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United States Environmental Protection Agency
Region 9 Laboratory

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

Date: **12/21/2020**

Subject: **Analytical Testing Results - Project R21S04**
WorkOrder **2012007**

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

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

Attached are the results from the analysis of samples from the **MEW OU1 FY2021 Vapor Intrusion Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

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

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

Analyses included in this report:

Volatile Organic Compounds by GC/MS

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

Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
F6-010-3ft-2d-R	2012007-01	Radiello 130	12/06/20 15:20	12/08/20 09:15
Waverly-MH1-2.5ft-2d-R	2012007-02	Radiello 130	12/06/20 15:25	12/08/20 09:15
Waverly-MH3-2ft-2d-R	2012007-04	Radiello 130	12/06/20 16:13	12/08/20 09:15
Waverly-MH4-2ft-2d-R	2012007-05	Radiello 130	12/06/20 16:35	12/08/20 09:15
Waverly-MH5-2.ft-2d-R	2012007-06	Radiello 130	12/06/20 16:30	12/08/20 09:15
F6-008-3ft-2d-R	2012007-07	Radiello 130	12/06/20 15:13	12/08/20 09:15
F6-031-3ft-2d-R	2012007-08	Radiello 130	12/06/20 14:40	12/08/20 09:15
F6-055-2ft-2d-R	2012007-09	Radiello 130	12/06/20 14:59	12/08/20 09:15
F6-010-3ft-1.5hr-R	2012007-10	Radiello 130	12/06/20 17:29	12/08/20 09:15
F6-008-3ft-2hr-R	2012007-11	Radiello 130	12/06/20 17:25	12/08/20 09:15
Waverly-MH1-2.5ft-1.5hr-R	2012007-12	Radiello 130	12/06/20 17:34	12/08/20 09:15
Waverly-MH2-2.5ft-1.5hr-R	2012007-13	Radiello 130	12/06/20 17:38	12/08/20 09:15
F6-031-3ft-2hr-R	2012007-14	Radiello 130	12/06/20 16:55	12/08/20 09:15
235 Fairchild-SC-5ft-2d	2012007-15	Radiello 130	12/06/20 16:21	12/08/20 09:15
Classics-MH1-2ft-2d-R	2012007-16	Radiello 130	12/06/20 17:03	12/08/20 09:15
Classics-MH2-2ft-2d-R	2012007-17	Radiello 130	12/06/20 17:05	12/08/20 09:15
6Sixty-MH3-2ft-2d-R	2012007-18	Radiello 130	12/06/20 17:18	12/08/20 09:15

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Project Manager: Alana Lee
Project Number: R21S04
Project: MEW OU1 FY2021 Vapor Intrusion Investigation

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

WorkOrder: 2012007
Reported: 12/21/20 12:26

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2012007-01									**Radiello 130 - Sampled: 12/06/20 15:20**
Sample ID: F6-010-3ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		7.0		0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		9.4		0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		6.9		0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		130		0.57	"	"	"	"	Radiello D1
Chloroform		46		0.47	"	"	"	"	Radiello D1
Trichloroethene	RE1	670		5.1	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		18		0.60	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			86 %	*86-118%*		"	"	"	
Lab ID: 2012007-02									**Radiello 130 - Sampled: 12/06/20 15:25**
Sample ID: Waverly-MH1-2.5ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		ND	U	0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
Chloroform		7.4		0.47	"	"	"	"	Radiello D1
Trichloroethene		27		0.51	"	"	"	"	Radiello D1
Tetrachloroethene		0.30	C1, J	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			89 %	*86-118%*		"	"	"	
Lab ID: 2012007-04									**Radiello 130 - Sampled: 12/06/20 16:13**
Sample ID: Waverly-MH3-2ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		ND	U	0.46	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
Chloroform		13		0.47	"	"	"	"	Radiello D1
Trichloroethene		ND	U	0.51	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			89 %	*86-118%*		"	"	"	
Lab ID: 2012007-05									**Radiello 130 - Sampled: 12/06/20 16:35**
Sample ID: Waverly-MH4-2ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		ND	U	0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
Chloroform		7.4		0.47	"	"	"	"	Radiello D1
Trichloroethene		ND	U	0.51	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.60	"	"	"	"	Radiello D1

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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2012007-05									**Radiello 130 - Sampled: 12/06/20 16:35**
Sample ID: Waverly-MH4-2ft-2d-R									**Volatile Organic Compounds Collected on Passive Air Sampling Devices**
Surrogate: Toluene-d8			87 %	*86-118%*		*B20L016*	*12/09/20*	*12/09/20*	
Lab ID: 2012007-06									**Radiello 130 - Sampled: 12/06/20 16:30**
Sample ID: Waverly-MH5-2.ft-2d-R									**Volatile Organic Compounds Collected on Passive Air Sampling Devices**
1,1-Dichloroethene		ND	U	0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	0.56	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	0.57	"	"	"	"	Radiello D1
Chloroform		0.27	C1, J	0.47	"	"	"	"	Radiello D1
Trichloroethene		ND	U	0.51	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	0.60	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			90 %	*86-118%*		"	"	"	
Lab ID: 2012007-07									**Radiello 130 - Sampled: 12/06/20 15:13**
Sample ID: F6-008-3ft-2d-R									**Volatile Organic Compounds Collected on Passive Air Sampling Devices**
1,1-Dichloroethene		19		0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		26		0.58	"	"	"	"	Radiello D1
1,1-Dichloroethane		18		0.57	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	360		5.8	"	"	"	12/10/20	Radiello D1
Chloroform		100		0.48	"	"	"	12/09/20	Radiello D1
Trichloroethene	RE1	1,400		5.2	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		50		0.61	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			88 %	*86-118%*		"	"	"	
Lab ID: 2012007-08									**Radiello 130 - Sampled: 12/06/20 14:40**
Sample ID: F6-031-3ft-2d-R									**Volatile Organic Compounds Collected on Passive Air Sampling Devices**
1,1-Dichloroethene		9.8		0.49	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		15		0.60	"	"	"	"	Radiello D1
1,1-Dichloroethane		12		0.59	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		120		0.60	"	"	"	"	Radiello D1
Chloroform		22		0.50	"	"	"	"	Radiello D1
Trichloroethene	RE1	380		2.7	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		39		0.63	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			88 %	*86-118%*		"	"	"	
Lab ID: 2012007-09									**Radiello 130 - Sampled: 12/06/20 14:59**
Sample ID: F6-055-2ft-2d-R									**Volatile Organic Compounds Collected on Passive Air Sampling Devices**
1,1-Dichloroethene		1.9		0.49	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		1.6		0.60	"	"	"	"	Radiello D1
1,1-Dichloroethane		1.9		0.59	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		12		0.60	"	"	"	"	Radiello D1

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Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2012007-09									**Radiello 130 - Sampled: 12/06/20 14:59**
Sample ID: F6-055-2ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
Chloroform		6.5		0.50	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
Trichloroethene		88		0.54	"	"	"	"	Radiello D1
Tetrachloroethene		4.9		0.63	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2012007-10									**Radiello 130 - Sampled: 12/06/20 17:29**
Sample ID: F6-010-3ft-1.5hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		20		14	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		23		17	"	"	"	"	Radiello D1
1,1-Dichloroethane		21		16	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		360		17	"	"	"	"	Radiello D1
Chloroform		310		14	"	"	"	"	Radiello D1
Trichloroethene		1,000		15	"	"	"	"	Radiello D1
Tetrachloroethene		28		18	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2012007-11									**Radiello 130 - Sampled: 12/06/20 17:25**
Sample ID: F6-008-3ft-2hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		30		10	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		31		13	"	"	"	"	Radiello D1
1,1-Dichloroethane		30		13	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		500		13	"	"	"	"	Radiello D1
Chloroform		400		11	"	"	"	"	Radiello D1
Trichloroethene		1,300		11	"	"	"	"	Radiello D1
Tetrachloroethene		35		13	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			89 %	*86-118%*		"	"	"	
Lab ID: 2012007-12									**Radiello 130 - Sampled: 12/06/20 17:34**
Sample ID: Waverly-MH1-2.5ft-1.5hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		ND	U	14	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		ND	U	17	"	"	"	"	Radiello D1
1,1-Dichloroethane		ND	U	16	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	17	"	"	"	"	Radiello D1
Chloroform		12	C1, J	14	"	"	"	"	Radiello D1
Trichloroethene		12	C1, J	15	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	18	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2012007-13									**Radiello 130 - Sampled: 12/06/20 17:38**
Sample ID: Waverly-MH2-2.5ft-1.5hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		ND	U	14	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1

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Project: MEW OU1 FY2021 Vapor Intrusion Investigation

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

WorkOrder: 2012007
Reported: 12/21/20 12:26

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 2012007-13									**Radiello 130 - Sampled: 12/06/20 17:38**
Sample ID: Waverly-MH2-2.5ft-1.5hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
trans-1,2-Dichloroethene		ND	U	17	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
1,1-Dichloroethane		ND	U	17	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		ND	U	17	"	"	"	"	Radiello D1
Chloroform		36		14	"	"	"	"	Radiello D1
Trichloroethene		12	C1, J	15	"	"	"	"	Radiello D1
Tetrachloroethene		ND	U	18	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			89 %	*86-118%*		"	"	"	
Lab ID: 2012007-14									**Radiello 130 - Sampled: 12/06/20 16:55**
Sample ID: F6-031-3ft-2hr-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		35		11	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		39		14	"	"	"	"	Radiello D1
1,1-Dichloroethane		35		14	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		340		14	"	"	"	"	Radiello D1
Chloroform		55		11	"	"	"	"	Radiello D1
Trichloroethene		980		12	"	"	"	"	Radiello D1
Tetrachloroethene		57		14	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			88 %	*86-118%*		"	"	"	
Lab ID: 2012007-15									**Radiello 130 - Sampled: 12/06/20 16:21**
Sample ID: 235 Fairchild-SC-5ft-2d									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		0.34	C1, J	0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		0.44	C1, J	0.58	"	"	"	"	Radiello D1
1,1-Dichloroethane		0.35	C1, J	0.57	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		5.3		0.58	"	"	"	"	Radiello D1
Chloroform		5.7		0.48	"	"	"	"	Radiello D1
Trichloroethene		17		0.52	"	"	"	"	Radiello D1
Tetrachloroethene		0.61		0.61	"	"	"	"	Radiello D1
Surrogate: Toluene-d8			88 %	*86-118%*		"	"	"	
Lab ID: 2012007-16									**Radiello 130 - Sampled: 12/06/20 17:03**
Sample ID: Classics-MH1-2ft-2d-R									
					Volatile Organic Compounds Collected on Passive Air Sampling Devices				
1,1-Dichloroethene		18		0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		21		0.58	"	"	"	"	Radiello D1
1,1-Dichloroethane		16		0.57	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		280		0.58	"	"	"	"	Radiello D1
Chloroform		86		0.48	"	"	"	"	Radiello D1
Trichloroethene	RE1	1,200		5.2	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		35		0.61	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2012007-17									**Radiello 130 - Sampled: 12/06/20 17:05**

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Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Sample ID: Classics-MH2-2ft-2d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene		22		0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		26		0.58	"	"	"	"	Radiello D1
1,1-Dichloroethane		19		0.57	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene	RE1	370		5.8	"	"	"	12/10/20	Radiello D1
Chloroform		110		0.48	"	"	"	12/09/20	Radiello D1
Trichloroethene	RE1	1,400		5.2	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		46		0.61	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	
Lab ID: 2012007-18								**Radiello 130 - Sampled: 12/06/20 17:18**	
Sample ID: 6Sixty-MH3-2ft-2d-R					**Volatile Organic Compounds Collected on Passive Air Sampling Devices**				
1,1-Dichloroethene		8.8		0.47	ug/m³ Air	B20L016	12/09/20	12/09/20	Radiello D1
trans-1,2-Dichloroethene		10		0.58	"	"	"	"	Radiello D1
1,1-Dichloroethane		7.7		0.57	"	"	"	"	Radiello D1
cis-1,2-Dichloroethene		140		0.58	"	"	"	"	Radiello D1
Chloroform		110		0.48	"	"	"	"	Radiello D1
Trichloroethene	RE1	550		2.6	"	"	"	12/10/20	Radiello D1
Tetrachloroethene		23		0.61	"	"	"	12/09/20	Radiello D1
Surrogate: Toluene-d8			87 %	*86-118%*		"	"	"	

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: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

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

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B20L016 - Passive Air Sampler										
Blank (B20L016-BLK1)				Prepared & Analyzed: 12/09/20						
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	*859*		ug/m³ Air	*992*		*87*	*86-118*			
LCS (B20L016-BS1)				Prepared & Analyzed: 12/09/20						
1,1-Dichloroethene	8.30	0.13	ug/m³ Air	13.1		64	22-143			
trans-1,2-Dichloroethene	10.6	0.16	ug/m³ Air	16.0		66	35-133			
1,1-Dichloroethane	11.0	0.16	ug/m³ Air	15.7		70	43-140			
cis-1,2-Dichloroethene	11.7	0.16	ug/m³ Air	16.0		73	49-134			
Chloroform	10.1	0.13	ug/m³ Air	13.2		76	56-132			
Trichloroethene	11.1	0.14	ug/m³ Air	14.4		77	69-124			
Tetrachloroethene	13.2	0.17	ug/m³ Air	16.8		79	69-124			
Surrogate: Toluene-d8	*889*		ug/m³ Air	*992*		*90*	*86-118*			
LCS Dup (B20L016-BSD1)				Prepared & Analyzed: 12/09/20						
1,1-Dichloroethene	10.0	0.13	ug/m³ Air	13.1		77	22-143	19	62	
trans-1,2-Dichloroethene	12.8	0.16	ug/m³ Air	16.0		80	35-133	19	53	
1,1-Dichloroethane	12.9	0.16	ug/m³ Air	15.7		82	43-140	16	44	
cis-1,2-Dichloroethene	13.5	0.16	ug/m³ Air	16.0		85	49-134	15	39	
Chloroform	11.4	0.13	ug/m³ Air	13.2		86	56-132	12	41	
Trichloroethene	12.7	0.14	ug/m³ Air	14.4		88	69-124	14	20	
Tetrachloroethene	14.7	0.17	ug/m³ Air	16.8		88	69-124	11	20	
Surrogate: Toluene-d8	*887*		ug/m³ Air	*992*		*89*	*86-118*			

United States Environmental Protection Agency
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1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project Manager: Alana Lee	**California Site Cleanup Section 3**	**WorkOrder: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

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

EPA Region 9 Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch S20L024 - B20L016										
Instrument Blank (S20L024-IBL1)				Prepared & Analyzed: 12/09/20						
1,1-Dichloroethene	ND	0.0	ug/L							U
trans-1,2-Dichloroethene	ND	0.0	ug/L							U
1,1-Dichloroethane	ND	0.0	ug/L							U
cis-1,2-Dichloroethene	ND	0.0	ug/L							U
Chloroform	ND	0.0	ug/L							U
Trichloroethene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*0.00*		ug/L				*86-118*			*U*
Batch S20L031 - B20L016										
Instrument Blank (S20L031-IBL1)				Prepared & Analyzed: 12/10/20						
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
Toluene	ND	0.0	ug/L							U
Tetrachloroethene	ND	0.0	ug/L							U
Surrogate: Toluene-d8	*0.00*		ug/L				*86-118*			*U*

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: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Qualifiers and Comments

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

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: 2012007**
Project Number: R21S04	**75 Hawthorne Street**	**Reported:** 12/21/20 12:26
Project: MEW OU1 FY2021 Vapor Intrusion Investigation	**San Francisco CA, 94105**	

Radiello: The carbon disulfide sample extract for 2012007-03 has a water layer. Analysis cancelled for this sample. TD 120/11/20

WORK ORDER

Printed: 12/9/2020 12:30:21PM

2012007

EPA Region 9 Laboratory

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

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

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

Shipping Containers	Description	Temp C	Custody Seals?	Containers Intact?	Labels COC Agree?	Preservation Confirmed?	Received on Ice?	Comments
Box 1	Box 1	17	Yes	Yes	Yes	No	No	

Date Due:	12/22/20 17:00 (14 day TAT)	SDG:	20343A
Received By:	Tatyana Dadiomov	Date Received:	12/08/20 09:15
Logged In By:	Tatyana Dadiomov	Date Logged In:	12/08/20 09:26

Analysis	Hold Time Expires	Comments	
2012007-01 F6-010-3ft-2d-R [Radiello 130] Sampled 12/06/20 15:20 (GMT-08:00) Pacific Time (US &			**I066V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	
2012007-02 Waverly-MH1-2.5ft-2d-R [Radiello 130] Sampled 12/06/20 15:25 (GMT-08:00) Pacific Time (US &			**I067V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	
2012007-03 Waverly-MH2-2.5ft-2d-R [Radiello 130] Sampled 12/06/20 15:58 (GMT-08:00) Pacific Time (US &			**I068V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	
2012007-04 Waverly-MH3-2ft-2d-R [Radiello 130] Sampled 12/06/20 16:13 (GMT-08:00) Pacific Time (US &			**I069V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	
2012007-05 Waverly-MH4-2ft-2d-R [Radiello 130] Sampled 12/06/20 16:35 (GMT-08:00) Pacific Time (US &			**I070V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	
2012007-06 Waverly-MH5-2.ft-2d-R [Radiello 130] Sampled 12/06/20 16:30 (GMT-08:00) Pacific Time (US &			**I071V**
VOCs, Passive Samplers	06/04/21	7 day prelim requested	

WORK ORDER

Printed: 12/9/2020 12:30:21PM

2012007

EPA Region 9 Laboratory

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

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments

2012007-07 F6-008-3ft-2d-R [Radiello 130] Sampled 12/06/20 15:13 (GMT-08:00) Pacific Time (US & **I073V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-08 F6-031-3ft-2d-R [Radiello 130] Sampled 12/06/20 14:40 (GMT-08:00) Pacific Time (US & **I072V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-09 F6-055-2ft-2d-R [Radiello 130] Sampled 12/06/20 14:59 (GMT-08:00) Pacific Time (US & **I074V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-10 F6-010-3ft-1.5hr-R [Radiello 130] Sampled 12/06/20 17:29 (GMT-08:00) Pacific Time (US & **I079V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-11 F6-008-3ft-2hr-R [Radiello 130] Sampled 12/06/20 17:25 (GMT-08:00) Pacific Time (US & **I080V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-12 Waverly-MH1-2.5ft-1.5hr-R [Radiello 130] Sampled 12/06/20 17:34 (GMT-08:00) Pacific Time (US & **I081V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-13 Waverly-MH2-2.5ft-1.5hr-R [Radiello 130] Sampled 12/06/20 17:38 (GMT-08:00) Pacific Time (US & **I082V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-14 F6-031-3ft-2hr-R [Radiello 130] Sampled 12/06/20 16:55 (GMT-08:00) Pacific Time (US & **I083V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-15 235 Fairchild-SC-5ft-2d [Radiello 130] Sampled 12/06/20 16:21 (GMT-08:00) Pacific Time (US & **I084V**

VOCs, Passive Samplers	06/04/21	7 day prelim requested

WORK ORDER

Printed: 12/9/2020 12:30:21PM

2012007

EPA Region 9 Laboratory

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

Analysis	Hold Time Expires	Comments

Analysis	Expires	Comments

2012007-16 Classics-MH1-2ft-2d-R [Radiello 130] Sampled 12/06/20 17:03 **I076V**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-17 Classics-MH2-2ft-2d-R [Radiello 130] Sampled 12/06/20 17:05 **I077V**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	06/04/21	7 day prelim requested

2012007-18 6Sixty-MH3-2ft-2d-R [Radiello 130] Sampled 12/06/20 17:18 **I078V**
(GMT-08:00) Pacific Time (US &

VOCs, Passive Samplers	06/04/21	7 day prelim requested

Reviewed By Date

U.S. Environmental Protection Agency

CHAIN OF CUSTODY RECORD

EPA REGION 9
75 Hawthorne Street
San Francisco, California 94105

Project / Case Number: R21S04 MEW (M6) OU1

FY21 MEW OU1 Vapor Intrusion and Sewer Pathway

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

Laboratory: EPA R9 Richmond

Sampler: Alana Lee Alana Lee

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

Start Date End Date	Start Time/ End/Time	Matrix	Comp	Grab	EPA ID Number	Unique ID	RAD130 - # Containers	AVG (beg / end) Temp - F	AVG (beg / end) Temp - F	TCE Screen -µg/m³	
12/04/2020 12/06/2020	15:00 15:20	AIR	X		F6-010-3ft-2d-R	I066V	1	68	68	500-1700	wet
12/04/2020 12/06/2020	15:05 15:25	AIR	X		Waverly-MH1-2.5ft-2d-R	I067V	1	68	68	5-1000	
12/04/2020 12/06/2020	15:18 15:58	AIR	X		Waverly-MH2-2.5ft-2d-R	I068V	1	68	68	5-1000	wet
12/04/2020 12/06/2020	15:35 16:13	AIR	X		Waverly-MH3-2ft-2d-R	I069V	1	68	68	5-500	
12/04/2020 12/06/2020	16:30 16:35	AIR	X		Waverly-MH4-2ft-2d-R	I070V	1	68	68	<50	
12/04/2020 12/06/2020	16:15 16:30	AIR	X		Waverly-MH5-2.ft-2d-R	I071V	1	68	68	<10	
12/04/2020 12/06/2020	15:45 15:13	AIR	X		F6-008-3ft-2d-R	I073V	1	68	68	500-1700	diffuser- wet
12/04/2020 12/06/2020	17:01 14:40	AIR	X		F6-031-3ft-2d-R	I072V	1	68	68	50-500	wet
12/04/2020 12/06/2020	17:08 14:59	AIR	X		F6-055-2ft-2d-R	I074V	1	68	68	20-150	
12/06/2020 12/06/2020	15:50 17:29	AIR	X		F6-010-3ft-1.5hr-R	I079V	1	68	68	500-1700	99 min re-sample
12/06/2020 12/06/2020	15:15 17:25	AIR	X		F6-008-3ft-2hr-R	I080V	1	68	68	500-1700	130 min re-sample
12/06/2020 12/06/2020	15:55 17:34	AIR	X		Waverly-MH1-2.5ft-1.5hr-R	I081V	1	68	68	5-1000	99 min re-sample
12/06/2020 12/06/2020	16:02 17:38	AIR	X		Waverly-MH2-2.5ft-1.5hr-R	I082V	1	68	68	5-1000	96 min re-sample
12/06/2020 12/06/2020	14:55 16:55	AIR	X		F6-031-3ft-2hr-R	I083V	1	68	68	50-500	120 min re-sample

Relinquished by: *(Signature)* Alana Lee — Date/Time 12/1/20 0700 VIA FEDEX

Received by: *(Signature)* Date/Time

Relinquished by: *(Signature)* Date/Time

Received for Laboratory by: *(Signature)* Hadlemand — Date/Time 12-08-20 9:15

Temp 17°C

Seals Intact? (Y/N)

Conditions / Remarks

1 OF 2

Table of Contents

U.S. Environmental Protection Agency

CHAIN OF CUSTODY RECORD

EPA REGION 9
75 Hawthorne Street
San Francisco, California 94105

Project / Case Number: R21S04 MEW (M6) OU1

FY21 MEW OU1 Vapor Intrusion and Sewer Pathway

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

Laboratory: EPA R9 Richmond

Sampler: Alana Lee Alana Lee

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

Start Date End Date	Start Time/ End/Time	Matrix	Comp	Grab	EPA ID Number	Unique ID	RAD130 - # Containers	AVG (beg / end) Temp - F	AVG (beg / end) Temp - F	TCE Screen -µg/m^3	
12/04/2020 12/06/2020	16:44 16:21	AIR	X		235 Fairchild-SC-5ft-2d	I084V	1	68	68	<20	
12/04/2020 12/06/2020	17:19 17:03	AIR	X		Classics-MH1-2ft-2d-R	I076V	1	68	68	100-800	
12/04/2020 12/06/2020	17:23 17:05	AIR	X		Classics-MH2-2ft-2d-R	I077V	1	68	68	100-800	
12/04/2020 12/06/2020	17:29 17:18	AIR	X		6Sixty-MH3-2ft-2d-R	I078V	1	68	68	50-500	

Alana Lee 12/6/2020

Relinquished by: *(Signature)* Alana Lee Date/Time 12/7/20 0700 via FEDEX

Received by: *(Signature)* Date/Time

Relinquished by: *(Signature)* Date/Time

Received for Laboratory by: *(Signature)* Hadlonne Date/Time 12-08-20 9:15

Temp 17°C

Seals Intact? (Y/N)

Conditions / Remarks

2 of 2

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Cooler/Box/Env 1 of 1

U.S. Environmental Protection Agency
Region 9 Richmond Laboratory

1337 South 46th Street
Richmond, CA 94804

Sample Receipt Checklist

Note in WO memo any items outside acceptable limits.

Project No: R21S04 **Work Order No(s):** 2012007 **Date:** 12/08/20 **by** TD

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

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

TEMPERATURE 17 °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

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

Exposure Time in Minutes

	Sample number	Retrieved Date (XX/XX/XXXX)	Retrieved Time	Deployed Date	Deployed Time	Minutes	Start temp C	End temp C	Avg temp K	Plate #
1	F6-010-3ft-2d-R	12/06/20	15:20	12/04/20	15:00	2900	20.00	20.00	293.15	I066V
2	Waverly-MH1-2.5ft-2d-R	12/06/20	15:25	12/04/20	15:05	2900	20.00	20.00	293.15	I067V
3	Waverly-MH2-2.5ft-2d-R	12/06/20	15:58	12/04/20	15:18	2920	20.00	20.00	293.15	I068V
4	Waverly-MH3-2ft-2d-R	12/06/20	16:13	12/04/20	15:35	2918	20.00	20.00	293.15	I069V
5	Waverly-MH4-2ft-2d-R	12/06/20	16:35	12/04/20	16:30	2885	20.00	20.00	293.15	I070V
6	Waverly-MH5-2.ft-2d-R	12/06/20	16:30	12/04/20	16:15	2895	20.00	20.00	293.15	I071V
7	F6-008-3ft-2d-R	12/06/20	15:13	12/04/20	15:45	2848	20.00	20.00	293.15	I073V
8	F6-031-3ft-2d-R	12/06/20	14:40	12/04/20	17:01	2739	20.00	20.00	293.15	I072V
9	F6-055-2ft-2d-R	12/06/20	14:59	12/04/20	17:08	2751	20.00	20.00	293.15	I074V
10	F6-010-3ft-1.5hr-R	12/06/20	17:29	12/06/20	15:50	99	20.00	20.00	293.15	I079V
11	F6-008-3ft-2hr-R	12/06/20	17:25	12/06/20	15:15	130	20.00	20.00	293.15	I080V
12	Waverly-MH1-2.5ft-1.5hr-R	12/06/20	17:34	12/06/20	15:55	99	20.00	20.00	293.15	I081V
13	Waverly-MH2-2.5ft-1.5hr-R	12/06/20	17:38	12/06/20	16:02	96	20.00	20.00	293.15	I082V
14	F6-031-3ft-2hr-R	12/06/20	16:55	12/06/20	14:55	120	20.00	20.00	293.15	I083V
15	235 Fairchild-SC-5ft-2d	12/06/20	16:21	12/04/20	16:44	2857	20.00	20.00	293.15	I084V
16	Classics-MH1-2ft-2d-R	12/06/20	17:03	12/04/20	17:19	2864	20.00	20.00	293.15	I076V
17	Classics-MH2-2ft-2d-R	12/06/20	17:05	12/04/20	17:23	2862	20.00	20.00	293.15	I077V
18	6Sixty-MH3-2ft-2d-R	12/06/20	17:18	12/04/20	17:29	2869	20.00	20.00	293.15	I078V

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BATCH

B20L016

Batch Date: 12/09/2020

Batch Matrix: Radiello 130

Batch Analyses:

VOCs, Passive Samplers

PREPARATION BENCH SHEET

B20L016

EPA Region 9 Laboratory

Project: R21S04

Printed: 12/9/2020 12:33:21PM

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	Prepared by	Extraction Comments
2012007-01 A	F6-010-3ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-02 A	Waverly-MH1-2.5ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-03 A	Waverly-MH2-2.5ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested WET
2012007-04 A	Waverly-MH3-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-05 A	Waverly-MH4-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-06 A	Waverly-MH5-2.ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-07 A	F6-008-3ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-08 A	F6-031-3ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-09 A	F6-055-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-10 A	F6-010-3ft-1.5hr-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-11 A	F6-008-3ft-2hr-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-12 A	Waverly-MH1-2.5ft-1.5hr-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-13 A	Waverly-MH2-2.5ft-1.5hr-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-14 A	F6-031-3ft-2hr-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-15 A	235 Fairchild-SC-5ft-2d	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-16 A	Classics-MH1-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested

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PREPARATION BENCH SHEET

B20L016

EPA Region 9 Laboratory

Project: R21S04

Printed: 12/9/2020 12:33:21PM

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	Prepared by	Extraction Comments
2012007-17 A	Classics-MH2-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
2012007-18 A	6Sixty-MH3-2ft-2d-R	12/09/20 06:19	1	2				50	TD	7 day prelim requested
B20L016-BLK1	Blank	12/09/20 06:19	1	2				50	TD	
B20L016-BS1	LCS	12/09/20 06:19	1	2		2006155	5	50	TD	
B20L016-BSD1	LCS Dup	12/09/20 06:19	1	2		2006155	5	50	TD	
B20L016-MRL1	MRL Check	12/09/20 06:19	1	2		2047001	5	50	TD	

Batch Comments

Reagents

Reagent #	Description
2045009	passive air Radiello tubes
2046038	Carbon disulfide

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PREPARATION BENCH SHEET

B20L016

EPA Region 9 Laboratory

Project: R21S04

Printed: 12/10/2020 7:47:30AM

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
2012007-01 A	F6-010-3ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-02 A	Waverly-MH1-2.5ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-03 A	Waverly-MH2-2.5ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested WET
2012007-04 A	Waverly-MH3-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-05 A	Waverly-MH4-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-06 A	Waverly-MH5-2.ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-07 A	F6-008-3ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-08 A	F6-031-3ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-09 A	F6-055-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-10 A	F6-010-3ft-1.5hr-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-11 A	F6-008-3ft-2hr-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-12 A	Waverly-MH1-2.5ft-1.5hr-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-13 A	Waverly-MH2-2.5ft-1.5hr-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-14 A	F6-031-3ft-2hr-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-15 A	235 Fairchild-SC-5ft-2d	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-16 A	Classics-MH1-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-17 A	Classics-MH2-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested
2012007-18 A	6Sixty-MH3-2ft-2d-R	12/09/20 06:19	1	2				50		TD	7 day prelim requested

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PREPARATION BENCH SHEET

B20L016

EPA Region 9 Laboratory

Project: R21S04

Printed: 12/10/2020 7:47:30AM

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
B20L016-BLK1	Blank	12/09/20 06:19	1	2				50		TD	
B20L016-BS1	LCS	12/09/20 06:19	1	2		2006155	5	50		TD	
B20L016-BSD1	LCS Dup	12/09/20 06:19	1	2		2006155	5	50		TD	
B20L016-MRL1	MRL Check	12/09/20 06:19	1	2		2047001	5	50		TD	

Batch Comments

Reagents

Reagent #	Description
2045009	passive air Radiello tubes
2046038	Carbon disulfide

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Calibration

2012007

Calibration Date: 12/07/2020

Instrument: AG5975CV

Calibration Analyses:

VOCs, Passive Samplers

Response Factor Report AG5975C

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

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

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

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Response Factor Report AG5975C

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

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

(#) = Out of Range

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Method Path : C:\MSDCHEM\1\RAVIOLI METHODS\2020\
Method File : 120720.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:14:00 2020
Response Via : Initial Calibration

Total Cpnds : 48

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	2-Fluorotoluene	-109	10.980	1.000	A	1	A	B
2	T	1,1-Dichloroethene	-61	3.090	0.281	A	1	A	B
3	T	trans-1,2-Dichloroethene	-61	4.376	0.399	A	1	A	B
4	T	1,1-Dichloroethane	-63	5.086	0.463	A	1	A	B
5	T	cis-1,2-Dichloroethene	-61	6.088	0.554	A	1	A	B
6	T	Chloroform	-83	6.652	0.606	A	1	A	B
7	T	1,1,1-Trichloroethane	-97	6.919	0.630	A	2	A	B
8	T	Carbon tetrachloride	-117	7.187	0.655	A	1	A	B
9	T	Benzene	-78	7.515	0.684	A	1	A	B
10	T	1,2-Dichloroethane	-62	7.552	0.688	A	1	A	B
11	T	Trichloroethene	-130	8.575	0.781	A	3	A	B
12	S	Toluene-d8	-98	10.487	0.955	A	1	A	B
13	T	Toluene	-91	10.582	0.964	A	1	A	B
14	T	1,1,2-Trichloroethane	-97	11.232	1.023	A	1	A	B
15	T	Tetrachloroethene	-166	11.432	1.041	A	1	A	B
16	T	Chlorobenzene	-112	12.773	1.163	A	1	A	B
17	T	1,1,1,2-Tetrachloroethane	-131	12.916	1.176	A	1	A	B
18	T	Ethylbenzene	-91	12.972	1.181	A	2	A	B
19	T	m&p-Xylene	-91	13.170	1.199	A	2	A	B
20	T	o-Xylene	-91	13.782	1.255	A	1	A	B
21	T	1,1,2,2-Tetrachloroethane	-83	14.880	1.355	A	1	A	B
22	T	1,3,5-Trimethylbenzene	-105	15.350	1.398	A	1	A	B
23	T	1,2,4-Trimethylbenzene	-105	15.906	1.449	A	1	A	B
24	T	Naphthalene	-128	17.904	1.631	A	1	A	B
25		2-Fluorotoluene SCAN	109	10.979	1.000	A	1	A	B
26		1,1-Dichloroethene SCAN	61	3.096	0.282	A	2	A	B
27		trans-1,2-Dichloroethene SCAN	61	4.381	0.399	A	2	A	B
28		1,1-Dichloroethane SCAN	63	5.084	0.463	A	2	A	B
29		cis-1,2-Dichloroethene SCAN	61	6.093	0.555	A	3	A	B
30		Chloroform SCAN	83	6.662	0.607	A	2	A	B
31		1,1,1-Trichloroethane SCAN	97	6.918	0.630	A	2	A	B
32		Carbon tetrachloride SCAN	117	7.185	0.654	A	3	A	B
33		Benzene SCAN	78	7.514	0.684	A	3	A	B
34		1,2-Dichloroethane SCAN	62	7.563	0.689	A	2	A	B
35		Trichloroethene SCAN	130	8.573	0.781	A	3	A	B
36		Toluene-d8 SCAN	98	10.486	0.955	A	1	A	B
37		Toluene SCAN	91	10.591	0.965	A	2	A	B
38		1,1,2-Trichloroethane SCAN	97	11.242	1.024	A	3	A	B
39		Tetrachloroethene SCAN	166	11.441	1.042	A	3	A	B
40		Chlorobenzene SCAN	112	12.772	1.163	A	3	A	B
41		1,1,1,2-Tetrachloroethane SCAN	131	12.915	1.176	A	3	A	B
42		Ethylbenzene SCAN	91	13.169	1.199	A	2	A	B
43		m&p-Xylene SCAN	91	13.169	1.199	A	3	A	B
44		o-Xylene SCAN	91	13.789	1.256	A	2	A	B
45		1,1,2,2-Tetrachloroethane SCAN	83	14.883	1.355	A	2	A	B
46		1,3,5-Trimethylbenzene SCAN	105	15.353	1.398	A	2	A	B
47		1,2,4-Trimethylbenzene SCAN	105	15.904	1.448	A	3	A	B
48		Naphthalene SCAN	128	17.902	1.630	A	2	A	B

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

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

CHEMSTATION AREA COUNT REPORT

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

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

CHEMSTATION CONCENTRATION REPORT

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

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

SCV REPORT

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

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

SEQUENCE

S20L021

Sequence Date: 12/07/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	ICAL	SEQUENCE #:	S20L021 12/07/20
BATCH #:		ANALYSIS:	VOA Passive Air.

	CHECKLIST ITEM	N/A	ANALYST Y/N	REVIEWER Y/N	IDENTIFY OUTLIERS / COMMENTS
DOCUMENTATION	ANALYST: Bench sheet(s) attached? REVIEWER: Bench sheet(s) reviewed?	✔			
	ANALYST: Sequence log(s) attached? REVIEWER: Sequence log(s) reviewed?		Y	Y	
	ANALYST: Every run has a PDF in LIMS? REVIEWER: Every PDF reviewed?		Y	Y	
INITIAL CALIBRATION	Date of Initial Calibration used: If applicable, note date of "Last Update" in Comments.	Tue Dec 08 06:26:34 2020			
	Initial Calibration ID (LIMS number):	2012007			
	ICAL within QC criteria?		Y	Y	
	SCV within QC criteria?		Y	Y	
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?		Y	Y	
	CCV(s) within QC criteria?	✔			
	QLS(s) within QC criteria?	✔			
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	✔			
	LCS(s) or SRM(s) within QC criteria?	✔			
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	ICAL	SEQUENCE #:	S20L021 12/07/20
BATCH #:		ANALYSIS:	VOA Passive Air.

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

APPROVALS	ANALYST INITIALS & DATE:	TD 12/08/20
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2020.12.16 12:37:09 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

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

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

GC/MS QA-QC Check Report

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

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

204852

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

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

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

Analysis Sequence

S20L021

Project:
Analysis:

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

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

Sequence Comments

Reagents

Reagent #	Description

Table of Contents

SEQUENCE DATA

S20L021

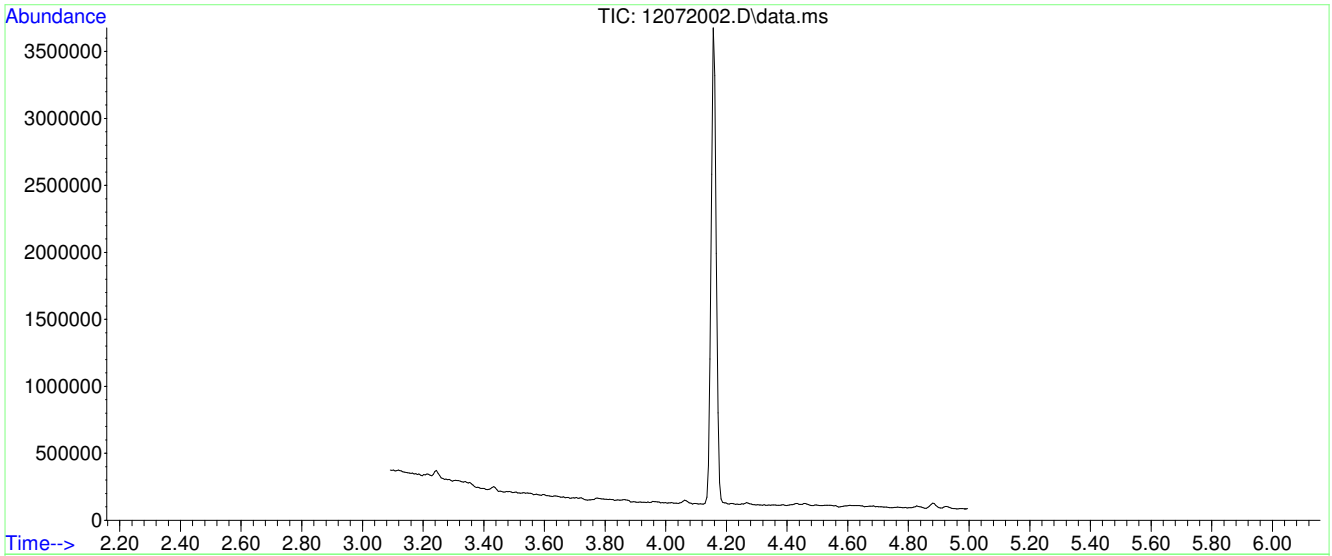
S20L021-TUN1

Table of Contents

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

Integration File: Ravioli.P

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



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

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

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

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

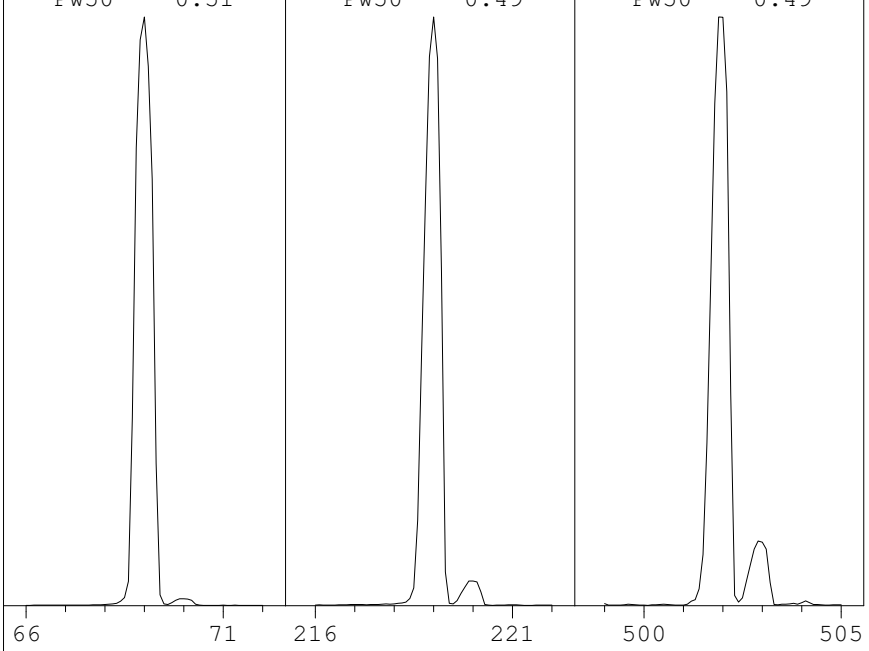
Average of 4.151 to 4.162 min.: 12072002.D\data.ms
S20L021-TUN1
Modified:subtracted

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

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

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

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

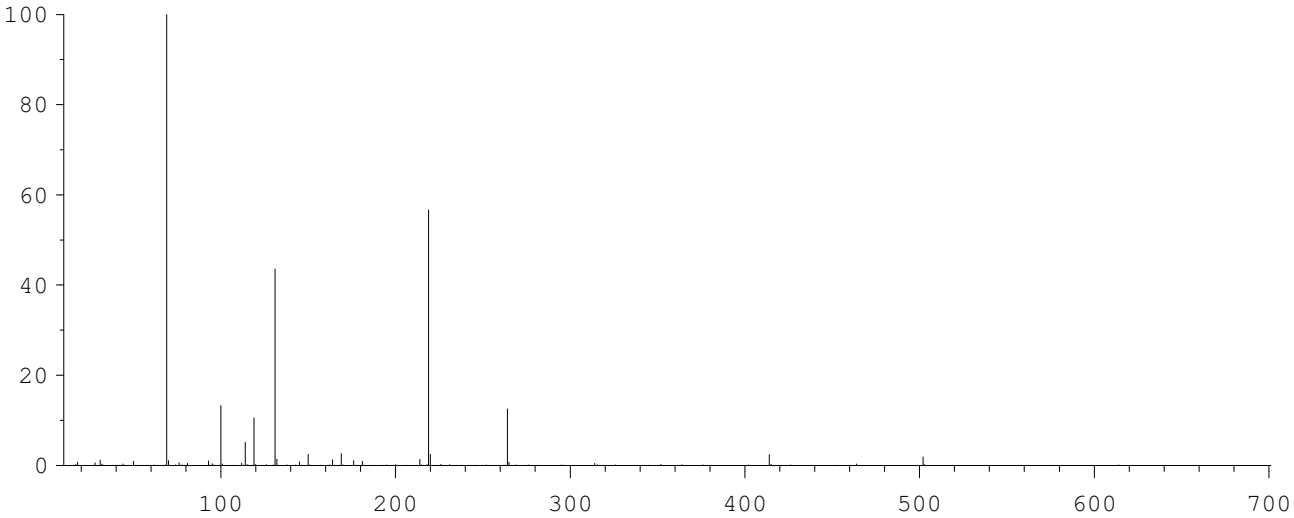


Ion Pol	Pos	MassGain	-1186
		MassOffs	-39
Emission	34.6	AmuGain	984
EIEnrgy	69.9	AmuOffs	128.50
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	22.25		
IonFcus	68.3	HEDEnab	On
EntLens	0.0	EMVolts	1424
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

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



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

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

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

Ramp Criteria:
Ion Focus Maximum 90 volts using ion 502; EM Gain 75158
Repeller Maximum 30 volts using ion 219; Gain Factor 0.75

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

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

S20L021-CAL1

Quantitation Report (Not Reviewed)

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

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

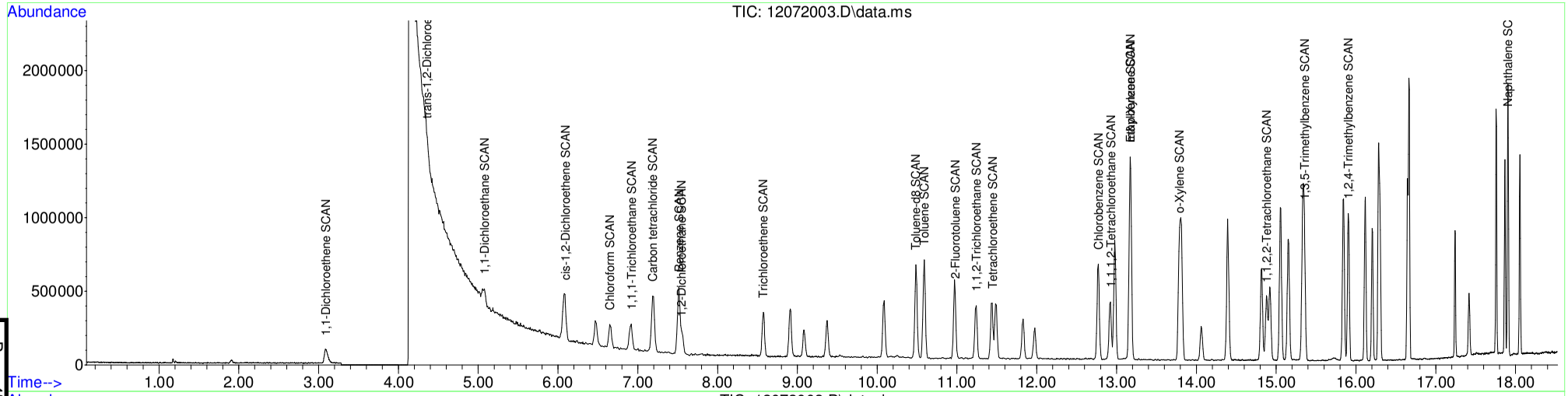
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	195592	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	783017	20670.27 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 413.41%#		
Target Compounds					Qvalue
2]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

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

Quantitation Report (Not Reviewed)

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

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



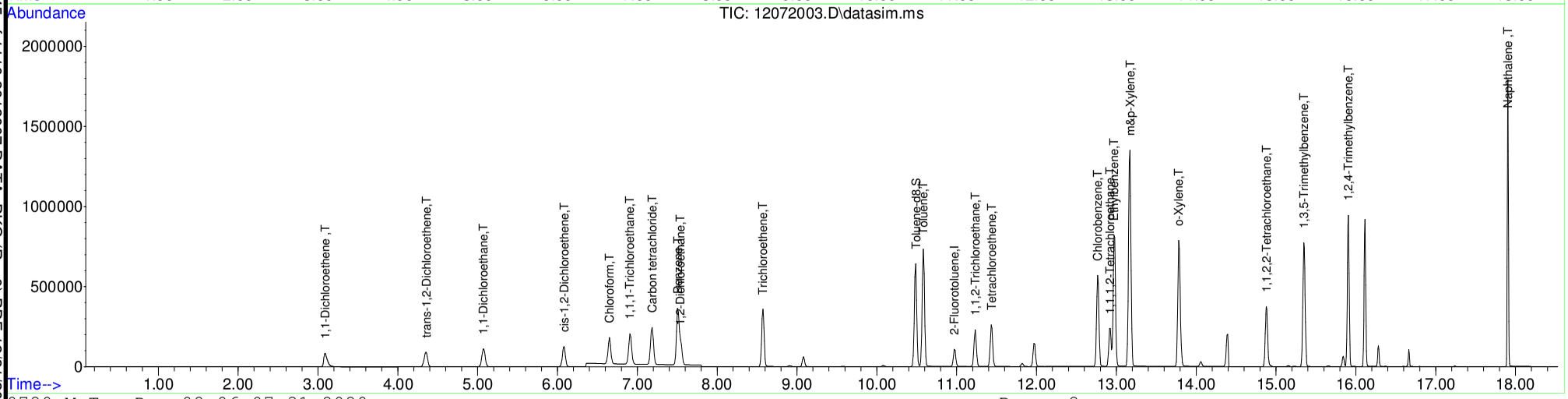


Table of Contents

S20L021-CAL2

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

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

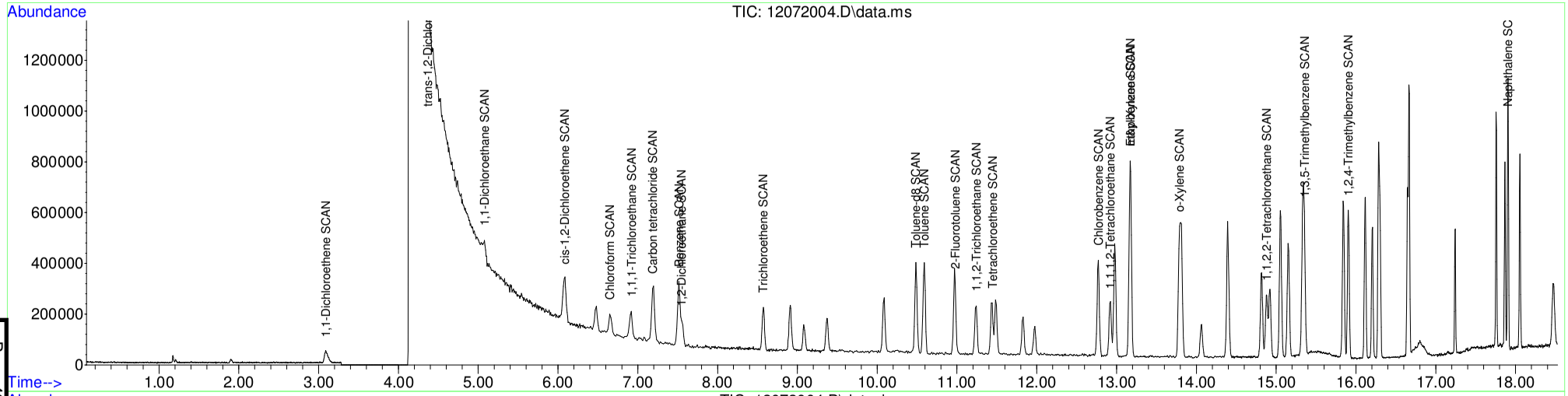
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	176421	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	433076	12674.76 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 253.50%#		
Target Compounds					Qvalue
2]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

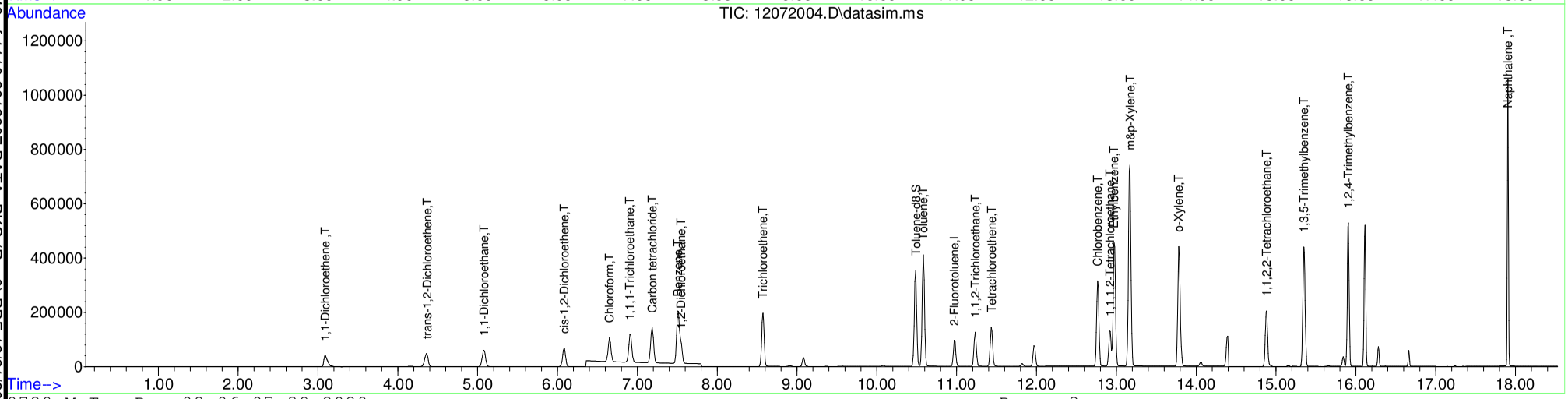
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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S20L021-CAL3

Quantitation Report (Not Reviewed)

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

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

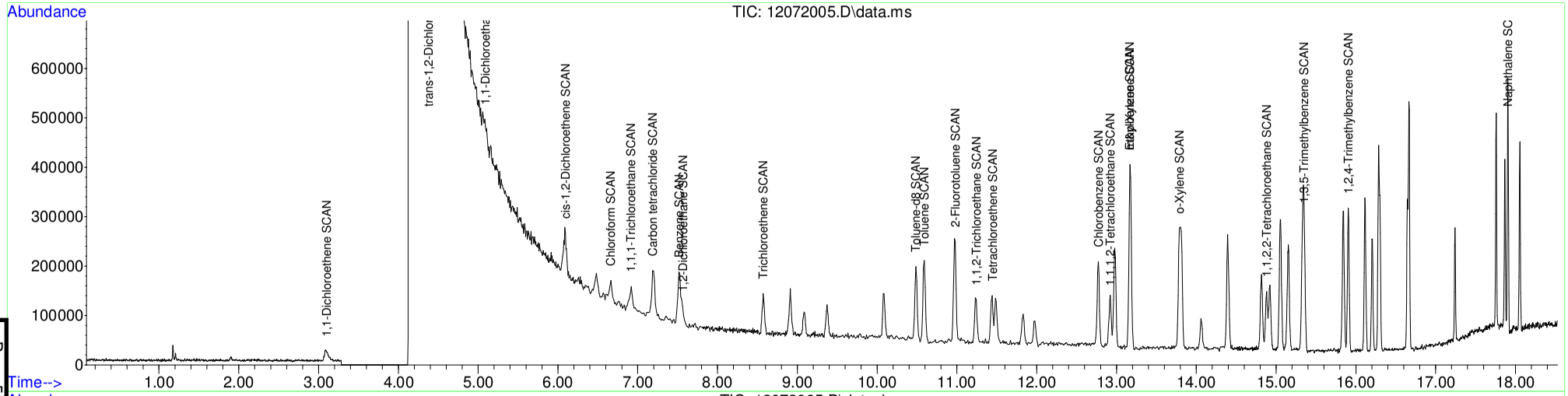
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.980	109	204852	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	186913	4711.13 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 94.22%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene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

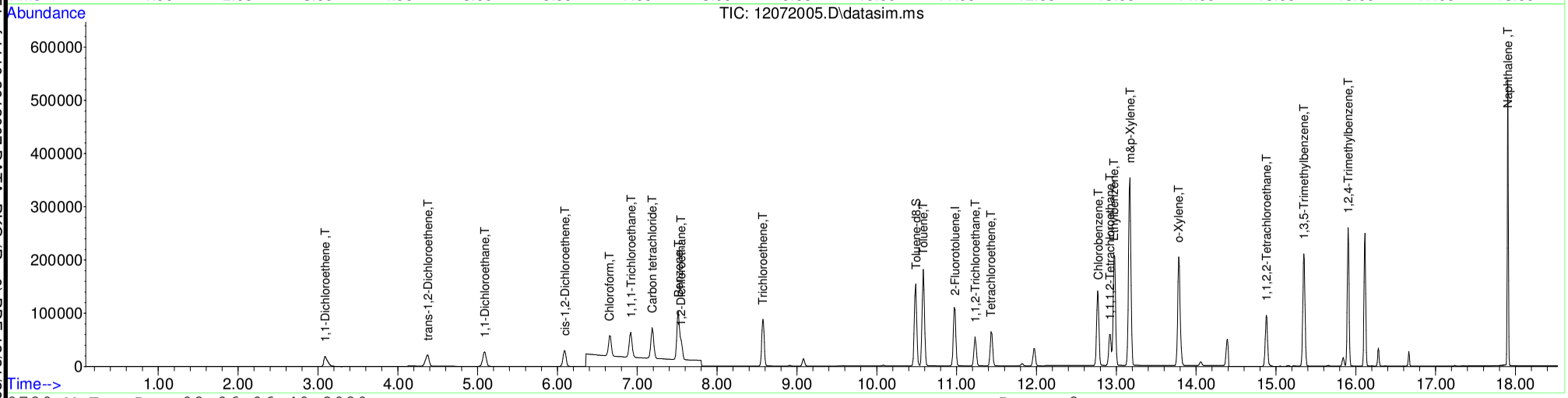
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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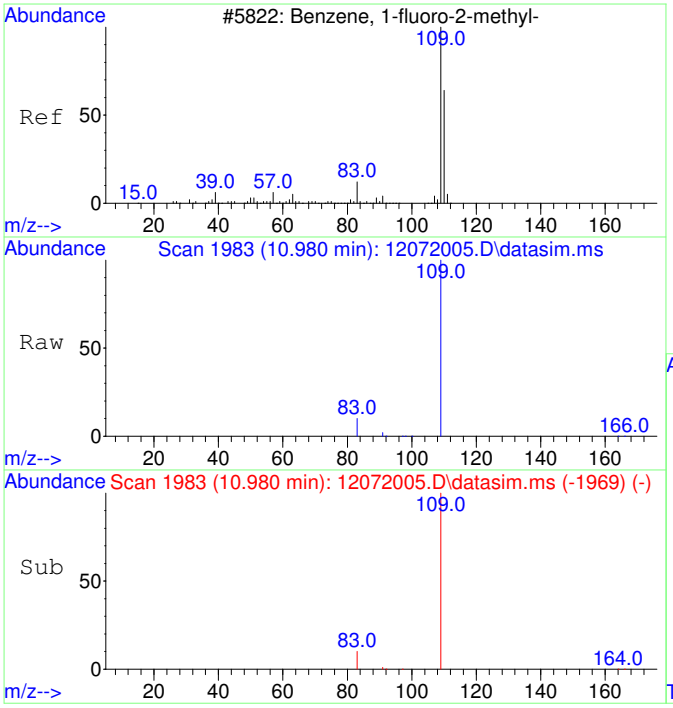
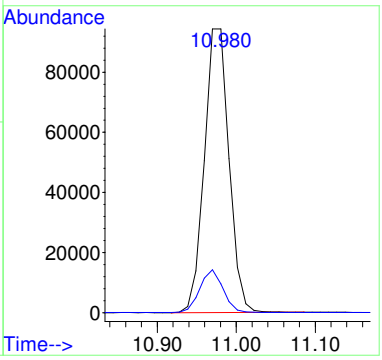
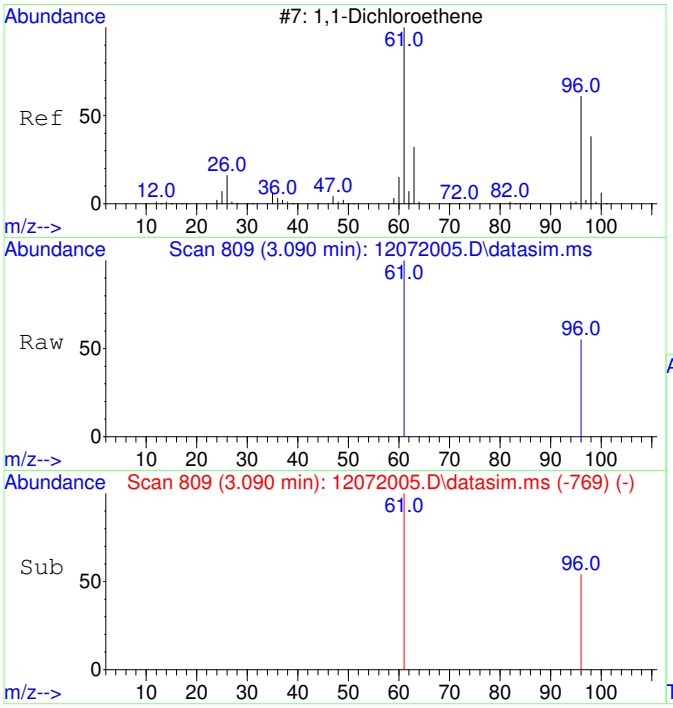


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.980 min Scan# 1983
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:109 Resp: 204852

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	42.3

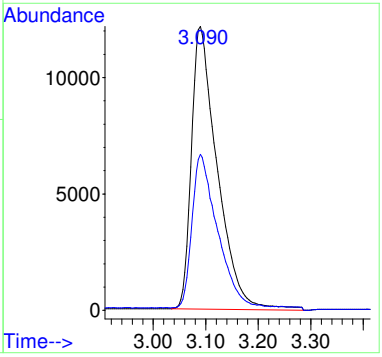


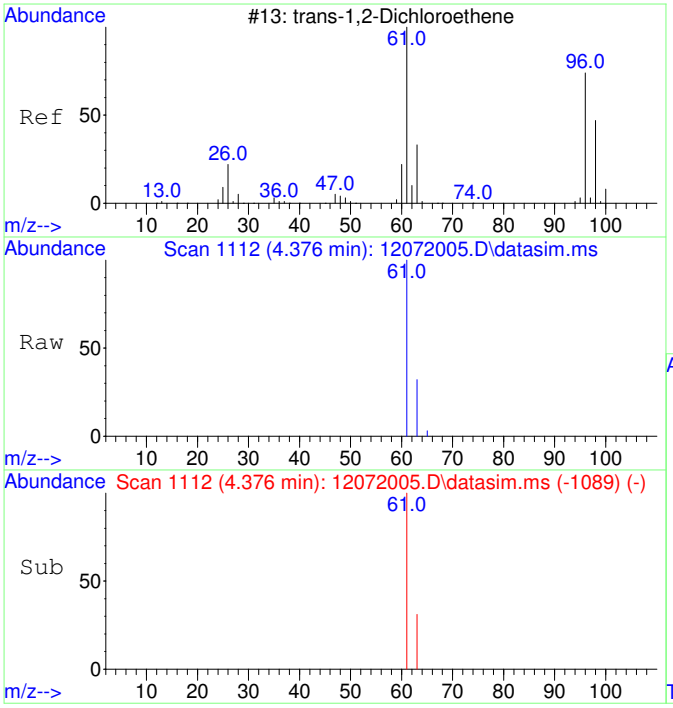


#2
1,1-Dichloroethene
Concen: 5150.06 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 41693

Ion	Ratio	Lower	Upper
61	100		
96	52.8	37.2	97.2

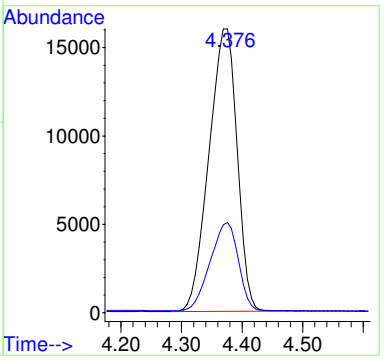


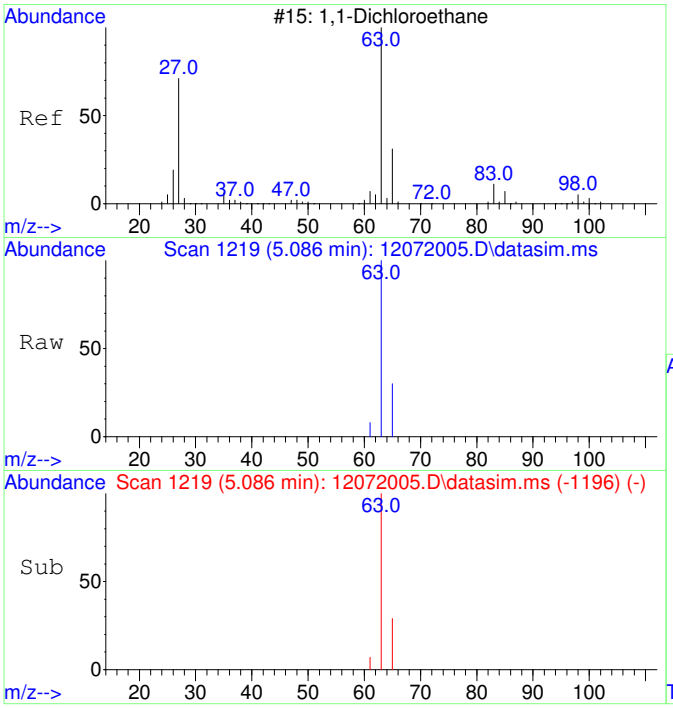


#3
trans-1,2-Dichloroethene
Concen: 5047.09 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 51683

Ion	Ratio	Lower	Upper
61	100		
63	30.9	2.4	62.4

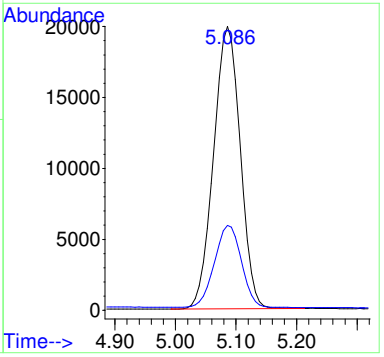


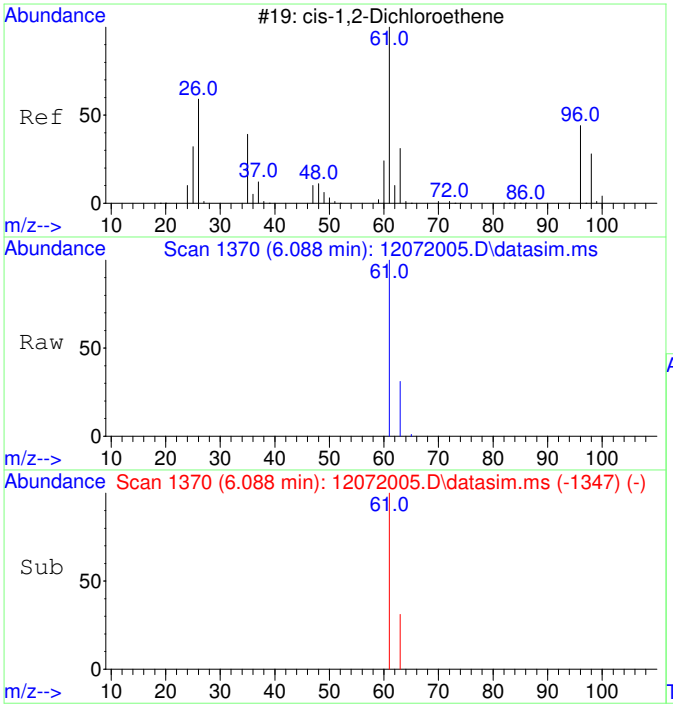


#4
1,1-Dichloroethane
Concen: 4984.90 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 63 Resp: 60968

Ion	Ratio	Lower	Upper
63	100		
65	29.2	1.8	61.8

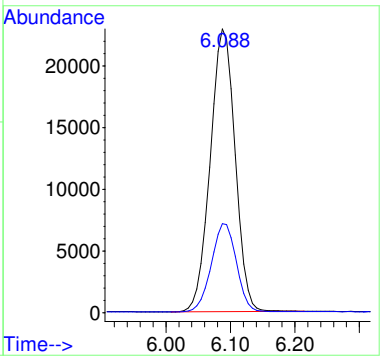


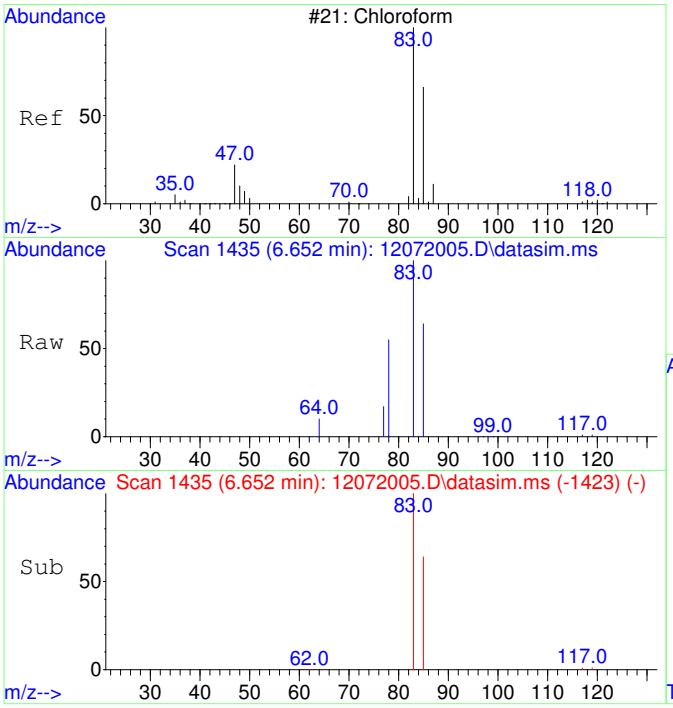


#5
cis-1,2-Dichloroethene
Concen: 4843.94 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 61359

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

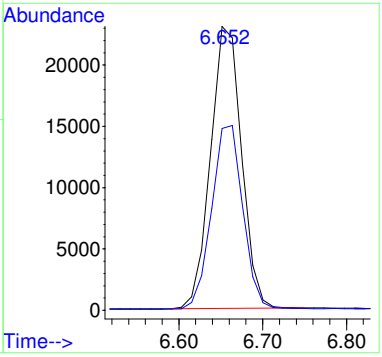


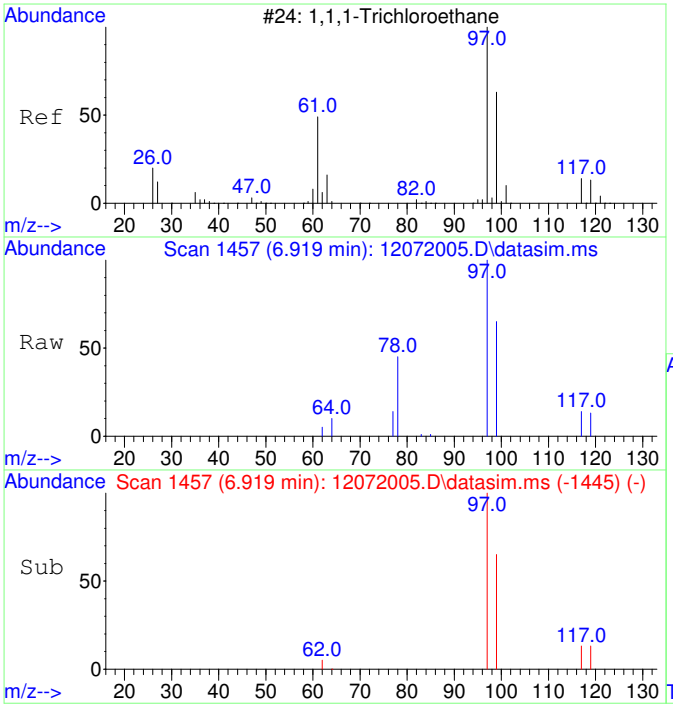


#6
Chloroform
Concen: 4843.71 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 58933

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

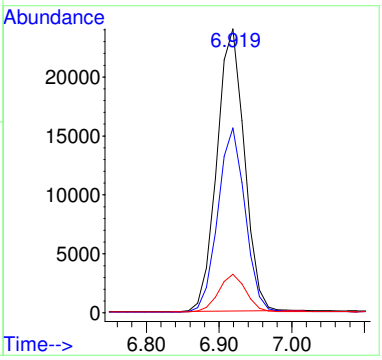


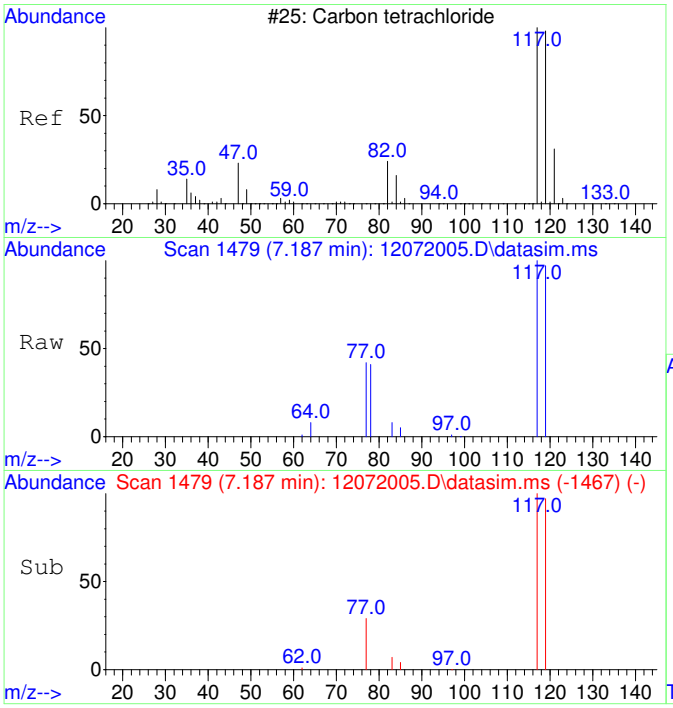


#7
1,1,1-Trichloroethane
Concen: 4813.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 62918

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

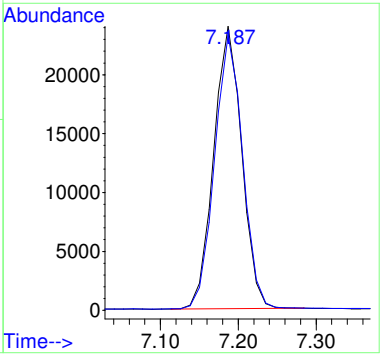


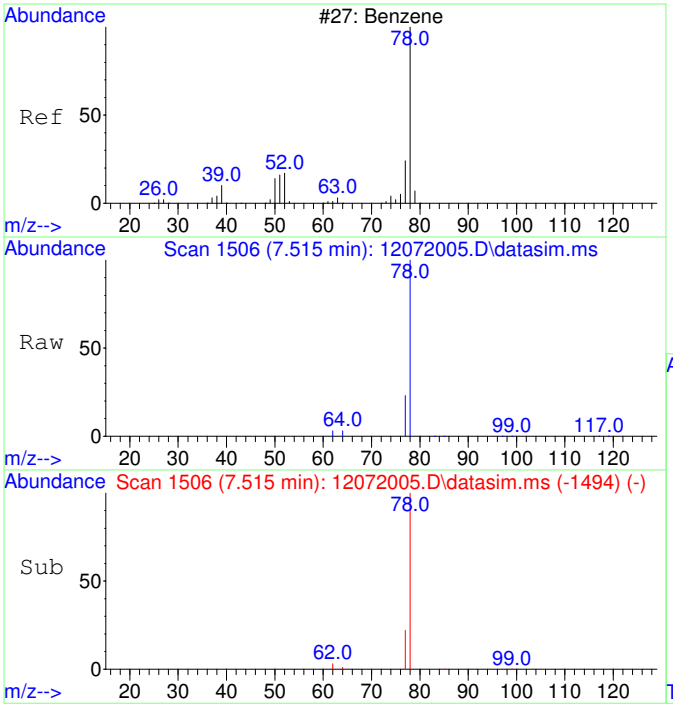


#8
Carbon tetrachloride
Concen: 4820.31 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:117 Resp: 60233

Ion	Ratio	Lower	Upper
117	100		
119	96.5	66.4	126.4

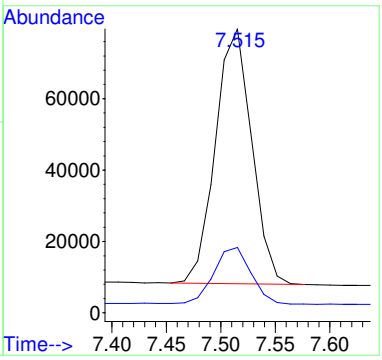


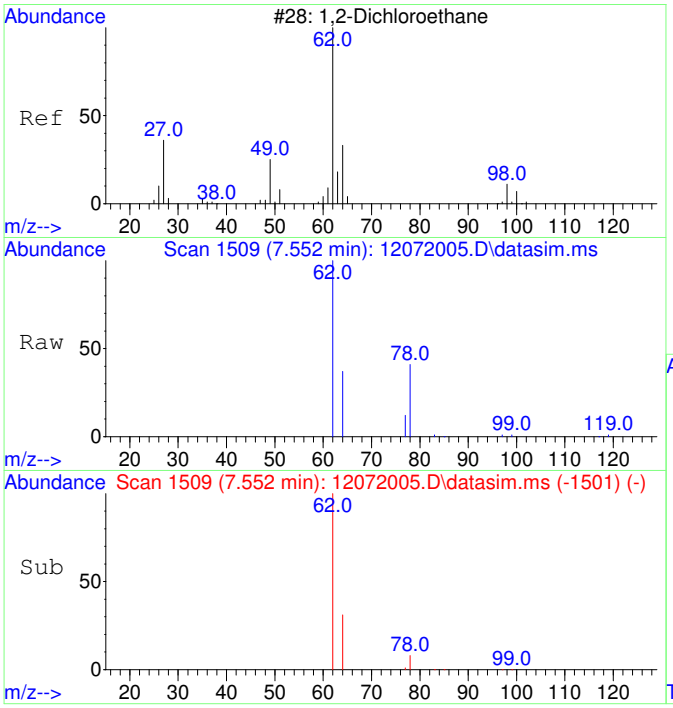


#9
Benzene
Concen: 4805.43 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 78 Resp: 165647

Ion	Ratio	Lower	Upper
78	100		
77	23.4	0.0	53.2

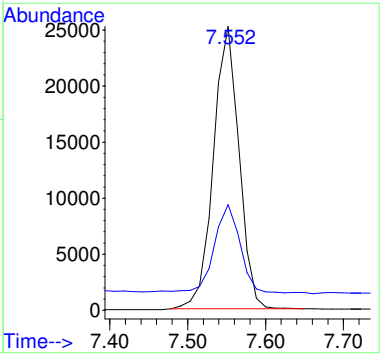


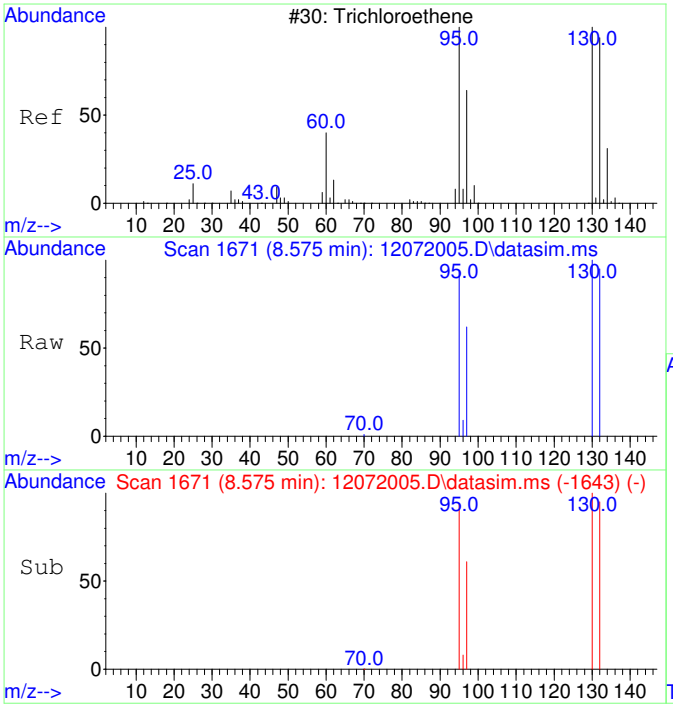


#10
1,2-Dichloroethane
Concen: 4890.64 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 62 Resp: 57511

Ion	Ratio	Lower	Upper
62	100		
64	31.0	2.3	62.3

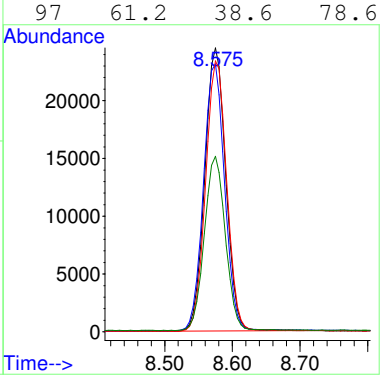


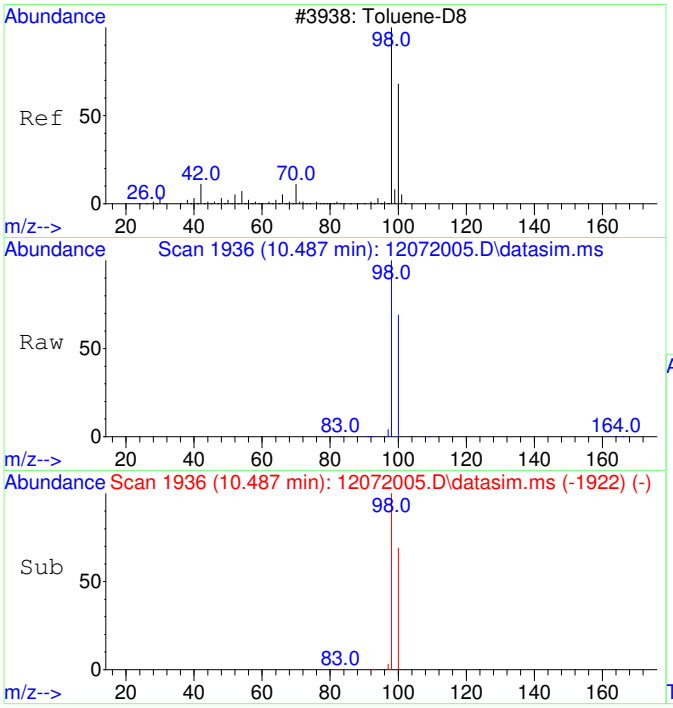


#11
Trichloroethene
Concen: 4836.52 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:130 Resp: 52638

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

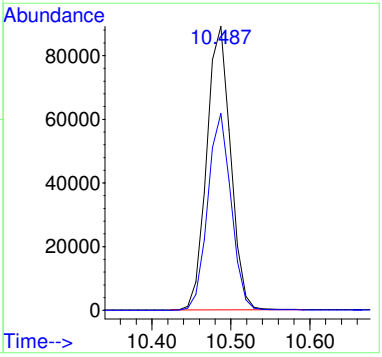


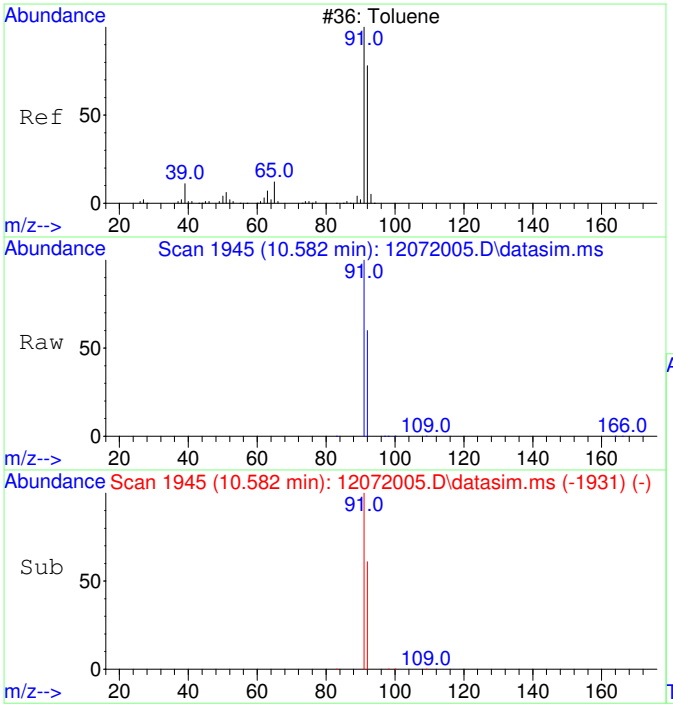


#12
Toluene-d8
Concen: 4711.13 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 98 Resp: 186913

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

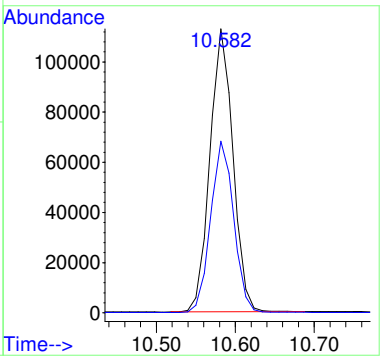


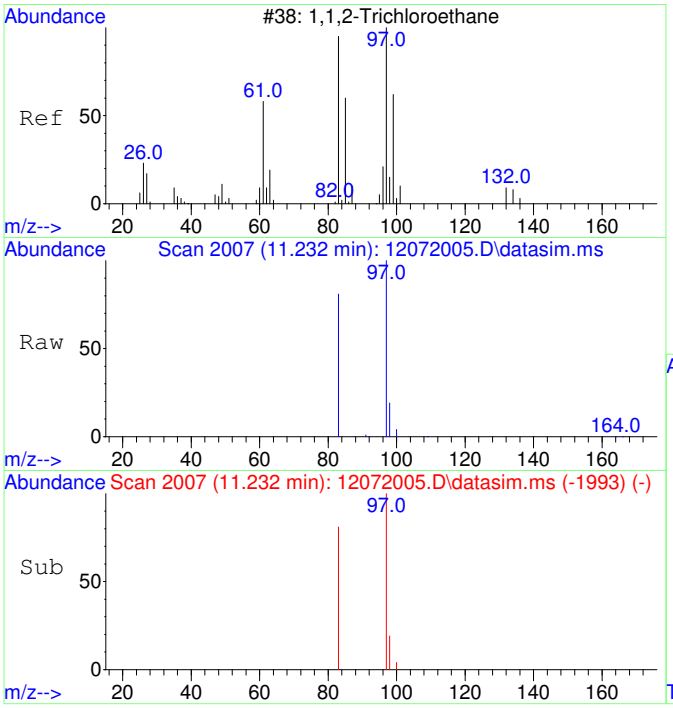


#13
Toluene
Concen: 4618.17 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 228131

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

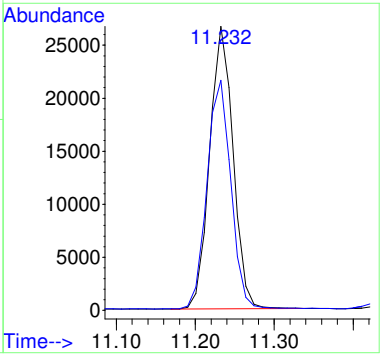


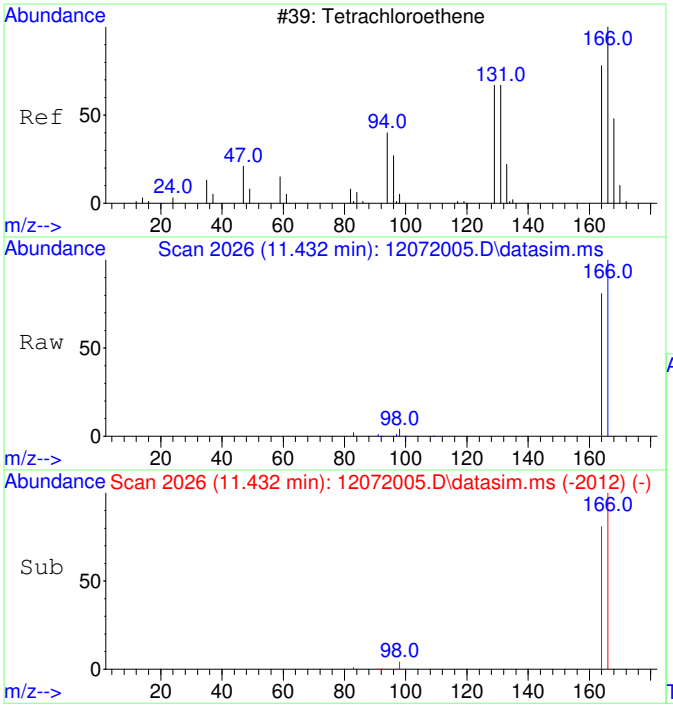


#14
1,1,2-Trichloroethane
Concen: 4785.50 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 54754

Ion	Ratio	Lower	Upper
97	100		
83	82.2	51.2	111.2

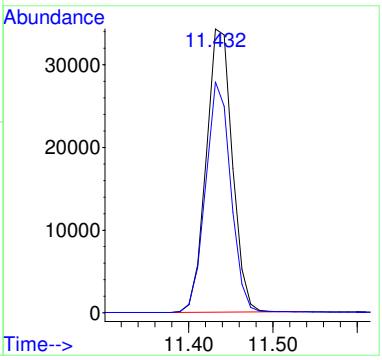


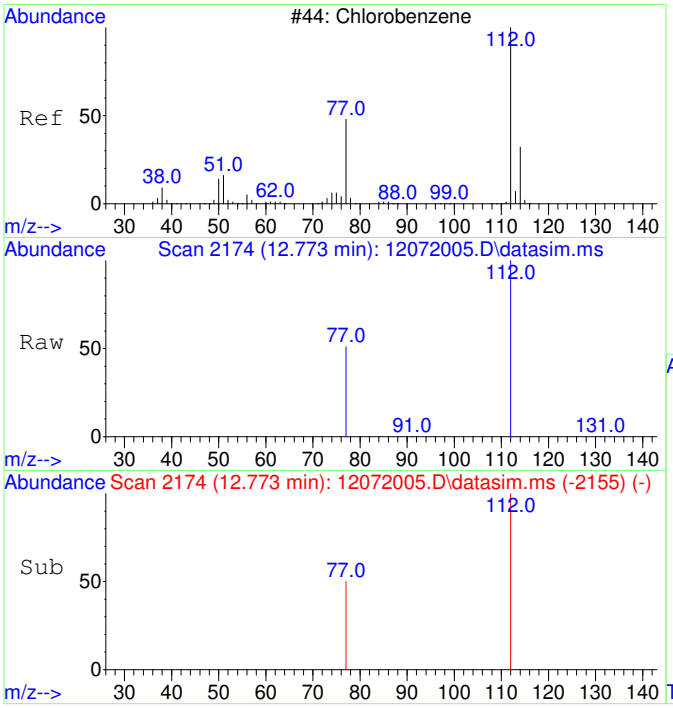


#15
Tetrachloroethene
Concen: 4807.99 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:166 Resp: 73978

Ion	Ratio	Lower	Upper
166	100		
164	78.3	47.8	107.8

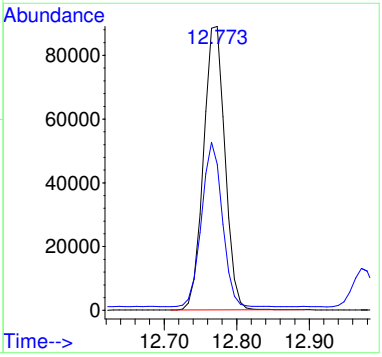


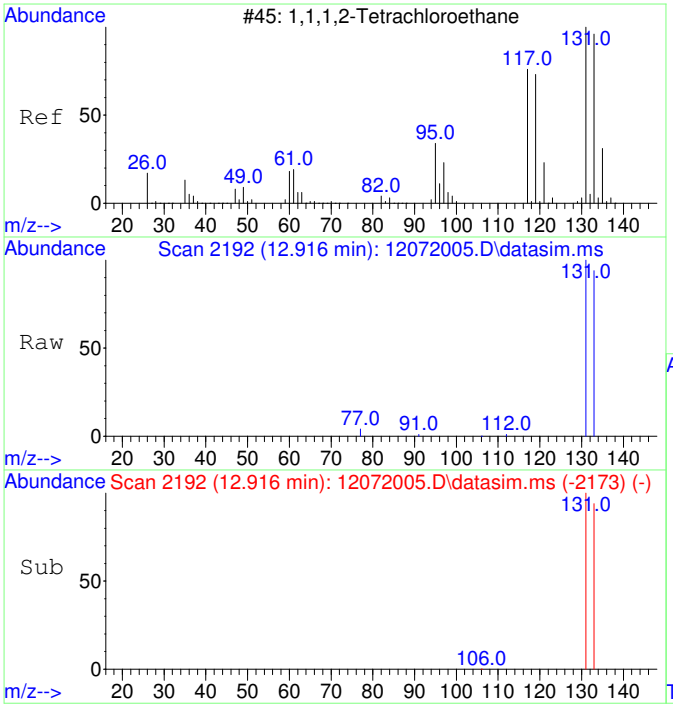


#16
Chlorobenzene
Concen: 4798.54 ug/L
RT: 12.773 min Scan# 2174
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:112 Resp: 183636

Ion	Ratio	Lower	Upper
112	100		
77	55.5	23.6	83.6

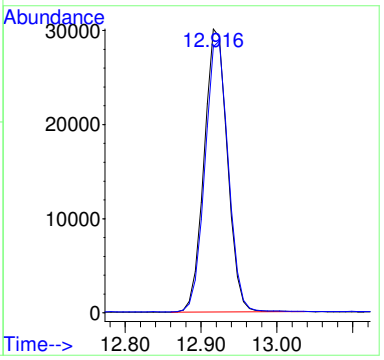


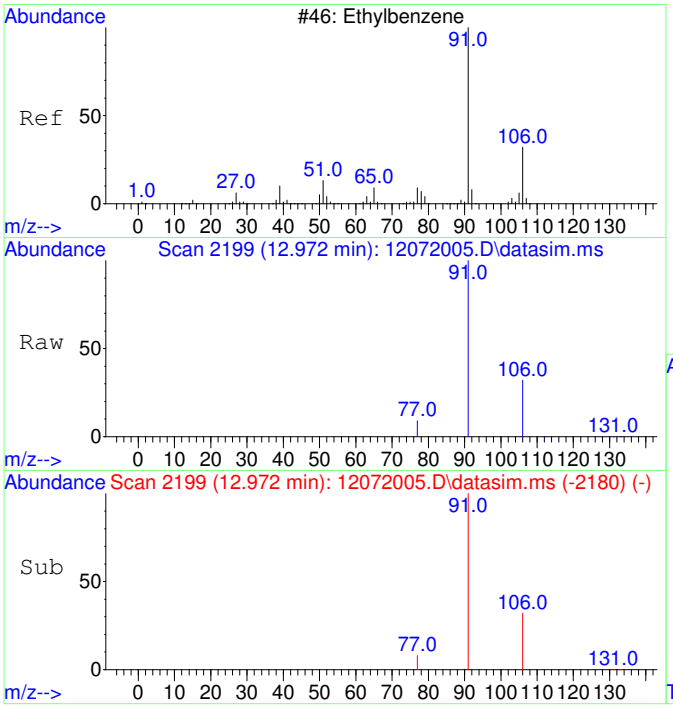


#17
1,1,1,2-Tetrachloroethane
Concen: 4786.10 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:131 Resp: 64105

Ion	Ratio	Lower	Upper
131	100		
133	95.6	66.3	126.3

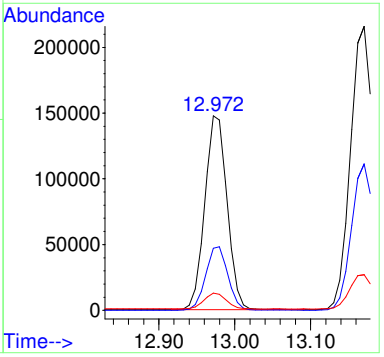


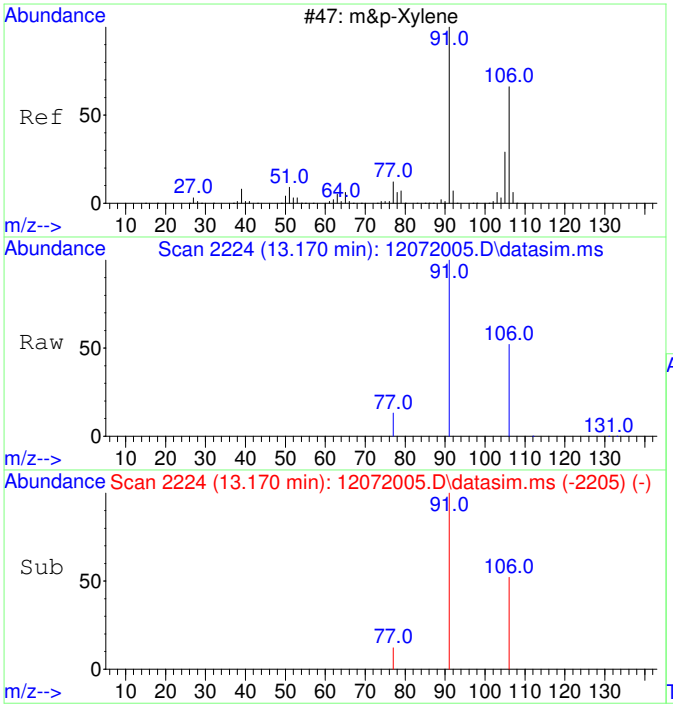


#18
Ethylbenzene
Concen: 4769.02 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 300900

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

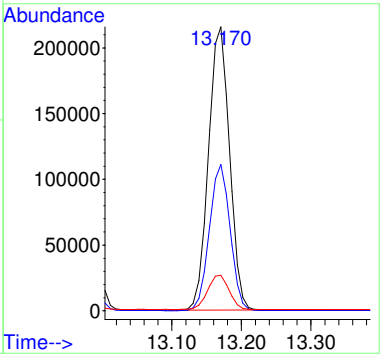


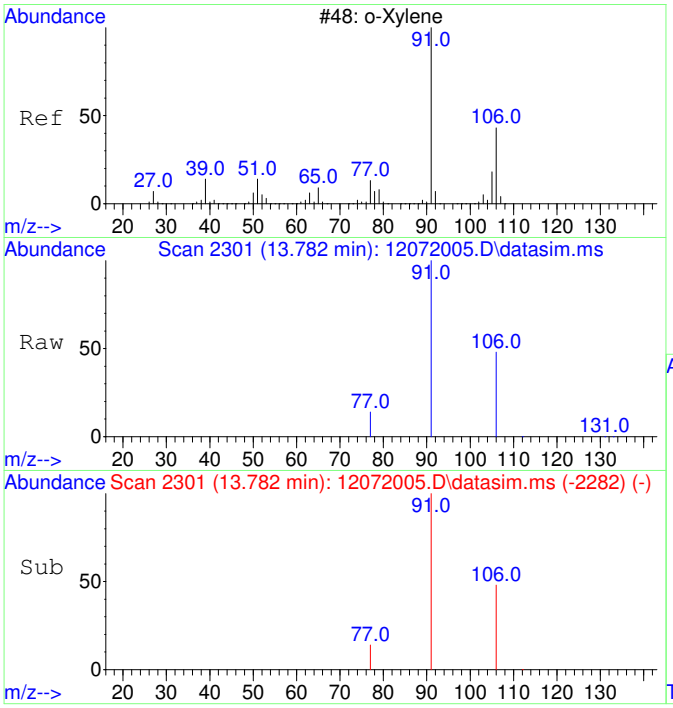


#19
m&p-Xylene
Concen: 9324.93 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 453072

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

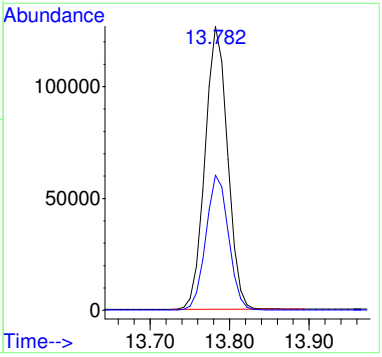


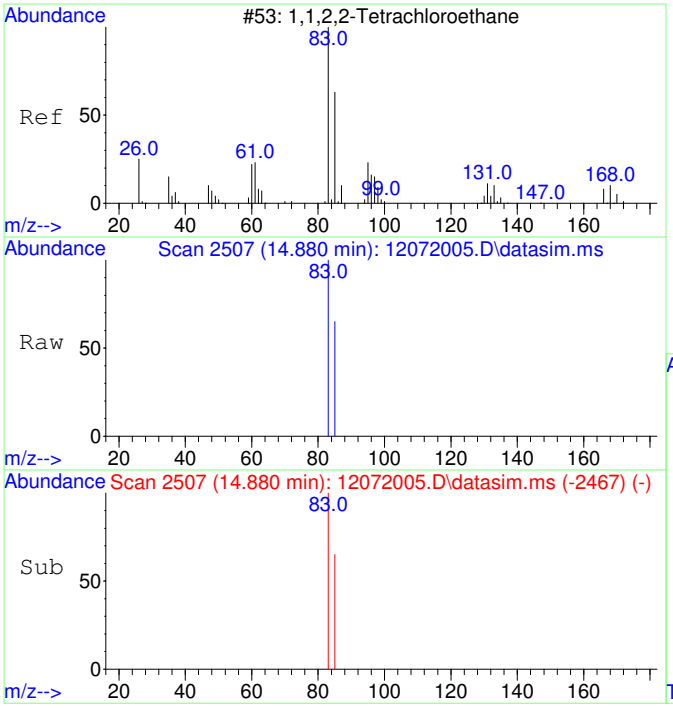


#20
o-Xylene
Concen: 4753.32 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 248059

Ion	Ratio	Lower	Upper
91	100		
106	48.0	19.2	79.2

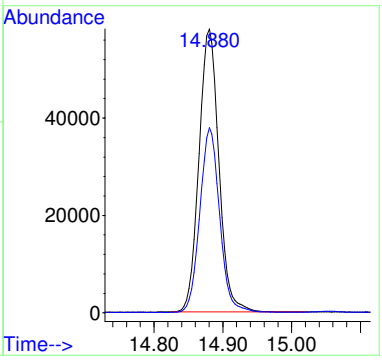


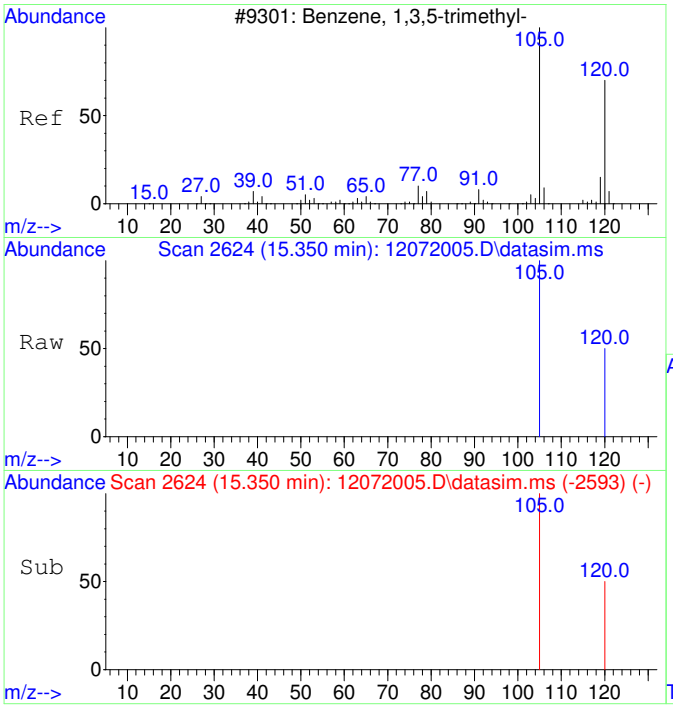


#21
1,1,2,2-Tetrachloroethane
Concen: 4794.47 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 116584

Ion	Ratio	Lower	Upper
83	100		
85	64.5	34.8	94.8

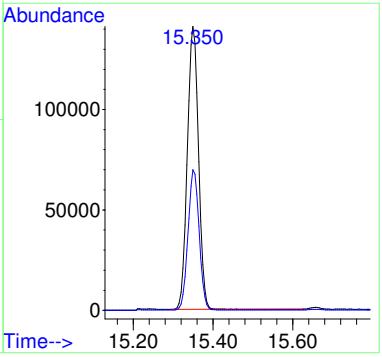


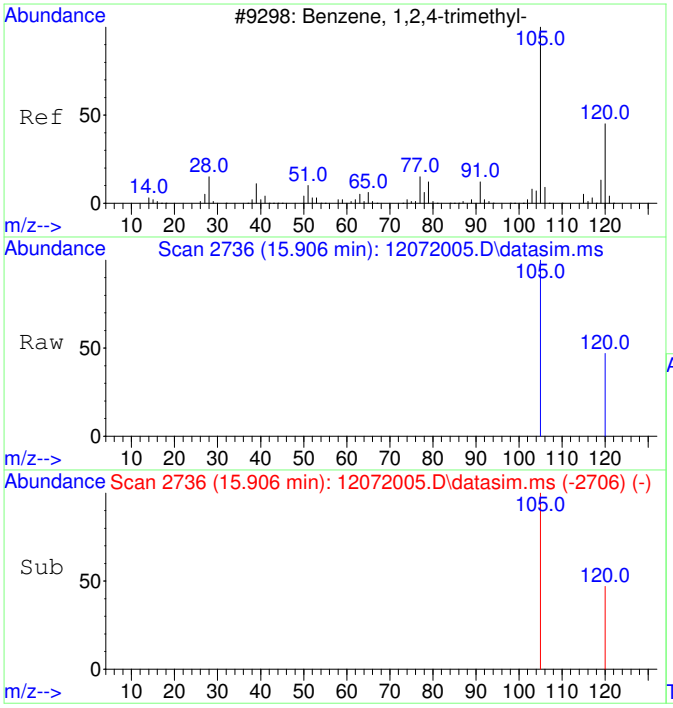


#22
1,3,5-Trimethylbenzene
Concen: 4771.13 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 273812

Ion	Ratio	Lower	Upper
105	100		
120	49.4	21.1	81.1

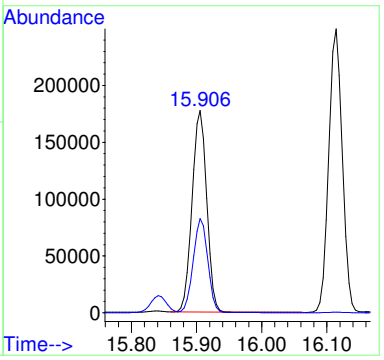


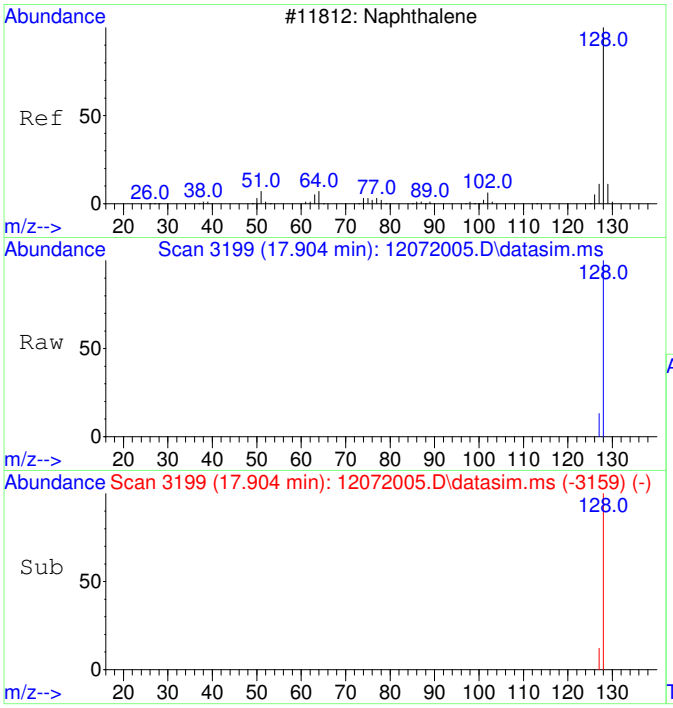


#23
1,2,4-Trimethylbenzene
Concen: 4711.81 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 276580

Ion	Ratio	Lower	Upper
105	100		
120	45.5	17.2	77.2

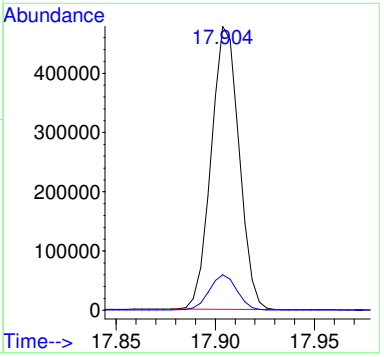


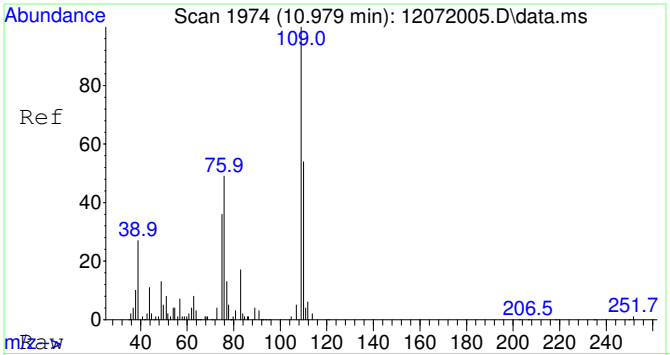


#24
Naphthalene
Concen: 5076.38 ug/L
RT: 17.904 min Scan# 3199
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:128 Resp: 465960

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

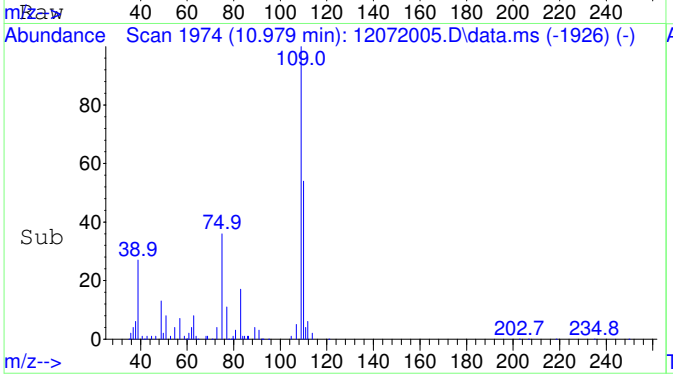


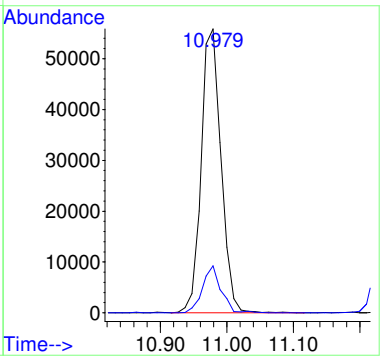


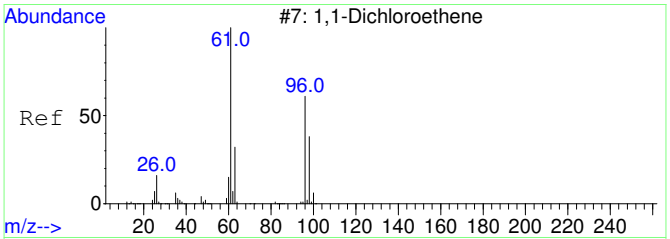
#25
2-Fluorotoluene SCAN
Concen: 5000.00 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

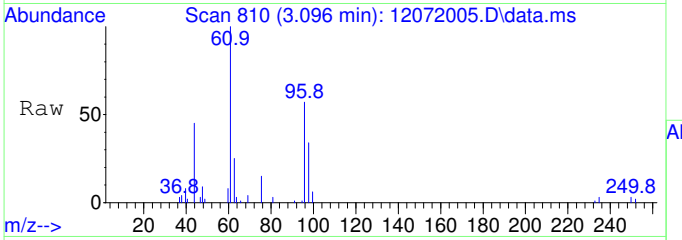
Tgt Ion:109 Resp: 116264

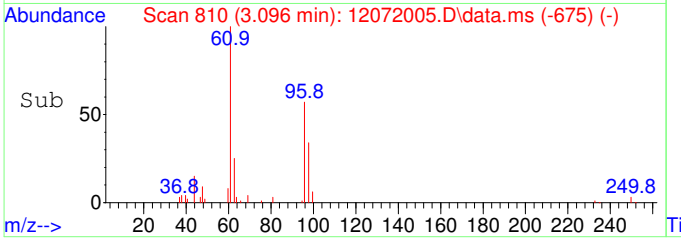
Ion	Ratio	Lower	Upper
109	100		
83	15.5	0.0	43.8







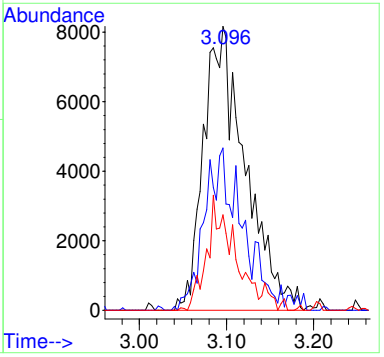


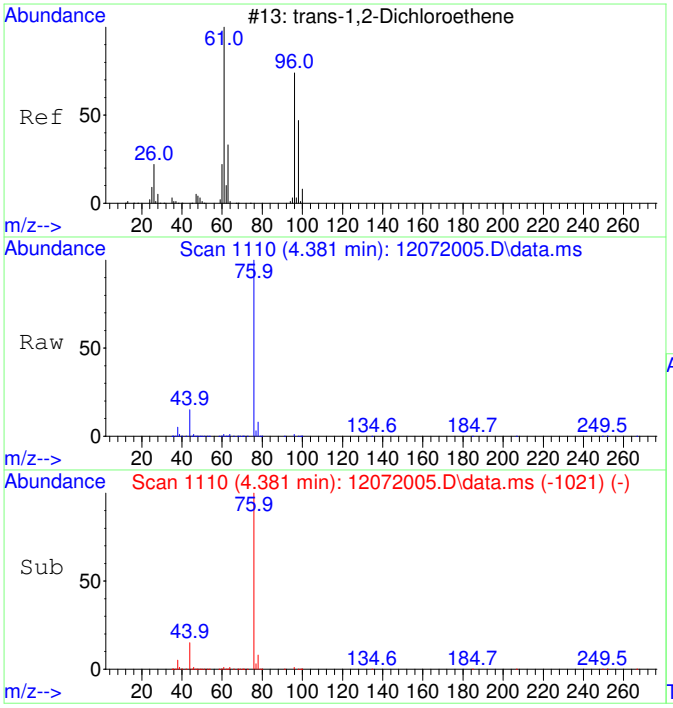


#26
1,1-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 3.096 min Scan# 810
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 27142

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

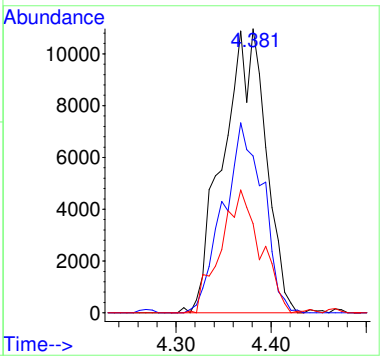


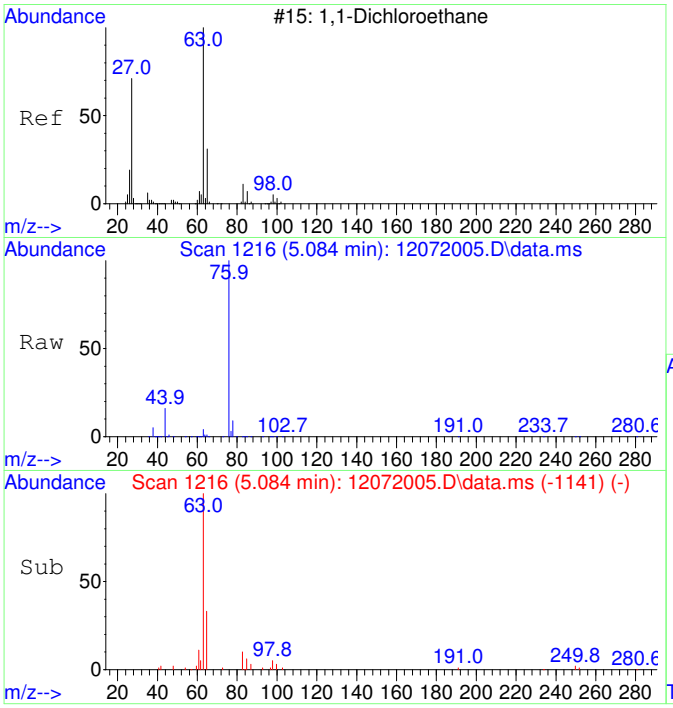


#27
trans-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 4.381 min Scan# 1110
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 34571

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

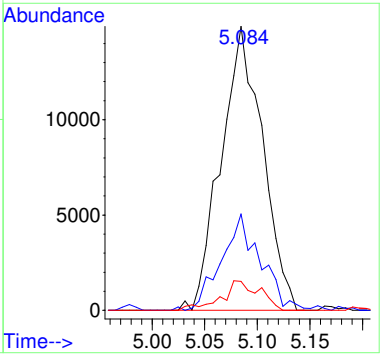


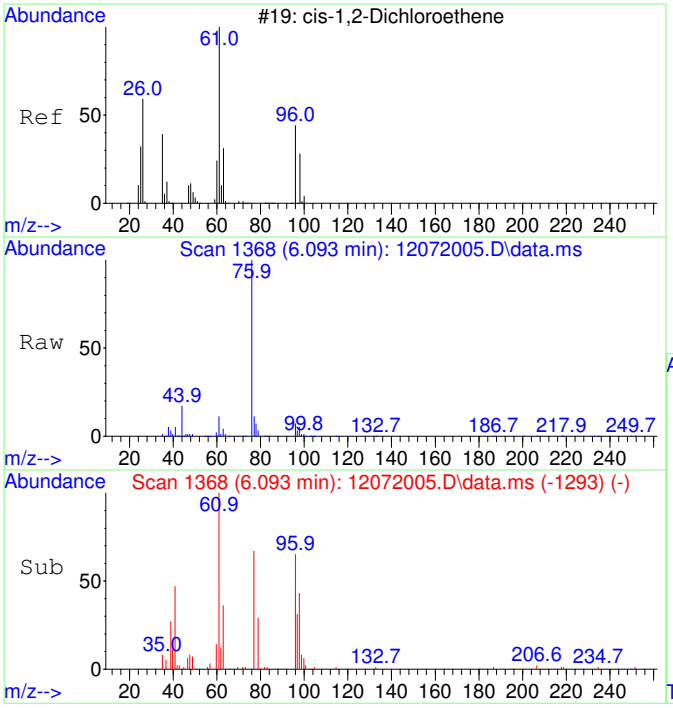


#28
1,1-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 63 Resp: 40806

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

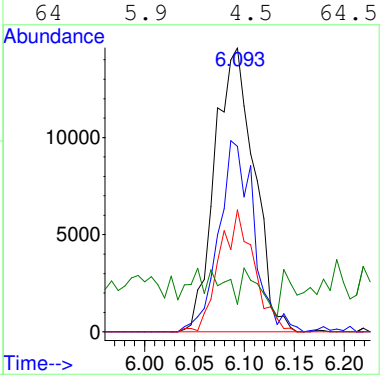


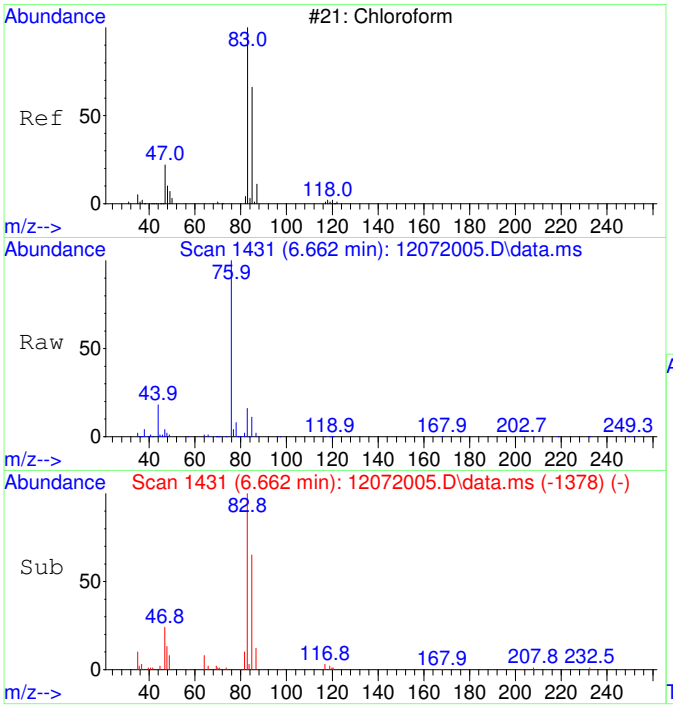


#29
cis-1,2-Dichloroethene SCAN
Concen: 5000.00 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 61 Resp: 40115

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

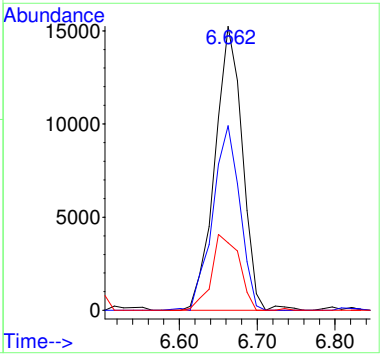


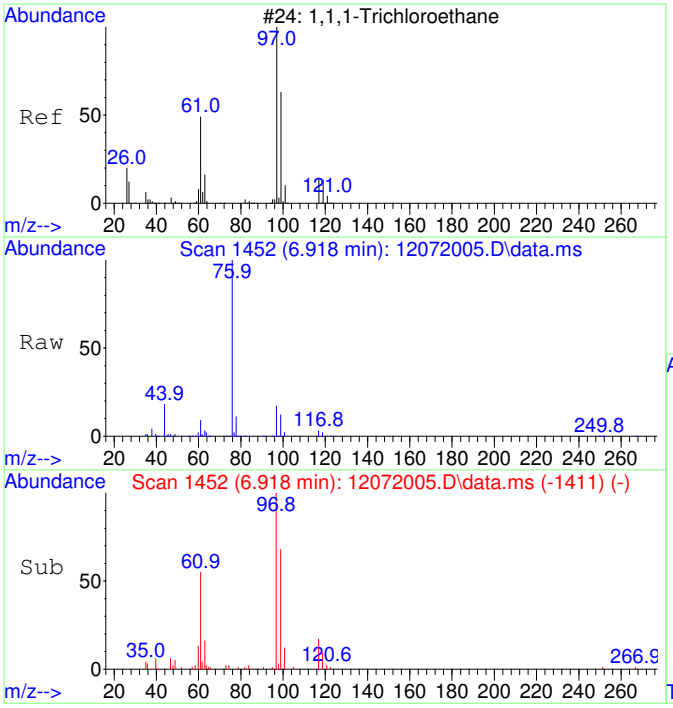


#30
Chloroform SCAN
Concen: 5000.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 37416

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

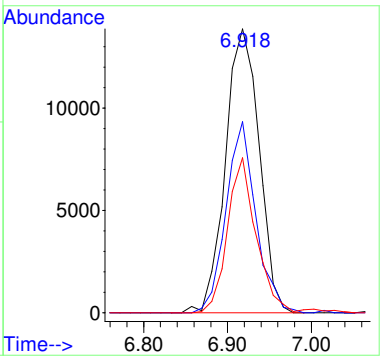


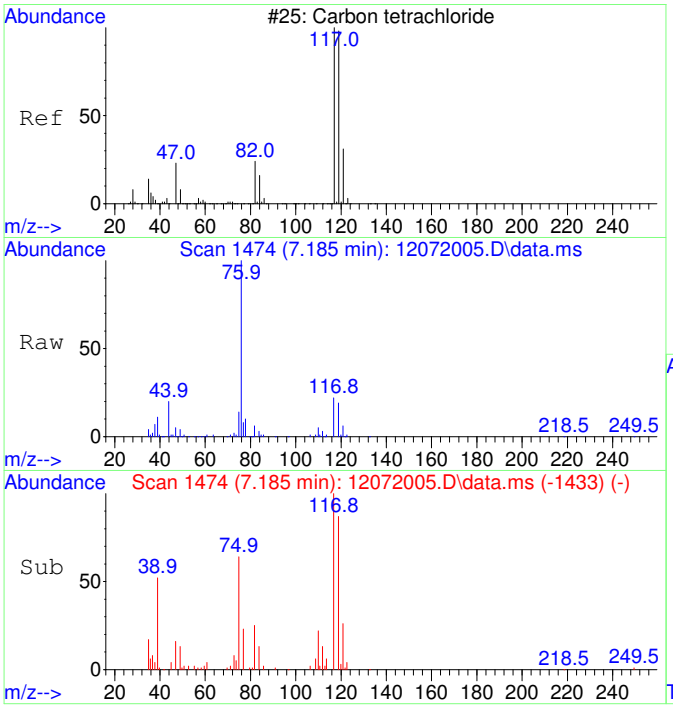


#31
1,1,1-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 38610

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

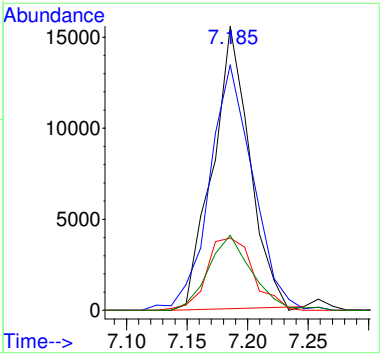


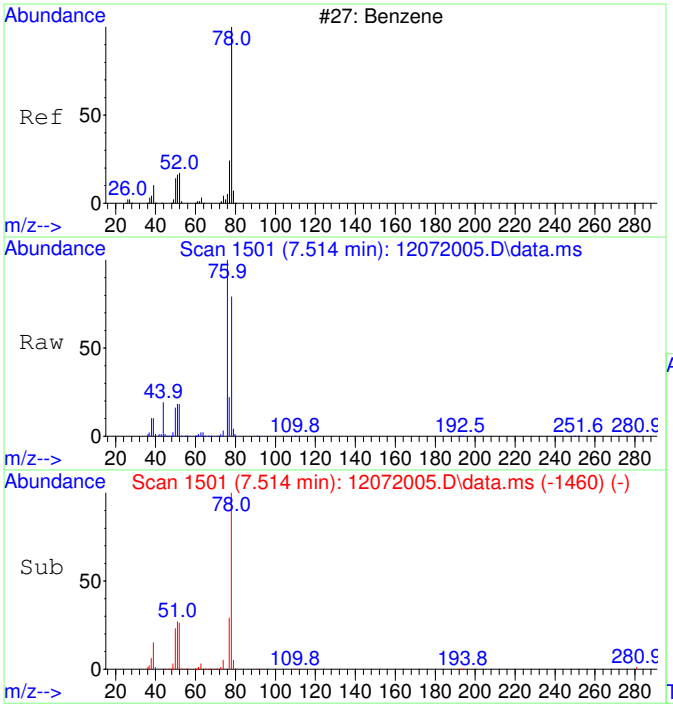


#32
Carbon tetrachloride SCAN
Concen: 5000.00 ug/L
RT: 7.185 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:117 Resp: 32994

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

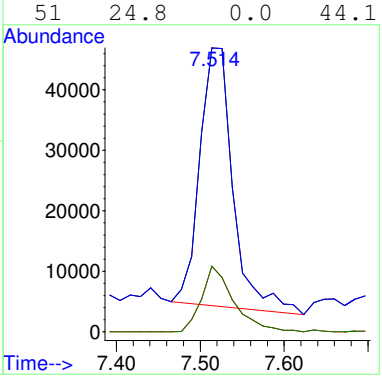


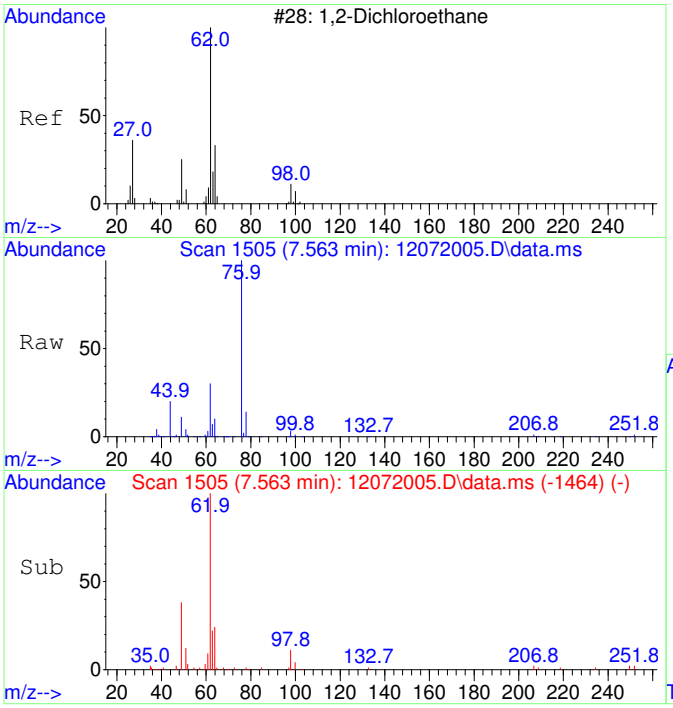


#33
Benzene SCAN
Concen: 5000.00 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 78 Resp: 116808

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

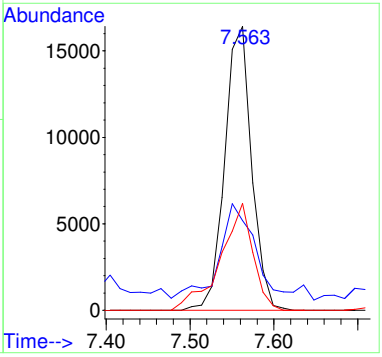


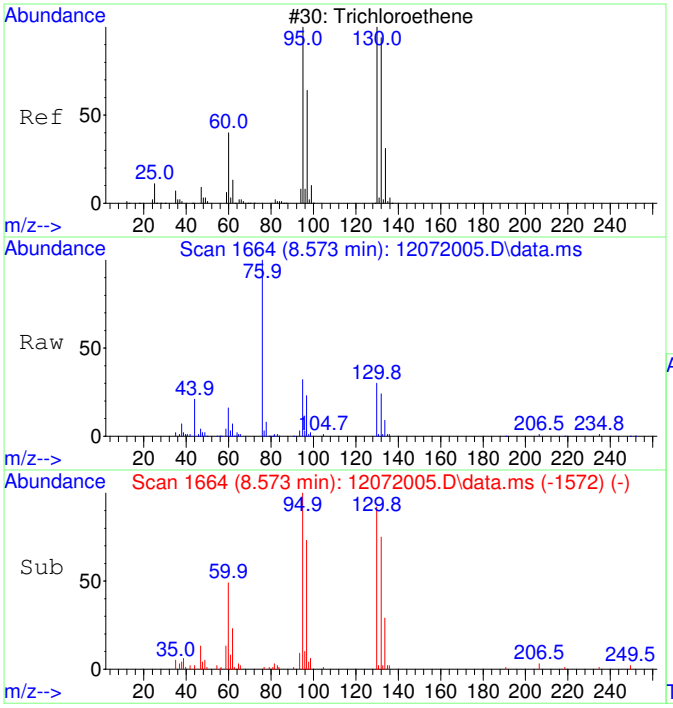


#34
1,2-Dichloroethane SCAN
Concen: 5000.00 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 62 Resp: 36537

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

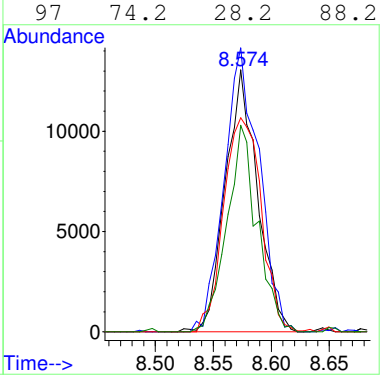


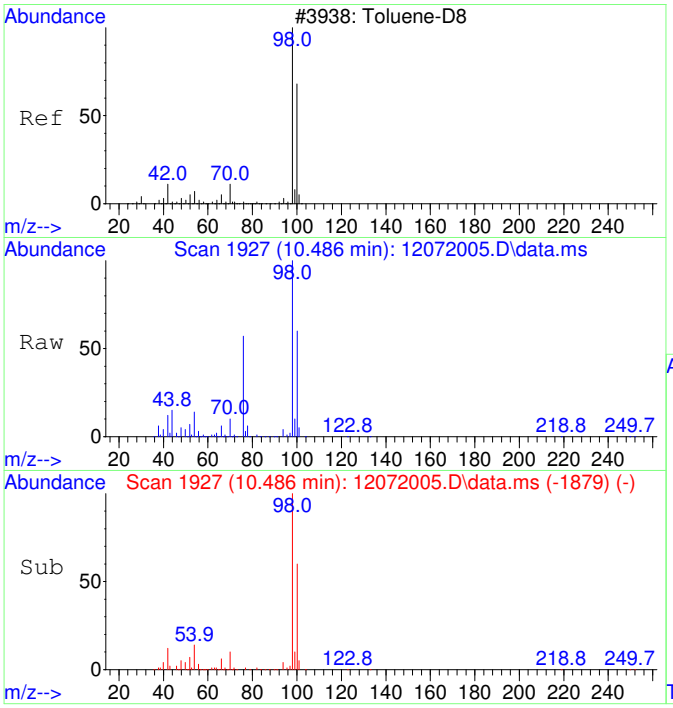


#35
Trichloroethene SCAN
Concen: 5000.00 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:130 Resp: 25470

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

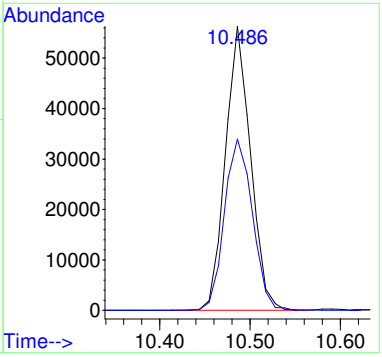


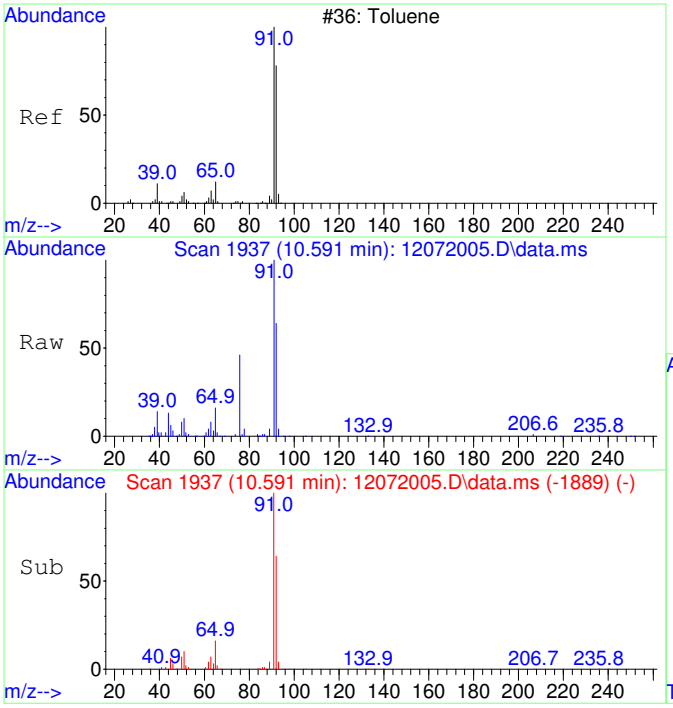


#36
Toluene-d8 SCAN
Concen: 5000.00 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 98 Resp: 109043

Ion	Ratio	Lower	Upper
98	100		
100	67.2	40.0	100.0

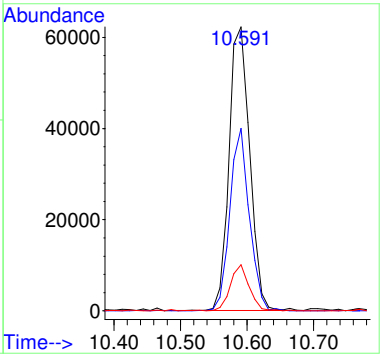


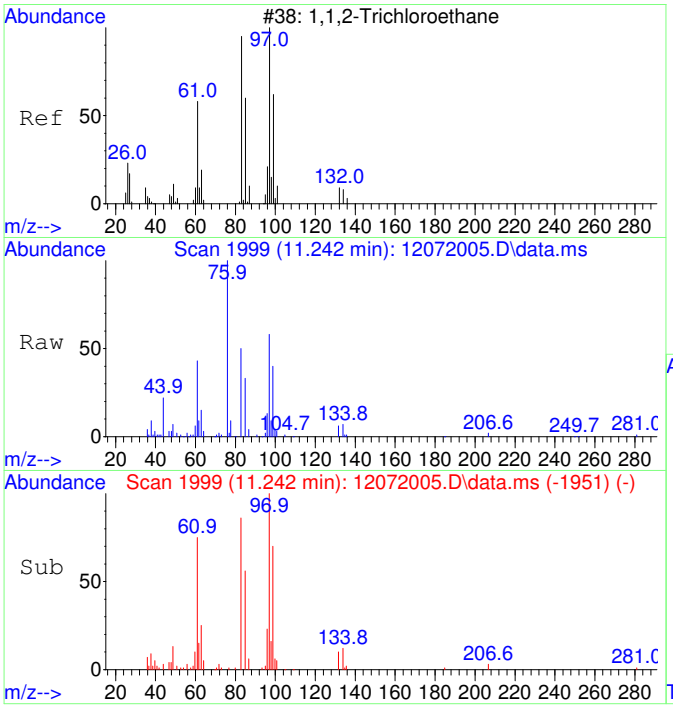


#37
Toluene SCAN
Concen: 5000.00 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 134257

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

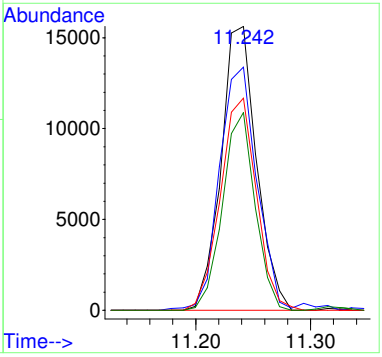


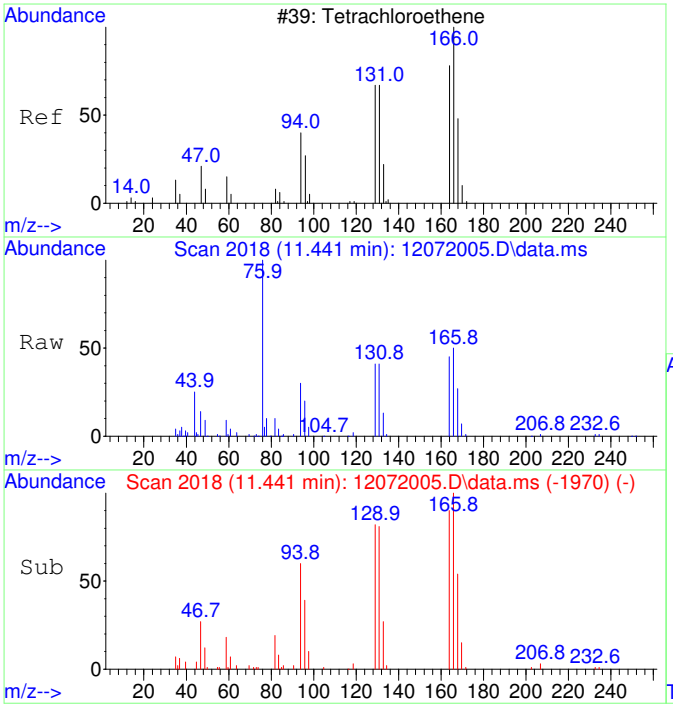


#38
1,1,2-Trichloroethane SCAN
Concen: 5000.00 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 97 Resp: 33652

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

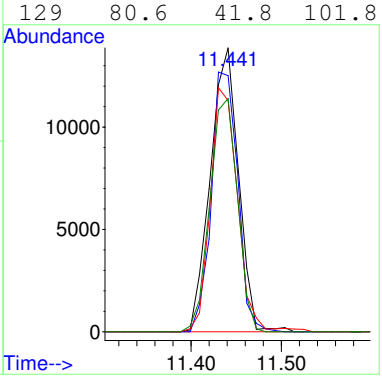


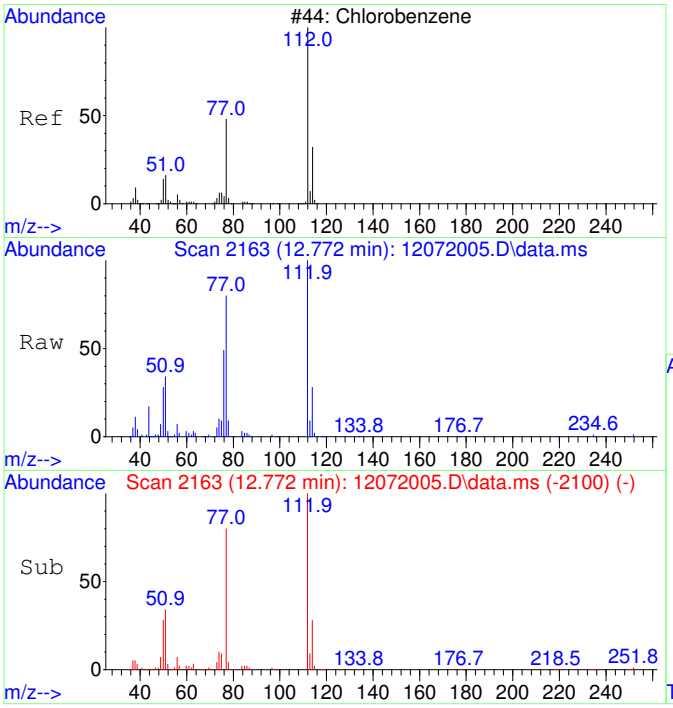


#39
Tetrachloroethene SCAN
Concen: 5000.00 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:166 Resp: 30203

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

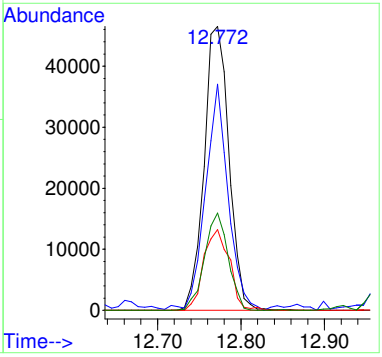


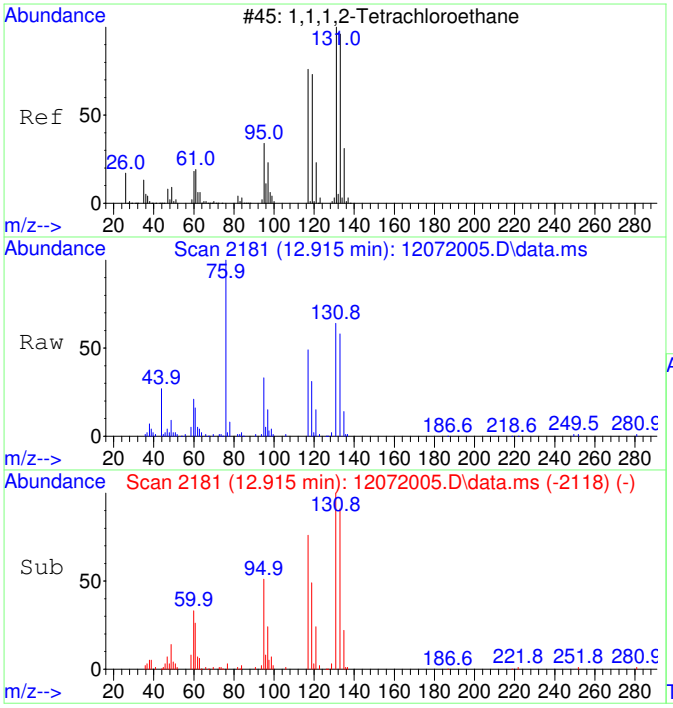


#40
Chlorobenzene SCAN
Concen: 5000.00 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:112 Resp: 96431

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

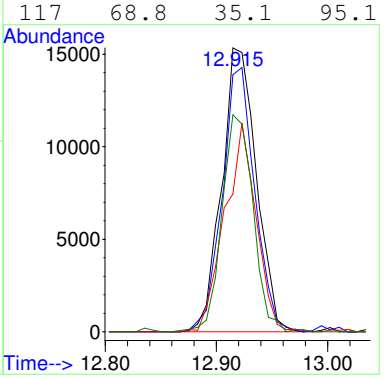


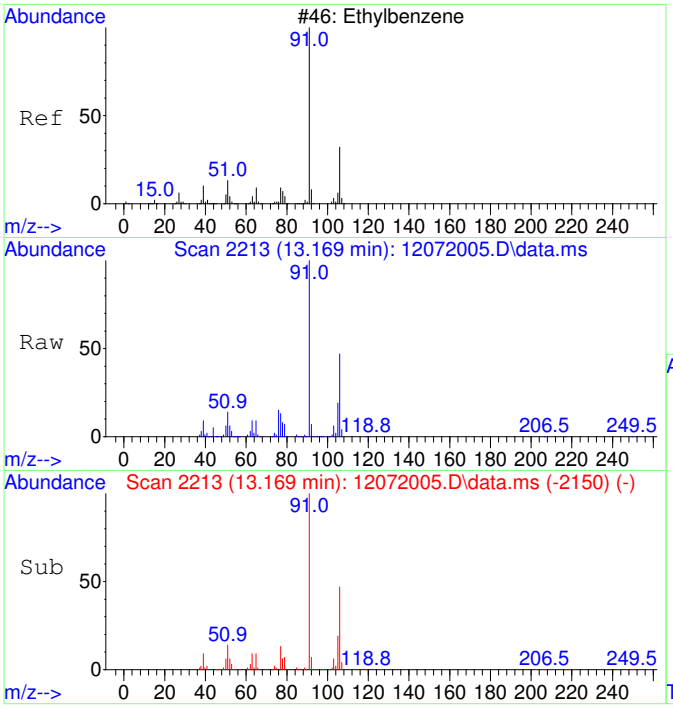


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:131 Resp: 33269

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

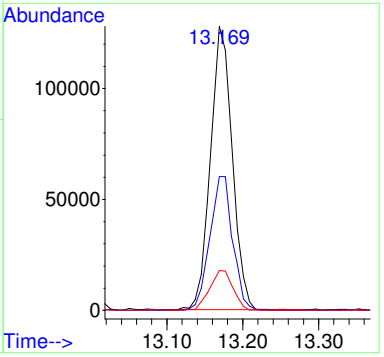


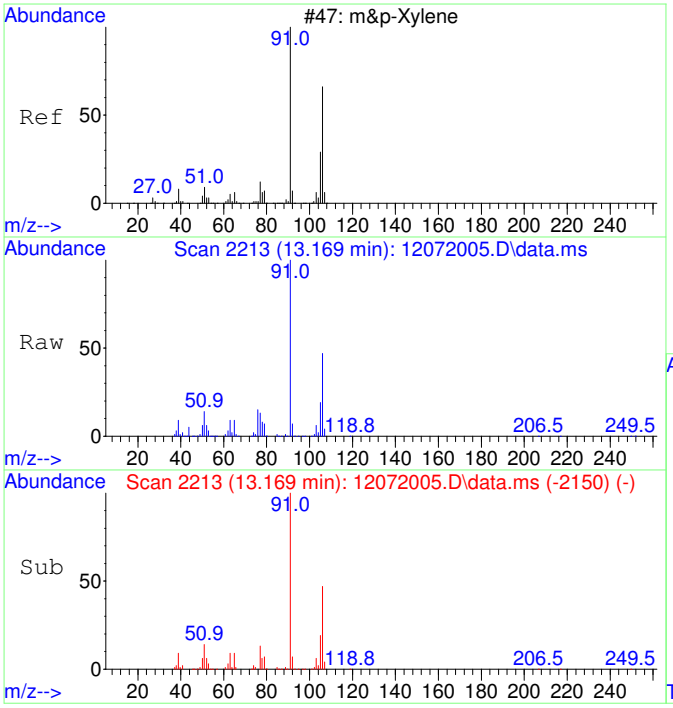


#42
Ethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 255849

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

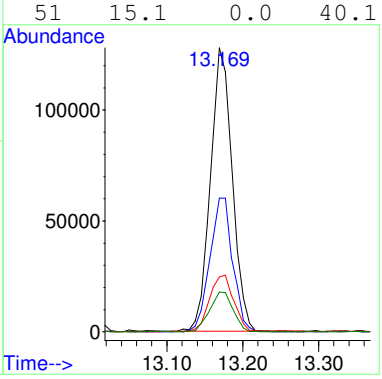


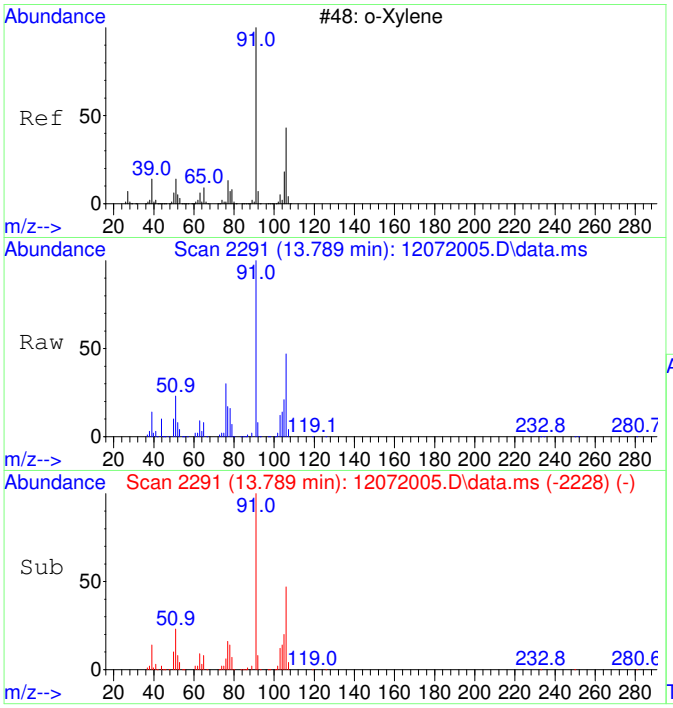


#43
m&p-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 255849

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

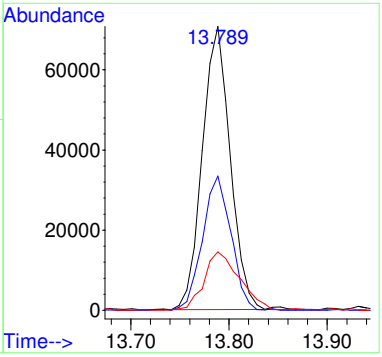


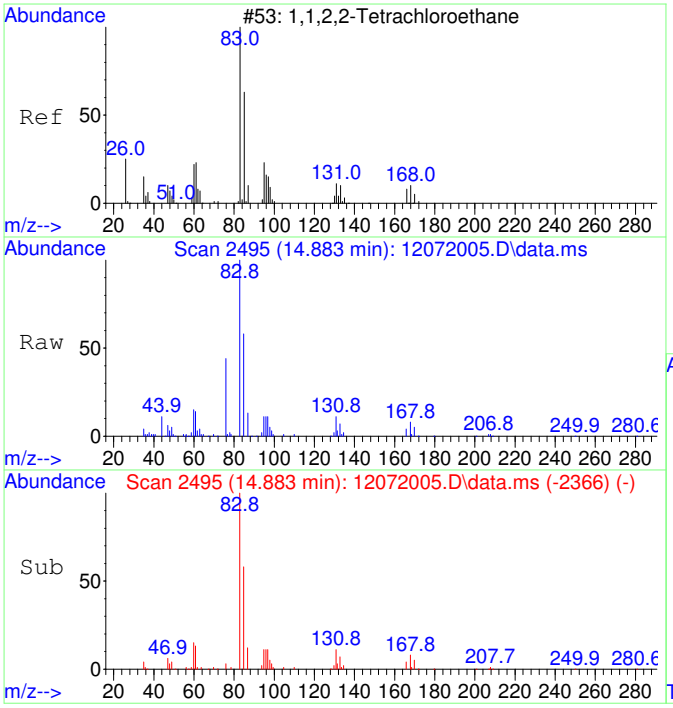


#44
o-Xylene SCAN
Concen: 5000.00 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 91 Resp: 139708

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

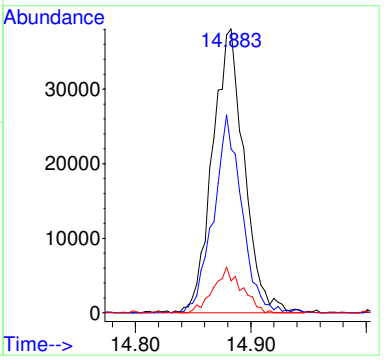


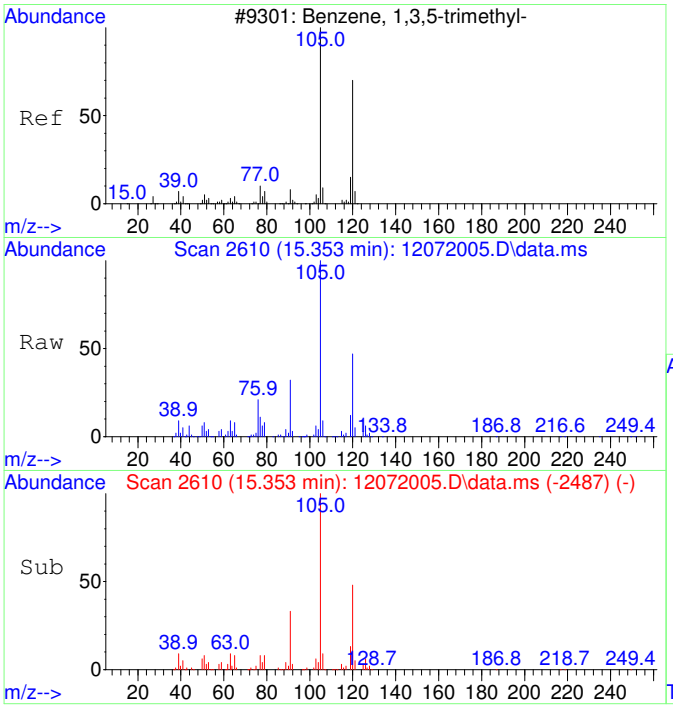


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 5000.00 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion: 83 Resp: 72641

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

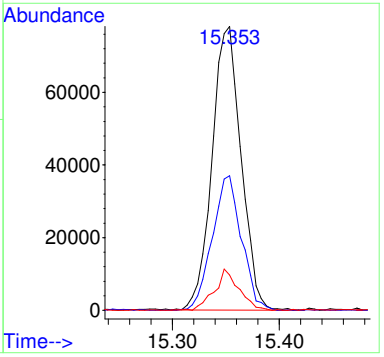


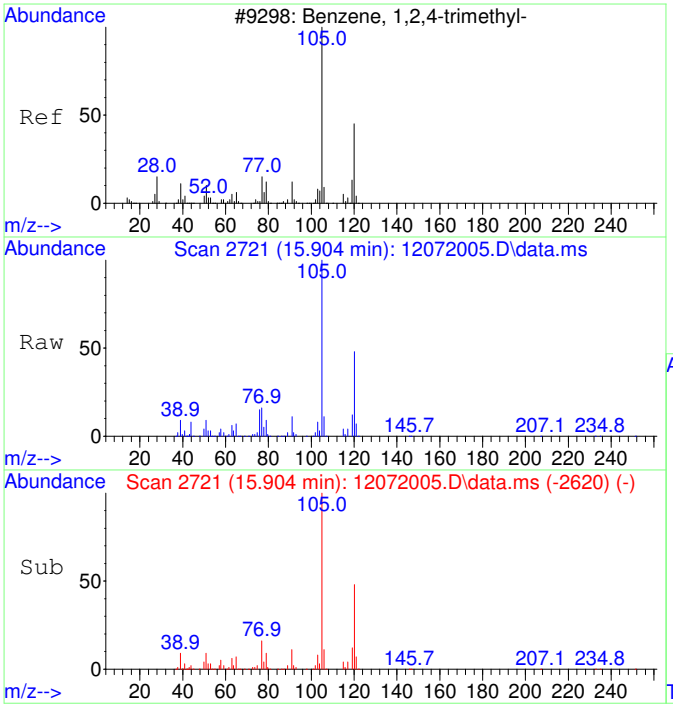


#46
1,3,5-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 147389

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

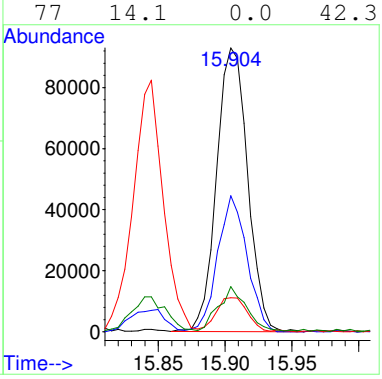


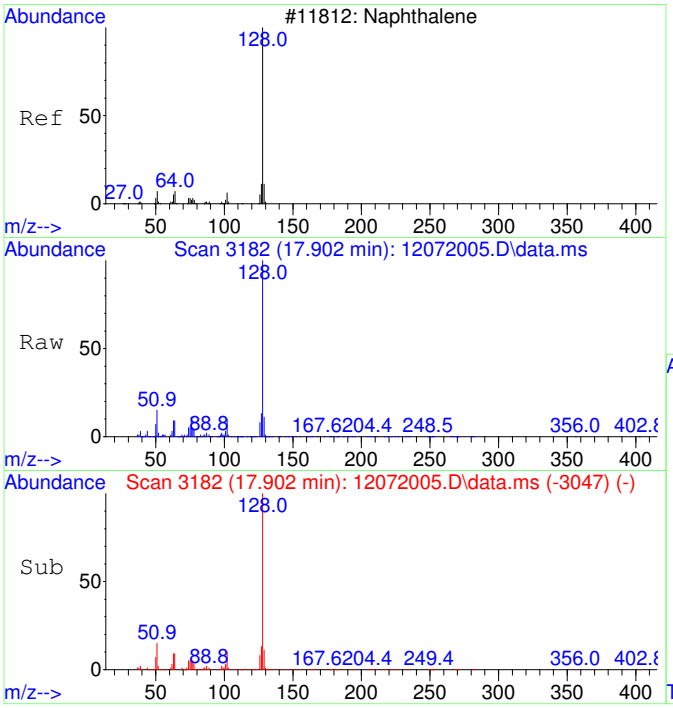


#47
1,2,4-Trimethylbenzene SCAN
Concen: 5000.00 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:105 Resp: 150588

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

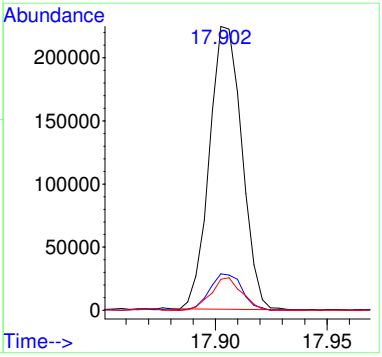




#48
Naphthalene SCAN
Concen: 5000.00 ug/L
RT: 17.902 min Scan# 3182
Delta R.T. 0.000 min
Lab File: 12072005.D
Acq: 7 Dec 2020 13:33

Tgt Ion:128 Resp: 226034

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



S20L021-CAL4

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

Before Manual Integration

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

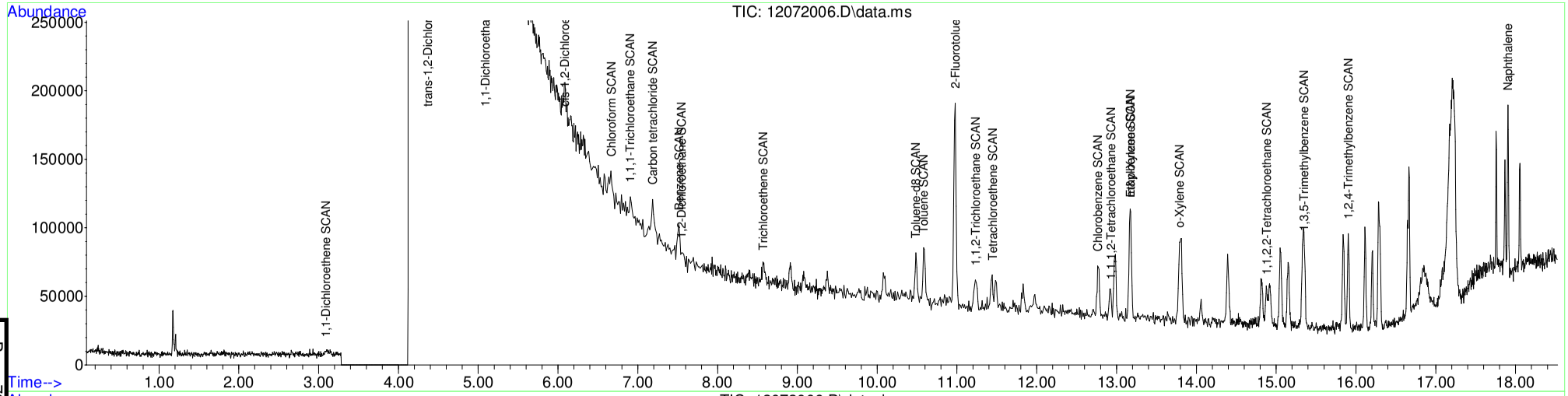
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	192171	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	40349	1084.10 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 21.68%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene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

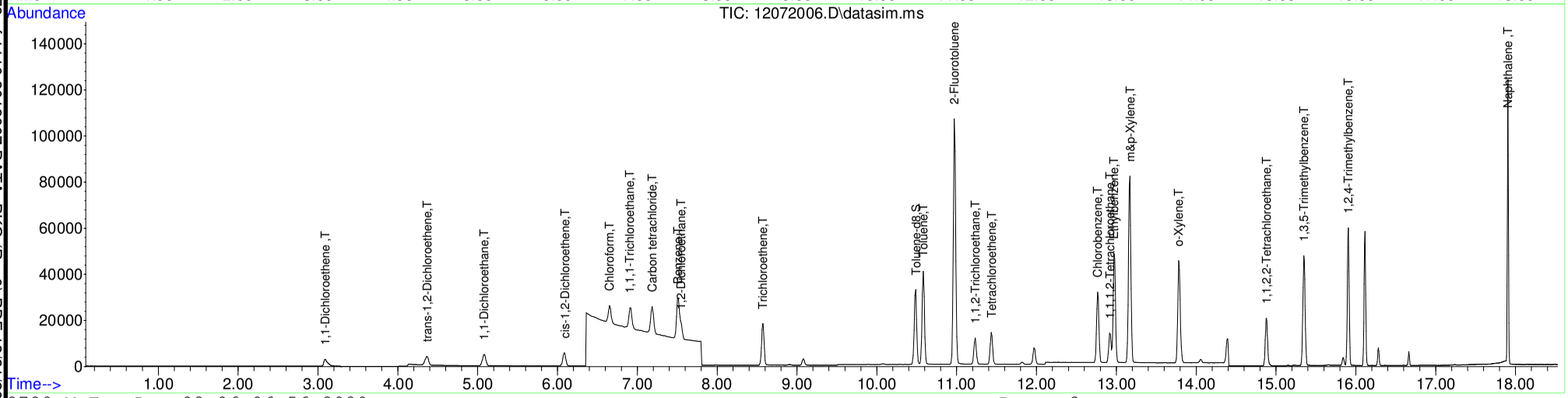
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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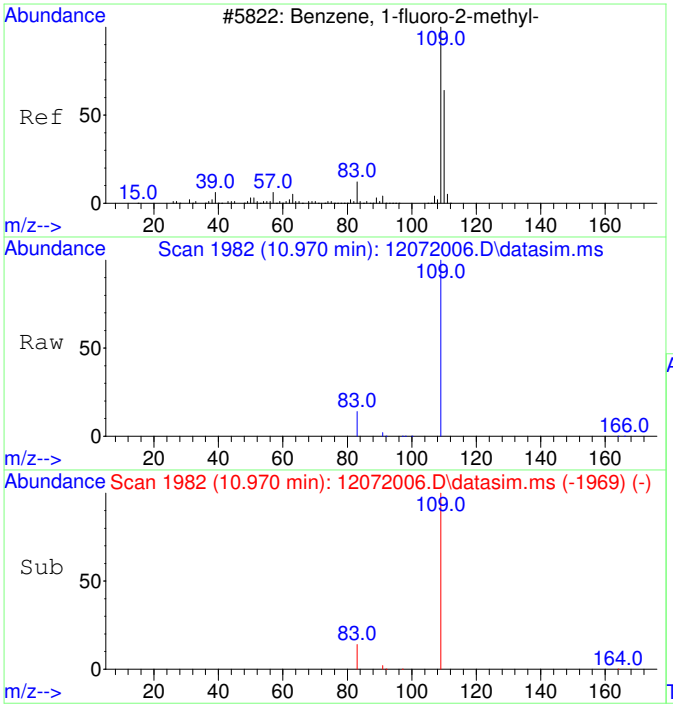
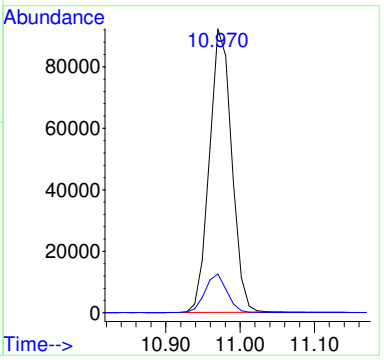
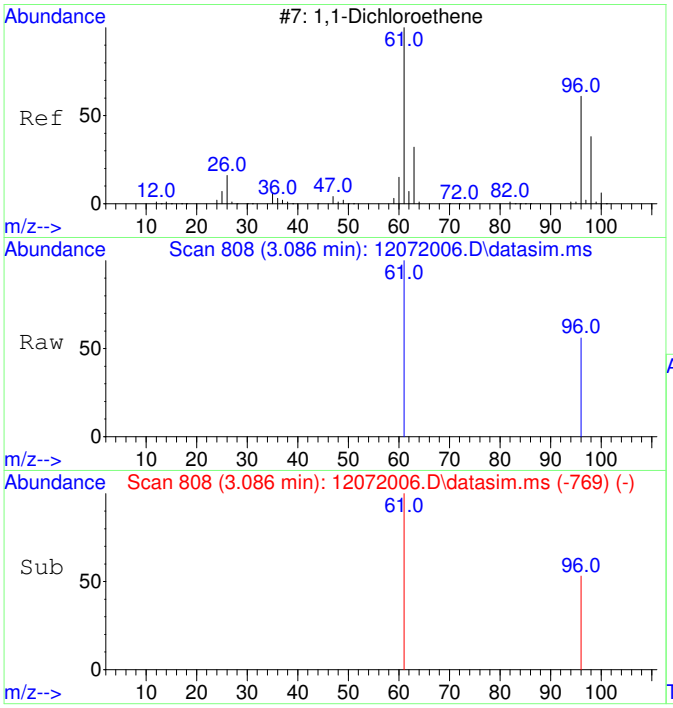


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:109 Resp: 192171

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

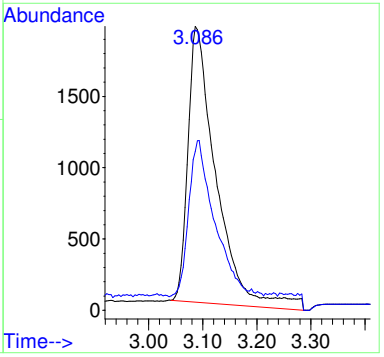




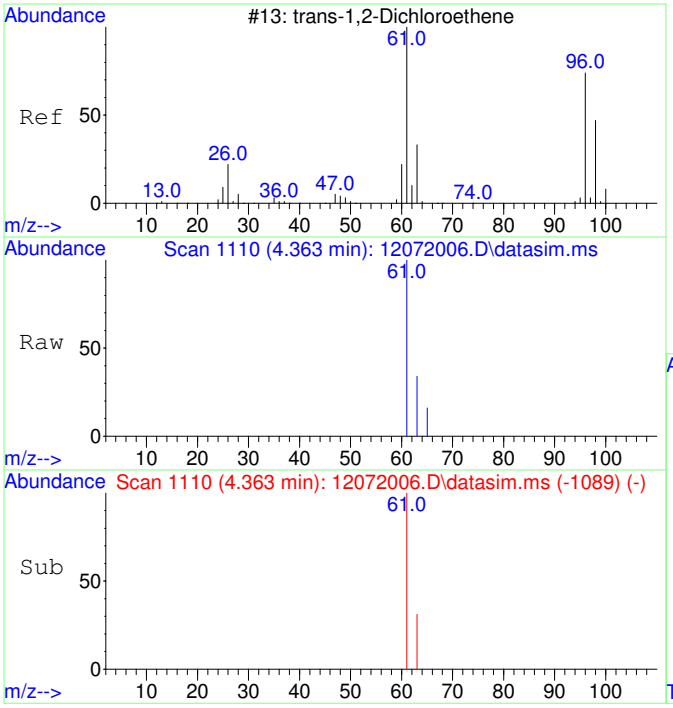
#2
1,1-Dichloroethene
Concen: 918.69 ug/L
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6977

Ion	Ratio	Lower	Upper
61	100		
96	58.6	37.2	97.2



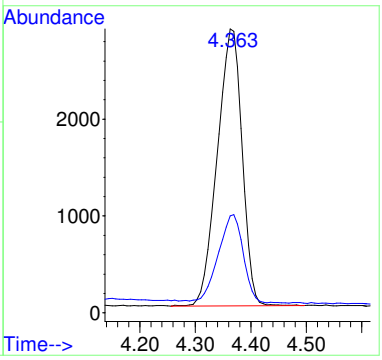
Before MI:
IMPROPER
BASELINE

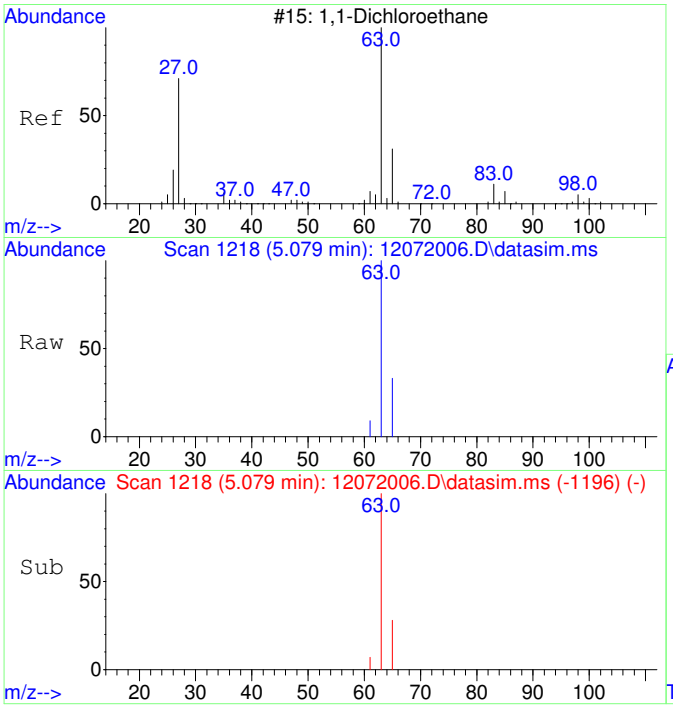


#3
trans-1,2-Dichloroethene
Concen: 926.37 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 8899

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.4	62.4

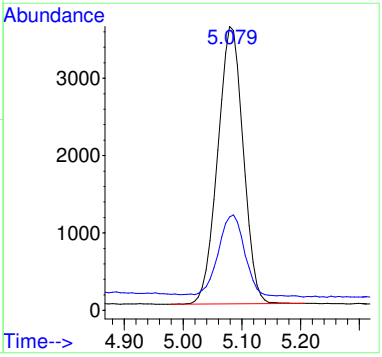


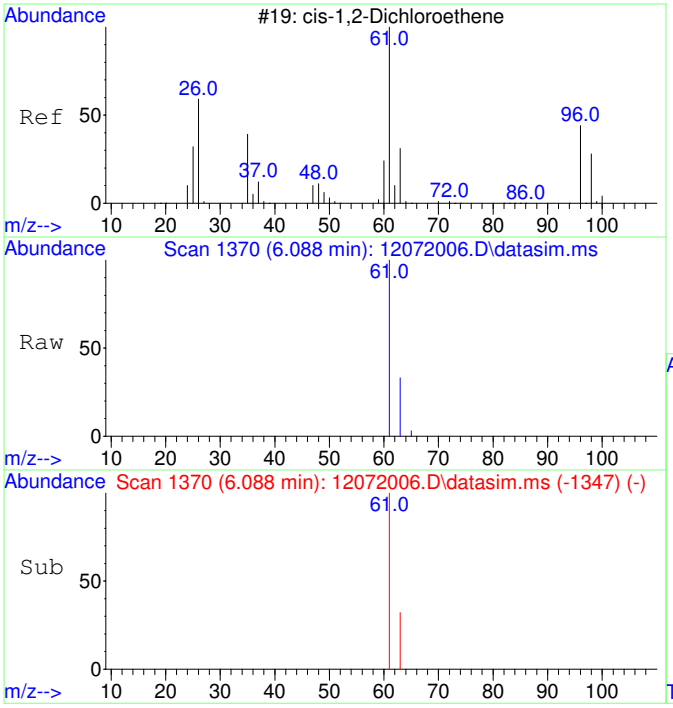


#4
1,1-Dichloroethane
Concen: 939.13 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 10775

Ion	Ratio	Lower	Upper
63	100		
65	30.8	1.8	61.8

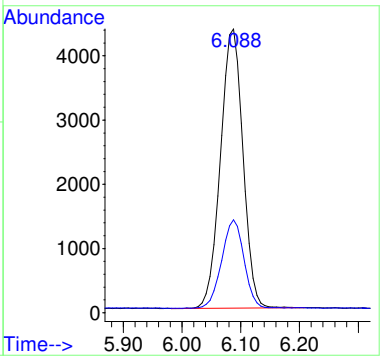


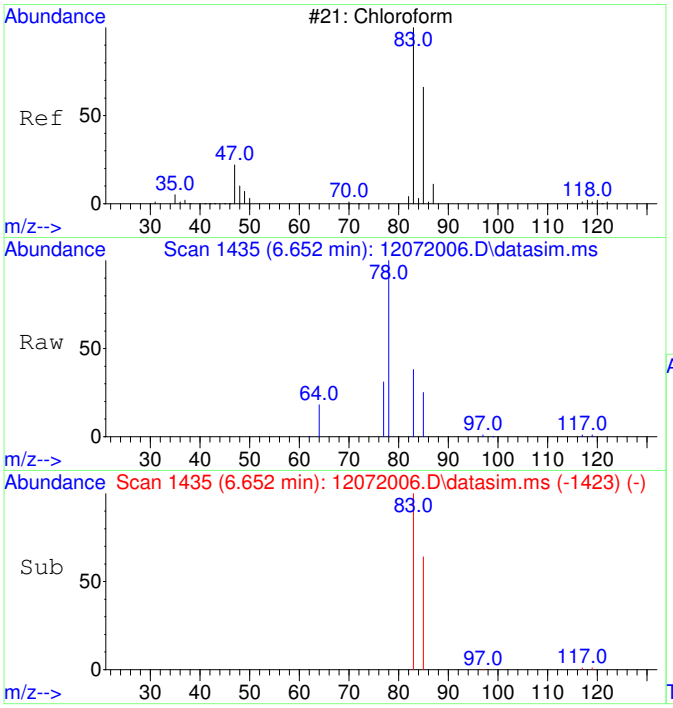


#5
cis-1,2-Dichloroethene
Concen: 970.12 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 11528

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

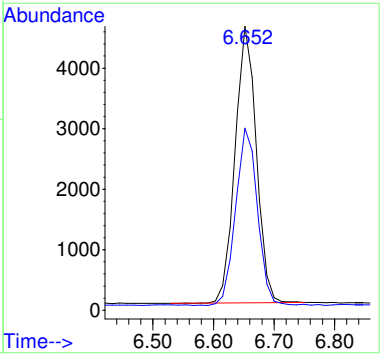


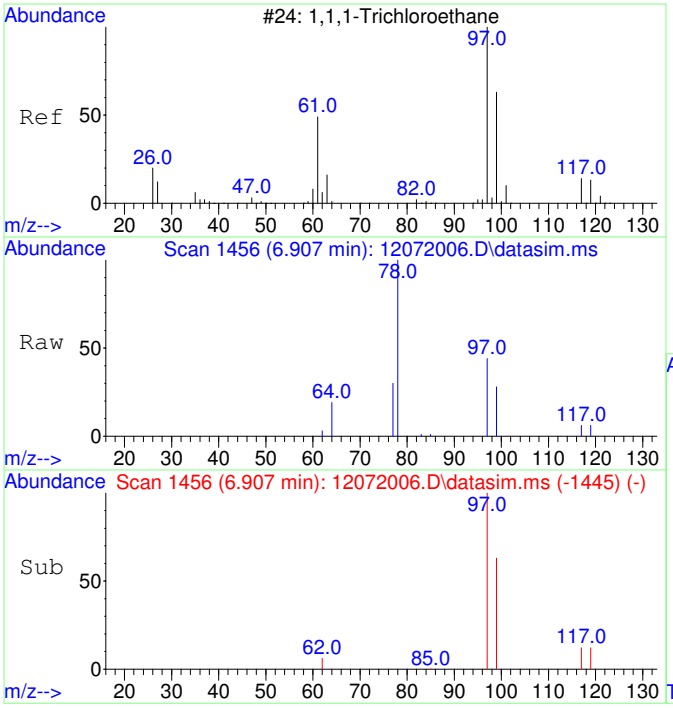


#6
Chloroform
Concen: 978.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 11165

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

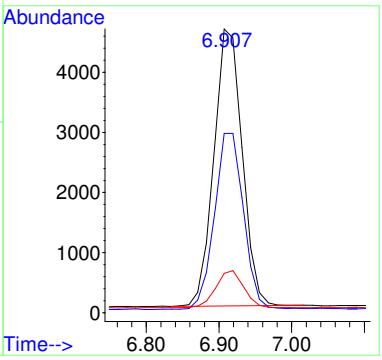


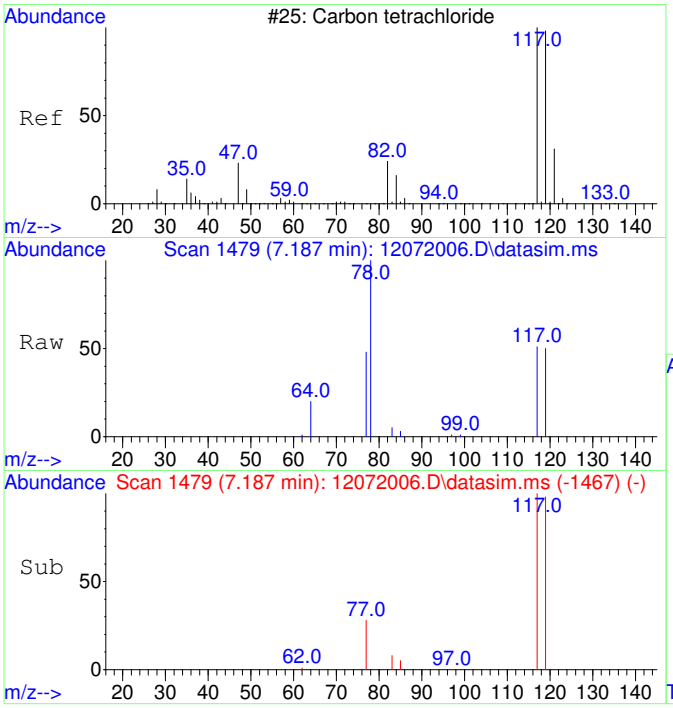


#7
1,1,1-Trichloroethane
Concen: 1017.13 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 12471

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

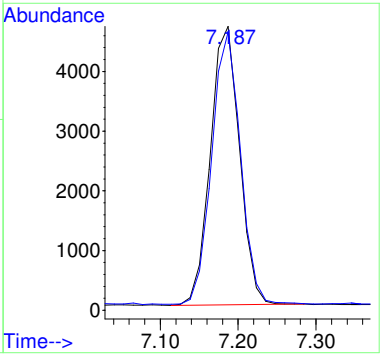


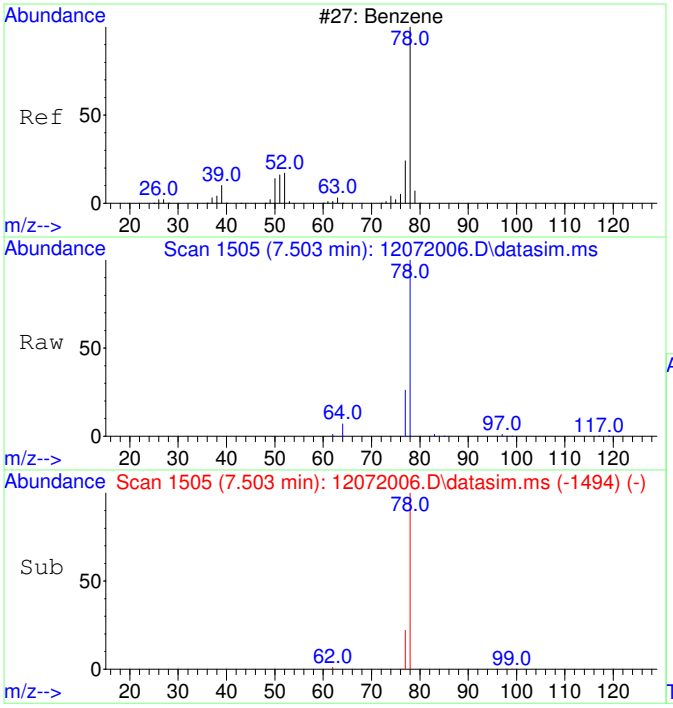


#8
Carbon tetrachloride
Concen: 1038.04 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 12168

Ion	Ratio	Lower	Upper
117	100		
119	95.6	66.4	126.4

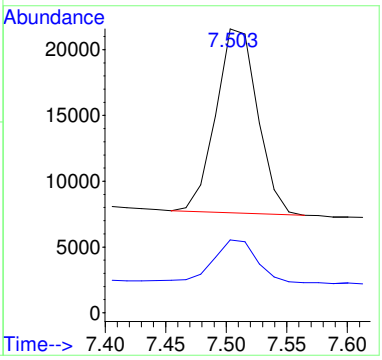


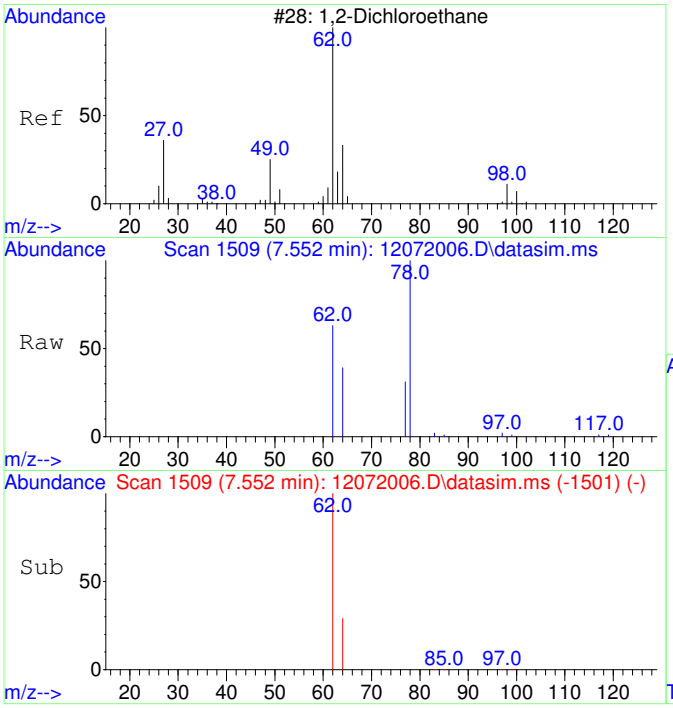


#9
Benzene
Concen: 1036.18 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 33507

Ion	Ratio	Lower	Upper
78	100		
77	27.2	0.0	53.2

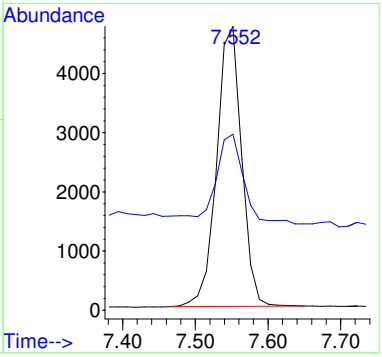


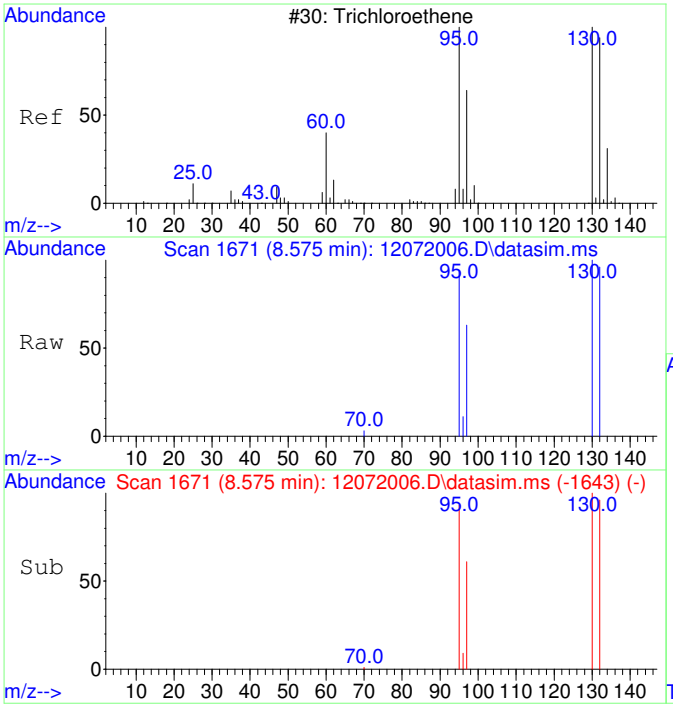


#10
1,2-Dichloroethane
Concen: 1025.16 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 11309

Ion	Ratio	Lower	Upper
62	100		
64	36.9	2.3	62.3

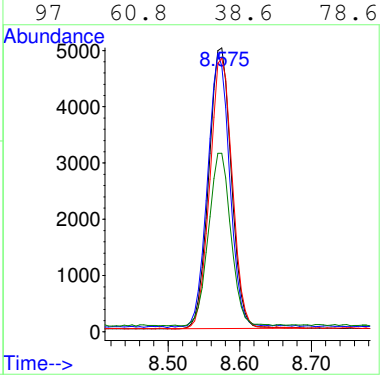


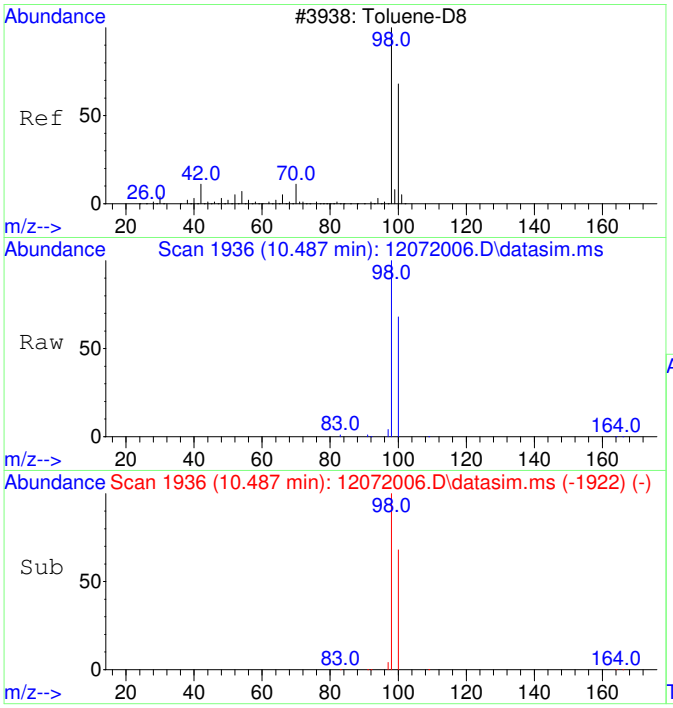


#11
Trichloroethene
Concen: 1064.47 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 10868

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

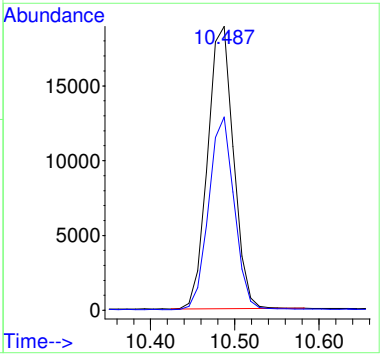


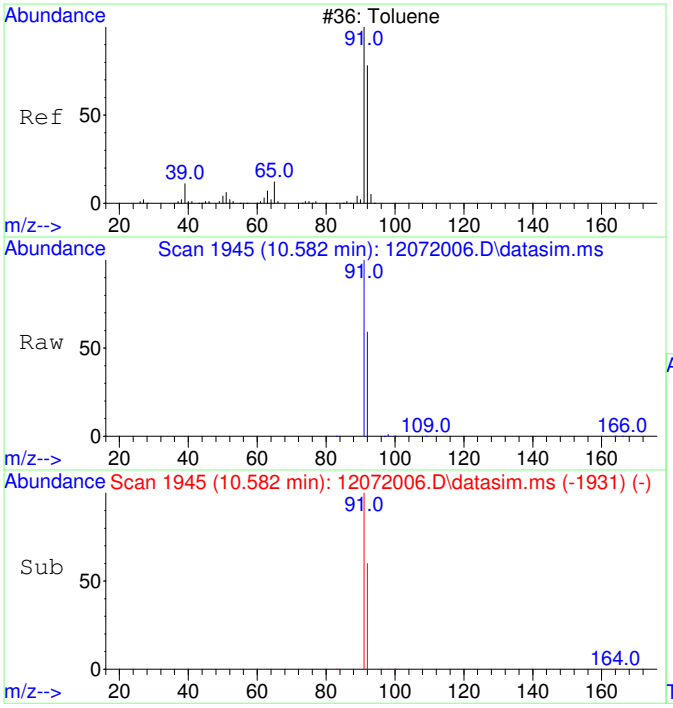


#12
Toluene-d8
Concen: 1084.10 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 40349

Ion	Ratio	Lower	Upper
98	100		
100	66.9	37.1	97.1

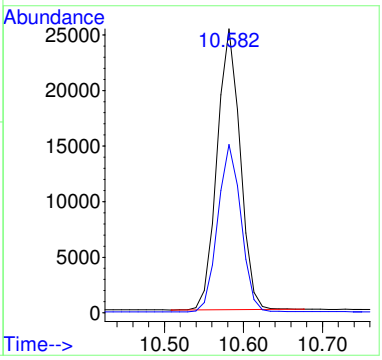


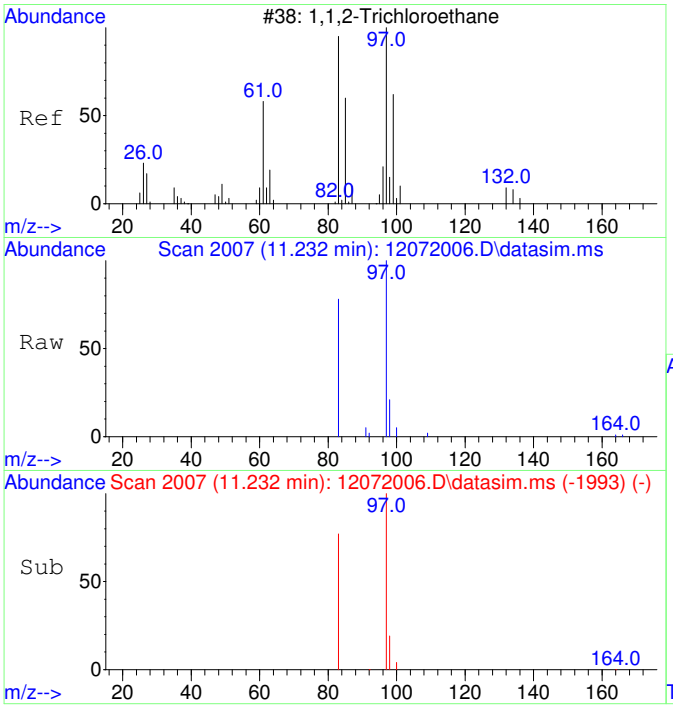


#13
Toluene
Concen: 1103.33 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 51129

Ion	Ratio	Lower	Upper
91	100		
92	59.8	29.9	89.9

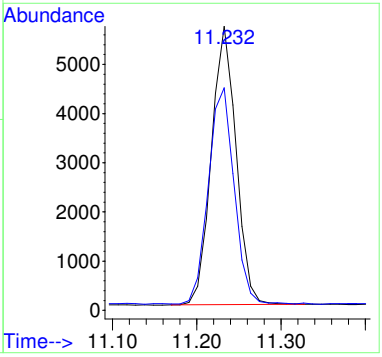


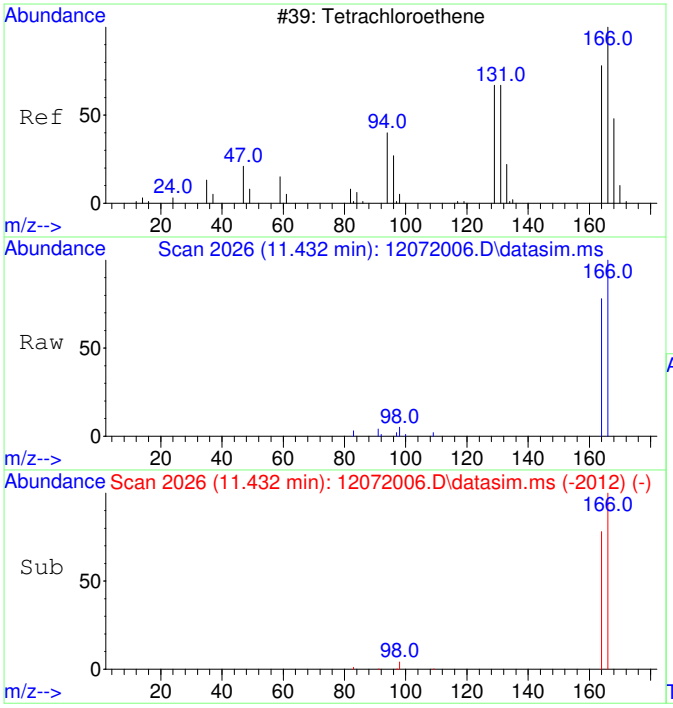


#14
1,1,2-Trichloroethane
Concen: 1073.57 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 11523

Ion	Ratio	Lower	Upper
97	100		
83	81.4	51.2	111.2

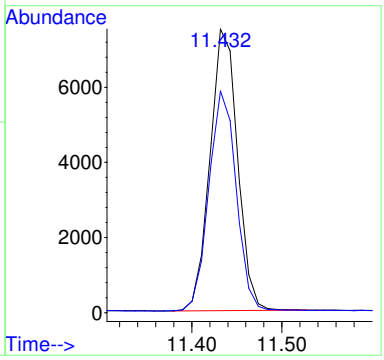


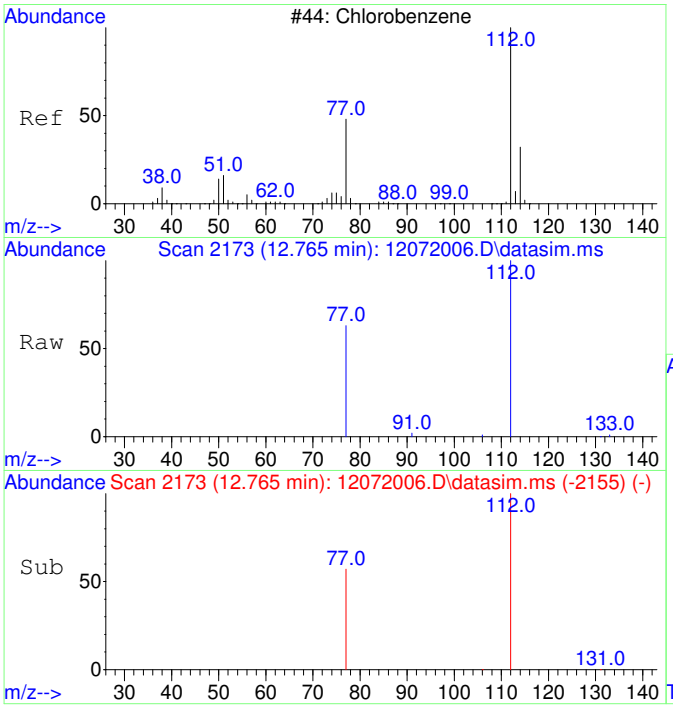


#15
Tetrachloroethene
Concen: 1101.36 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 15897

Ion	Ratio	Lower	Upper
166	100		
164	77.5	47.8	107.8

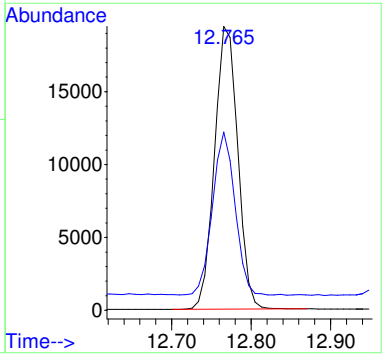


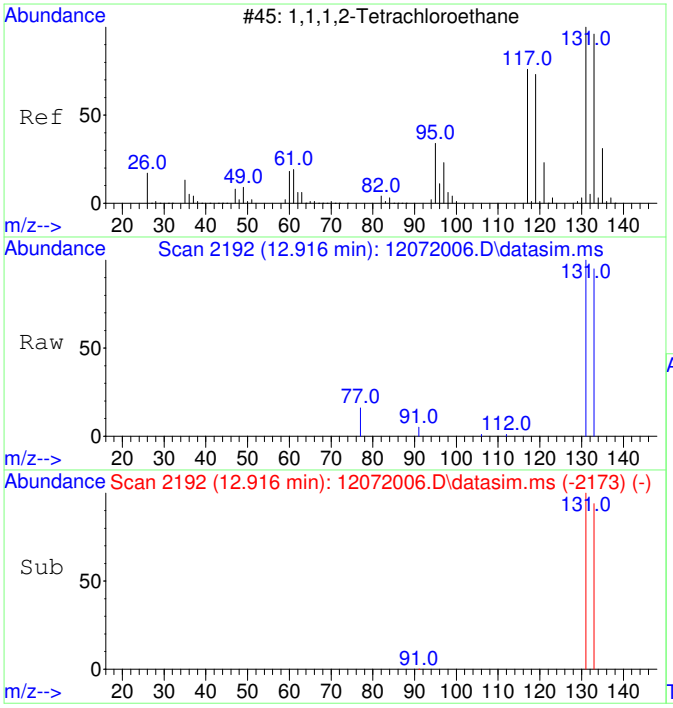


#16
Chlorobenzene
Concen: 1098.83 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 39448

Ion	Ratio	Lower	Upper
112	100		
77	55.4	23.6	83.6

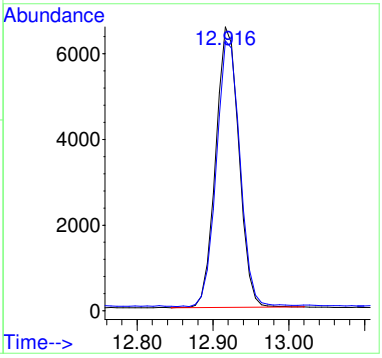


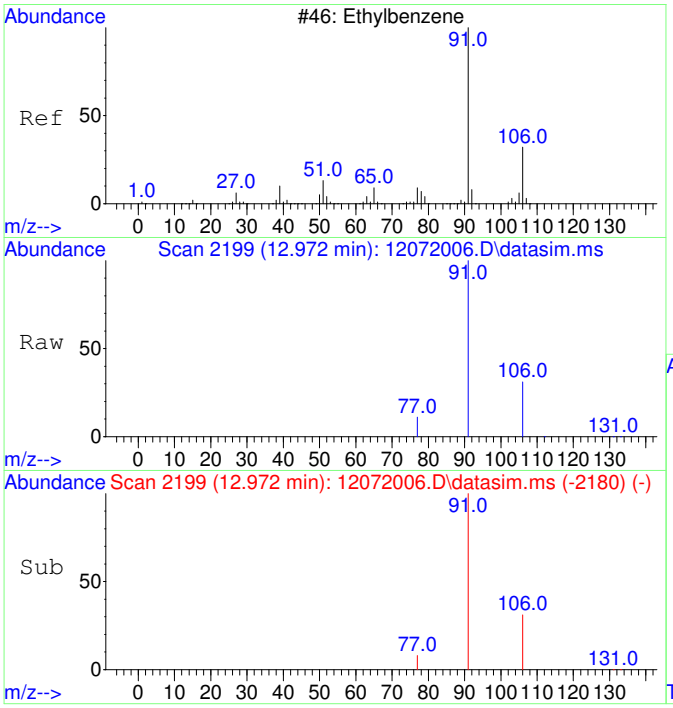


#17
1,1,1,2-Tetrachloroethane
Concen: 1104.11 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 13873

Ion	Ratio	Lower	Upper
131	100		
133	95.9	66.3	126.3

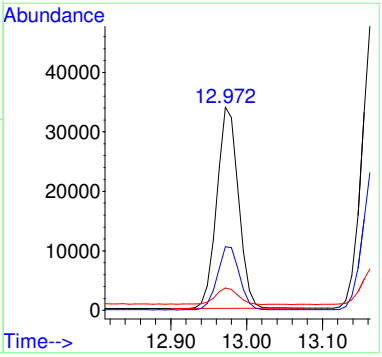


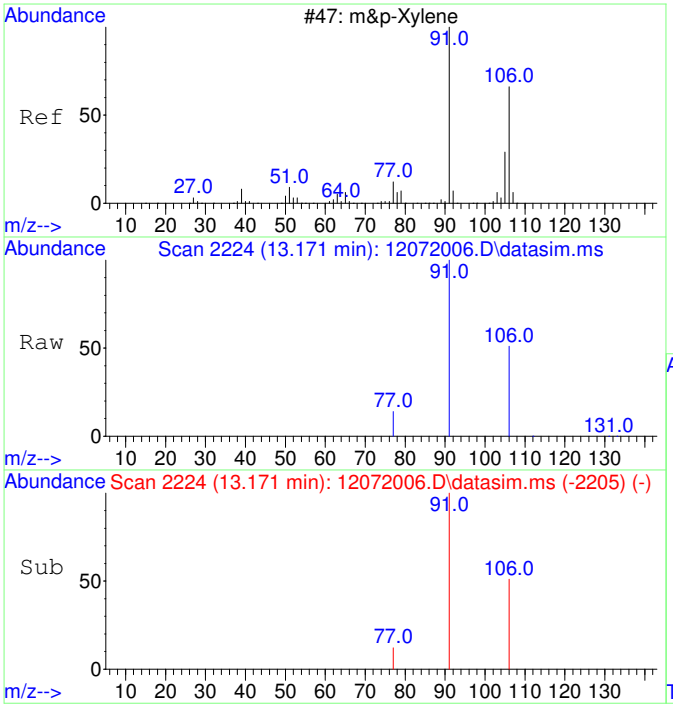


#18
Ethylbenzene
Concen: 1130.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 66895

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

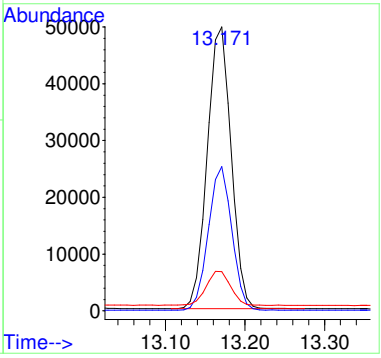


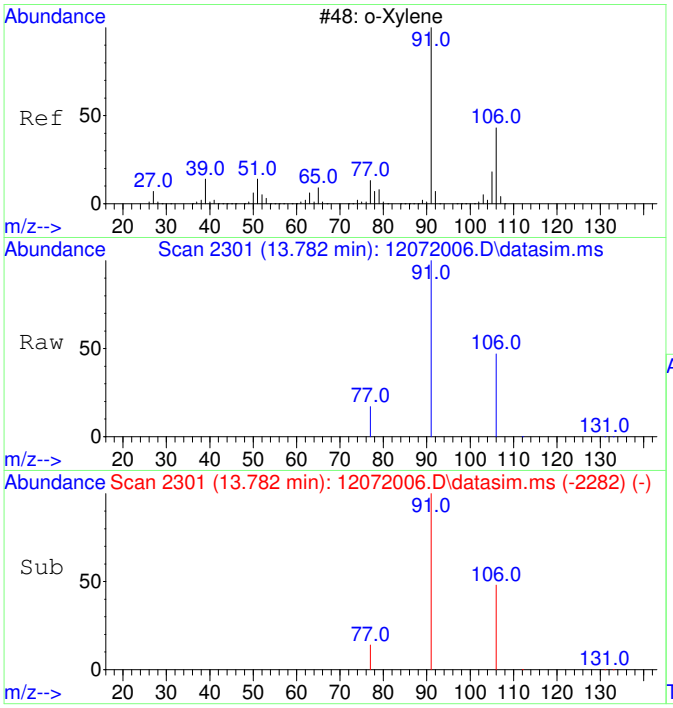


#19
m&p-Xylene
Concen: 2275.67 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 103724

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

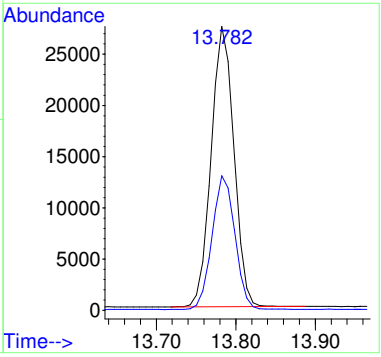


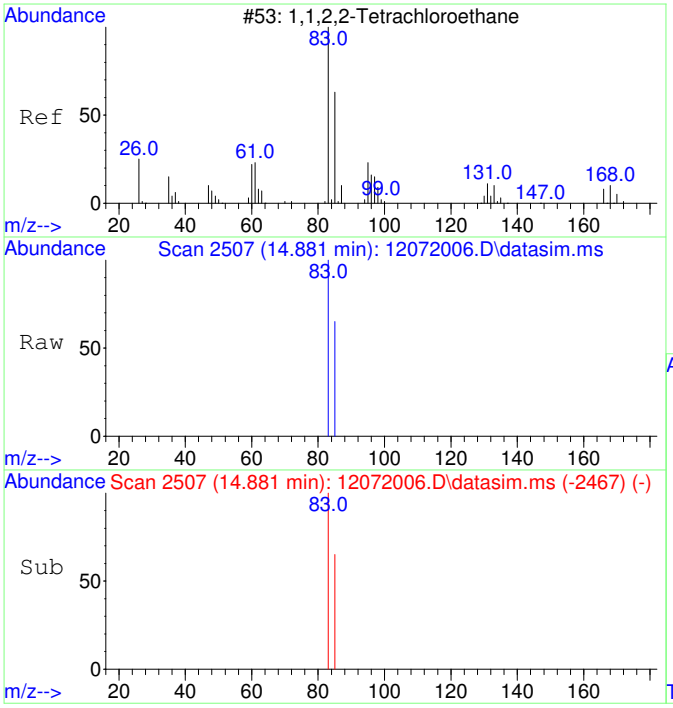


#20
o-Xylene
Concen: 1109.83 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 54333

Ion	Ratio	Lower	Upper
91	100		
106	48.1	19.2	79.2

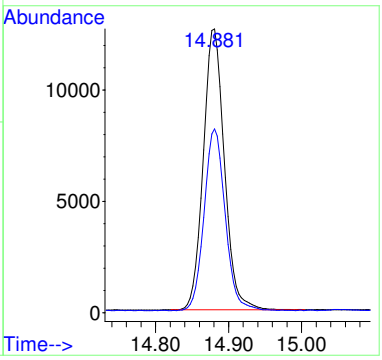


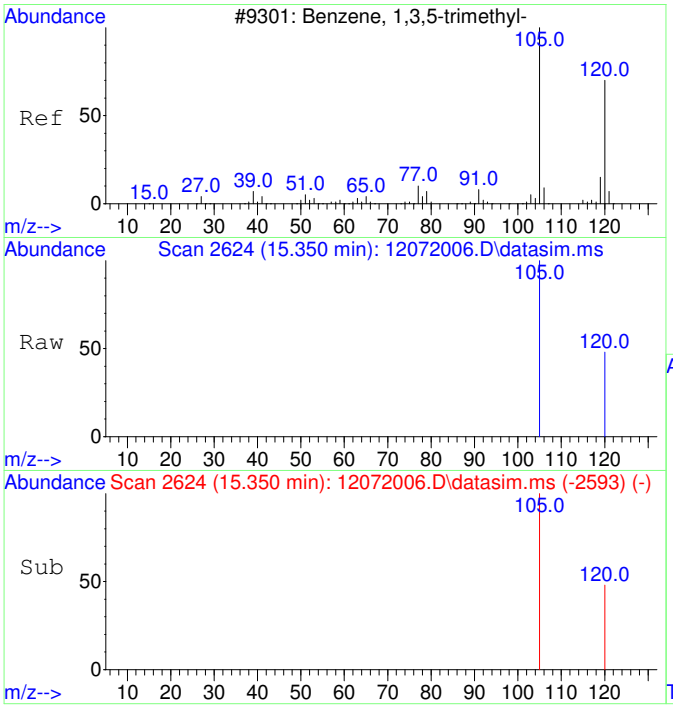


#21
1,1,2,2-Tetrachloroethane
Concen: 1108.19 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 25279

Ion	Ratio	Lower	Upper
83	100		
85	64.7	34.8	94.8

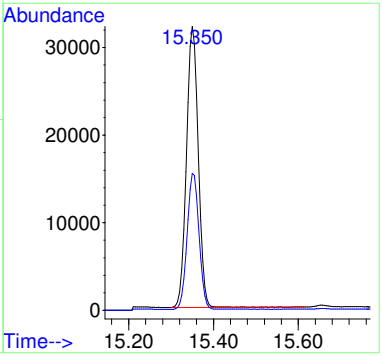


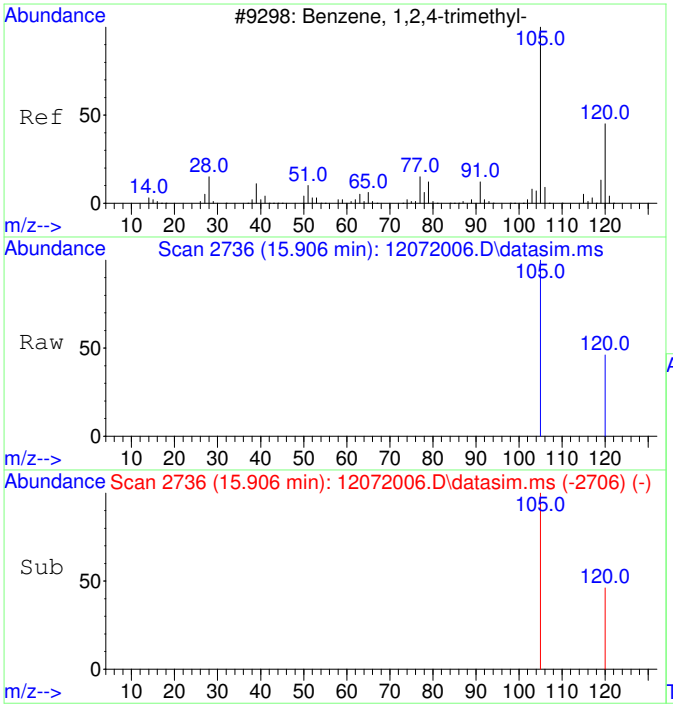


#22
1,3,5-Trimethylbenzene
Concen: 1145.65 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 61678

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

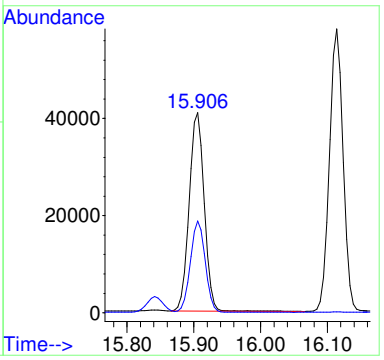


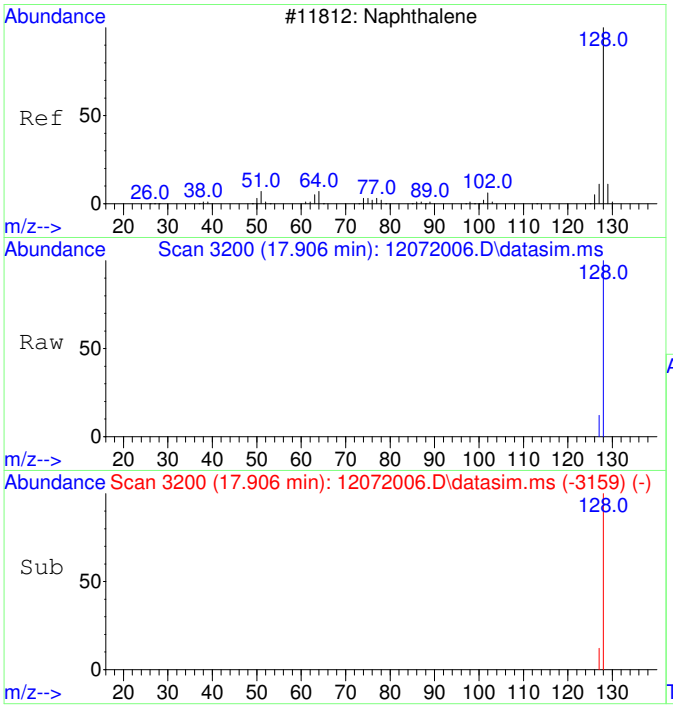


#23
1,2,4-Trimethylbenzene
Concen: 1157.33 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 63729

Ion	Ratio	Lower	Upper
105	100		
120	44.7	17.2	77.2

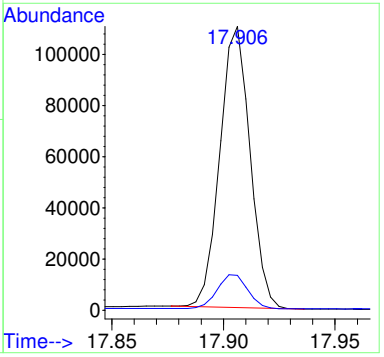


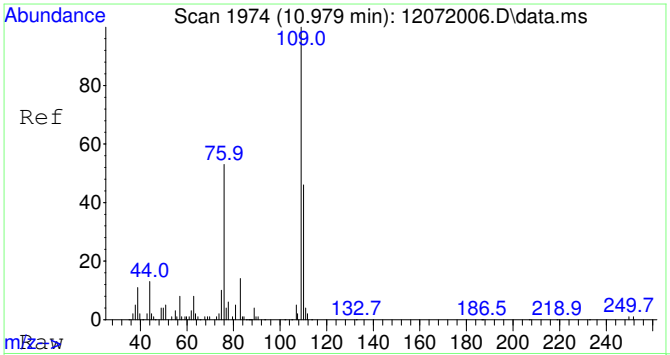


#24
Naphthalene
Concen: 1190.66 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 102525

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

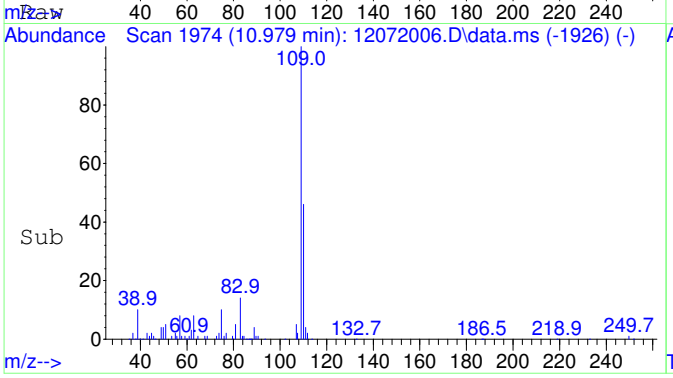


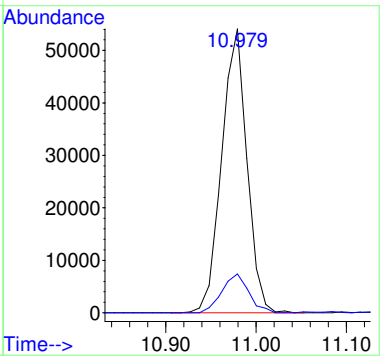


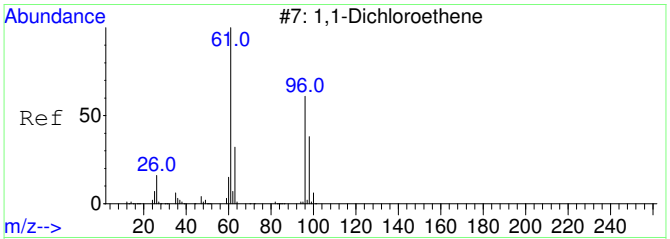
#25
2-Fluorotoluene SCAN
Concen: 4837.67 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

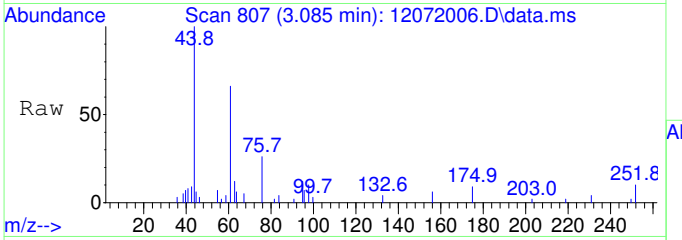
Tgt Ion:109 Resp: 105526

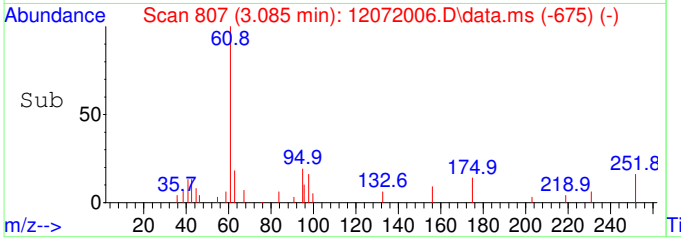
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







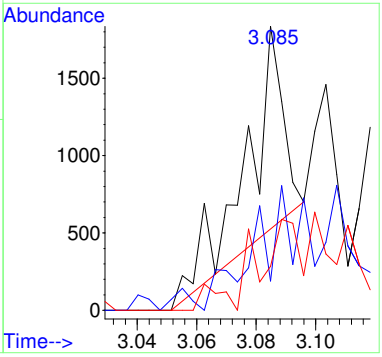


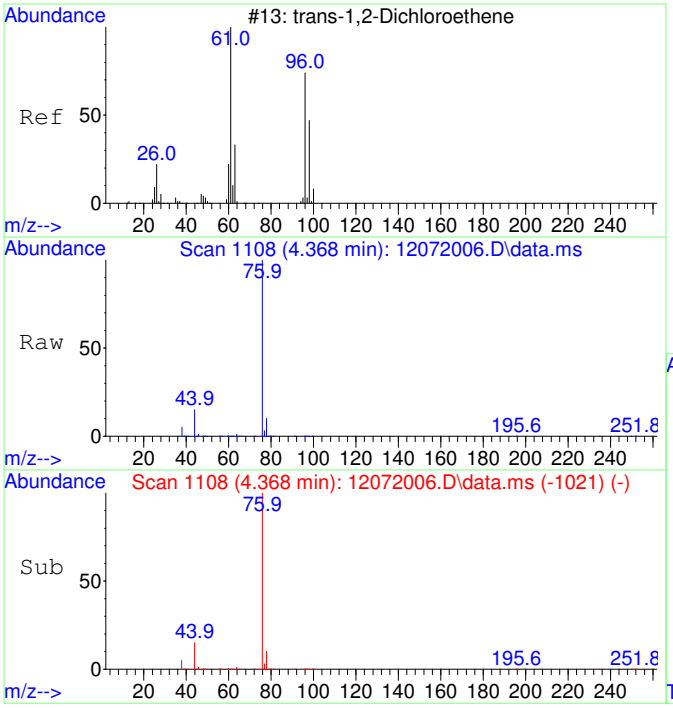


#26
1,1-Dichloroethene SCAN
Concen: 224.65 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 1144

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

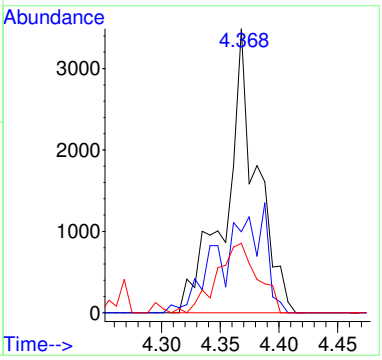


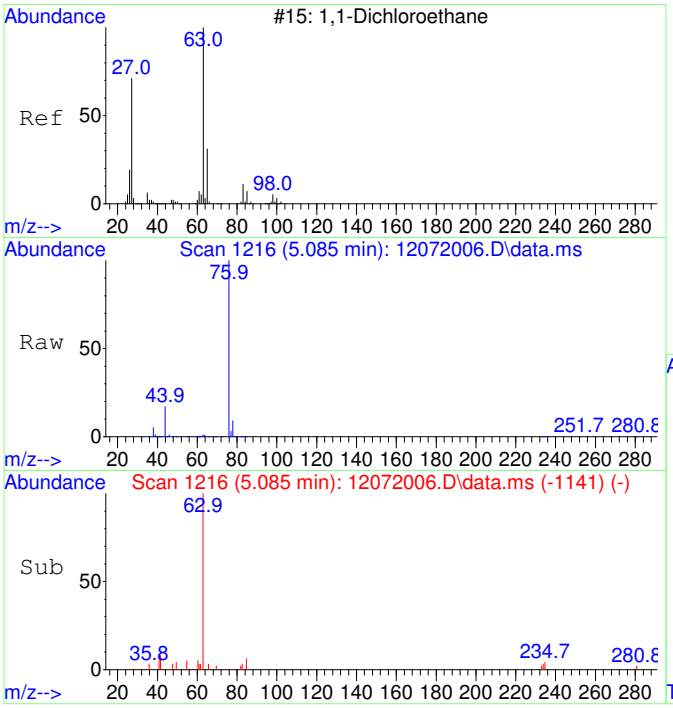


#27
trans-1,2-Dichloroethene SCAN
Concen: 988.56 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6412

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

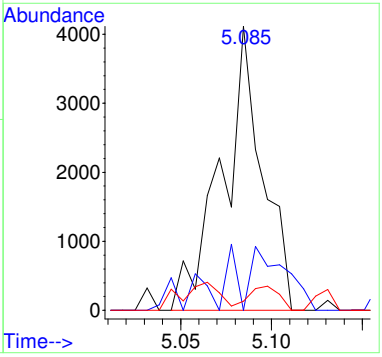


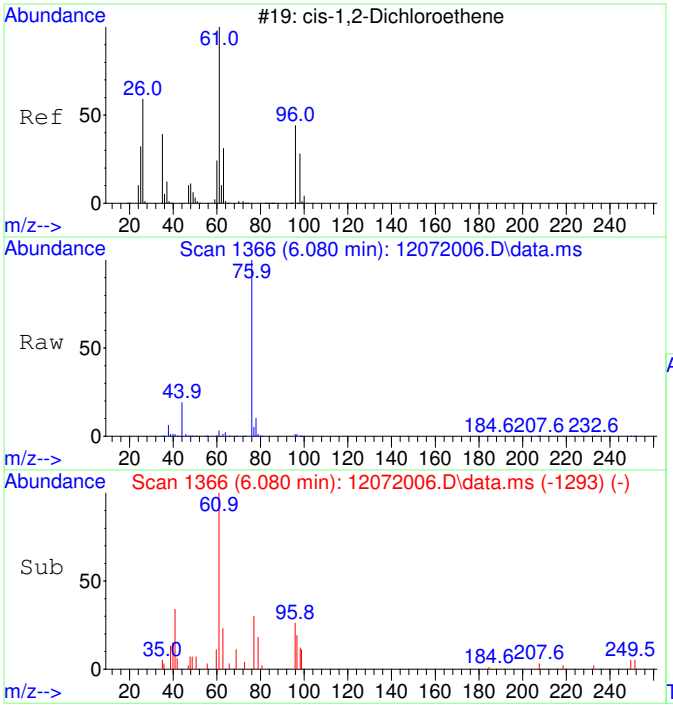


#28
1,1-Dichloroethane SCAN
Concen: 829.42 ug/L
RT: 5.085 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 6350

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

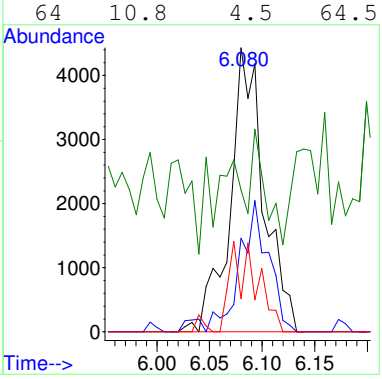


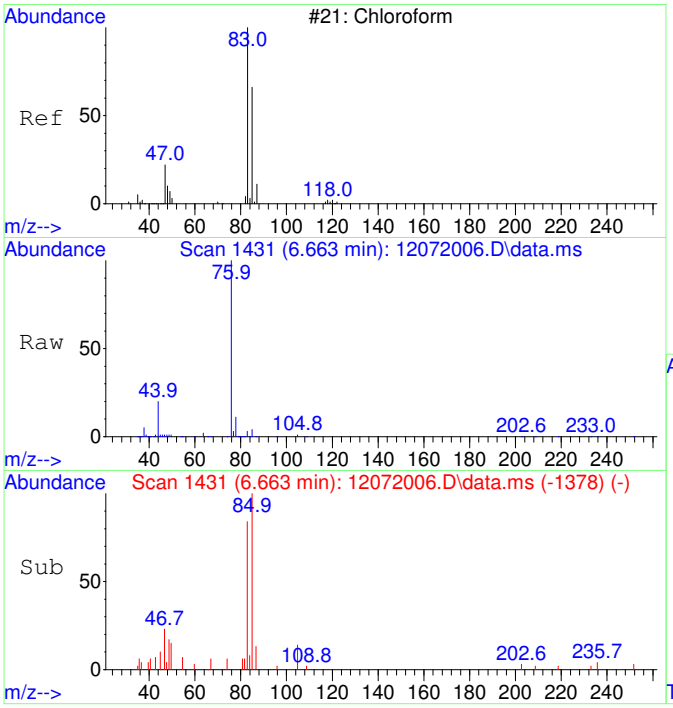


#29
cis-1,2-Dichloroethene SCAN
Concen: 1312.72 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 9880

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

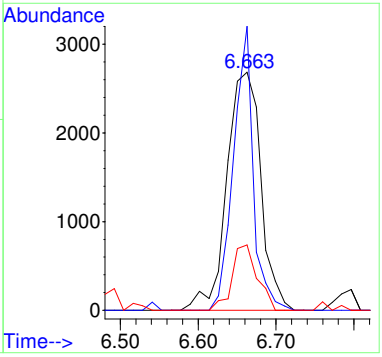


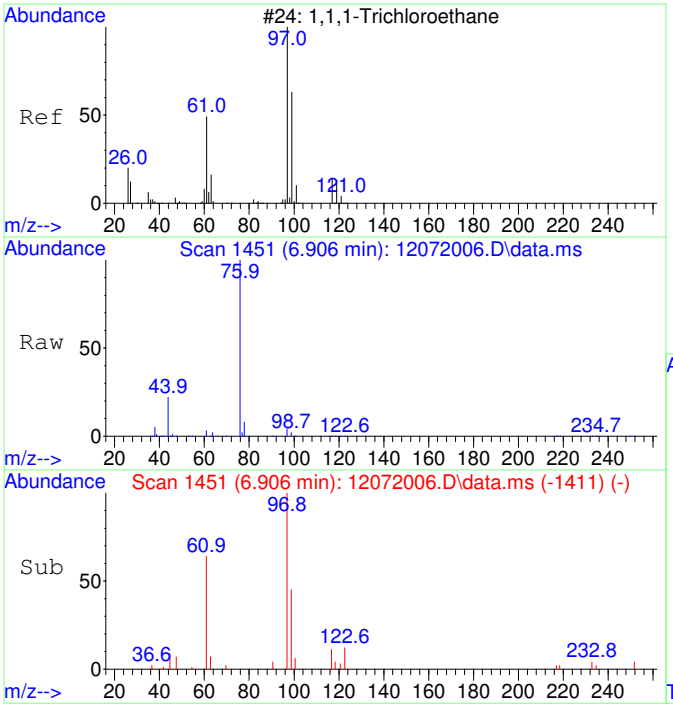


#30
Chloroform SCAN
Concen: 1164.68 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 8176

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

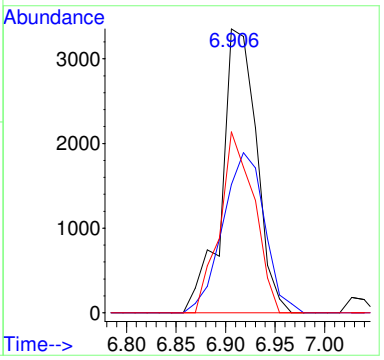


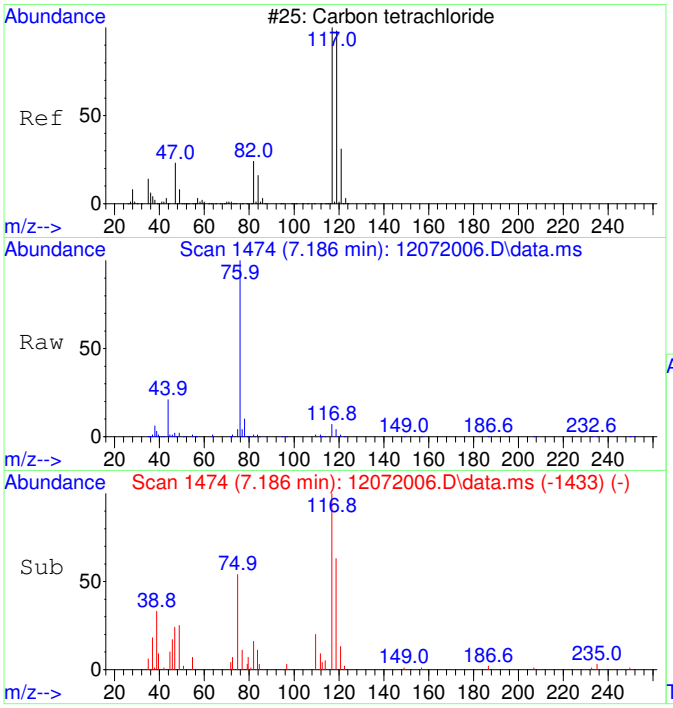


#31
1,1,1-Trichloroethane SCAN
Concen: 1131.56 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 8197

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

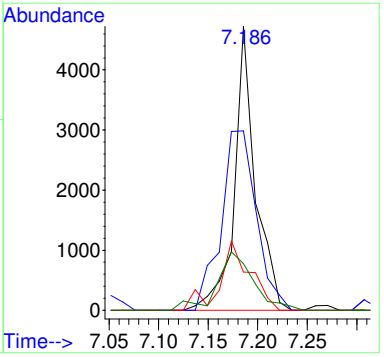


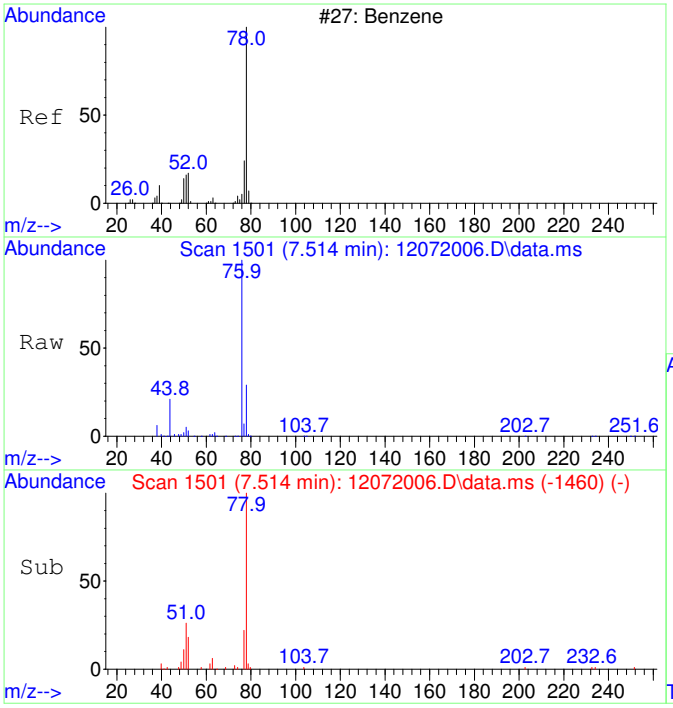


#32
Carbon tetrachloride SCAN
Concen: 1125.63 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 6968

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

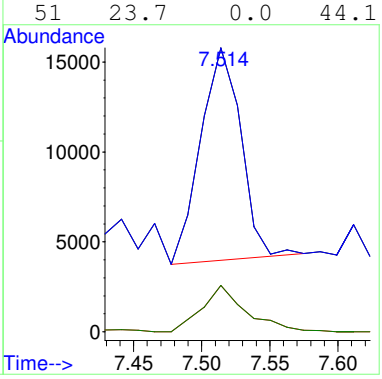


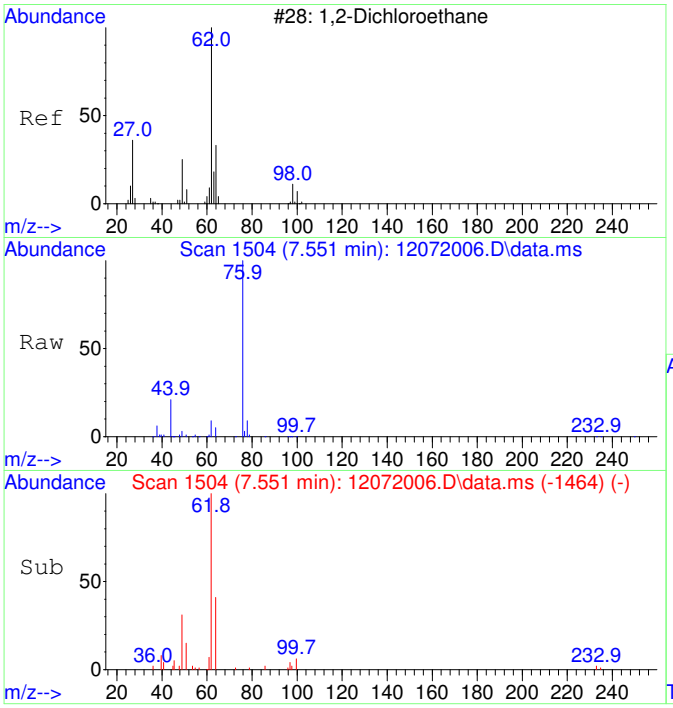


#33
Benzene SCAN
Concen: 1117.71 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 24495

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

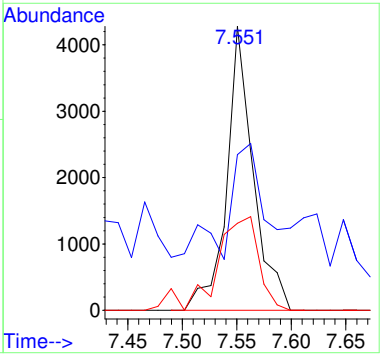


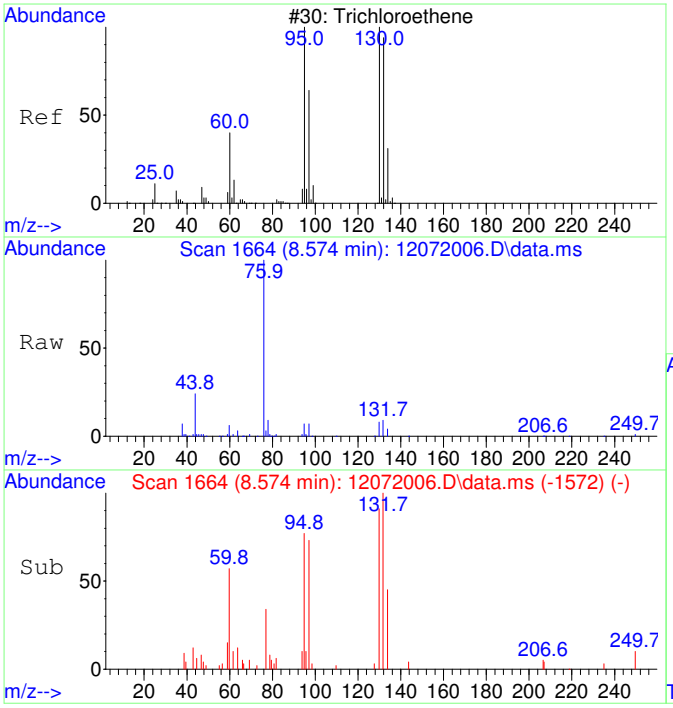


#34
1,2-Dichloroethane SCAN
Concen: 1059.80 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 7265

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

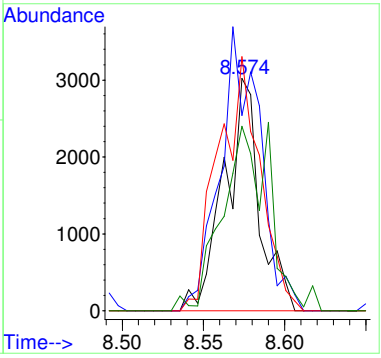


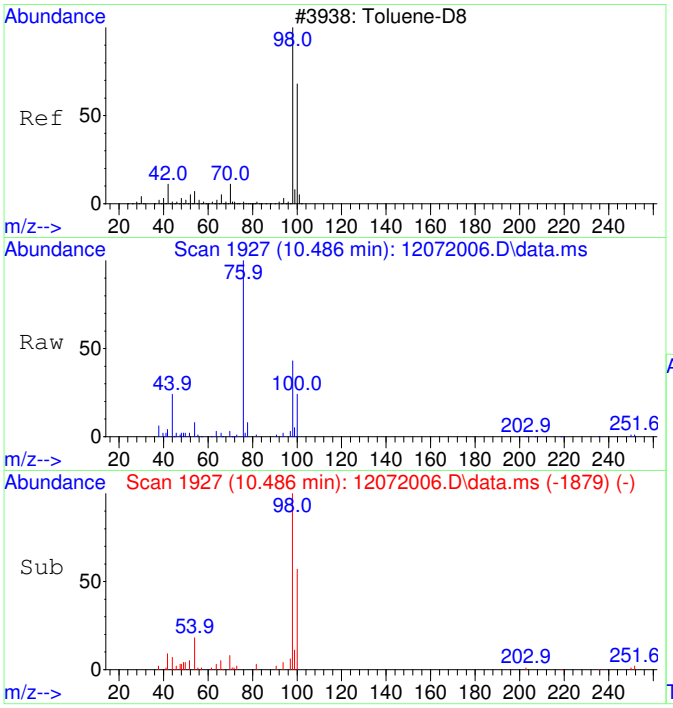


#35
Trichloroethene SCAN
Concen: 958.85 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 4582

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

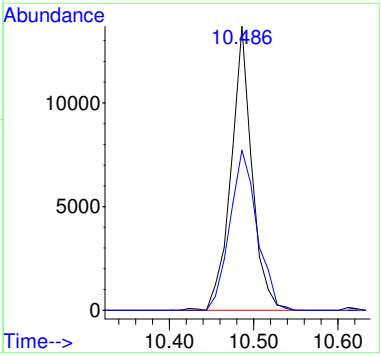


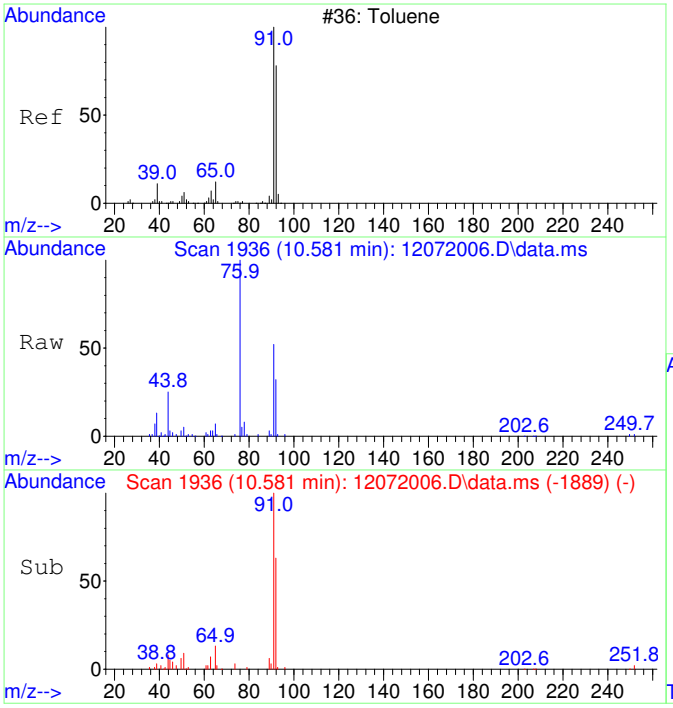


#36
Toluene-d8 SCAN
Concen: 1153.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 23597

Ion	Ratio	Lower	Upper
98	100		
100	73.3	40.0	100.0

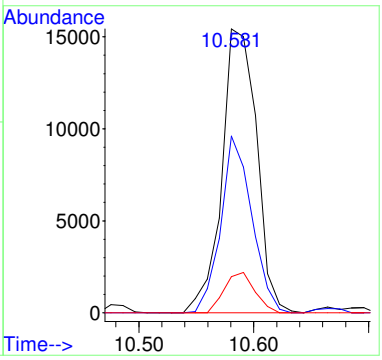


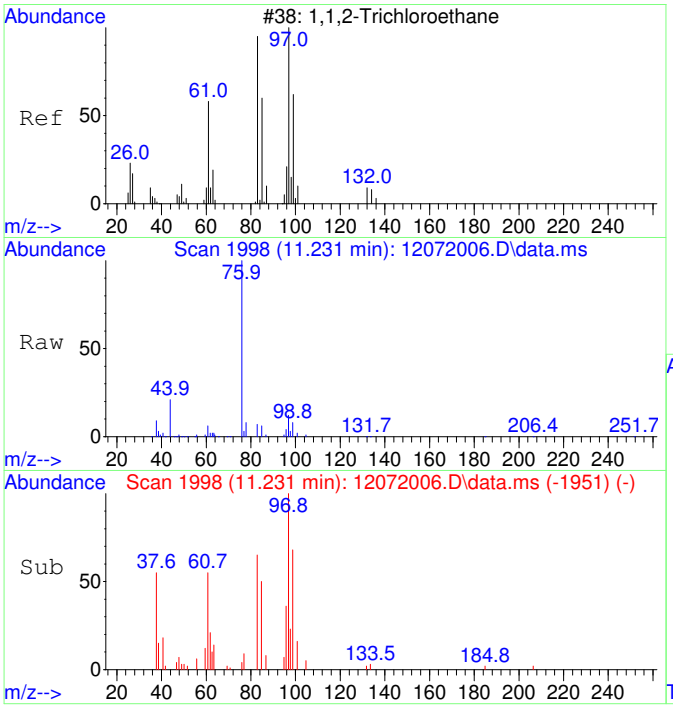


#37
Toluene SCAN
Concen: 1290.59 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 32509

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

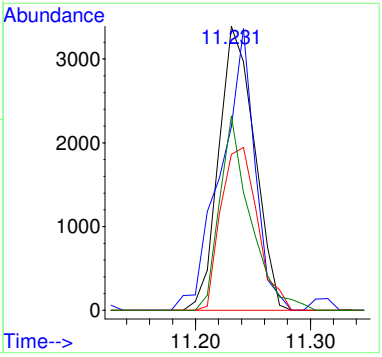


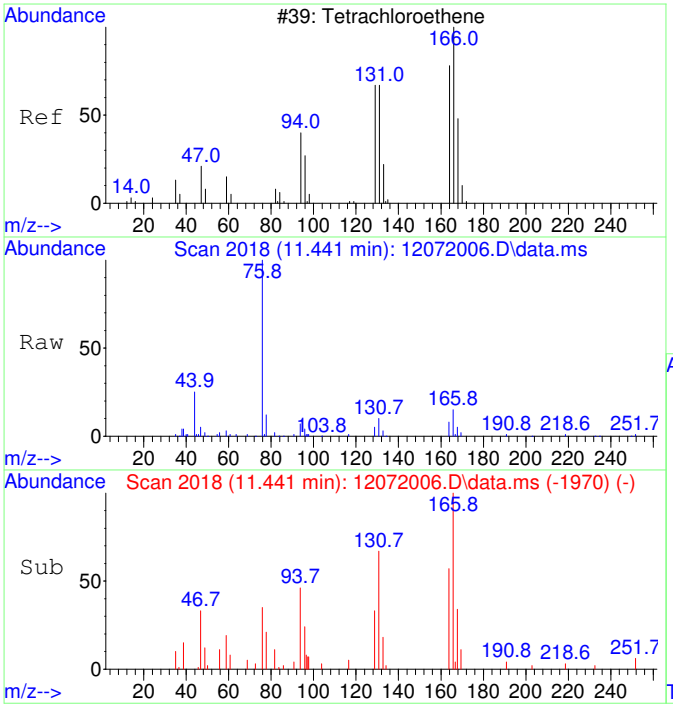


#38
1,1,2-Trichloroethane SCAN
Concen: 1159.53 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 7321

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

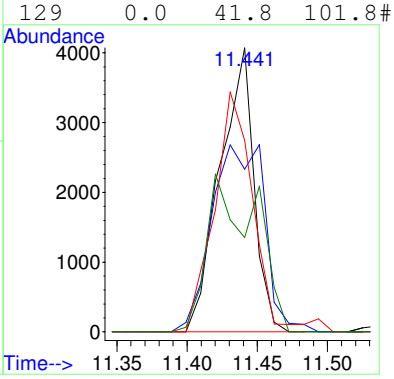


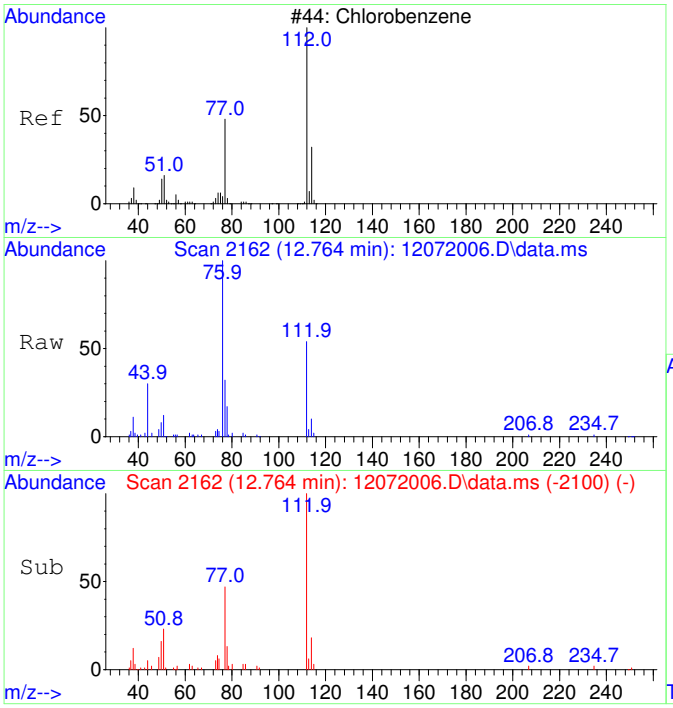


#39
Tetrachloroethene SCAN
Concen: 1216.76 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 6895

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

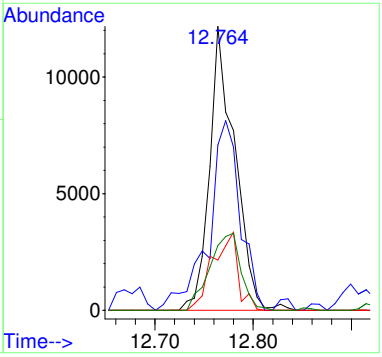


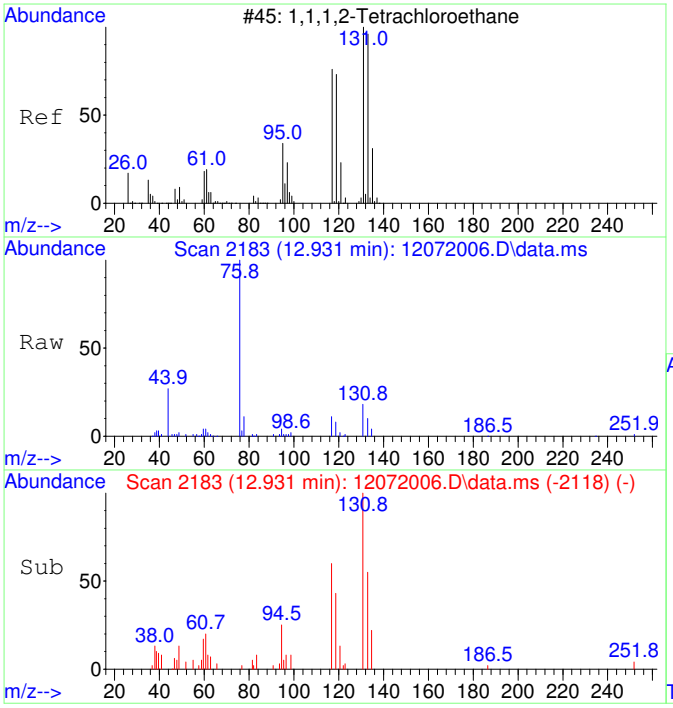


#40
Chlorobenzene SCAN
Concen: 1200.56 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 21721

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

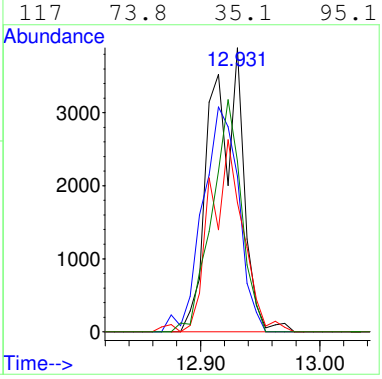


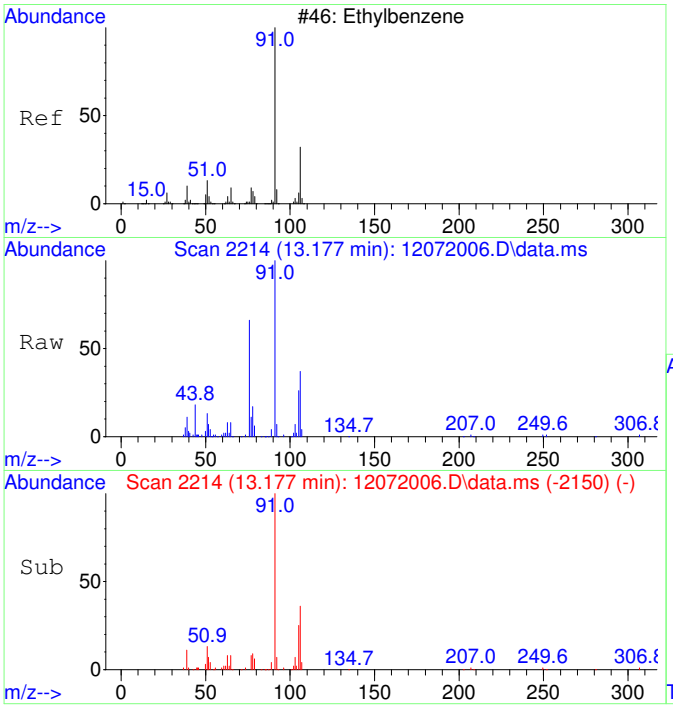


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 1181.69 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.016 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 7376

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

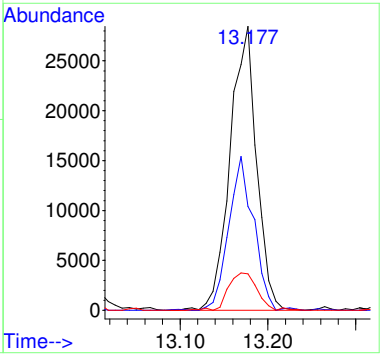


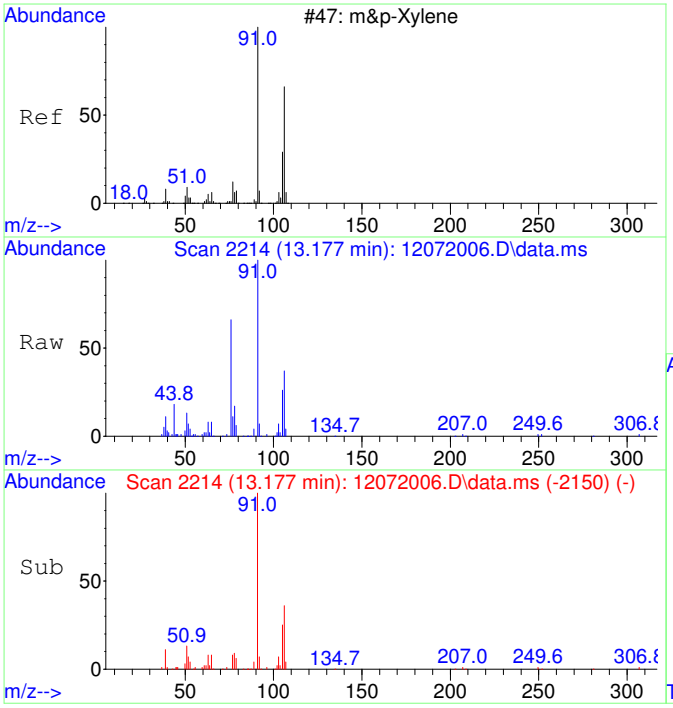


#42
Ethylbenzene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

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

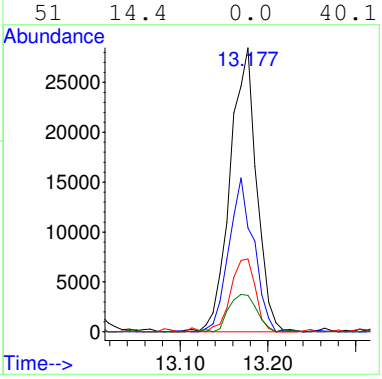


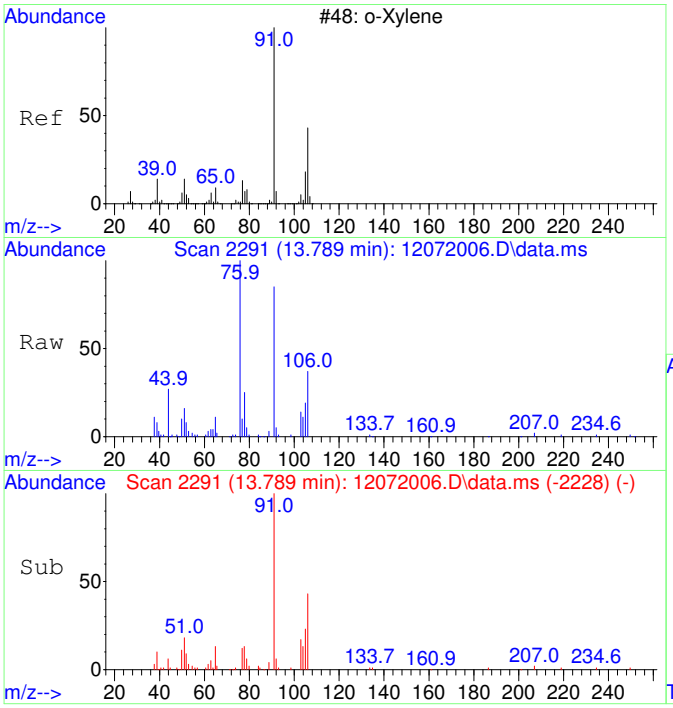


#43
m&p-Xylene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

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

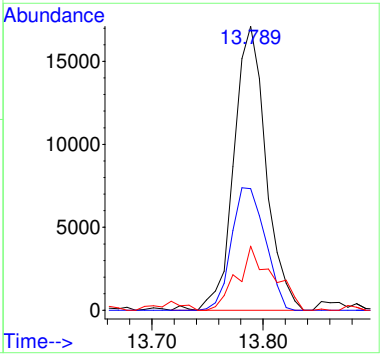


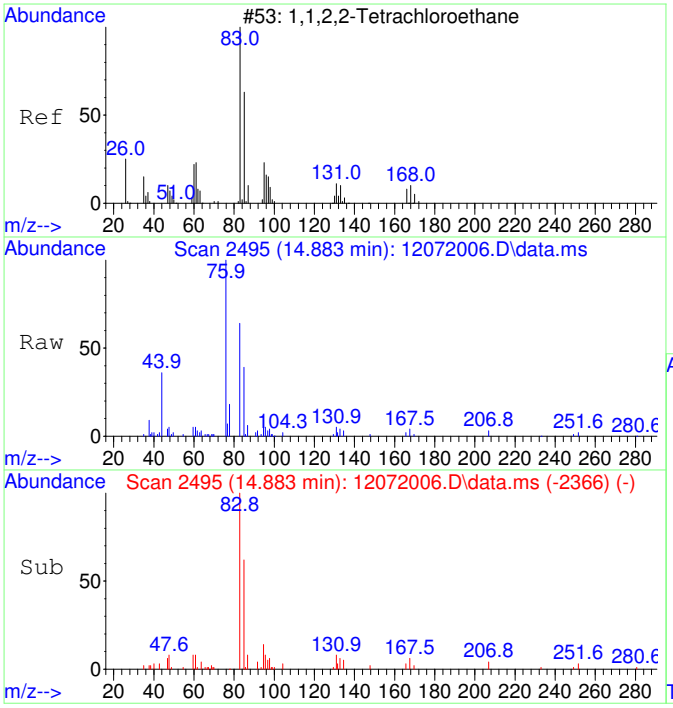


#44
o-Xylene SCAN
Concen: 1304.94 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 34205

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

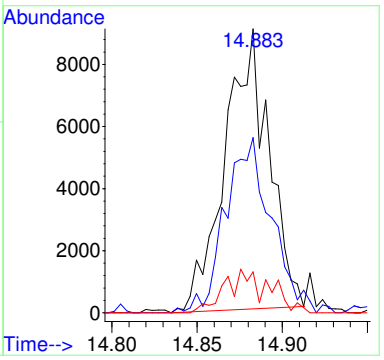


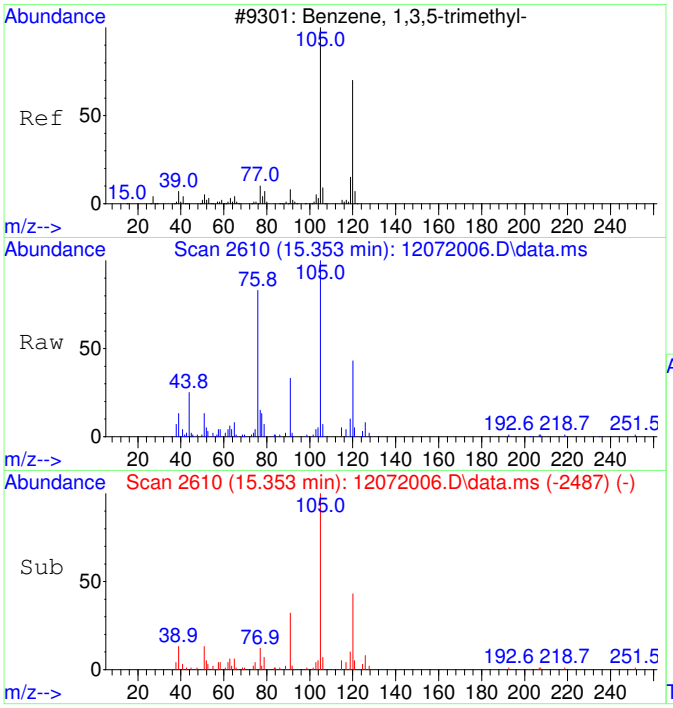


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 1195.11 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 16288

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

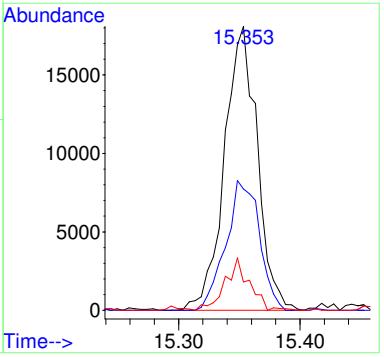


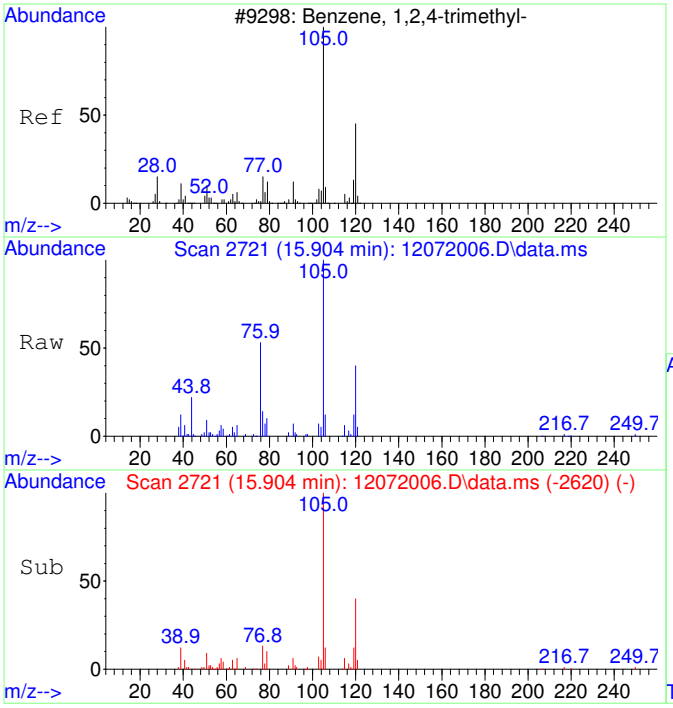


#46
1,3,5-Trimethylbenzene SCAN
Concen: 1231.15 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 34045

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

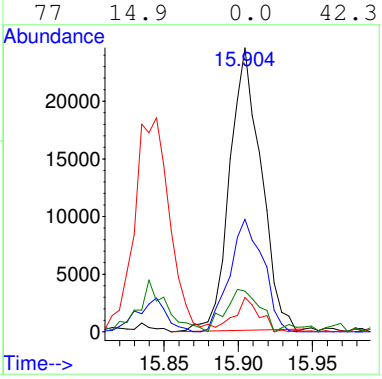


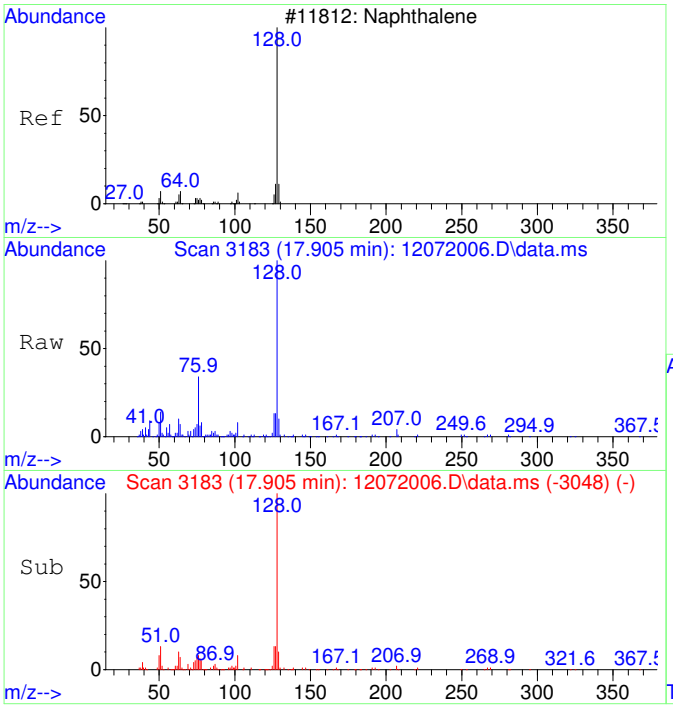


#47
1,2,4-Trimethylbenzene SCAN
Concen: 1276.92 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 36077

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

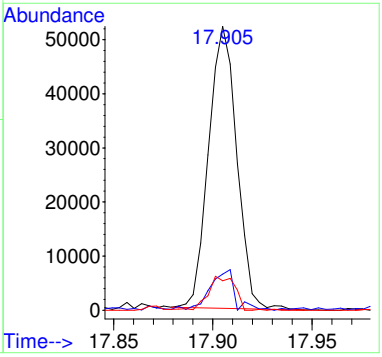




#48
Naphthalene SCAN
Concen: 1213.61 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 51467

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



Quantitation Report (QT Reviewed)

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

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

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

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

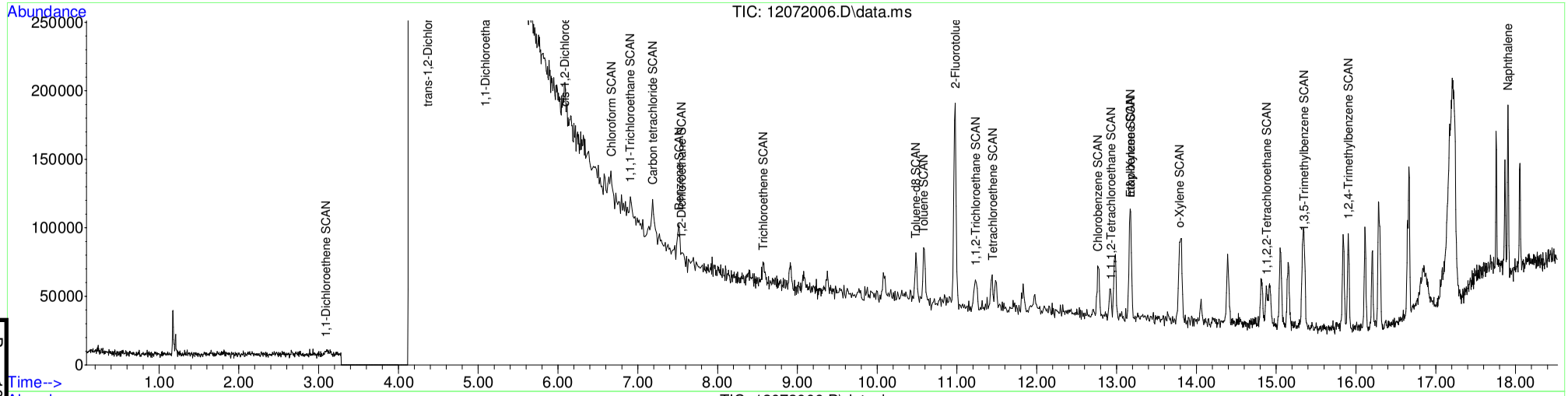
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.970	109	192171	5000.00	ug/L		0.00
System Monitoring Compounds							
12) Toluene-d8	10.487	98	40349	1084.10	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 21.68%#				
Target Compounds						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

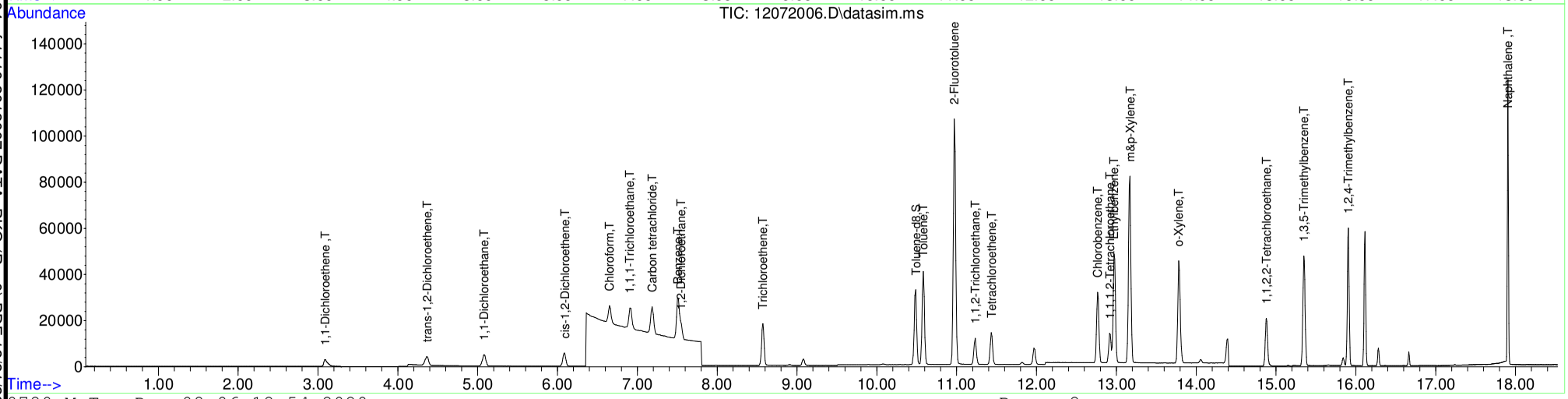
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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

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





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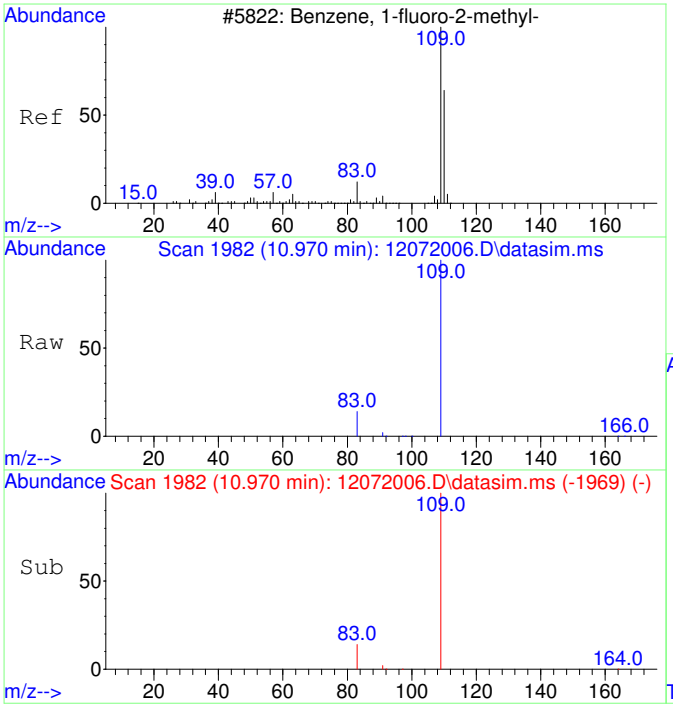
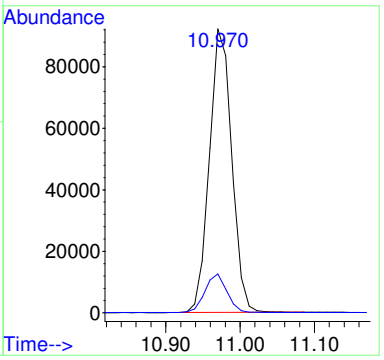
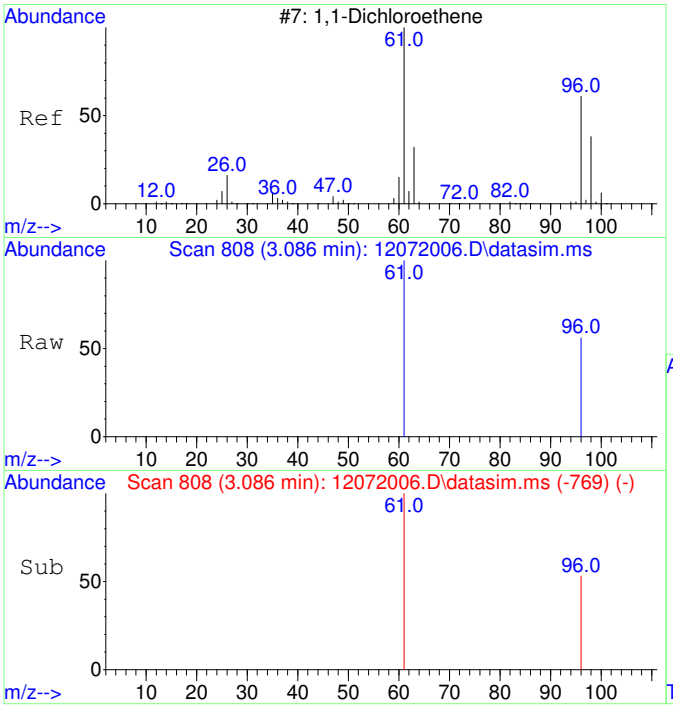


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:109 Resp: 192171

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

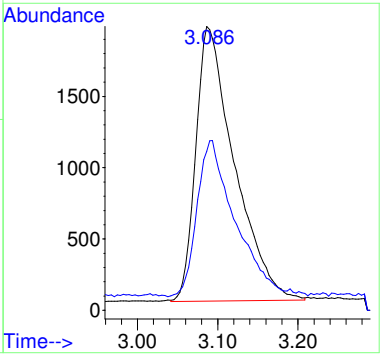


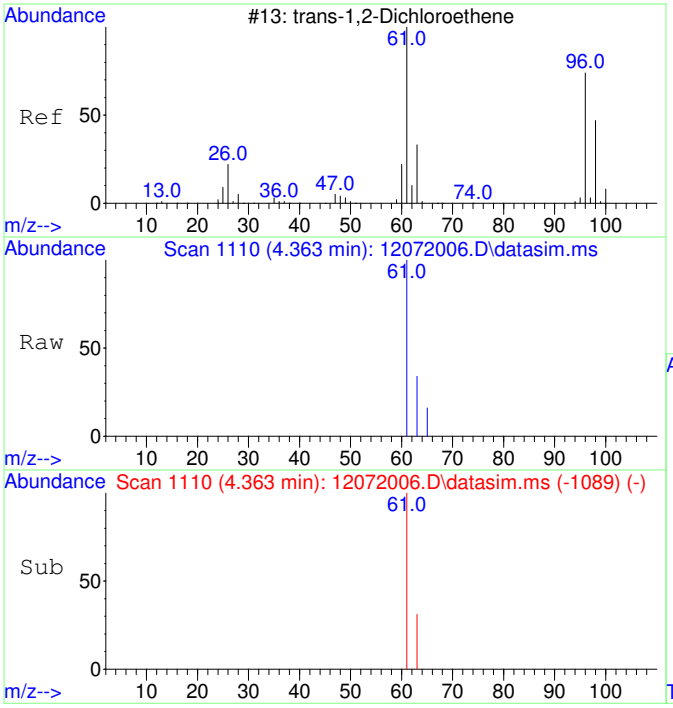


#2
1,1-Dichloroethene
Concen: 847.46 ug/L m
RT: 3.086 min Scan# 808
Delta R.T. -0.004 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6436

Ion	Ratio	Lower	Upper
61	100		
96	63.5	37.2	97.2

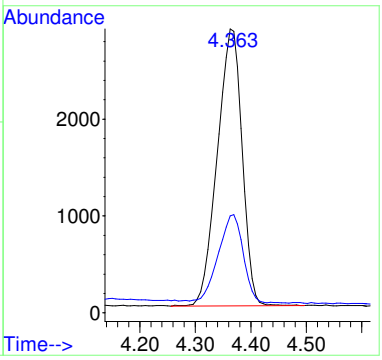


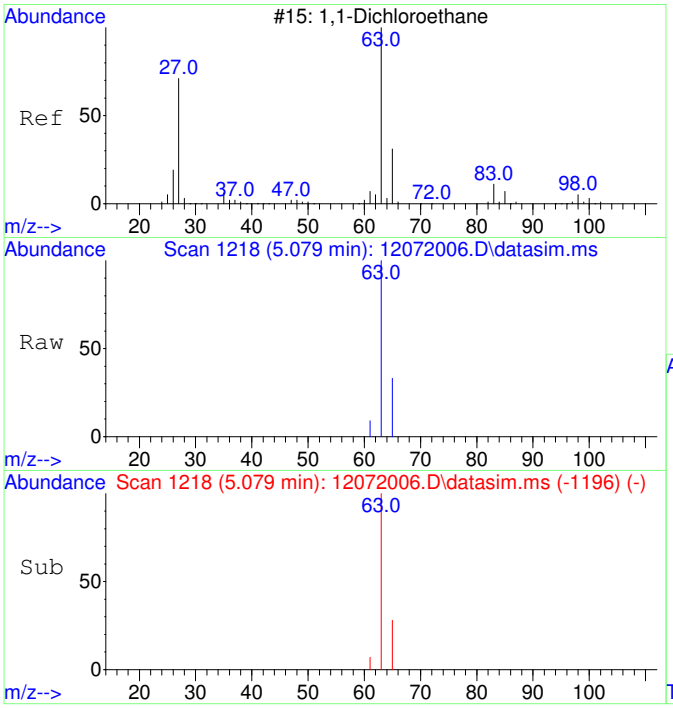


#3
trans-1,2-Dichloroethene
Concen: 926.37 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 8899

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.4	62.4

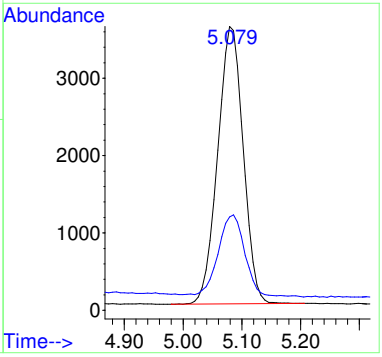


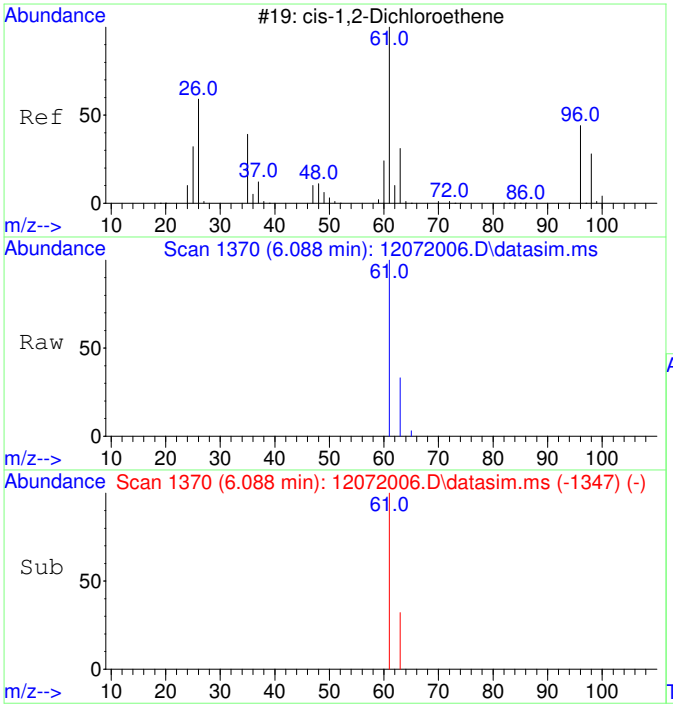


#4
1,1-Dichloroethane
Concen: 939.13 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 10775

Ion	Ratio	Lower	Upper
63	100		
65	30.8	1.8	61.8

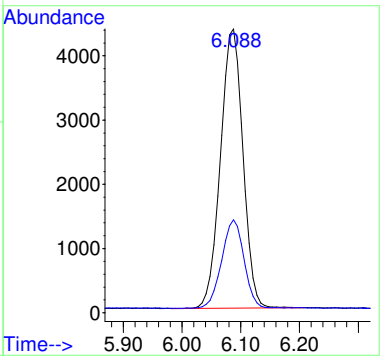


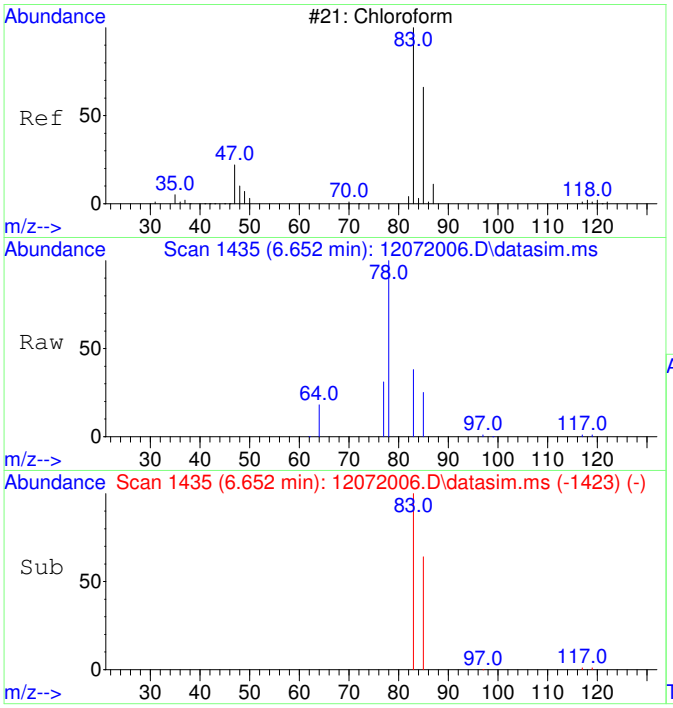


#5
cis-1,2-Dichloroethene
Concen: 970.12 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 11528

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

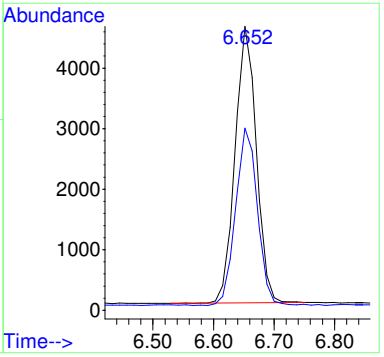


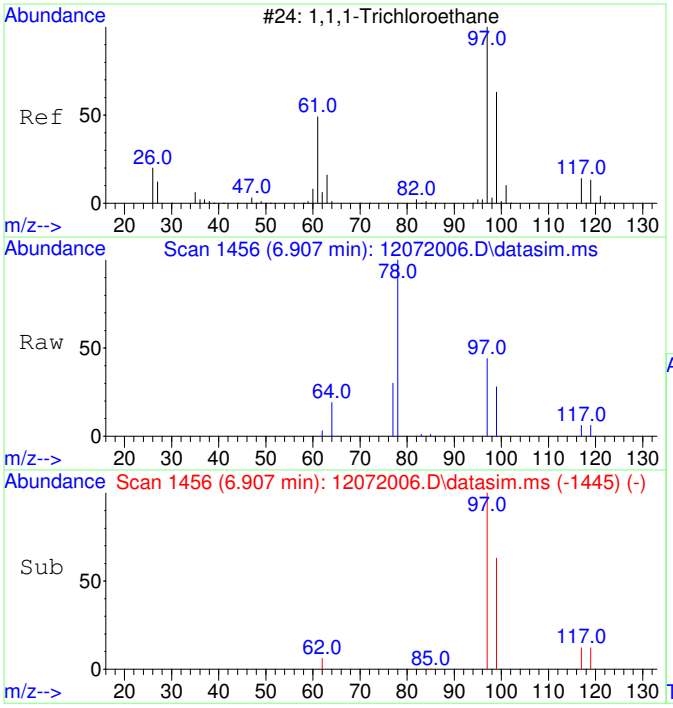


#6
Chloroform
Concen: 978.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 11165

Ion	Ratio	Lower	Upper
83	100		
85	65.4	35.1	95.1

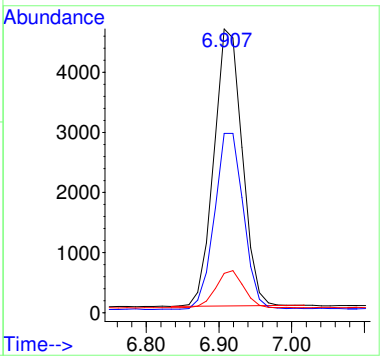


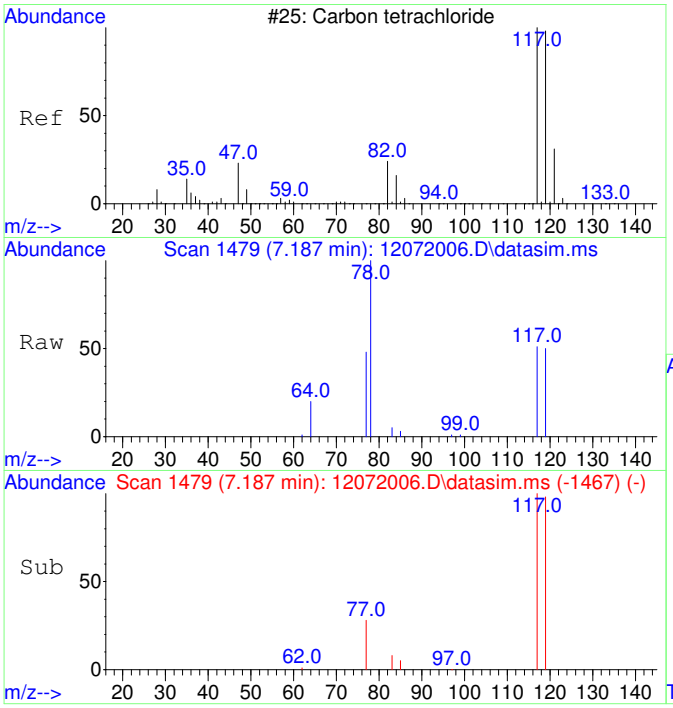


#7
1,1,1-Trichloroethane
Concen: 1017.13 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 12471

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

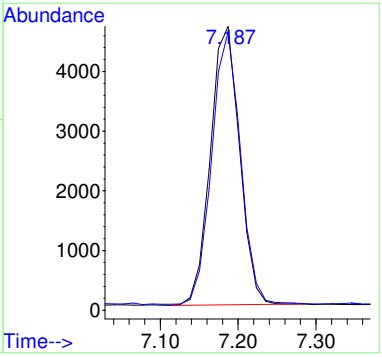


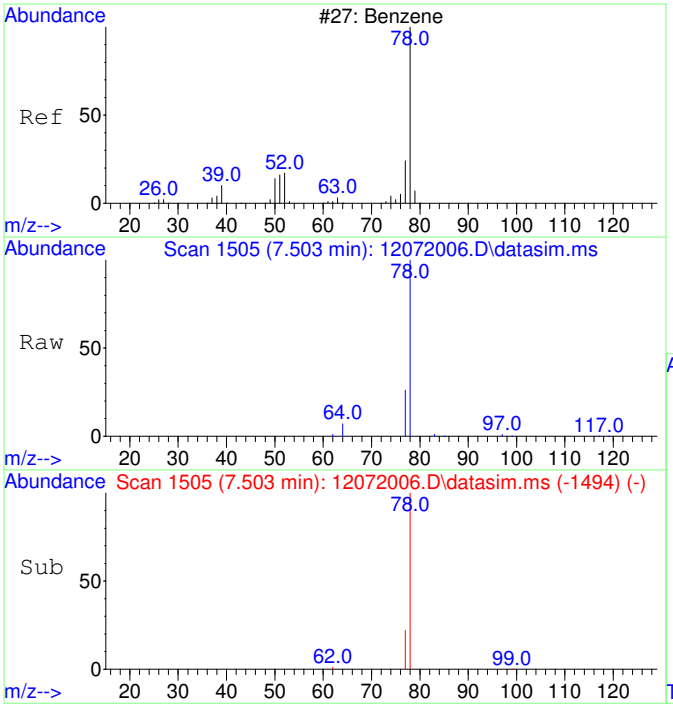


#8
Carbon tetrachloride
Concen: 1038.04 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 12168

Ion	Ratio	Lower	Upper
117	100		
119	95.6	66.4	126.4

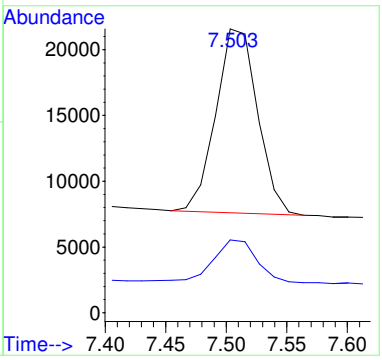


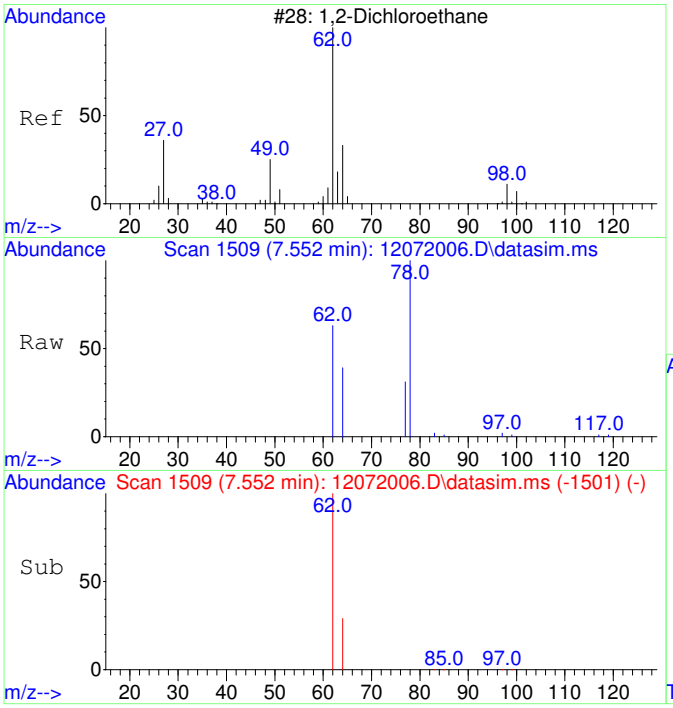


#9
Benzene
Concen: 1036.18 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 33507

Ion	Ratio	Lower	Upper
78	100		
77	27.2	0.0	53.2

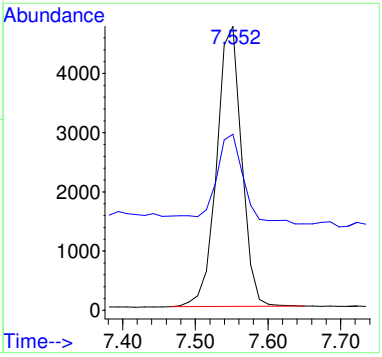


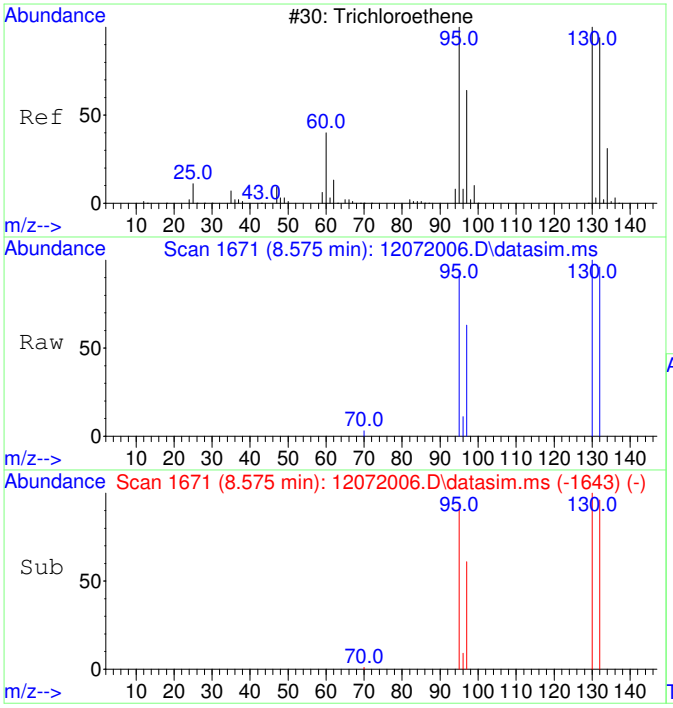


#10
1,2-Dichloroethane
Concen: 1025.16 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 11309

Ion	Ratio	Lower	Upper
62	100		
64	36.9	2.3	62.3

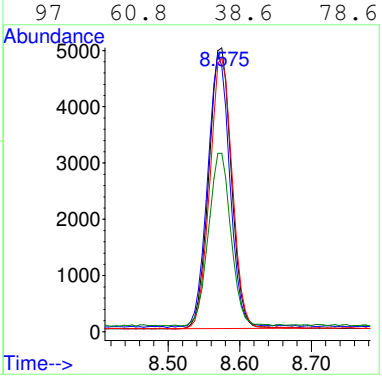


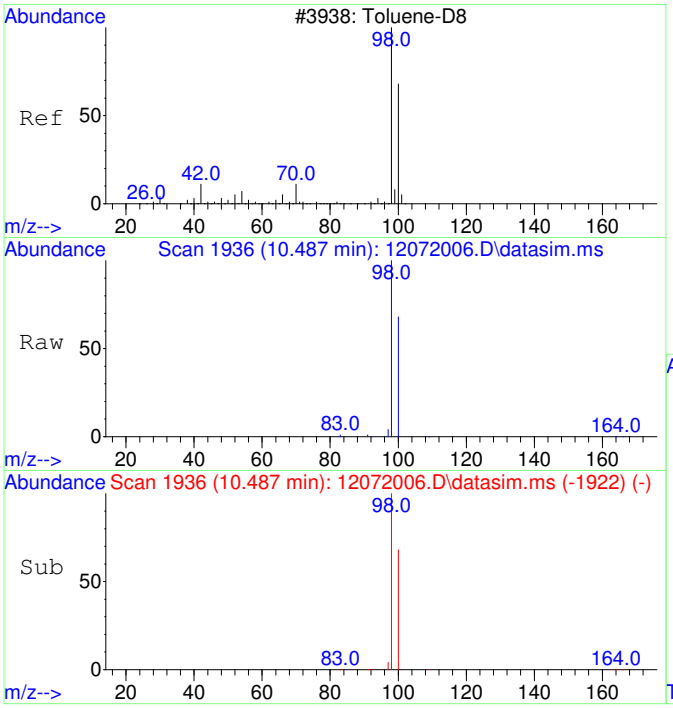


#11
Trichloroethene
Concen: 1064.47 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 10868

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

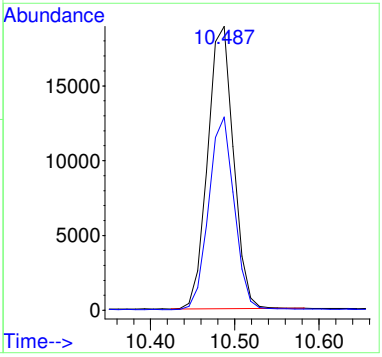


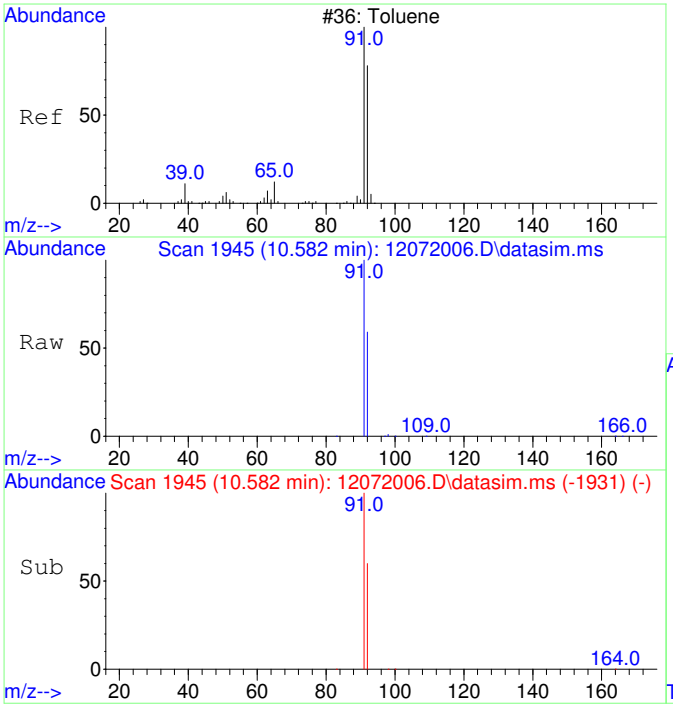


#12
Toluene-d8
Concen: 1084.10 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 40349

Ion	Ratio	Lower	Upper
98	100		
100	66.9	37.1	97.1

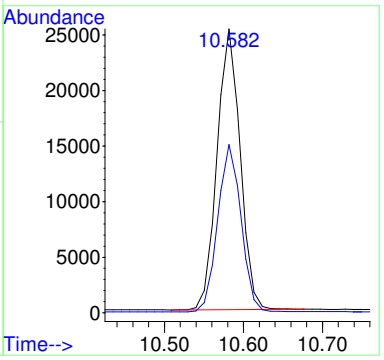


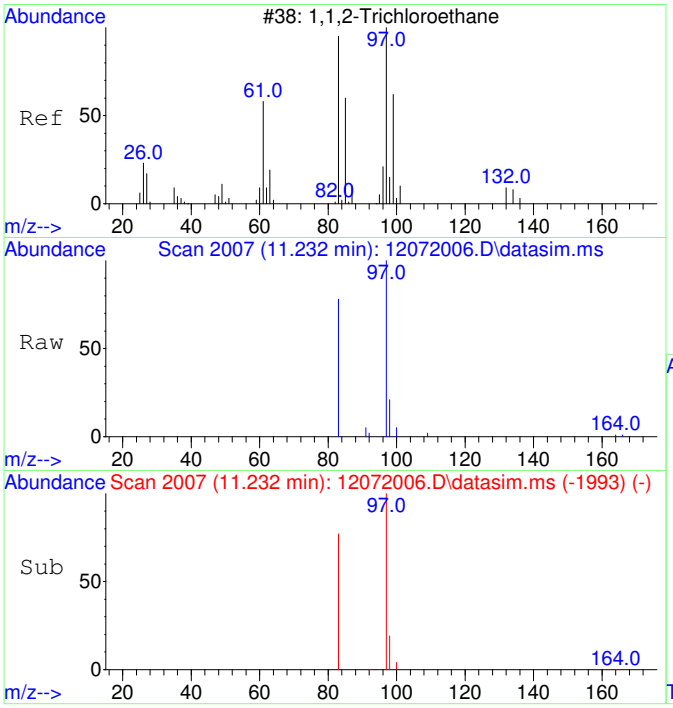


#13
Toluene
Concen: 1103.33 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 51129

Ion	Ratio	Lower	Upper
91	100		
92	59.8	29.9	89.9

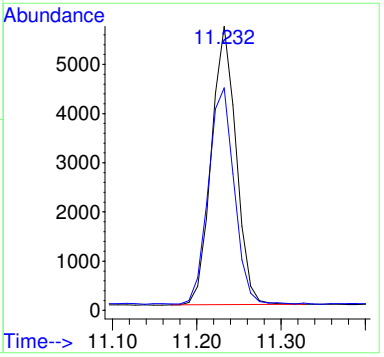


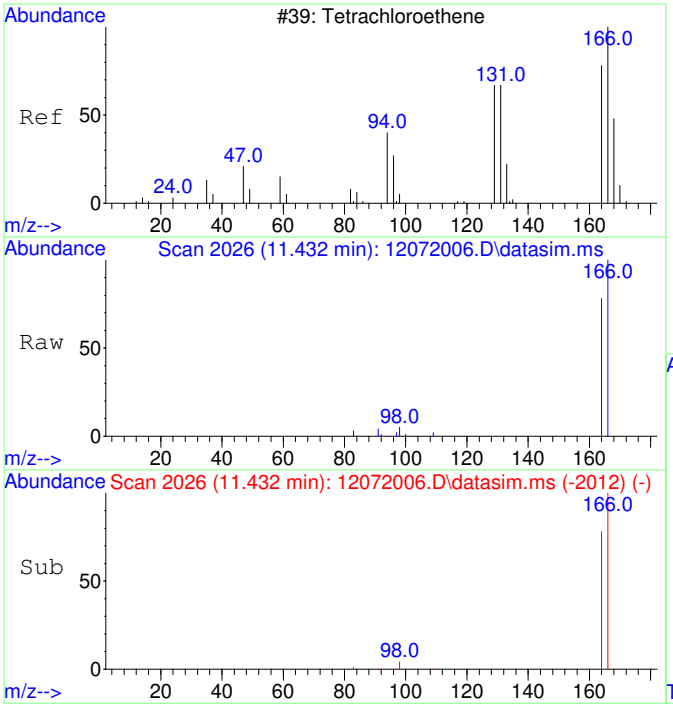


#14
1,1,2-Trichloroethane
Concen: 1073.57 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 11523

Ion	Ratio	Lower	Upper
97	100		
83	81.4	51.2	111.2

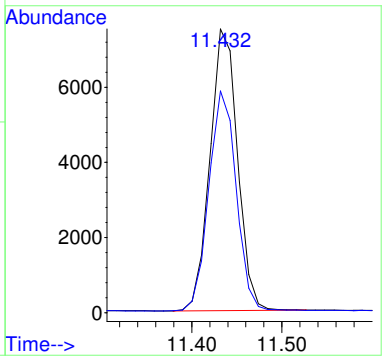


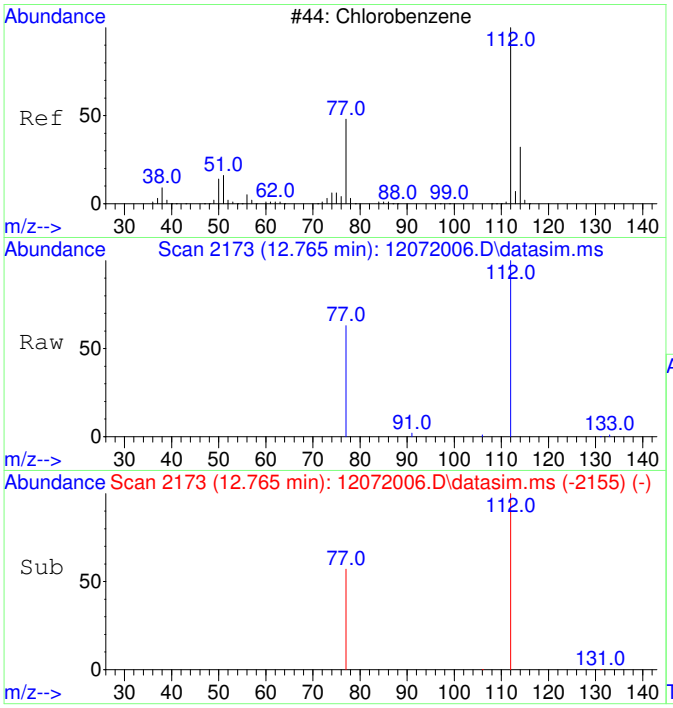


#15
Tetrachloroethene
Concen: 1101.36 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 15897

Ion	Ratio	Lower	Upper
166	100		
164	77.5	47.8	107.8

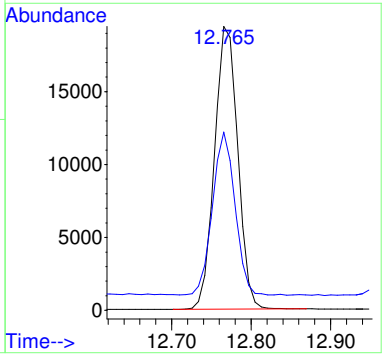


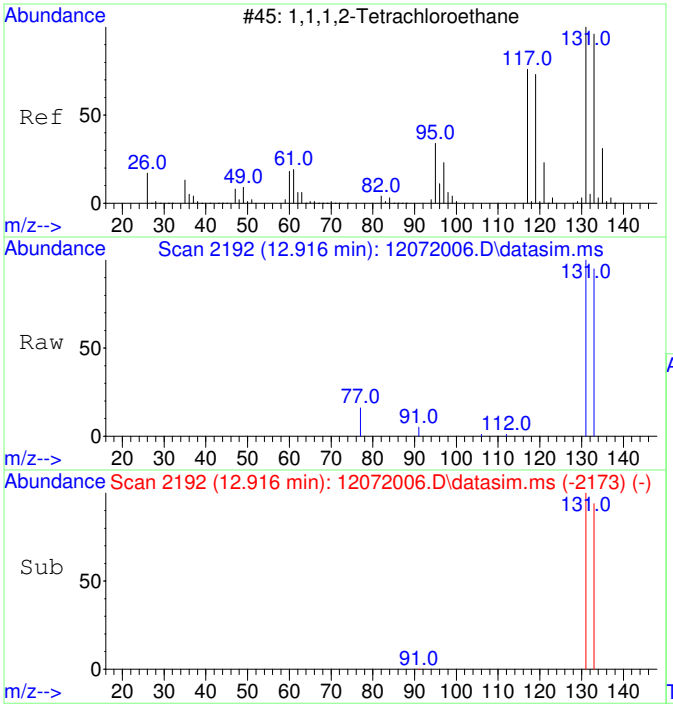


#16
Chlorobenzene
Concen: 1098.83 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 39448

Ion	Ratio	Lower	Upper
112	100		
77	55.4	23.6	83.6

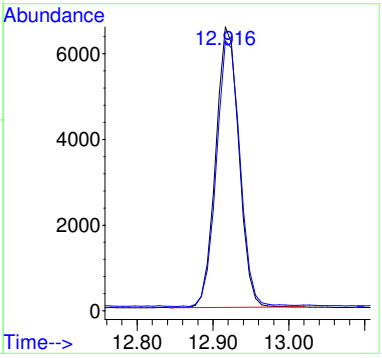


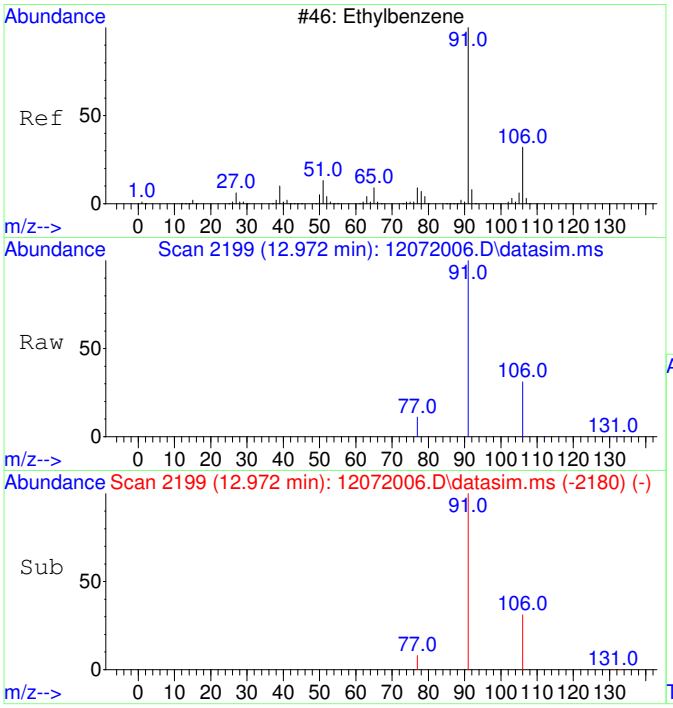


#17
1,1,1,2-Tetrachloroethane
Concen: 1104.11 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 13873

Ion	Ratio	Lower	Upper
131	100		
133	95.9	66.3	126.3

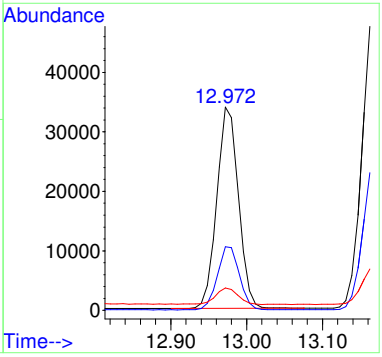


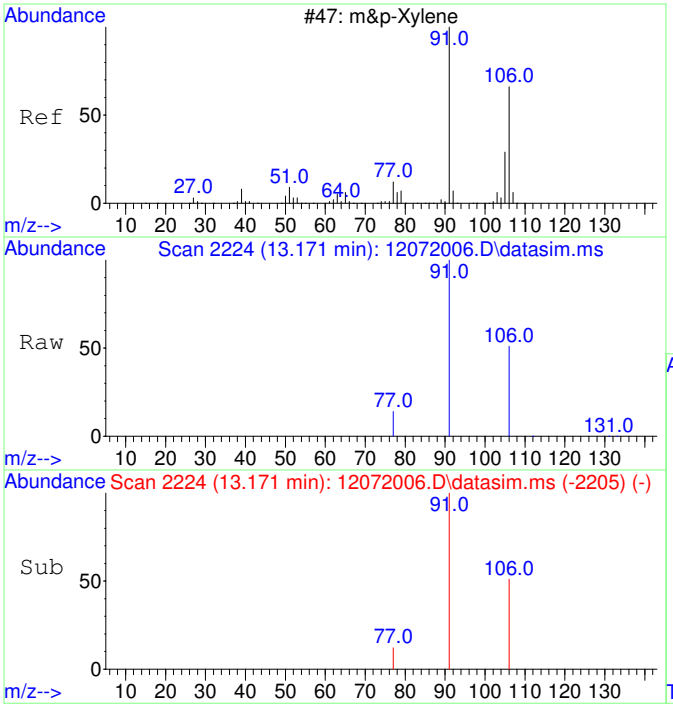


#18
Ethylbenzene
Concen: 1130.19 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 66895

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

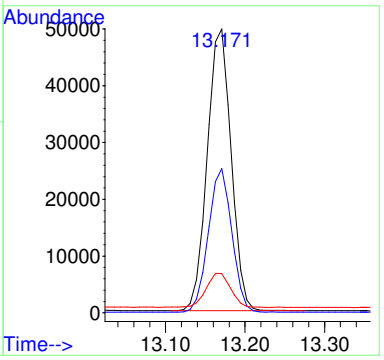


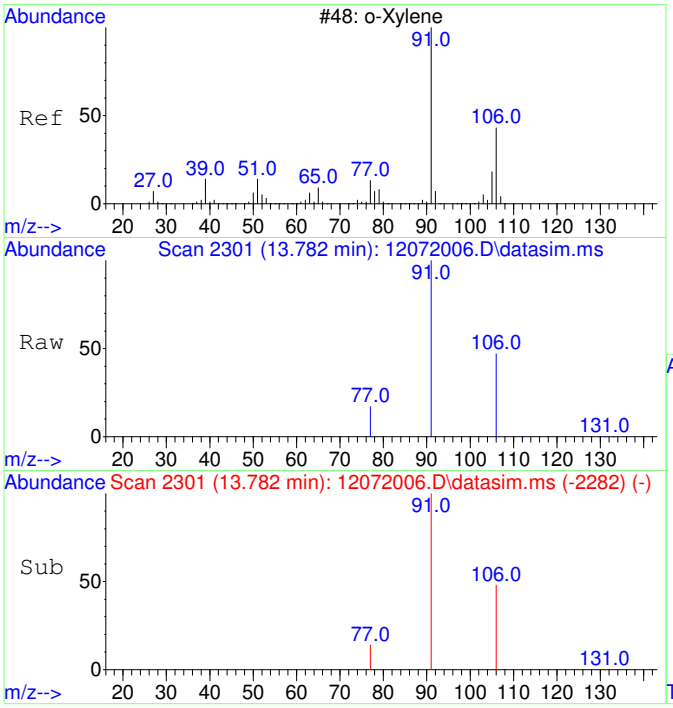


#19
m&p-Xylene
Concen: 2275.67 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 103724

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

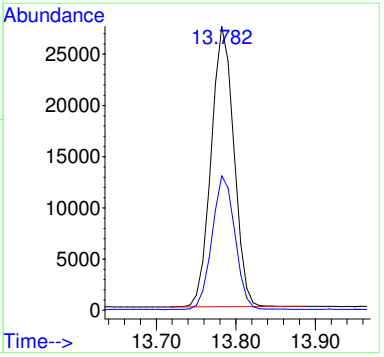


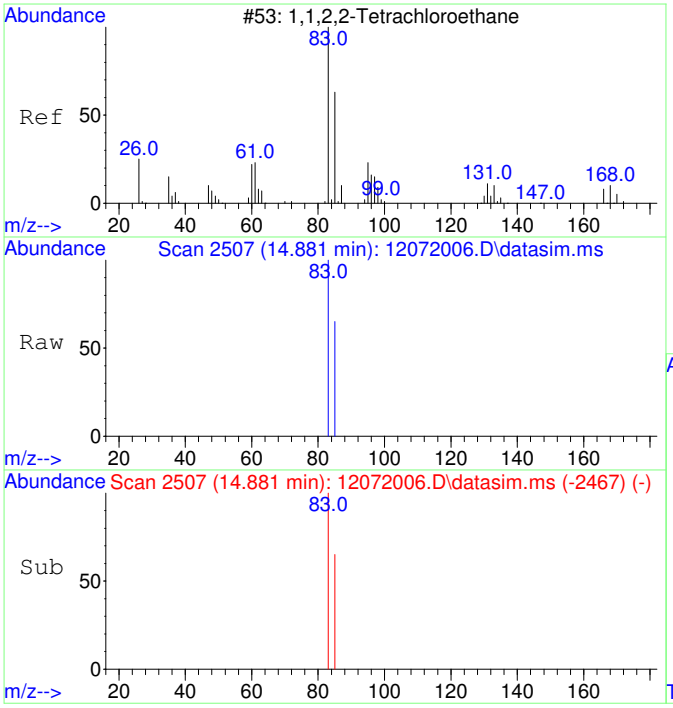


#20
o-Xylene
Concen: 1109.83 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 54333

Ion	Ratio	Lower	Upper
91	100		
106	48.1	19.2	79.2

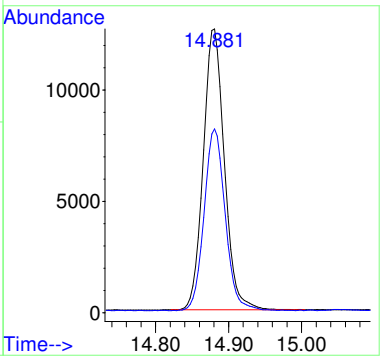


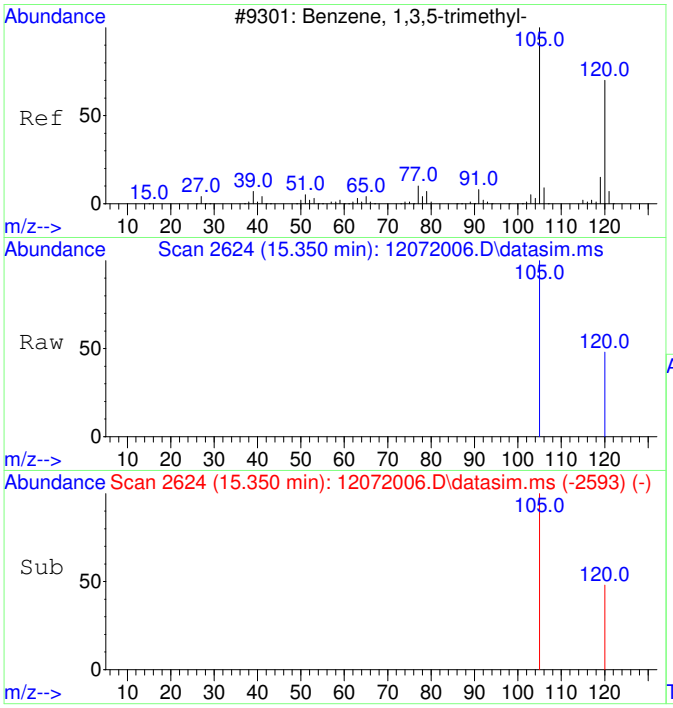


#21
1,1,2,2-Tetrachloroethane
Concen: 1108.19 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 25279

Ion	Ratio	Lower	Upper
83	100		
85	64.7	34.8	94.8

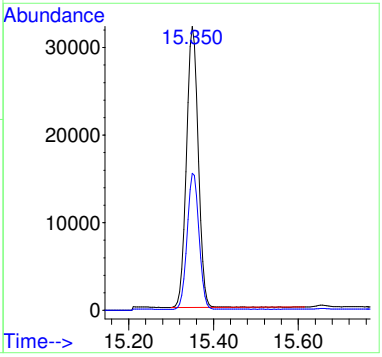


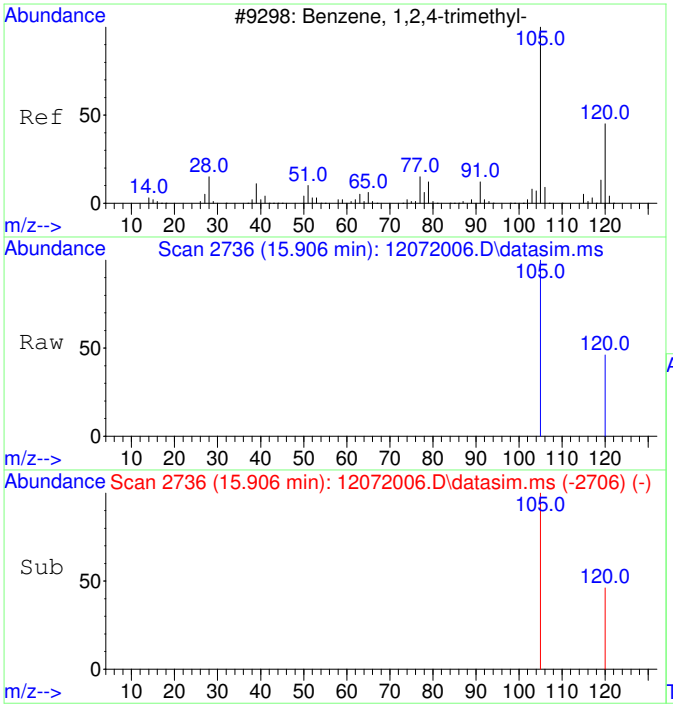


#22
1,3,5-Trimethylbenzene
Concen: 1145.65 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 61678

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

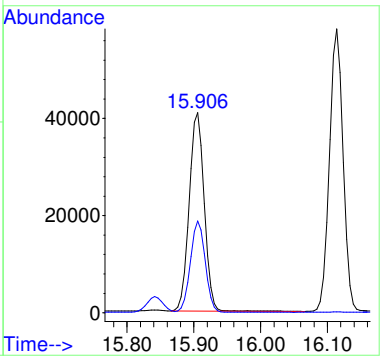


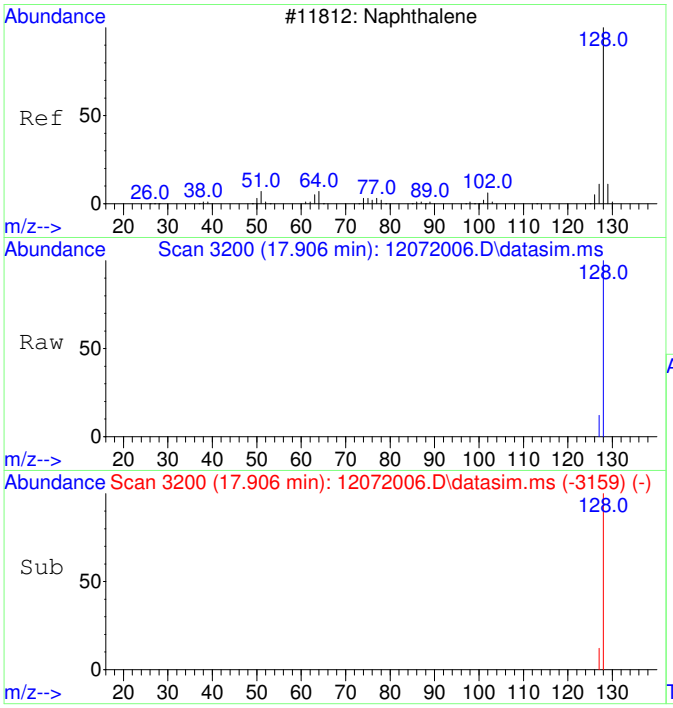


#23
1,2,4-Trimethylbenzene
Concen: 1157.33 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 63729

Ion	Ratio	Lower	Upper
105	100		
120	44.7	17.2	77.2

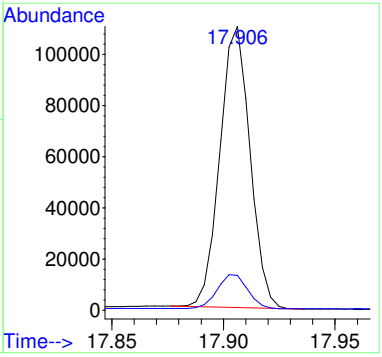


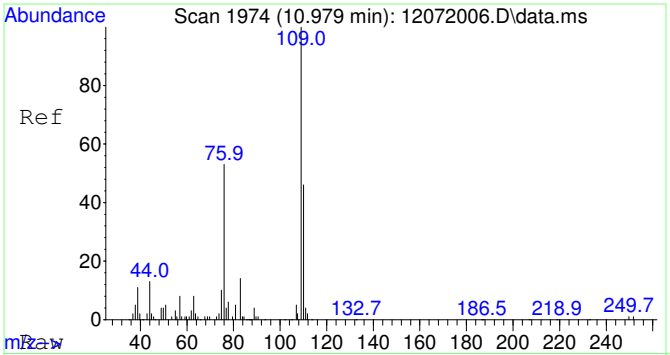


#24
Naphthalene
Concen: 1190.66 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 102525

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

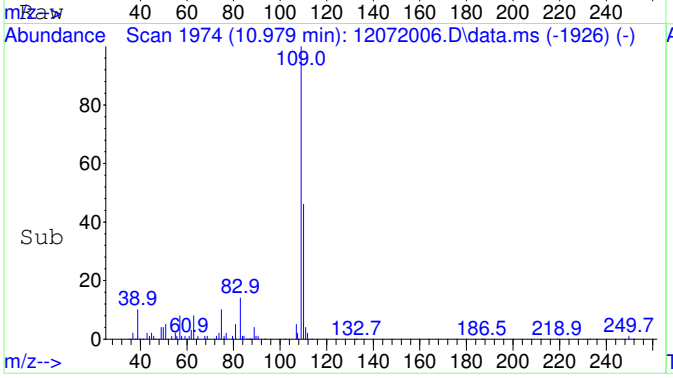


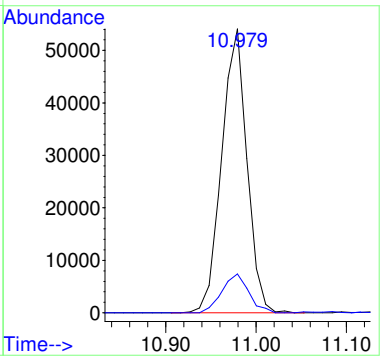


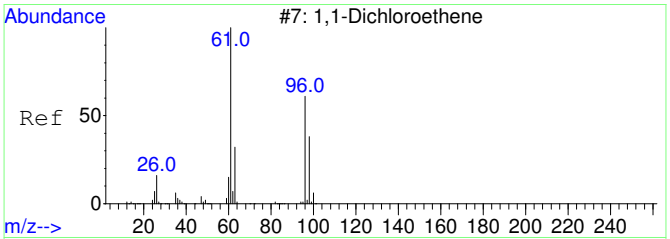
#25
2-Fluorotoluene SCAN
Concen: 4837.67 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

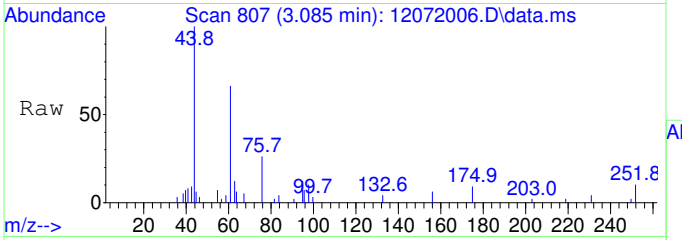
Tgt Ion:109 Resp: 105526

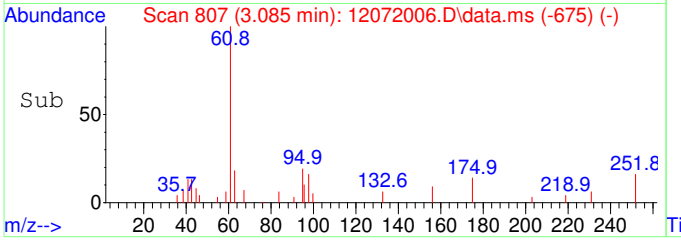
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







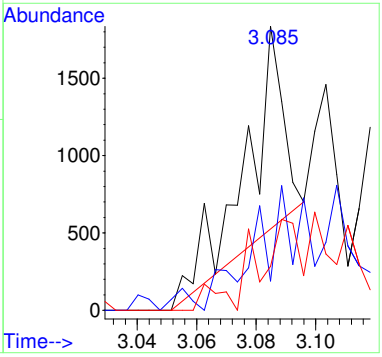


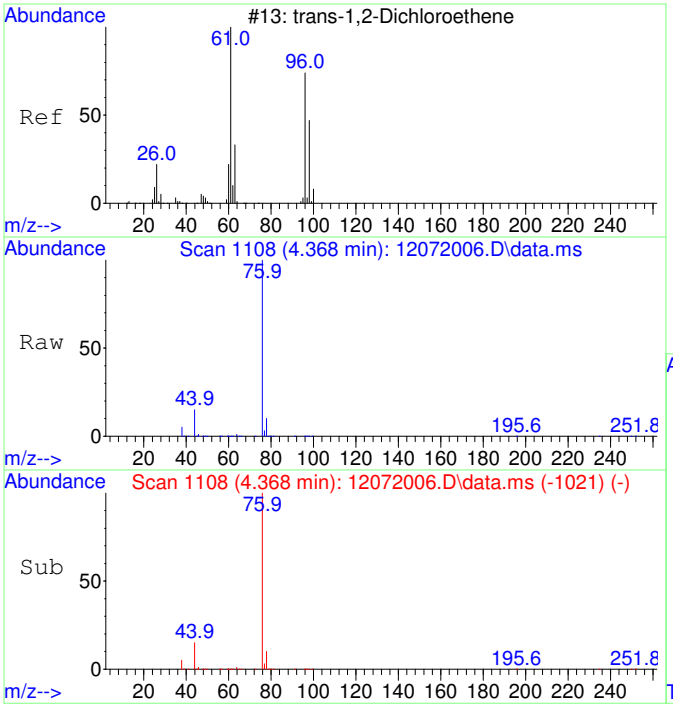


#26
1,1-Dichloroethene SCAN
Concen: 224.65 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 1144

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

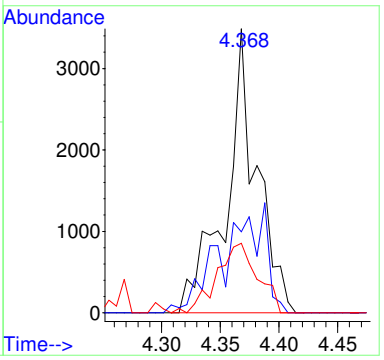


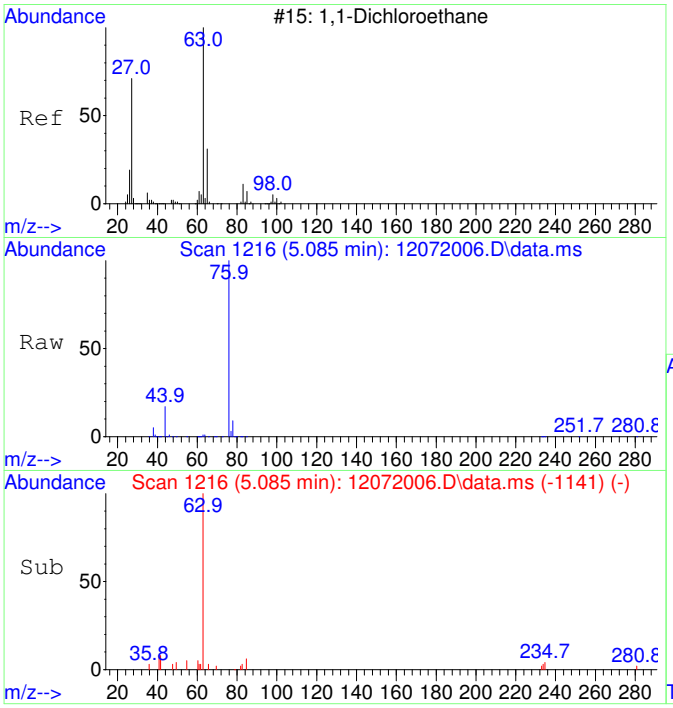


#27
trans-1,2-Dichloroethene SCAN
Concen: 988.56 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 6412

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

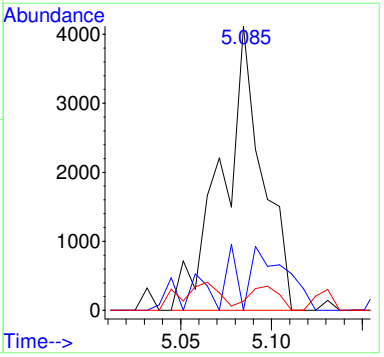


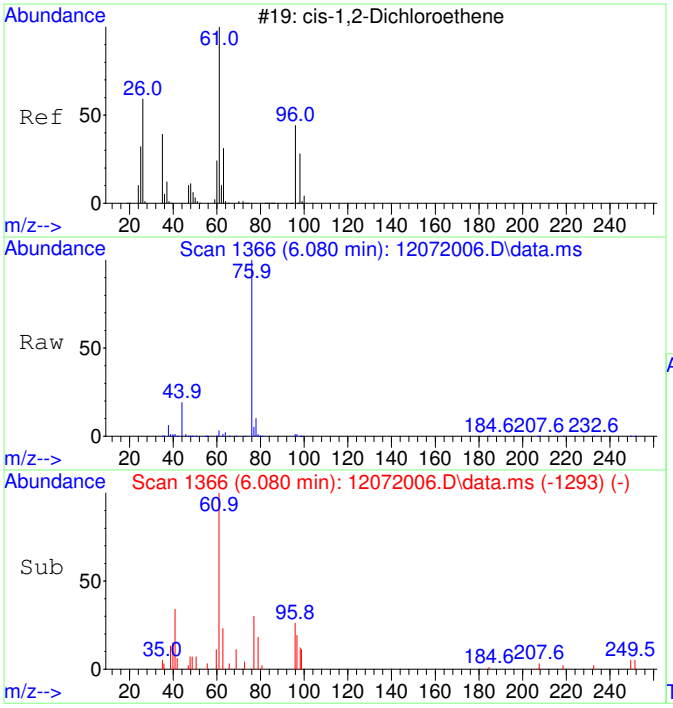


#28
1,1-Dichloroethane SCAN
Concen: 829.42 ug/L
RT: 5.085 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 63 Resp: 6350

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

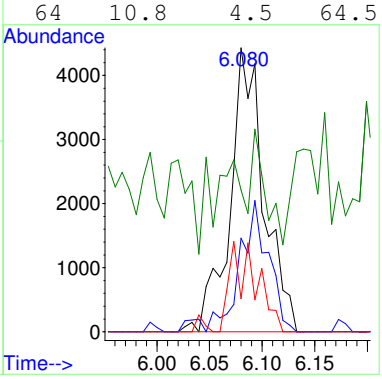


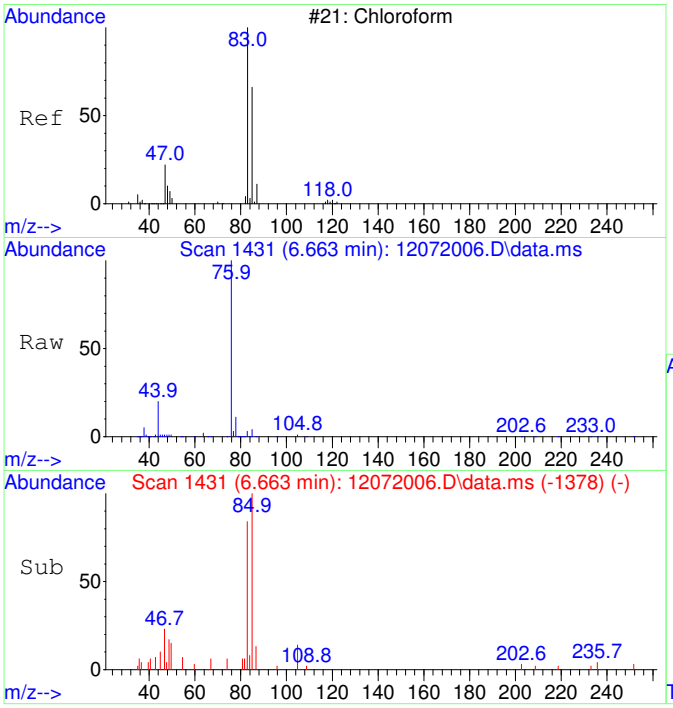


#29
cis-1,2-Dichloroethene SCAN
Concen: 1312.72 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 61 Resp: 9880

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

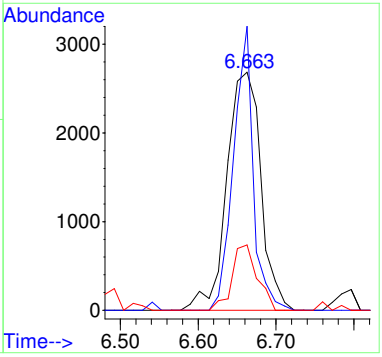


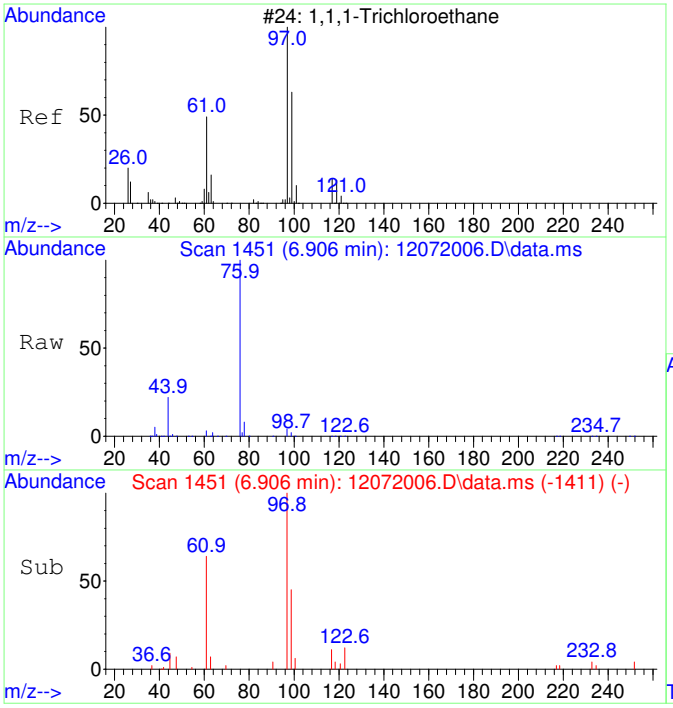


#30
Chloroform SCAN
Concen: 1164.68 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 8176

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

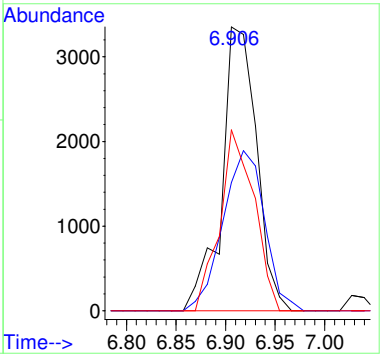


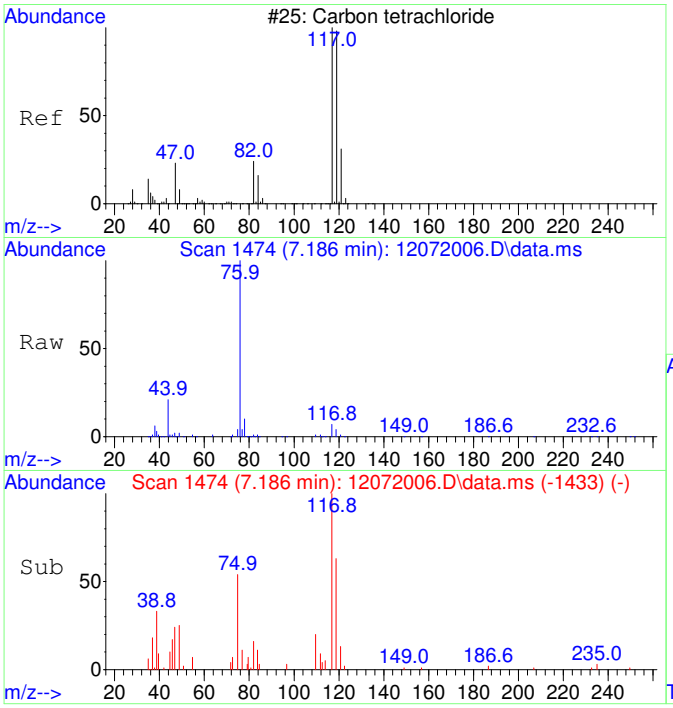


#31
1,1,1-Trichloroethane SCAN
Concen: 1131.56 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 8197

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

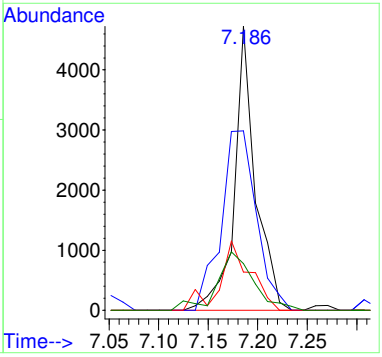


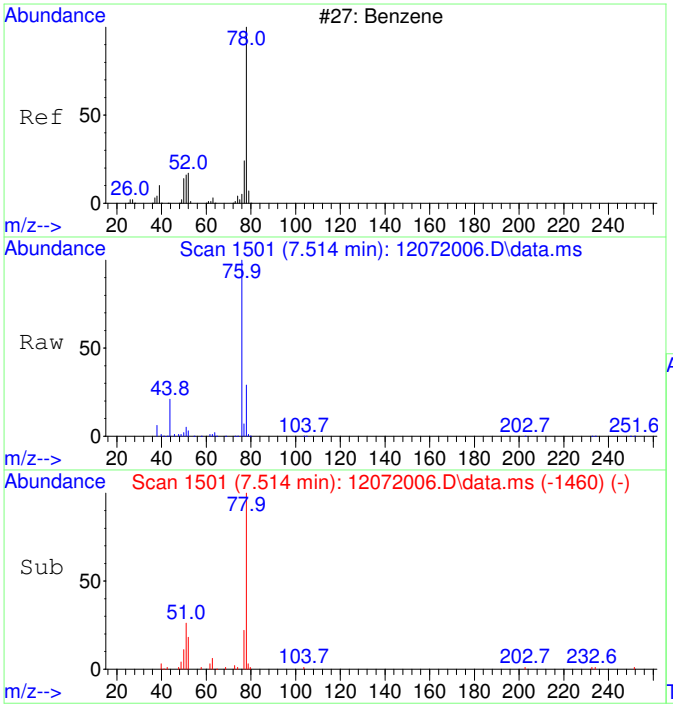


#32
Carbon tetrachloride SCAN
Concen: 1125.63 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:117 Resp: 6968

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

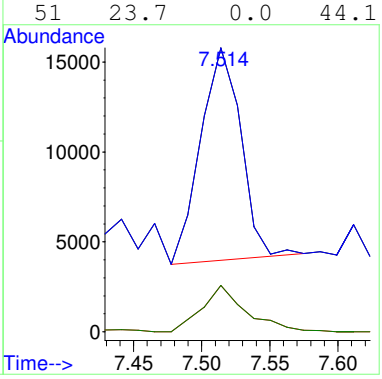


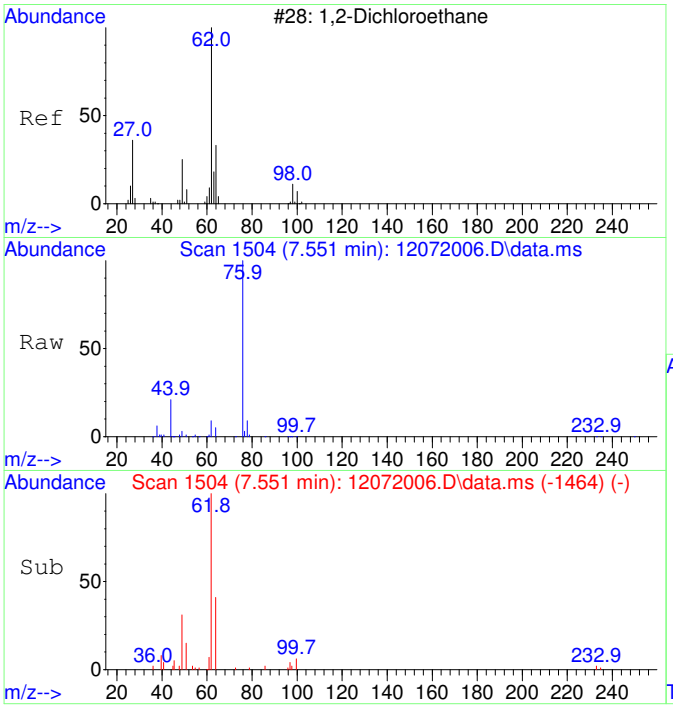


#33
Benzene SCAN
Concen: 1117.71 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 78 Resp: 24495

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

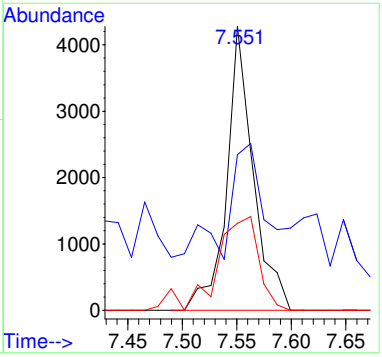


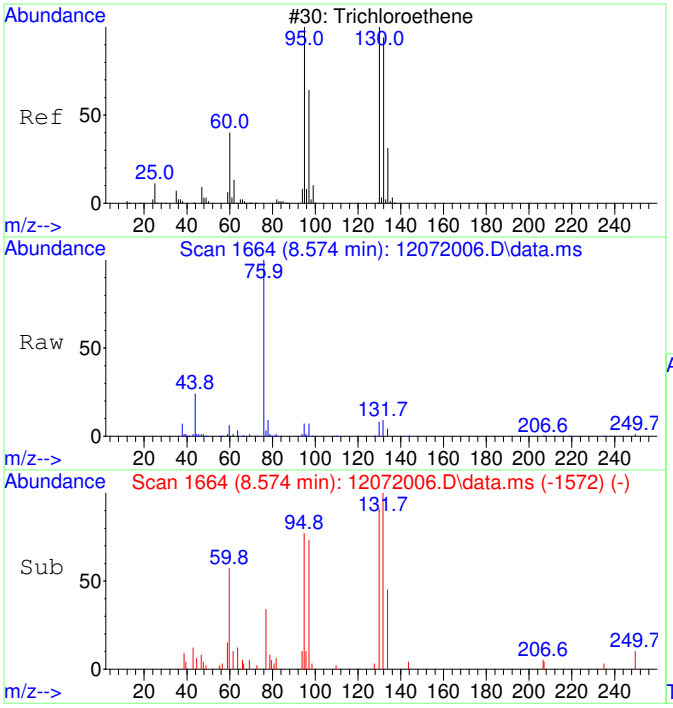


#34
1,2-Dichloroethane SCAN
Concen: 1059.80 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 62 Resp: 7265

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

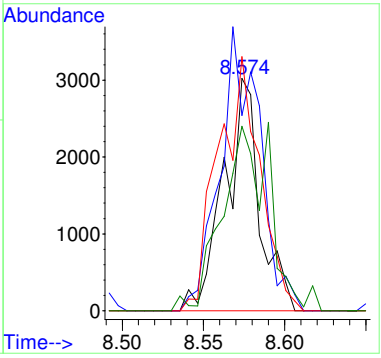


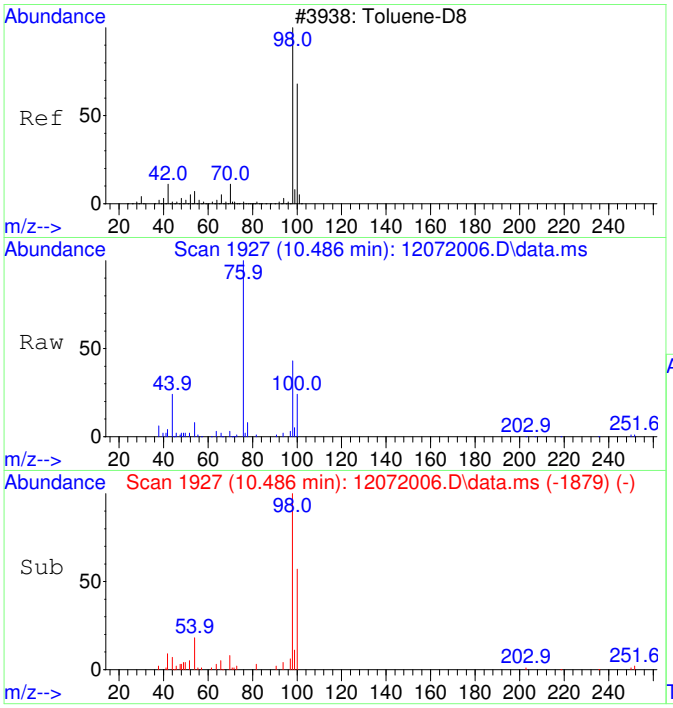


#35
Trichloroethene SCAN
Concen: 958.85 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:130 Resp: 4582

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

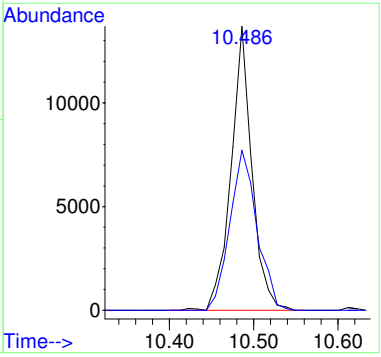


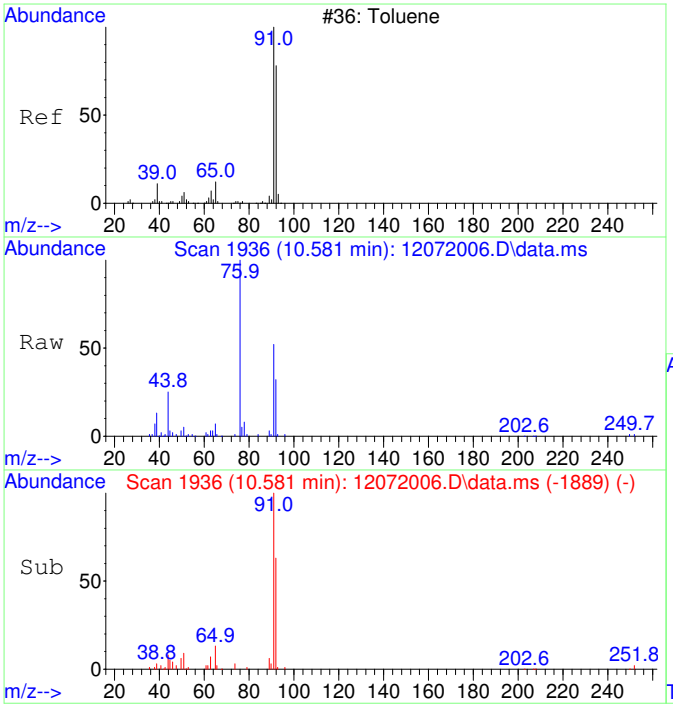


#36
Toluene-d8 SCAN
Concen: 1153.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 98 Resp: 23597

Ion	Ratio	Lower	Upper
98	100		
100	73.3	40.0	100.0

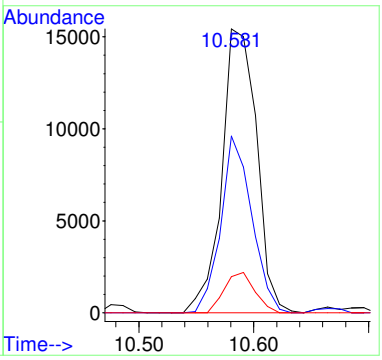


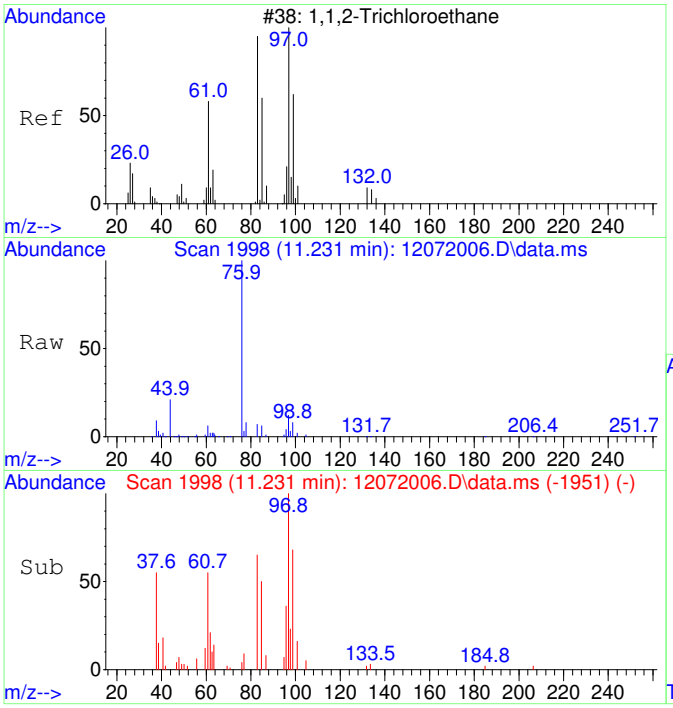


#37
Toluene SCAN
Concen: 1290.59 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 32509

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

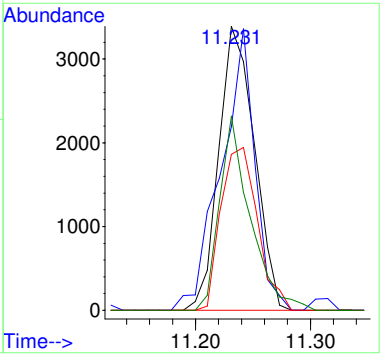


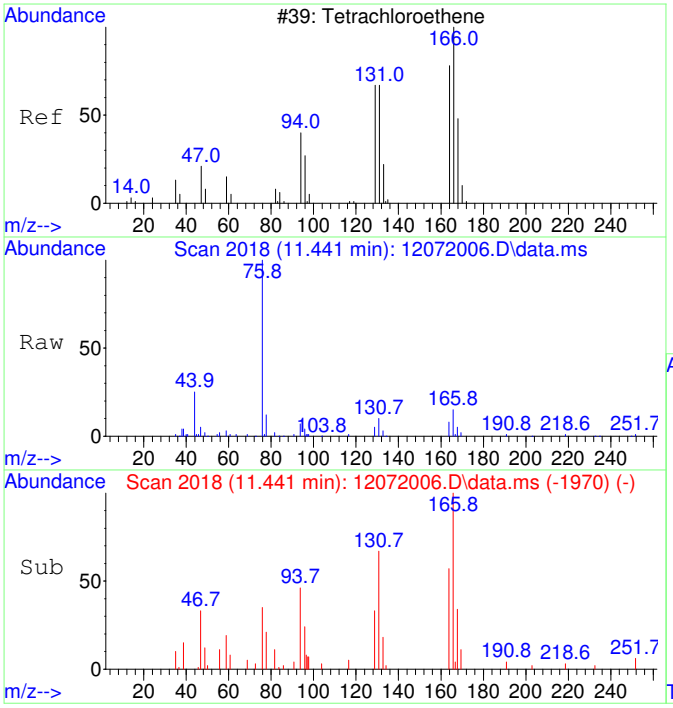


#38
1,1,2-Trichloroethane SCAN
Concen: 1159.53 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 97 Resp: 7321

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

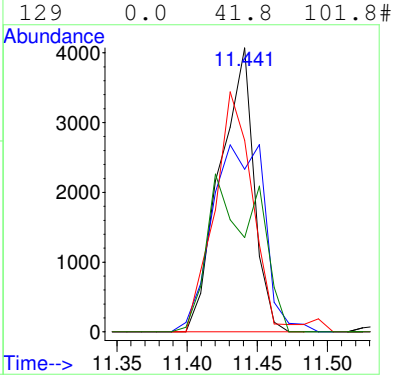


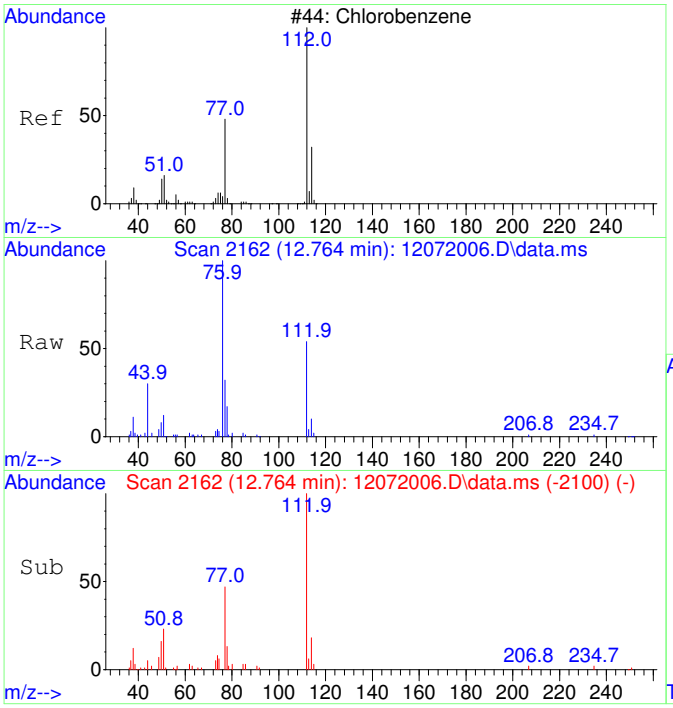


#39
Tetrachloroethene SCAN
Concen: 1216.76 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:166 Resp: 6895

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

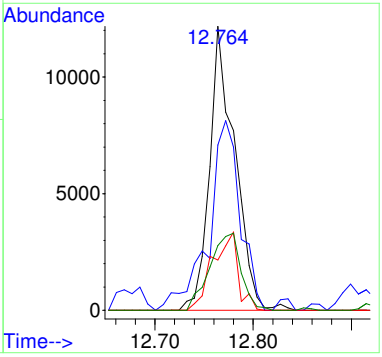


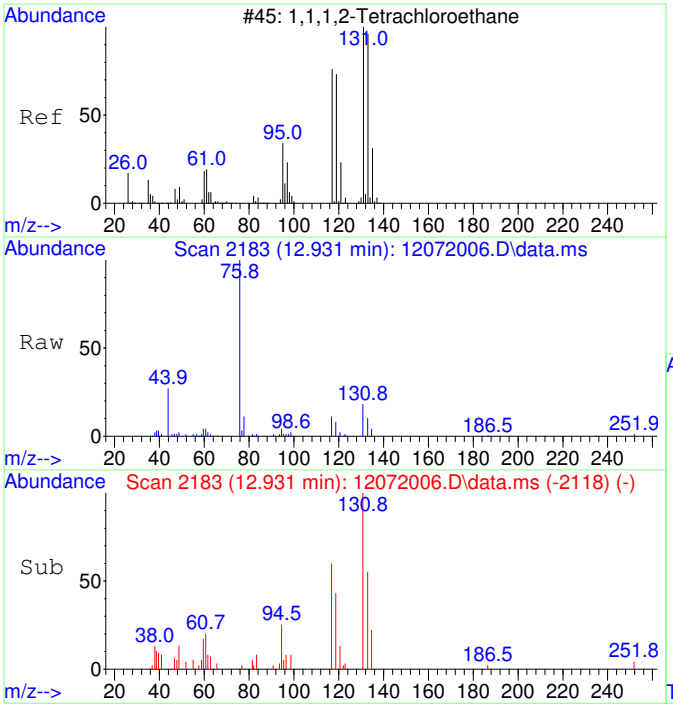


#40
Chlorobenzene SCAN
Concen: 1200.56 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:112 Resp: 21721

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

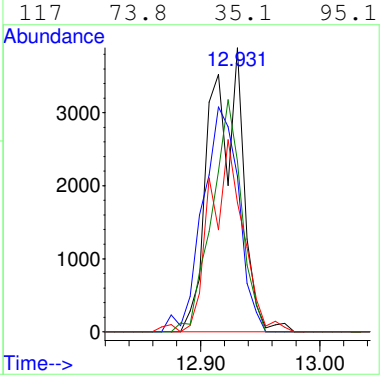


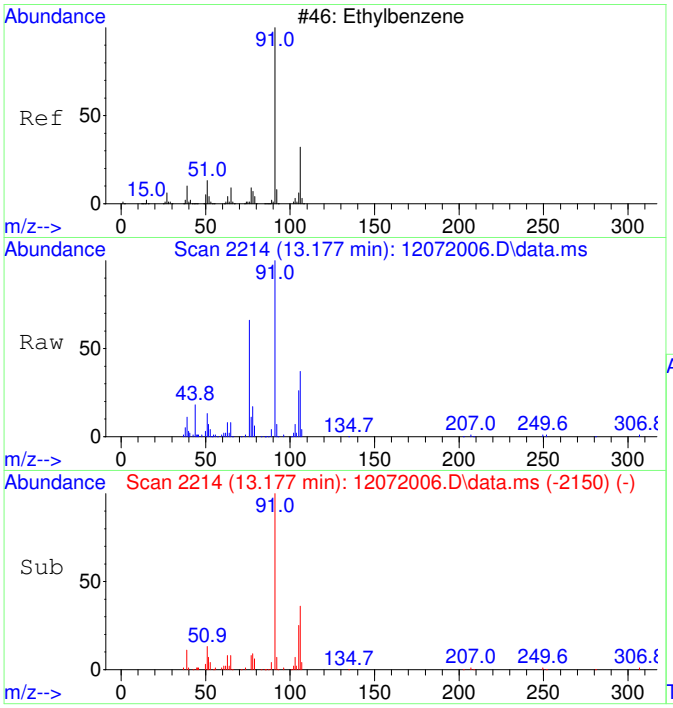


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 1181.69 ug/L
RT: 12.931 min Scan# 2183
Delta R.T. 0.016 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:131 Resp: 7376

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

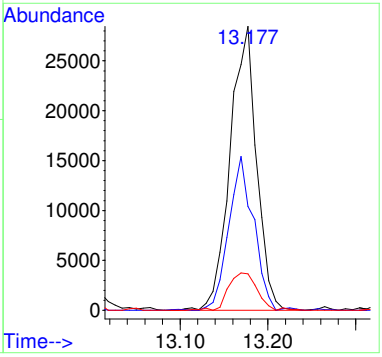


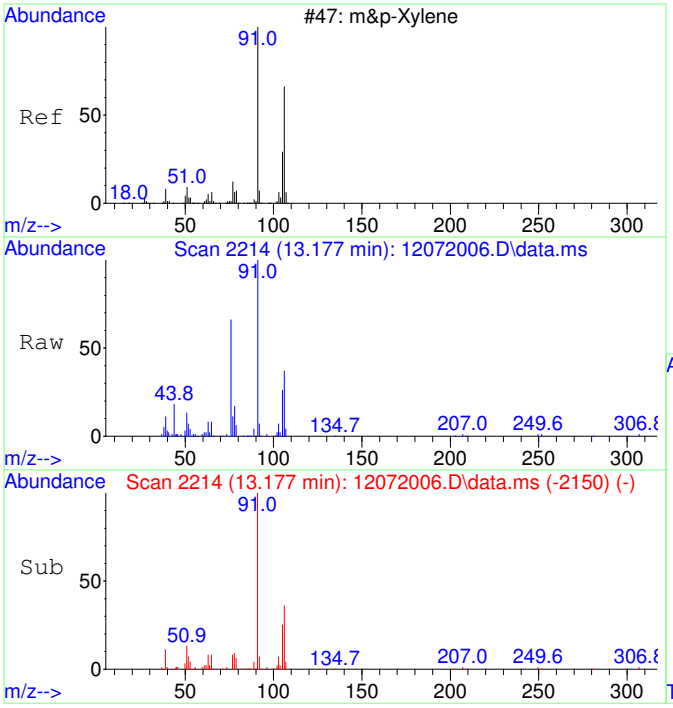


#42
Ethylbenzene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

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

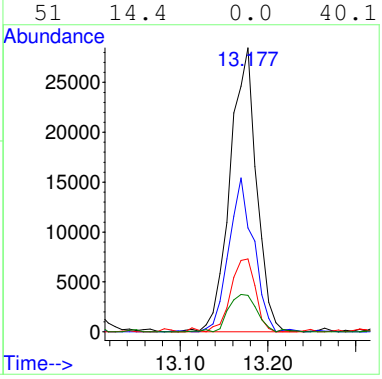


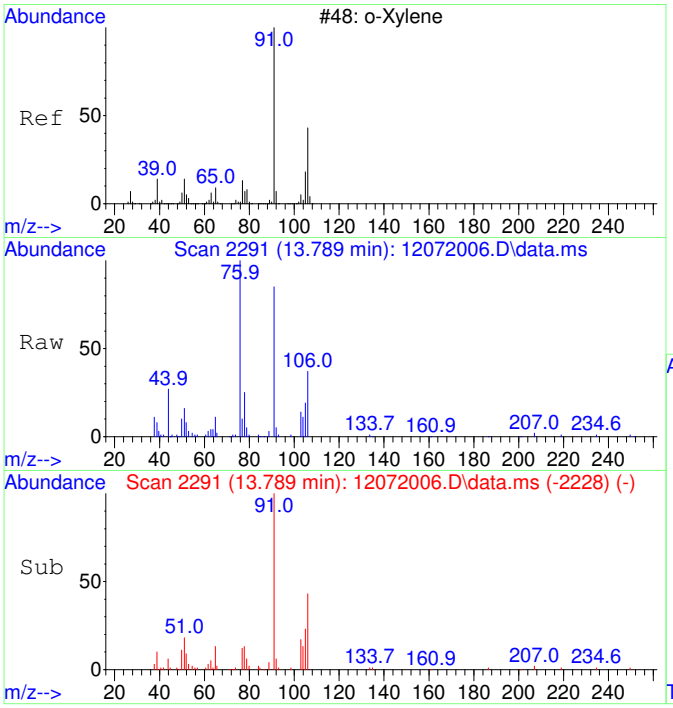


#43
m&p-Xylene SCAN
Concen: 1241.88 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 59613

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

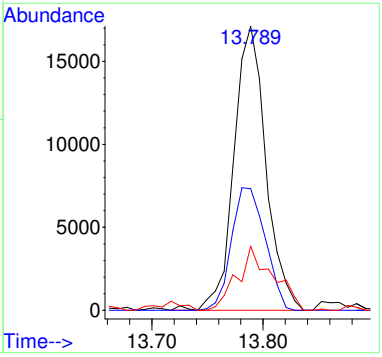


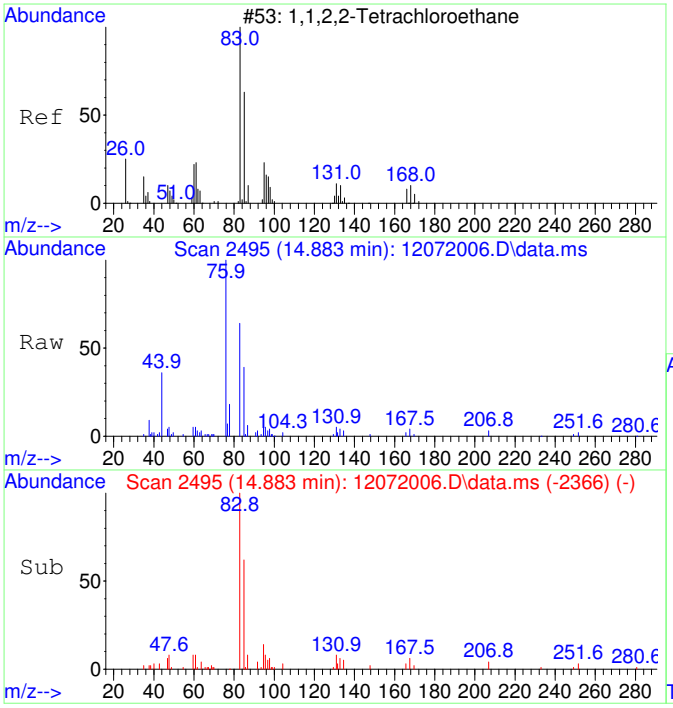


#44
o-Xylene SCAN
Concen: 1304.94 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 91 Resp: 34205

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

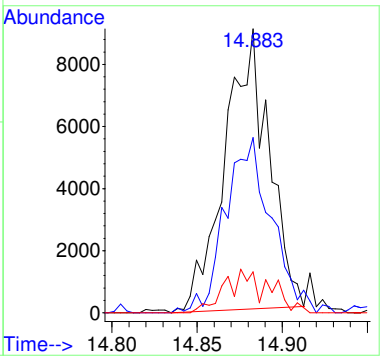


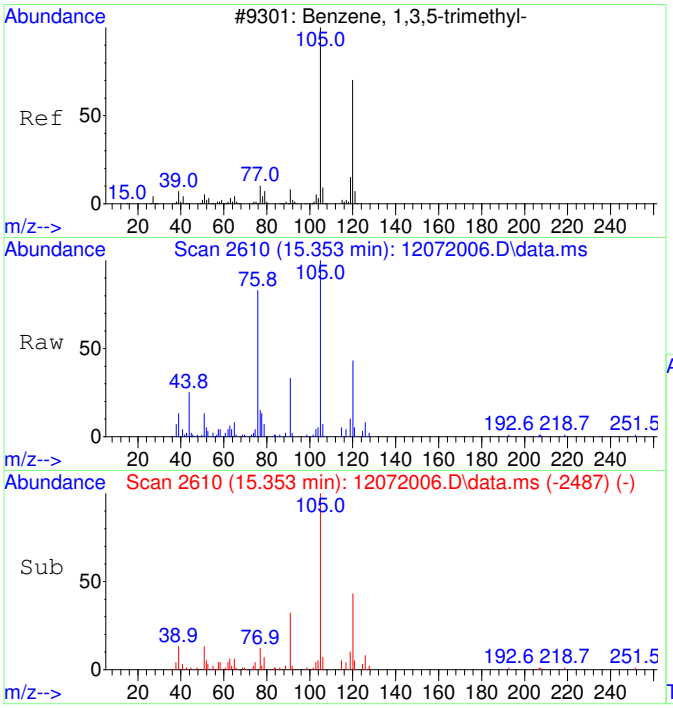


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 1195.11 ug/L
RT: 14.883 min Scan# 2495
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion: 83 Resp: 16288

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

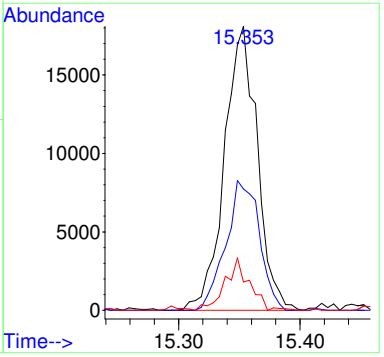


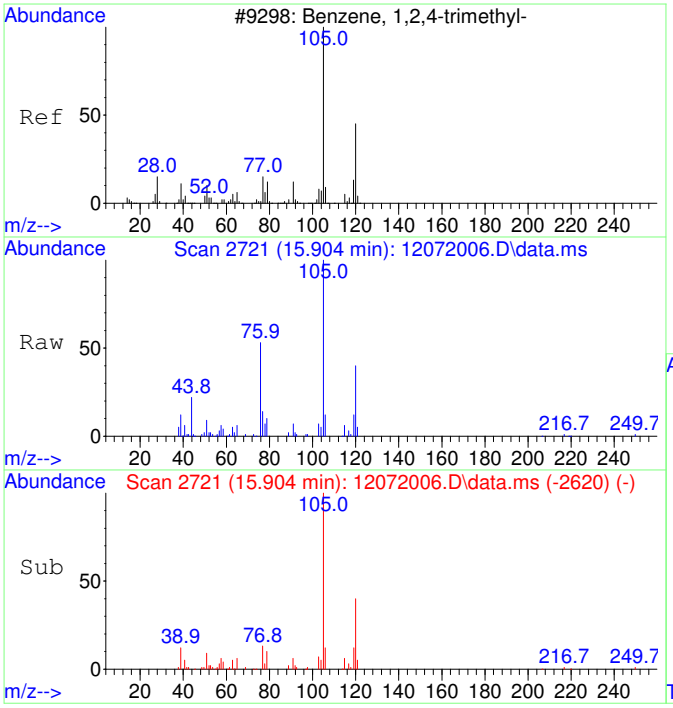


#46
1,3,5-Trimethylbenzene SCAN
Concen: 1231.15 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 34045

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

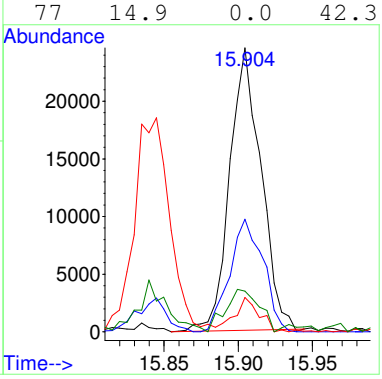


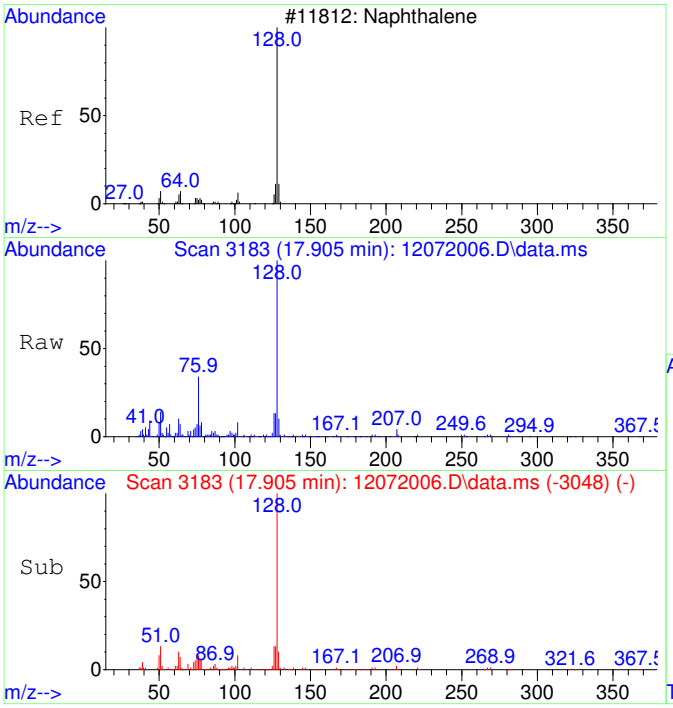


#47
1,2,4-Trimethylbenzene SCAN
Concen: 1276.92 ug/L
RT: 15.904 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:105 Resp: 36077

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

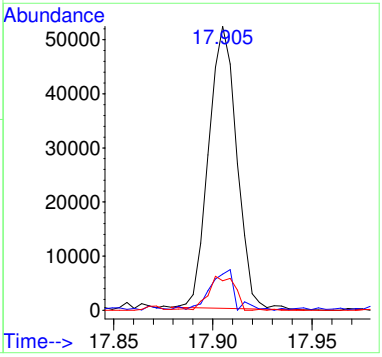




#48
Naphthalene SCAN
Concen: 1213.61 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072006.D
Acq: 7 Dec 2020 13:56

Tgt Ion:128 Resp: 51467

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



S20L021-CAL5

Before Manual Integration

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

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

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

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
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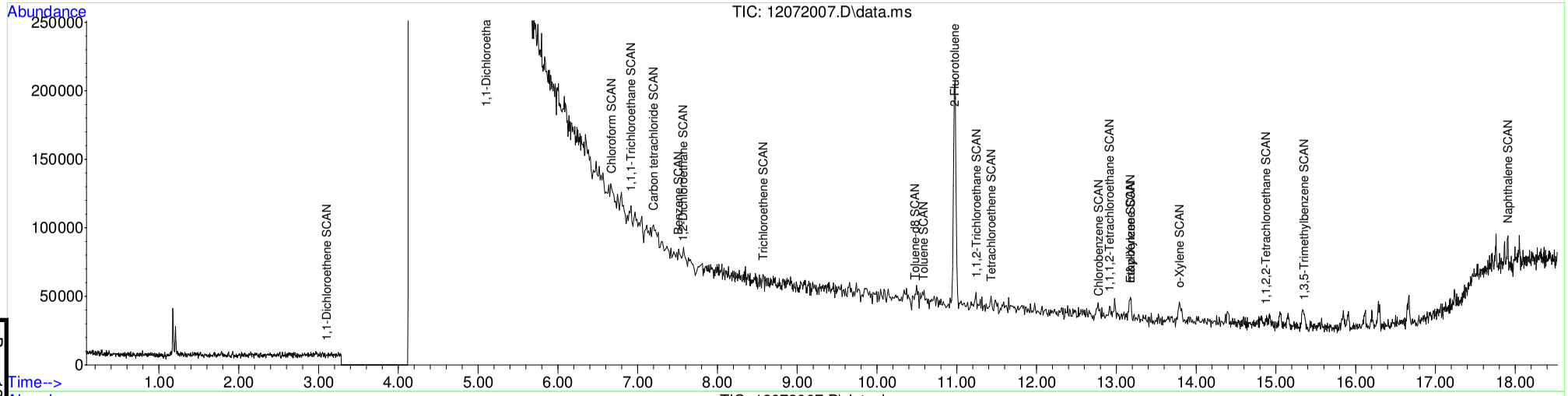

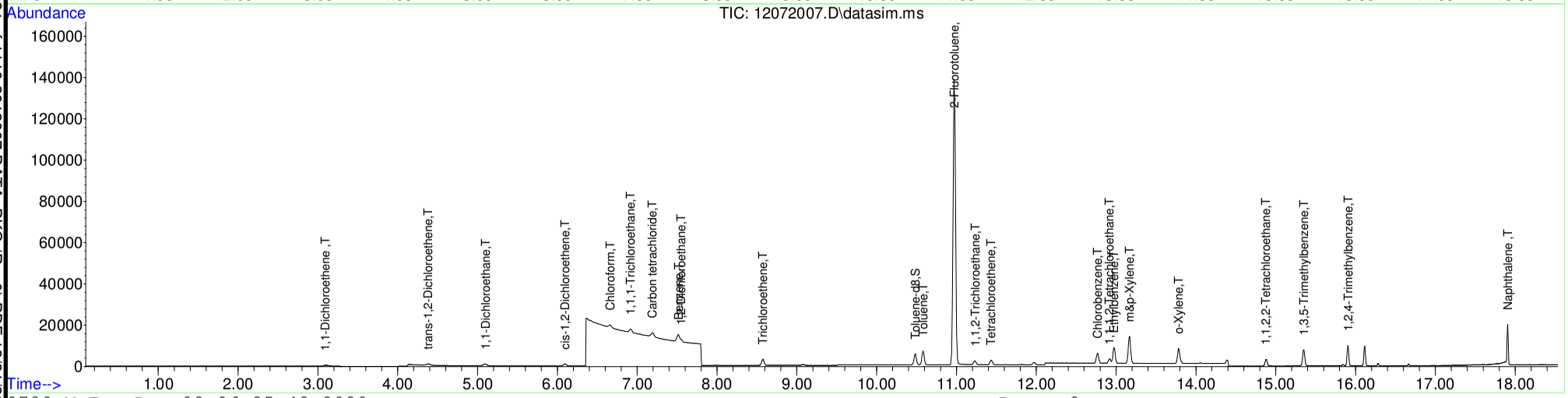

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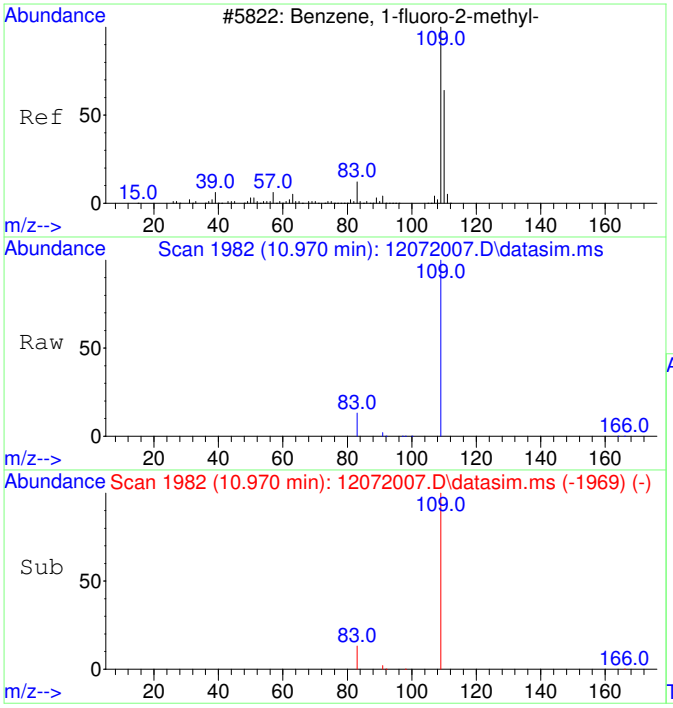
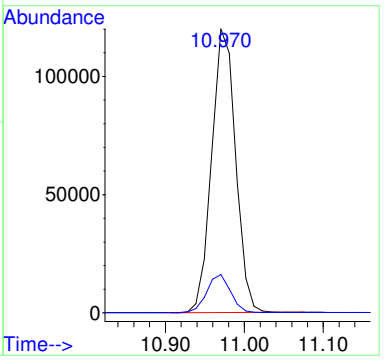
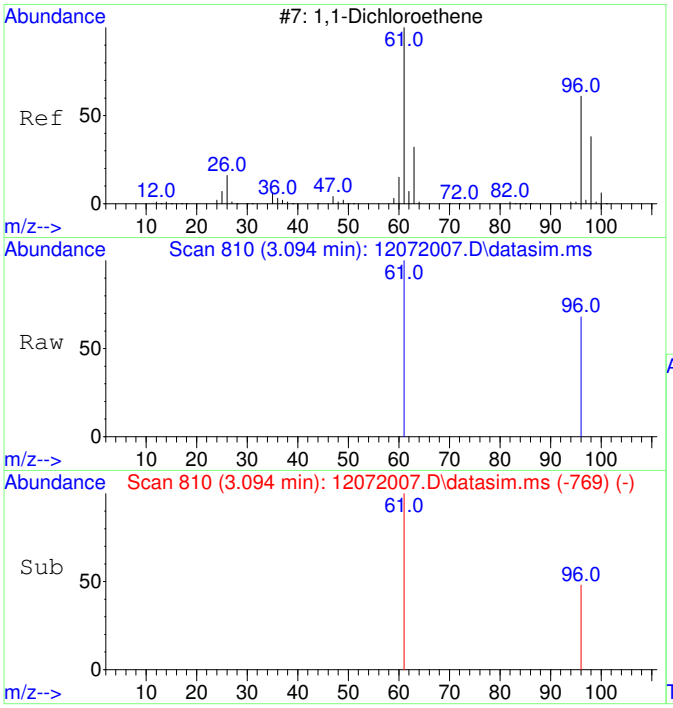


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:109 Resp: 252253

Ion	Ratio	Lower	Upper
109	100		
83	13.2	0.0	42.3

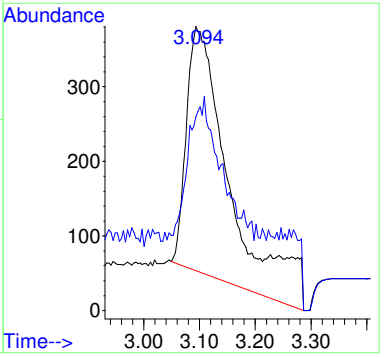




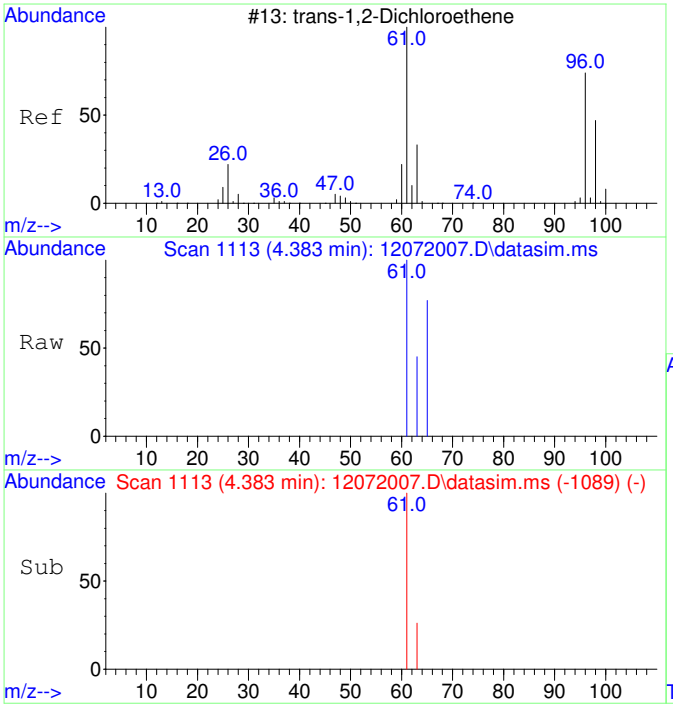
#2
1,1-Dichloroethene
Concen: 175.49 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1752

Ion	Ratio	Lower	Upper
61	100		
96	41.5	37.2	97.2



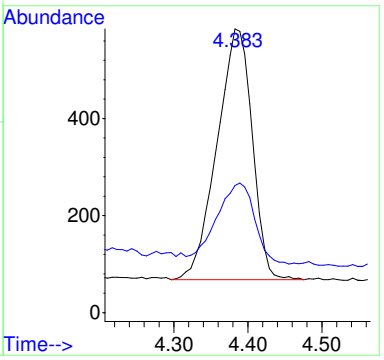
Before MI:
IMPROPER
BASELINE

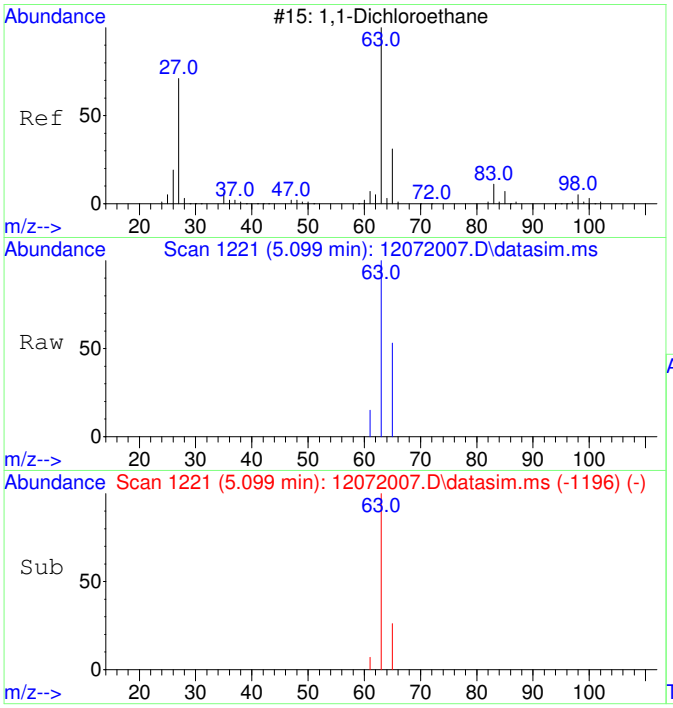


#3
trans-1,2-Dichloroethene
Concen: 135.61 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1710

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.4	62.4

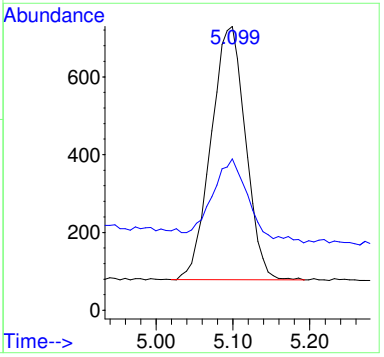


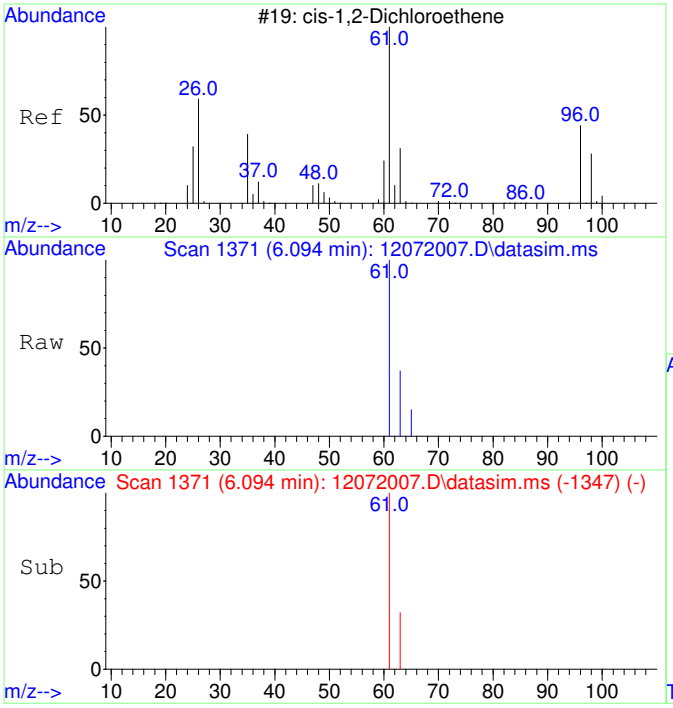


#4
1,1-Dichloroethane
Concen: 134.39 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 2024

Ion	Ratio	Lower	Upper
63	100		
65	36.1	1.8	61.8

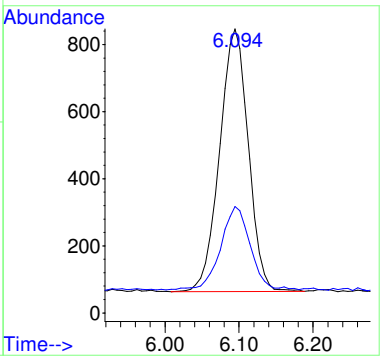


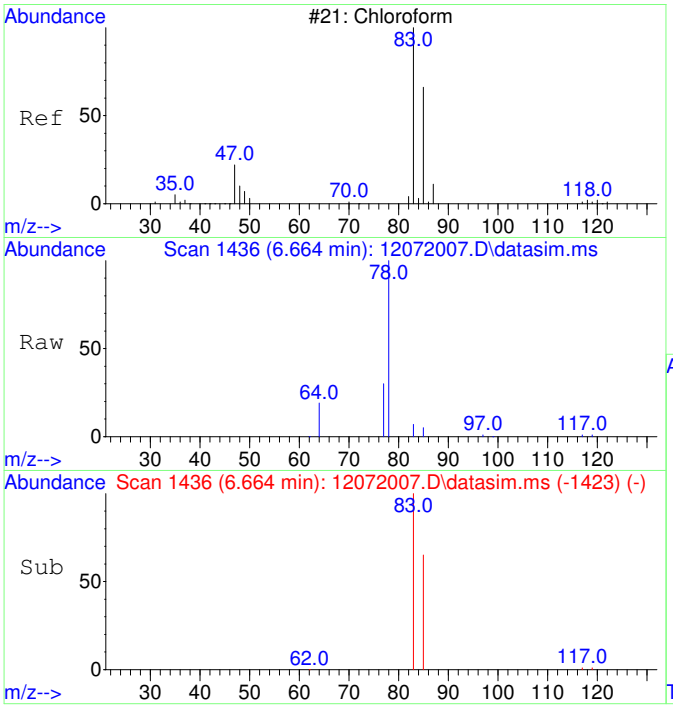


#5
cis-1,2-Dichloroethene
Concen: 135.72 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 2117

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.5	62.5

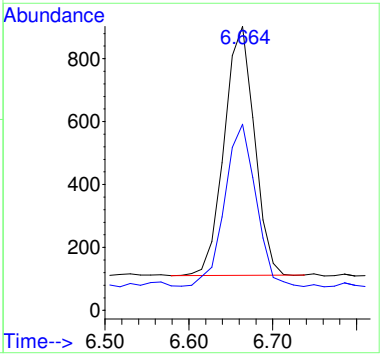


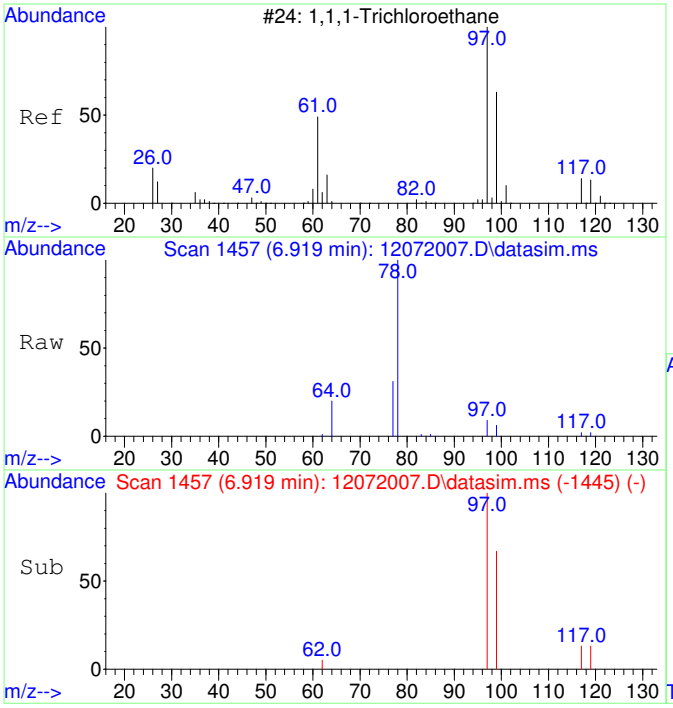


#6
Chloroform
Concen: 131.69 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1973

Ion	Ratio	Lower	Upper
83	100		
85	67.3	35.1	95.1

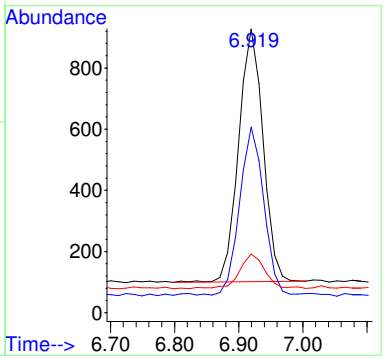


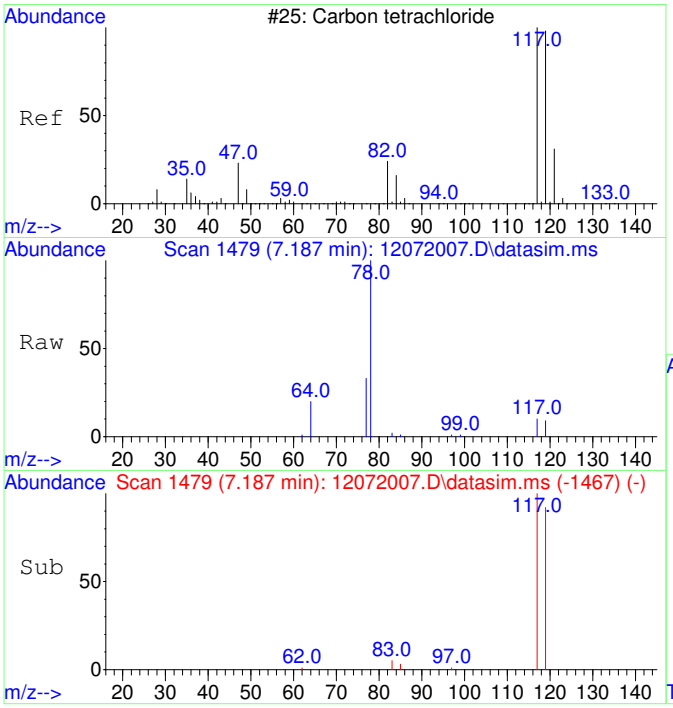


#7
1,1,1-Trichloroethane
Concen: 135.33 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 2178

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

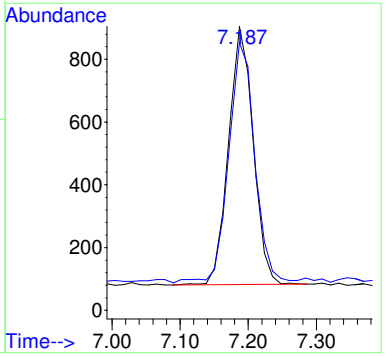


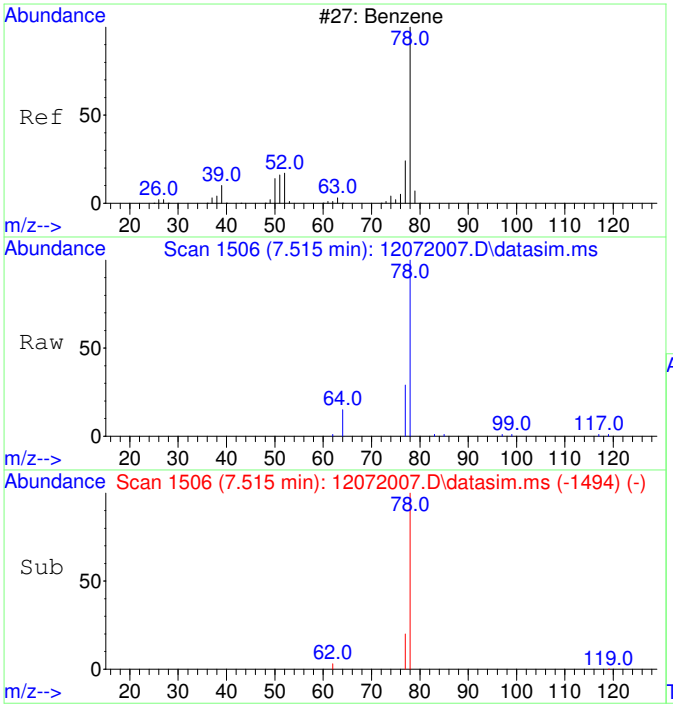


#8
Carbon tetrachloride
Concen: 133.62 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 2056

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

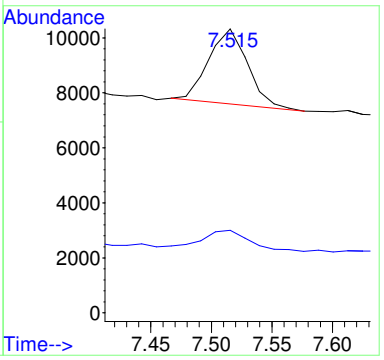


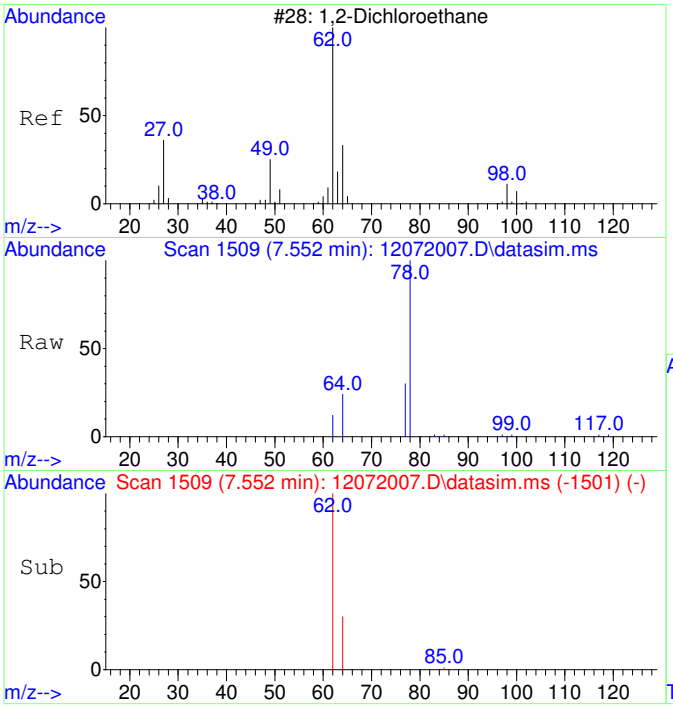


#9
Benzene
Concen: 139.94 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 5940

Ion	Ratio	Lower	Upper
78	100		
77	42.5	0.0	53.2

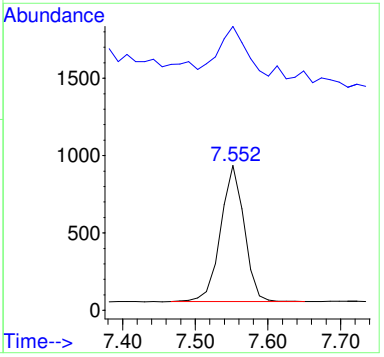


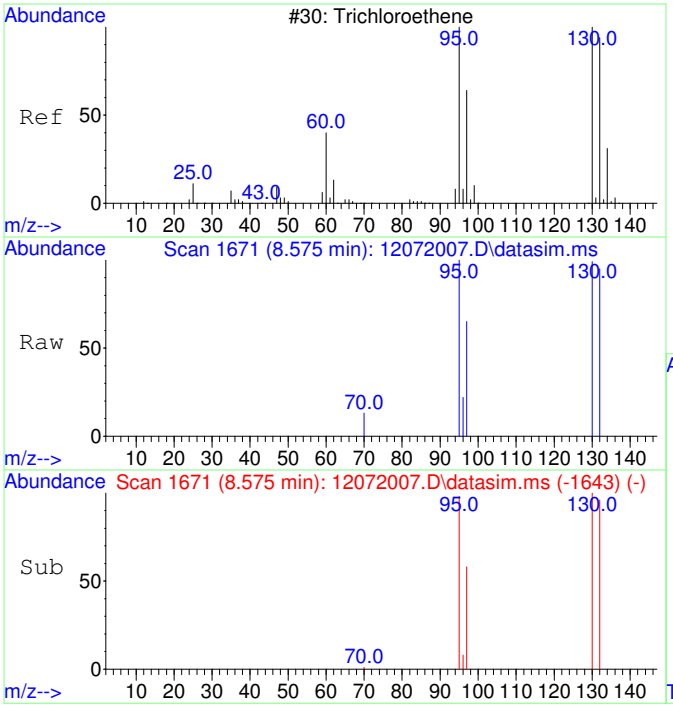


#10
1,2-Dichloroethane
Concen: 136.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1980

Ion	Ratio	Lower	Upper
62	100		
64	41.8	2.3	62.3

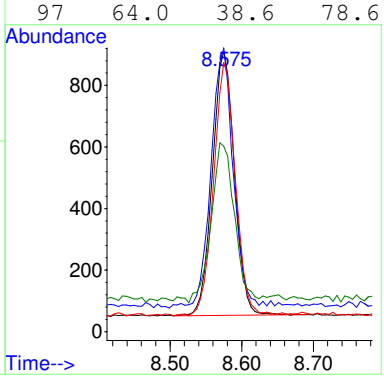


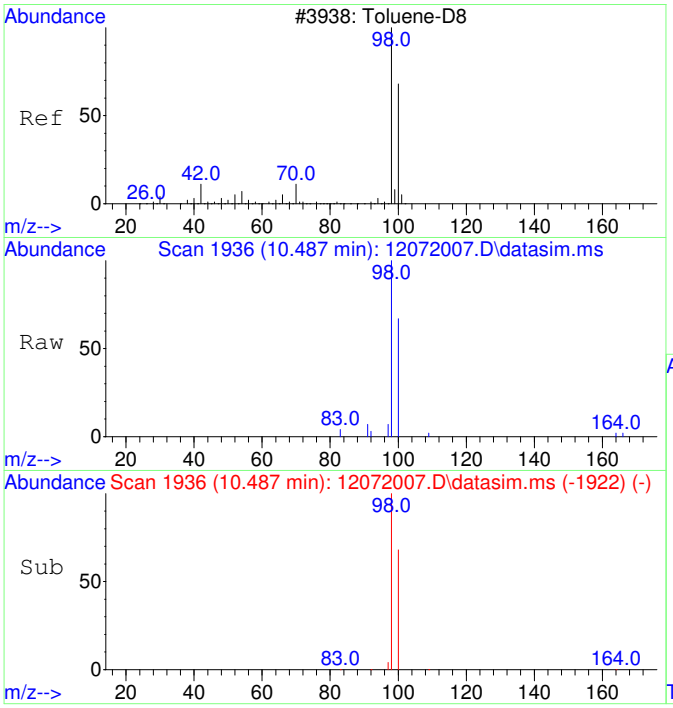


#11
Trichloroethene
Concen: 136.03 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 1823

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

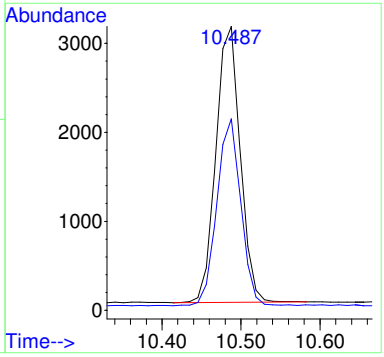


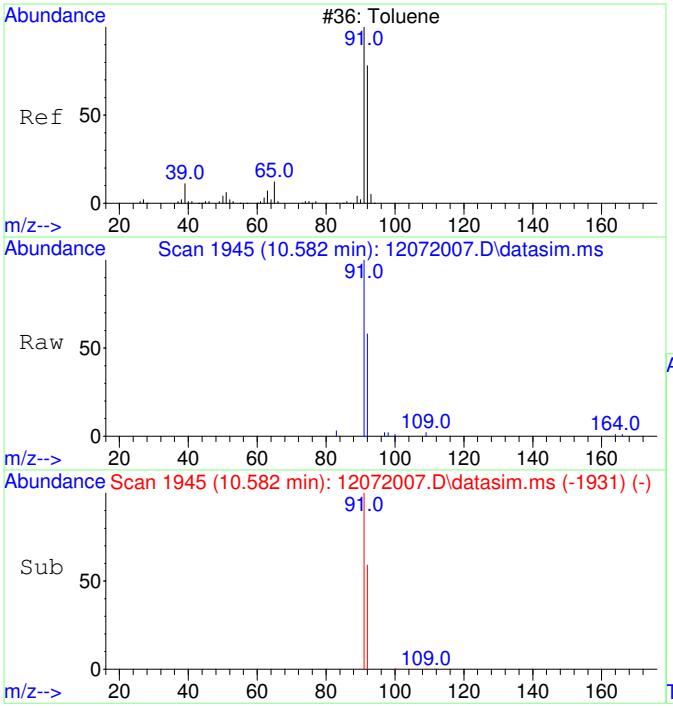


#12
Toluene-d8
Concen: 135.40 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 6615

Ion	Ratio	Lower	Upper
98	100		
100	66.2	37.1	97.1

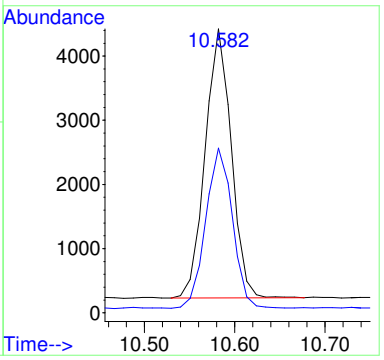


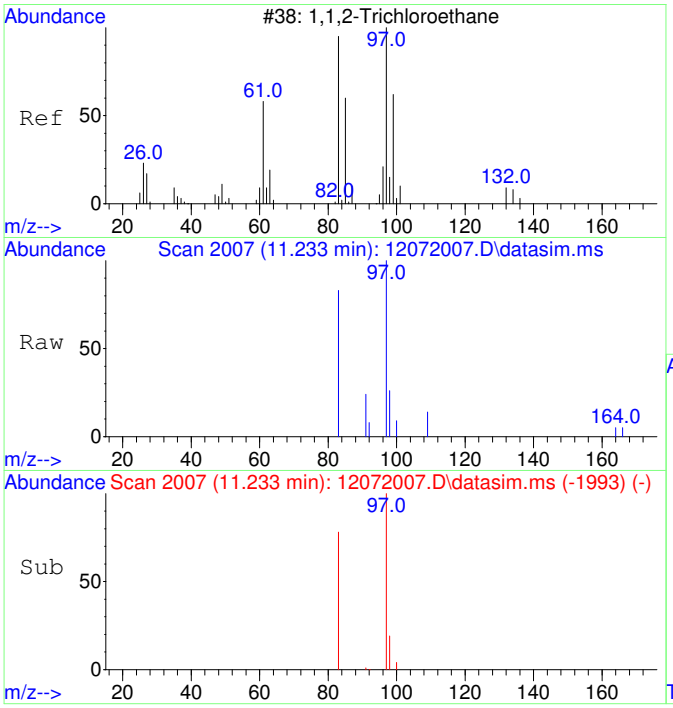


#13
Toluene
Concen: 138.31 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 8413

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

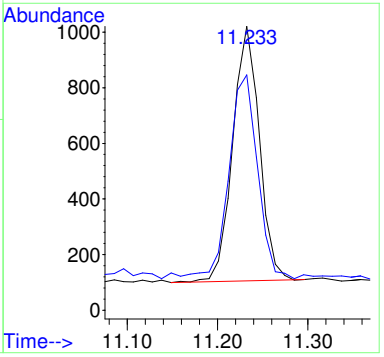


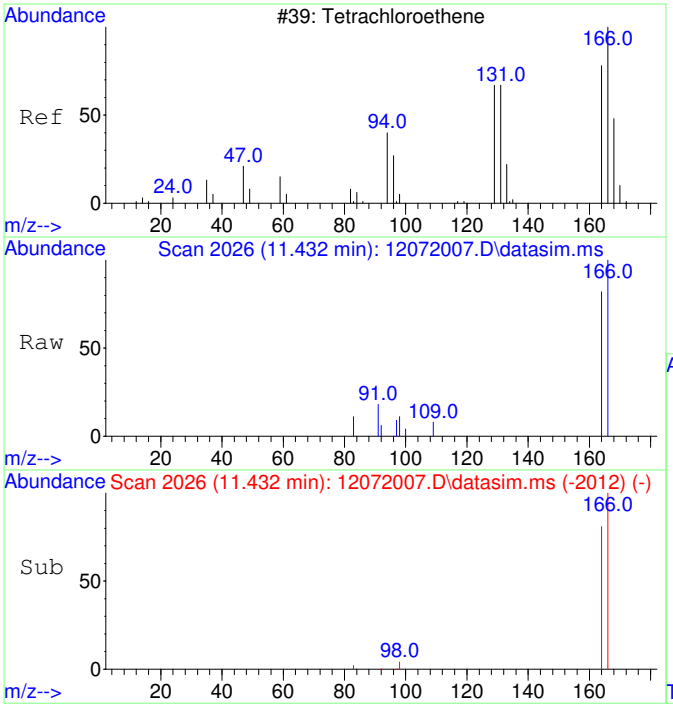


#14
1,1,2-Trichloroethane
Concen: 133.72 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1884

Ion	Ratio	Lower	Upper
97	100		
83	86.1	51.2	111.2

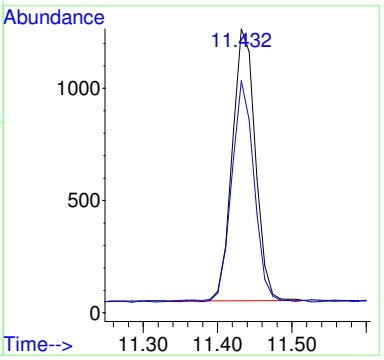


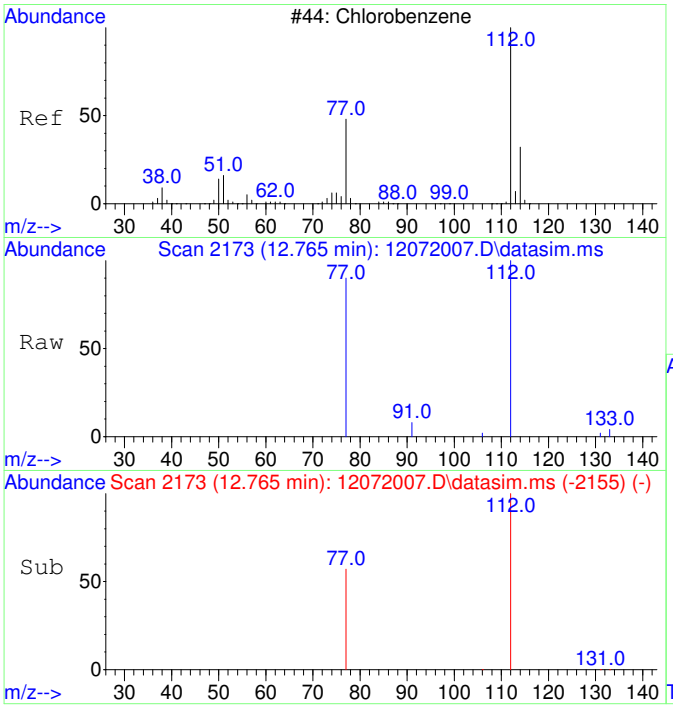


#15
Tetrachloroethene
Concen: 137.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 2596

Ion	Ratio	Lower	Upper
166	100		
164	79.8	47.8	107.8

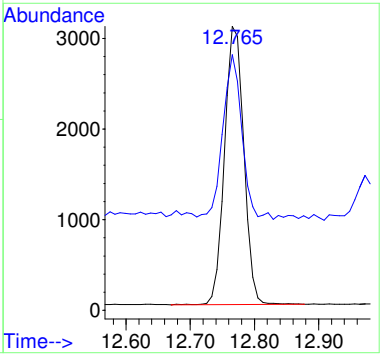


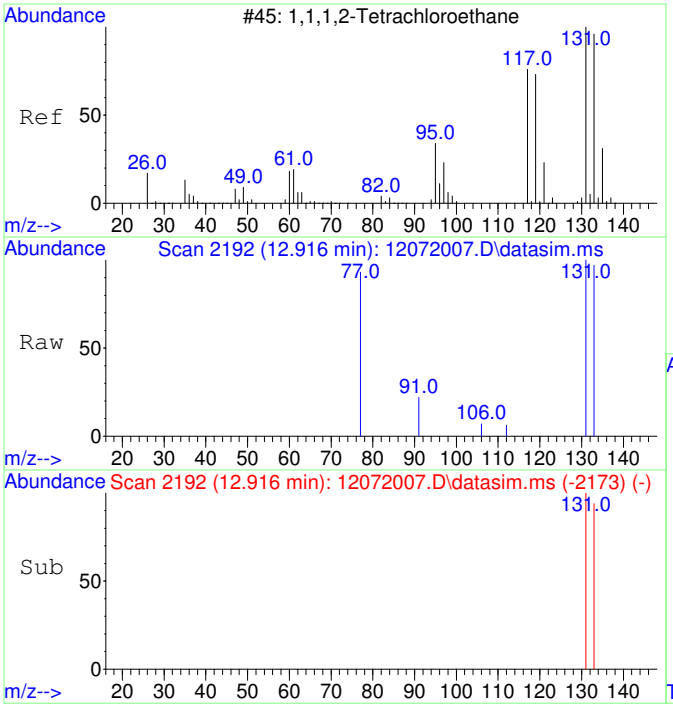


#16
Chlorobenzene
Concen: 135.22 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 6372

Ion	Ratio	Lower	Upper
112	100		
77	59.1	23.6	83.6

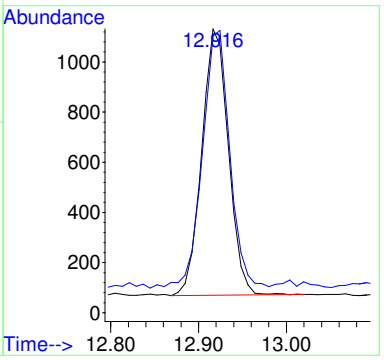


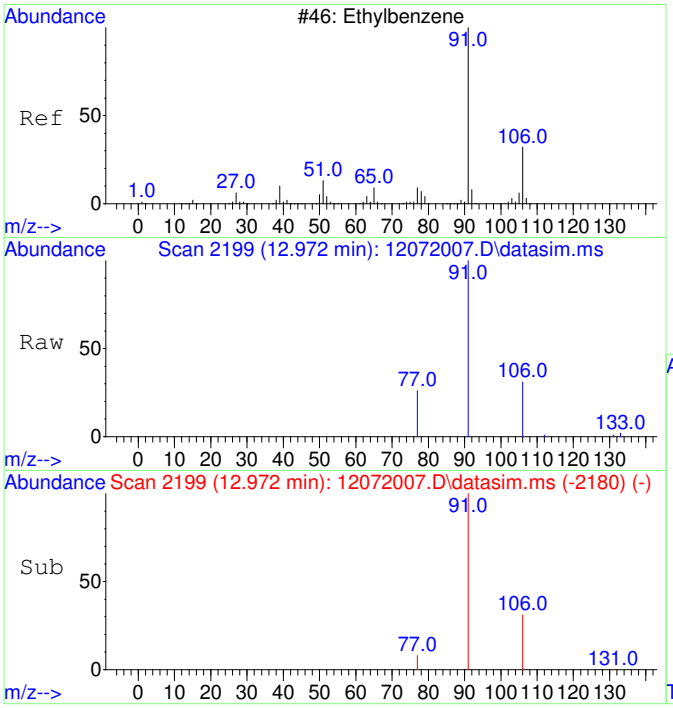


#17
1,1,1,2-Tetrachloroethane
Concen: 135.81 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 2240

Ion	Ratio	Lower	Upper
131	100		
133	98.2	66.3	126.3

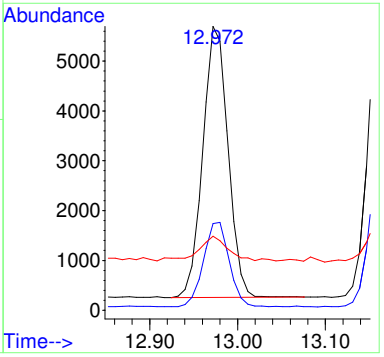


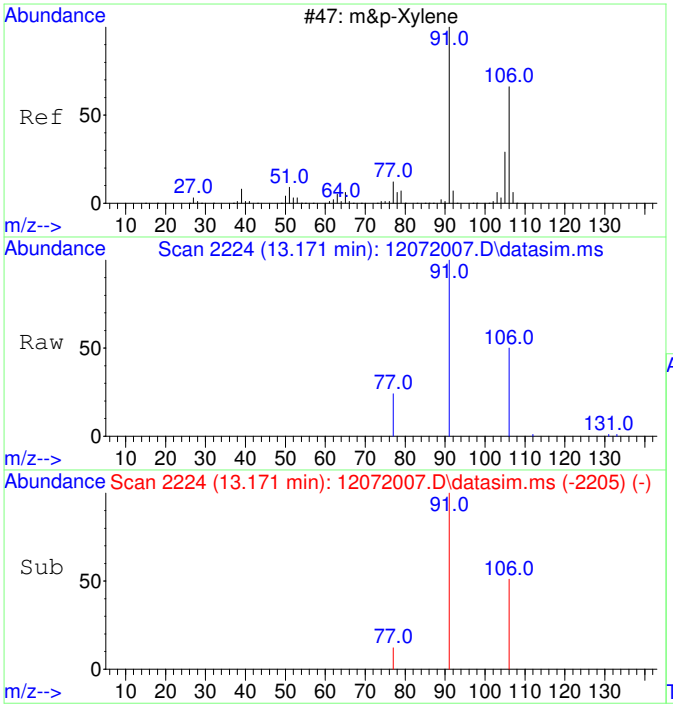


#18
Ethylbenzene
Concen: 139.93 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10872

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

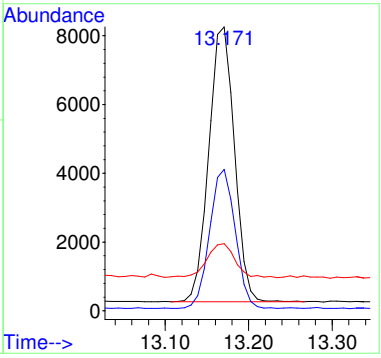


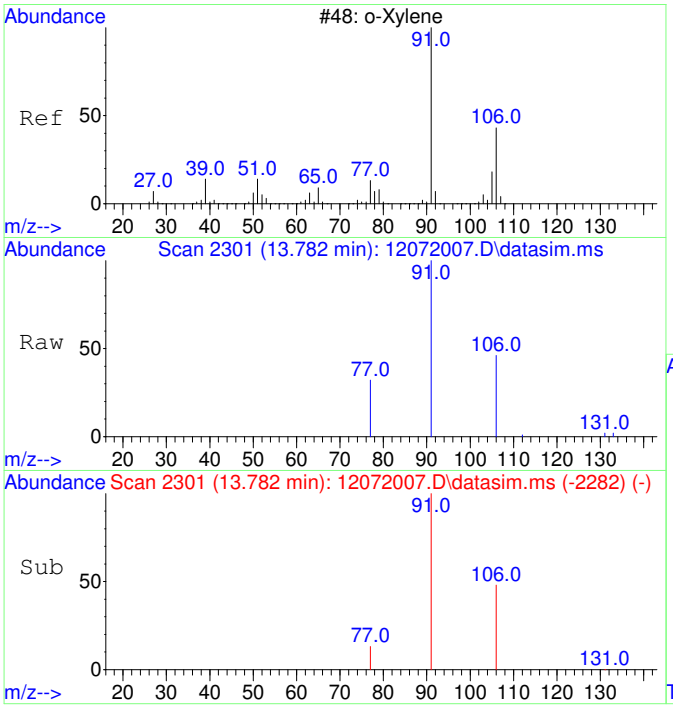


#19
m&p-Xylene
Concen: 285.38 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 17074

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

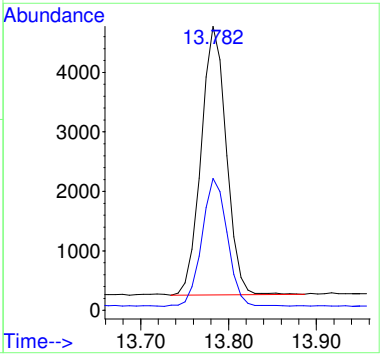


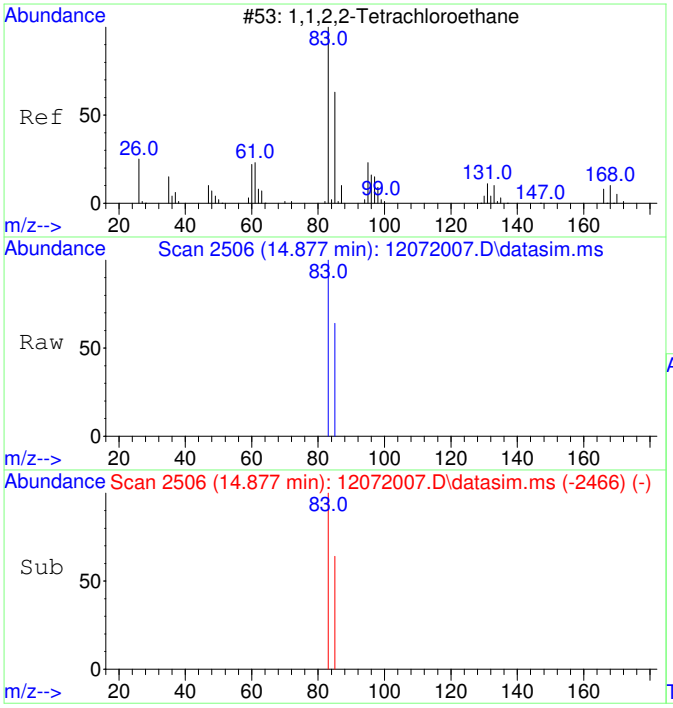


#20
o-Xylene
Concen: 140.07 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 9001

Ion	Ratio	Lower	Upper
91	100		
106	48.2	19.2	79.2

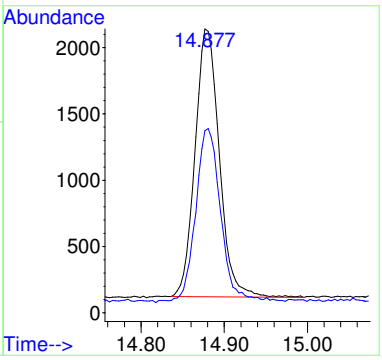


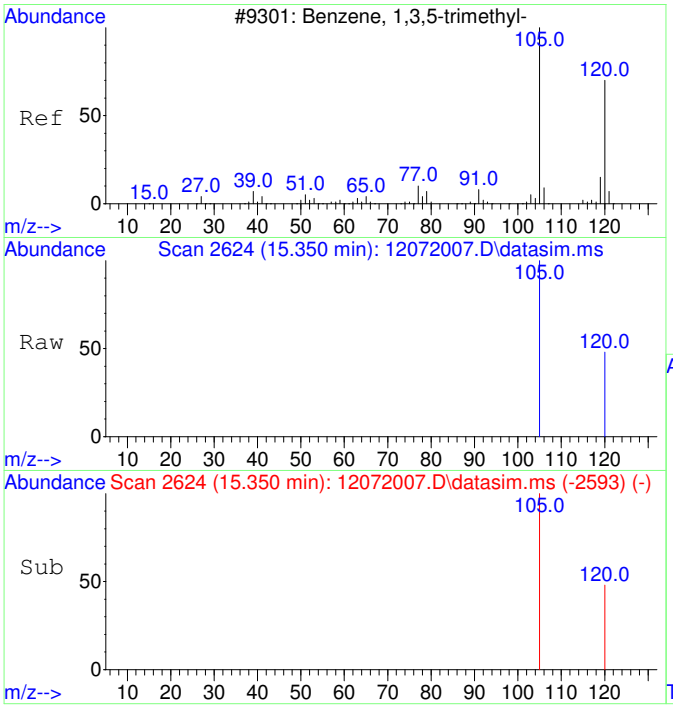


#21
1,1,2,2-Tetrachloroethane
Concen: 136.76 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 4095

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

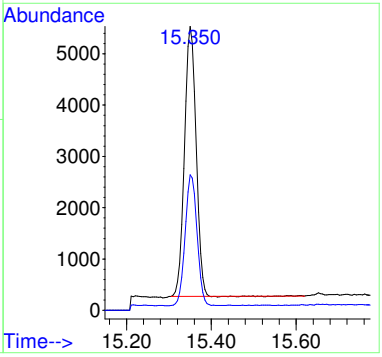


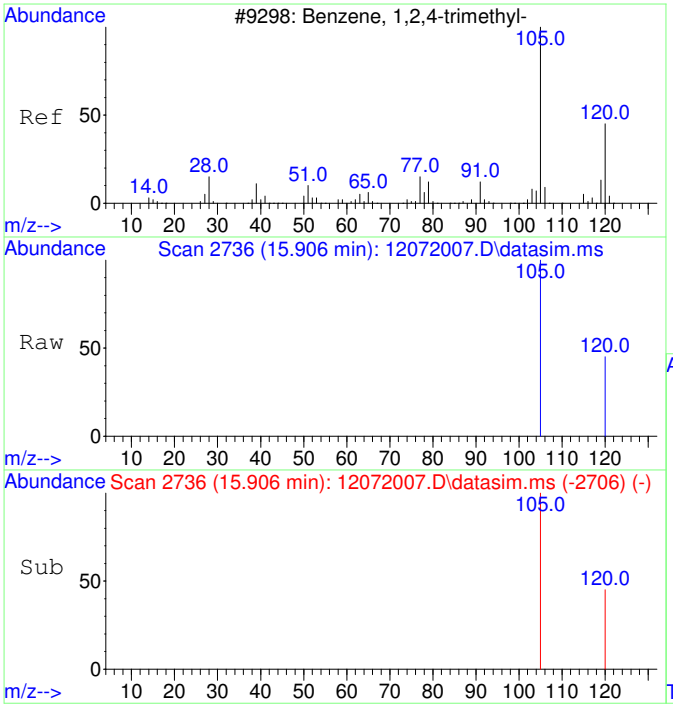


#22
1,3,5-Trimethylbenzene
Concen: 141.75 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10017

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

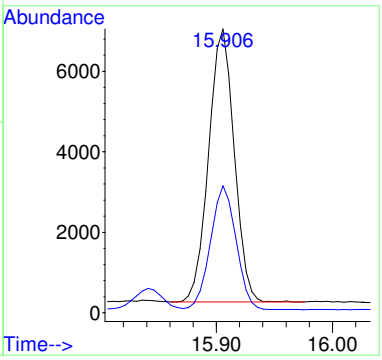


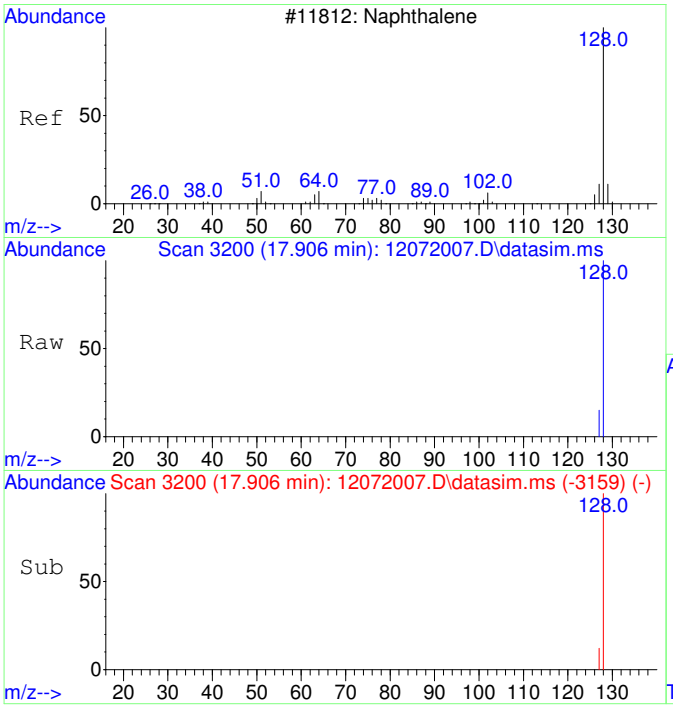


#23
1,2,4-Trimethylbenzene
Concen: 143.95 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10405

Ion	Ratio	Lower	Upper
105	100		
120	44.6	17.2	77.2

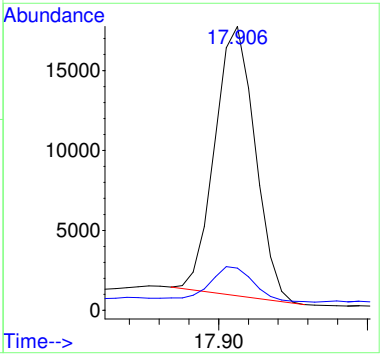


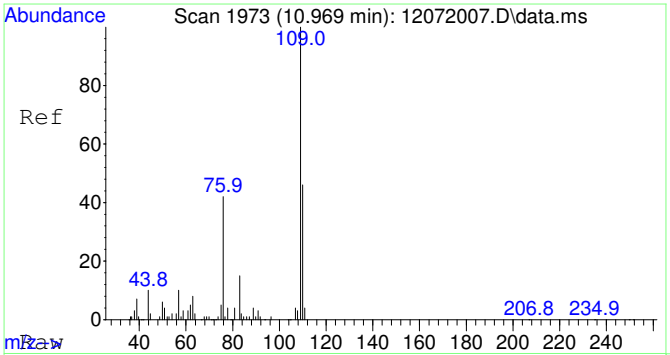


#24
Naphthalene
Concen: 132.61 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 15689

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

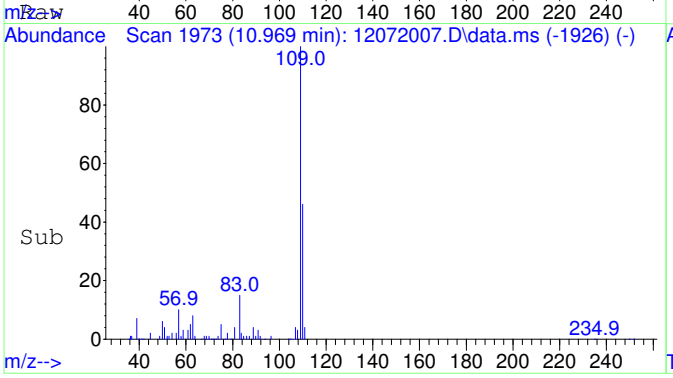


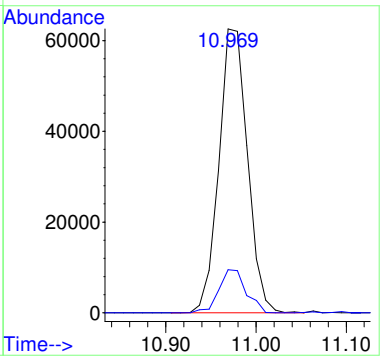


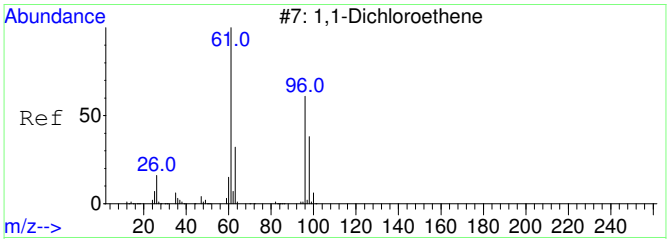
#25
2-Fluorotoluene SCAN
Concen: 4827.25 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

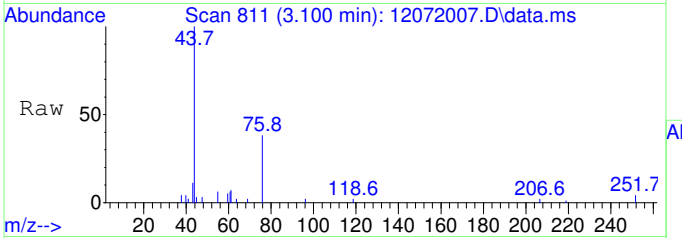
Tgt Ion:109 Resp: 138220

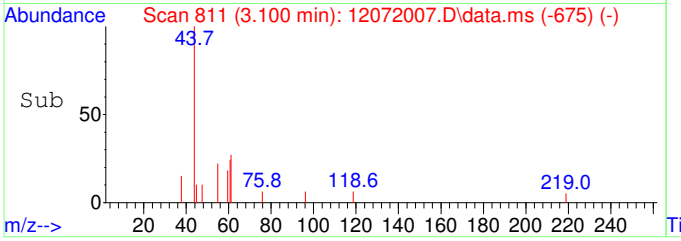
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







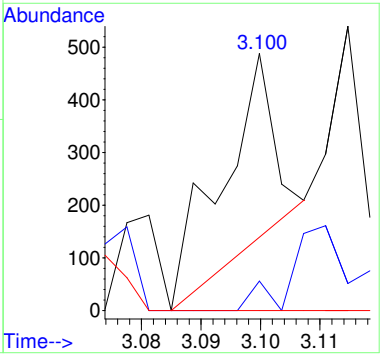


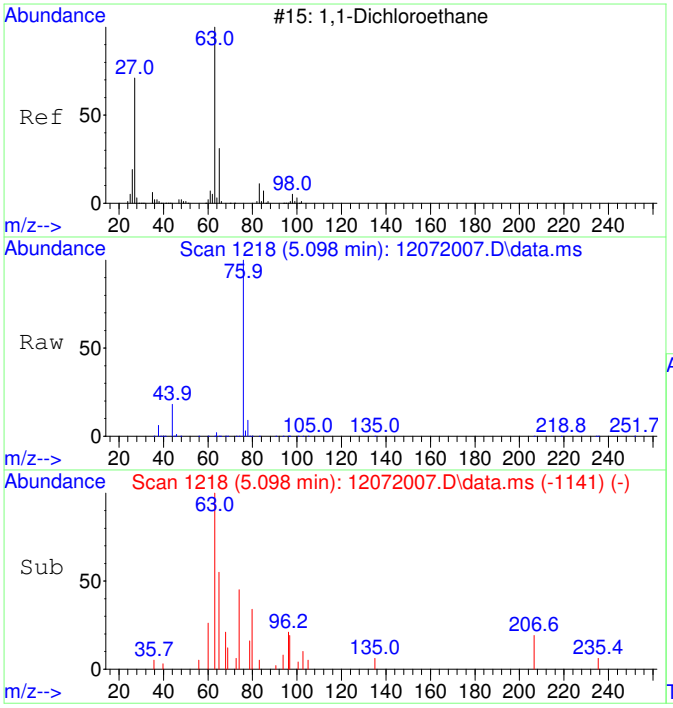


#26
1,1-Dichloroethene SCAN
Concen: 34.26 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 229

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

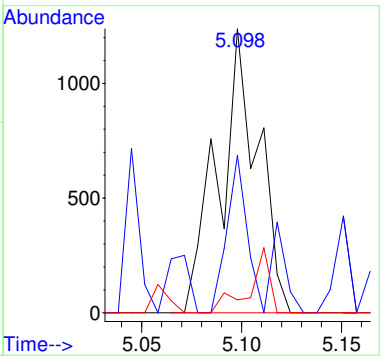


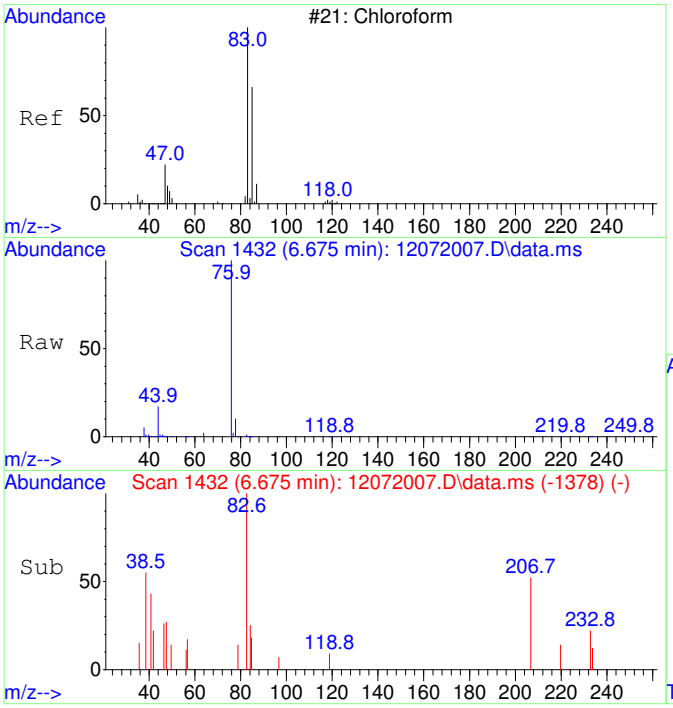


#28
1,1-Dichloroethane SCAN
Concen: 168.66 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 1695

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

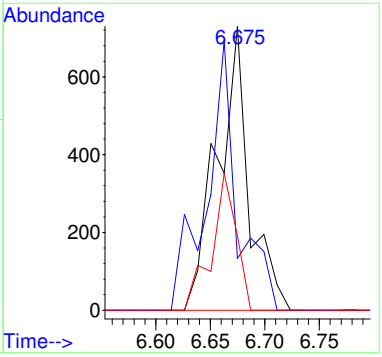


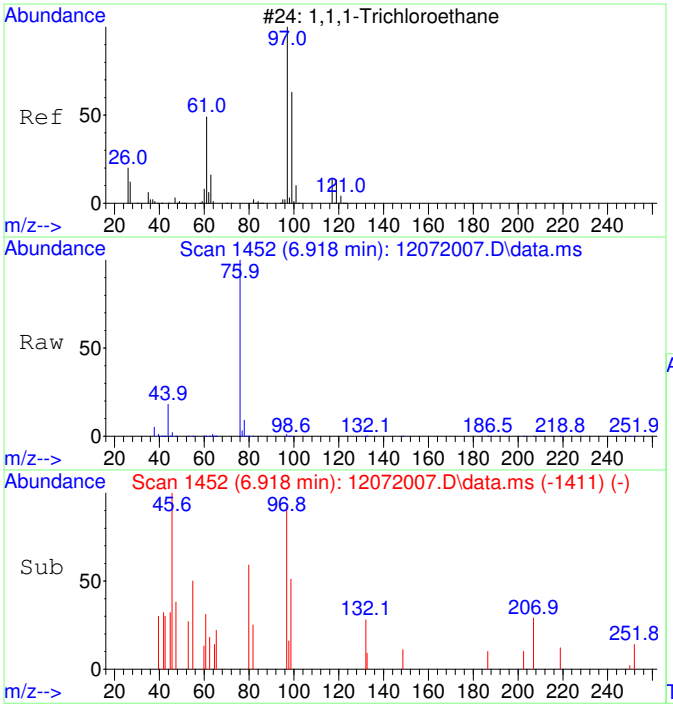


#30
Chloroform SCAN
Concen: 161.05 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1484

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

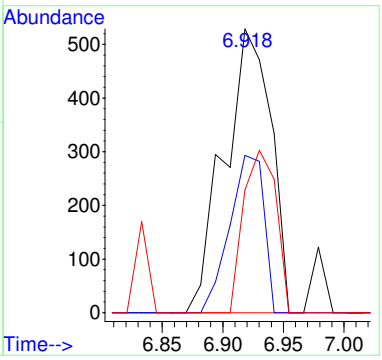


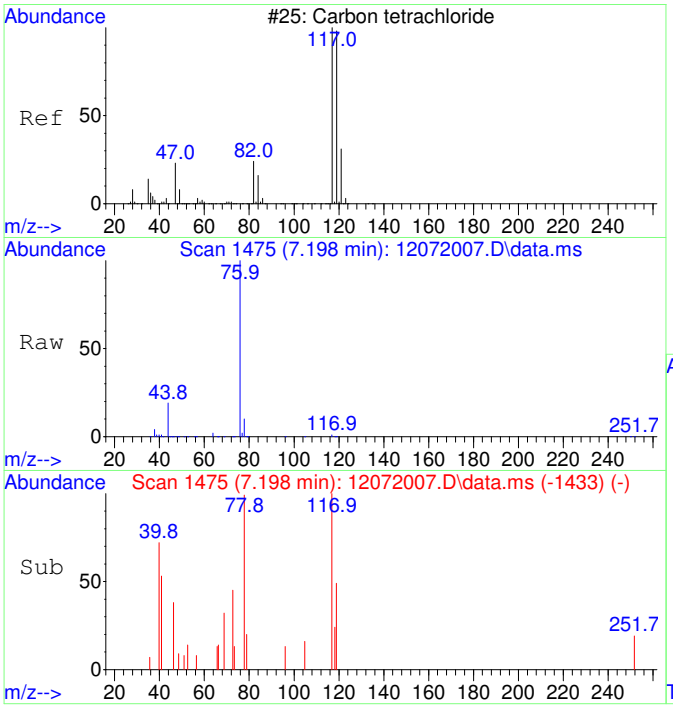


#31
1,1,1-Trichloroethane SCAN
Concen: 149.86 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1425

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

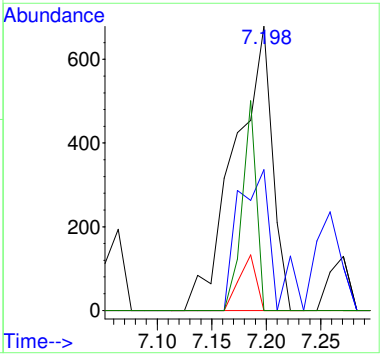


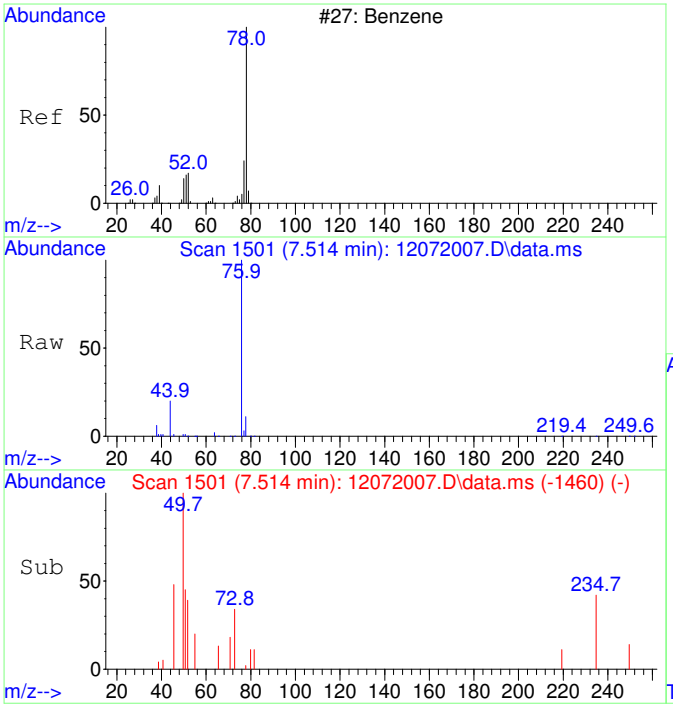


#32
Carbon tetrachloride SCAN
Concen: 200.47 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 1629

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

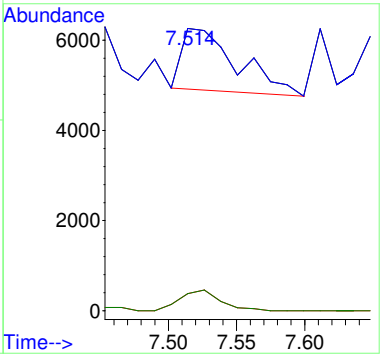


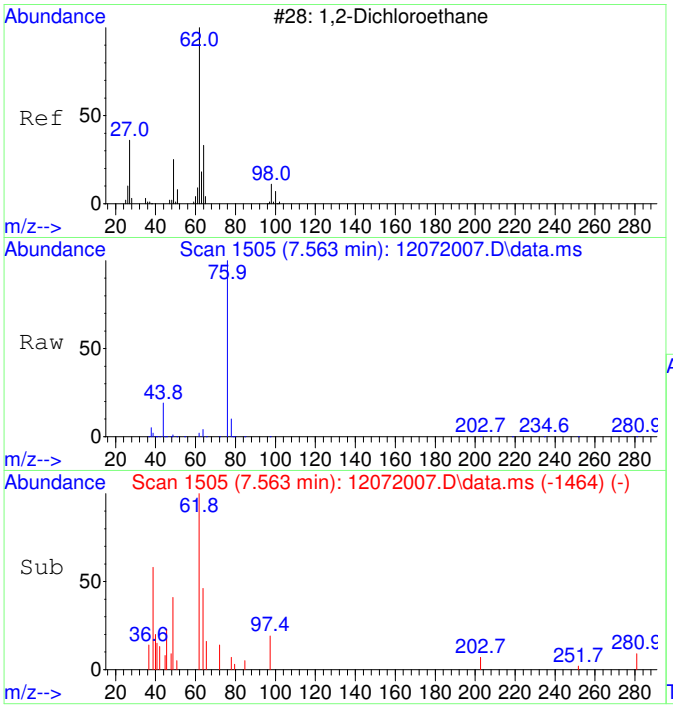


#33
Benzene SCAN
Concen: 132.09 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 3800

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

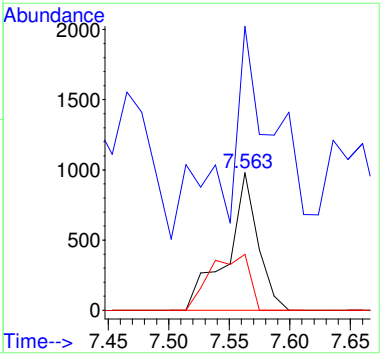


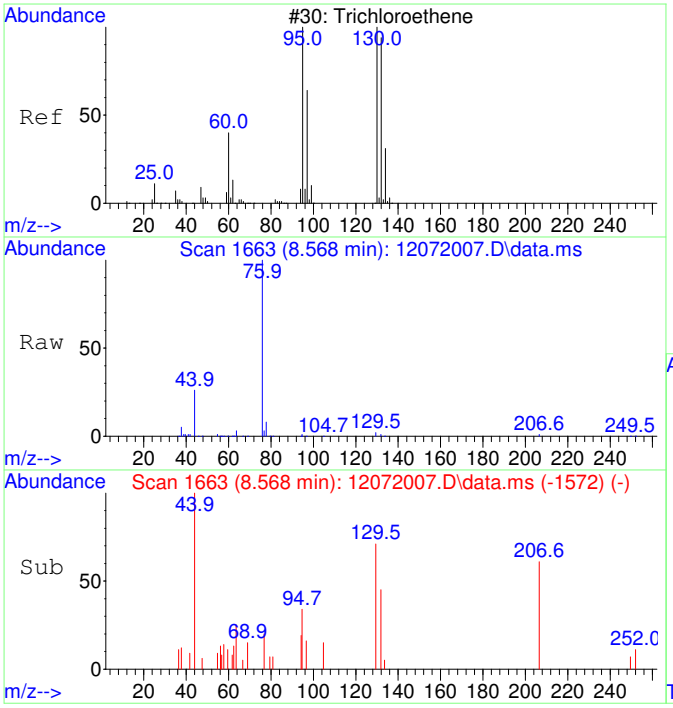


#34
1,2-Dichloroethane SCAN
Concen: 193.37 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1740

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

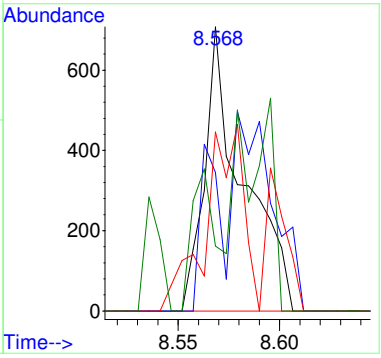


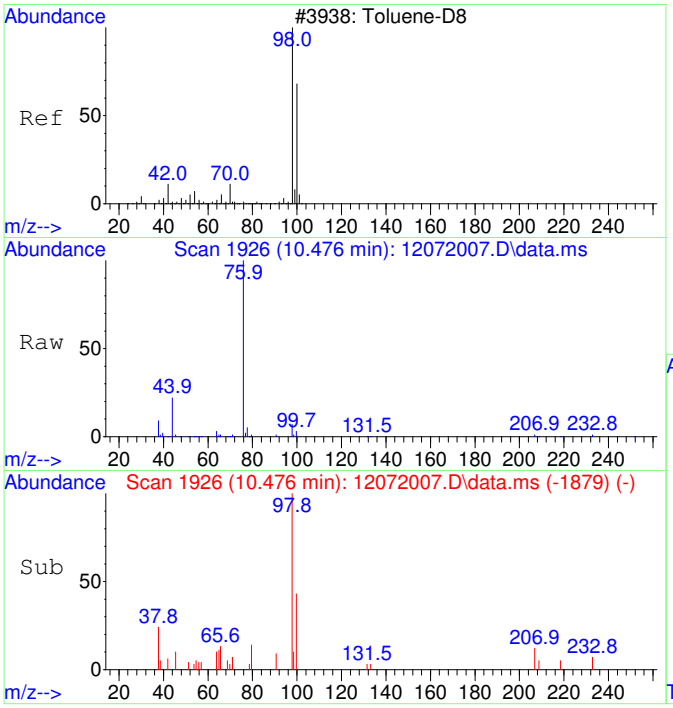


#35
Trichloroethene SCAN
Concen: 147.62 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 926

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

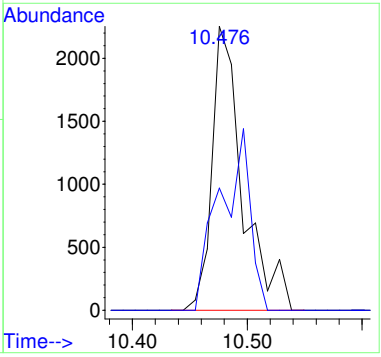


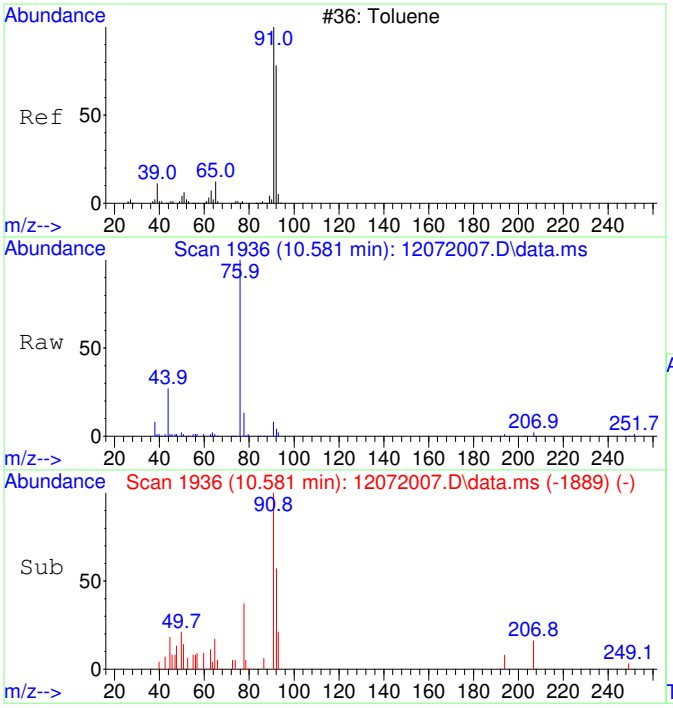


#36
Toluene-d8 SCAN
Concen: 155.54 ug/L
RT: 10.476 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 4177

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

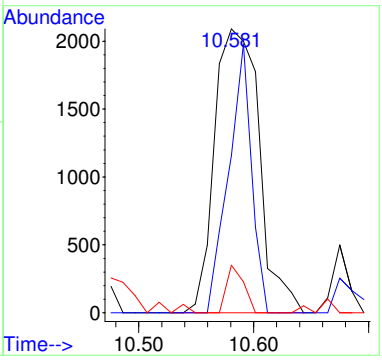


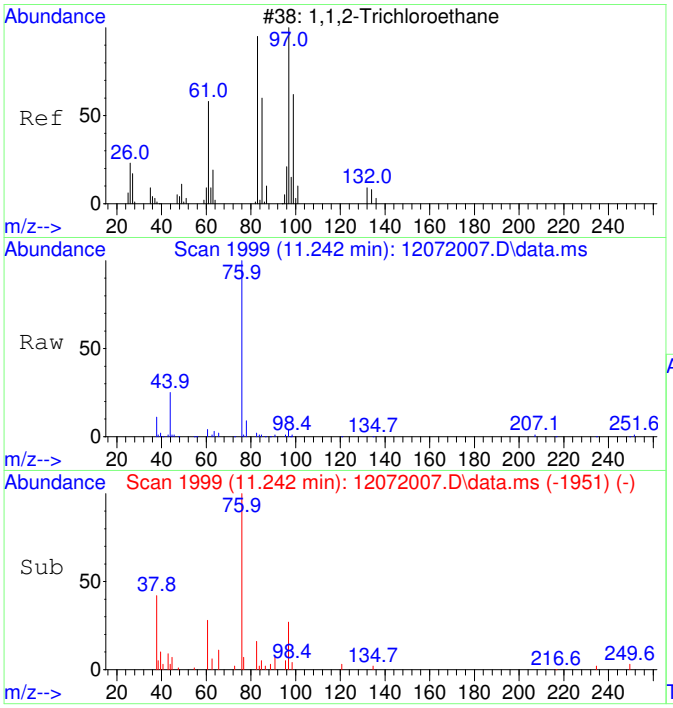


#37
Toluene SCAN
Concen: 171.27 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 5663

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

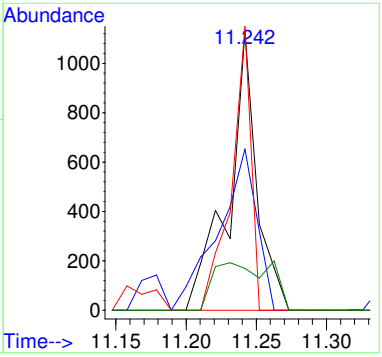


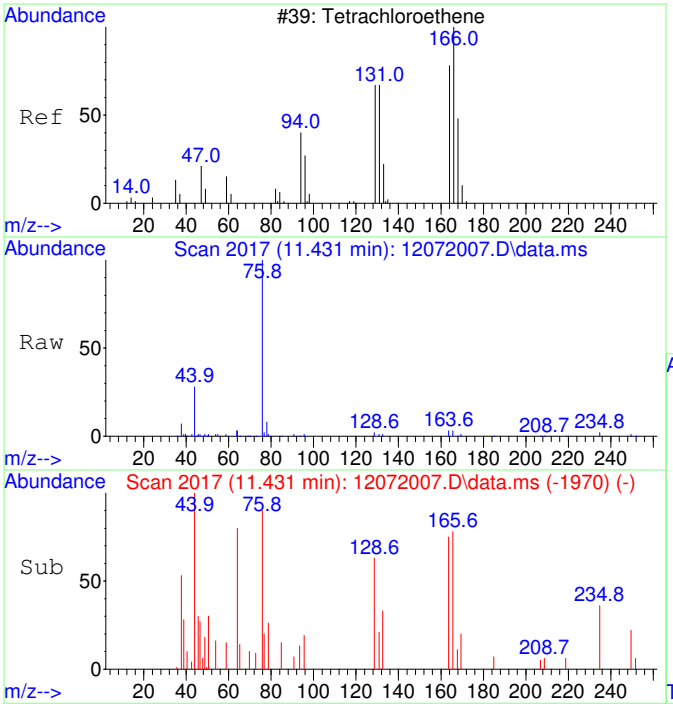


#38
1,1,2-Trichloroethane SCAN
Concen: 192.45 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1595

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

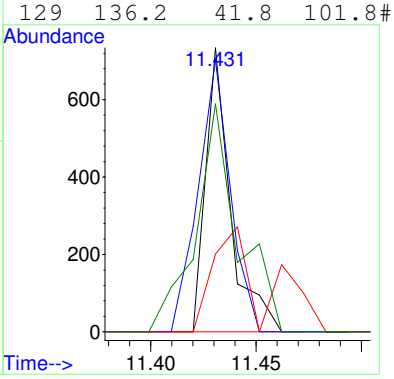


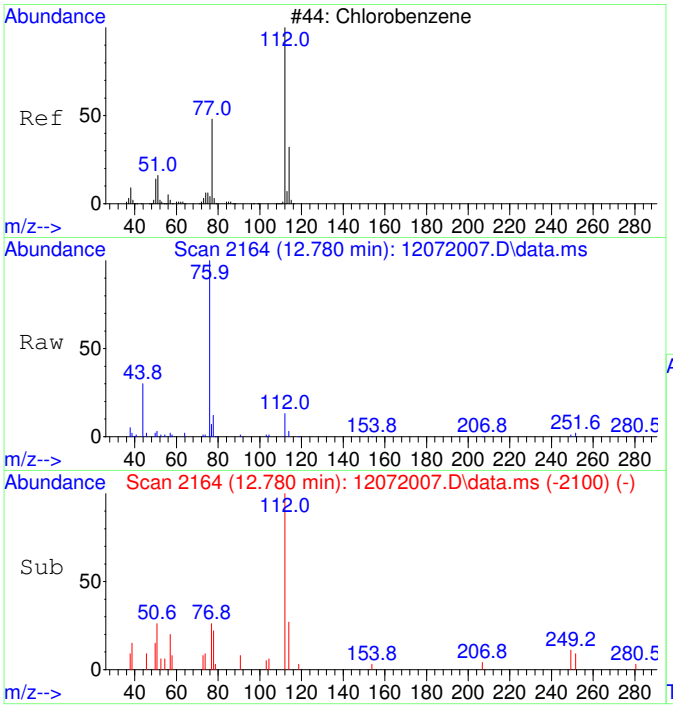


#39
Tetrachloroethene SCAN
Concen: 80.66 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 600

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

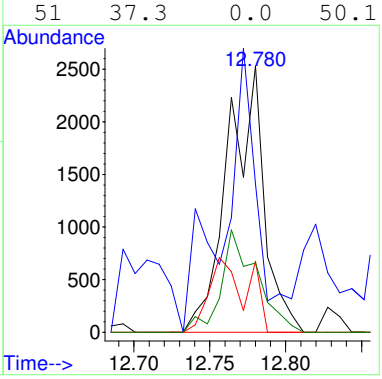


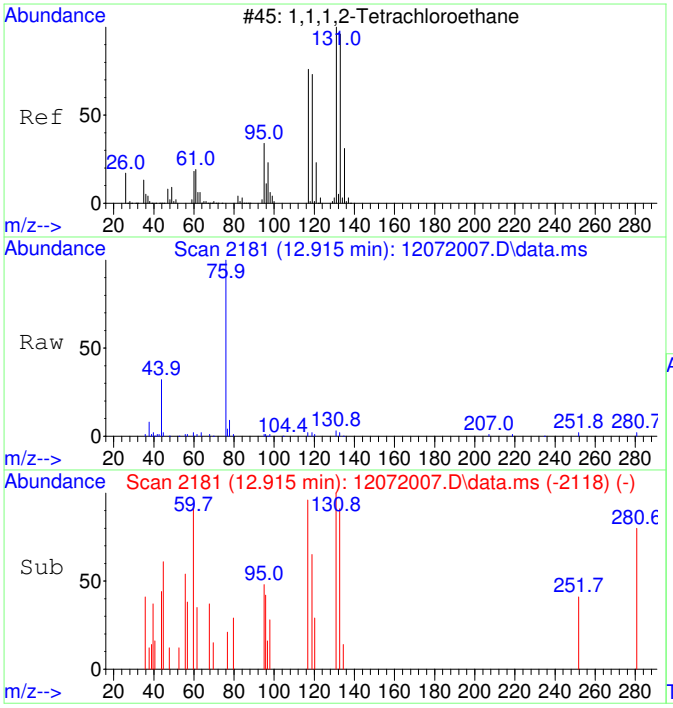


#40
Chlorobenzene SCAN
Concen: 179.38 ug/L
RT: 12.780 min Scan# 2164
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 4260

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

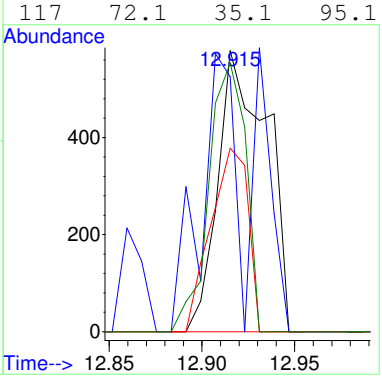


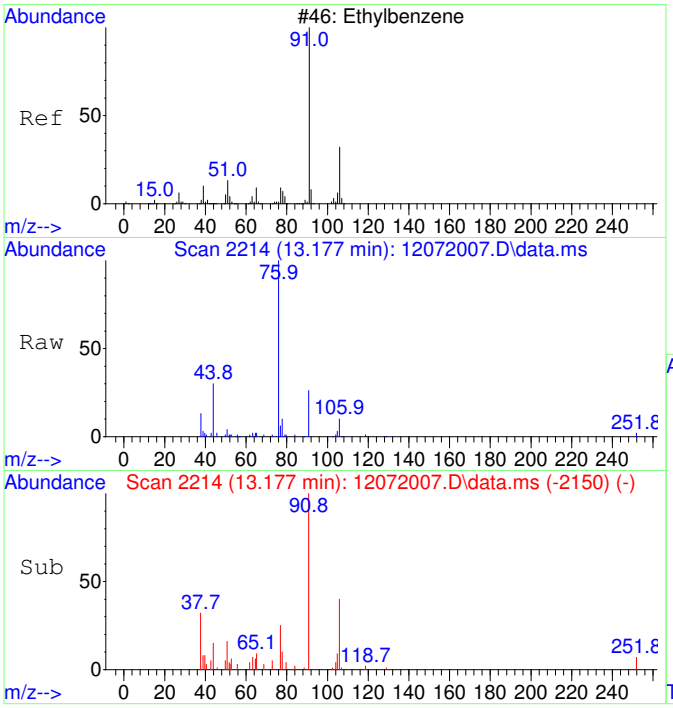


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 130.10 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 1066

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

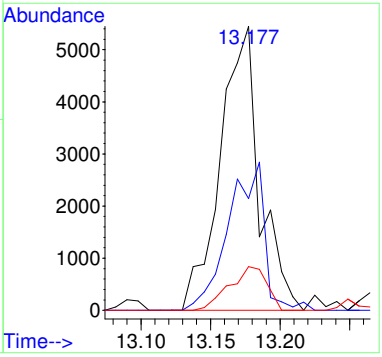


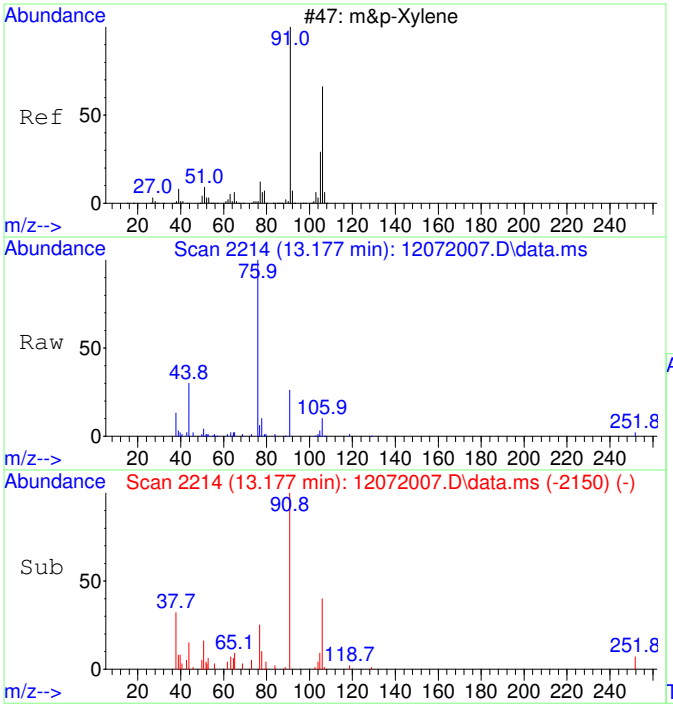


#42
Ethylbenzene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

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

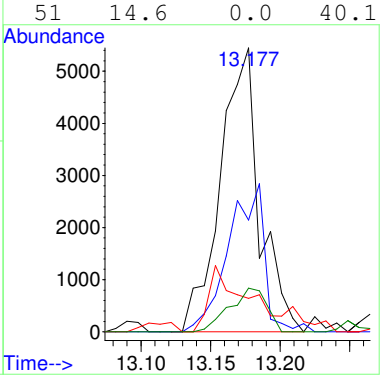


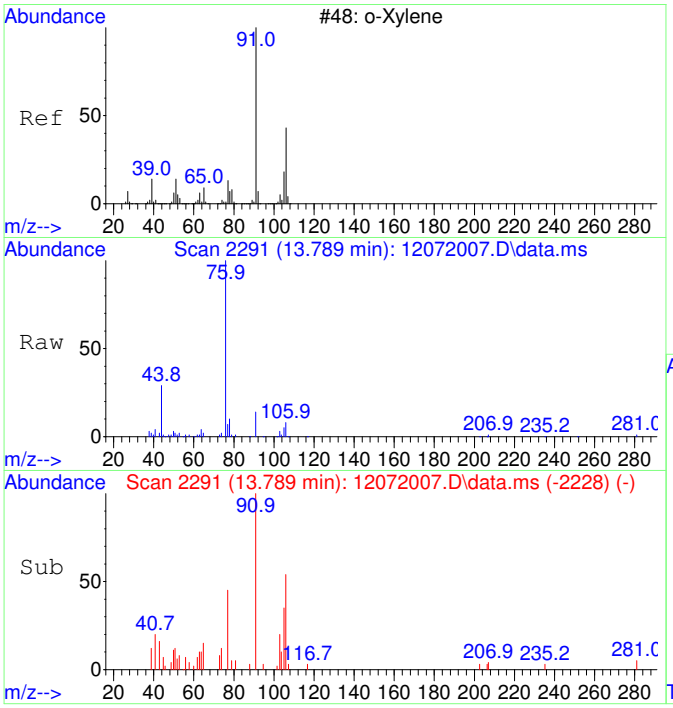


#43
m&p-Xylene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

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

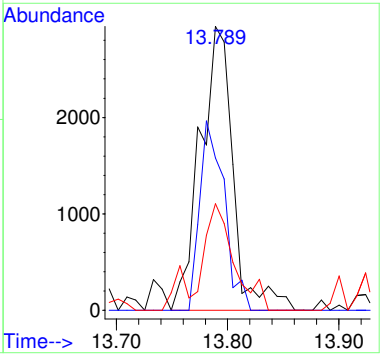


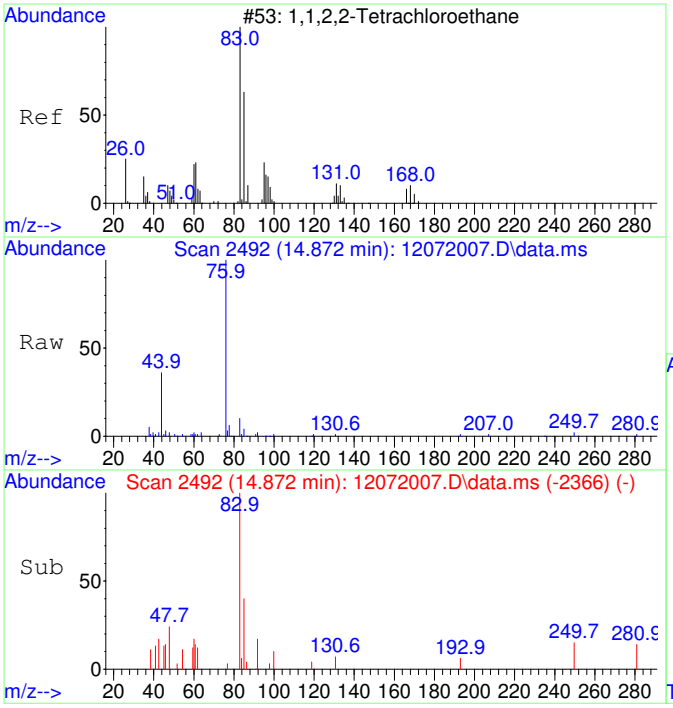


#44
o-Xylene SCAN
Concen: 176.50 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 6073

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

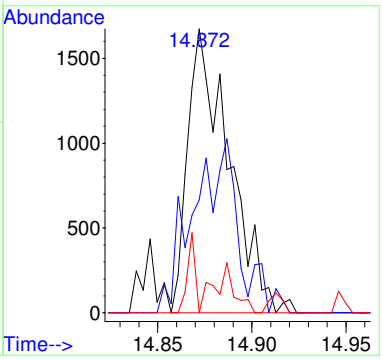


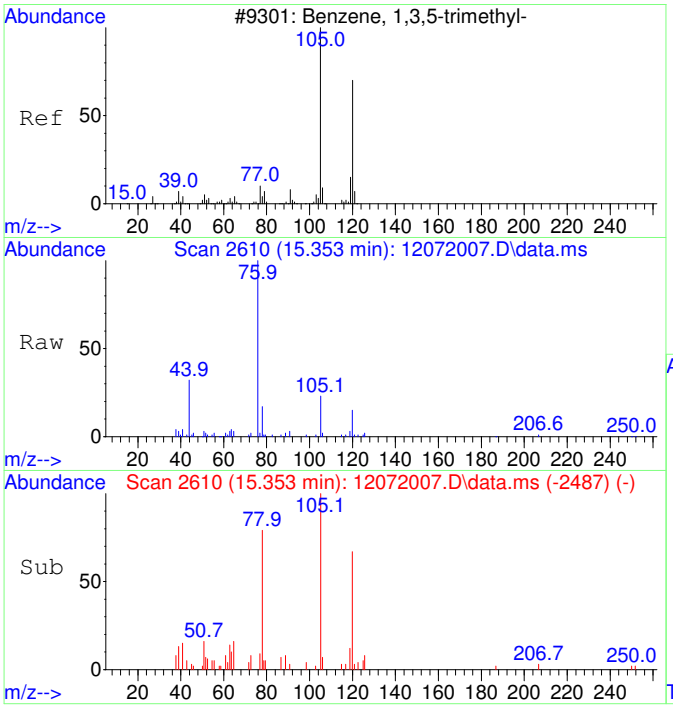


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 142.65 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.011 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 2552

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

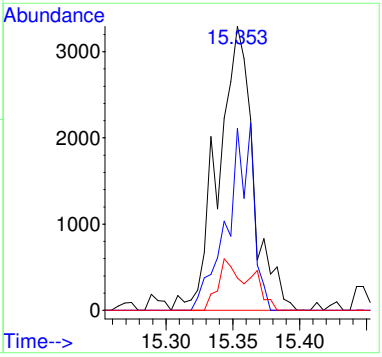


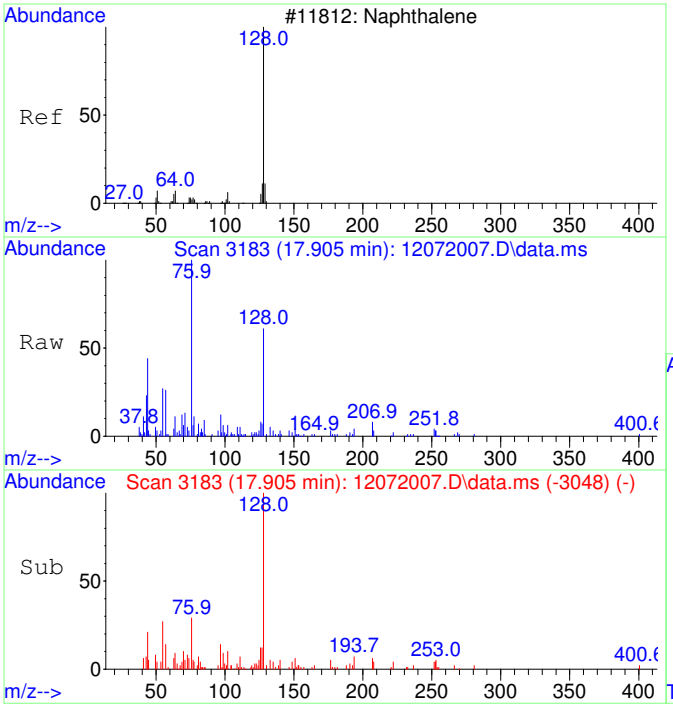


#46
1,3,5-Trimethylbenzene SCAN
Concen: 166.98 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 6061

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

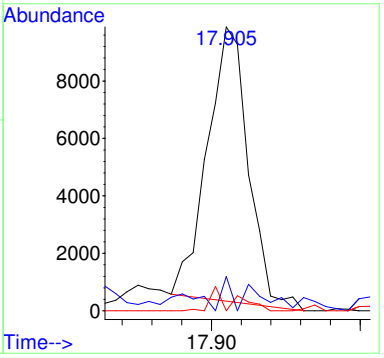




#48
Naphthalene SCAN
Concen: 163.35 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 9093

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



Quantitation Report (QT Reviewed)

Table of Contents

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

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

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

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

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

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120720\
Data File : 12072007.D
Acq On : 7 Dec 2020 14:20
InstName : AG5975C
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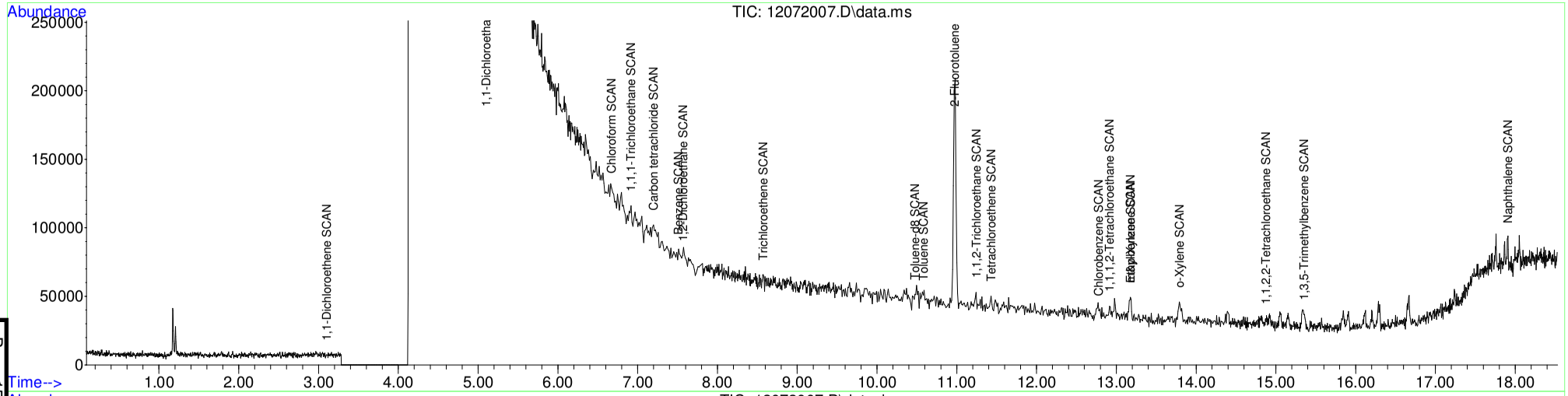
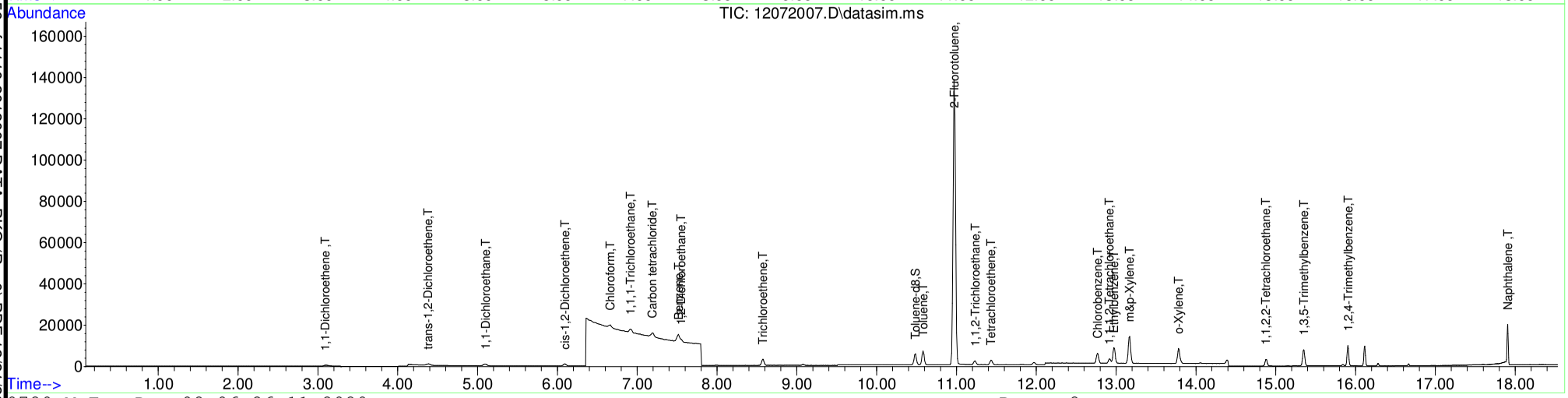
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120720.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:14:00 2020
Response via : Initial Calibration





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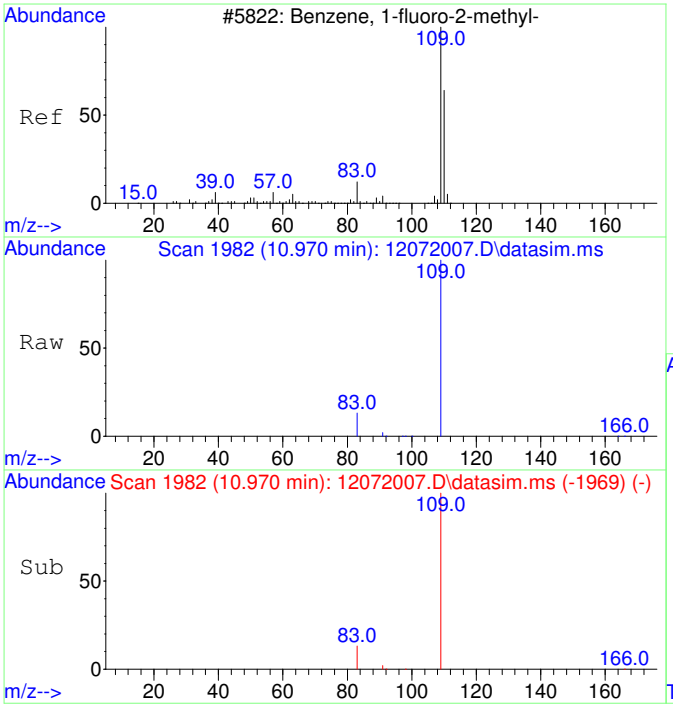
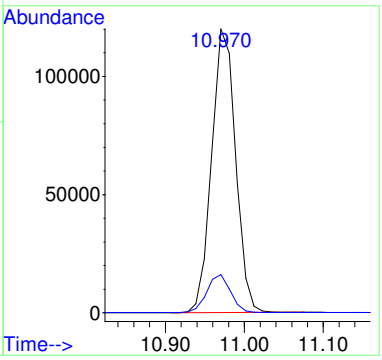
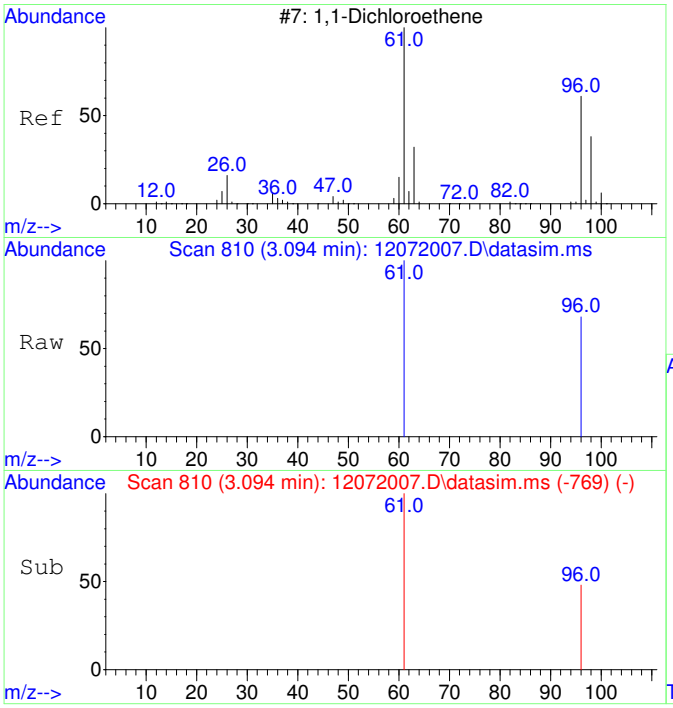


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:109 Resp: 252253

Ion	Ratio	Lower	Upper
109	100		
83	13.2	0.0	42.3

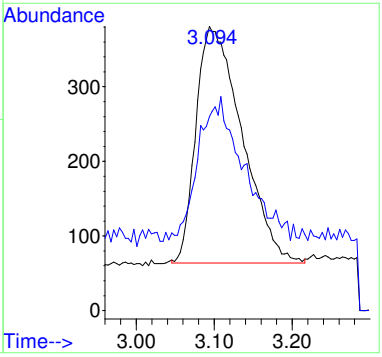


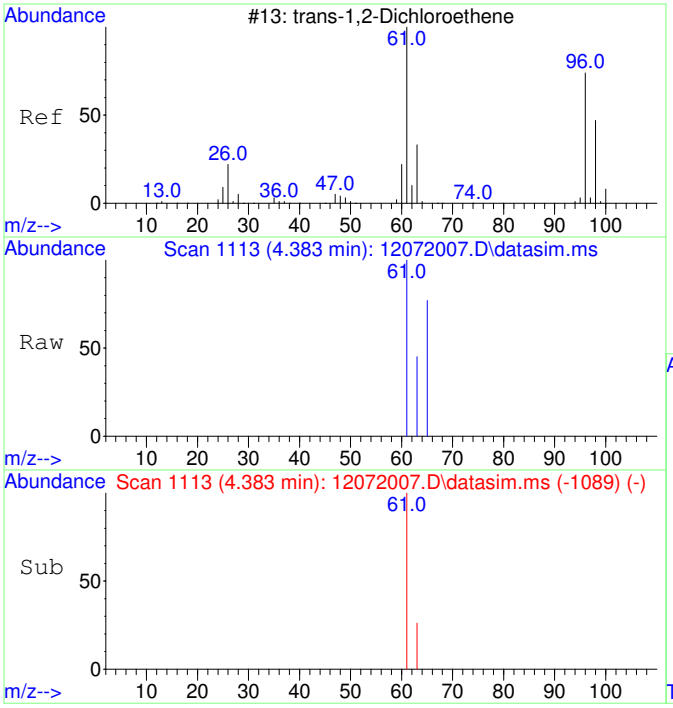


#2
1,1-Dichloroethene
Concen: 129.92 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1297

Ion	Ratio	Lower	Upper
61	100		
96	56.1	37.2	97.2

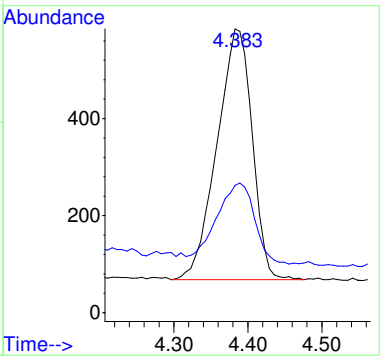


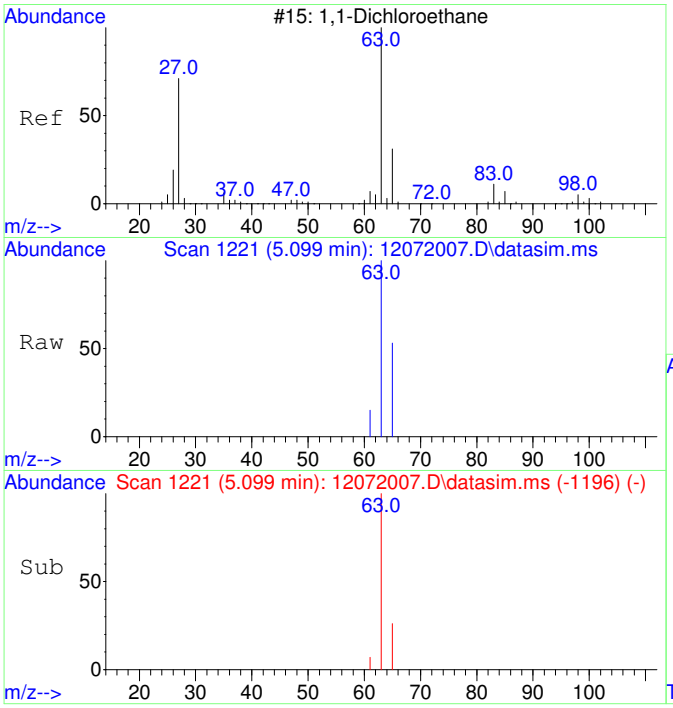


#3
trans-1,2-Dichloroethene
Concen: 135.61 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 1710

Ion	Ratio	Lower	Upper
61	100		
63	35.1	2.4	62.4

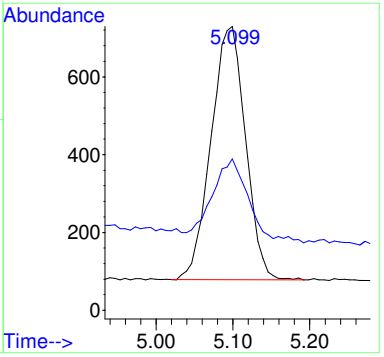


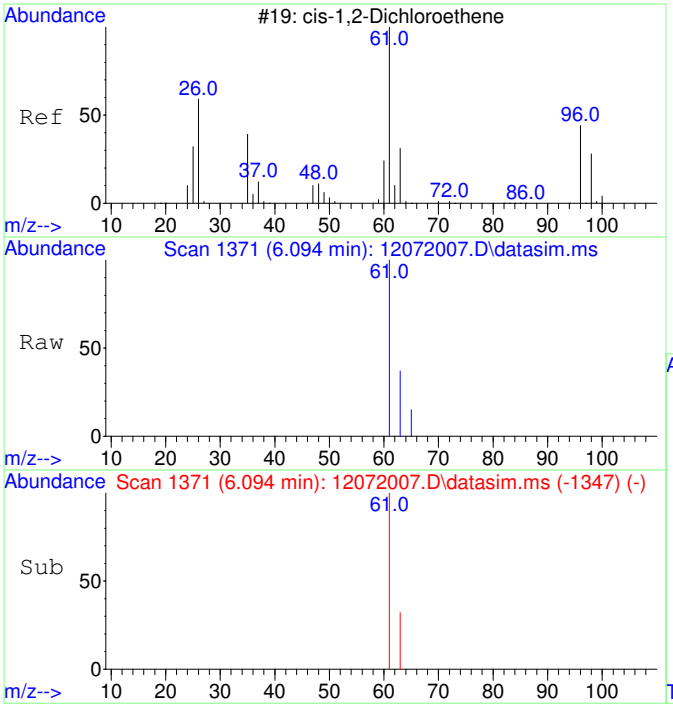


#4
1,1-Dichloroethane
Concen: 134.39 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 2024

Ion	Ratio	Lower	Upper
63	100		
65	36.1	1.8	61.8

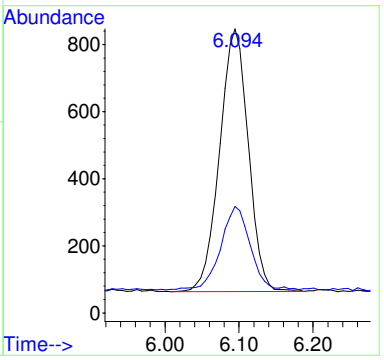


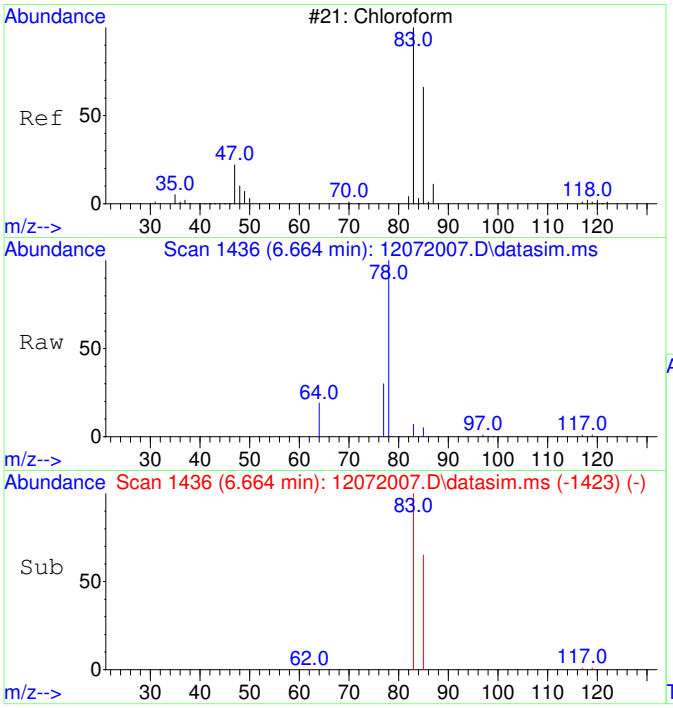


#5
cis-1,2-Dichloroethene
Concen: 135.72 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 2117

Ion	Ratio	Lower	Upper
61	100		
63	32.2	2.5	62.5

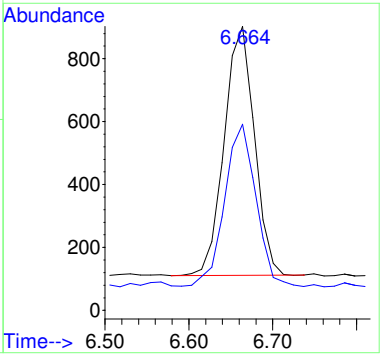


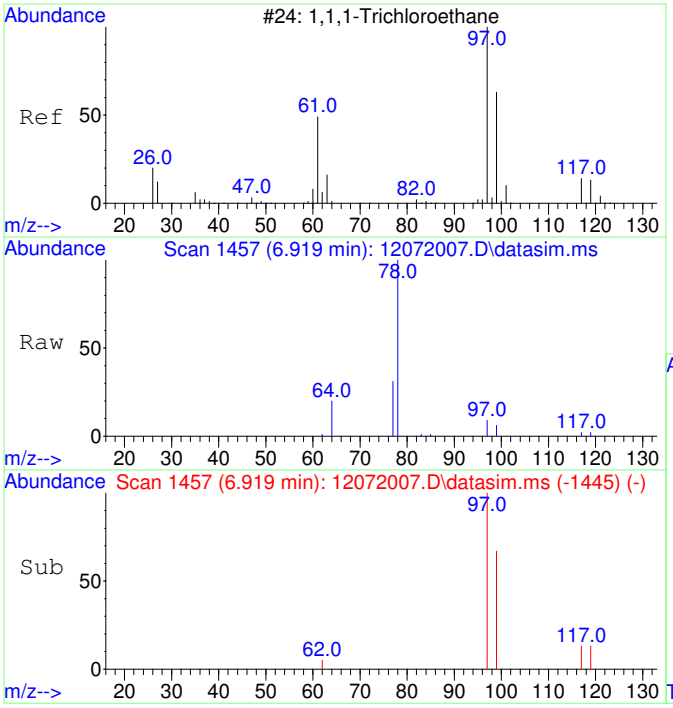


#6
Chloroform
Concen: 131.69 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1973

Ion	Ratio	Lower	Upper
83	100		
85	67.3	35.1	95.1

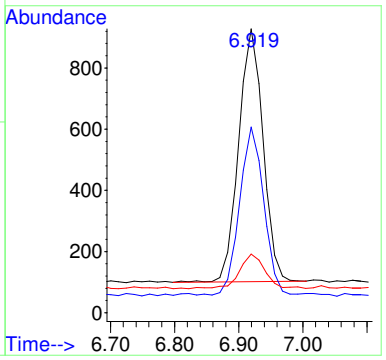


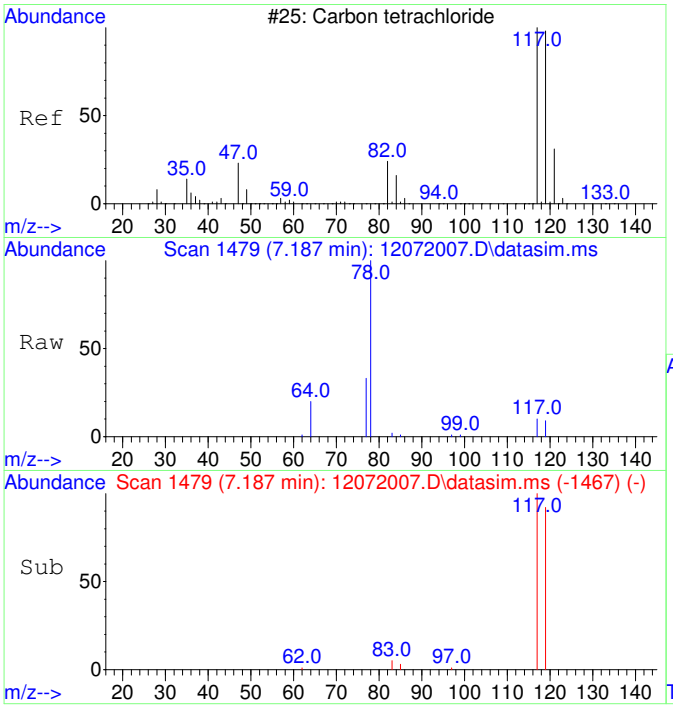


#7
1,1,1-Trichloroethane
Concen: 135.33 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 2178

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

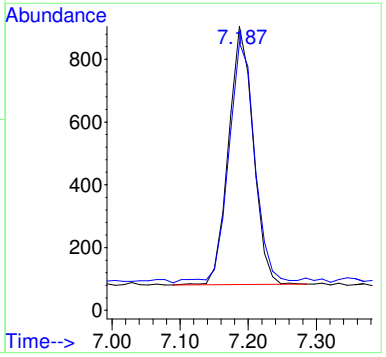


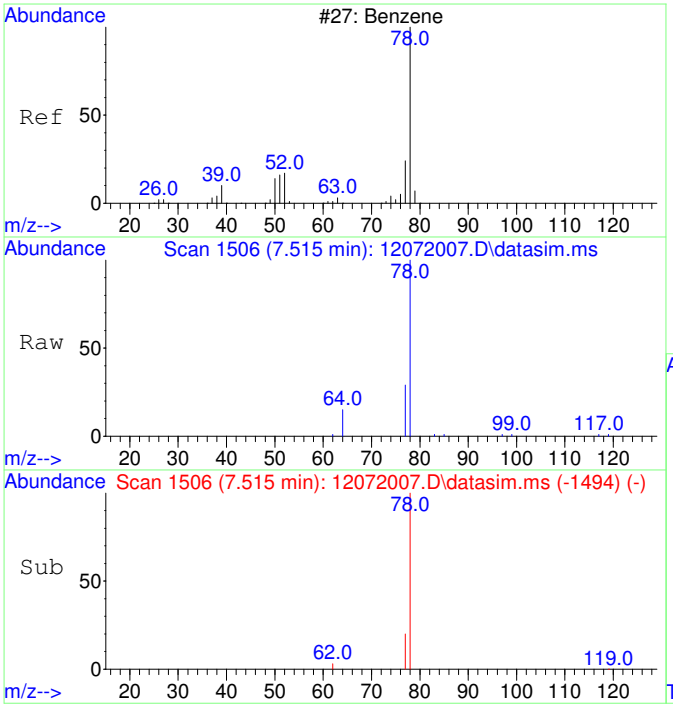


#8
Carbon tetrachloride
Concen: 133.62 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 2056

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

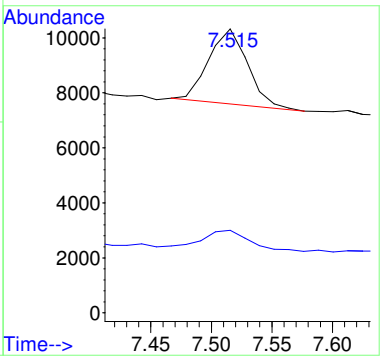


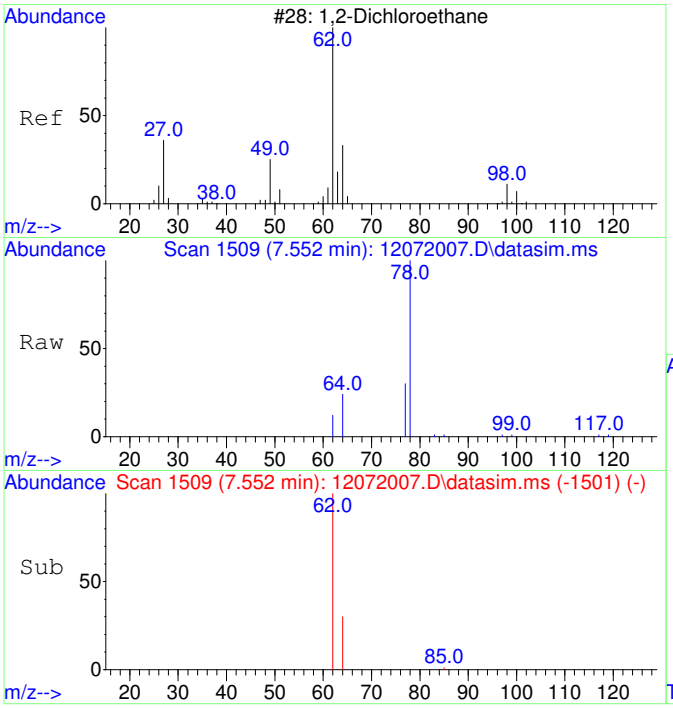


#9
Benzene
Concen: 139.94 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 5940

Ion	Ratio	Lower	Upper
78	100		
77	42.5	0.0	53.2

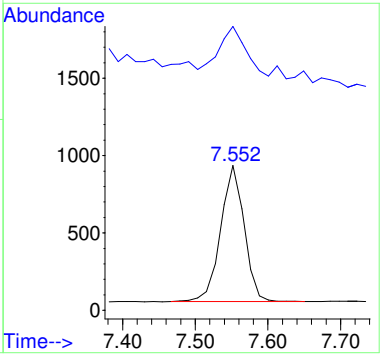


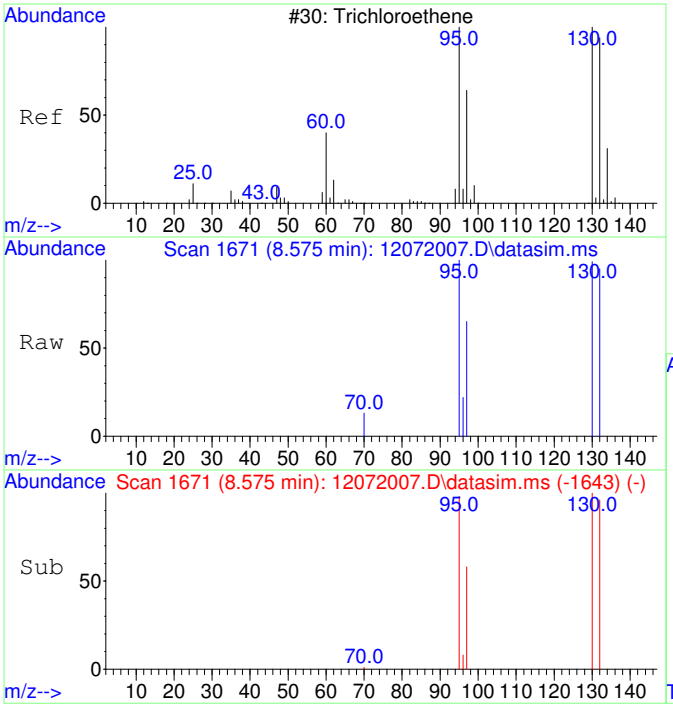


#10
1,2-Dichloroethane
Concen: 136.74 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1980

Ion	Ratio	Lower	Upper
62	100		
64	41.8	2.3	62.3

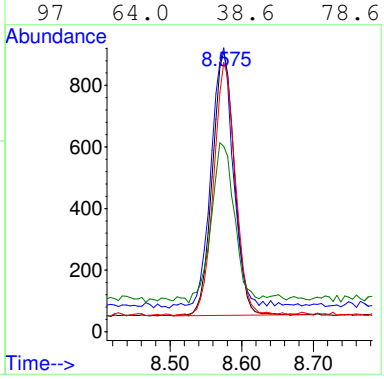


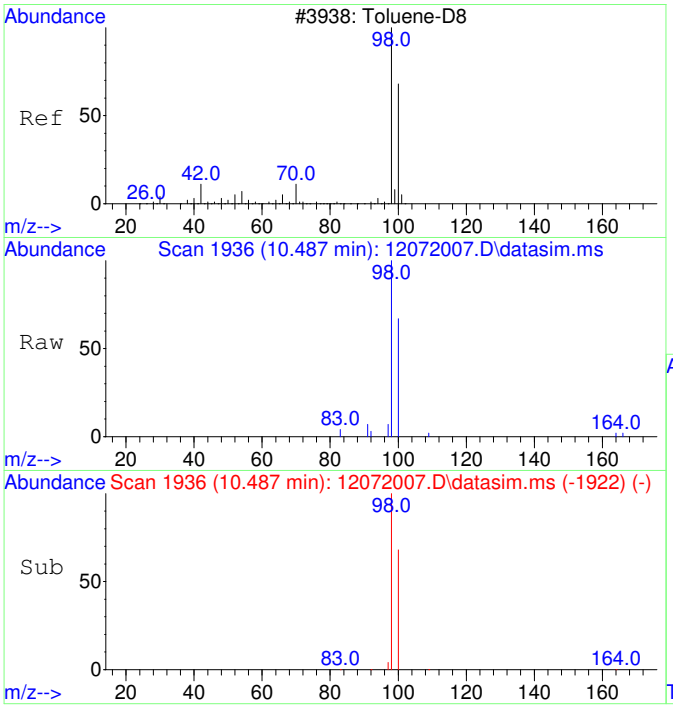


#11
Trichloroethene
Concen: 136.03 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 1823

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

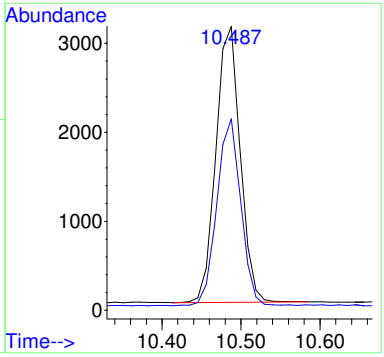


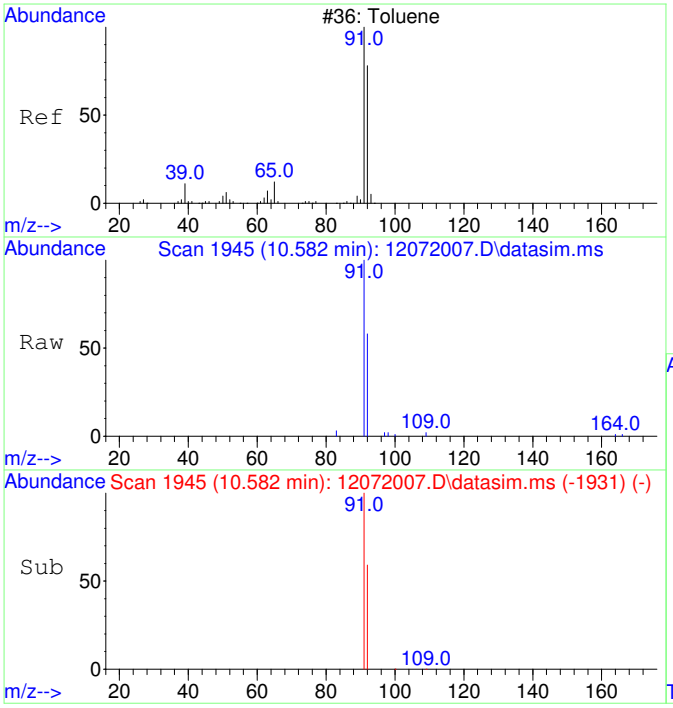


#12
Toluene-d8
Concen: 135.40 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 6615

Ion	Ratio	Lower	Upper
98	100		
100	66.2	37.1	97.1

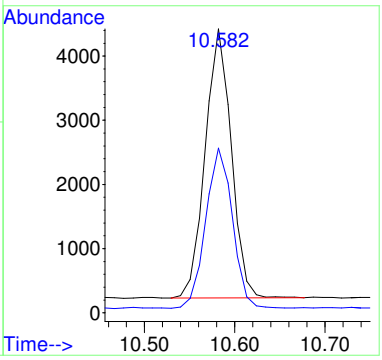


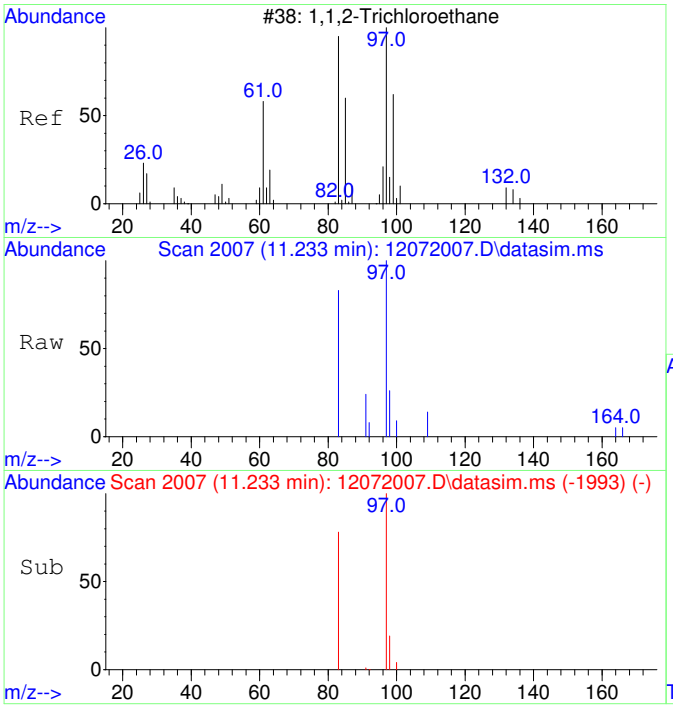


#13
Toluene
Concen: 138.31 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 8413

Ion	Ratio	Lower	Upper
91	100		
92	60.6	29.9	89.9

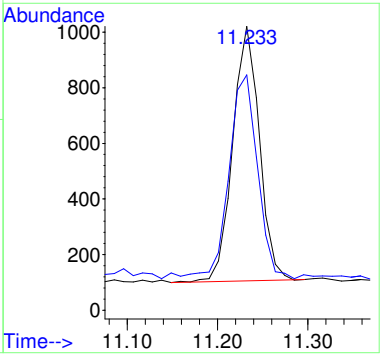


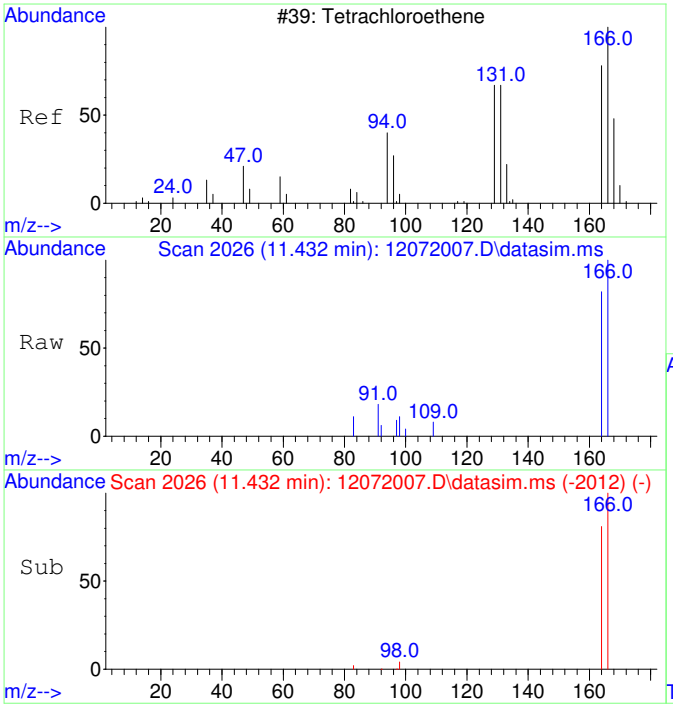


#14
1,1,2-Trichloroethane
Concen: 133.72 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1884

Ion	Ratio	Lower	Upper
97	100		
83	86.1	51.2	111.2

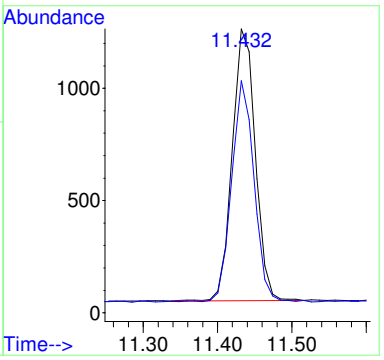


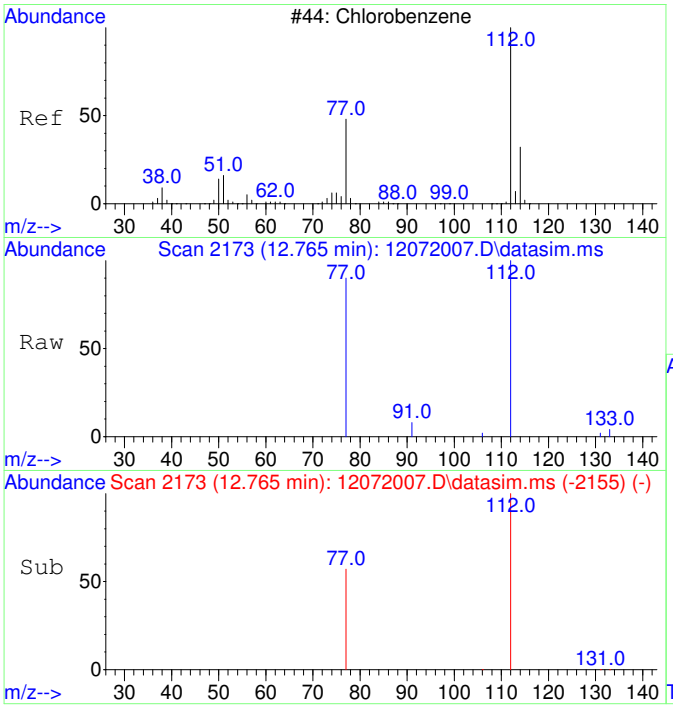


#15
Tetrachloroethene
Concen: 137.02 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 2596

Ion	Ratio	Lower	Upper
166	100		
164	79.8	47.8	107.8

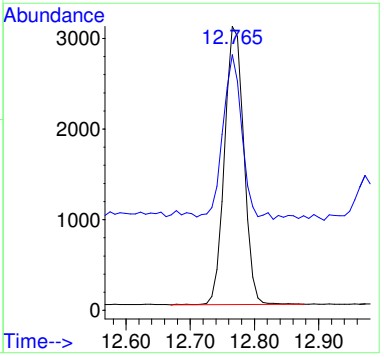


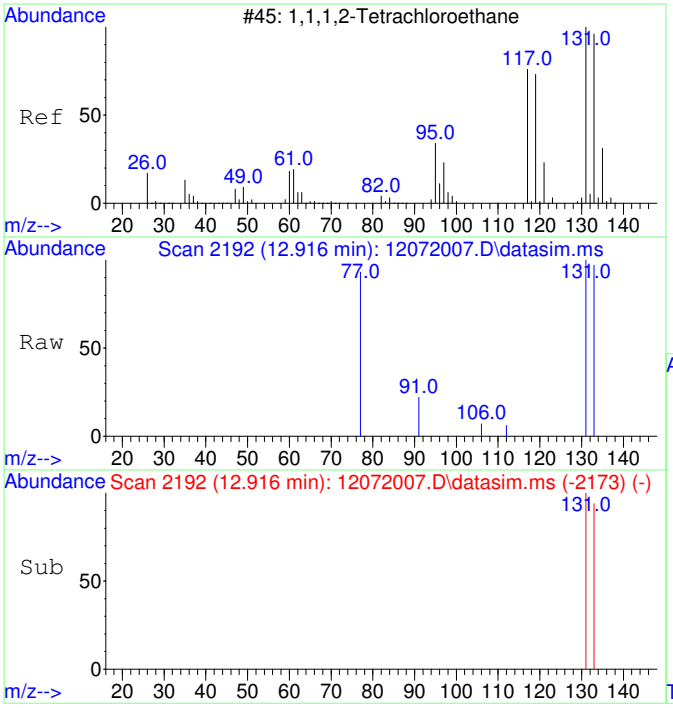


#16
Chlorobenzene
Concen: 135.22 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 6372

Ion	Ratio	Lower	Upper
112	100		
77	59.1	23.6	83.6

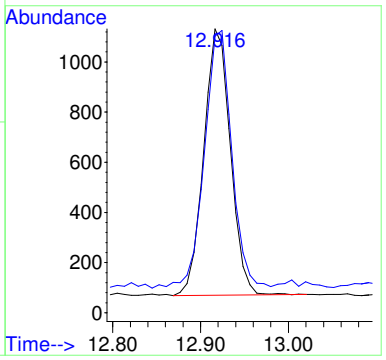


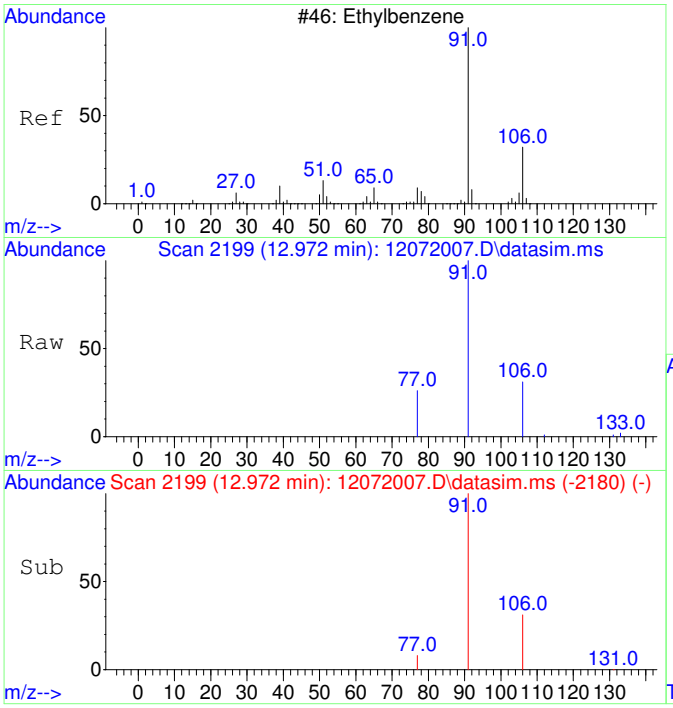


#17
1,1,1,2-Tetrachloroethane
Concen: 135.81 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 2240

Ion	Ratio	Lower	Upper
131	100		
133	98.2	66.3	126.3

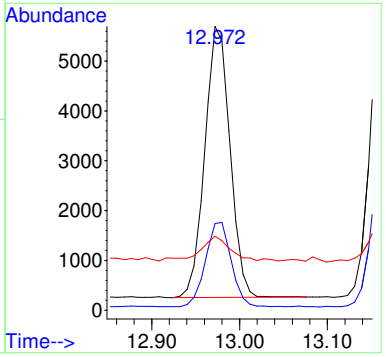


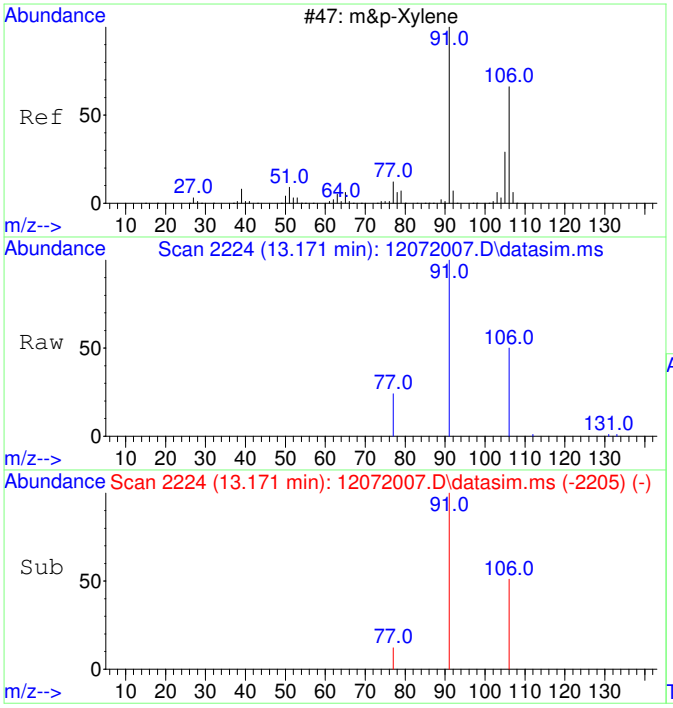


#18
Ethylbenzene
Concen: 139.93 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10872

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

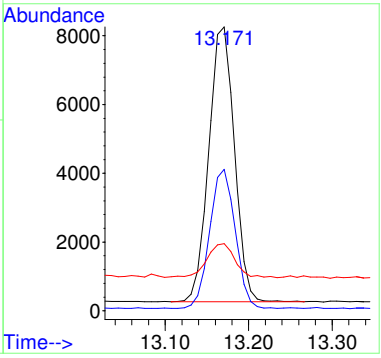


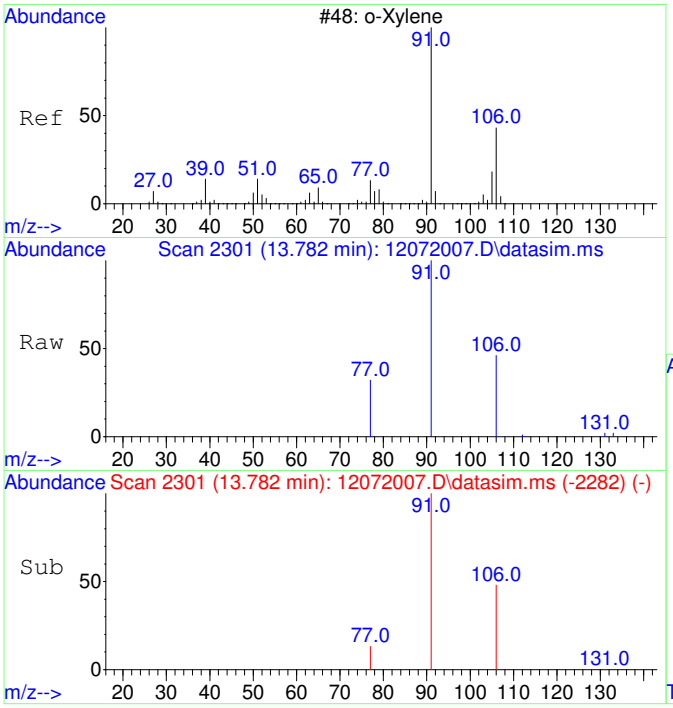


#19
m&p-Xylene
Concen: 285.38 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 17074

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

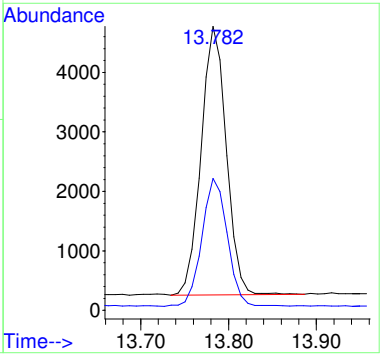


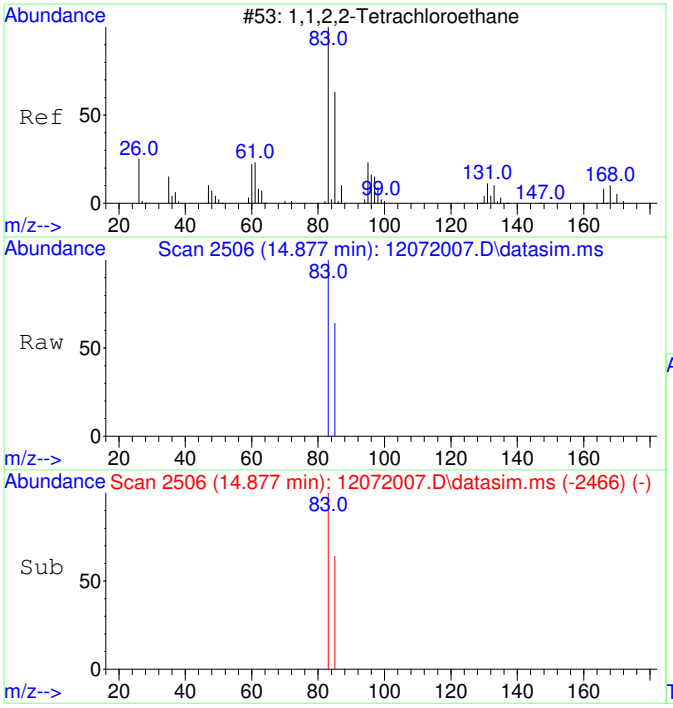


#20
o-Xylene
Concen: 140.07 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 9001

Ion	Ratio	Lower	Upper
91	100		
106	48.2	19.2	79.2

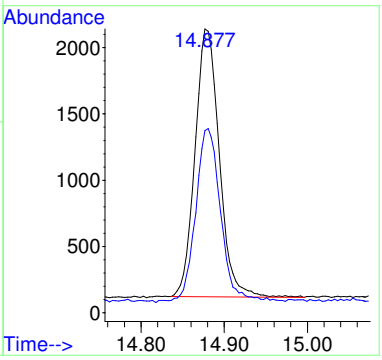


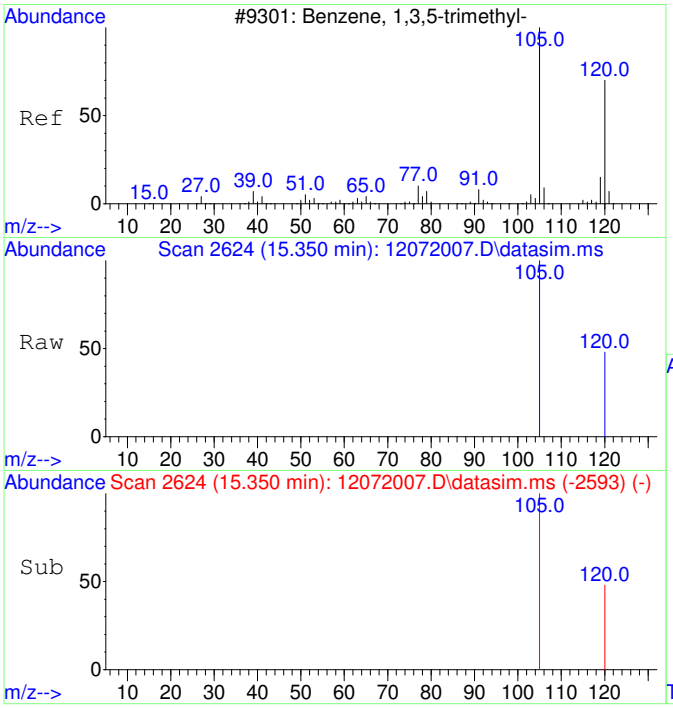


#21
1,1,2,2-Tetrachloroethane
Concen: 136.76 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 4095

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

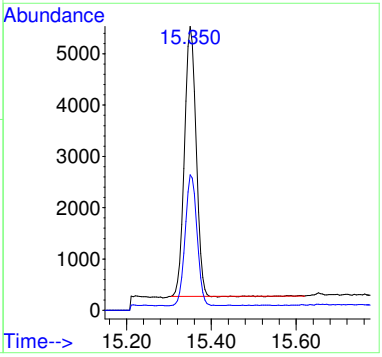


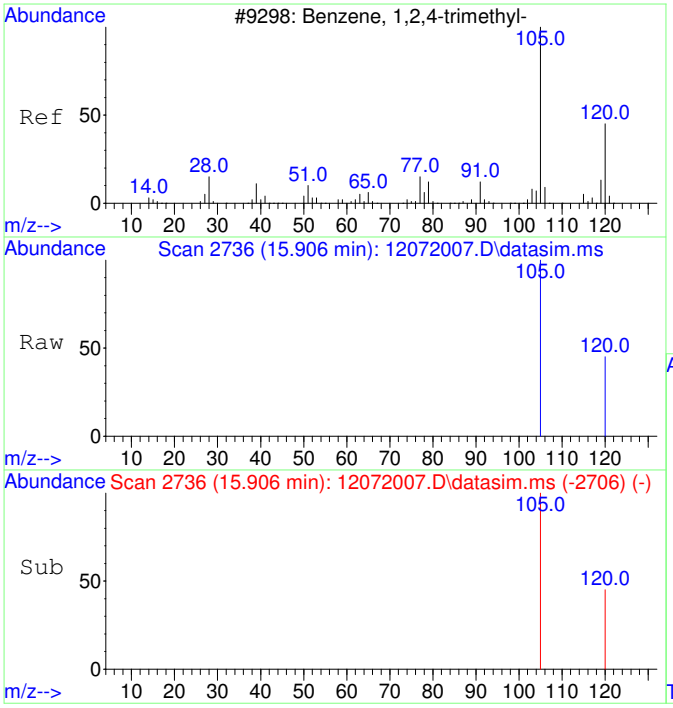


#22
1,3,5-Trimethylbenzene
Concen: 141.75 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10017

Ion	Ratio	Lower	Upper
105	100		
120	48.7	21.1	81.1

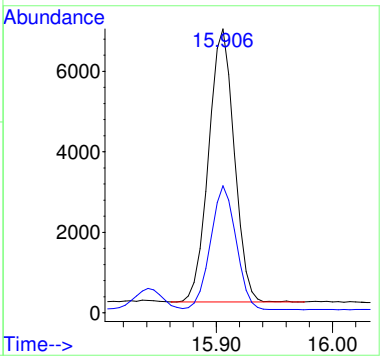


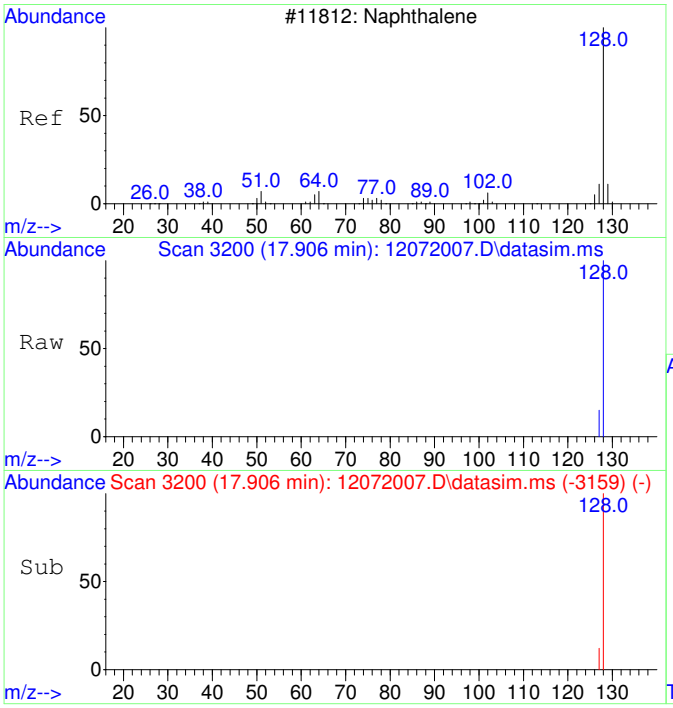


#23
1,2,4-Trimethylbenzene
Concen: 143.95 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 10405

Ion	Ratio	Lower	Upper
105	100		
120	44.6	17.2	77.2

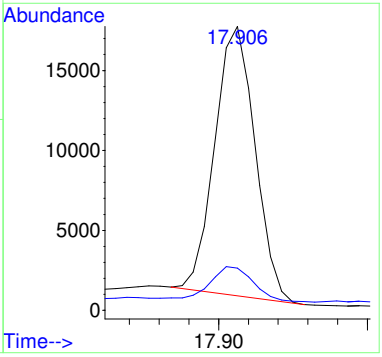


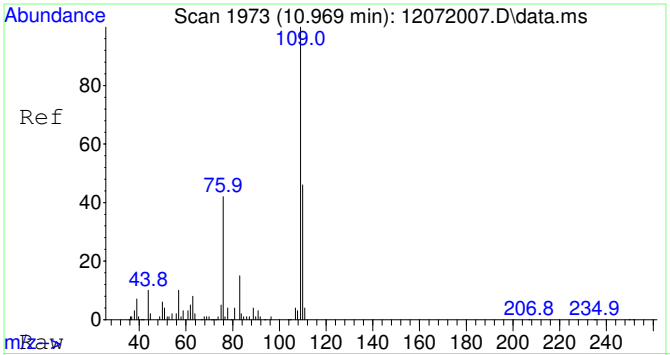


#24
Naphthalene
Concen: 132.61 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 15689

Ion	Ratio	Lower	Upper
128	100		
127	12.2	0.0	42.5

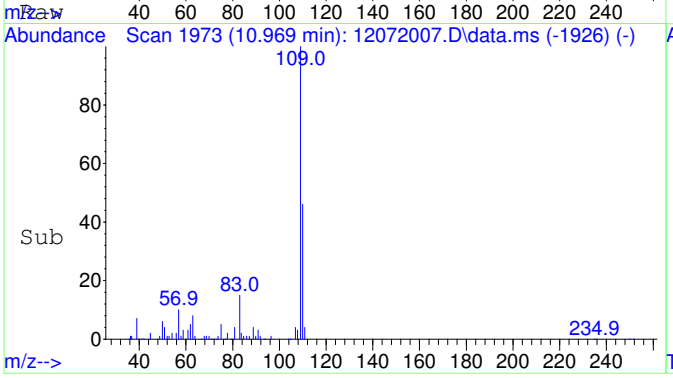


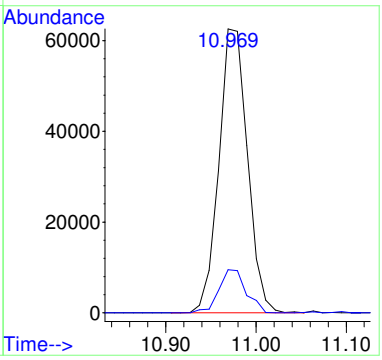


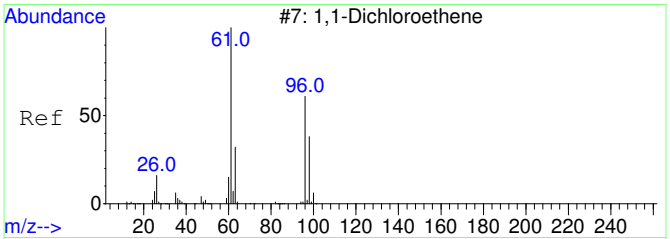
#25
2-Fluorotoluene SCAN
Concen: 4827.25 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

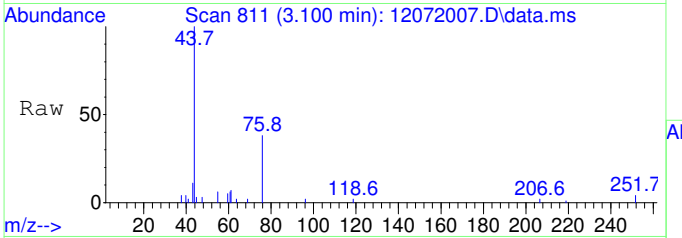
Tgt Ion:109 Resp: 138220

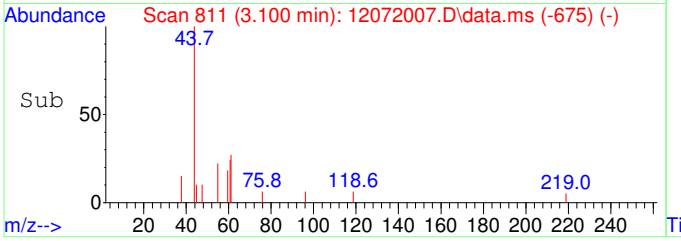
Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8







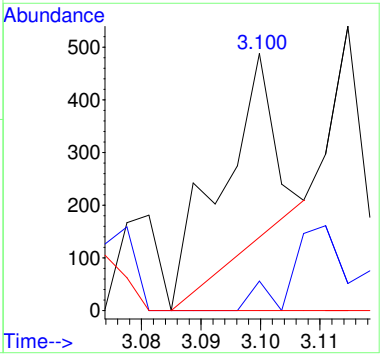


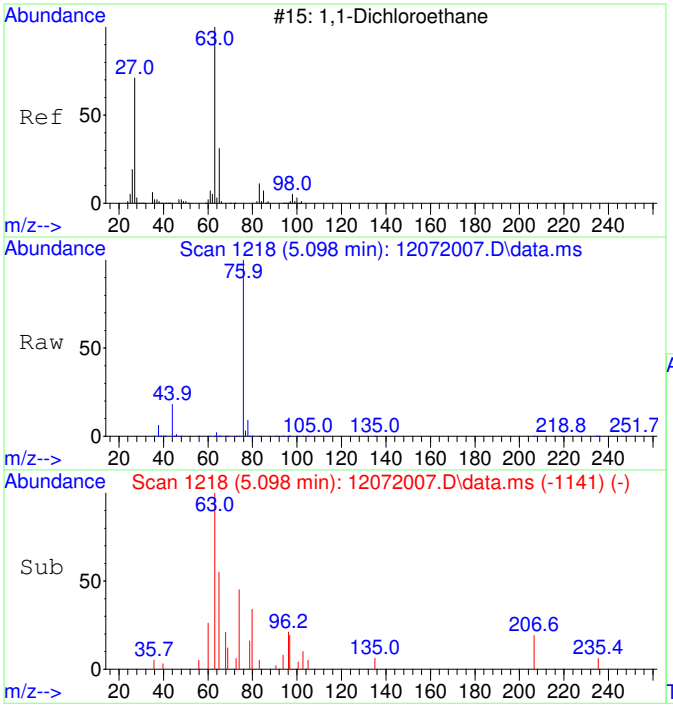


#26
1,1-Dichloroethene SCAN
Concen: 34.26 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 61 Resp: 229

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

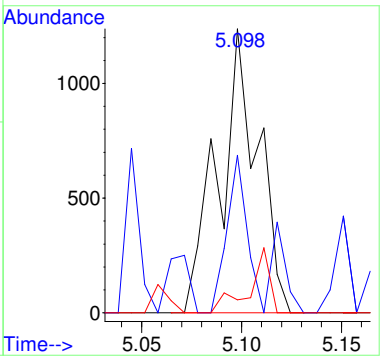


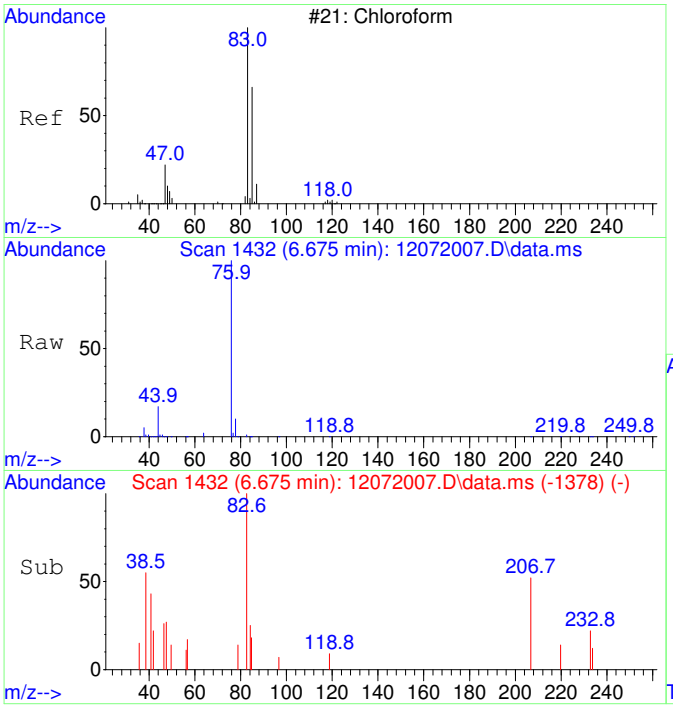


#28
1,1-Dichloroethane SCAN
Concen: 168.66 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.014 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 63 Resp: 1695

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

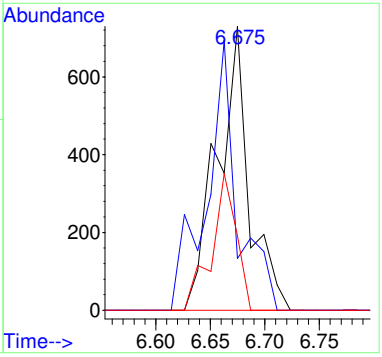


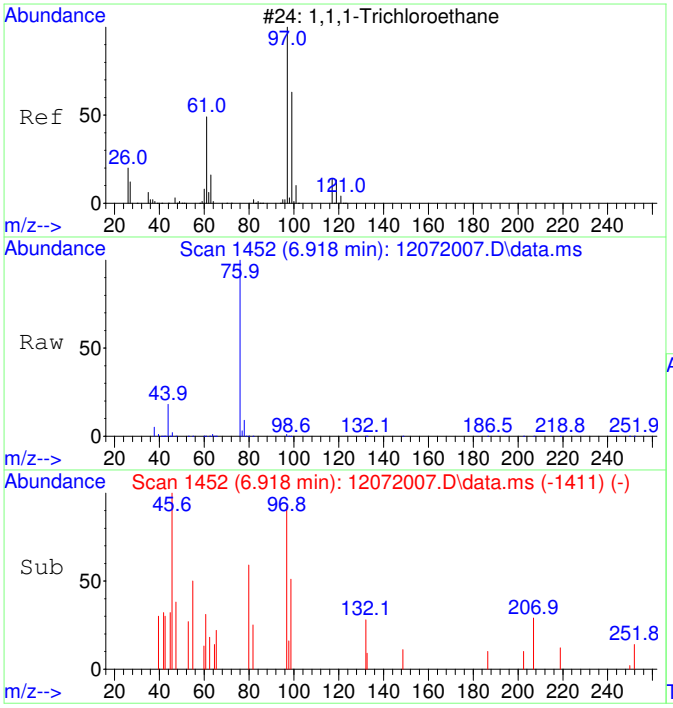


#30
Chloroform SCAN
Concen: 161.05 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 1484

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

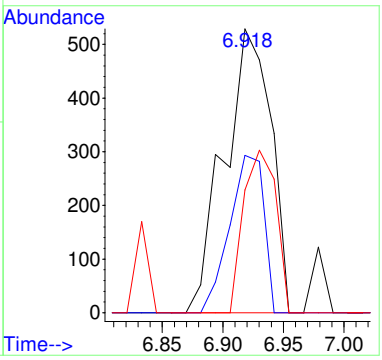


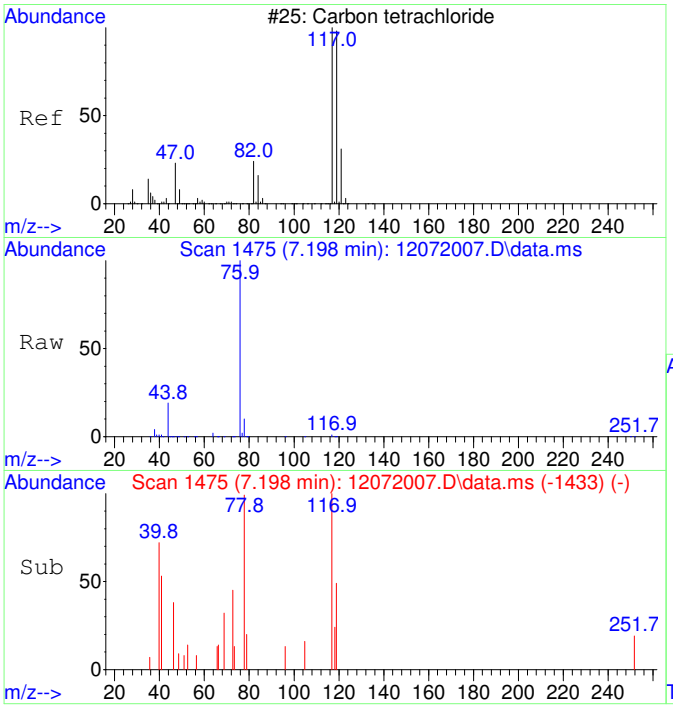


#31
1,1,1-Trichloroethane SCAN
Concen: 149.86 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1425

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

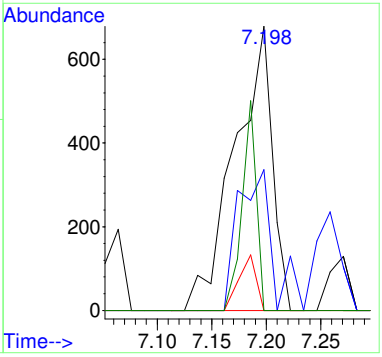


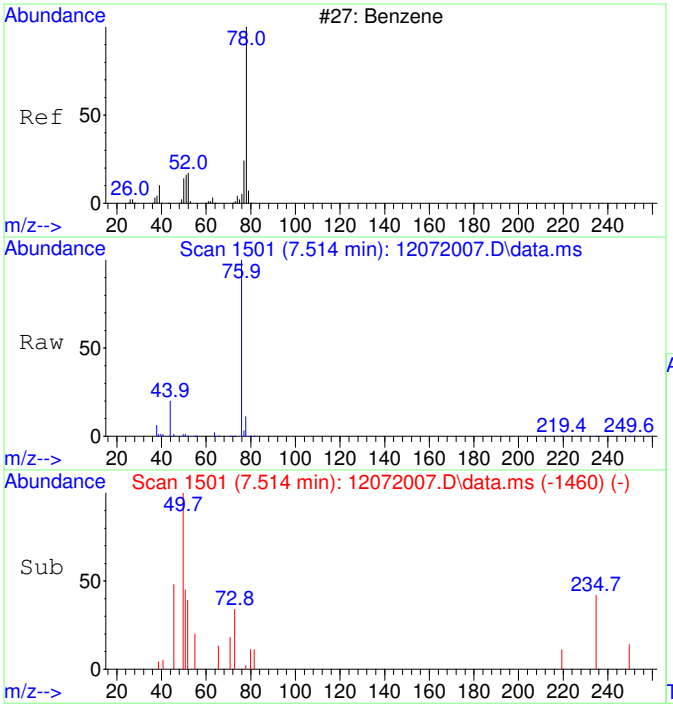


#32
Carbon tetrachloride SCAN
Concen: 200.47 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:117 Resp: 1629

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

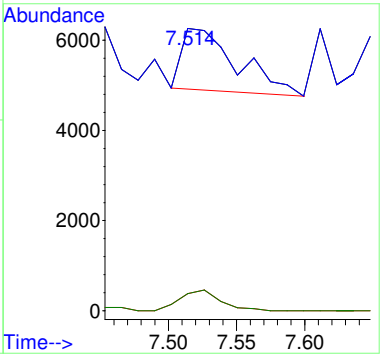


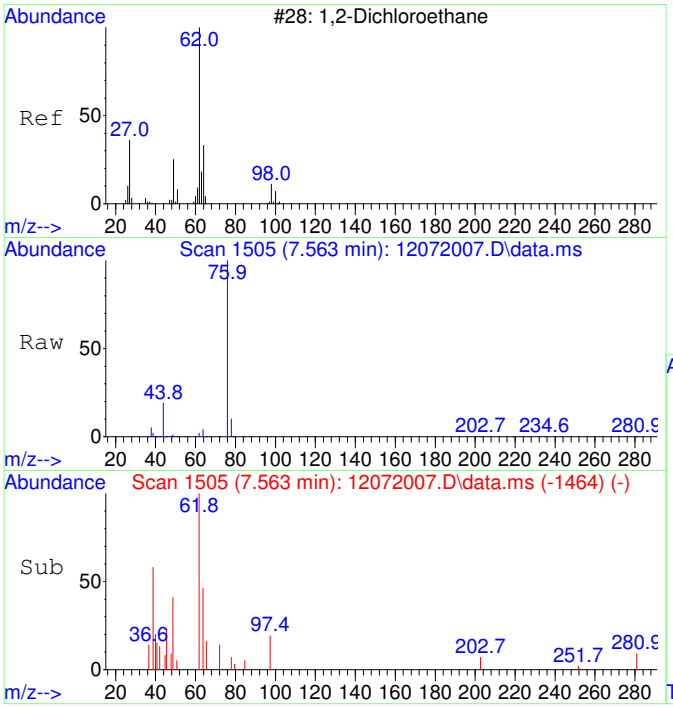


#33
Benzene SCAN
Concen: 132.09 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 78 Resp: 3800

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

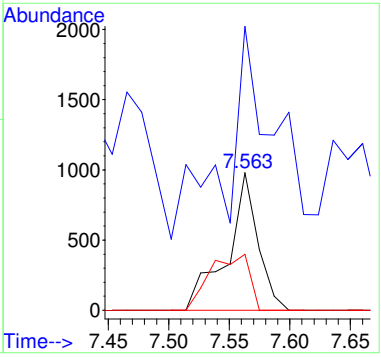


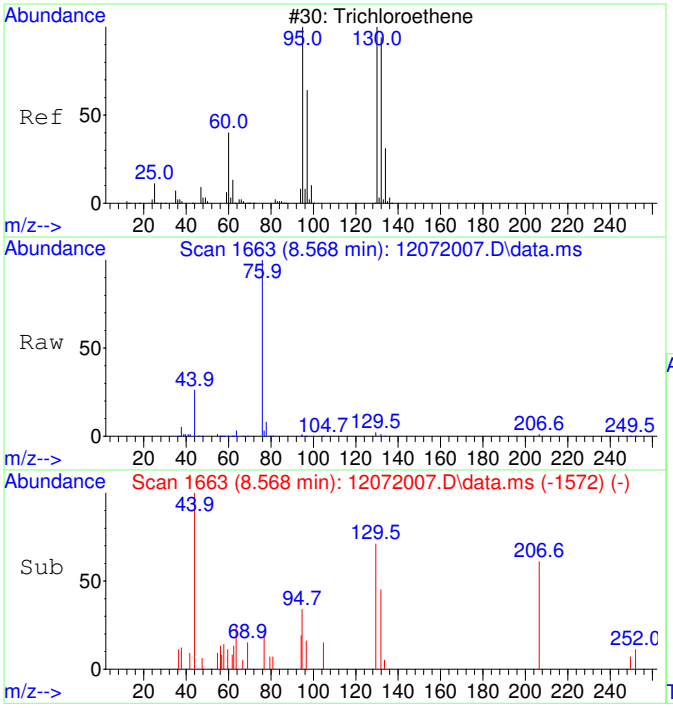


#34
1,2-Dichloroethane SCAN
Concen: 193.37 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 62 Resp: 1740

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

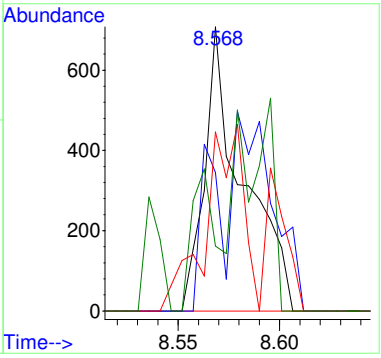


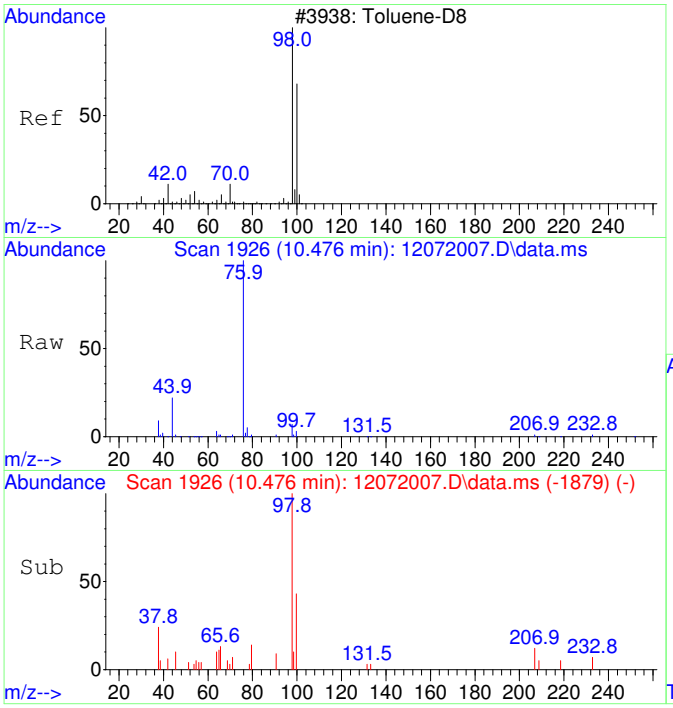


#35
Trichloroethene SCAN
Concen: 147.62 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:130 Resp: 926

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

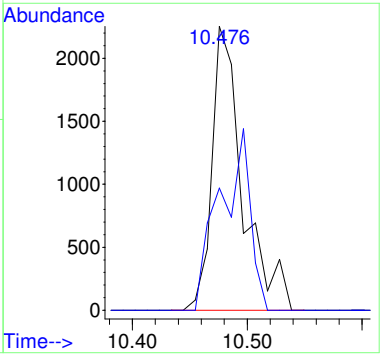


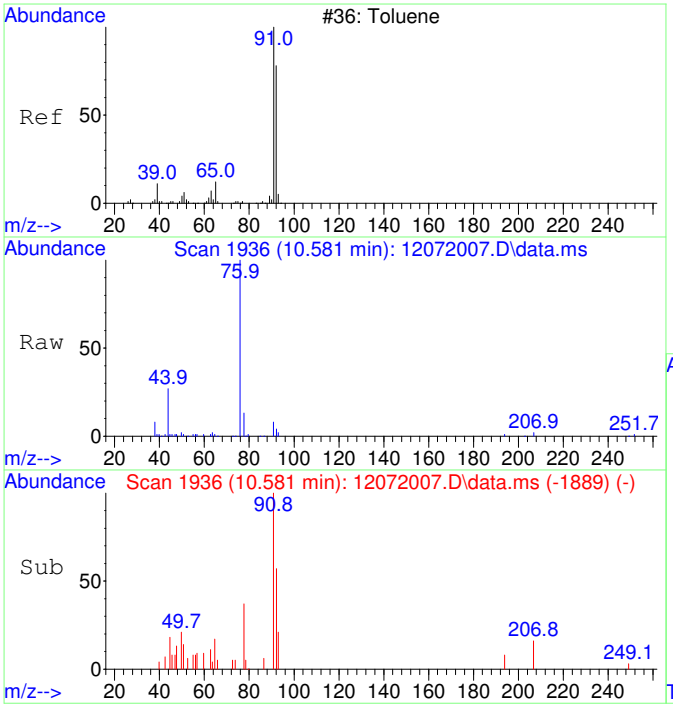


#36
Toluene-d8 SCAN
Concen: 155.54 ug/L
RT: 10.476 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 98 Resp: 4177

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

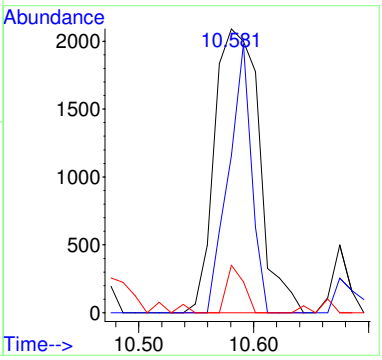


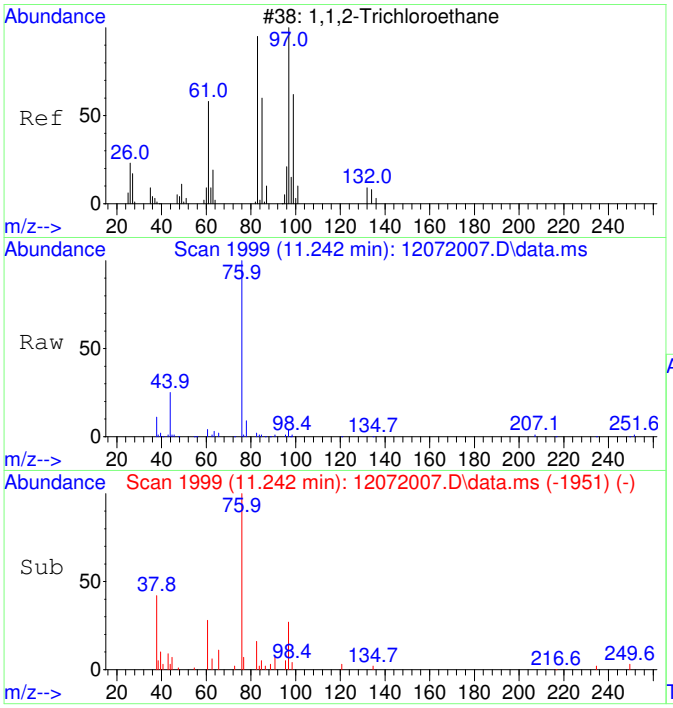


#37
Toluene SCAN
Concen: 171.27 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 5663

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

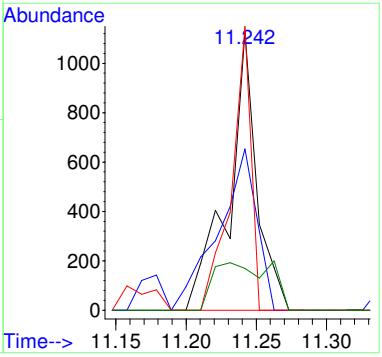


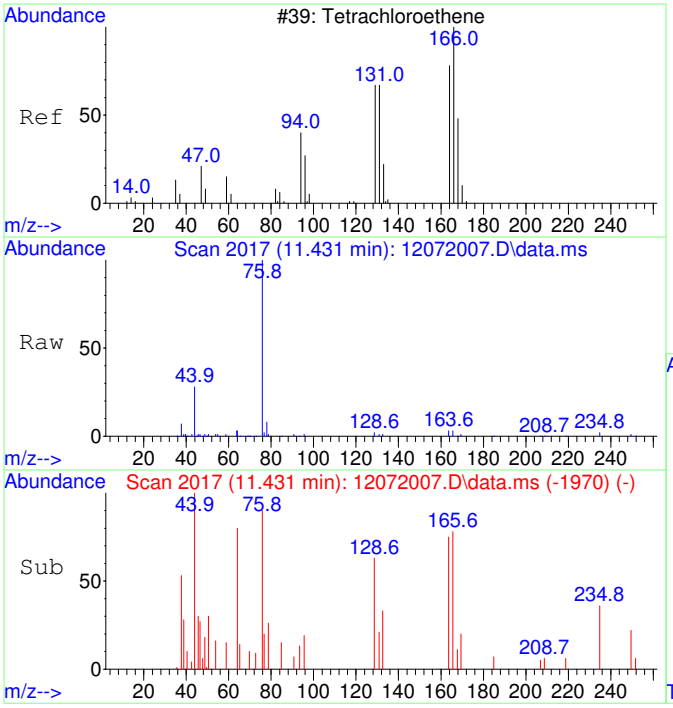


#38
1,1,2-Trichloroethane SCAN
Concen: 192.45 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 97 Resp: 1595

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

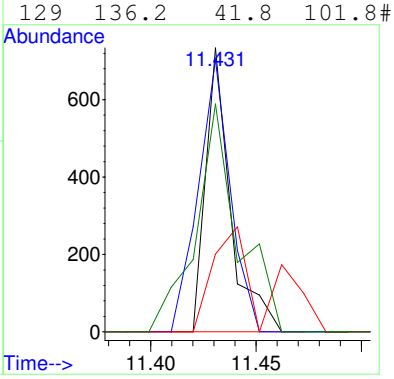


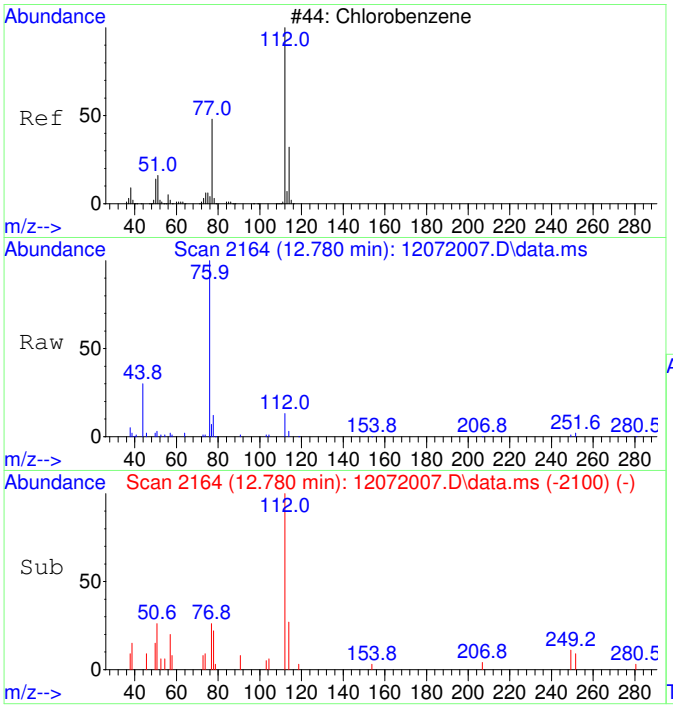


#39
Tetrachloroethene SCAN
Concen: 80.66 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:166 Resp: 600

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

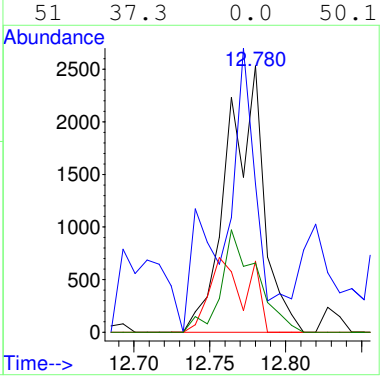


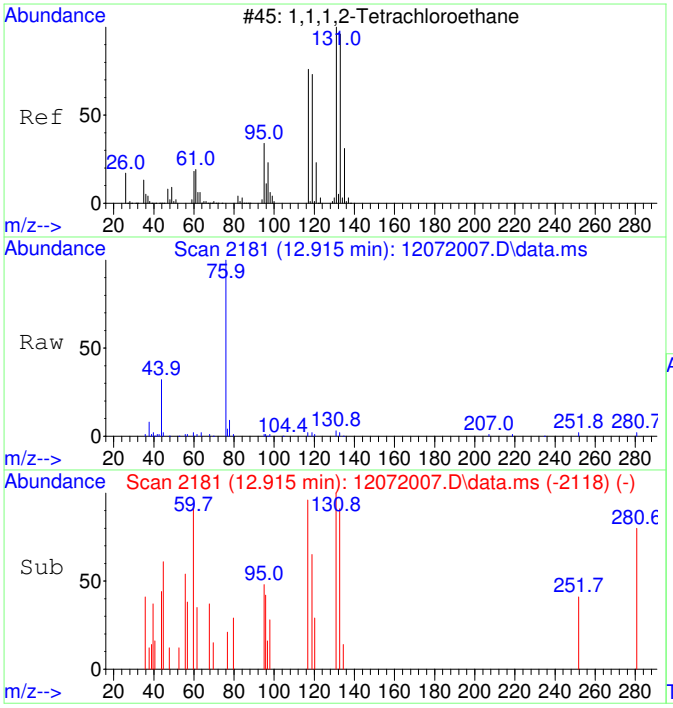


#40
Chlorobenzene SCAN
Concen: 179.38 ug/L
RT: 12.780 min Scan# 2164
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:112 Resp: 4260

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

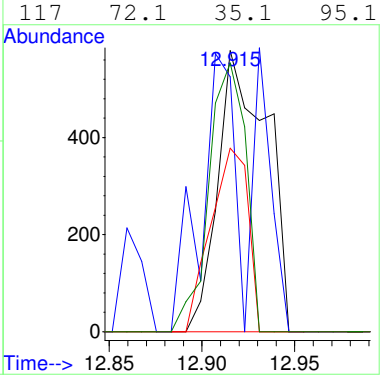


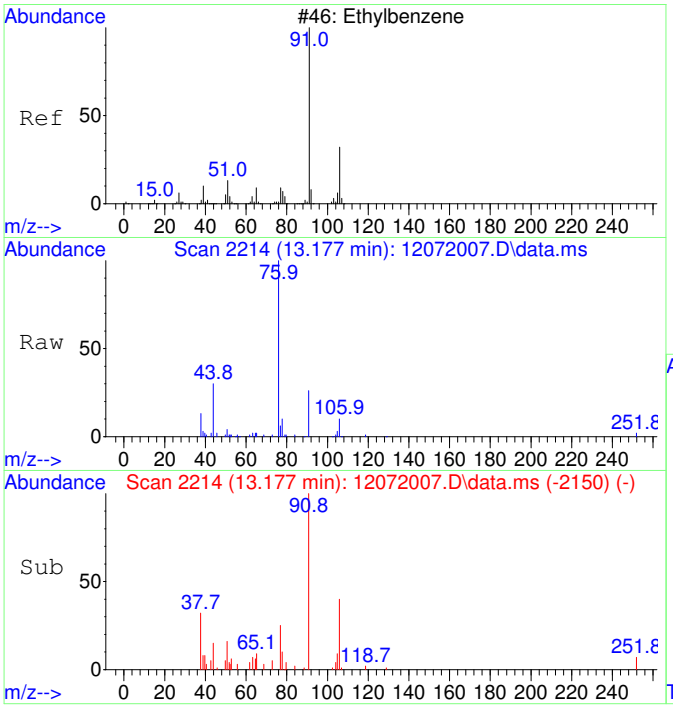


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 130.10 ug/L
RT: 12.915 min Scan# 2181
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:131 Resp: 1066

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

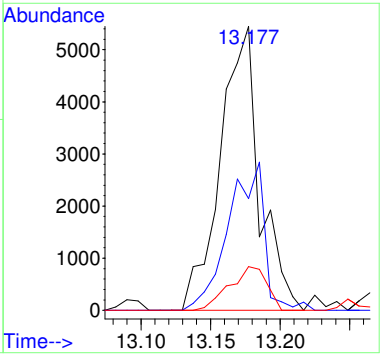


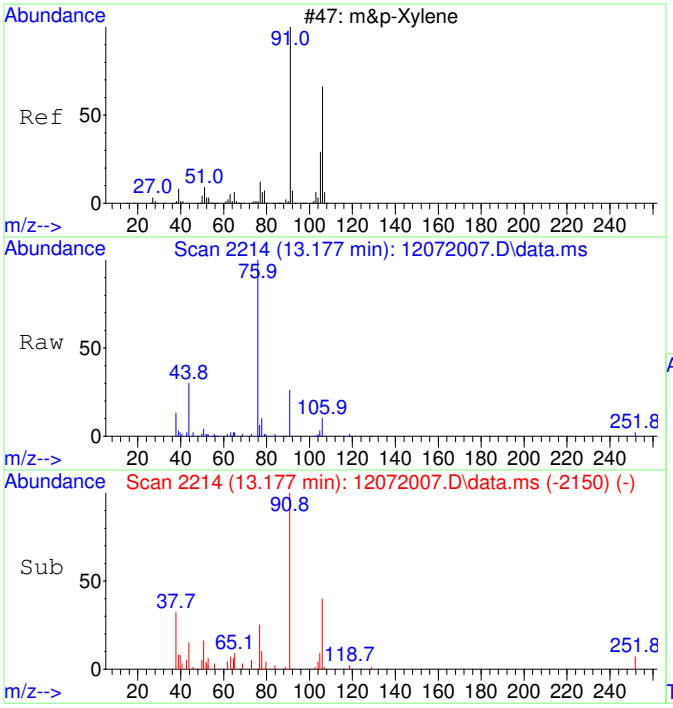


#42
Ethylbenzene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

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

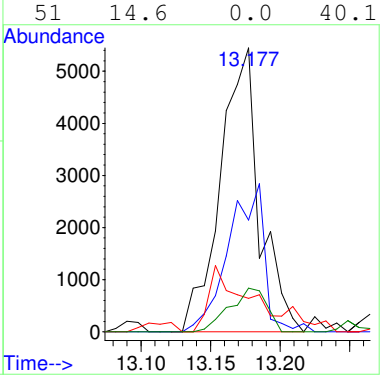


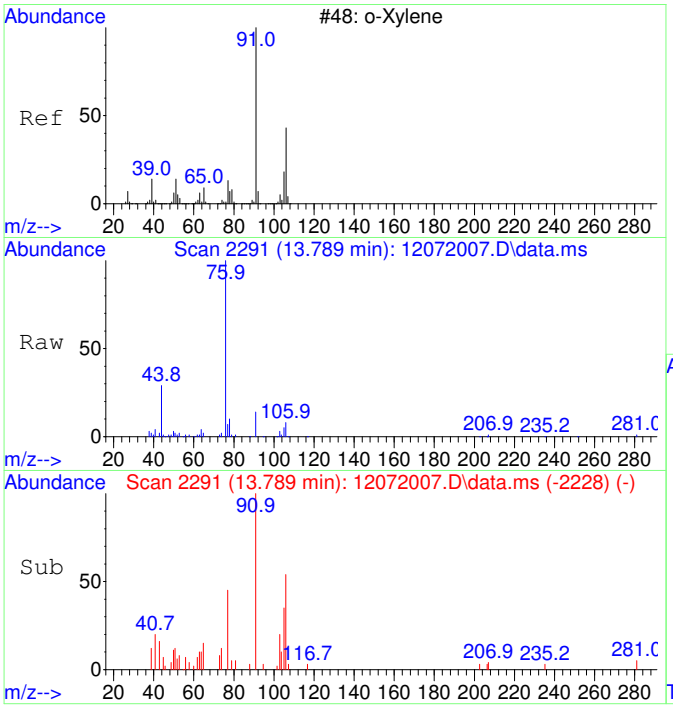


#43
m&p-Xylene SCAN
Concen: 169.70 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 10693

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

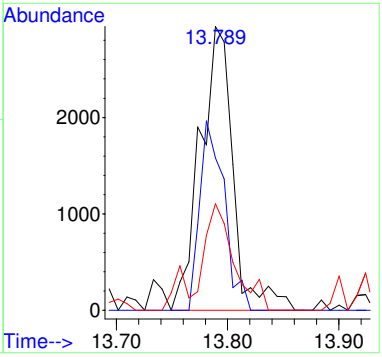


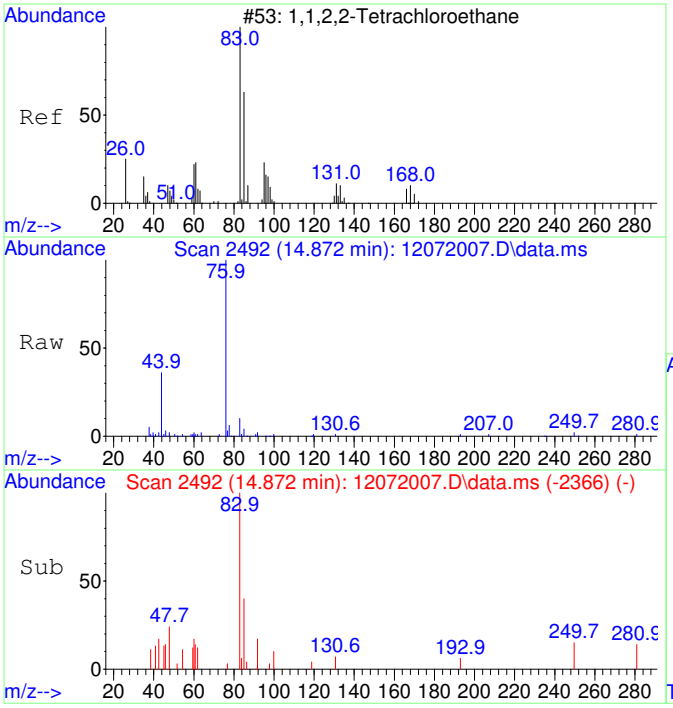


#44
o-Xylene SCAN
Concen: 176.50 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 91 Resp: 6073

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

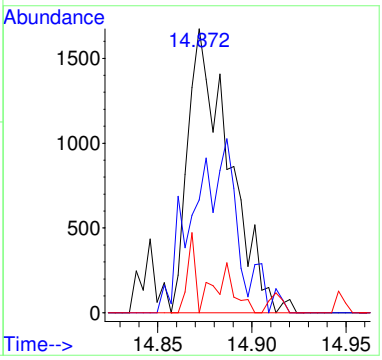


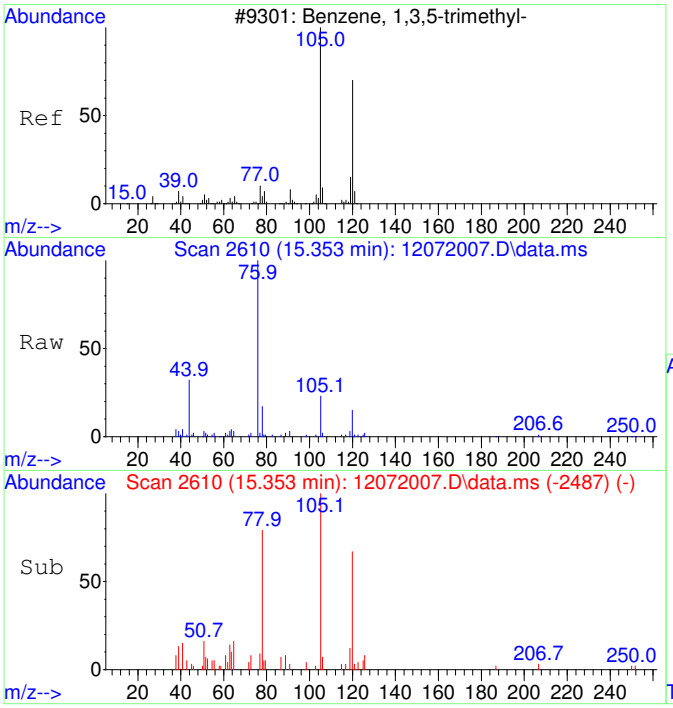


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 142.65 ug/L
RT: 14.872 min Scan# 2492
Delta R.T. -0.011 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion: 83 Resp: 2552

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

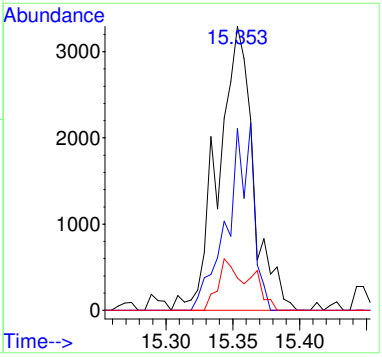


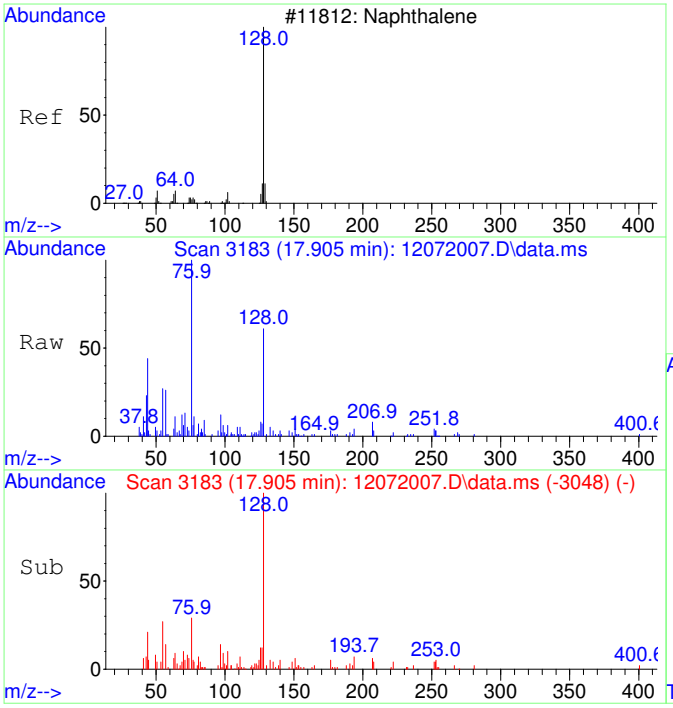


#46
1,3,5-Trimethylbenzene SCAN
Concen: 166.98 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:105 Resp: 6061

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

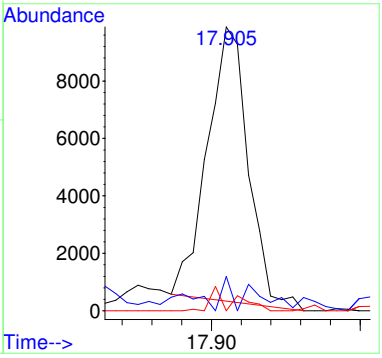




#48
Naphthalene SCAN
Concen: 163.35 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12072007.D
Acq: 7 Dec 2020 14:20

Tgt Ion:128 Resp: 9093

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



S20L021-CAL6

Before Manual Integration

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

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

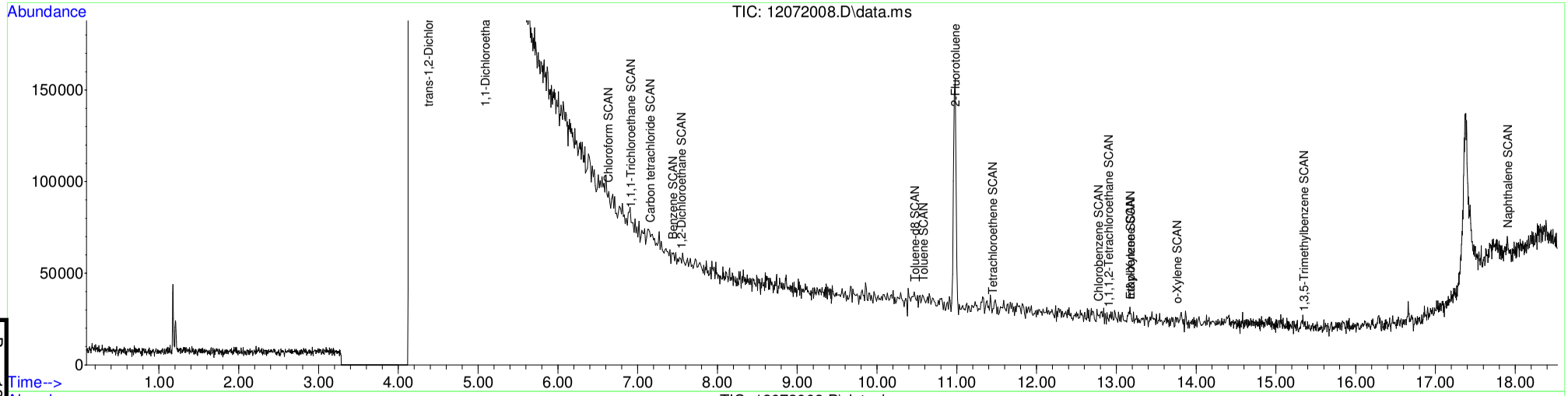
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	187138	5000.00	ug/L	-0.01
System Monitoring Compounds						
12) Toluene-d8	10.487	98	1770	48.84	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 0.98%#			
Target Compounds						Qvalue
2]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

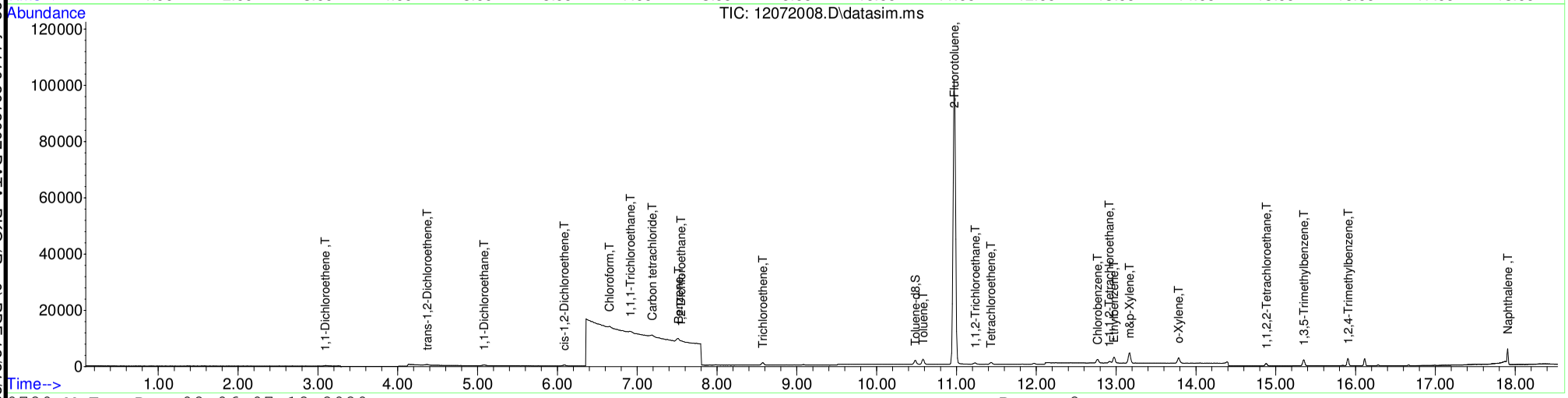
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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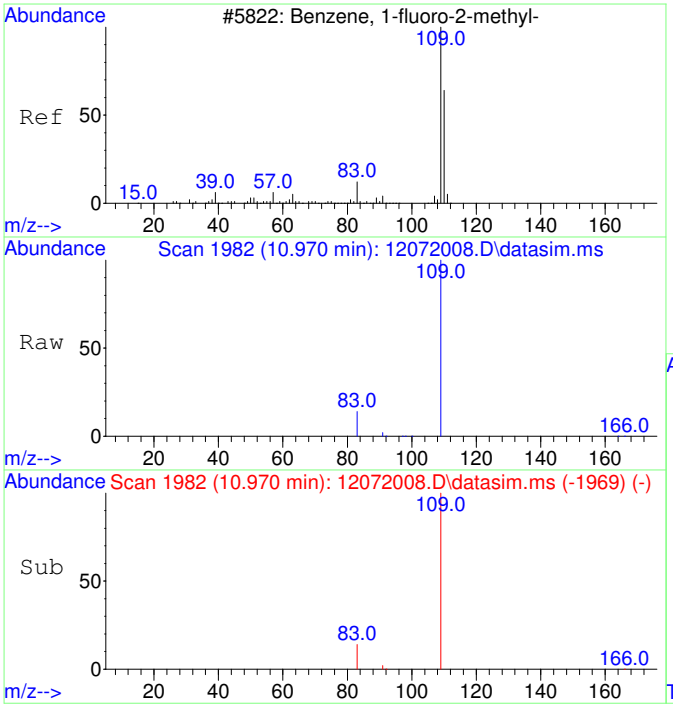
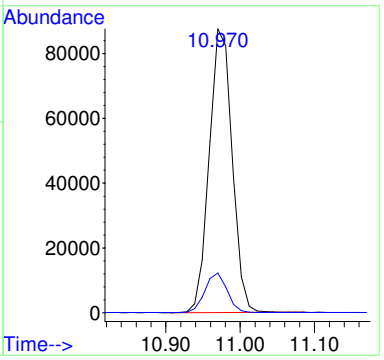
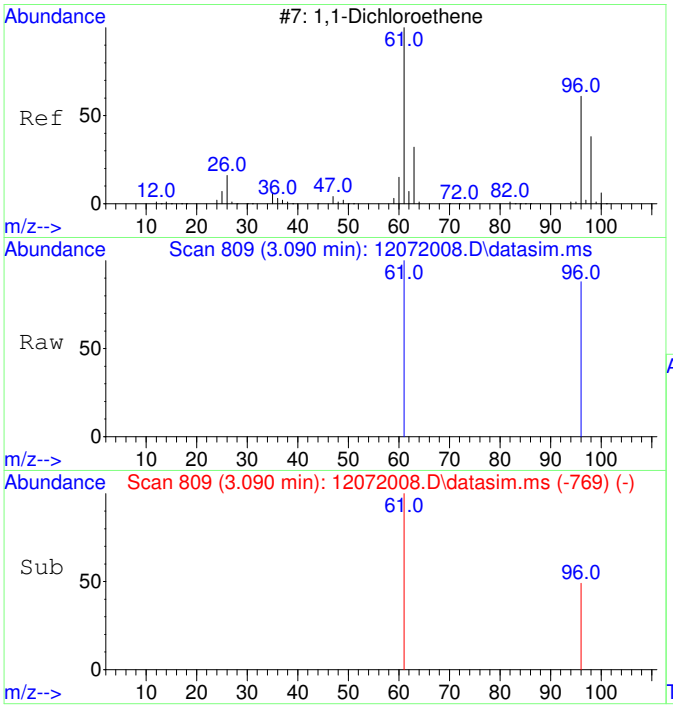


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:109 Resp: 187138

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

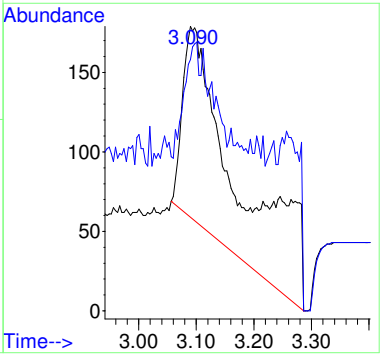




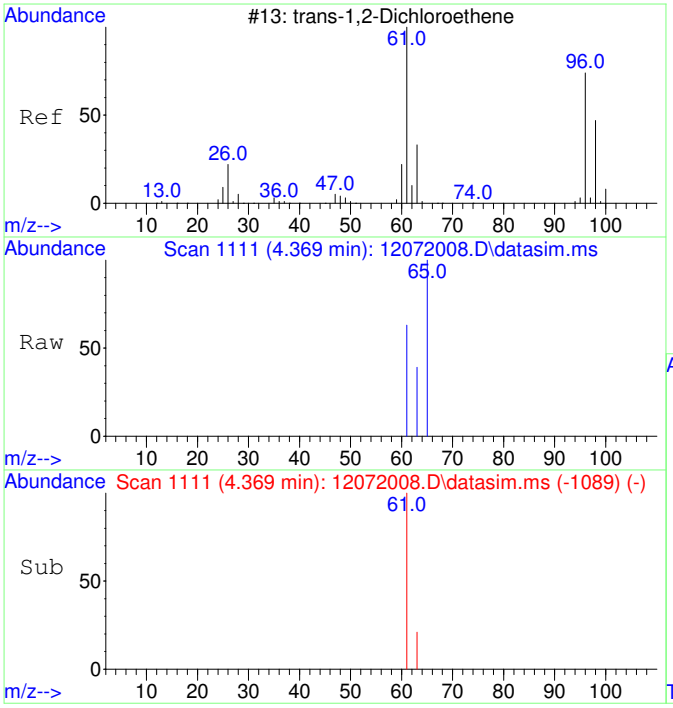
#2
1,1-Dichloroethene
Concen: 109.52 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 810

Ion	Ratio	Lower	Upper
61	100		
96	16.8	37.2	97.2#



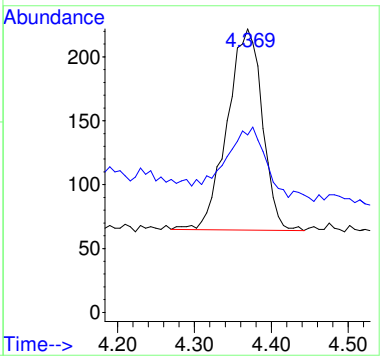
Before MI:
IMPROPER
BASELINE

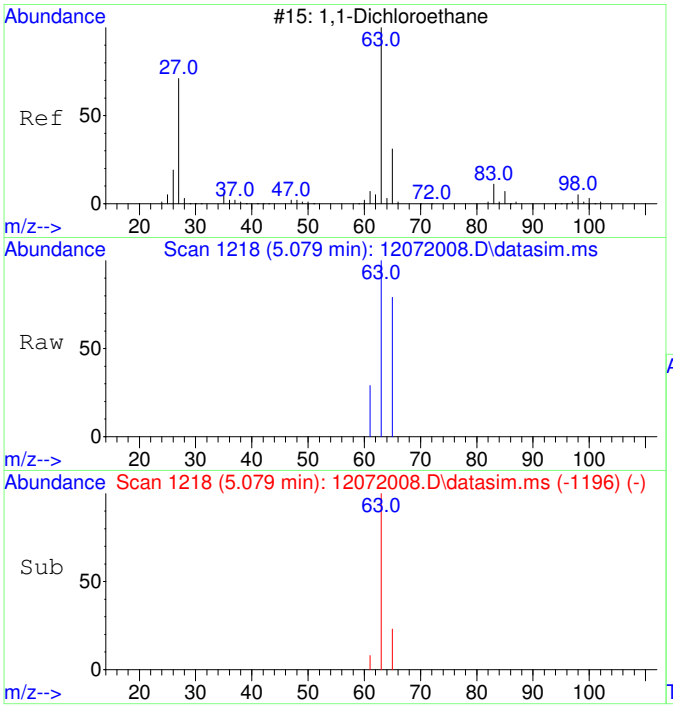


#3
trans-1,2-Dichloroethene
Concen: 53.24 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 498

Ion	Ratio	Lower	Upper
61	100		
63	40.2	2.4	62.4

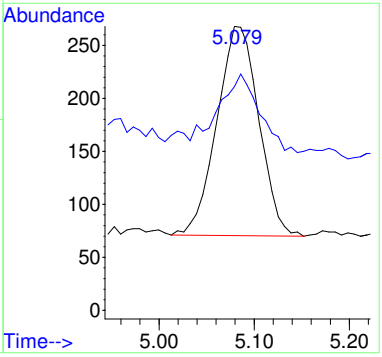


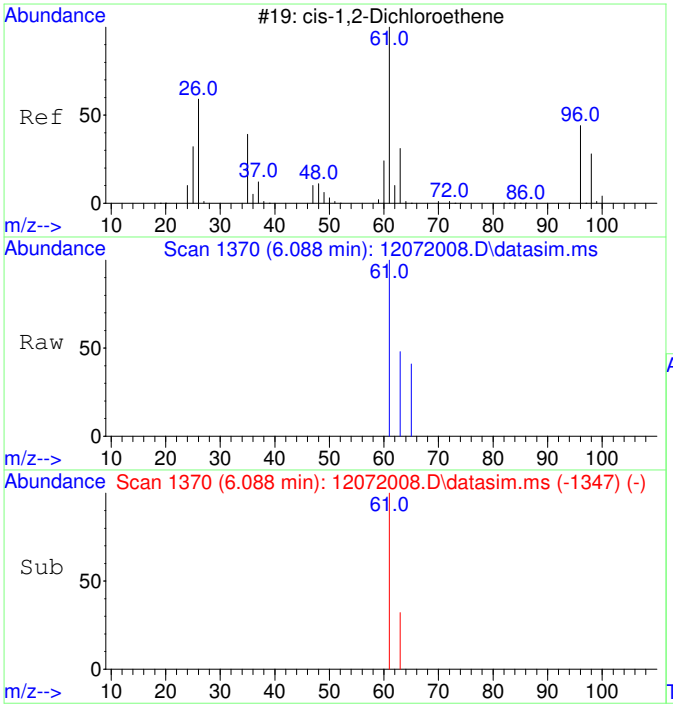


#4
1,1-Dichloroethane
Concen: 54.33 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 607

Ion	Ratio	Lower	Upper
63	100		
65	38.6	1.8	61.8

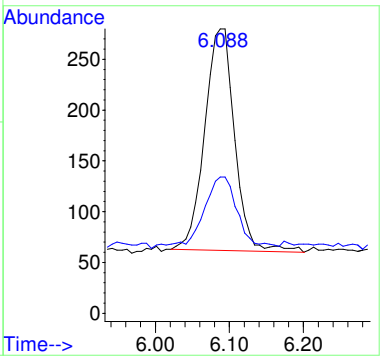


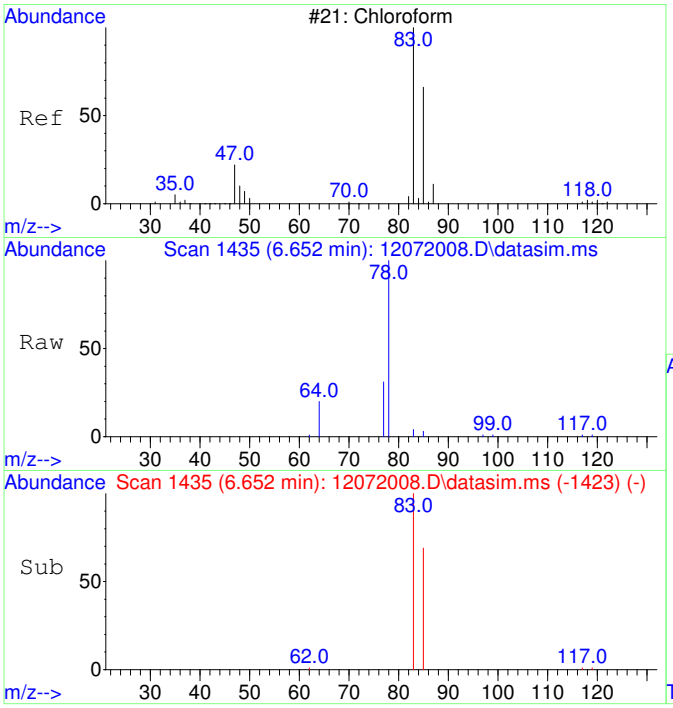


#5
cis-1,2-Dichloroethene
Concen: 53.06 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 614

Ion	Ratio	Lower	Upper
61	100		
63	36.8	2.5	62.5

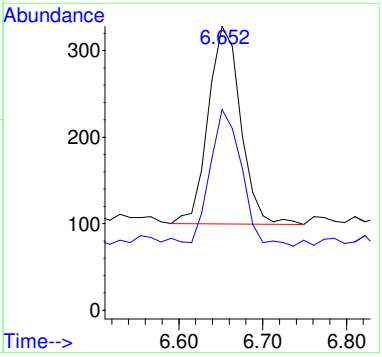


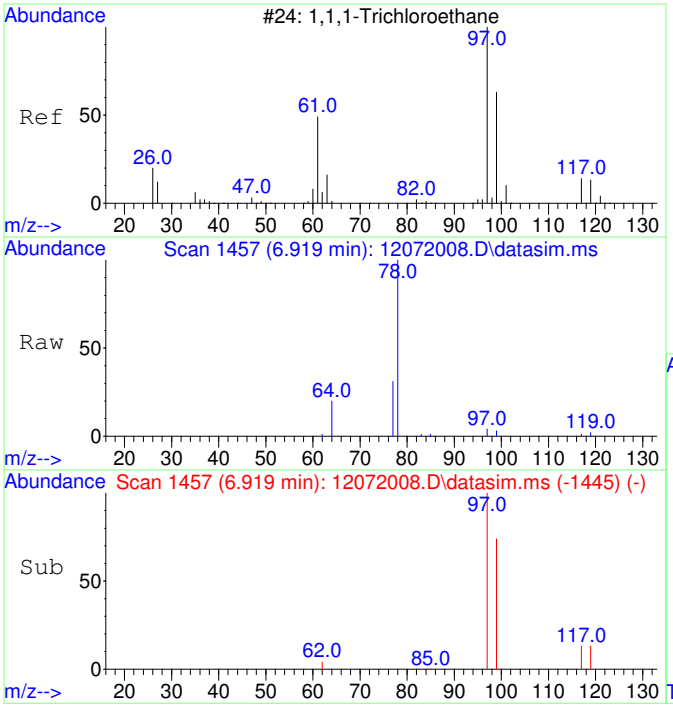


#6
Chloroform
Concen: 55.24 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 614

Ion	Ratio	Lower	Upper
83	100		
85	67.1	35.1	95.1

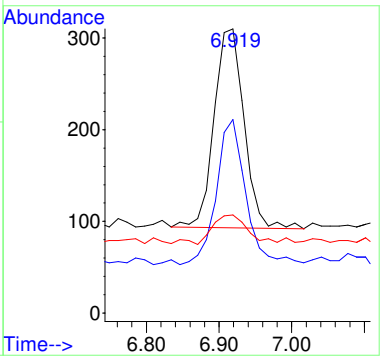


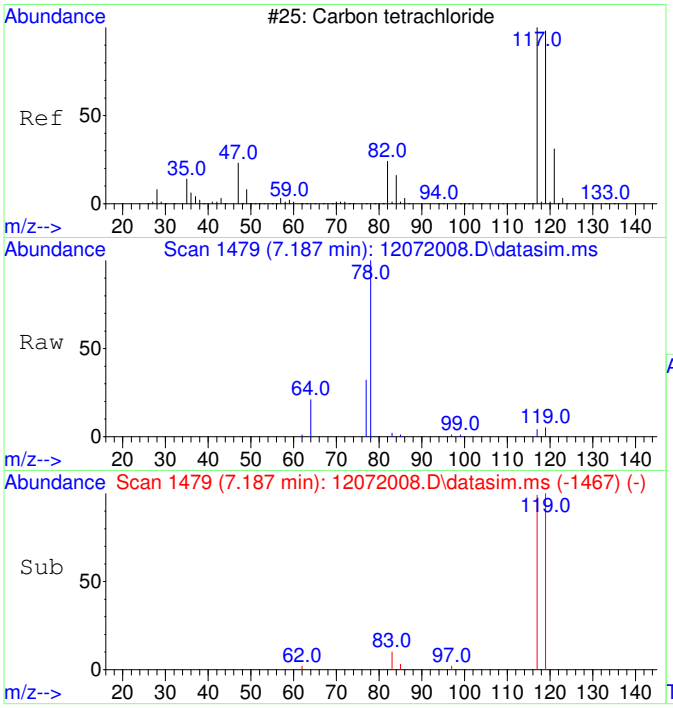


#7
1,1,1-Trichloroethane
Concen: 51.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 620

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

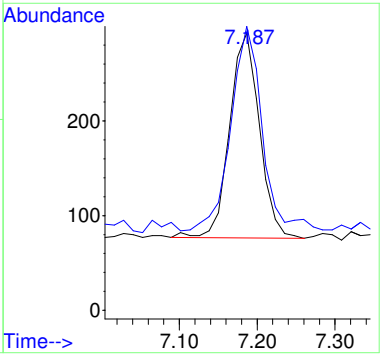


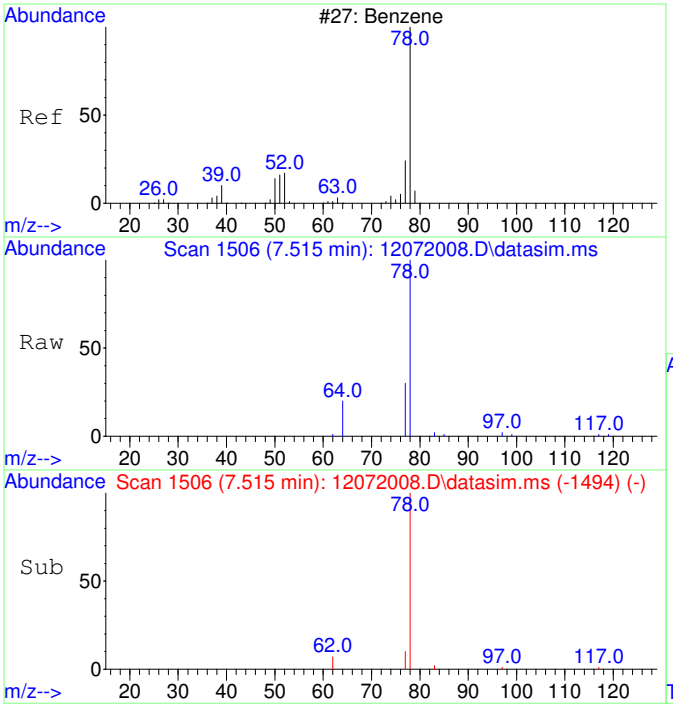


#8
Carbon tetrachloride
Concen: 50.55 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 577

Ion	Ratio	Lower	Upper
117	100		
119	103.8	66.4	126.4

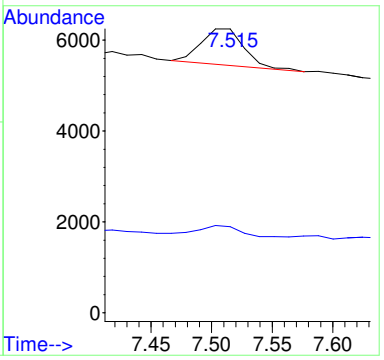


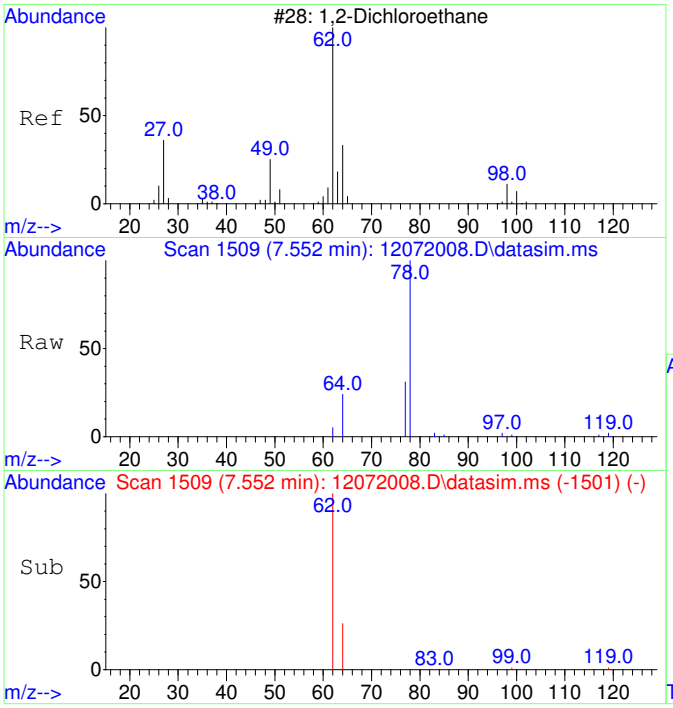


#9
Benzene
Concen: 59.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 1867

Ion	Ratio	Lower	Upper
78	100		
77	34.5	0.0	53.2

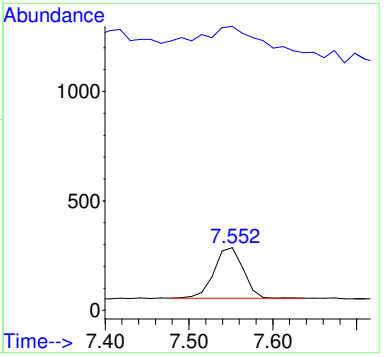


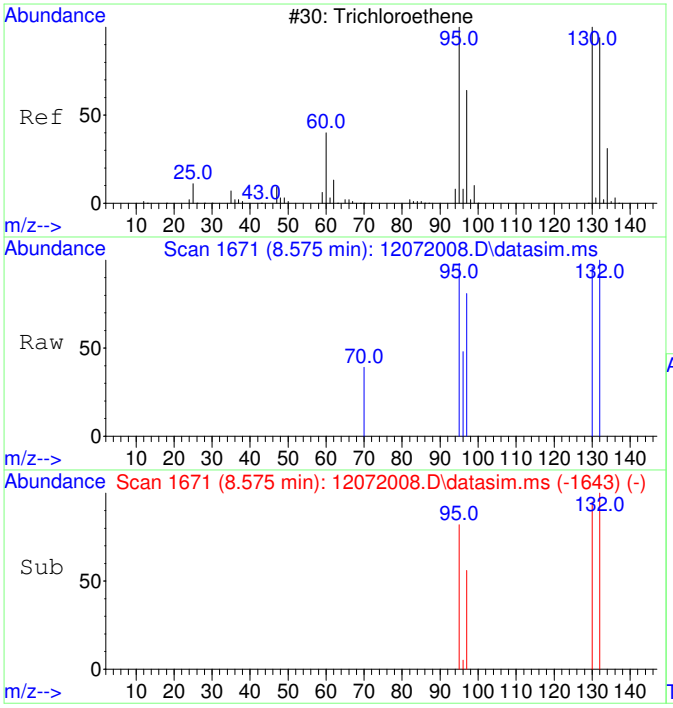


#10
1,2-Dichloroethane
Concen: 52.13 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 560

Ion	Ratio	Lower	Upper
62	100		
64	107.5	2.3	62.3#

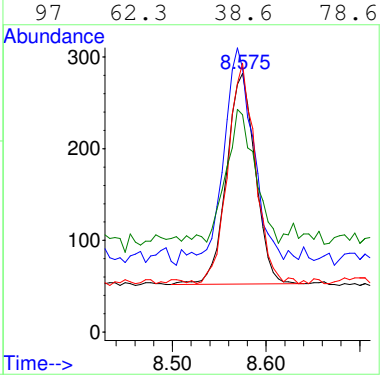


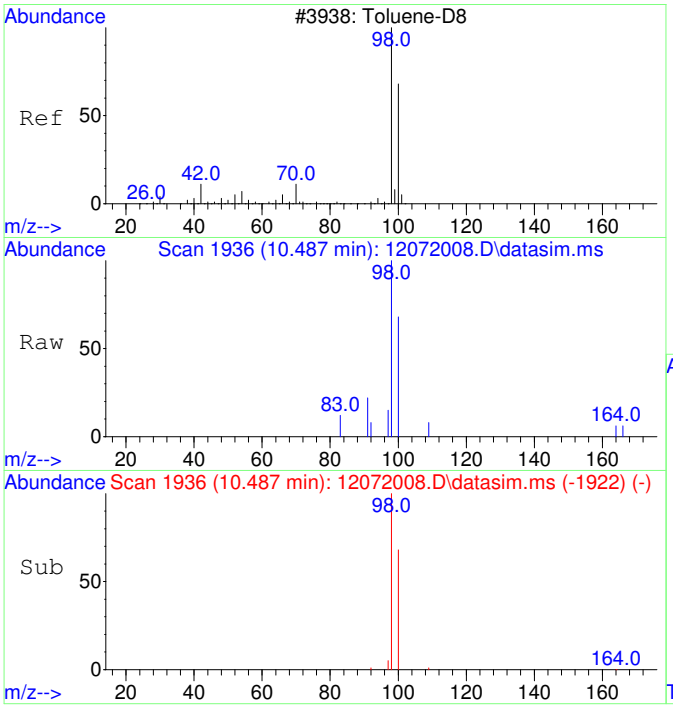


#11
Trichloroethene
Concen: 48.88 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:130 Resp: 486

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

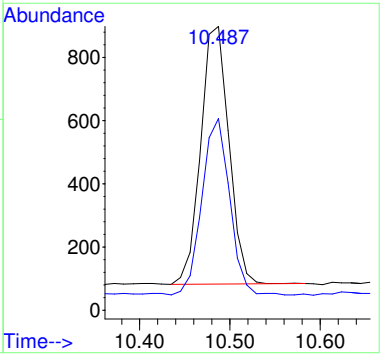


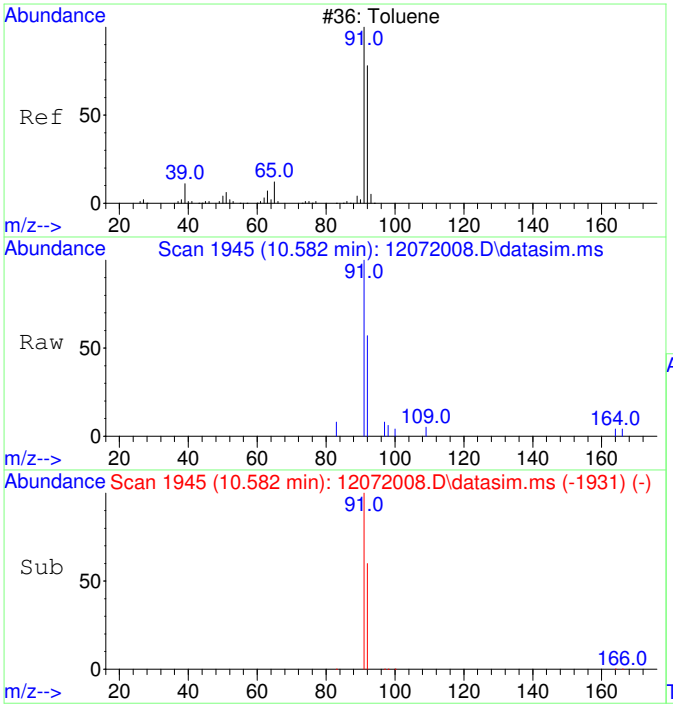


#12
Toluene-d8
Concen: 48.84 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1770

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

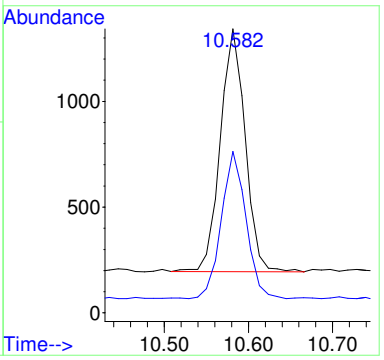


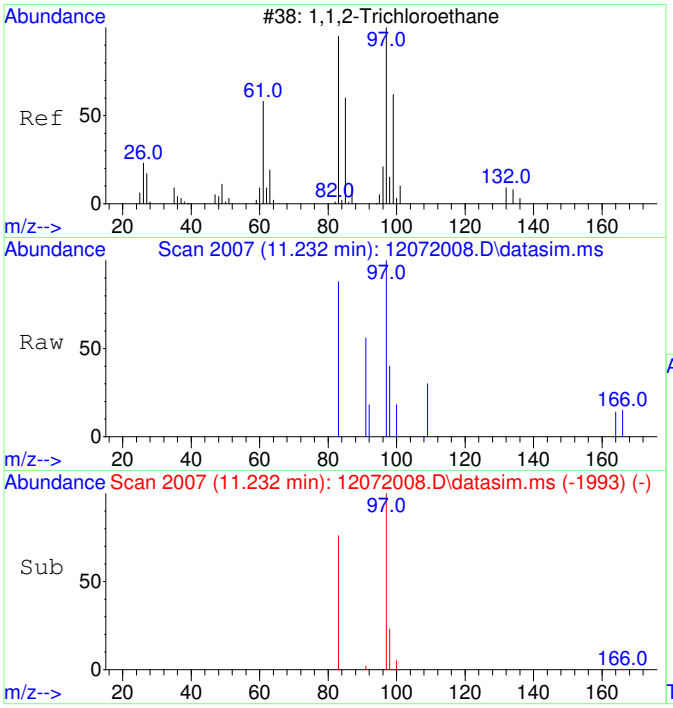


#13
Toluene
Concen: 52.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2356

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

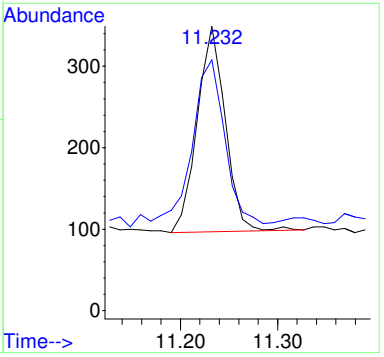


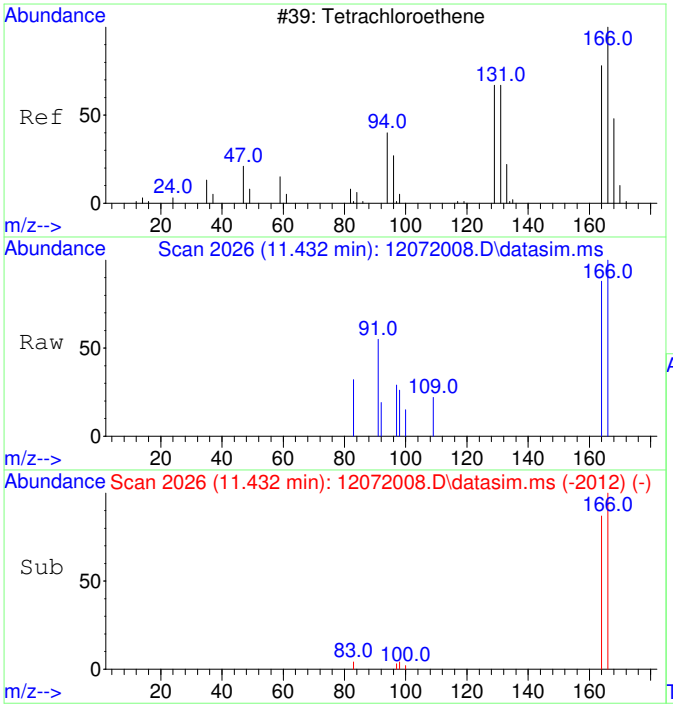


#14
1,1,2-Trichloroethane
Concen: 48.41 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 506

Ion	Ratio	Lower	Upper
97	100		
83	98.4	51.2	111.2

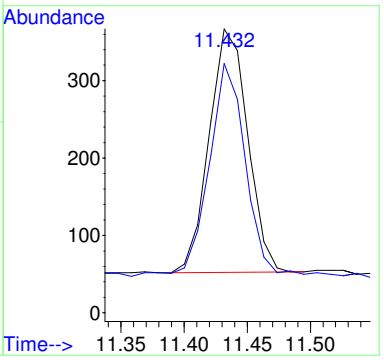


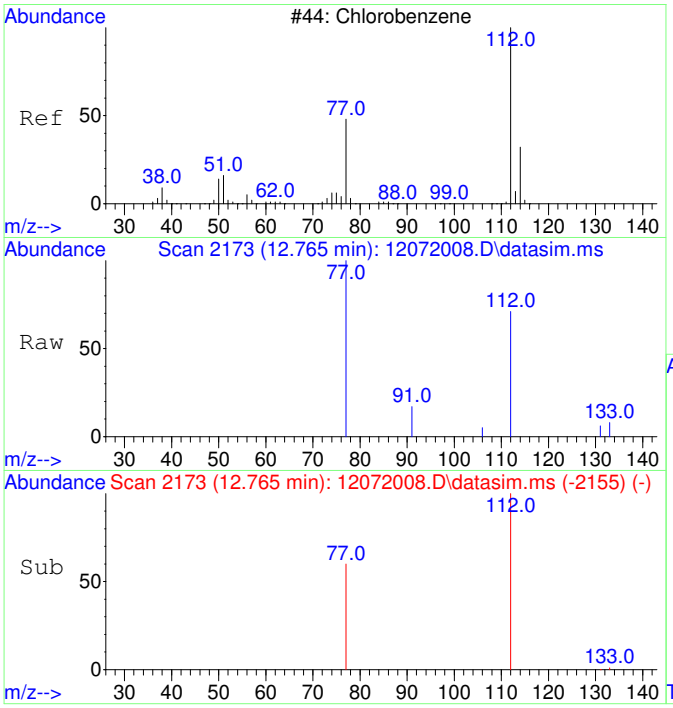


#15
Tetrachloroethene
Concen: 47.52 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 668

Ion	Ratio	Lower	Upper
166	100		
164	83.4	47.8	107.8

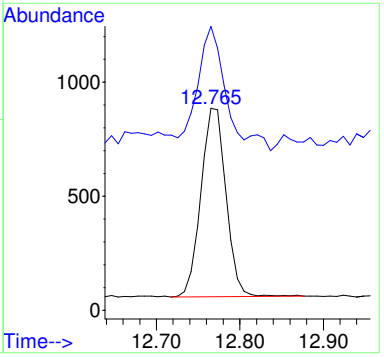


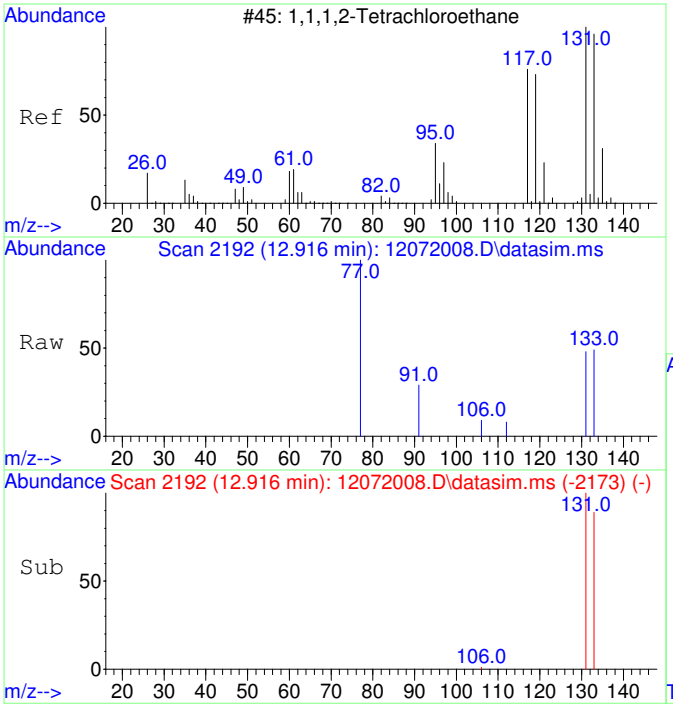


#16
Chlorobenzene
Concen: 49.43 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 1728

Ion	Ratio	Lower	Upper
112	100		
77	60.0	23.6	83.6

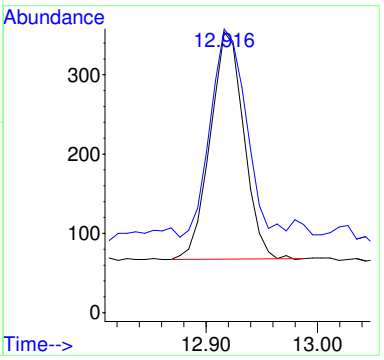


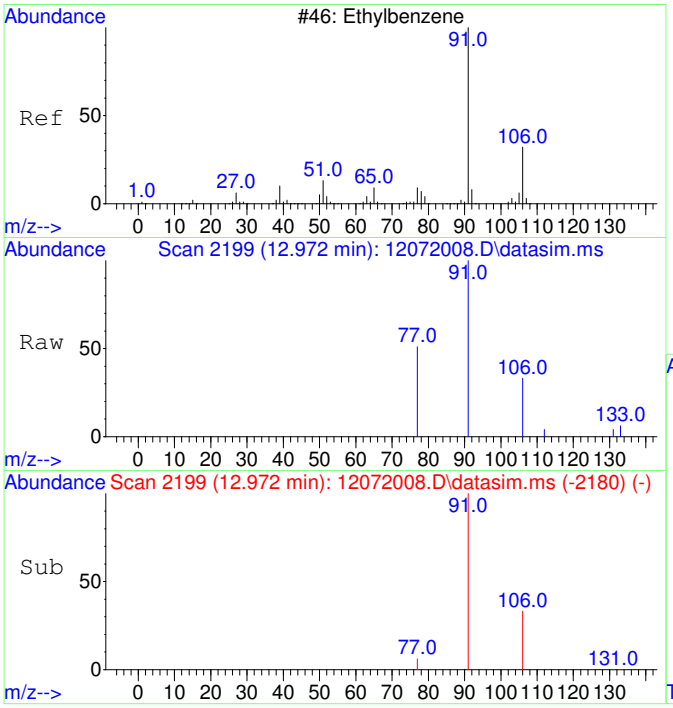


#17
1,1,1,2-Tetrachloroethane
Concen: 49.12 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 601

Ion	Ratio	Lower	Upper
131	100		
133	98.5	66.3	126.3

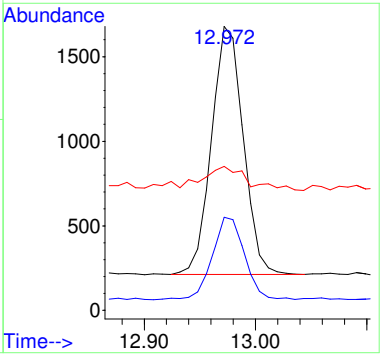


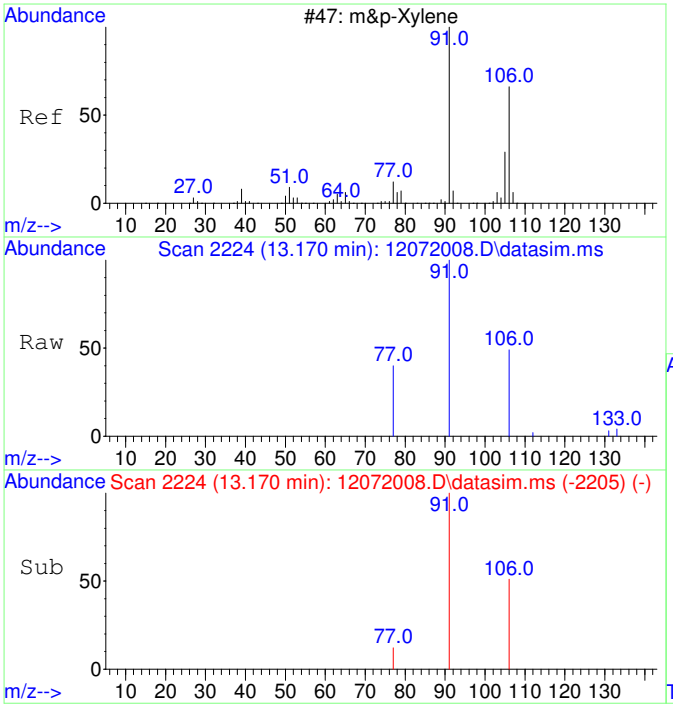


#18
Ethylbenzene
Concen: 50.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2907

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

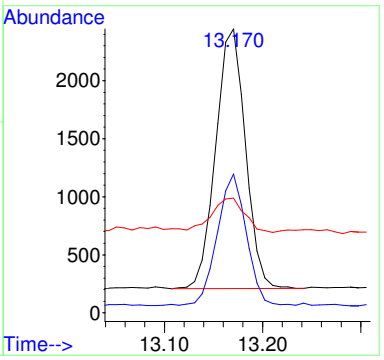


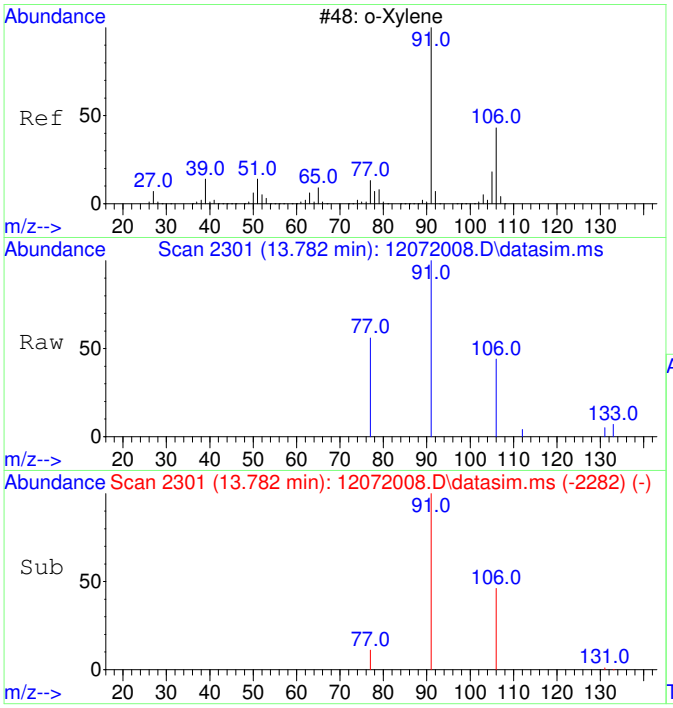


#19
m&p-Xylene
Concen: 105.66 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 4690

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

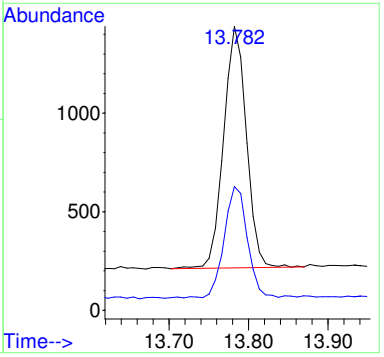


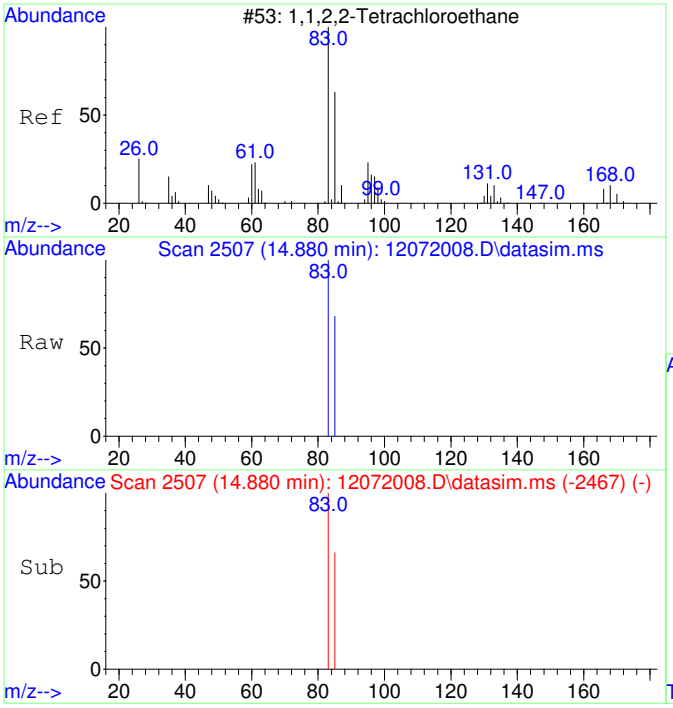


#20
o-Xylene
Concen: 51.14 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2438

Ion	Ratio	Lower	Upper
91	100		
106	46.8	19.2	79.2

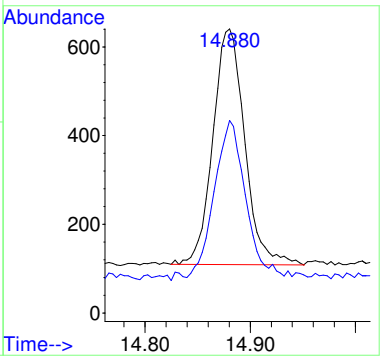


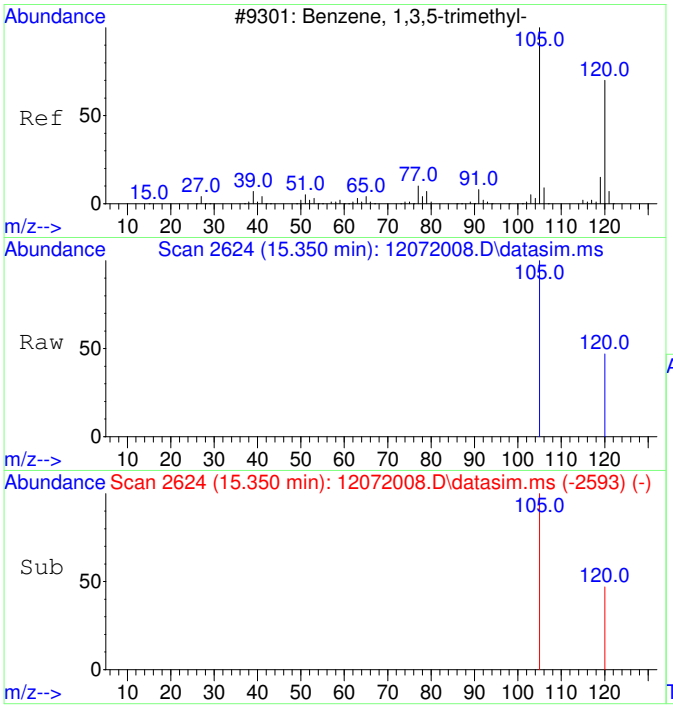


#21
1,1,2,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 1116

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

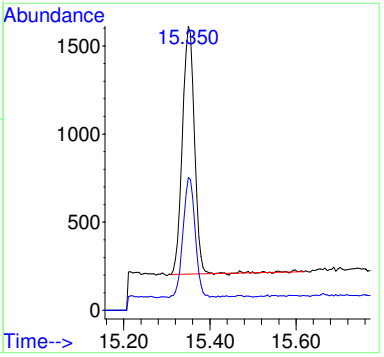


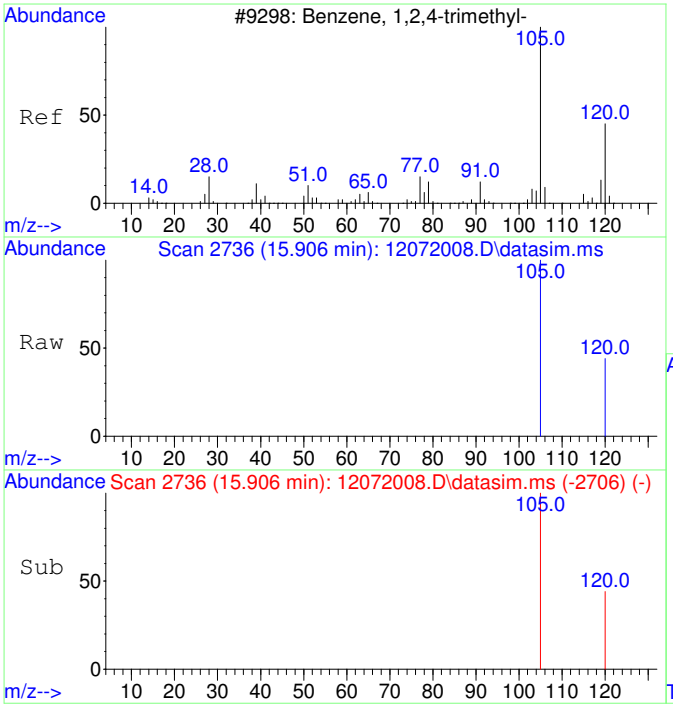


#22
1,3,5-Trimethylbenzene
Concen: 52.23 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2738

Ion	Ratio	Lower	Upper
105	100		
120	46.1	21.1	81.1

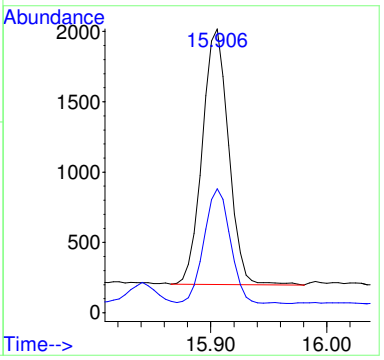


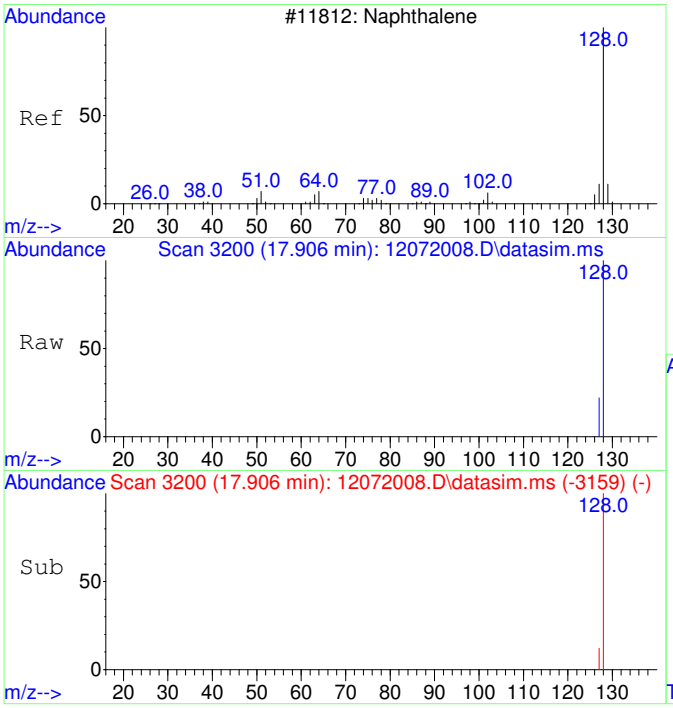


#23
1,2,4-Trimethylbenzene
Concen: 53.45 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2866

Ion	Ratio	Lower	Upper
105	100		
120	44.2	17.2	77.2

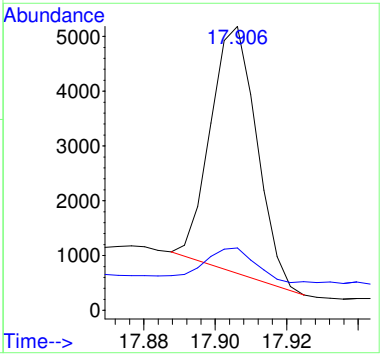




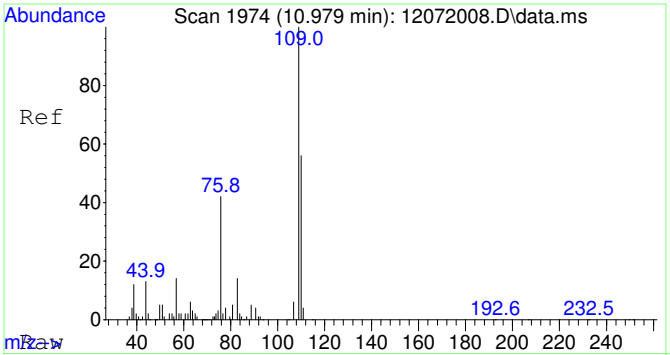
#24
Naphthalene
Concen: 47.08 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 3948

Ion	Ratio	Lower	Upper
128	100		
127	13.4	0.0	42.5



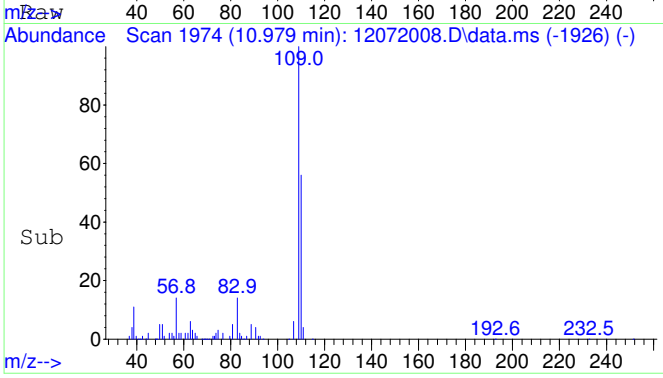
Before MI:
IMPROPER
BASELINE

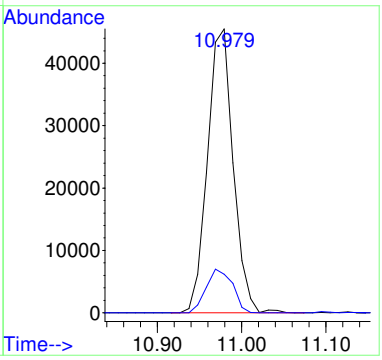


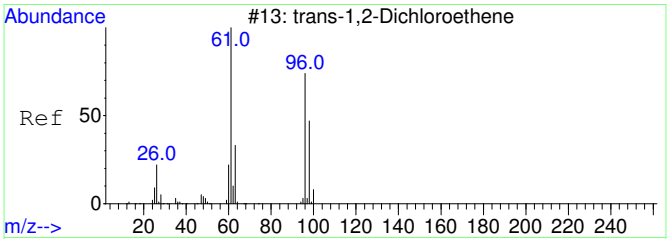
#25
2-Fluorotoluene SCAN
Concen: 4561.89 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

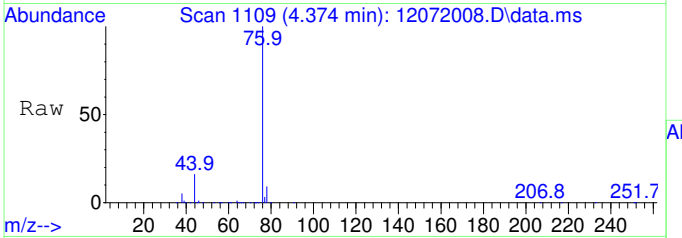
Tgt Ion:109 Resp: 96904

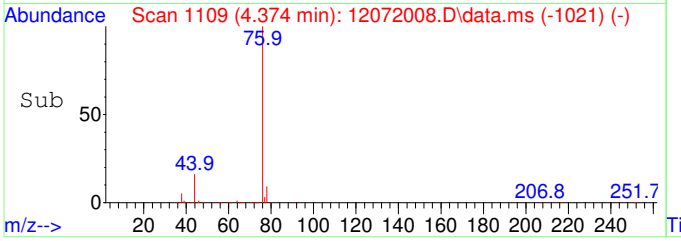
Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8







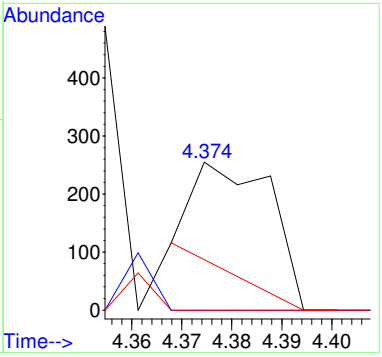


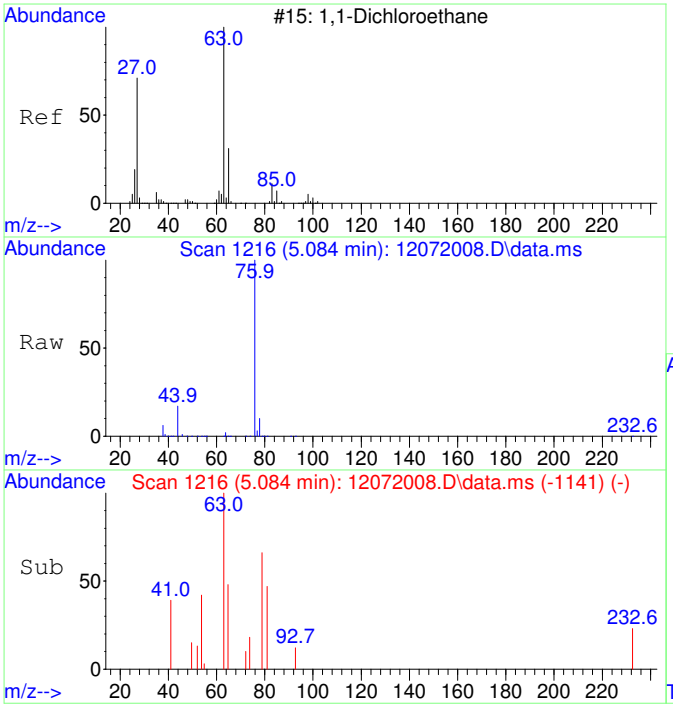


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.61 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 187

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

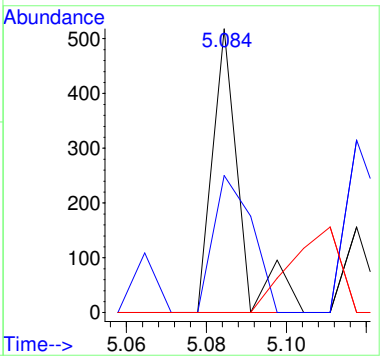


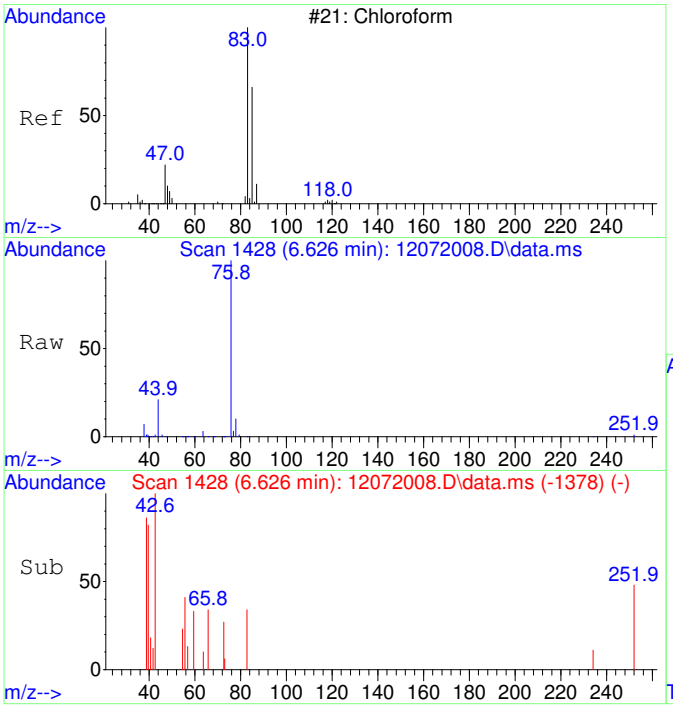


#28
1,1-Dichloroethane SCAN
Concen: 32.73 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 244

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

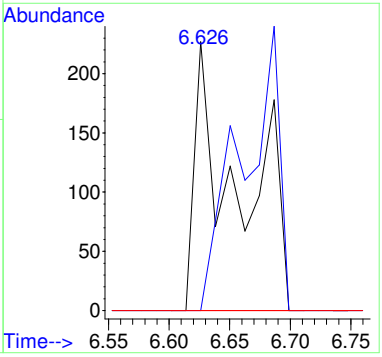


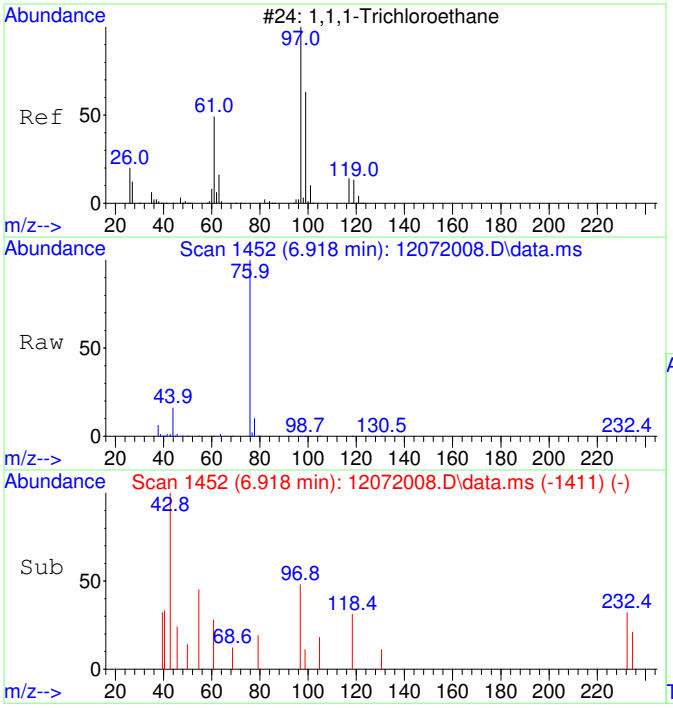


#30
Chloroform SCAN
Concen: 81.33 ug/L
RT: 6.626 min Scan# 1428
Delta R.T. -0.036 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 556

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

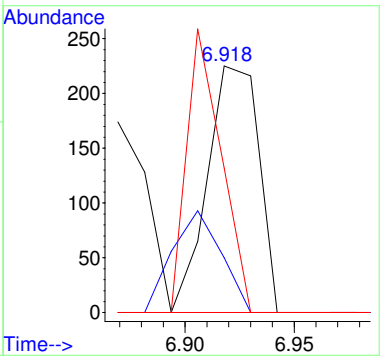


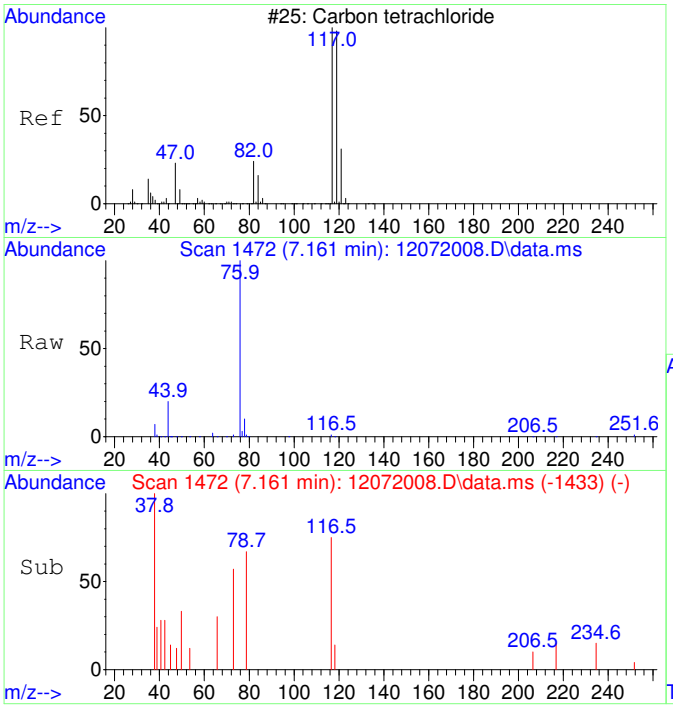


#31
1,1,1-Trichloroethane SCAN
Concen: 52.31 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 369

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

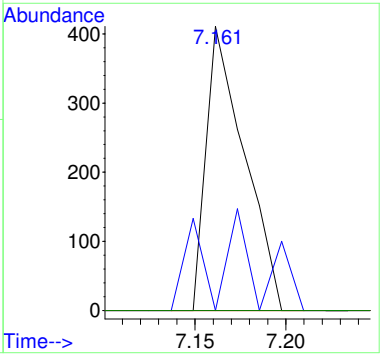


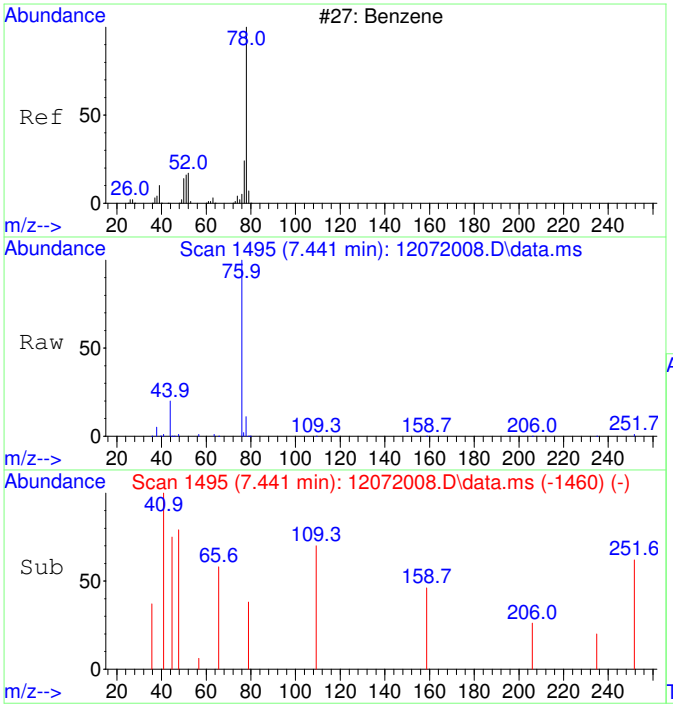


#32
Carbon tetrachloride SCAN
Concen: 99.86 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 602

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

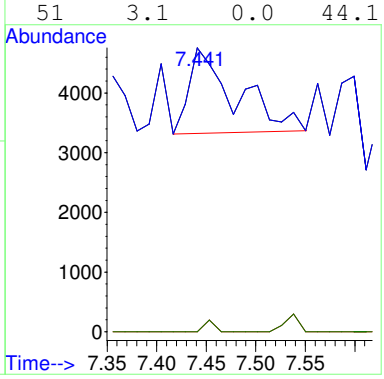


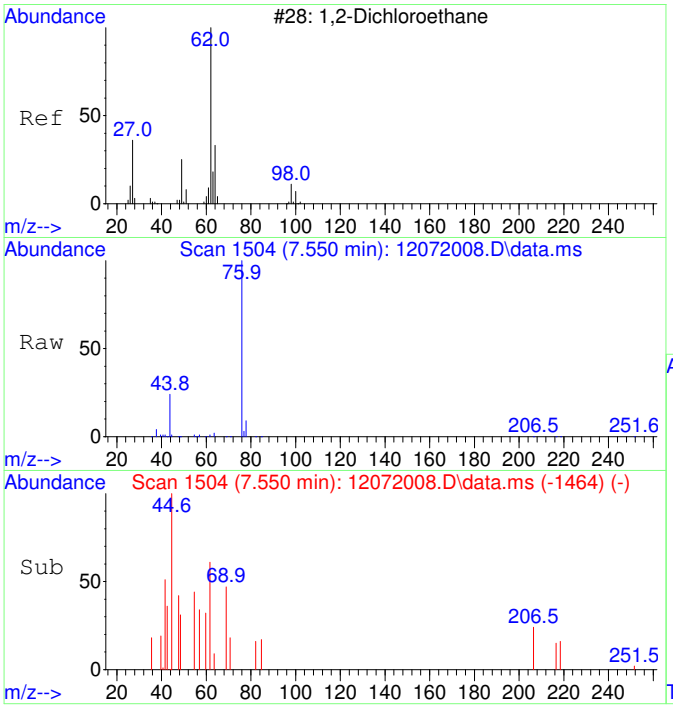


#33
Benzene SCAN
Concen: 219.62 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.073 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 4687

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

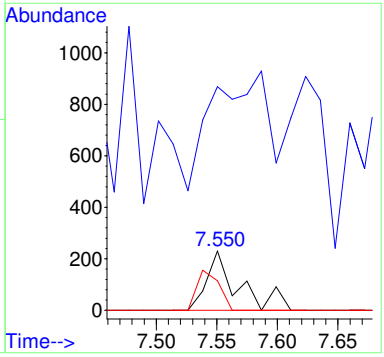


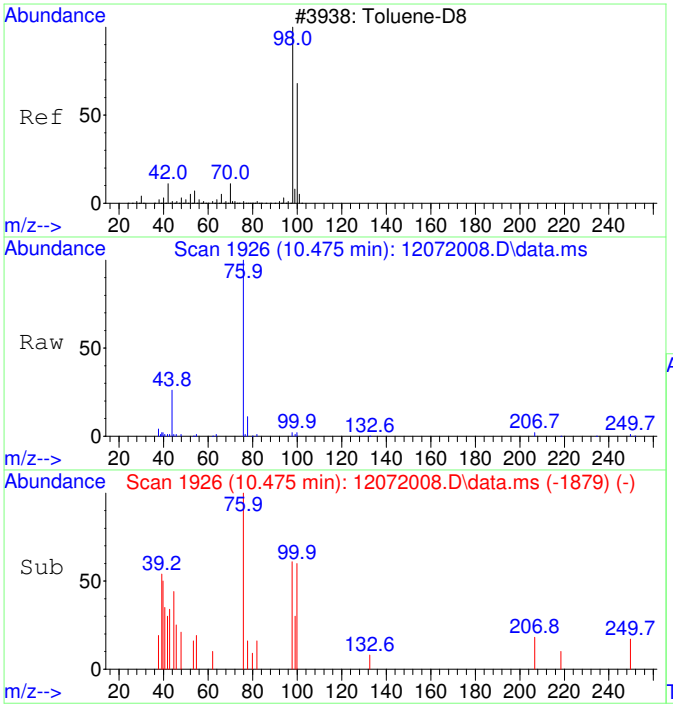


#34
1,2-Dichloroethane SCAN
Concen: 62.02 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 414

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

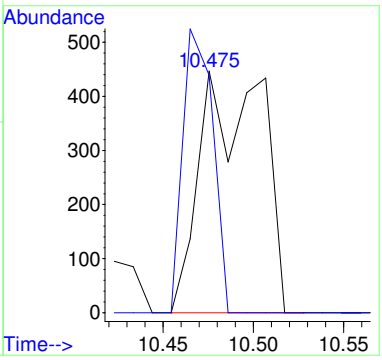


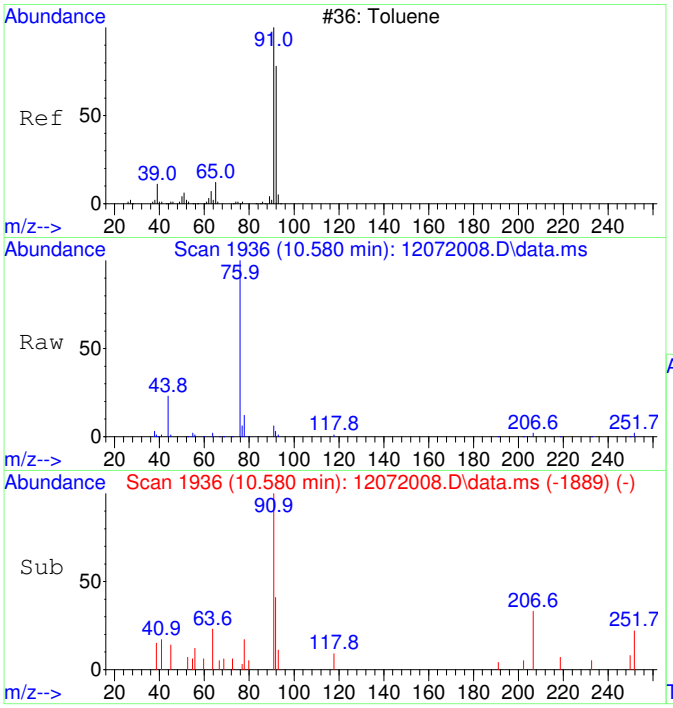


#36
Toluene-d8 SCAN
Concen: 53.86 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1073

Ion	Ratio	Lower	Upper
98	100		
100	56.6	40.0	100.0

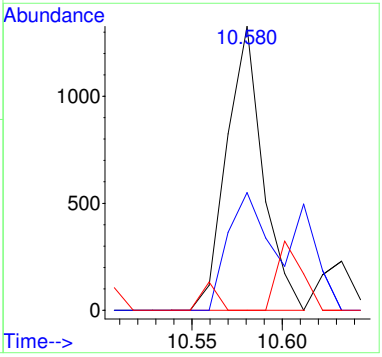


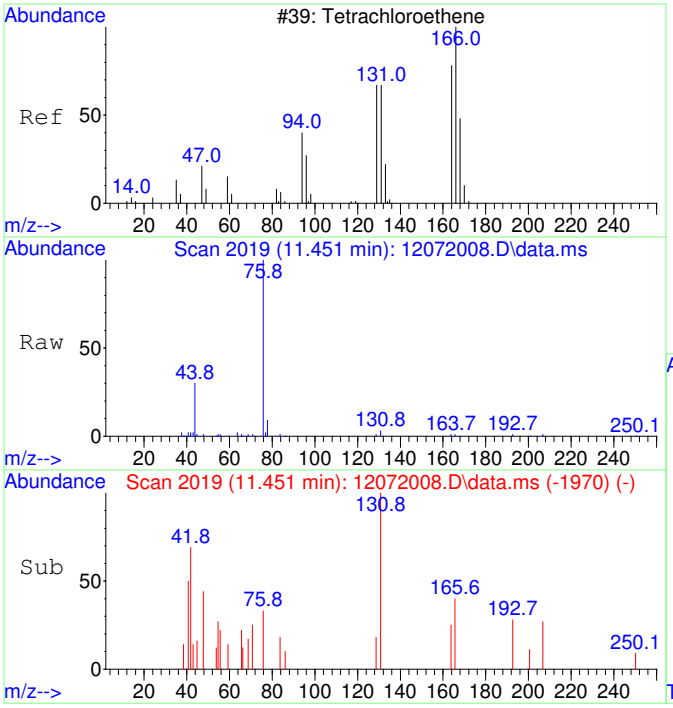


#37
Toluene SCAN
Concen: 75.62 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1855

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

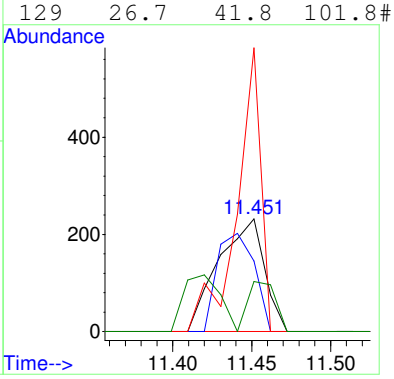


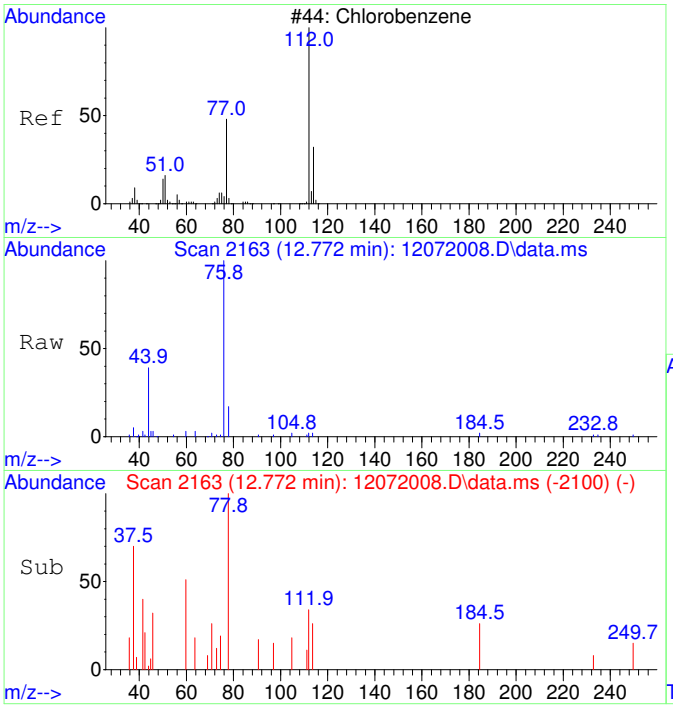


#39
Tetrachloroethene SCAN
Concen: 84.99 ug/L
RT: 11.451 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 469

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

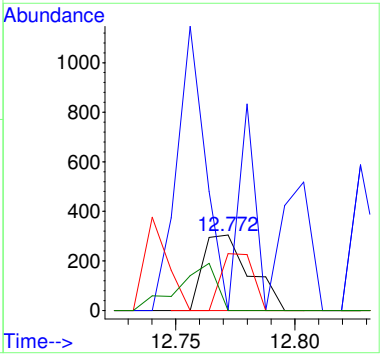


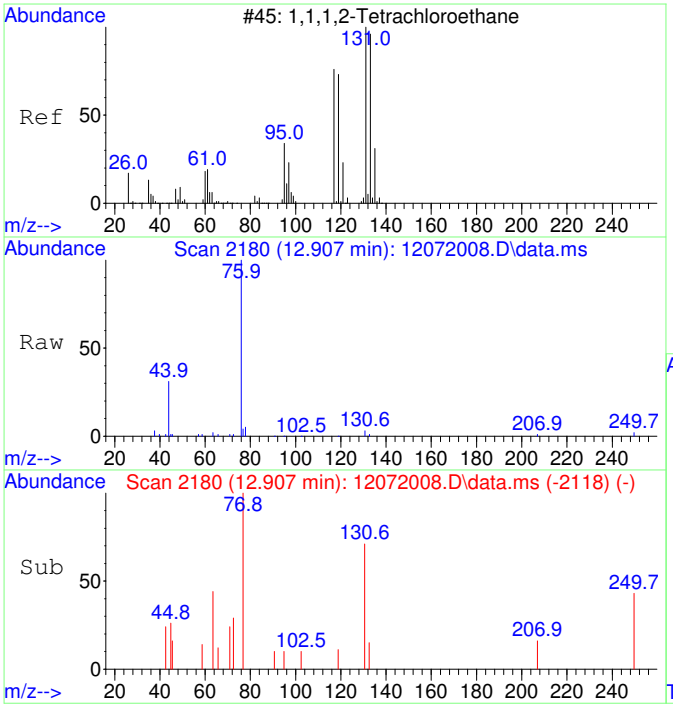


#40
Chlorobenzene SCAN
Concen: 23.61 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 416

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

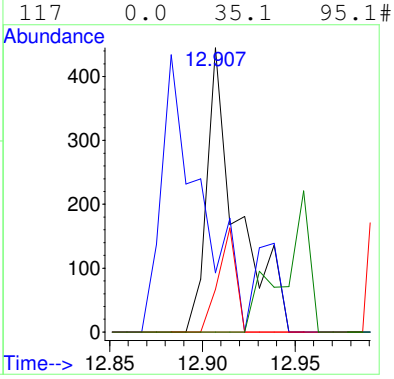


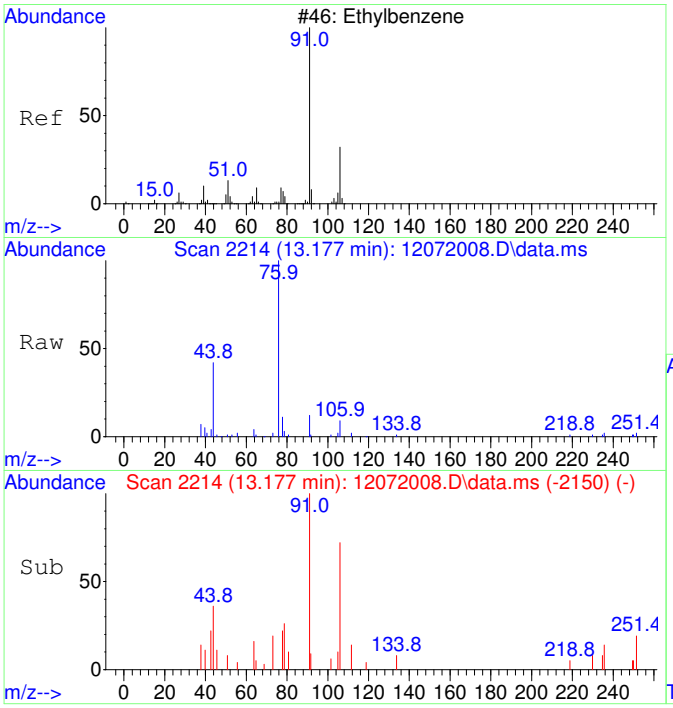


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 84.89 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 516

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

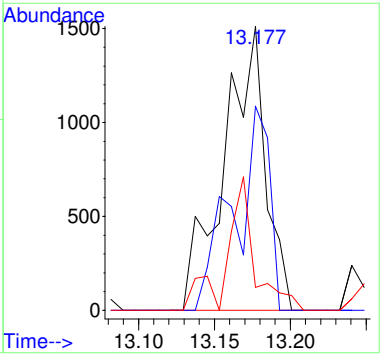


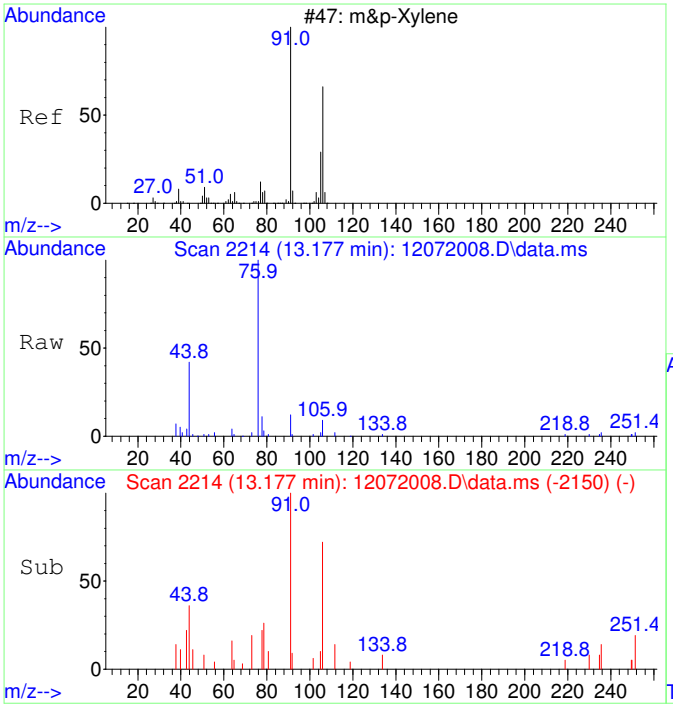


#42
Ethylbenzene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

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

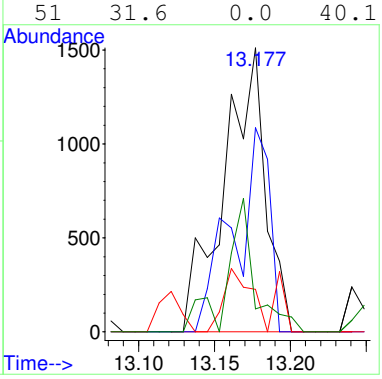


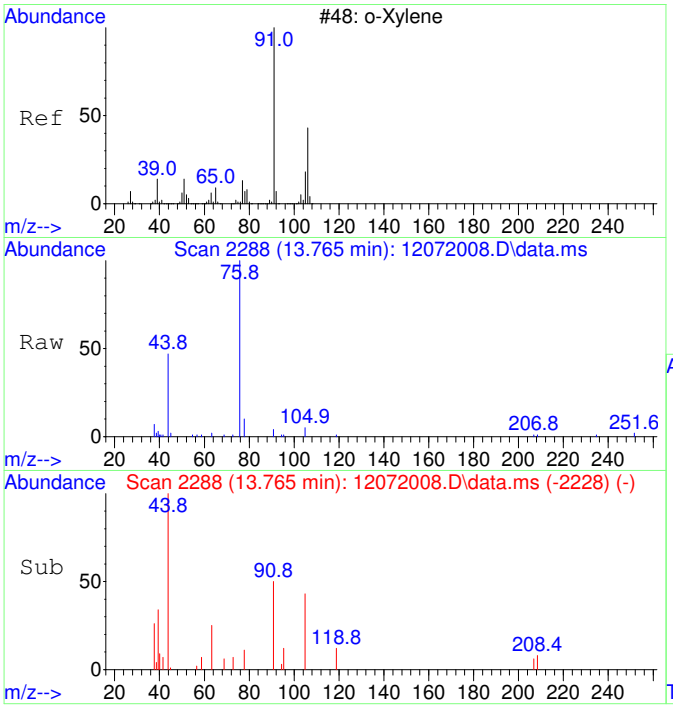


#43
m&p-Xylene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

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

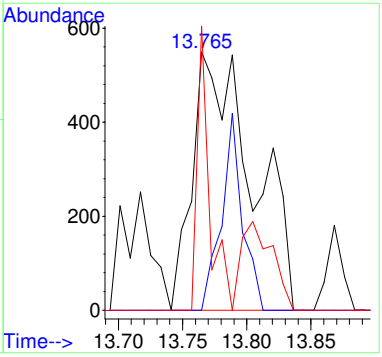


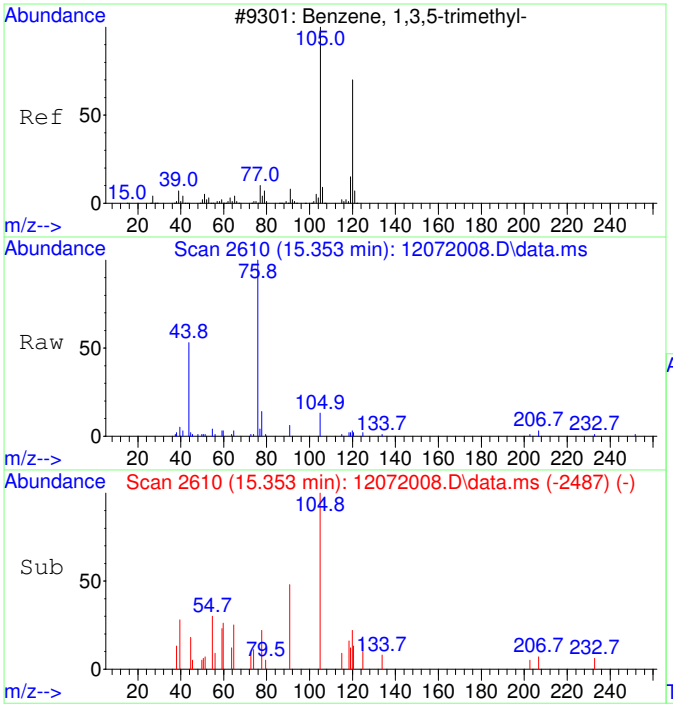


#44
o-Xylene SCAN
Concen: 70.17 ug/L
RT: 13.765 min Scan# 2288
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1791

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

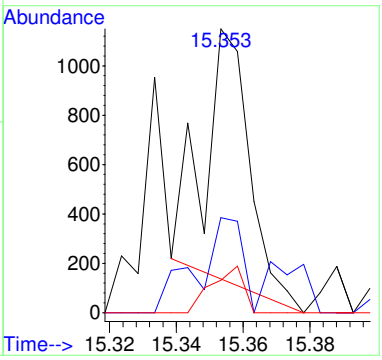


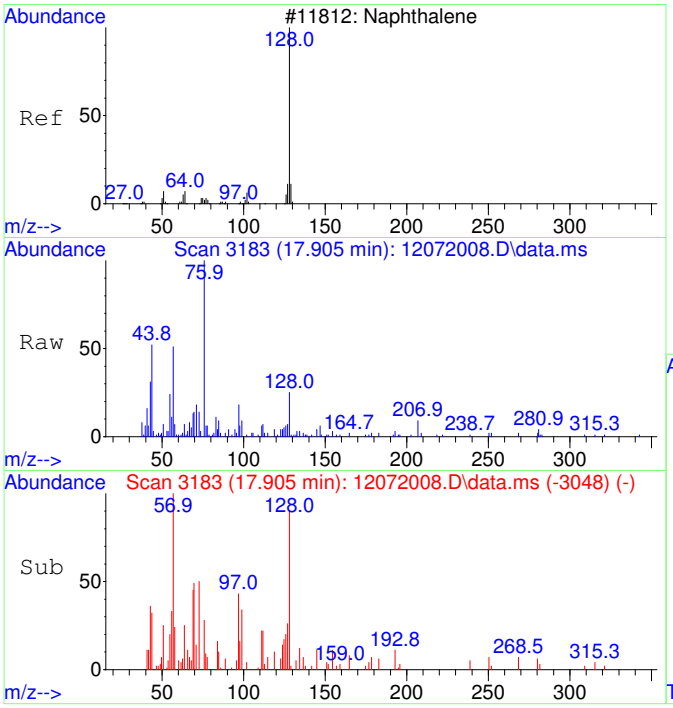


#46
1,3,5-Trimethylbenzene SCAN
Concen: 34.54 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 930

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

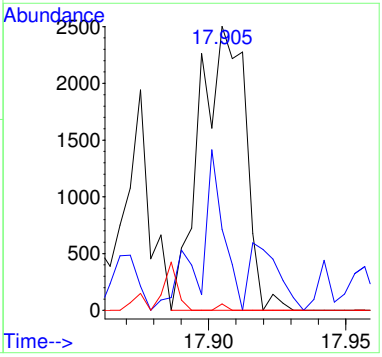




#48
Naphthalene SCAN
Concen: 70.25 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 2901

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



Quantitation Report (QT Reviewed)

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M.I. Performed By:

TD at 6:30 am, Dec 08, 2020

M.I. Approved By:

ZAR at 2:54 pm, Dec 14, 2020

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

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

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

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

Quantitation Report (QT Reviewed)

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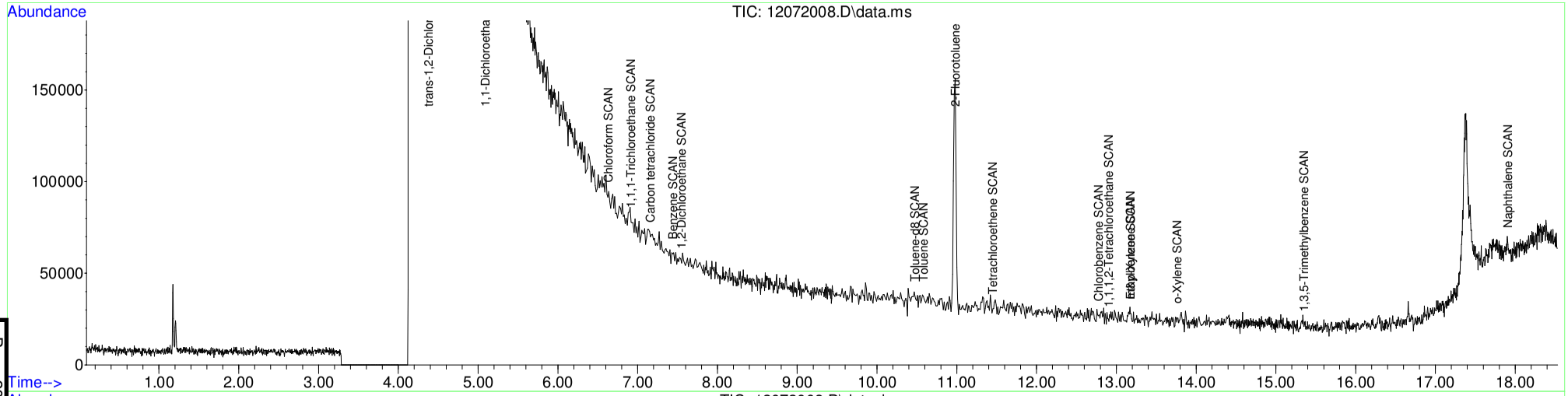
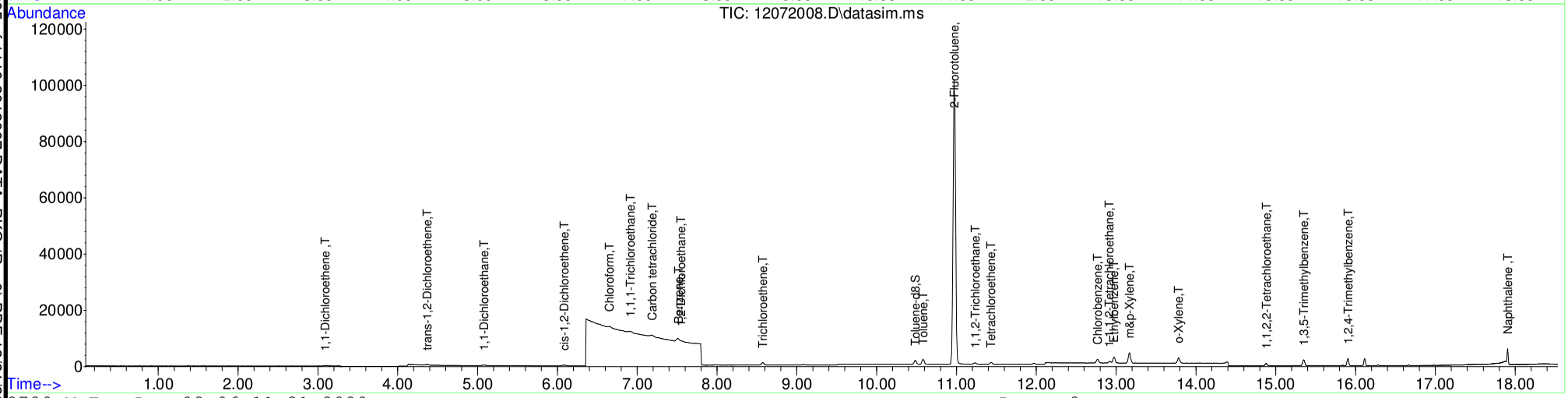
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:05:27 2020
Response via : Initial Calibration





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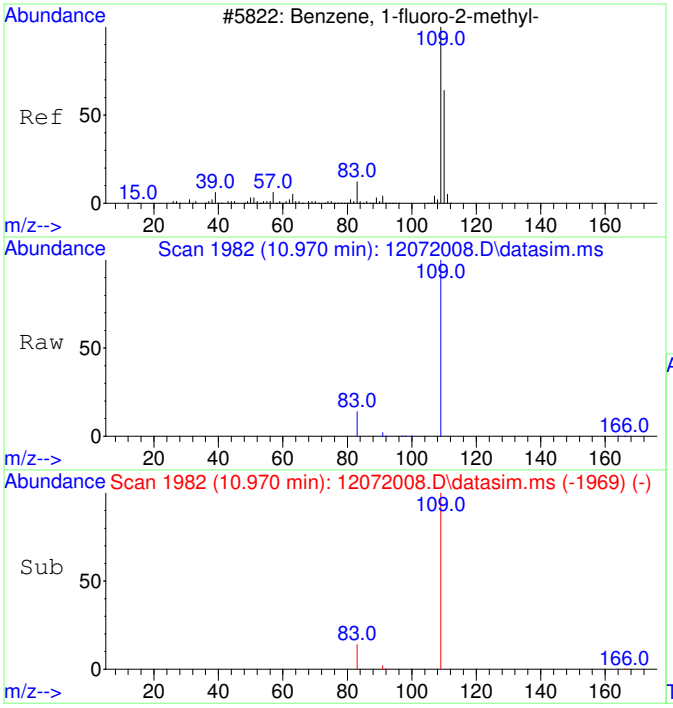
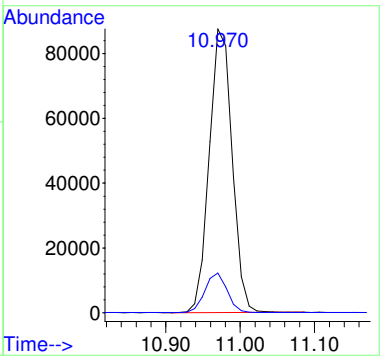
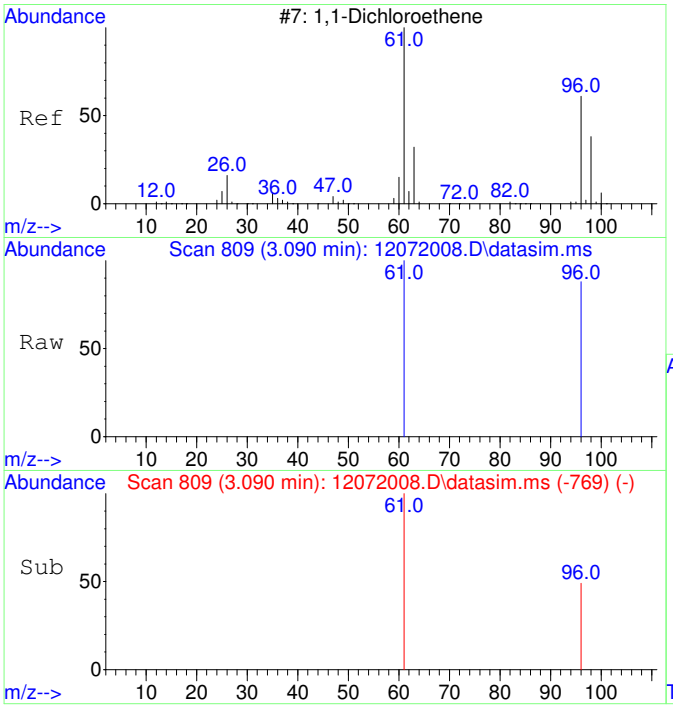


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:109 Resp: 187138

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

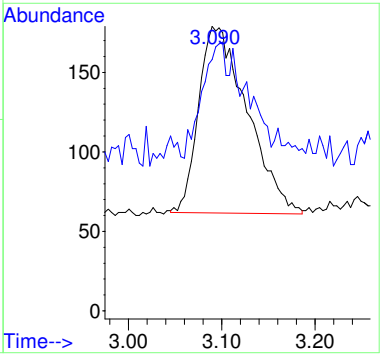


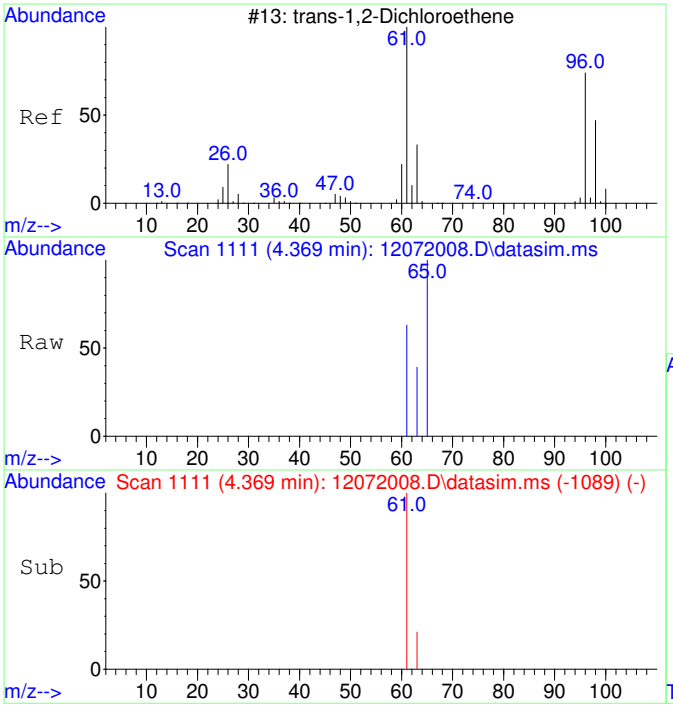


#2
1,1-Dichloroethene
Concen: 57.33 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 424

Ion	Ratio	Lower	Upper
61	100		
96	32.1	37.2	97.2#

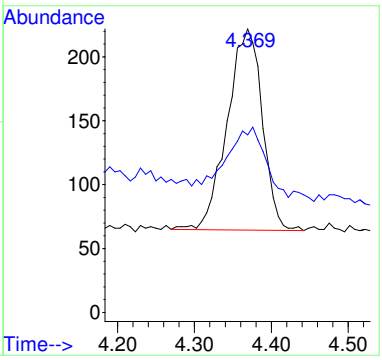


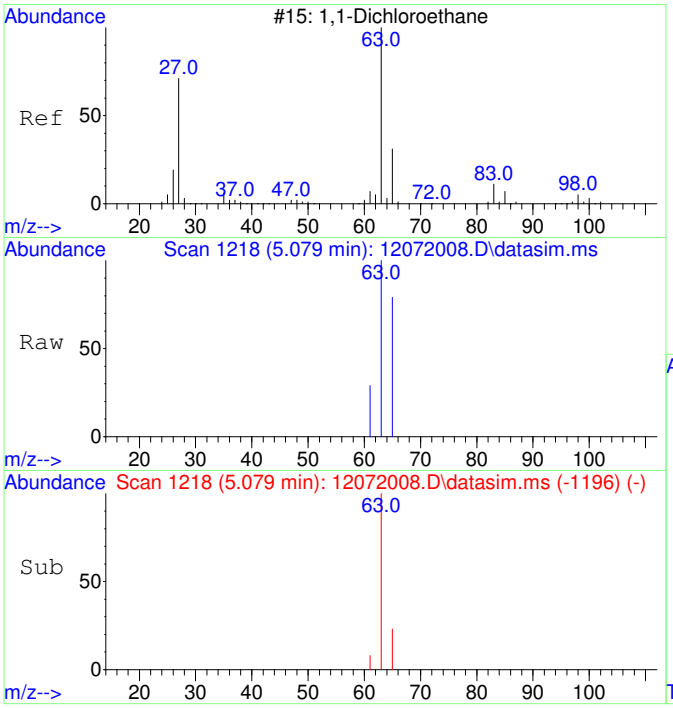


#3
trans-1,2-Dichloroethene
Concen: 53.24 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 498

Ion	Ratio	Lower	Upper
61	100		
63	40.2	2.4	62.4

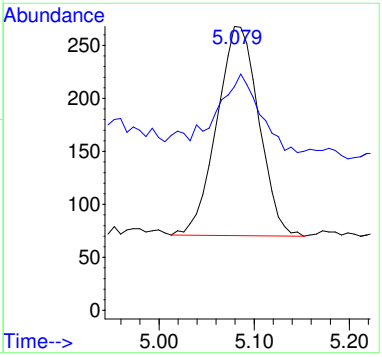


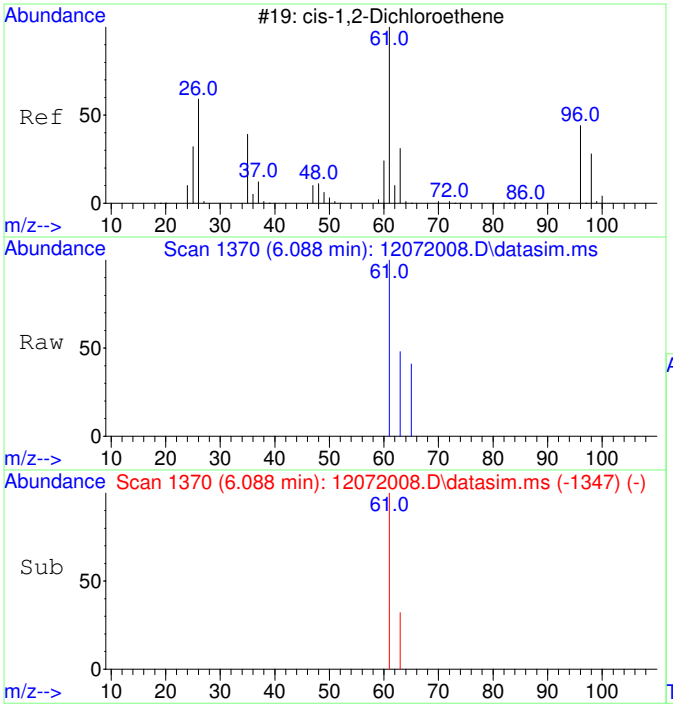


#4
1,1-Dichloroethane
Concen: 54.33 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 607

Ion	Ratio	Lower	Upper
63	100		
65	38.6	1.8	61.8

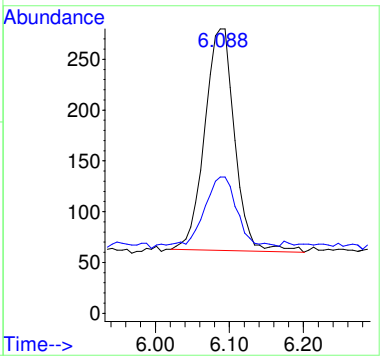


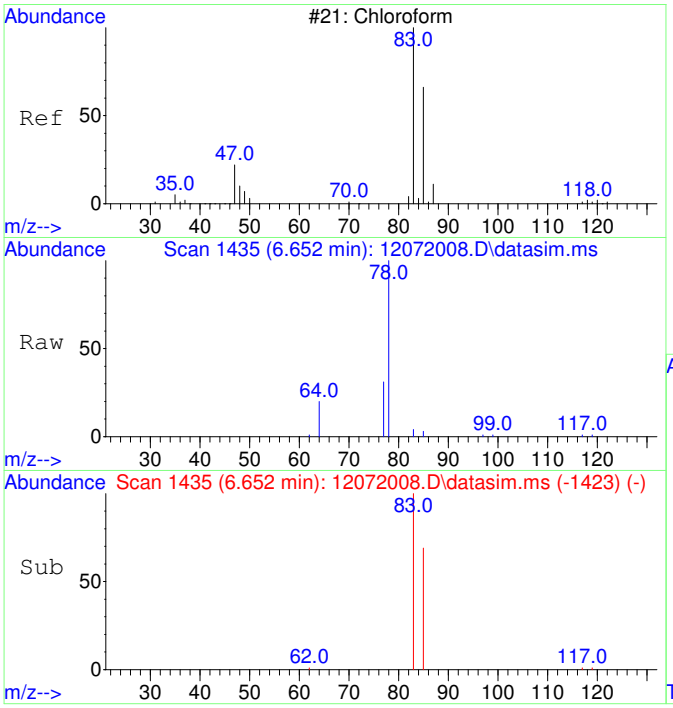


#5
cis-1,2-Dichloroethene
Concen: 53.06 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 614

Ion	Ratio	Lower	Upper
61	100		
63	36.8	2.5	62.5

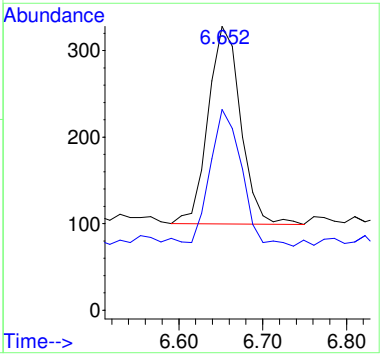


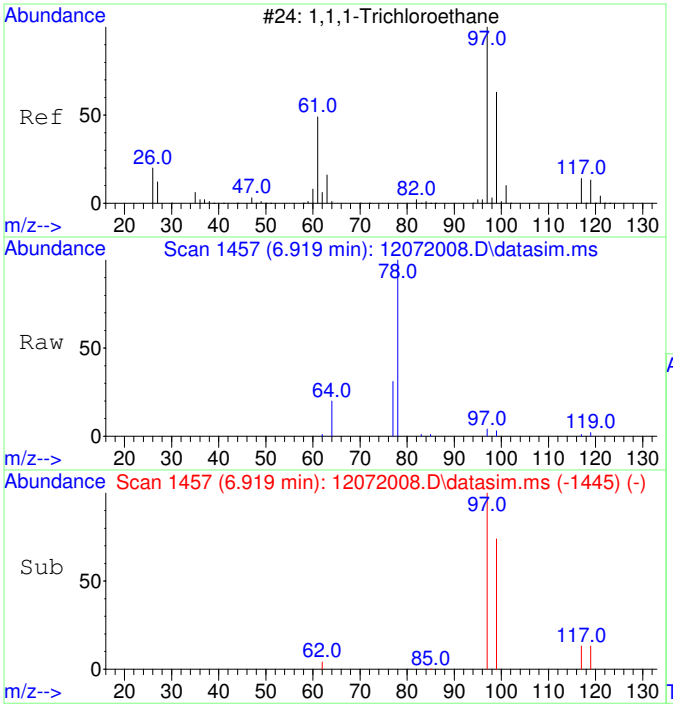


#6
Chloroform
Concen: 55.24 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 614

Ion	Ratio	Lower	Upper
83	100		
85	67.1	35.1	95.1

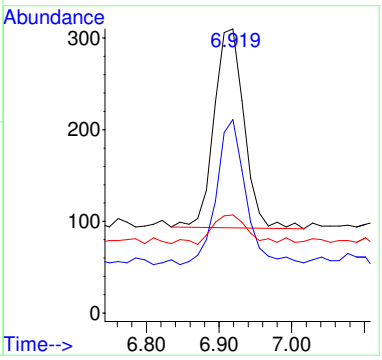


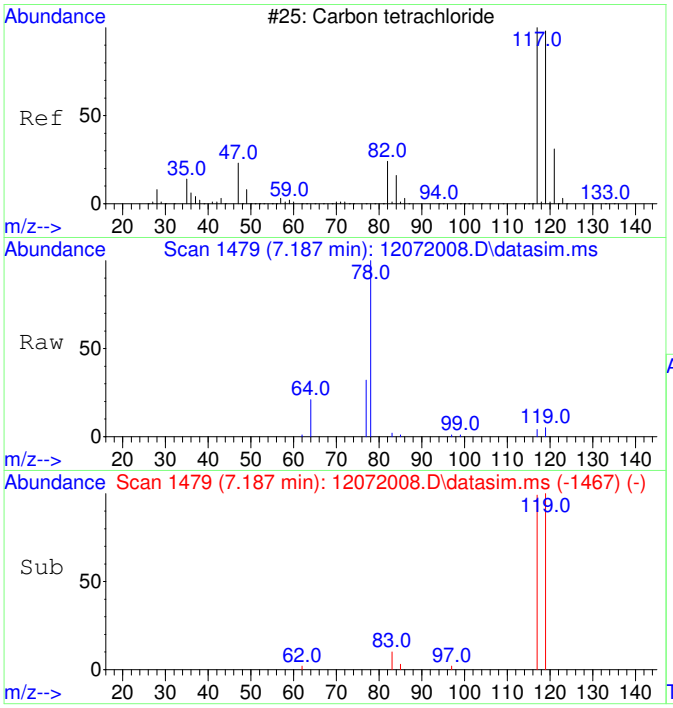


#7
1,1,1-Trichloroethane
Concen: 51.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 620

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

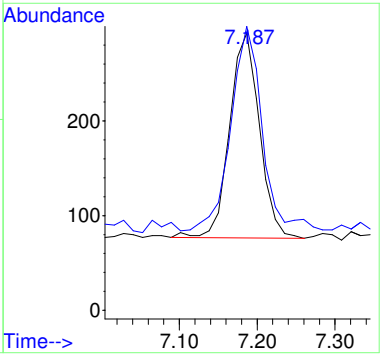


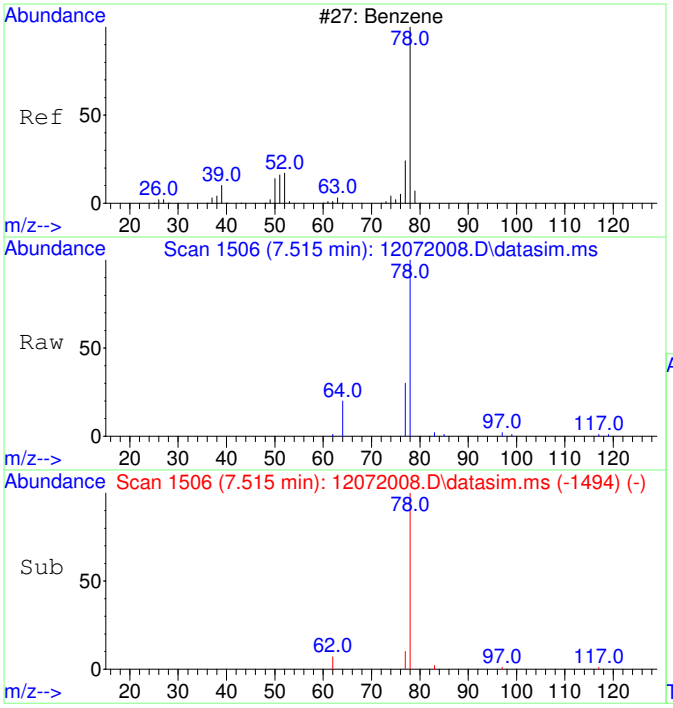


#8
Carbon tetrachloride
Concen: 50.55 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 577

Ion	Ratio	Lower	Upper
117	100		
119	103.8	66.4	126.4

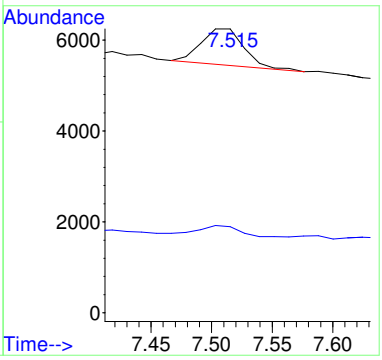


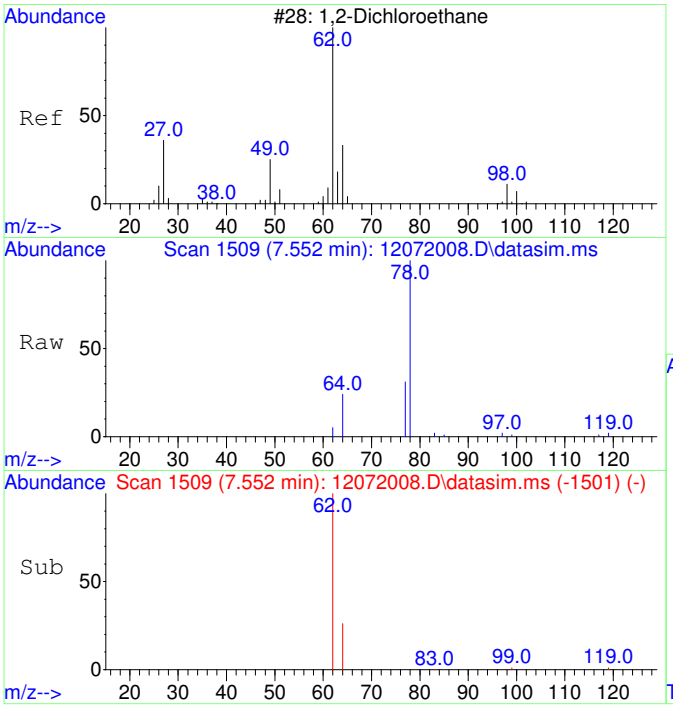


#9
Benzene
Concen: 59.29 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 1867

Ion	Ratio	Lower	Upper
78	100		
77	34.5	0.0	53.2

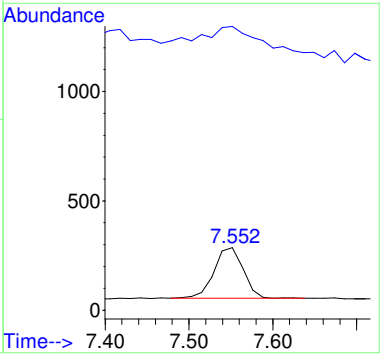


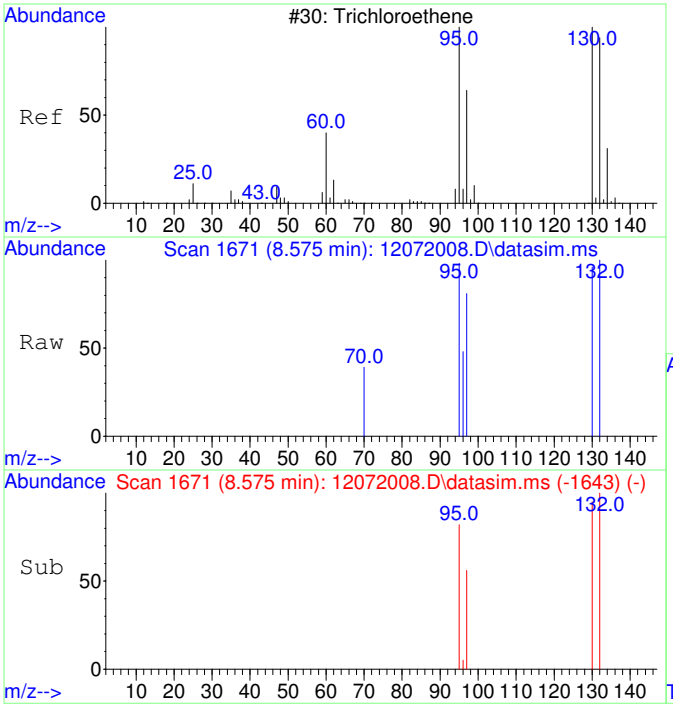


#10
1,2-Dichloroethane
Concen: 52.13 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 560

Ion	Ratio	Lower	Upper
62	100		
64	107.5	2.3	62.3#

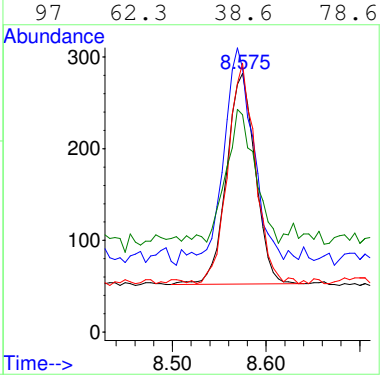


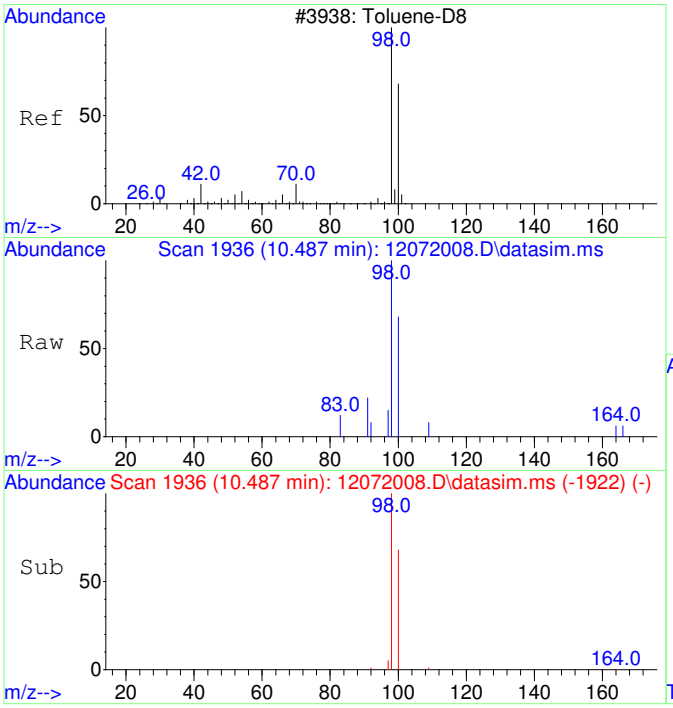


#11
Trichloroethene
Concen: 48.88 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:130 Resp: 486

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

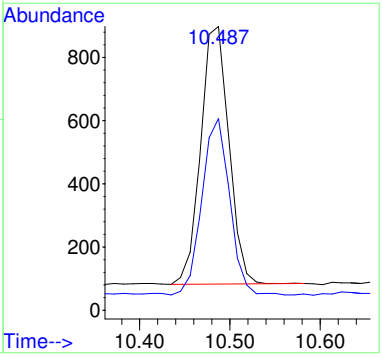


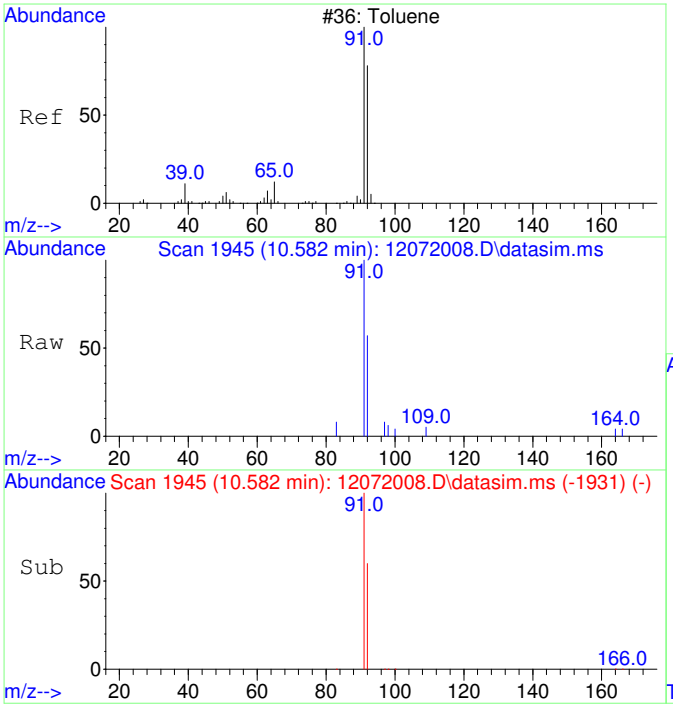


#12
Toluene-d8
Concen: 48.84 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1770

Ion	Ratio	Lower	Upper
98	100		
100	66.7	37.1	97.1

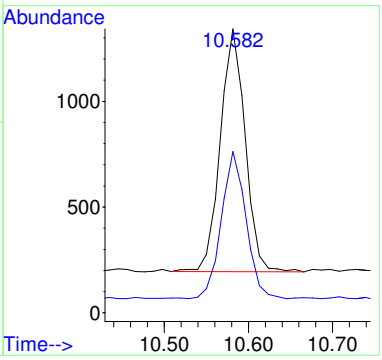


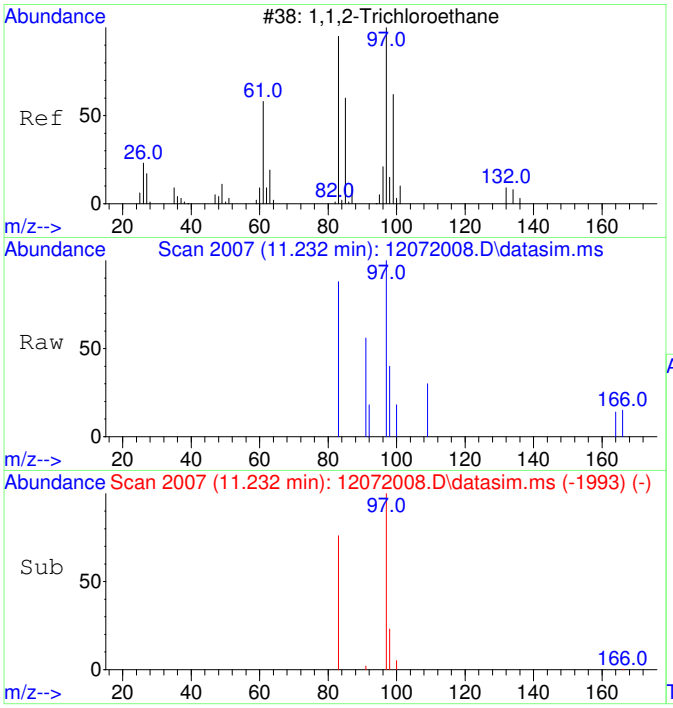


#13
Toluene
Concen: 52.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2356

Ion	Ratio	Lower	Upper
91	100		
92	59.3	29.9	89.9

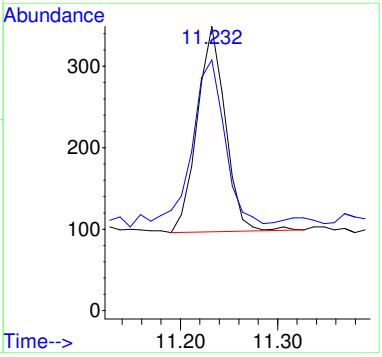


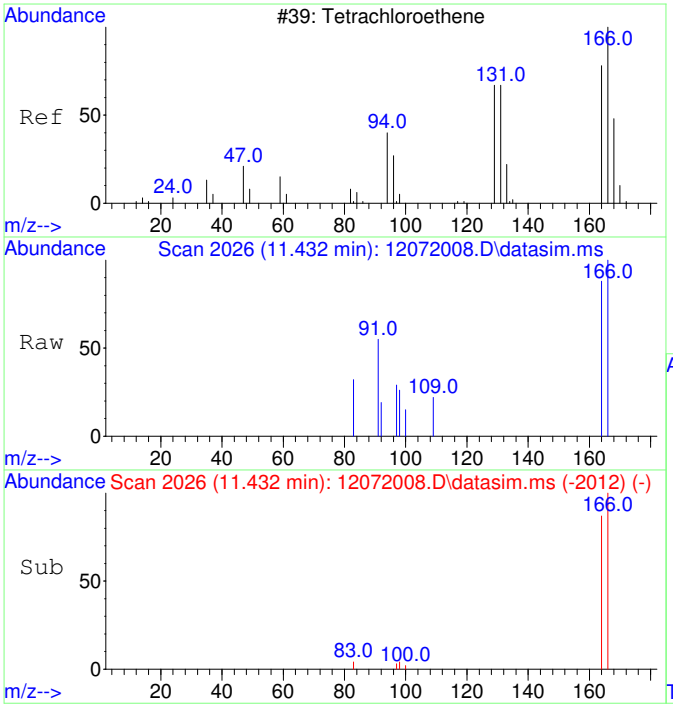


#14
1,1,2-Trichloroethane
Concen: 48.41 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 506

Ion	Ratio	Lower	Upper
97	100		
83	98.4	51.2	111.2

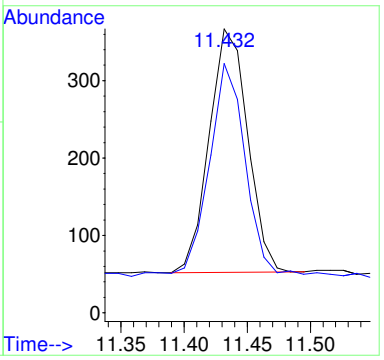


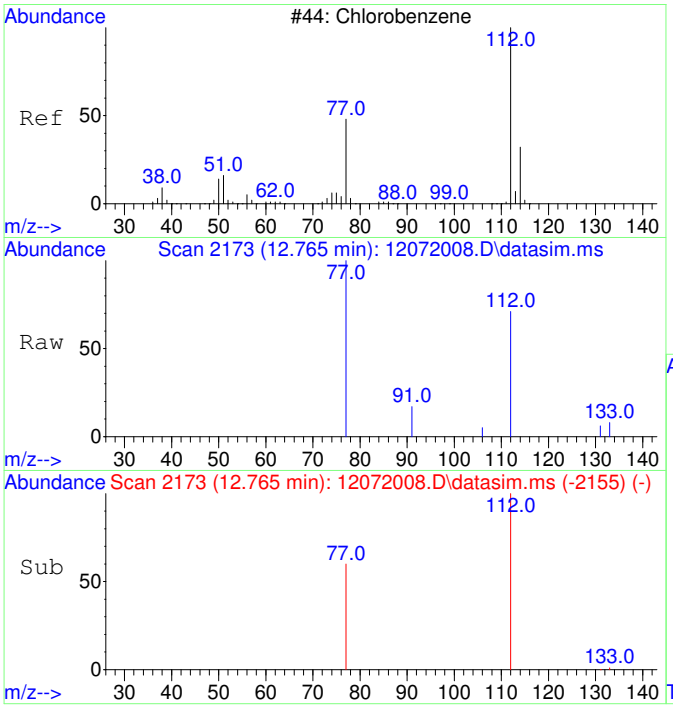


#15
Tetrachloroethene
Concen: 47.52 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 668

Ion	Ratio	Lower	Upper
166	100		
164	83.4	47.8	107.8

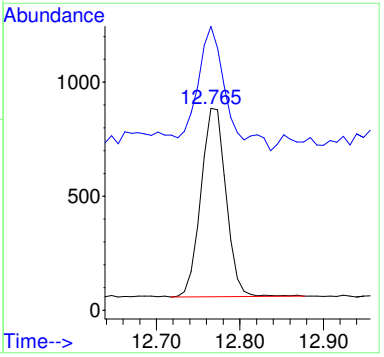


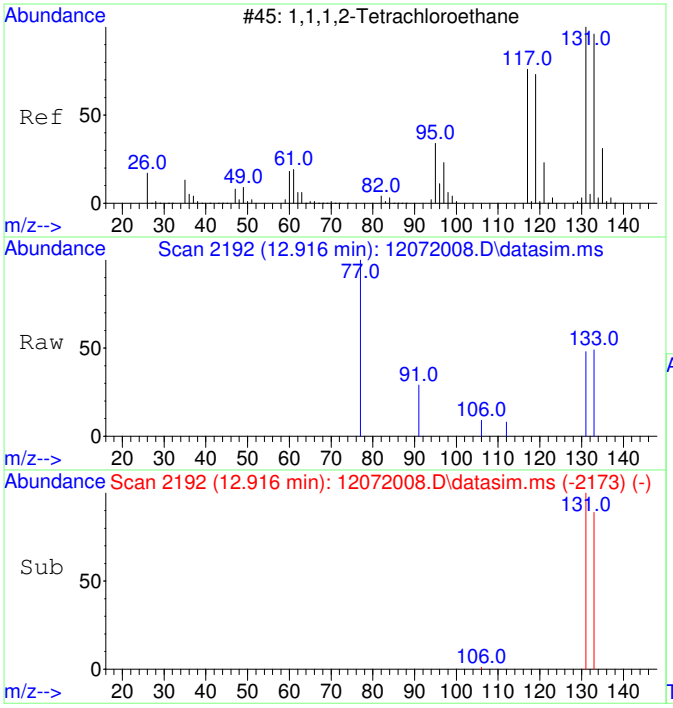


#16
Chlorobenzene
Concen: 49.43 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 1728

Ion	Ratio	Lower	Upper
112	100		
77	60.0	23.6	83.6

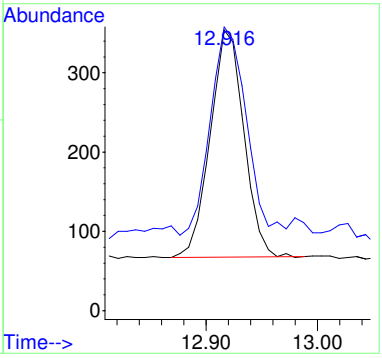


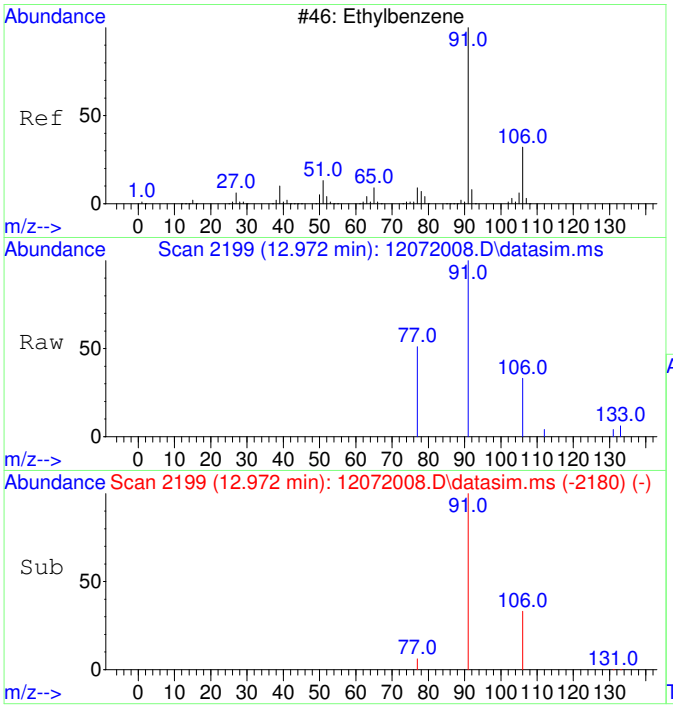


#17
1,1,1,2-Tetrachloroethane
Concen: 49.12 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 601

Ion	Ratio	Lower	Upper
131	100		
133	98.5	66.3	126.3

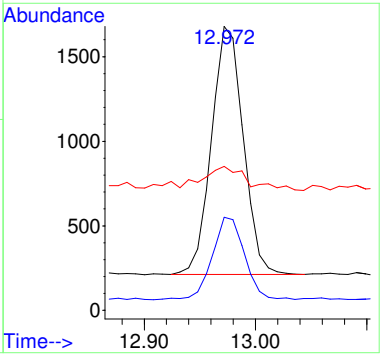


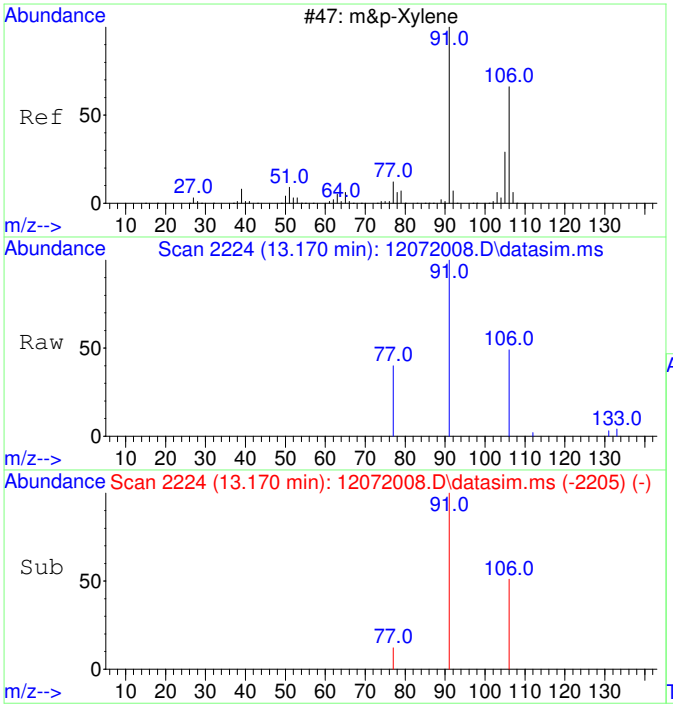


#18
Ethylbenzene
Concen: 50.43 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2907

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

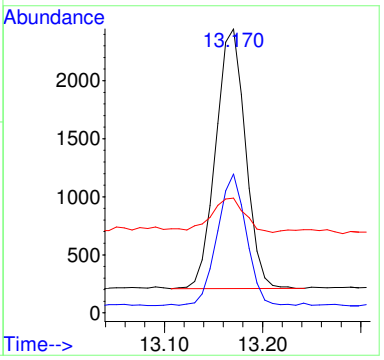


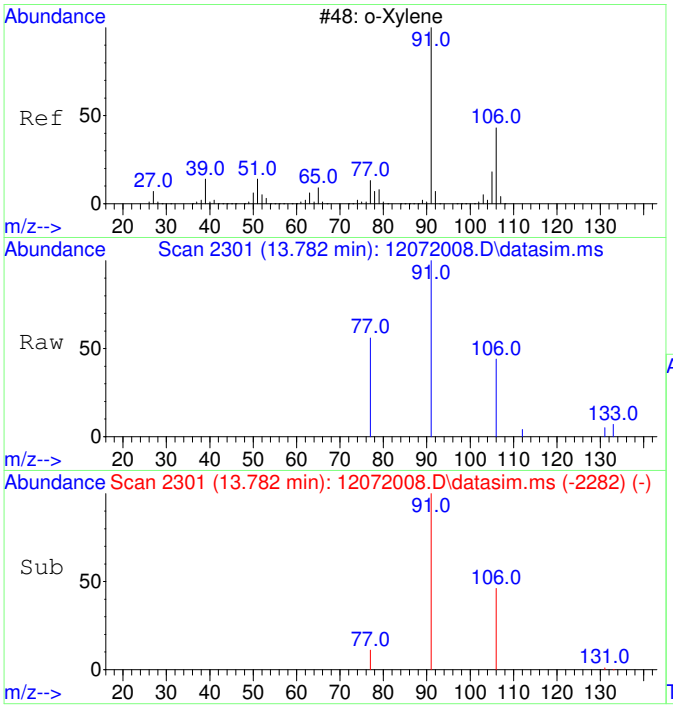


#19
m&p-Xylene
Concen: 105.66 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 4690

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

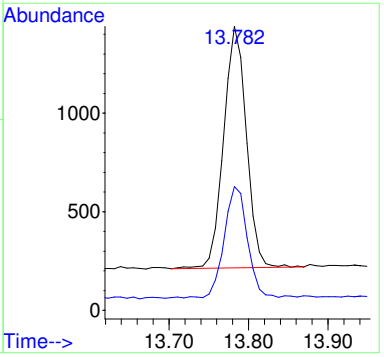


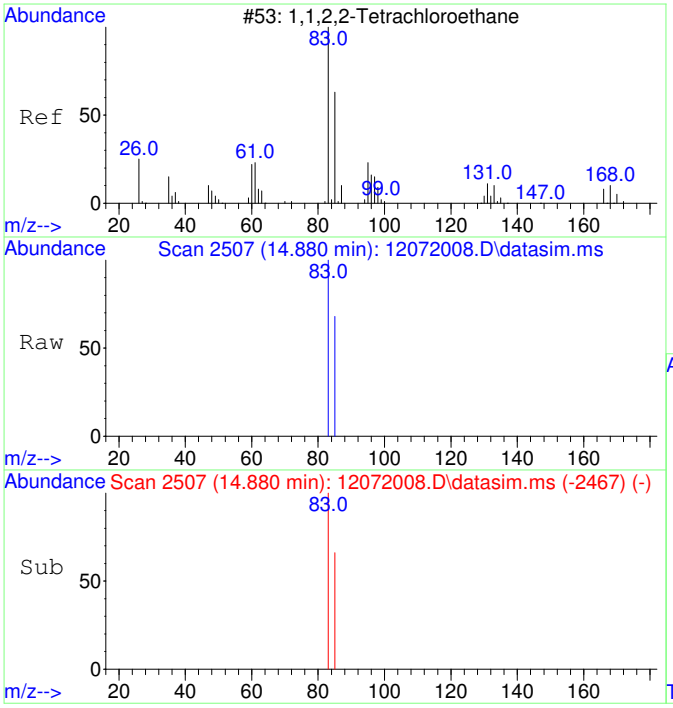


#20
o-Xylene
Concen: 51.14 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2438

Ion	Ratio	Lower	Upper
91	100		
106	46.8	19.2	79.2

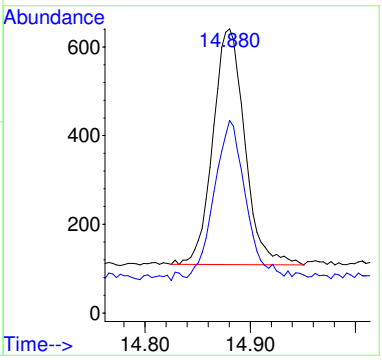


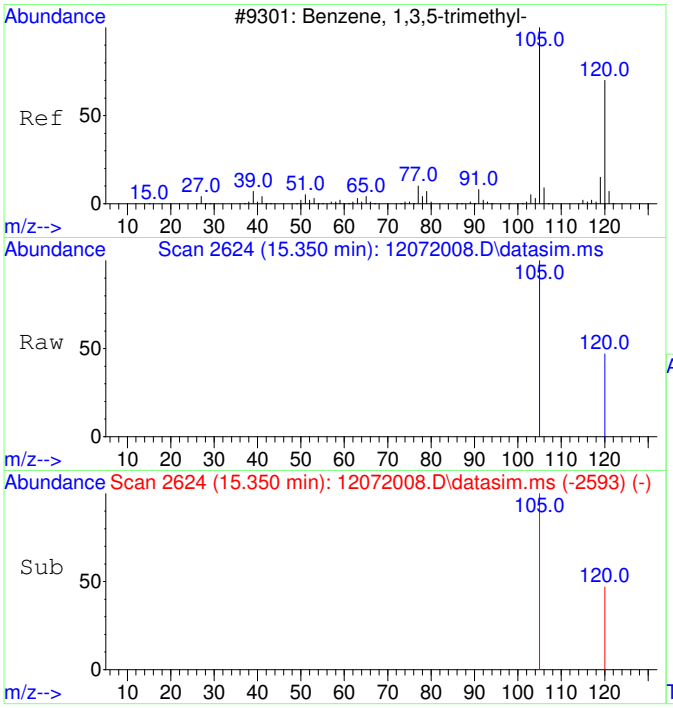


#21
1,1,2,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 1116

Ion	Ratio	Lower	Upper
83	100		
85	63.8	34.8	94.8

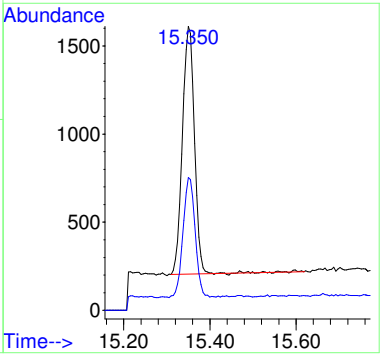


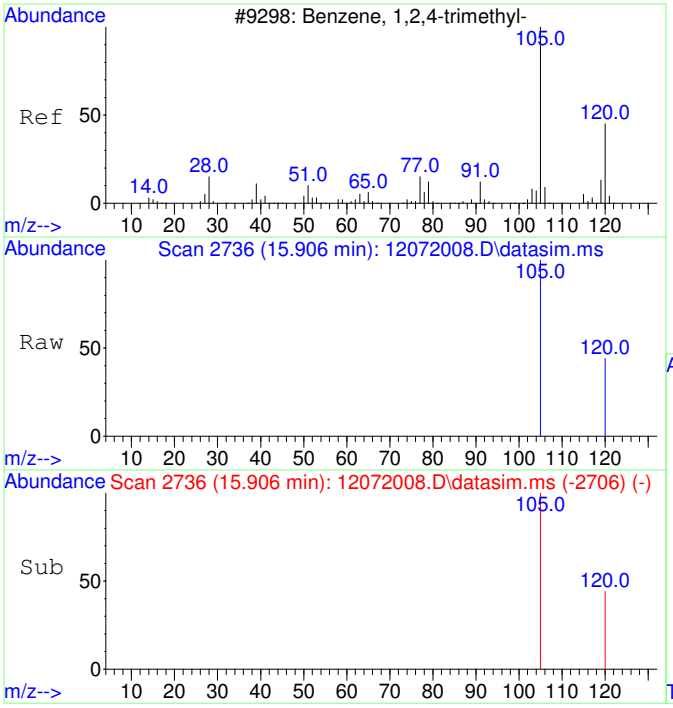


#22
1,3,5-Trimethylbenzene
Concen: 52.23 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2738

Ion	Ratio	Lower	Upper
105	100		
120	46.1	21.1	81.1

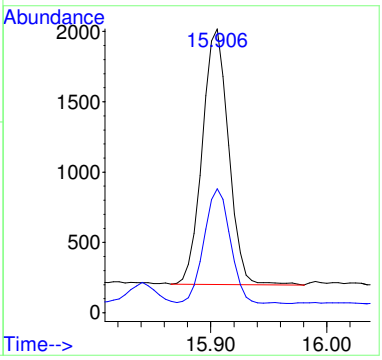


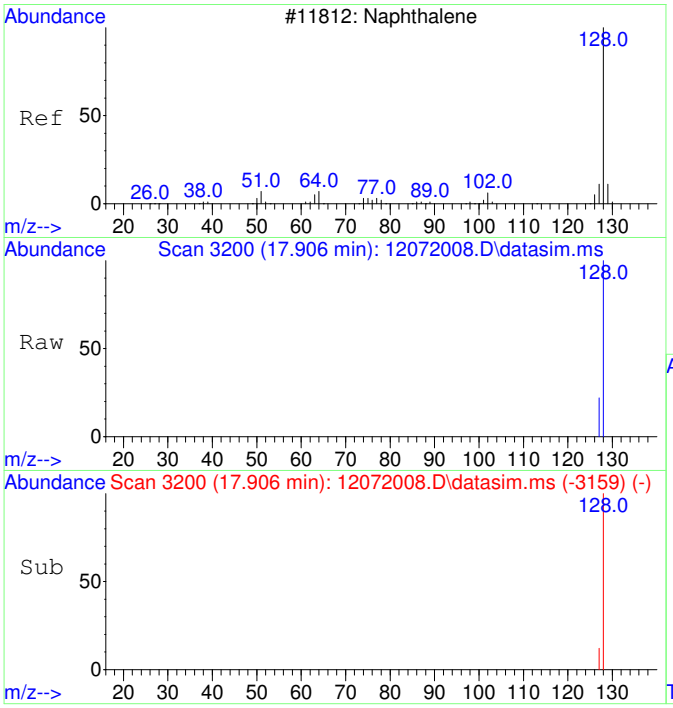


#23
1,2,4-Trimethylbenzene
Concen: 53.45 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 2866

Ion	Ratio	Lower	Upper
105	100		
120	44.2	17.2	77.2

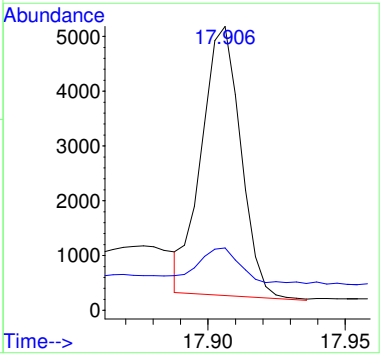


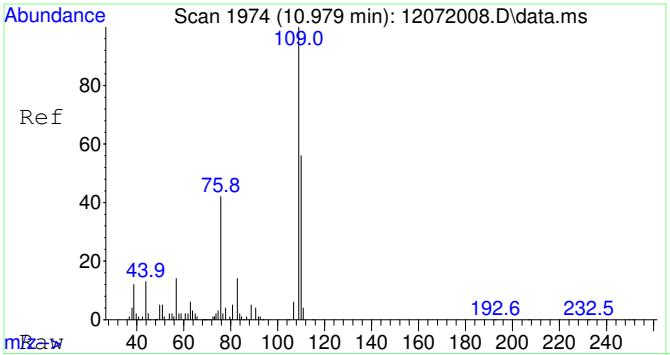


#24
Naphthalene
Concen: 57.91 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 4856

Ion	Ratio	Lower	Upper
128	100		
127	10.9	0.0	42.5

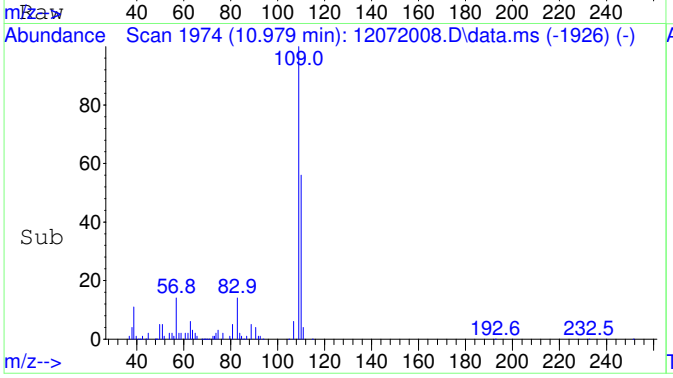


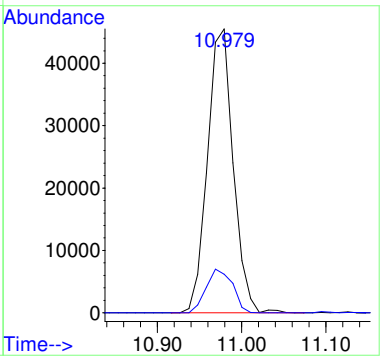


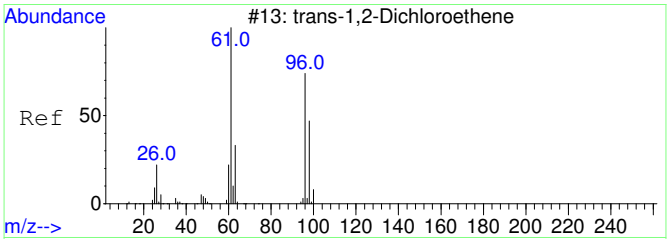
#25
2-Fluorotoluene SCAN
Concen: 4561.89 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

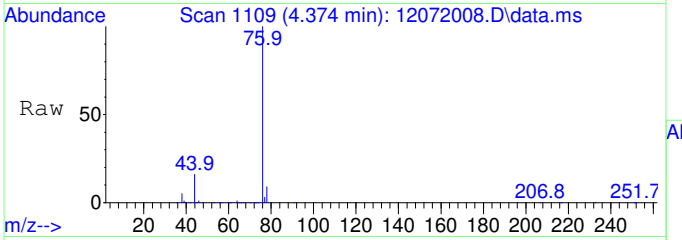
Tgt Ion:109 Resp: 96904

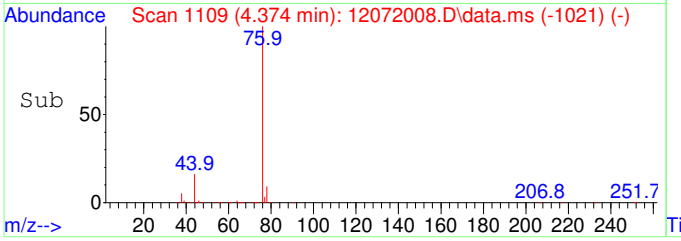
Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8







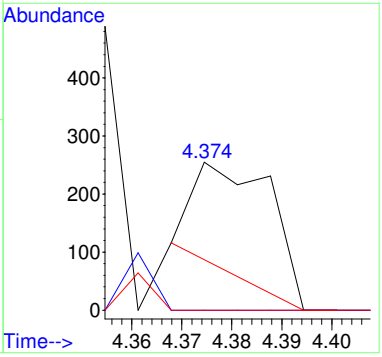


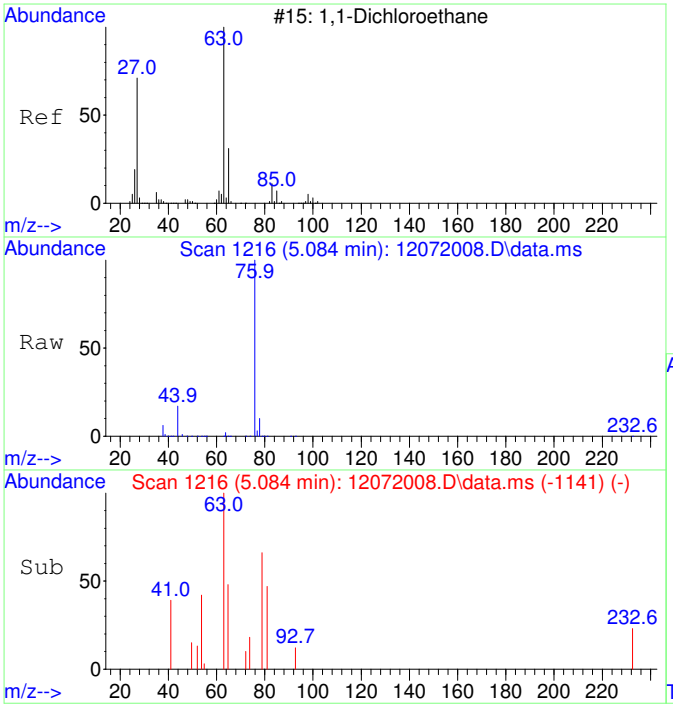


#27
trans-1,2-Dichloroethene SCAN
Concen: 29.61 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 61 Resp: 187

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

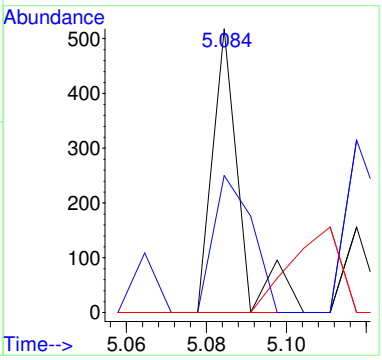


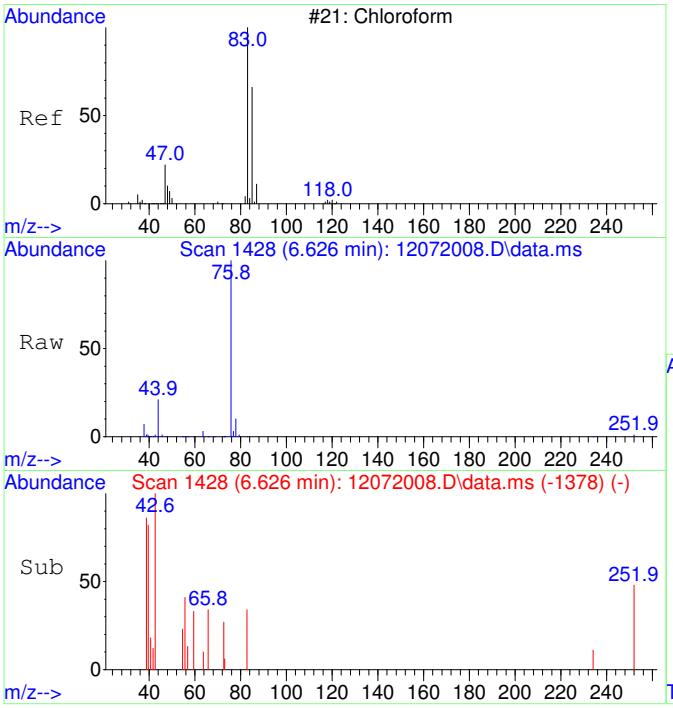


#28
1,1-Dichloroethane SCAN
Concen: 32.73 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 63 Resp: 244

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

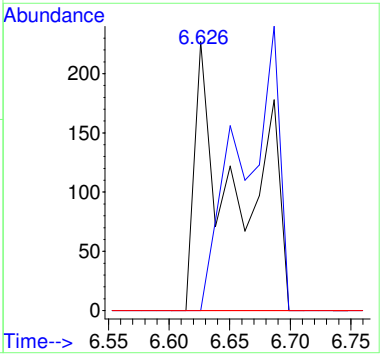


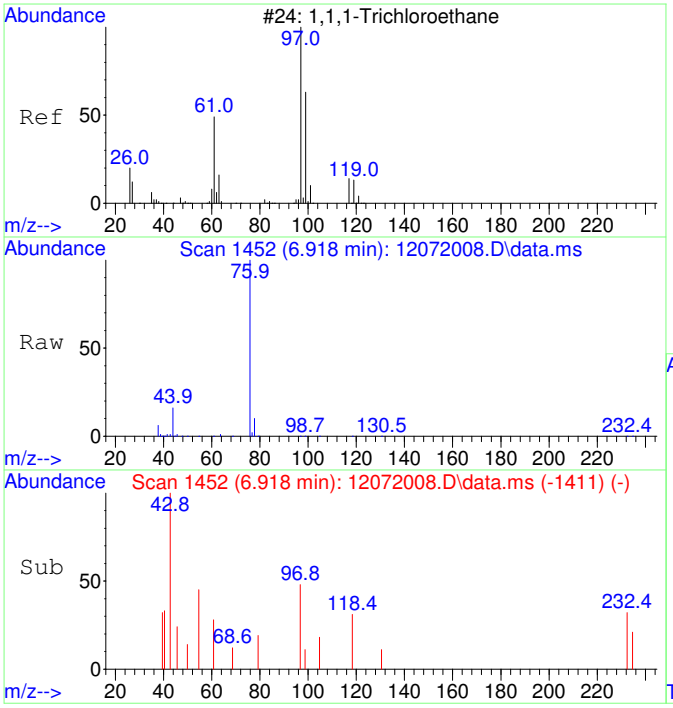


#30
Chloroform SCAN
Concen: 81.33 ug/L
RT: 6.626 min Scan# 1428
Delta R.T. -0.036 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 83 Resp: 556

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

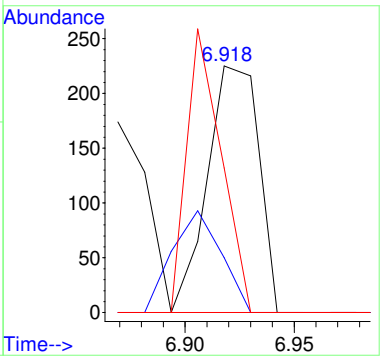


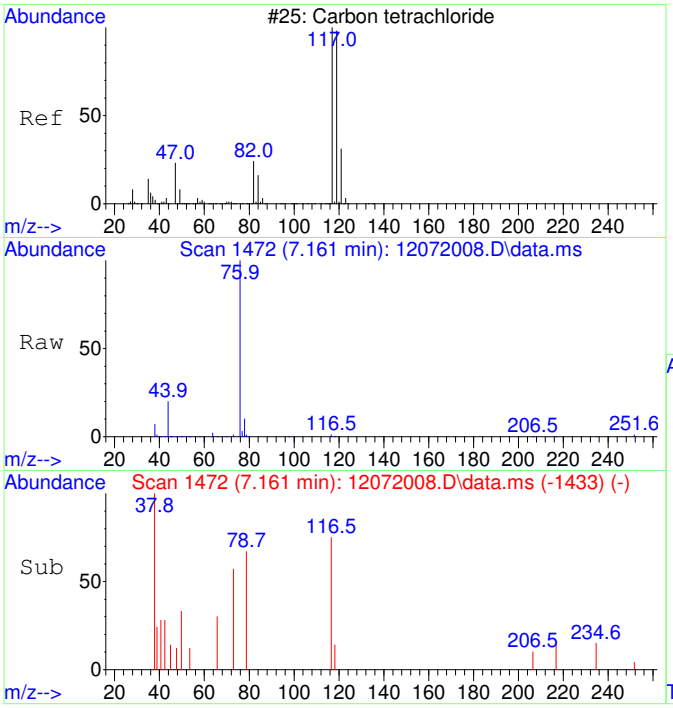


#31
1,1,1-Trichloroethane SCAN
Concen: 52.31 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 97 Resp: 369

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

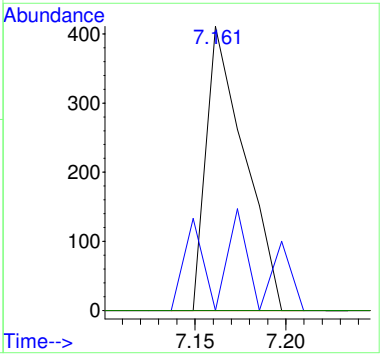


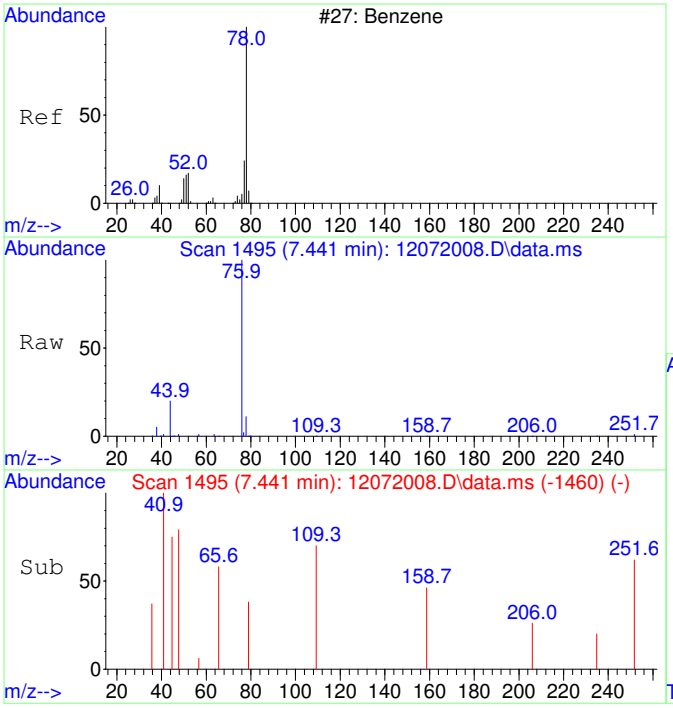


#32
Carbon tetrachloride SCAN
Concen: 99.86 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:117 Resp: 602

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

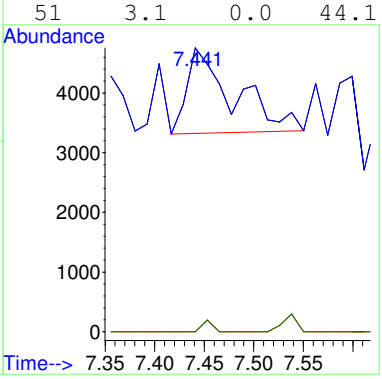


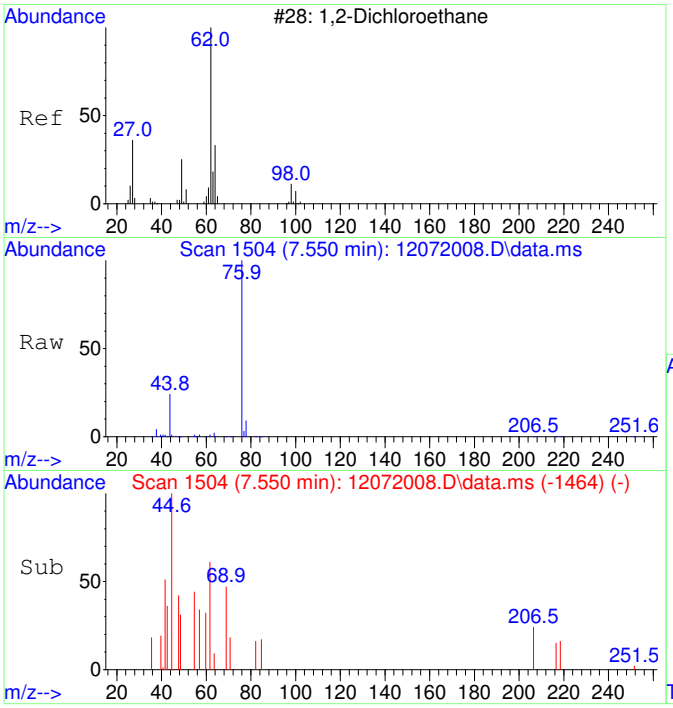


#33
Benzene SCAN
Concen: 219.62 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.073 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 78 Resp: 4687

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

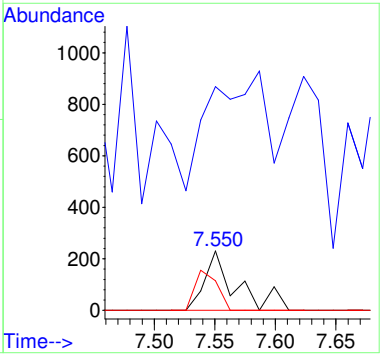


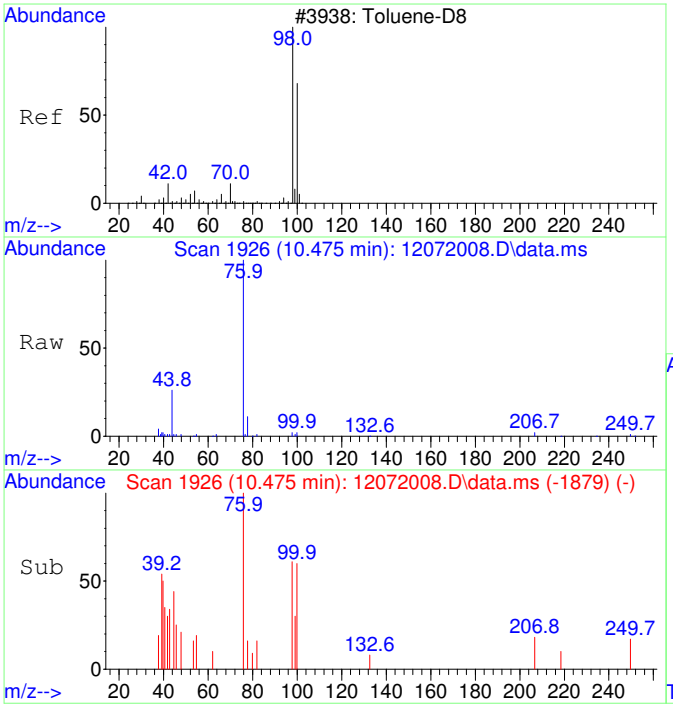


#34
1,2-Dichloroethane SCAN
Concen: 62.02 ug/L
RT: 7.550 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 62 Resp: 414

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

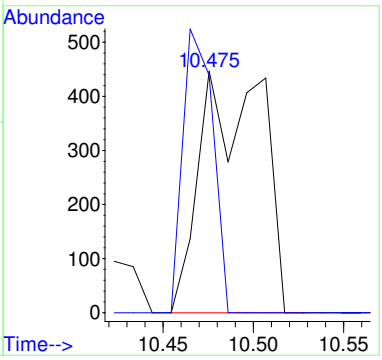


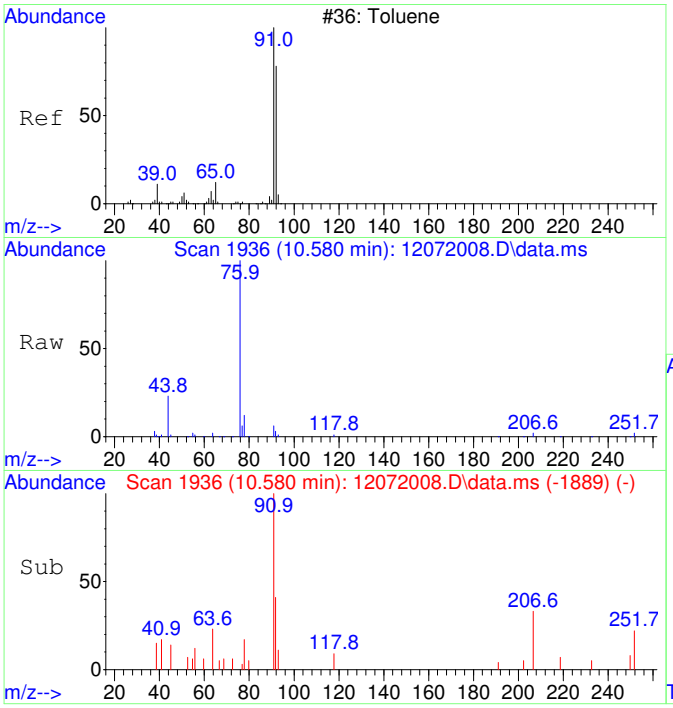


#36
Toluene-d8 SCAN
Concen: 53.86 ug/L
RT: 10.475 min Scan# 1926
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 98 Resp: 1073

Ion	Ratio	Lower	Upper
98	100		
100	56.6	40.0	100.0

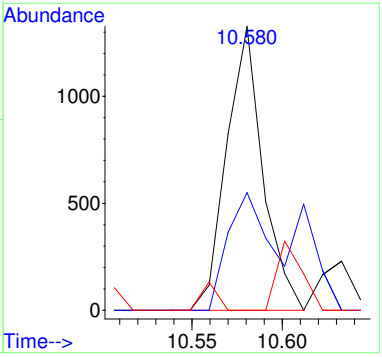


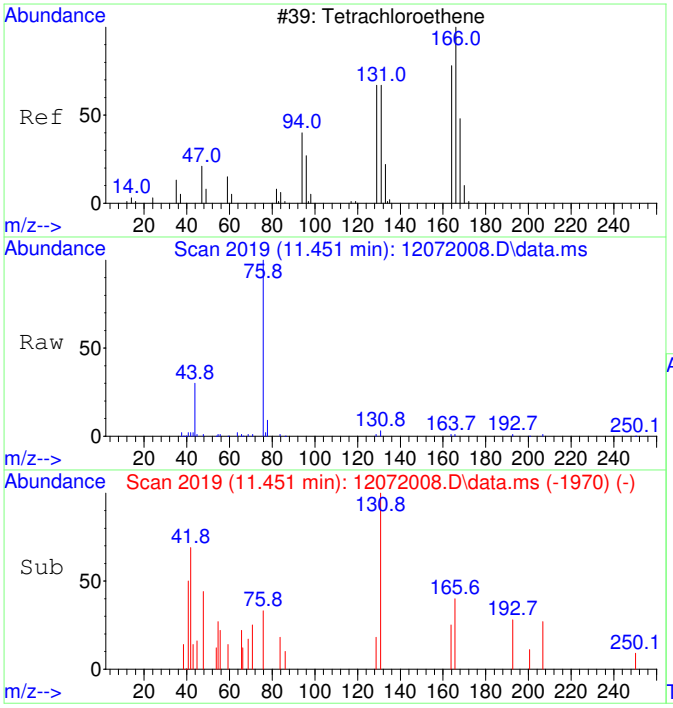


#37
Toluene SCAN
Concen: 75.62 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1855

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

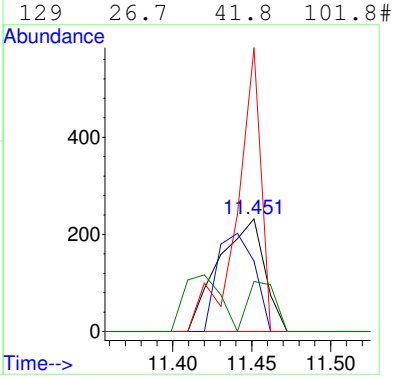


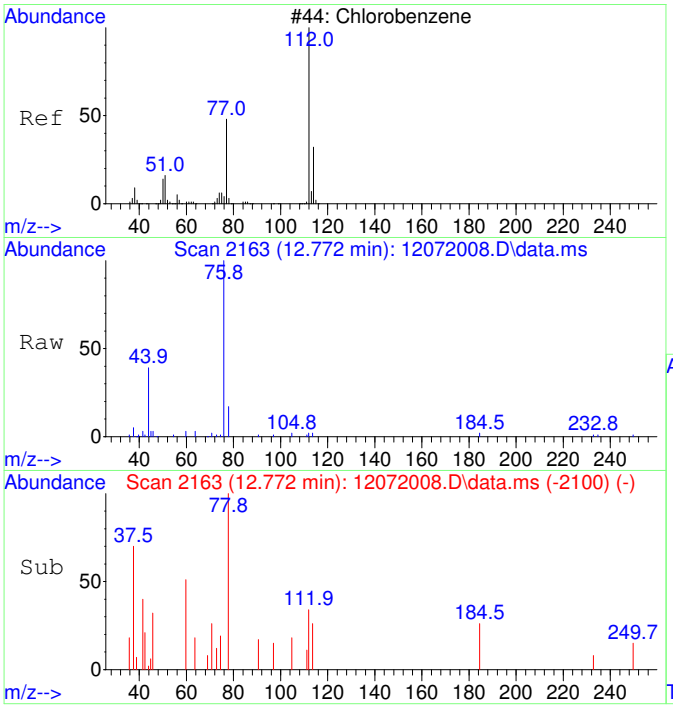


#39
Tetrachloroethene SCAN
Concen: 84.99 ug/L
RT: 11.451 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:166 Resp: 469

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

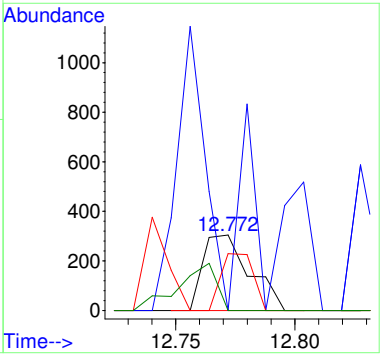


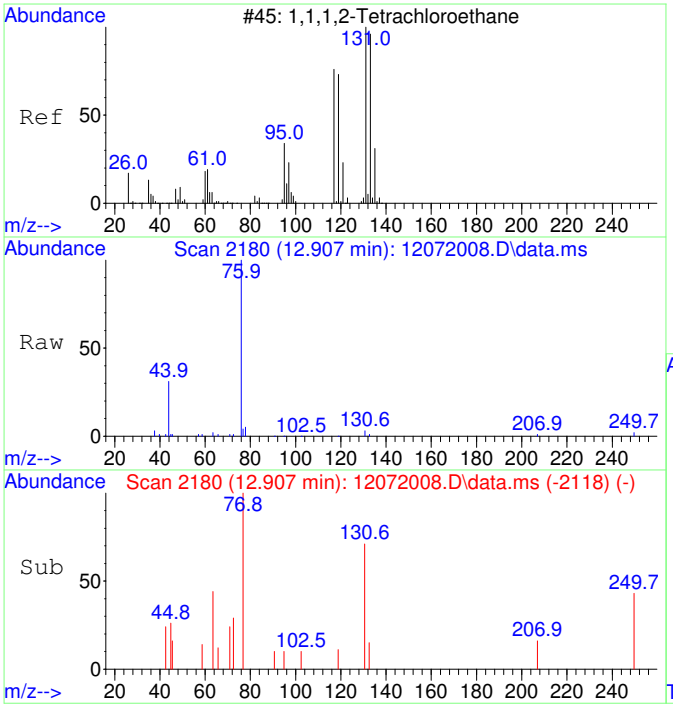


#40
Chlorobenzene SCAN
Concen: 23.61 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:112 Resp: 416

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

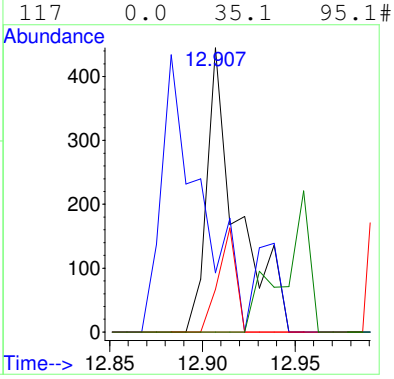


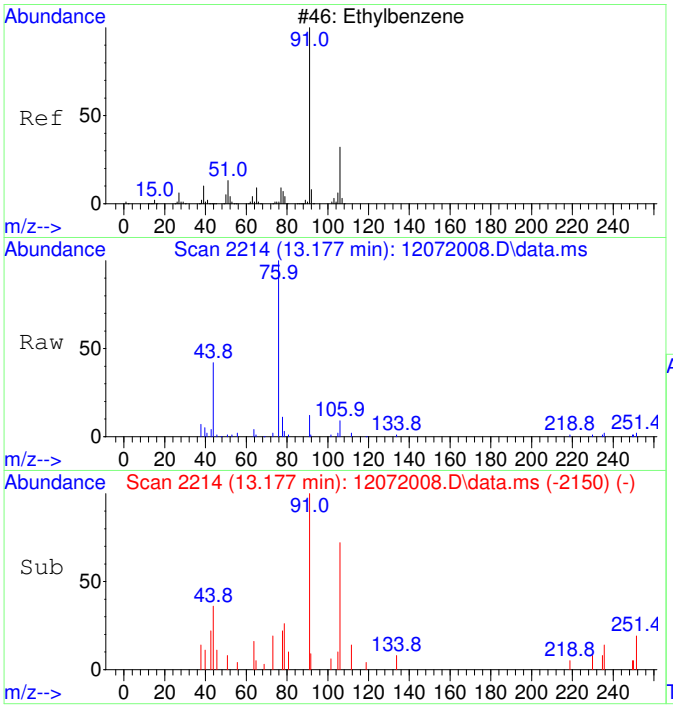


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 84.89 ug/L
RT: 12.907 min Scan# 2180
Delta R.T. -0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:131 Resp: 516

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

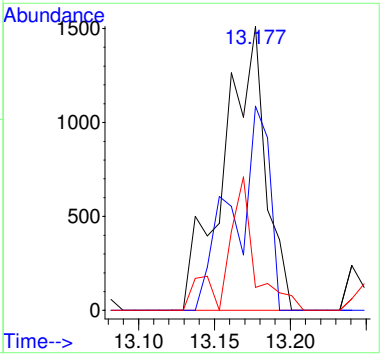


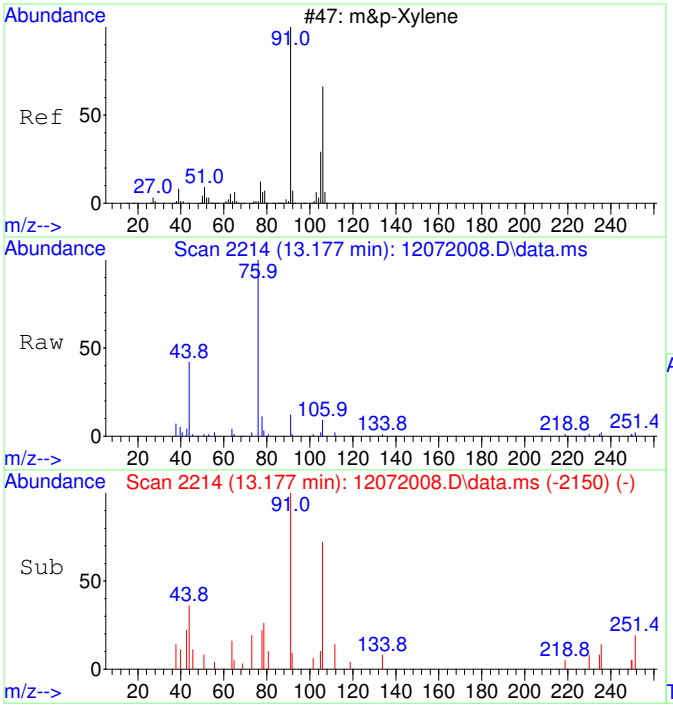


#42
Ethylbenzene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

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

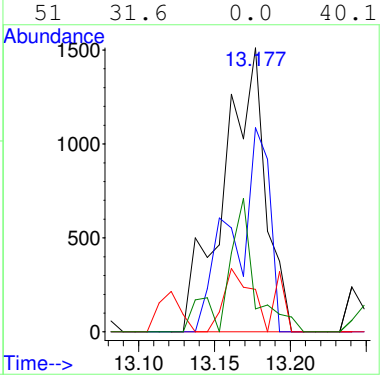


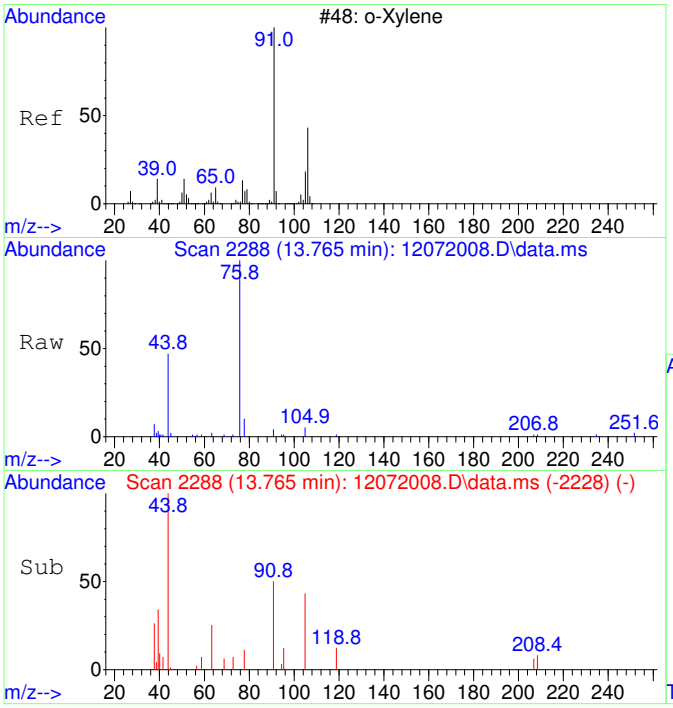


#43
m&p-Xylene SCAN
Concen: 61.97 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 2897

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

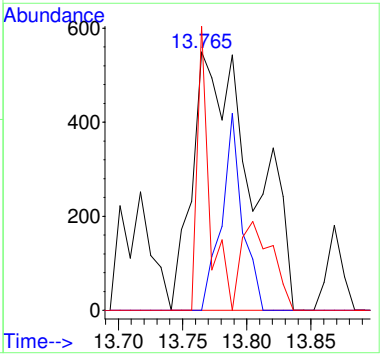


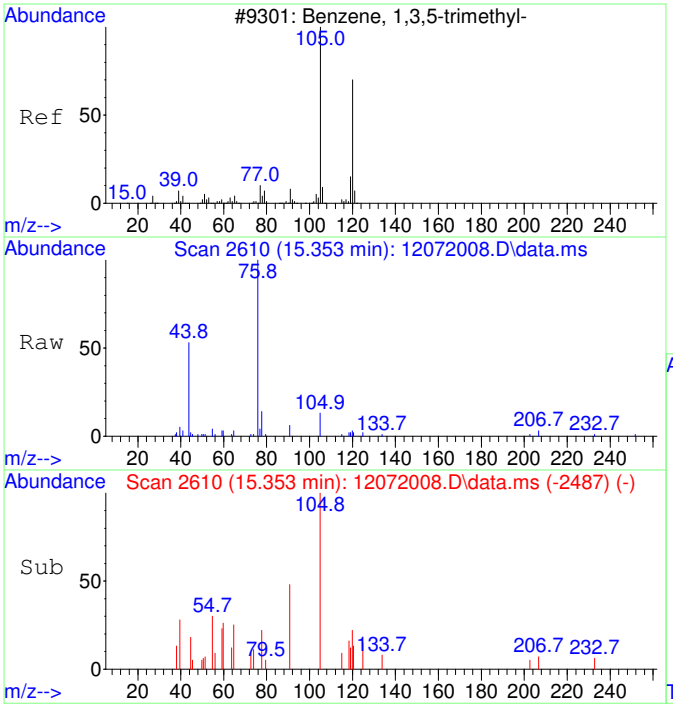


#44
o-Xylene SCAN
Concen: 70.17 ug/L
RT: 13.765 min Scan# 2288
Delta R.T. -0.024 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion: 91 Resp: 1791

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

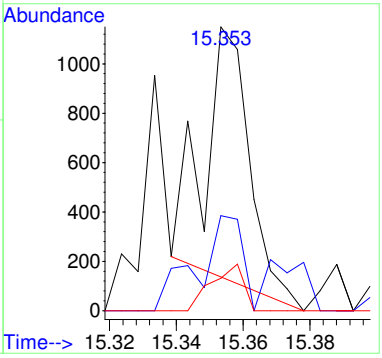


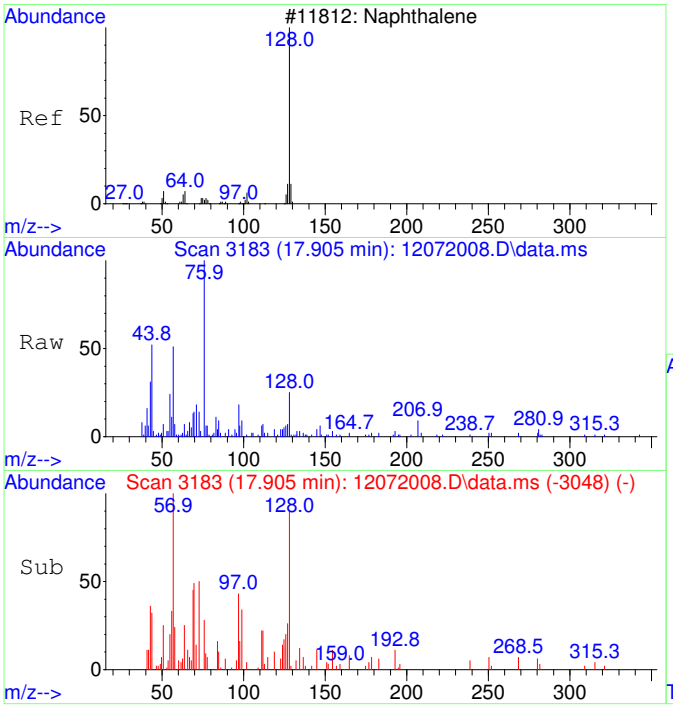


#46
1,3,5-Trimethylbenzene SCAN
Concen: 34.54 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:105 Resp: 930

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

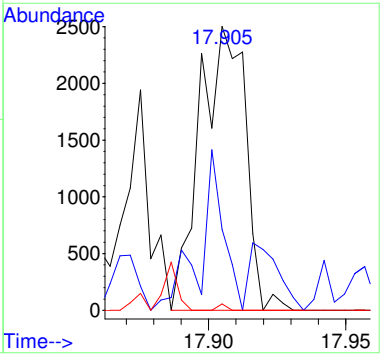




#48
Naphthalene SCAN
Concen: 70.25 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.002 min
Lab File: 12072008.D
Acq: 7 Dec 2020 14:43

Tgt Ion:128 Resp: 2901

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



S20L021-SCV1

Quantitation Report (Not Reviewed)

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

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

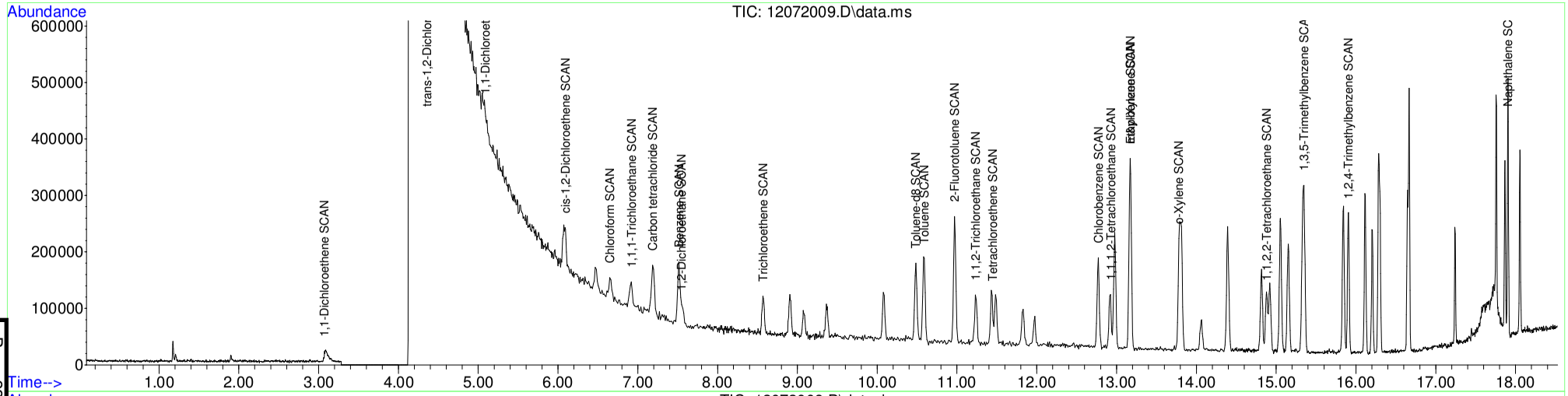
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	207424	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	174700	4348.70 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.97%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene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

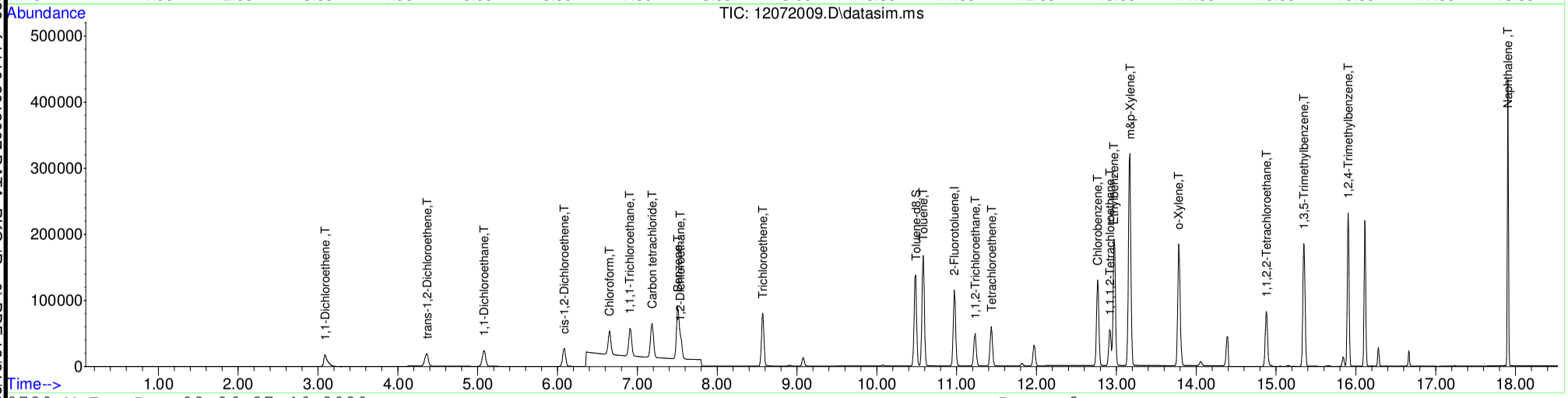
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

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

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





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SEQUENCE

S20L024

Sequence Date: 12/09/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20L016	SEQUENCE #:	S20L024 12/09/20
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.	Tue Dec 08 06:26:34 2020			
	Initial Calibration ID (LIMS number):	2012007			
	ICAL within QC criteria?	✔			
	SCV within QC criteria?	✔			
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?	☐	Y	Y	
	CCV(s) within QC criteria?	☐	Y	Y	
	QLS(s) within QC criteria?	☐	Y	Y	
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	☐	Y	Y	
	LCS(s) or SRM(s) within QC criteria?	☐	Y	Y	
	MSs/MSDs and/or DUPs within QC criteria?	✔			
	Other method-specific QCs within QC criteria? Specify if applicable.	✔			

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20L016	SEQUENCE #:	S20L024 12/09/20
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?	☐	Y	Y	
	Are problems, anomalies, discrepancies documented in LIMS? Specify if applicable.	✔			
MANUAL INT	Were manual integrations performed and documented? Specify if applicable.	☐	Y	Y	

APPROVALS	ANALYST INITIALS & DATE:	TD 12/11/20
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2020.12.16 12:35:04 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\120920\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	12092001.D	1	S20L024IBL1		9 Dec 2020 9:10
2	12092002.D	1	S20L024-TUN1	BFB 2040028	9 Dec 2020 9:31
3	12092003.D	1	S20L024-CCV1	2030070 5 mg/L	9 Dec 2020 9:41
4	12092004.D	1	S20L024-CRL1	2030073 0.05 mg/L	9 Dec 2020 10:04
5	12092005.D	1	B20L016-BLK1		9 Dec 2020 10:28
6	12092006.D	1	B20L016-BS1		9 Dec 2020 10:52
7	12092007.D	1	B20L016-BSD1		9 Dec 2020 11:15
8	12092008.D	1	B20L016-MRL1		9 Dec 2020 11:39
9	12092009.D	1	2012007-01		9 Dec 2020 12:02
10	12092010.D	1	2012007-02		9 Dec 2020 12:26
11	12092011.D	1	2012007-04		9 Dec 2020 12:50
12	12092012.D	1	2012007-05		9 Dec 2020 13:13
13	12092013.D	1	2012007-06		9 Dec 2020 13:37
14	12092014.D	1	2012007-07		9 Dec 2020 14:00
15	12092015.D	1	2012007-08		9 Dec 2020 14:24
16	12092016.D	1	2012007-09		9 Dec 2020 14:48
17	12092017.D	1	2012007-10		9 Dec 2020 15:11
18	12092018.D	1	2012007-11		9 Dec 2020 15:35
19	12092019.D	1	2012007-12		9 Dec 2020 15:59
20	12092020.D	1	2012007-13		9 Dec 2020 16:22
21	12092021.D	1	2012007-14		9 Dec 2020 16:46
22	12092022.D	1	2012007-15		9 Dec 2020 17:10
23	12092023.D	1	2012007-16		9 Dec 2020 17:33
24	12092024.D	1	2012007-17		9 Dec 2020 17:57
25	12092025.D	1	2012007-18		9 Dec 2020 18:21
1	12092026.D	1	IB		9 Dec 2020 18:44
1	12092027.D	1	IB		9 Dec 2020 19:08
1	12092028.D	1	IB		9 Dec 2020 19:32
1	12092029.D	1	IB		9 Dec 2020 19:55

GC/MS QA-QC Check Report

Table of Contents

Tune File : C:\msdchem\1\Ravioli Data\2020\120920\12092002.D
Tune Time : 9 Dec 2020 9:31

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\120920\12092003.D

File	Sample	Surrogate Recovery %	Internal Standard Responses
			166009
12092003.D	S20L024-CC	96	166009
12092004.D	S20L024-CR	1*	189663
12092005.D	B20L016-BL	87	302867
12092006.D	B20L016-BS	90	199400
12092007.D	B20L016-BSD	89	227762
12092008.D	B20L016-MR	88	204619
12092009.D	2012007-01	86	293718
12092010.D	2012007-02	89	172019
12092011.D	2012007-04	89	198727
12092012.D	2012007-05	87	250671
12092013.D	2012007-06	90	169925
12092014.D	2012007-07	88	174227
12092015.D	2012007-08	88	190472
12092016.D	2012007-09	87	277445
12092017.D	2012007-10	87	236682
12092018.D	2012007-11	89	166855
12092019.D	2012007-12	87	264329
12092020.D	2012007-13	89	224126
12092021.D	2012007-14	88	223614
12092022.D	2012007-15	88	251010
12092023.D	2012007-16	87	252665

```
12092024.D
         2012007-17   87                      233354
---------------------------------------------------------------------------
12092025.D
         2012007-18   87                      229464
---------------------------------------------------------------------------
(fails) - fails 12hr time check   * - fails criteria

    Created: Thu Dec 10 07:45:51 2020  AG5975C
```

Analysis Sequence

S20L024

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 12/11/2020 11:18 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20L024-IBL1	Instrument Blank	1	12/9/20 9:10			TD	12092001.D	
S20L024-TUN1	BFB	2	12/9/20 9:31	2040028		TD	12092002.D	
S20L024-CCV1	Calibration Check	3	12/9/20 9:41	2030070		TD	12092003.D	
S20L024-CRL1	Instrument RL Check	4	12/9/20 10:04	2030073		TD	12092004.D	
B20L016-BLK1	Blank	5	12/9/20 10:28			TD	12092005.D	
B20L016-BS1	LCS	6	12/9/20 10:52			TD	12092006.D	
B20L016-BSD1	LCS Dup	7	12/9/20 11:15			TD	12092007.D	
B20L016-MRL1	MRL Check	8	12/9/20 11:39			TD	12092008.D	
2012007-01 A	F6-010-3ft-2d-R	9	12/9/20 12:02			TD	12092009.D	
2012007-02 A	Waverly-MH1-2.5ft-2d-R	10	12/9/20 12:26			TD	12092010.D	
2012007-04 A	Waverly-MH3-2ft-2d-R	11	12/9/20 12:50			TD	12092011.D	
2012007-05 A	Waverly-MH4-2ft-2d-R	12	12/9/20 13:13			TD	12092012.D	
2012007-06 A	Waverly-MH5-2.ft-2d-R	13	12/9/20 13:37			TD	12092013.D	
2012007-07 A	F6-008-3ft-2d-R	14	12/9/20 14:00			TD	12092014.D	
2012007-08 A	F6-031-3ft-2d-R	15	12/9/20 14:24			TD	12092015.D	
2012007-09 A	F6-055-2ft-2d-R	16	12/9/20 14:48			TD	12092016.D	
2012007-10 A	F6-010-3ft-1.5hr-R	17	12/9/20 15:11			TD	12092017.D	
2012007-11 A	F6-008-3ft-2hr-R	18	12/9/20 15:35			TD	12092018.D	
2012007-12 A	Waverly-MH1-2.5ft-1.5hr-R	19	12/9/20 15:59			TD	12092019.D	
2012007-13 A	Waverly-MH2-2.5ft-1.5hr-R	20	12/9/20 16:22			TD	12092020.D	
2012007-14 A	F6-031-3ft-2hr-R	21	12/9/20 16:46			TD	12092021.D	
2012007-15 A	235 Fairchild-SC-5ft-2d	22	12/9/20 17:10			TD	12092022.D	

Analysis Sequence

S20L024

(Continued)

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 12/11/2020 11:18 am

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
2012007-16 A	Classics-MH1-2ft-2d-R	23	12/9/20 17:33			TD	12092023.D	
2012007-17 A	Classics-MH2-2ft-2d-R	24	12/9/20 17:57			TD	12092024.D	
2012007-18 A	6Sixty-MH3-2ft-2d-R	25	12/9/20 18:21			TD	12092025.D	

Sequence Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S20L024

S20L024-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092001.D
Acq On : 9 Dec 2020 9:10
InstName : AG5975C
Operator : TD
Sample : S20L024-IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 10 09:10:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

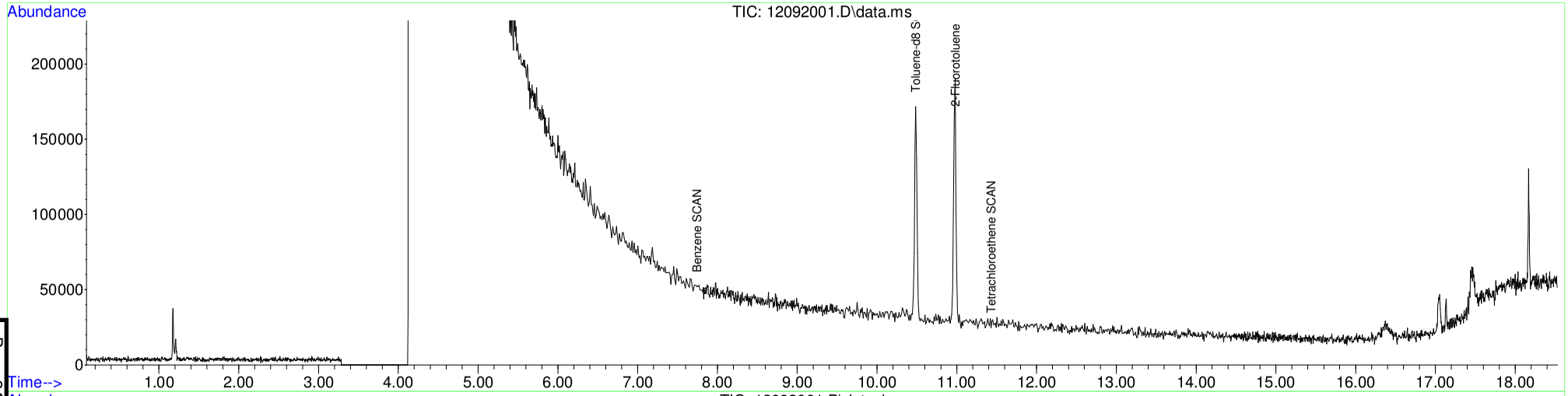
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	215329	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	173514	4160.62	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 83.21%#			
Target Compounds						Qvalue
25) 2-Fluorotoluene SCAN	10.979	109	119623	4894.15	ug/L	97
33) Benzene SCAN	7.745	78	6006	244.58	ug/L	93
36) Toluene-d8 SCAN	10.486	98	101692	4436.05	ug/L	97
39) Tetrachloroethene SCAN	11.431	166	234	36.85	ug/L #	12

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092001.D
Acq On : 9 Dec 2020 9:10
InstName : AG5975C
Operator : TD
Sample : S20L024IBL1
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 10 09:10:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration



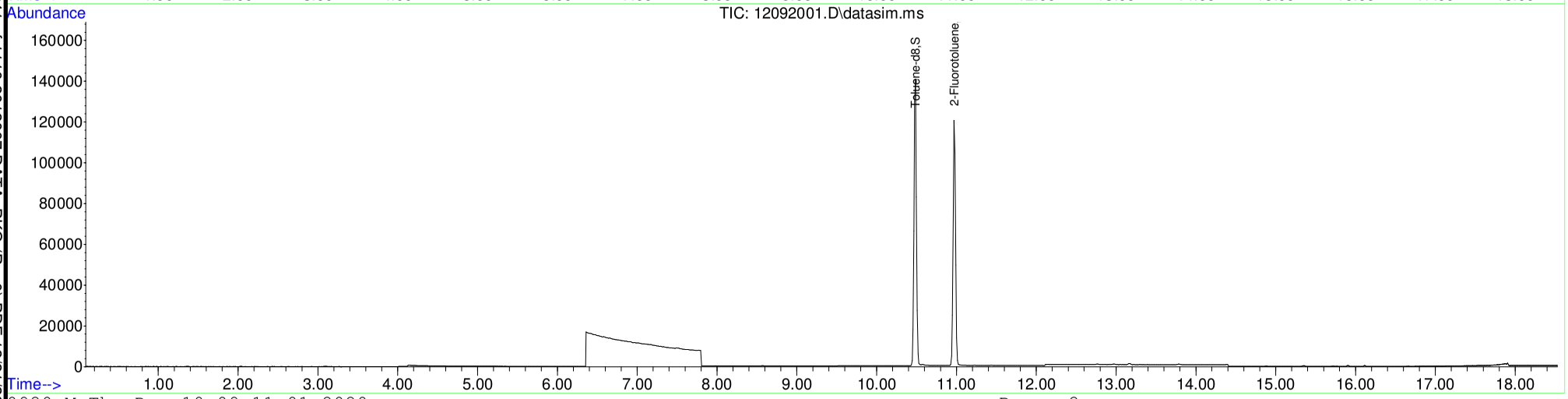


Table of Contents

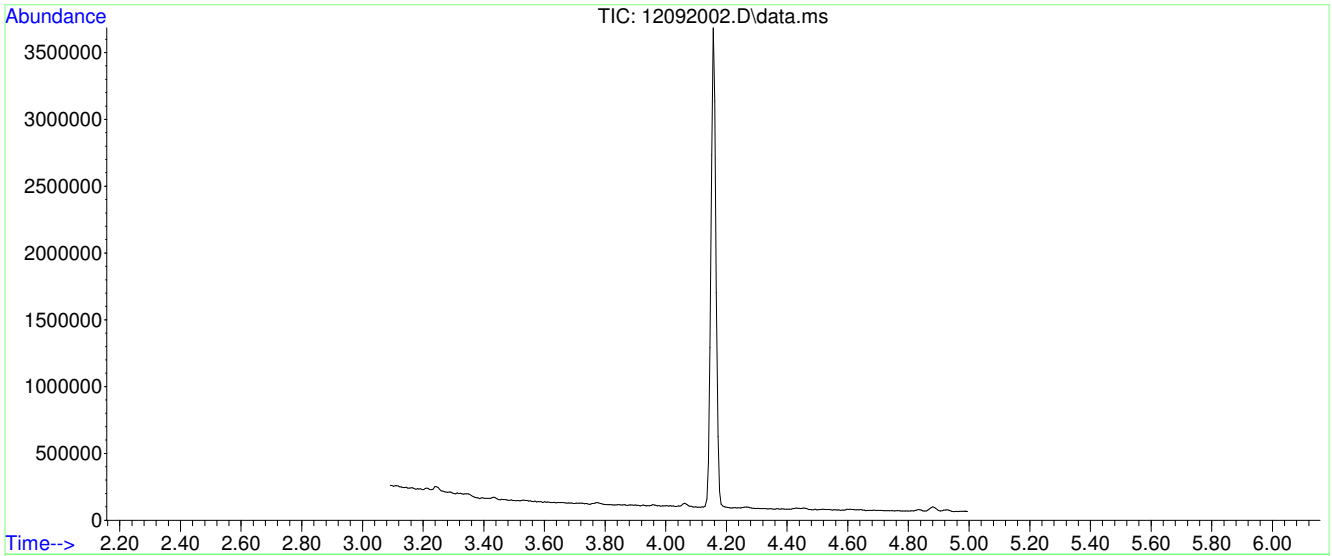
S20L024-TUN1

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092002.D
Acq On : 9 Dec 2020 9:31
Operator : TD
Sample : S20L024-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:26:34 2020



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.2	134341	PASS
75	95	30	60	46.7	311019	PASS
95	95	100	100	100.0	665600	PASS
96	95	5	9	6.5	42976	PASS
173	174	0.00	2	1.0	5310	PASS
174	95	50	120	81.5	542208	PASS
175	174	5	9	7.4	39901	PASS
176	174	95	101	96.7	524416	PASS
177	176	5	9	6.5	34221	PASS

Average of 4.151 to 4.162 min.: 12092002.D\data.ms
S20L024-TUN1
Modified:subtracted

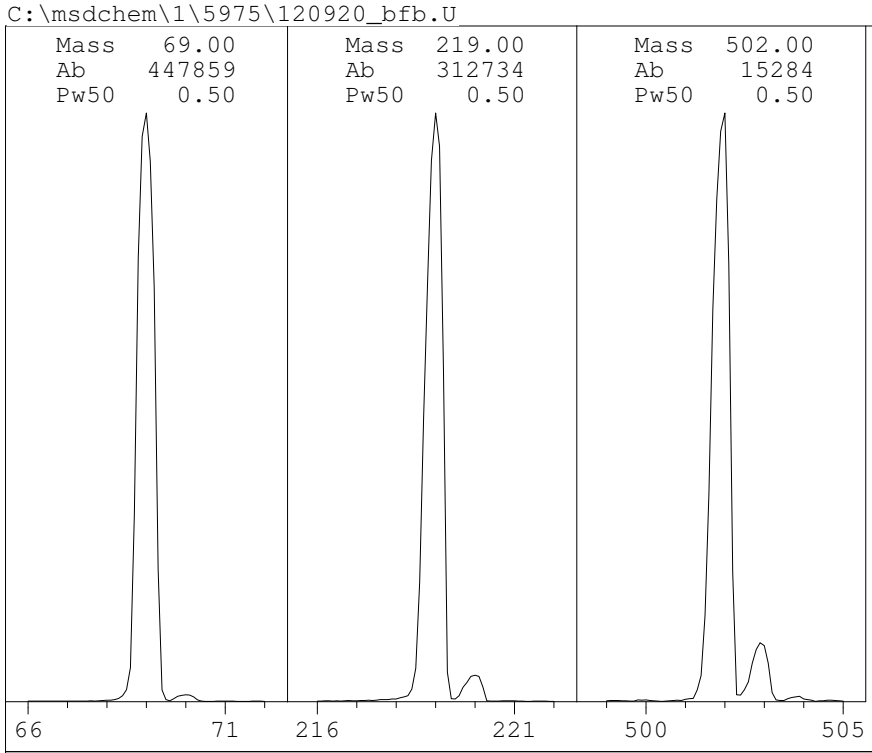
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	4836	48.00	3561	61.00	28387	72.00	2935
37.05	26712	49.00	25691	62.00	27941	73.00	24397
38.00	22906	50.00	134341	63.00	20136	74.00	94960
39.00	8942	51.05	42200	63.95	1867	75.00	311019
40.00	276	52.00	1990	65.10	219	76.00	20120
41.00	21	54.95	1311	66.00	169	76.95	3139
43.00	203	56.00	9072	67.00	1568	77.95	1826
44.00	2589	56.95	16614	68.00	57597	78.90	12303
44.95	5435	58.00	643	69.00	58936	79.90	3225
45.95	134	58.80	169	70.00	4285	80.90	12693
47.00	10790	60.00	5466	71.05	250	81.90	2514

Average of 4.151 to 4.162 min.: 12092002.D\data.ms
S20L024-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	371	102.90	151	116.90	3127	128.90	1046
85.95	674	103.95	2423	117.90	2006	129.85	2117
87.00	24515	104.95	843	118.95	2718	130.85	856
88.00	23875	105.95	2356	119.95	119	133.00	154
90.90	1916	106.80	548	121.80	90	133.85	121
92.00	16357	109.90	275	122.85	112	134.95	965
93.00	24749	110.90	487	123.95	371	135.90	162
94.00	71355	111.90	253	124.90	214	136.95	808
95.00	665600	112.90	287	125.90	266	138.80	67
96.00	42976	114.95	657	126.85	178	139.85	347
97.00	1415	115.90	1936	127.90	1833	140.90	5463

Average of 4.151 to 4.162 min.: 12092002.D\data.ms
S20L024-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.85	527	152.90	503	170.90	190	191.90	59
142.90	5544	153.80	70	171.10	125	192.95	293
143.90	312	153.95	233	171.75	342	220.90	62
144.90	526	154.95	1436	173.05	5310	249.00	125
145.95	759	155.85	192	174.00	542208	250.00	58
146.90	381	156.95	982	175.00	39901	250.90	52
147.95	1302	158.85	811	176.00	524416		
148.80	130	160.85	589	177.00	34221		
149.00	238	169.80	84	177.95	1049		
149.90	549	170.10	149	190.70	67		
151.95	341	170.50	56	191.00	90		

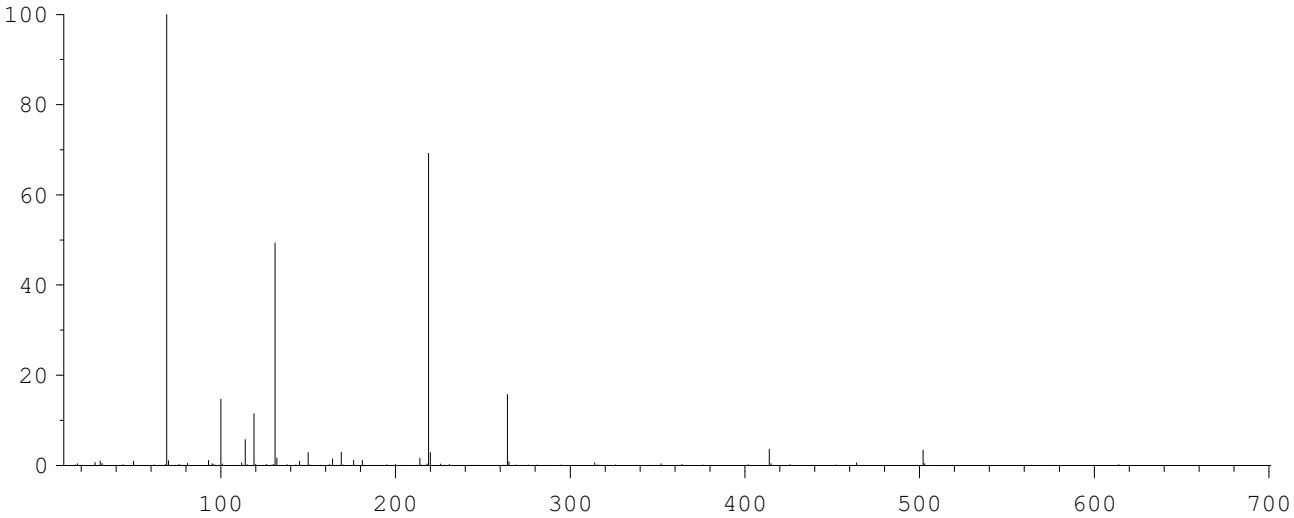


Ion Pol	Pos	MassGain	-1192
		MassOffs	-39
Emission	34.6	AmuGain	984
EIEnrgy	69.9	AmuOffs	128.50
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	22.25		
IonFcus	68.3	HEDEnab	On
EntLens	0.0	EMVolts	1424
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
115 peaks Base: 69.00 Abundance: 423040



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	423040	100.00	70.00	4536	1.07
219.00	292608	69.17	220.00	11988	4.10
502.00	14390	3.40	503.00	1475	10.25

Air/Water Check: H20~0.41% N2~0.63% O2~0.41% CO2~0.15% N2/H2O~156.53%

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 98184
Repeller Maximum 30 volts using ion 219; Gain Factor 0.98

MassGain Values(Samples): -1182(3) -1175(2) -1153(1) -1112(0) -1025(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	128.5	128.5	128.5	128.5	128.5	128.5	128.5
Entrance Lens Offset:	14.8	11.3	11.3	13.1	14.8	16.1	16.1
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	0.9	100.0	49.3	69.2	3.6	3.4	

S20L024-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092003.D
Acq On : 9 Dec 2020 9:41
InstName : AG5975C
Operator : TD
Sample : S20L024-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 09 10:00:03 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	81	0.00
2	T	1,1-Dichloroethene	0.198	0.217	-9.6	86	0.00
3	T	trans-1,2-Dichloroethene	0.250	0.257	-2.8	83	-0.01
4	T	1,1-Dichloroethane	0.299	0.308	-3.0	84	0.00
5	T	cis-1,2-Dichloroethene	0.309	0.319	-3.2	86	0.00
6	T	Chloroform	0.297	0.302	-1.7	85	0.00
7	T	1,1,1-Trichloroethane	0.319	0.325	-1.9	86	-0.01
8	T	Carbon tetrachloride	0.305	0.306	-0.3	84	0.00
9	T	Benzene	0.841	0.820	2.5	82	-0.01
10	T	1,2-Dichloroethane	0.287	0.300	-4.5	87	0.00
11	T	Trichloroethene	0.266	0.257	3.4	81	0.00
12	S	Toluene-d8	0.968	0.930	3.9	83	0.00
13	T	Toluene	1.206	1.137	5.7	83	0.00
14	T	1,1,2-Trichloroethane	0.279	0.263	5.7	80	0.00
15	T	Tetrachloroethene	0.376	0.357	5.1	80	0.00
16	T	Chlorobenzene	0.934	0.865	7.4	78	0.00
17	T	1,1,1,2-Tetrachloroethane	0.327	0.301	8.0	78	0.00
18	T	Ethylbenzene	1.540	1.422	7.7	78	0.00
19	T	m&p-Xylene	1.186	1.086	8.4	80	0.00
20	T	o-Xylene	1.274	1.161	8.9	78	0.00
21	T	1,1,2,2-Tetrachloroethane	0.594	0.531	10.6	76	0.00
22	T	1,3,5-Trimethylbenzene	1.401	1.276	8.9	77	0.00
23	T	1,2,4-Trimethylbenzene	1.433	1.287	10.2	77	0.00
24	T	Naphthalene	2.321	2.065	11.0	74	0.00
25		2-Fluorotoluene SCAN	0.568	0.544	4.2	78	0.00
26		1,1-Dichloroethene SCAN	0.132	0.147	-11.4	90	0.00
27		trans-1,2-Dichloroethene SC	0.169	0.189	-11.8	91	-0.01
28		1,1-Dichloroethane SCAN	0.199	0.206	-3.5	84	-0.01
29		cis-1,2-Dichloroethene SCAN	0.196	0.225	-14.8	93	0.00
30		Chloroform SCAN	0.183	0.192	-4.9	85	0.00
31		1,1,1-Trichloroethane SCAN	0.188	0.214	-13.8	92	0.00
32		Carbon tetrachloride SCAN	0.161	0.202	-25.5	102	0.00
33		Benzene SCAN	0.570	0.616	-8.1	88	0.00
34		1,2-Dichloroethane SCAN	0.178	0.214	-20.2	97	-0.01
35		Trichloroethene SCAN	0.124	0.147	-18.5	96	0.00
36		Toluene-d8 SCAN	0.532	0.568	-6.8	86	0.00
37		Toluene SCAN	0.655	0.642	2.0	79	0.00
38		1,1,2-Trichloroethane SCAN	0.164	0.155	5.5	76	0.00
39		Tetrachloroethene SCAN	0.147	0.167	-13.6	92	0.00
40		Chlorobenzene SCAN	0.471	0.455	3.4	78	0.00
41		1,1,1,2-Tetrachloroethane S	0.162	0.152	6.2	76	0.00
42		Ethylbenzene SCAN	1.249	1.303	-4.3	85	0.00
43		m&p-Xylene SCAN	1.249	1.303	-4.3	85	0.00
44		o-Xylene SCAN	0.682	0.686	-0.6	82	0.00
45		1,1,2,2-Tetrachloroethane S	0.355	0.342	3.7	78	0.00
46		1,3,5-Trimethylbenzene SCAN	0.719	0.717	0.3	81	0.00
47		1,2,4-Trimethylbenzene SCAN	0.735	0.725	1.4	80	0.00
48		Naphthalene SCAN	1.103	1.029	6.7	76	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\120920\
Data File : 12092003.D
Acq On : 9 Dec 2020 9:41
InstName : AG5975C
Operator : TD
Sample : S20L024-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 09 10:00:03 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

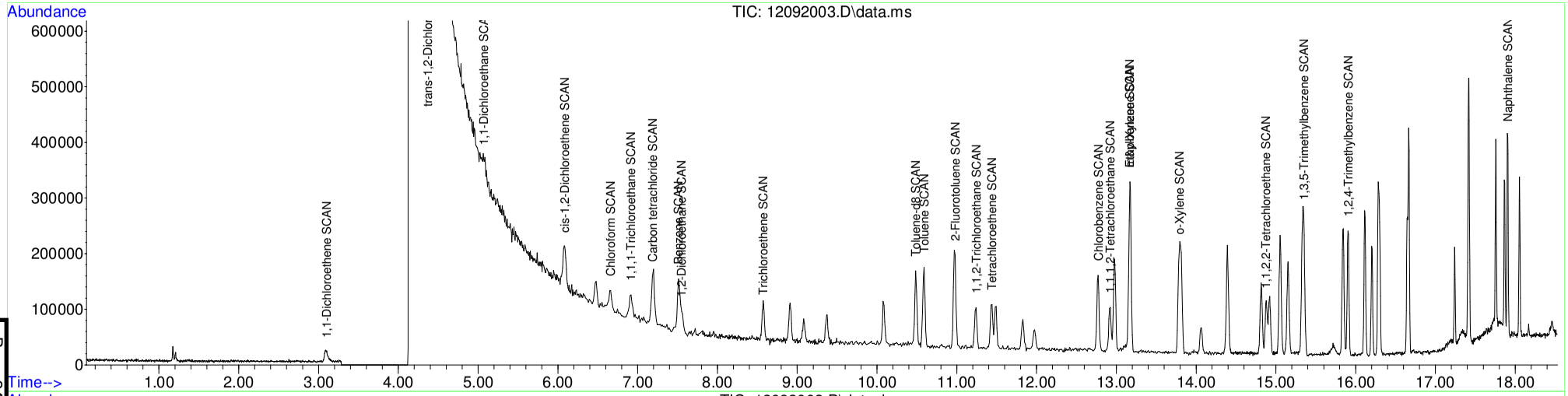
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	166009	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	154307	4799.32 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 95.99%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	36002	5469.34 ug/L	81
3] trans-1,2-Dichloroethene	4.363	61	42681	5143.23 ug/L	98
4] 1,1-Dichloroethane	5.079	63	51121	5157.77 ug/L	95
5] cis-1,2-Dichloroethene	6.088	61	53026	5165.57 ug/L	98
6] Chloroform	6.652	83	50181	5089.41 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	53953	5093.88 ug/L	100
8] Carbon tetrachloride	7.187	117	50877	5024.24 ug/L	100
9] Benzene	7.503	78	136203	4875.77 ug/L	100
10] 1,2-Dichloroethane	7.552	62	49753	5220.86 ug/L	100
11] Trichloroethene	8.575	130	42736	4845.47 ug/L	96
13] Toluene	10.582	91	188684	4713.35 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	43619	4704.31 ug/L	98
15] Tetrachloroethene	11.432	166	59308	4756.45 ug/L	99
16] Chlorobenzene	12.765	112	143658	4632.23 ug/L	96
17] 1,1,1,2-Tetrachloroethane	12.916	131	49968	4603.53 ug/L	99
18] Ethylbenzene	12.972	91	236028	4616.14 ug/L	98
19] m&p-Xylene	13.170	91	360543	9156.80 ug/L	98
20] o-Xylene	13.782	91	192810	4559.11 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.877	83	88165	4474.11 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	211794	4553.98 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	213656	4491.50 ug/L	97
24] Naphthalene	17.906	128	342780	4447.64 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	90264	4790.14 ug/L	94
26) 1,1-Dichloroethene SCAN	3.100	61	24477	5564.10 ug/L	69
27) trans-1,2-Dichloroethe...	4.368	61	31422	5607.90 ug/L	76
28) 1,1-Dichloroethane SCAN	5.071	63	34172	5166.84 ug/L	95
29) cis-1,2-Dichloroethene...	6.086	61	37349	5744.48 ug/L #	69
30) Chloroform SCAN	6.662	83	31902	5260.65 ug/L	87
31) 1,1,1-Trichloroethane ...	6.918	97	35528	5677.40 ug/L	88
32) Carbon tetrachloride SCAN	7.186	117	33601	6283.42 ug/L	88
33) Benzene SCAN	7.514	78	102300	5403.58 ug/L	96
34) 1,2-Dichloroethane SCAN	7.550	62	35452	5986.69 ug/L	91
35) Trichloroethene SCAN	8.568	130	24340	5896.17 ug/L	86
36) Toluene-d8 SCAN	10.486	98	94232	5331.87 ug/L	93
37) Toluene SCAN	10.591	91	106499	4894.26 ug/L	86
38) 1,1,2-Trichloroethane ...	11.242	97	25712	4714.15 ug/L	93
39) Tetrachloroethene SCAN	11.441	166	27657	5649.81 ug/L	93
40) Chlorobenzene SCAN	12.772	112	75495	4830.37 ug/L	83
41) 1,1,1,2-Tetrachloroeth...	12.923	131	25205	4674.40 ug/L	91
42) Ethylbenzene SCAN	13.169	91	216272	5215.49 ug/L	92
43) m&p-Xylene SCAN	13.169	91	216272	5215.49 ug/L	93
44) o-Xylene SCAN	13.789	91	113873	5028.96 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.875	83	56791	4823.66 ug/L	99
46) 1,3,5-Trimethylbenzene...	15.348	105	119068	4984.35 ug/L	96
47) 1,2,4-Trimethylbenzene...	15.904	105	120379	4932.18 ug/L	94
48) Naphthalene SCAN	17.905	128	170815	4662.63 ug/L	88

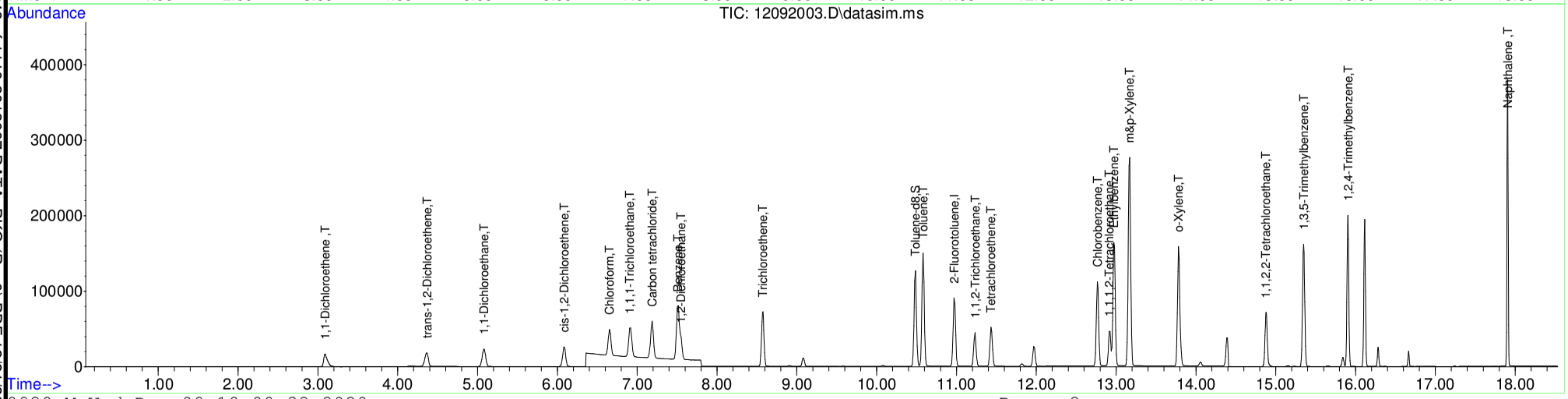
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092003.D
Acq On : 9 Dec 2020 9:41
InstName : AG5975C
Operator : TD
Sample : S20L024-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 09 10:00:03 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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S20L024-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20L024-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 12/9/20 10:04
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	44.81	90%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	45.88	92%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	46.01	92%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	46.98	94%	60	140	pass
6)	Chloroform	6.652	50.0	49.36	99%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	50.82	102%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	49.70	99%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	50.42	101%	60	140	pass
11)	Trichloroethene	8.575	50.0	49.12	98%	60	140	pass
12)	Toluene-d8	10.487	50.0	50.45	101%	60	140	pass
13)	Toluene	10.582	50.0	53.11	106%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	48.90	98%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	53.07	106%	60	140	pass
16)	Chlorobenzene	12.773	50.0	51.42	103%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	50.24	100%	60	140	pass
18)	Ethylbenzene	12.972	50.0	53.26	107%	60	140	pass
19)	m&p-Xylene	13.170	100.0	108.81	109%	60	140	pass
20)	o-Xylene	13.782	50.0	53.15	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	51.97	104%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	57.08	114%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	55.38	111%	60	140	pass
24)	Naphthalene	17.904	50.0	58.30	117%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

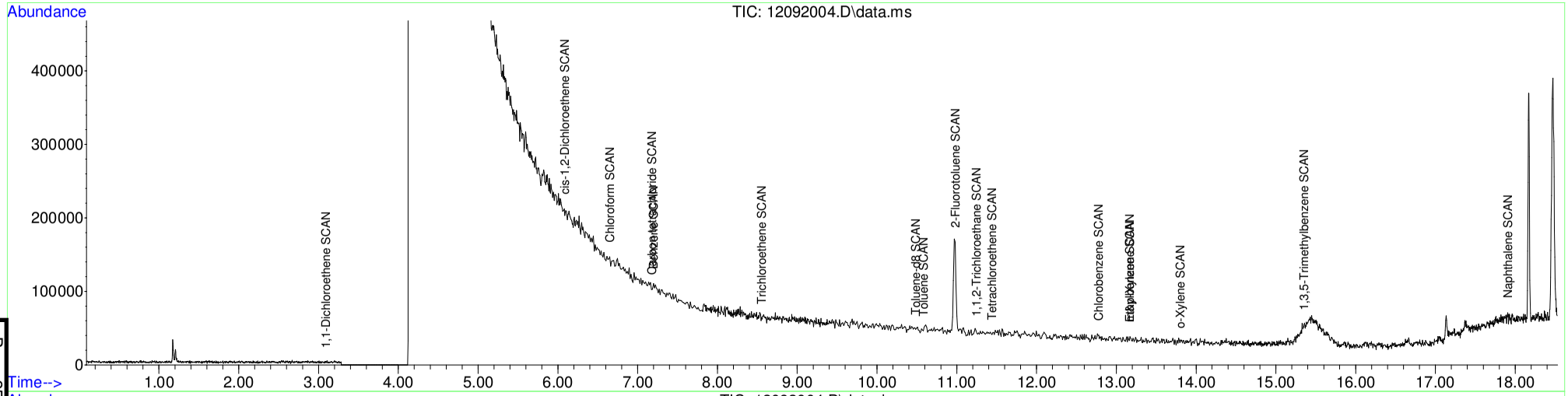
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	189663	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	1853	50.45	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.01%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	672	89.36	ug/L	73
3] trans-1,2-Dichloroethene	4.363	61	435	45.88	ug/L	84
4] 1,1-Dichloroethane	5.086	63	521	46.01	ug/L	58
5] cis-1,2-Dichloroethene	6.088	61	551	46.98	ug/L	96
6] Chloroform	6.652	83	556	49.36	ug/L	98
7] 1,1,1-Trichloroethane	6.907	97	615	50.82	ug/L	94
8] Carbon tetrachloride	7.187	117	575	49.70	ug/L	87
9] Benzene	7.503	78	1676	52.51	ug/L	48
10] 1,2-Dichloroethane	7.552	62	549	50.42	ug/L #	1
11] Trichloroethene	8.569	130	495	49.12	ug/L	94
13] Toluene	10.582	91	2429	53.11	ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	518	48.90	ug/L	92
15] Tetrachloroethene	11.432	166	756	53.07	ug/L	99
16] Chlorobenzene	12.765	112	1822	51.42	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	623	50.24	ug/L	95
18] Ethylbenzene	12.972	91	3111	53.26	ug/L	97
19] m&p-Xylene	13.170	91	4895	108.81	ug/L	96
20] o-Xylene	13.782	91	2568	53.15	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	1170	51.97	ug/L	97
22] 1,3,5-Trimethylbenzene	15.350	105	3033	57.08	ug/L	94
23] 1,2,4-Trimethylbenzene	15.906	105	3010	55.38	ug/L	97
24] Naphthalene	17.906	128	4337	49.26	ug/L	98
25) 2-Fluorotoluene SCAN	10.979	109	101604	4719.47	ug/L	94
26) 1,1-Dichloroethene SCAN	3.085	61	137	27.26	ug/L #	25
29) cis-1,2-Dichloroethene...	6.080	61	195	26.25	ug/L #	31
30) Chloroform SCAN	6.650	83	787	113.59	ug/L #	27
32) Carbon tetrachloride SCAN	7.173	117	403	65.96	ug/L #	61
33) Benzene SCAN	7.198	78	3227	149.19	ug/L	97
35) Trichloroethene SCAN	8.557	130	172	36.47	ug/L #	60
36) Toluene-d8 SCAN	10.486	98	1672	82.81	ug/L	71
37) Toluene SCAN	10.580	91	1723	69.31	ug/L #	63
38) 1,1,2-Trichloroethane ...	11.242	97	326	52.32	ug/L #	33
39) Tetrachloroethene SCAN	11.441	166	676	120.87	ug/L #	27
40) Chlorobenzene SCAN	12.772	112	873	48.89	ug/L #	1
42) Ethylbenzene SCAN	13.169	91	3117	65.79	ug/L	84
43) m&p-Xylene SCAN	13.169	91	3117	65.79	ug/L	83
44) o-Xylene SCAN	13.797	91	1780	68.81	ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	1915	70.17	ug/L	76
48) Naphthalene SCAN	17.905	128	3684	88.02	ug/L	94

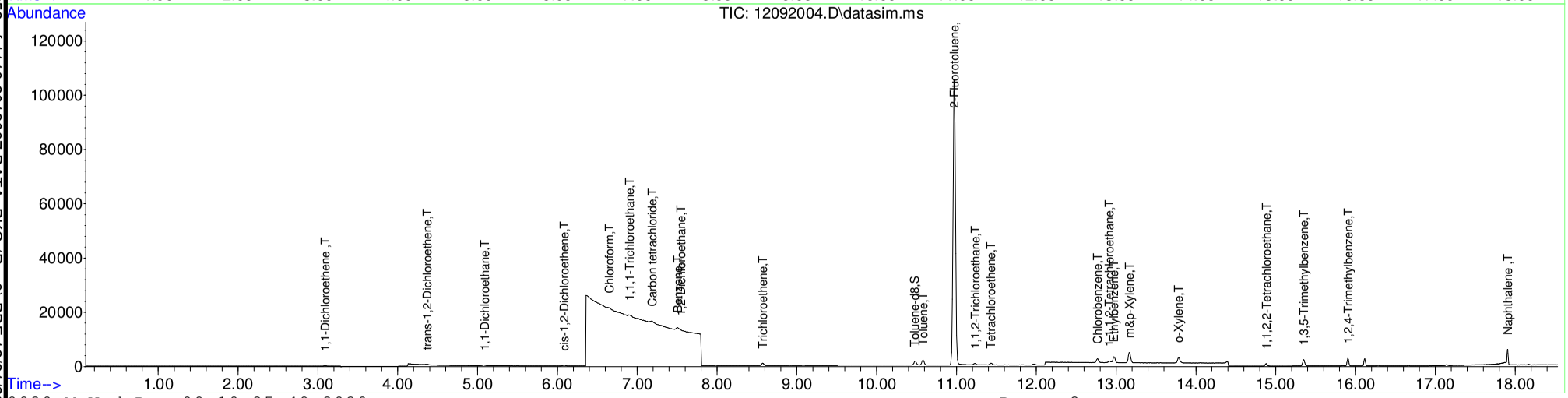
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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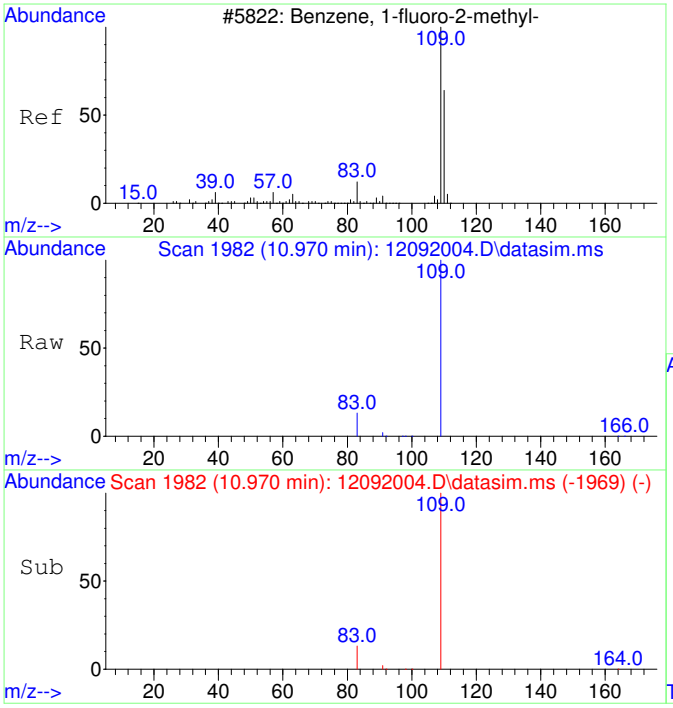
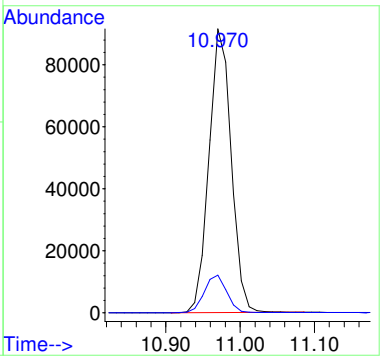
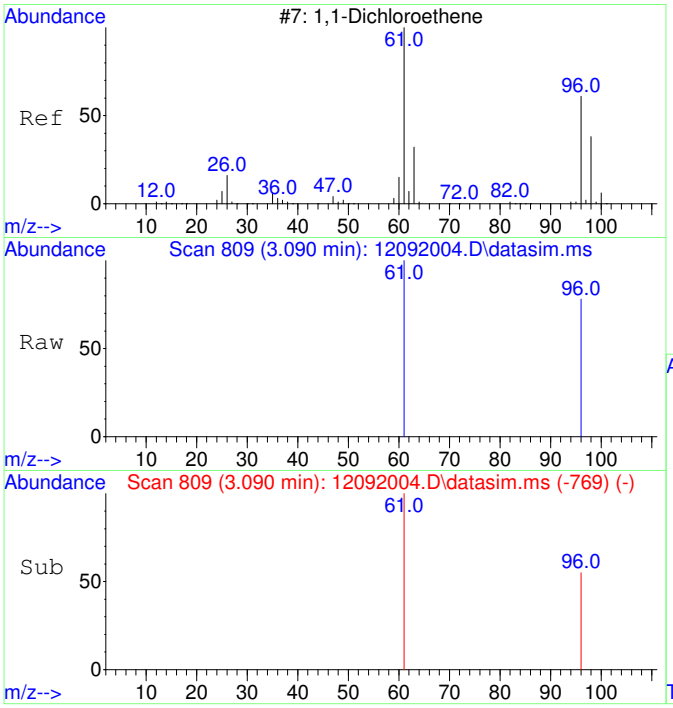


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:109 Resp: 189663

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

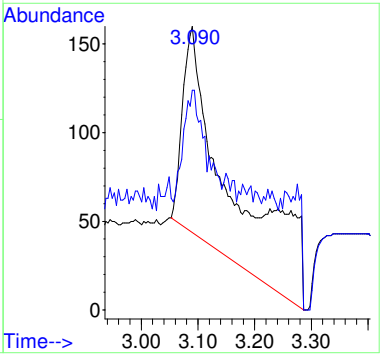




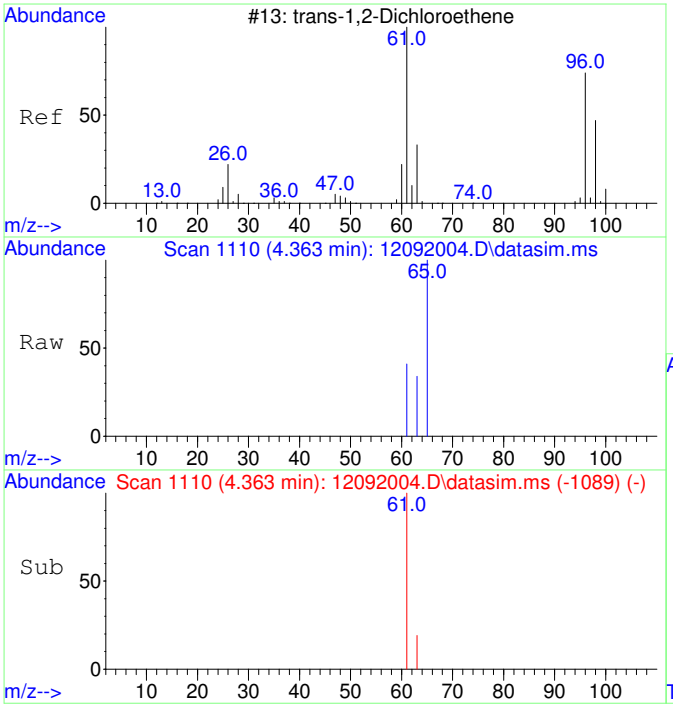
#2
1,1-Dichloroethene
Concen: 89.36 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 672

Ion	Ratio	Lower	Upper
61	100		
96	45.5	37.2	97.2



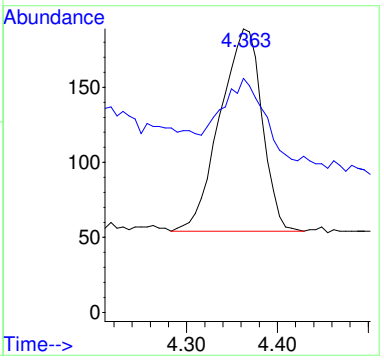
Before MI:
IMPROPER
BASELINE

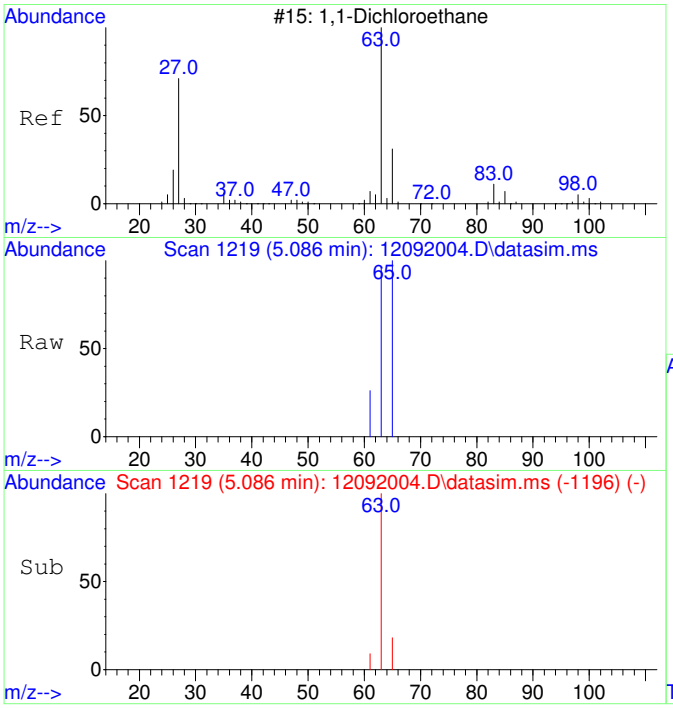


#3
trans-1,2-Dichloroethene
Concen: 45.88 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
63	41.4	2.4	62.4

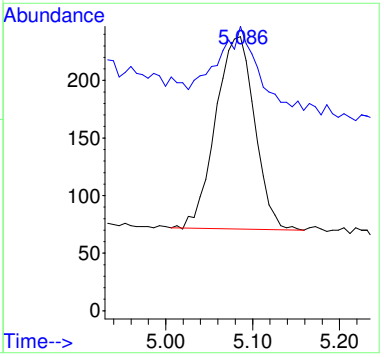


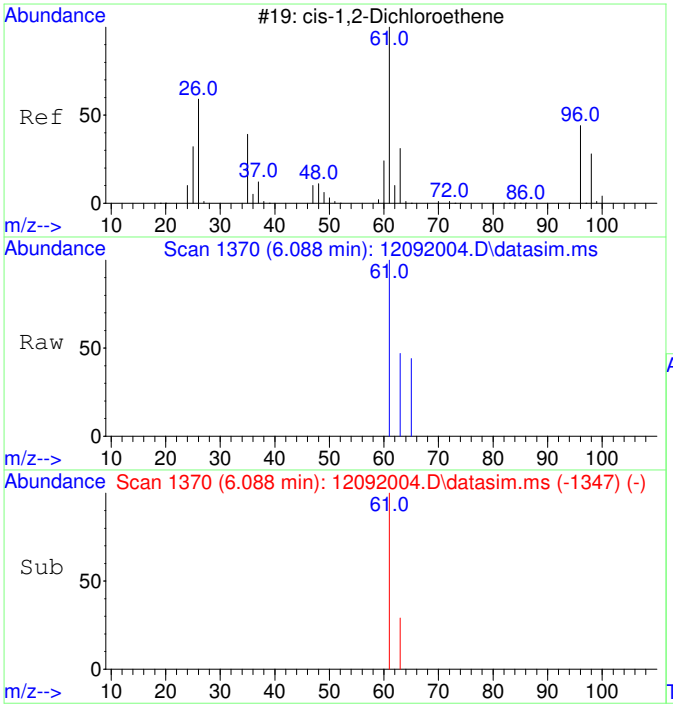


#4
1,1-Dichloroethane
Concen: 46.01 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 63 Resp: 521

Ion	Ratio	Lower	Upper
63	100		
65	54.9	1.8	61.8

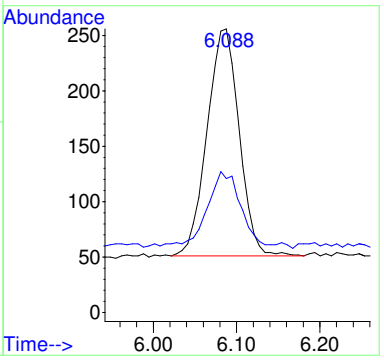


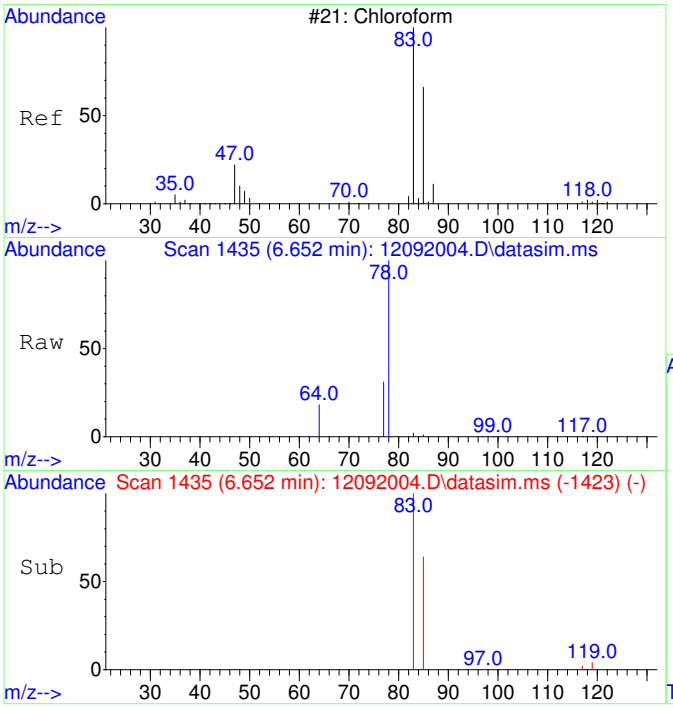


#5
cis-1,2-Dichloroethene
Concen: 46.98 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 551

Ion	Ratio	Lower	Upper
61	100		
63	34.8	2.5	62.5

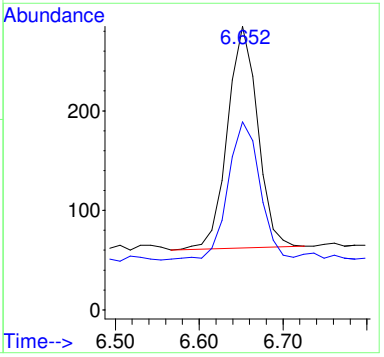


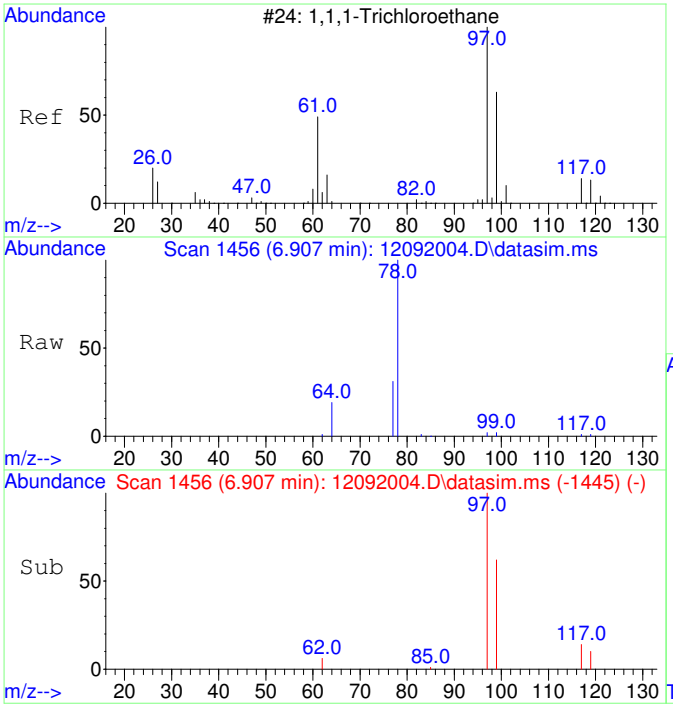


#6
Chloroform
Concen: 49.36 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 556

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

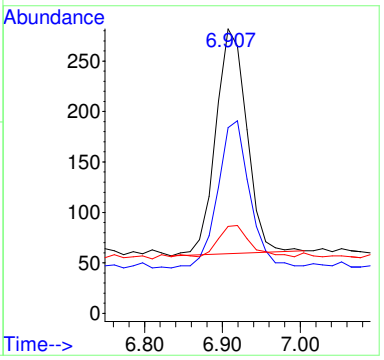


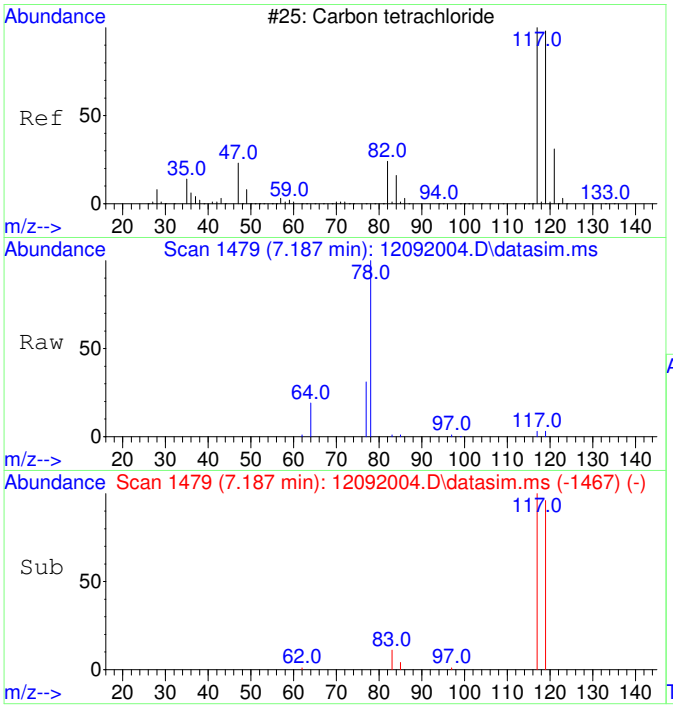


#7
1,1,1-Trichloroethane
Concen: 50.82 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 615

Ion	Ratio	Lower	Upper
97	100		
99	67.8	34.6	94.6
117	18.2	0.0	43.2

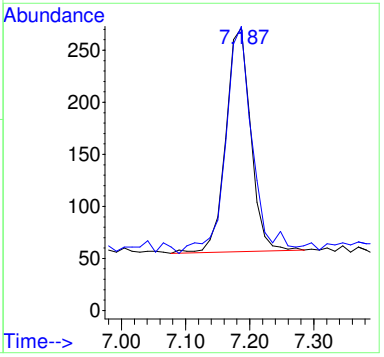


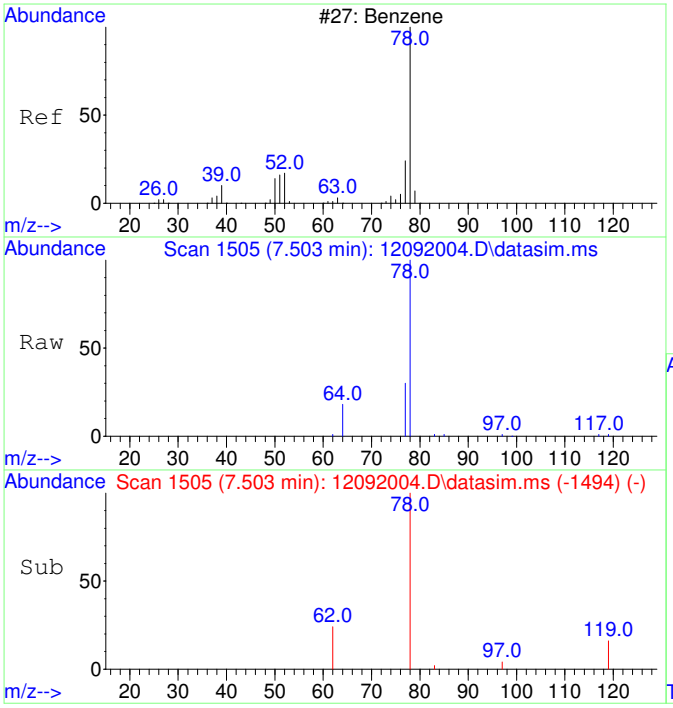


#8
Carbon tetrachloride
Concen: 49.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 575

Ion	Ratio	Lower	Upper
117	100		
119	109.4	66.4	126.4

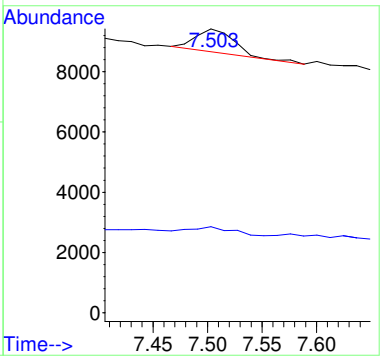


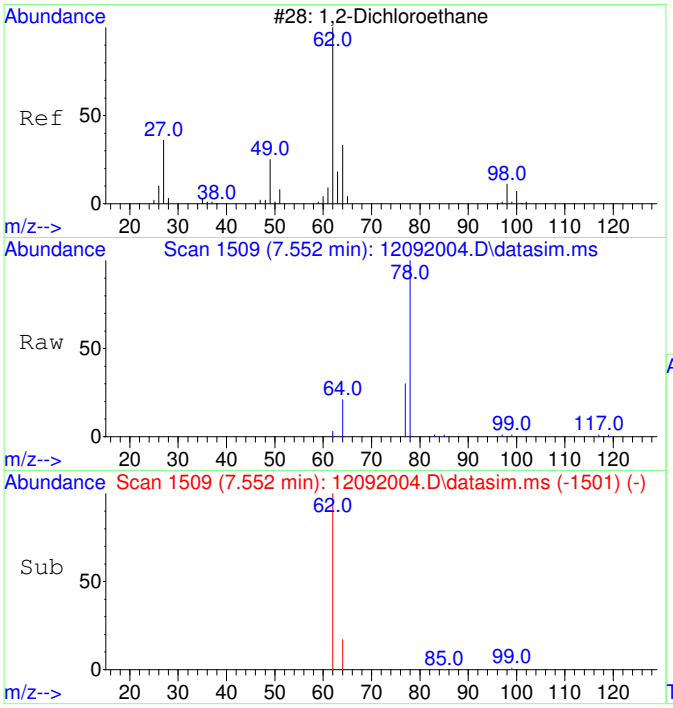


#9
Benzene
Concen: 52.51 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 1676

Ion	Ratio	Lower	Upper
78	100		
77	48.4	0.0	53.2

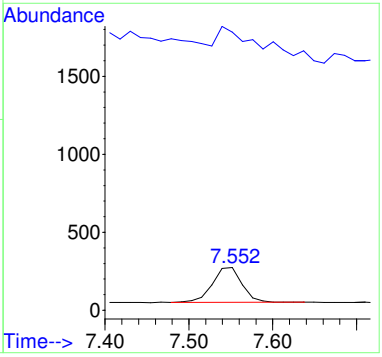


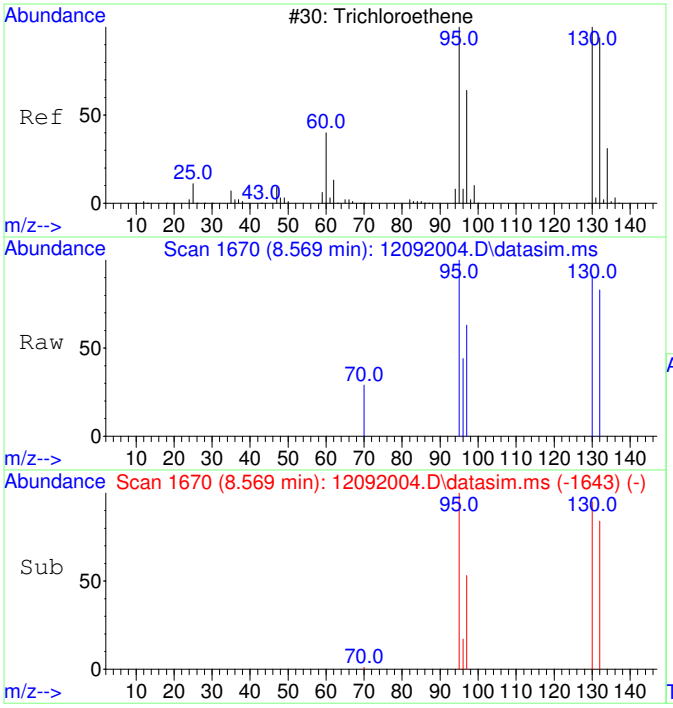


#10
1,2-Dichloroethane
Concen: 50.42 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 62 Resp: 549

Ion	Ratio	Lower	Upper
62	100		
64	148.8	2.3	62.3#

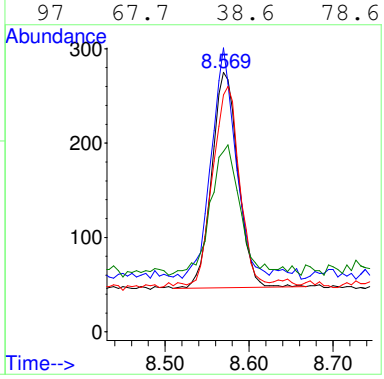


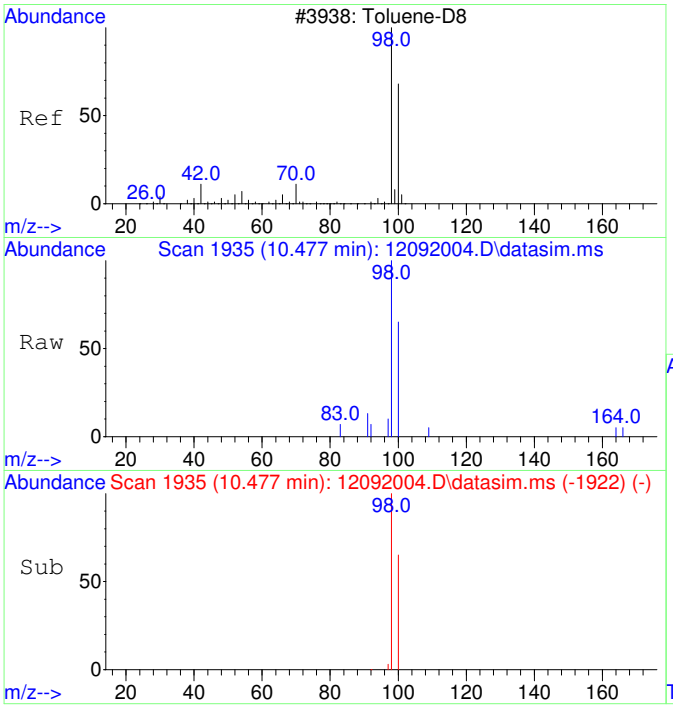


#11
Trichloroethene
Concen: 49.12 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 495

Ion	Ratio	Lower	Upper
130	100		
95	97.8	60.7	120.7
132	98.0	76.0	116.0
97	67.7	38.6	78.6

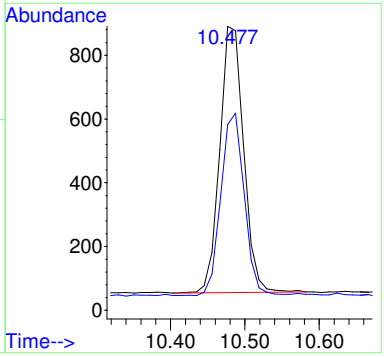


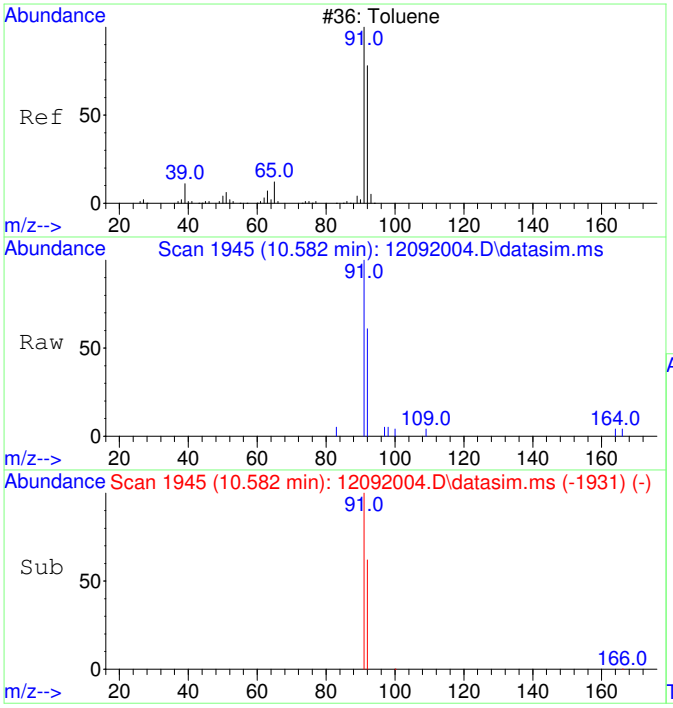


#12
Toluene-d8
Concen: 50.45 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1853

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

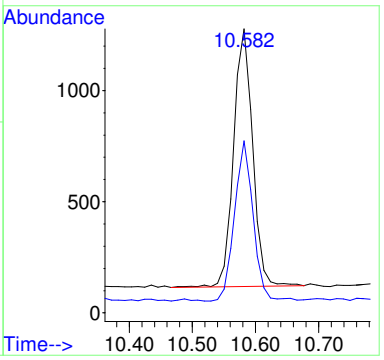


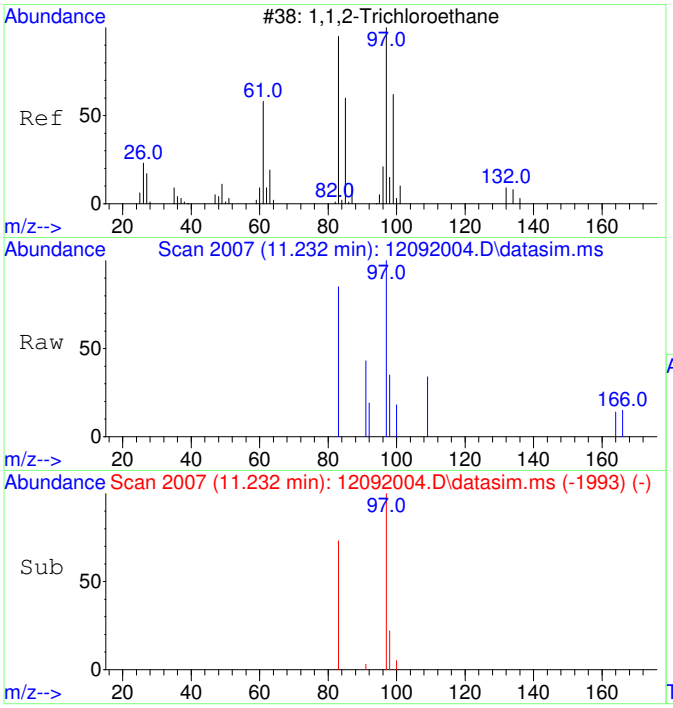


#13
Toluene
Concen: 53.11 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2429

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

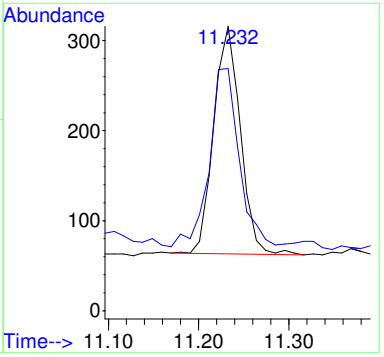


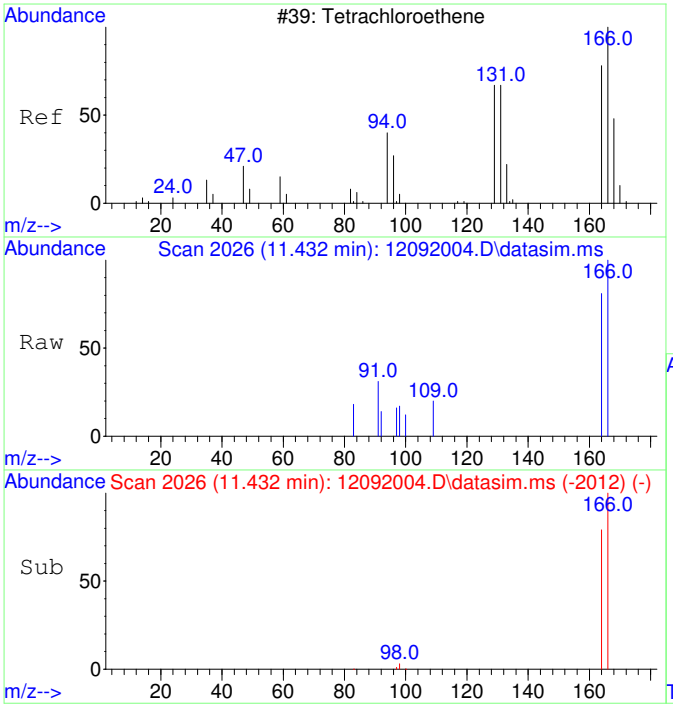


#14
1,1,2-Trichloroethane
Concen: 48.90 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 518

Ion	Ratio	Lower	Upper
97	100		
83	88.2	51.2	111.2

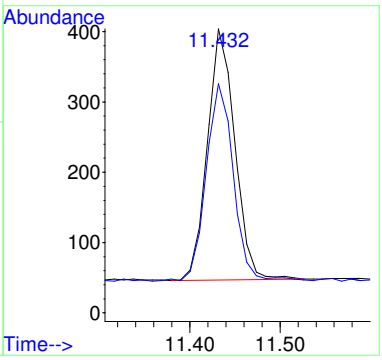


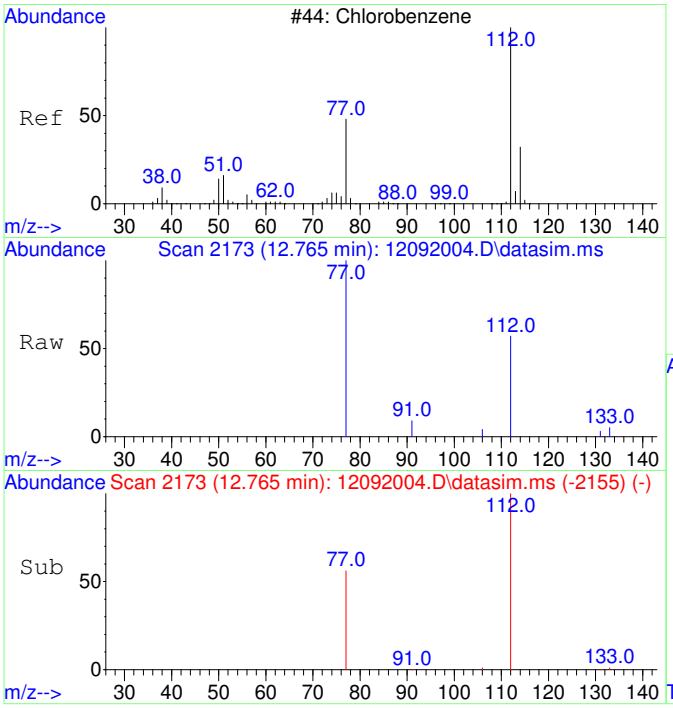


#15
Tetrachloroethene
Concen: 53.07 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 756

Ion	Ratio	Lower	Upper
166	100		
164	77.2	47.8	107.8

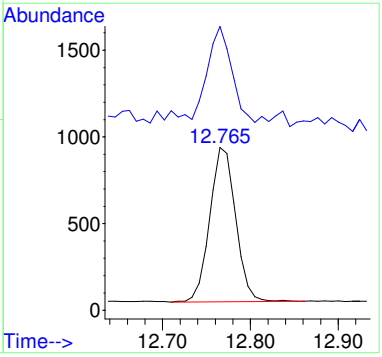


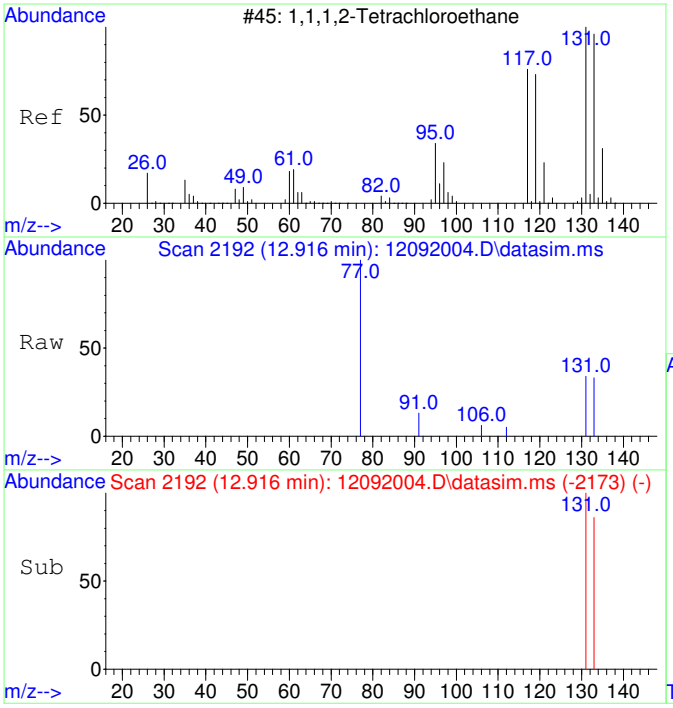


#16
Chlorobenzene
Concen: 51.42 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 1822

Ion	Ratio	Lower	Upper
112	100		
77	59.3	23.6	83.6

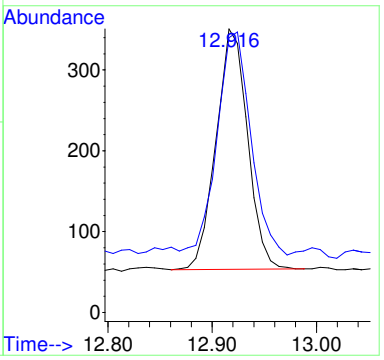


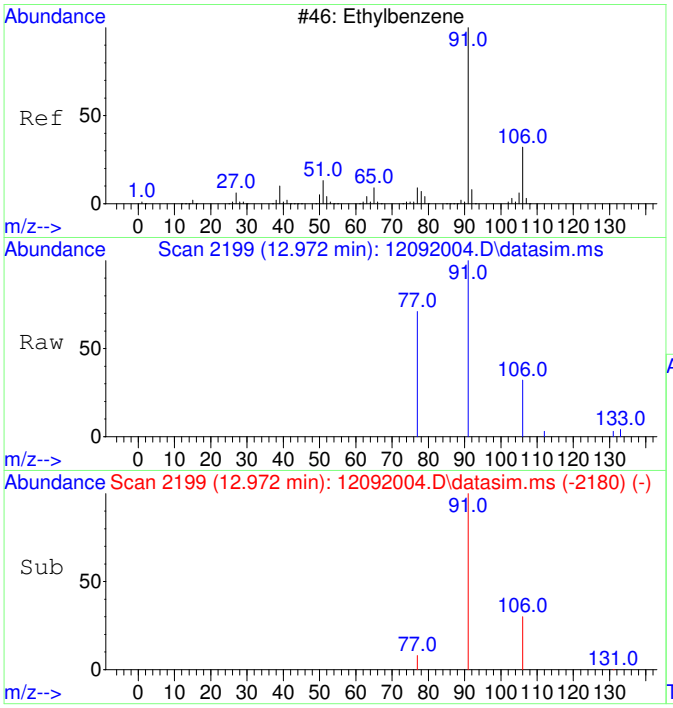


#17
1,1,1,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:131 Resp: 623

Ion	Ratio	Lower	Upper
131	100		
133	100.8	66.3	126.3

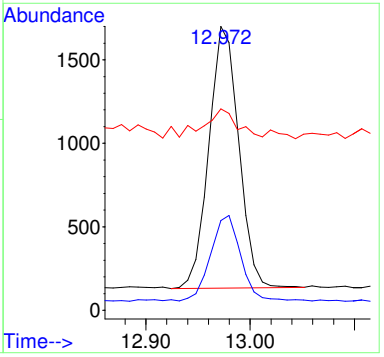


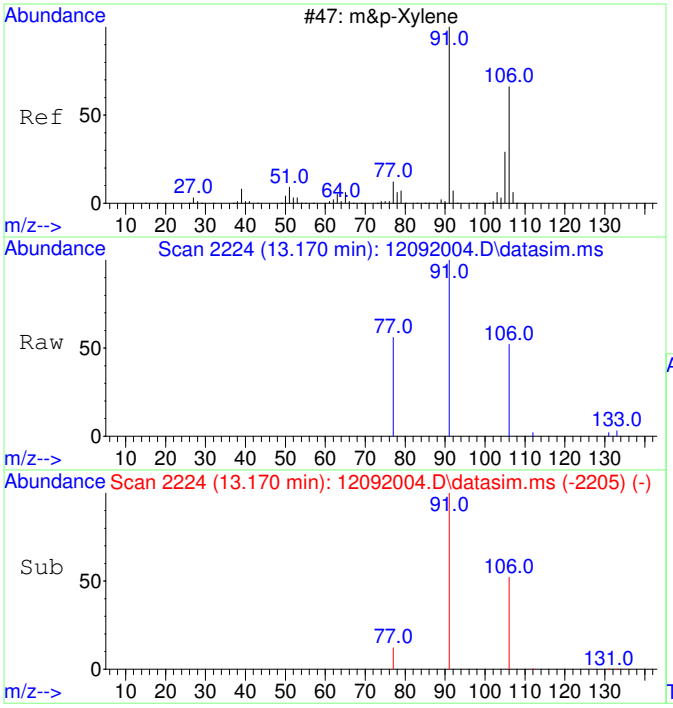


#18
Ethylbenzene
Concen: 53.26 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3111

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	12.9	0.0	38.2

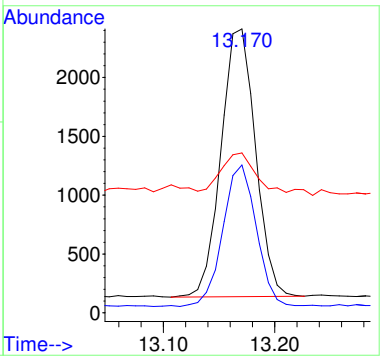


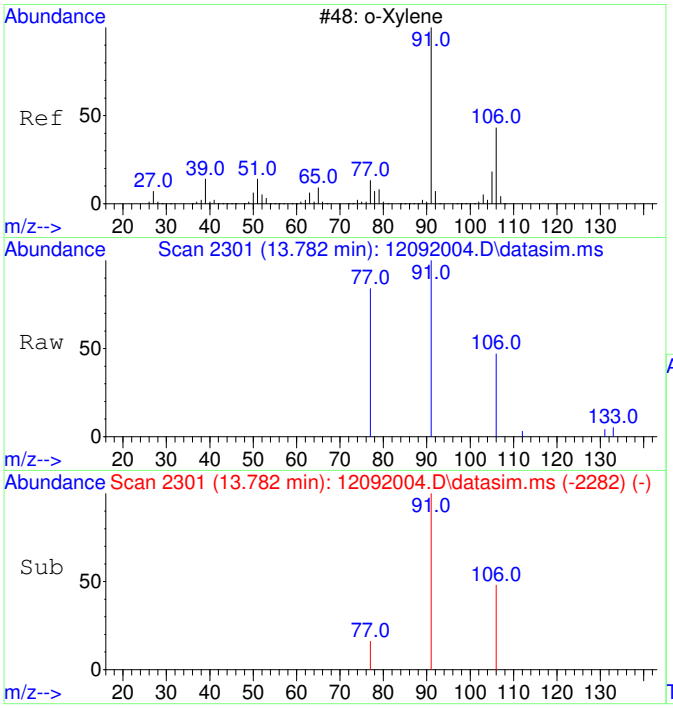


#19
m&p-Xylene
Concen: 108.81 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 4895

Ion	Ratio	Lower	Upper
91	100		
106	51.1	22.2	82.2
77	17.4	0.0	42.4

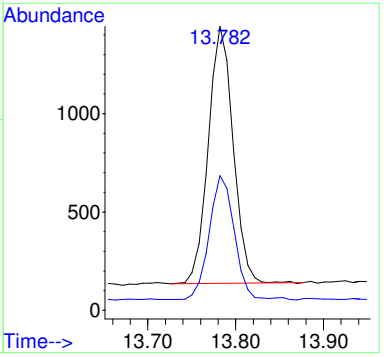


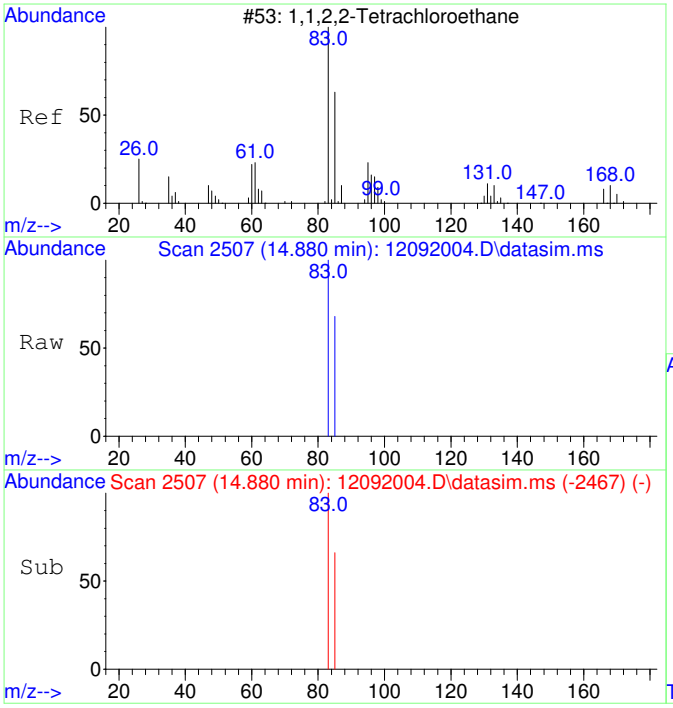


#20
o-Xylene
Concen: 53.15 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

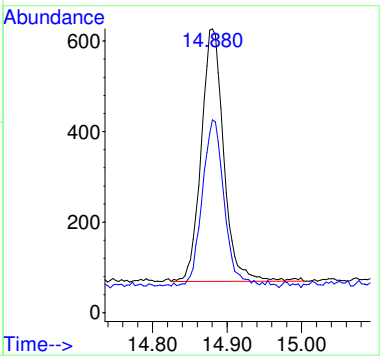


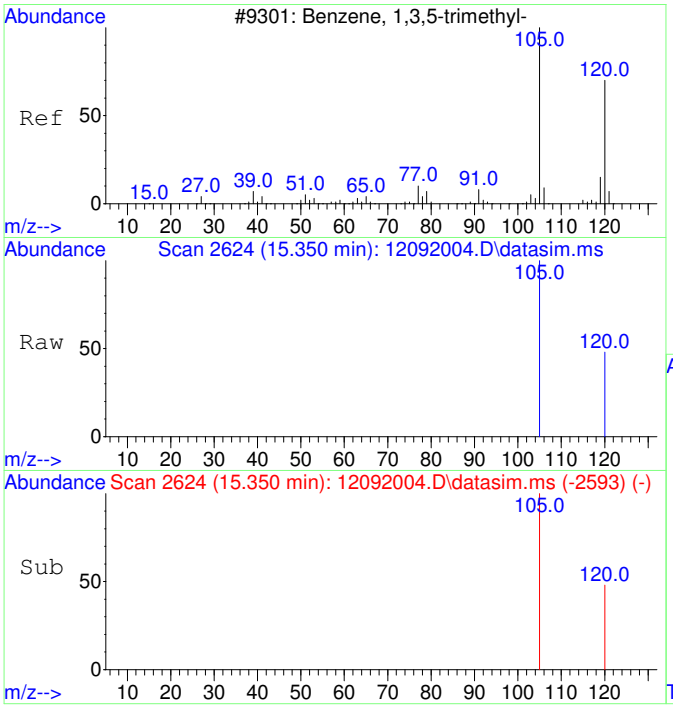


#21
1,1,2,2-Tetrachloroethane
Concen: 51.97 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 1170

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.8	94.8

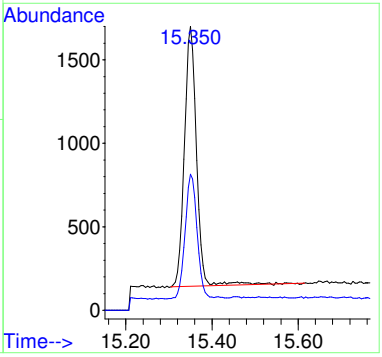


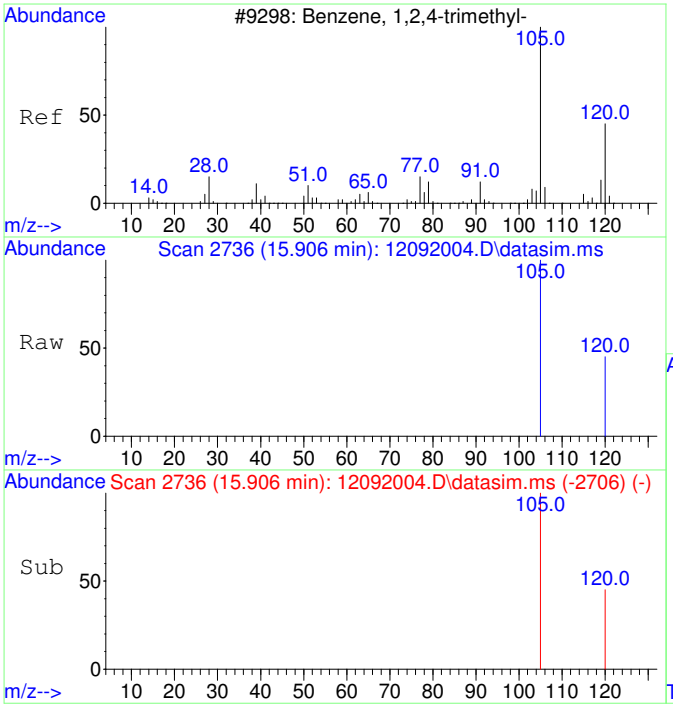


#22
1,3,5-Trimethylbenzene
Concen: 57.08 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3033

Ion	Ratio	Lower	Upper
105	100		
120	46.9	21.1	81.1

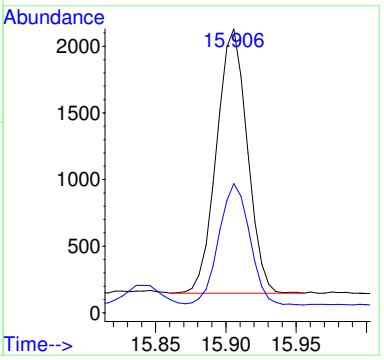


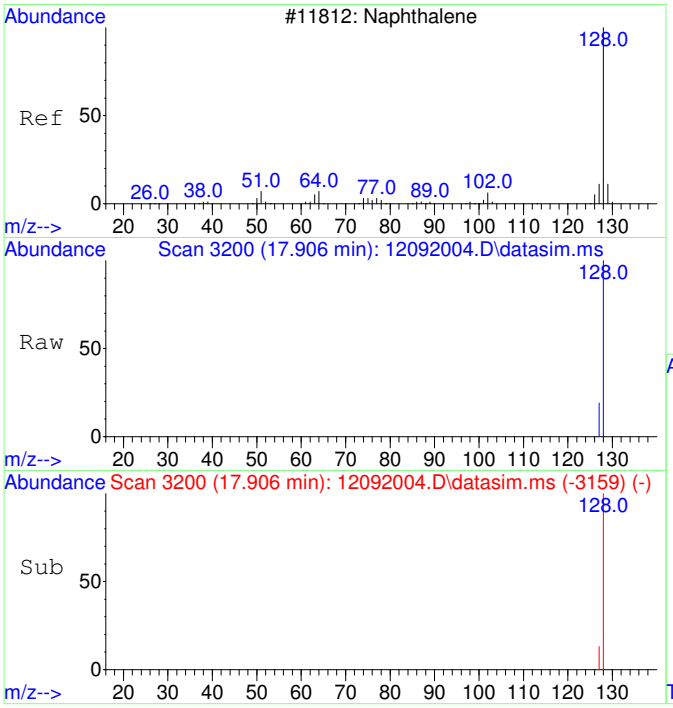


#23
1,2,4-Trimethylbenzene
Concen: 55.38 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3010

Ion	Ratio	Lower	Upper
105	100		
120	45.4	17.2	77.2

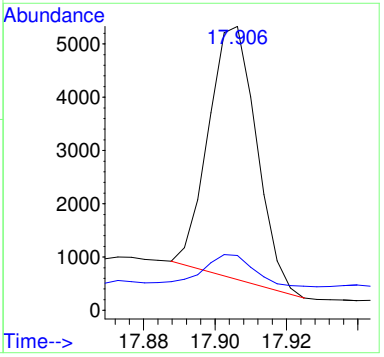




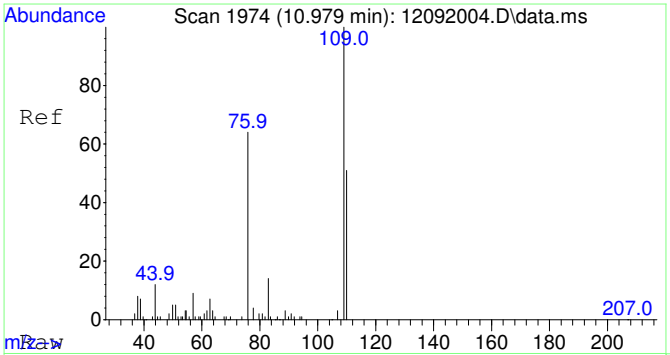
#24
Naphthalene
Concen: 49.26 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 4337

Ion	Ratio	Lower	Upper
128	100		
127	11.6	0.0	42.5



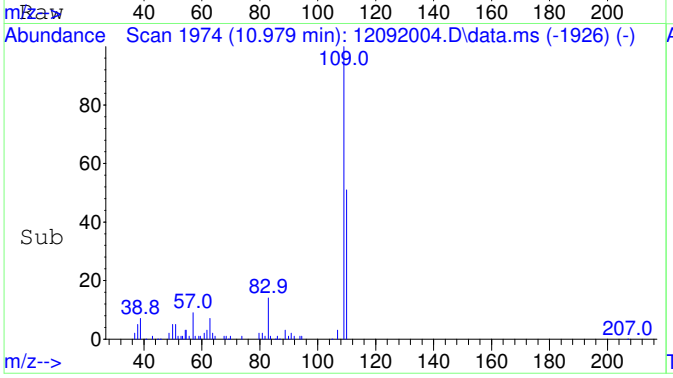
Before MI:
IMPROPER
BASELINE

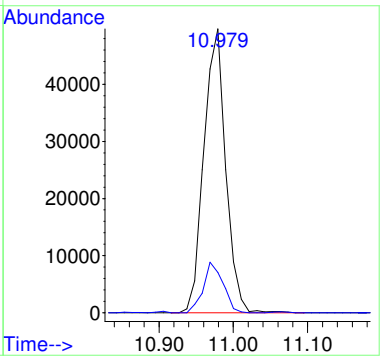


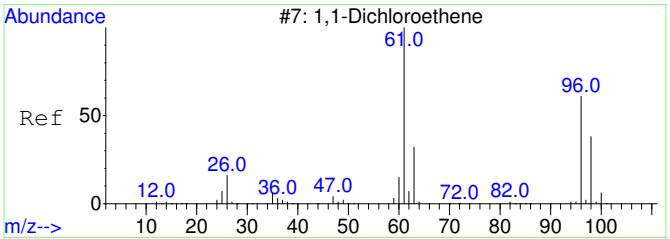
#25
2-Fluorotoluene SCAN
Concen: 4719.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

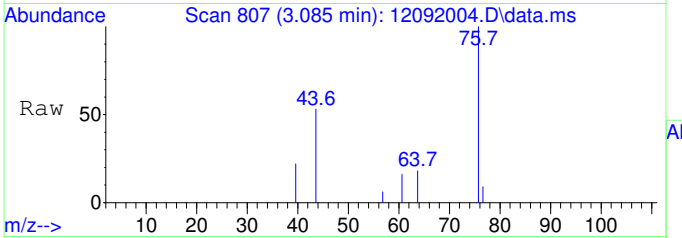
Tgt Ion:109 Resp: 101604

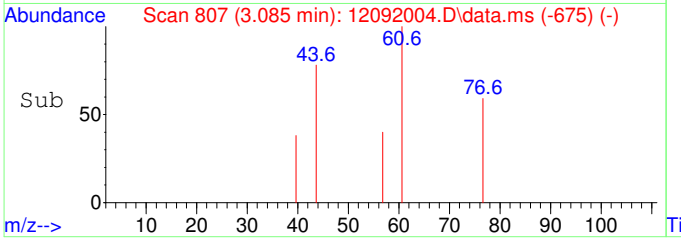
Ion	Ratio	Lower	Upper
109	100		
83	16.1	0.0	43.8







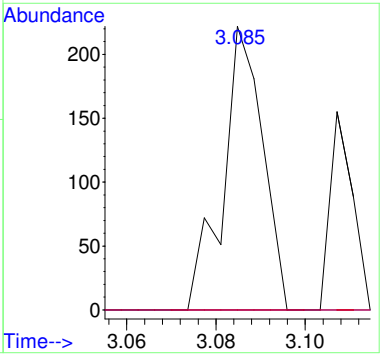


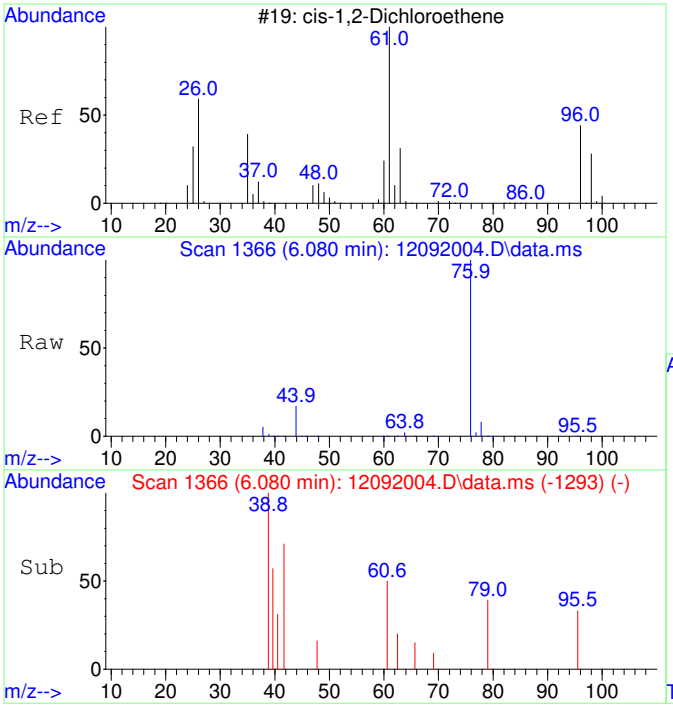


#26
1,1-Dichloroethene SCAN
Concen: 27.26 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 137

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

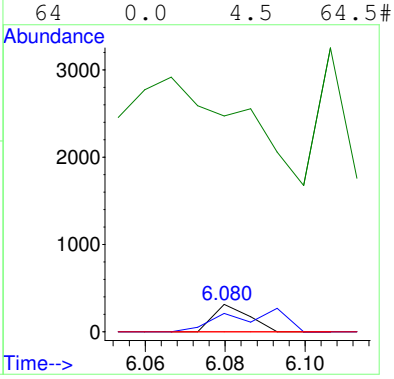


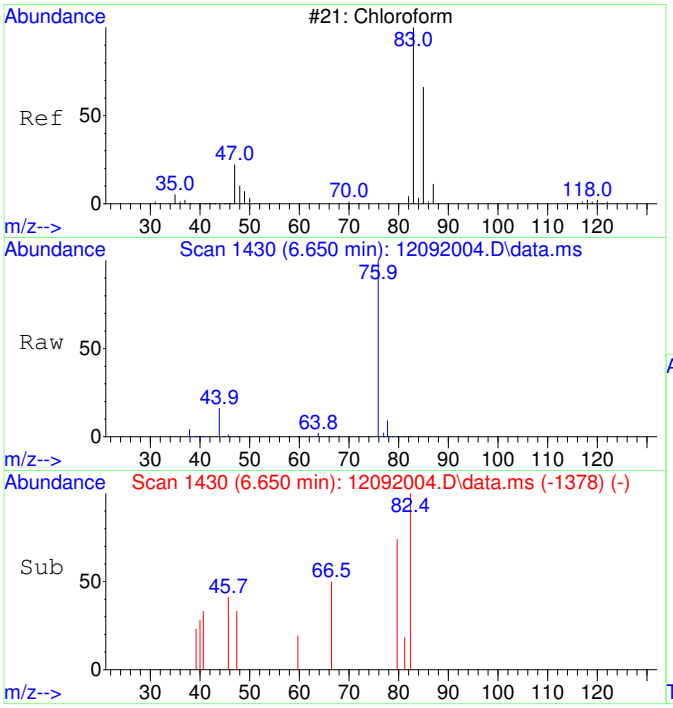


#29
cis-1,2-Dichloroethene SCAN
Concen: 26.25 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 195

Ion	Ratio	Lower	Upper
61	100		
96	130.8	39.9	99.9#
98	0.0	13.5	73.5#
64	0.0	4.5	64.5#

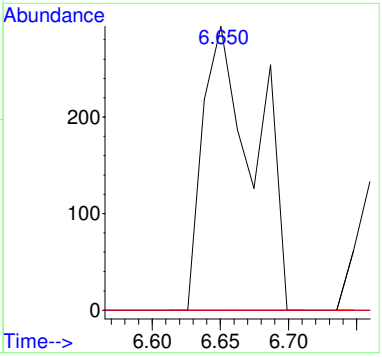


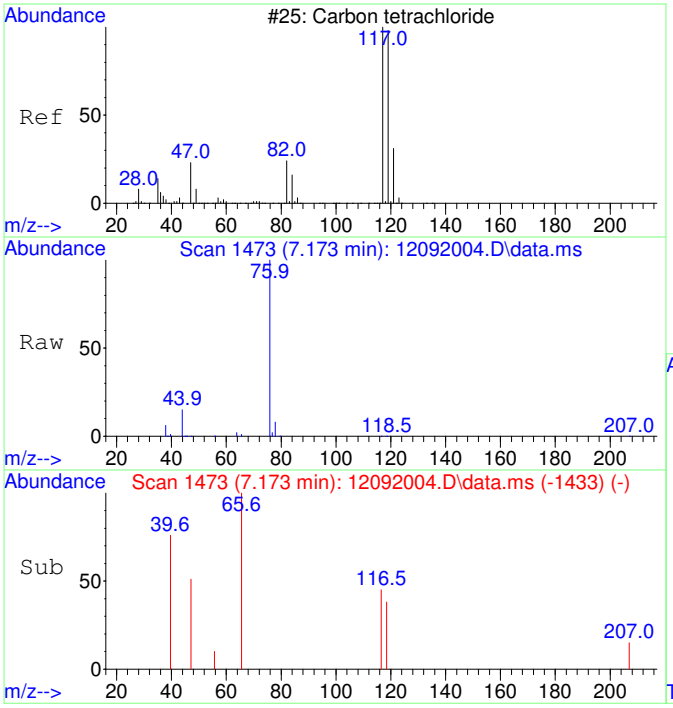


#30
Chloroform SCAN
Concen: 113.59 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 787

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

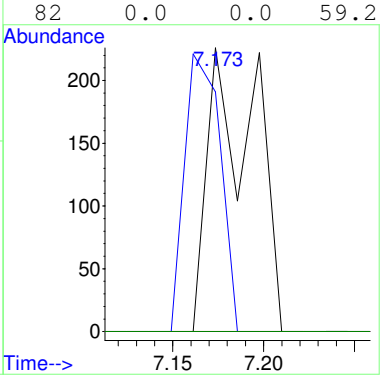


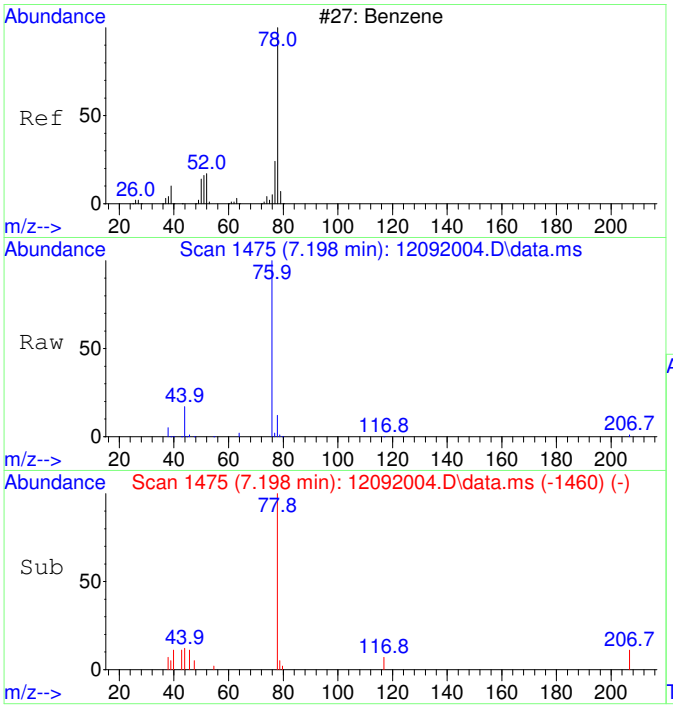


#32
Carbon tetrachloride SCAN
Concen: 65.96 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 403

Ion	Ratio	Lower	Upper
117	100		
119	74.7	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

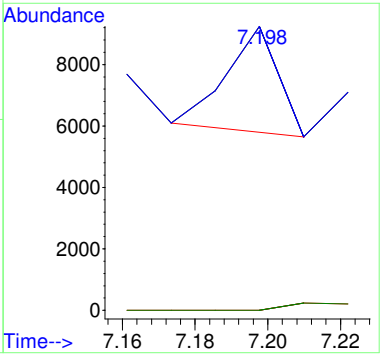


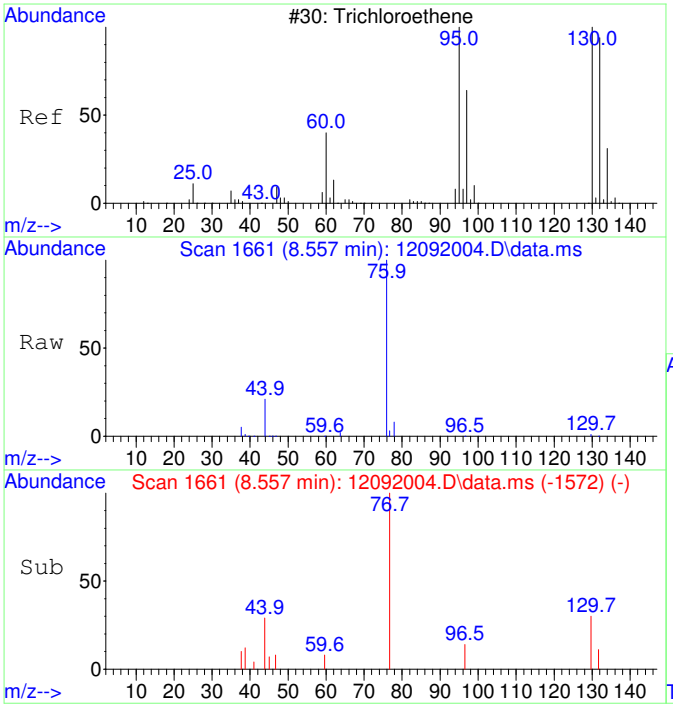


#33
Benzene SCAN
Concen: 149.19 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. -0.316 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 3227

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.0	0.0	47.9
51	10.0	0.0	44.1

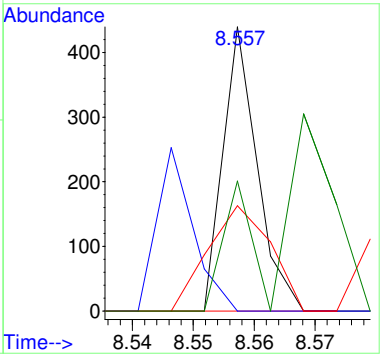


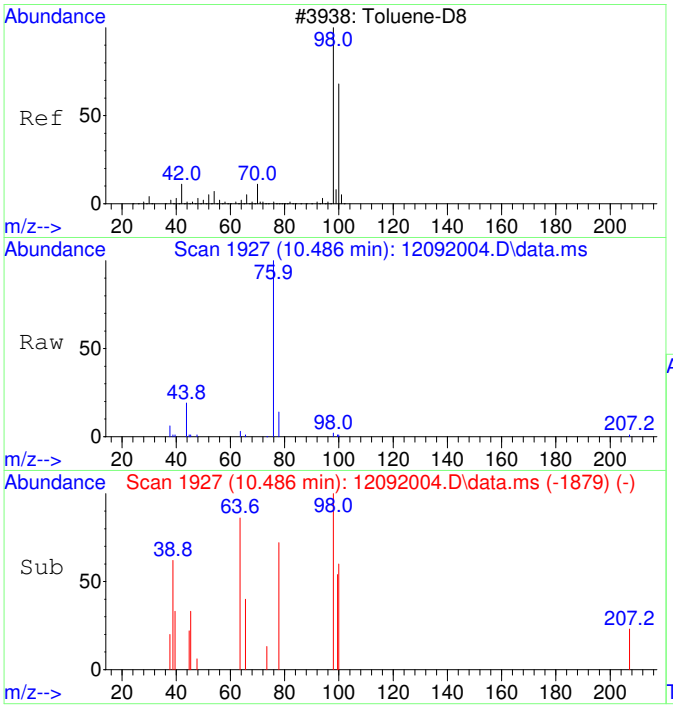


#35
Trichloroethene SCAN
Concen: 36.47 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.016 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 172

Ion	Ratio	Lower	Upper
130	100		
95	60.5	60.5	120.5#
132	68.0	59.6	119.6
97	0.0	28.2	88.2#

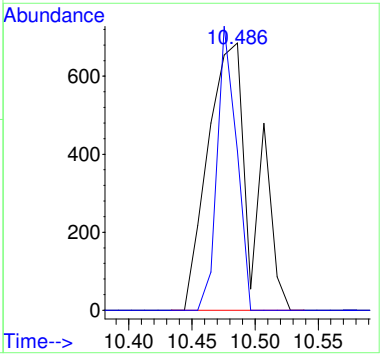


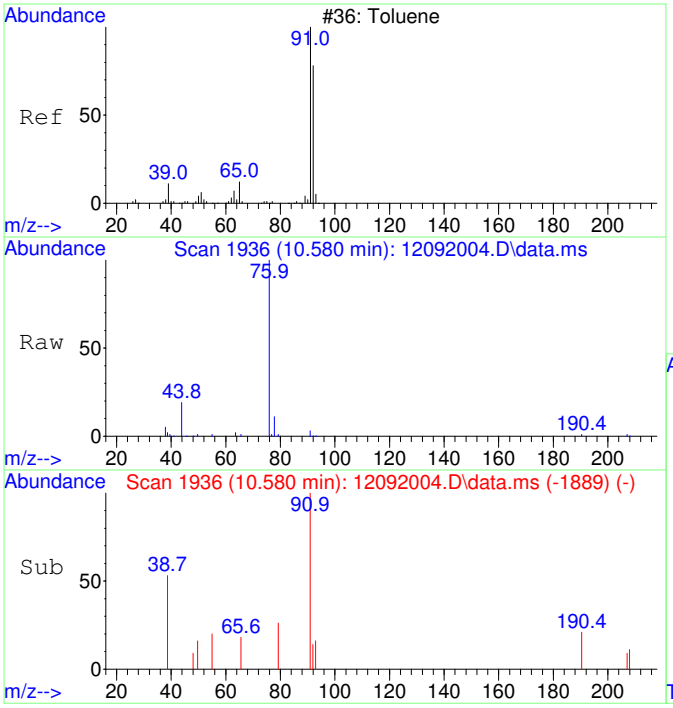


#36
Toluene-d8 SCAN
Concen: 82.81 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1672

Ion	Ratio	Lower	Upper
98	100		
100	46.5	40.0	100.0

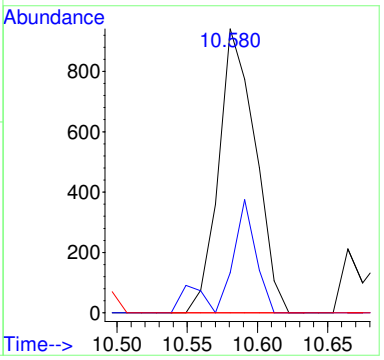


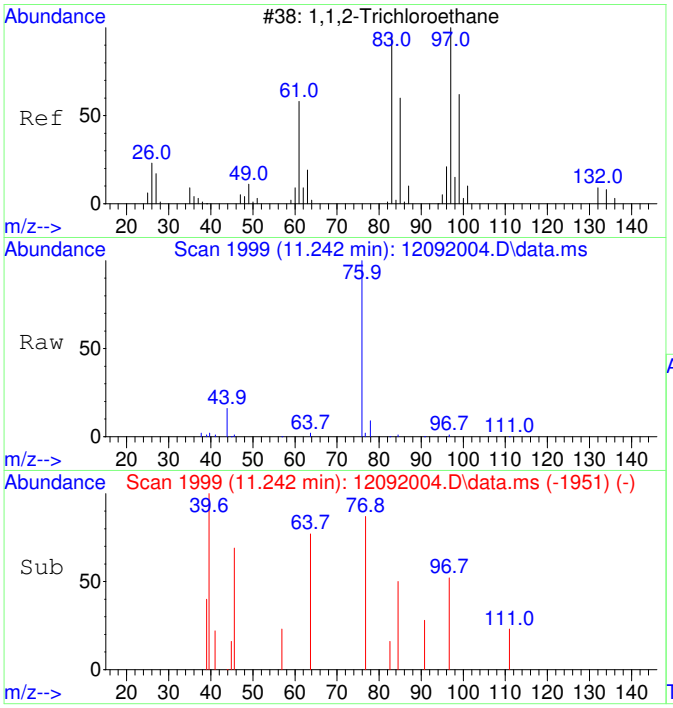


#37
Toluene SCAN
Concen: 69.31 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1723

Ion	Ratio	Lower	Upper
91	100		
92	29.7	28.3	88.3
65	0.0	0.0	41.0

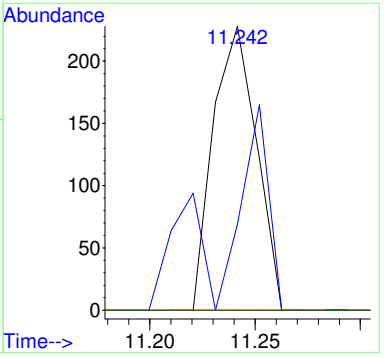


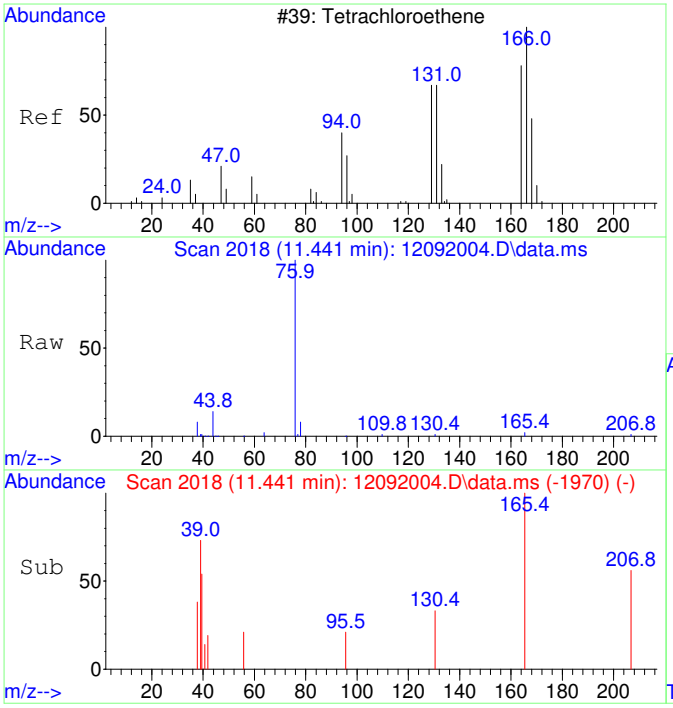


#38
1,1,2-Trichloroethane SCAN
Concen: 52.32 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 326

Ion	Ratio	Lower	Upper
97	100		
83	45.1	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

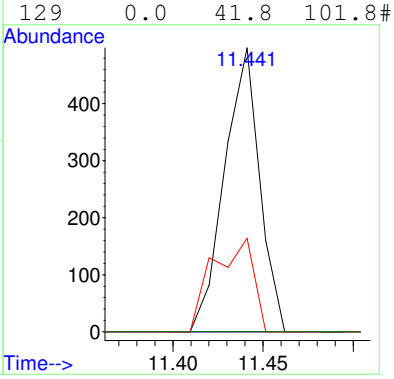


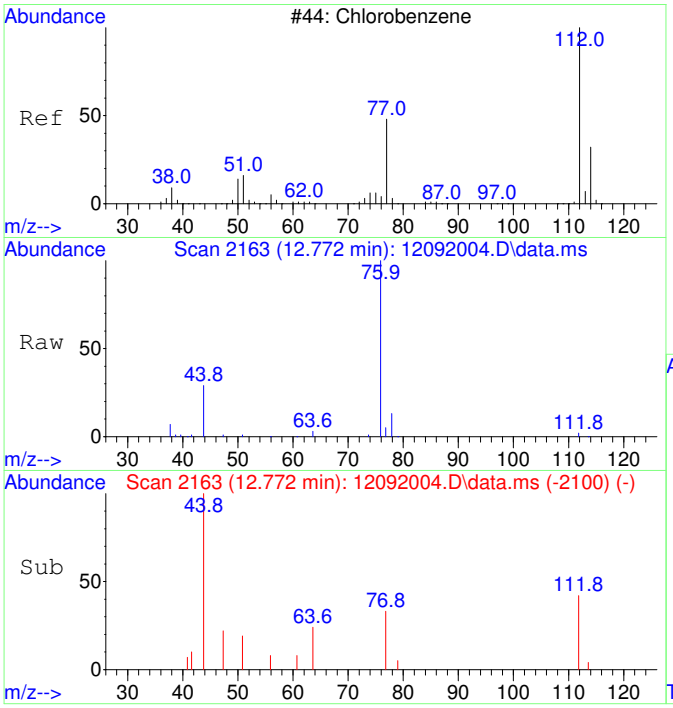


#39
Tetrachloroethene SCAN
Concen: 120.87 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 676

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	37.9	38.7	98.7#
129	0.0	41.8	101.8#

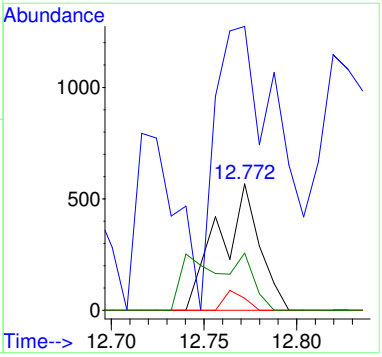


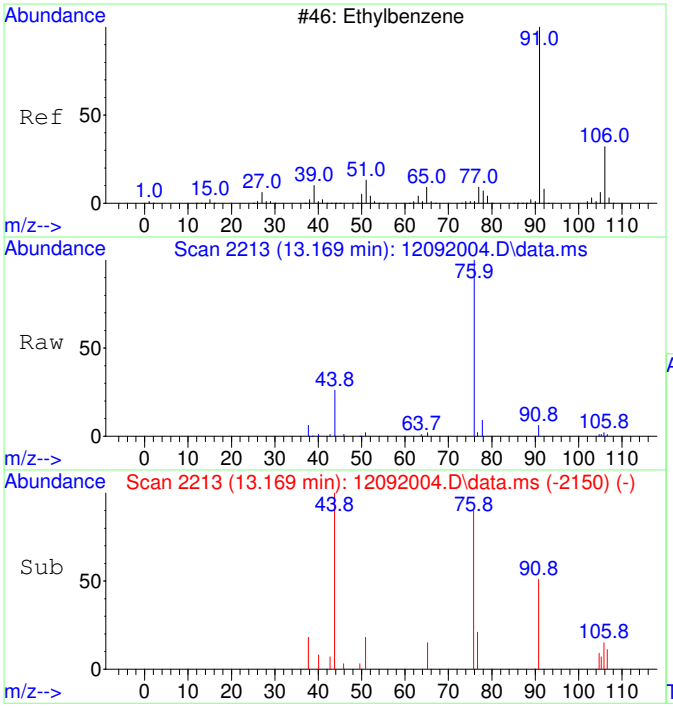


#40
Chlorobenzene SCAN
Concen: 48.89 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 873

Ion	Ratio	Lower	Upper
112	100		
77	267.7	28.2	88.2#
114	7.9	2.3	62.3
51	60.8	0.0	50.1#

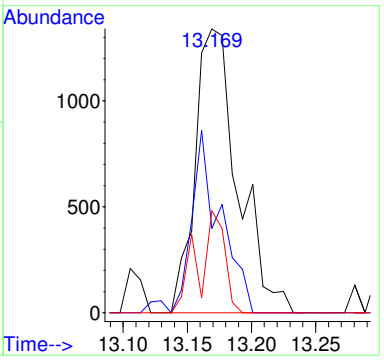


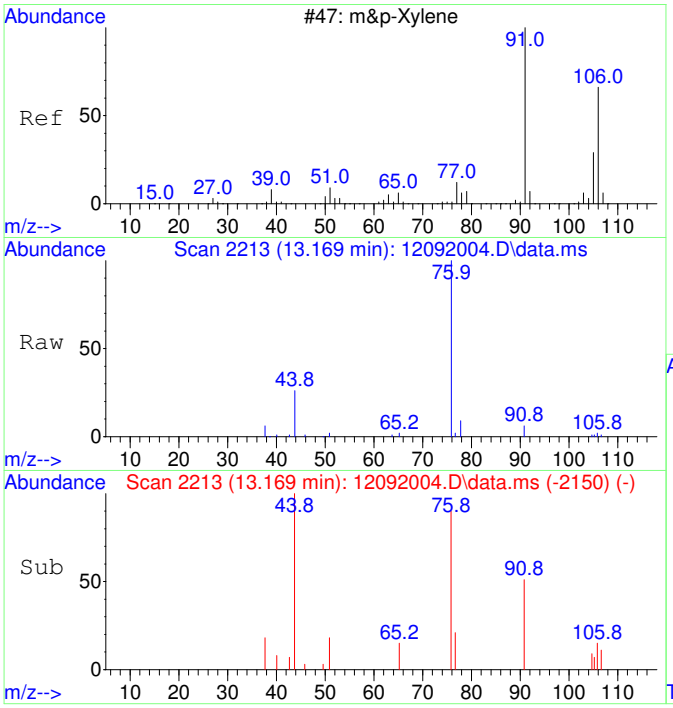


#42
Ethylbenzene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
51	22.1	0.0	40.1

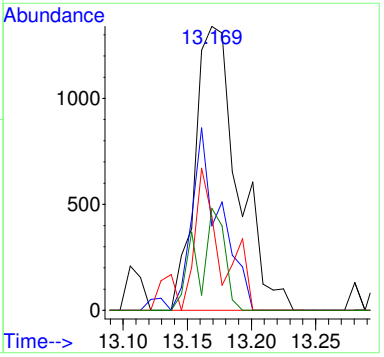


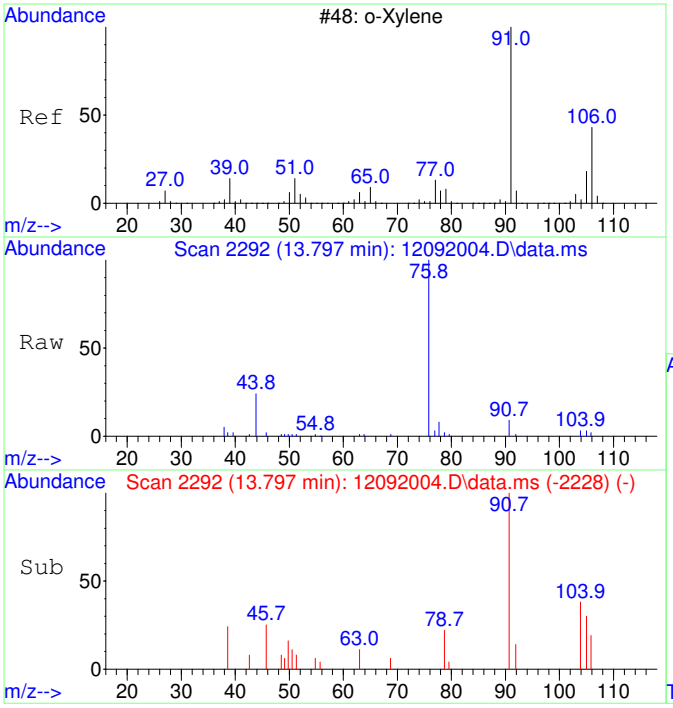


#43
m&p-Xylene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
105	35.1	0.0	54.7
51	22.1	0.0	40.1

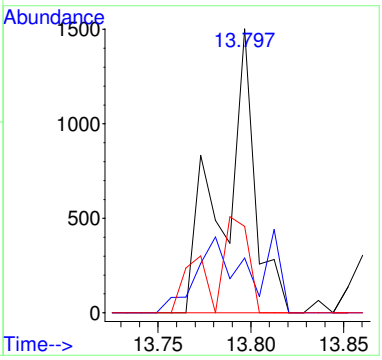


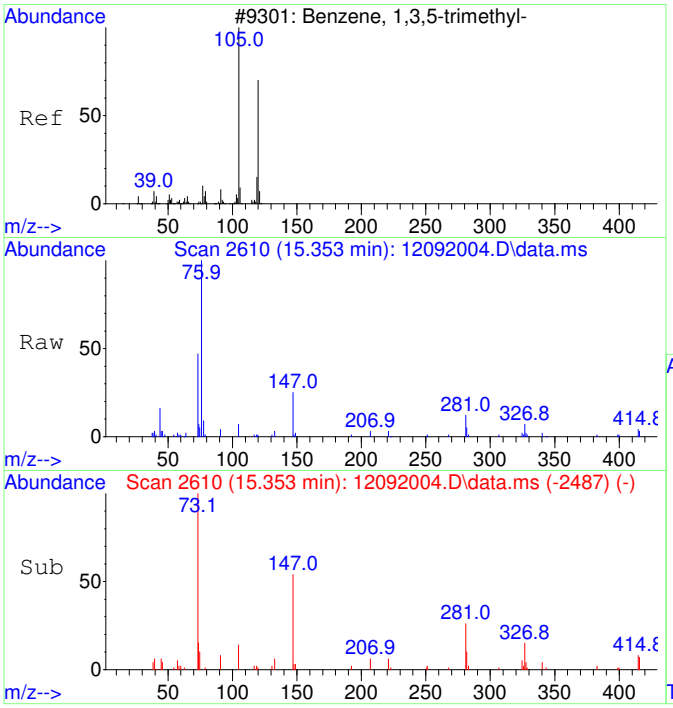


#44
o-Xylene SCAN
Concen: 68.81 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1780

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	40.3	0.0	56.6

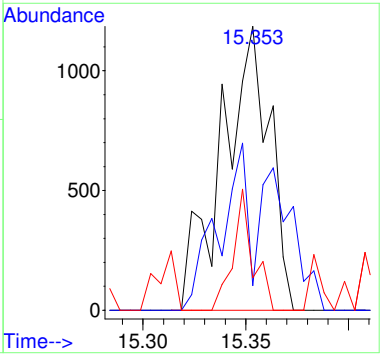


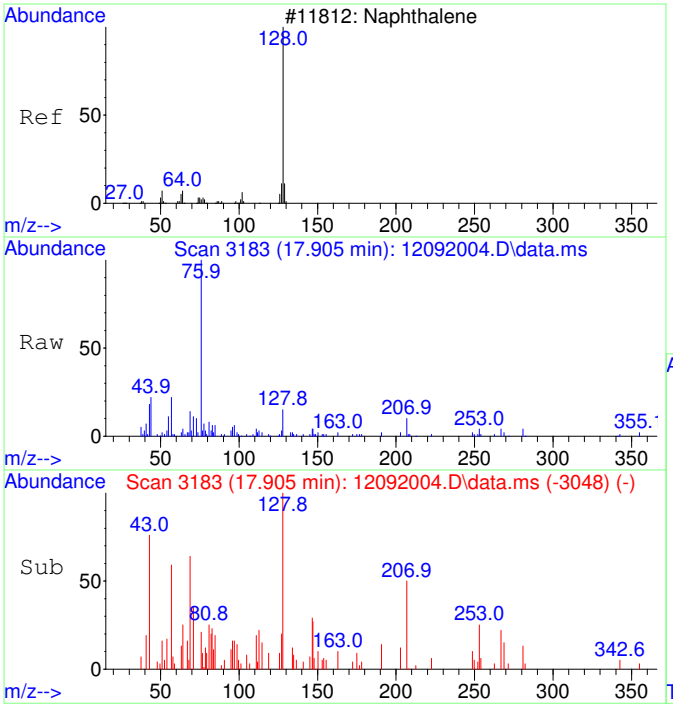


#46
1,3,5-Trimethylbenzene SCAN
Concen: 70.17 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 1915

Ion	Ratio	Lower	Upper
105	100		
120	29.8	18.3	78.3
119	17.5	0.0	43.1

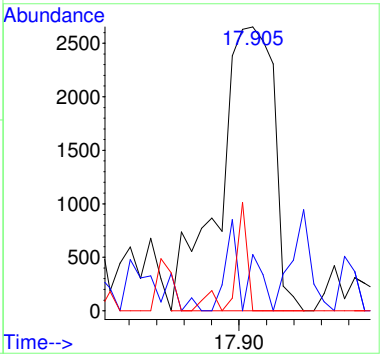




#48
Naphthalene SCAN
Concen: 88.02 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 3684

Ion	Ratio	Lower	Upper
128	100		
127	11.8	0.0	44.0
129	8.6	0.0	40.8



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 10:28 am, Dec 09, 2020

M.I. Approved By:
ZAR at 2:58 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

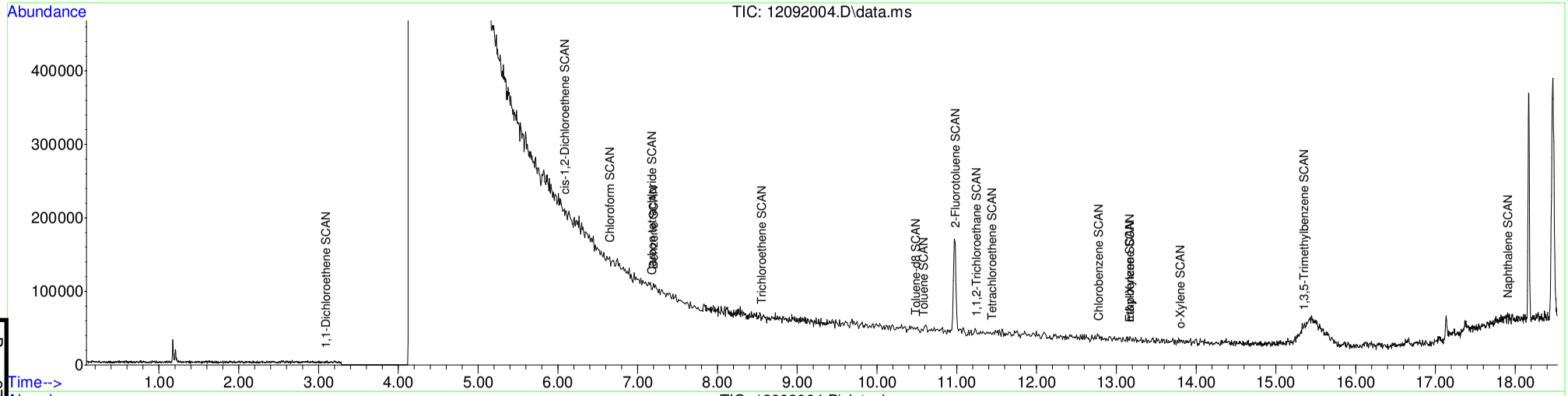
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	189663	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1853	50.45 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	337m	44.81 ug/L	
3] trans-1,2-Dichloroethene	4.363	61	435	45.88 ug/L	84
4] 1,1-Dichloroethane	5.086	63	521	46.01 ug/L	58
5] cis-1,2-Dichloroethene	6.088	61	551	46.98 ug/L	96
6] Chloroform	6.652	83	556	49.36 ug/L	98
7] 1,1,1-Trichloroethane	6.907	97	615	50.82 ug/L	94
8] Carbon tetrachloride	7.187	117	575	49.70 ug/L	87
9] Benzene	7.503	78	1676	52.51 ug/L	48
10] 1,2-Dichloroethane	7.552	62	549	50.42 ug/L #	1
11] Trichloroethene	8.569	130	495	49.12 ug/L	94
13] Toluene	10.582	91	2429	53.11 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	518	48.90 ug/L	92
15] Tetrachloroethene	11.432	166	756	53.07 ug/L	99
16] Chlorobenzene	12.765	112	1822	51.42 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	623	50.24 ug/L	95
18] Ethylbenzene	12.972	91	3111	53.26 ug/L	97
19] m&p-Xylene	13.170	91	4895	108.81 ug/L	96
20] o-Xylene	13.782	91	2568	53.15 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	1170	51.97 ug/L	97
22] 1,3,5-Trimethylbenzene	15.350	105	3033	57.08 ug/L	94
23] 1,2,4-Trimethylbenzene	15.906	105	3010	55.38 ug/L	97
24] Naphthalene	17.906	128	5133m	58.30 ug/L	
25) 2-Fluorotoluene SCAN	10.979	109	101604	4719.47 ug/L	94
26) 1,1-Dichloroethene SCAN	3.085	61	137	27.26 ug/L #	25
29) cis-1,2-Dichloroethene...	6.080	61	195	26.25 ug/L #	31
30) Chloroform SCAN	6.650	83	787	113.59 ug/L #	27
32) Carbon tetrachloride SCAN	7.173	117	403	65.96 ug/L #	61
33) Benzene SCAN	7.198	78	3227	149.19 ug/L	97
35) Trichloroethene SCAN	8.557	130	172	36.47 ug/L #	60
36) Toluene-d8 SCAN	10.486	98	1672	82.81 ug/L	71
37) Toluene SCAN	10.580	91	1723	69.31 ug/L #	63
38) 1,1,2-Trichloroethane ...	11.242	97	326	52.32 ug/L #	33
39) Tetrachloroethene SCAN	11.441	166	676	120.87 ug/L #	27
40) Chlorobenzene SCAN	12.772	112	873	48.89 ug/L #	1
42) Ethylbenzene SCAN	13.169	91	3117	65.79 ug/L	84
43) m&p-Xylene SCAN	13.169	91	3117	65.79 ug/L	83
44) o-Xylene SCAN	13.797	91	1780	68.81 ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	1915	70.17 ug/L	76
48) Naphthalene SCAN	17.905	128	3684	88.02 ug/L	94

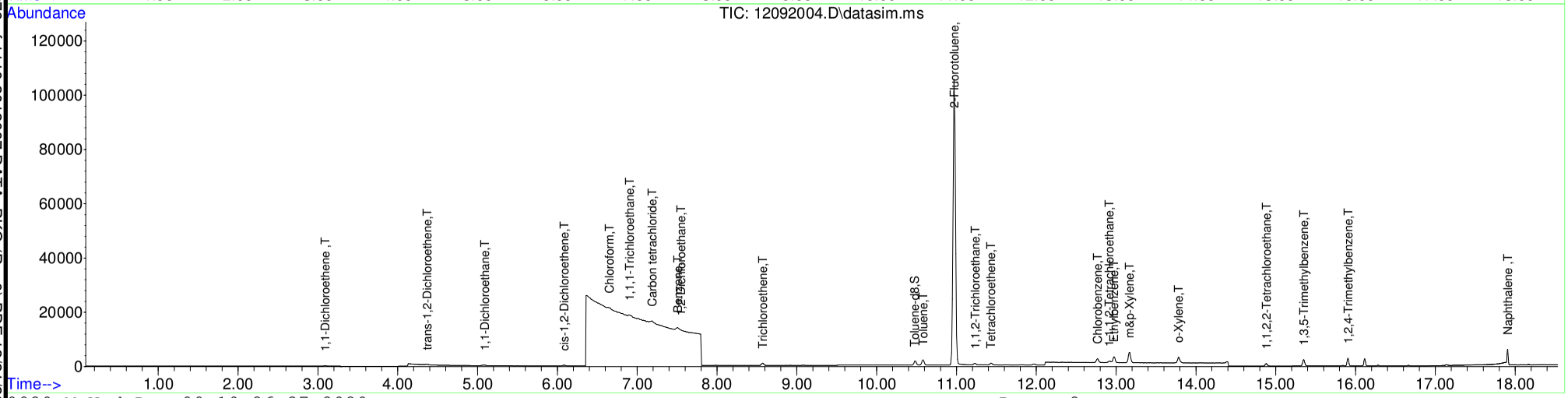
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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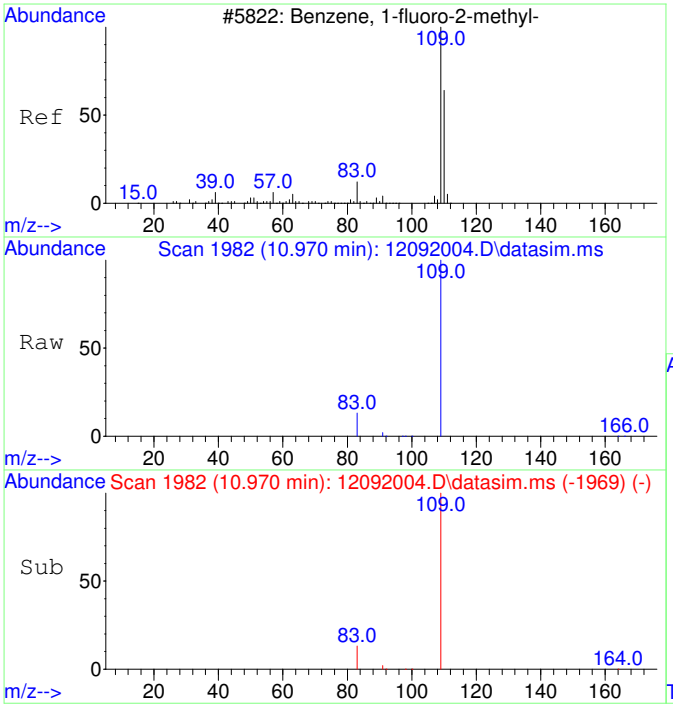
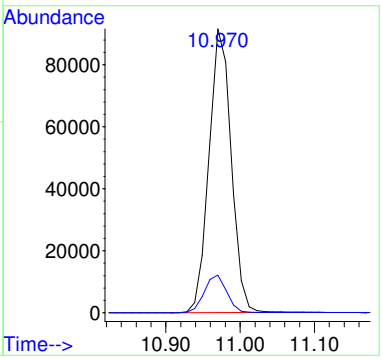
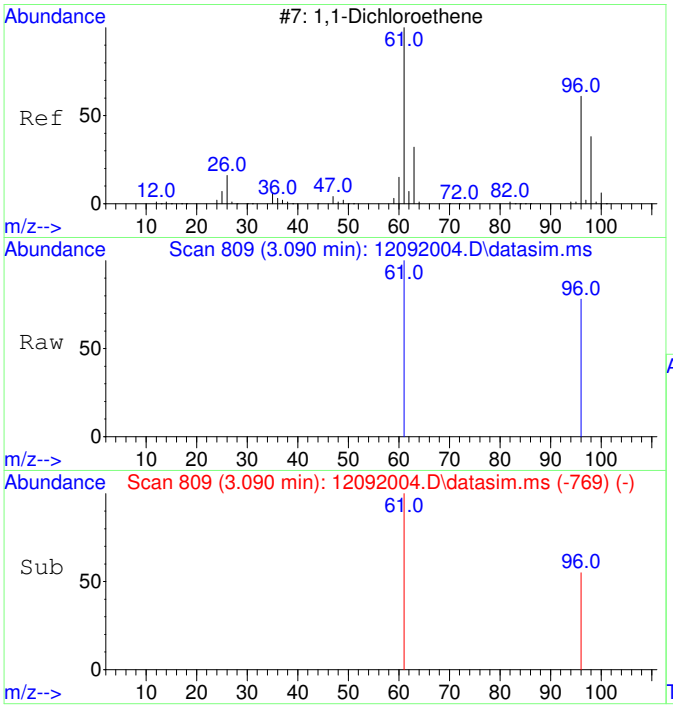


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:109 Resp: 189663

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

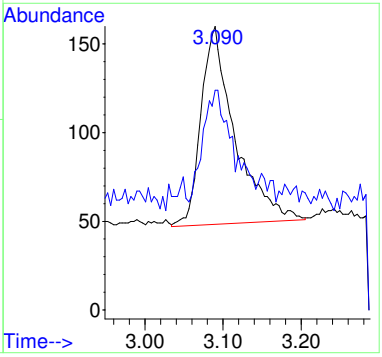


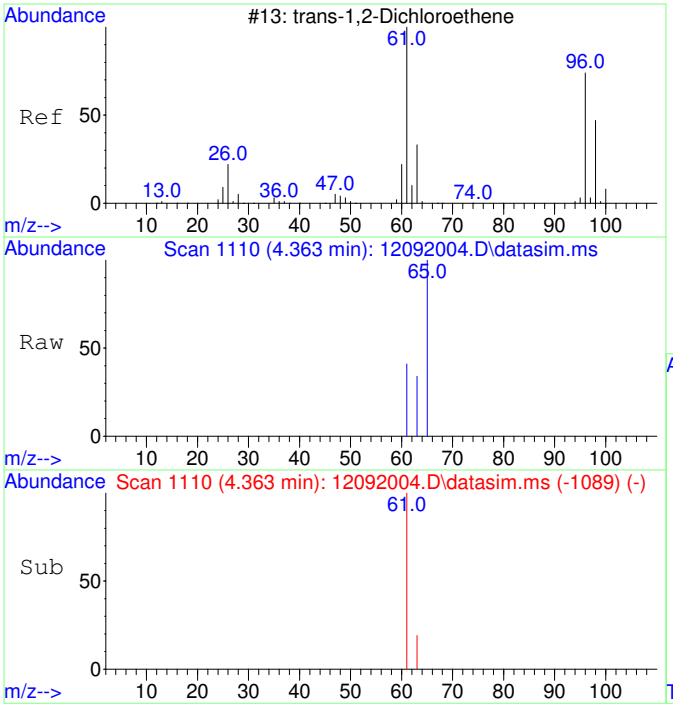


#2
1,1-Dichloroethene
Concen: 44.81 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	90.8	37.2	97.2

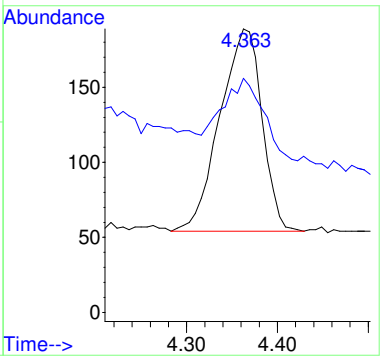


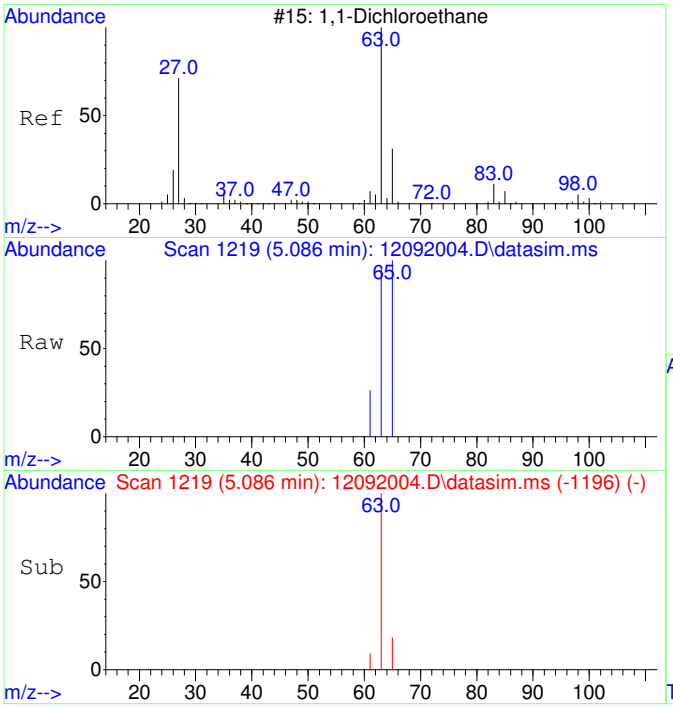


#3
trans-1,2-Dichloroethene
Concen: 45.88 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
63	41.4	2.4	62.4

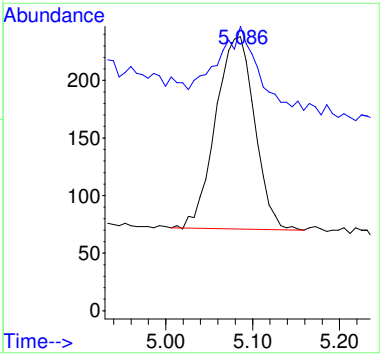


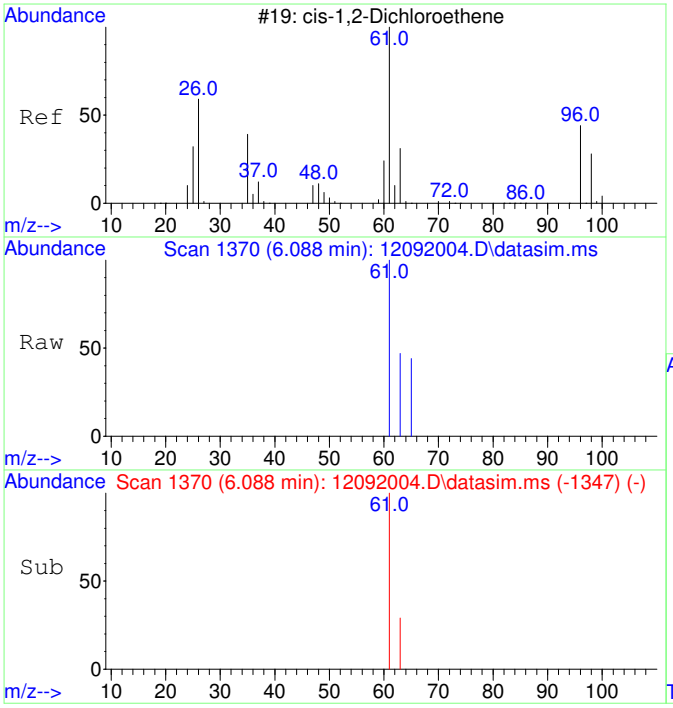


#4
1,1-Dichloroethane
Concen: 46.01 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 63 Resp: 521

Ion	Ratio	Lower	Upper
63	100		
65	54.9	1.8	61.8

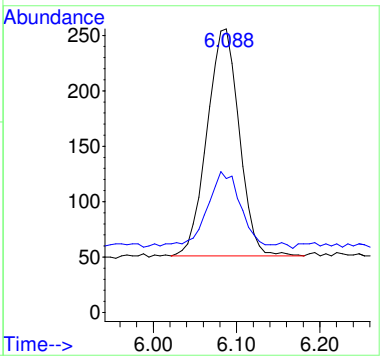


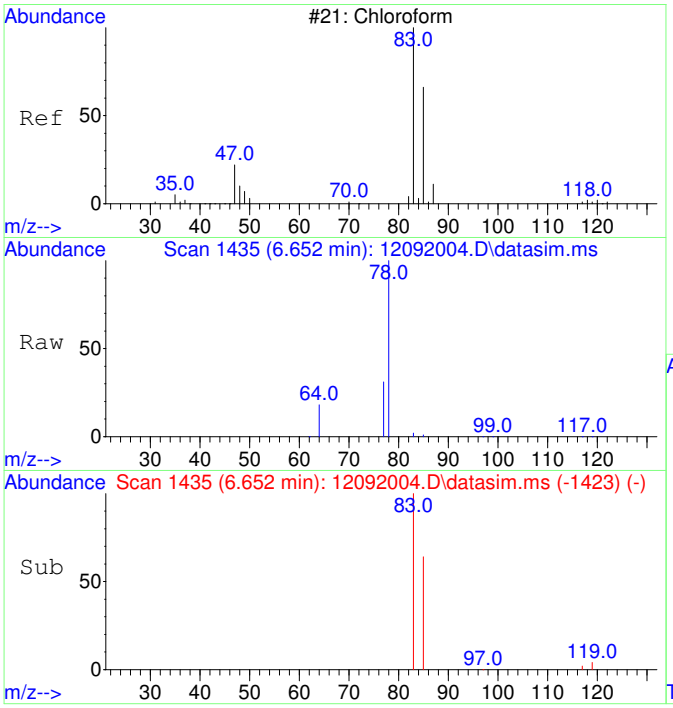


#5
cis-1,2-Dichloroethene
Concen: 46.98 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 551

Ion	Ratio	Lower	Upper
61	100		
63	34.8	2.5	62.5

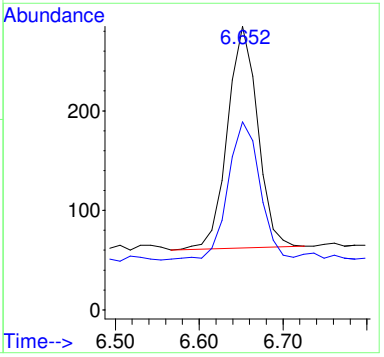


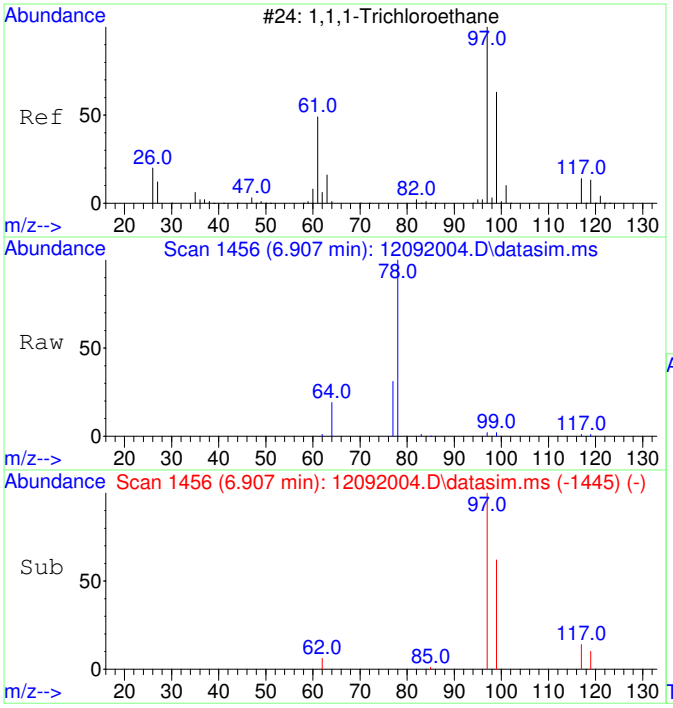


#6
Chloroform
Concen: 49.36 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 556

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

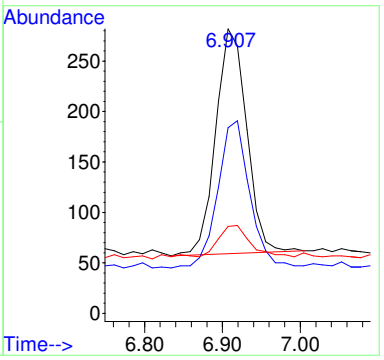


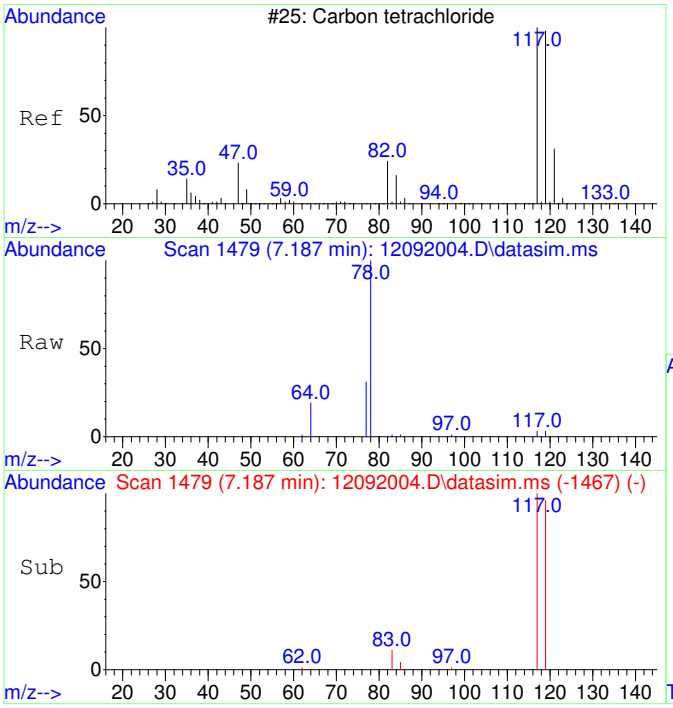


#7
1,1,1-Trichloroethane
Concen: 50.82 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 615

Ion	Ratio	Lower	Upper
97	100		
99	67.8	34.6	94.6
117	18.2	0.0	43.2

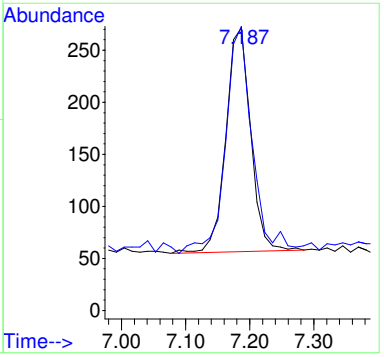


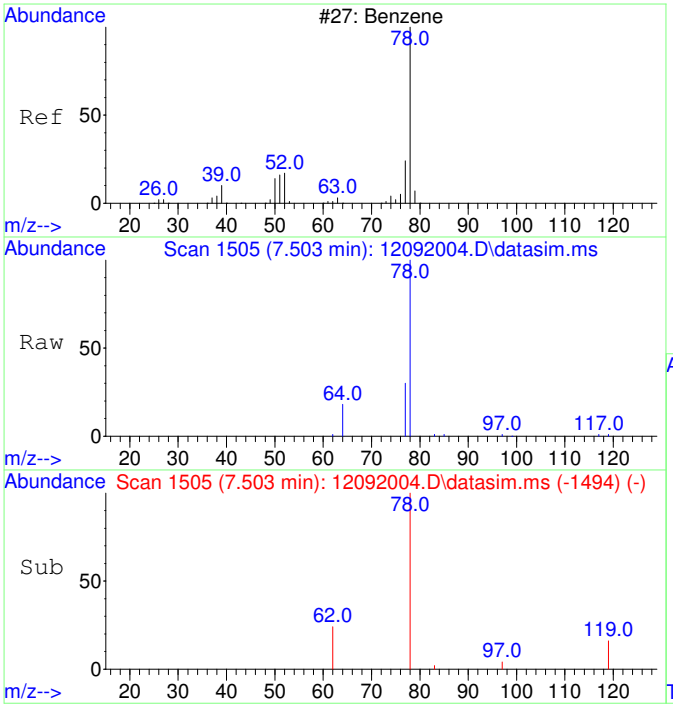


#8
Carbon tetrachloride
Concen: 49.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 575

Ion	Ratio	Lower	Upper
117	100		
119	109.4	66.4	126.4

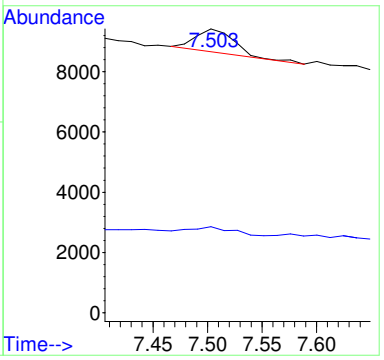


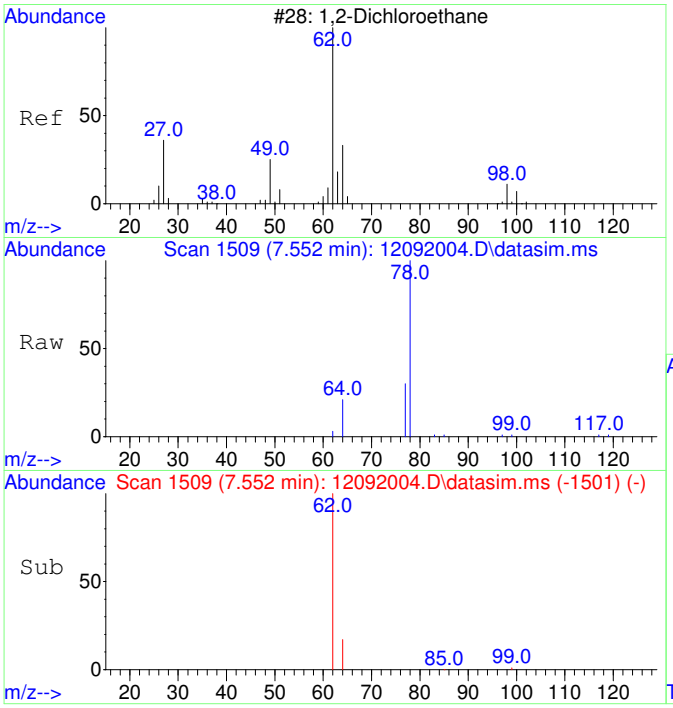


#9
Benzene
Concen: 52.51 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 1676

Ion	Ratio	Lower	Upper
78	100		
77	48.4	0.0	53.2

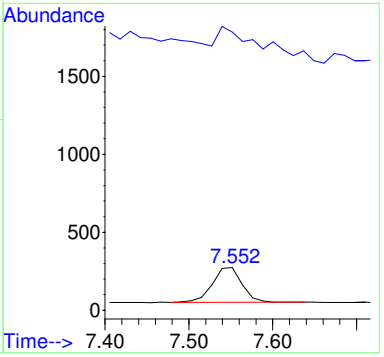


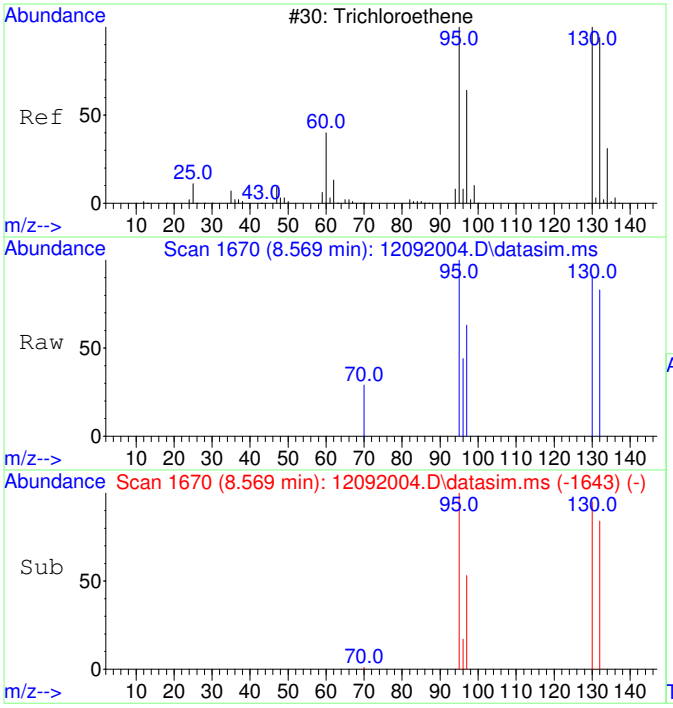


#10
1,2-Dichloroethane
Concen: 50.42 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 62 Resp: 549

Ion	Ratio	Lower	Upper
62	100		
64	148.8	2.3	62.3#

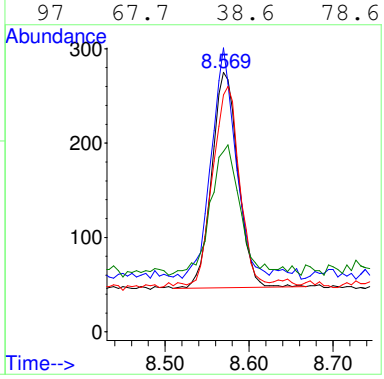


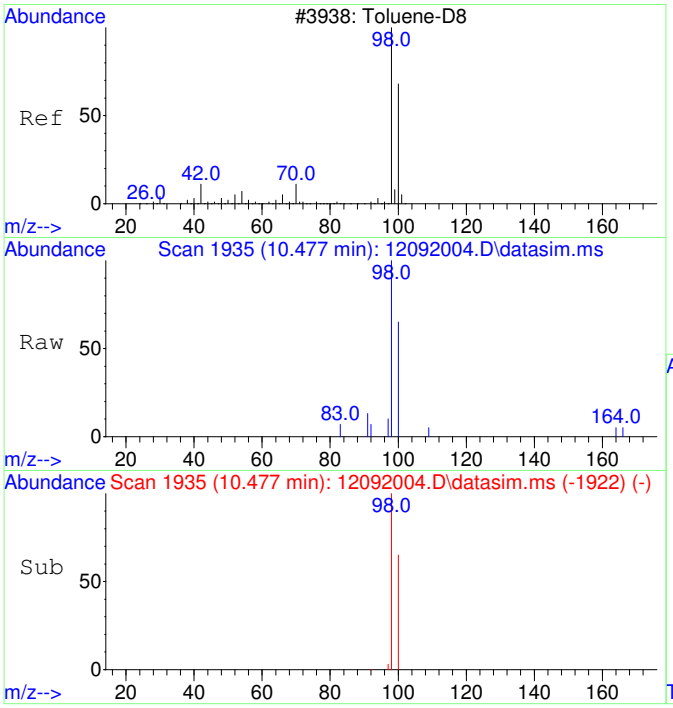


#11
Trichloroethene
Concen: 49.12 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 495

Ion	Ratio	Lower	Upper
130	100		
95	97.8	60.7	120.7
132	98.0	76.0	116.0
97	67.7	38.6	78.6

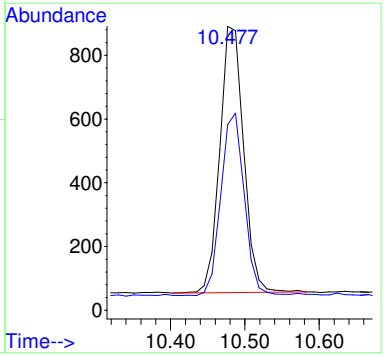


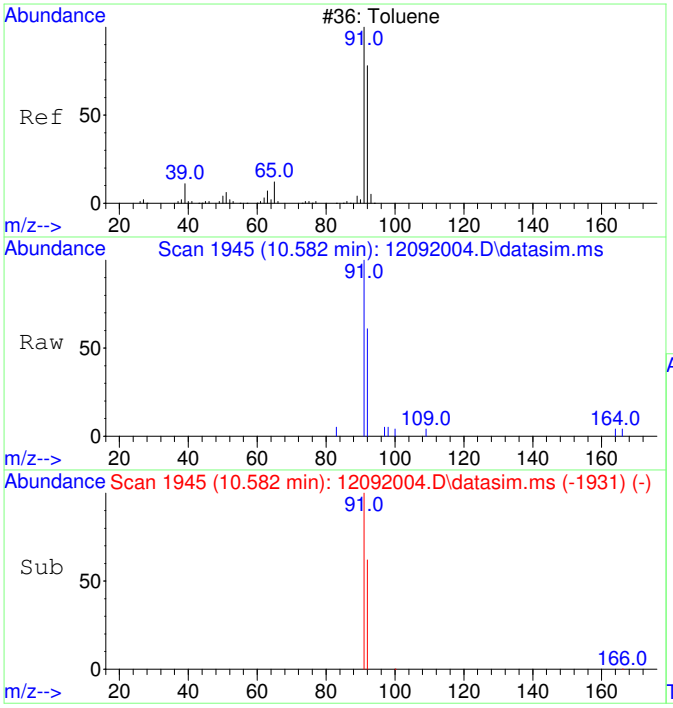


#12
Toluene-d8
Concen: 50.45 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1853

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

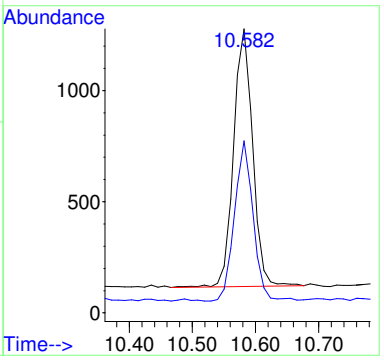


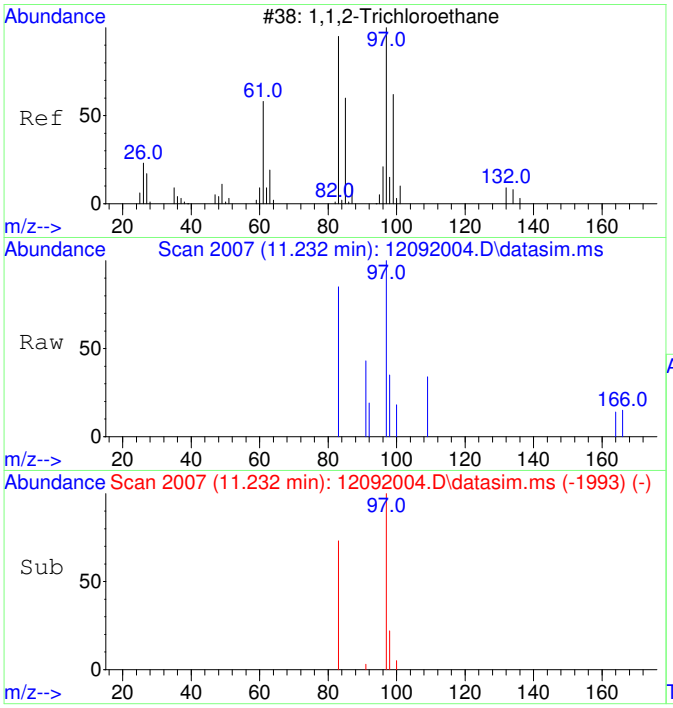


#13
Toluene
Concen: 53.11 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2429

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

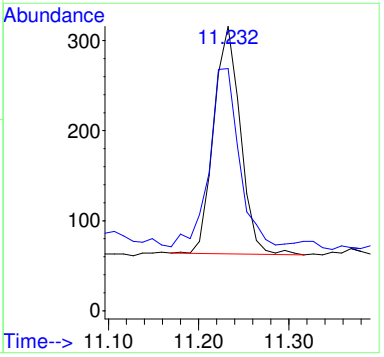


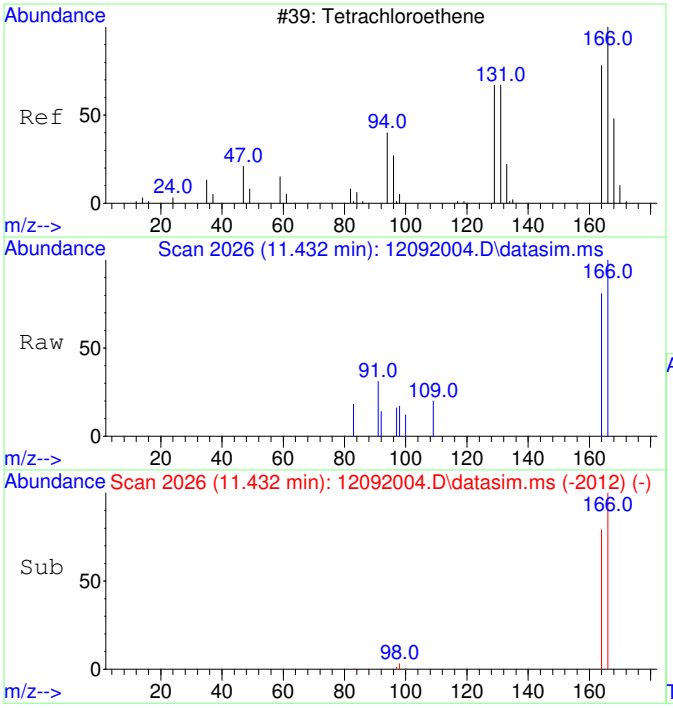


#14
1,1,2-Trichloroethane
Concen: 48.90 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 518

Ion	Ratio	Lower	Upper
97	100		
83	88.2	51.2	111.2

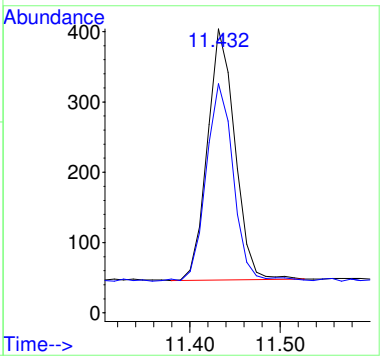


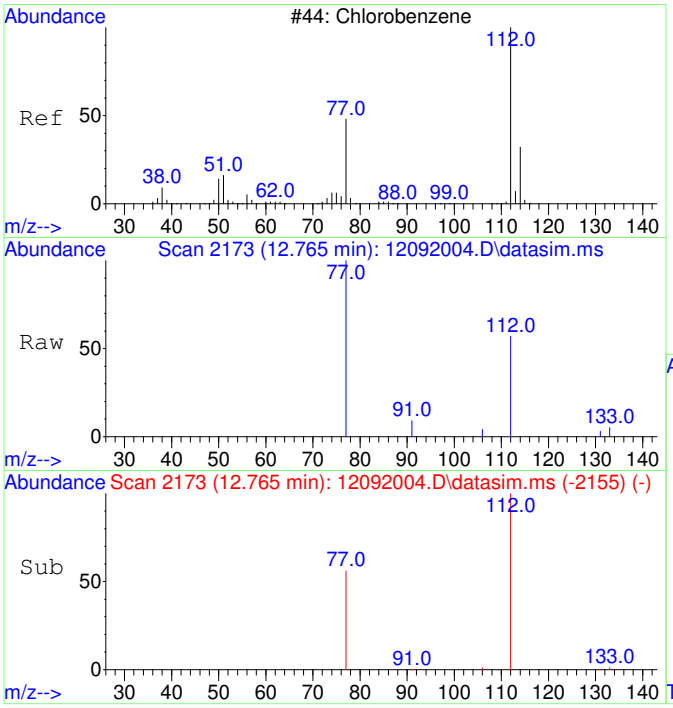


#15
Tetrachloroethene
Concen: 53.07 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 756

Ion	Ratio	Lower	Upper
166	100		
164	77.2	47.8	107.8

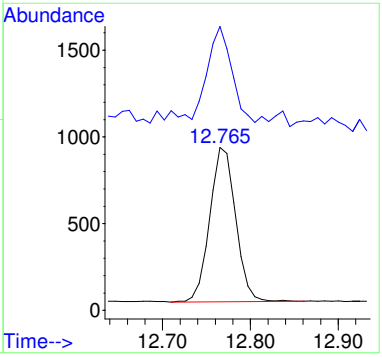


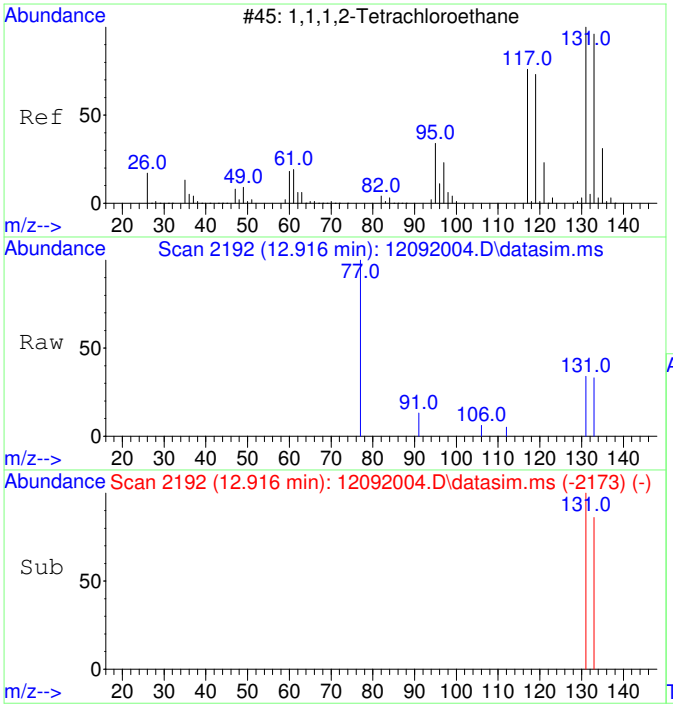


#16
Chlorobenzene
Concen: 51.42 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 1822

Ion	Ratio	Lower	Upper
112	100		
77	59.3	23.6	83.6

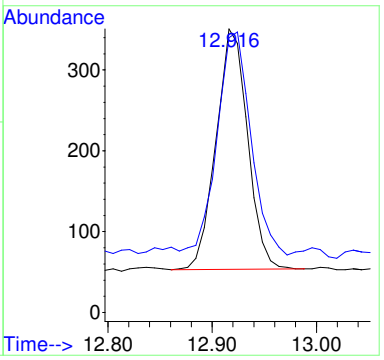


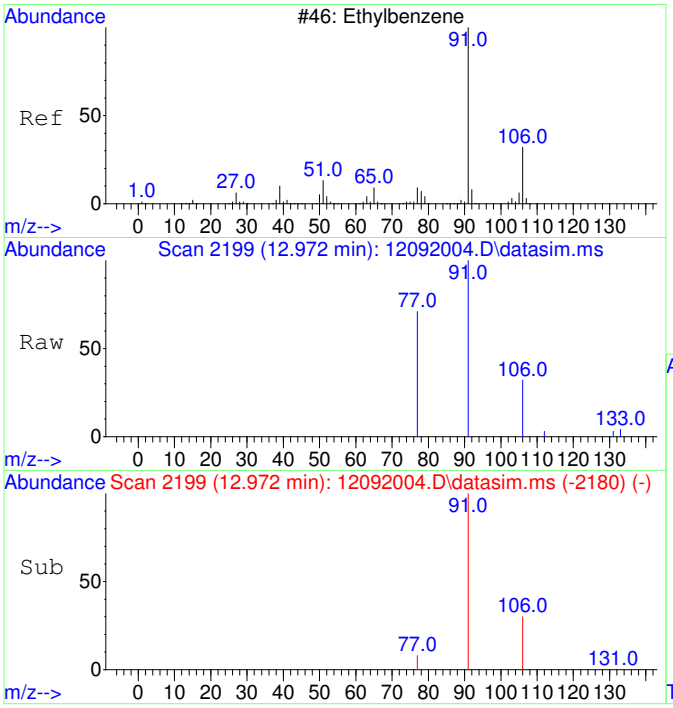


#17
1,1,1,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:131 Resp: 623

Ion	Ratio	Lower	Upper
131	100		
133	100.8	66.3	126.3

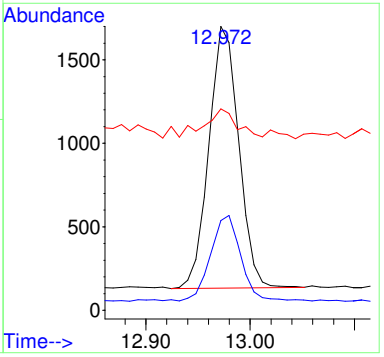


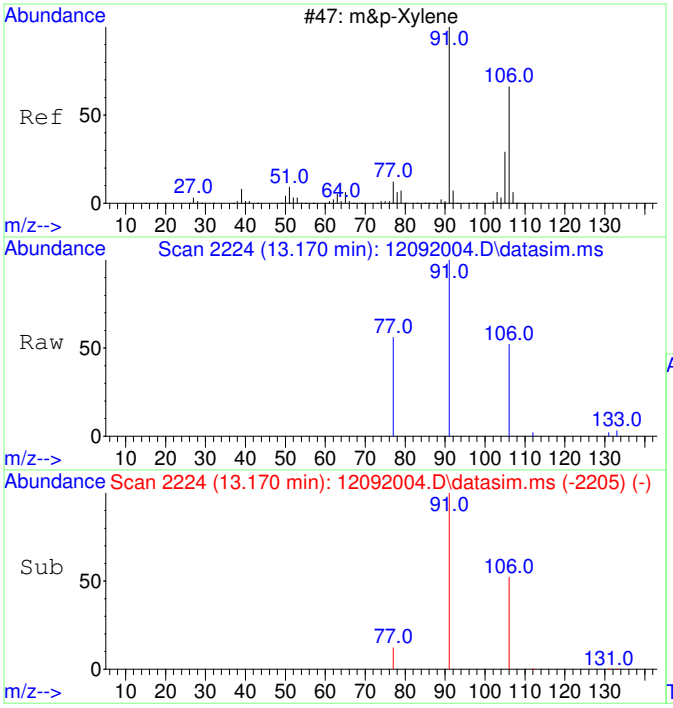


#18
Ethylbenzene
Concen: 53.26 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3111

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	12.9	0.0	38.2

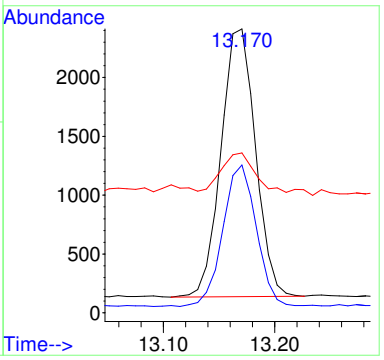


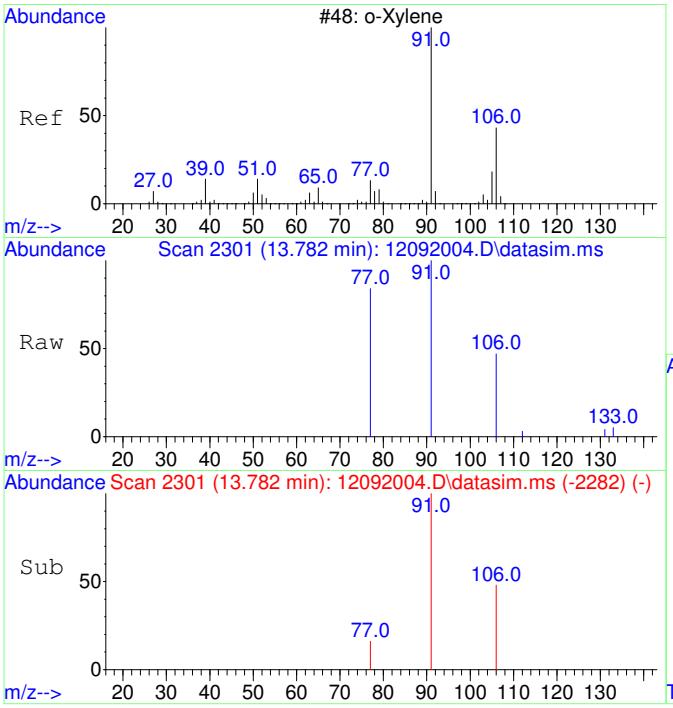


#19
m&p-Xylene
Concen: 108.81 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 4895

Ion	Ratio	Lower	Upper
91	100		
106	51.1	22.2	82.2
77	17.4	0.0	42.4

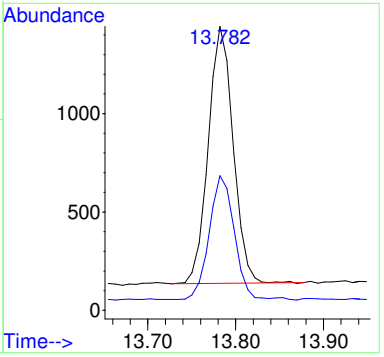


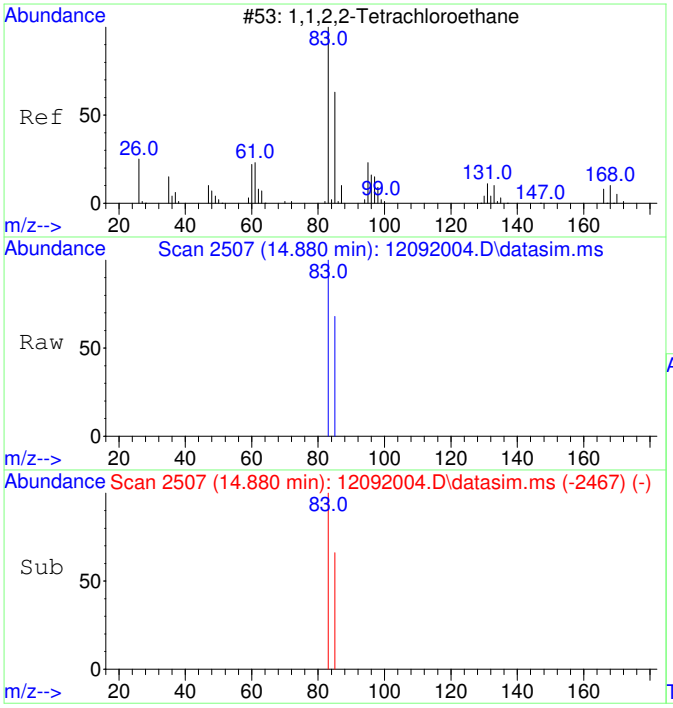


#20
o-Xylene
Concen: 53.15 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

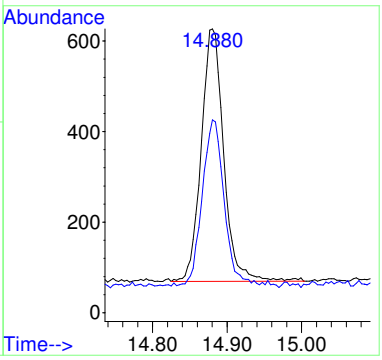


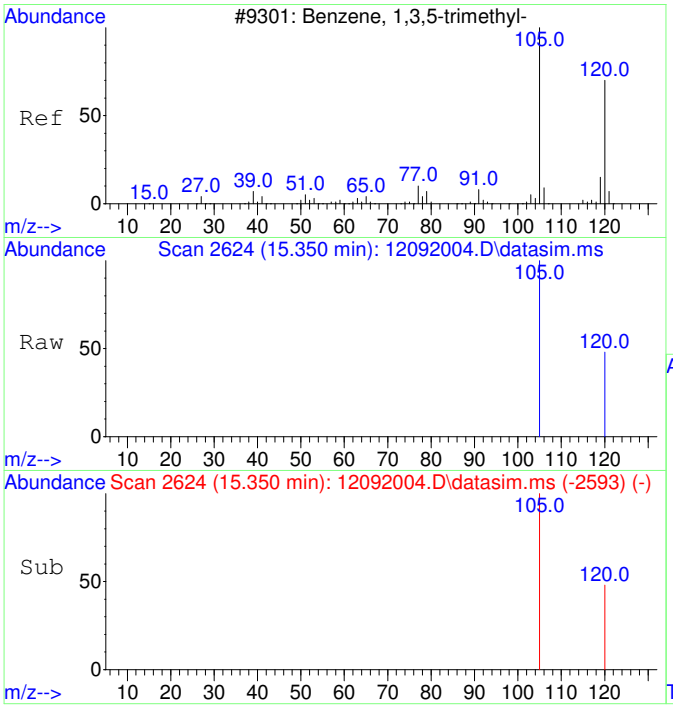


#21
1,1,2,2-Tetrachloroethane
Concen: 51.97 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 1170

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.8	94.8

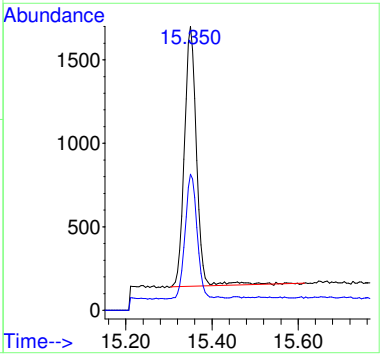


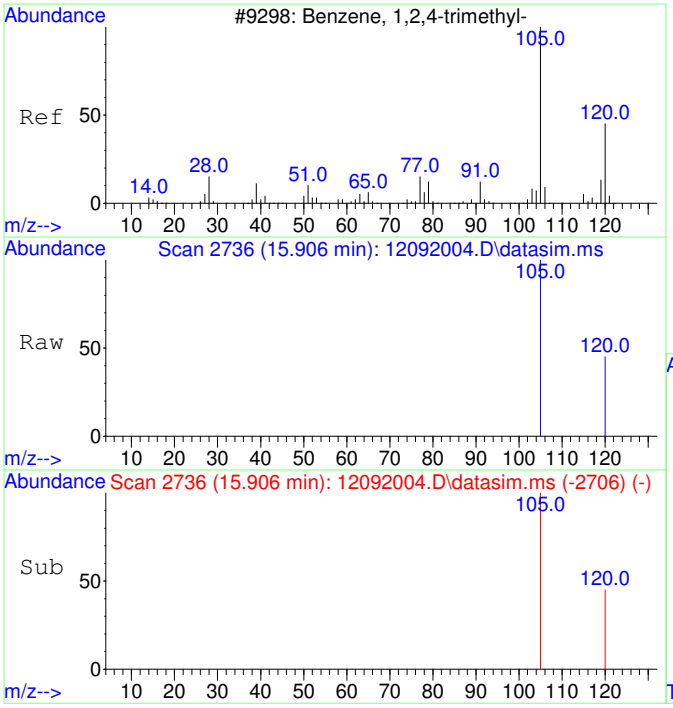


#22
1,3,5-Trimethylbenzene
Concen: 57.08 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3033

Ion	Ratio	Lower	Upper
105	100		
120	46.9	21.1	81.1

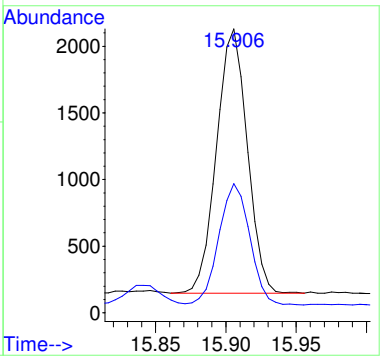


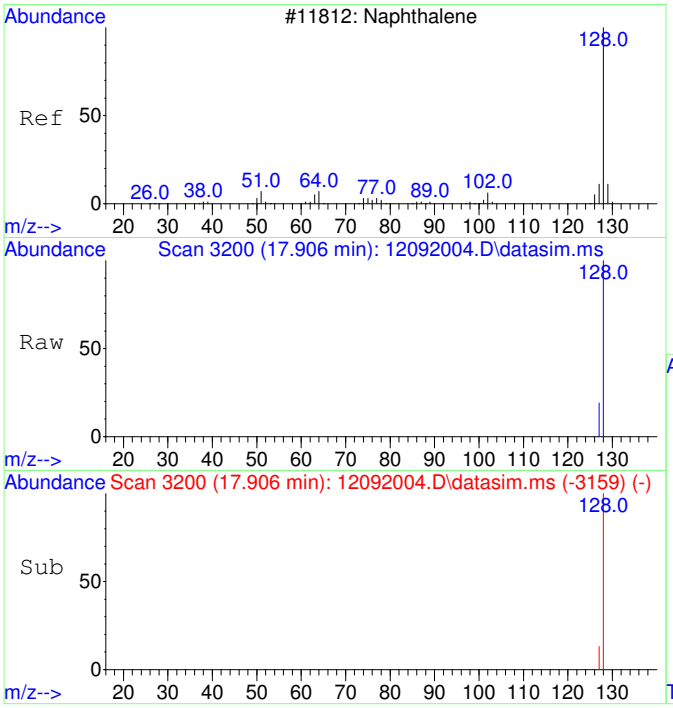


#23
1,2,4-Trimethylbenzene
Concen: 55.38 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3010

Ion	Ratio	Lower	Upper
105	100		
120	45.4	17.2	77.2

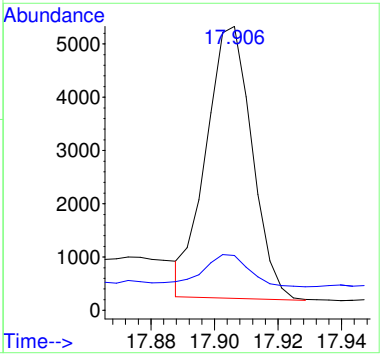


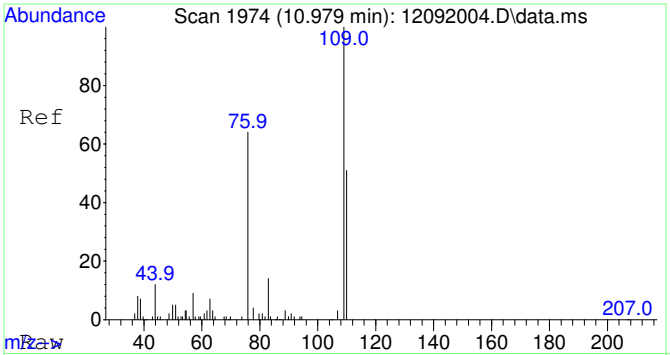


#24
Naphthalene
Concen: 58.30 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 5133

Ion	Ratio	Lower	Upper
128	100		
127	9.8	0.0	42.5

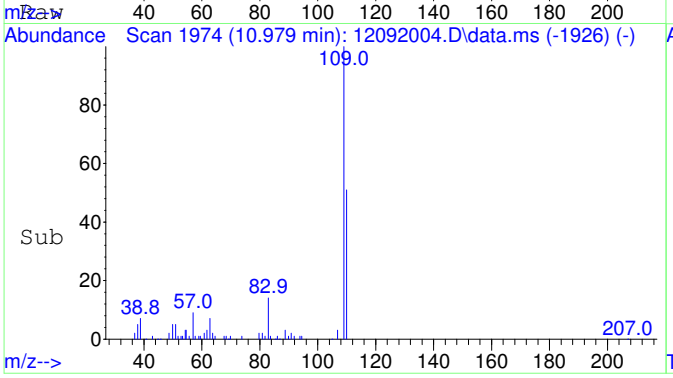


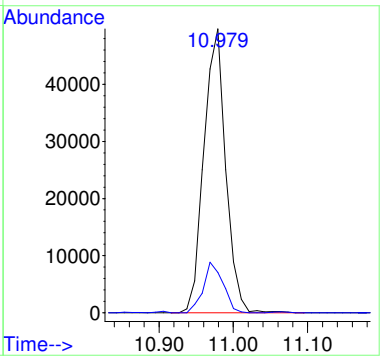


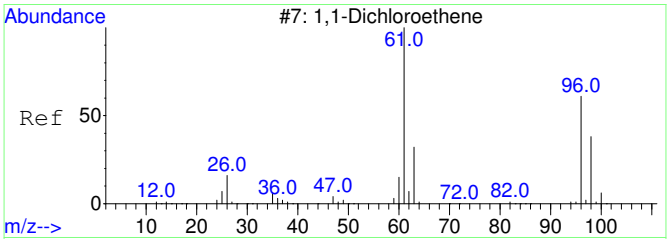
#25
2-Fluorotoluene SCAN
Concen: 4719.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

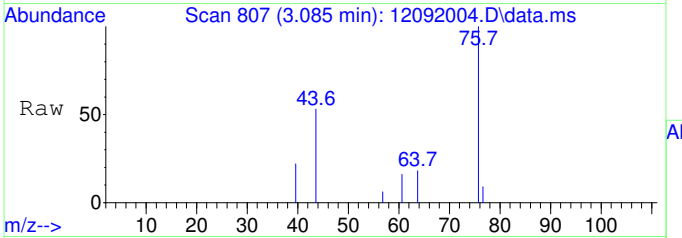
Tgt Ion:109 Resp: 101604

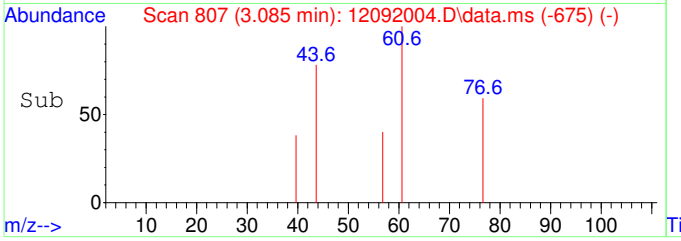
Ion	Ratio	Lower	Upper
109	100		
83	16.1	0.0	43.8







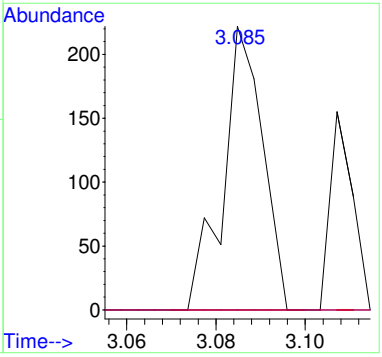


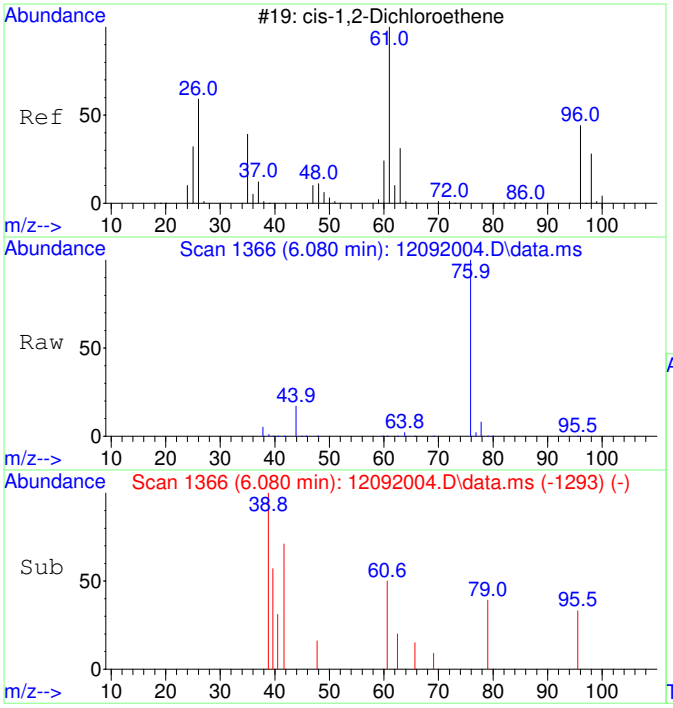


#26
1,1-Dichloroethene SCAN
Concen: 27.26 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 137

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

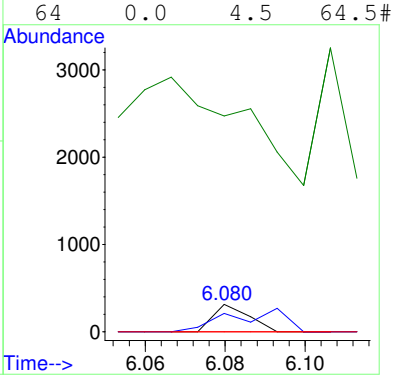


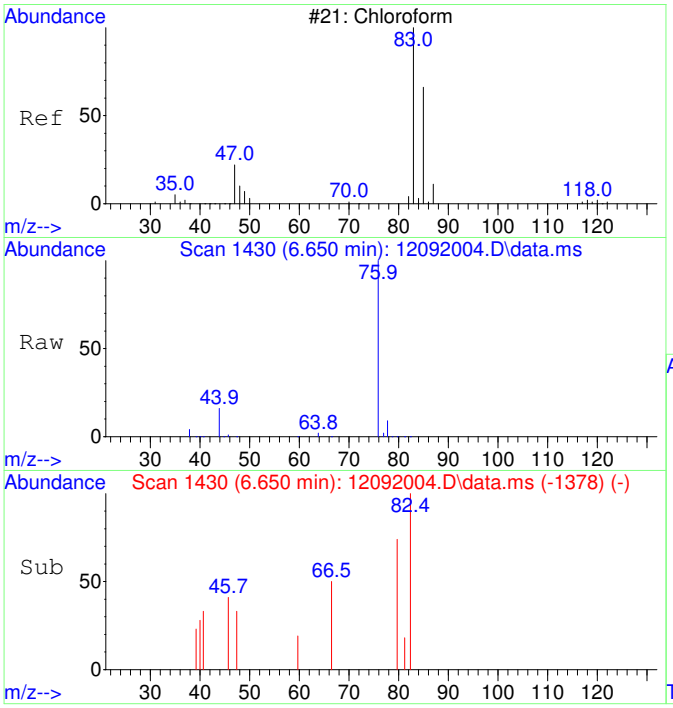


#29
cis-1,2-Dichloroethene SCAN
Concen: 26.25 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 195

Ion	Ratio	Lower	Upper
61	100		
96	130.8	39.9	99.9#
98	0.0	13.5	73.5#
64	0.0	4.5	64.5#

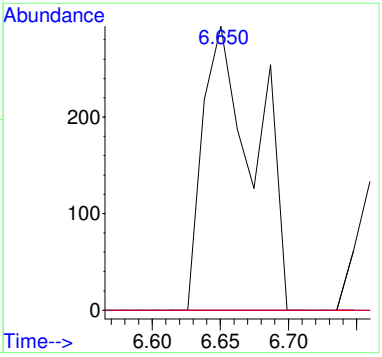


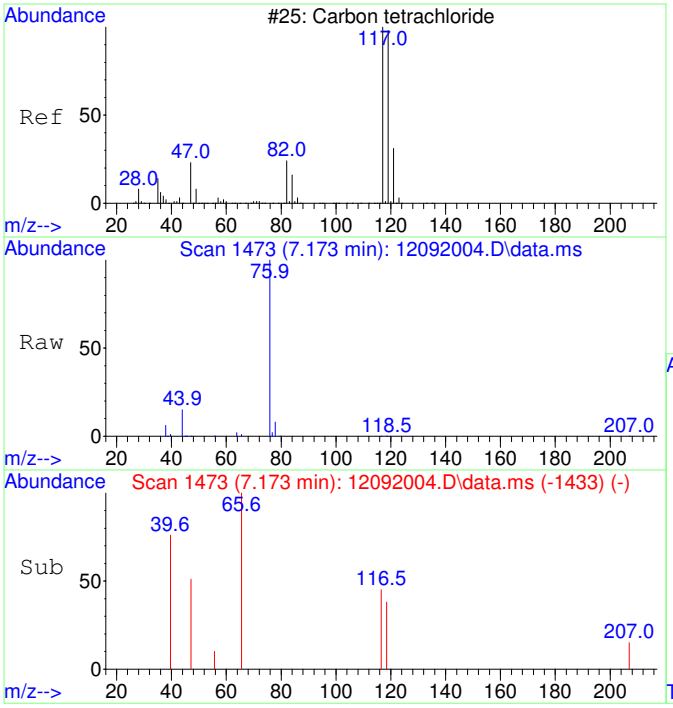


#30
Chloroform SCAN
Concen: 113.59 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 787

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

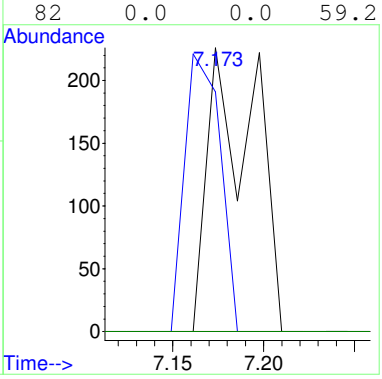


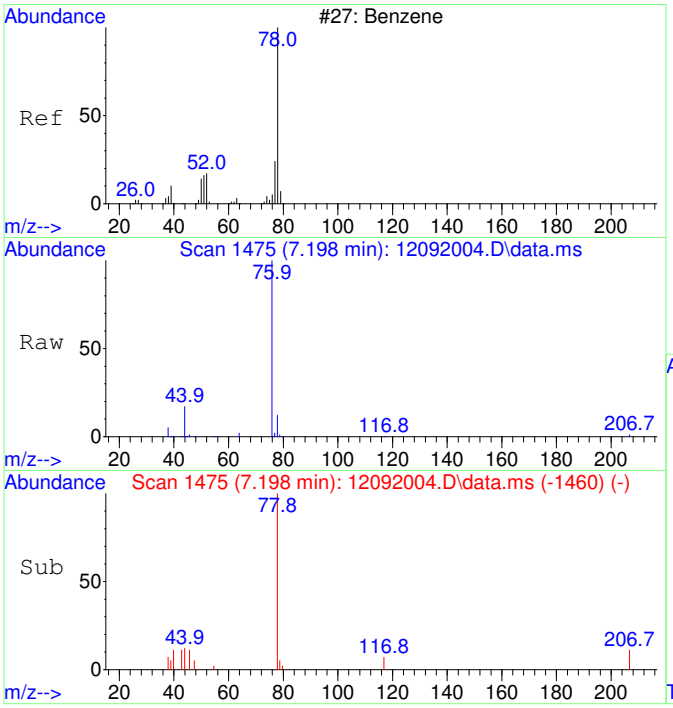


#32
Carbon tetrachloride SCAN
Concen: 65.96 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 403

Ion	Ratio	Lower	Upper
117	100		
119	74.7	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

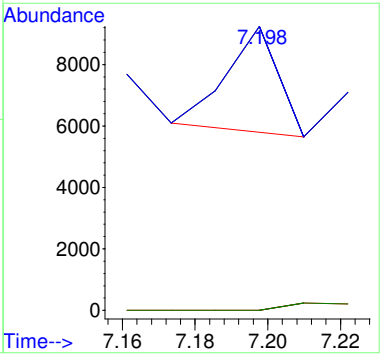


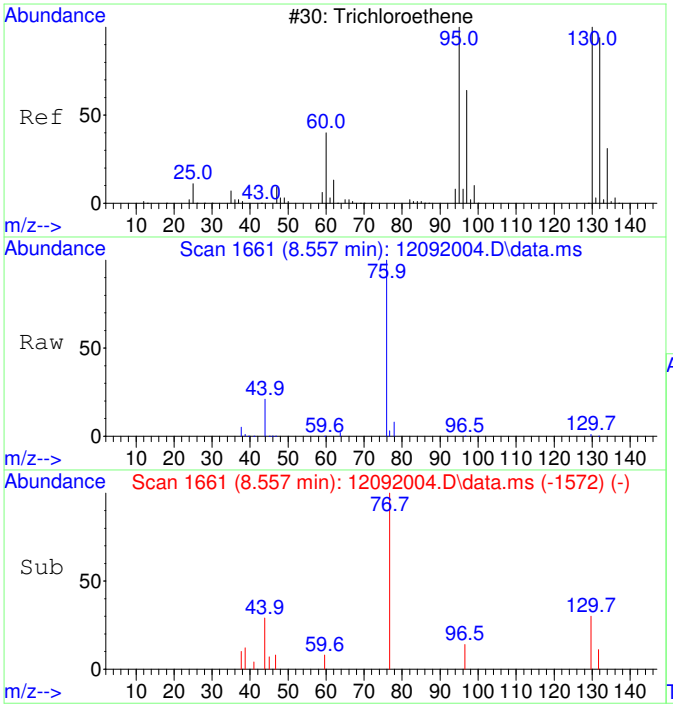


#33
Benzene SCAN
Concen: 149.19 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. -0.316 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 3227

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.0	0.0	47.9
51	10.0	0.0	44.1

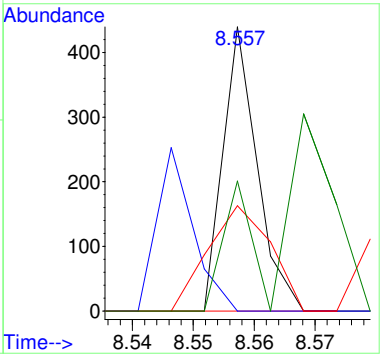


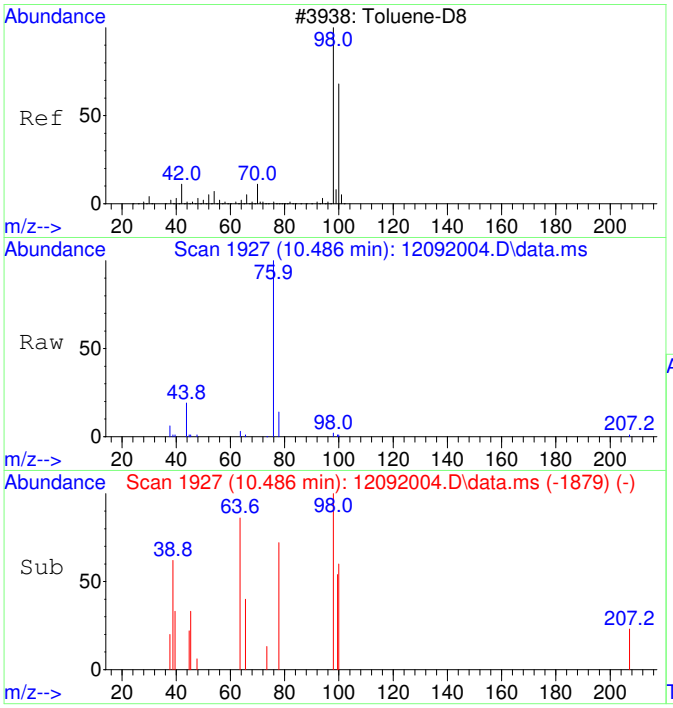


#35
Trichloroethene SCAN
Concen: 36.47 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.016 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 172

Ion	Ratio	Lower	Upper
130	100		
95	60.5	60.5	120.5#
132	68.0	59.6	119.6
97	0.0	28.2	88.2#

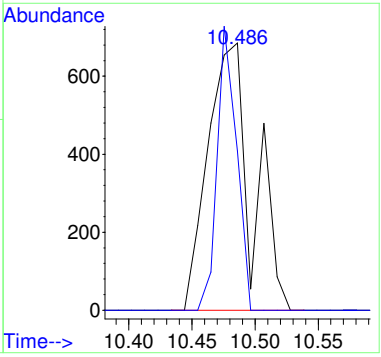


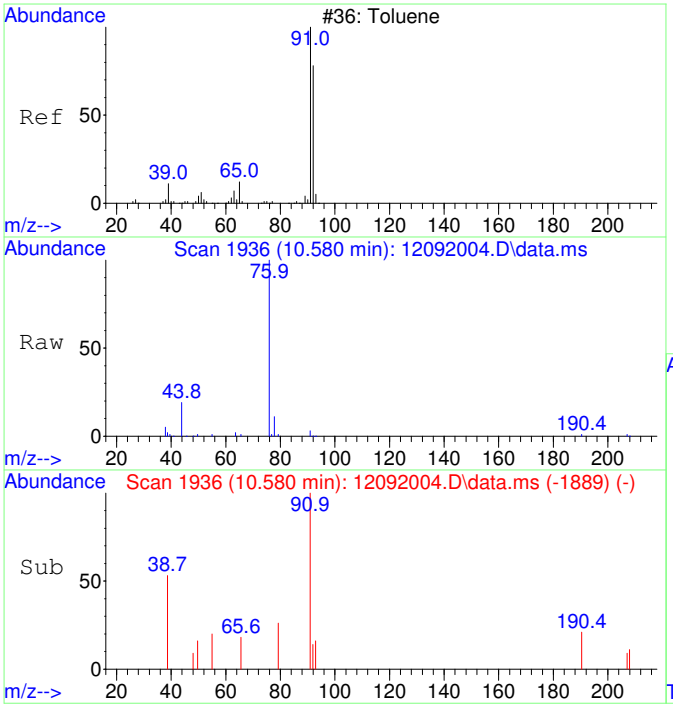


#36
Toluene-d8 SCAN
Concen: 82.81 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1672

Ion	Ratio	Lower	Upper
98	100		
100	46.5	40.0	100.0

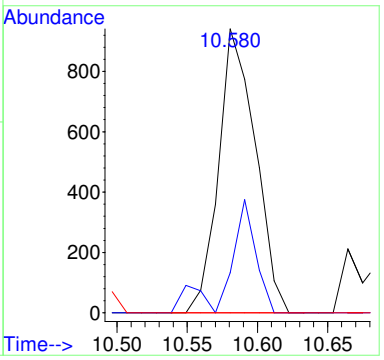


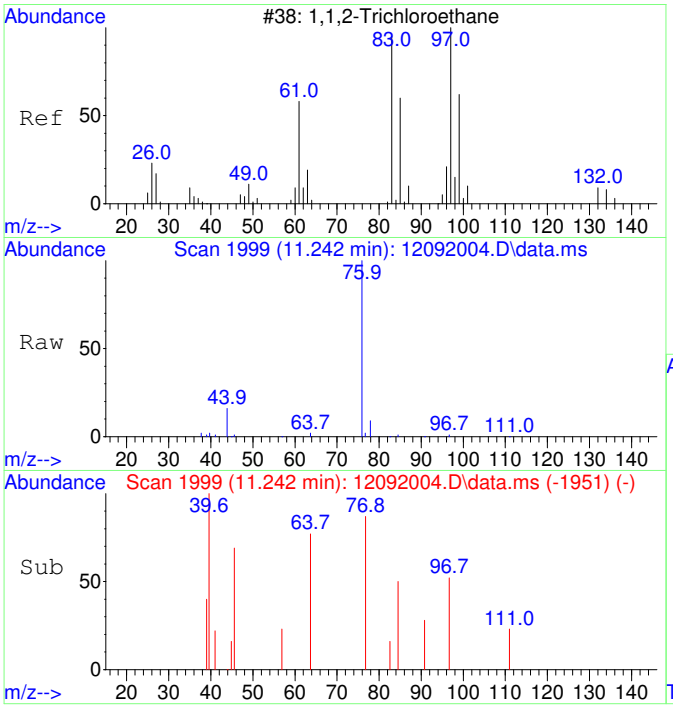


#37
Toluene SCAN
Concen: 69.31 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1723

Ion	Ratio	Lower	Upper
91	100		
92	29.7	28.3	88.3
65	0.0	0.0	41.0

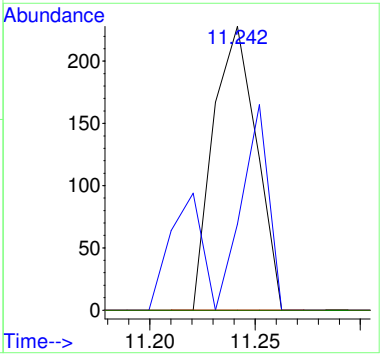


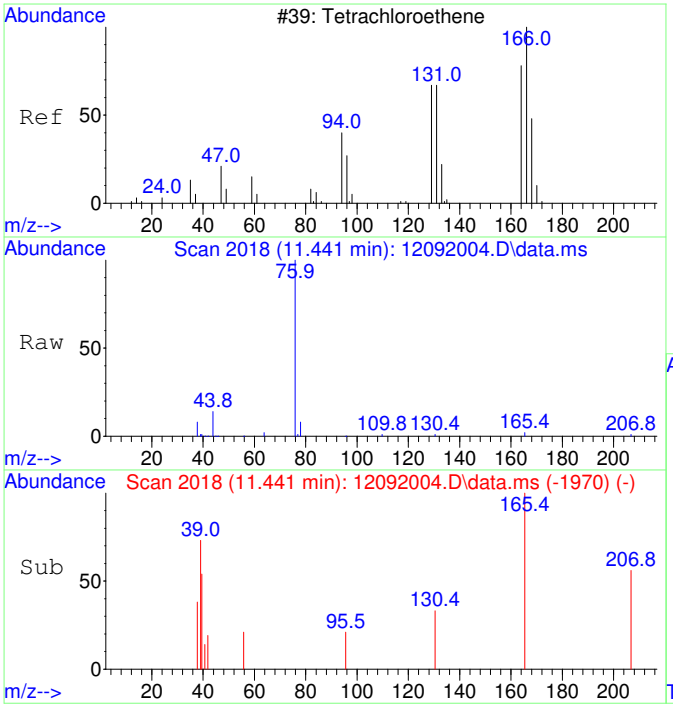


#38
1,1,2-Trichloroethane SCAN
Concen: 52.32 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 326

Ion	Ratio	Lower	Upper
97	100		
83	45.1	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

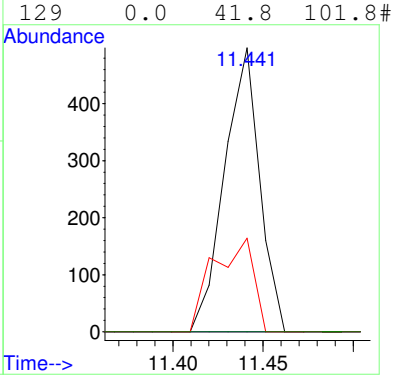


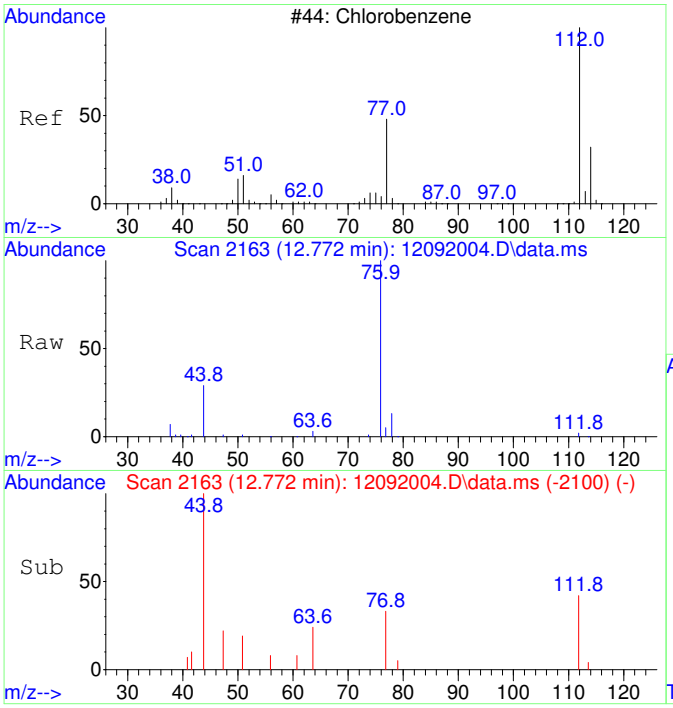


#39
Tetrachloroethene SCAN
Concen: 120.87 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 676

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	37.9	38.7	98.7#
129	0.0	41.8	101.8#

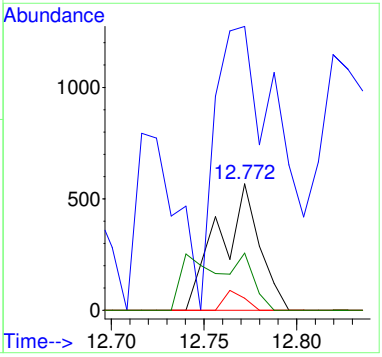


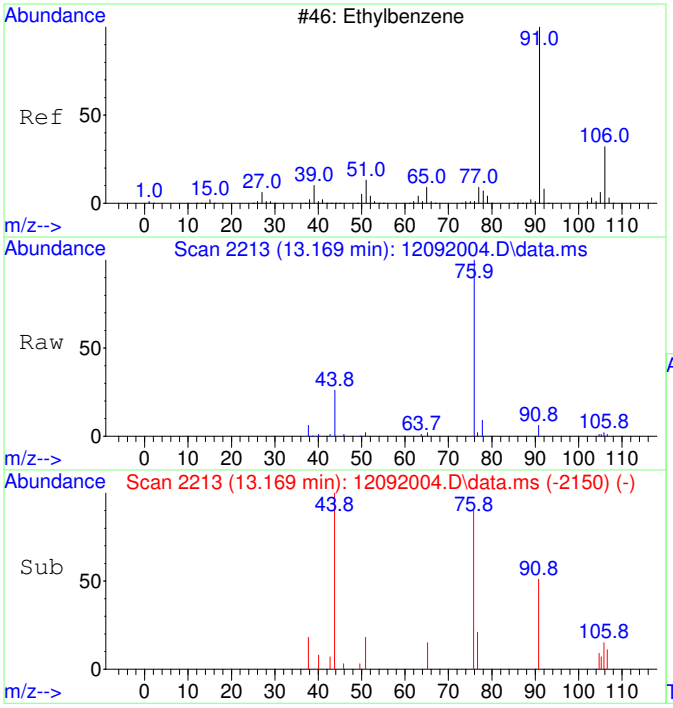


#40
Chlorobenzene SCAN
Concen: 48.89 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 873

Ion	Ratio	Lower	Upper
112	100		
77	267.7	28.2	88.2#
114	7.9	2.3	62.3
51	60.8	0.0	50.1#

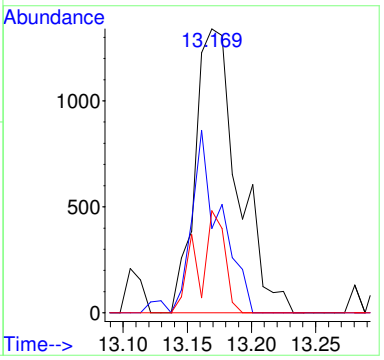


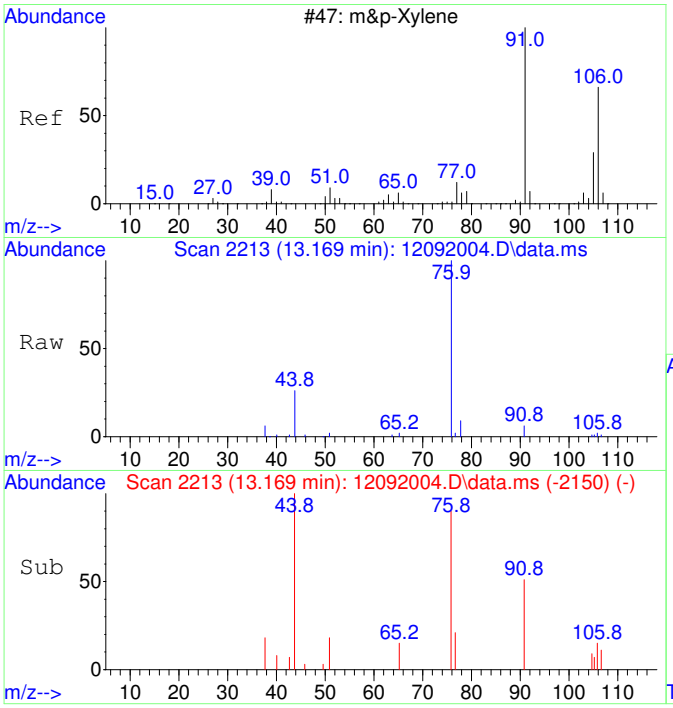


#42
Ethylbenzene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
51	22.1	0.0	40.1

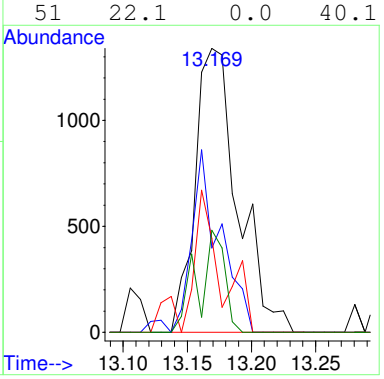


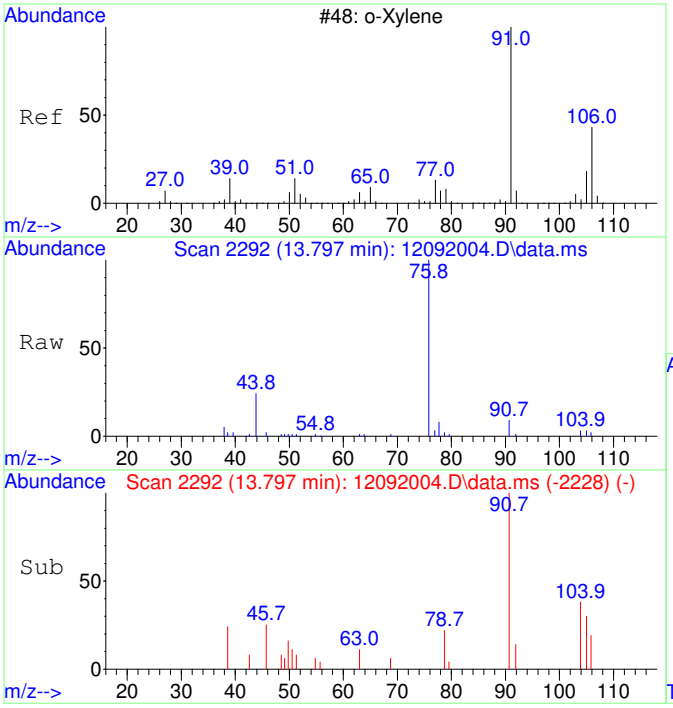


#43
m&p-Xylene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
105	35.1	0.0	54.7
51	22.1	0.0	40.1

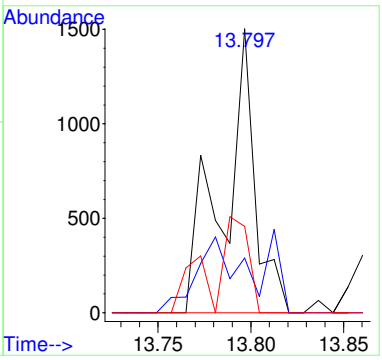


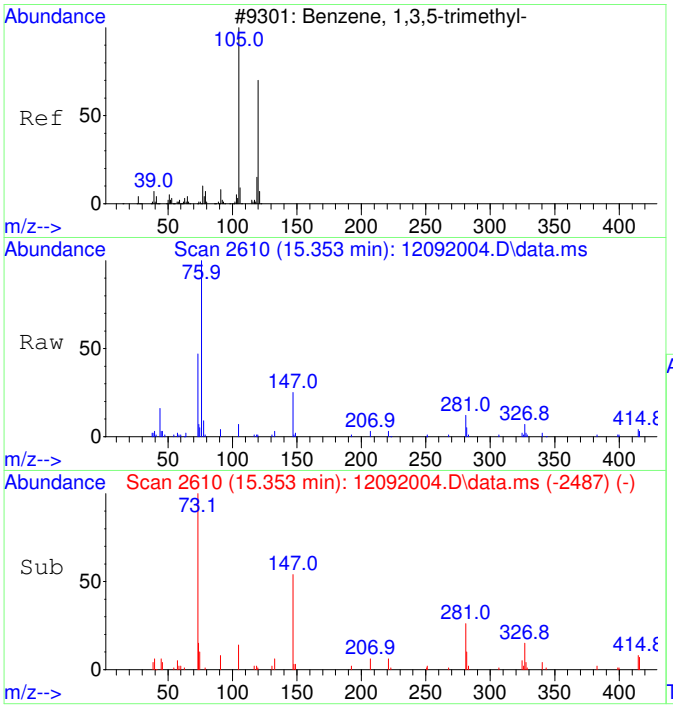


#44
o-Xylene SCAN
Concen: 68.81 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1780

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	40.3	0.0	56.6

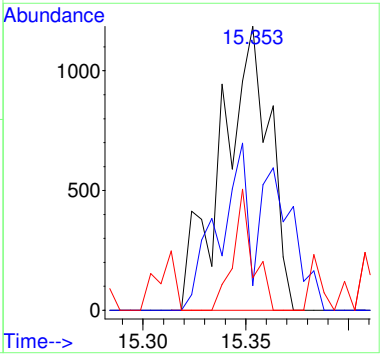


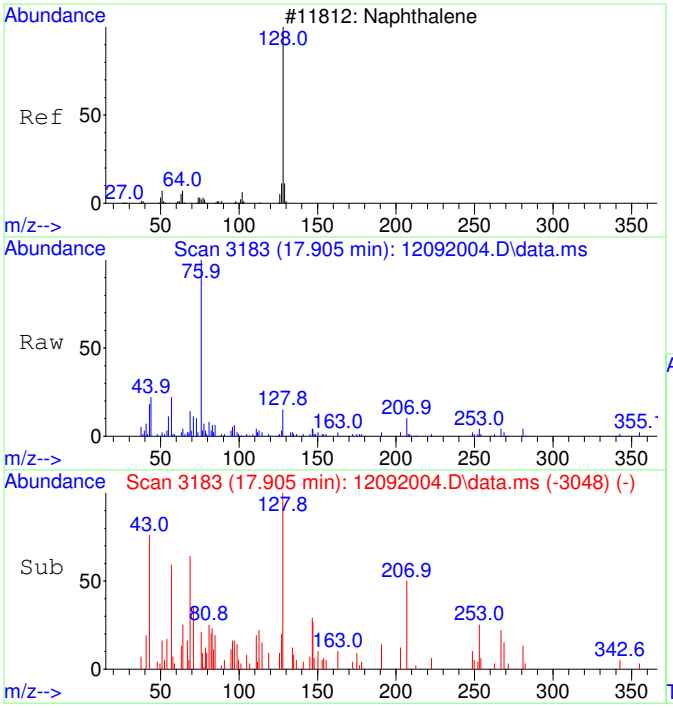


#46
1,3,5-Trimethylbenzene SCAN
Concen: 70.17 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 1915

Ion	Ratio	Lower	Upper
105	100		
120	29.8	18.3	78.3
119	17.5	0.0	43.1

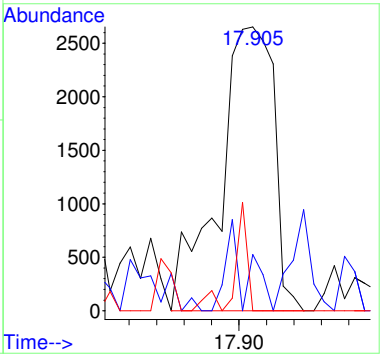




#48
Naphthalene SCAN
Concen: 88.02 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 3684

Ion	Ratio	Lower	Upper
128	100		
127	11.8	0.0	44.0
129	8.6	0.0	40.8



B20L016-BLK1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092005.D
Acq On : 9 Dec 2020 10:28
InstName : AG5975C
Operator : TD
Sample : B20L016-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 09 10:47:19 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

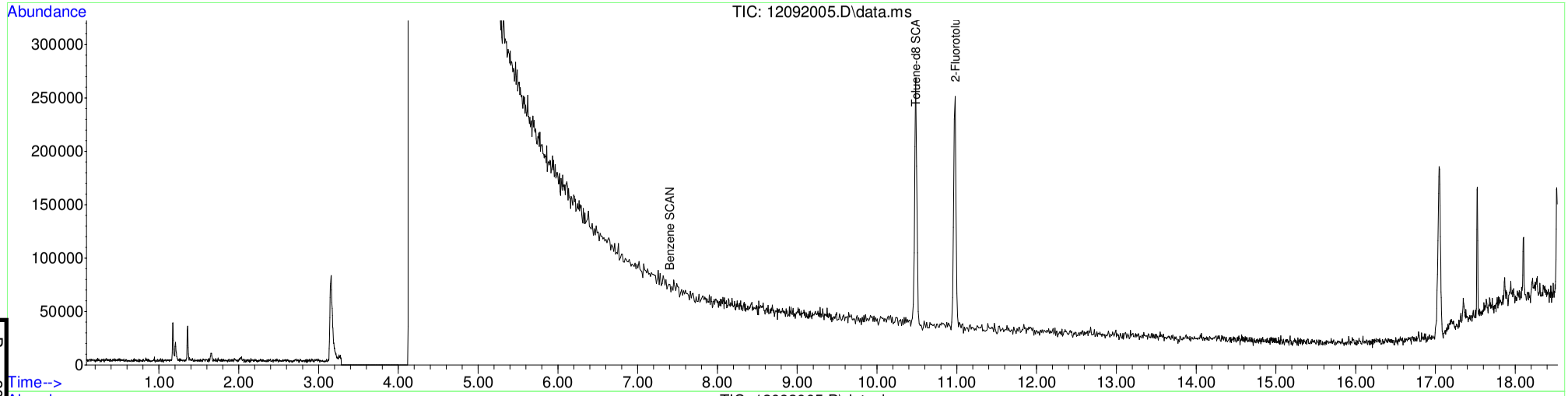
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	302867	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	253946	4329.28	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.59%			
Target Compounds						Qvalue
9] Benzene	7.503	78	1681	32.98	ug/L #	17
25) 2-Fluorotoluene SCAN	10.979	109	174396	5072.82	ug/L	99
33) Benzene SCAN	7.405	78	9366	271.17	ug/L	92
36) Toluene-d8 SCAN	10.486	98	156914	4866.56	ug/L	99

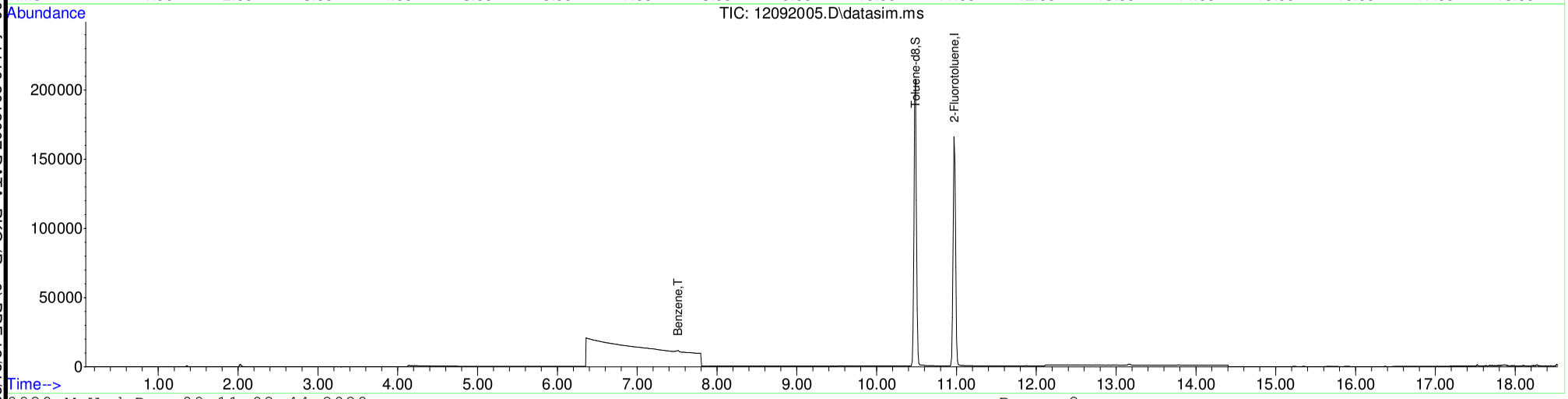
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092005.D
Acq On : 9 Dec 2020 10:28
InstName : AG5975C
Operator : TD
Sample : B20L016-BLK1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 09 10:47:19 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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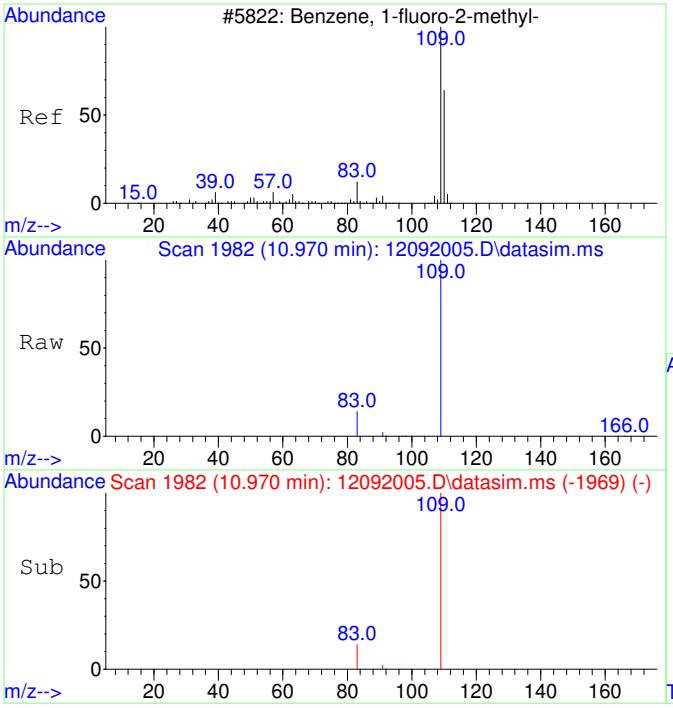
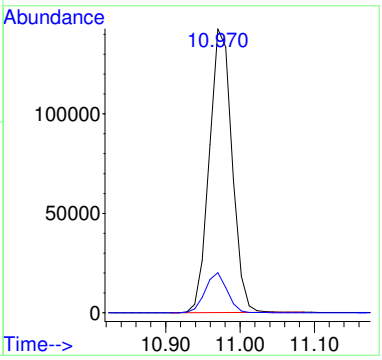
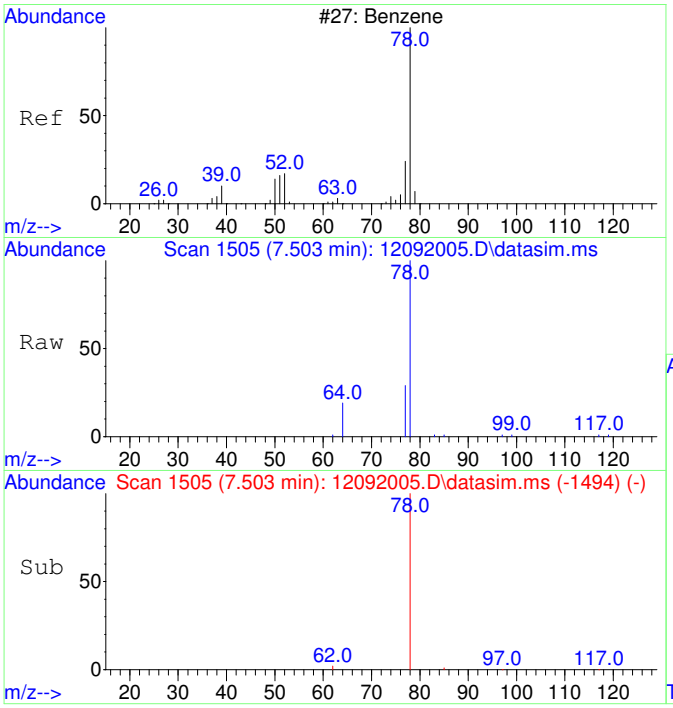


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion:109 Resp: 302867

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

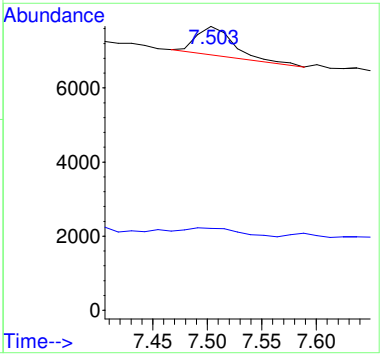


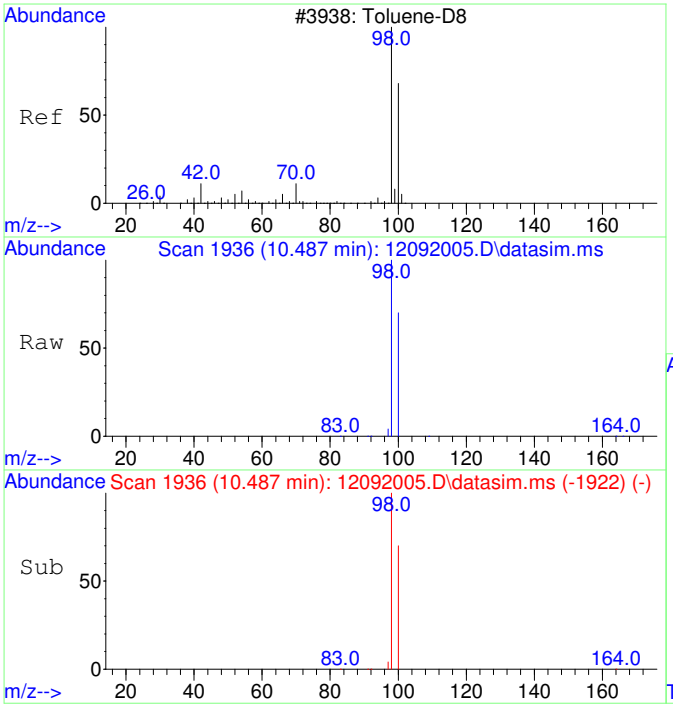


#9
Benzene
Concen: 32.98 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion: 78 Resp: 1681

Ion	Ratio	Lower	Upper
78	100		
77	63.6	0.0	53.2#

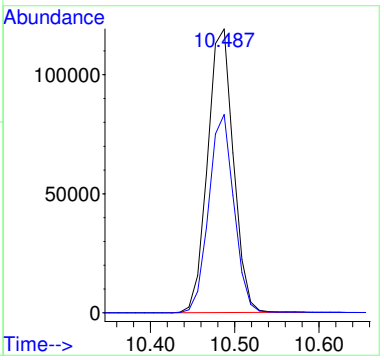


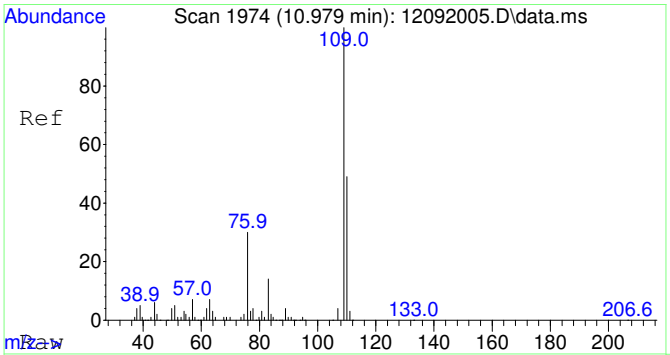


#12
Toluene-d8
Concen: 4329.28 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion: 98 Resp: 253946

Ion	Ratio	Lower	Upper
98	100		
100	68.1	37.1	97.1

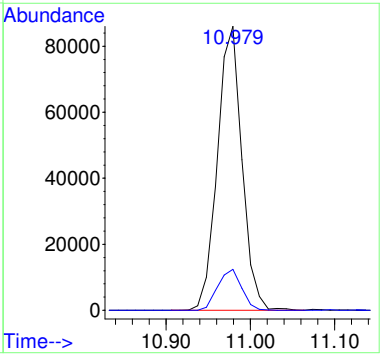


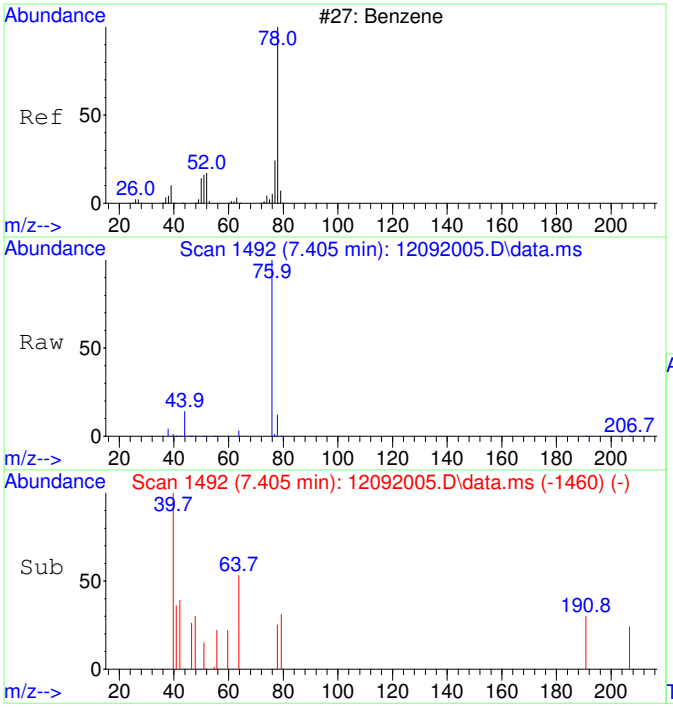


#25
2-Fluorotoluene SCAN
Concen: 5072.82 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion:109 Resp: 174396

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8

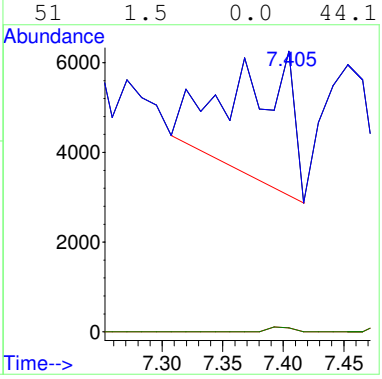


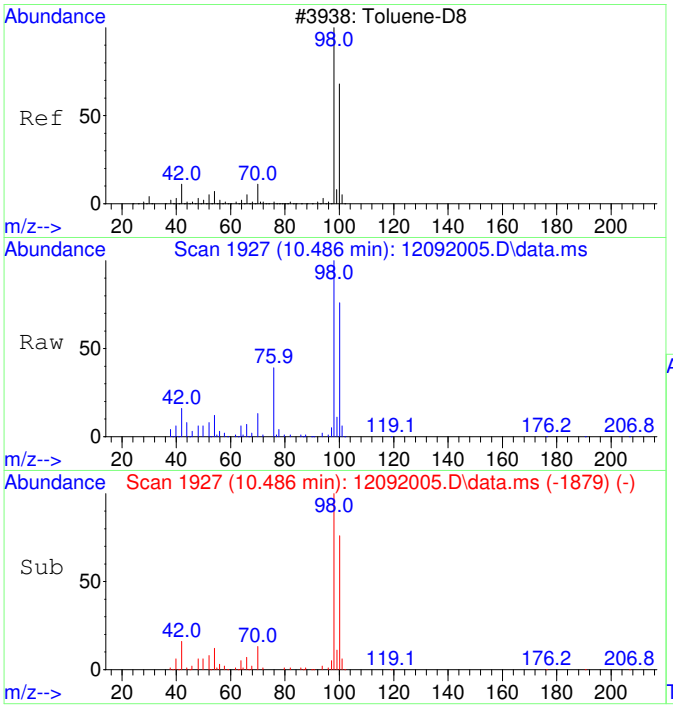


#33
Benzene SCAN
Concen: 271.17 ug/L
RT: 7.405 min Scan# 1492
Delta R.T. -0.109 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion: 78 Resp: 9366

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	1.5	0.0	47.9
51	1.5	0.0	44.1

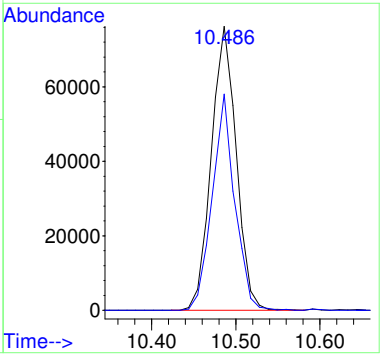




#36
Toluene-d8 SCAN
Concen: 4866.56 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092005.D
Acq: 9 Dec 2020 10:28

Tgt Ion: 98 Resp: 156914

Ion	Ratio	Lower	Upper
98	100		
100	68.9	40.0	100.0



B20L016-BS1

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20L016-BS1
Misc Info: 0
Date Acquired: 12/9/2020
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3177.63**	**64%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.376**	**5000**	**3310.12**	**66%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.086**	**5000**	**3503.81**	**70%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.088**	**5000**	**3641.67**	**73%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.652**	**5000**	**3804.92**	**76%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**3859.49**	**77%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	3816.38	76%	60	126	pass
9)	Benzene	7.515	5000	3626.07	73%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	3938.87	79%	57	128	pass
11)	**Trichloroethene**	**8.575**	**5000**	**3845.55**	**77%**	**69**	**124**	**pass**
12)	Toluene-d8	10.487	5000	4481.26	90%	70	130	pass
13)	Toluene	10.582	5000	3801.49	76%	77	111	FAIL NT
14)	1,1,2-Trichloroethane	11.232	5000	3967.81	79%	76	115	pass
15)	**Tetrachloroethene**	**11.432**	**5000**	**3932.44**	**79%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.773	5000	3593.25	72%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.916	5000	4024.39	80%	68	130	**pass**
18)	Ethylbenzene	12.972	5000	4026.44	81%	70	130	pass
19)	m&p-Xylene	13.170	10000	7799.10	78%	66	129	pass
20)	o-Xylene	13.782	5000	3618.44	72%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.880	5000	3722.90	74%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.350	5000	3992.39	80%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.906	5000	3668.92	73%	54	143	pass
25)	2-Fluorotoluene SCAN	10.979	5000	5000.28	100%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.381	5000	3552.95	71%	83	110	FAIL
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	4019.86	80%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	4577.94	92%	59	119	pass
33)	Benzene SCAN	7.514	5000	3815.51	76%	69	129	pass
35)	Trichloroethene SCAN	8.573	5000	4115.02	82%	69	129	pass
37)	Toluene SCAN	10.591	5000	4435.13	89%	66	126	pass
39)	Tetrachloroethene SCAN	11.441	5000	4868.68	97%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.915	5000	3974.70	79%	62	122	pass
43)	m&p-Xylene SCAN	13.169	5000	4456.80	89%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.883	5000	3977.57	80%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.904	5000	3901.75	78%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092006.D
Acq On : 9 Dec 2020 10:52
InstName : AG5975C
Operator : TD
Sample : B20L016-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:10:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

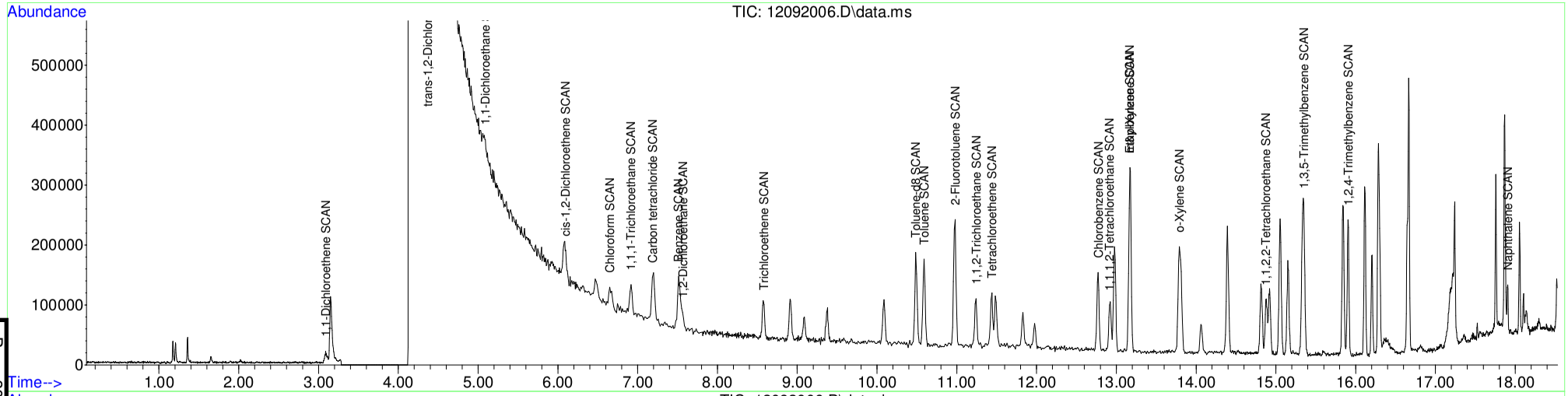
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.981	109	199400	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.488	98	173061	4481.26 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.63%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	25124	3177.63 ug/L	81
3] trans-1,2-Dichloroethene	4.363	61	32994	3310.12 ug/L	97
4] 1,1-Dichloroethane	5.079	63	41713	3503.81 ug/L	95
5] cis-1,2-Dichloroethene	6.088	61	44902	3641.67 ug/L	98
6] Chloroform	6.652	83	45062	3804.92 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	49101	3859.49 ug/L	100
8] Carbon tetrachloride	7.187	117	46419	3816.38 ug/L	100
9] Benzene	7.515	78	121667	3626.07 ug/L	99
10] 1,2-Dichloroethane	7.552	62	45086	3938.87 ug/L	98
11] Trichloroethene	8.575	130	40739	3845.55 ug/L	97
13] Toluene	10.582	91	182790	3801.49 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	44190	3967.81 ug/L	99
15] Tetrachloroethene	11.432	166	58896	3932.44 ug/L	99
16] Chlorobenzene	12.766	112	133851	3593.25 ug/L	96
17] 1,1,1,2-Tetrachloroethane	12.916	131	52468	4024.39 ug/L	99
18] Ethylbenzene	12.972	91	247286	4026.44 ug/L	99
19] m&p-Xylene	13.171	91	368851	7799.10 ug/L	98
20] o-Xylene	13.782	91	183808	3618.44 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.881	83	88118	3722.90 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	223023	3992.39 ug/L	96
23] 1,2,4-Trimethylbenzene	15.906	105	209631	3668.92 ug/L	97
24] Naphthalene	17.906	128	65306	705.46 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	113176	5000.28 ug/L	98
26) 1,1-Dichloroethene SCAN	3.089	61	16747	3169.42 ug/L	76
27) trans-1,2-Dichloroethe...	4.368	61	23912	3552.95 ug/L #	65
28) 1,1-Dichloroethane SCAN	5.085	63	30400	3826.79 ug/L	94
29) cis-1,2-Dichloroethene...	6.093	61	31393	4019.86 ug/L #	74
30) Chloroform SCAN	6.651	83	30379	4170.63 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	34410	4577.94 ug/L	90
32) Carbon tetrachloride SCAN	7.186	117	28659	4461.81 ug/L	91
33) Benzene SCAN	7.514	78	86764	3815.51 ug/L	92
34) 1,2-Dichloroethane SCAN	7.563	62	30915	4346.32 ug/L	83
35) Trichloroethene SCAN	8.585	130	20404	4115.02 ug/L	77
36) Toluene-d8 SCAN	10.486	98	101686	4790.14 ug/L	95
37) Toluene SCAN	10.591	91	115920	4435.13 ug/L	98
38) 1,1,2-Trichloroethane ...	11.242	97	26584	4057.84 ug/L	88
39) Tetrachloroethene SCAN	11.441	166	28627	4868.68 ug/L	94
40) Chlorobenzene SCAN	12.772	112	75954	4045.94 ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.915	131	25743	3974.70 ug/L	91
42) Ethylbenzene SCAN	13.169	91	221984	4456.80 ug/L	90
43) m&p-Xylene SCAN	13.169	91	221984	4456.80 ug/L	92
44) o-Xylene SCAN	13.789	91	115888	4260.91 ug/L	93
45) 1,1,2,2-Tetrachloroeth...	14.876	83	56249	3977.57 ug/L	97
46) 1,3,5-Trimethylbenzene...	15.348	105	126642	4413.65 ug/L	99
47) 1,2,4-Trimethylbenzene...	15.904	105	114384	3901.75 ug/L	96
48) Naphthalene SCAN	17.905	128	34329	780.14 ug/L	99

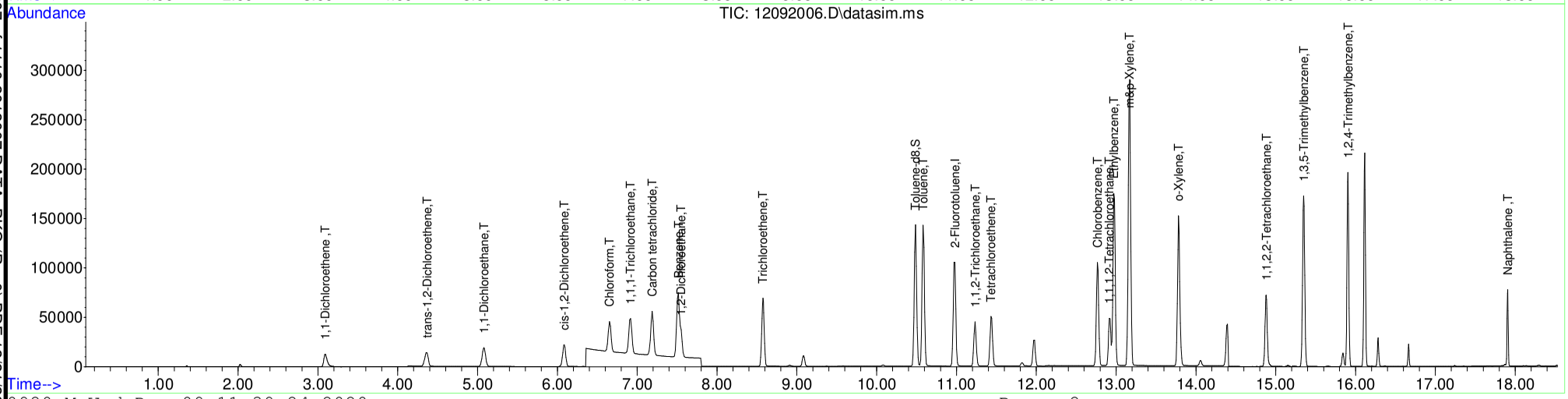
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092006.D
Acq On : 9 Dec 2020 10:52
InstName : AG5975C
Operator : TD
Sample : B20L016-BS1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:10:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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B20L016-BSD1

Blanks Spike or Blank Spike Duplicate

Instrument Name: AG5975C
Sample Name: B20L016-BSD1
Misc Info: 0
Date Acquired: 12/9/2020
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000	5000.00	100%	70	130	pass
2)	**1,1-Dichloroethene**	**3.090**	**5000**	**3841.17**	**77%**	**22**	**143**	**pass**
3)	**trans-1,2-Dichloroethene**	**4.376**	**5000**	**4004.96**	**80%**	**35**	**133**	**pass**
4)	**1,1-Dichloroethane**	**5.086**	**5000**	**4099.83**	**82%**	**43**	**140**	**pass**
5)	**cis-1,2-Dichloroethene**	**6.088**	**5000**	**4231.80**	**85%**	**49**	**134**	**pass**
6)	**Chloroform**	**6.652**	**5000**	**4306.45**	**86%**	**56**	**132**	**pass**
7)	**1,1,1-Trichloroethane**	**6.919**	**5000**	**4557.35**	**91%**	**58**	**131**	pass
8)	Carbon tetrachloride	7.187	5000	4563.55	91%	60	126	pass
9)	Benzene	7.515	5000	4270.76	85%	63	121	pass
10)	1,2-Dichloroethane	7.552	5000	4547.31	91%	57	128	pass
11)	**Trichloroethene**	**8.575**	**5000**	**4423.91**	**88%**	**69**	**124**	**pass**
12)	Toluene-d8	10.487	5000	4469.96	89%	70	130	pass
13)	Toluene	10.582	5000	4265.98	85%	77	111	pass
14)	1,1,2-Trichloroethane	11.232	5000	4340.85	87%	76	115	pass
15)	**Tetrachloroethene**	**11.432**	**5000**	**4382.59**	**88%**	**69**	**124**	**pass**
16)	Chlorobenzene	12.773	5000	3973.02	79%	64	122	pass
17)	1,1,1,2-Tetrachloroethane	12.916	5000	4354.31	87%	68	130	**pass**
18)	Ethylbenzene	12.972	5000	4327.75	87%	70	130	pass
19)	m&p-Xylene	13.170	10000	8372.94	84%	66	129	pass
20)	o-Xylene	13.782	5000	3926.06	79%	63	121	pass
21)	1,1,2,2-Tetrachloroethane	14.880	5000	4005.24	80%	55	132	pass
22)	1,3,5-Trimethylbenzene	15.350	5000	4168.53	83%	61	140	pass
23)	1,2,4-Trimethylbenzene	15.906	5000	3845.78	77%	54	143	pass
25)	2-Fluorotoluene SCAN	10.979	5000	5033.55	101%	20	110	pass
27)	trans-1,2-Dichloroethene SCAN	4.381	5000	4026.56	81%	83	110	FAIL
29)	cis-1,2-Dichloroethene SCAN	6.093	5000	4439.44	89%	58	118	pass
31)	1,1,1-Trichloroethane SCAN	6.918	5000	4835.65	97%	59	119	pass
33)	Benzene SCAN	7.514	5000	4142.83	83%	69	129	pass
35)	Trichloroethene SCAN	8.573	5000	4853.01	97%	69	129	pass
37)	Toluene SCAN	10.591	5000	4897.54	98%	66	126	pass
39)	Tetrachloroethene SCAN	11.441	5000	5198.06	104%	59	119	pass
41)	1,1,1,2-Tetrachloroethane SCAN	12.915	5000	4983.41	100%	62	122	pass
43)	m&p-Xylene SCAN	13.169	5000	4648.84	93%	68	128	pass
45)	1,1,2,2-Tetrachloroethane SCAN	14.883	5000	4259.46	85%	63	123	pass
47)	1,2,4-Trimethylbenzene SCAN	15.904	5000	4212.17	84%	20	110	pass

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092007.D
Acq On : 9 Dec 2020 11:15
InstName : AG5975C
Operator : TD
Sample : B20L016-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 09 11:34:26 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

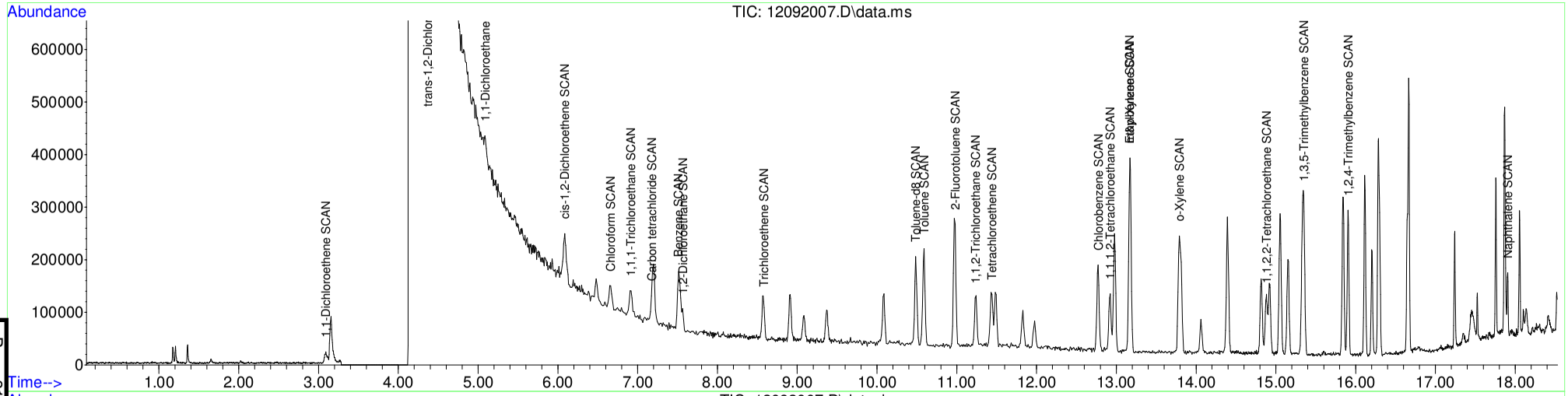
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	227762	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	197178	4469.96 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.40%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.086	61	34690	3841.17 ug/L	83
3] trans-1,2-Dichloroethene	4.369	61	45598	4004.96 ug/L	98
4] 1,1-Dichloroethane	5.086	63	55751	4099.83 ug/L	95
5] cis-1,2-Dichloroethene	6.088	61	59600	4231.80 ug/L	98
6] Chloroform	6.652	83	58256	4306.45 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	66226	4557.35 ug/L	100
8] Carbon tetrachloride	7.187	117	63402	4563.55 ug/L	100
9] Benzene	7.515	78	163681	4270.76 ug/L	100
10] 1,2-Dichloroethane	7.552	62	59454	4547.31 ug/L	98
11] Trichloroethene	8.575	130	53532	4423.91 ug/L	96
13] Toluene	10.582	91	234301	4265.98 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	55221	4340.85 ug/L	98
15] Tetrachloroethene	11.432	166	74974	4382.59 ug/L	100
16] Chlorobenzene	12.765	112	169048	3973.02 ug/L	96
17] 1,1,1,2-Tetrachloroethane	12.916	131	64844	4354.31 ug/L	100
18] Ethylbenzene	12.972	91	303596	4327.75 ug/L	99
19] m&p-Xylene	13.171	91	452315	8372.94 ug/L	98
20] o-Xylene	13.782	91	227801	3926.06 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.881	83	108285	4005.24 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	265984	4168.53 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	250991	3845.78 ug/L	96
24] Naphthalene	17.906	128	102287	967.35 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	130134	5033.55 ug/L	96
26) 1,1-Dichloroethene SCAN	3.092	61	19863	3291.03 ug/L #	42
27) trans-1,2-Dichloroethe...	4.368	61	30954	4026.56 ug/L	75
28) 1,1-Dichloroethane SCAN	5.085	63	38301	4221.00 ug/L	94
29) cis-1,2-Dichloroethene...	6.087	61	39601	4439.44 ug/L #	74
30) Chloroform SCAN	6.663	83	38560	4634.56 ug/L	94
31) 1,1,1-Trichloroethane ...	6.918	97	41517	4835.65 ug/L	89
32) Carbon tetrachloride SCAN	7.174	117	40386	5504.59 ug/L	88
33) Benzene SCAN	7.514	78	107607	4142.83 ug/L	93
34) 1,2-Dichloroethane SCAN	7.563	62	41148	5064.60 ug/L	91
35) Trichloroethene SCAN	8.579	130	27486	4853.01 ug/L	81
36) Toluene-d8 SCAN	10.486	98	114199	4709.70 ug/L	95
37) Toluene SCAN	10.591	91	146213	4897.54 ug/L	98
38) 1,1,2-Trichloroethane ...	11.231	97	34216	4572.43 ug/L	92
39) Tetrachloroethene SCAN	11.441	166	34911	5198.06 ug/L	91
40) Chlorobenzene SCAN	12.772	112	91756	4279.04 ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.923	131	36867	4983.41 ug/L	95
42) Ethylbenzene SCAN	13.169	91	264484	4648.84 ug/L	92
43) m&p-Xylene SCAN	13.169	91	264484	4648.84 ug/L	93
44) o-Xylene SCAN	13.789	91	138937	4472.24 ug/L	96
45) 1,1,2,2-Tetrachloroeth...	14.879	83	68803	4259.46 ug/L	98
46) 1,3,5-Trimethylbenzene...	15.348	105	151170	4612.43 ug/L	96
47) 1,2,4-Trimethylbenzene...	15.904	105	141048	4212.17 ug/L	94
48) Naphthalene SCAN	17.905	128	50531	1005.34 ug/L	97

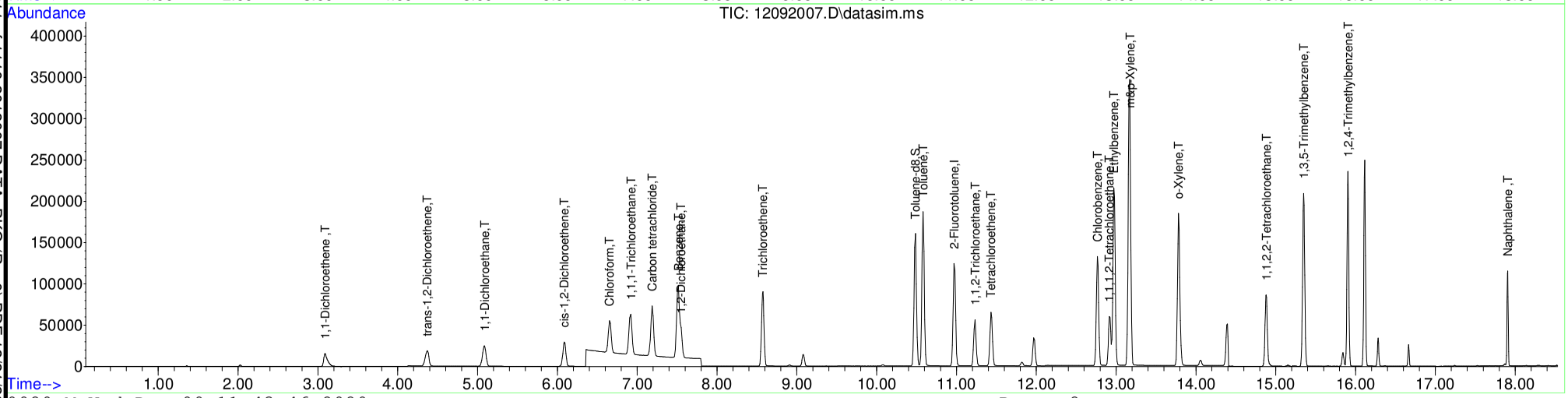
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092007.D
Acq On : 9 Dec 2020 11:15
InstName : AG5975C
Operator : TD
Sample : B20L016-BSD1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 09 11:34:26 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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B20L016-MRL1

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

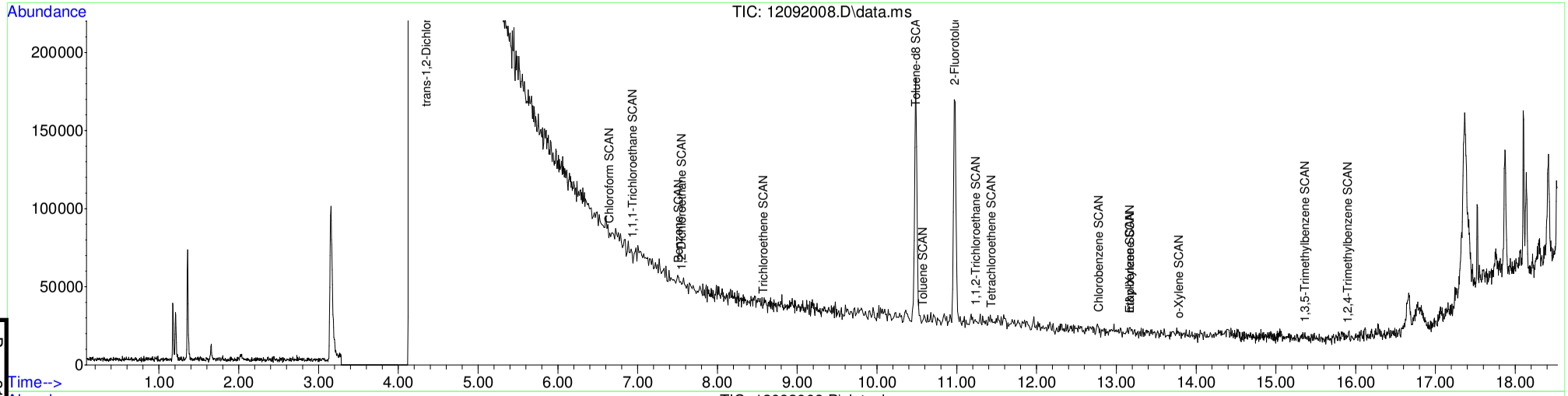
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204619	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	175348	4424.67	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.49%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	611	75.31	ug/L #	49
3] trans-1,2-Dichloroethene	4.356	61	386	37.74	ug/L	92
4] 1,1-Dichloroethane	5.073	63	454	37.16	ug/L	91
5] cis-1,2-Dichloroethene	6.081	61	484	38.25	ug/L	92
6] Chloroform	6.652	83	512	42.13	ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	571	43.74	ug/L	98
8] Carbon tetrachloride	7.175	117	540	43.26	ug/L	87
9] Benzene	7.503	78	2996	87.01	ug/L #	28
10] 1,2-Dichloroethane	7.540	62	508	43.25	ug/L	65
11] Trichloroethene	8.575	130	491	45.17	ug/L	94
13] Toluene	10.582	91	2507	50.81	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	512	44.80	ug/L	91
15] Tetrachloroethene	11.432	166	722	46.98	ug/L	96
16] Chlorobenzene	12.765	112	1747	45.70	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	642	47.99	ug/L	100
18] Ethylbenzene	12.972	91	3324	52.74	ug/L	95
19] m&p-Xylene	13.171	91	5757	118.62	ug/L	96
20] o-Xylene	13.782	91	2631	50.47	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	1133	46.65	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	2973	51.86	ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	3394	57.89	ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	115624	4978.14	ug/L	98
27) trans-1,2-Dichloroethe...	4.348	61	299	43.29	ug/L #	17
30) Chloroform SCAN	6.638	83	592	79.20	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.930	97	242	31.37	ug/L #	19
33) Benzene SCAN	7.514	78	3485	149.35	ug/L	97
34) 1,2-Dichloroethane SCAN	7.551	62	185	25.35	ug/L #	60
35) Trichloroethene SCAN	8.568	130	123	24.17	ug/L #	55
36) Toluene-d8 SCAN	10.486	98	109238	5014.65	ug/L	92
37) Toluene SCAN	10.570	91	2259	84.23	ug/L #	32
38) 1,1,2-Trichloroethane ...	11.231	97	263	39.12	ug/L #	42
39) Tetrachloroethene SCAN	11.431	166	167	27.68	ug/L #	29
40) Chlorobenzene SCAN	12.772	112	1014	52.64	ug/L #	37
42) Ethylbenzene SCAN	13.169	91	4335	84.81	ug/L	70
43) m&p-Xylene SCAN	13.169	91	4335	84.81	ug/L	77
44) o-Xylene SCAN	13.781	91	1805	64.67	ug/L	72
46) 1,3,5-Trimethylbenzene...	15.358	105	1997	67.82	ug/L	75
47) 1,2,4-Trimethylbenzene...	15.899	105	1826	60.70	ug/L	86

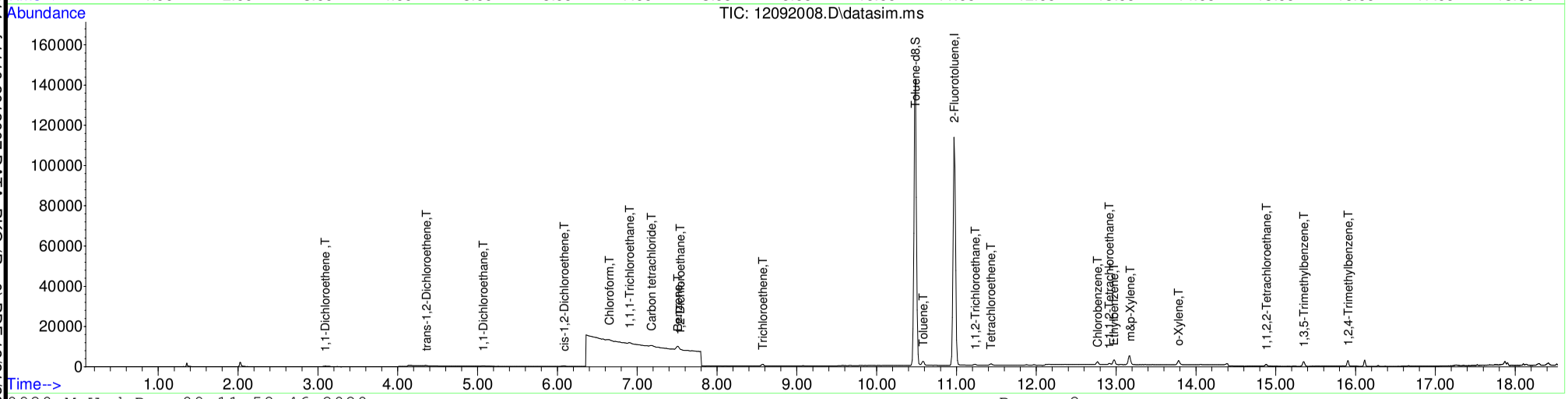
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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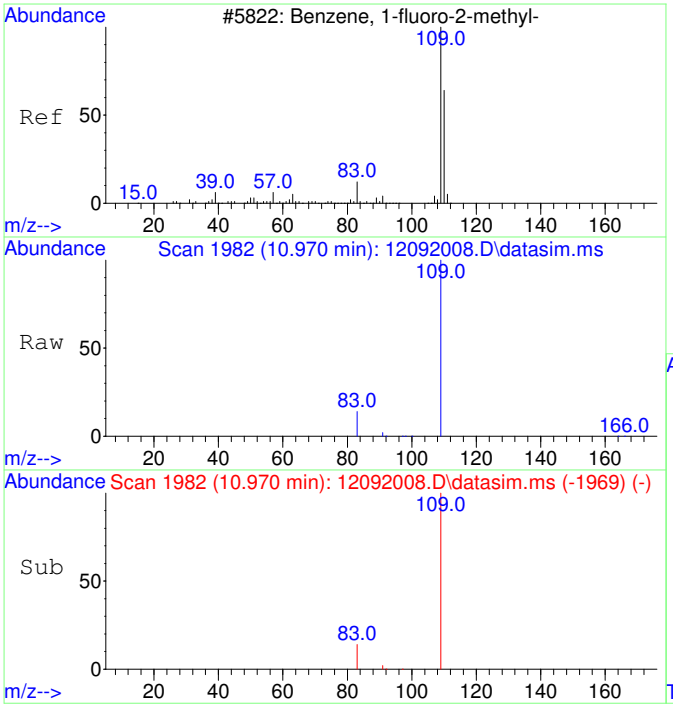
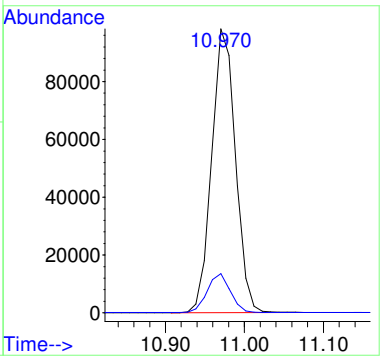
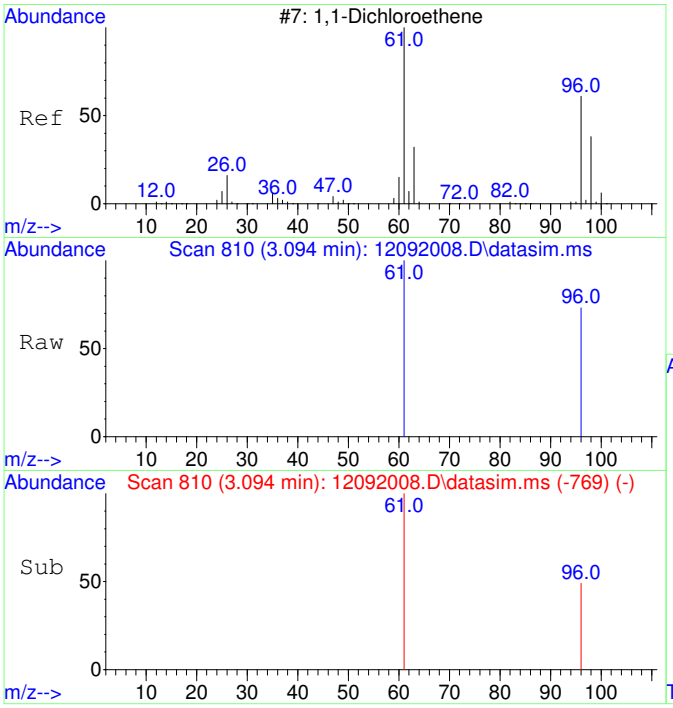


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 204619

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

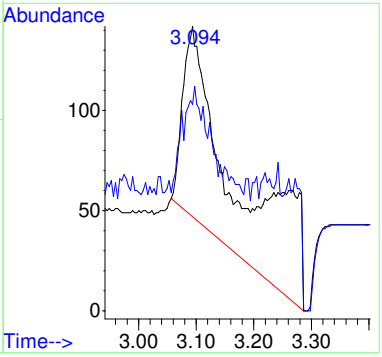




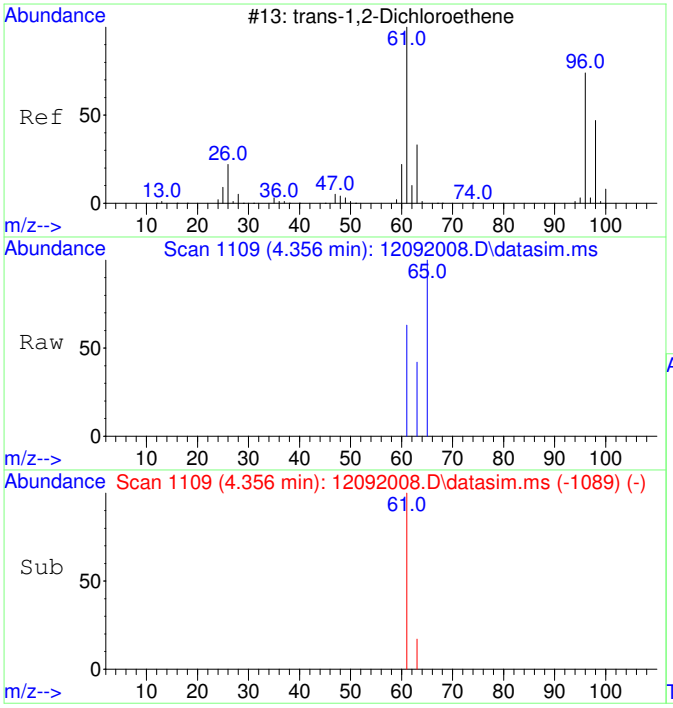
#2
1,1-Dichloroethene
Concen: 75.31 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 611

Ion	Ratio	Lower	Upper
61	100		
96	26.2	37.2	97.2#



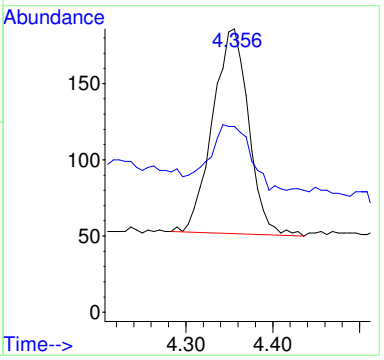
Before MI:
IMPROPER
BASELINE

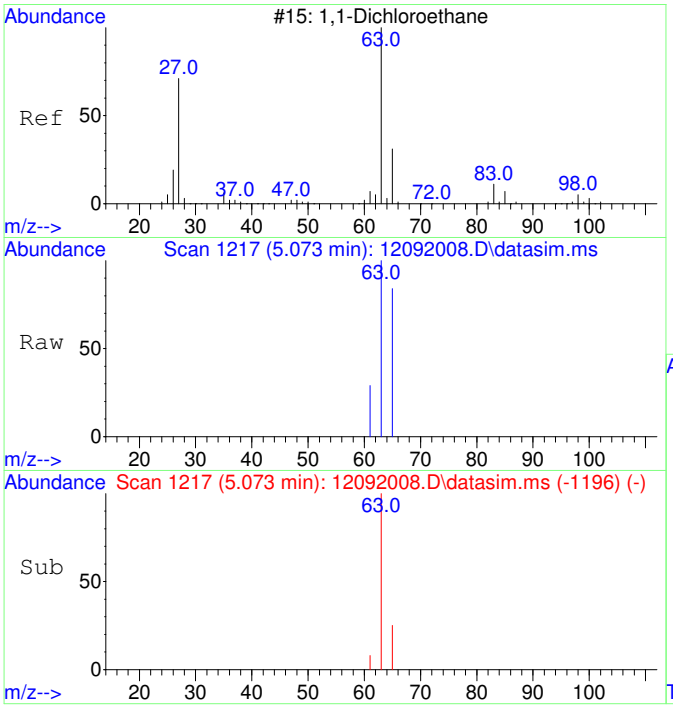


#3
trans-1,2-Dichloroethene
Concen: 37.74 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 386

Ion	Ratio	Lower	Upper
61	100		
63	37.0	2.4	62.4

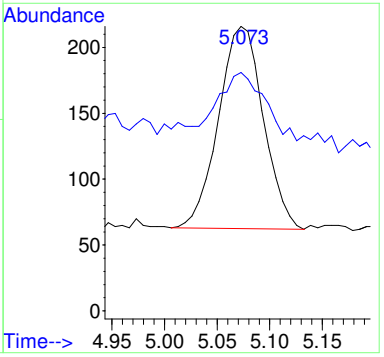


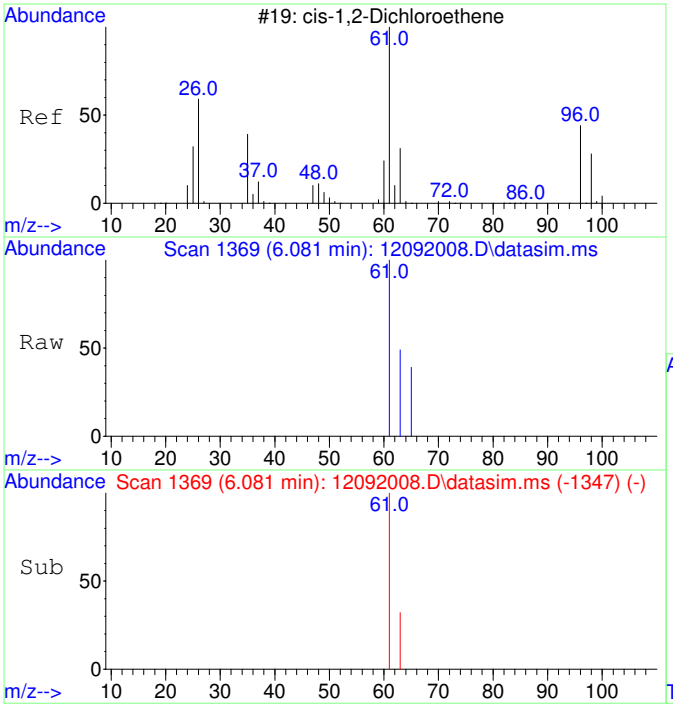


#4
1,1-Dichloroethane
Concen: 37.16 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 63 Resp: 454

Ion	Ratio	Lower	Upper
63	100		
65	36.8	1.8	61.8

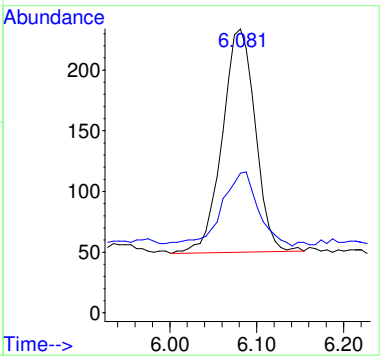


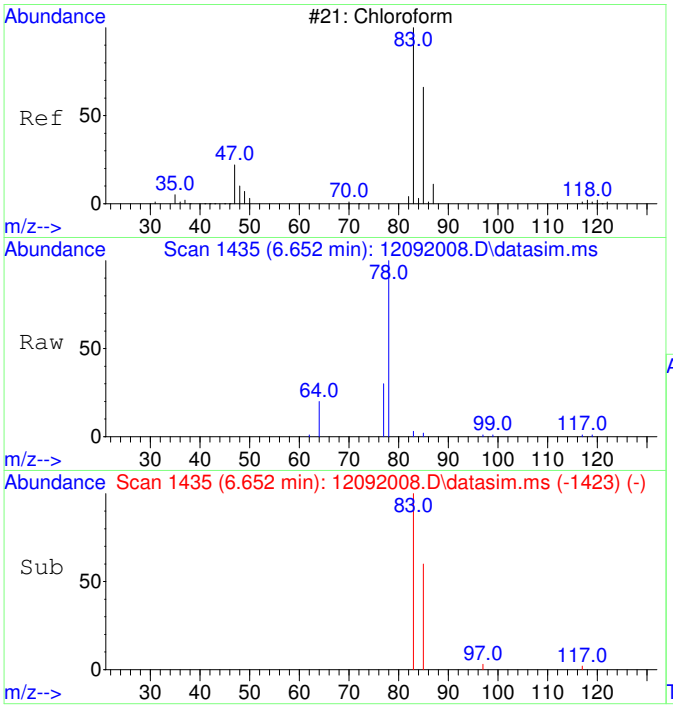


#5
cis-1,2-Dichloroethene
Concen: 38.25 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
63	37.2	2.5	62.5

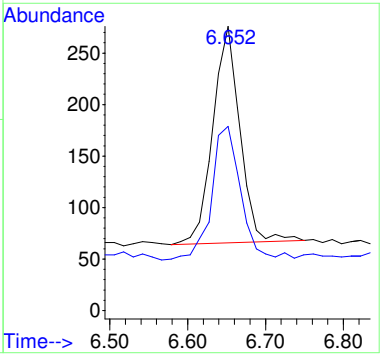


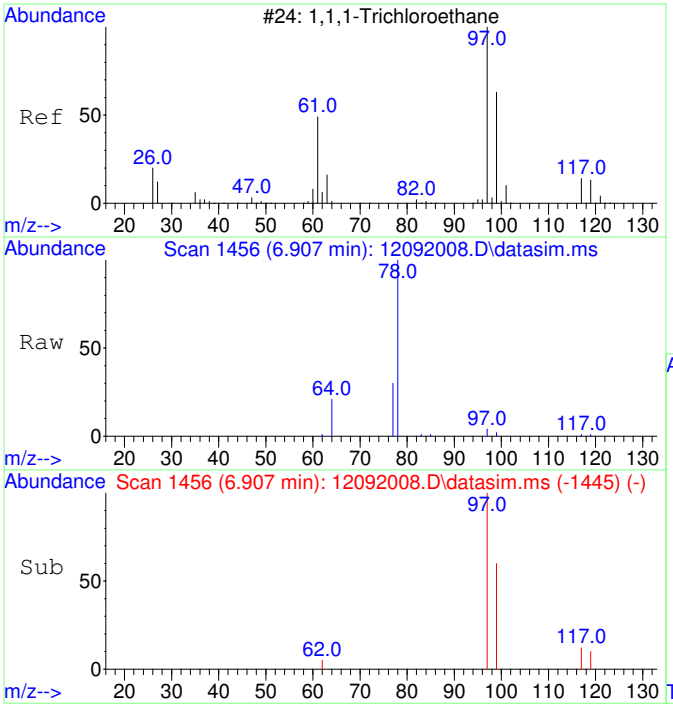


#6
Chloroform
Concen: 42.13 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 512

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

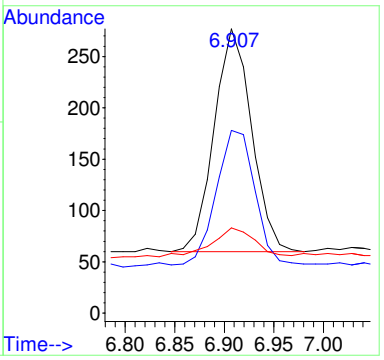


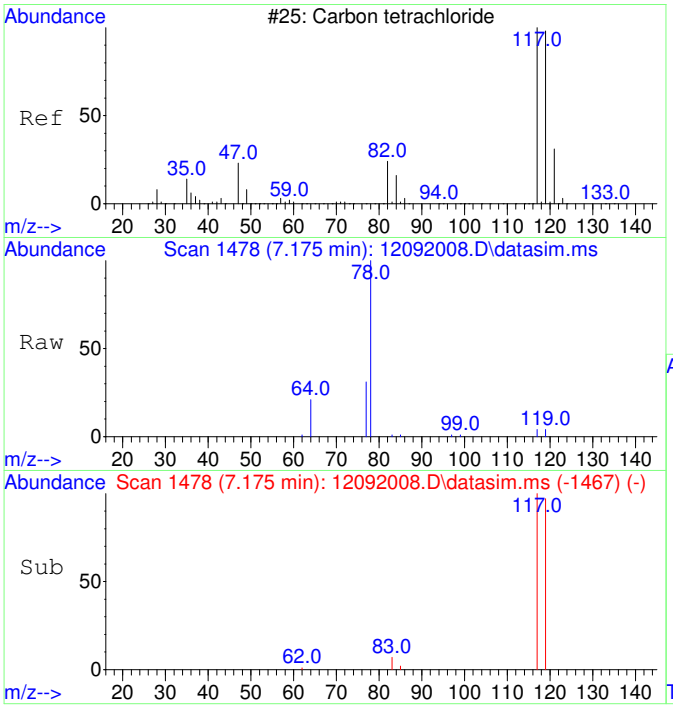


#7
1,1,1-Trichloroethane
Concen: 43.74 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 571

Ion	Ratio	Lower	Upper
97	100		
99	66.2	34.6	94.6
117	14.9	0.0	43.2

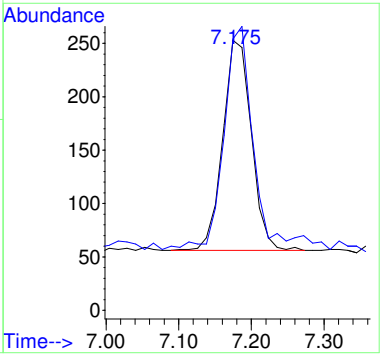


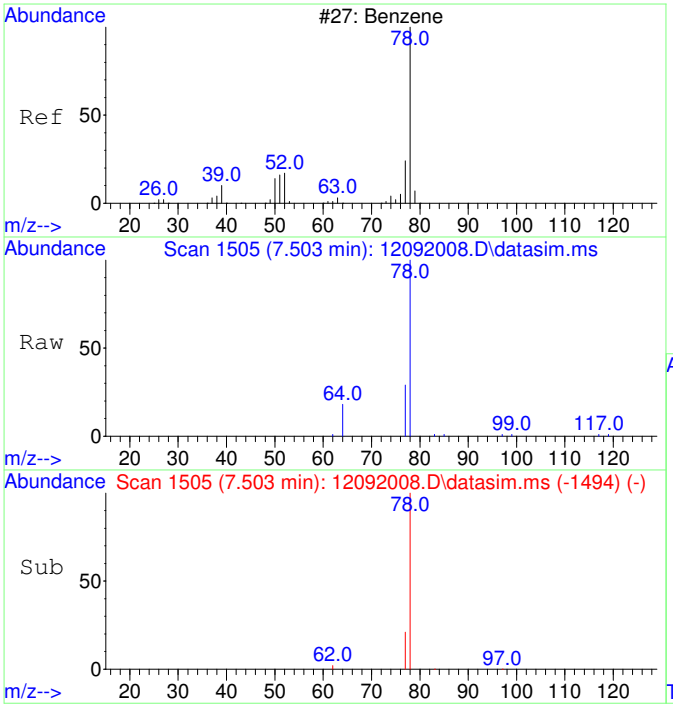


#8
Carbon tetrachloride
Concen: 43.26 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:117 Resp: 540

Ion	Ratio	Lower	Upper
117	100		
119	108.9	66.4	126.4

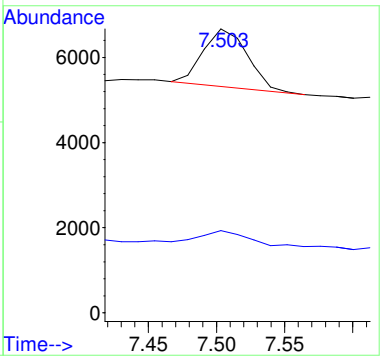


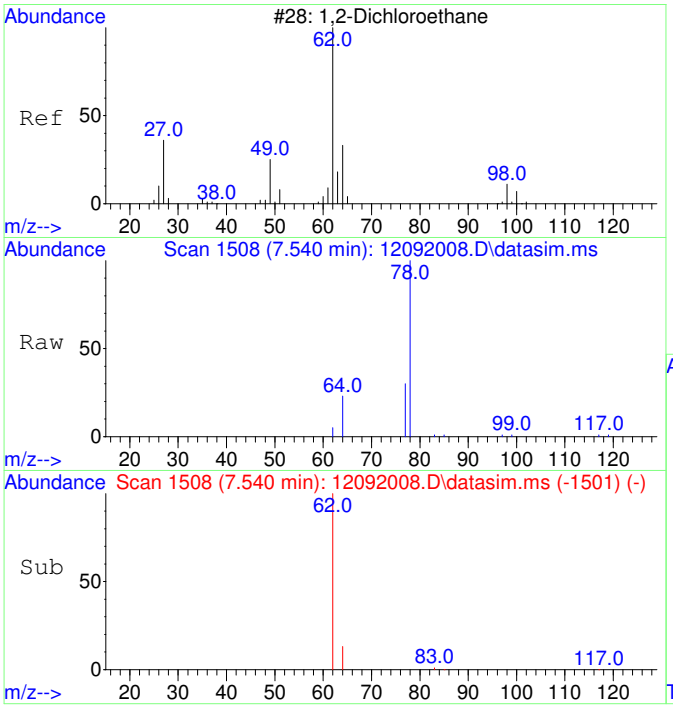


#9
Benzene
Concen: 87.01 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 2996

Ion	Ratio	Lower	Upper
78	100		
77	58.3	0.0	53.2#

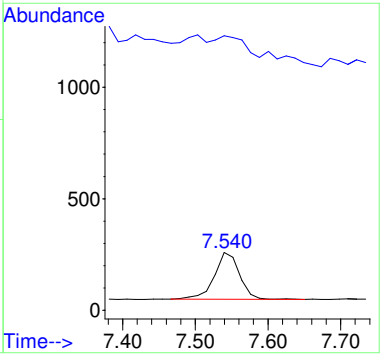


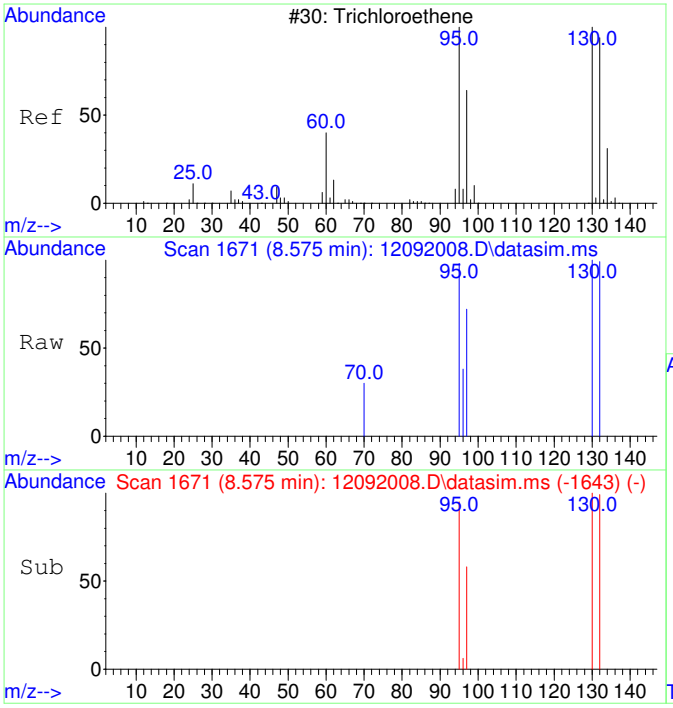


#10
1,2-Dichloroethane
Concen: 43.25 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 508

Ion	Ratio	Lower	Upper
62	100		
64	52.0	2.3	62.3

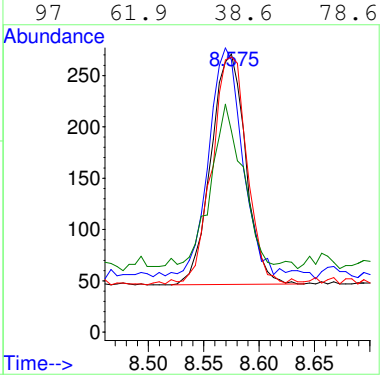


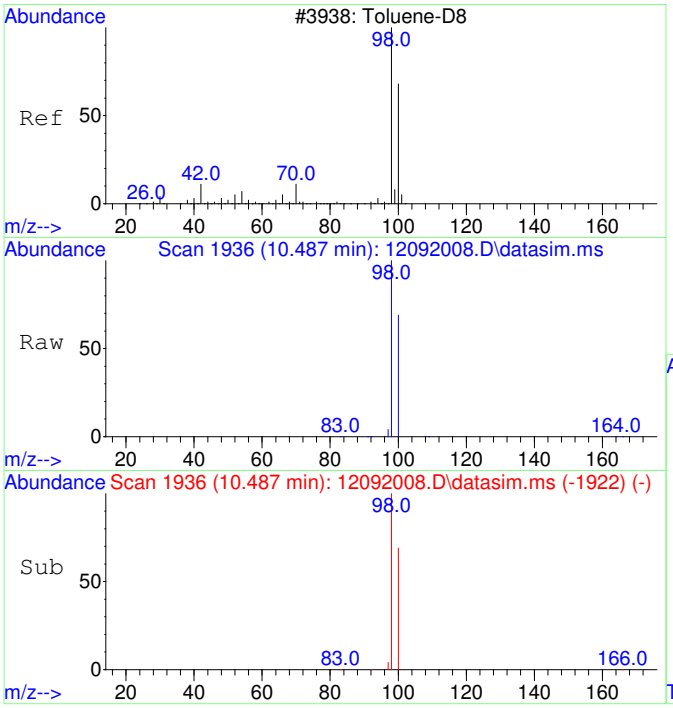


#11
Trichloroethene
Concen: 45.17 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 491

Ion	Ratio	Lower	Upper
130	100		
95	100.2	60.7	120.7
132	99.2	76.0	116.0
97	61.9	38.6	78.6

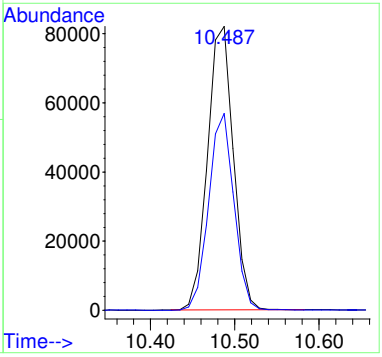


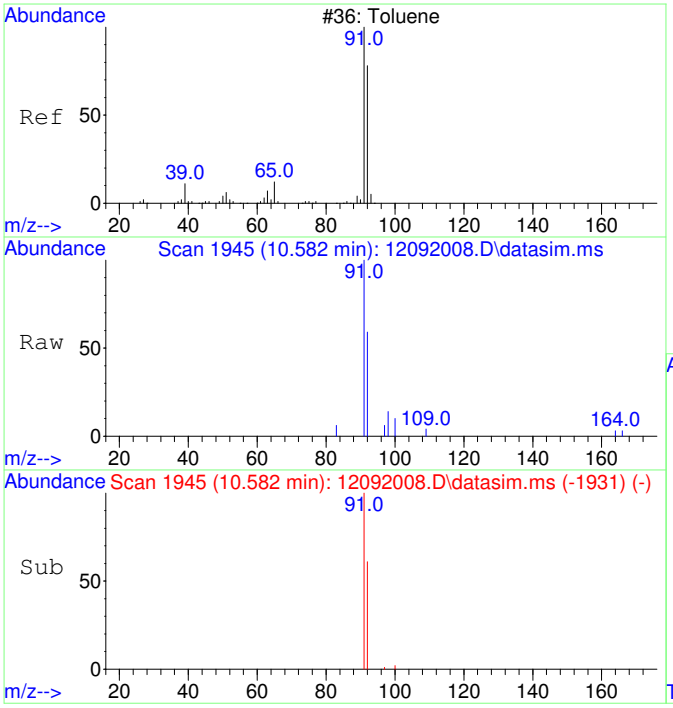


#12
Toluene-d8
Concen: 4424.67 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 175348

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

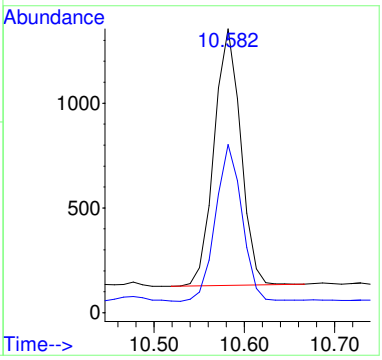


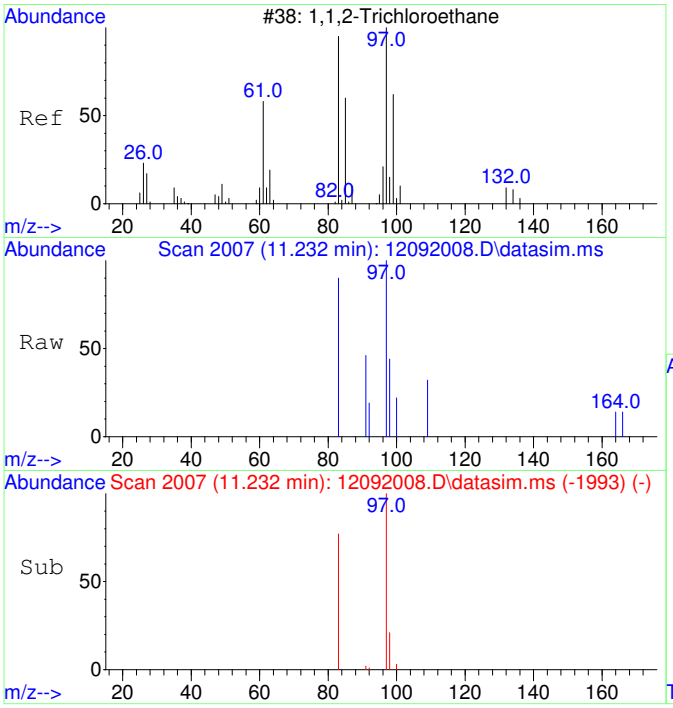


#13
Toluene
Concen: 50.81 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2507

Ion	Ratio	Lower	Upper
91	100		
92	60.4	29.9	89.9

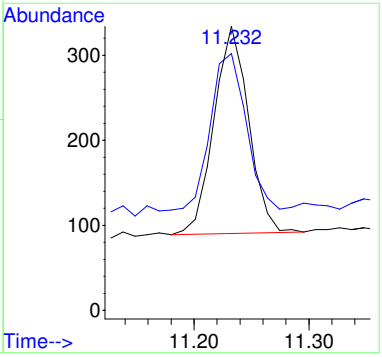


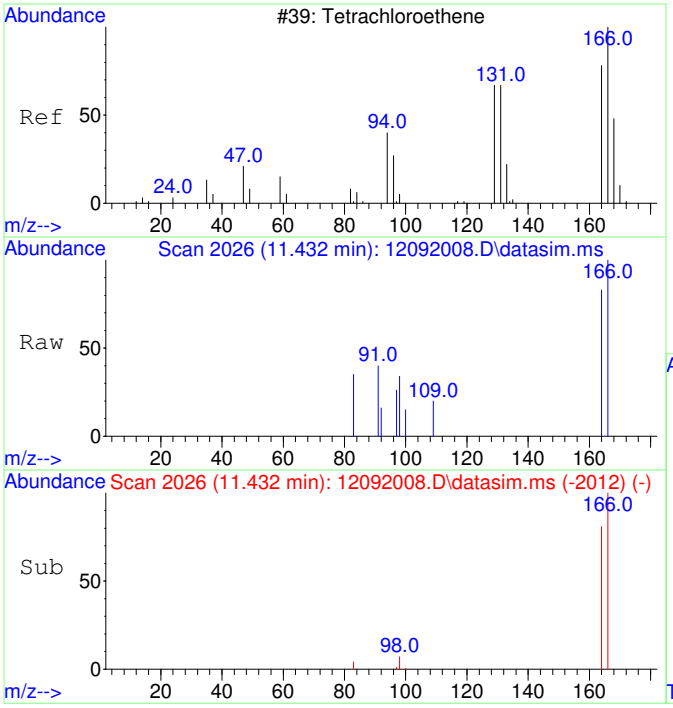


#14
1,1,2-Trichloroethane
Concen: 44.80 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	89.3	51.2	111.2

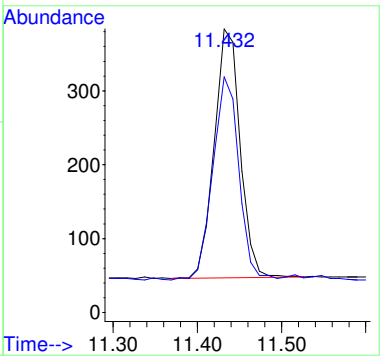


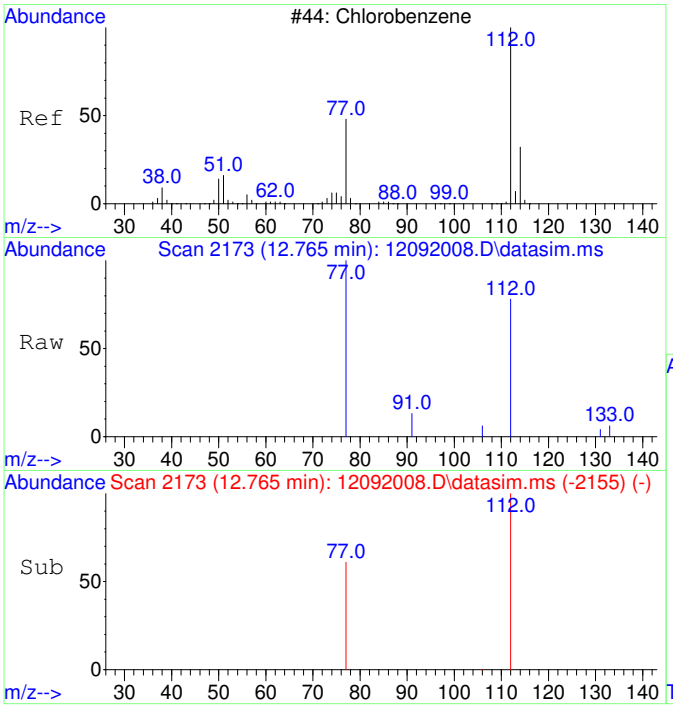


#15
Tetrachloroethene
Concen: 46.98 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 722

Ion	Ratio	Lower	Upper
166	100		
164	80.9	47.8	107.8

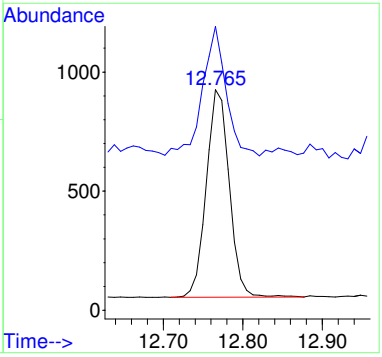


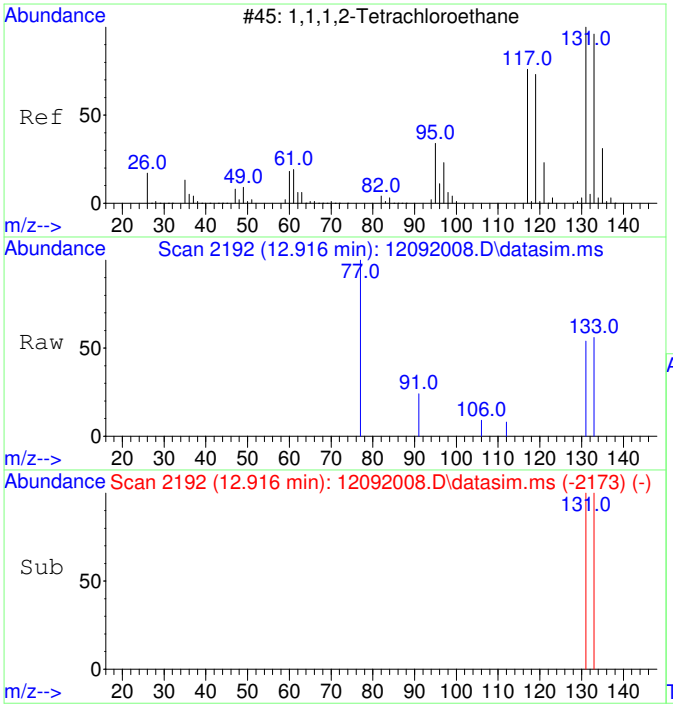


#16
Chlorobenzene
Concen: 45.70 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1747

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

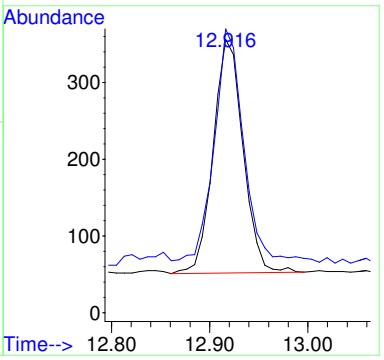


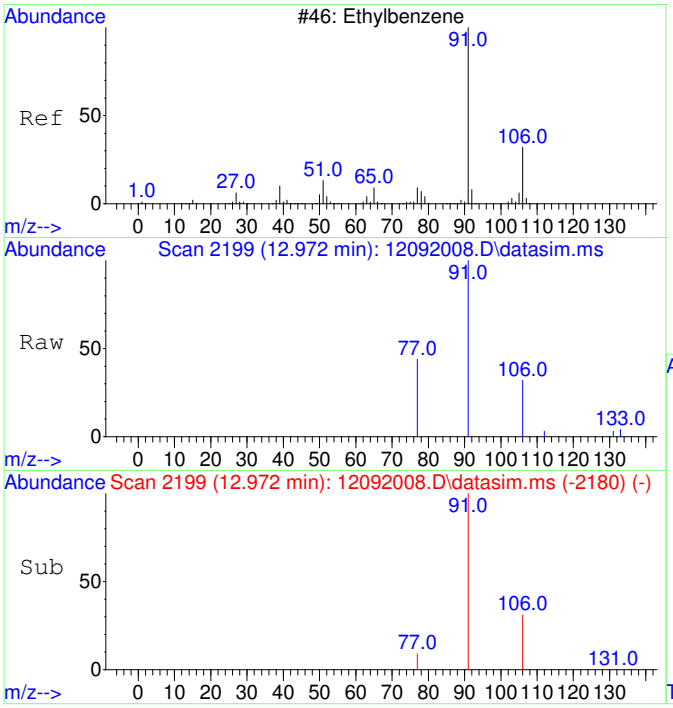


#17
1,1,1,2-Tetrachloroethane
Concen: 47.99 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:131 Resp: 642

Ion	Ratio	Lower	Upper
131	100		
133	96.7	66.3	126.3

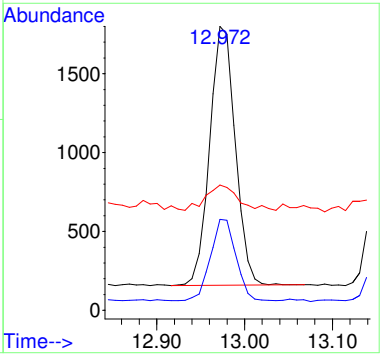


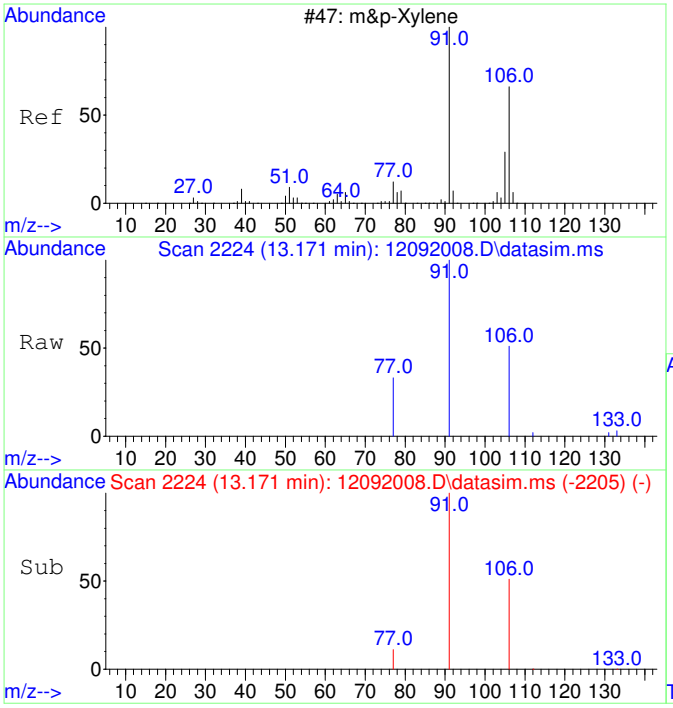


#18
Ethylbenzene
Concen: 52.74 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 3324

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	11.9	0.0	38.2

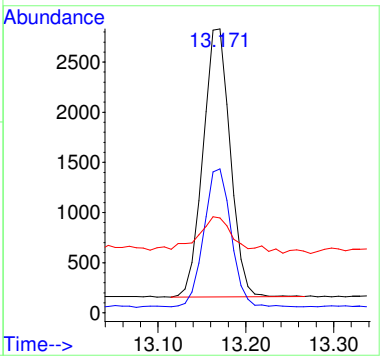


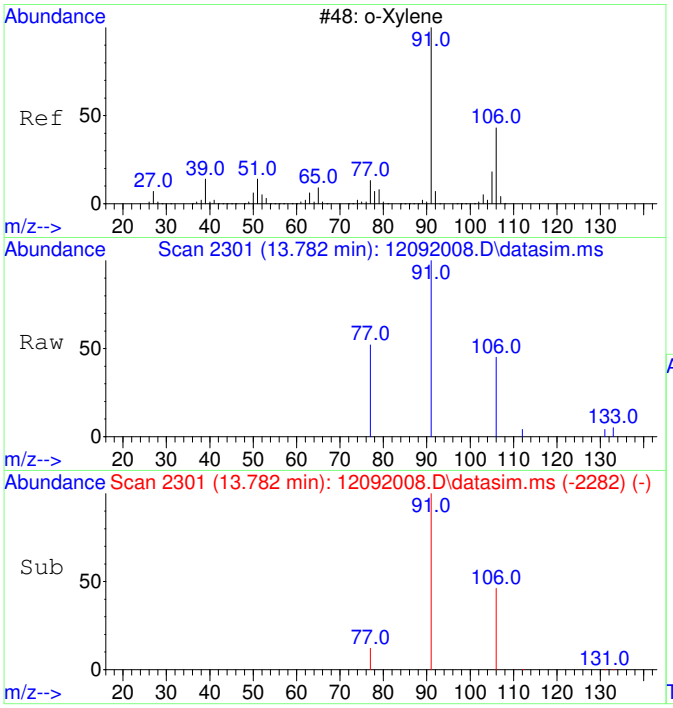


#19
m&p-Xylene
Concen: 118.62 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 5757

Ion	Ratio	Lower	Upper
91	100		
106	51.3	22.2	82.2
77	19.3	0.0	42.4

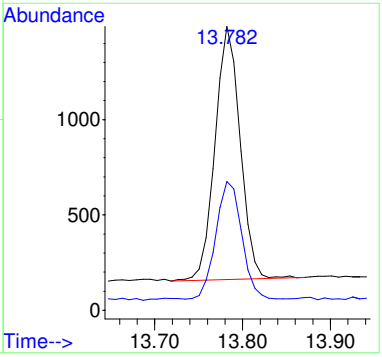


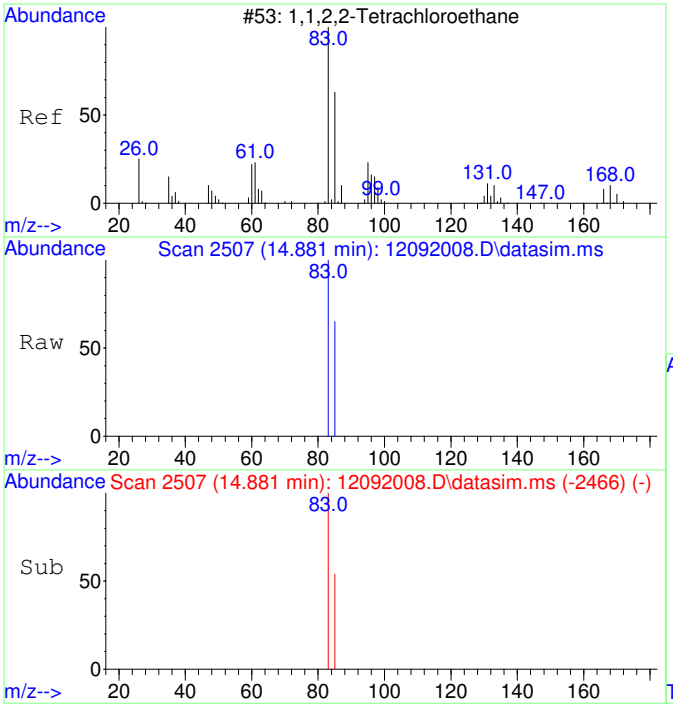


#20
o-Xylene
Concen: 50.47 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2631

Ion	Ratio	Lower	Upper
91	100		
106	47.8	19.2	79.2

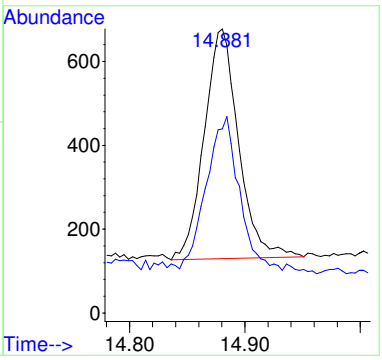


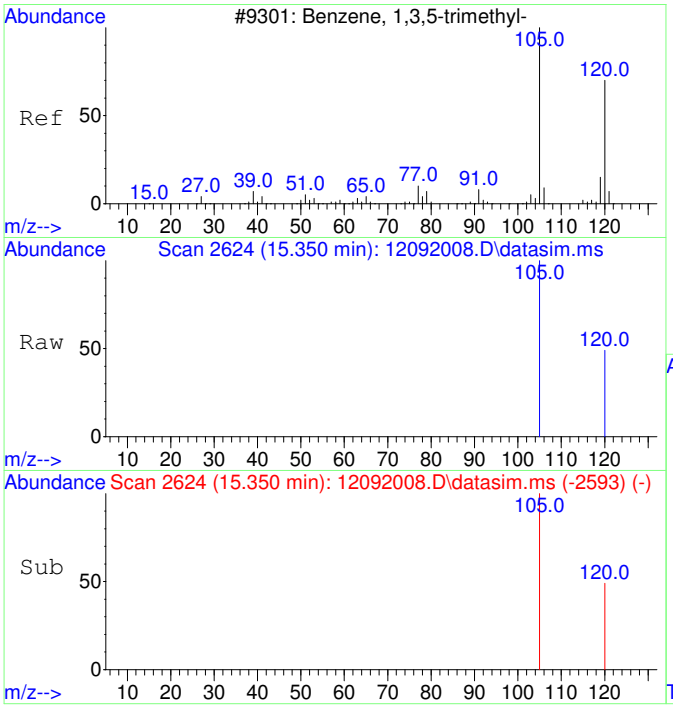


#21
1,1,2,2-Tetrachloroethane
Concen: 46.65 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 1133

Ion	Ratio	Lower	Upper
83	100		
85	64.6	34.8	94.8

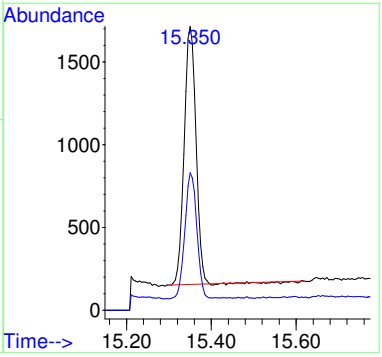


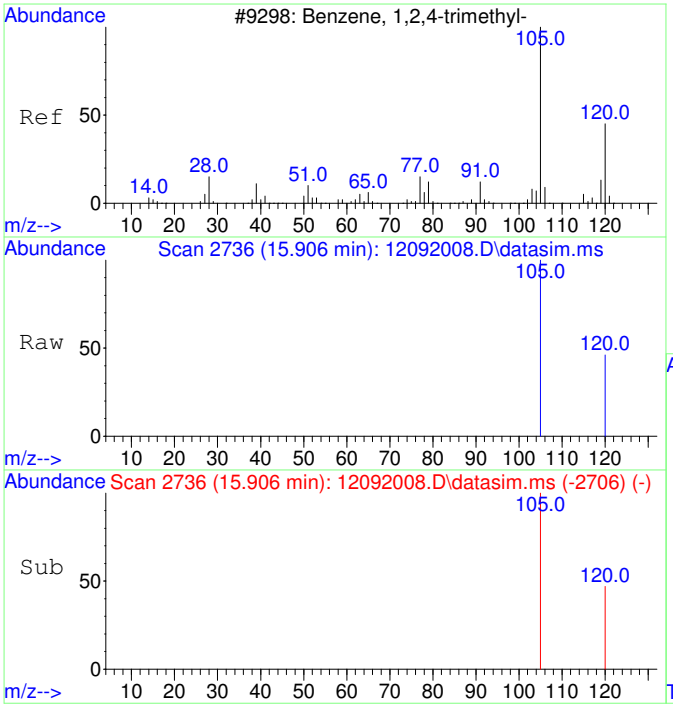


#22
1,3,5-Trimethylbenzene
Concen: 51.86 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 2973

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

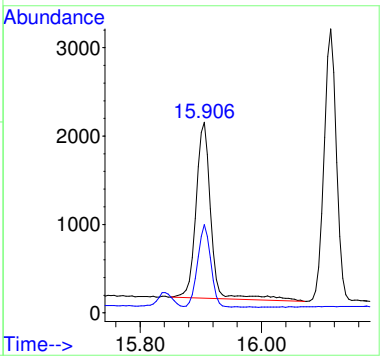


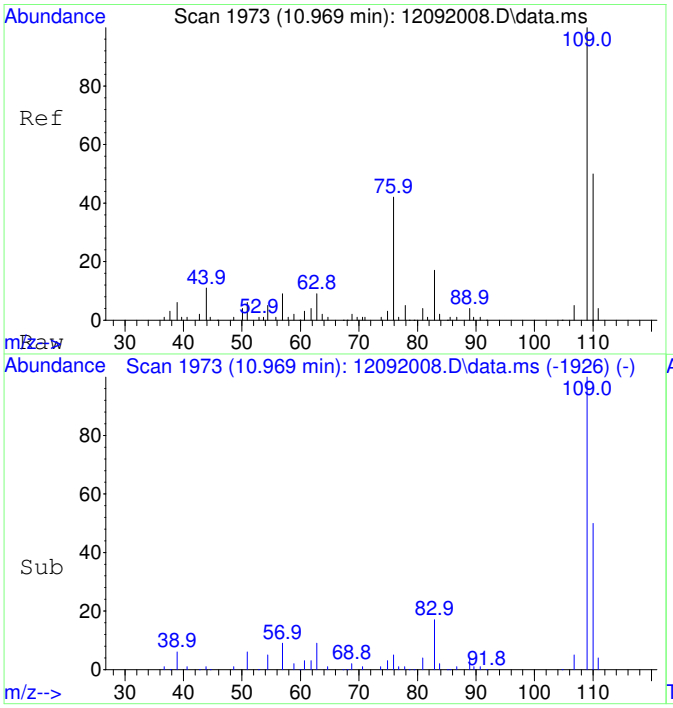


#23
1,2,4-Trimethylbenzene
Concen: 57.89 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 3394

Ion	Ratio	Lower	Upper
105	100		
120	40.5	17.2	77.2

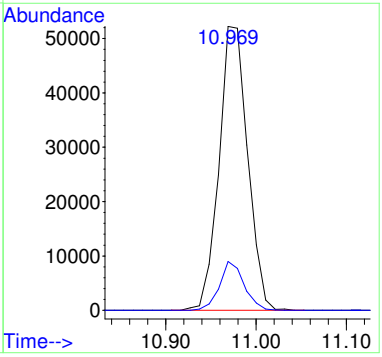


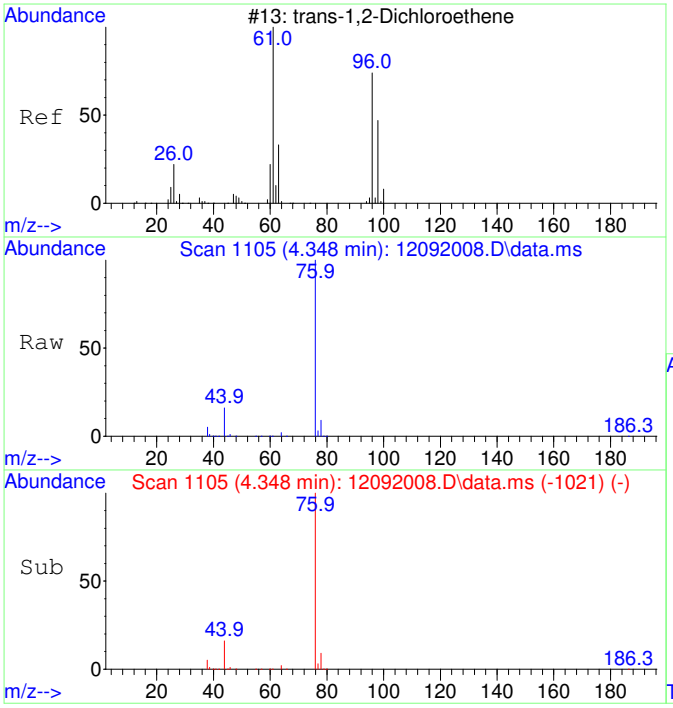


#25
2-Fluorotoluene SCAN
Concen: 4978.14 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 115624

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

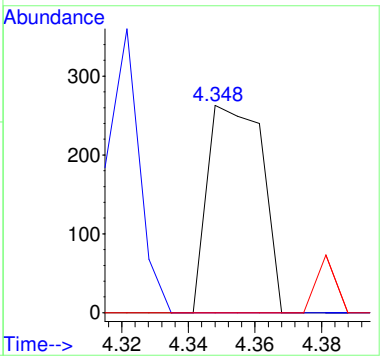


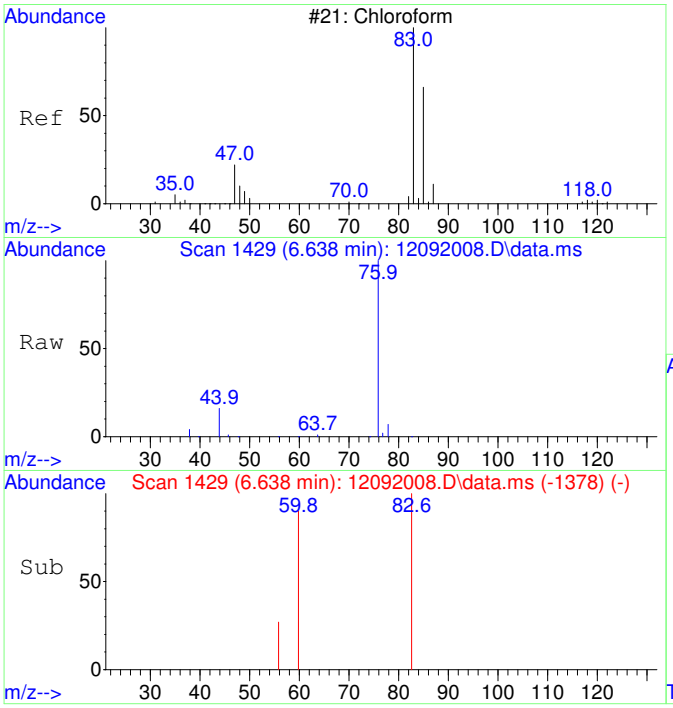


#27
trans-1,2-Dichloroethene SCAN
Concen: 43.29 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 299

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

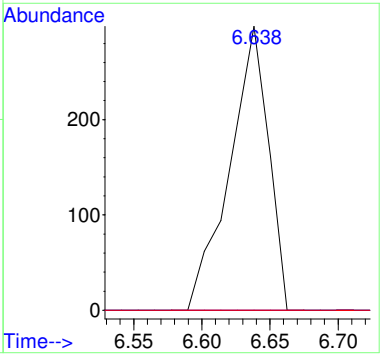


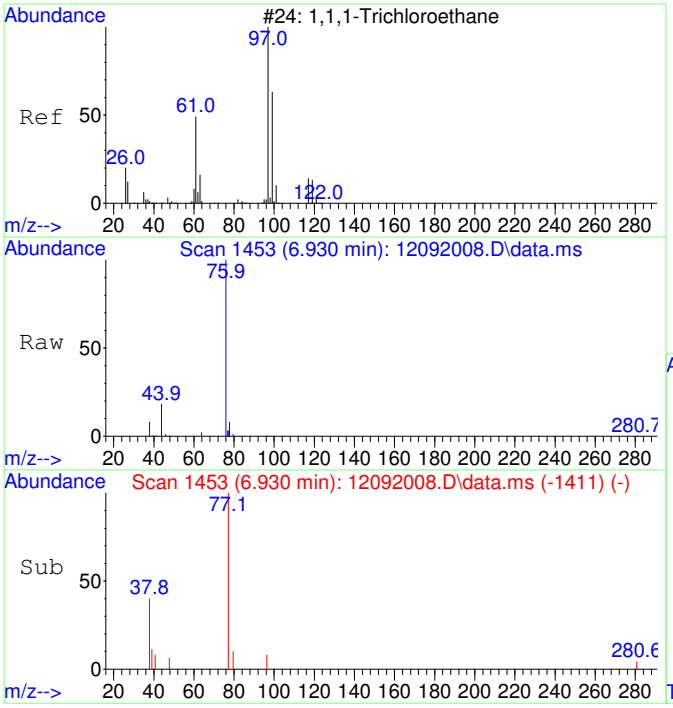


#30
Chloroform SCAN
Concen: 79.20 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 592

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

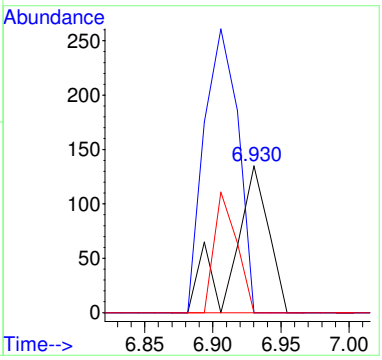


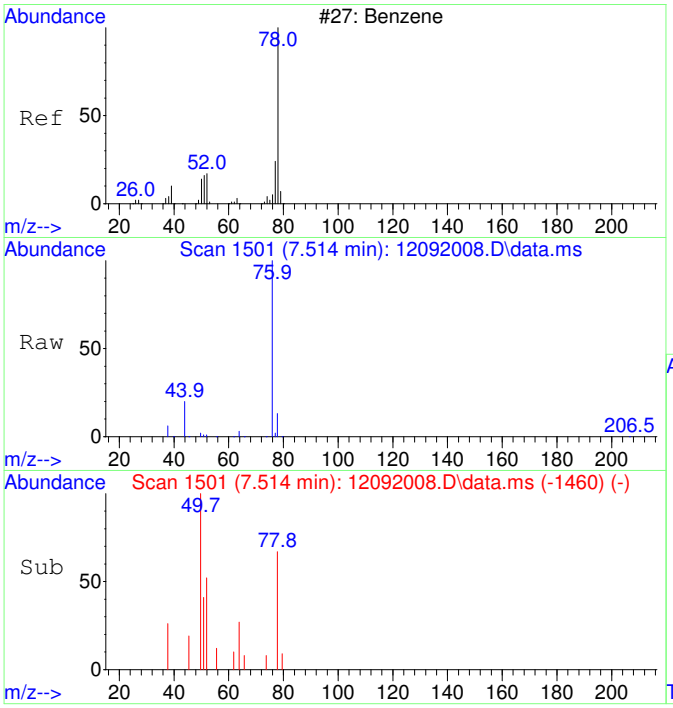


#31
1,1,1-Trichloroethane SCAN
Concen: 31.37 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 242

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

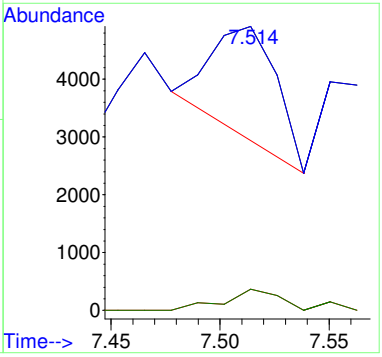


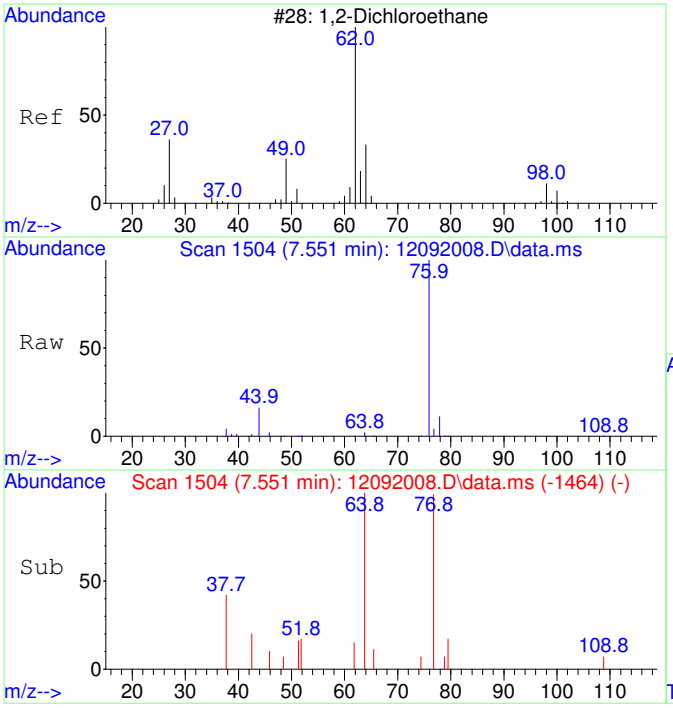


#33
Benzene SCAN
Concen: 149.35 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 3485

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.1	0.0	47.9
51	21.1	0.0	44.1

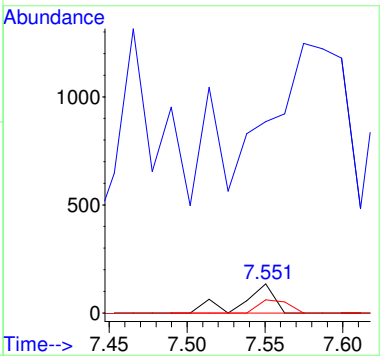


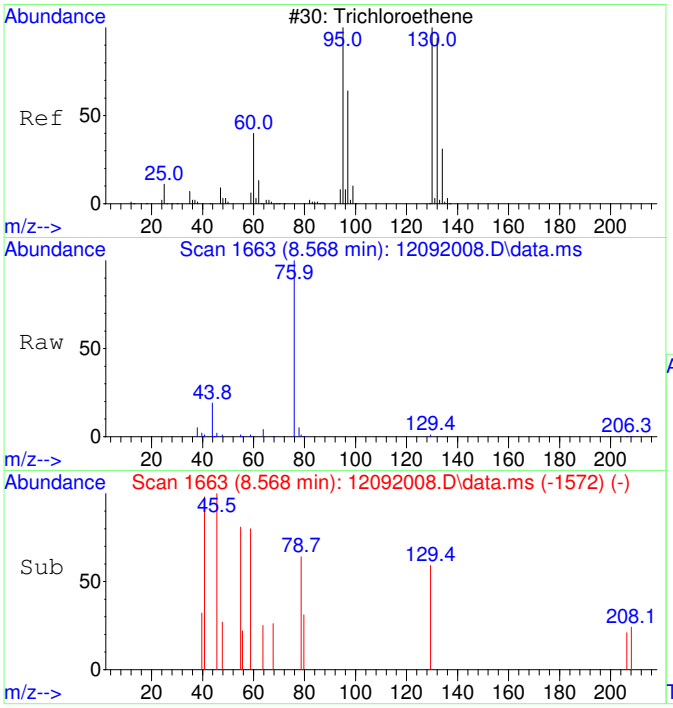


#34
1,2-Dichloroethane SCAN
Concen: 25.35 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 185

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	44.3	3.9	63.9

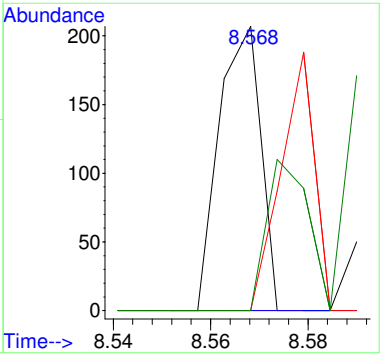


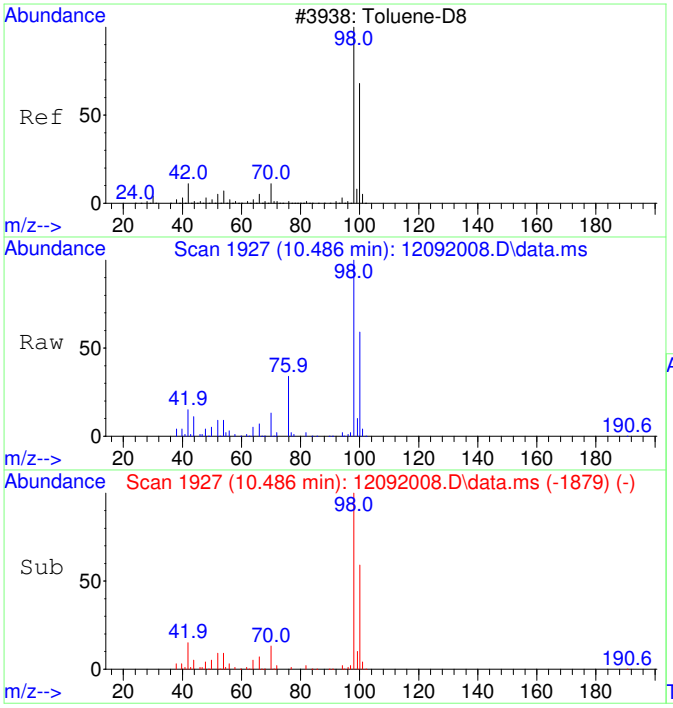


#35
Trichloroethene SCAN
Concen: 24.17 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 123

Ion	Ratio	Lower	Upper
130	100		
95	0.0	60.5	120.5#
132	73.2	59.6	119.6
97	52.8	28.2	88.2

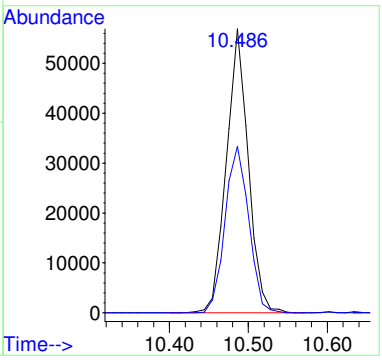


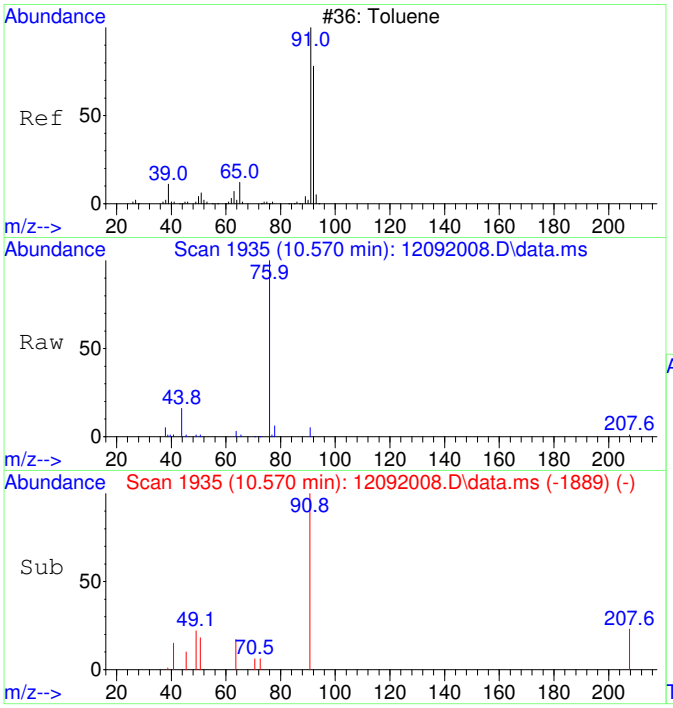


#36
Toluene-d8 SCAN
Concen: 5014.65 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 109238

Ion	Ratio	Lower	Upper
98	100		
100	63.3	40.0	100.0

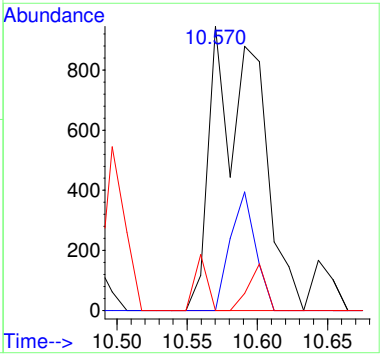


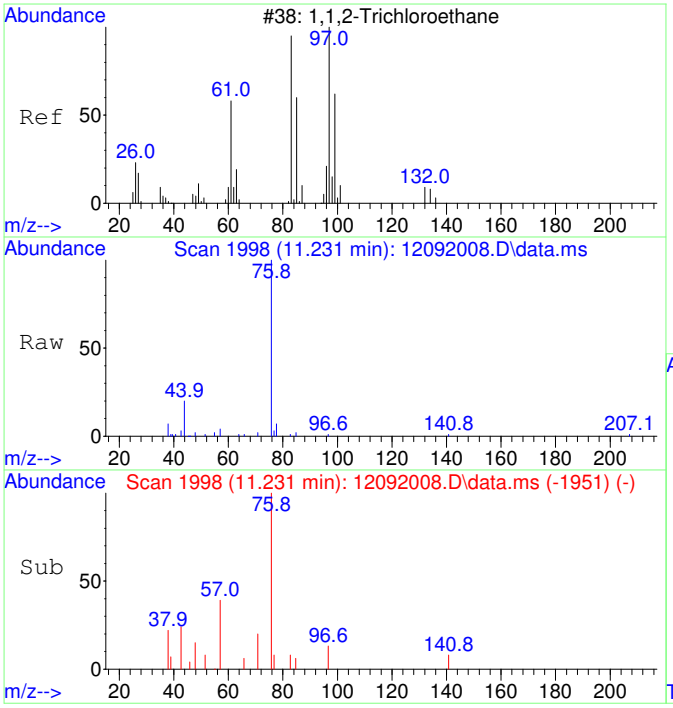


#37
Toluene SCAN
Concen: 84.23 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2259

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	5.2	0.0	41.0

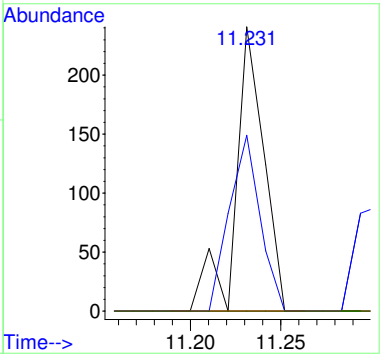


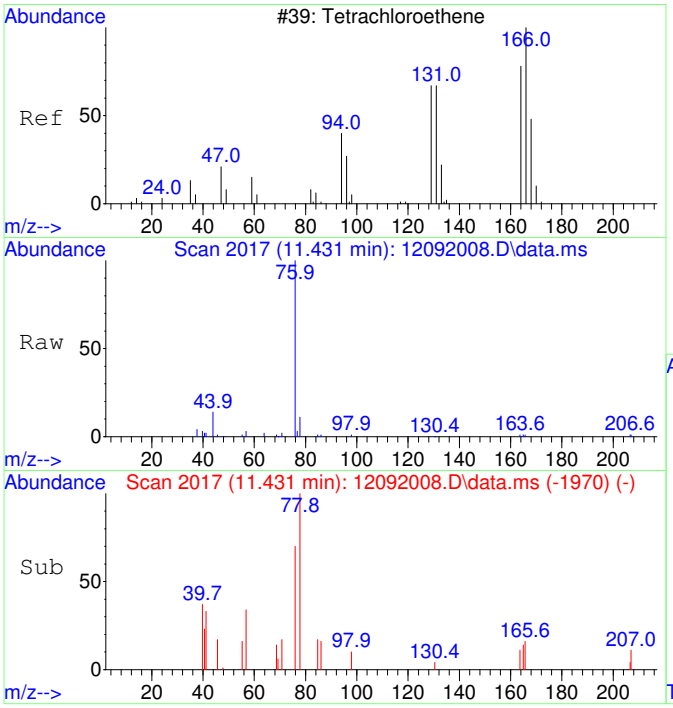


#38
1,1,2-Trichloroethane SCAN
Concen: 39.12 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 263

Ion	Ratio	Lower	Upper
97	100		
83	67.7	57.7	117.7
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

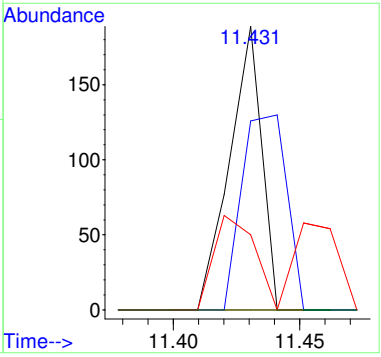


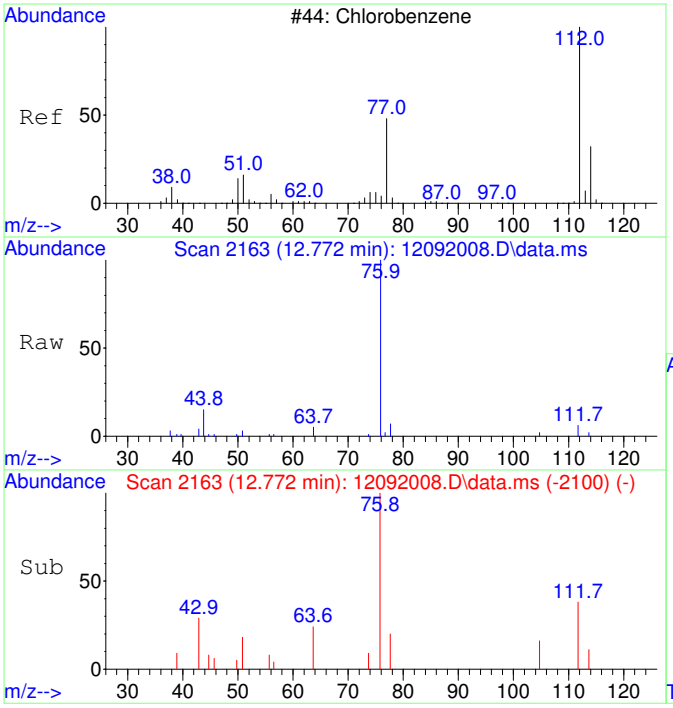


#39
Tetrachloroethene SCAN
Concen: 27.68 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 167

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	42.5	38.7	98.7
129	0.0	41.8	101.8#

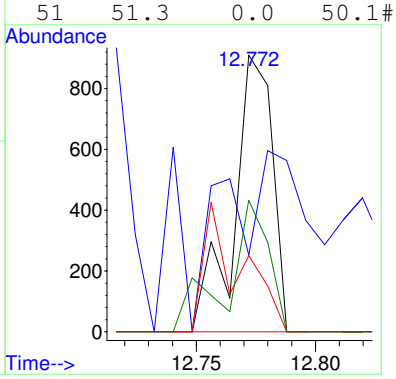


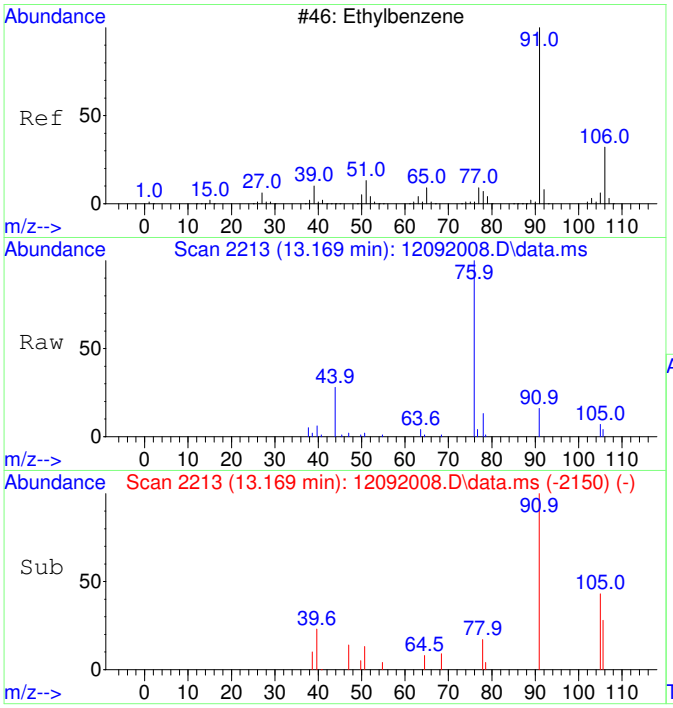


#40
Chlorobenzene SCAN
Concen: 52.64 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1014

Ion	Ratio	Lower	Upper
112	100		
77	106.3	28.2	88.2#
114	0.0	2.3	62.3#
51	51.3	0.0	50.1#

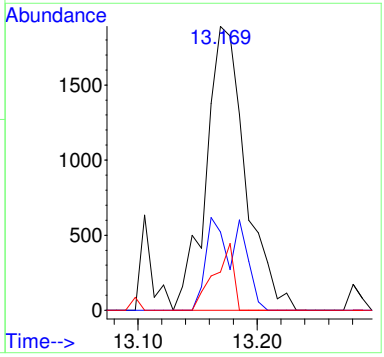


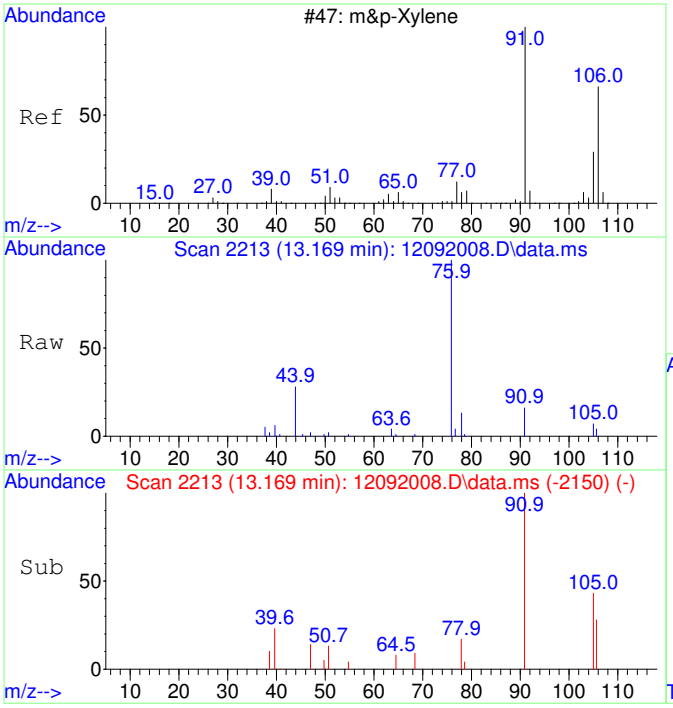


#42
Ethylbenzene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
51	11.5	0.0	40.1

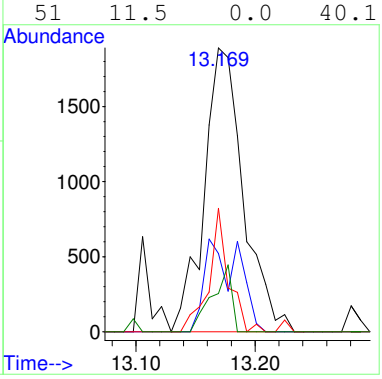


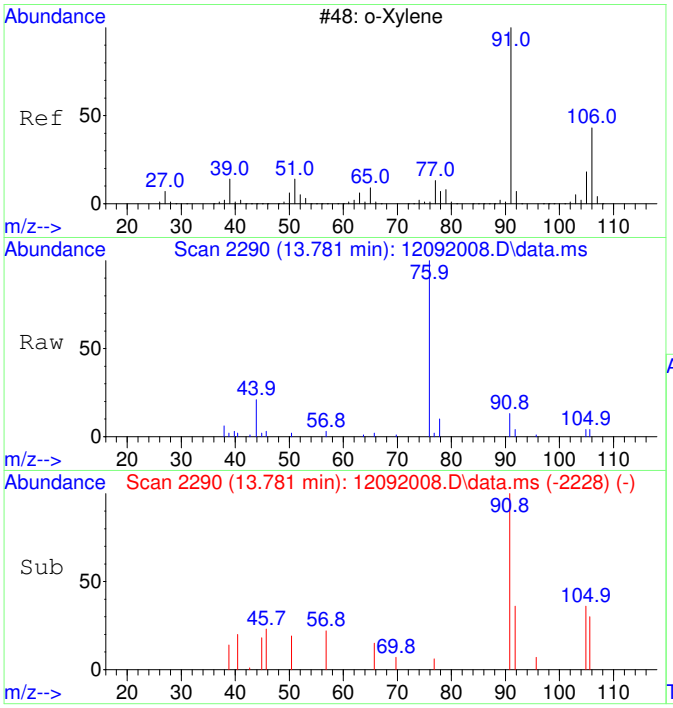


#43
m&p-Xylene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
105	21.7	0.0	54.7
51	11.5	0.0	40.1

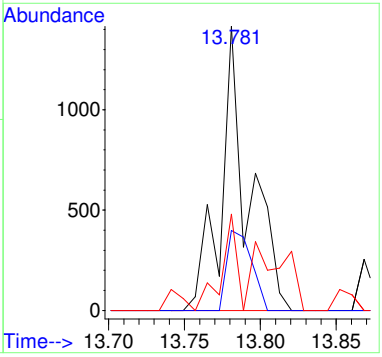


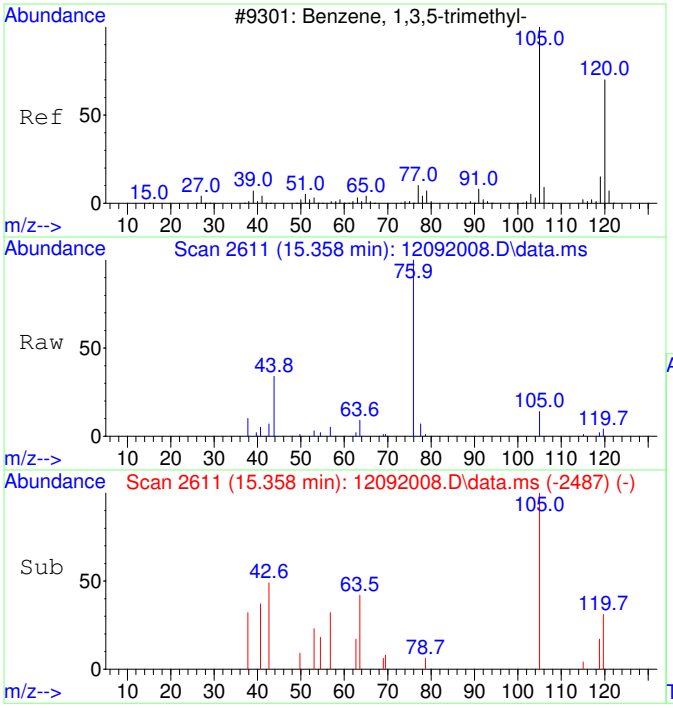


#44
o-Xylene SCAN
Concen: 64.67 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 1805

Ion	Ratio	Lower	Upper
91	100		
106	25.2	18.0	78.0
105	18.3	0.0	56.6

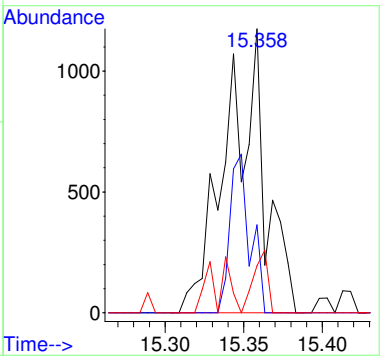


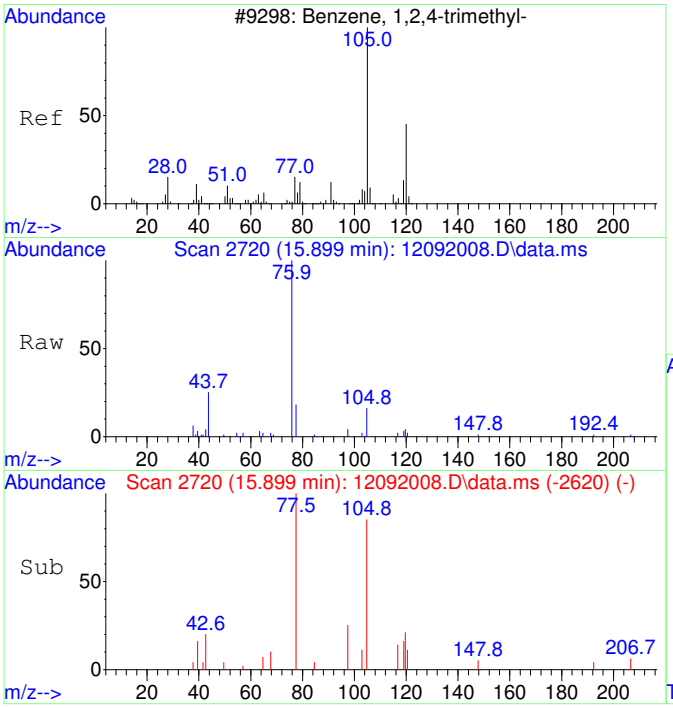


#46
1,3,5-Trimethylbenzene SCAN
Concen: 67.82 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1997

Ion	Ratio	Lower	Upper
105	100		
120	29.1	18.3	78.3
119	8.2	0.0	43.1

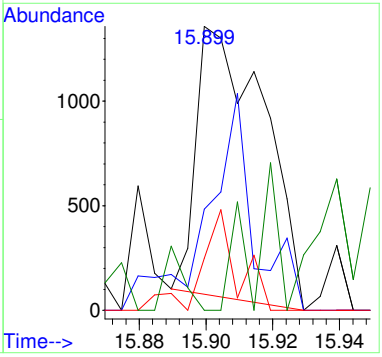




#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.70 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1826

Ion	Ratio	Lower	Upper
105	100		
120	55.9	16.9	76.9
119	19.7	0.0	41.9
77	8.4	0.0	42.3



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 12:01 pm, Dec 09, 2020

M.I. Approved By:
ZAR at 2:59 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204619	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	175348	4424.67	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.49%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	300m	36.98	ug/L	
3] trans-1,2-Dichloroethene	4.356	61	386	37.74	ug/L	92
4] 1,1-Dichloroethane	5.073	63	454	37.16	ug/L	91
5] cis-1,2-Dichloroethene	6.081	61	484	38.25	ug/L	92
6] Chloroform	6.652	83	512	42.13	ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	571	43.74	ug/L	98
8] Carbon tetrachloride	7.175	117	540	43.26	ug/L	87
9] Benzene	7.503	78	2996	87.01	ug/L #	28
10] 1,2-Dichloroethane	7.540	62	508	43.25	ug/L	65
11] Trichloroethene	8.575	130	491	45.17	ug/L	94
13] Toluene	10.582	91	2507	50.81	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	512	44.80	ug/L	91
15] Tetrachloroethene	11.432	166	722	46.98	ug/L	96
16] Chlorobenzene	12.765	112	1747	45.70	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	642	47.99	ug/L	100
18] Ethylbenzene	12.972	91	3324	52.74	ug/L	95
19] m&p-Xylene	13.171	91	5757	118.62	ug/L	96
20] o-Xylene	13.782	91	2631	50.47	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	1133	46.65	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	2973	51.86	ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	3394	57.89	ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	115624	4978.14	ug/L	98
27) trans-1,2-Dichloroethe...	4.348	61	299	43.29	ug/L #	17
30) Chloroform SCAN	6.638	83	592	79.20	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.930	97	242	31.37	ug/L #	19
33) Benzene SCAN	7.514	78	3485	149.35	ug/L	97
34) 1,2-Dichloroethane SCAN	7.551	62	185	25.35	ug/L #	60
35) Trichloroethene SCAN	8.568	130	123	24.17	ug/L #	55
36) Toluene-d8 SCAN	10.486	98	109238	5014.65	ug/L	92
37) Toluene SCAN	10.570	91	2259	84.23	ug/L #	32
38) 1,1,2-Trichloroethane ...	11.231	97	263	39.12	ug/L #	42
39) Tetrachloroethene SCAN	11.431	166	167	27.68	ug/L #	29
40) Chlorobenzene SCAN	12.772	112	1014	52.64	ug/L #	37
42) Ethylbenzene SCAN	13.169	91	4335	84.81	ug/L	70
43) m&p-Xylene SCAN	13.169	91	4335	84.81	ug/L	77
44) o-Xylene SCAN	13.781	91	1805	64.67	ug/L	72
46) 1,3,5-Trimethylbenzene...	15.358	105	1997	67.82	ug/L	75
47) 1,2,4-Trimethylbenzene...	15.899	105	1826	60.70	ug/L	86

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
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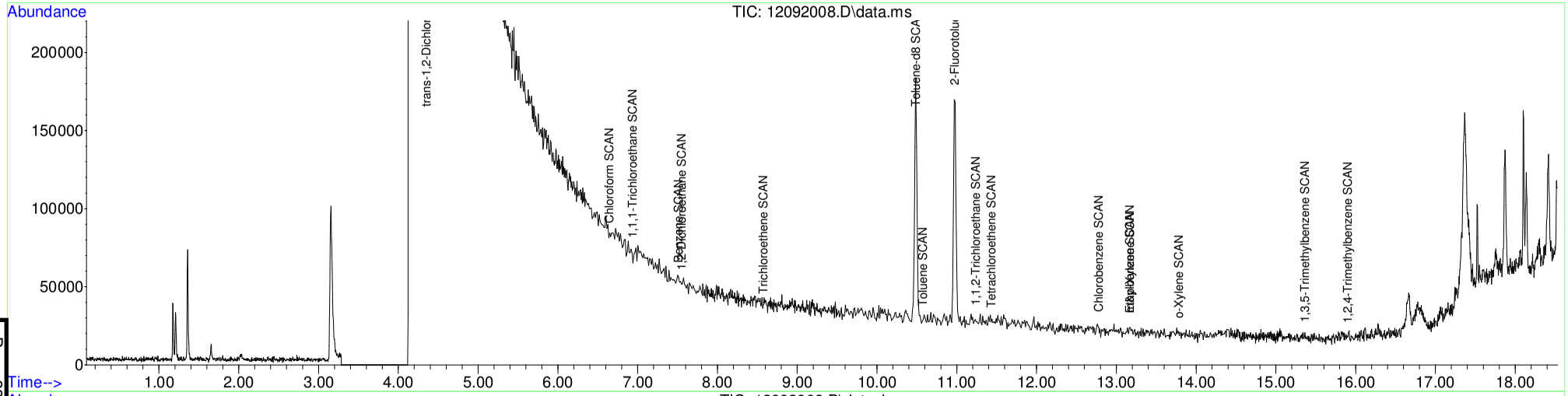
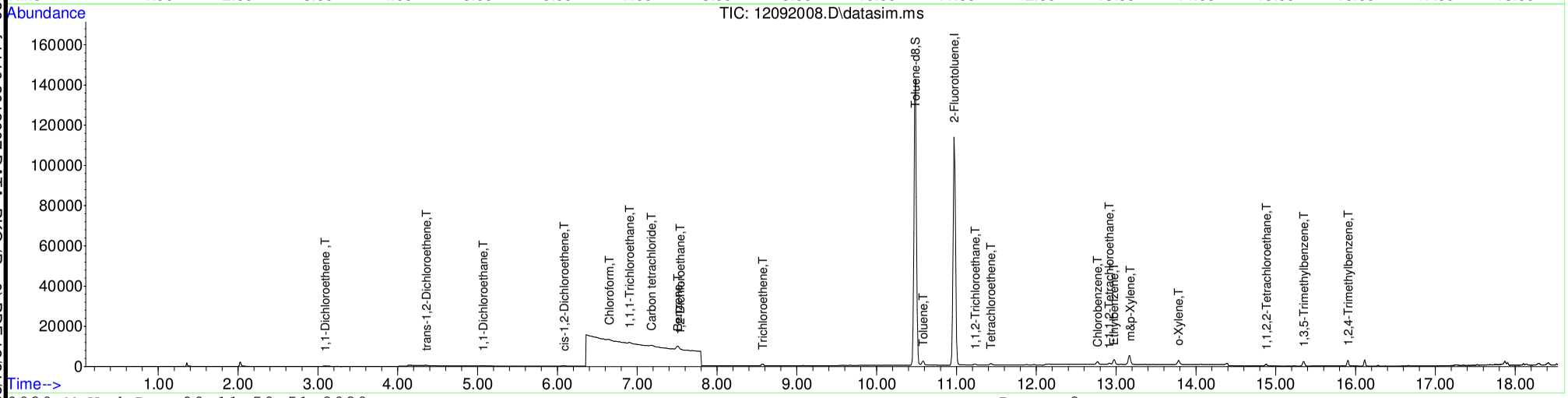
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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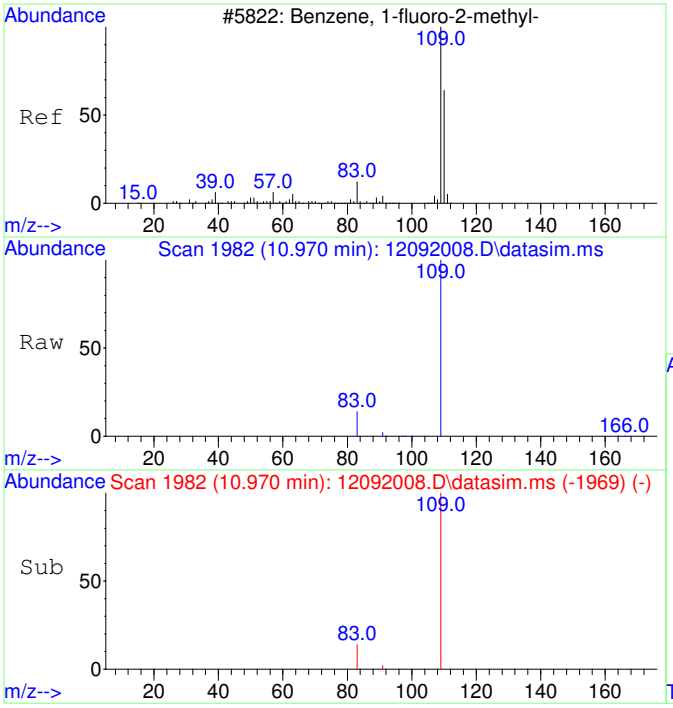
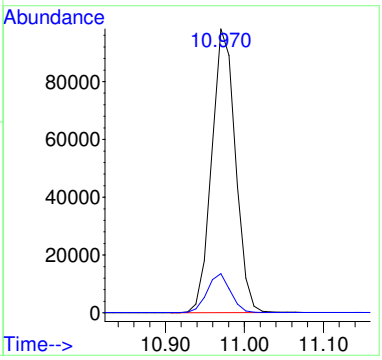
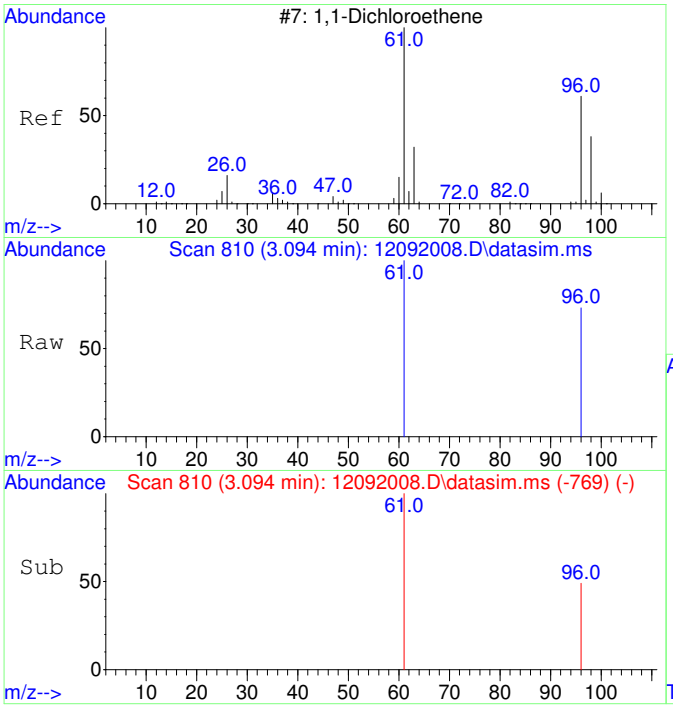


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 204619

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

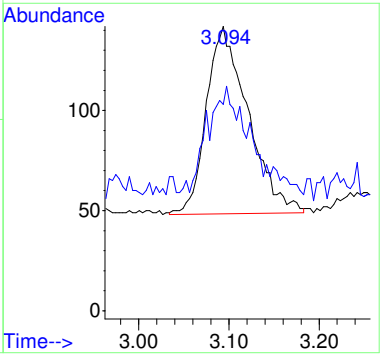


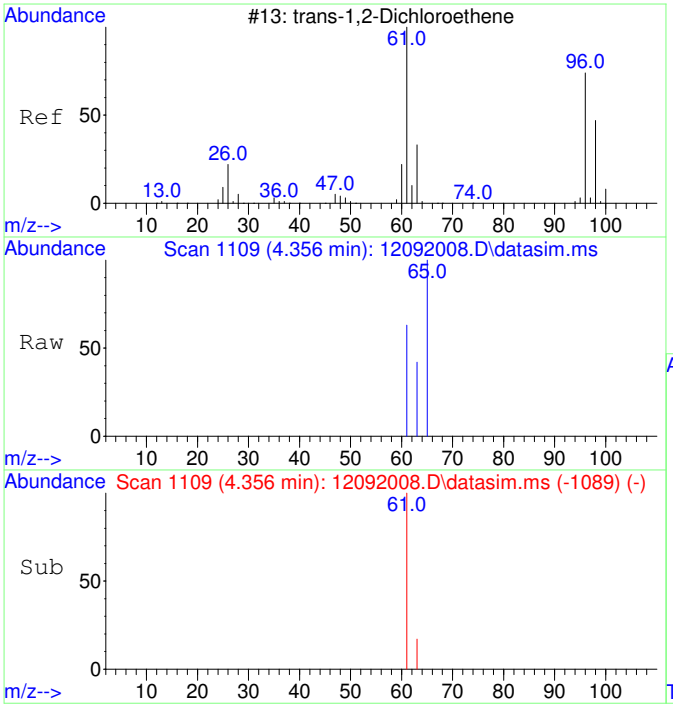


#2
1,1-Dichloroethene
Concen: 36.98 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 300

Ion	Ratio	Lower	Upper
61	100		
96	53.3	37.2	97.2

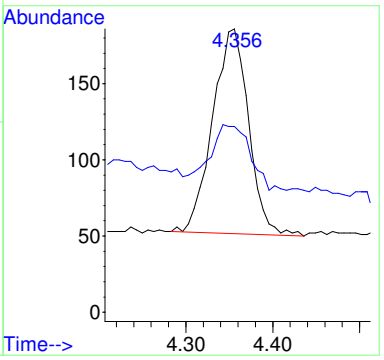


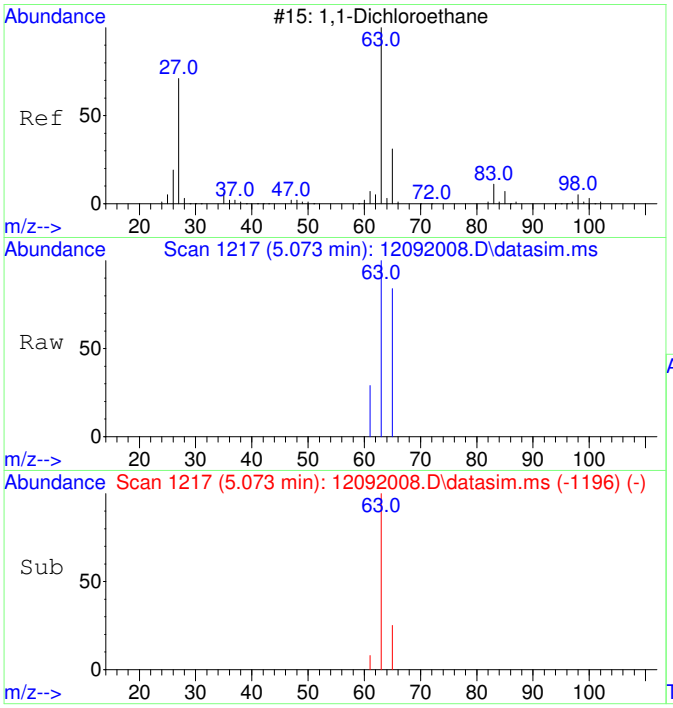


#3
trans-1,2-Dichloroethene
Concen: 37.74 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 386

Ion	Ratio	Lower	Upper
61	100		
63	37.0	2.4	62.4

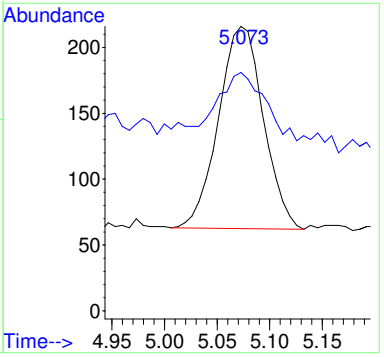


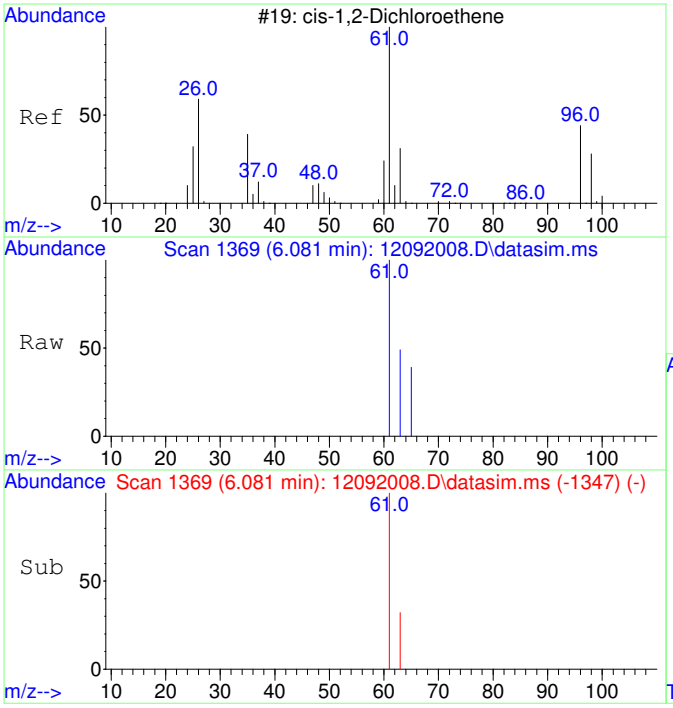


#4
1,1-Dichloroethane
Concen: 37.16 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 63 Resp: 454

Ion	Ratio	Lower	Upper
63	100		
65	36.8	1.8	61.8

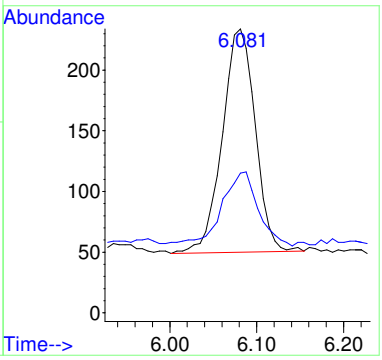


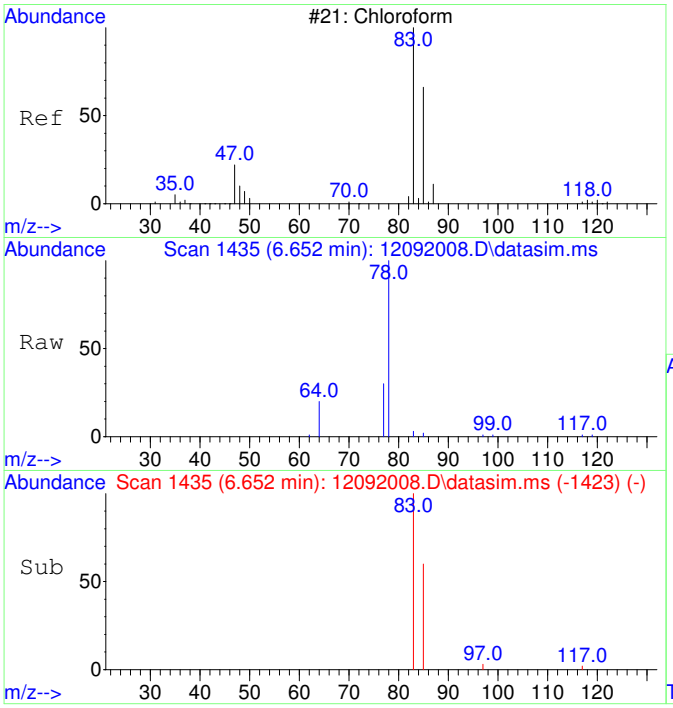


#5
cis-1,2-Dichloroethene
Concen: 38.25 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
63	37.2	2.5	62.5

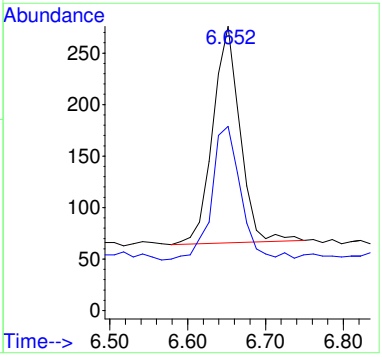


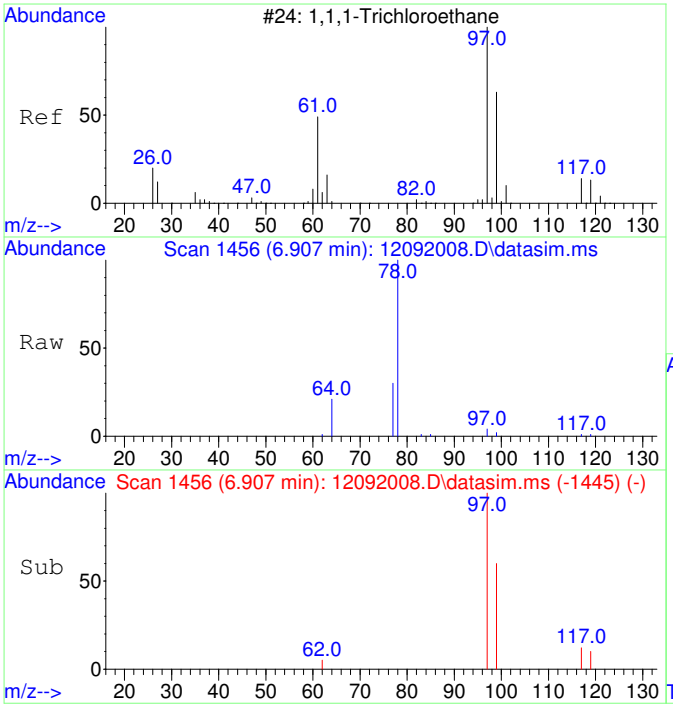


#6
Chloroform
Concen: 42.13 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 512

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

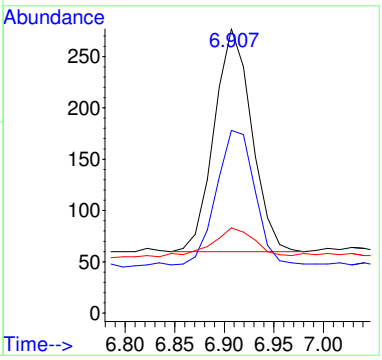


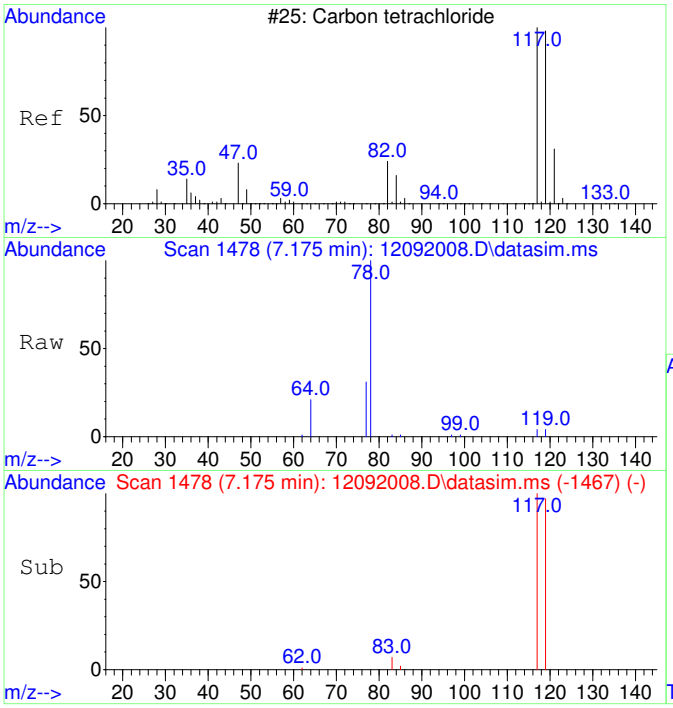


#7
1,1,1-Trichloroethane
Concen: 43.74 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 571

Ion	Ratio	Lower	Upper
97	100		
99	66.2	34.6	94.6
117	14.9	0.0	43.2

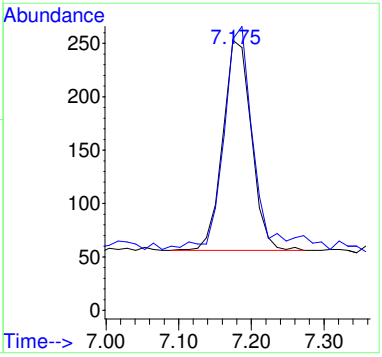


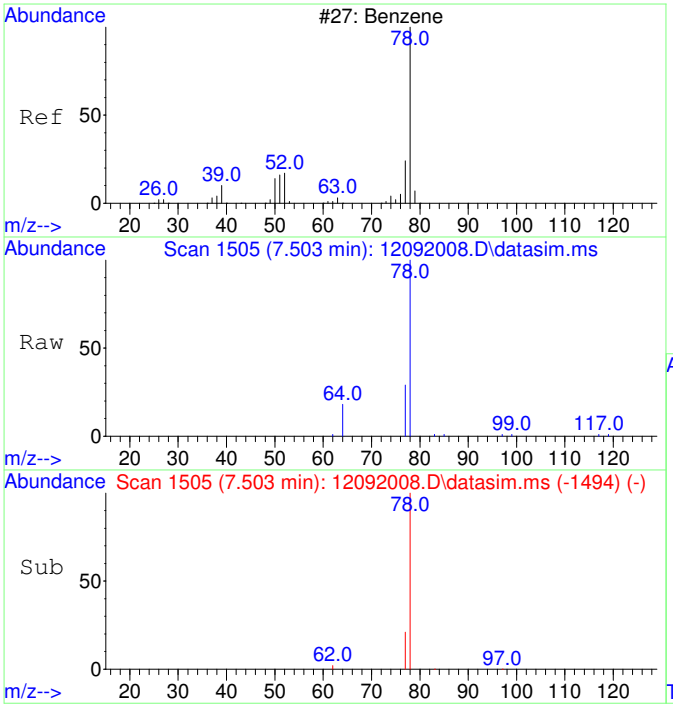


#8
Carbon tetrachloride
Concen: 43.26 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:117 Resp: 540

Ion	Ratio	Lower	Upper
117	100		
119	108.9	66.4	126.4

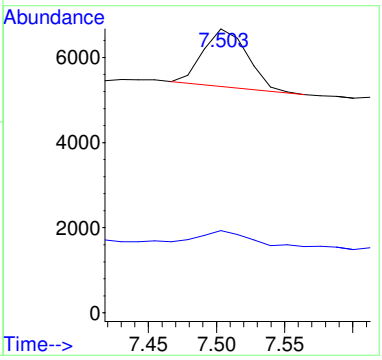


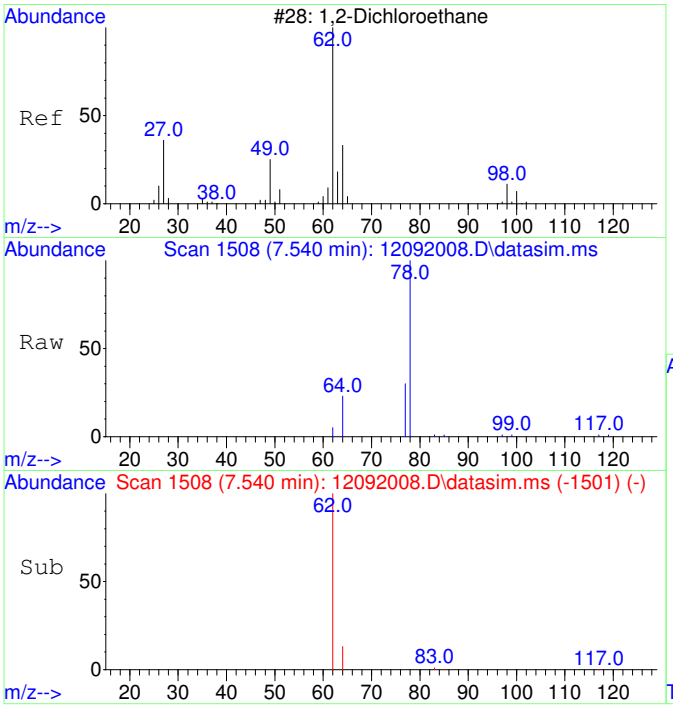


#9
Benzene
Concen: 87.01 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 2996

Ion	Ratio	Lower	Upper
78	100		
77	58.3	0.0	53.2#

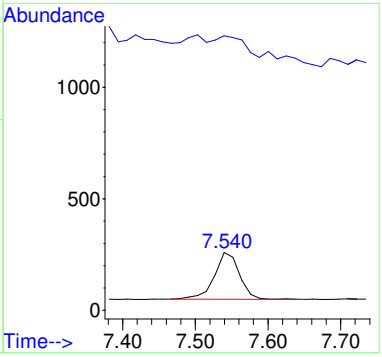


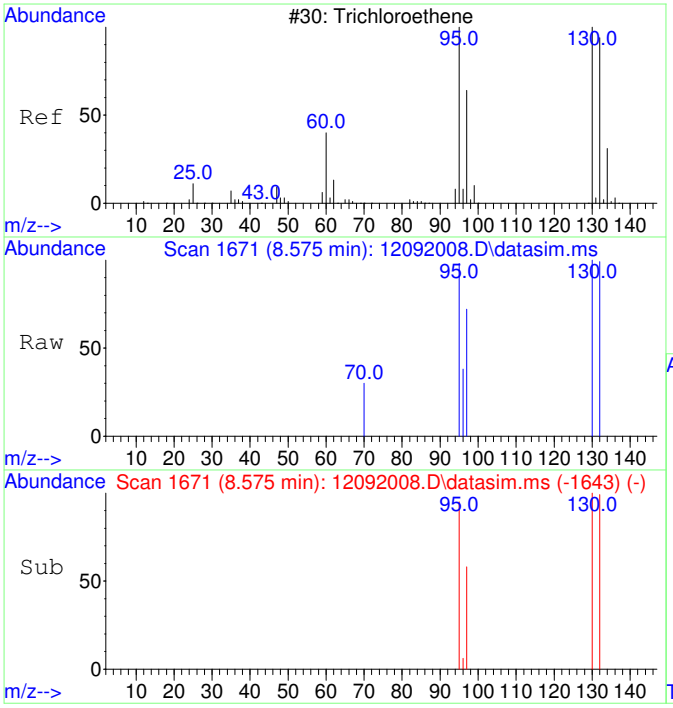


#10
1,2-Dichloroethane
Concen: 43.25 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 508

Ion	Ratio	Lower	Upper
62	100		
64	52.0	2.3	62.3

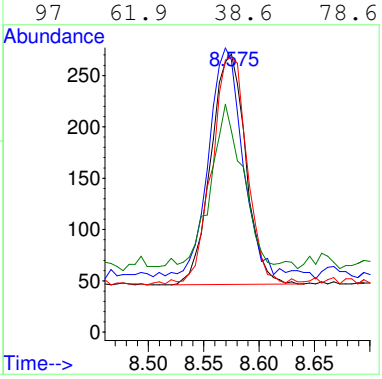


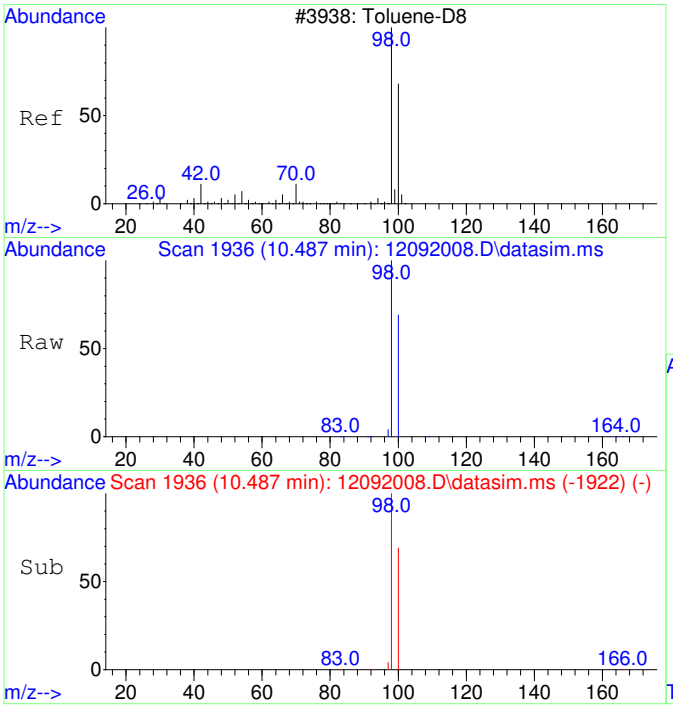


#11
Trichloroethene
Concen: 45.17 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 491

Ion	Ratio	Lower	Upper
130	100		
95	100.2	60.7	120.7
132	99.2	76.0	116.0
97	61.9	38.6	78.6

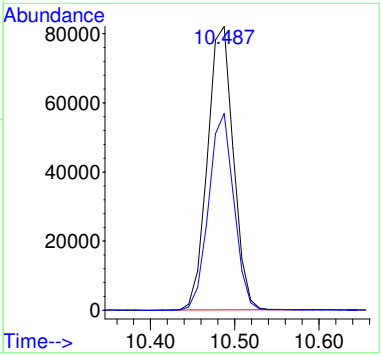


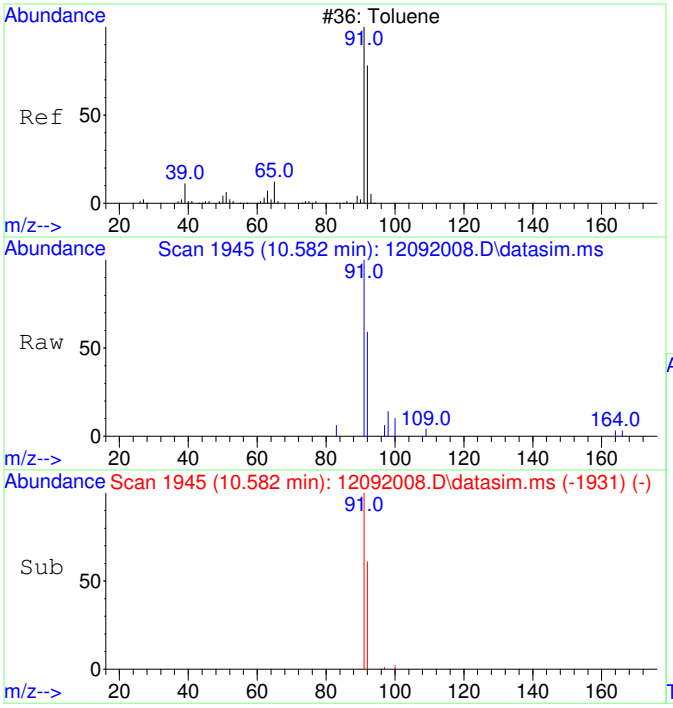


#12
Toluene-d8
Concen: 4424.67 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 175348

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

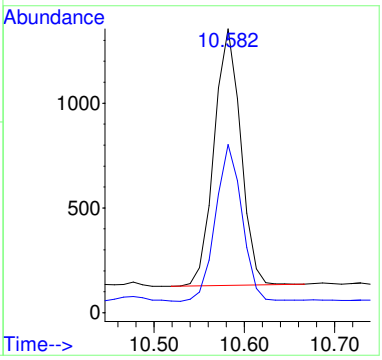


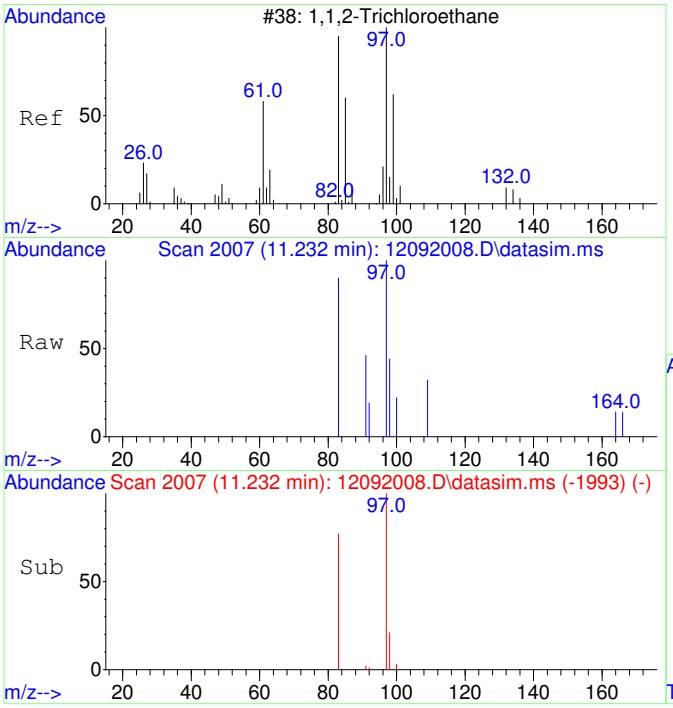


#13
Toluene
Concen: 50.81 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2507

Ion	Ratio	Lower	Upper
91	100		
92	60.4	29.9	89.9

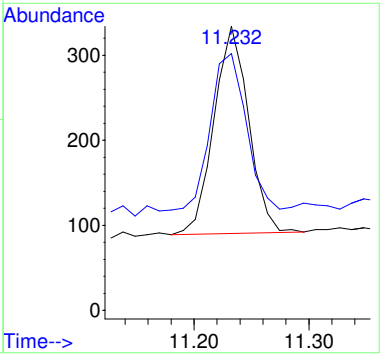


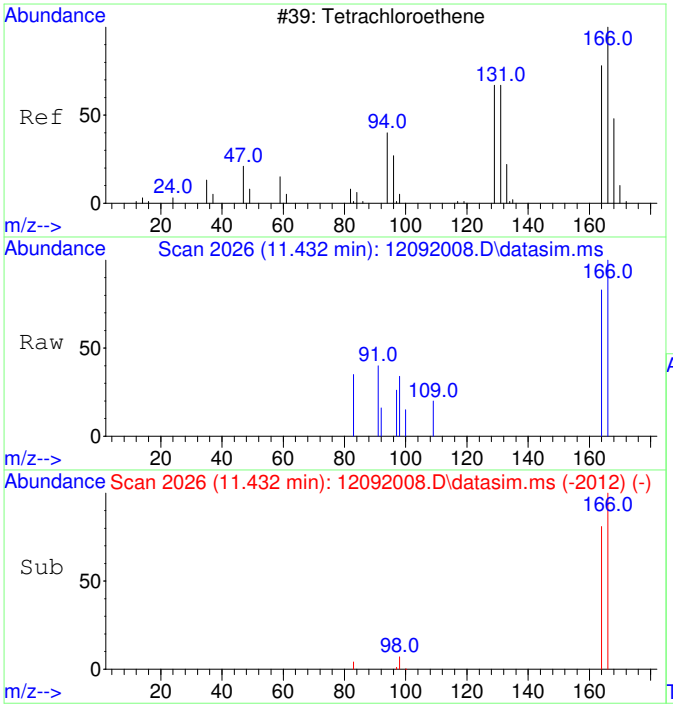


#14
1,1,2-Trichloroethane
Concen: 44.80 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	89.3	51.2	111.2

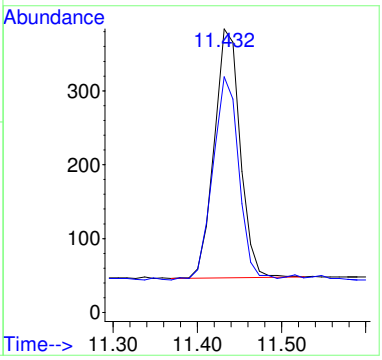


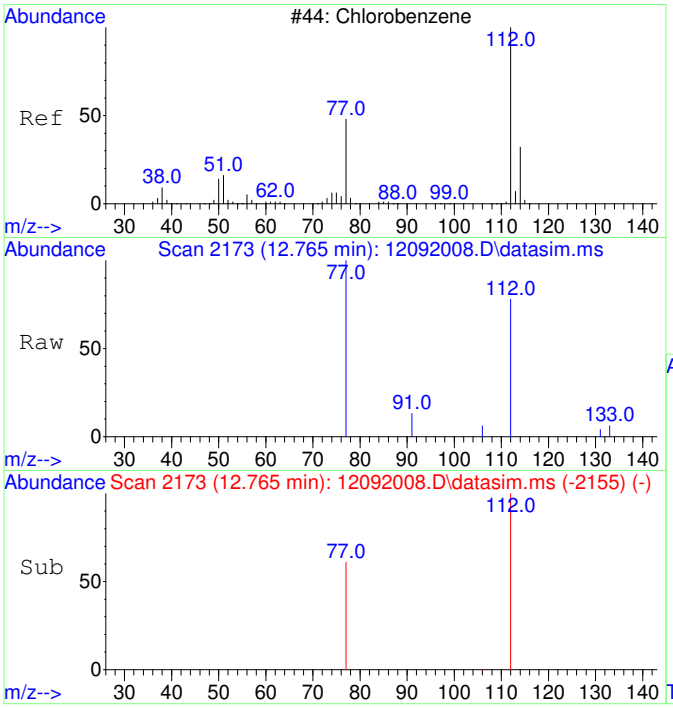


#15
Tetrachloroethene
Concen: 46.98 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 722

Ion	Ratio	Lower	Upper
166	100		
164	80.9	47.8	107.8

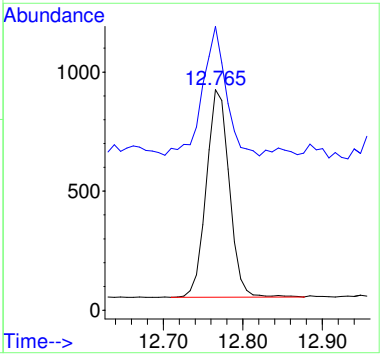


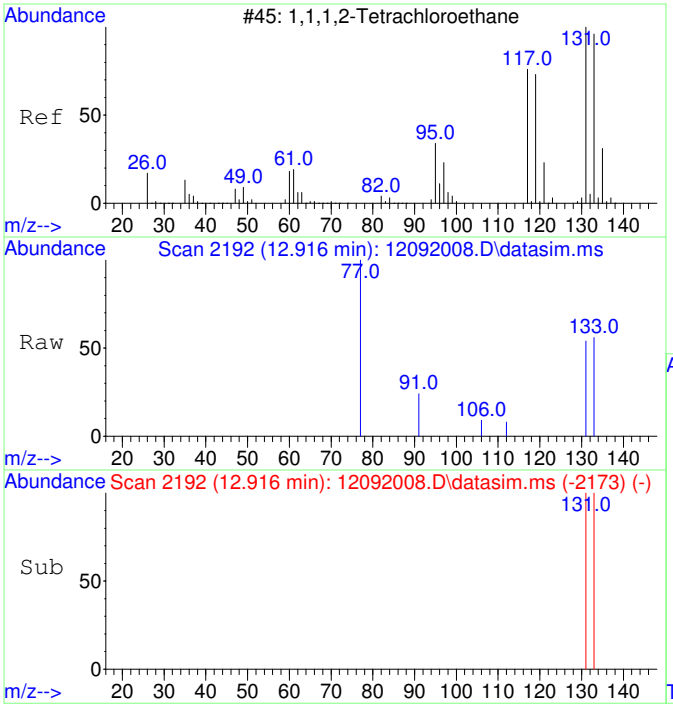


#16
Chlorobenzene
Concen: 45.70 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1747

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

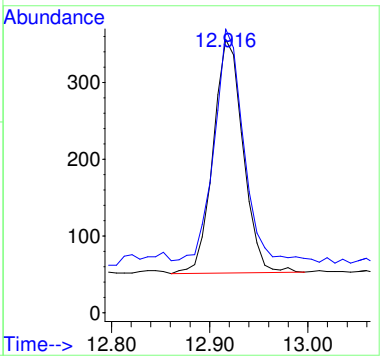


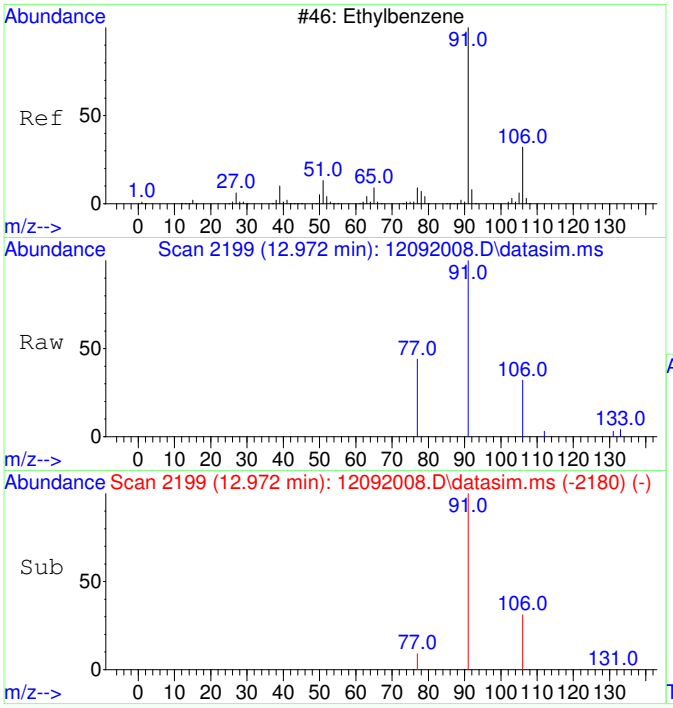


#17
1,1,1,2-Tetrachloroethane
Concen: 47.99 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:131 Resp: 642

Ion	Ratio	Lower	Upper
131	100		
133	96.7	66.3	126.3

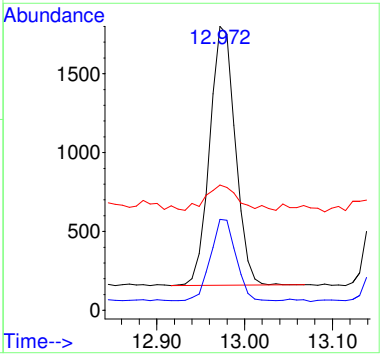


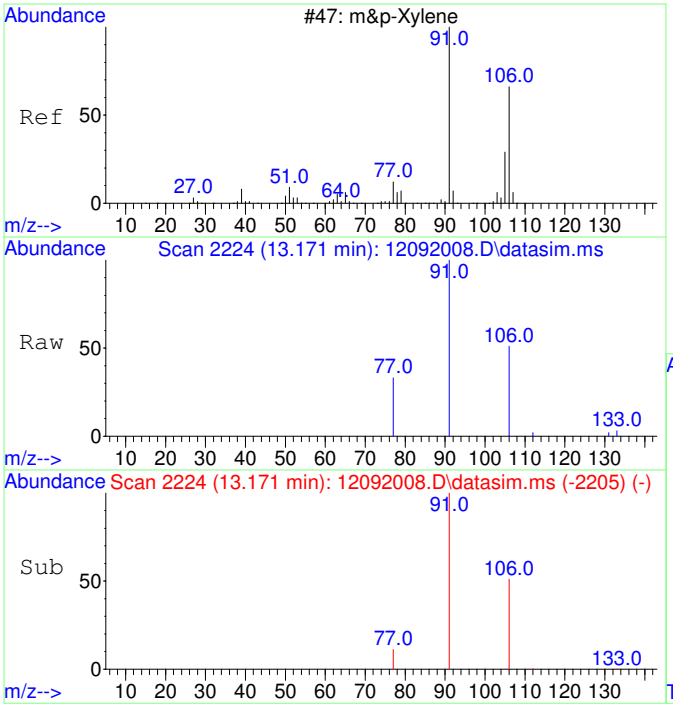


#18
Ethylbenzene
Concen: 52.74 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 3324

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	11.9	0.0	38.2

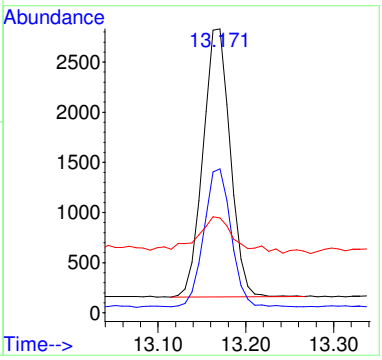


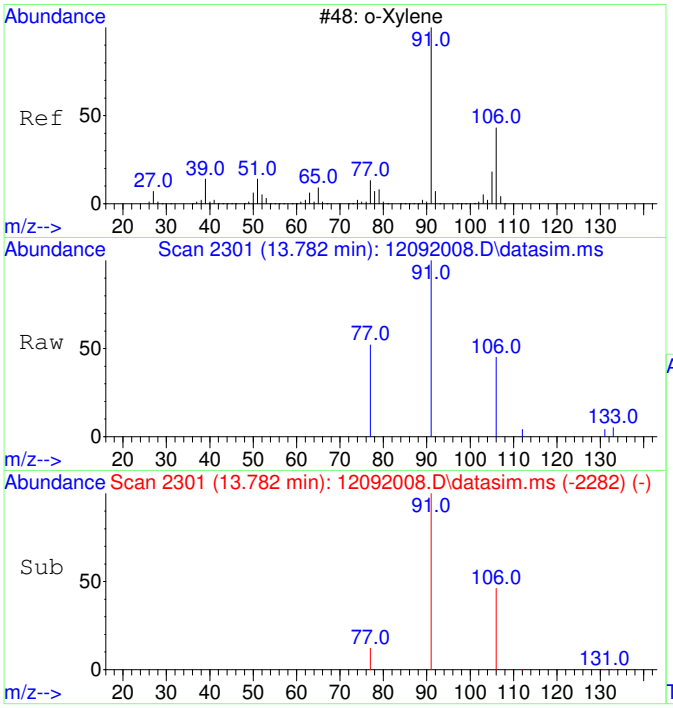


#19
m&p-Xylene
Concen: 118.62 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 5757

Ion	Ratio	Lower	Upper
91	100		
106	51.3	22.2	82.2
77	19.3	0.0	42.4

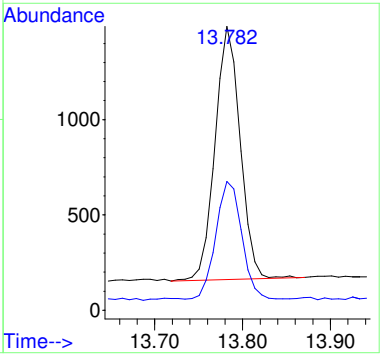


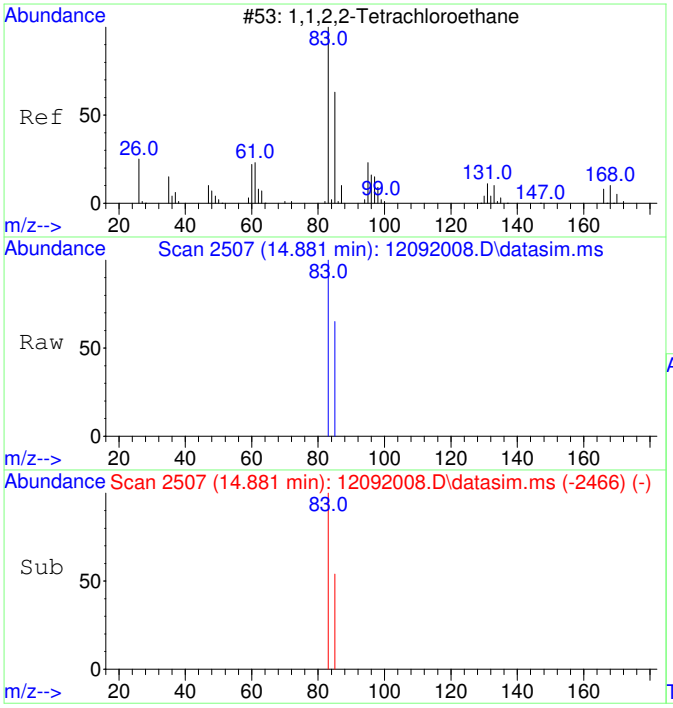


#20
o-Xylene
Concen: 50.47 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2631

Ion	Ratio	Lower	Upper
91	100		
106	47.8	19.2	79.2

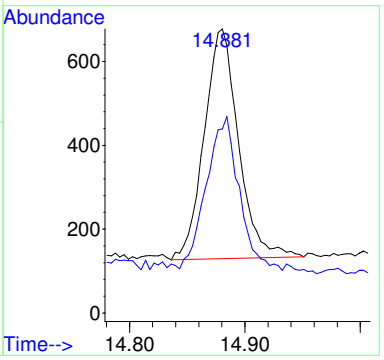


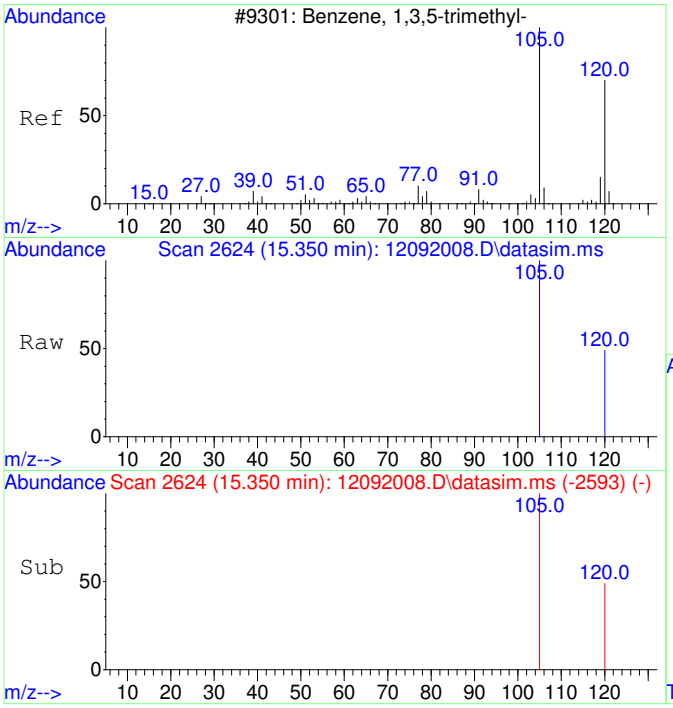


#21
1,1,2,2-Tetrachloroethane
Concen: 46.65 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 1133

Ion	Ratio	Lower	Upper
83	100		
85	64.6	34.8	94.8

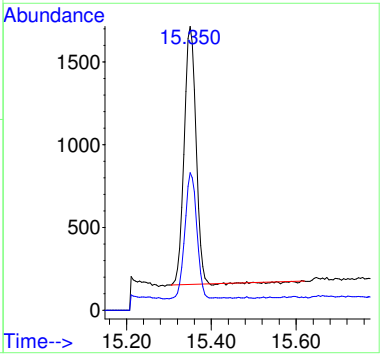


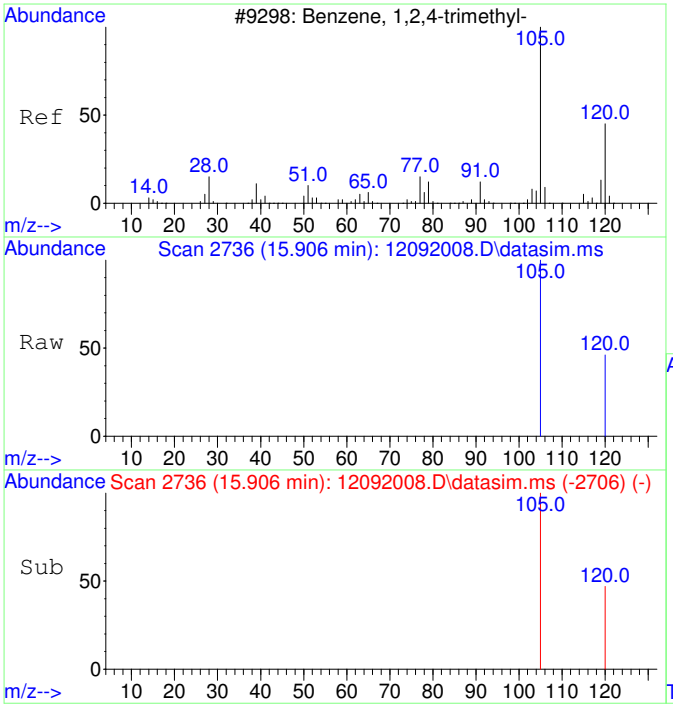


#22
1,3,5-Trimethylbenzene
Concen: 51.86 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 2973

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

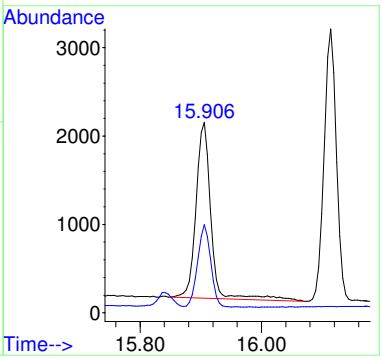


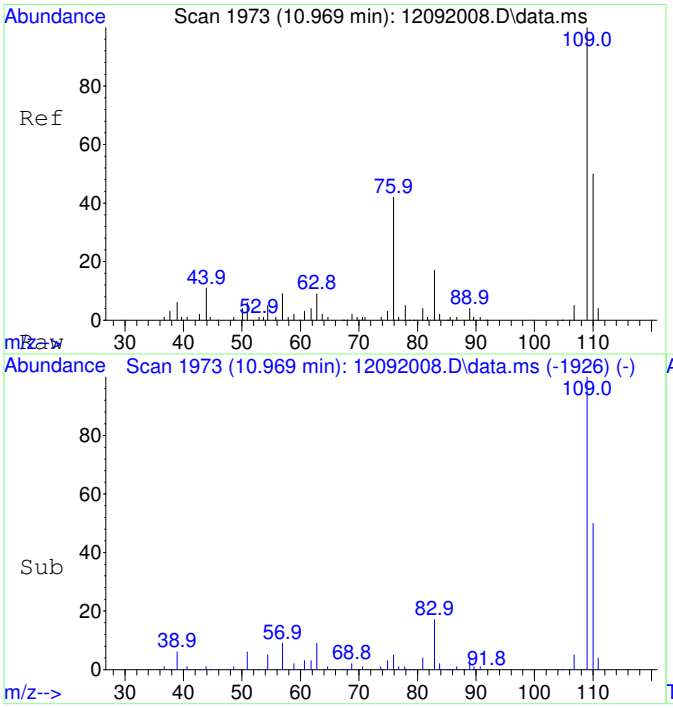


#23
1,2,4-Trimethylbenzene
Concen: 57.89 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 3394

Ion	Ratio	Lower	Upper
105	100		
120	40.5	17.2	77.2

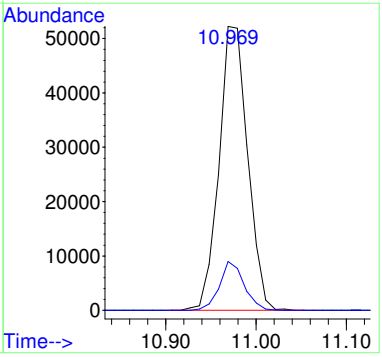


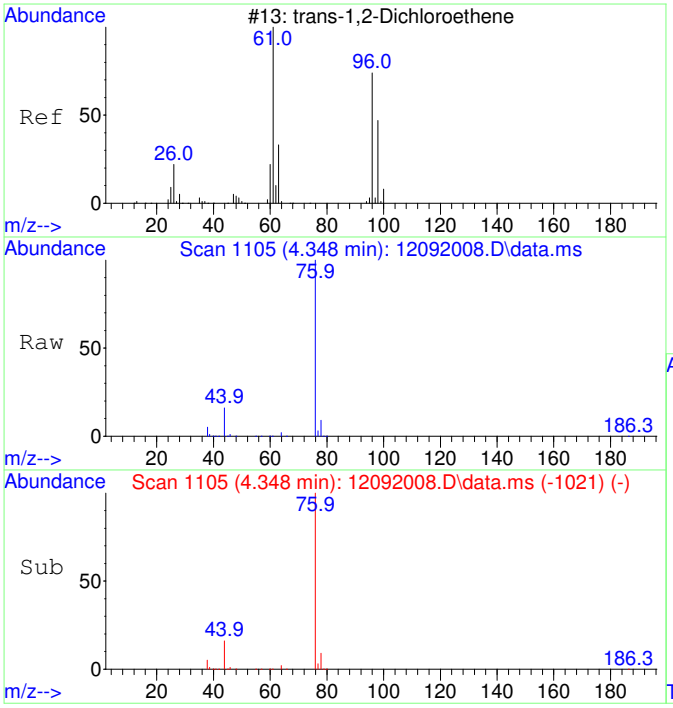


#25
2-Fluorotoluene SCAN
Concen: 4978.14 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 115624

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

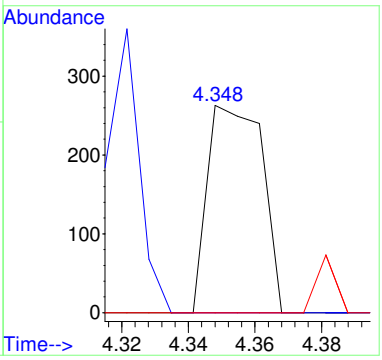


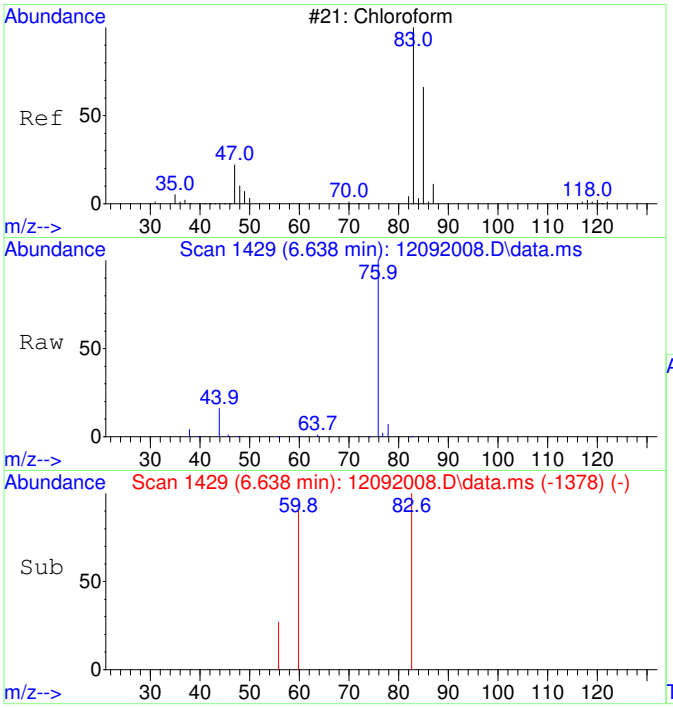


#27
trans-1,2-Dichloroethene SCAN
Concen: 43.29 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 299

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

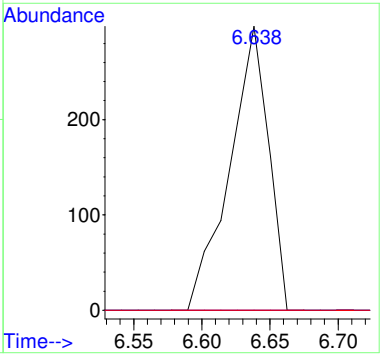


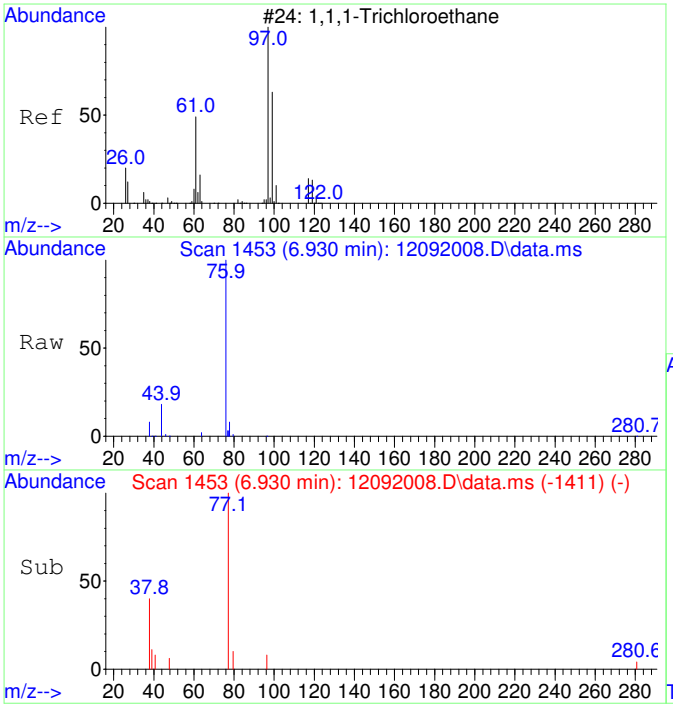


#30
Chloroform SCAN
Concen: 79.20 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 592

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

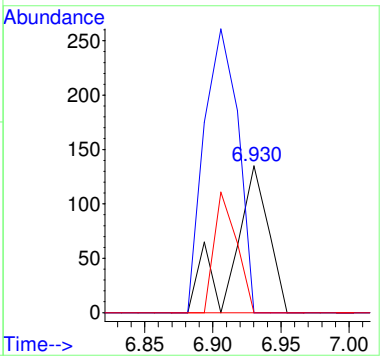


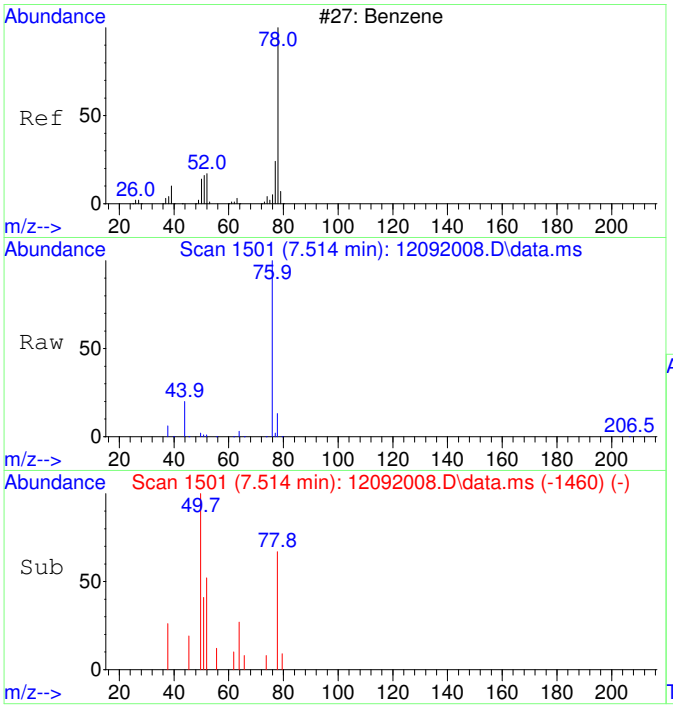


#31
1,1,1-Trichloroethane SCAN
Concen: 31.37 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 242

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

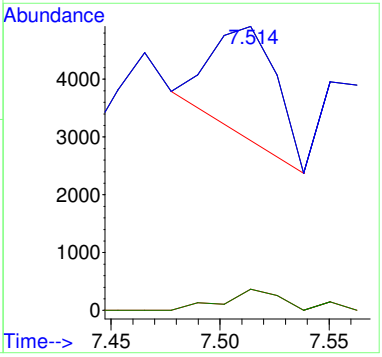


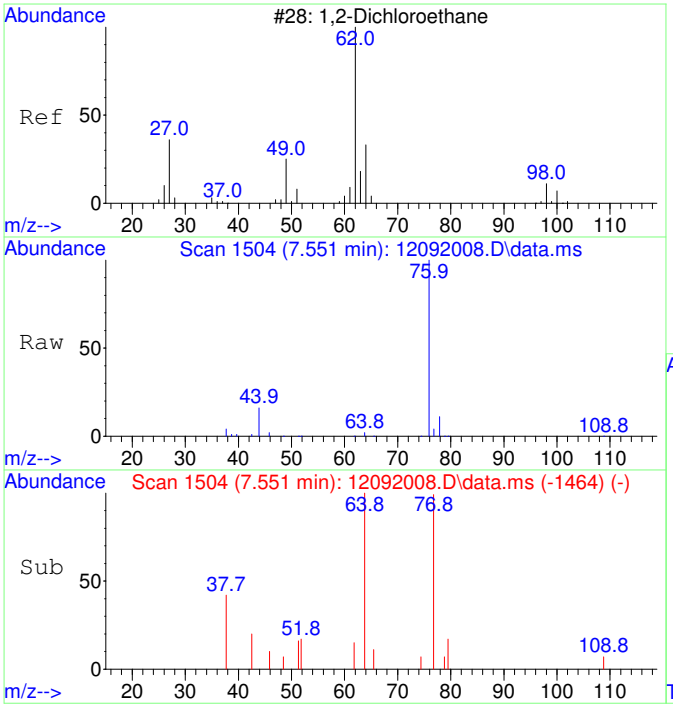


#33
Benzene SCAN
Concen: 149.35 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 3485

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.1	0.0	47.9
51	21.1	0.0	44.1

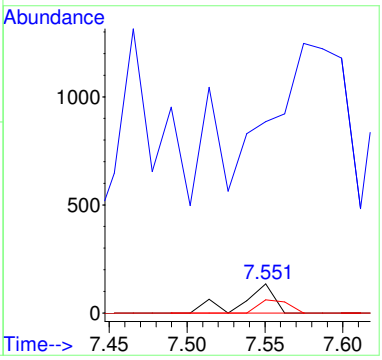


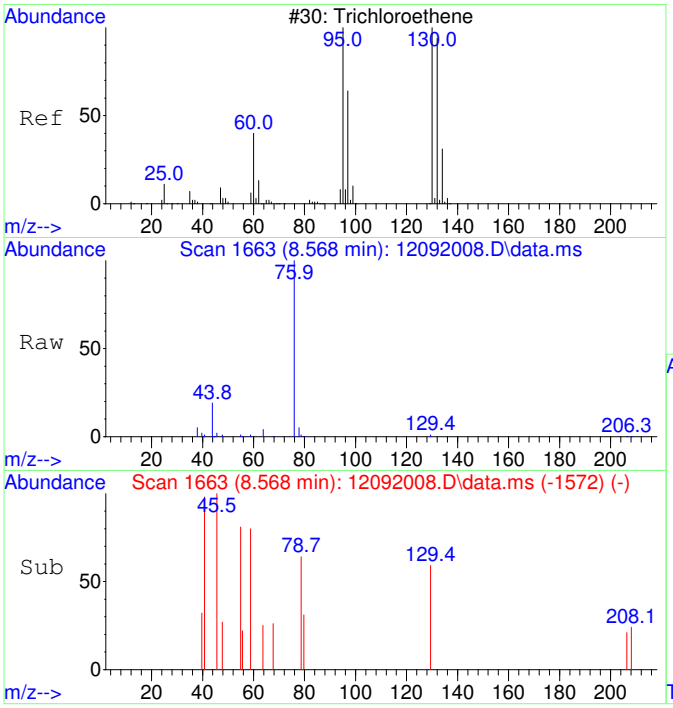


#34
1,2-Dichloroethane SCAN
Concen: 25.35 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 185

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	44.3	3.9	63.9

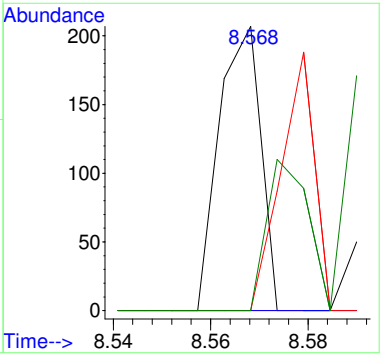


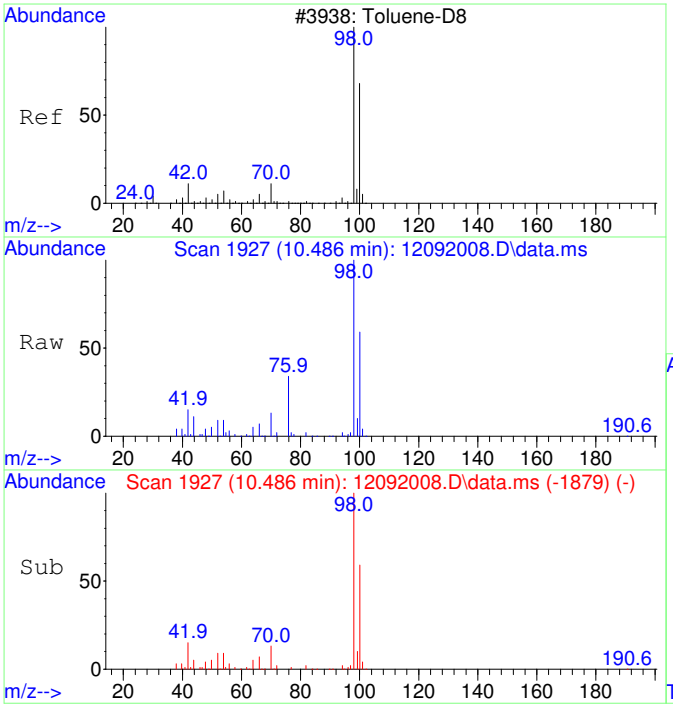


#35
Trichloroethene SCAN
Concen: 24.17 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 123

Ion	Ratio	Lower	Upper
130	100		
95	0.0	60.5	120.5#
132	73.2	59.6	119.6
97	52.8	28.2	88.2

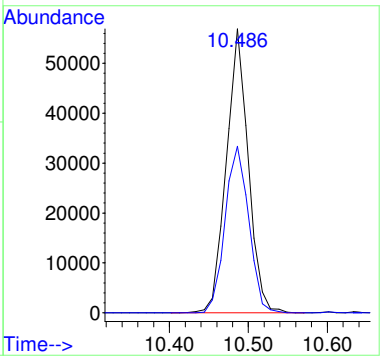


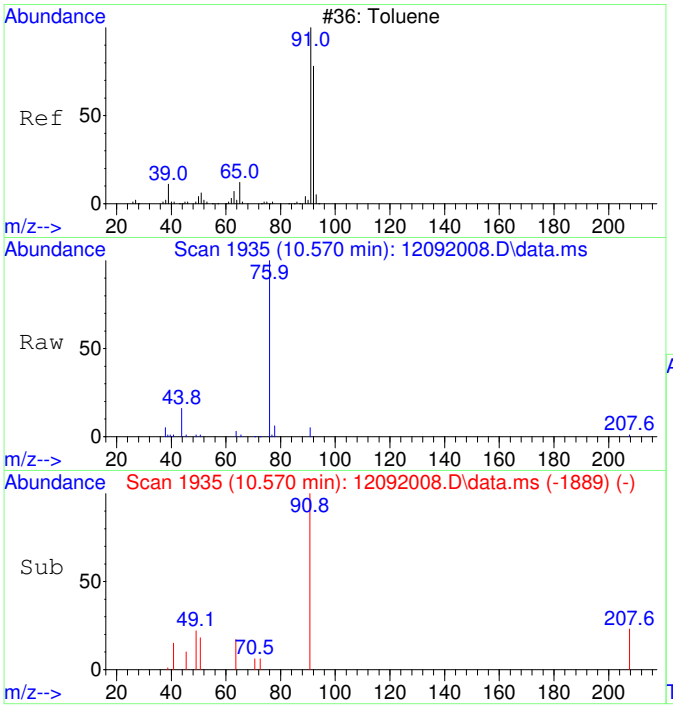


#36
Toluene-d8 SCAN
Concen: 5014.65 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 109238

Ion	Ratio	Lower	Upper
98	100		
100	63.3	40.0	100.0

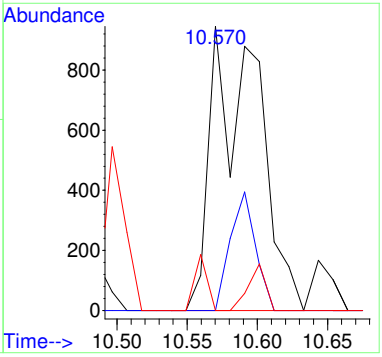


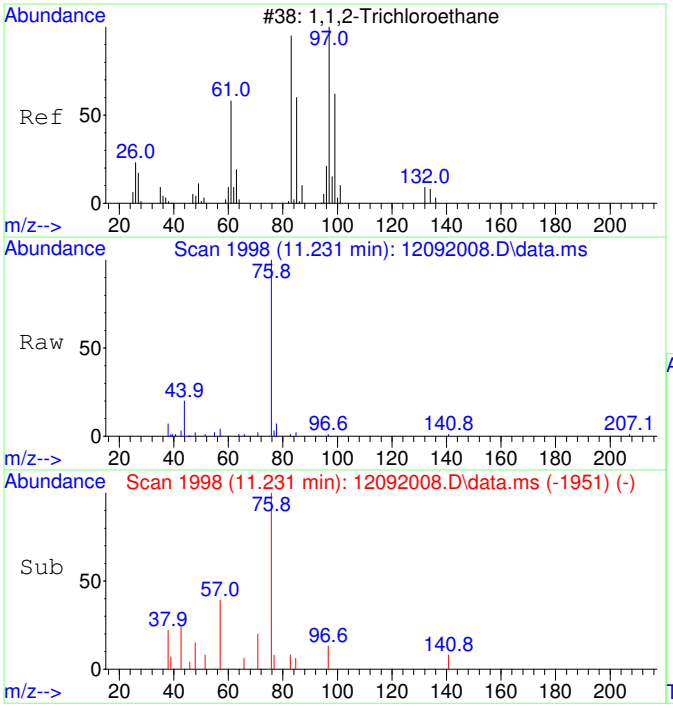


#37
Toluene SCAN
Concen: 84.23 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2259

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	5.2	0.0	41.0

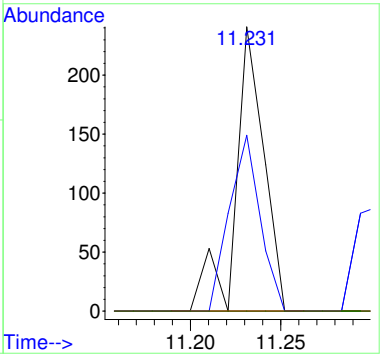


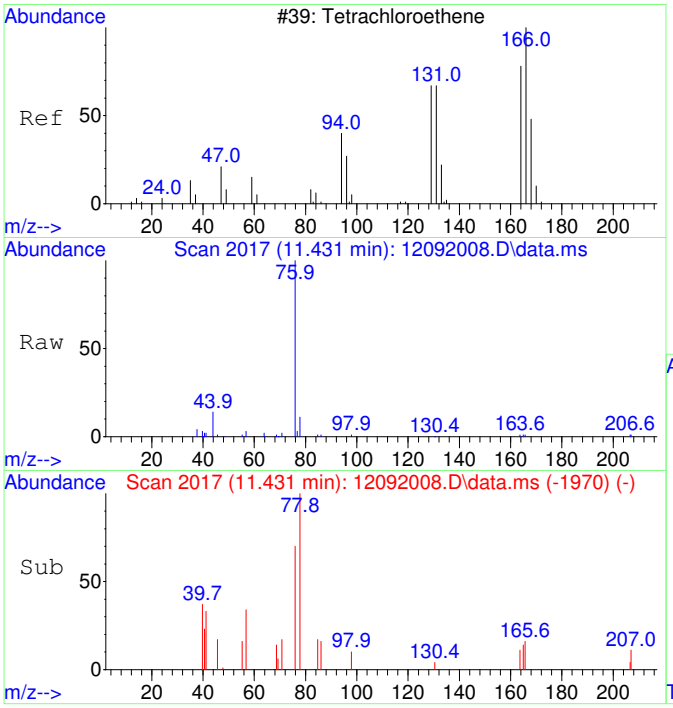


#38
1,1,2-Trichloroethane SCAN
Concen: 39.12 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 263

Ion	Ratio	Lower	Upper
97	100		
83	67.7	57.7	117.7
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

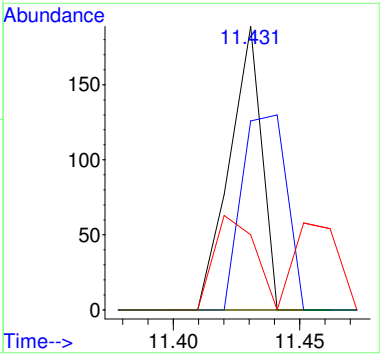


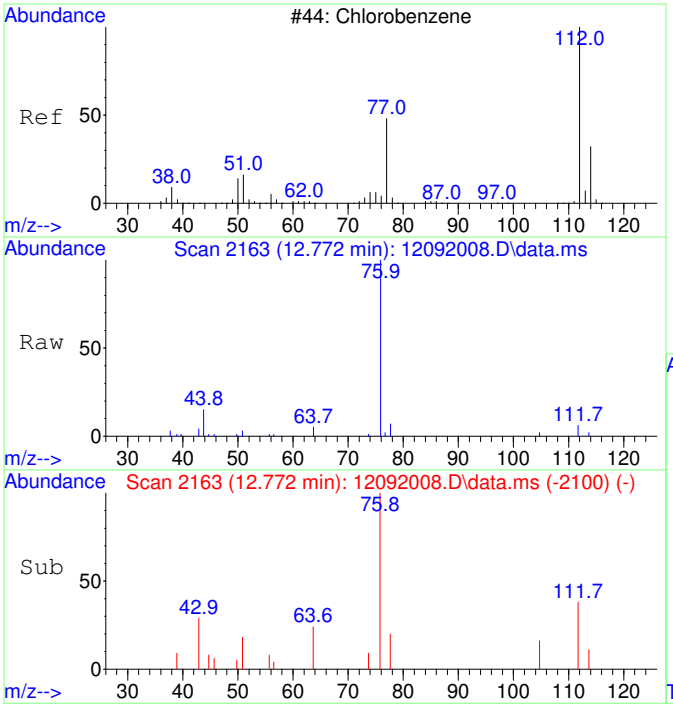


#39
Tetrachloroethene SCAN
Concen: 27.68 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 167

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	42.5	38.7	98.7
129	0.0	41.8	101.8#

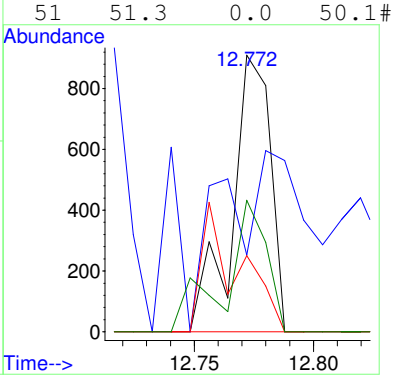


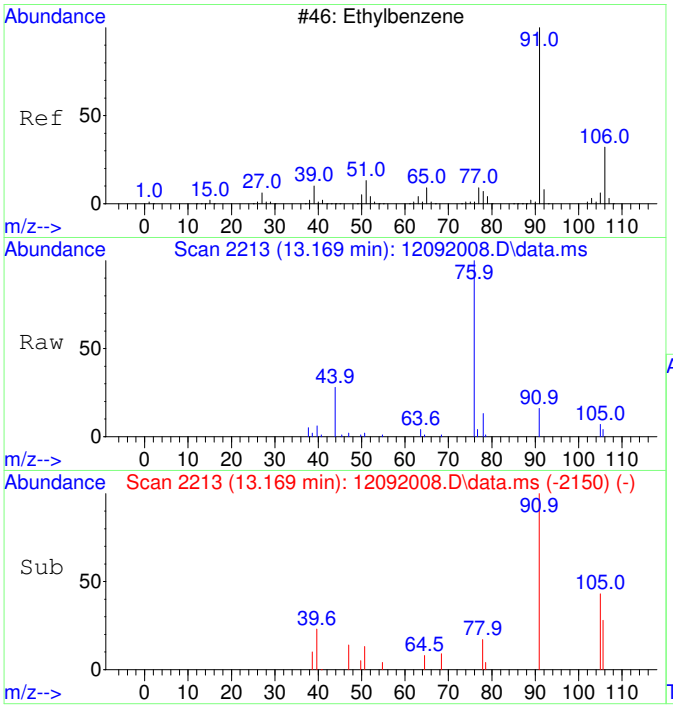


#40
Chlorobenzene SCAN
Concen: 52.64 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1014

Ion	Ratio	Lower	Upper
112	100		
77	106.3	28.2	88.2#
114	0.0	2.3	62.3#
51	51.3	0.0	50.1#

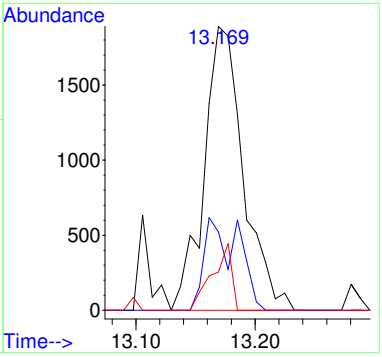


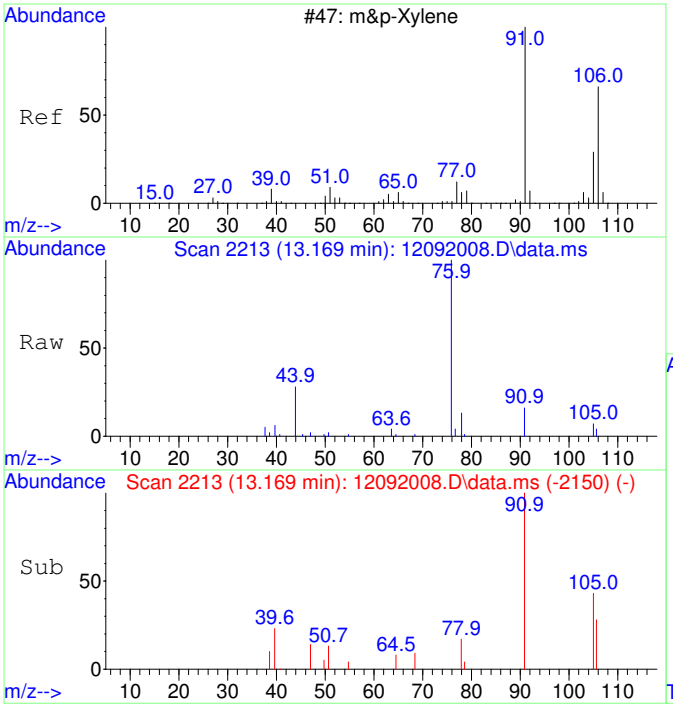


#42
Ethylbenzene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
51	11.5	0.0	40.1

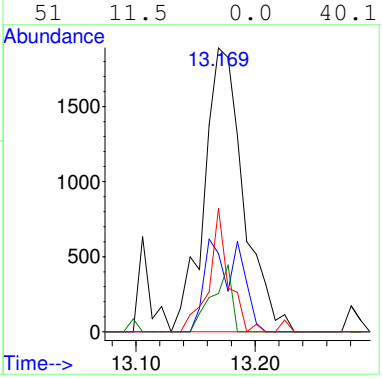


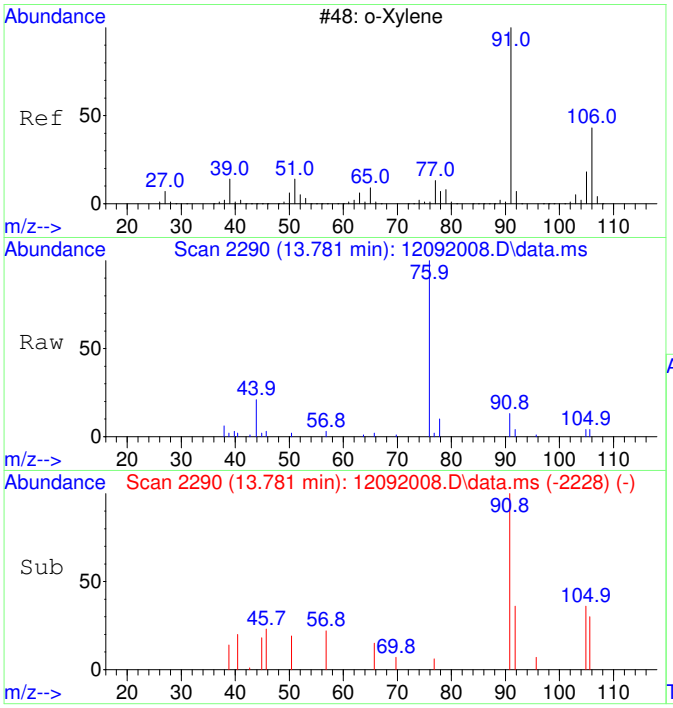


#43
m&p-Xylene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
105	21.7	0.0	54.7
51	11.5	0.0	40.1

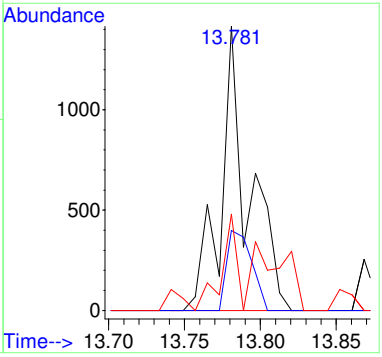


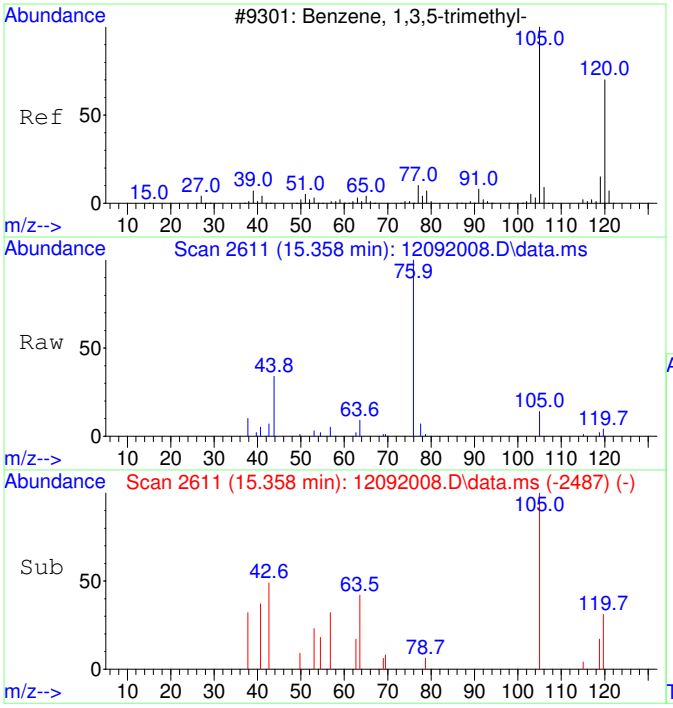


#44
o-Xylene SCAN
Concen: 64.67 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 1805

Ion	Ratio	Lower	Upper
91	100		
106	25.2	18.0	78.0
105	18.3	0.0	56.6

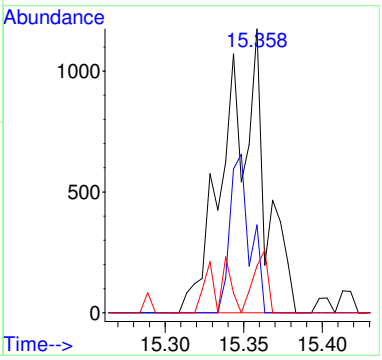


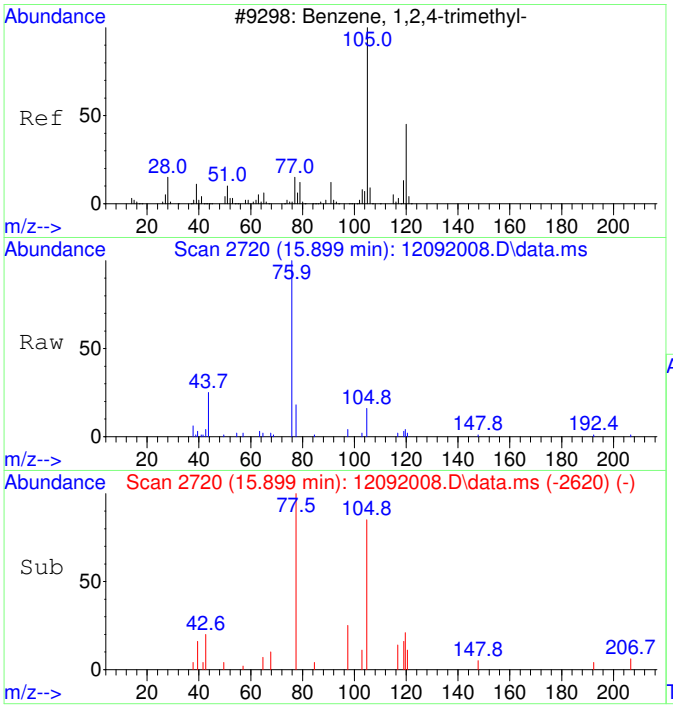


#46
1,3,5-Trimethylbenzene SCAN
Concen: 67.82 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1997

Ion	Ratio	Lower	Upper
105	100		
120	29.1	18.3	78.3
119	8.2	0.0	43.1

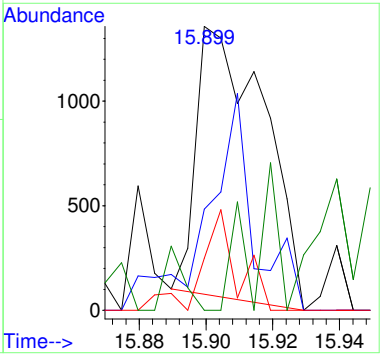




#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.70 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1826

Ion	Ratio	Lower	Upper
105	100		
120	55.9	16.9	76.9
119	19.7	0.0	41.9
77	8.4	0.0	42.3



2012007-01

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092009.D
Acq On : 9 Dec 2020 12:02
InstName : AG5975C
Operator : TD
Sample : 2012007-01
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 07:24:09 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

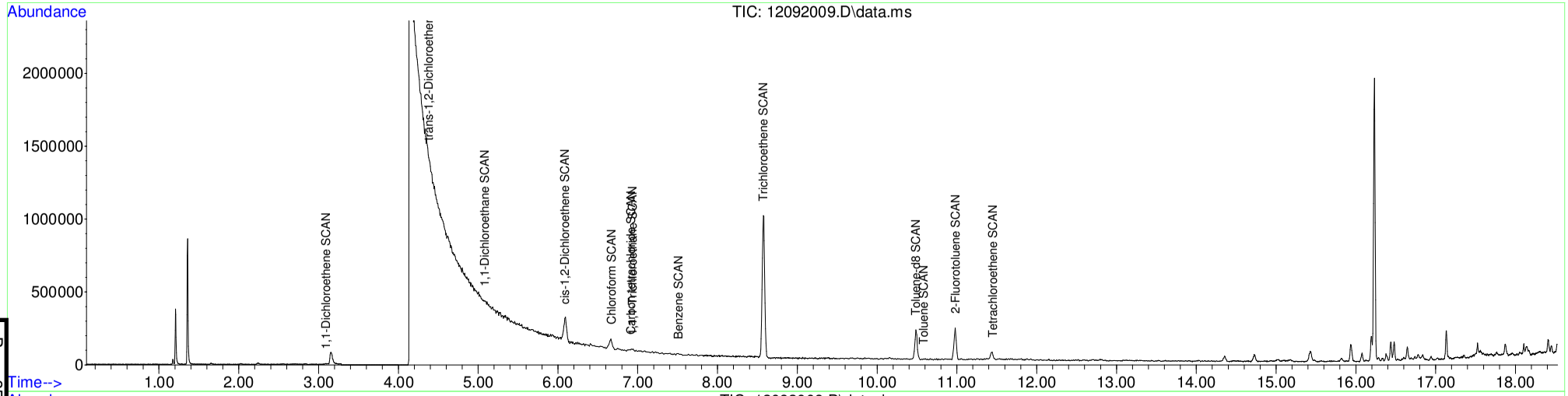
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	293718	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	243949	4288.39 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	85.77%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	9348	802.65 ug/L	80
3] trans-1,2-Dichloroethene	4.369	61	12057	821.19 ug/L	99
4] 1,1-Dichloroethane	5.086	63	10843	618.32 ug/L	97
5] cis-1,2-Dichloroethene	6.088	61	203584	11209.18 ug/L	98
6] Chloroform	6.652	83	85362	4893.21 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	7087	378.18 ug/L	100
8] Carbon tetrachloride	7.187	117	451	25.17 ug/L	95
9] Benzene	7.515	78	2745	55.54 ug/L	56
11] Trichloroethene	8.575	130	677580	43421.38 ug/L **oc**	96
13] Toluene	10.582	91	6334	89.43 ug/L	99
15] Tetrachloroethene	11.432	166	33999	1541.12 ug/L	99
19] m&p-Xylene	13.163	91	2487	35.70 ug/L	97
20] o-Xylene	13.782	91	1735	23.19 ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	169981	5098.41 ug/L	97
26) 1,1-Dichloroethene SCAN	3.092	61	1480	190.15 ug/L #	53
27) trans-1,2-Dichloroethe...	4.375	61	8782	885.85 ug/L	73
28) 1,1-Dichloroethane SCAN	5.078	63	7643	653.16 ug/L	77
29) cis-1,2-Dichloroethene...	6.086	61	137052	11914.02 ug/L #	78
30) Chloroform SCAN	6.663	83	58931	5492.45 ug/L	95
31) 1,1,1-Trichloroethane ...	6.930	97	4471	403.82 ug/L	78
32) Carbon tetrachloride SCAN	6.918	117	550	58.13 ug/L #	38
33) Benzene SCAN	7.502	78	6059	180.89 ug/L #	91
35) Trichloroethene SCAN	8.574	130	355663	48695.56 ug/L	85
36) Toluene-d8 SCAN	10.486	98	147232	4708.52 ug/L	95
37) Toluene SCAN	10.580	91	4509	117.12 ug/L #	30
39) Tetrachloroethene SCAN	11.441	166	15452	1784.08 ug/L	87

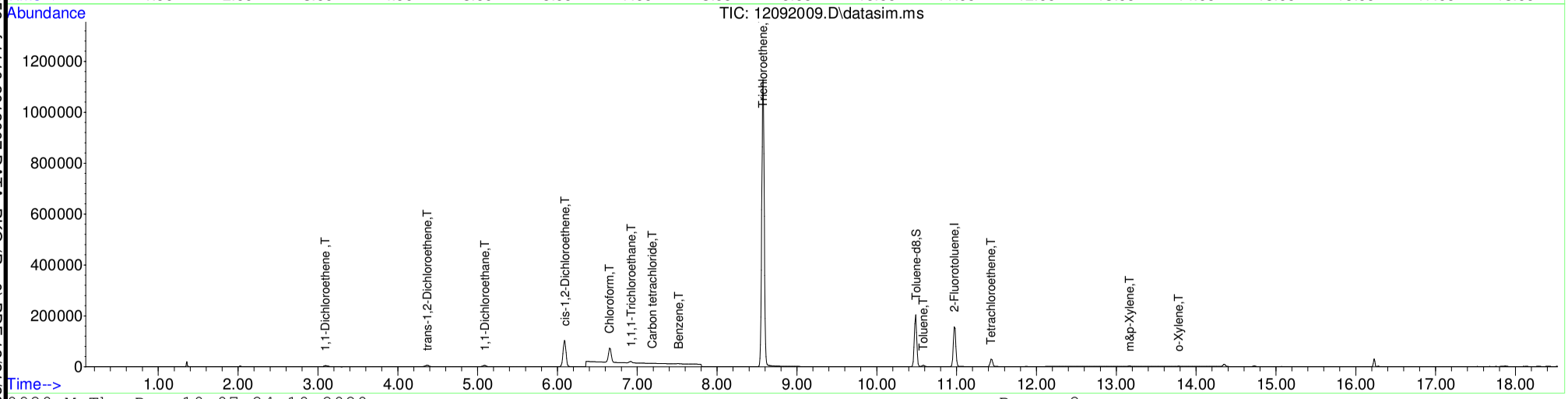
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092009.D
Acq On : 9 Dec 2020 12:02
InstName : AG5975C
Operator : TD
Sample : 2012007-01
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 07:24:09 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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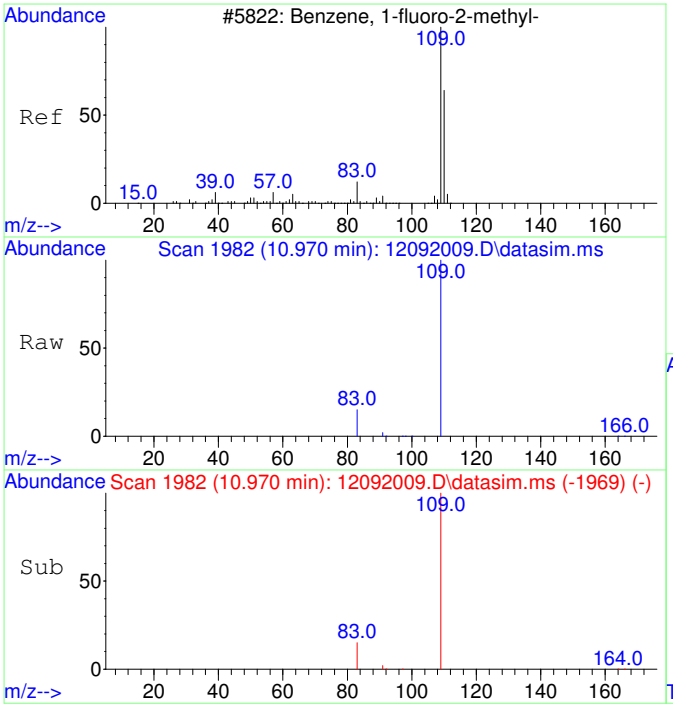
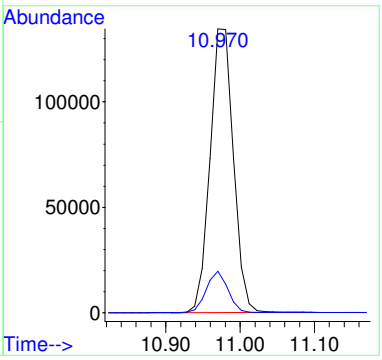
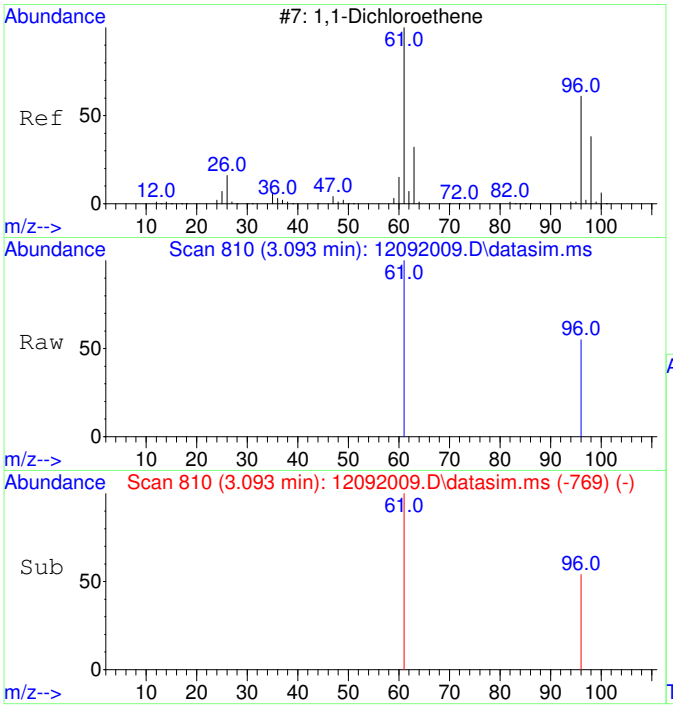


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:109 Resp: 293718

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

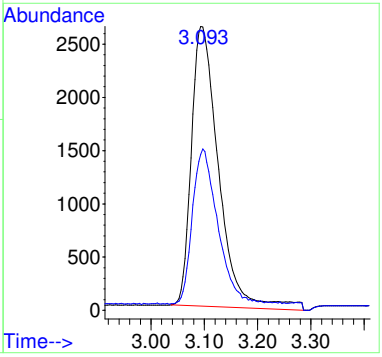




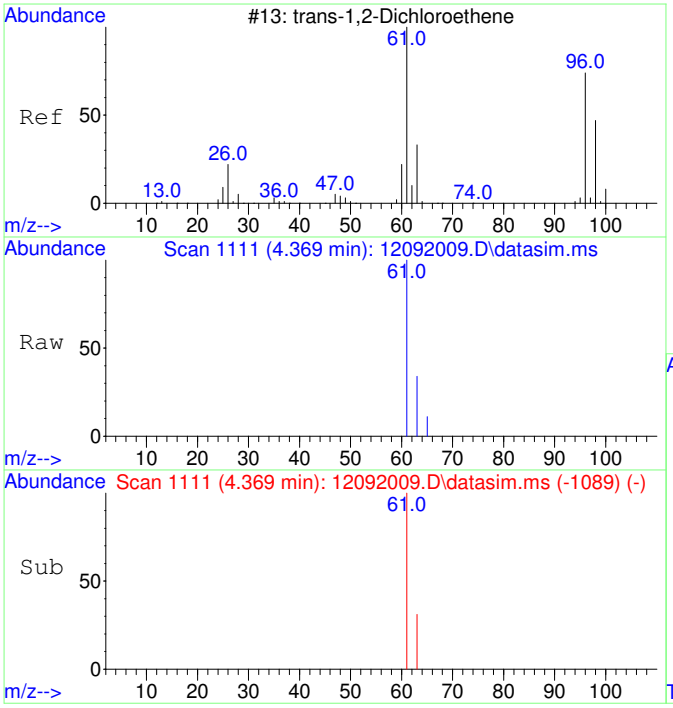
#2
1,1-Dichloroethene
Concen: 802.65 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 9348

Ion	Ratio	Lower	Upper
61	100		
96	51.5	37.2	97.2



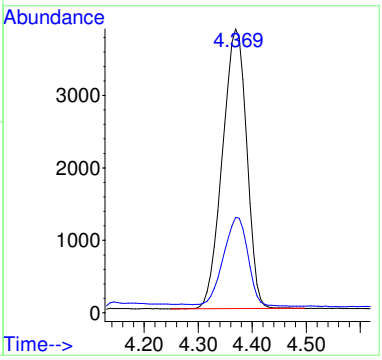
Before MI:
IMPROPER
BASELINE

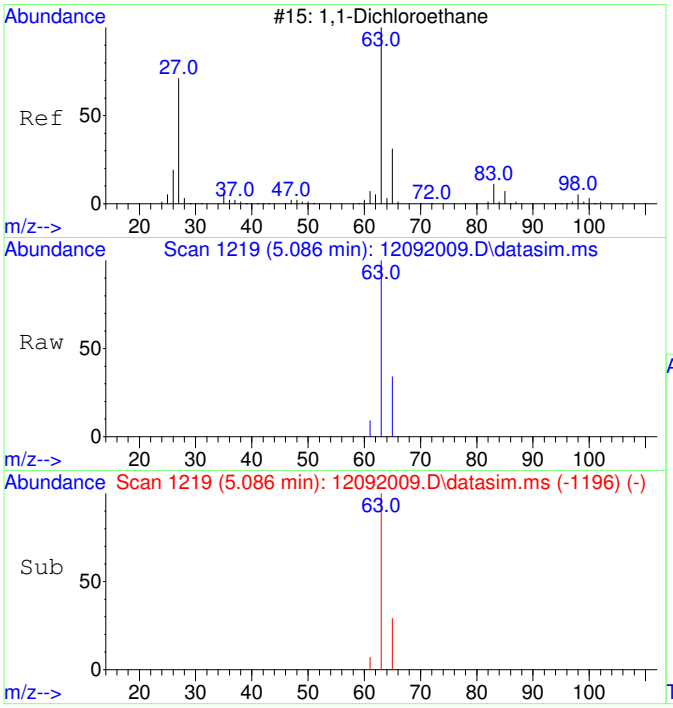


#3
trans-1,2-Dichloroethene
Concen: 821.19 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 12057

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.4	62.4

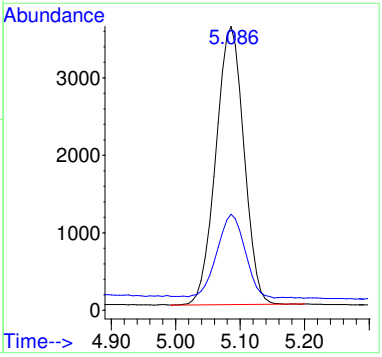


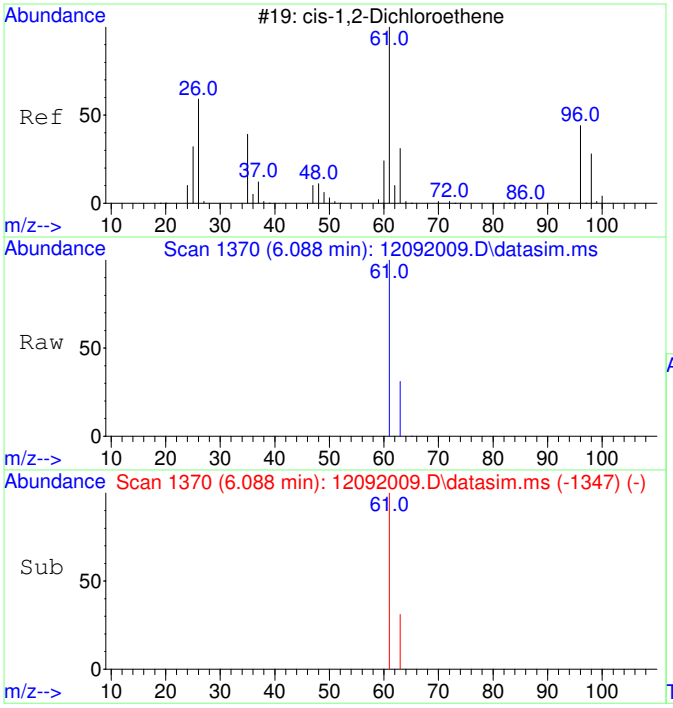


#4
1,1-Dichloroethane
Concen: 618.32 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 63 Resp: 10843

Ion	Ratio	Lower	Upper
63	100		
65	30.1	1.8	61.8

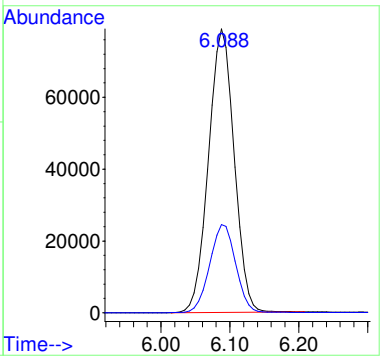


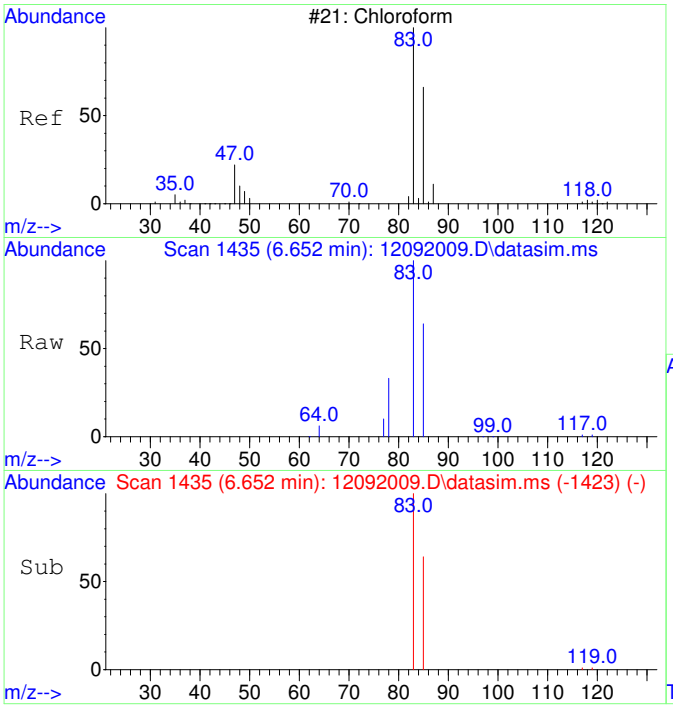


#5
cis-1,2-Dichloroethene
Concen: 11209.18 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 203584

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

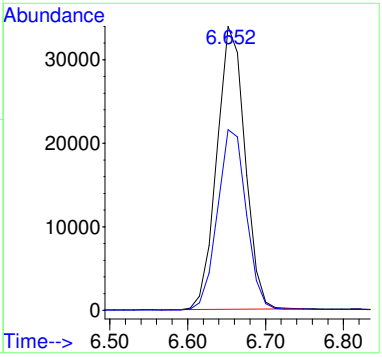


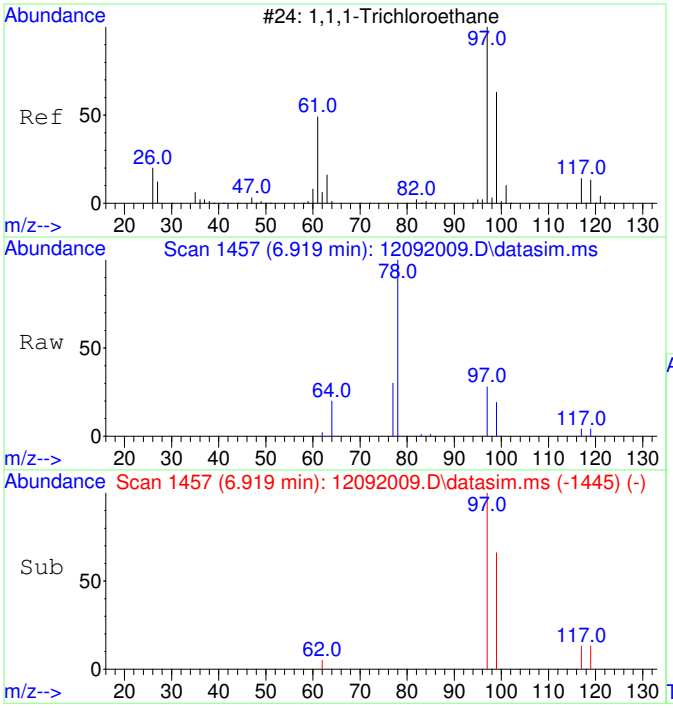


#6
Chloroform
Concen: 4893.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 83 Resp: 85362

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

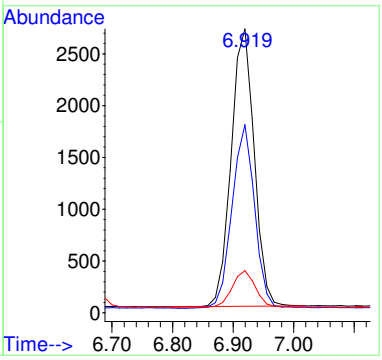


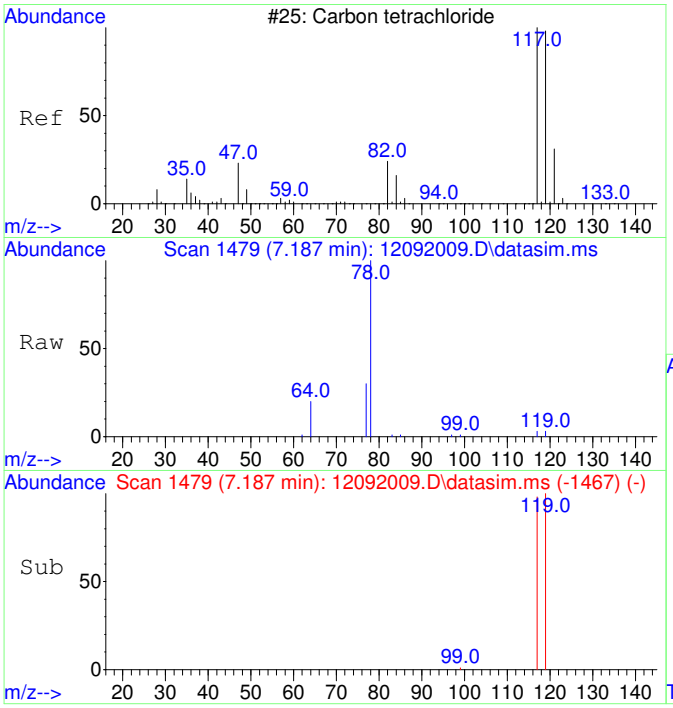


#7
1,1,1-Trichloroethane
Concen: 378.18 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 97 Resp: 7087

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	13.2	0.0	43.2

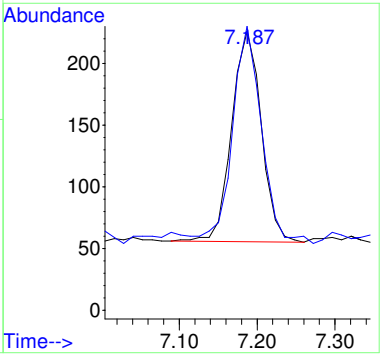


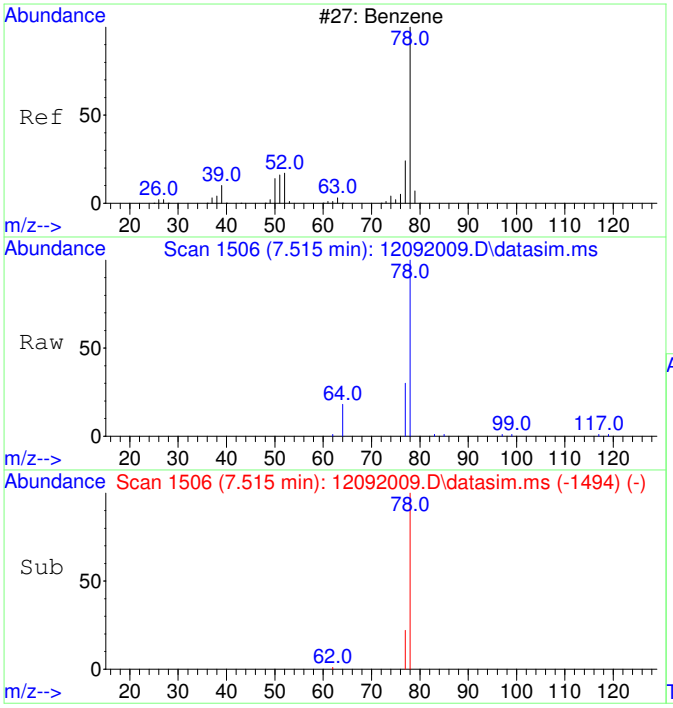


#8
Carbon tetrachloride
Concen: 25.17 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:117 Resp: 451

Ion	Ratio	Lower	Upper
117	100		
119	101.1	66.4	126.4

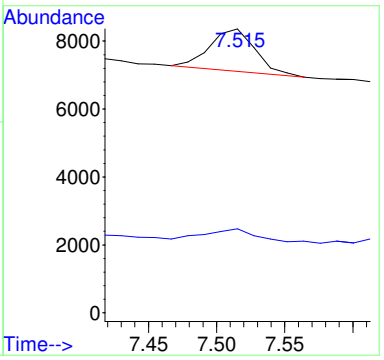


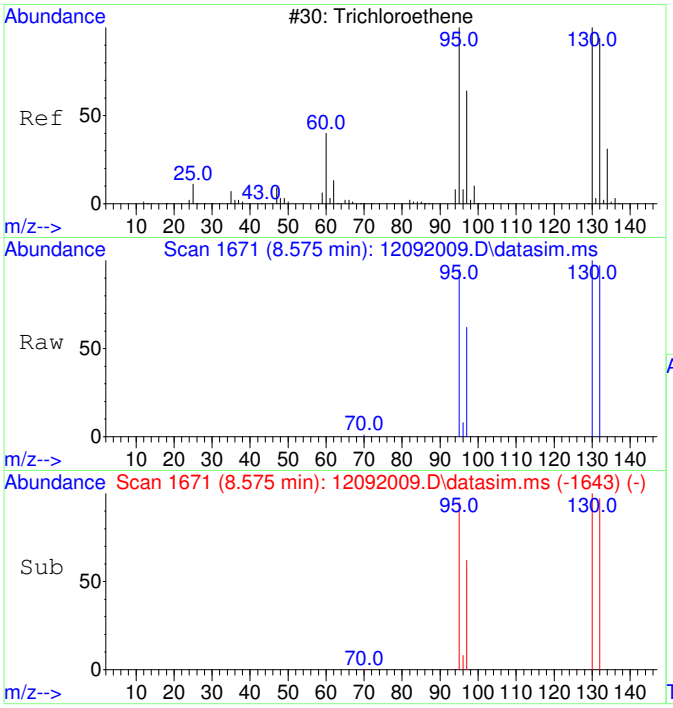


#9
Benzene
Concen: 55.54 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 78 Resp: 2745

Ion	Ratio	Lower	Upper
78	100		
77	44.6	0.0	53.2

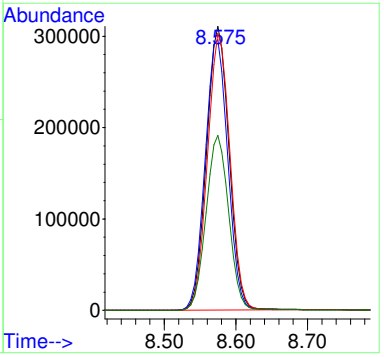


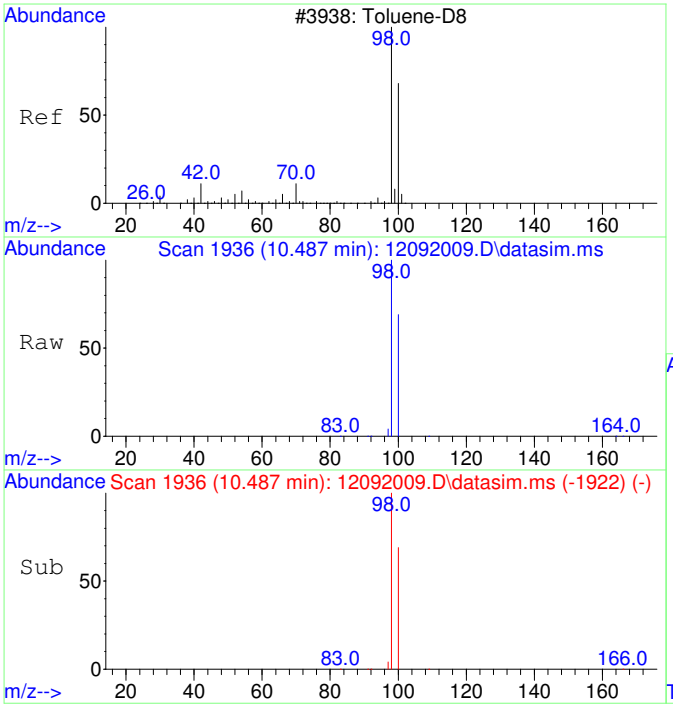


#11
Trichloroethene
Concen: 43421.38 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:130 Resp: 677580

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	97.1	76.0	116.0
97	61.6	38.6	78.6

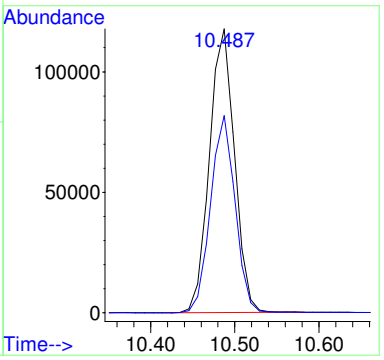


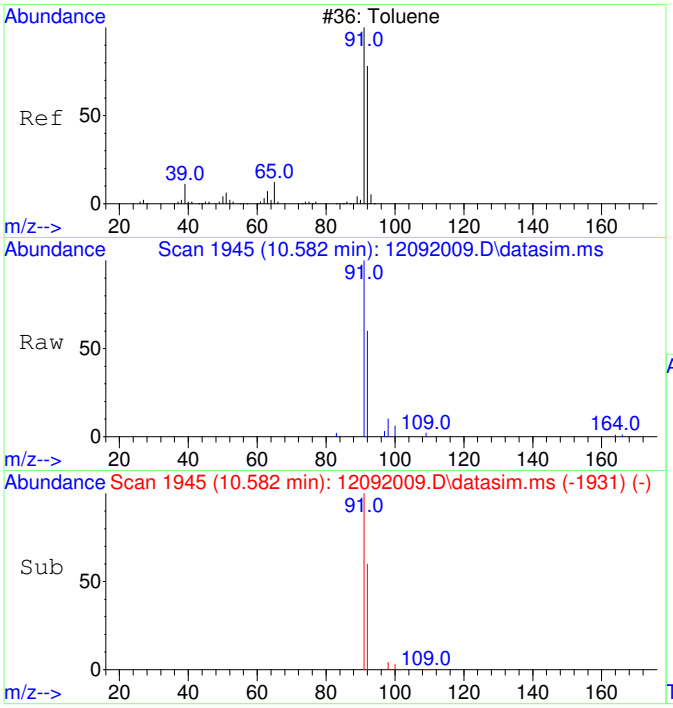


#12
Toluene-d8
Concen: 4288.39 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 98 Resp: 243949

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

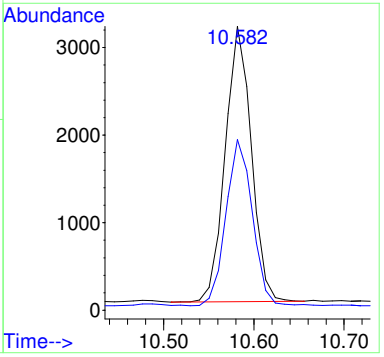


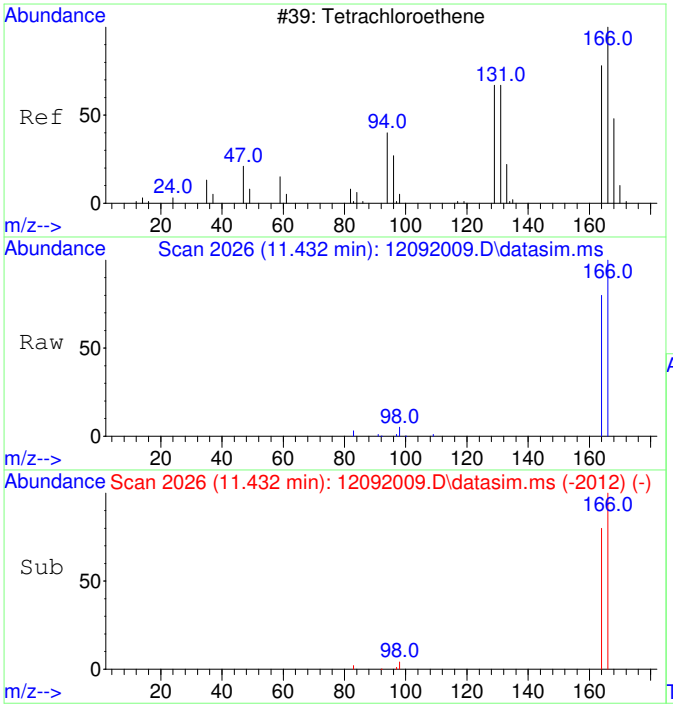


#13
Toluene
Concen: 89.43 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 6334

Ion	Ratio	Lower	Upper
91	100		
92	60.7	29.9	89.9

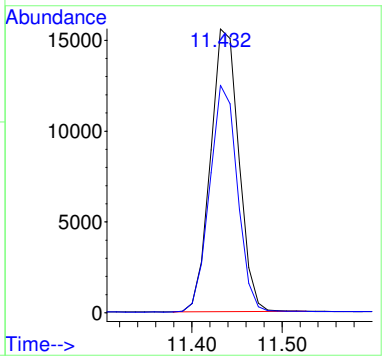


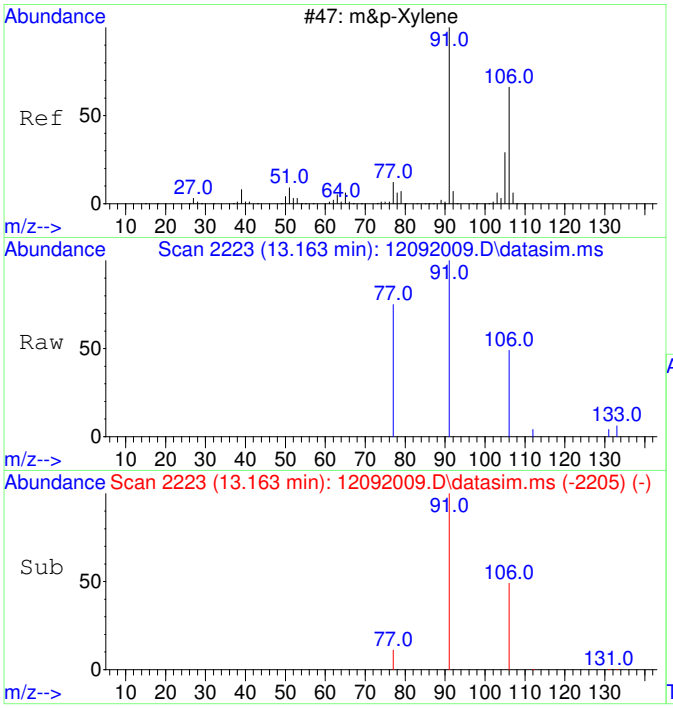


#15
Tetrachloroethene
Concen: 1541.12 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:166 Resp: 33999

Ion	Ratio	Lower	Upper
166	100		
164	78.4	47.8	107.8

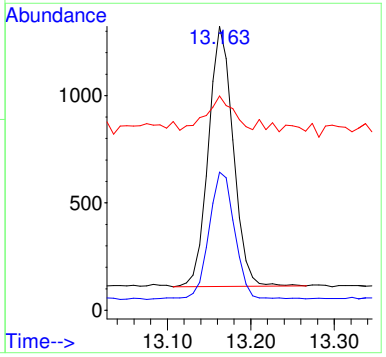


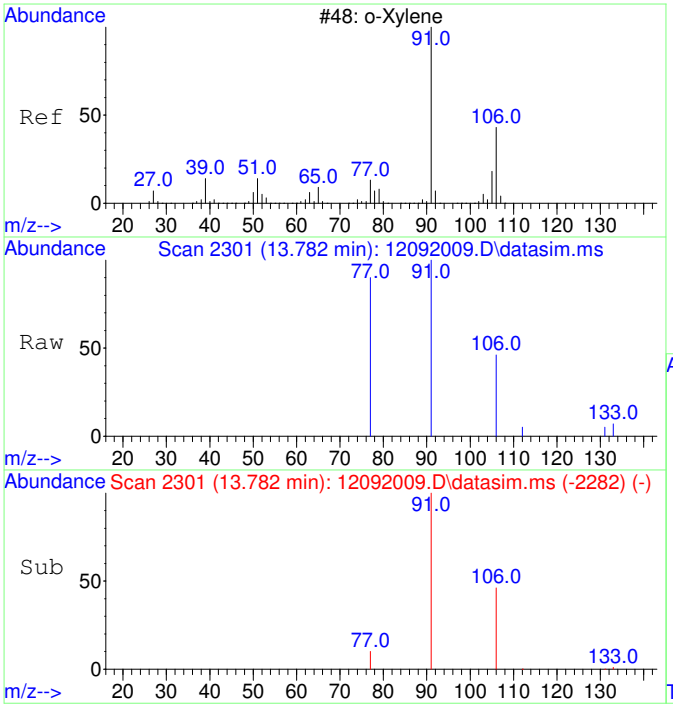


#19
m&p-Xylene
Concen: 35.70 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 2487

Ion	Ratio	Lower	Upper
91	100		
106	51.2	22.2	82.2
77	16.0	0.0	42.4

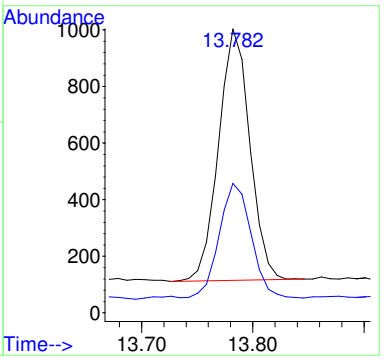


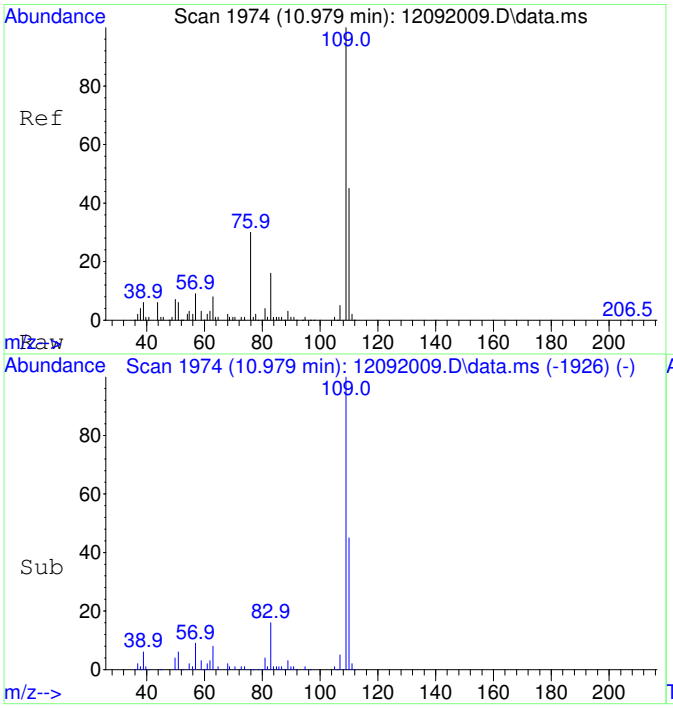


#20
o-Xylene
Concen: 23.19 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 1735

Ion	Ratio	Lower	Upper
91	100		
106	46.1	19.2	79.2

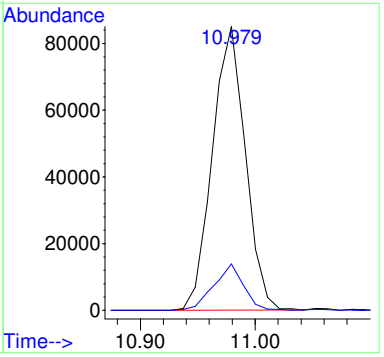


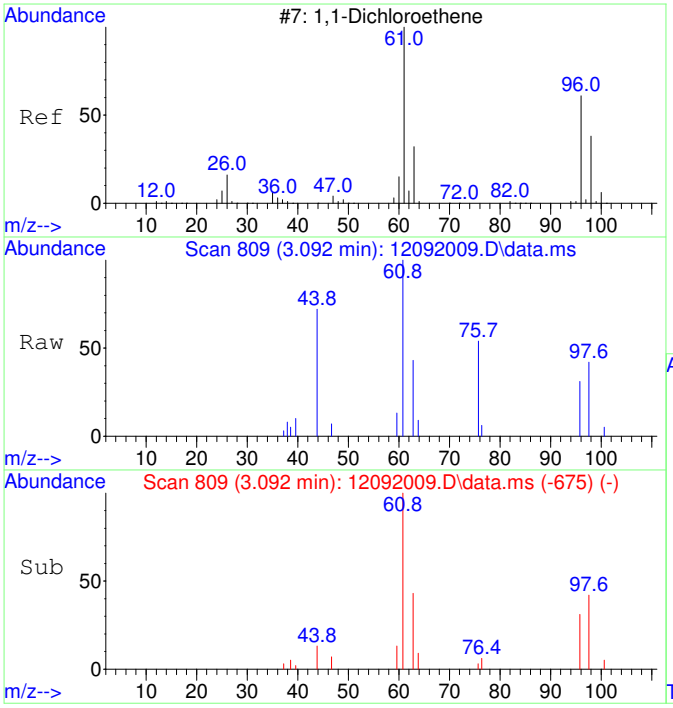


#25
2-Fluorotoluene SCAN
Concen: 5098.41 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:109 Resp: 169981

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

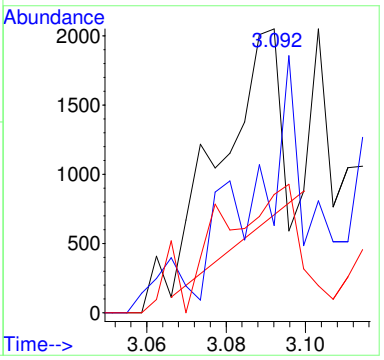


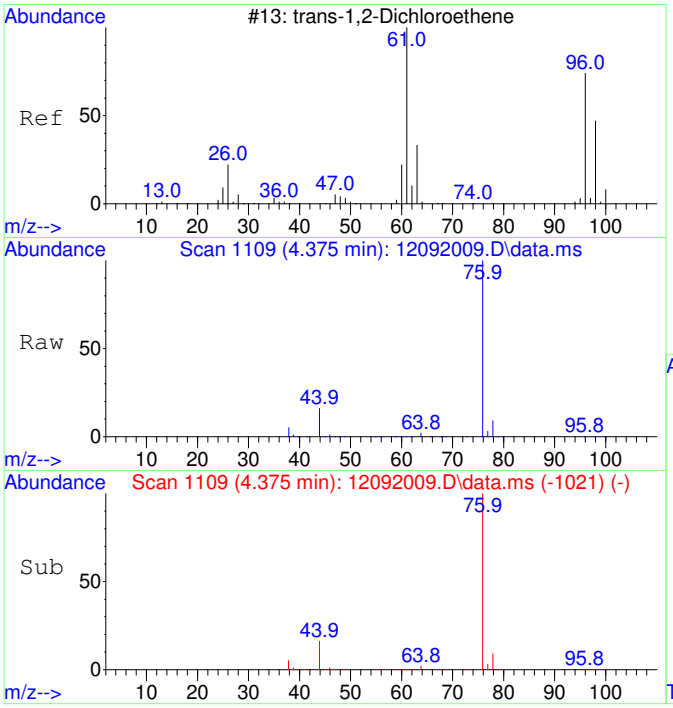


#26
1,1-Dichloroethene SCAN
Concen: 190.15 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.004 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 1480

Ion	Ratio	Lower	Upper
61	100		
96	30.4	33.1	93.1#
98	75.1	11.2	71.2#

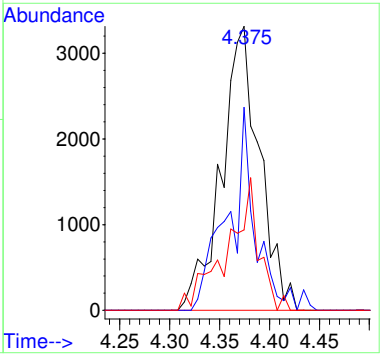


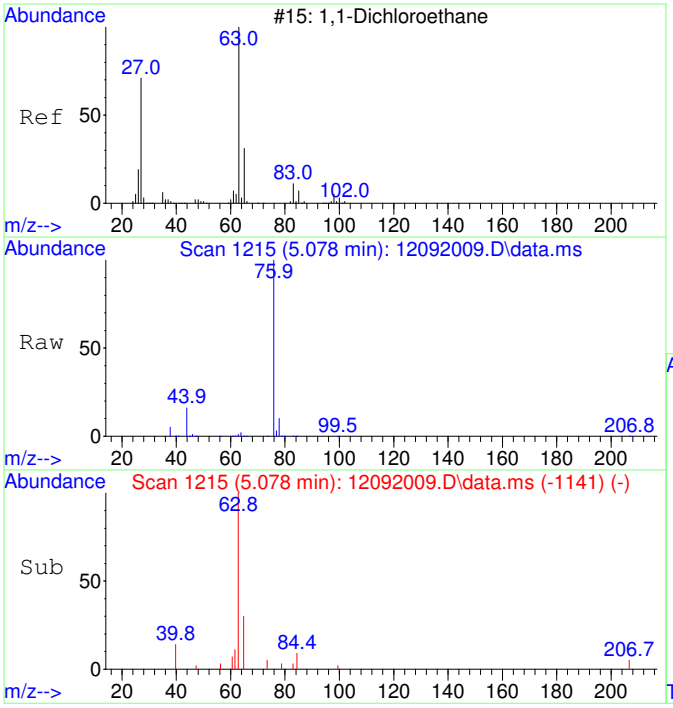


#27
trans-1,2-Dichloroethene SCAN
Concen: 885.85 ug/L
RT: 4.375 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 8782

Ion	Ratio	Lower	Upper
61	100		
96	50.4	49.0	109.0
98	38.8	20.5	80.5

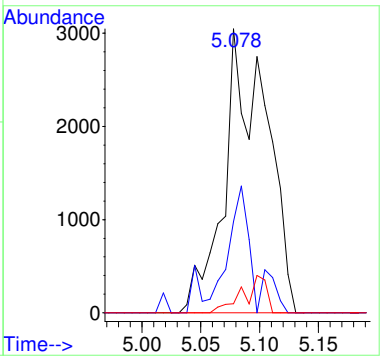


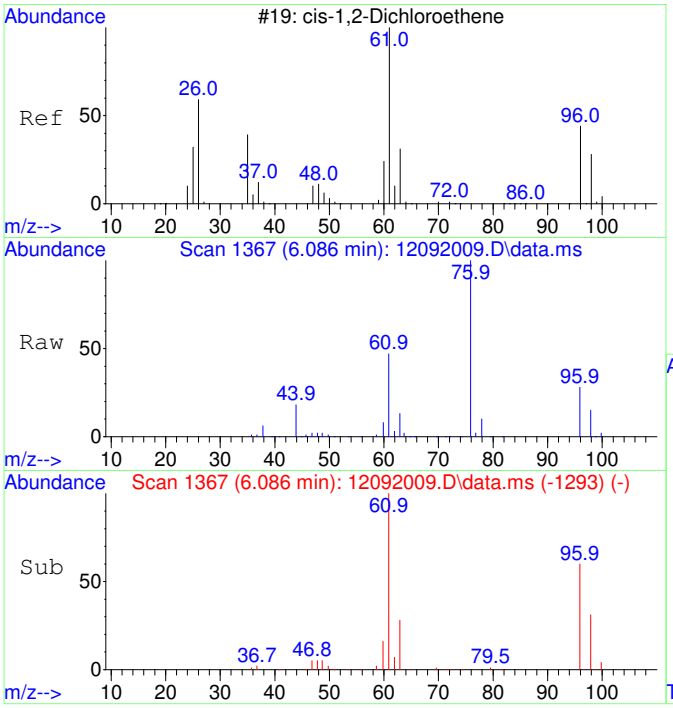


#28
1,1-Dichloroethane SCAN
Concen: 653.16 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 63 Resp: 7643

Ion	Ratio	Lower	Upper
63	100		
65	18.2	1.3	61.3
83	7.2	0.0	45.9

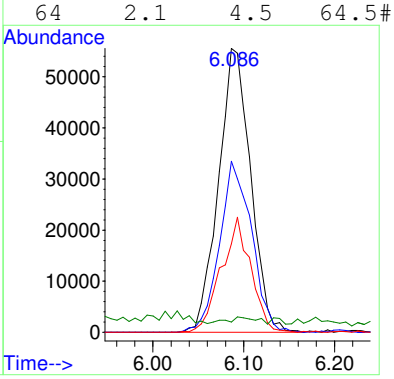


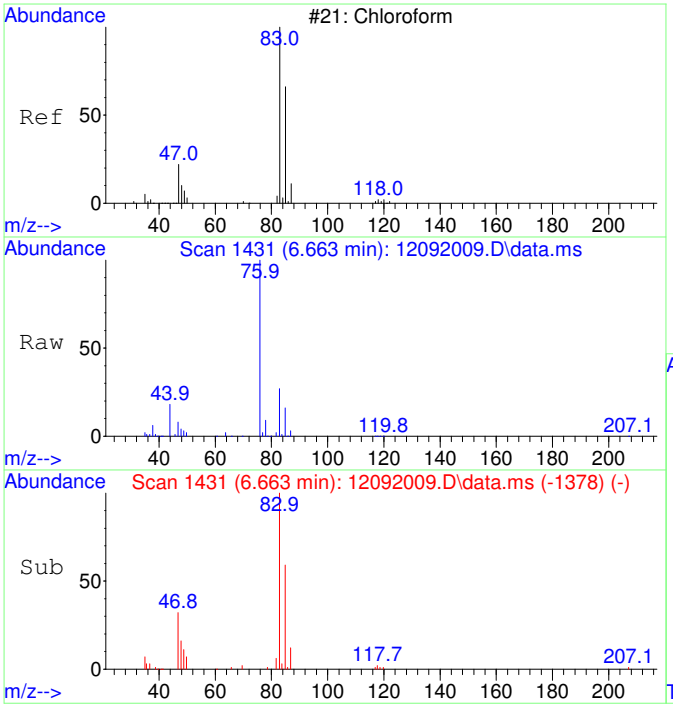


#29
cis-1,2-Dichloroethene SCAN
Concen: 11914.02 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 137052

Ion	Ratio	Lower	Upper
61	100		
96	59.9	39.9	99.9
98	37.2	13.5	73.5
64	2.1	4.5	64.5#

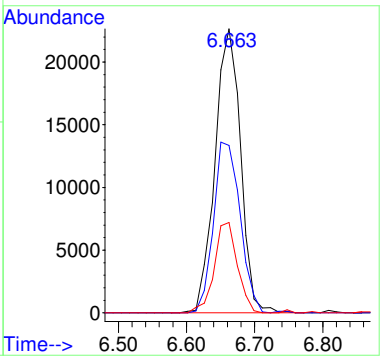


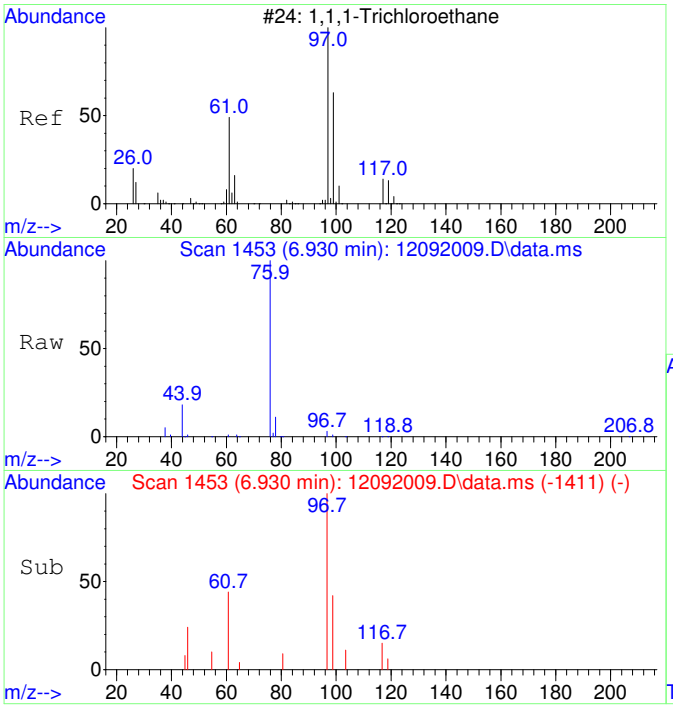


#30
Chloroform SCAN
Concen: 5492.45 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 83 Resp: 58931

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.6	94.6
47	28.8	0.0	53.4

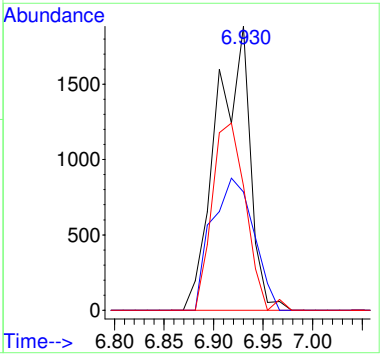


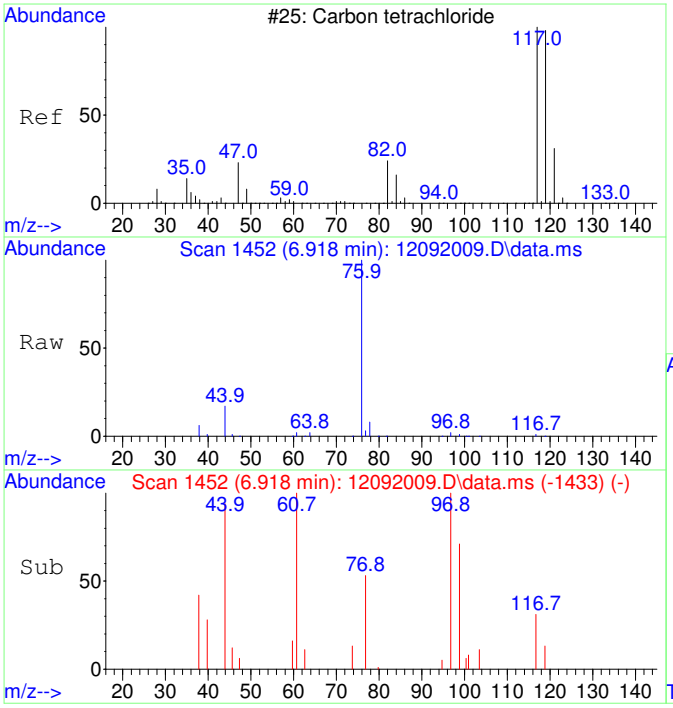


#31
1,1,1-Trichloroethane SCAN
Concen: 403.82 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 97 Resp: 4471

Ion	Ratio	Lower	Upper
97	100		
99	57.8	43.6	103.6
61	65.8	18.0	78.0

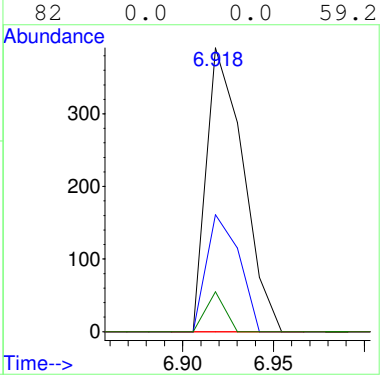


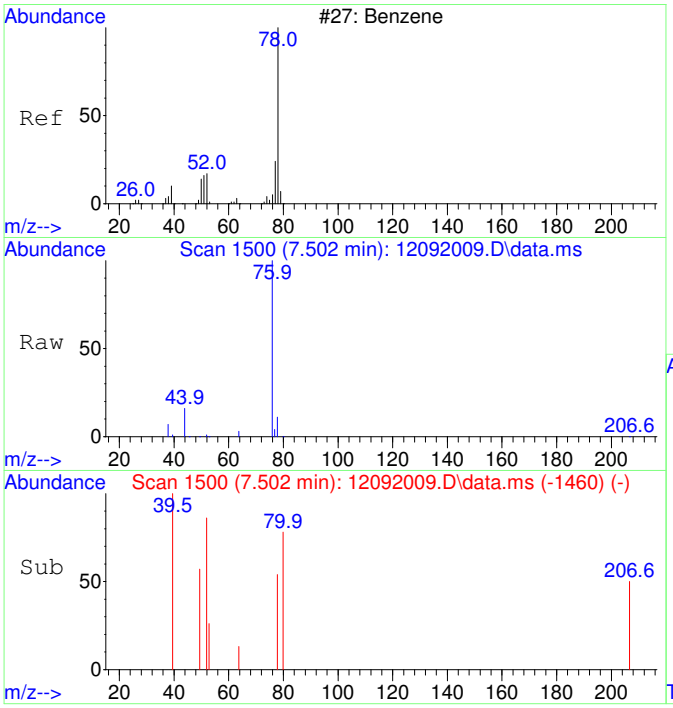


#32
Carbon tetrachloride SCAN
Concen: 58.13 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.268 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:117 Resp: 550

Ion	Ratio	Lower	Upper
117	100		
119	36.5	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

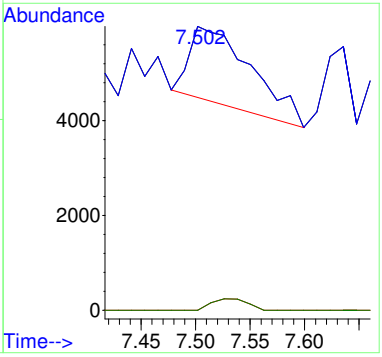


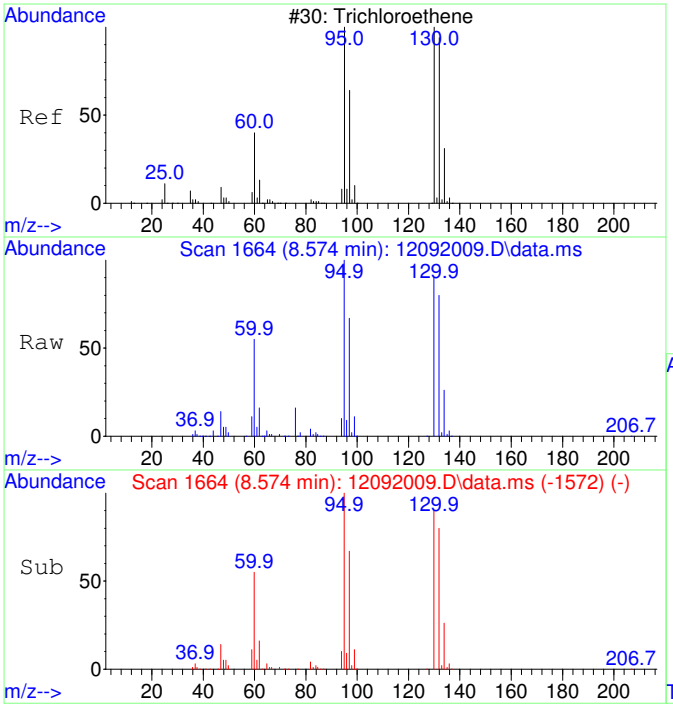


#33
Benzene SCAN
Concen: 180.89 ug/L
RT: 7.502 min Scan# 1500
Delta R.T. -0.012 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 78 Resp: 6059

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

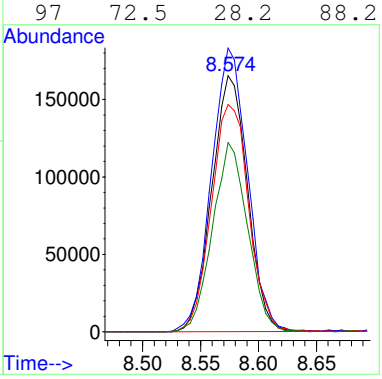


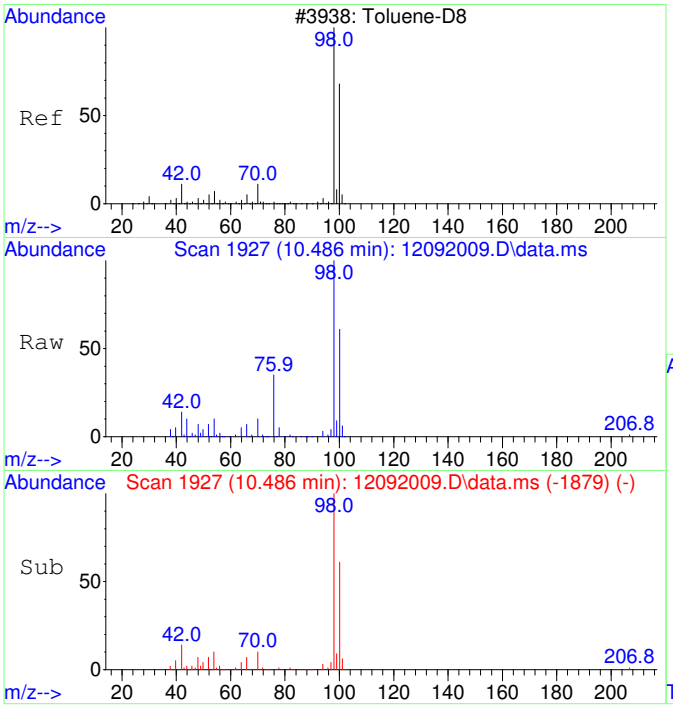


#35
Trichloroethene SCAN
Concen: 48695.56 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:130 Resp: 355663

Ion	Ratio	Lower	Upper
130	100		
95	111.6	60.5	120.5
132	93.2	59.6	119.6
97	72.5	28.2	88.2

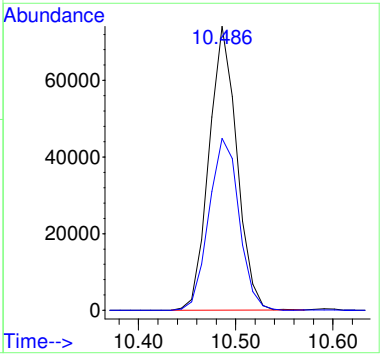


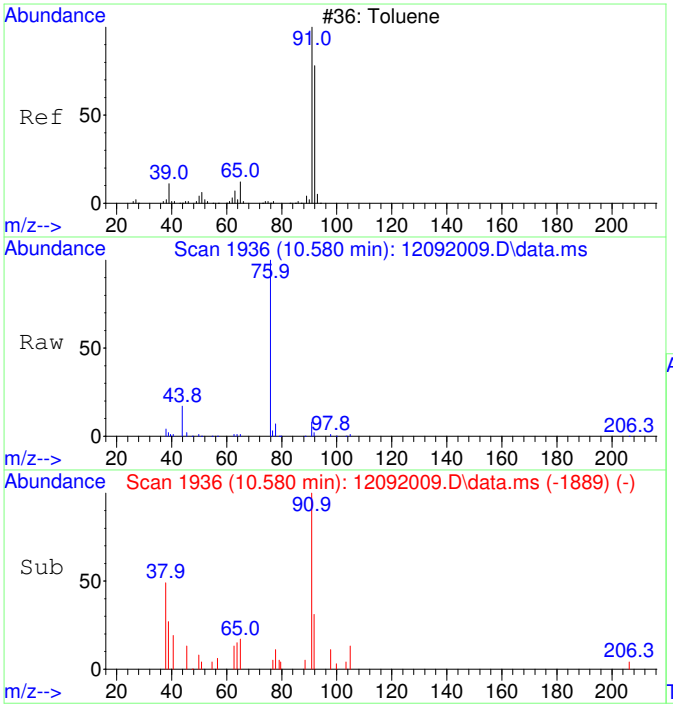


#36
Toluene-d8 SCAN
Concen: 4708.52 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 98 Resp: 147232

Ion	Ratio	Lower	Upper
98	100		
100	65.6	40.0	100.0

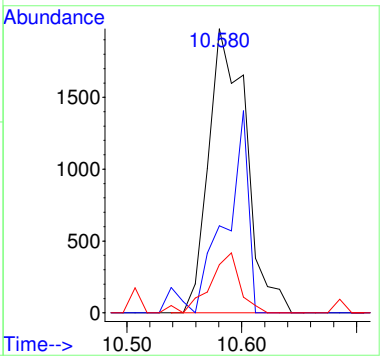


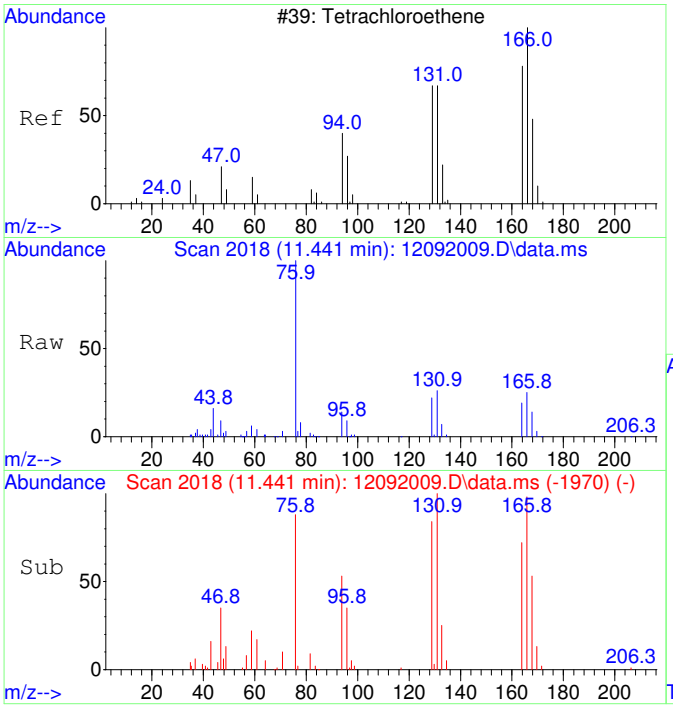


#37
Toluene SCAN
Concen: 117.12 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 4509

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

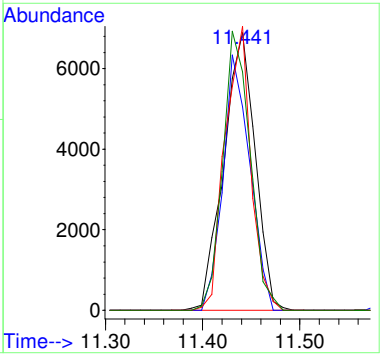




#39
Tetrachloroethene SCAN
Concen: 1784.08 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:166 Resp: 15452

Ion	Ratio	Lower	Upper
166	100		
164	78.7	50.9	110.9
131	84.5	38.7	98.7
129	87.6	41.8	101.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092009.D
Acq On : 9 Dec 2020 12:02
InstName : AG5975C
Operator : TD
Sample : 2012007-01
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 07:24:09 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

M.I. Performed By:
TD at 9:18 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:00 pm, Dec 14, 2020

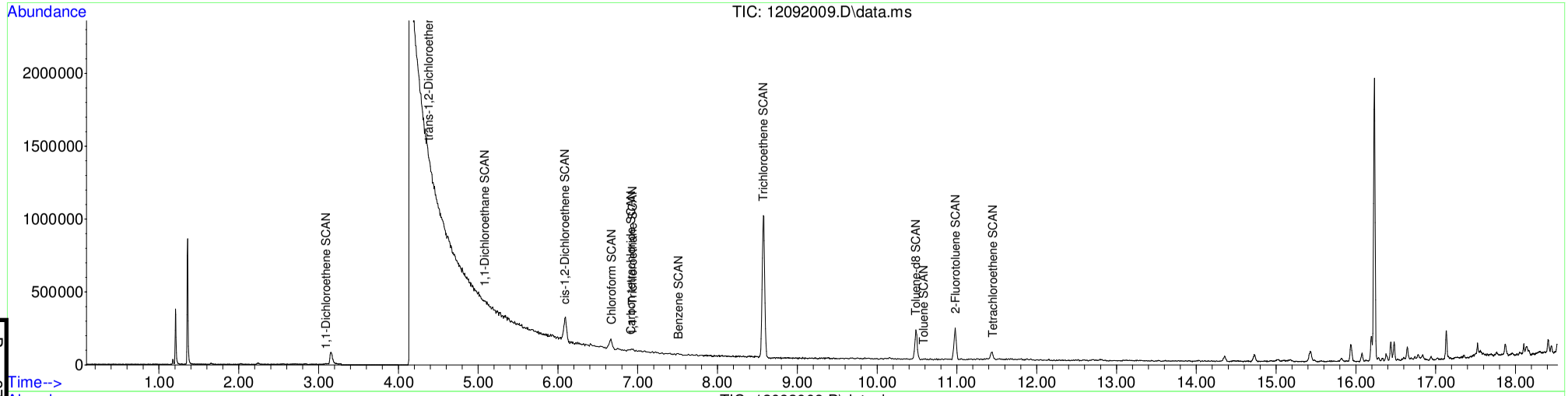
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	293718	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	243949	4288.39 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	85.77%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	8776m	753.54 ug/L	
3] trans-1,2-Dichloroethene	4.369	61	12057	821.19 ug/L	99
4] 1,1-Dichloroethane	5.086	63	10843	618.32 ug/L	97
5] cis-1,2-Dichloroethene	6.088	61	203584	11209.18 ug/L	98
6] Chloroform	6.652	83	85362	4893.21 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	7087	378.18 ug/L	100
8] Carbon tetrachloride	7.187	117	451	25.17 ug/L	95
9] Benzene	7.515	78	2745	55.54 ug/L	56
11] Trichloroethene	8.575	130	677580	43421.38 ug/L **oc**	96
13] Toluene	10.582	91	6334	89.43 ug/L	99
15] Tetrachloroethene	11.432	166	33999	1541.12 ug/L	99
19] m&p-Xylene	13.163	91	2487	35.70 ug/L	97
20] o-Xylene	13.782	91	1735	23.19 ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	169981	5098.41 ug/L	97
26) 1,1-Dichloroethene SCAN	3.092	61	1480	190.15 ug/L #	53
27) trans-1,2-Dichloroethe...	4.375	61	8782	885.85 ug/L	73
28) 1,1-Dichloroethane SCAN	5.078	63	7643	653.16 ug/L	77
29) cis-1,2-Dichloroethene...	6.086	61	137052	11914.02 ug/L #	78
30) Chloroform SCAN	6.663	83	58931	5492.45 ug/L	95
31) 1,1,1-Trichloroethane ...	6.930	97	4471	403.82 ug/L	78
32) Carbon tetrachloride SCAN	6.918	117	550	58.13 ug/L #	38
33) Benzene SCAN	7.502	78	6059	180.89 ug/L #	91
35) Trichloroethene SCAN	8.574	130	355663	48695.56 ug/L	85
36) Toluene-d8 SCAN	10.486	98	147232	4708.52 ug/L	95
37) Toluene SCAN	10.580	91	4509	117.12 ug/L #	30
39) Tetrachloroethene SCAN	11.441	166	15452	1784.08 ug/L	87

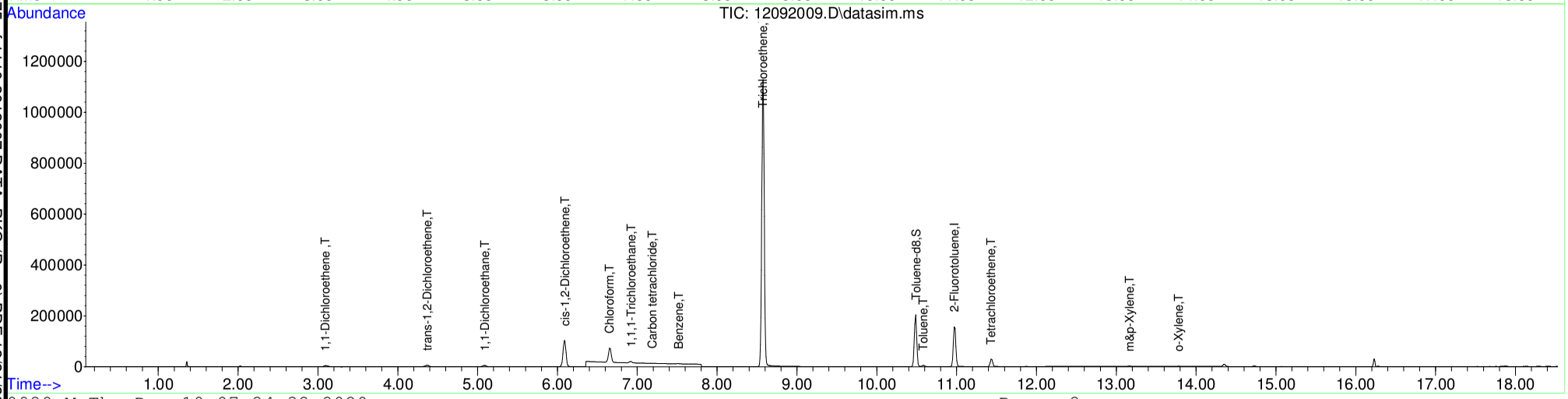
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092009.D
Acq On : 9 Dec 2020 12:02
InstName : AG5975C
Operator : TD
Sample : 2012007-01
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Dec 10 07:24:09 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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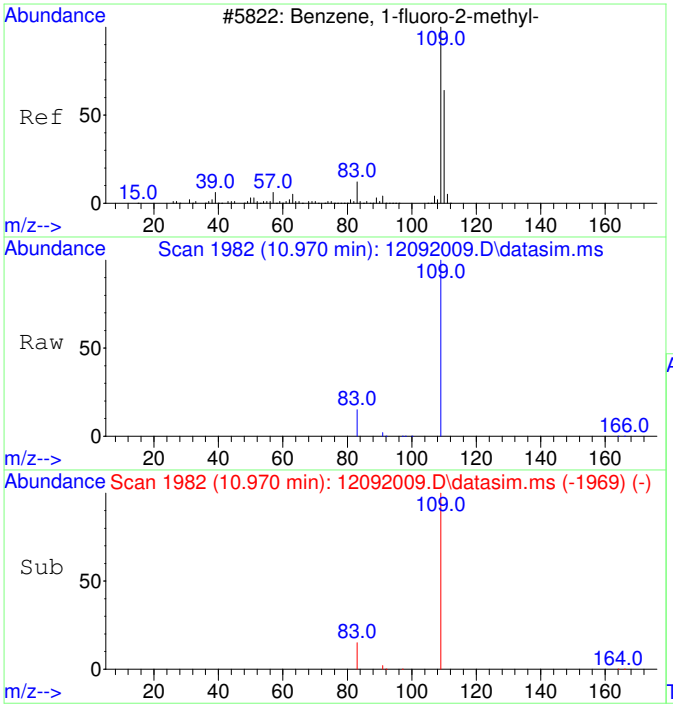
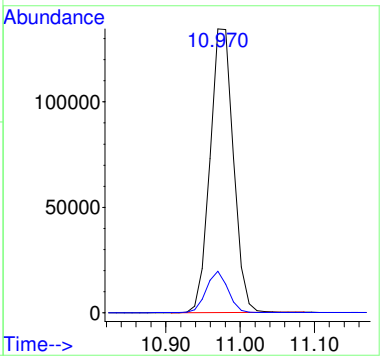
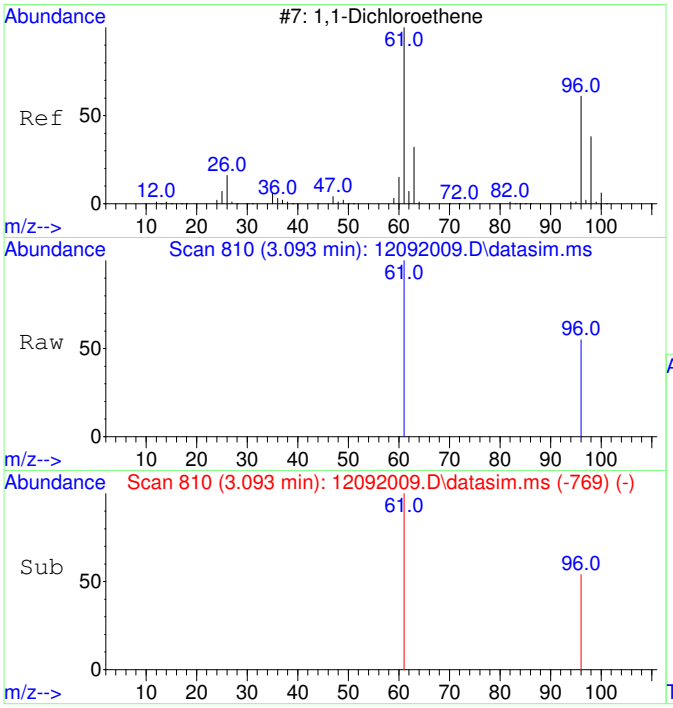


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:109 Resp: 293718

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

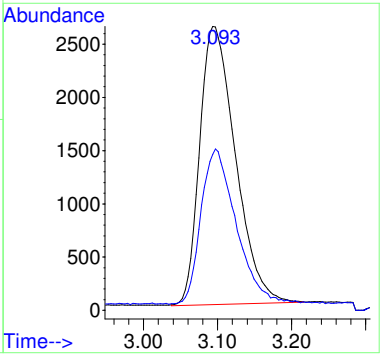


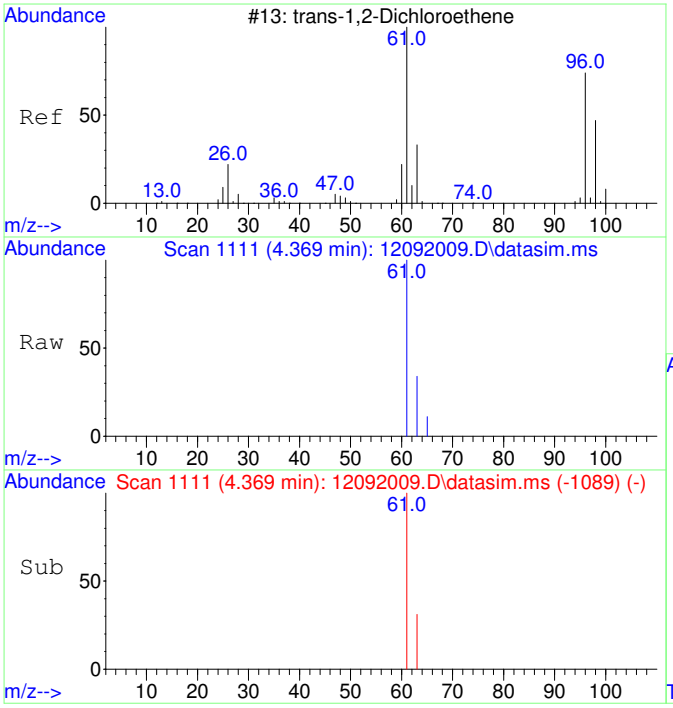


#2
1,1-Dichloroethene
Concen: 753.54 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 8776

Ion	Ratio	Lower	Upper
61	100		
96	54.8	37.2	97.2

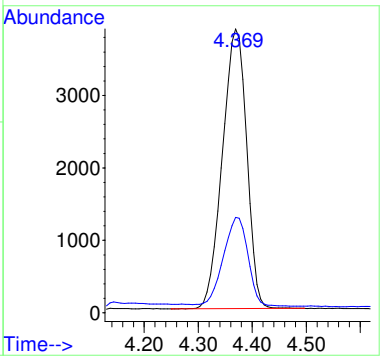


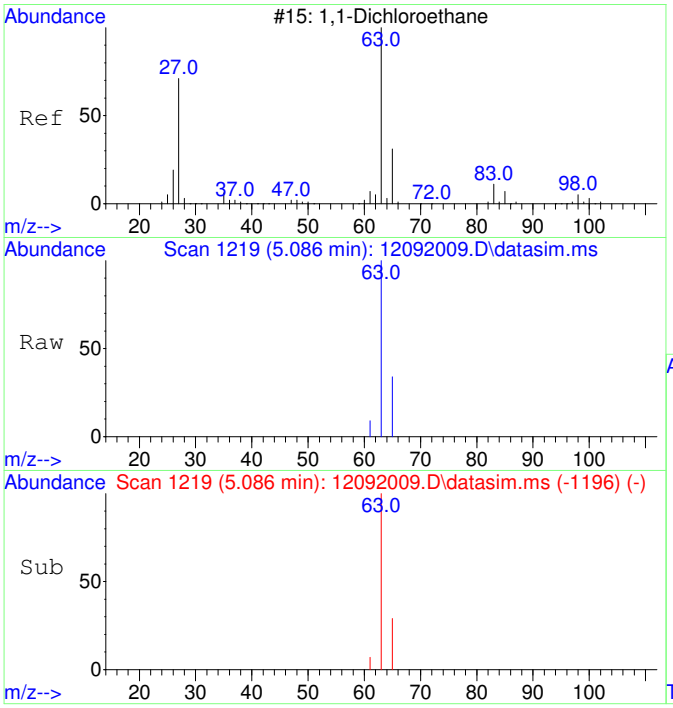


#3
trans-1,2-Dichloroethene
Concen: 821.19 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 12057

Ion	Ratio	Lower	Upper
61	100		
63	32.1	2.4	62.4

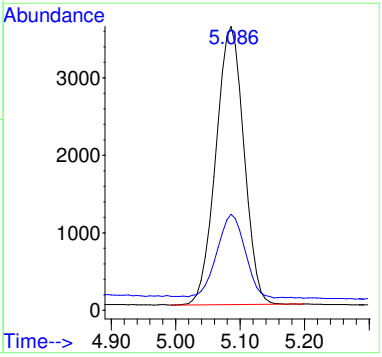


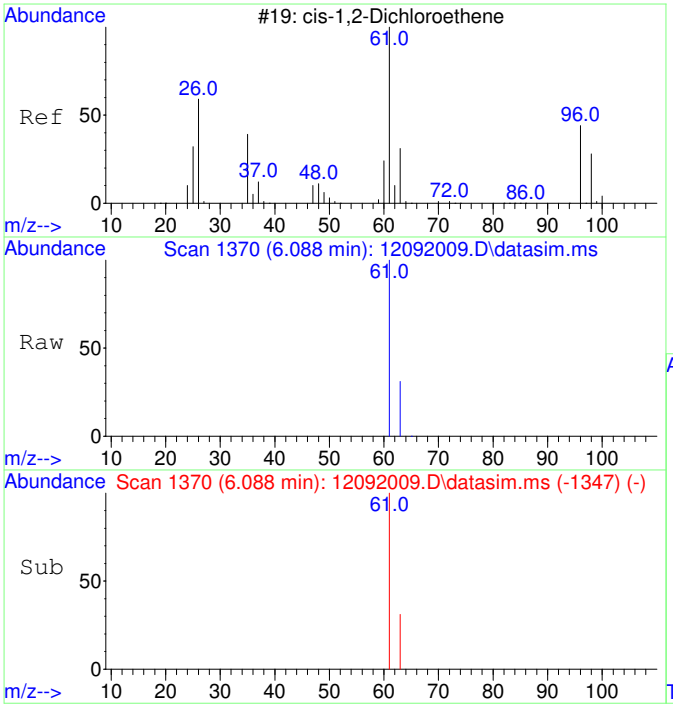


#4
1,1-Dichloroethane
Concen: 618.32 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 63 Resp: 10843

Ion	Ratio	Lower	Upper
63	100		
65	30.1	1.8	61.8

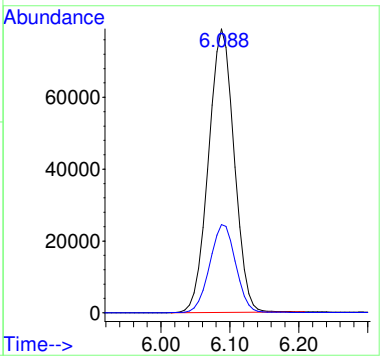


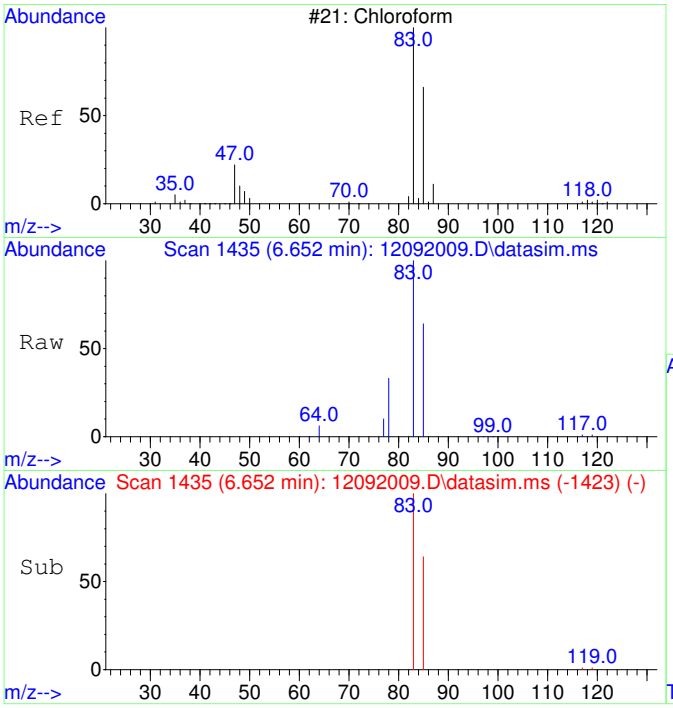


#5
cis-1,2-Dichloroethene
Concen: 11209.18 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 203584

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

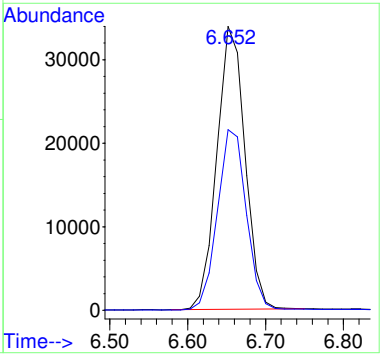


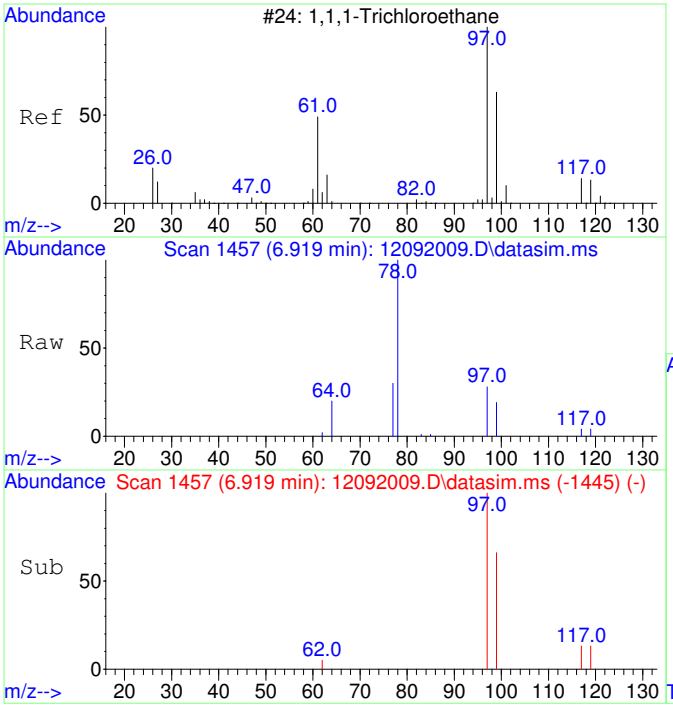


#6
Chloroform
Concen: 4893.21 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 83 Resp: 85362

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

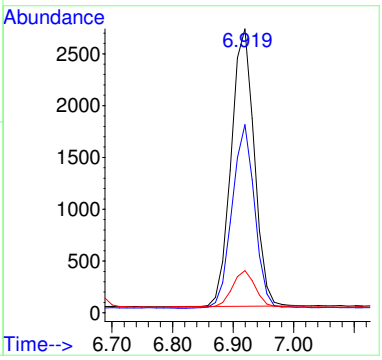


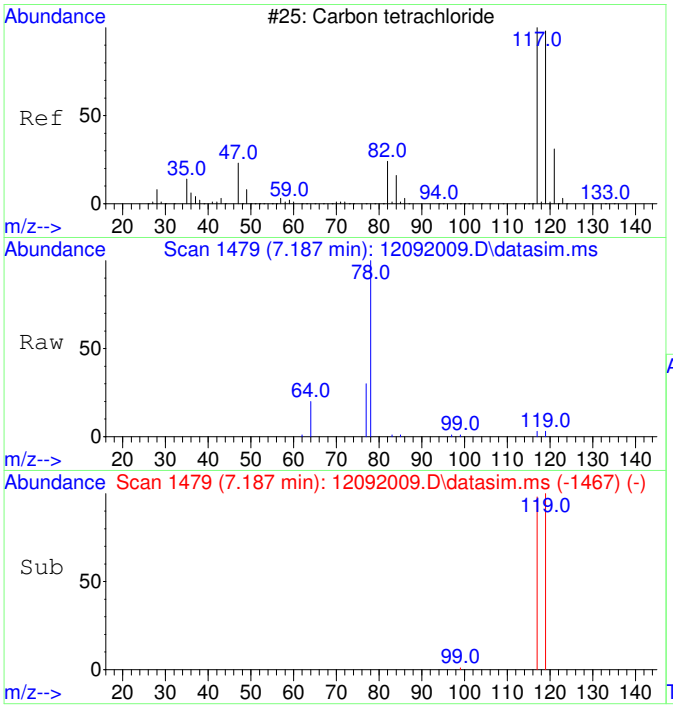


#7
1,1,1-Trichloroethane
Concen: 378.18 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 97 Resp: 7087

Ion	Ratio	Lower	Upper
97	100		
99	64.3	34.6	94.6
117	13.2	0.0	43.2

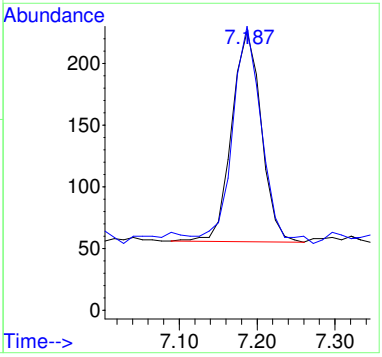


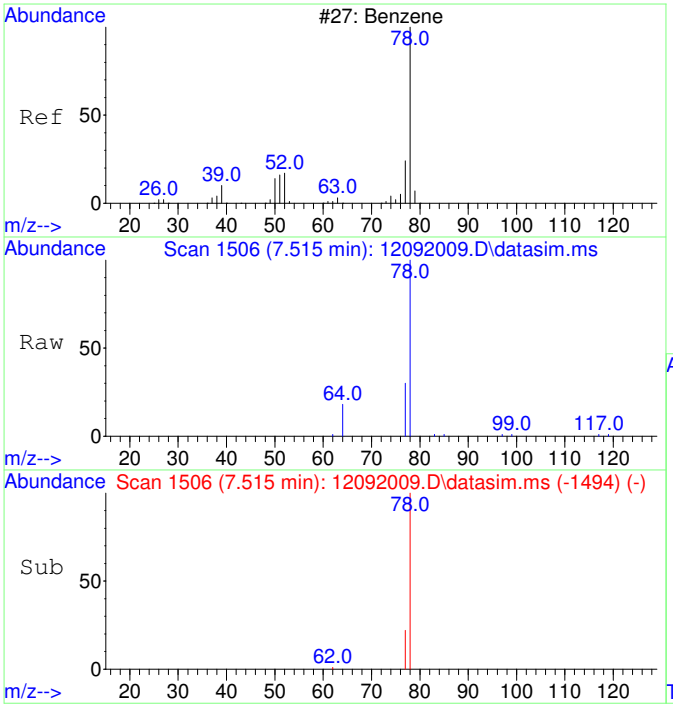


#8
Carbon tetrachloride
Concen: 25.17 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:117 Resp: 451

Ion	Ratio	Lower	Upper
117	100		
119	101.1	66.4	126.4

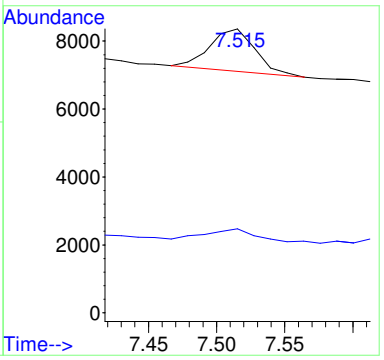


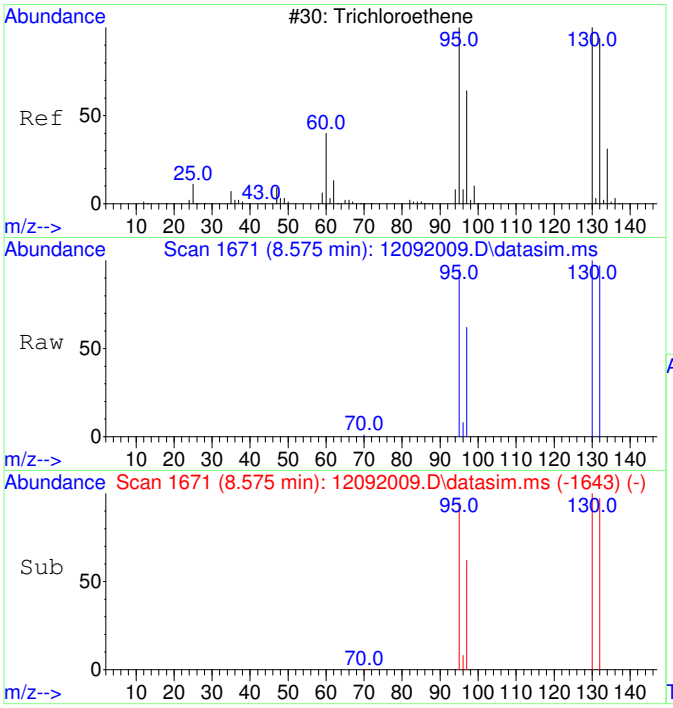


#9
Benzene
Concen: 55.54 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 78 Resp: 2745

Ion	Ratio	Lower	Upper
78	100		
77	44.6	0.0	53.2

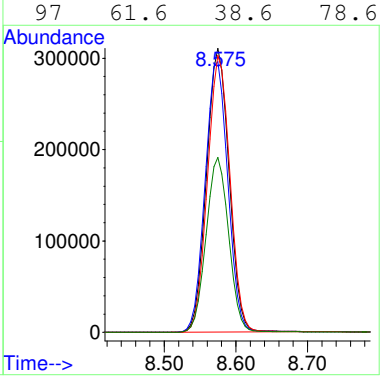


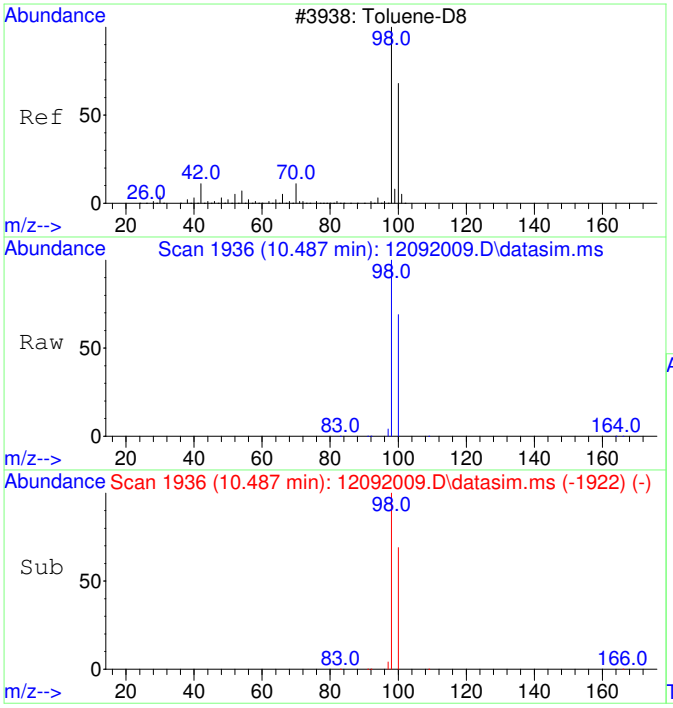


#11
Trichloroethene
Concen: 43421.38 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:130 Resp: 677580

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	97.1	76.0	116.0
97	61.6	38.6	78.6

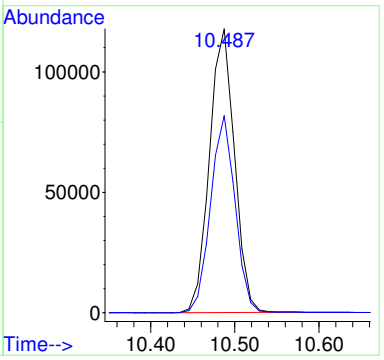


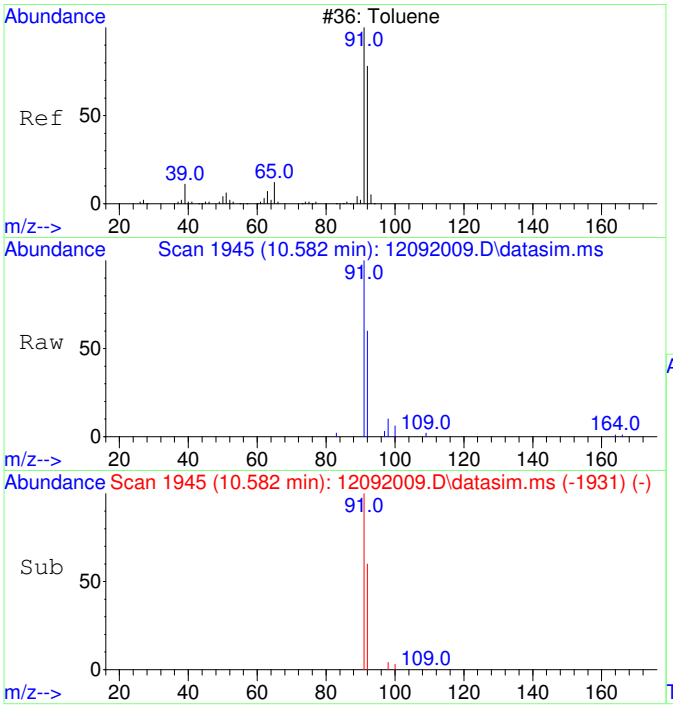


#12
Toluene-d8
Concen: 4288.39 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 98 Resp: 243949

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

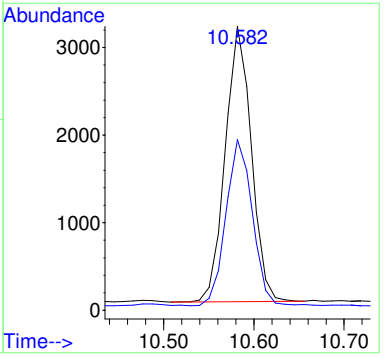


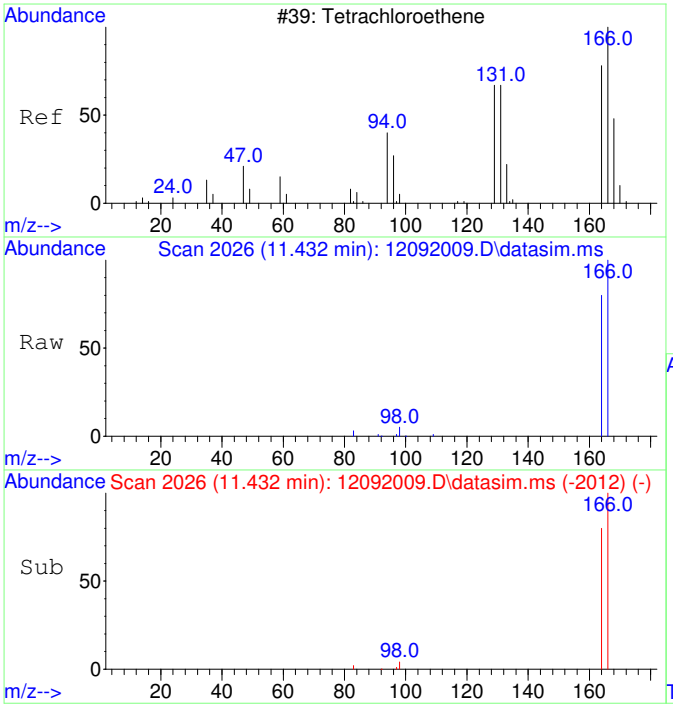


#13
Toluene
Concen: 89.43 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 6334

Ion	Ratio	Lower	Upper
91	100		
92	60.7	29.9	89.9

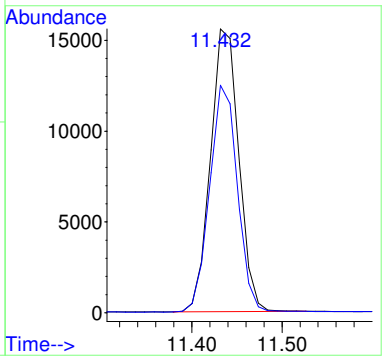


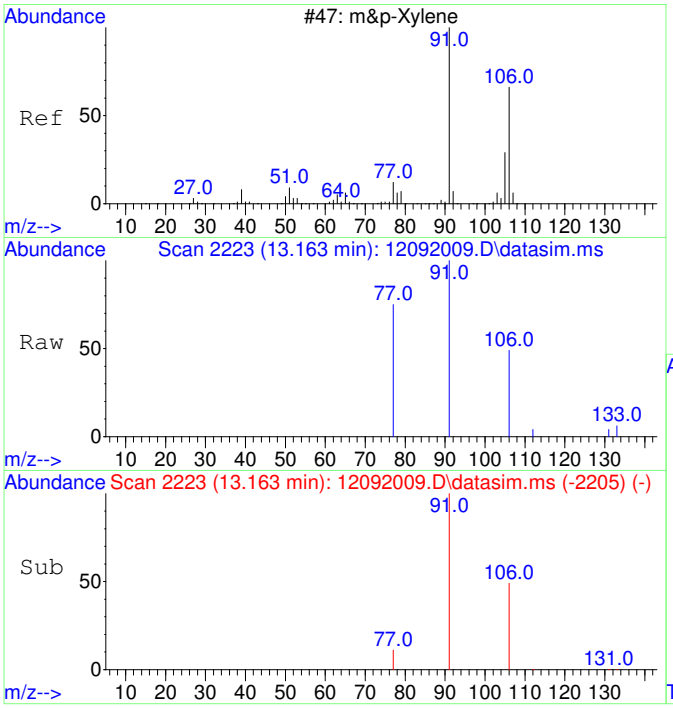


#15
Tetrachloroethene
Concen: 1541.12 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:166 Resp: 33999

Ion	Ratio	Lower	Upper
166	100		
164	78.4	47.8	107.8

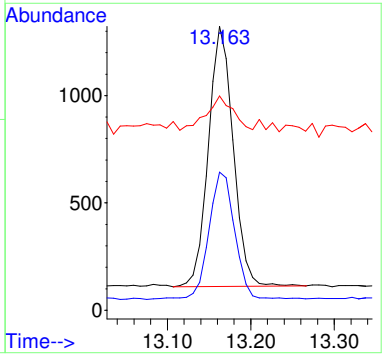


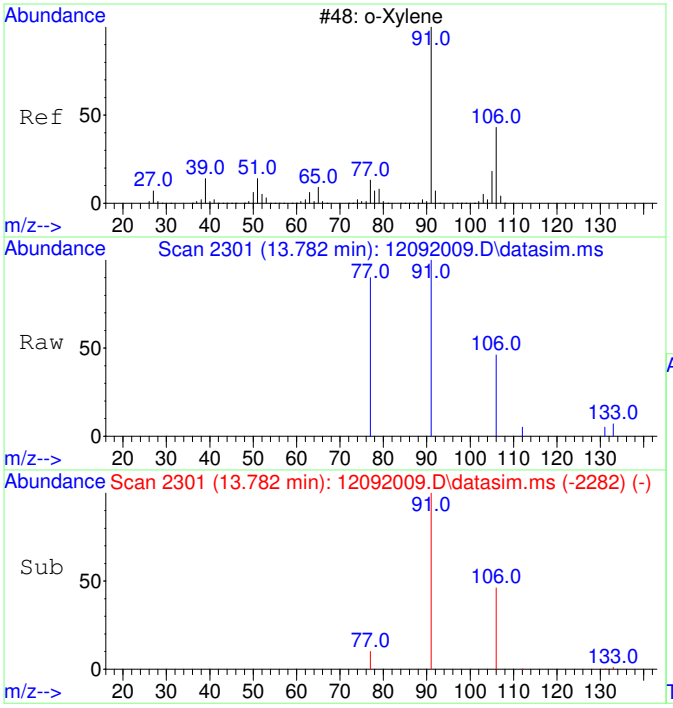


#19
m&p-Xylene
Concen: 35.70 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 2487

Ion	Ratio	Lower	Upper
91	100		
106	51.2	22.2	82.2
77	16.0	0.0	42.4

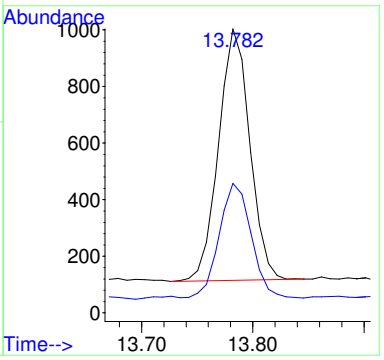


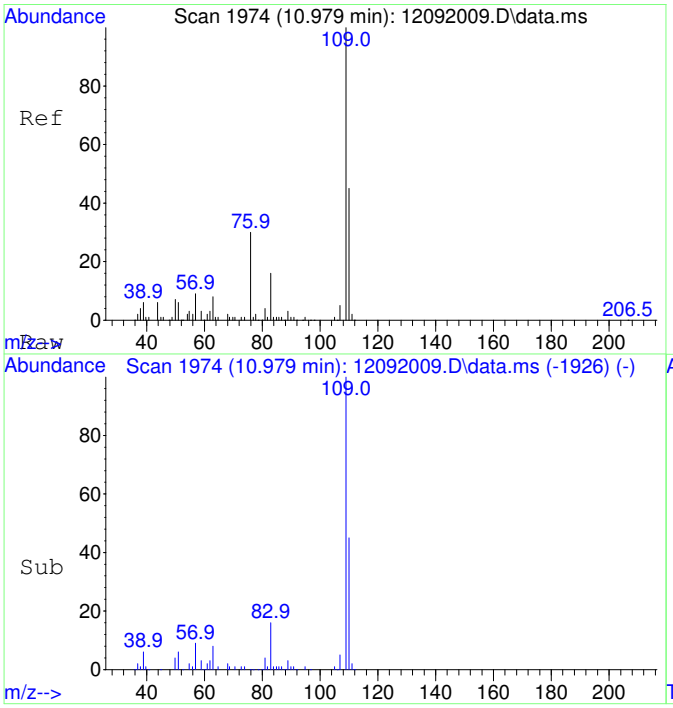


#20
o-Xylene
Concen: 23.19 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 1735

Ion	Ratio	Lower	Upper
91	100		
106	46.1	19.2	79.2

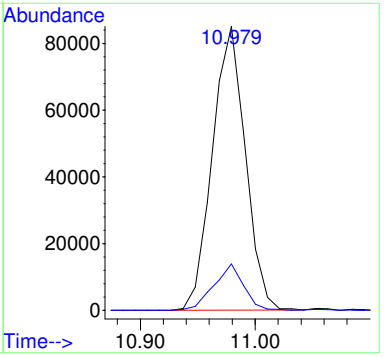


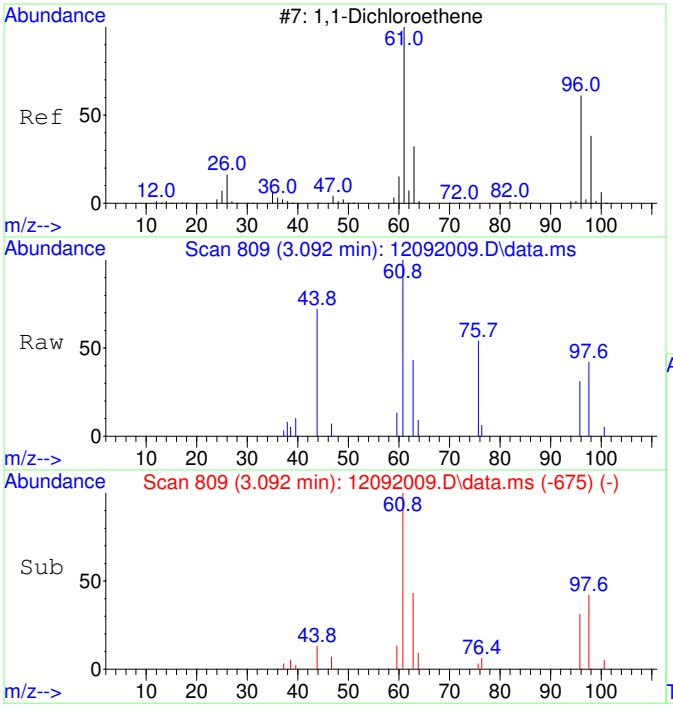


#25
2-Fluorotoluene SCAN
Concen: 5098.41 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:109 Resp: 169981

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

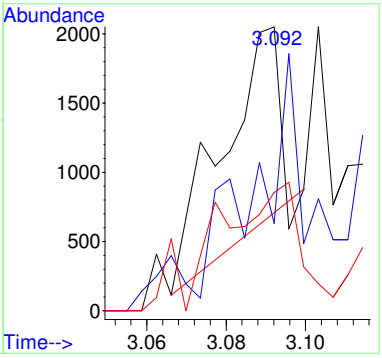


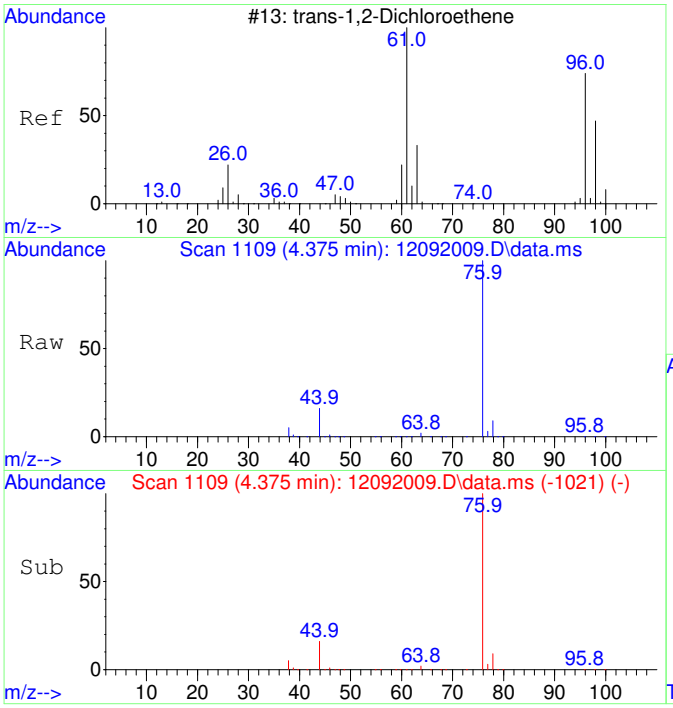


#26
1,1-Dichloroethene SCAN
Concen: 190.15 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.004 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 1480

Ion	Ratio	Lower	Upper
61	100		
96	30.4	33.1	93.1#
98	75.1	11.2	71.2#

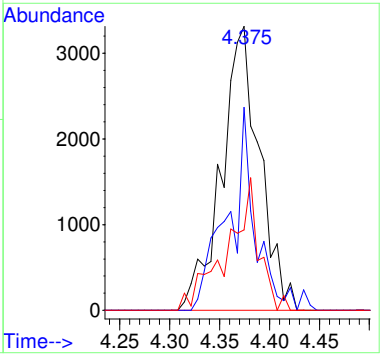


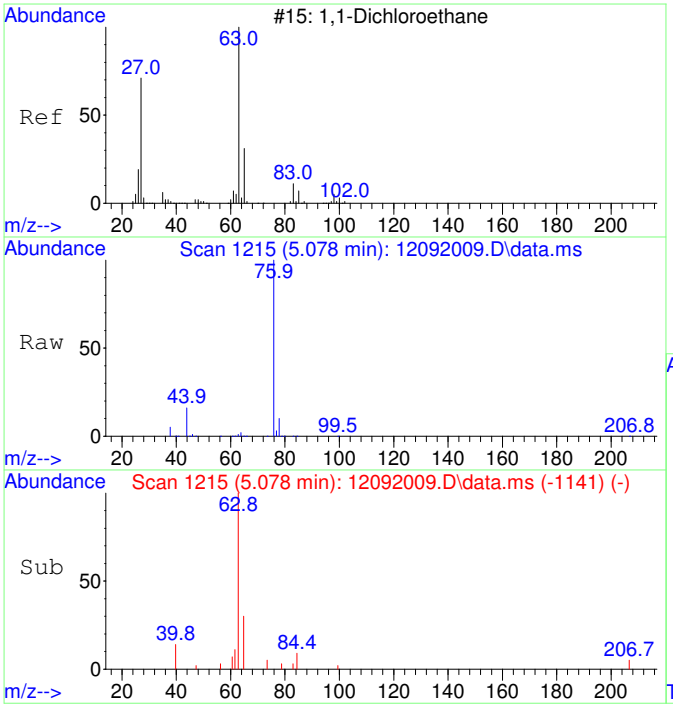


#27
trans-1,2-Dichloroethene SCAN
Concen: 885.85 ug/L
RT: 4.375 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 8782

Ion	Ratio	Lower	Upper
61	100		
96	50.4	49.0	109.0
98	38.8	20.5	80.5

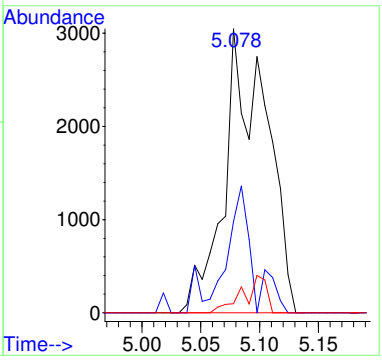


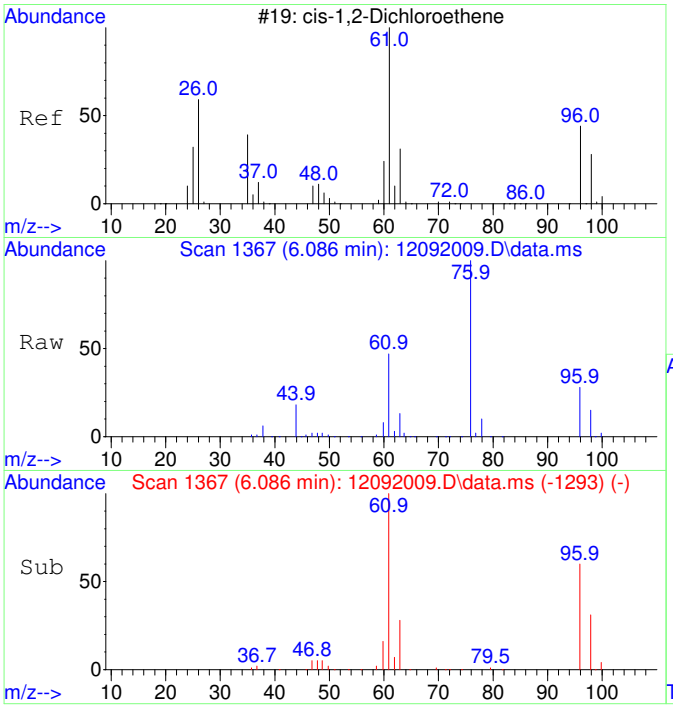


#28
1,1-Dichloroethane SCAN
Concen: 653.16 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 63 Resp: 7643

Ion	Ratio	Lower	Upper
63	100		
65	18.2	1.3	61.3
83	7.2	0.0	45.9

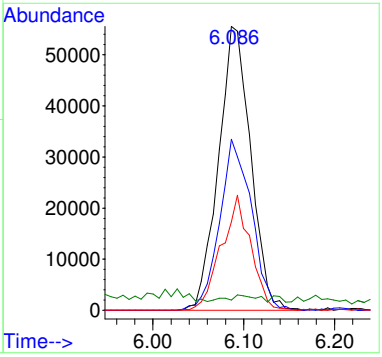


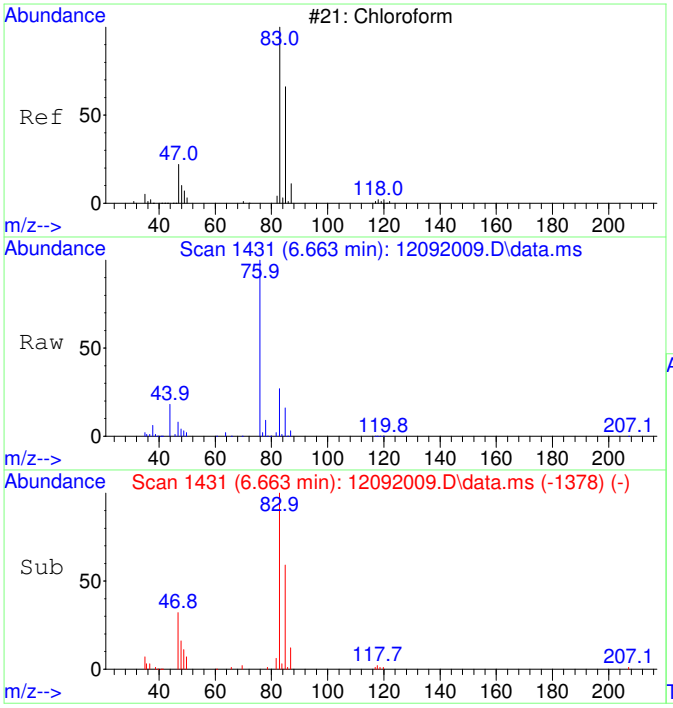


#29
cis-1,2-Dichloroethene SCAN
Concen: 11914.02 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 61 Resp: 137052

Ion	Ratio	Lower	Upper
61	100		
96	59.9	39.9	99.9
98	37.2	13.5	73.5
64	2.1	4.5	64.5#

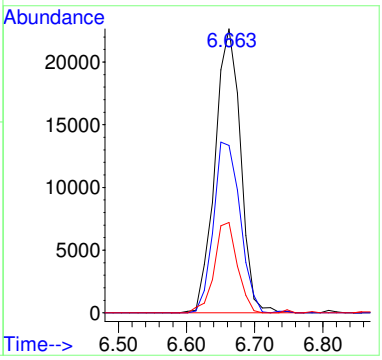


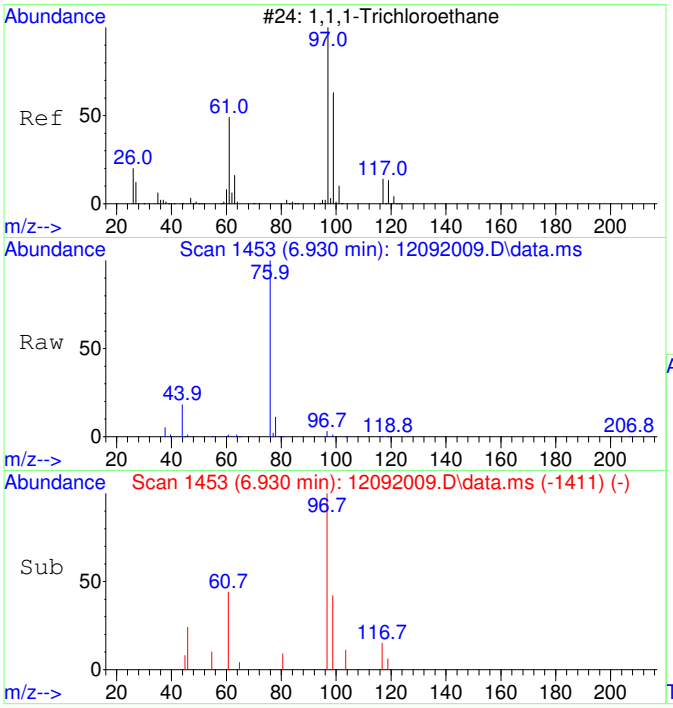


#30
Chloroform SCAN
Concen: 5492.45 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 83 Resp: 58931

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.6	94.6
47	28.8	0.0	53.4

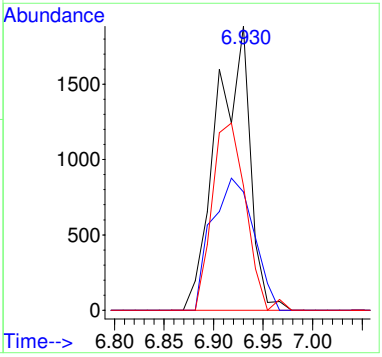


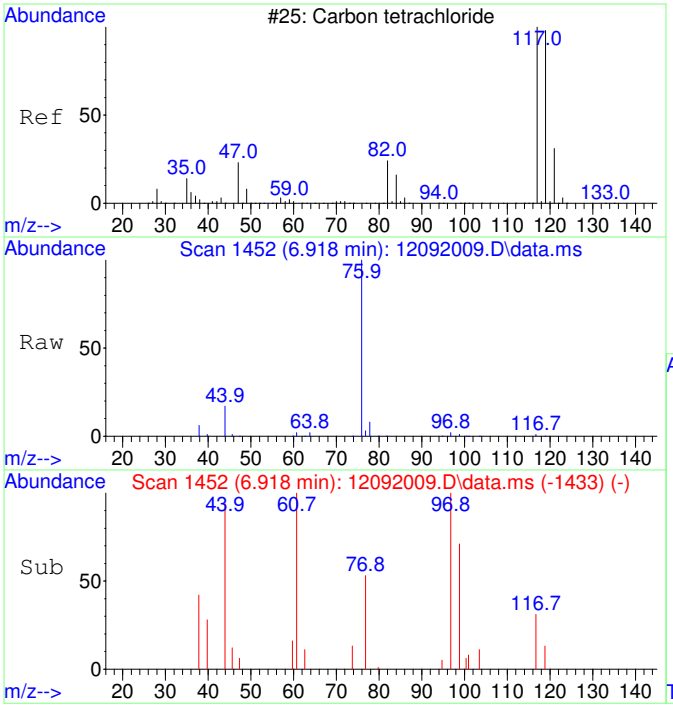


#31
1,1,1-Trichloroethane SCAN
Concen: 403.82 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 97 Resp: 4471

Ion	Ratio	Lower	Upper
97	100		
99	57.8	43.6	103.6
61	65.8	18.0	78.0

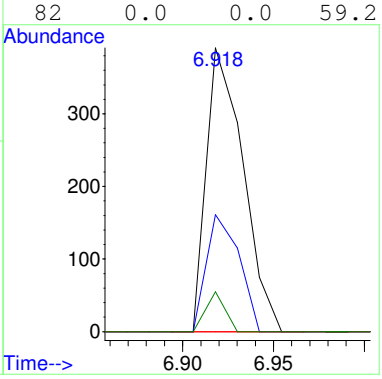


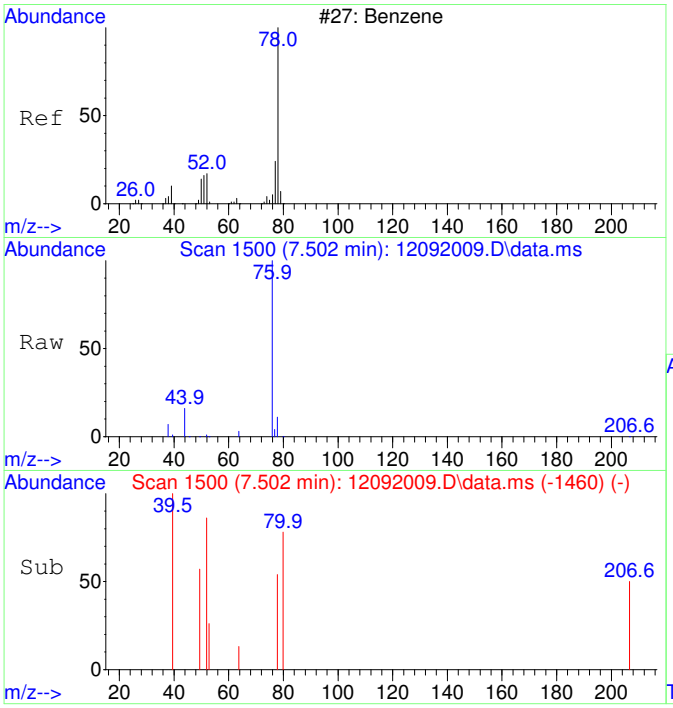


#32
Carbon tetrachloride SCAN
Concen: 58.13 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.268 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:117 Resp: 550

Ion	Ratio	Lower	Upper
117	100		
119	36.5	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

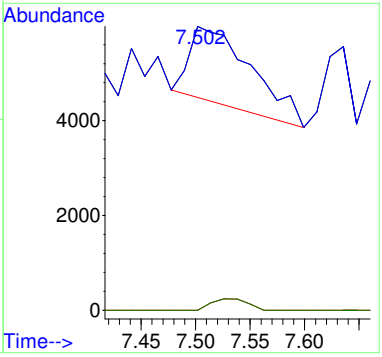


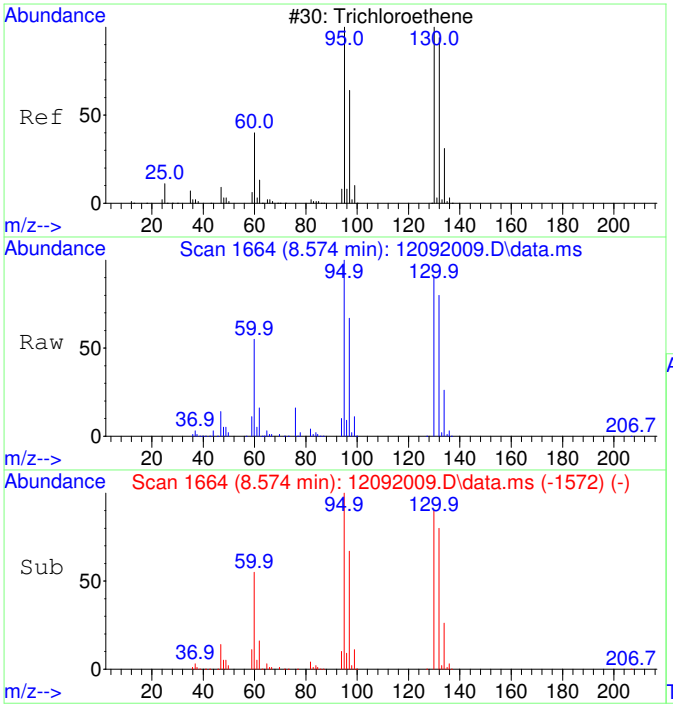


#33
Benzene SCAN
Concen: 180.89 ug/L
RT: 7.502 min Scan# 1500
Delta R.T. -0.012 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 78 Resp: 6059

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

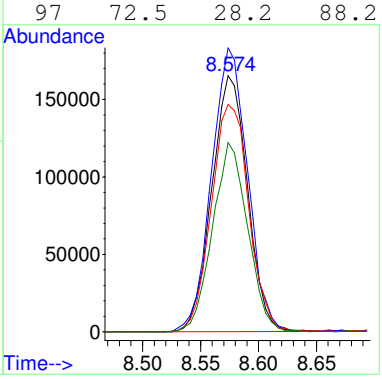


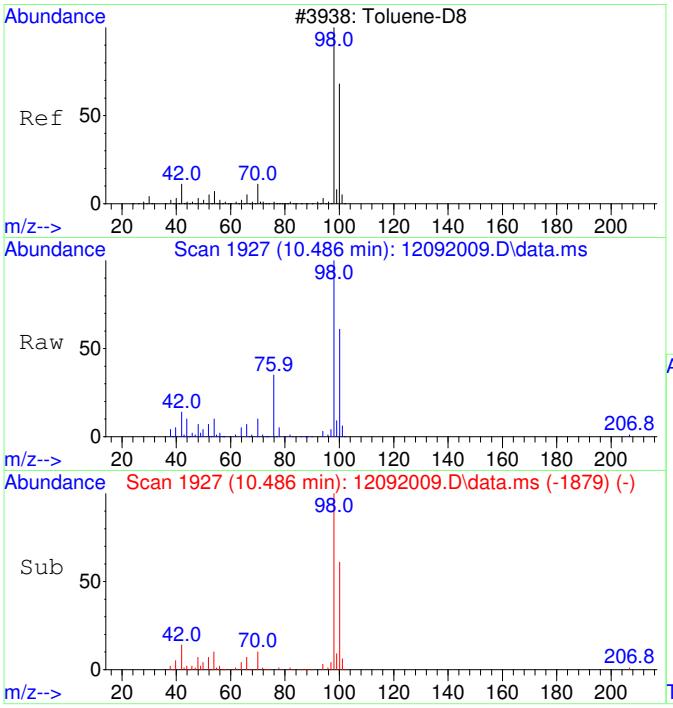


#35
Trichloroethene SCAN
Concen: 48695.56 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:130 Resp: 355663

Ion	Ratio	Lower	Upper
130	100		
95	111.6	60.5	120.5
132	93.2	59.6	119.6
97	72.5	28.2	88.2

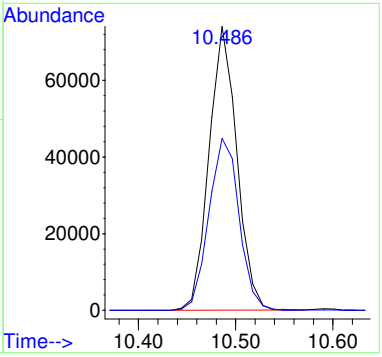


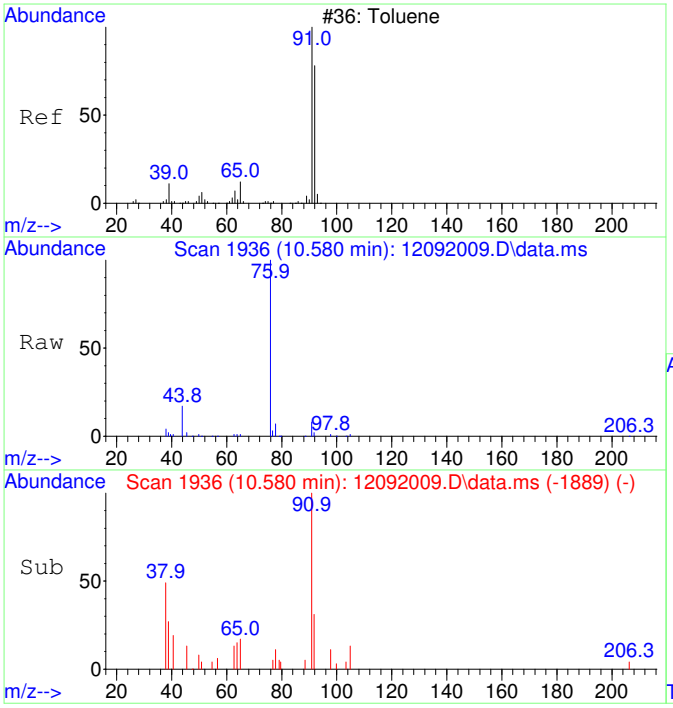


#36
Toluene-d8 SCAN
Concen: 4708.52 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 98 Resp: 147232

Ion	Ratio	Lower	Upper
98	100		
100	65.6	40.0	100.0

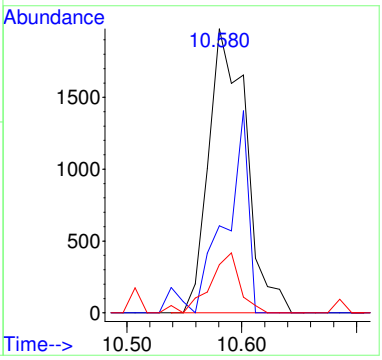


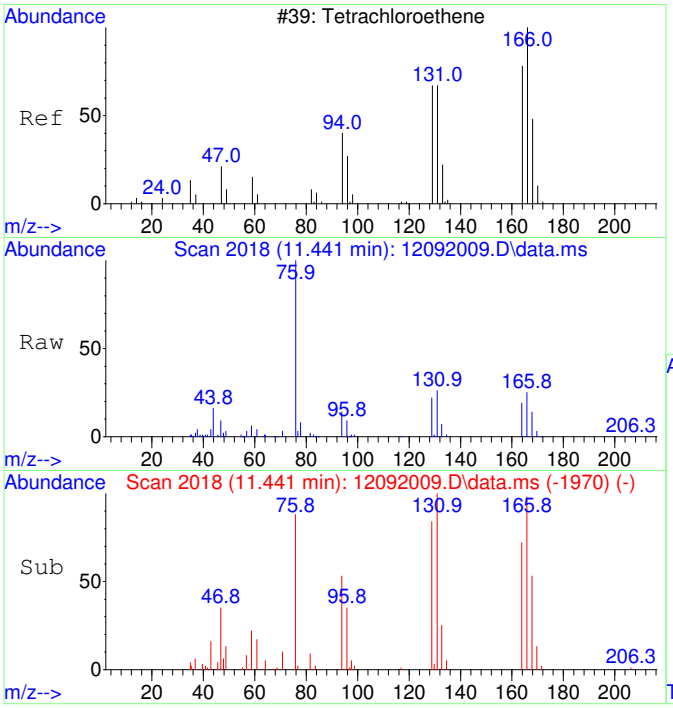


#37
Toluene SCAN
Concen: 117.12 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion: 91 Resp: 4509

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

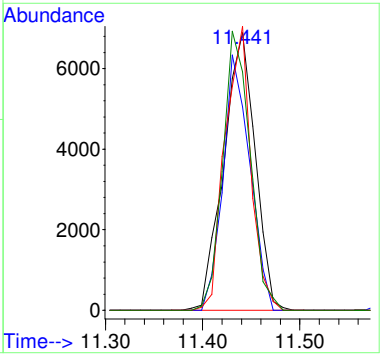




#39
Tetrachloroethene SCAN
Concen: 1784.08 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092009.D
Acq: 9 Dec 2020 12:02

Tgt Ion:166 Resp: 15452

Ion	Ratio	Lower	Upper
166	100		
164	78.7	50.9	110.9
131	84.5	38.7	98.7
129	87.6	41.8	101.8



2012007-02

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092010.D
Acq On : 9 Dec 2020 12:26
InstName : AG5975C
Operator : TD
Sample : 2012007-02
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 09 12:45:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

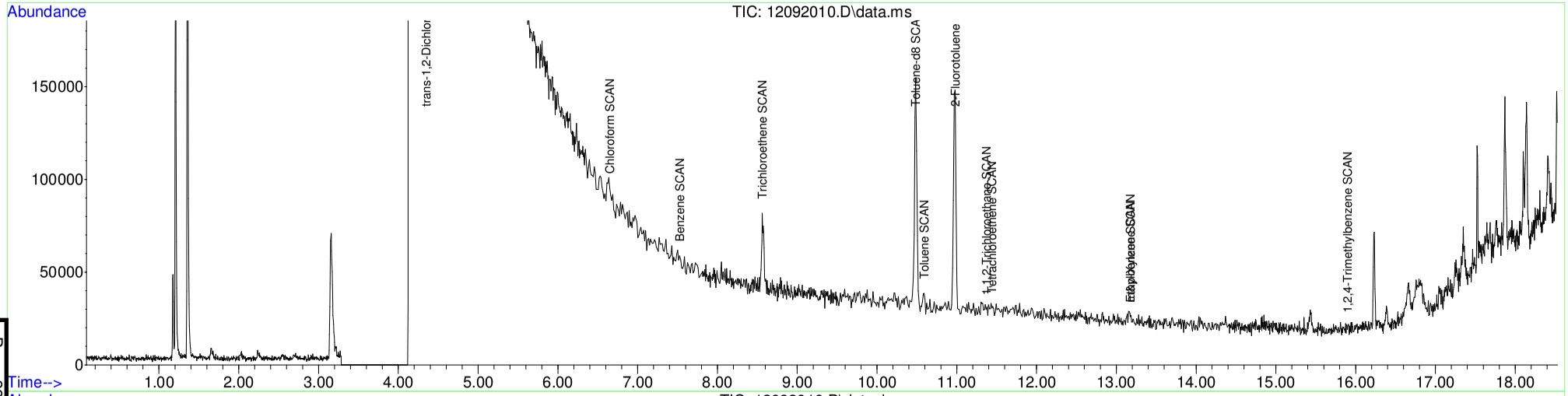
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	172019	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	147895	4439.18	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.78%			
Target Compounds						Qvalue
3] trans-1,2-Dichloroethene	4.343	61	202	23.49	ug/L	69
6] Chloroform	6.640	83	7987	781.75	ug/L	100
8] Carbon tetrachloride	7.175	117	337	32.12	ug/L	95
9] Benzene	7.503	78	4312	148.97	ug/L	58
11] Trichloroethene	8.569	130	23650	2587.79	ug/L	97
13] Toluene	10.582	91	7734	186.45	ug/L	100
15] Tetrachloroethene	11.432	166	328	25.39	ug/L	98
18] Ethylbenzene	12.972	91	2245	42.37	ug/L	97
19] m&p-Xylene	13.163	91	5278	129.36	ug/L	95
20] o-Xylene	13.782	91	1899	43.33	ug/L	94
23] 1,2,4-Trimethylbenzene	15.906	105	2208	44.80	ug/L	90
25) 2-Fluorotoluene SCAN	10.979	109	97791	5008.27	ug/L	97
27) trans-1,2-Dichloroethe...	4.348	61	224	38.58	ug/L #	17
30) Chloroform SCAN	6.650	83	4863	773.89	ug/L	90
33) Benzene SCAN	7.526	78	6861	349.74	ug/L #	91
35) Trichloroethene SCAN	8.563	130	12446	2909.61	ug/L	79
36) Toluene-d8 SCAN	10.486	98	89483	4886.26	ug/L	100
37) Toluene SCAN	10.591	91	4318	191.50	ug/L #	64
38) 1,1,2-Trichloroethane ...	11.368	97	130	23.00	ug/L #	1
39) Tetrachloroethene SCAN	11.441	166	171	33.71	ug/L #	16
42) Ethylbenzene SCAN	13.177	91	3744	87.13	ug/L	99
43) m&p-Xylene SCAN	13.177	91	3744	87.13	ug/L	92
47) 1,2,4-Trimethylbenzene...	15.900	105	1486	58.76	ug/L #	44

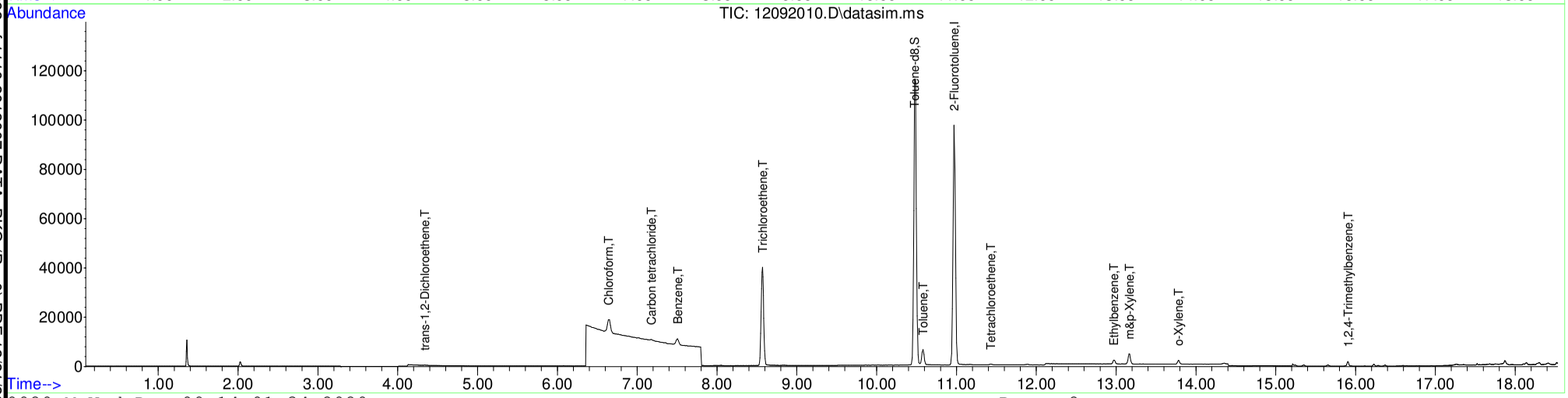
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092010.D
Acq On : 9 Dec 2020 12:26
InstName : AG5975C
Operator : TD
Sample : 2012007-02
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 09 12:45:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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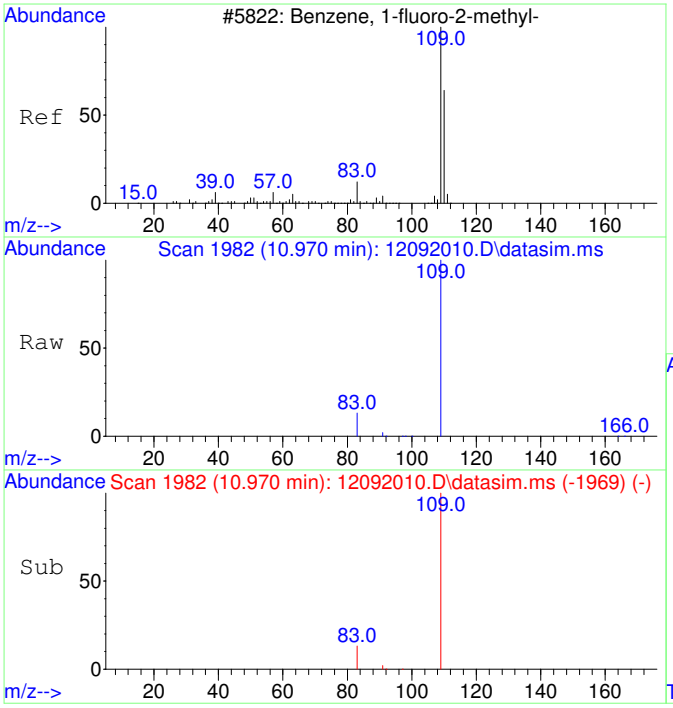
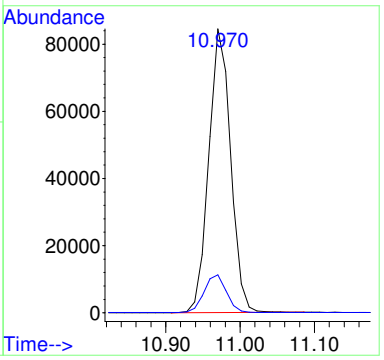
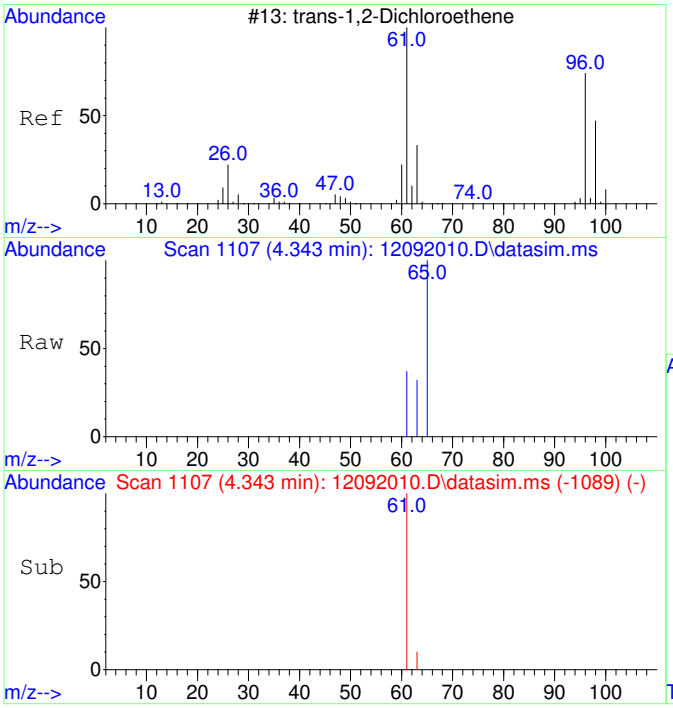


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:109 Resp: 172019

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

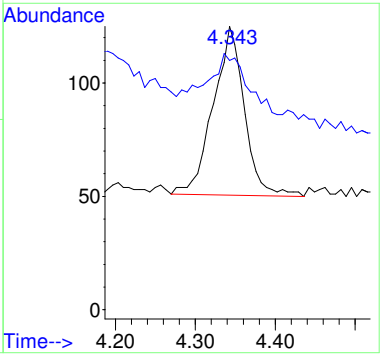


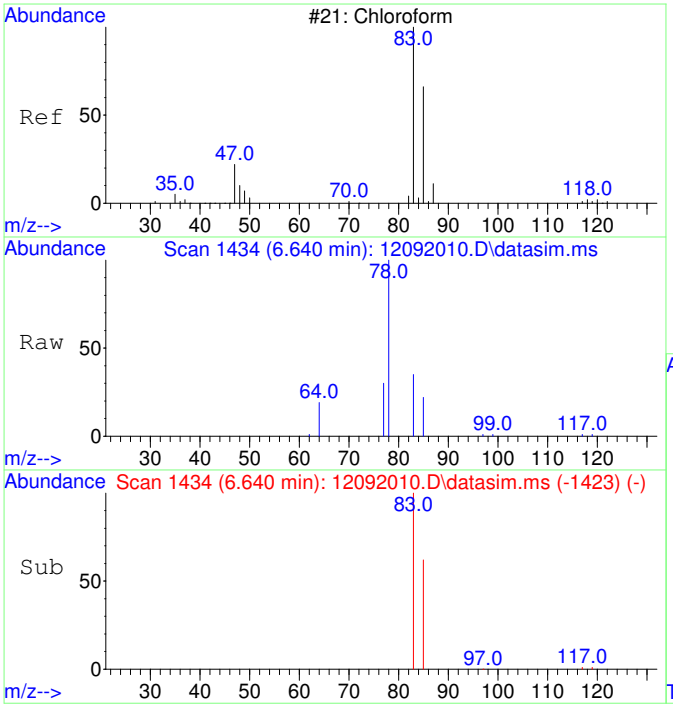


#3
trans-1,2-Dichloroethene
Concen: 23.49 ug/L
RT: 4.343 min Scan# 1107
Delta R.T. -0.033 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 61 Resp: 202

Ion	Ratio	Lower	Upper
61	100		
63	49.5	2.4	62.4

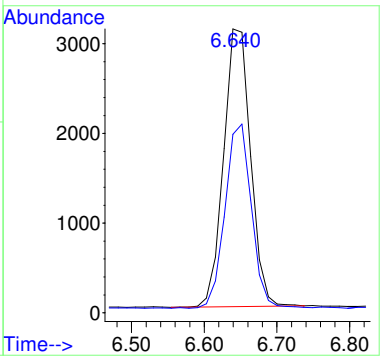


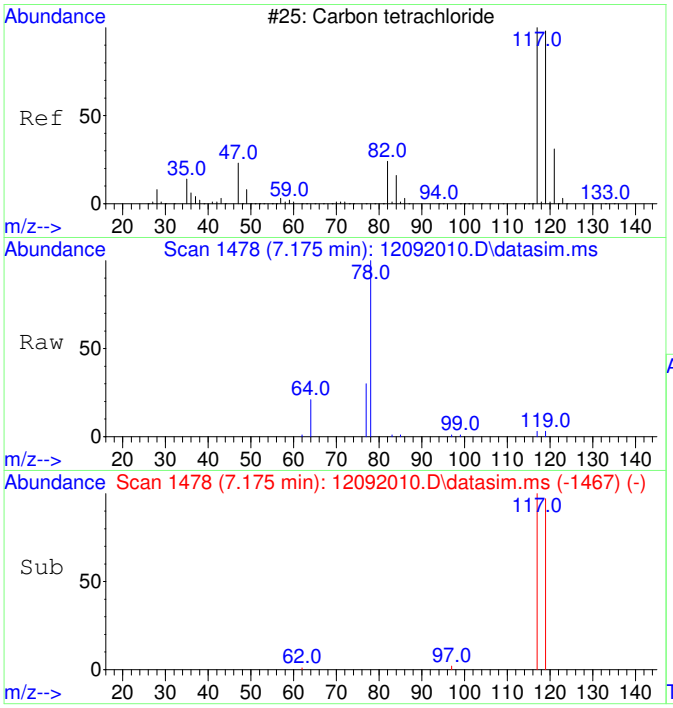


#6
Chloroform
Concen: 781.75 ug/L
RT: 6.640 min Scan# 1434
Delta R.T. -0.012 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 83 Resp: 7987

Ion	Ratio	Lower	Upper
83	100		
85	64.8	35.1	95.1

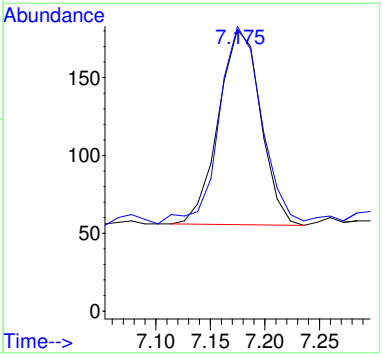


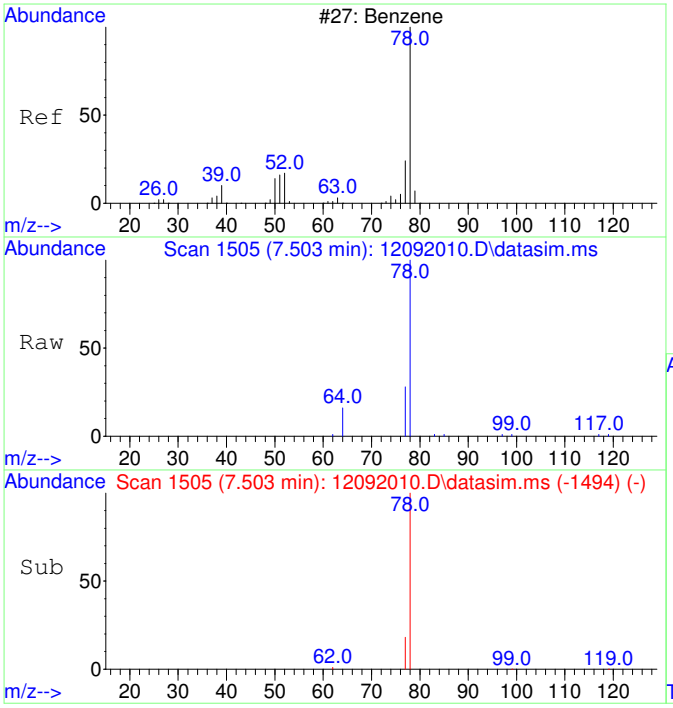


#8
Carbon tetrachloride
Concen: 32.12 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:117 Resp: 337

Ion	Ratio	Lower	Upper
117	100		
119	101.8	66.4	126.4

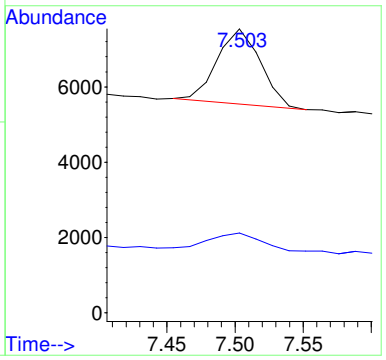


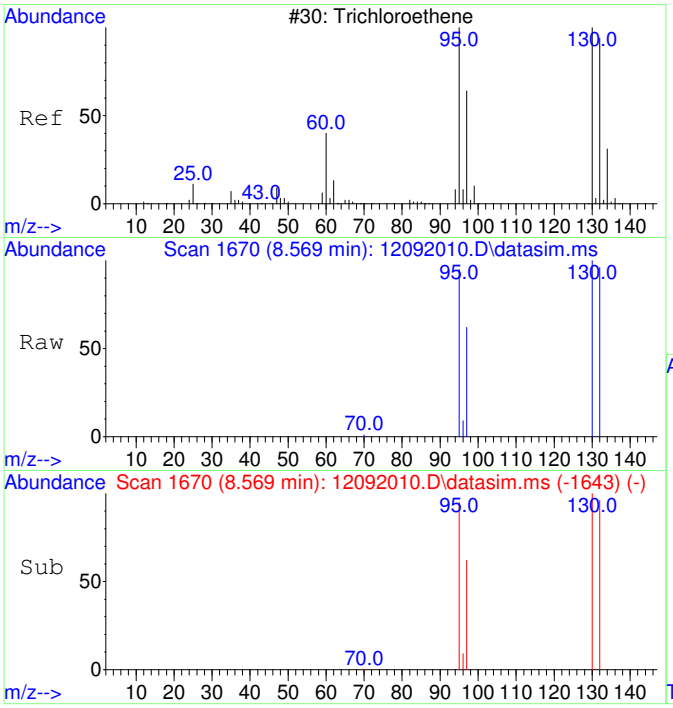


#9
Benzene
Concen: 148.97 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 78 Resp: 4312

Ion	Ratio	Lower	Upper
78	100		
77	43.9	0.0	53.2

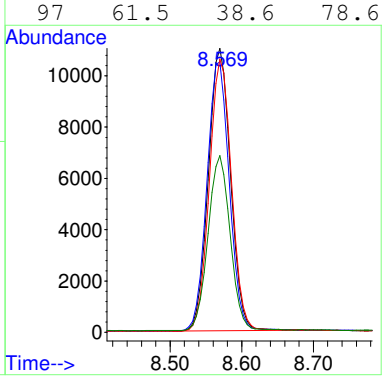


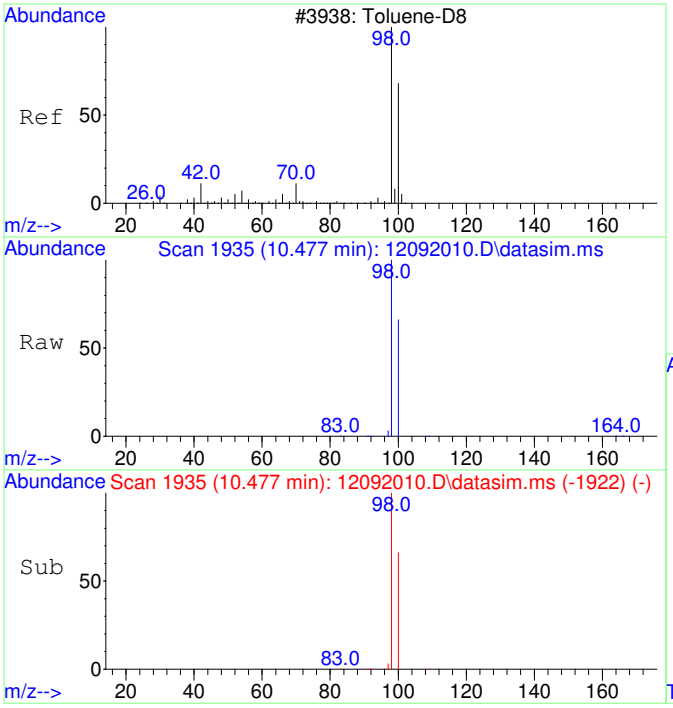


#11
Trichloroethene
Concen: 2587.79 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:130 Resp: 23650

Ion	Ratio	Lower	Upper
130	100		
95	96.0	60.7	120.7
132	95.7	76.0	116.0
97	61.5	38.6	78.6

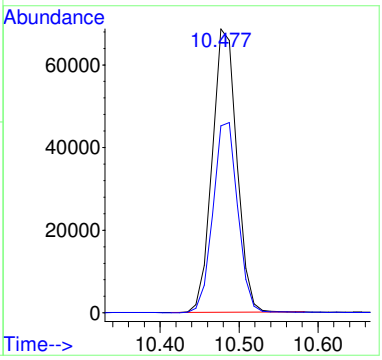


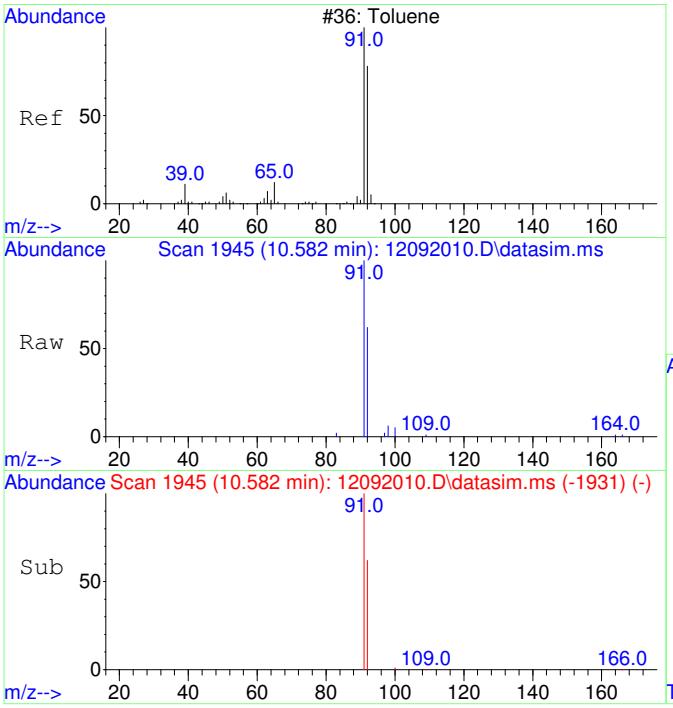


#12
Toluene-d8
Concen: 4439.18 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 98 Resp: 147895

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

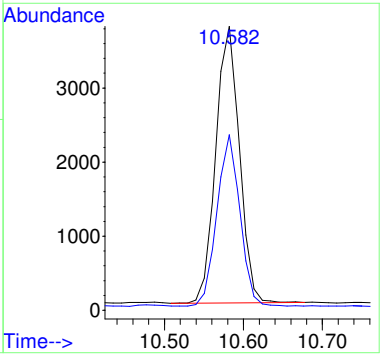


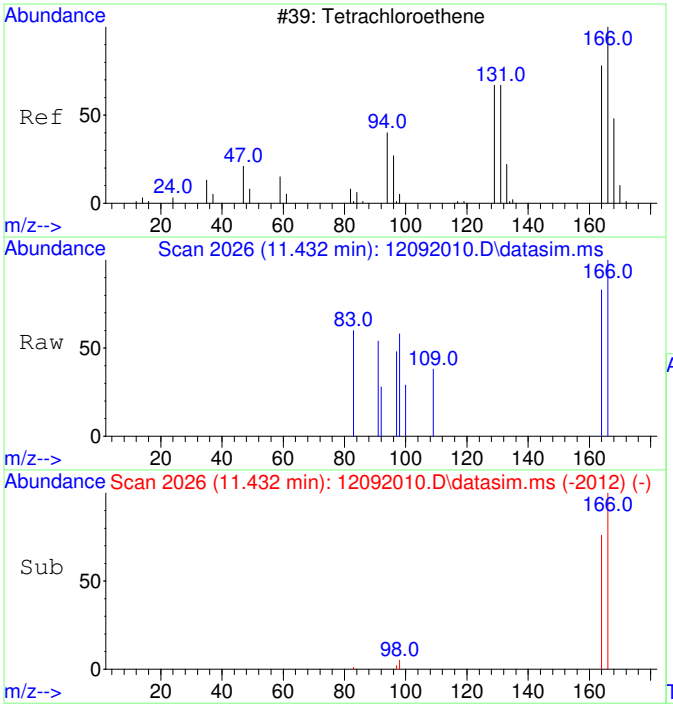


#13
Toluene
Concen: 186.45 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 7734

Ion	Ratio	Lower	Upper
91	100		
92	60.0	29.9	89.9

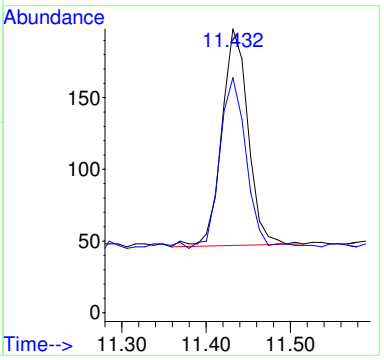


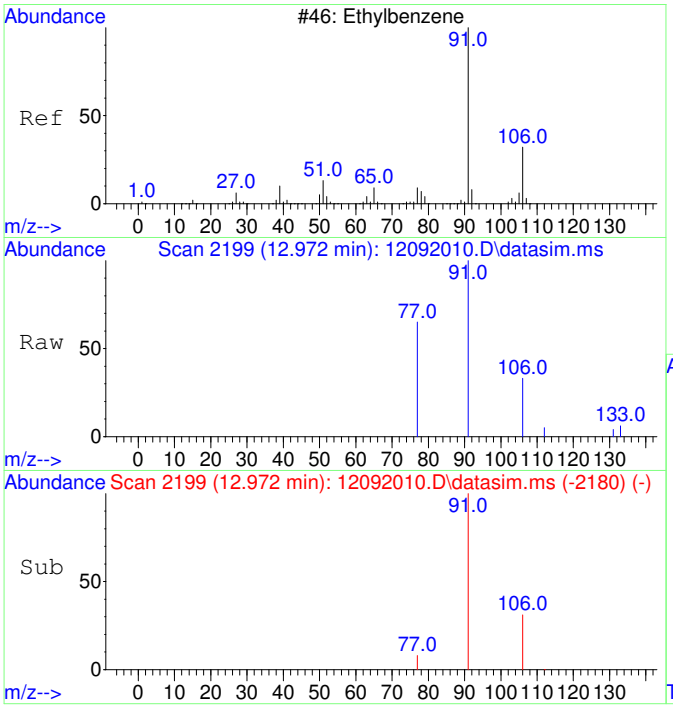


#15
Tetrachloroethene
Concen: 25.39 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:166 Resp: 328

Ion	Ratio	Lower	Upper
166	100		
164	79.9	47.8	107.8

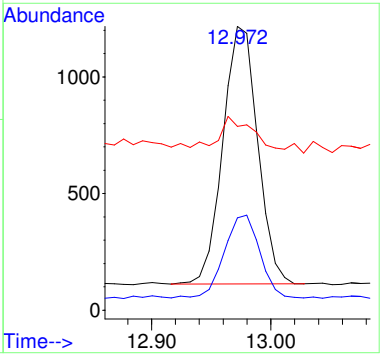


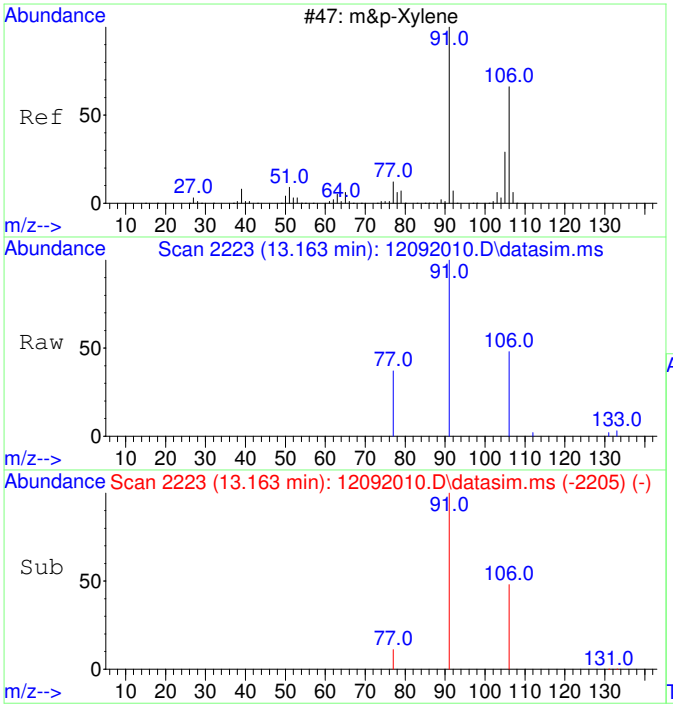


#18
Ethylbenzene
Concen: 42.37 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 2245

Ion	Ratio	Lower	Upper
91	100		
106	32.6	3.0	63.0
77	11.8	0.0	38.2

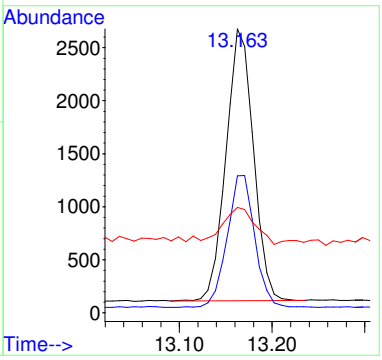


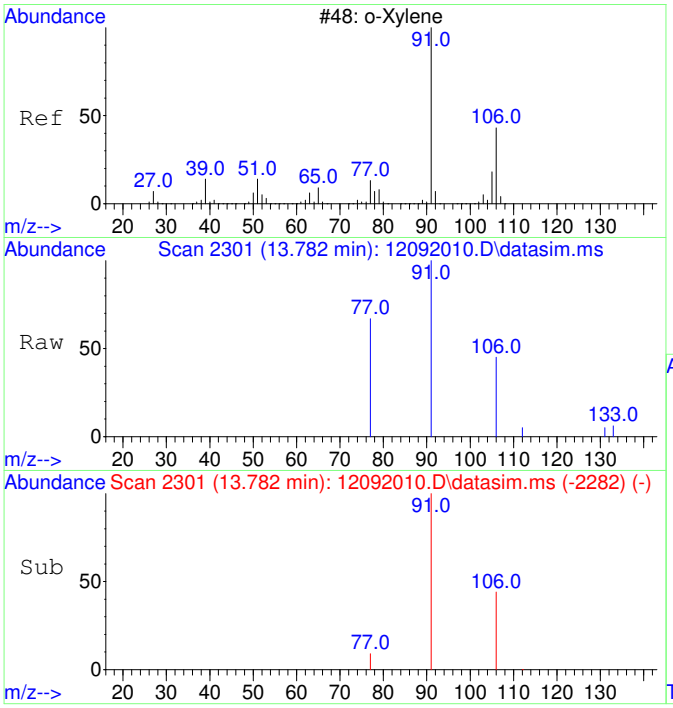


#19
m&p-Xylene
Concen: 129.36 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 5278

Ion	Ratio	Lower	Upper
91	100		
106	48.7	22.2	82.2
77	13.8	0.0	42.4

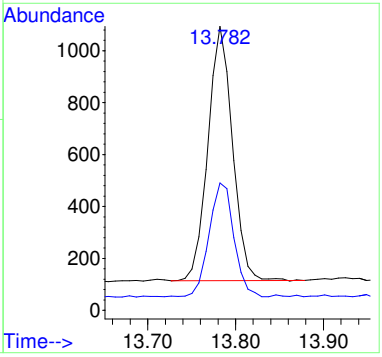


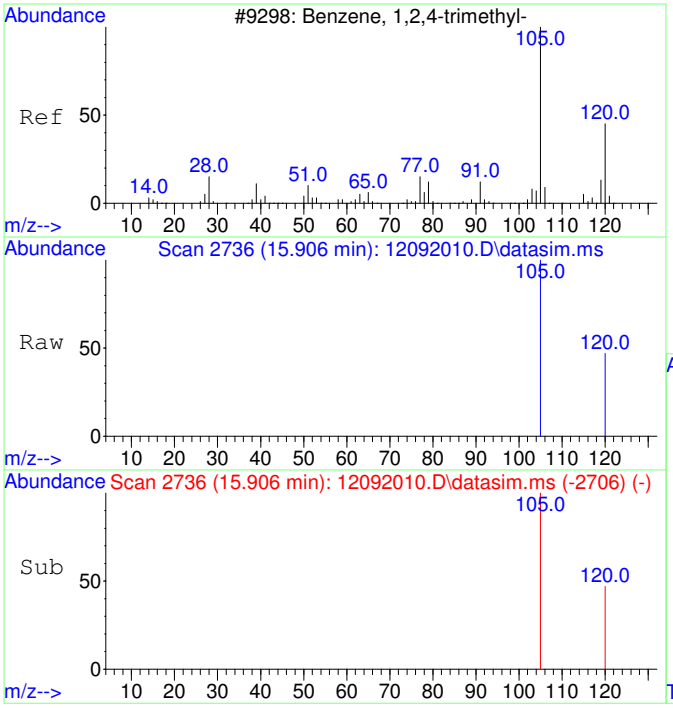


#20
o-Xylene
Concen: 43.33 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 1899

Ion	Ratio	Lower	Upper
91	100		
106	45.2	19.2	79.2

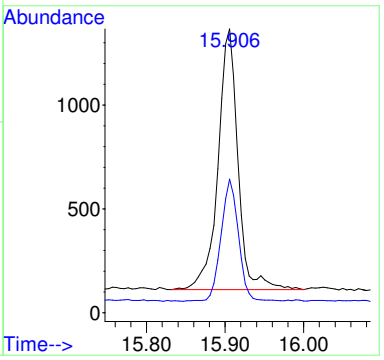


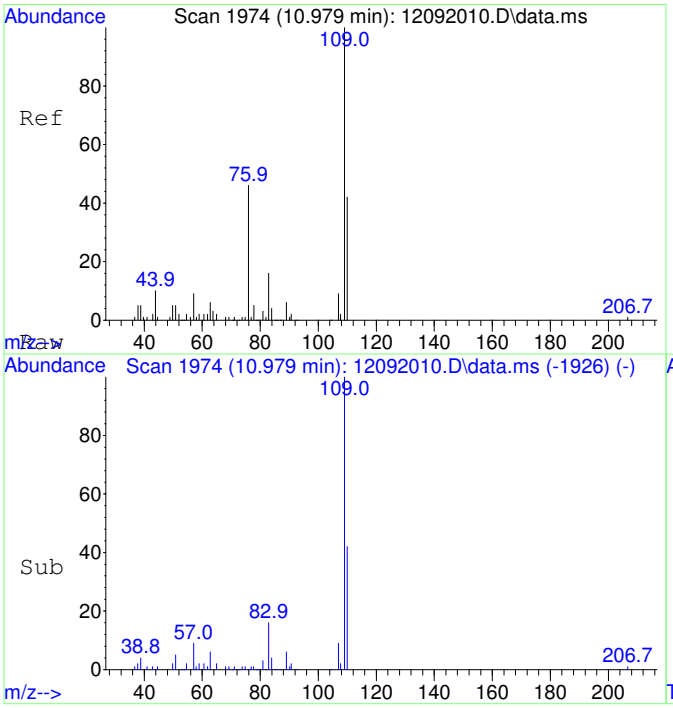


#23
1,2,4-Trimethylbenzene
Concen: 44.80 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:105 Resp: 2208

Ion	Ratio	Lower	Upper
105	100		
120	40.5	17.2	77.2

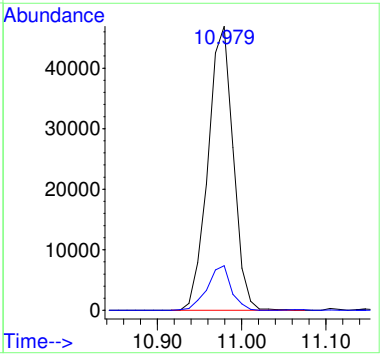


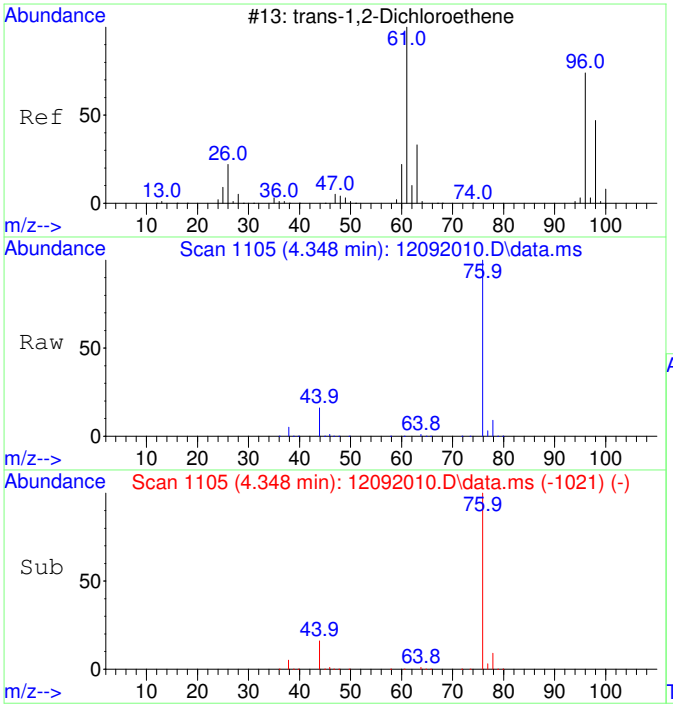


#25
2-Fluorotoluene SCAN
Concen: 5008.27 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:109 Resp: 97791

Ion	Ratio	Lower	Upper
109	100		
83	15.0	0.0	43.8

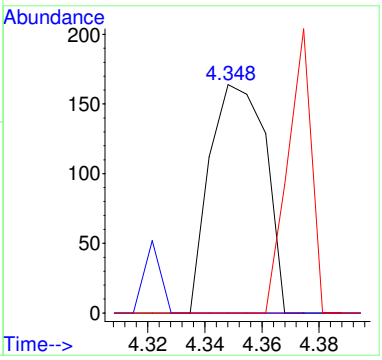


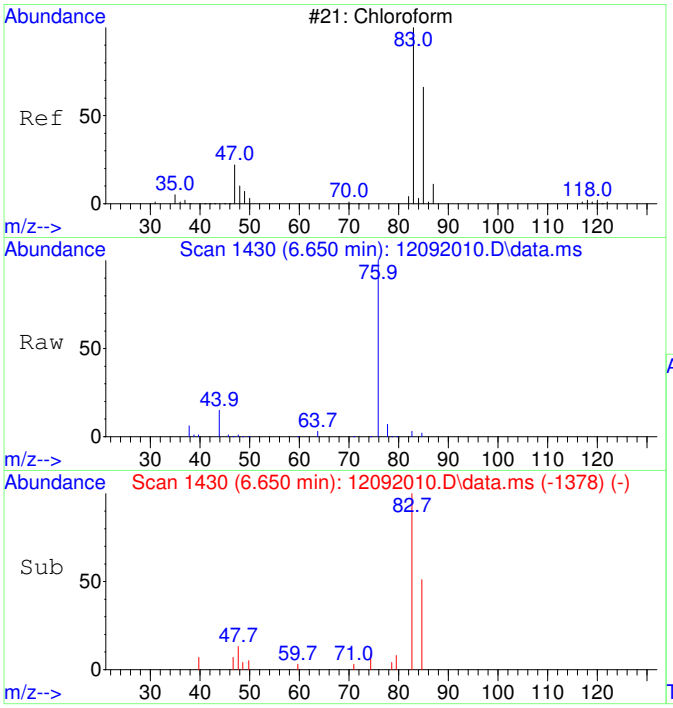


#27
trans-1,2-Dichloroethene SCAN
Concen: 38.58 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 61 Resp: 224

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

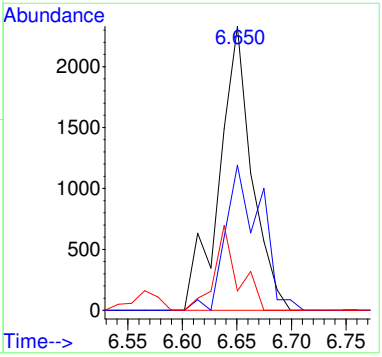


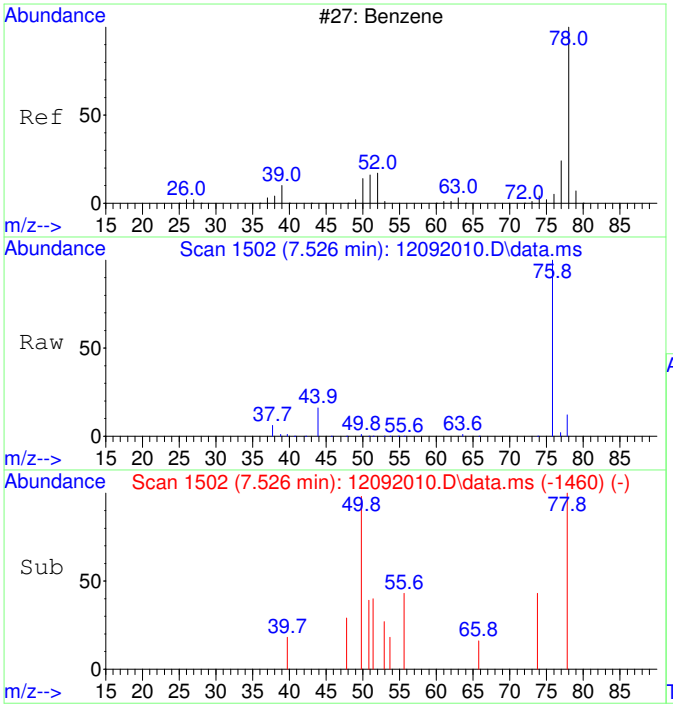


#30
Chloroform SCAN
Concen: 773.89 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 83 Resp: 4863

Ion	Ratio	Lower	Upper
83	100		
85	55.4	34.6	94.6
47	21.5	0.0	53.4

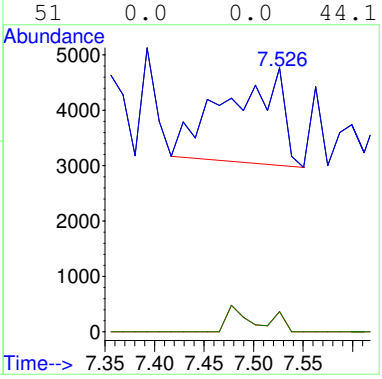


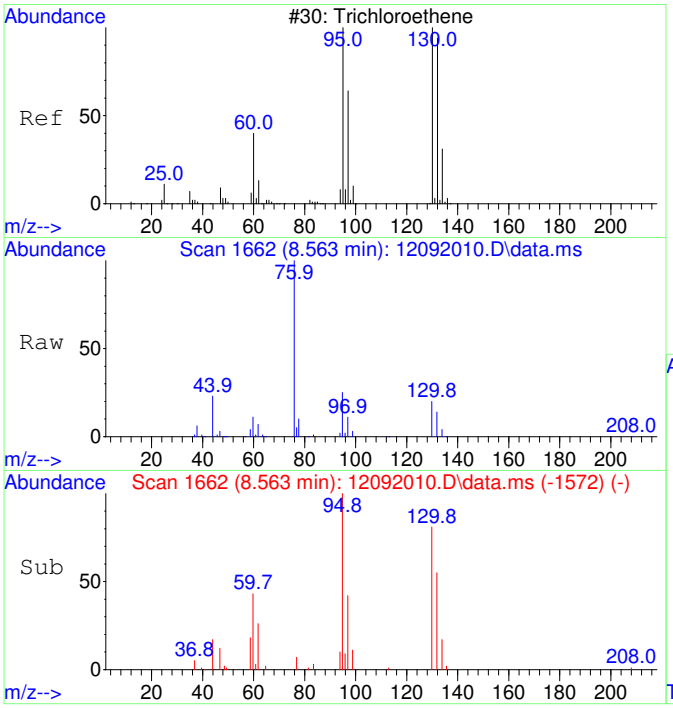


#33
Benzene SCAN
Concen: 349.74 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 78 Resp: 6861

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

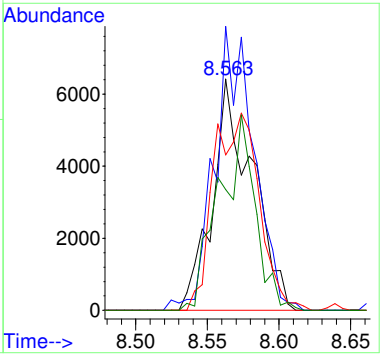


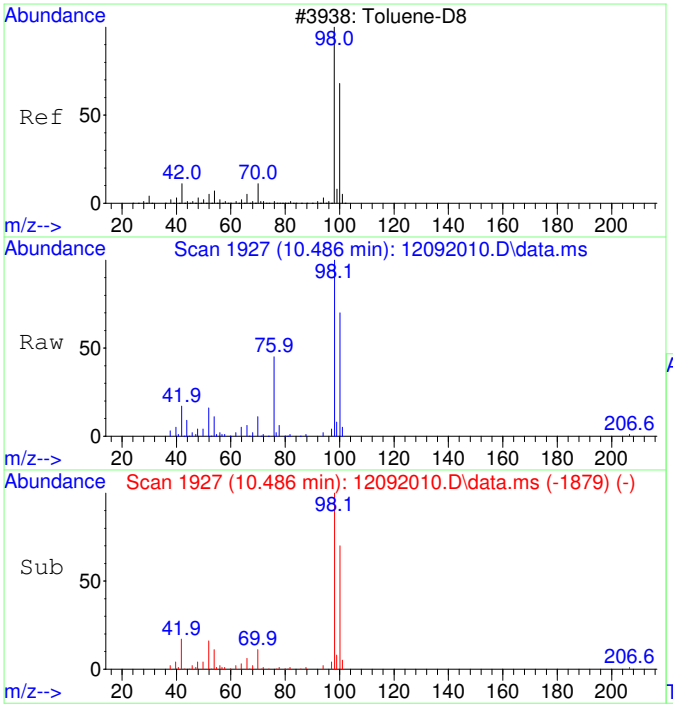


#35
Trichloroethene SCAN
Concen: 2909.61 ug/L
RT: 8.563 min Scan# 1662
Delta R.T. -0.011 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:130 Resp: 12446

Ion	Ratio	Lower	Upper
130	100		
95	120.2	60.5	120.5
132	97.0	59.6	119.6
97	76.0	28.2	88.2

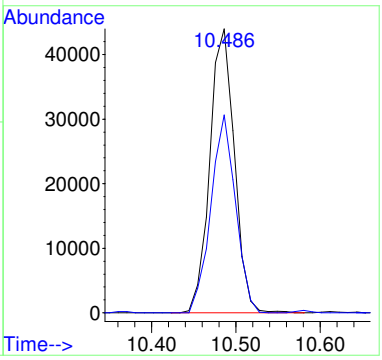


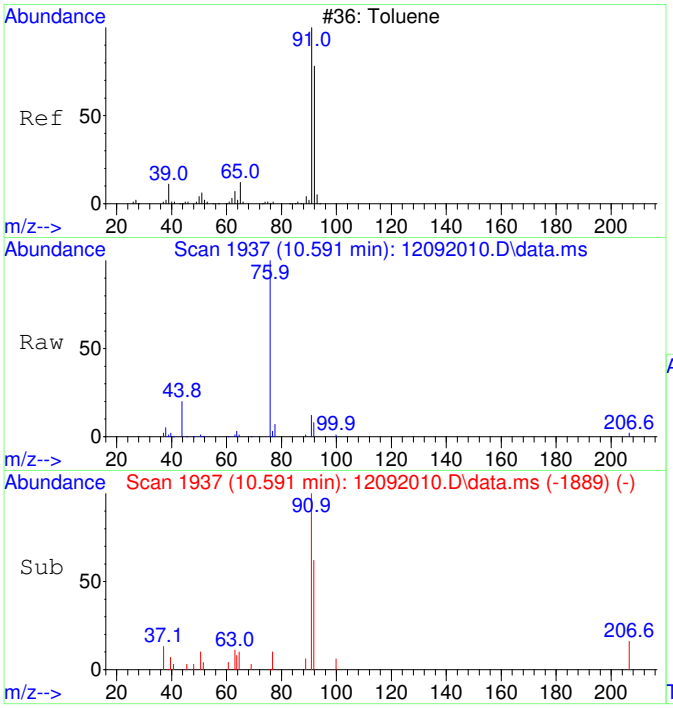


#36
Toluene-d8 SCAN
Concen: 4886.26 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 98 Resp: 89483

Ion	Ratio	Lower	Upper
98	100		
100	69.8	40.0	100.0

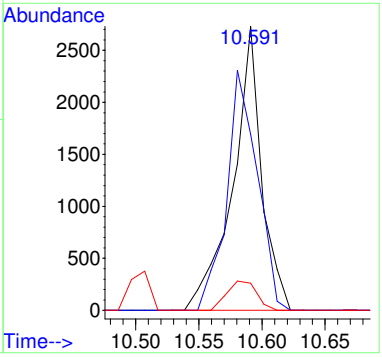


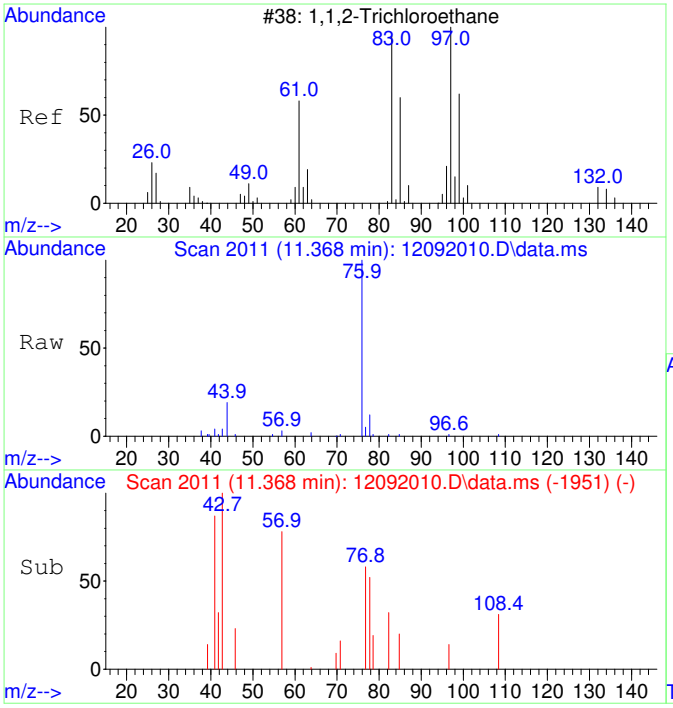


#37
Toluene SCAN
Concen: 191.50 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 4318

Ion	Ratio	Lower	Upper
91	100		
92	89.8	28.3	88.3#
65	10.8	0.0	41.0

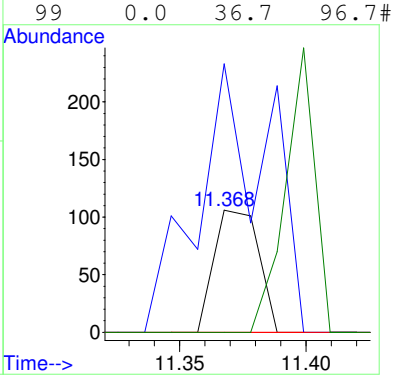


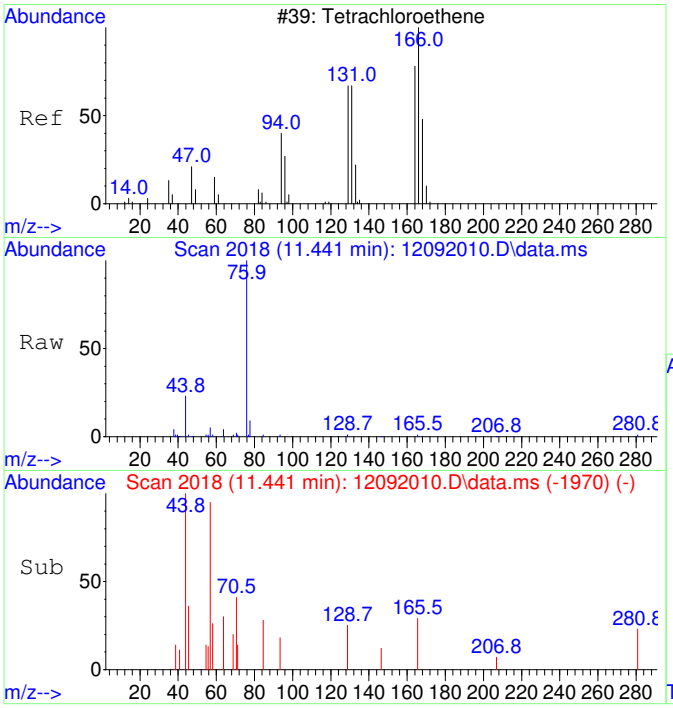


#38
1,1,2-Trichloroethane SCAN
Concen: 23.00 ug/L
RT: 11.368 min Scan# 2011
Delta R.T. 0.126 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 97 Resp: 130

Ion	Ratio	Lower	Upper
97	100		
83	346.2	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

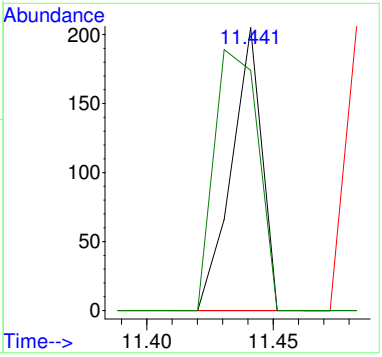


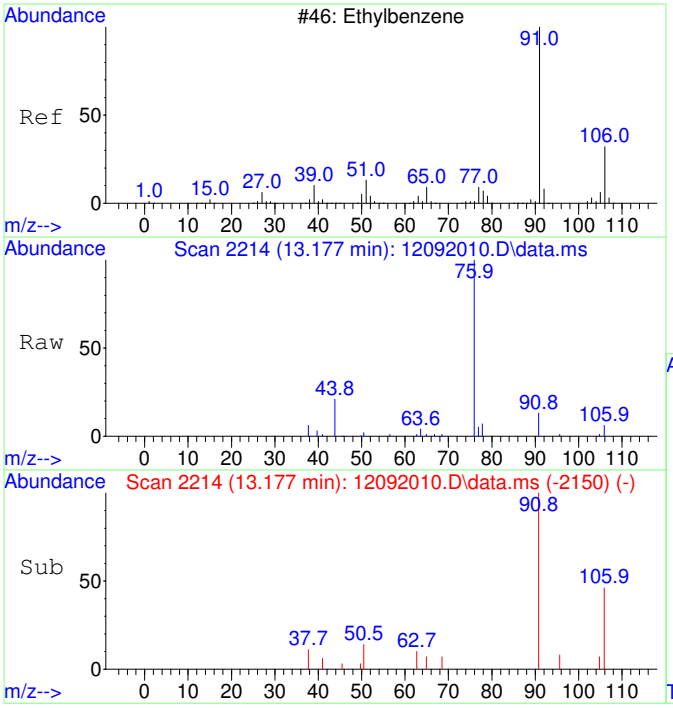


#39
Tetrachloroethene SCAN
Concen: 33.71 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:166 Resp: 171

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	0.0	38.7	98.7#
129	133.9	41.8	101.8#

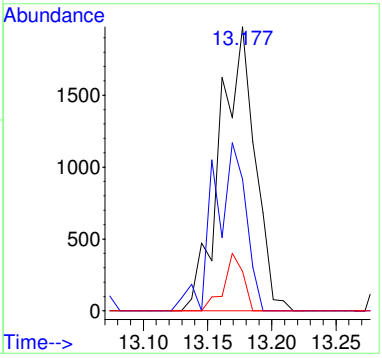


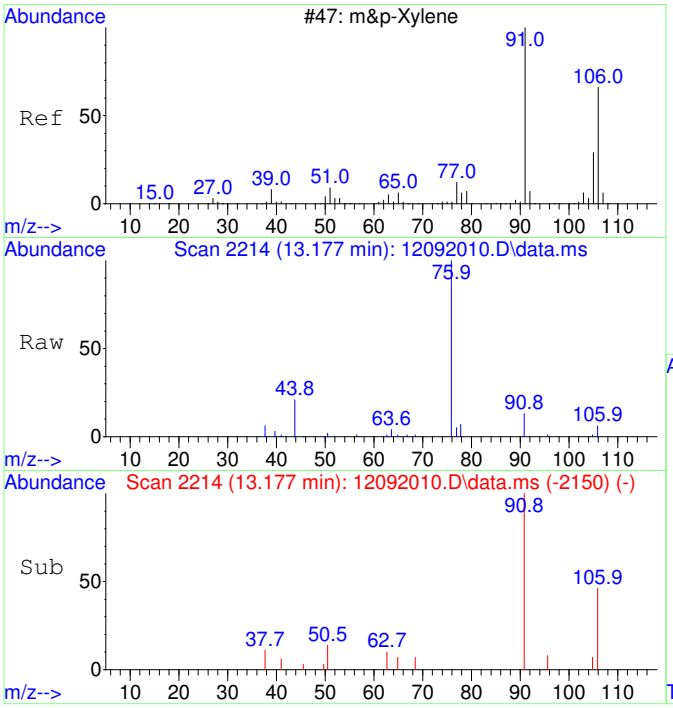


#42
Ethylbenzene SCAN
Concen: 87.13 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 3744

Ion	Ratio	Lower	Upper
91	100		
106	53.8	23.1	83.1
51	11.1	0.0	40.1

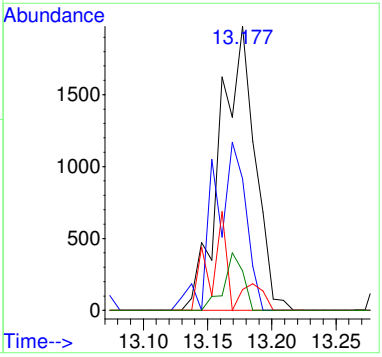


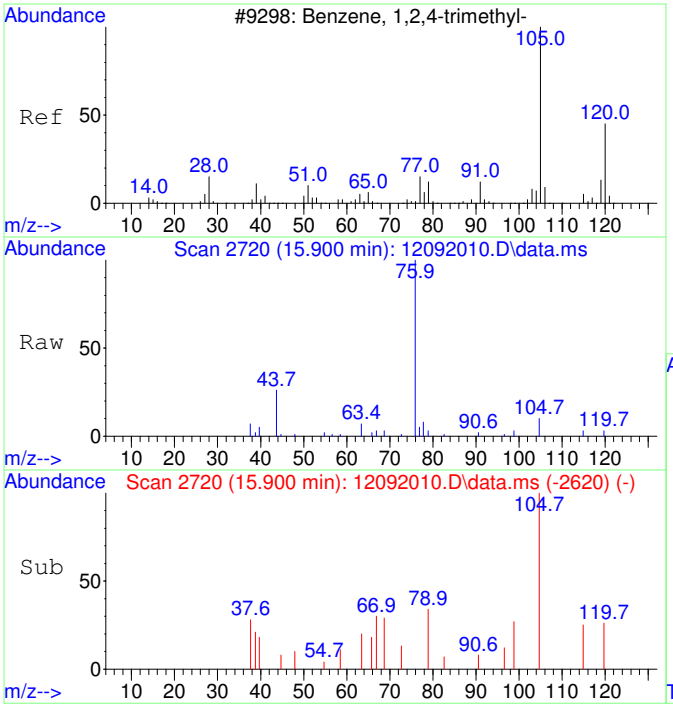


#43
m&p-Xylene SCAN
Concen: 87.13 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion: 91 Resp: 3744

Ion	Ratio	Lower	Upper
91	100		
106	53.8	23.1	83.1
105	12.9	0.0	54.7
51	11.1	0.0	40.1

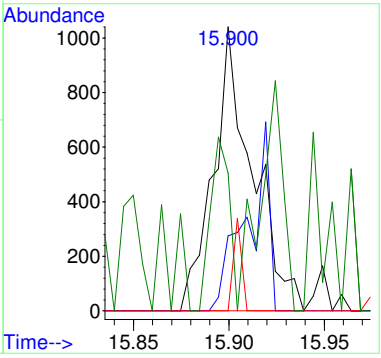




#47
1,2,4-Trimethylbenzene SCAN
Concen: 58.76 ug/L
RT: 15.900 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 12092010.D
Acq: 9 Dec 2020 12:26

Tgt Ion:105 Resp: 1486

Ion	Ratio	Lower	Upper
105	100		
120	0.0	16.9	76.9#
119	6.8	0.0	41.9
77	29.6	0.0	42.3



2012007-04

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092011.D
Acq On : 9 Dec 2020 12:50
InstName : AG5975C
Operator : TD
Sample : 2012007-04
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 09 13:08:45 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

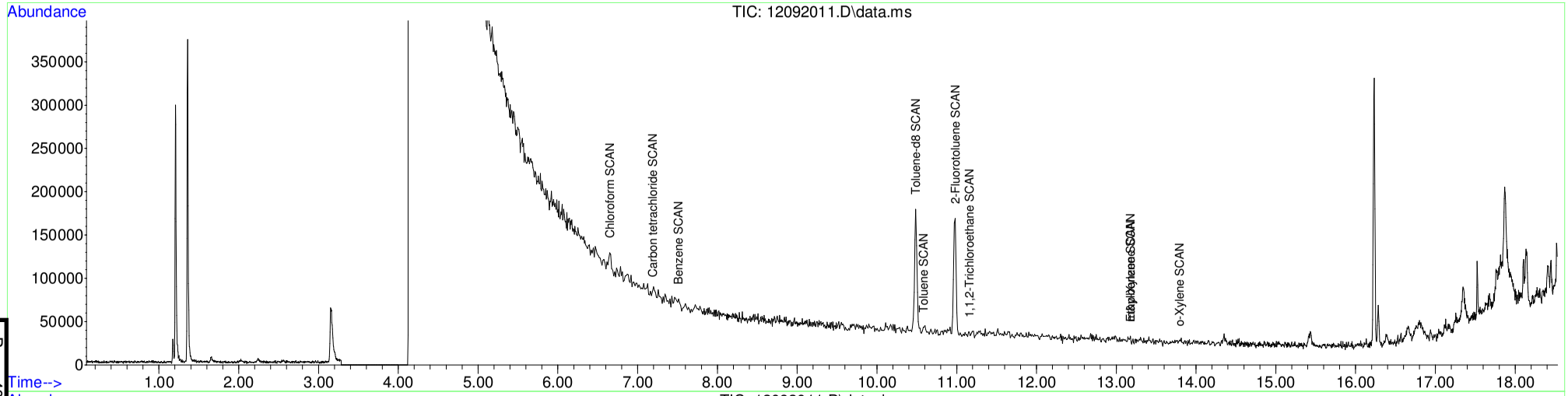
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	198727	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	170556	4431.35	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.63%			
Target Compounds						Qvalue
6] Chloroform	6.652	83	16055	1360.23	ug/L	100
8] Carbon tetrachloride	7.175	117	450	37.12	ug/L	96
9] Benzene	7.503	78	5387	161.09	ug/L	72
13] Toluene	10.582	91	8310	173.41	ug/L	100
18] Ethylbenzene	12.972	91	2418	39.50	ug/L	93
19] m&p-Xylene	13.163	91	6256	132.73	ug/L	96
20] o-Xylene	13.782	91	2241	44.27	ug/L	98
23] 1,2,4-Trimethylbenzene	15.906	105	2635	46.27	ug/L	90
25) 2-Fluorotoluene SCAN	10.980	109	109005	4832.31	ug/L	97
30) Chloroform SCAN	6.651	83	10074	1387.71	ug/L	95
32) Carbon tetrachloride SCAN	7.186	117	372	58.11	ug/L #	48
33) Benzene SCAN	7.514	78	5766	254.42	ug/L	98
36) Toluene-d8 SCAN	10.486	98	98418	4651.90	ug/L	96
37) Toluene SCAN	10.581	91	5261	201.97	ug/L	91
38) 1,1,2-Trichloroethane ...	11.158	97	282	43.19	ug/L #	13
42) Ethylbenzene SCAN	13.177	91	4275	86.12	ug/L	81
43) m&p-Xylene SCAN	13.177	91	4275	86.12	ug/L #	72
44) o-Xylene SCAN	13.789	91	1889	69.69	ug/L	85

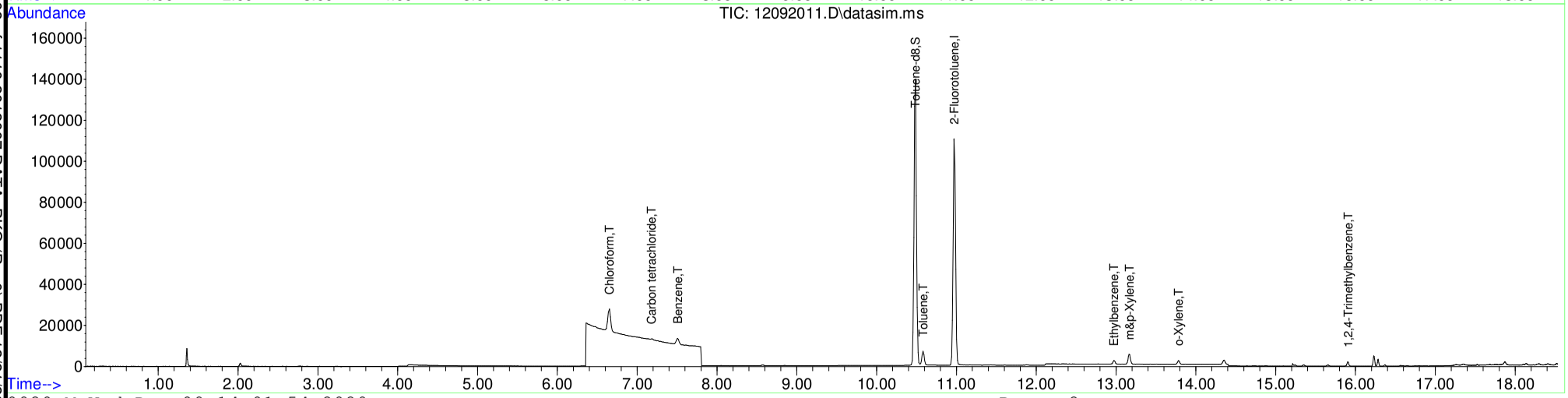
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092011.D
Acq On : 9 Dec 2020 12:50
InstName : AG5975C
Operator : TD
Sample : 2012007-04
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 09 13:08:45 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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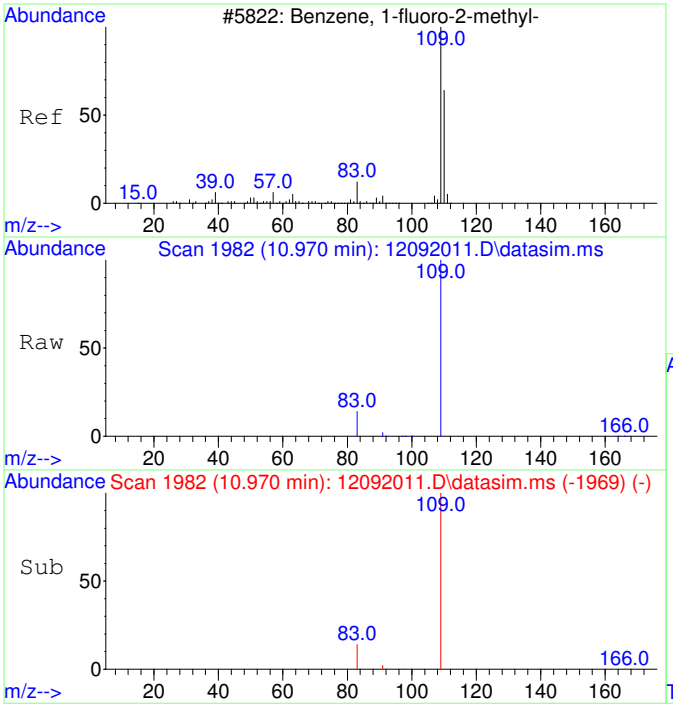
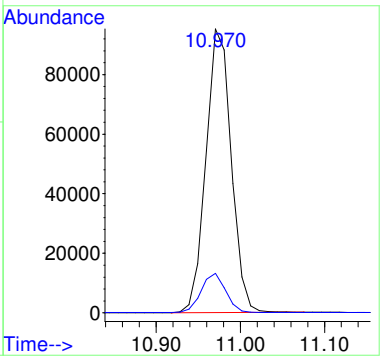
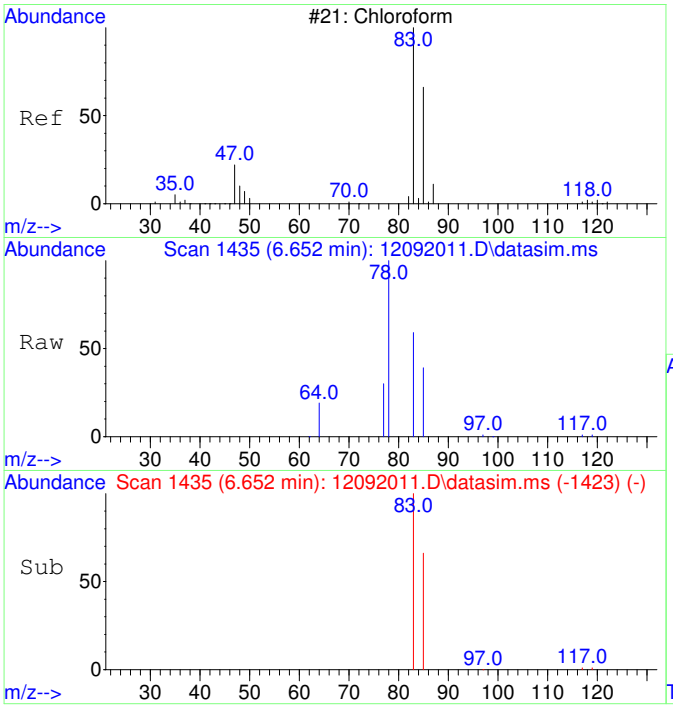


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion:109 Resp: 198727

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

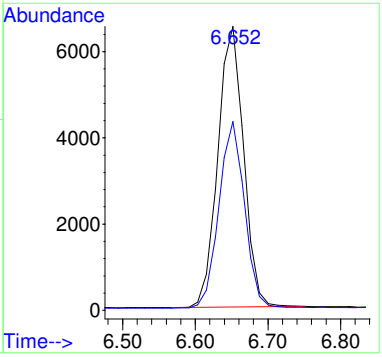


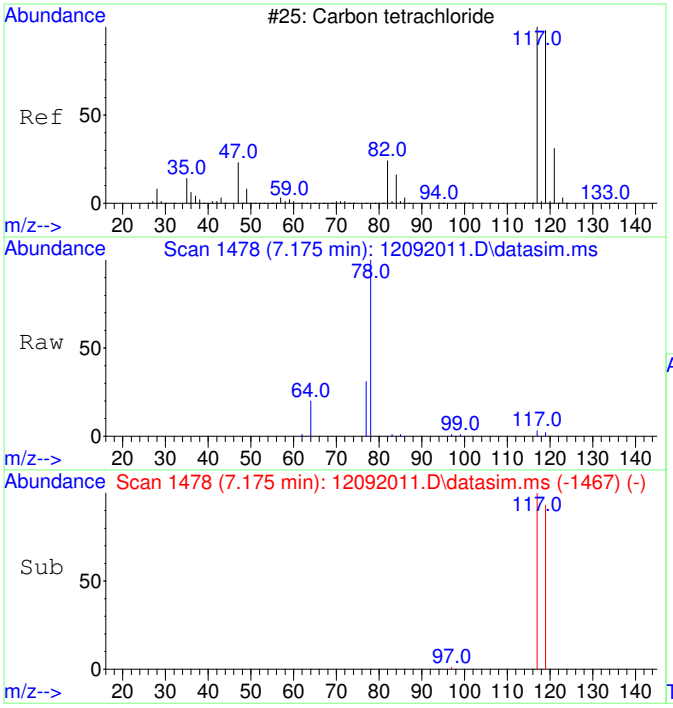


#6
Chloroform
Concen: 1360.23 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 83 Resp: 16055

Ion	Ratio	Lower	Upper
83	100		
85	65.3	35.1	95.1

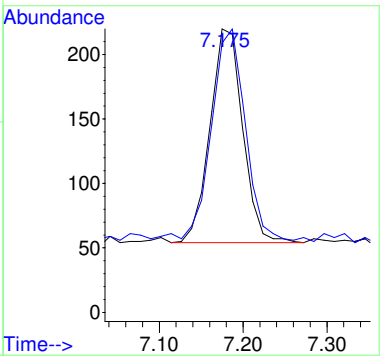


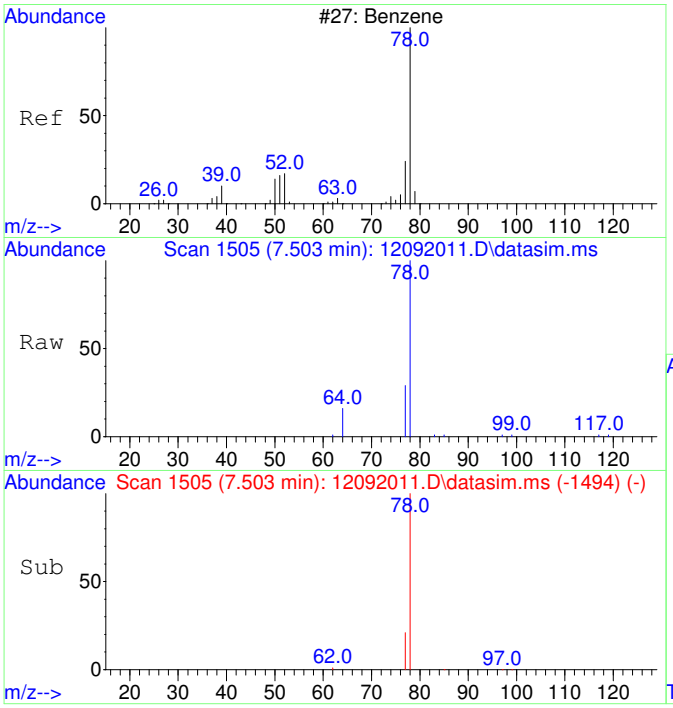


#8
Carbon tetrachloride
Concen: 37.12 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion:117 Resp: 450

Ion	Ratio	Lower	Upper
117	100		
119	100.4	66.4	126.4

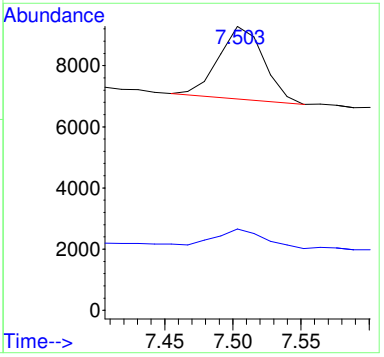


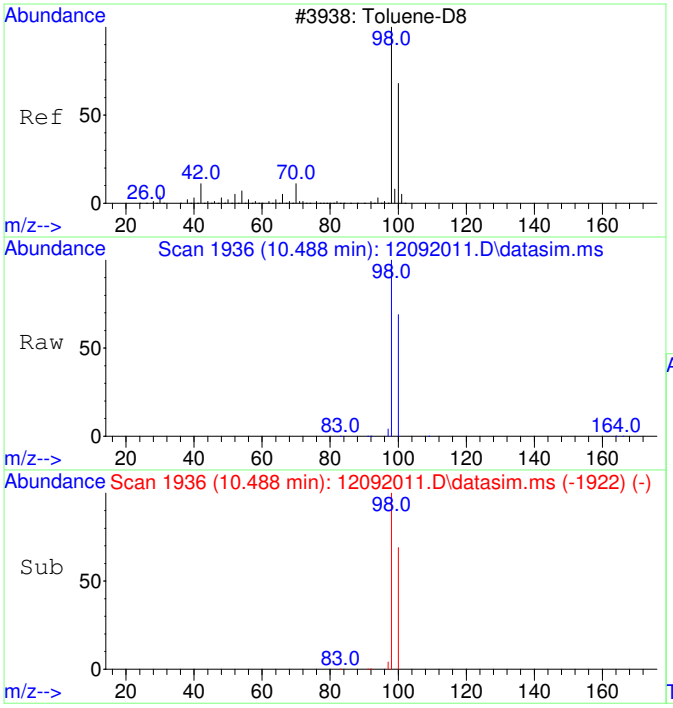


#9
Benzene
Concen: 161.09 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 78 Resp: 5387

Ion	Ratio	Lower	Upper
78	100		
77	36.7	0.0	53.2

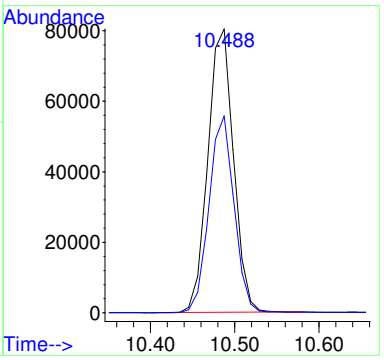


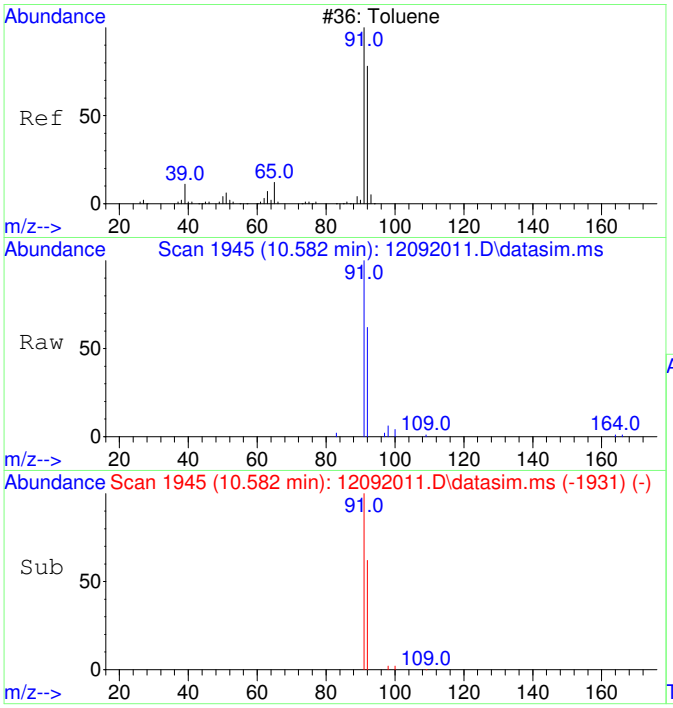


#12
Toluene-d8
Concen: 4431.35 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 98 Resp: 170556

Ion	Ratio	Lower	Upper
98	100		
100	67.5	37.1	97.1

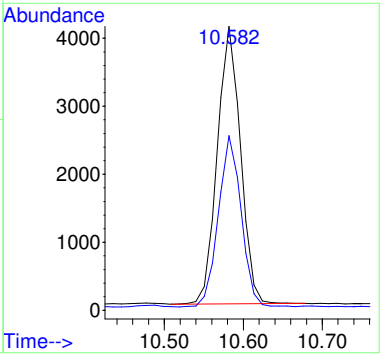


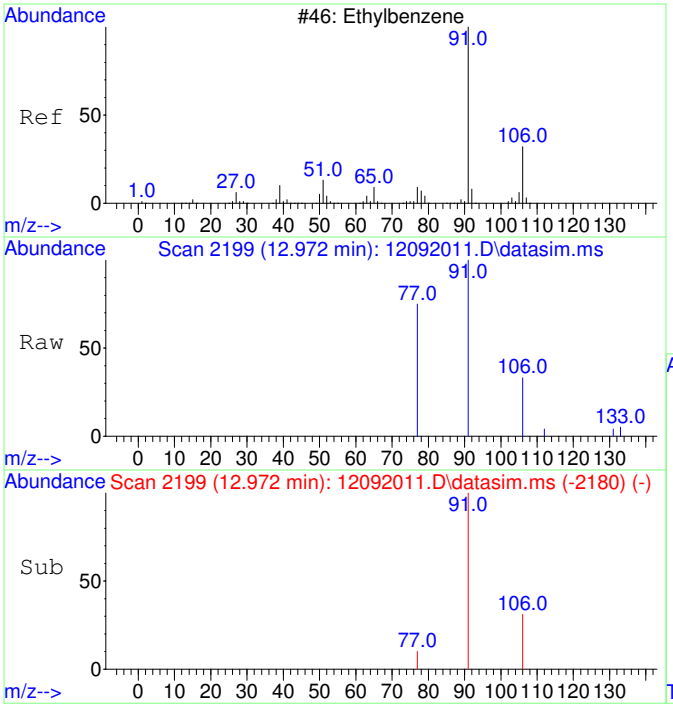


#13
Toluene
Concen: 173.41 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 8310

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

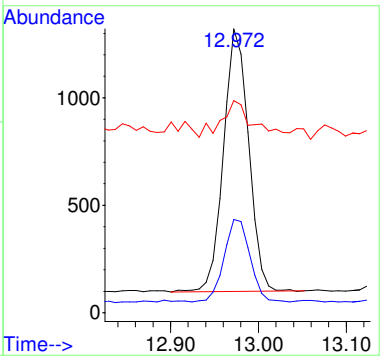


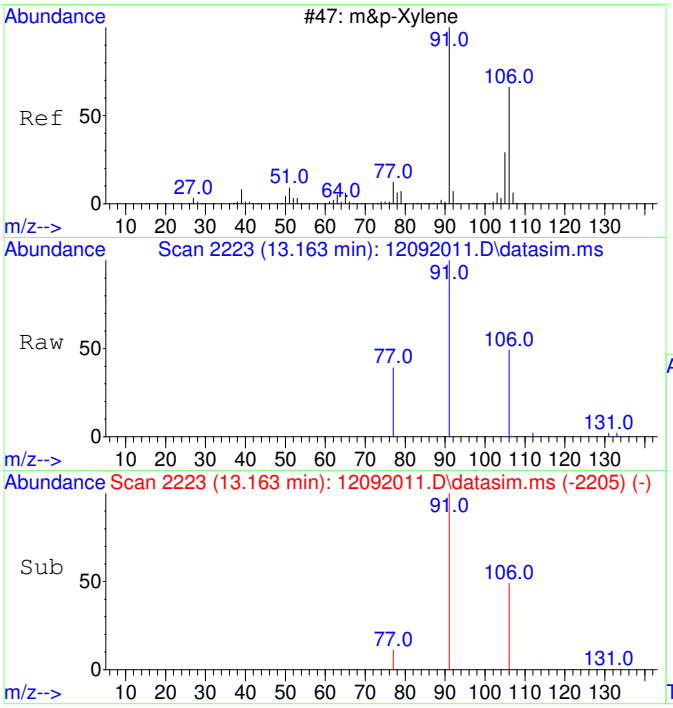


#18
Ethylbenzene
Concen: 39.50 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 2418

Ion	Ratio	Lower	Upper
91	100		
106	31.8	3.0	63.0
77	17.9	0.0	38.2

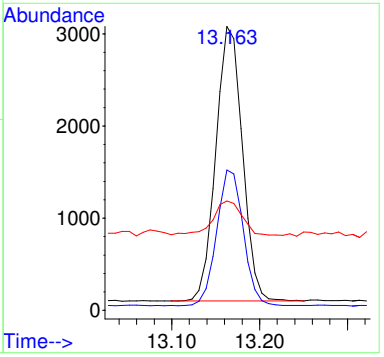


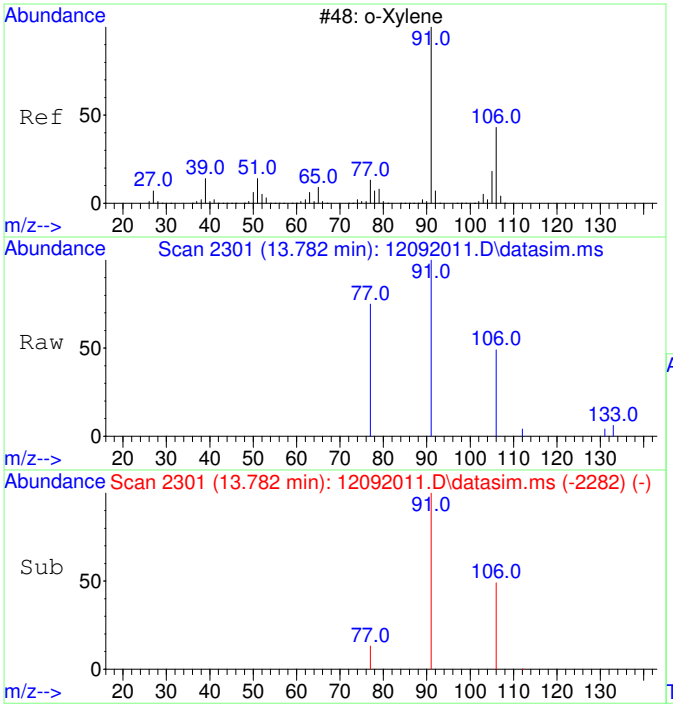


#19
m&p-Xylene
Concen: 132.73 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 6256

Ion	Ratio	Lower	Upper
91	100		
106	49.4	22.2	82.2
77	13.8	0.0	42.4

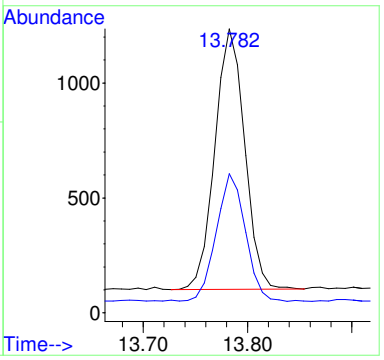


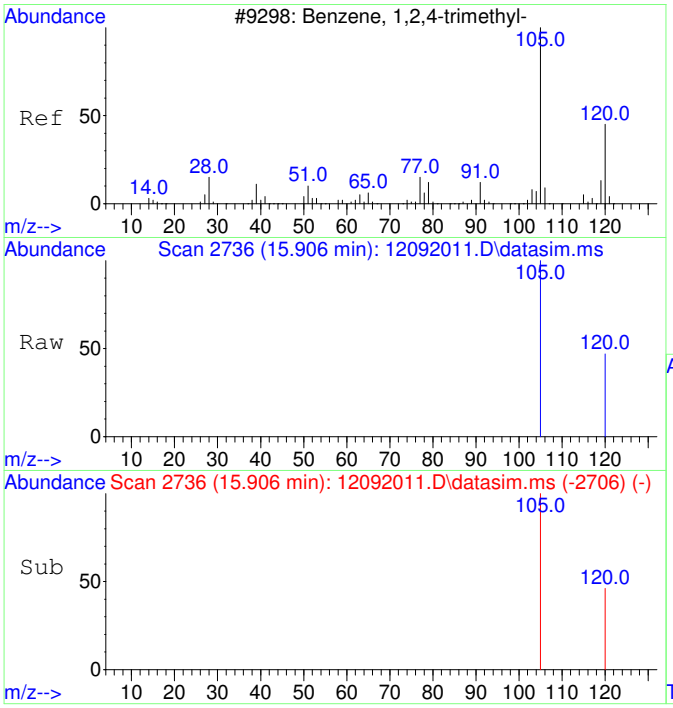


#20
o-Xylene
Concen: 44.27 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 2241

Ion	Ratio	Lower	Upper
91	100		
106	47.9	19.2	79.2

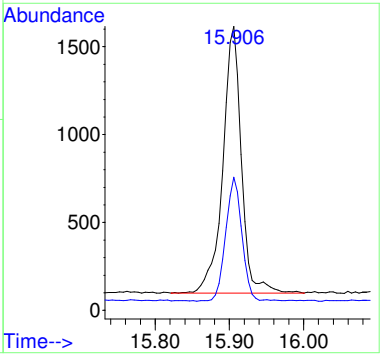


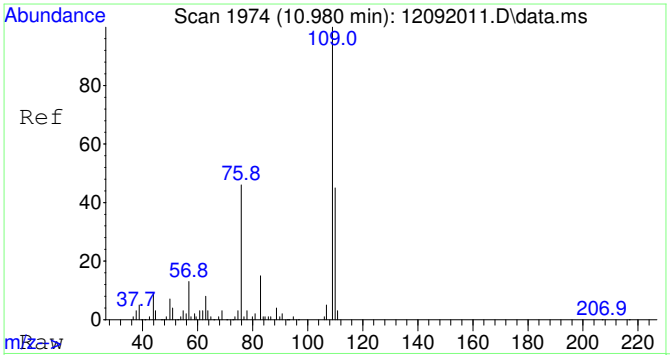


#23
1,2,4-Trimethylbenzene
Concen: 46.27 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion:105 Resp: 2635

Ion	Ratio	Lower	Upper
105	100		
120	40.3	17.2	77.2

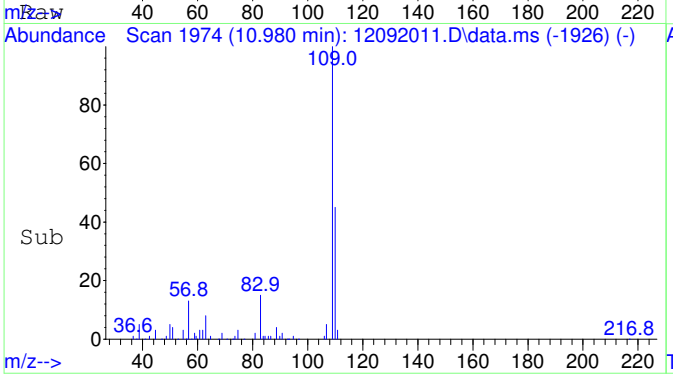


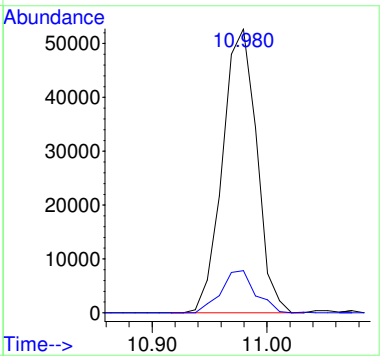


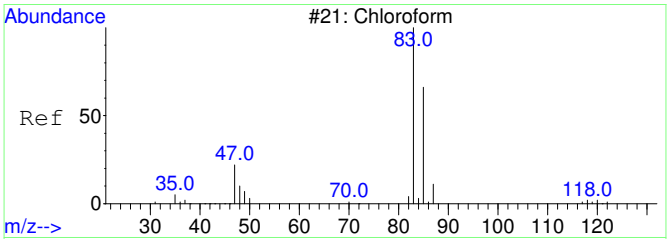
#25
2-Fluorotoluene SCAN
Concen: 4832.31 ug/L
RT: 10.980 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion:109 Resp: 109005

Ion	Ratio	Lower	Upper
109	100		
83	15.1	0.0	43.8



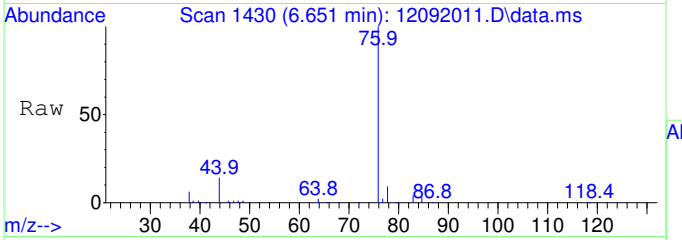


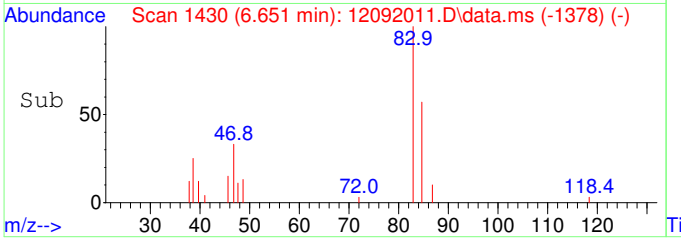


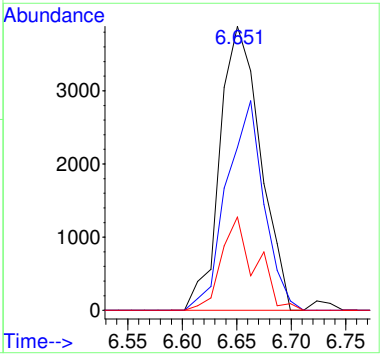
#30
Chloroform SCAN
Concen: 1387.71 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

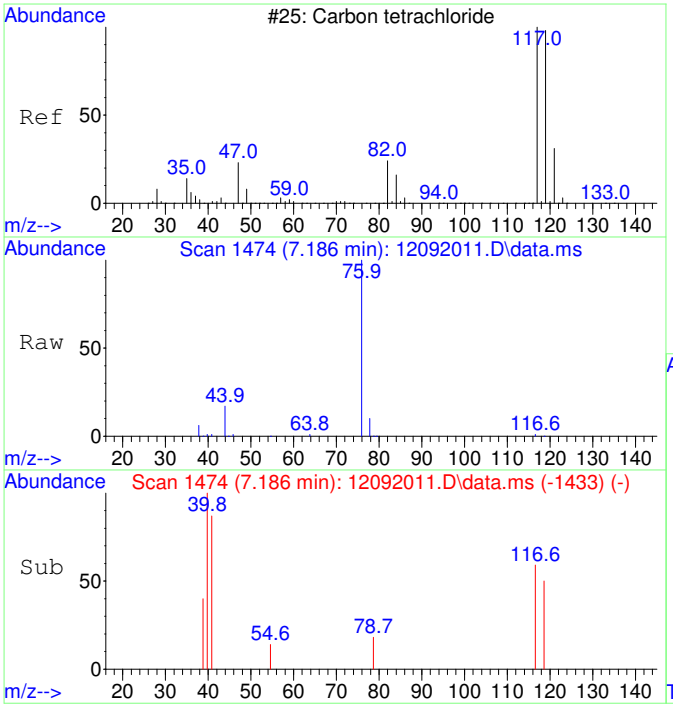
Tgt Ion: 83 Resp: 10074

Ion	Ratio	Lower	Upper
83	100		
85	67.9	34.6	94.6
47	27.6	0.0	53.4





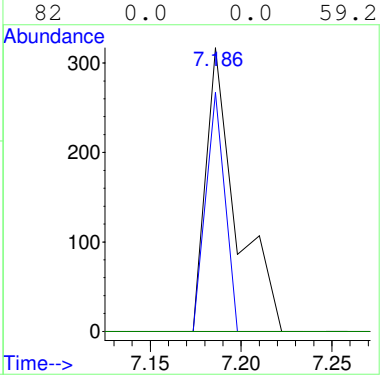


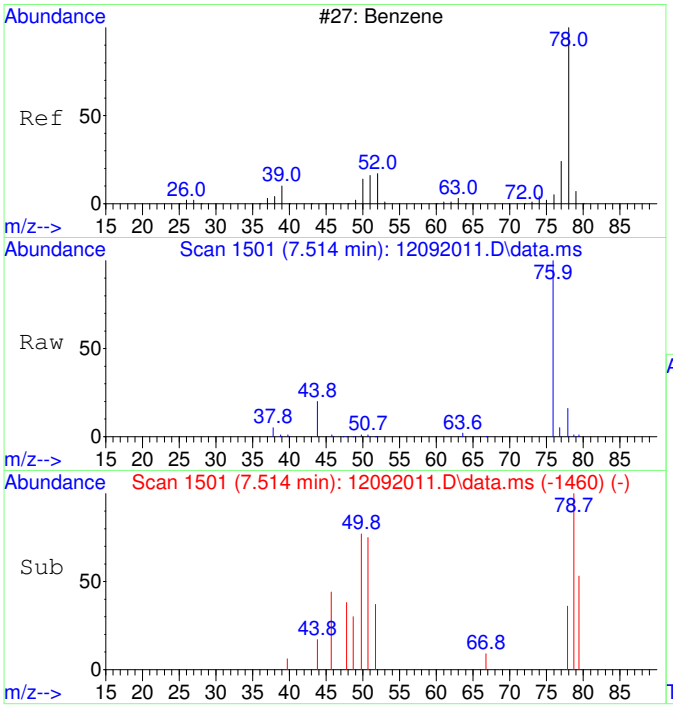


#32
Carbon tetrachloride SCAN
Concen: 58.11 ug/L
RT: 7.186 min Scan# 1474
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion:117 Resp: 372

Ion	Ratio	Lower	Upper
117	100		
119	52.4	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

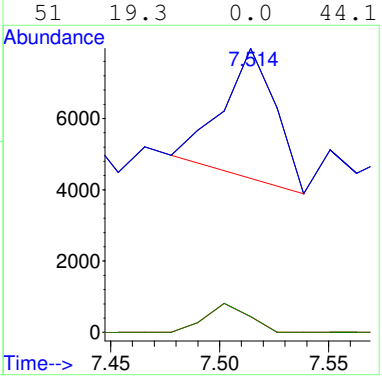


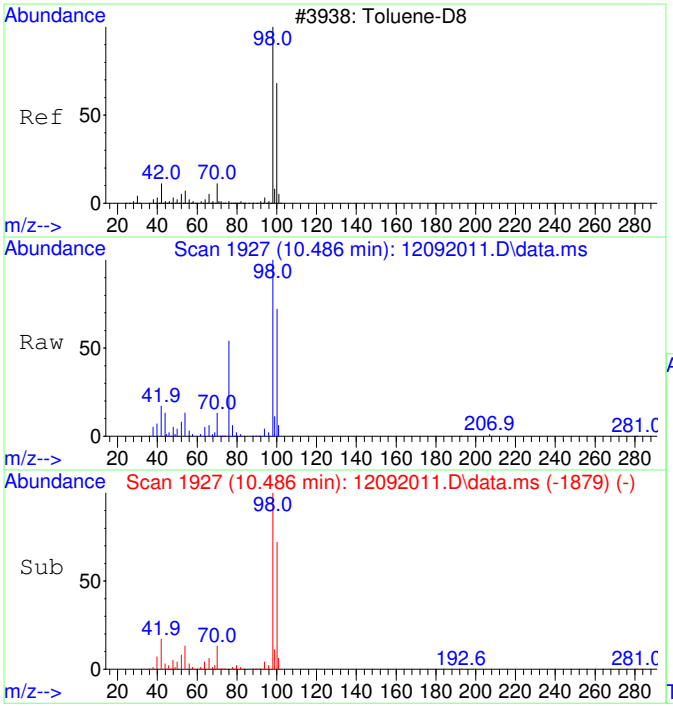


#33
Benzene SCAN
Concen: 254.42 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 78 Resp: 5766

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	19.3	0.0	47.9
51	19.3	0.0	44.1

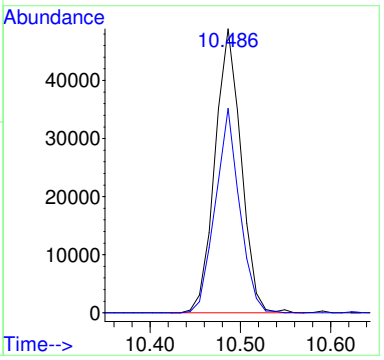


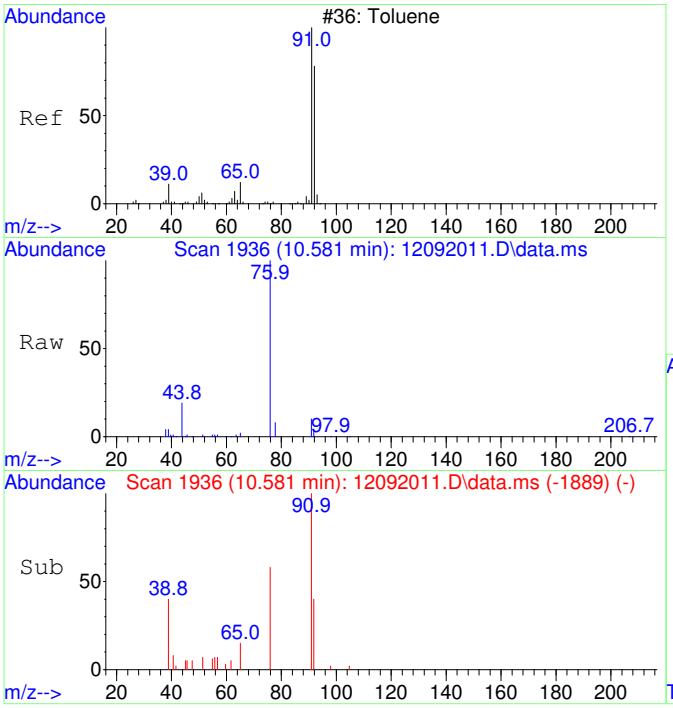


#36
Toluene-d8 SCAN
Concen: 4651.90 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 98 Resp: 98418

Ion	Ratio	Lower	Upper
98	100		
100	67.1	40.0	100.0

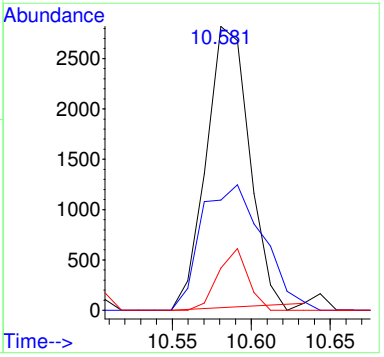


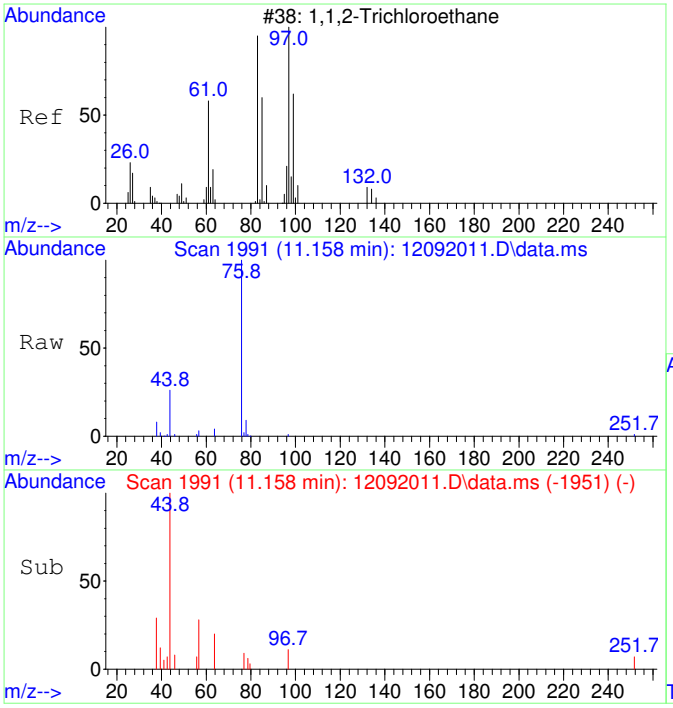


#37
Toluene SCAN
Concen: 201.97 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 5261

Ion	Ratio	Lower	Upper
91	100		
92	64.8	28.3	88.3
65	15.3	0.0	41.0

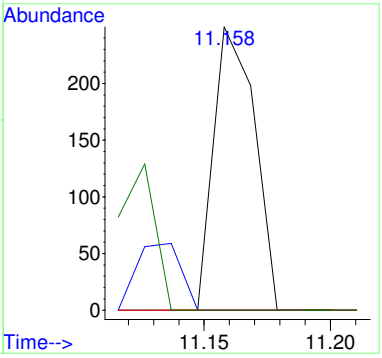


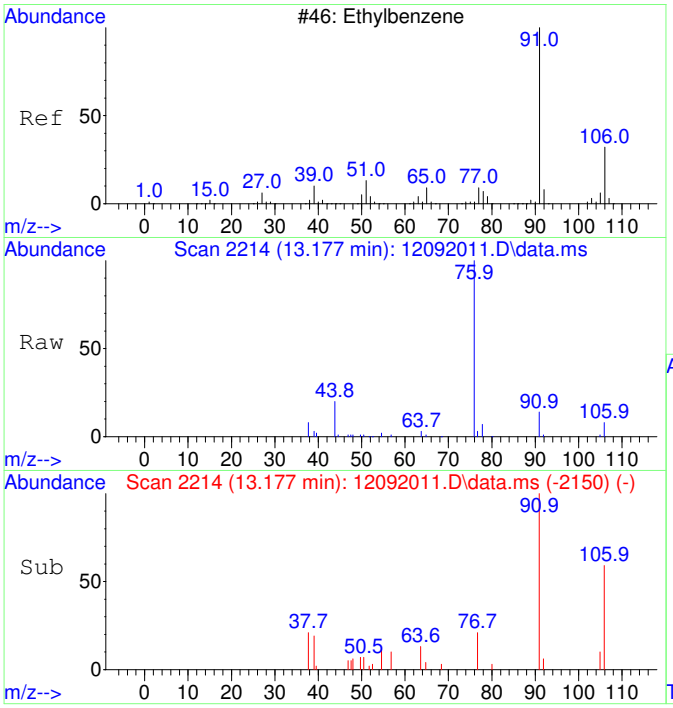


#38
1,1,2-Trichloroethane SCAN
Concen: 43.19 ug/L
RT: 11.158 min Scan# 1991
Delta R.T. -0.084 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 97 Resp: 282

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

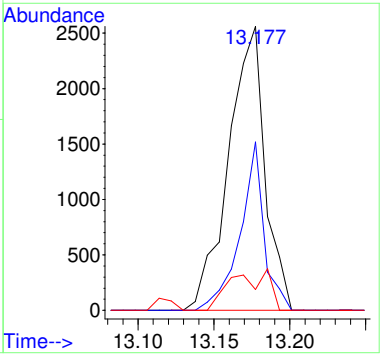


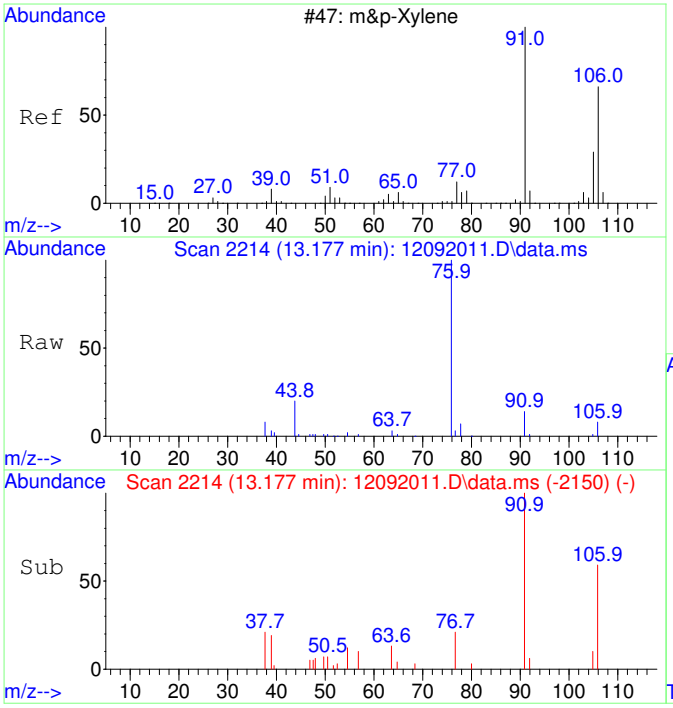


#42
Ethylbenzene SCAN
Concen: 86.12 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 4275

Ion	Ratio	Lower	Upper
91	100		
106	38.8	23.1	83.1
51	14.8	0.0	40.1

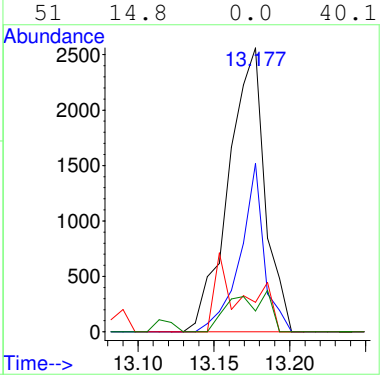


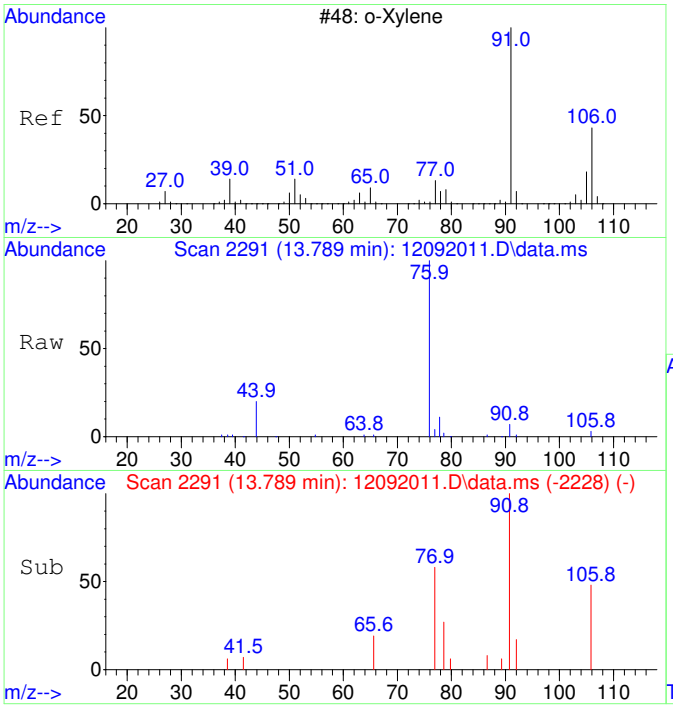


#43
m&p-Xylene SCAN
Concen: 86.12 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 4275

Ion	Ratio	Lower	Upper
91	100		
106	38.8	23.1	83.1
105	0.0	0.0	54.7
51	14.8	0.0	40.1

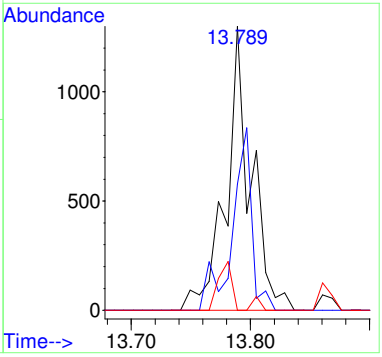




#44
o-Xylene SCAN
Concen: 69.69 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12092011.D
Acq: 9 Dec 2020 12:50

Tgt Ion: 91 Resp: 1889

Ion	Ratio	Lower	Upper
91	100		
106	50.7	18.0	78.0
105	9.3	0.0	56.6



2012007-05

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092012.D
Acq On : 9 Dec 2020 13:13
InstName : AG5975C
Operator : TD
Sample : 2012007-05
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 09 13:32:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

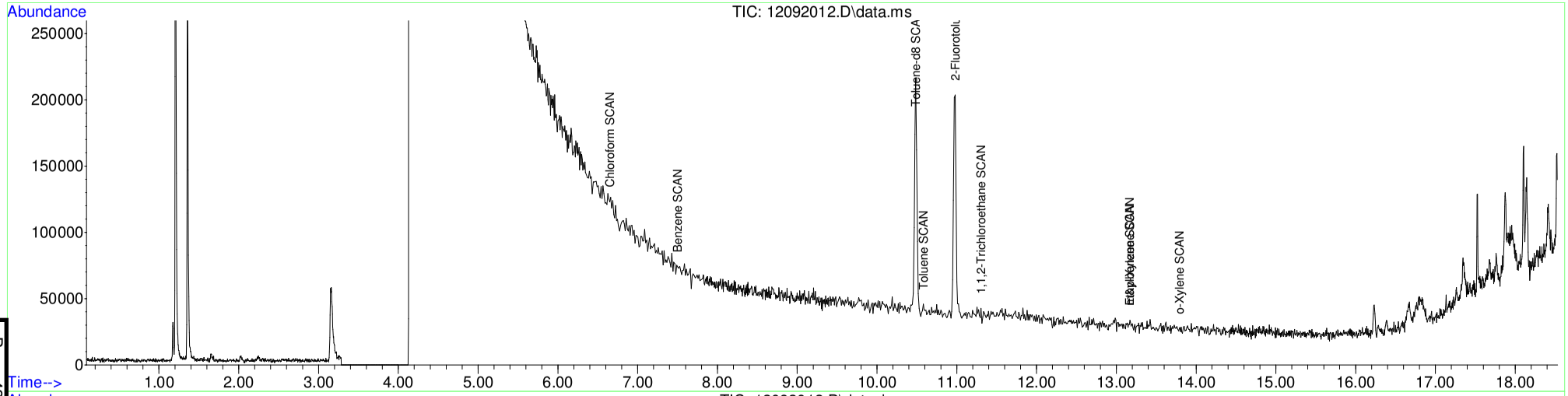
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	250671	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	211694	4360.44 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.21%		
Target Compounds					Qvalue
6] Chloroform	6.652	83	11636	781.55 ug/L	99
9] Benzene	7.503	78	4446	105.40 ug/L	67
13] Toluene	10.582	91	6517	107.81 ug/L	100
18] Ethylbenzene	12.972	91	1891	24.49 ug/L	92
19] m&p-Xylene	13.162	91	4409	74.16 ug/L	95
20] o-Xylene	13.782	91	1678	26.28 ug/L	99
23] 1,2,4-Trimethylbenzene	15.906	105	1778	24.75 ug/L	85
25) 2-Fluorotoluene SCAN	10.979	109	138617	4871.66 ug/L	96
30) Chloroform SCAN	6.650	83	7451	813.70 ug/L #	86
33) Benzene SCAN	7.502	78	8759	306.40 ug/L	98
36) Toluene-d8 SCAN	10.486	98	126032	4722.69 ug/L	97
37) Toluene SCAN	10.580	91	4960	150.96 ug/L #	34
38) 1,1,2-Trichloroethane ...	11.304	97	258	31.33 ug/L #	13
42) Ethylbenzene SCAN	13.169	91	2818	45.01 ug/L	82
43) m&p-Xylene SCAN	13.169	91	2818	45.01 ug/L	85
44) o-Xylene SCAN	13.789	91	1169	34.19 ug/L #	59

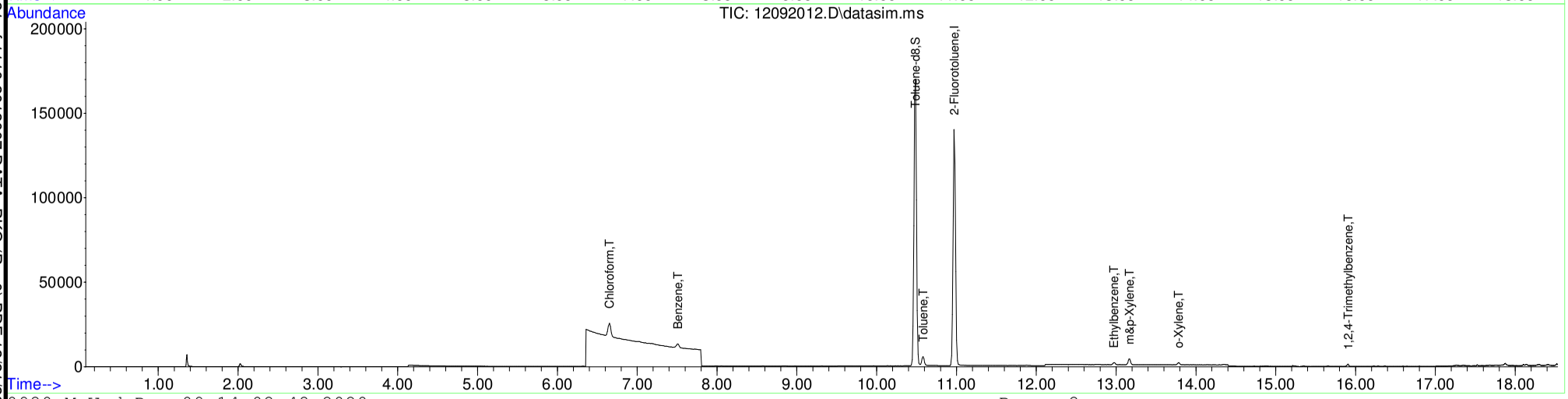
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092012.D
Acq On : 9 Dec 2020 13:13
InstName : AG5975C
Operator : TD
Sample : 2012007-05
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 09 13:32:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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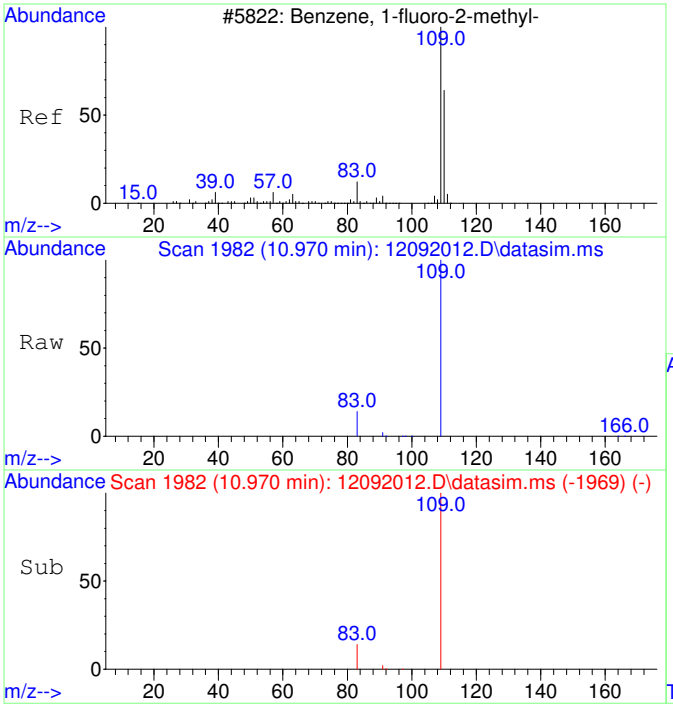
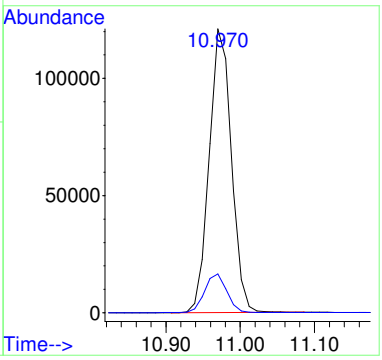
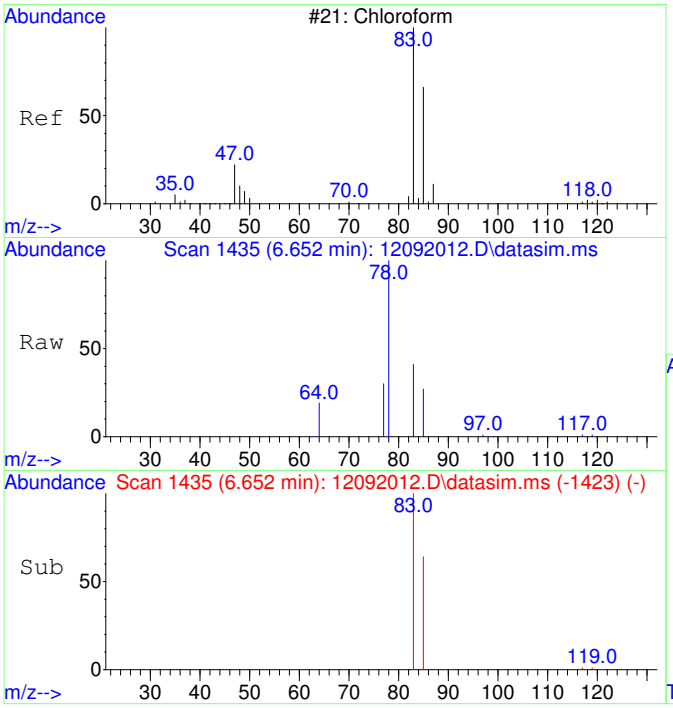


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion:109 Resp: 250671

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

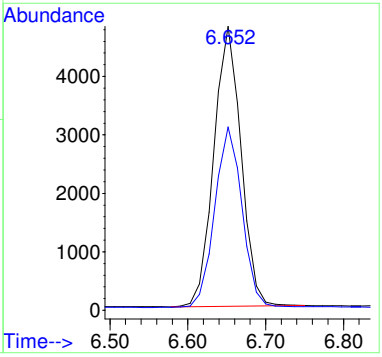


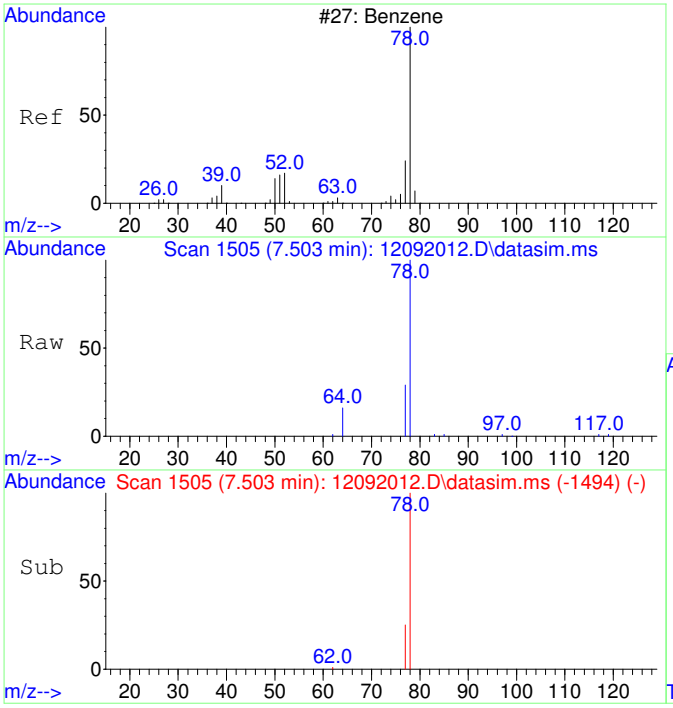


#6
Chloroform
Concen: 781.55 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 83 Resp: 11636

Ion	Ratio	Lower	Upper
83	100		
85	64.1	35.1	95.1

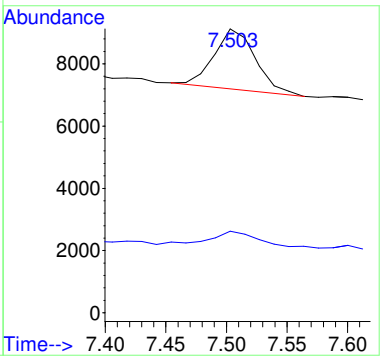


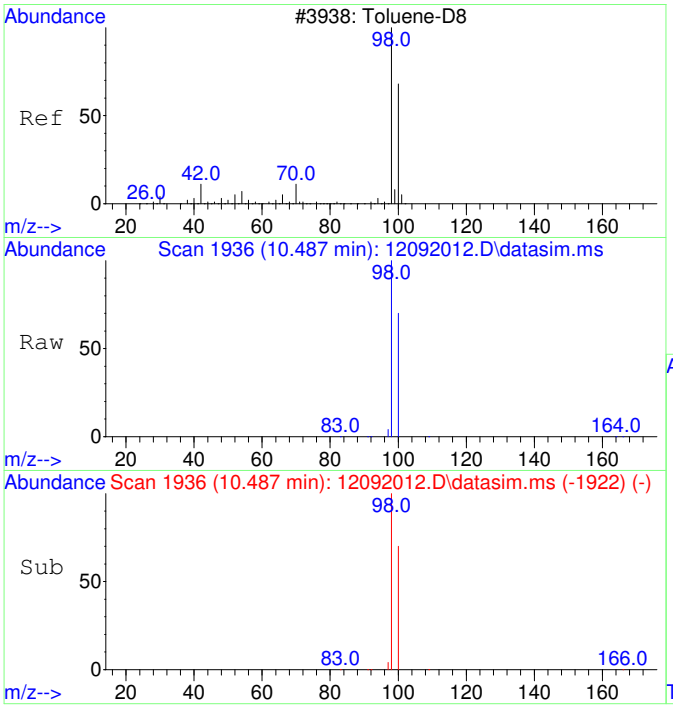


#9
Benzene
Concen: 105.40 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 78 Resp: 4446

Ion	Ratio	Lower	Upper
78	100		
77	39.2	0.0	53.2

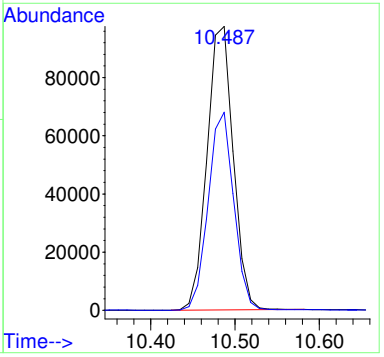


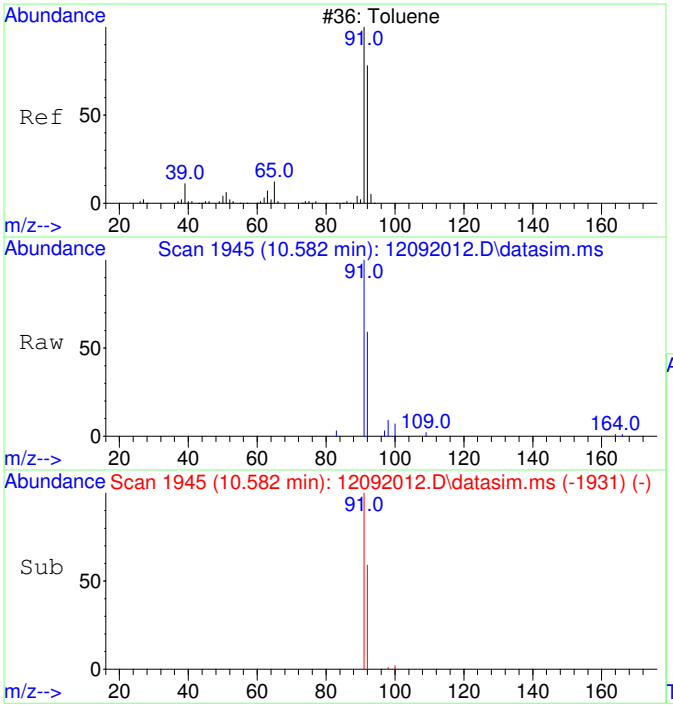


#12
Toluene-d8
Concen: 4360.44 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 98 Resp: 211694

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

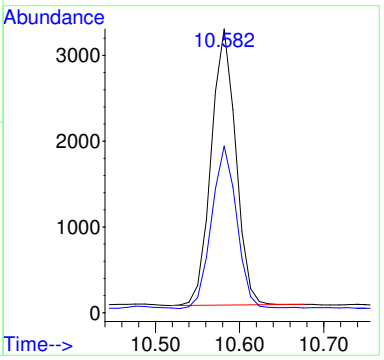


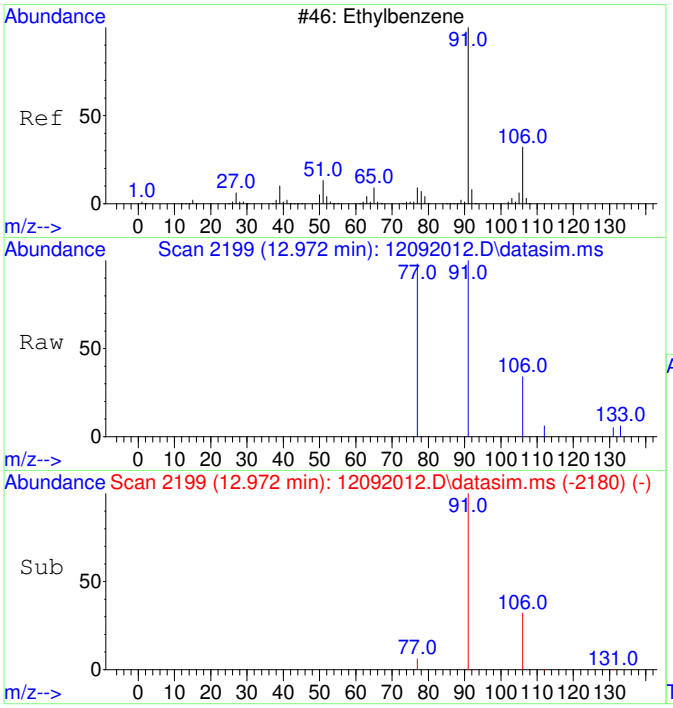


#13
Toluene
Concen: 107.81 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 6517

Ion	Ratio	Lower	Upper
91	100		
92	59.7	29.9	89.9

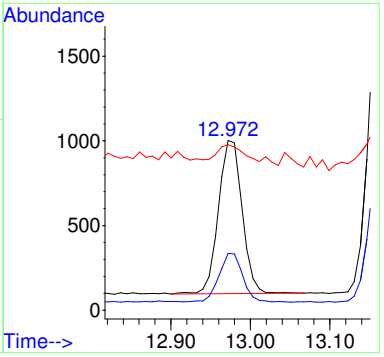


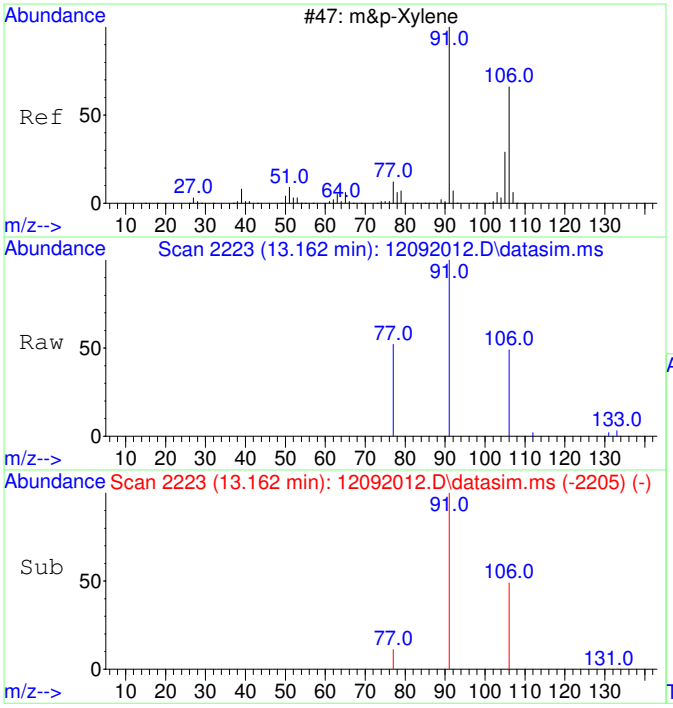


#18
Ethylbenzene
Concen: 24.49 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 1891

Ion	Ratio	Lower	Upper
91	100		
106	31.3	3.0	63.0
77	18.5	0.0	38.2

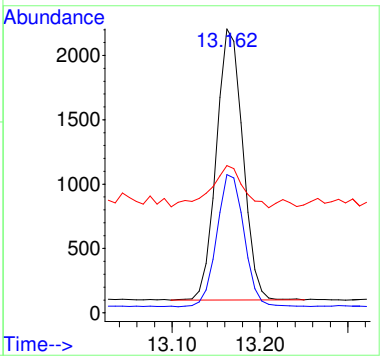


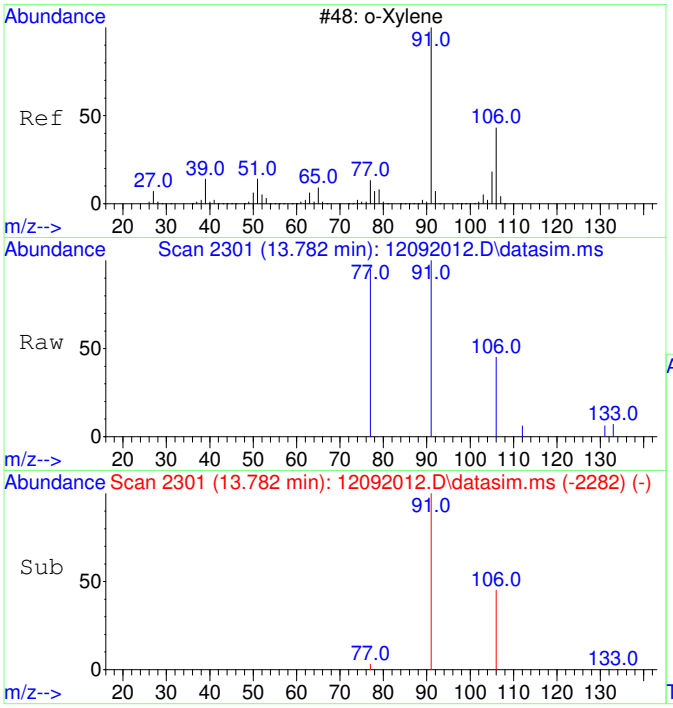


#19
m&p-Xylene
Concen: 74.16 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 4409

Ion	Ratio	Lower	Upper
91	100		
106	50.2	22.2	82.2
77	18.9	0.0	42.4

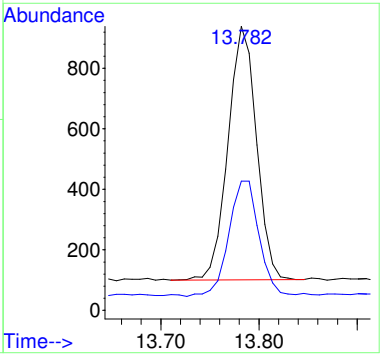


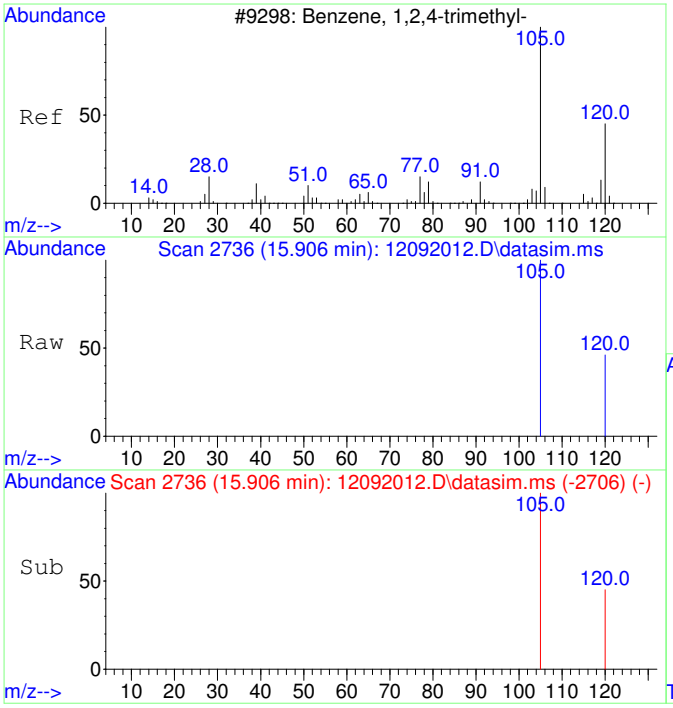


#20
o-Xylene
Concen: 26.28 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 1678

Ion	Ratio	Lower	Upper
91	100		
106	48.7	19.2	79.2

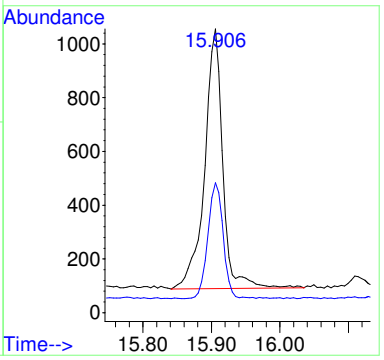


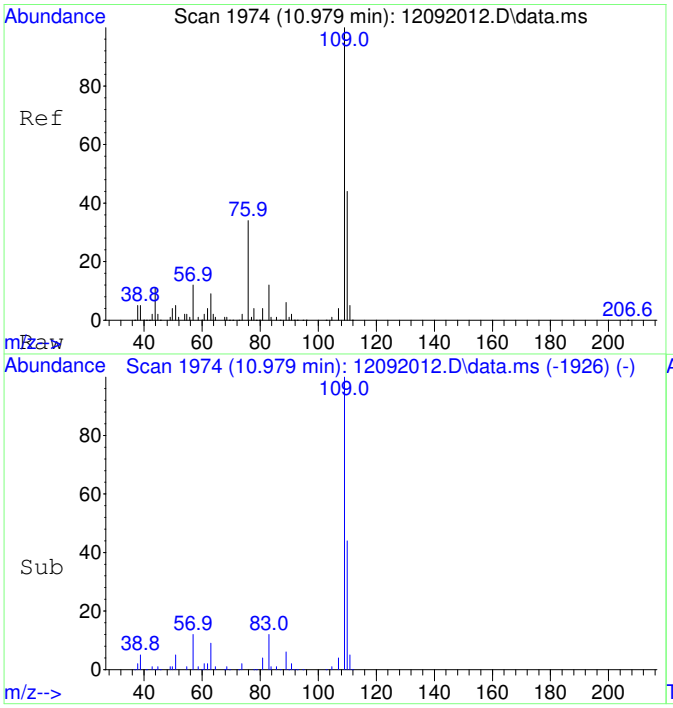


#23
1,2,4-Trimethylbenzene
Concen: 24.75 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion:105 Resp: 1778

Ion	Ratio	Lower	Upper
105	100		
120	37.3	17.2	77.2

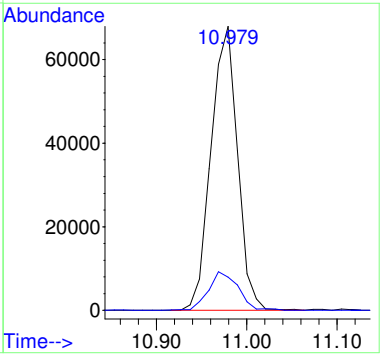


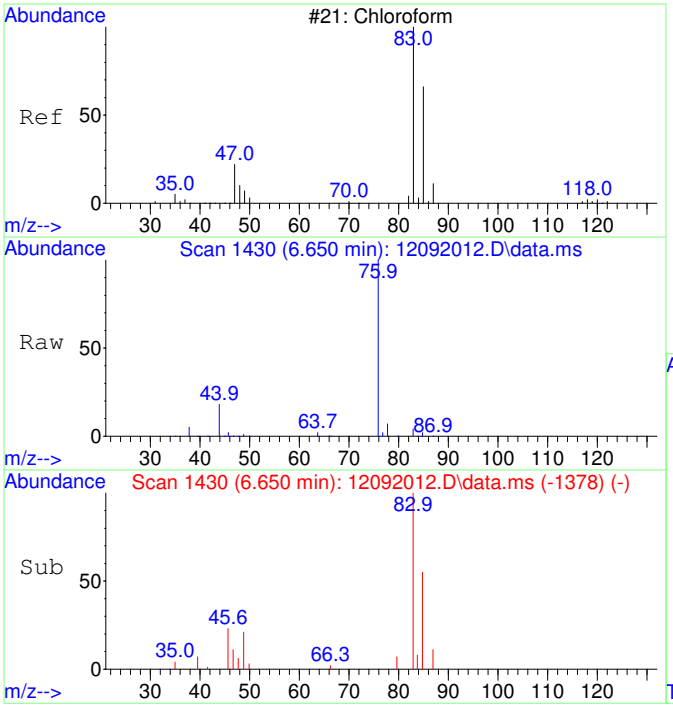


#25
2-Fluorotoluene SCAN
Concen: 4871.66 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion:109 Resp: 138617

Ion	Ratio	Lower	Upper
109	100		
83	15.3	0.0	43.8

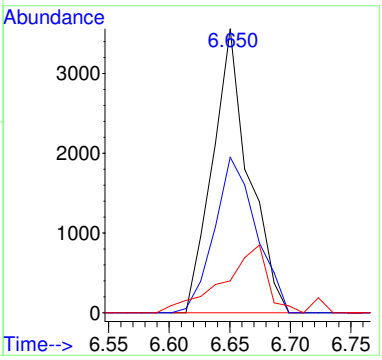


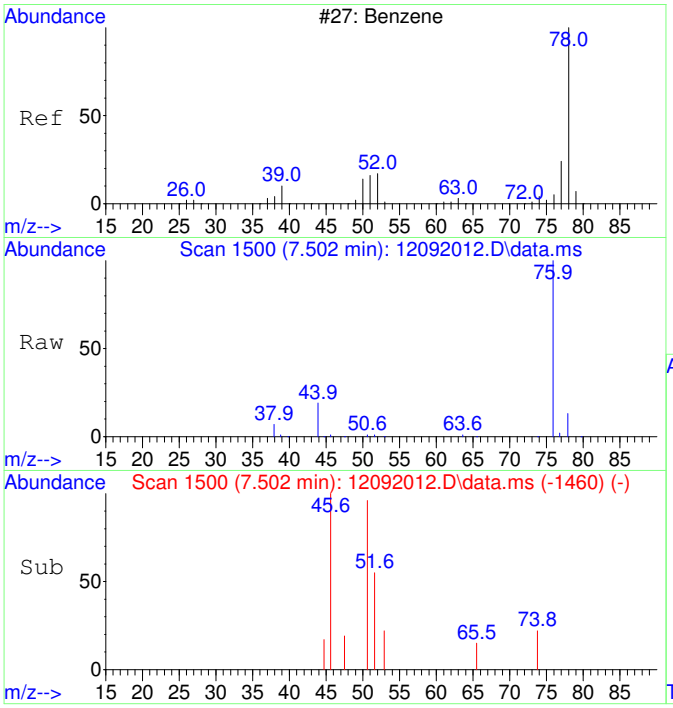


#30
Chloroform SCAN
Concen: 813.70 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 83 Resp: 7451

Ion	Ratio	Lower	Upper
83	100		
85	63.3	34.6	94.6
47	0.0	0.0	53.4

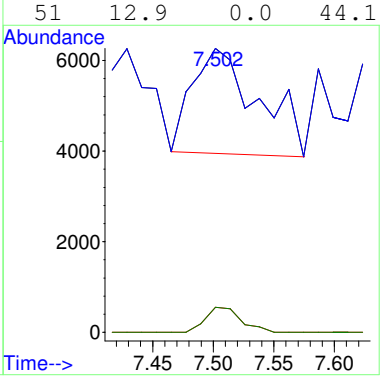


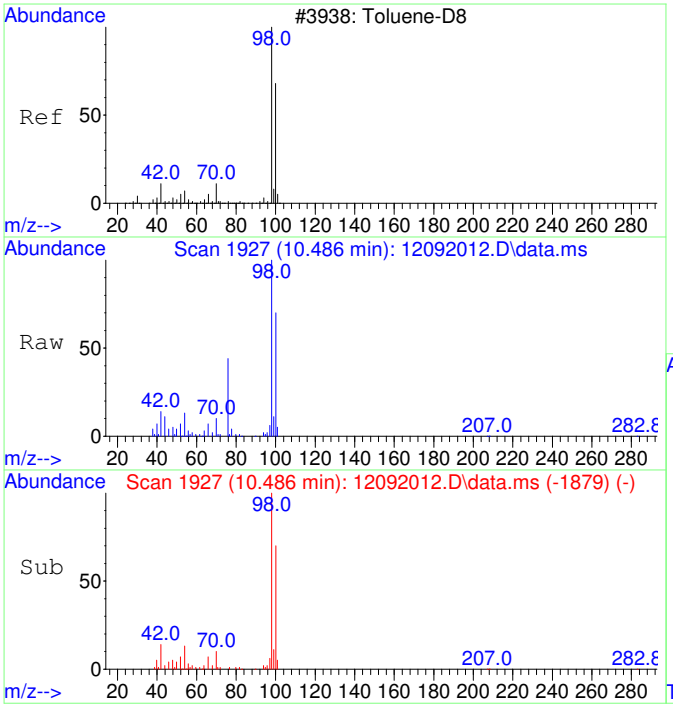


#33
Benzene SCAN
Concen: 306.40 ug/L
RT: 7.502 min Scan# 1500
Delta R.T. -0.012 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 78 Resp: 8759

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	12.9	0.0	47.9
51	12.9	0.0	44.1

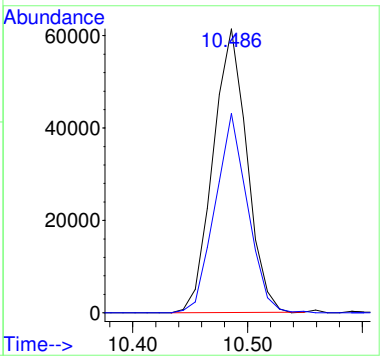


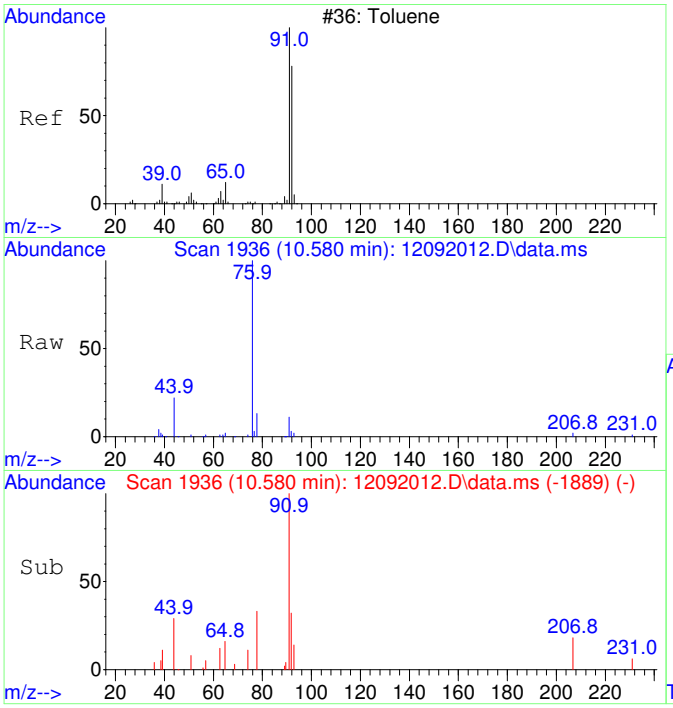


#36
Toluene-d8 SCAN
Concen: 4722.69 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 98 Resp: 126032

Ion	Ratio	Lower	Upper
98	100		
100	67.5	40.0	100.0

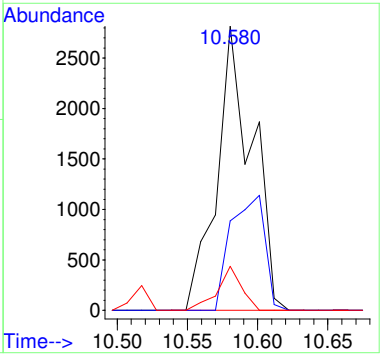


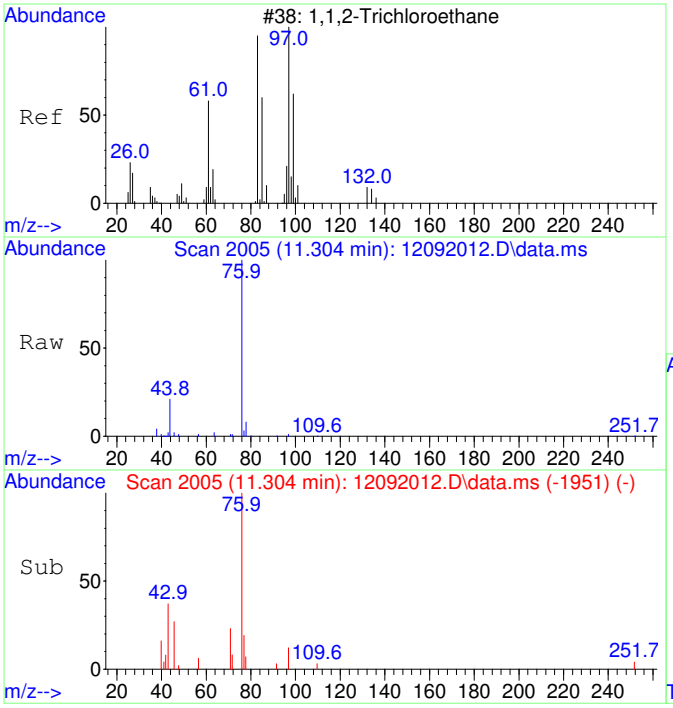


#37
Toluene SCAN
Concen: 150.96 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.011 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 4960

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	10.5	0.0	41.0

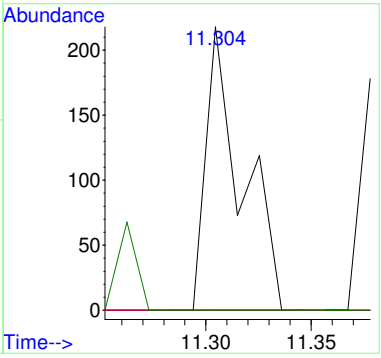


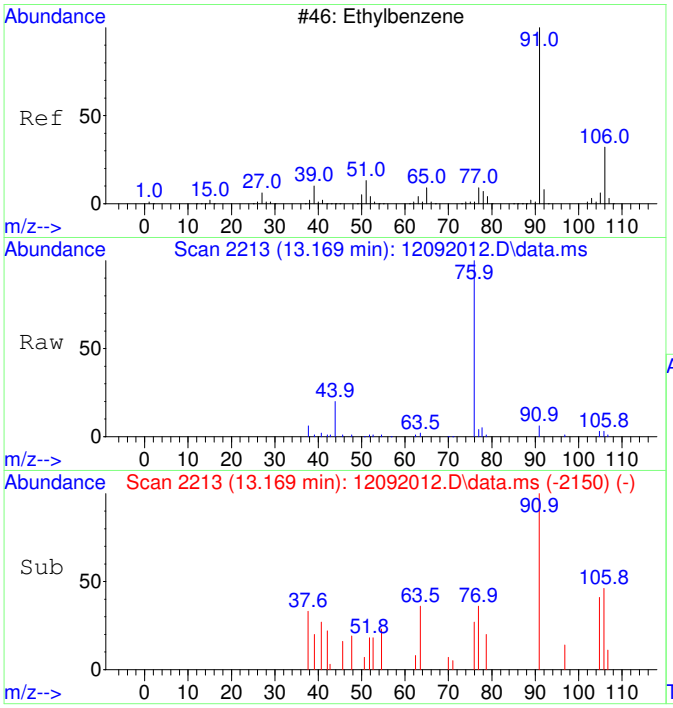


#38
1,1,2-Trichloroethane SCAN
Concen: 31.33 ug/L
RT: 11.304 min Scan# 2005
Delta R.T. 0.063 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 97 Resp: 258

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

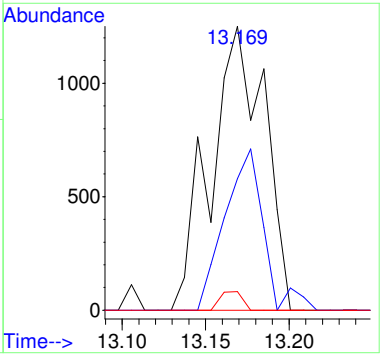


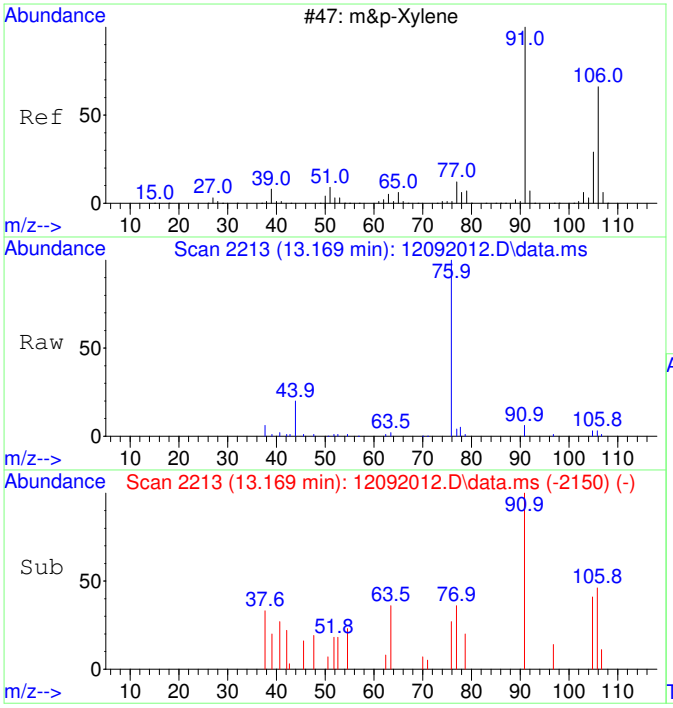


#42
Ethylbenzene SCAN
Concen: 45.01 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 2818

Ion	Ratio	Lower	Upper
91	100		
106	40.9	23.1	83.1
51	2.7	0.0	40.1

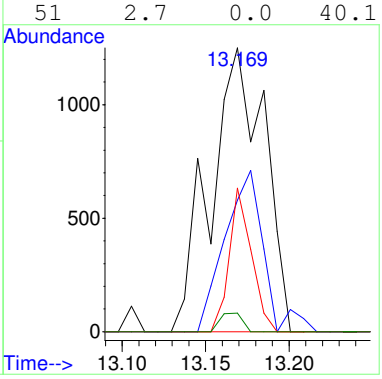


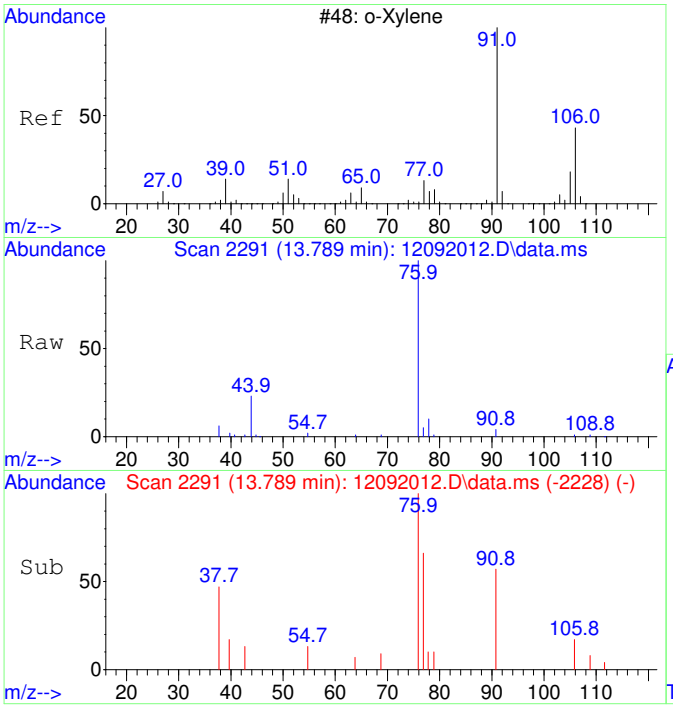


#43
m&p-Xylene SCAN
Concen: 45.01 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 2818

Ion	Ratio	Lower	Upper
91	100		
106	40.9	23.1	83.1
105	20.8	0.0	54.7
51	2.7	0.0	40.1

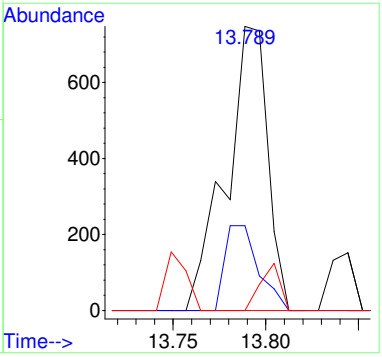




#44
o-Xylene SCAN
Concen: 34.19 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. -0.000 min
Lab File: 12092012.D
Acq: 9 Dec 2020 13:13

Tgt Ion: 91 Resp: 1169

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



2012007-06

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092013.D
Acq On : 9 Dec 2020 13:37
InstName : AG5975C
Operator : TD
Sample : 2012007-06
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 09 13:55:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

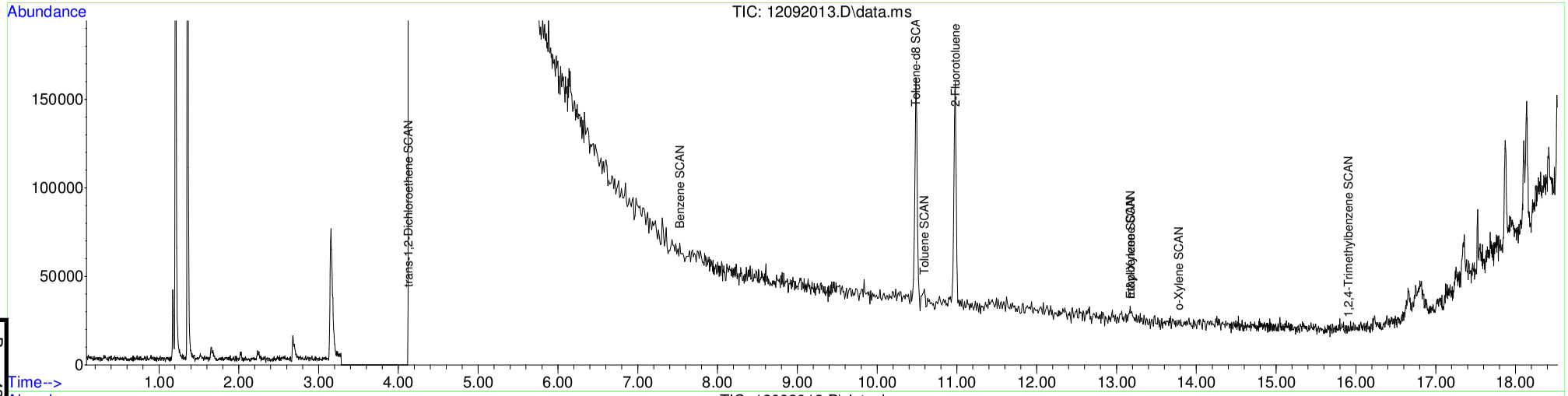
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	169925	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	147957	4495.77	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 89.92%			
Target Compounds						Qvalue
6] Chloroform	6.652	83	289	28.64	ug/L	89
8] Carbon tetrachloride	7.175	117	378	36.47	ug/L	85
9] Benzene	7.503	78	4689	163.99	ug/L	59
13] Toluene	10.582	91	8775	214.15	ug/L	98
18] Ethylbenzene	12.972	91	2487	47.52	ug/L	95
19] m&p-Xylene	13.163	91	6048	150.06	ug/L	96
20] o-Xylene	13.782	91	2015	46.55	ug/L	98
23] 1,2,4-Trimethylbenzene	15.905	105	2184	44.85	ug/L	88
25) 2-Fluorotoluene SCAN	10.980	109	100043	5186.74	ug/L	100
27) trans-1,2-Dichloroethe...	4.123	61	271	47.25	ug/L #	17
33) Benzene SCAN	7.526	78	5978	308.49	ug/L	96
36) Toluene-d8 SCAN	10.486	98	89207	4931.22	ug/L	98
37) Toluene SCAN	10.591	91	5848	262.56	ug/L	84
42) Ethylbenzene SCAN	13.177	91	4168	98.20	ug/L	95
43) m&p-Xylene SCAN	13.177	91	4168	98.20	ug/L	90
44) o-Xylene SCAN	13.773	91	1463	63.12	ug/L #	36
47) 1,2,4-Trimethylbenzene...	15.908	105	1065	42.63	ug/L	93

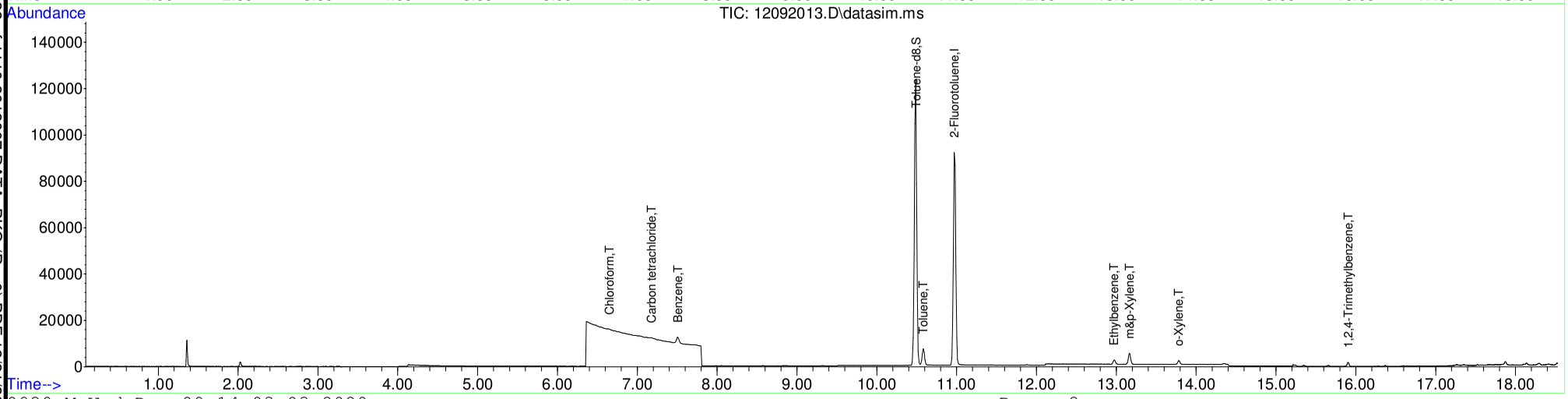
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092013.D
Acq On : 9 Dec 2020 13:37
InstName : AG5975C
Operator : TD
Sample : 2012007-06
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 09 13:55:56 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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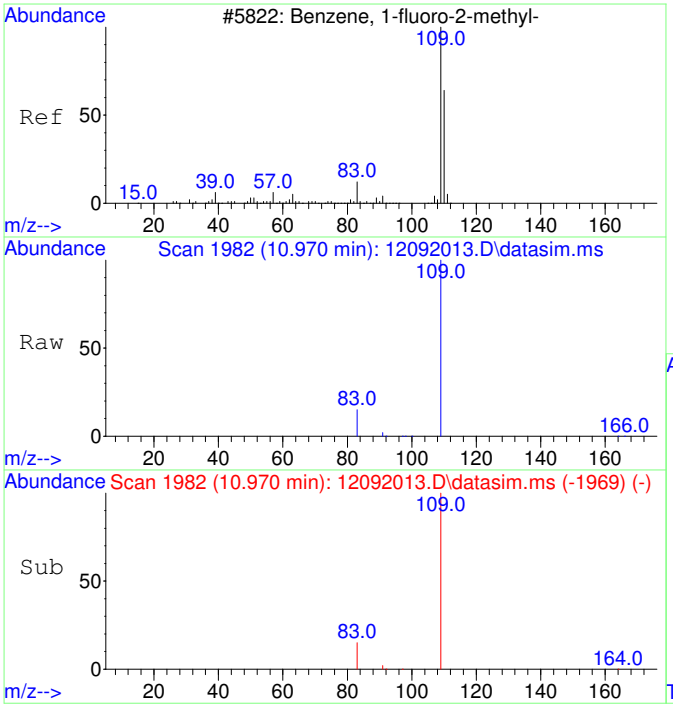
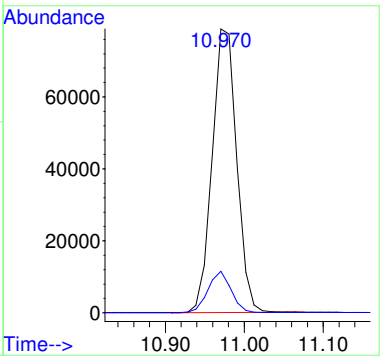
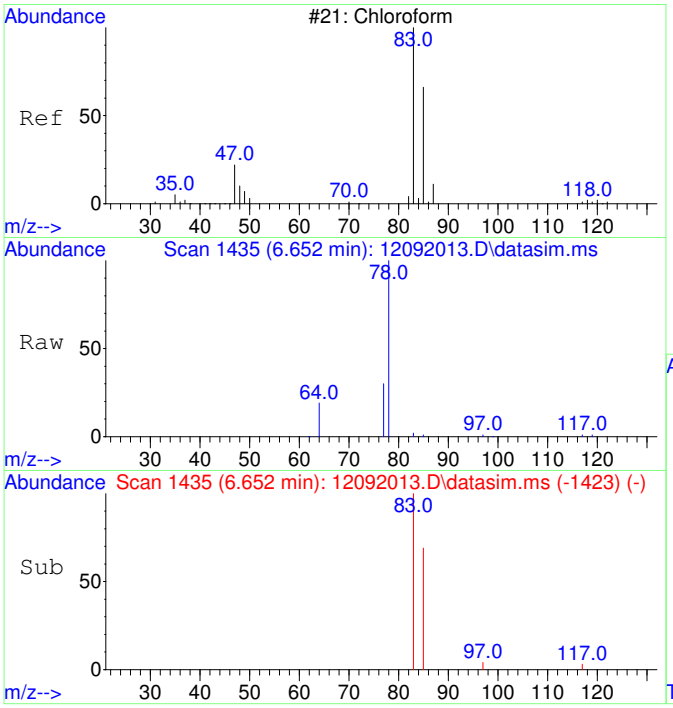


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion:109 Resp: 169925

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

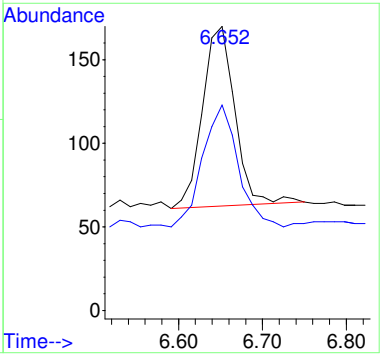


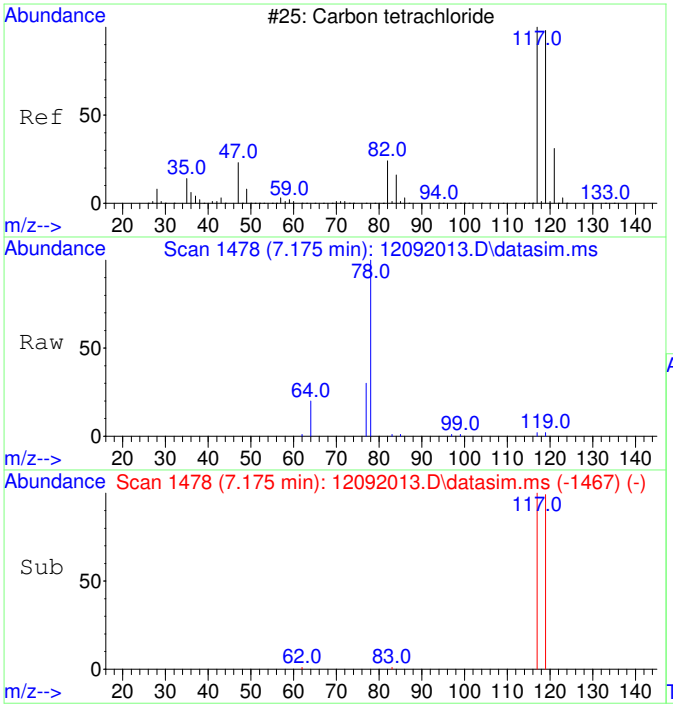


#6
Chloroform
Concen: 28.64 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 83 Resp: 289

Ion	Ratio	Lower	Upper
83	100		
85	74.0	35.1	95.1

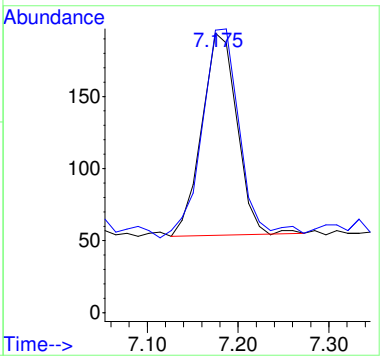


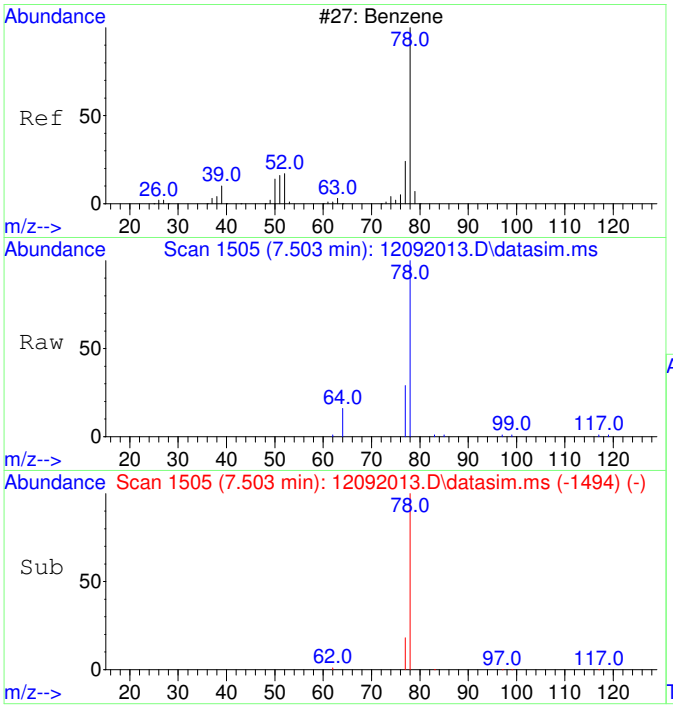


#8
Carbon tetrachloride
Concen: 36.47 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion:117 Resp: 378

Ion	Ratio	Lower	Upper
117	100		
119	111.1	66.4	126.4

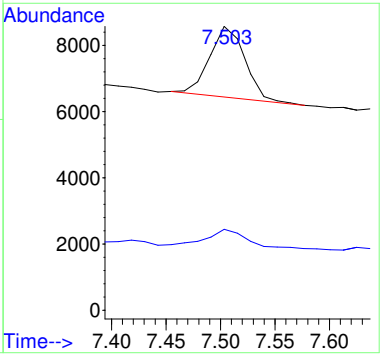


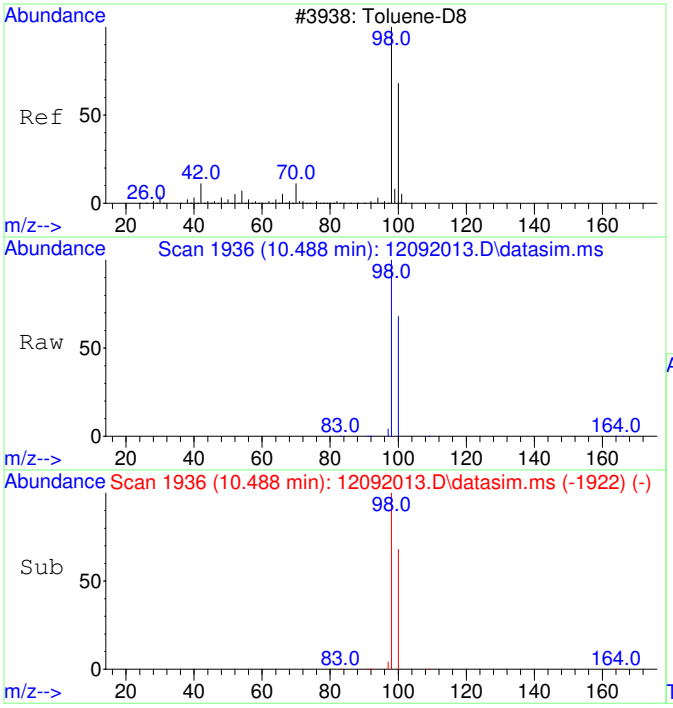


#9
Benzene
Concen: 163.99 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 78 Resp: 4689

Ion	Ratio	Lower	Upper
78	100		
77	43.0	0.0	53.2

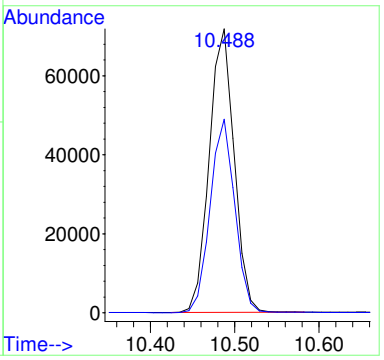


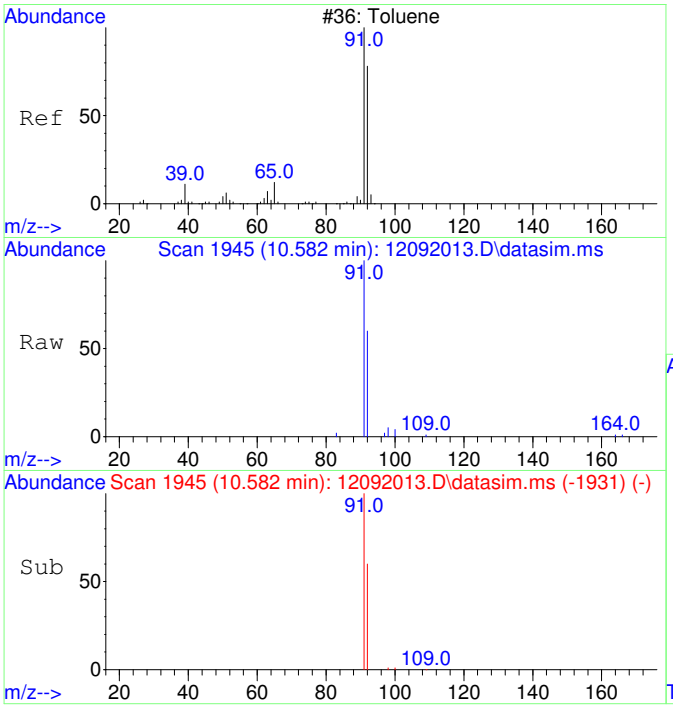


#12
Toluene-d8
Concen: 4495.77 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 98 Resp: 147957

Ion	Ratio	Lower	Upper
98	100		
100	67.1	37.1	97.1

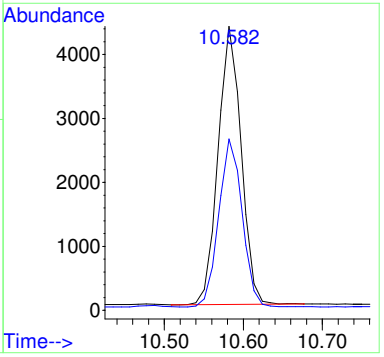


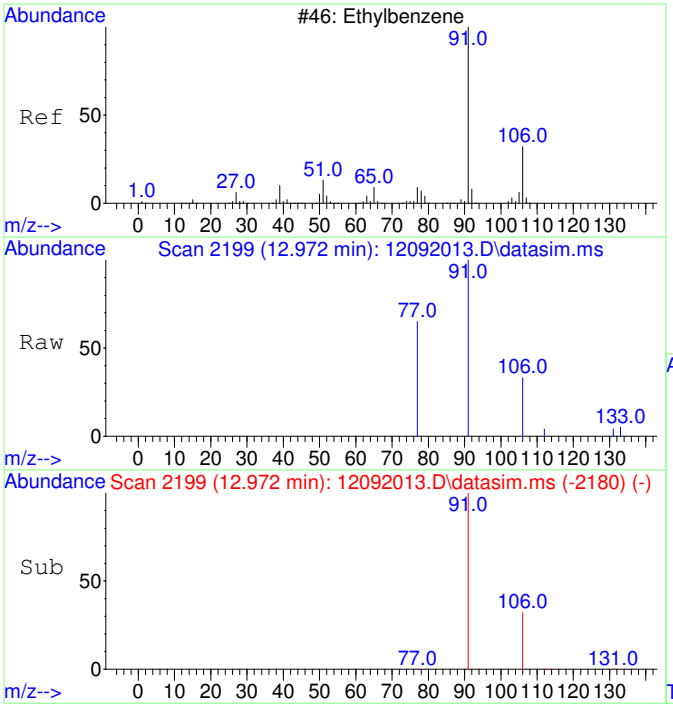


#13
Toluene
Concen: 214.15 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 8775

Ion	Ratio	Lower	Upper
91	100		
92	61.3	29.9	89.9

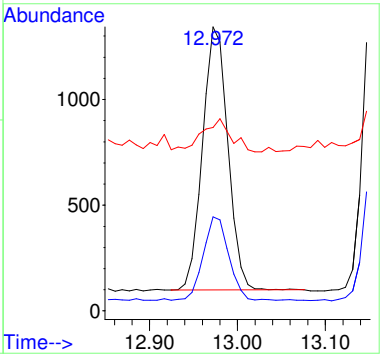


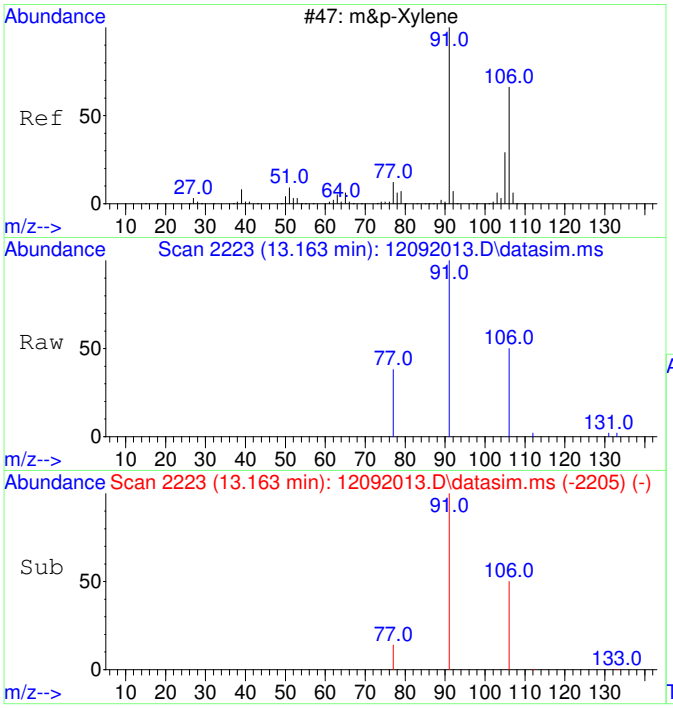


#18
Ethylbenzene
Concen: 47.52 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 2487

Ion	Ratio	Lower	Upper
91	100		
106	31.8	3.0	63.0
77	13.6	0.0	38.2

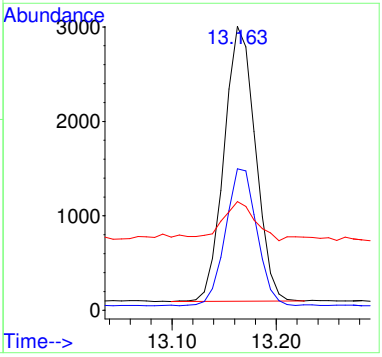


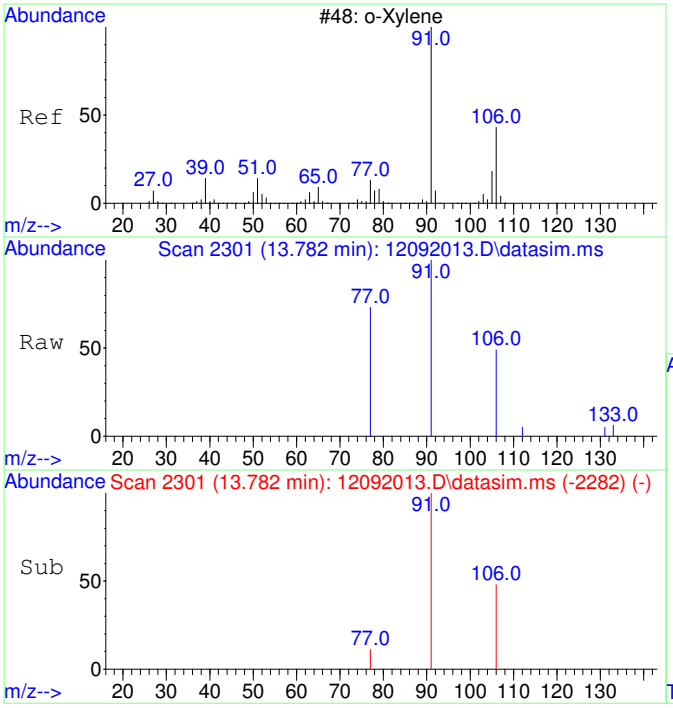


#19
m&p-Xylene
Concen: 150.06 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 6048

Ion	Ratio	Lower	Upper
91	100		
106	49.9	22.2	82.2
77	14.5	0.0	42.4

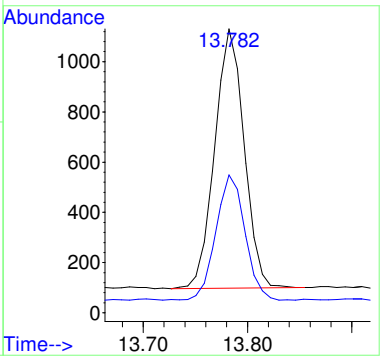


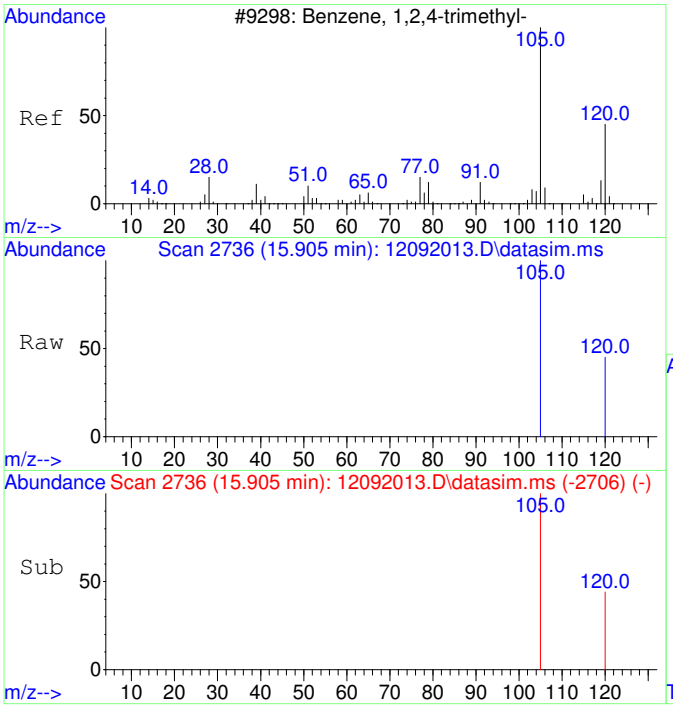


#20
o-Xylene
Concen: 46.55 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 2015

Ion	Ratio	Lower	Upper
91	100		
106	47.7	19.2	79.2

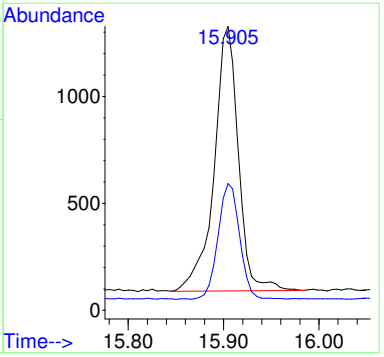


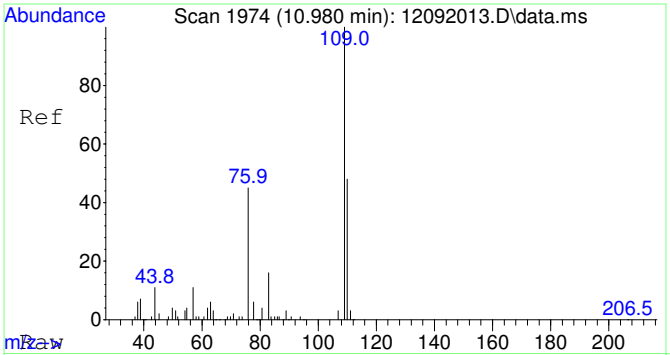


#23
1,2,4-Trimethylbenzene
Concen: 44.85 ug/L
RT: 15.905 min Scan# 2736
Delta R.T. -0.001 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion:105 Resp: 2184

Ion	Ratio	Lower	Upper
105	100		
120	39.1	17.2	77.2

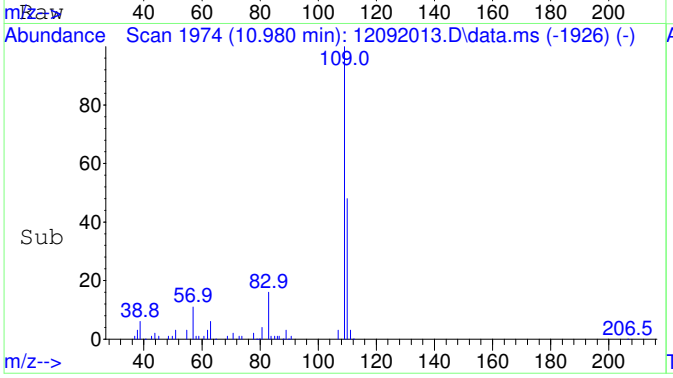


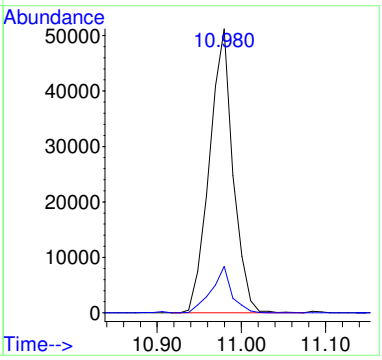


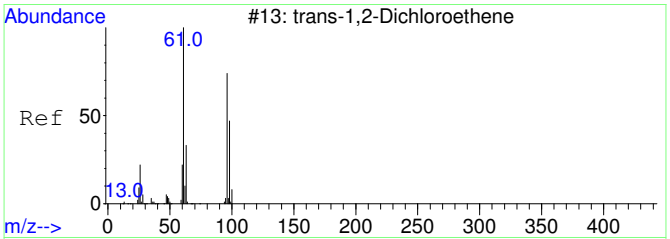
#25
2-Fluorotoluene SCAN
Concen: 5186.74 ug/L
RT: 10.980 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion:109 Resp: 100043

Ion	Ratio	Lower	Upper
109	100		
83	14.0	0.0	43.8



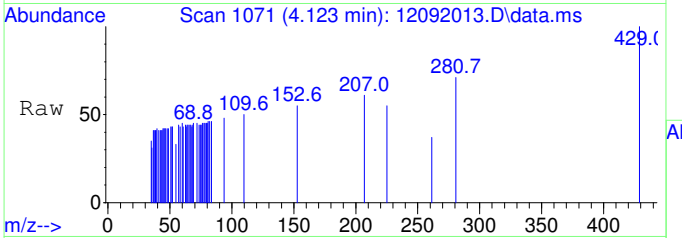


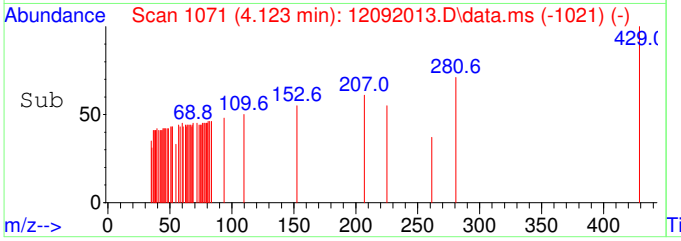


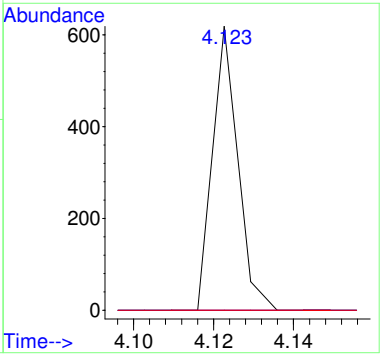
#27
trans-1,2-Dichloroethene SCAN
Concen: 47.25 ug/L
RT: 4.123 min Scan# 1071
Delta R.T. -0.258 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

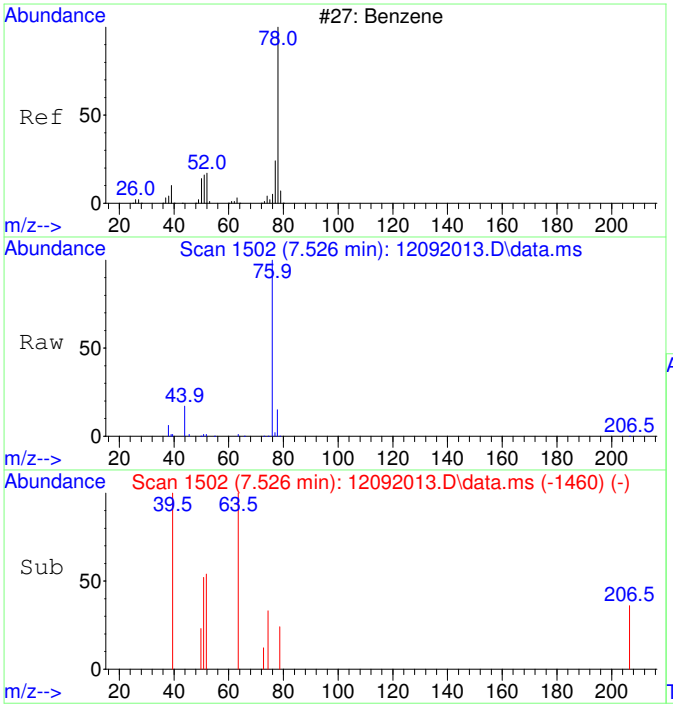
Tgt Ion: 61 Resp: 271

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





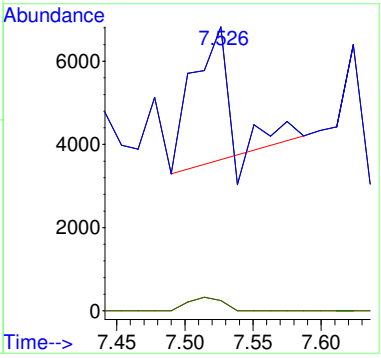


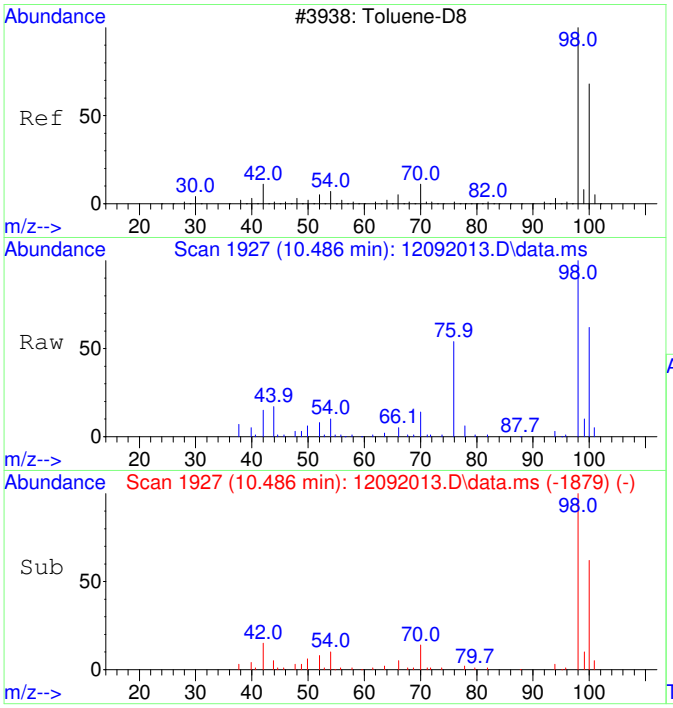


#33
Benzene SCAN
Concen: 308.49 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 78 Resp: 5978

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	9.6	0.0	47.9
51	9.6	0.0	44.1

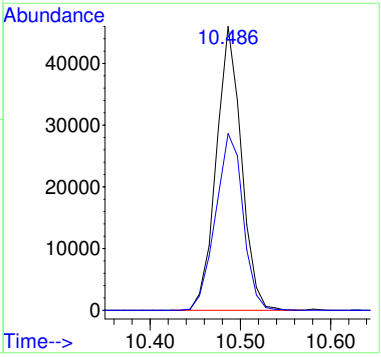


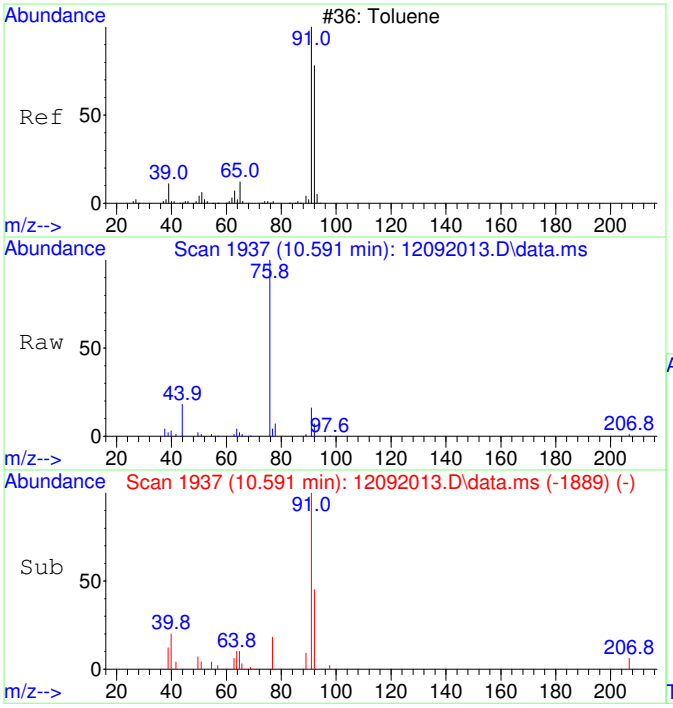


#36
Toluene-d8 SCAN
Concen: 4931.22 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 98 Resp: 89207

Ion	Ratio	Lower	Upper
98	100		
100	68.2	40.0	100.0

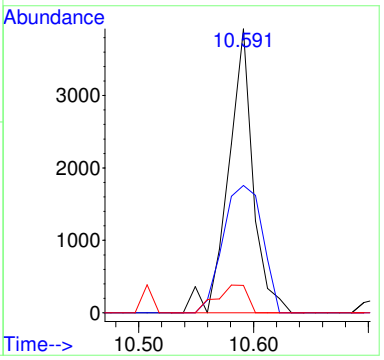


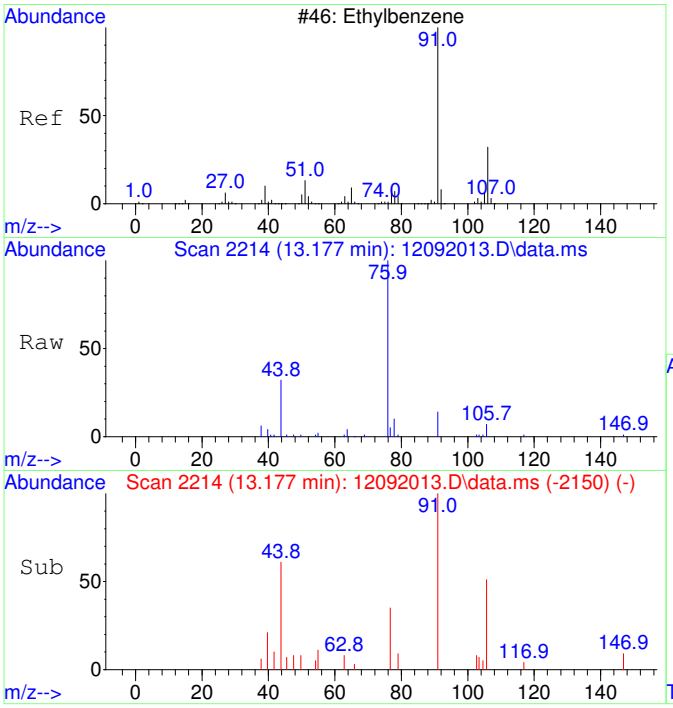


#37
Toluene SCAN
Concen: 262.56 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 5848

Ion	Ratio	Lower	Upper
91	100		
92	72.2	28.3	88.3
65	12.2	0.0	41.0

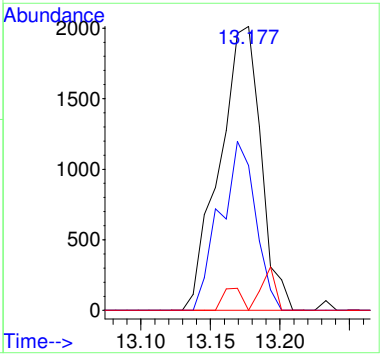


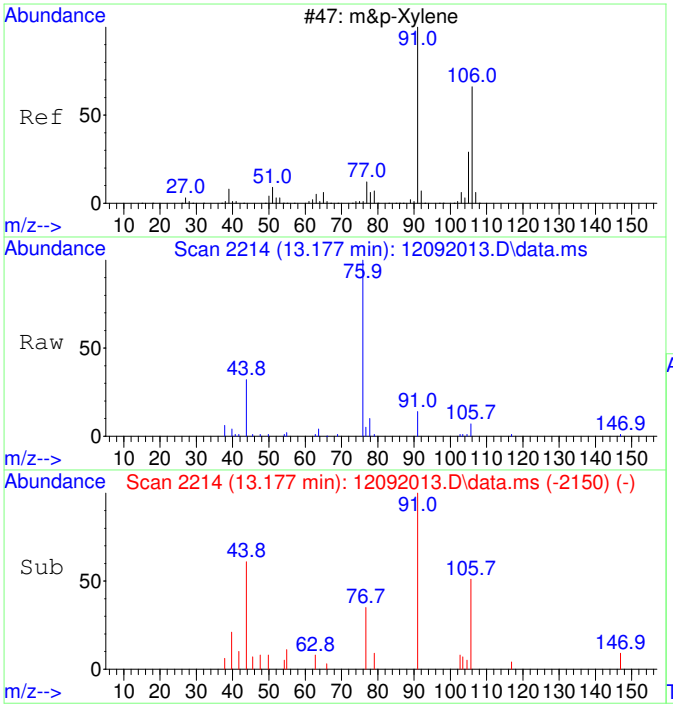


#42
Ethylbenzene SCAN
Concen: 98.20 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 4168

Ion	Ratio	Lower	Upper
91	100		
106	51.0	23.1	83.1
51	3.6	0.0	40.1

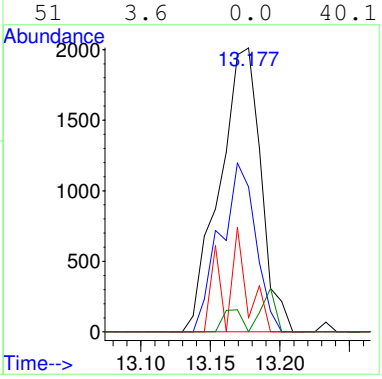


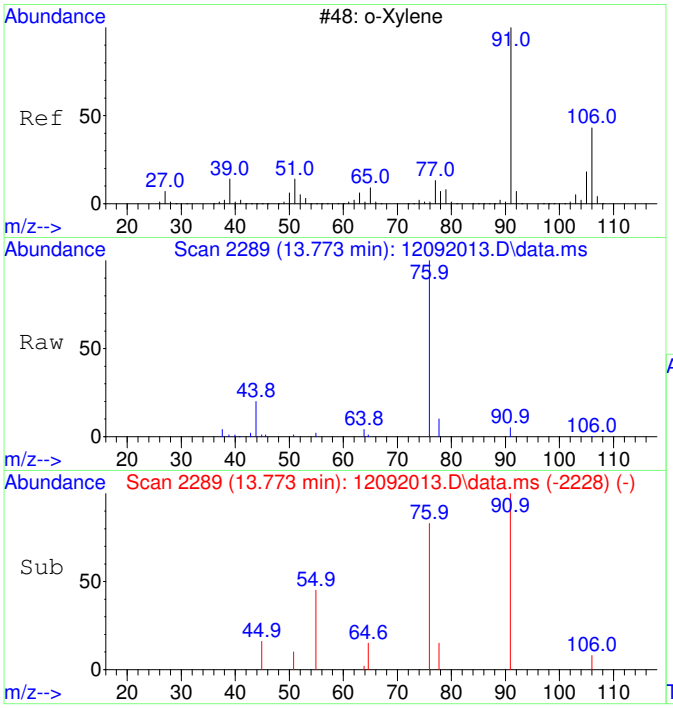


#43
m&p-Xylene SCAN
Concen: 98.20 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 4168

Ion	Ratio	Lower	Upper
91	100		
106	51.0	23.1	83.1
105	13.4	0.0	54.7
51	3.6	0.0	40.1

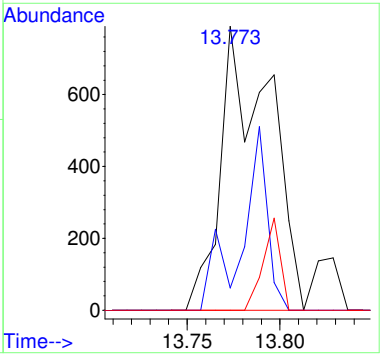


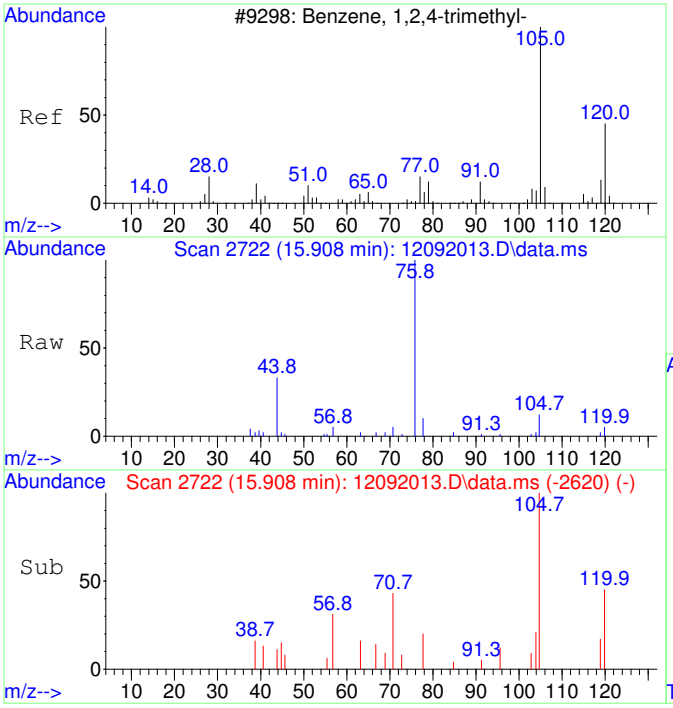


#44
o-Xylene SCAN
Concen: 63.12 ug/L
RT: 13.773 min Scan# 2289
Delta R.T. -0.016 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion: 91 Resp: 1463

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

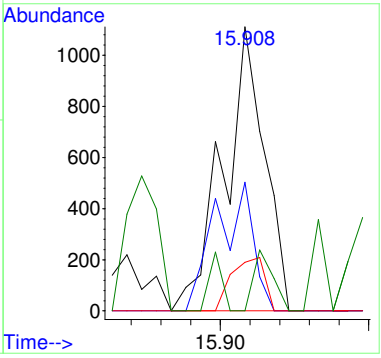




#47
1,2,4-Trimethylbenzene SCAN
Concen: 42.63 ug/L
RT: 15.908 min Scan# 2722
Delta R.T. 0.004 min
Lab File: 12092013.D
Acq: 9 Dec 2020 13:37

Tgt Ion:105 Resp: 1065

Ion	Ratio	Lower	Upper
105	100		
120	41.7	16.9	76.9
119	15.1	0.0	41.9
77	10.2	0.0	42.3



2012007-07

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092014.D
Acq On : 9 Dec 2020 14:00
InstName : AG5975C
Operator : TD
Sample : 2012007-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 10 05:55:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

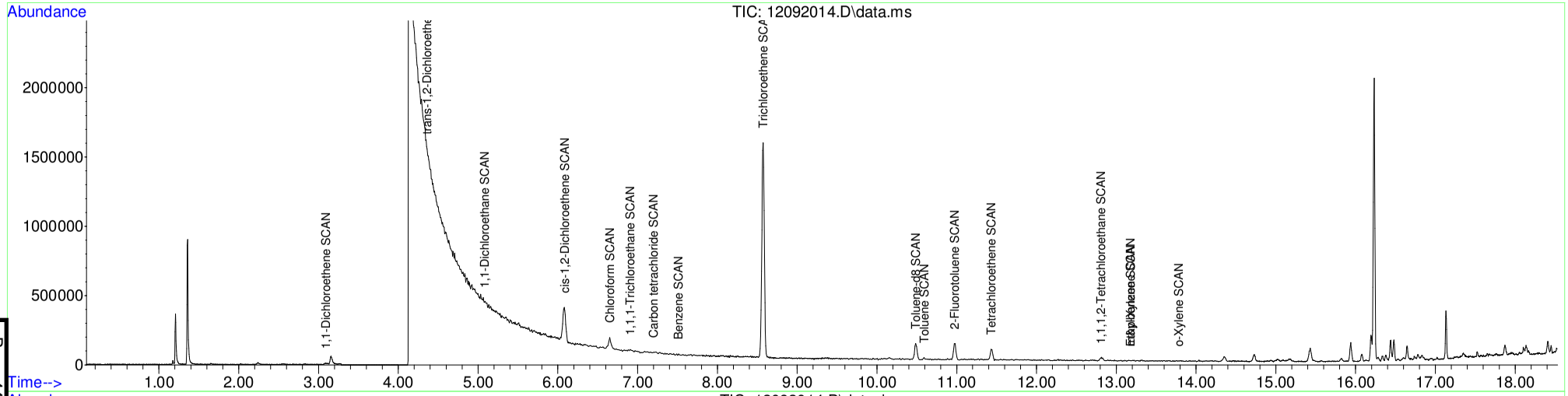
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	174227	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.488	98	147714	4377.56 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.55%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	14315	2072.12 ug/L	84
3] trans-1,2-Dichloroethene	4.350	61	19361	2223.03 ug/L	98
4] 1,1-Dichloroethane	5.073	63	16700	1605.44 ug/L	97
5] cis-1,2-Dichloroethene	6.075	61	322258	29912.24 ug/L OC	98
6] Chloroform	6.652	83	108940	10527.66 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	11512	1035.62 ug/L	99
8] Carbon tetrachloride	7.175	117	591	55.61 ug/L	100
9] Benzene	7.503	78	2461	83.94 ug/L	44
11] Trichloroethene	8.570	130	1072012	115813.13 ug/L OC	96
13] Toluene	10.582	91	9552	227.36 ug/L	100
15] Tetrachloroethene	11.432	166	53150	4061.53 ug/L	100
17] 1,1,1,2-Tetrachloroethane	12.813	131	974	85.50 ug/L #	1
19] m&p-Xylene	13.163	91	1792	43.37 ug/L	92
20] o-Xylene	13.782	91	1283	28.91 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	95728	4840.48 ug/L	98
26) 1,1-Dichloroethene SCAN	3.089	61	8491	1839.13 ug/L #	74
27) trans-1,2-Dichloroethe...	4.362	61	13910	2365.43 ug/L	76
28) 1,1-Dichloroethane SCAN	5.078	63	11217	1616.02 ug/L	69
29) cis-1,2-Dichloroethene...	6.080	61	228890	33543.99 ug/L #	77
30) Chloroform SCAN	6.651	83	69458	10913.39 ug/L	97
31) 1,1,1-Trichloroethane ...	6.906	97	5444	828.92 ug/L	98
32) Carbon tetrachloride SCAN	7.198	117	418	74.48 ug/L #	15
33) Benzene SCAN	7.514	78	13664	687.70 ug/L	94
35) Trichloroethene SCAN	8.574	130	558454	128900.09 ug/L	83
36) Toluene-d8 SCAN	10.486	98	87814	4734.35 ug/L	98
37) Toluene SCAN	10.591	91	6311	276.35 ug/L	94
39) Tetrachloroethene SCAN	11.431	166	24594	4787.11 ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.804	131	581	102.67 ug/L #	28
42) Ethylbenzene SCAN	13.177	91	1061	24.38 ug/L #	50
43) m&p-Xylene SCAN	13.177	91	1061	24.38 ug/L #	57
44) o-Xylene SCAN	13.781	91	1008	42.42 ug/L #	46

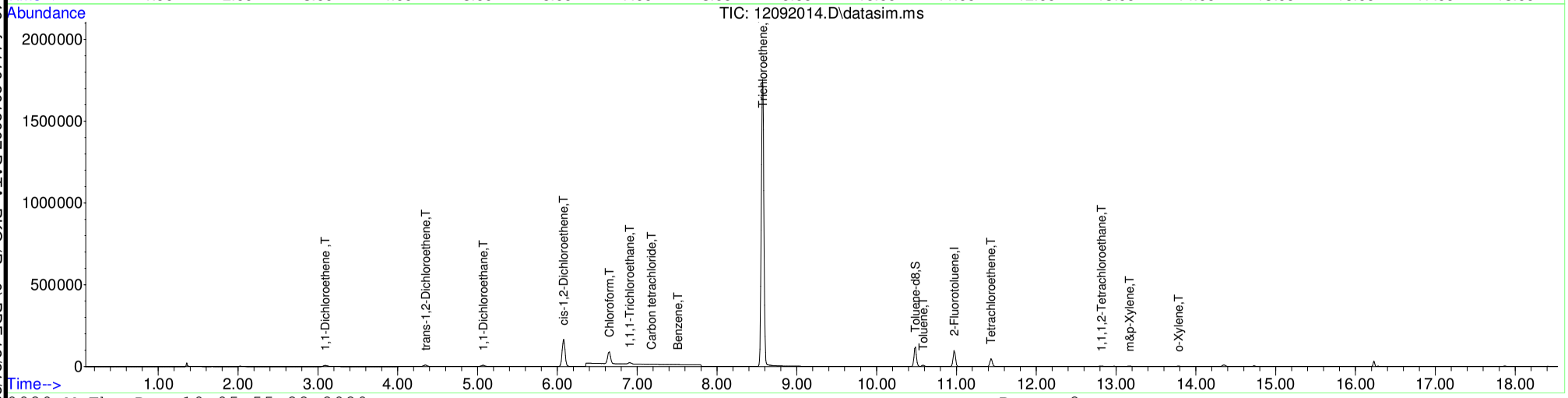
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092014.D
Acq On : 9 Dec 2020 14:00
InstName : AG5975C
Operator : TD
Sample : 2012007-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 10 05:55:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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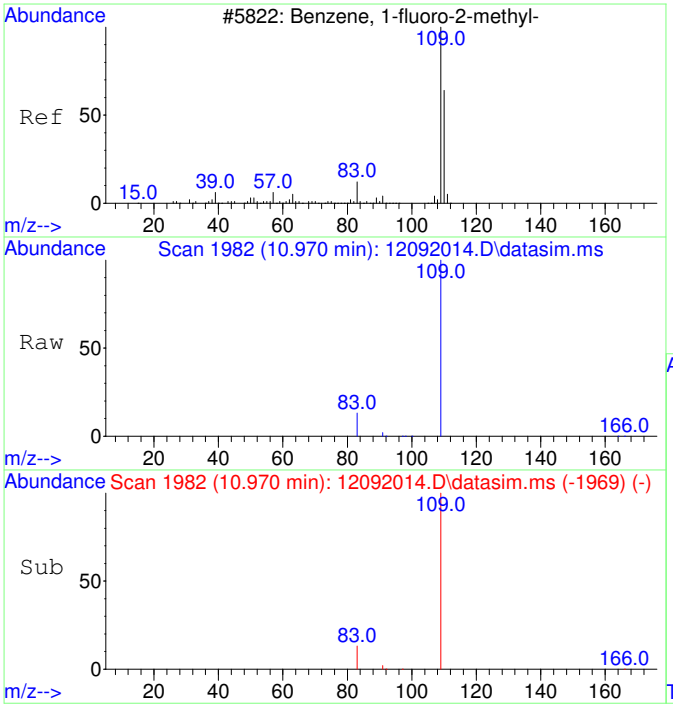
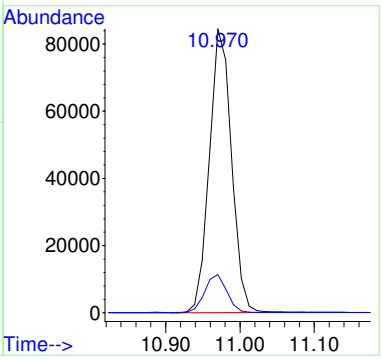
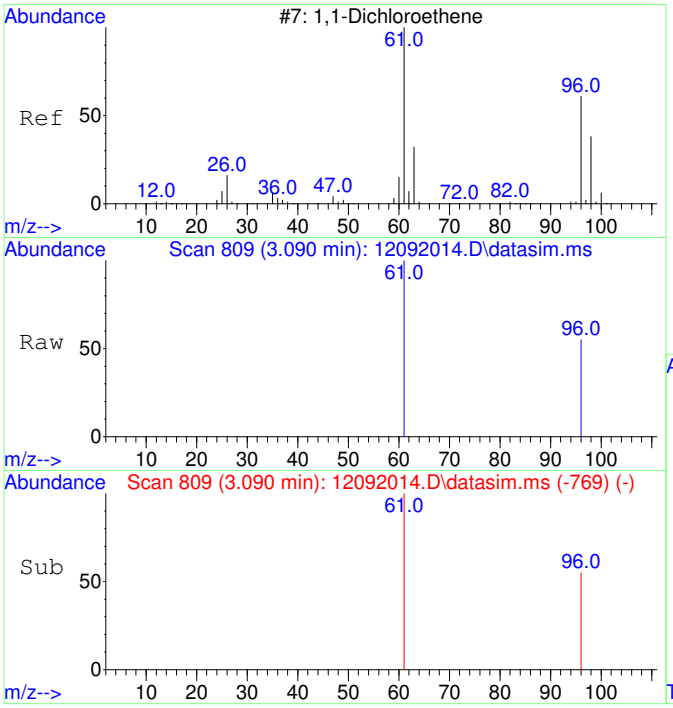


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:109 Resp: 174227

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

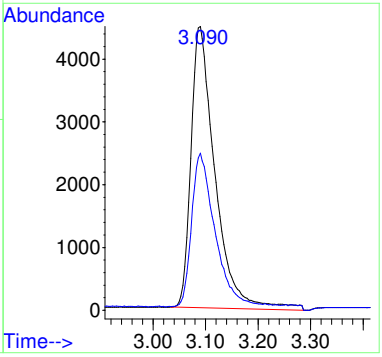




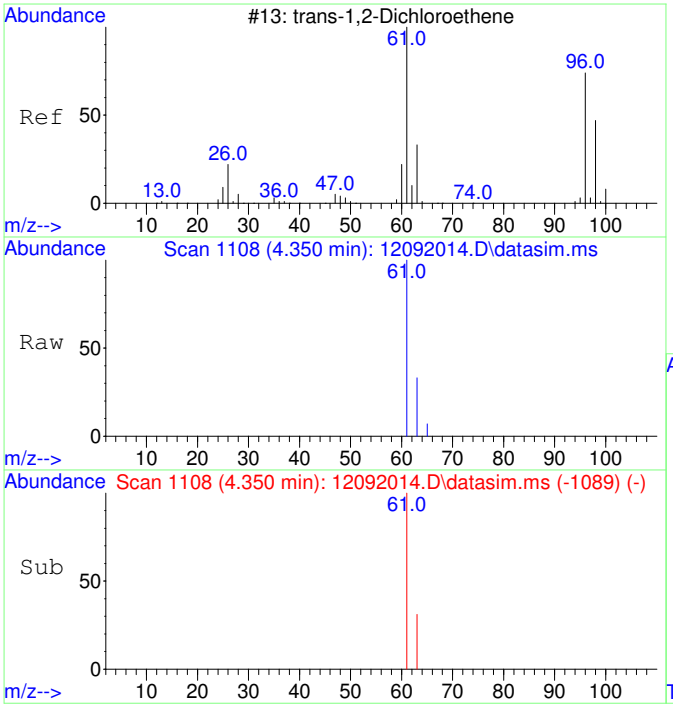
#2
1,1-Dichloroethene
Concen: 2072.12 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 14315

Ion	Ratio	Lower	Upper
61	100		
96	54.7	37.2	97.2



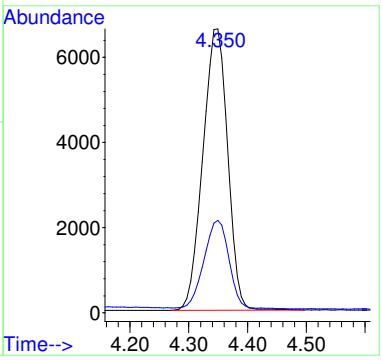
Before MI:
IMPROPER
BASELINE

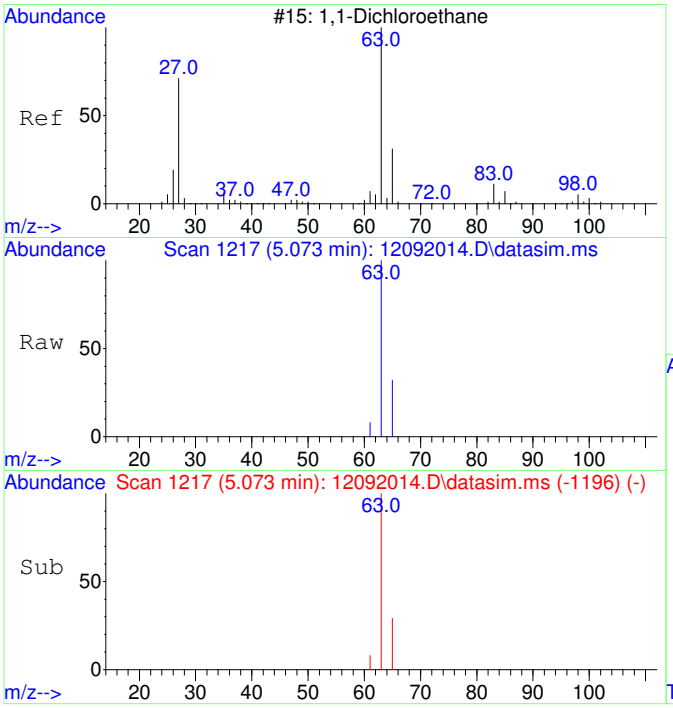


#3
trans-1,2-Dichloroethene
Concen: 2223.03 ug/L
RT: 4.350 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 19361

Ion	Ratio	Lower	Upper
61	100		
63	31.1	2.4	62.4

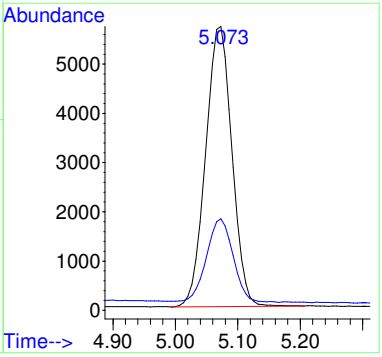


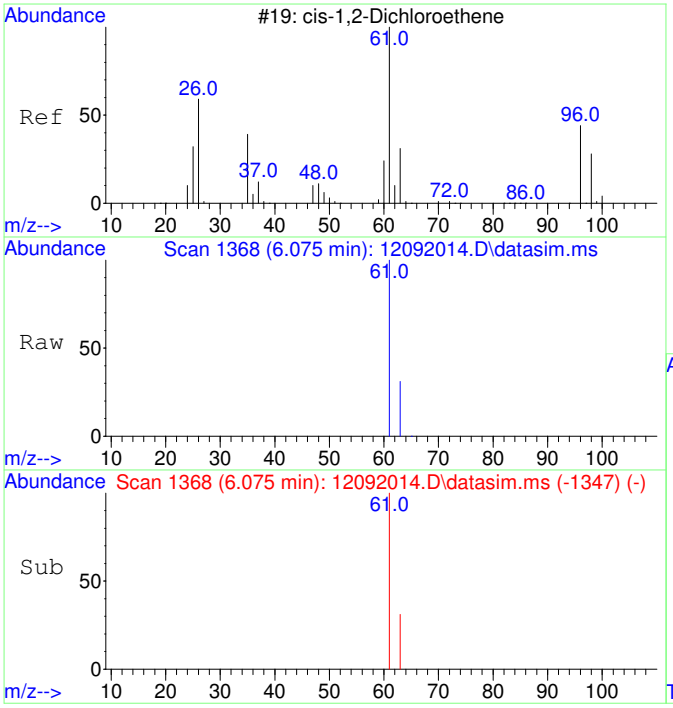


#4
1,1-Dichloroethane
Concen: 1605.44 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 63 Resp: 16700

Ion	Ratio	Lower	Upper
63	100		
65	30.2	1.8	61.8

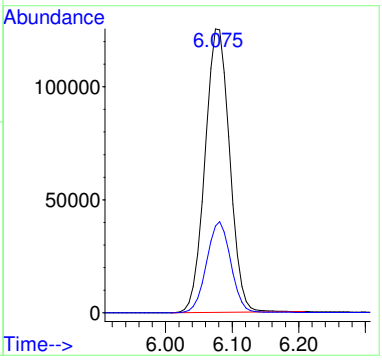


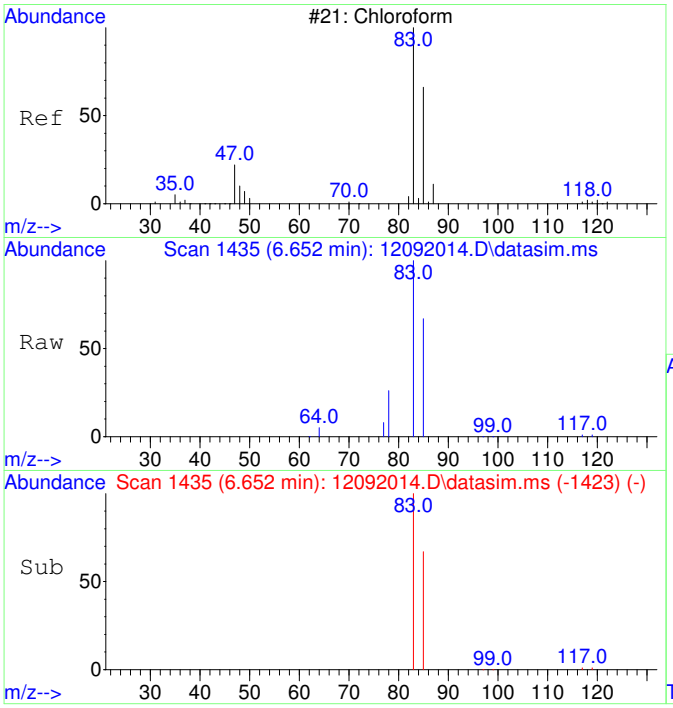


#5
cis-1,2-Dichloroethene
Concen: 29912.24 ug/L
RT: 6.075 min Scan# 1368
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 322258

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

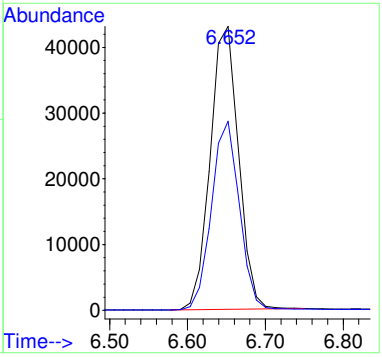


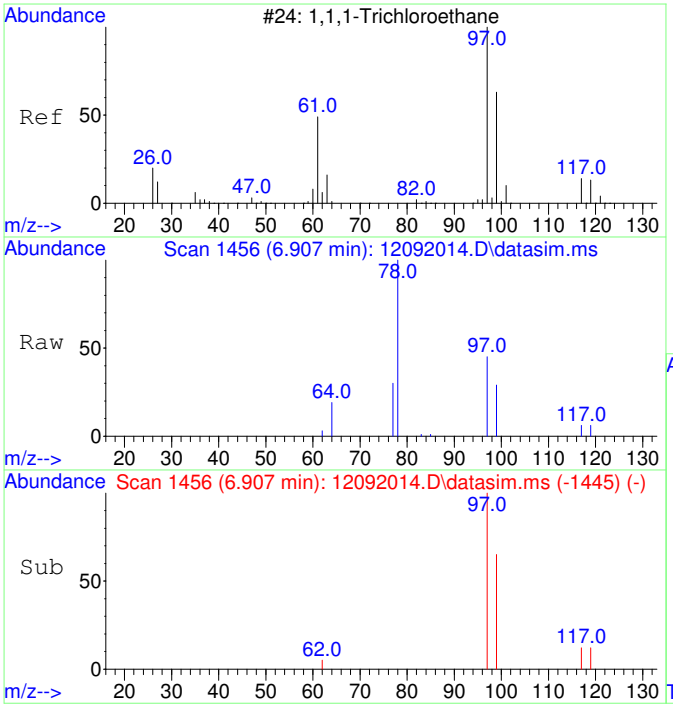


#6
Chloroform
Concen: 10527.66 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 83 Resp: 108940

Ion	Ratio	Lower	Upper
83	100		
85	65.1	35.1	95.1

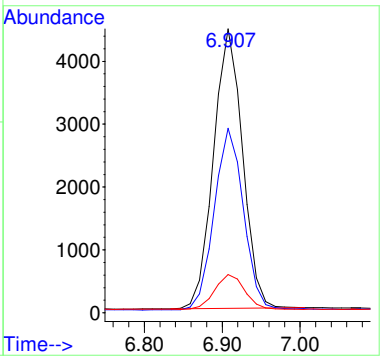


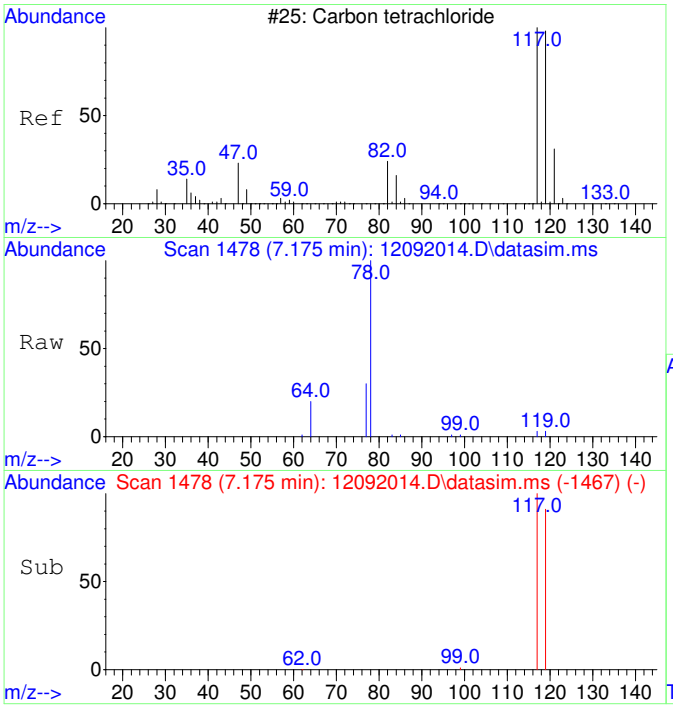


#7
1,1,1-Trichloroethane
Concen: 1035.62 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 97 Resp: 11512

Ion	Ratio	Lower	Upper
97	100		
99	65.2	34.6	94.6
117	12.8	0.0	43.2

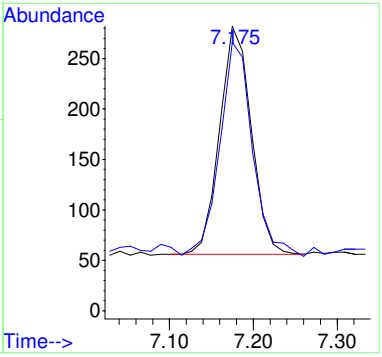


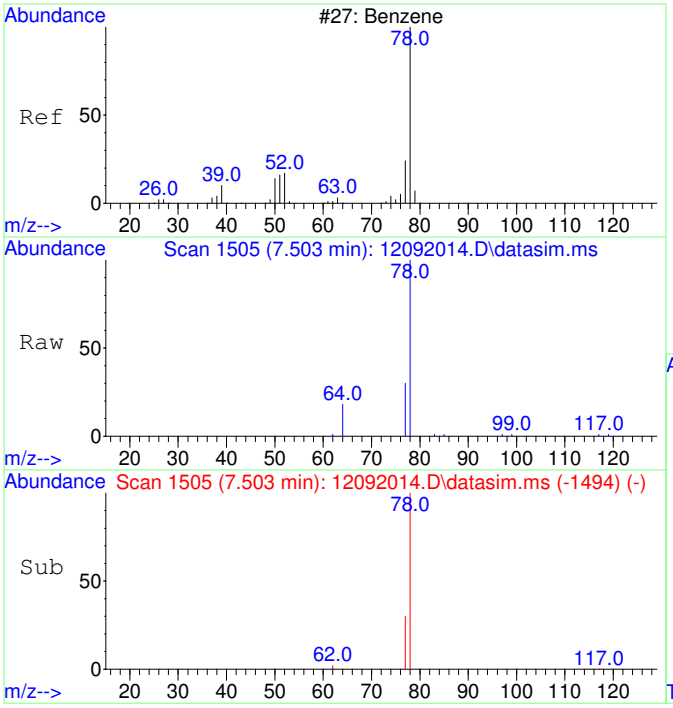


#8
Carbon tetrachloride
Concen: 55.61 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:117 Resp: 591

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

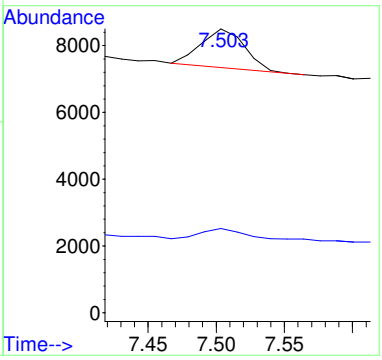


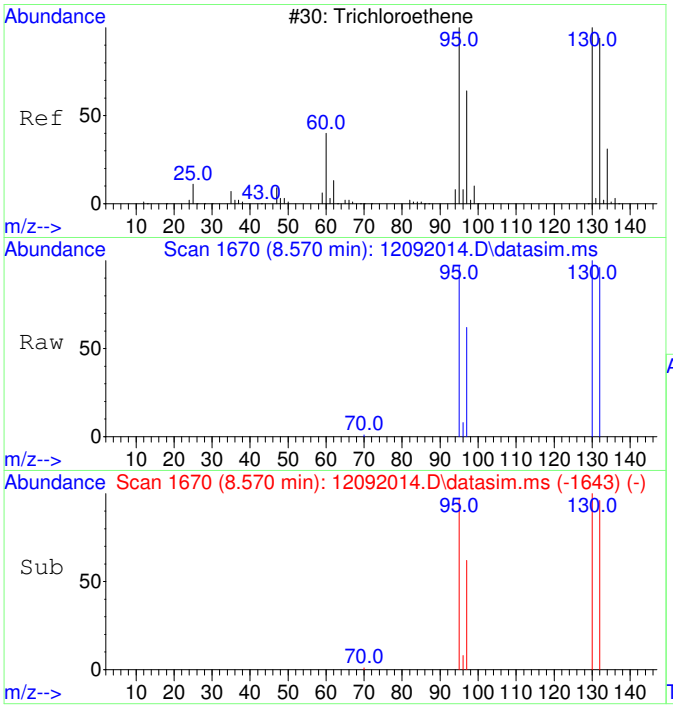


#9
Benzene
Concen: 83.94 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 78 Resp: 2461

Ion	Ratio	Lower	Upper
78	100		
77	50.6	0.0	53.2

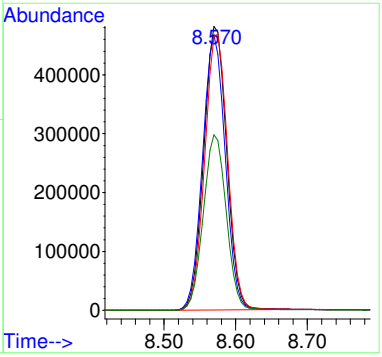


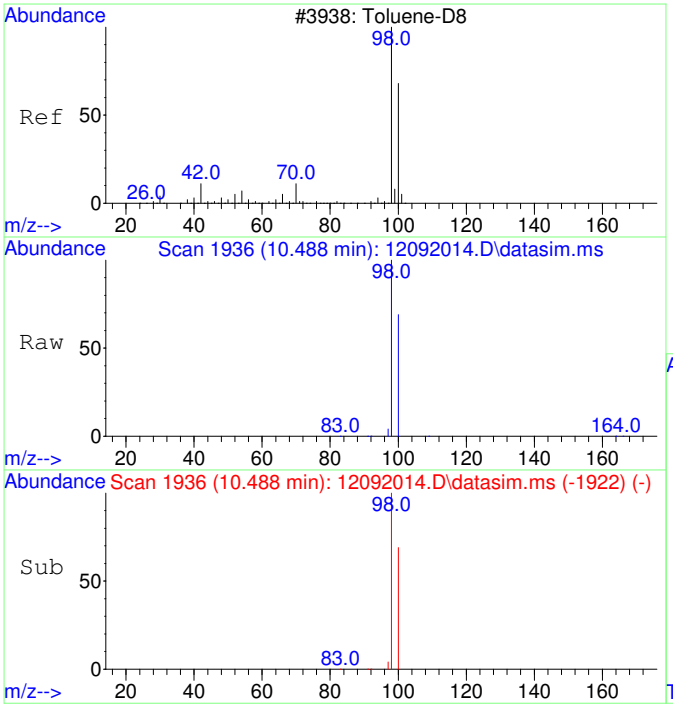


#11
Trichloroethene
Concen: 115813.13 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:130 Resp: 1072012

Ion	Ratio	Lower	Upper
130	100		
95	95.9	60.7	120.7
132	97.2	76.0	116.0
97	61.7	38.6	78.6

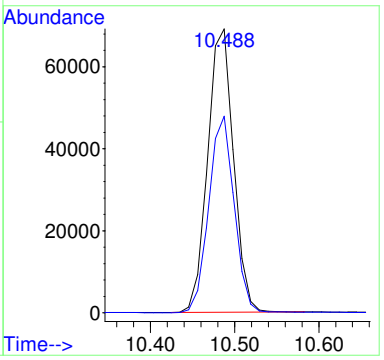


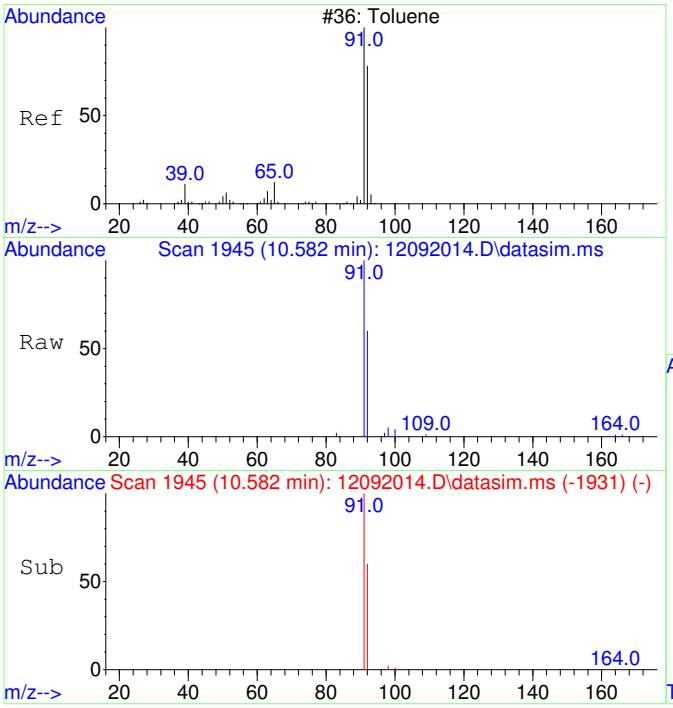


#12
Toluene-d8
Concen: 4377.56 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 98 Resp: 147714

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

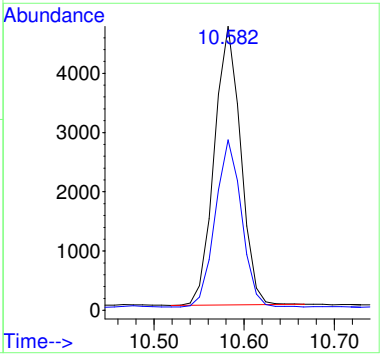


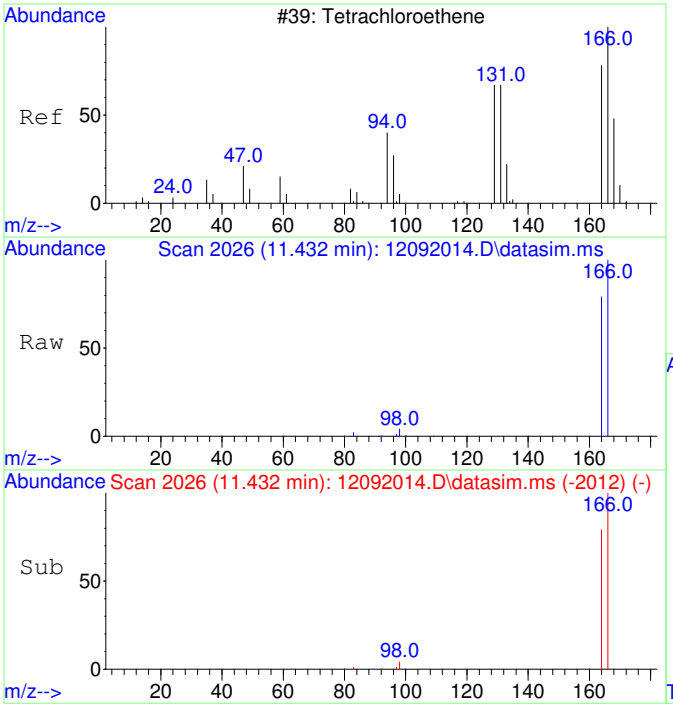


#13
Toluene
Concen: 227.36 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 9552

Ion	Ratio	Lower	Upper
91	100		
92	59.9	29.9	89.9

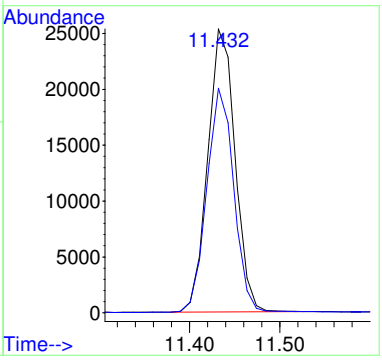


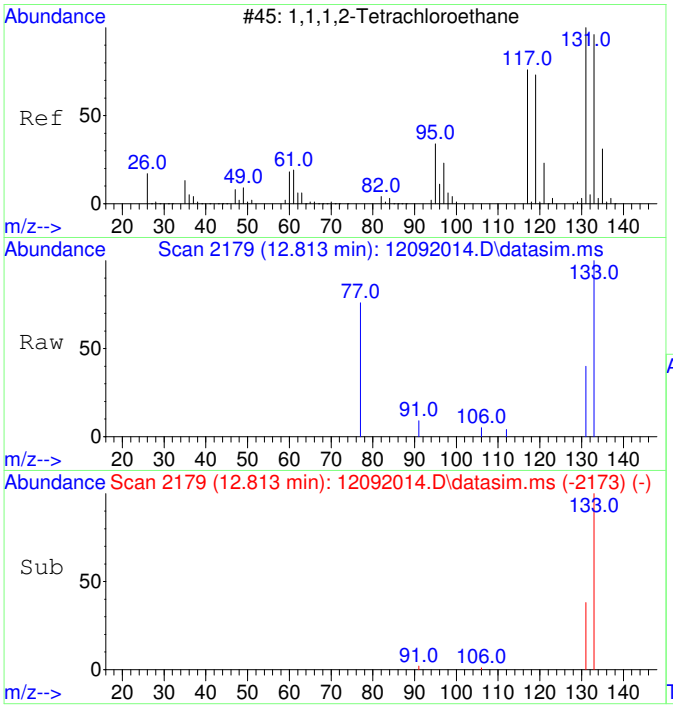


#15
Tetrachloroethene
Concen: 4061.53 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:166 Resp: 53150

Ion	Ratio	Lower	Upper
166	100		
164	77.9	47.8	107.8

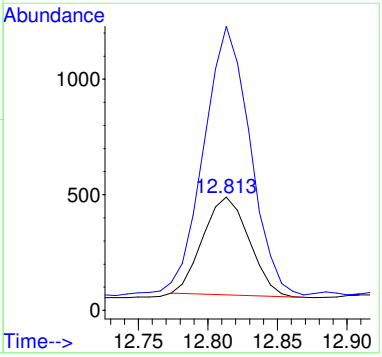


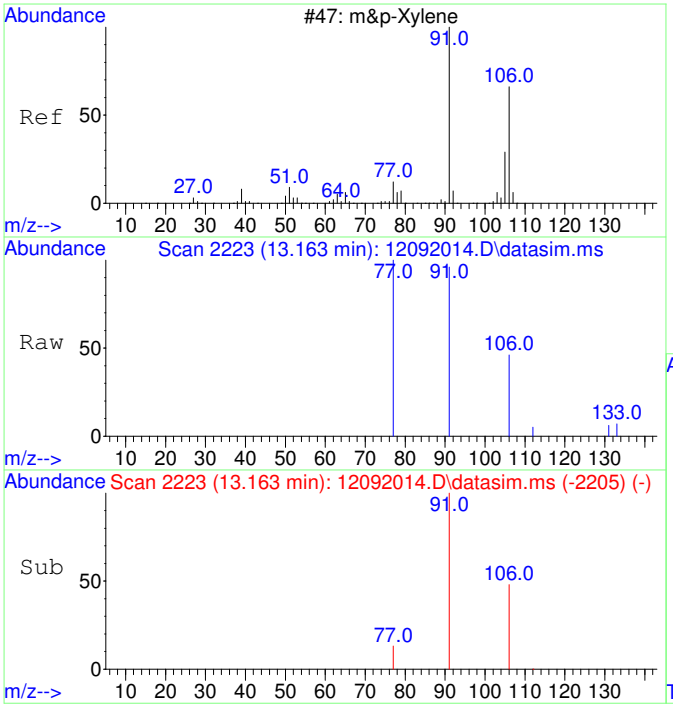


#17
1,1,1,2-Tetrachloroethane
Concen: 85.50 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:131 Resp: 974

Ion	Ratio	Lower	Upper
131	100		
133	273.6	66.3	126.3#

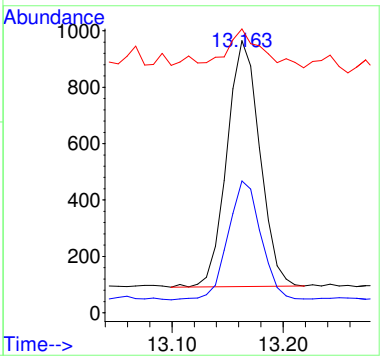


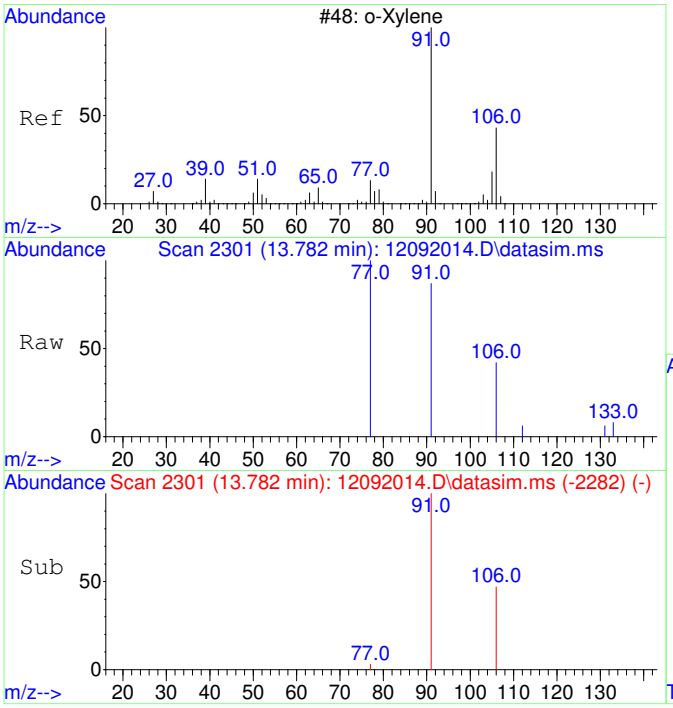


#19
m&p-Xylene
Concen: 43.37 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1792

Ion	Ratio	Lower	Upper
91	100		
106	47.8	22.2	82.2
77	18.3	0.0	42.4

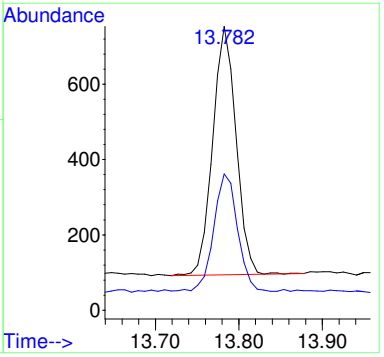


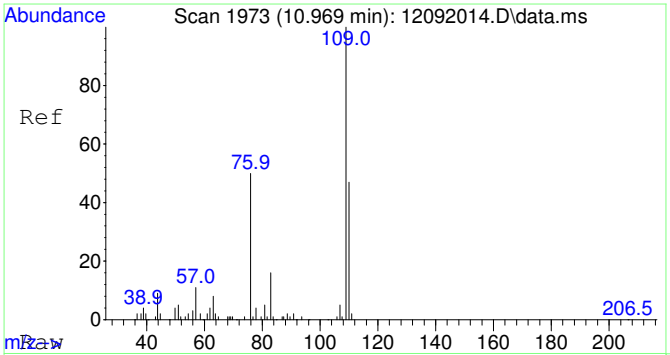


#20
o-Xylene
Concen: 28.91 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1283

Ion	Ratio	Lower	Upper
91	100		
106	49.3	19.2	79.2

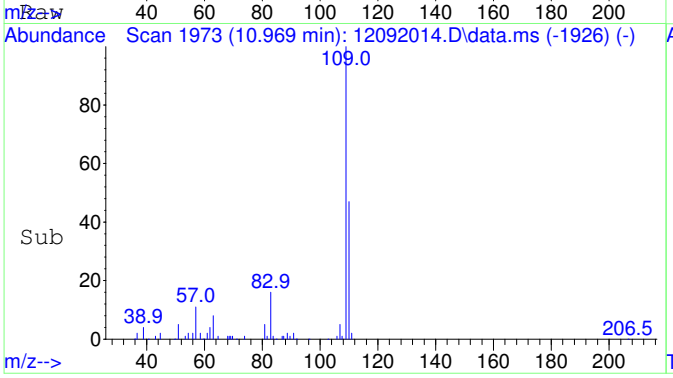


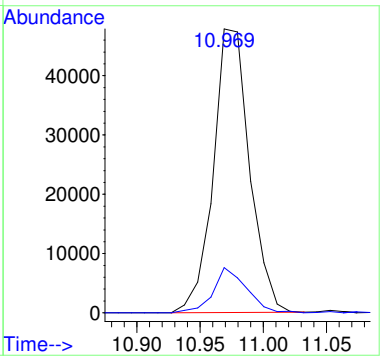


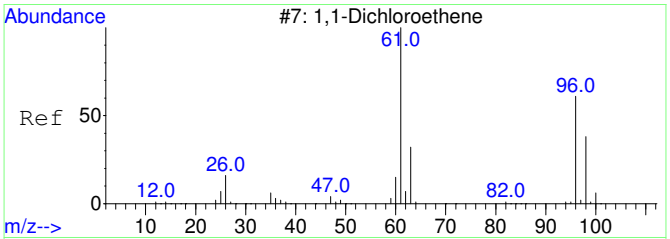
#25
2-Fluorotoluene SCAN
Concen: 4840.48 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:109 Resp: 95728

Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8



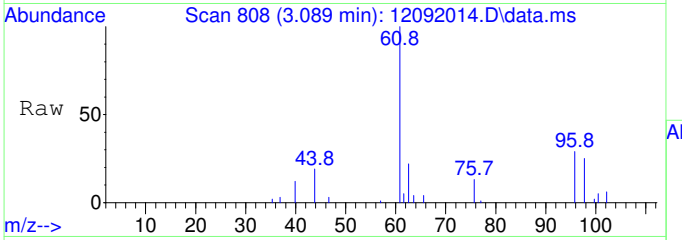


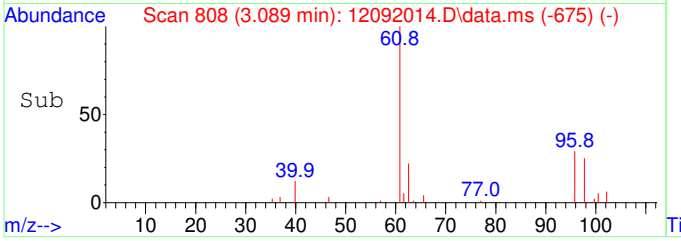


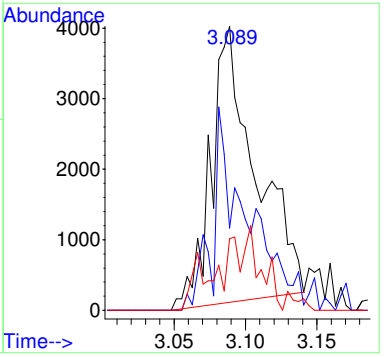
#26
1,1-Dichloroethene SCAN
Concen: 1839.13 ug/L
RT: 3.089 min Scan# 808
Delta R.T. -0.007 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

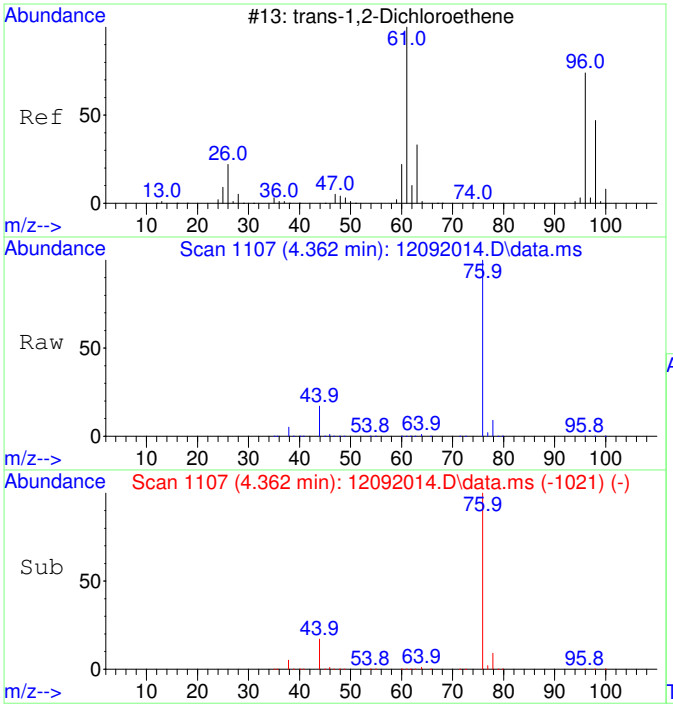
Tgt Ion: 61 Resp: 8491

Ion	Ratio	Lower	Upper
61	100		
96	60.1	33.1	93.1
98	3.2	11.2	71.2#





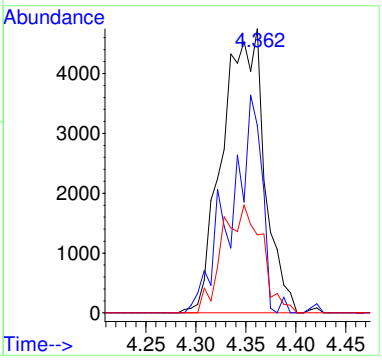


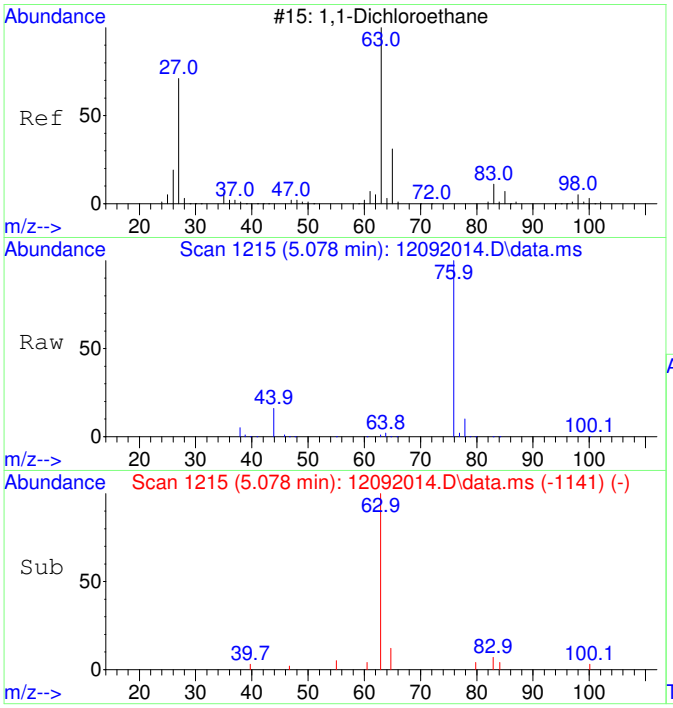


#27
trans-1,2-Dichloroethene SCAN
Concen: 2365.43 ug/L
RT: 4.362 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 13910

Ion	Ratio	Lower	Upper
61	100		
96	56.1	49.0	109.0
98	35.9	20.5	80.5

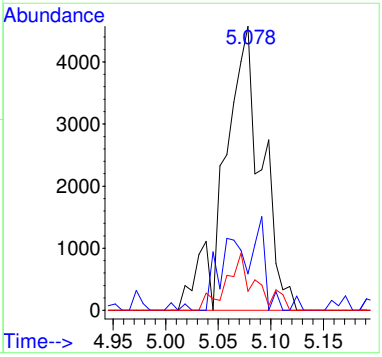


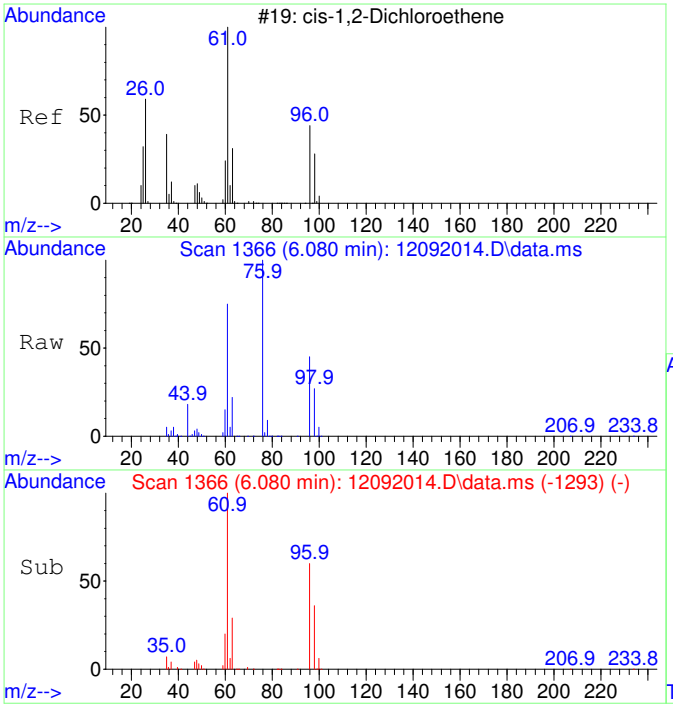


#28
1,1-Dichloroethane SCAN
Concen: 1616.02 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 63 Resp: 11217

Ion	Ratio	Lower	Upper
63	100		
65	6.0	1.3	61.3
83	16.0	0.0	45.9

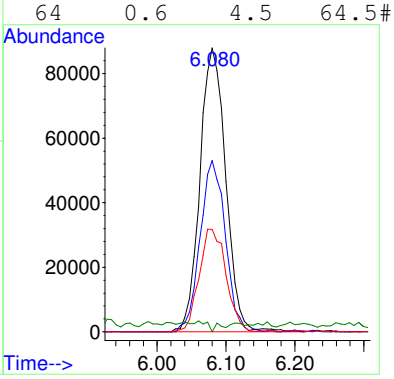


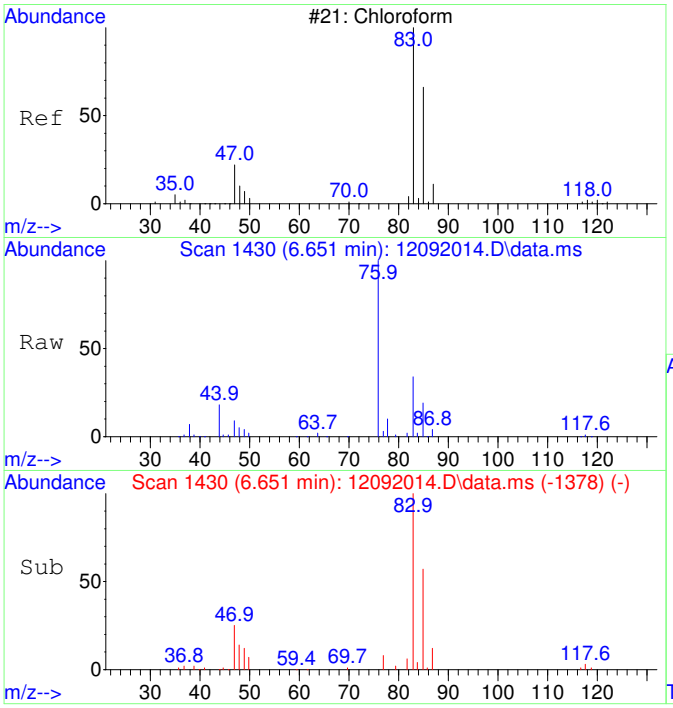


#29
cis-1,2-Dichloroethene SCAN
Concen: 33543.99 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 228890

Ion	Ratio	Lower	Upper
61	100		
96	58.7	39.9	99.9
98	37.5	13.5	73.5
64	0.6	4.5	64.5#

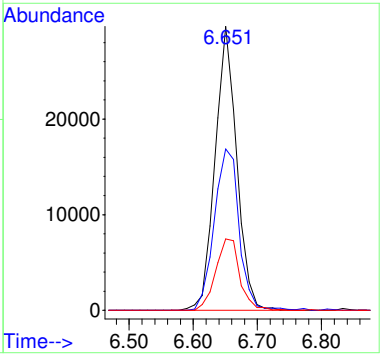


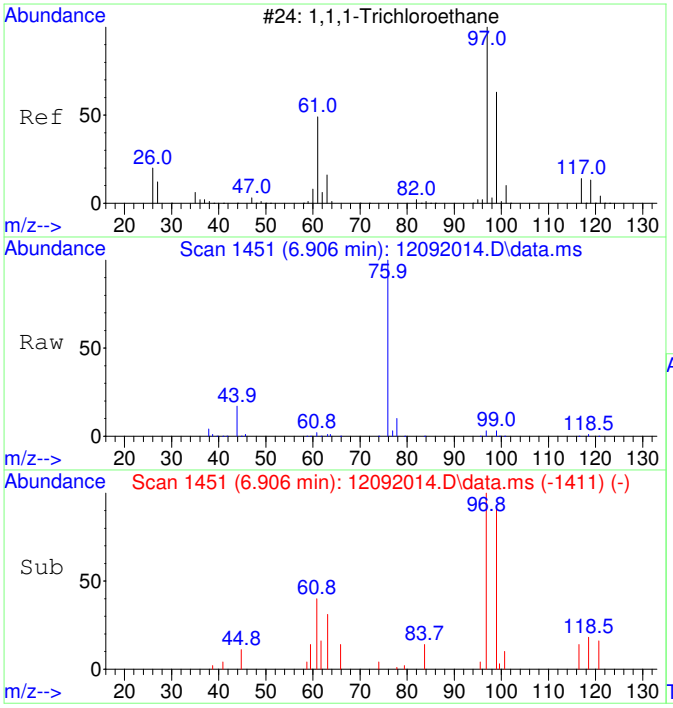


#30
Chloroform SCAN
Concen: 10913.39 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 83 Resp: 69458

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.6	94.6
47	28.0	0.0	53.4

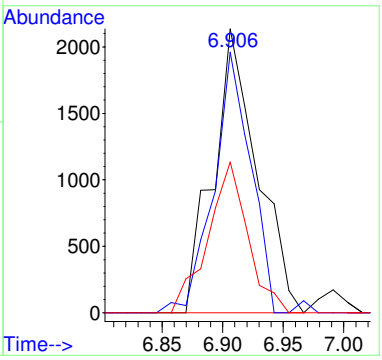


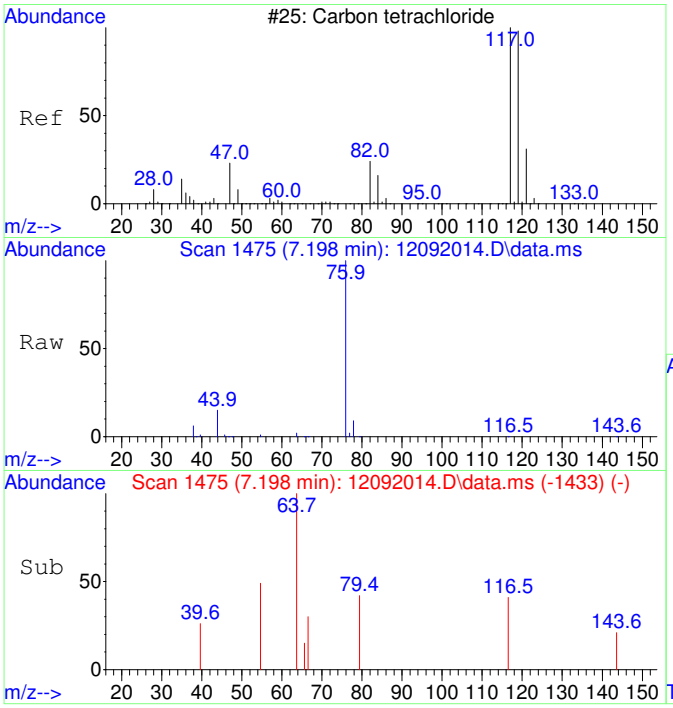


#31
1,1,1-Trichloroethane SCAN
Concen: 828.92 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 97 Resp: 5444

Ion	Ratio	Lower	Upper
97	100		
99	76.8	43.6	103.6
61	47.8	18.0	78.0

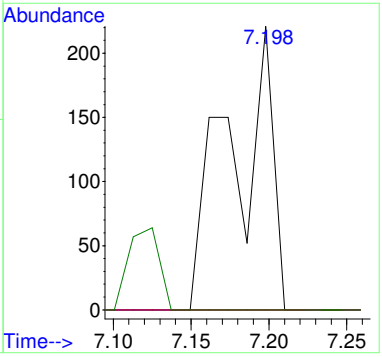


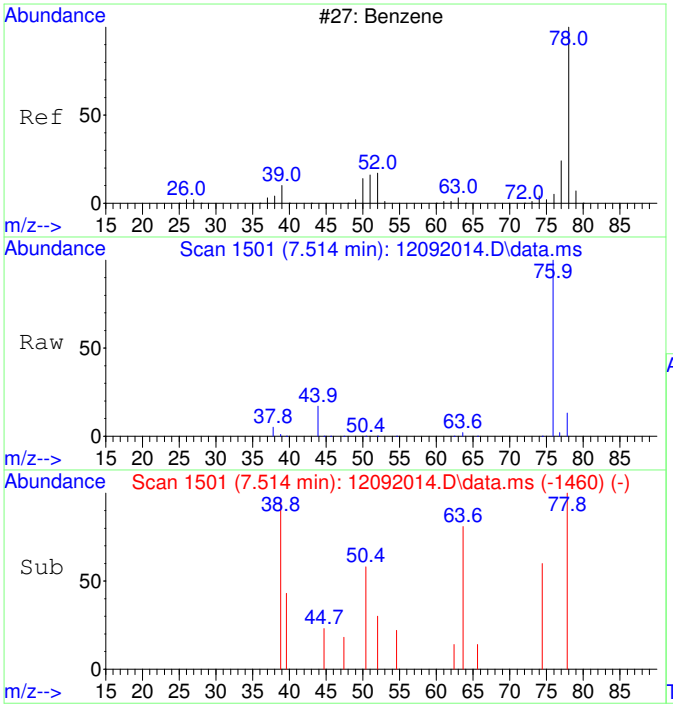


#32
Carbon tetrachloride SCAN
Concen: 74.48 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:117 Resp: 418

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

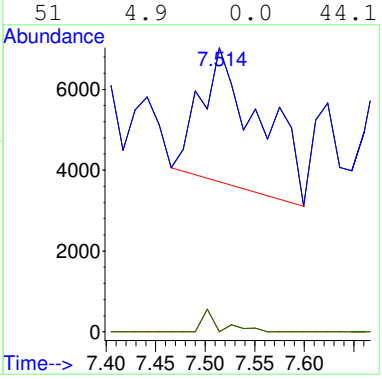


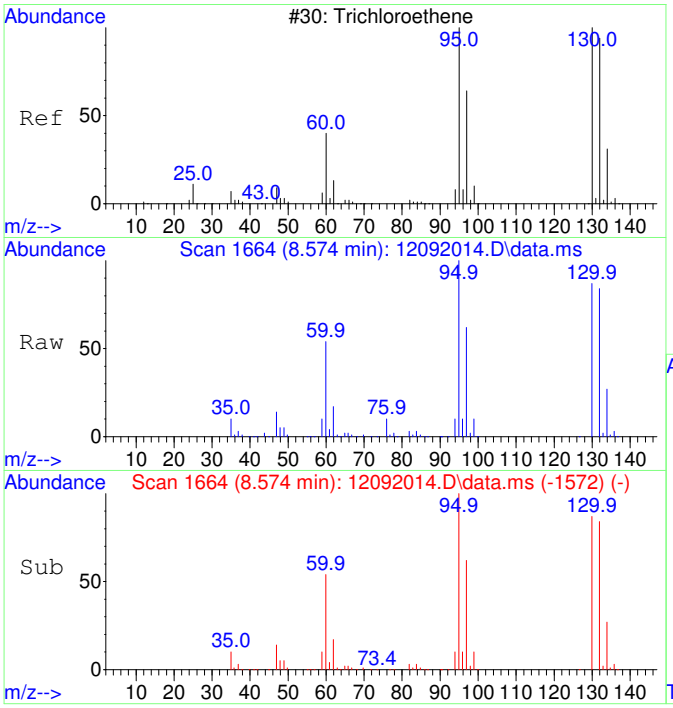


#33
Benzene SCAN
Concen: 687.70 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 78 Resp: 13664

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.9	0.0	47.9
51	4.9	0.0	44.1

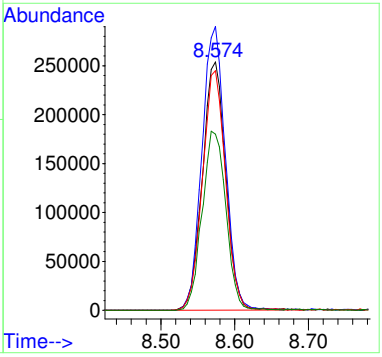


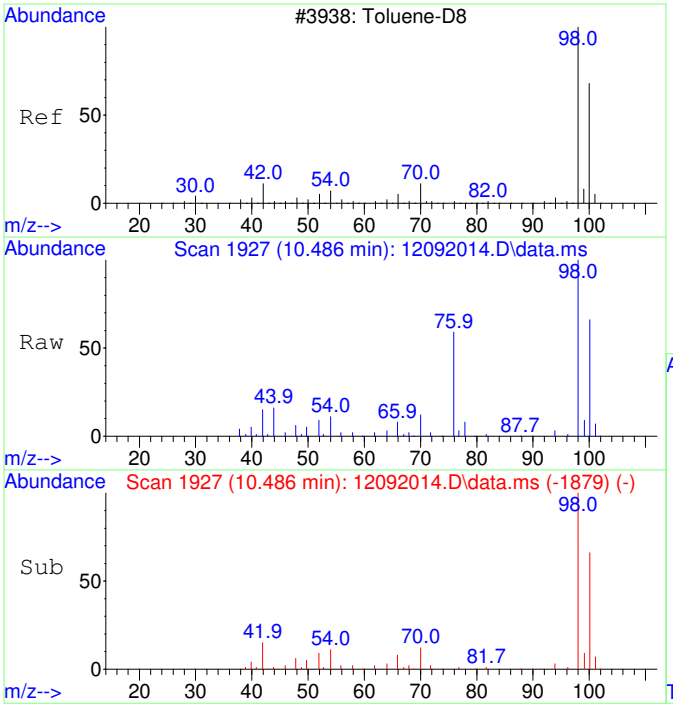


#35
Trichloroethene SCAN
Concen: 128900.09 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:130 Resp: 558454

Ion	Ratio	Lower	Upper
130	100		
95	114.0	60.5	120.5
132	95.4	59.6	119.6
97	73.2	28.2	88.2

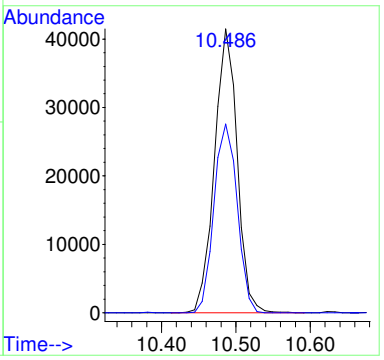


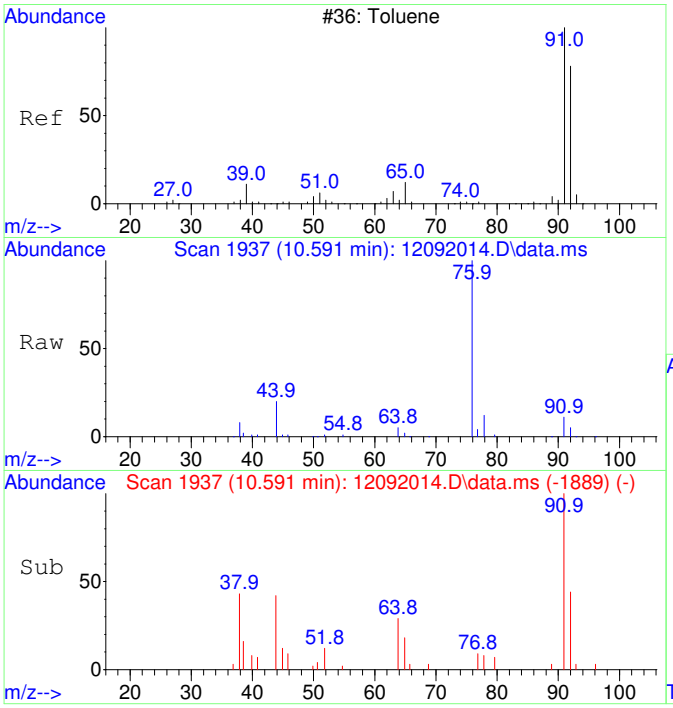


#36
Toluene-d8 SCAN
Concen: 4734.35 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 98 Resp: 87814

Ion	Ratio	Lower	Upper
98	100		
100	68.0	40.0	100.0

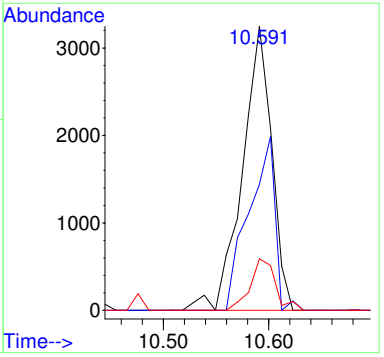


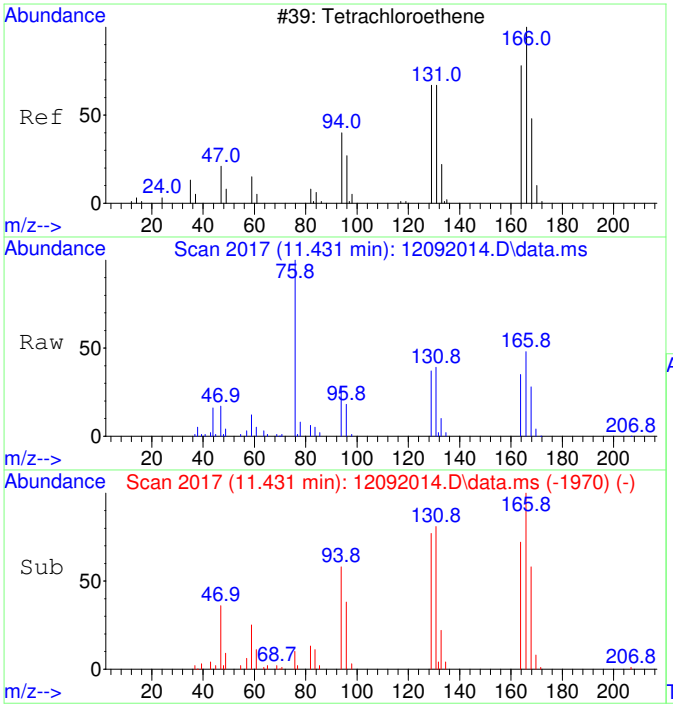


#37
Toluene SCAN
Concen: 276.35 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 6311

Ion	Ratio	Lower	Upper
91	100		
92	54.6	28.3	88.3
65	15.5	0.0	41.0

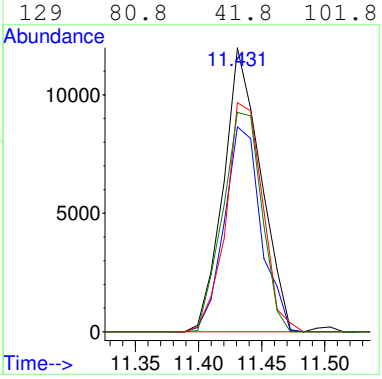


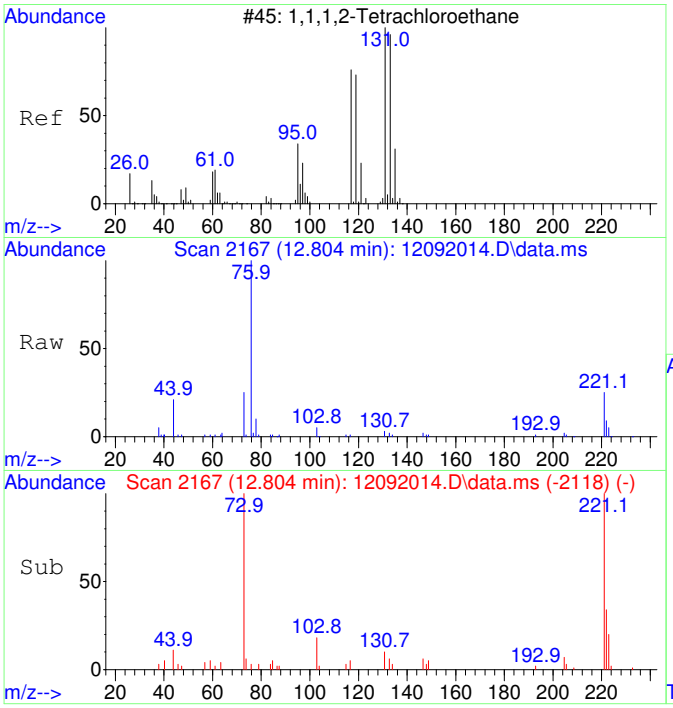


#39
Tetrachloroethene SCAN
Concen: 4787.11 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:166 Resp: 24594

Ion	Ratio	Lower	Upper
166	100		
164	71.6	50.9	110.9
131	79.4	38.7	98.7
129	80.8	41.8	101.8

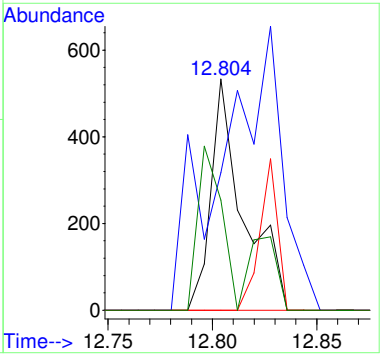


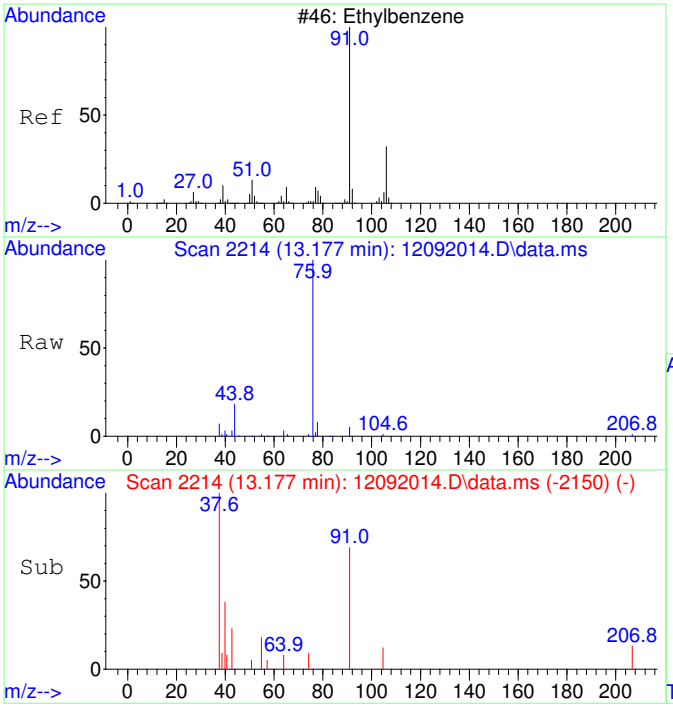


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 102.67 ug/L
RT: 12.804 min Scan# 2167
Delta R.T. -0.111 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:131 Resp: 581

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	51.8	35.1	95.1

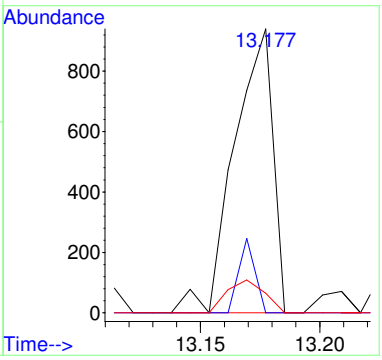


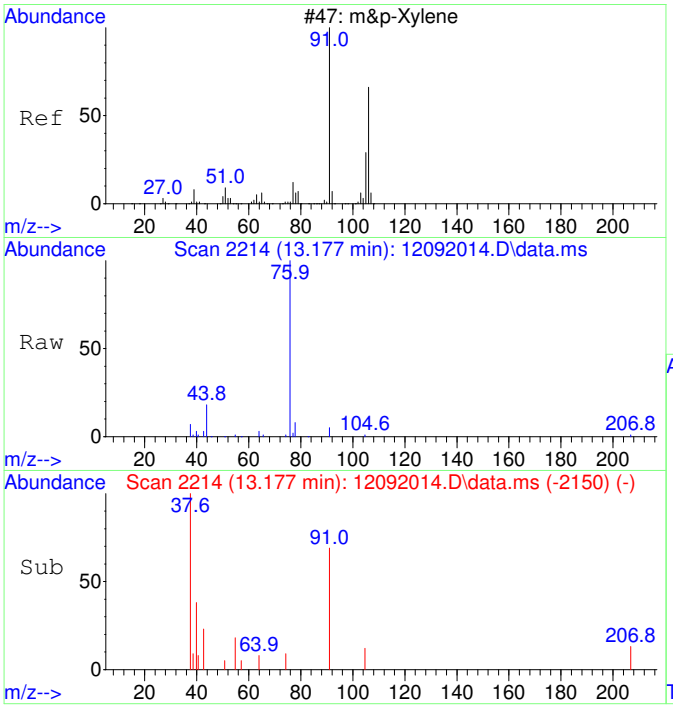


#42
Ethylbenzene SCAN
Concen: 24.38 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1061

Ion	Ratio	Lower	Upper
91	100		
106	11.0	23.1	83.1#
51	11.3	0.0	40.1

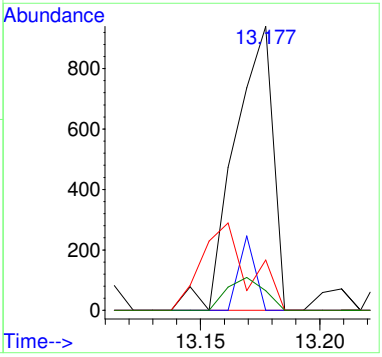


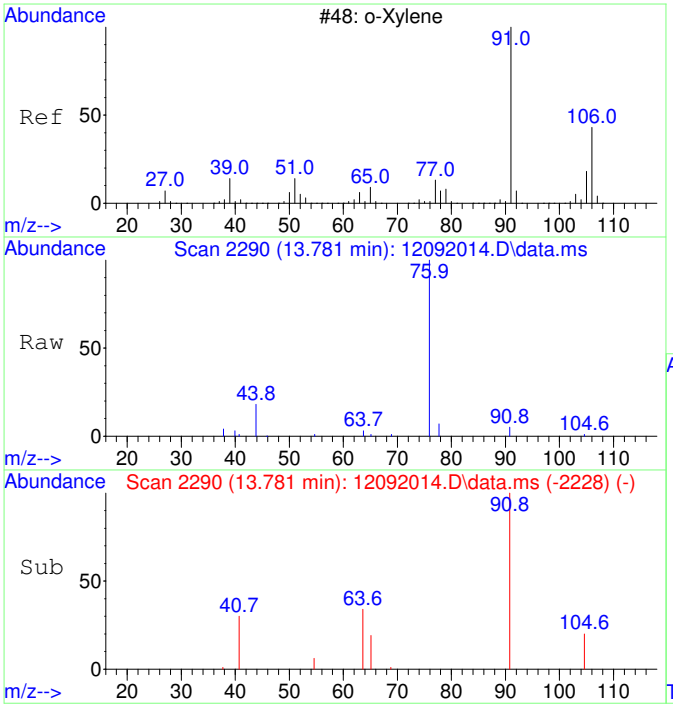


#43
m&p-Xylene SCAN
Concen: 24.38 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1061

Ion	Ratio	Lower	Upper
91	100		
106	11.0	23.1	83.1#
105	37.4	0.0	54.7
51	11.3	0.0	40.1

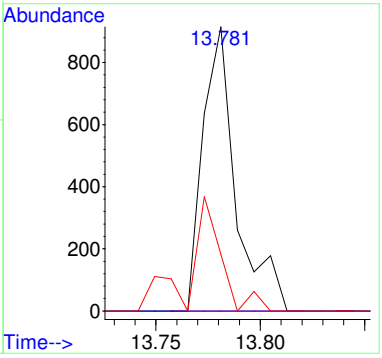




#44
o-Xylene SCAN
Concen: 42.42 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1008

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	39.2	0.0	56.6



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092014.D
Acq On : 9 Dec 2020 14:00
InstName : AG5975C
Operator : TD
Sample : 2012007-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

M.I. Performed By:
TD at 9:21 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:01 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

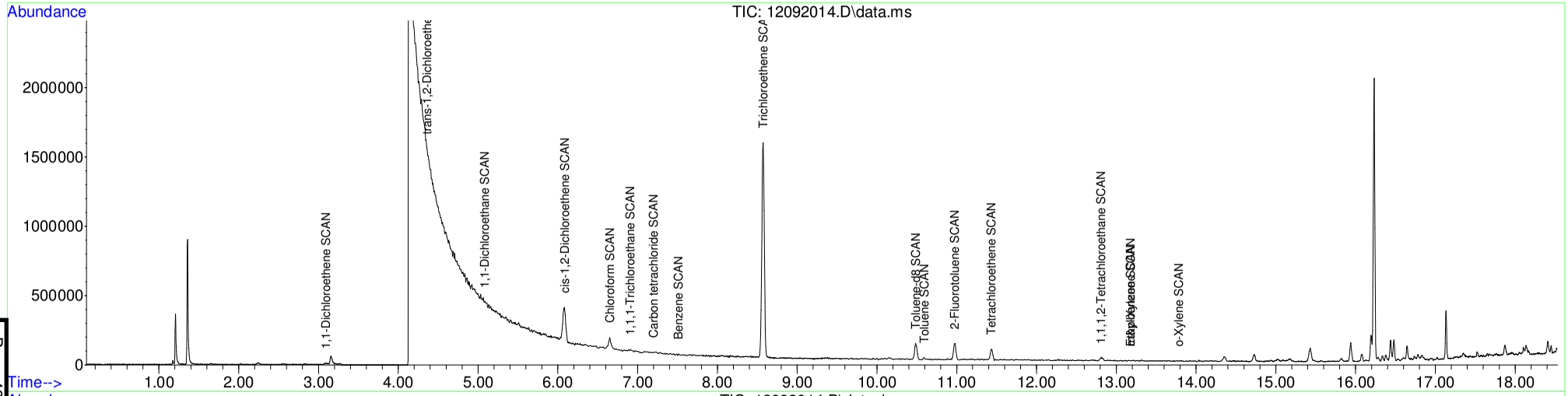
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	174227	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.488	98	147714	4377.56 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.55%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	13871m	2007.85 ug/L	
3] trans-1,2-Dichloroethene	4.350	61	19361	2223.03 ug/L	98
4] 1,1-Dichloroethane	5.073	63	16700	1605.44 ug/L	97
5] cis-1,2-Dichloroethene	6.075	61	322258	29912.24 ug/L OC	98
6] Chloroform	6.652	83	108940	10527.66 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	11512	1035.62 ug/L	99
8] Carbon tetrachloride	7.175	117	591	55.61 ug/L	100
9] Benzene	7.503	78	2461	83.94 ug/L	44
11] Trichloroethene	8.570	130	1072012	115813.13 ug/L OC	96
13] Toluene	10.582	91	9552	227.36 ug/L	100
15] Tetrachloroethene	11.432	166	53150	4061.53 ug/L	100
17] 1,1,1,2-Tetrachloroethane	12.813	131	974	85.50 ug/L #	1
19] m&p-Xylene	13.163	91	1792	43.37 ug/L	92
20] o-Xylene	13.782	91	1283	28.91 ug/L	100
25) 2-Fluorotoluene SCAN	10.969	109	95728	4840.48 ug/L	98
26) 1,1-Dichloroethene SCAN	3.089	61	8491	1839.13 ug/L #	74
27) trans-1,2-Dichloroethe...	4.362	61	13910	2365.43 ug/L	76
28) 1,1-Dichloroethane SCAN	5.078	63	11217	1616.02 ug/L	69
29) cis-1,2-Dichloroethene...	6.080	61	228890	33543.99 ug/L #	77
30) Chloroform SCAN	6.651	83	69458	10913.39 ug/L	97
31) 1,1,1-Trichloroethane ...	6.906	97	5444	828.92 ug/L	98
32) Carbon tetrachloride SCAN	7.198	117	418	74.48 ug/L #	15
33) Benzene SCAN	7.514	78	13664	687.70 ug/L	94
35) Trichloroethene SCAN	8.574	130	558454	128900.09 ug/L	83
36) Toluene-d8 SCAN	10.486	98	87814	4734.35 ug/L	98
37) Toluene SCAN	10.591	91	6311	276.35 ug/L	94
39) Tetrachloroethene SCAN	11.431	166	24594	4787.11 ug/L	89
41) 1,1,1,2-Tetrachloroeth...	12.804	131	581	102.67 ug/L #	28
42) Ethylbenzene SCAN	13.177	91	1061	24.38 ug/L #	50
43) m&p-Xylene SCAN	13.177	91	1061	24.38 ug/L #	57
44) o-Xylene SCAN	13.781	91	1008	42.42 ug/L #	46

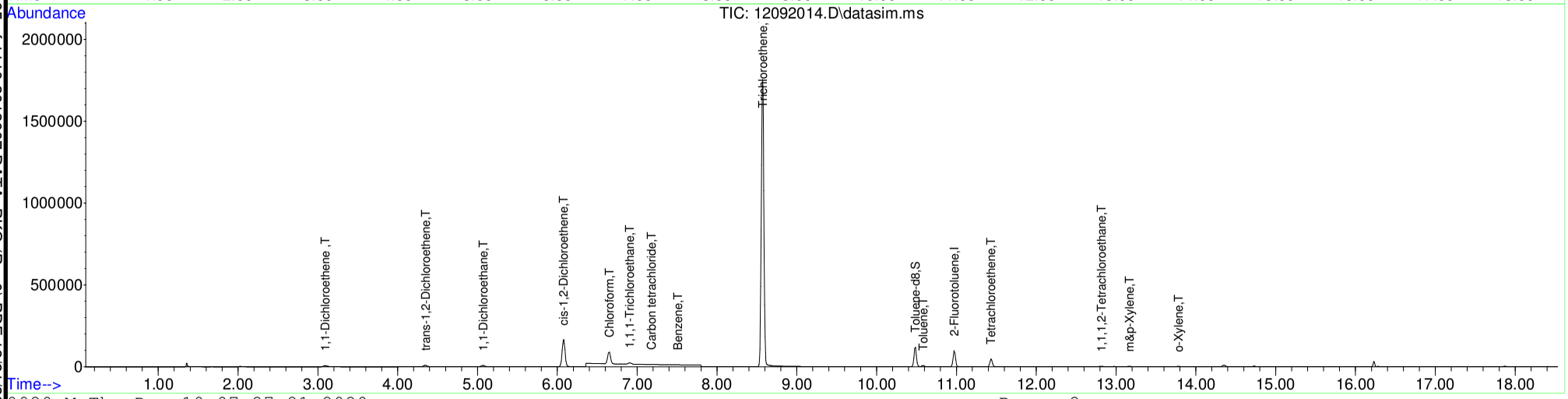
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092014.D
Acq On : 9 Dec 2020 14:00
InstName : AG5975C
Operator : TD
Sample : 2012007-07
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 10 05:55:21 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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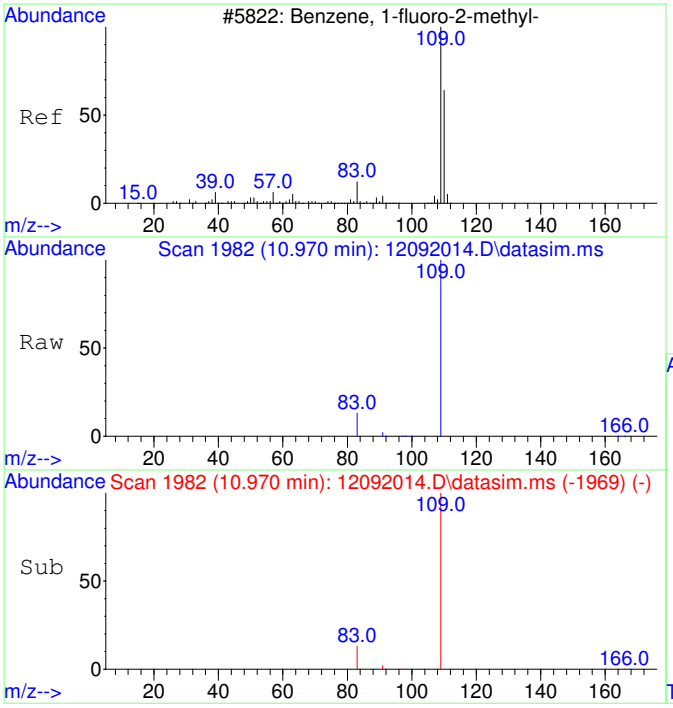
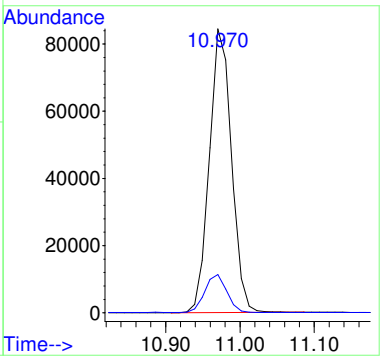
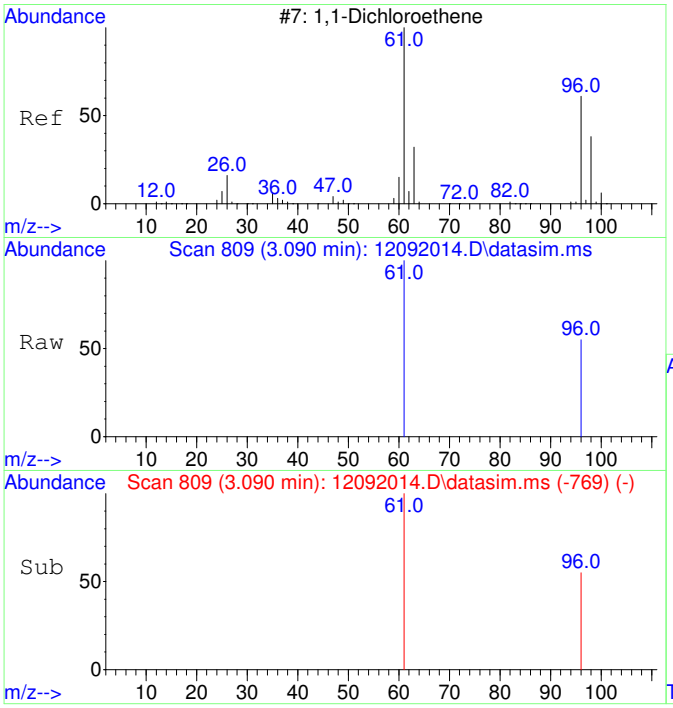


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:109 Resp: 174227

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

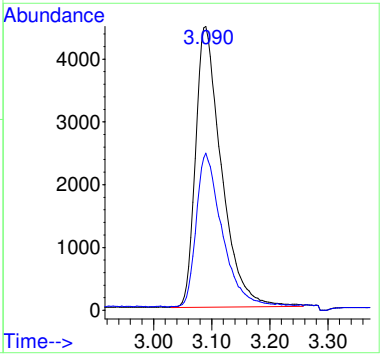


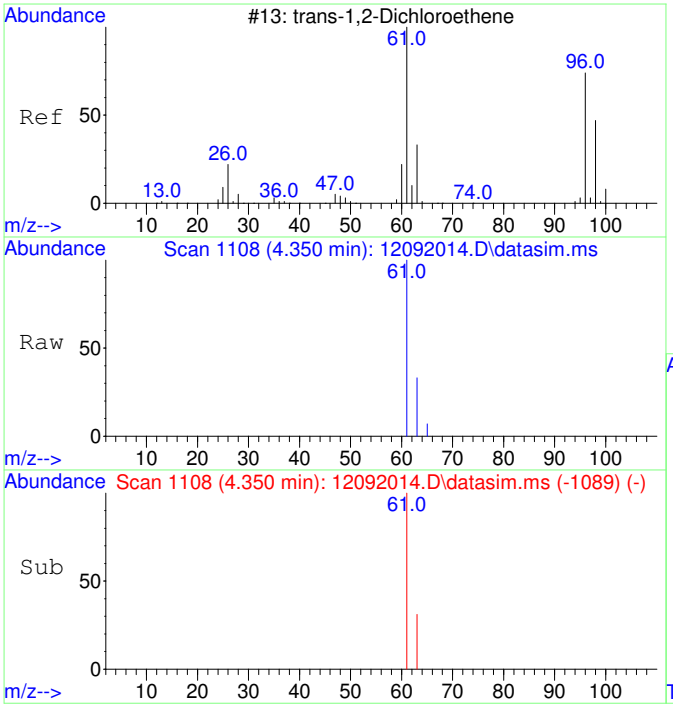


#2
1,1-Dichloroethene
Concen: 2007.85 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 13871

Ion	Ratio	Lower	Upper
61	100		
96	56.4	37.2	97.2

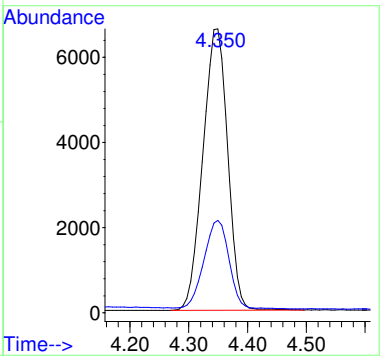


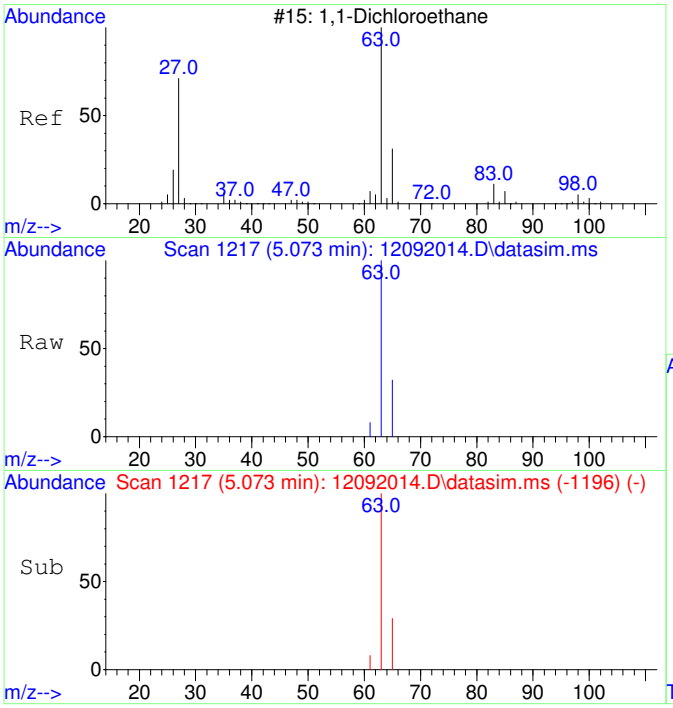


#3
trans-1,2-Dichloroethene
Concen: 2223.03 ug/L
RT: 4.350 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 19361

Ion	Ratio	Lower	Upper
61	100		
63	31.1	2.4	62.4

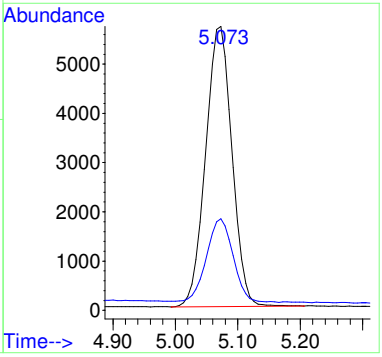


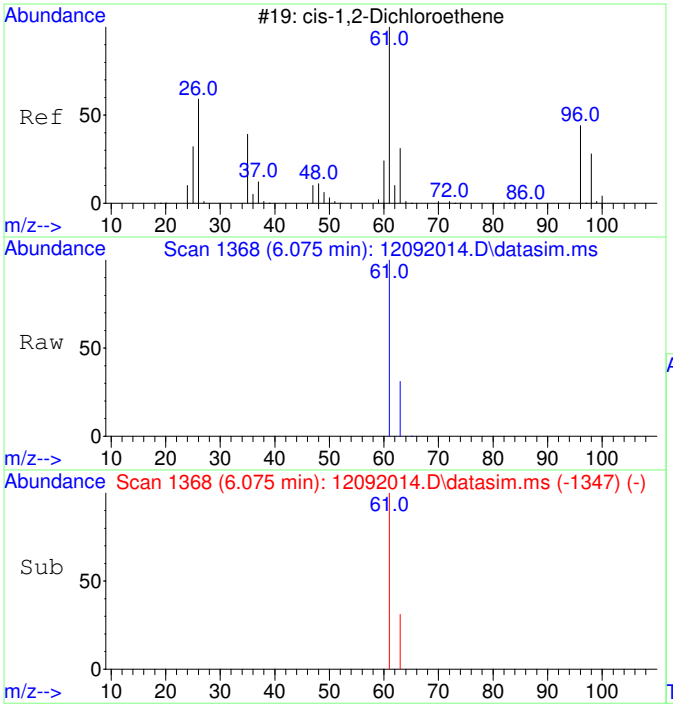


#4
1,1-Dichloroethane
Concen: 1605.44 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 63 Resp: 16700

Ion	Ratio	Lower	Upper
63	100		
65	30.2	1.8	61.8

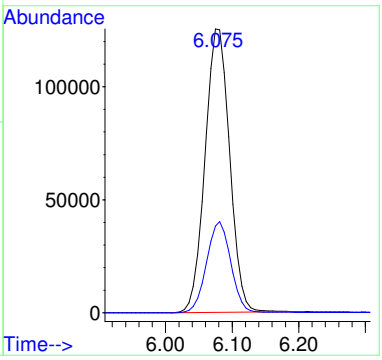


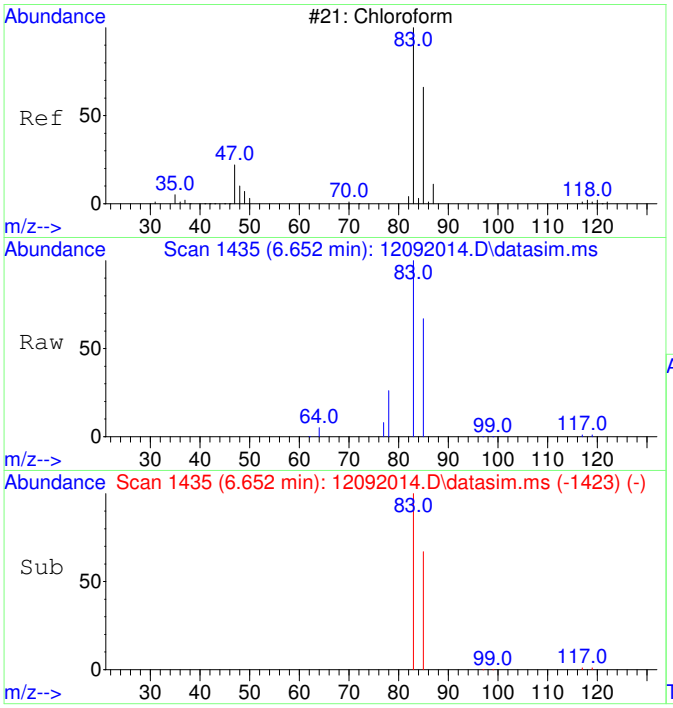


#5
cis-1,2-Dichloroethene
Concen: 29912.24 ug/L
RT: 6.075 min Scan# 1368
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 322258

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

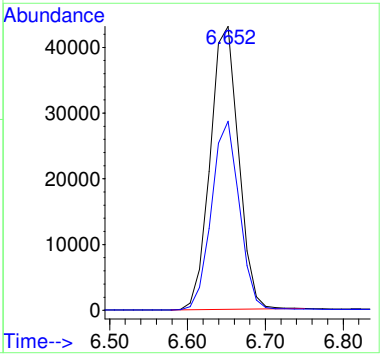


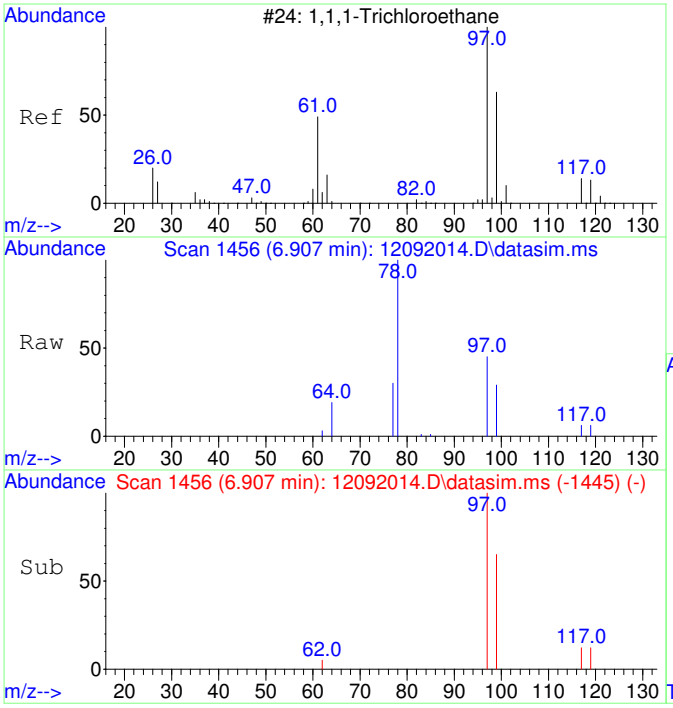


#6
Chloroform
Concen: 10527.66 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 83 Resp: 108940

Ion	Ratio	Lower	Upper
83	100		
85	65.1	35.1	95.1

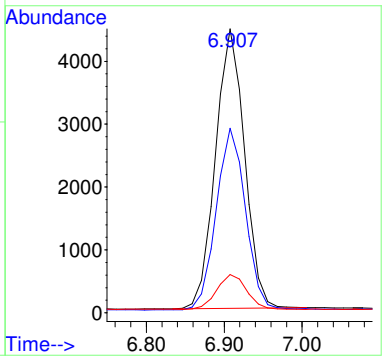


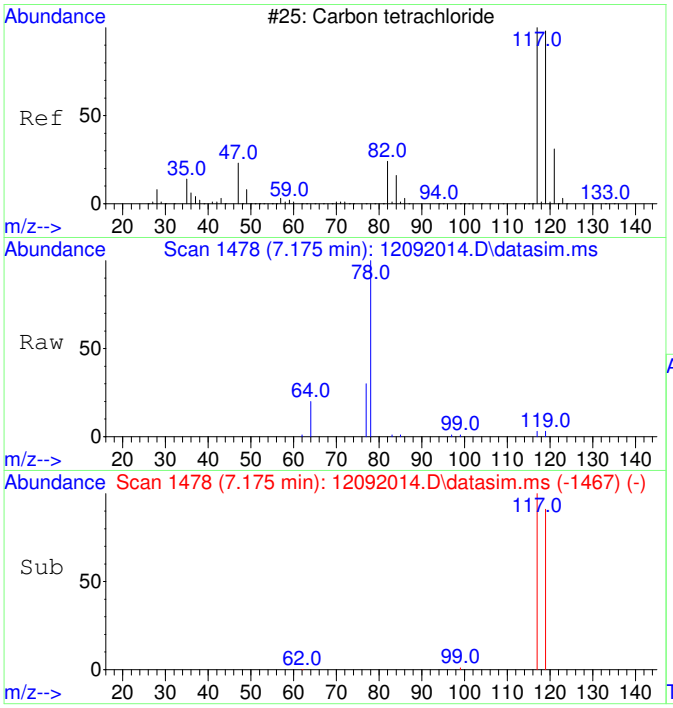


#7
1,1,1-Trichloroethane
Concen: 1035.62 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 97 Resp: 11512

Ion	Ratio	Lower	Upper
97	100		
99	65.2	34.6	94.6
117	12.8	0.0	43.2

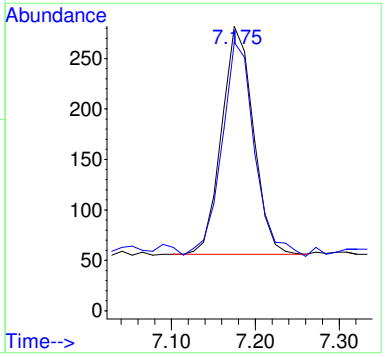


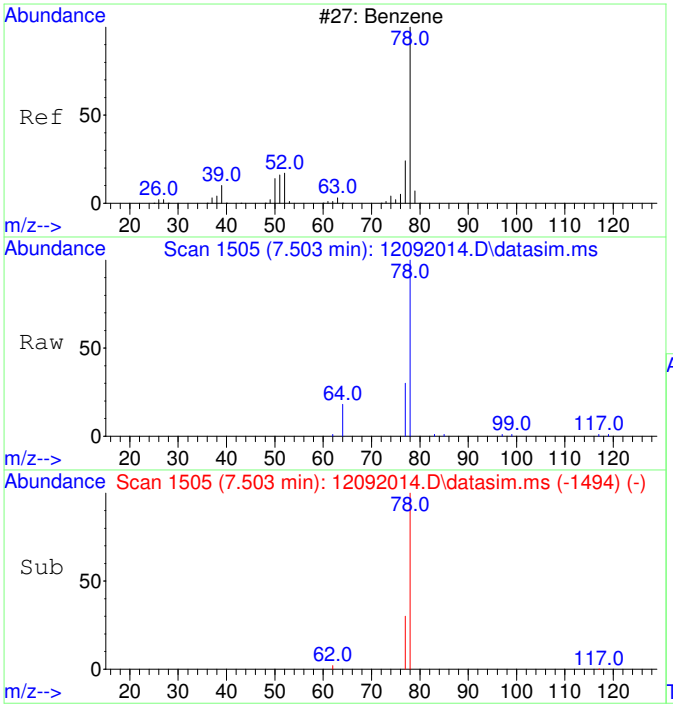


#8
Carbon tetrachloride
Concen: 55.61 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:117 Resp: 591

Ion	Ratio	Lower	Upper
117	100		
119	96.6	66.4	126.4

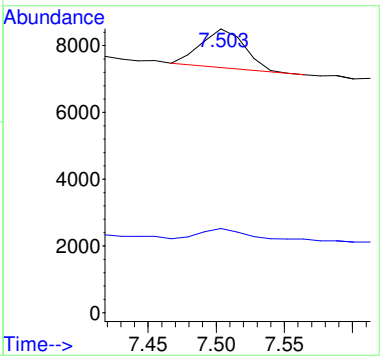


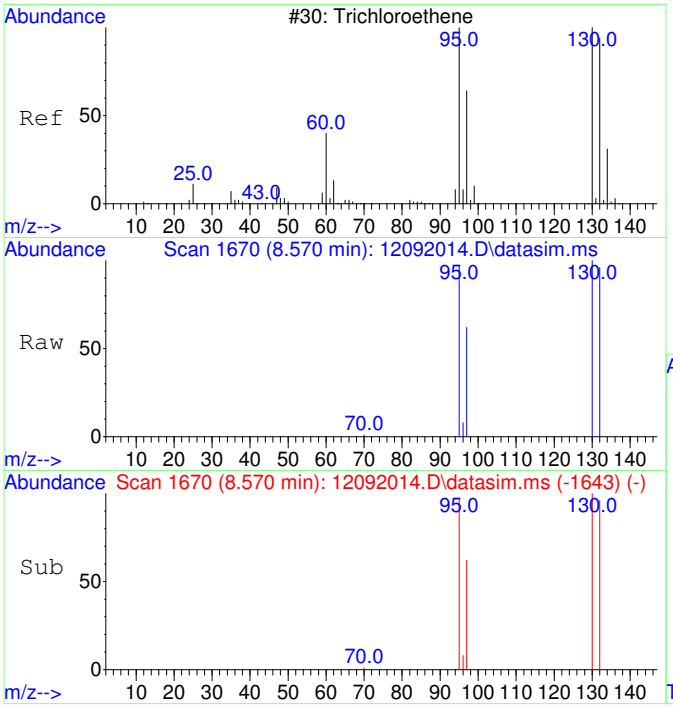


#9
Benzene
Concen: 83.94 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 78 Resp: 2461

Ion	Ratio	Lower	Upper
78	100		
77	50.6	0.0	53.2

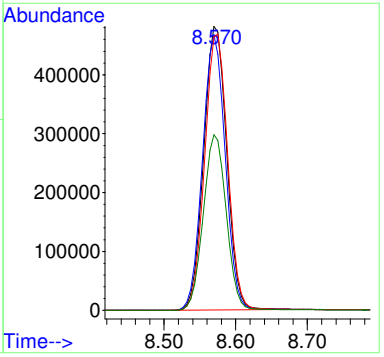


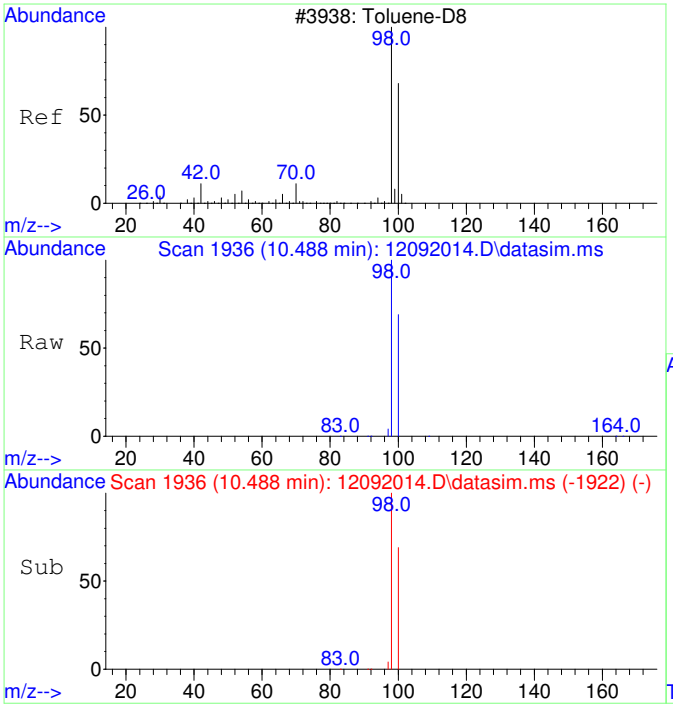


#11
Trichloroethene
Concen: 115813.13 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:130 Resp: 1072012

Ion	Ratio	Lower	Upper
130	100		
95	95.9	60.7	120.7
132	97.2	76.0	116.0
97	61.7	38.6	78.6

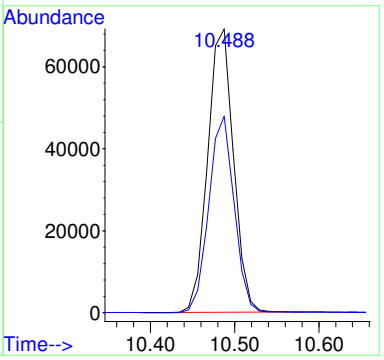


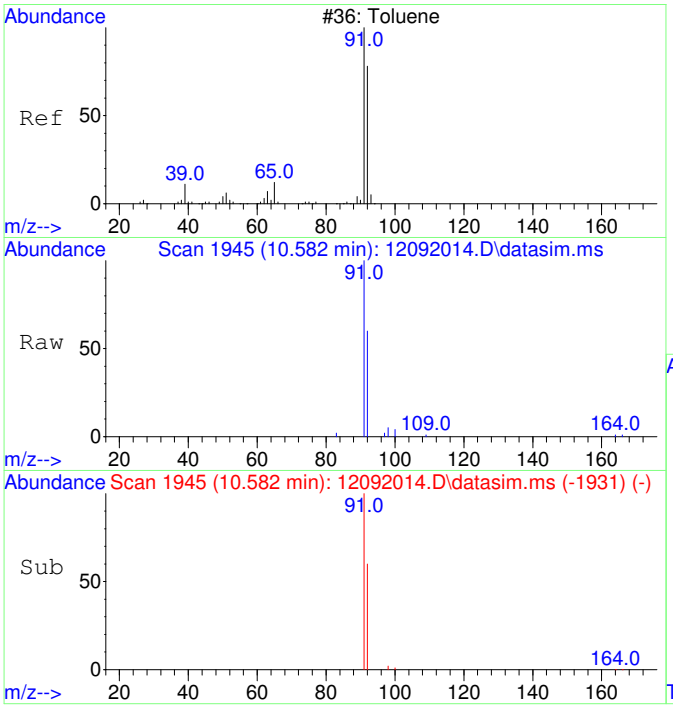


#12
Toluene-d8
Concen: 4377.56 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 98 Resp: 147714

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

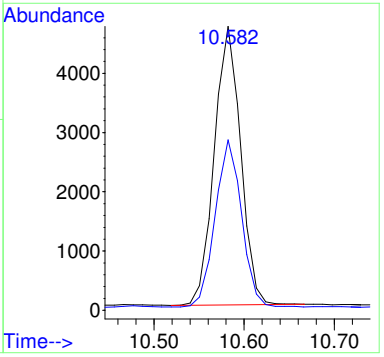


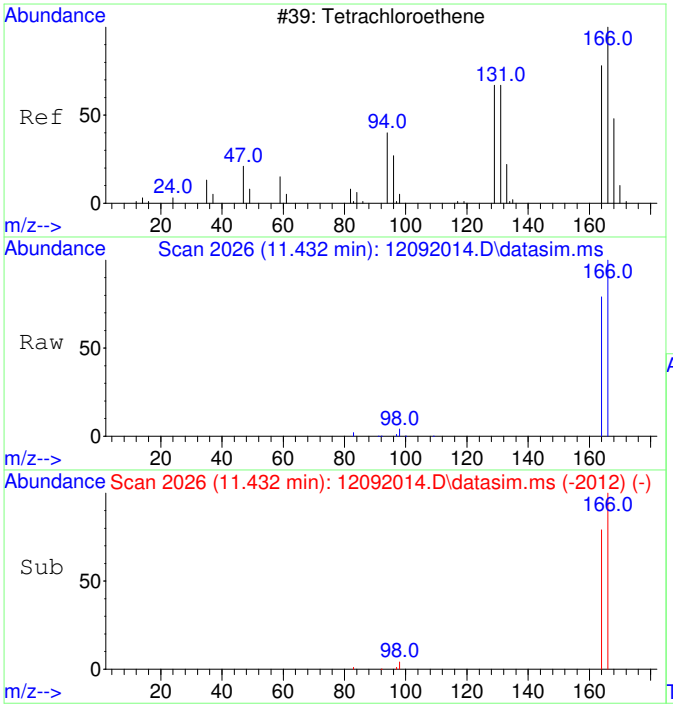


#13
Toluene
Concen: 227.36 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 9552

Ion	Ratio	Lower	Upper
91	100		
92	59.9	29.9	89.9

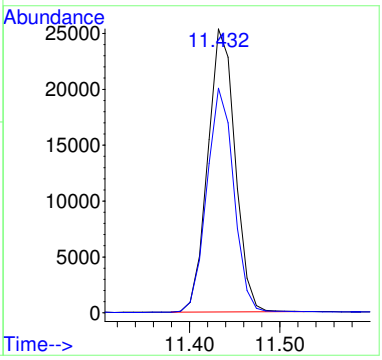


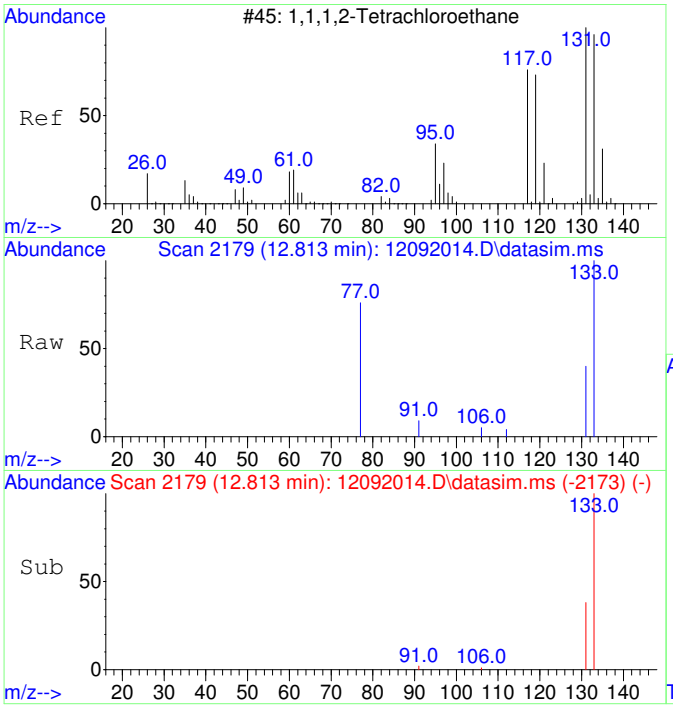


#15
Tetrachloroethene
Concen: 4061.53 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:166 Resp: 53150

Ion	Ratio	Lower	Upper
166	100		
164	77.9	47.8	107.8

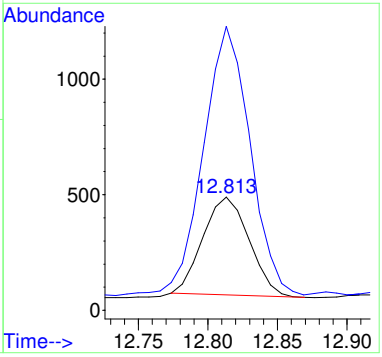


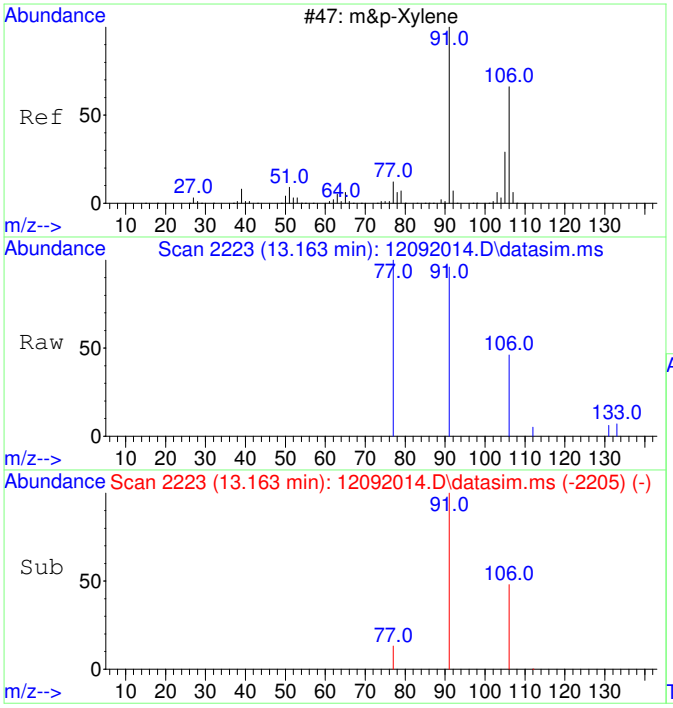


#17
1,1,1,2-Tetrachloroethane
Concen: 85.50 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:131 Resp: 974

Ion	Ratio	Lower	Upper
131	100		
133	273.6	66.3	126.3#

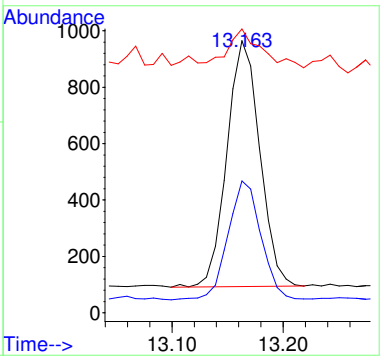


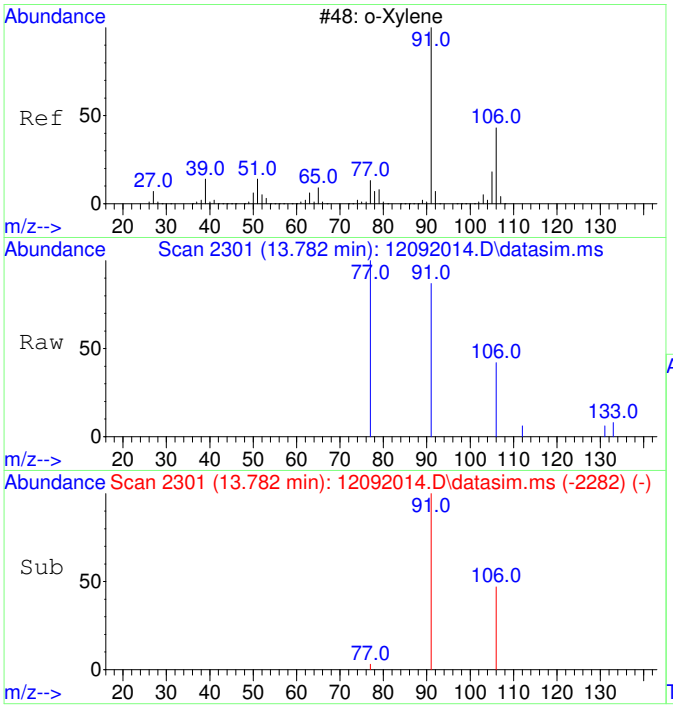


#19
m&p-Xylene
Concen: 43.37 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1792

Ion	Ratio	Lower	Upper
91	100		
106	47.8	22.2	82.2
77	18.3	0.0	42.4

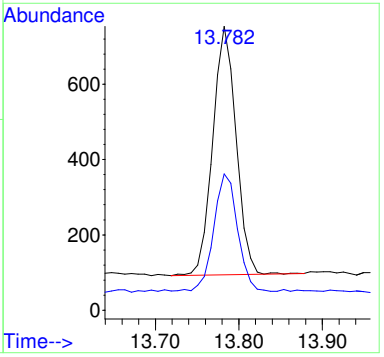


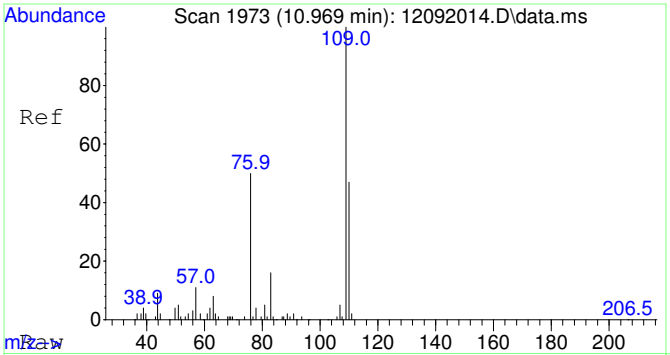


#20
o-Xylene
Concen: 28.91 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1283

Ion	Ratio	Lower	Upper
91	100		
106	49.3	19.2	79.2

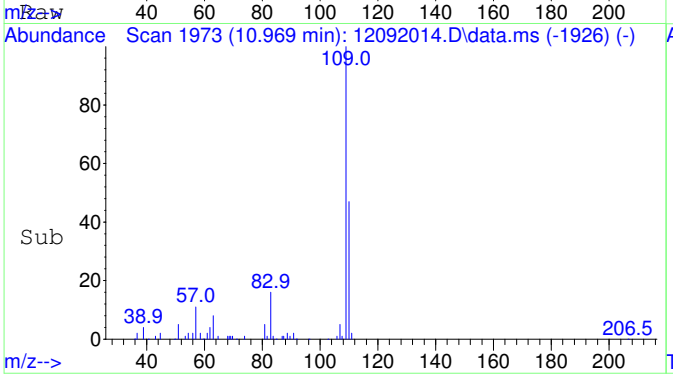


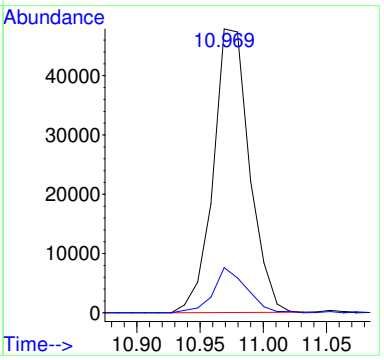


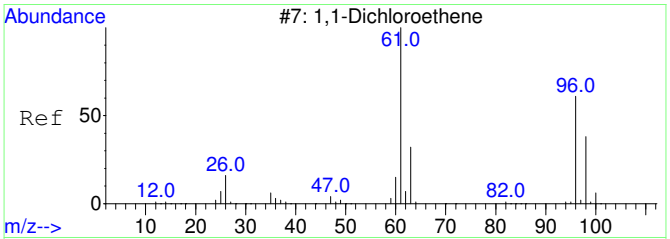
#25
2-Fluorotoluene SCAN
Concen: 4840.48 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:109 Resp: 95728

Ion	Ratio	Lower	Upper
109	100		
83	14.5	0.0	43.8



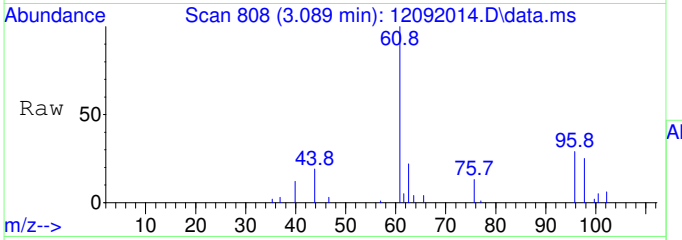


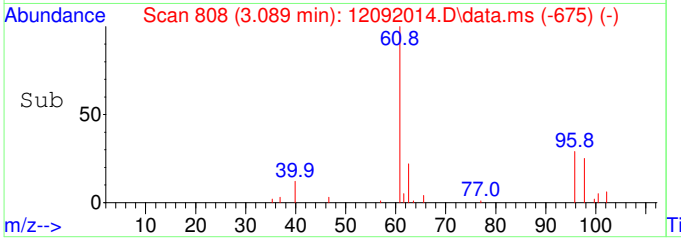


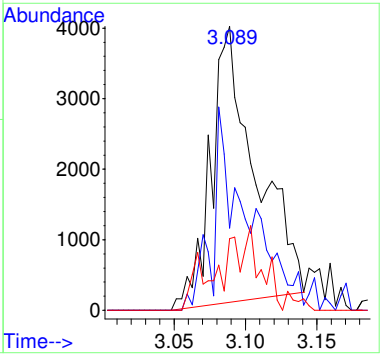
#26
1,1-Dichloroethene SCAN
Concen: 1839.13 ug/L
RT: 3.089 min Scan# 808
Delta R.T. -0.007 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

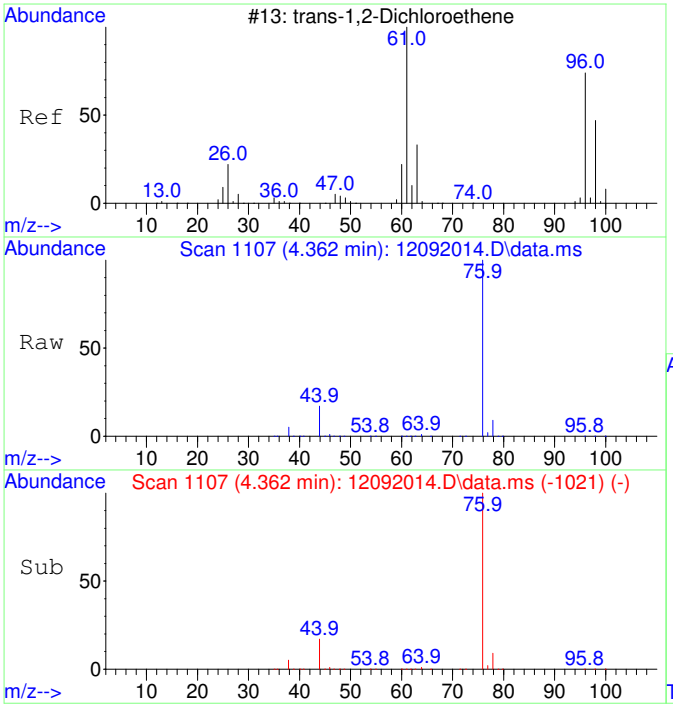
Tgt Ion: 61 Resp: 8491

Ion	Ratio	Lower	Upper
61	100		
96	60.1	33.1	93.1
98	3.2	11.2	71.2#





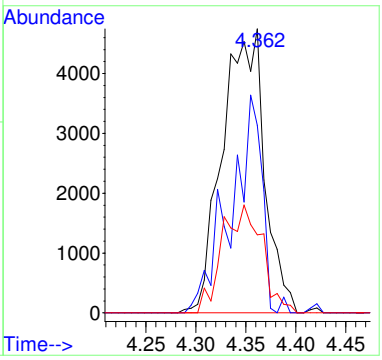


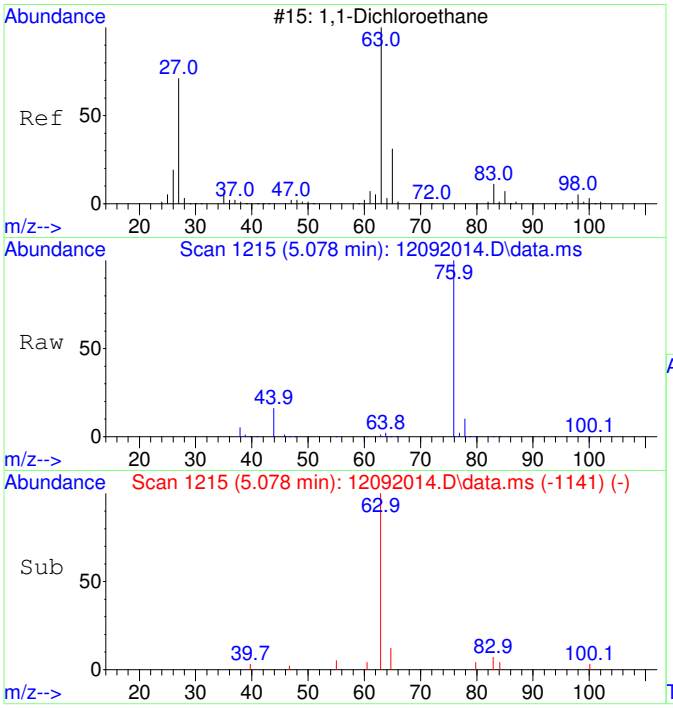


#27
trans-1,2-Dichloroethene SCAN
Concen: 2365.43 ug/L
RT: 4.362 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 13910

Ion	Ratio	Lower	Upper
61	100		
96	56.1	49.0	109.0
98	35.9	20.5	80.5

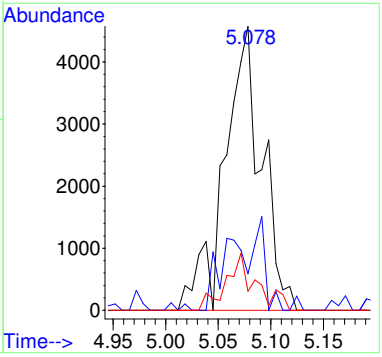


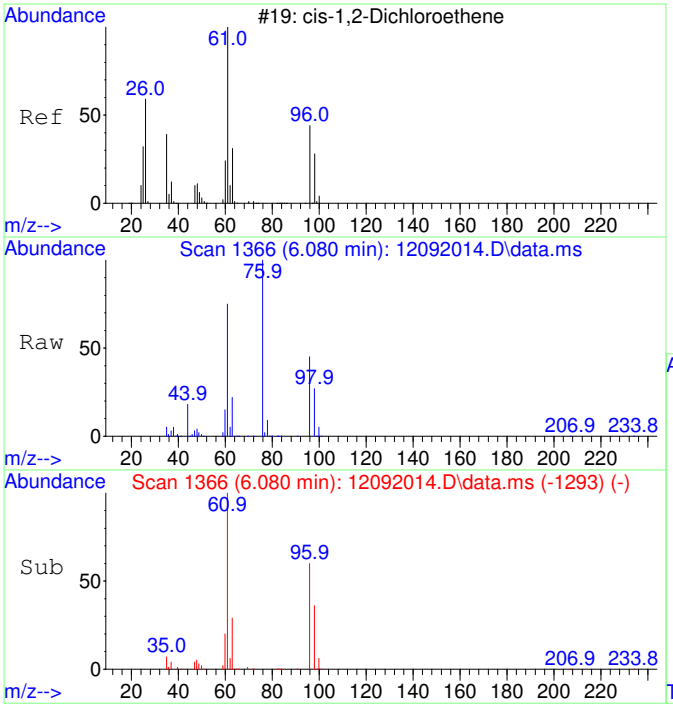


#28
1,1-Dichloroethane SCAN
Concen: 1616.02 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 63 Resp: 11217

Ion	Ratio	Lower	Upper
63	100		
65	6.0	1.3	61.3
83	16.0	0.0	45.9

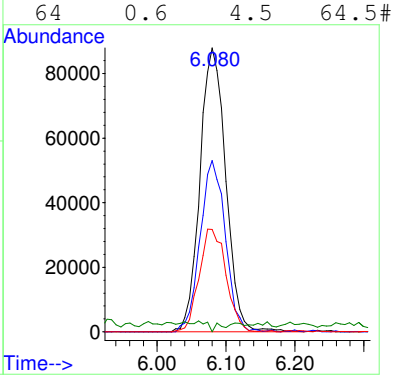


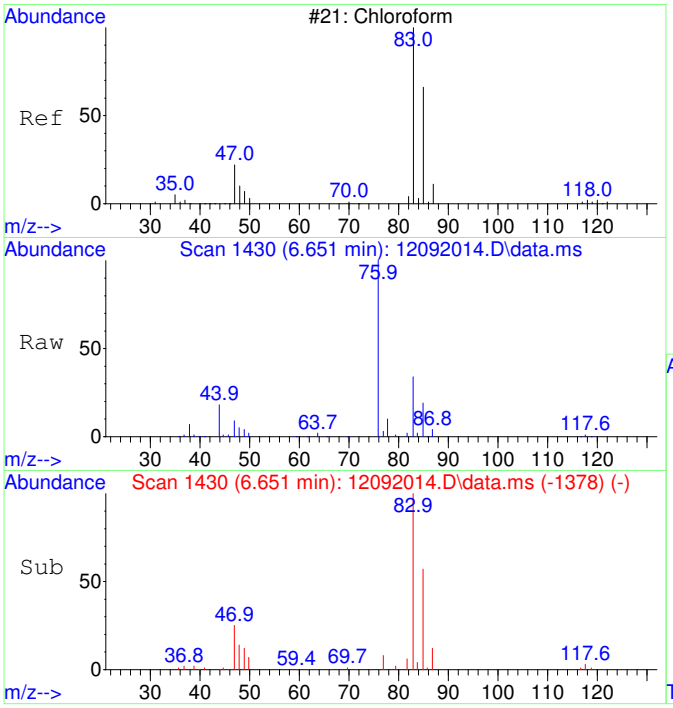


#29
cis-1,2-Dichloroethene SCAN
Concen: 33543.99 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 61 Resp: 228890

Ion	Ratio	Lower	Upper
61	100		
96	58.7	39.9	99.9
98	37.5	13.5	73.5
64	0.6	4.5	64.5#

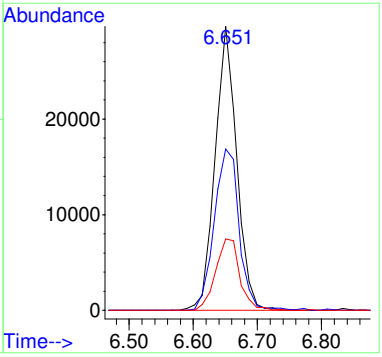


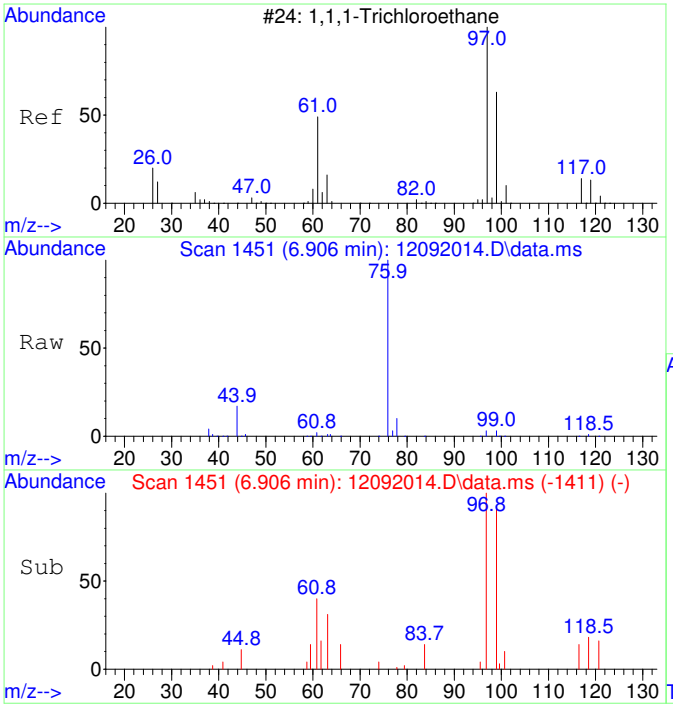


#30
Chloroform SCAN
Concen: 10913.39 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 83 Resp: 69458

Ion	Ratio	Lower	Upper
83	100		
85	65.3	34.6	94.6
47	28.0	0.0	53.4

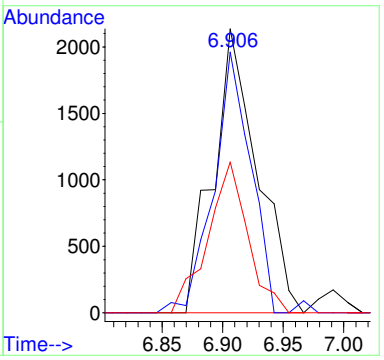


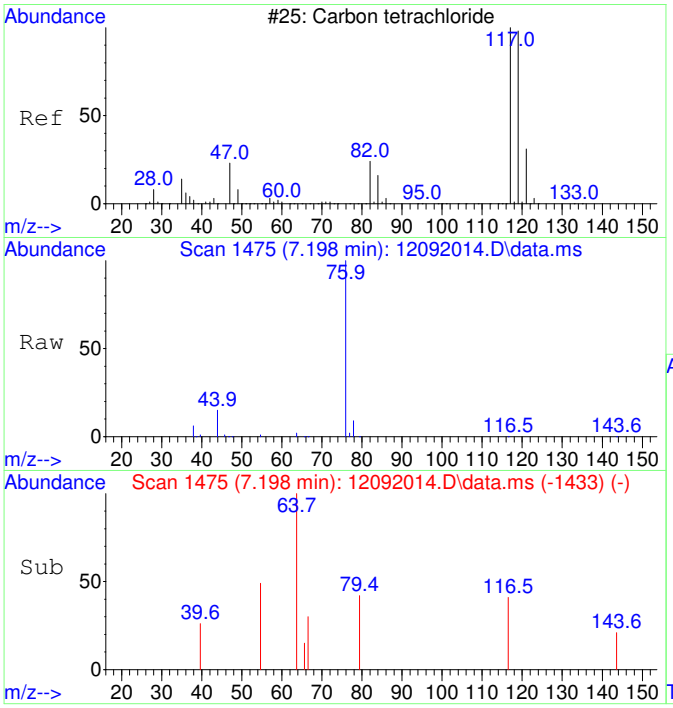


#31
1,1,1-Trichloroethane SCAN
Concen: 828.92 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 97 Resp: 5444

Ion	Ratio	Lower	Upper
97	100		
99	76.8	43.6	103.6
61	47.8	18.0	78.0

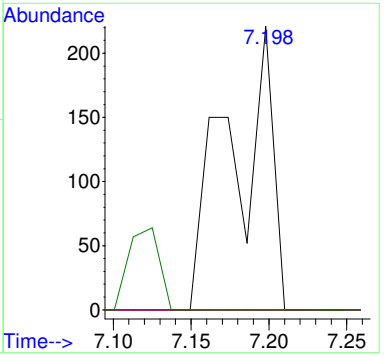


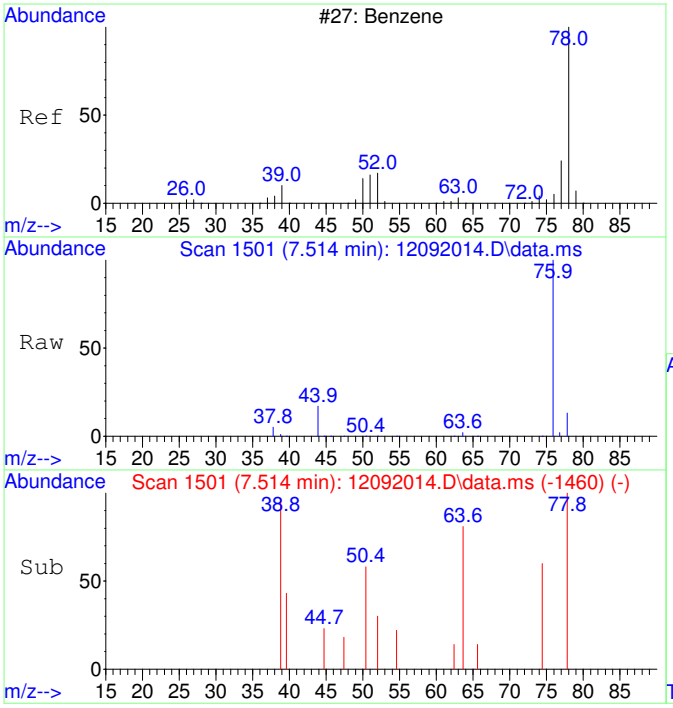


#32
Carbon tetrachloride SCAN
Concen: 74.48 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.013 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:117 Resp: 418

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

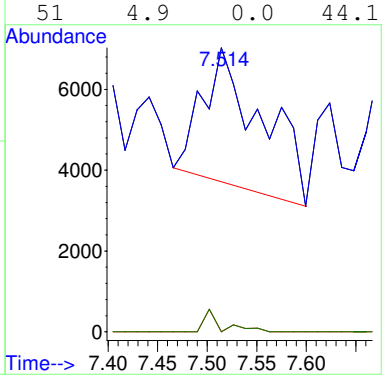


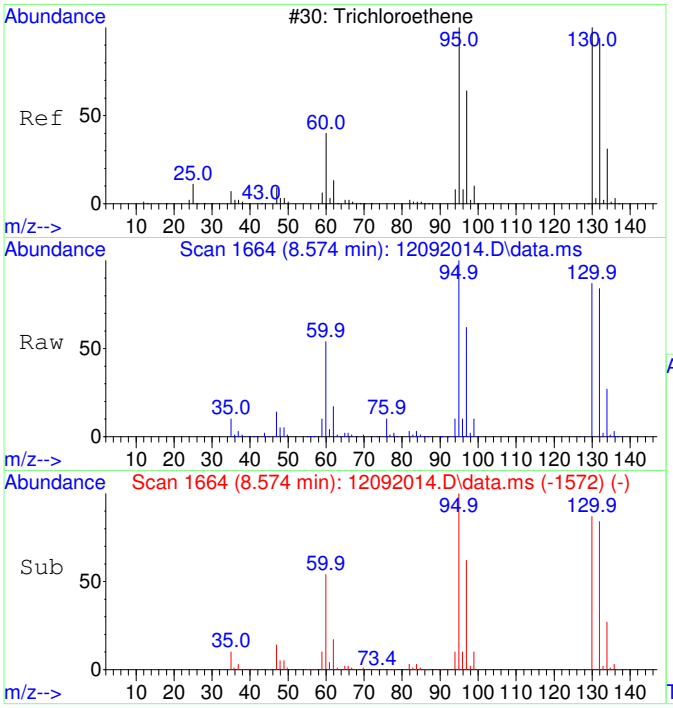


#33
Benzene SCAN
Concen: 687.70 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 78 Resp: 13664

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	4.9	0.0	47.9
51	4.9	0.0	44.1

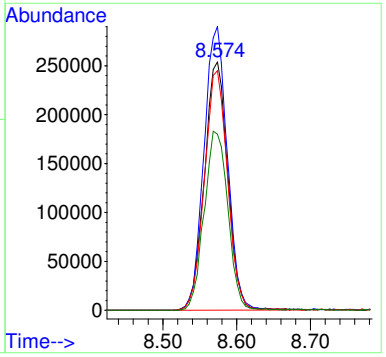


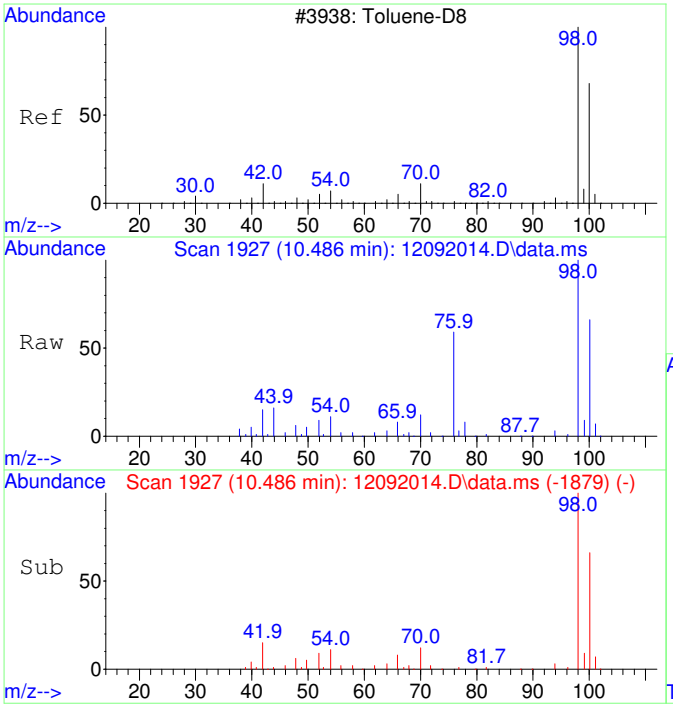


#35
Trichloroethene SCAN
Concen: 128900.09 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:130 Resp: 558454

Ion	Ratio	Lower	Upper
130	100		
95	114.0	60.5	120.5
132	95.4	59.6	119.6
97	73.2	28.2	88.2

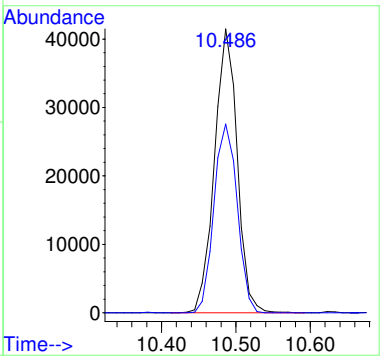


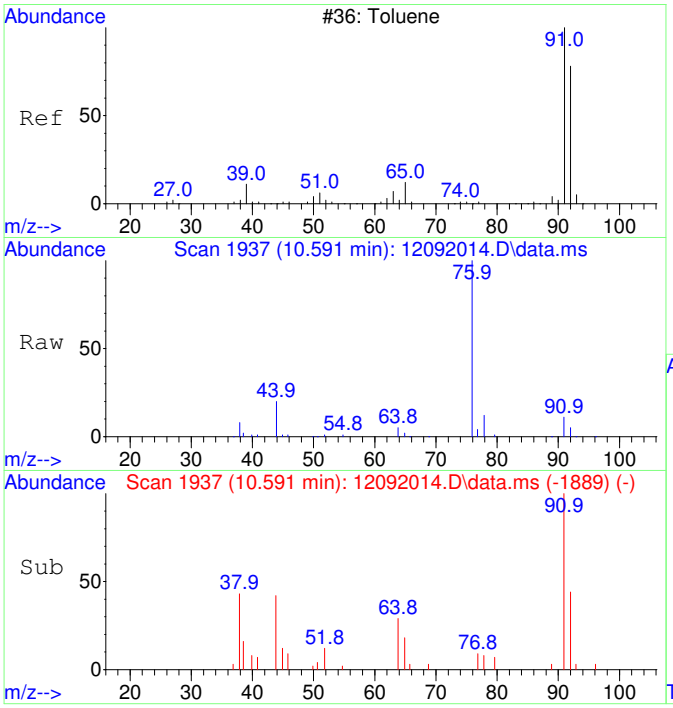


#36
Toluene-d8 SCAN
Concen: 4734.35 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 98 Resp: 87814

Ion	Ratio	Lower	Upper
98	100		
100	68.0	40.0	100.0

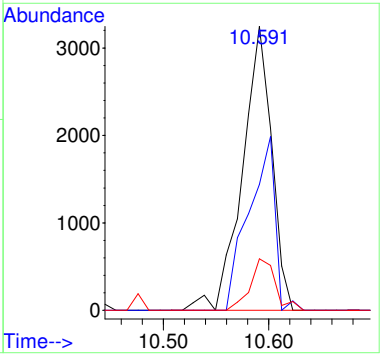


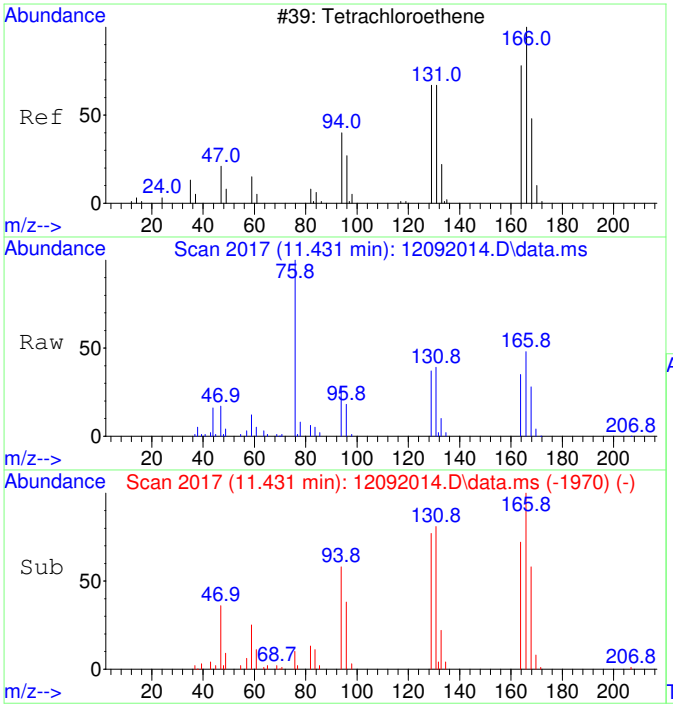


#37
Toluene SCAN
Concen: 276.35 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 6311

Ion	Ratio	Lower	Upper
91	100		
92	54.6	28.3	88.3
65	15.5	0.0	41.0

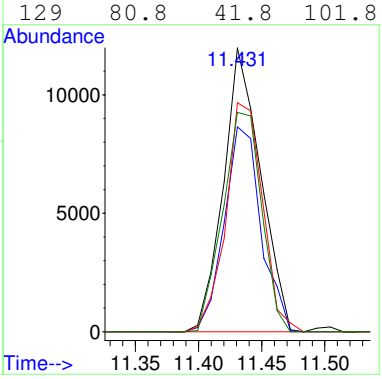


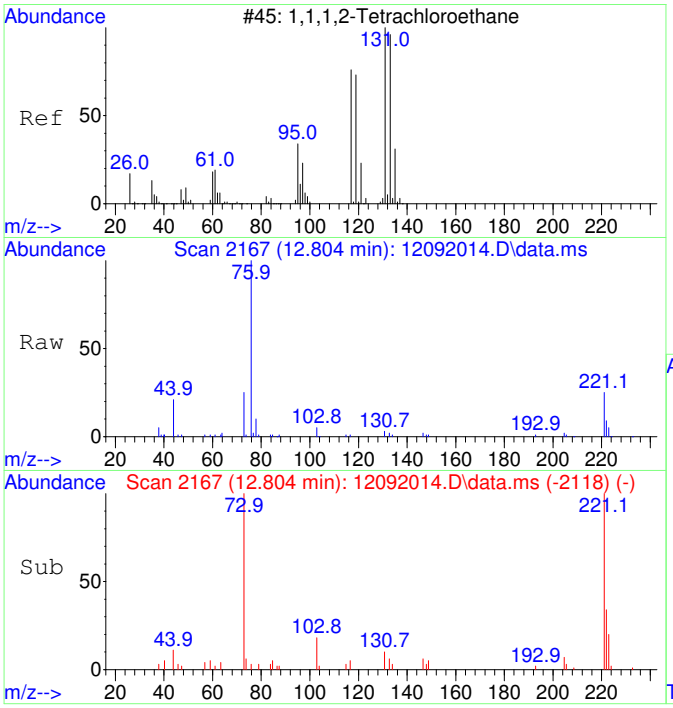


#39
Tetrachloroethene SCAN
Concen: 4787.11 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:166 Resp: 24594

Ion	Ratio	Lower	Upper
166	100		
164	71.6	50.9	110.9
131	79.4	38.7	98.7
129	80.8	41.8	101.8

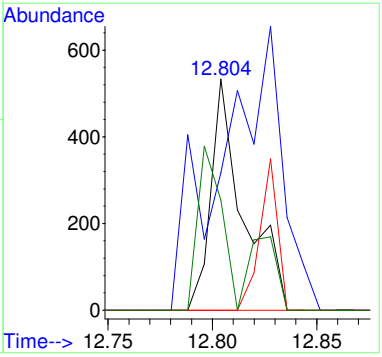


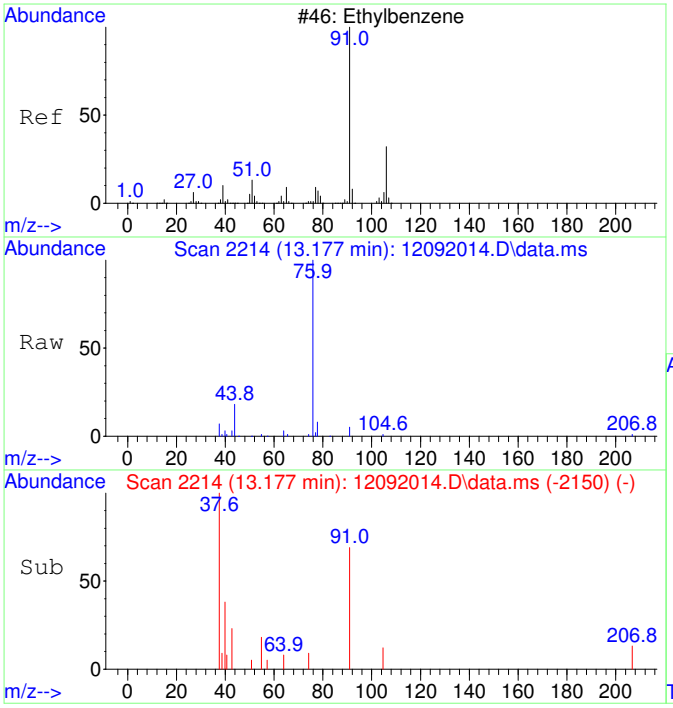


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 102.67 ug/L
RT: 12.804 min Scan# 2167
Delta R.T. -0.111 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion:131 Resp: 581

Ion	Ratio	Lower	Upper
131	100		
133	0.0	66.9	126.9#
119	0.0	40.4	100.4#
117	51.8	35.1	95.1

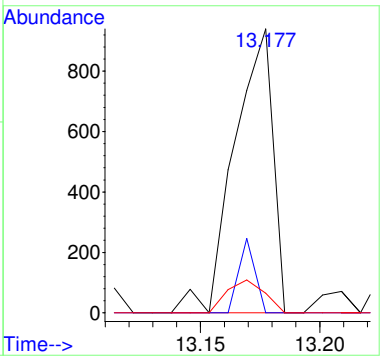


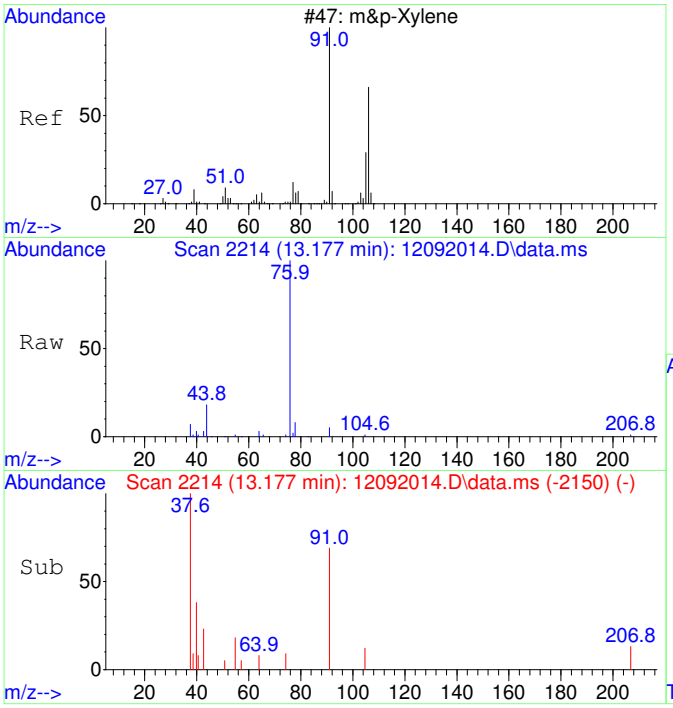


#42
Ethylbenzene SCAN
Concen: 24.38 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1061

Ion	Ratio	Lower	Upper
91	100		
106	11.0	23.1	83.1#
51	11.3	0.0	40.1

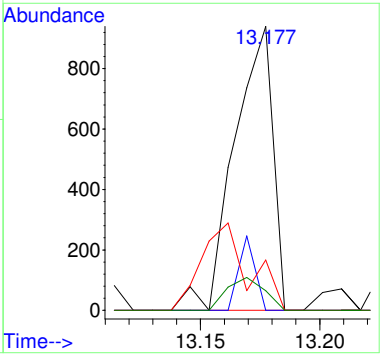


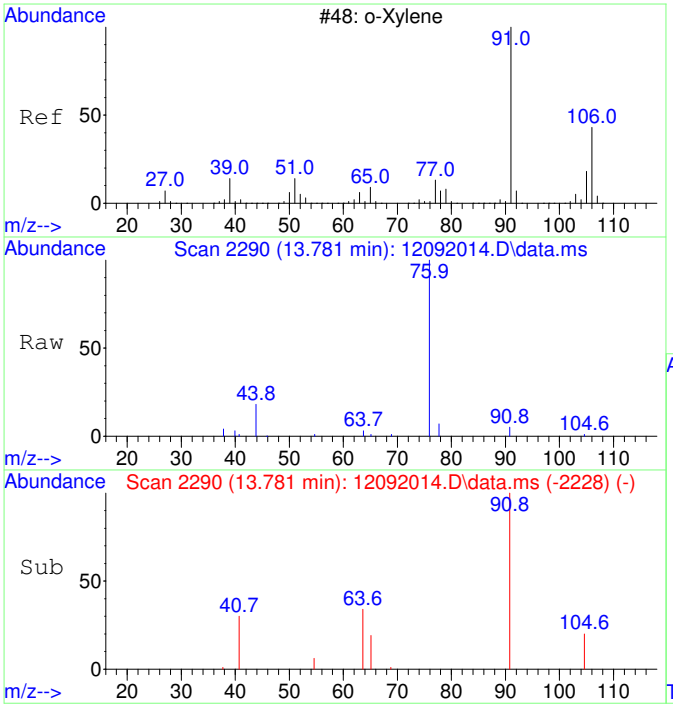


#43
m&p-Xylene SCAN
Concen: 24.38 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1061

Ion	Ratio	Lower	Upper
91	100		
106	11.0	23.1	83.1#
105	37.4	0.0	54.7
51	11.3	0.0	40.1

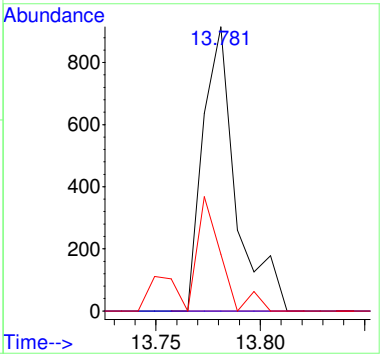




#44
o-Xylene SCAN
Concen: 42.42 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092014.D
Acq: 9 Dec 2020 14:00

Tgt Ion: 91 Resp: 1008

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	39.2	0.0	56.6



2012007-08

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092015.D
Acq On : 9 Dec 2020 14:24
InstName : AG5975C
Operator : TD
Sample : 2012007-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 10 05:55:27 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

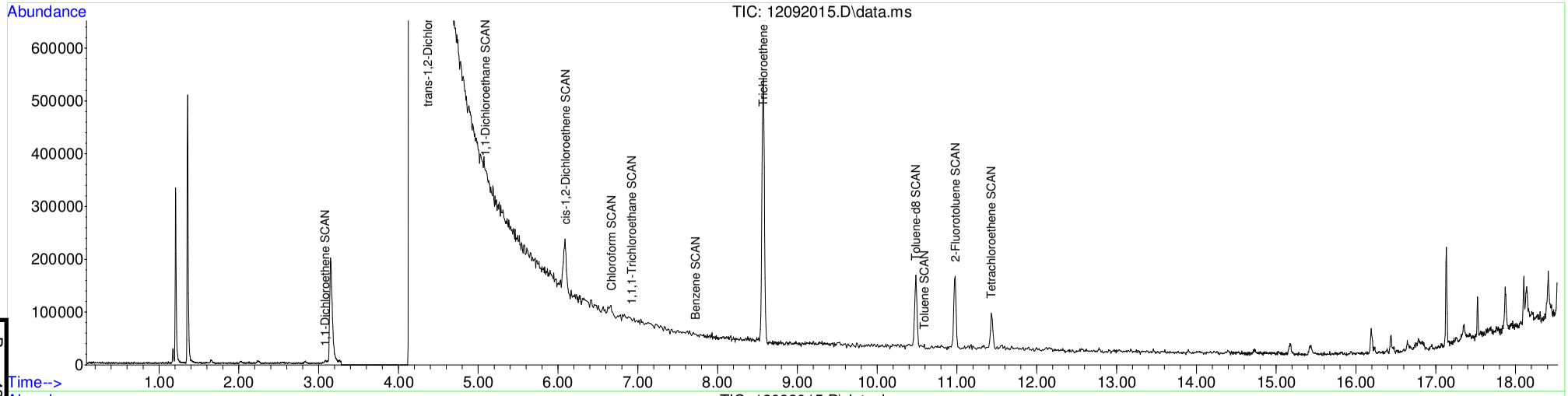
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	190472	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	162063	4393.18 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.86%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	8027	1062.83 ug/L	80
3] trans-1,2-Dichloroethene	4.363	61	11898	1249.61 ug/L	99
4] 1,1-Dichloroethane	5.079	63	11077	974.06 ug/L	97
5] cis-1,2-Dichloroethene	6.081	61	113695	9653.19 ug/L	98
6] Chloroform	6.652	83	24944	2204.93 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	4764	392.02 ug/L	99
8] Carbon tetrachloride	7.175	117	387	33.31 ug/L	92
9] Benzene	7.503	78	2956	92.23 ug/L	40
11] Trichloroethene	8.569	130	341385	33735.48 ug/L **oc**	97
13] Toluene	10.582	91	5067	110.32 ug/L	100
15] Tetrachloroethene	11.432	166	44531	3112.67 ug/L	100
19] m&p-Xylene	13.163	91	1434	31.74 ug/L	92
25) 2-Fluorotoluene SCAN	10.979	109	107529	4973.47 ug/L	95
26) 1,1-Dichloroethene SCAN	3.081	61	1411	279.55 ug/L	67
27) trans-1,2-Dichloroethe...	4.361	61	8230	1280.17 ug/L #	48
28) 1,1-Dichloroethane SCAN	5.091	63	6655	877.01 ug/L #	50
29) cis-1,2-Dichloroethene...	6.086	61	76648	10274.79 ug/L #	81
30) Chloroform SCAN	6.663	83	15801	2270.94 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	2404	334.82 ug/L #	72
33) Benzene SCAN	7.721	78	2665	122.69 ug/L	93
35) Trichloroethene SCAN	8.574	130	177879	37555.61 ug/L	85
36) Toluene-d8 SCAN	10.486	98	99538	4908.74 ug/L	93
37) Toluene SCAN	10.591	91	2611	104.58 ug/L #	78
39) Tetrachloroethene SCAN	11.431	166	21664	3857.16 ug/L	93

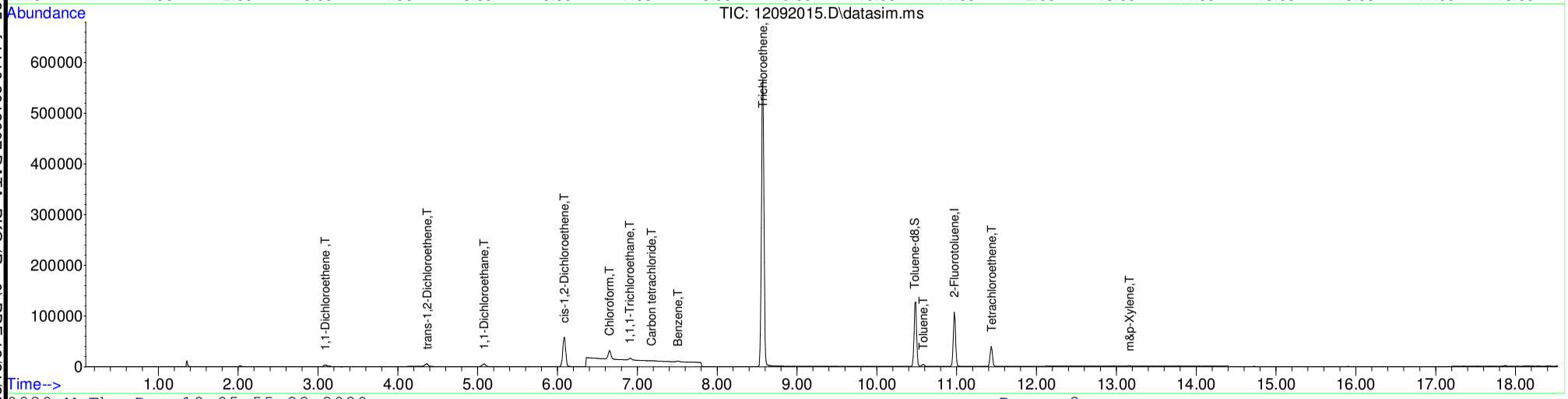
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092015.D
Acq On : 9 Dec 2020 14:24
InstName : AG5975C
Operator : TD
Sample : 2012007-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 10 05:55:27 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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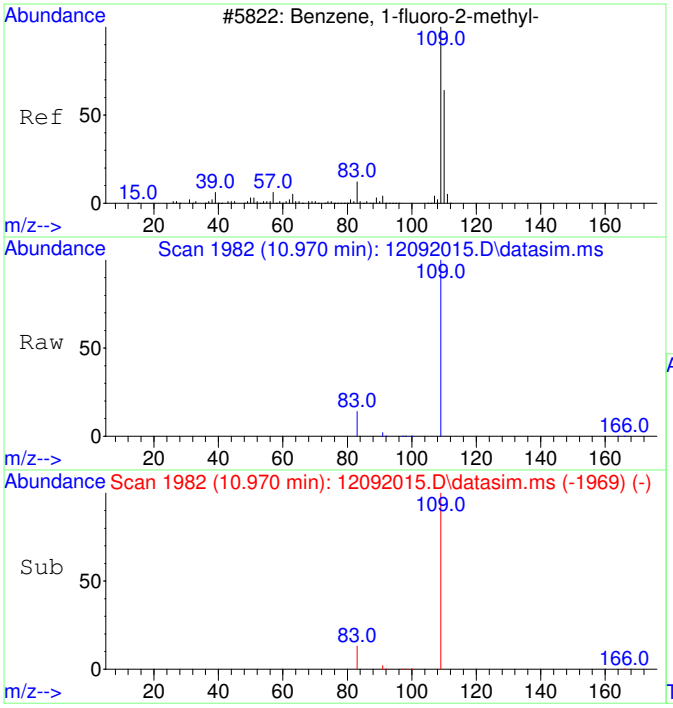
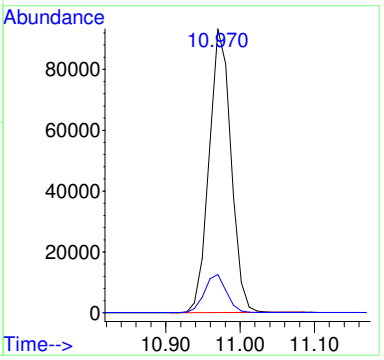
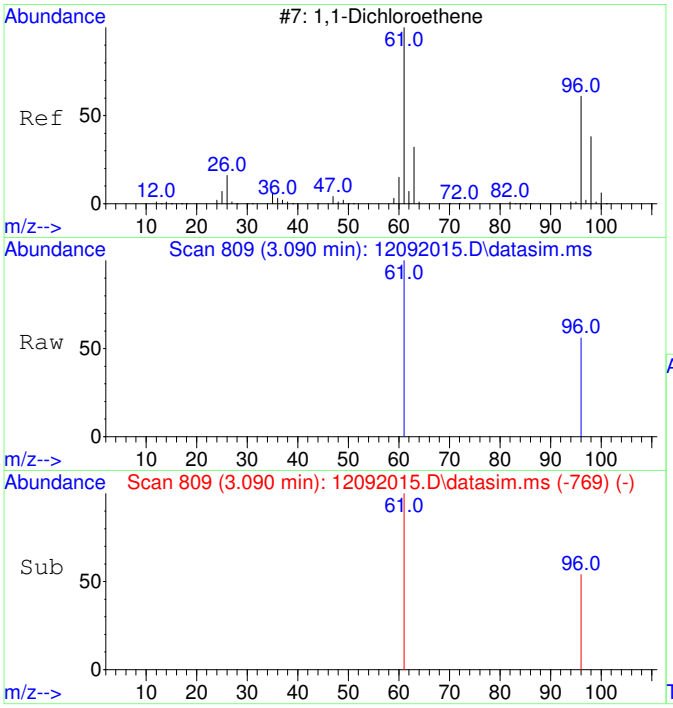


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:109 Resp: 190472

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

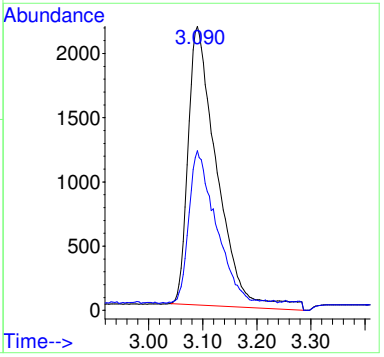




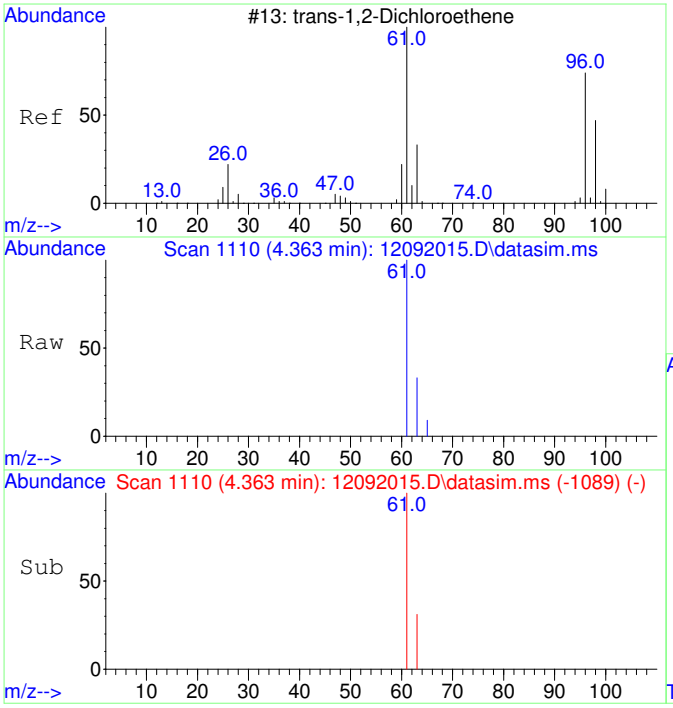
#2
1,1-Dichloroethene
Concen: 1062.83 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 8027

Ion	Ratio	Lower	Upper
61	100		
96	51.3	37.2	97.2



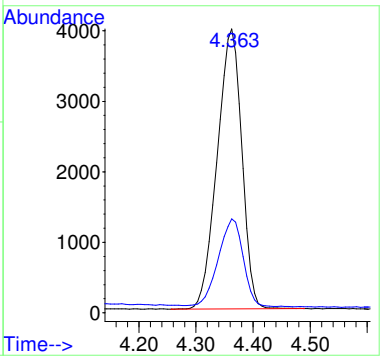
Before MI:
IMPROPER
BASELINE

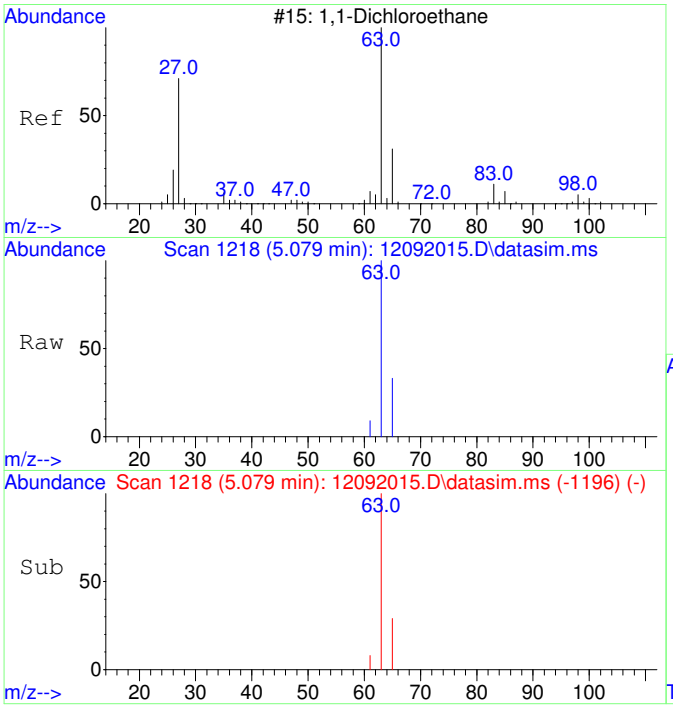


#3
trans-1,2-Dichloroethene
Concen: 1249.61 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 11898

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.4	62.4

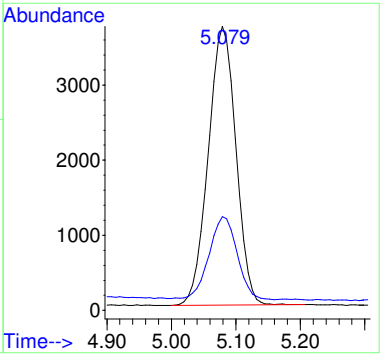


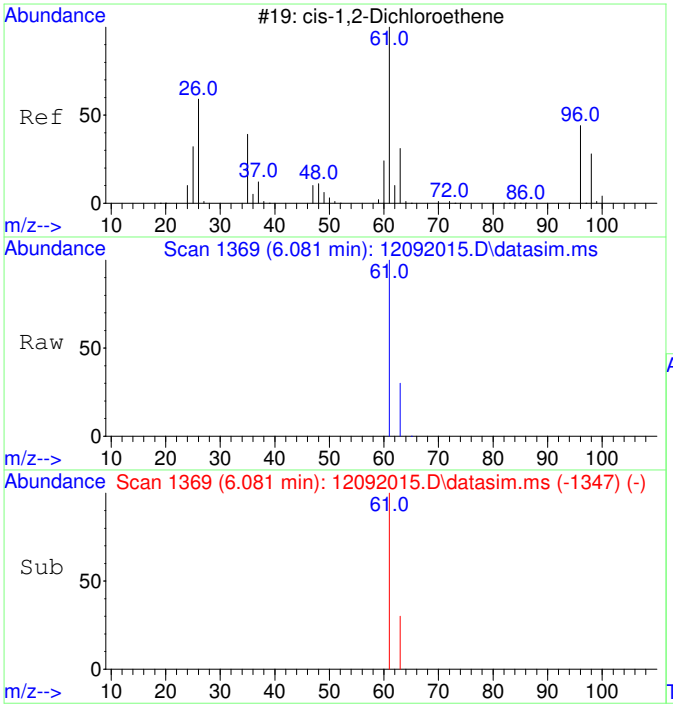


#4
1,1-Dichloroethane
Concen: 974.06 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 63 Resp: 11077

Ion	Ratio	Lower	Upper
63	100		
65	30.4	1.8	61.8

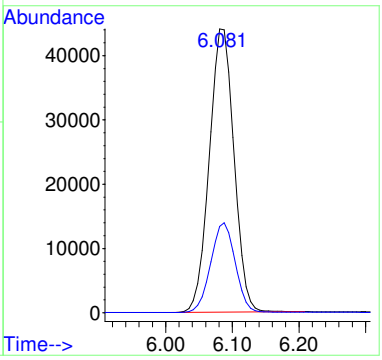


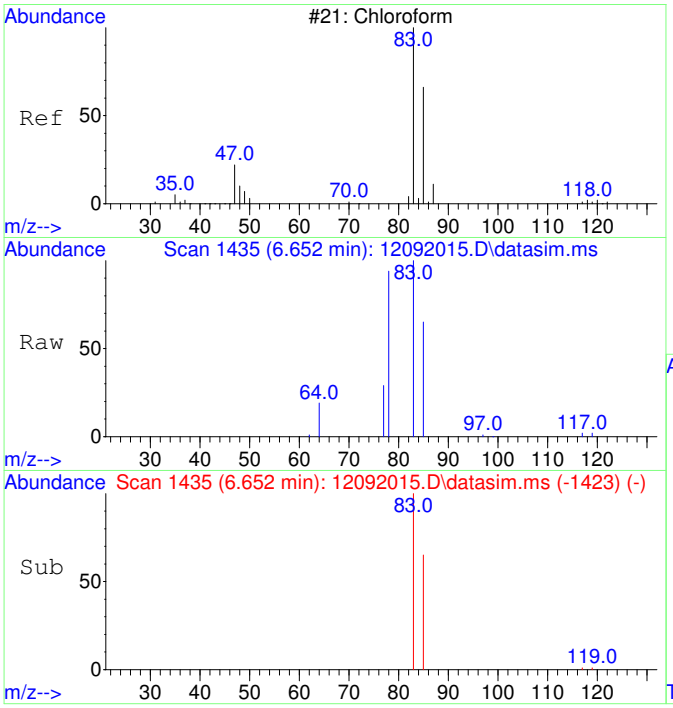


#5
cis-1,2-Dichloroethene
Concen: 9653.19 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 113695

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

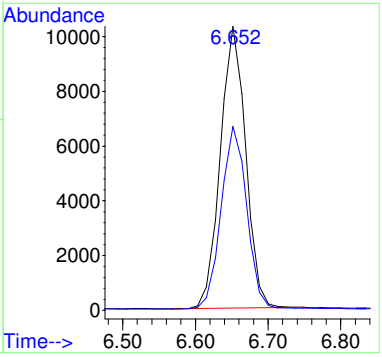


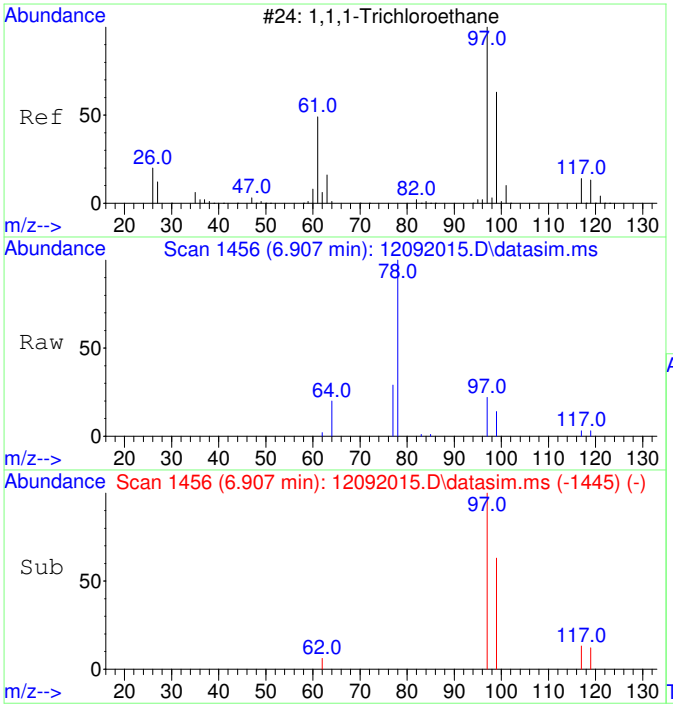


#6
Chloroform
Concen: 2204.93 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 83 Resp: 24944

Ion	Ratio	Lower	Upper
83	100		
85	65.1	35.1	95.1

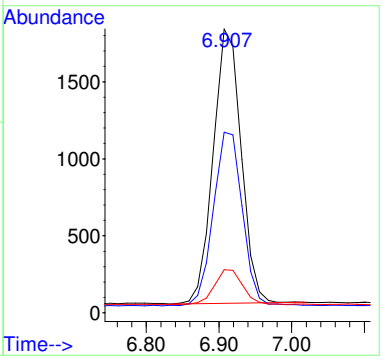


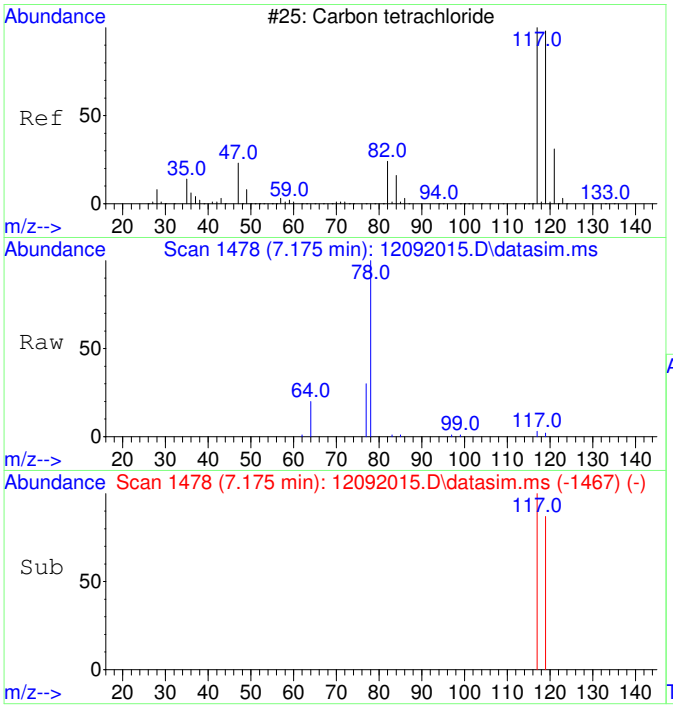


#7
1,1,1-Trichloroethane
Concen: 392.02 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 97 Resp: 4764

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	12.8	0.0	43.2

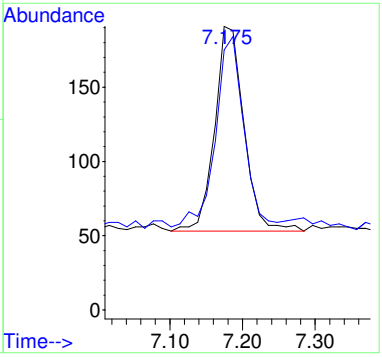


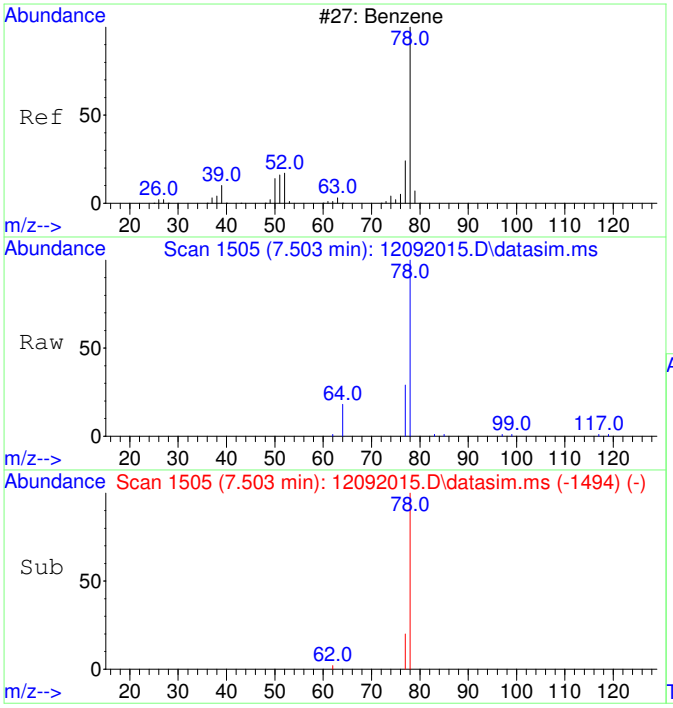


#8
Carbon tetrachloride
Concen: 33.31 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:117 Resp: 387

Ion	Ratio	Lower	Upper
117	100		
119	88.9	66.4	126.4

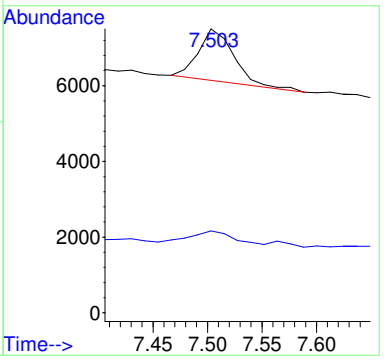


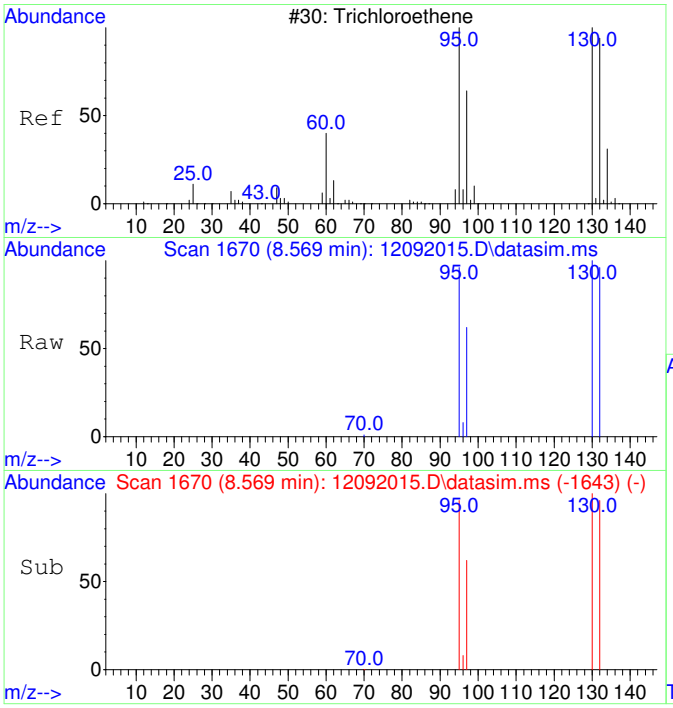


#9
Benzene
Concen: 92.23 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 78 Resp: 2956

Ion	Ratio	Lower	Upper
78	100		
77	52.5	0.0	53.2

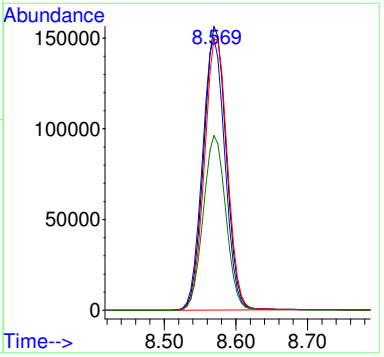


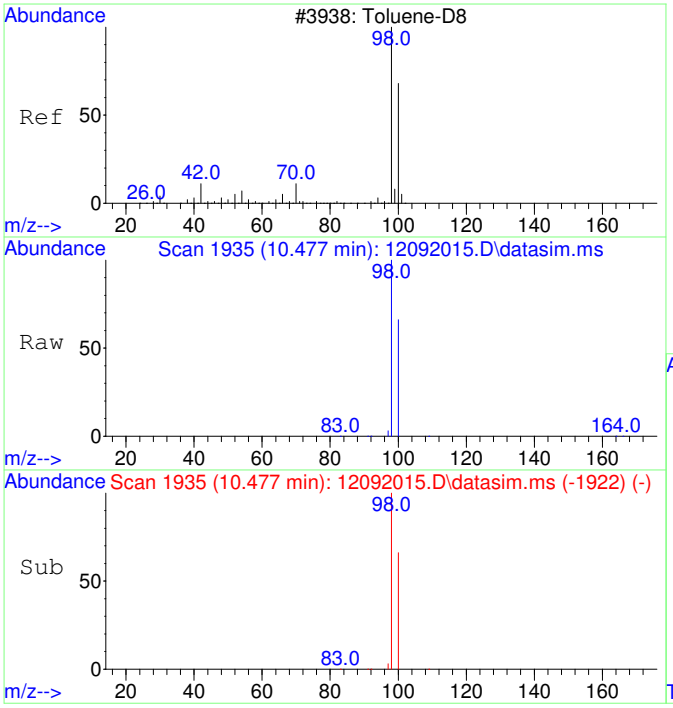


#11
Trichloroethene
Concen: 33735.48 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:130 Resp: 341385

Ion	Ratio	Lower	Upper
130	100		
95	95.8	60.7	120.7
132	96.8	76.0	116.0
97	61.6	38.6	78.6

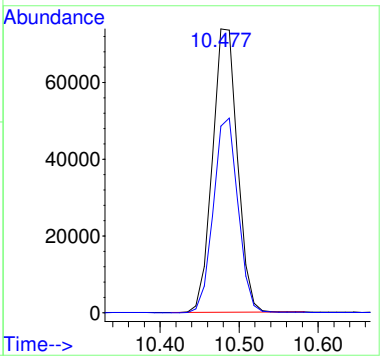


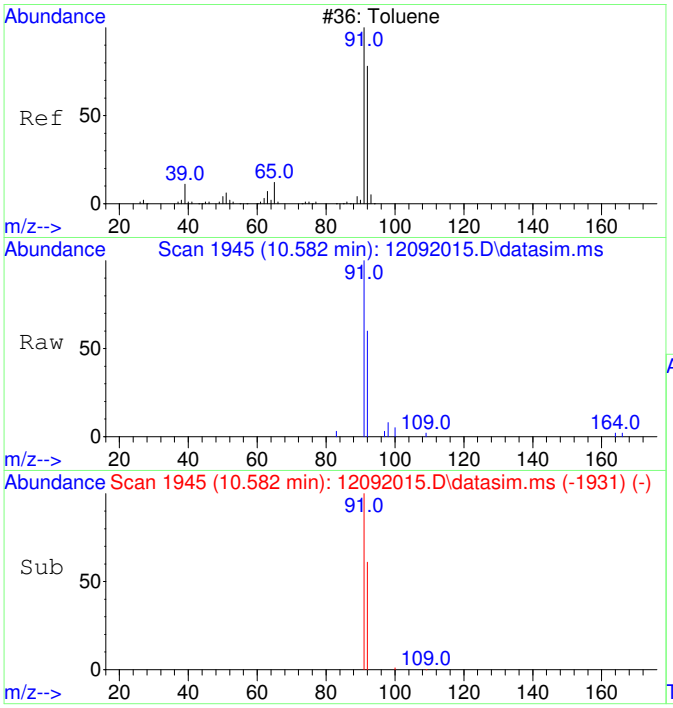


#12
Toluene-d8
Concen: 4393.18 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 98 Resp: 162063

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

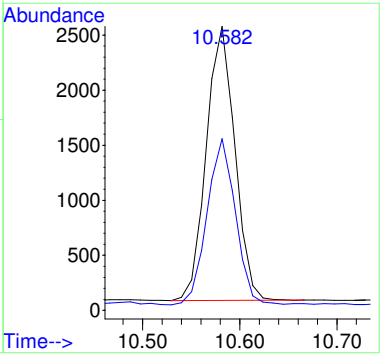


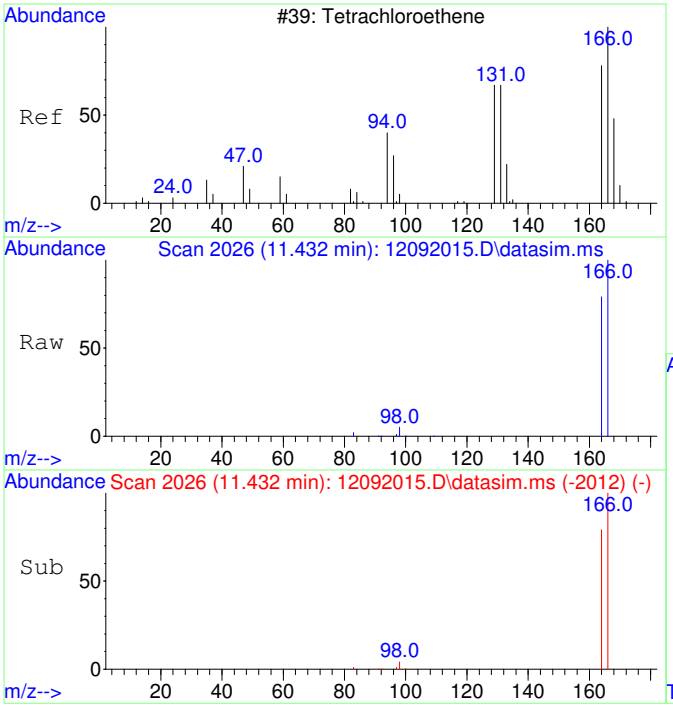


#13
Toluene
Concen: 110.32 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 5067

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

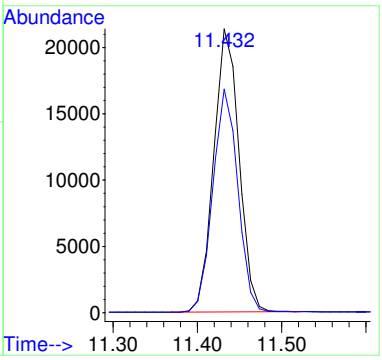


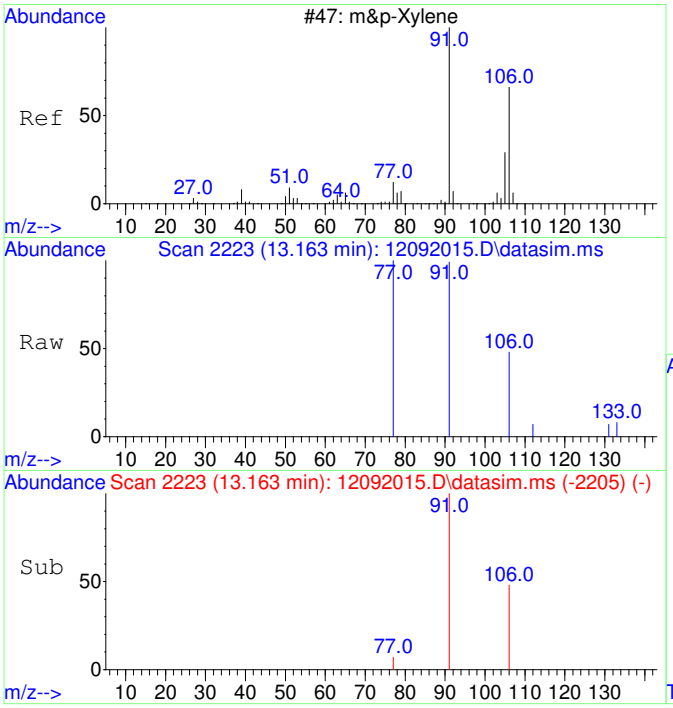


#15
Tetrachloroethene
Concen: 3112.67 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:166 Resp: 44531

Ion	Ratio	Lower	Upper
166	100		
164	77.8	47.8	107.8

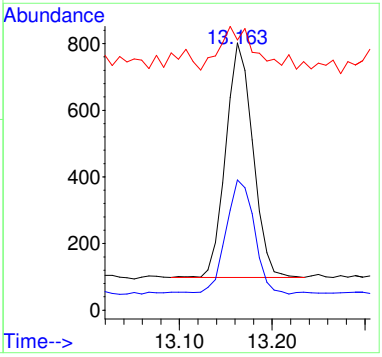


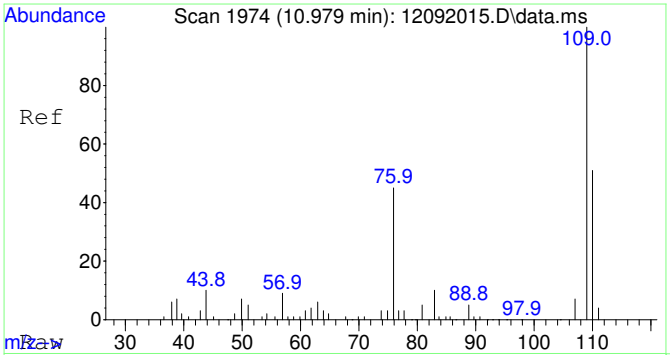


#19
m&p-Xylene
Concen: 31.74 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 1434

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	24.3	0.0	42.4

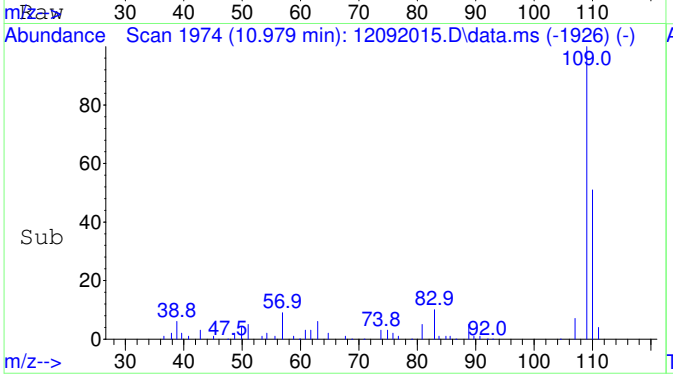


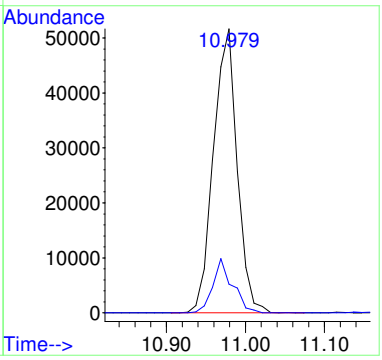


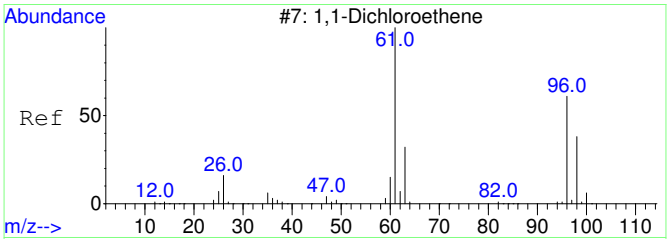
#25
2-Fluorotoluene SCAN
Concen: 4973.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:109 Resp: 107529

Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8



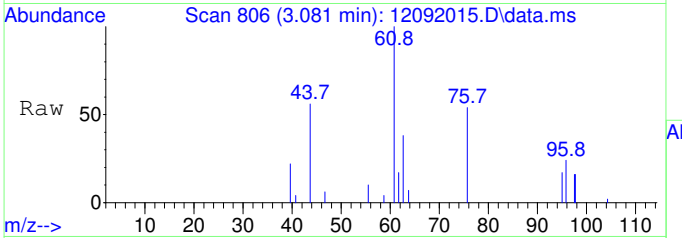


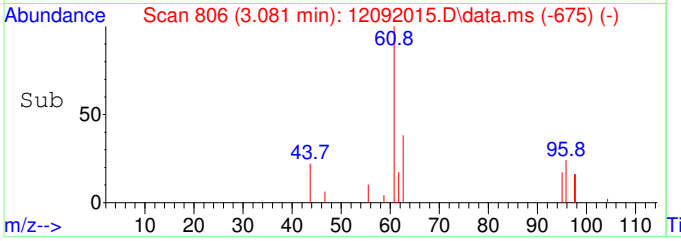


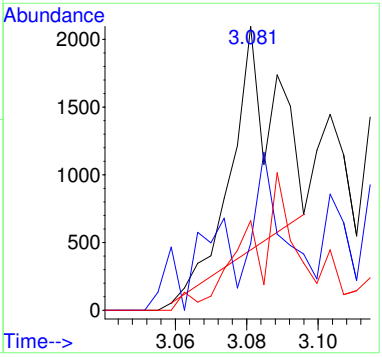
#26
1,1-Dichloroethene SCAN
Concen: 279.55 ug/L
RT: 3.081 min Scan# 806
Delta R.T. -0.015 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

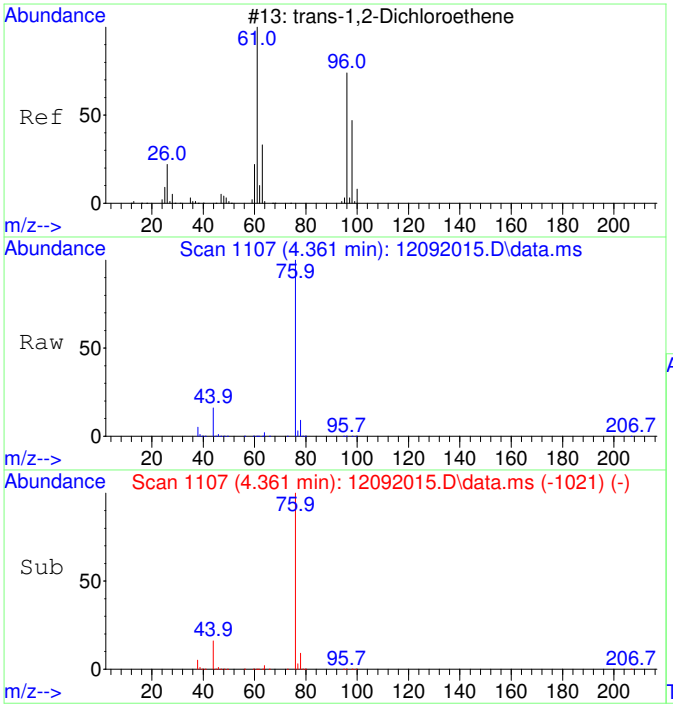
Tgt Ion: 61 Resp: 1411

Ion	Ratio	Lower	Upper
61	100		
96	34.2	33.1	93.1
98	57.9	11.2	71.2





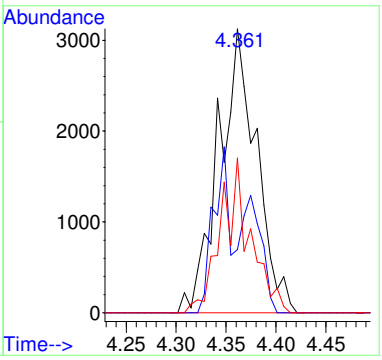


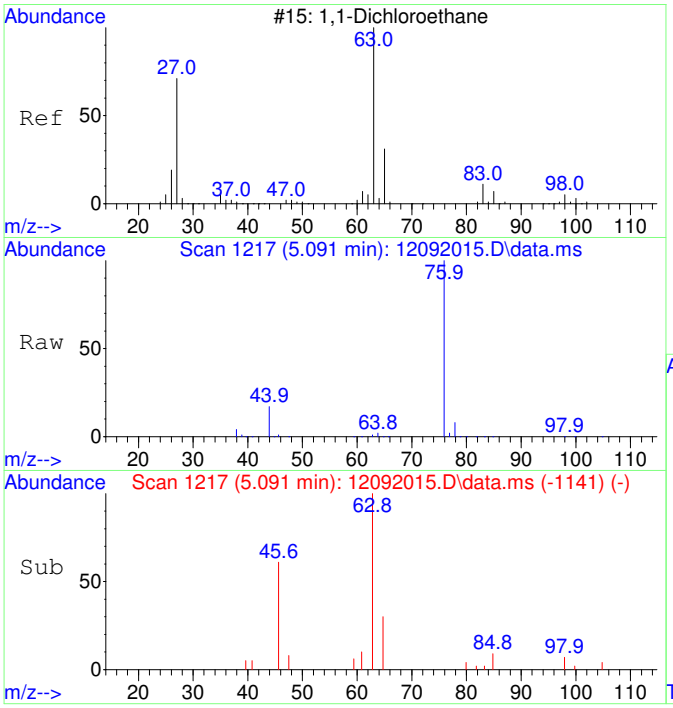


#27
trans-1,2-Dichloroethene SCAN
Concen: 1280.17 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 8230

Ion	Ratio	Lower	Upper
61	100		
96	10.4	49.0	109.0#
98	42.2	20.5	80.5

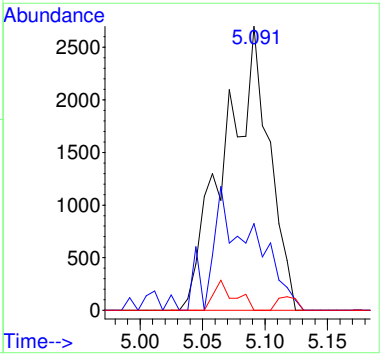


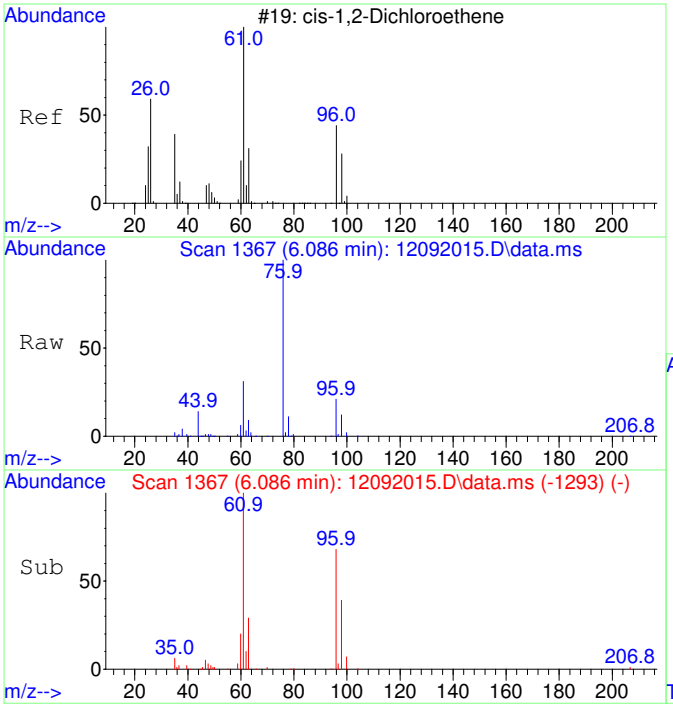


#28
1,1-Dichloroethane SCAN
Concen: 877.01 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. 0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 63 Resp: 6655

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

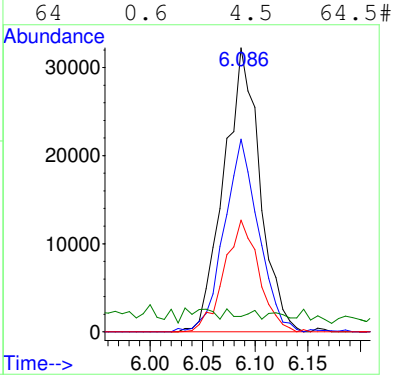


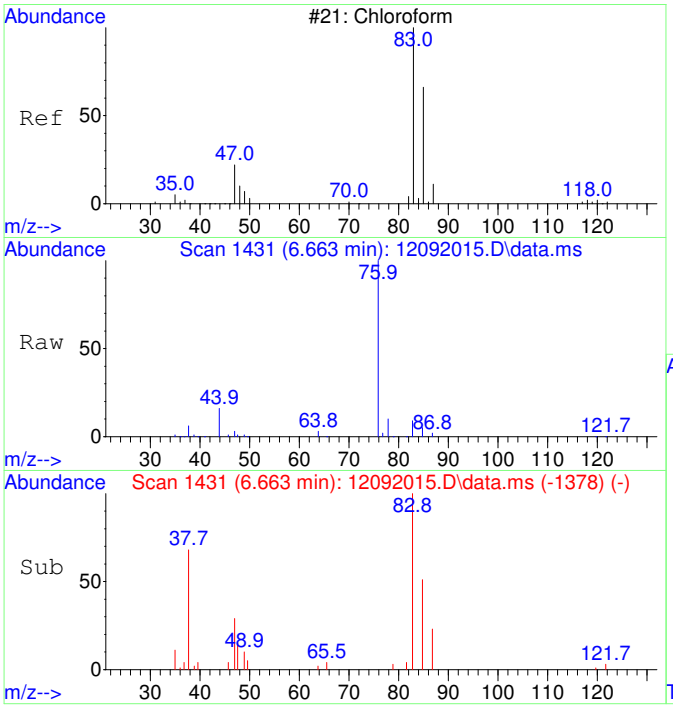


#29
cis-1,2-Dichloroethene SCAN
Concen: 10274.79 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 76648

Ion	Ratio	Lower	Upper
61	100		
96	64.6	39.9	99.9
98	38.0	13.5	73.5
64	0.6	4.5	64.5#

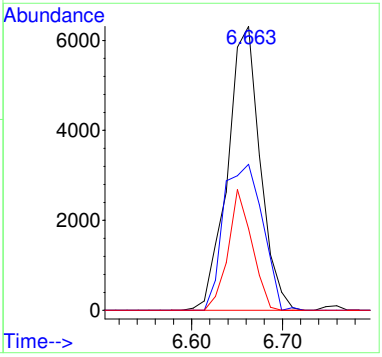


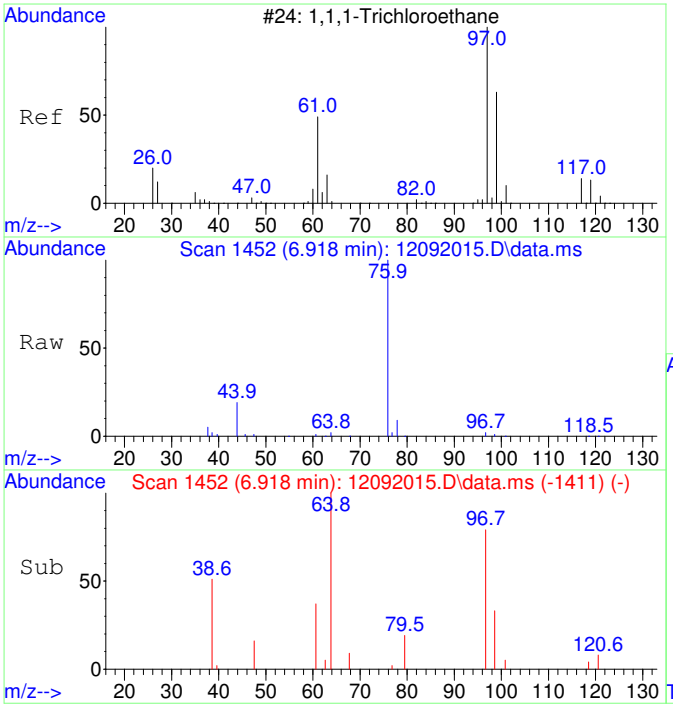


#30
Chloroform SCAN
Concen: 2270.94 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 83 Resp: 15801

Ion	Ratio	Lower	Upper
83	100		
85	61.6	34.6	94.6
47	31.0	0.0	53.4

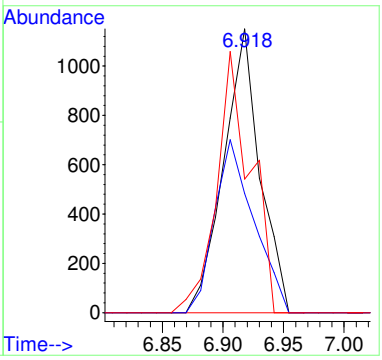


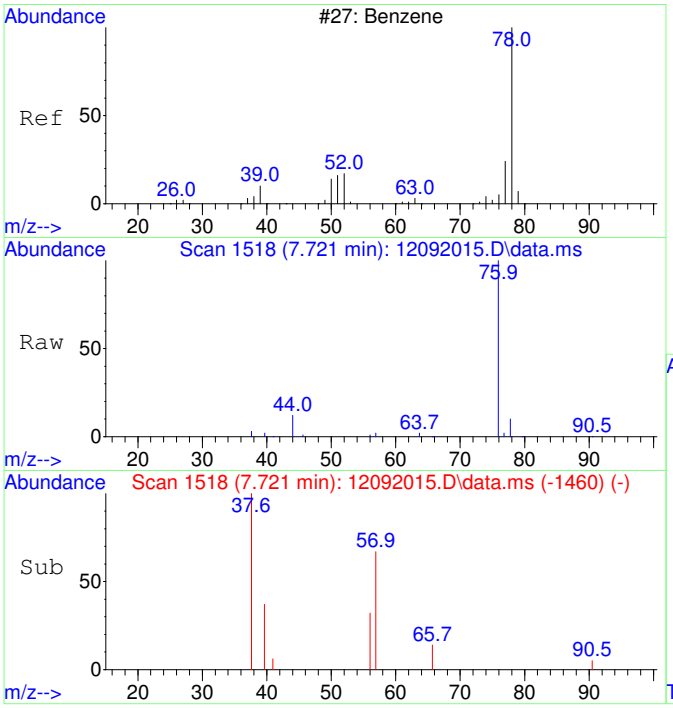


#31
1,1,1-Trichloroethane SCAN
Concen: 334.82 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 97 Resp: 2404

Ion	Ratio	Lower	Upper
97	100		
99	65.9	43.6	103.6
61	86.0	18.0	78.0#

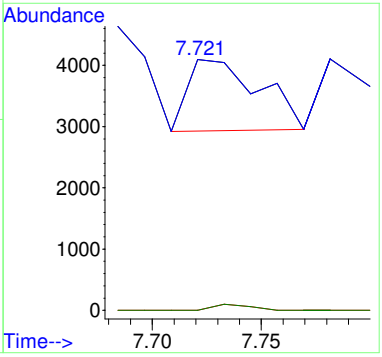


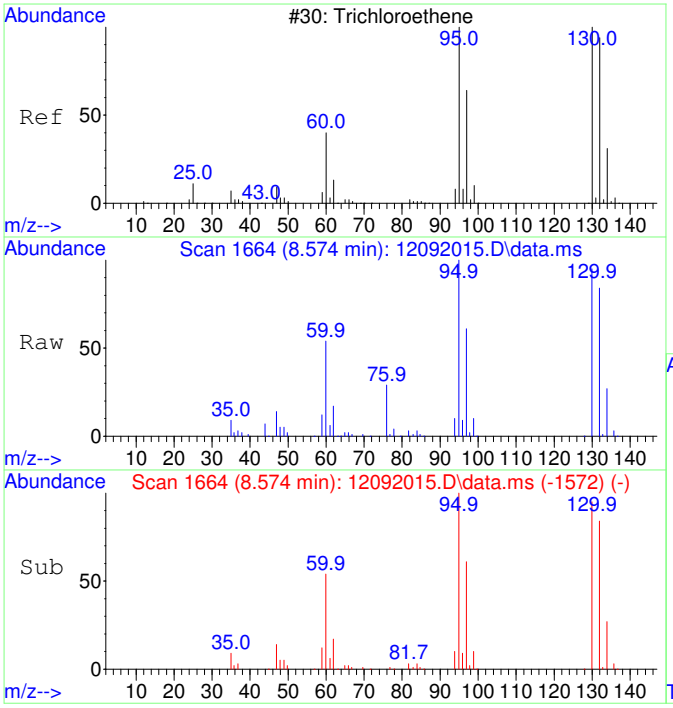


#33
Benzene SCAN
Concen: 122.69 ug/L
RT: 7.721 min Scan# 1518
Delta R.T. 0.207 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 78 Resp: 2665

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

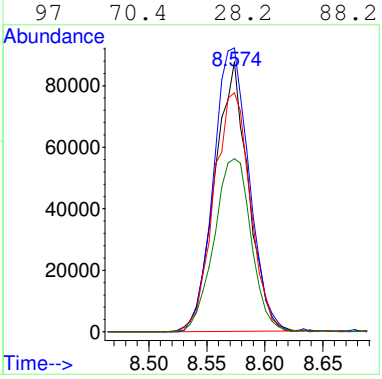


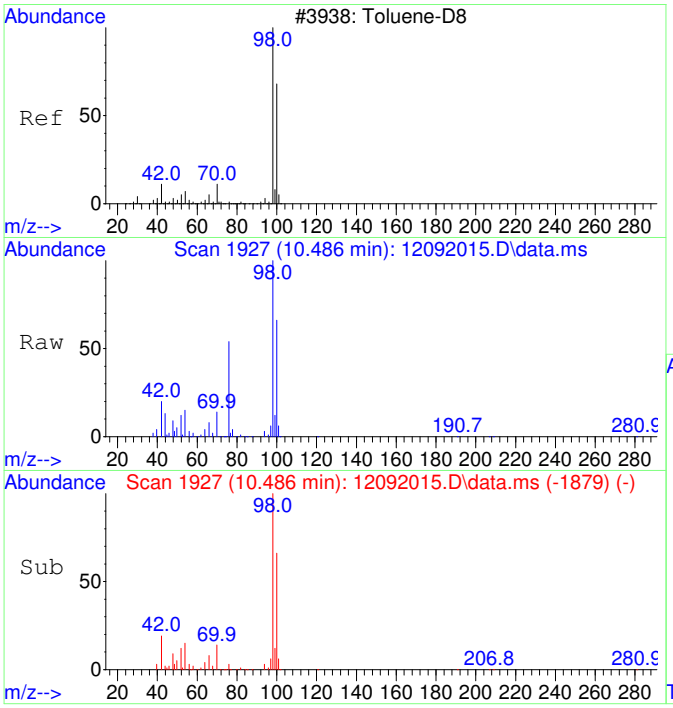


#35
Trichloroethene SCAN
Concen: 37555.61 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:130 Resp: 177879

Ion	Ratio	Lower	Upper
130	100		
95	111.0	60.5	120.5
132	96.4	59.6	119.6
97	70.4	28.2	88.2

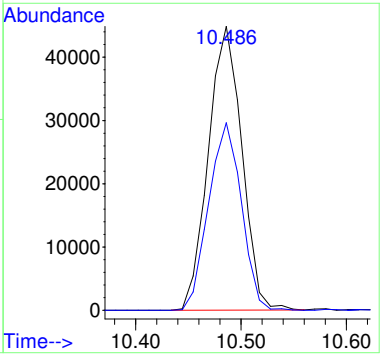


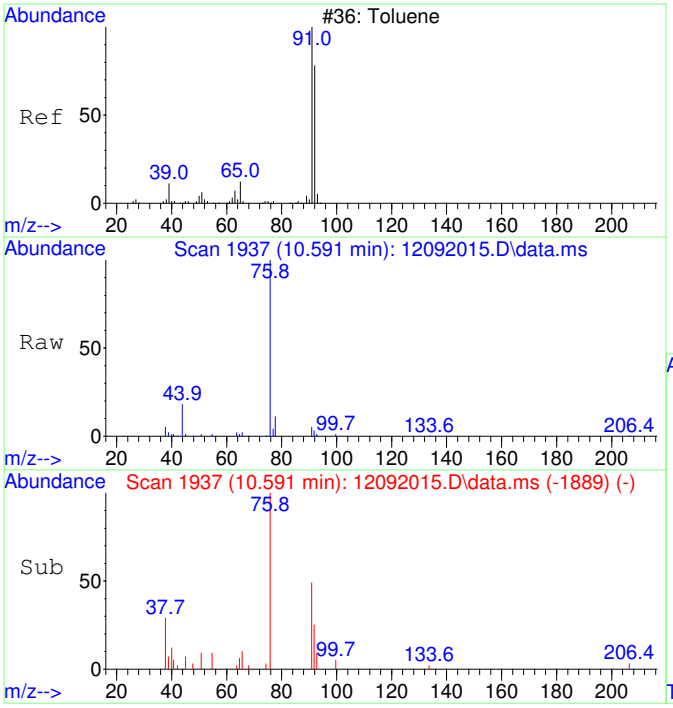


#36
Toluene-d8 SCAN
Concen: 4908.74 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 98 Resp: 99538

Ion	Ratio	Lower	Upper
98	100		
100	64.4	40.0	100.0

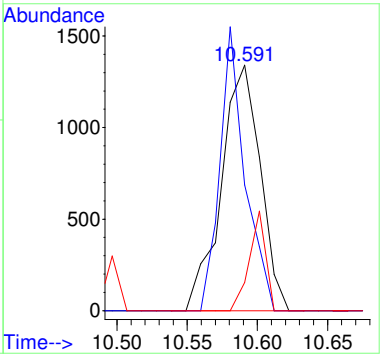


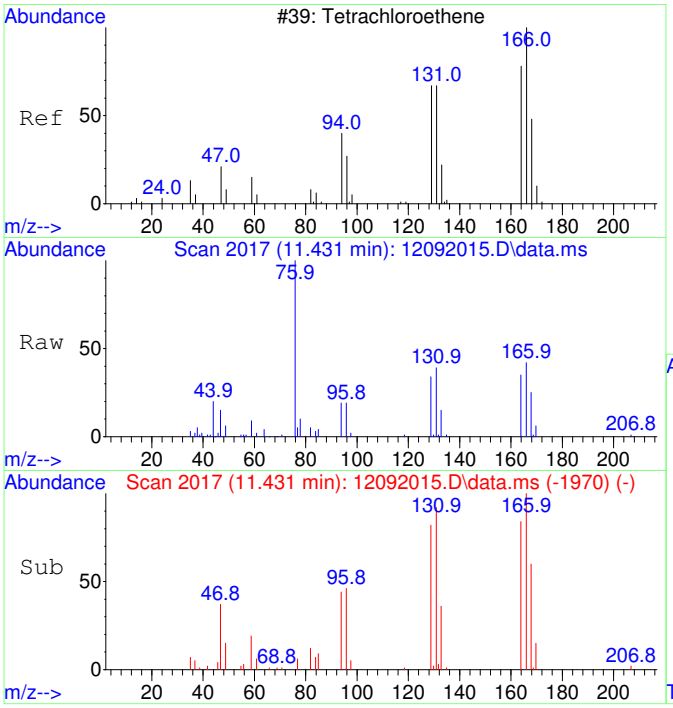


#37
Toluene SCAN
Concen: 104.58 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 2611

Ion	Ratio	Lower	Upper
91	100		
92	74.0	28.3	88.3
65	0.0	0.0	41.0

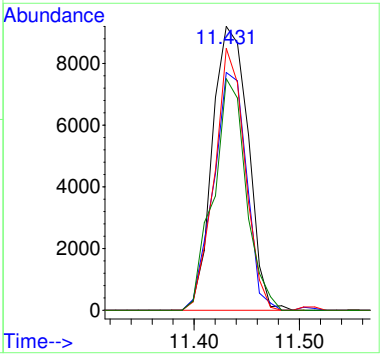




#39
Tetrachloroethene SCAN
Concen: 3857.16 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:166 Resp: 21664

Ion	Ratio	Lower	Upper
166	100		
164	77.8	50.9	110.9
131	79.3	38.7	98.7
129	75.1	41.8	101.8



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092015.D
Acq On : 9 Dec 2020 14:24
InstName : AG5975C
Operator : TD
Sample : 2012007-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

M.I. Performed By:
TD at 9:21 am, Dec 10, 2020

M.I. Approved By:
ZAR at 4:05 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:27 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

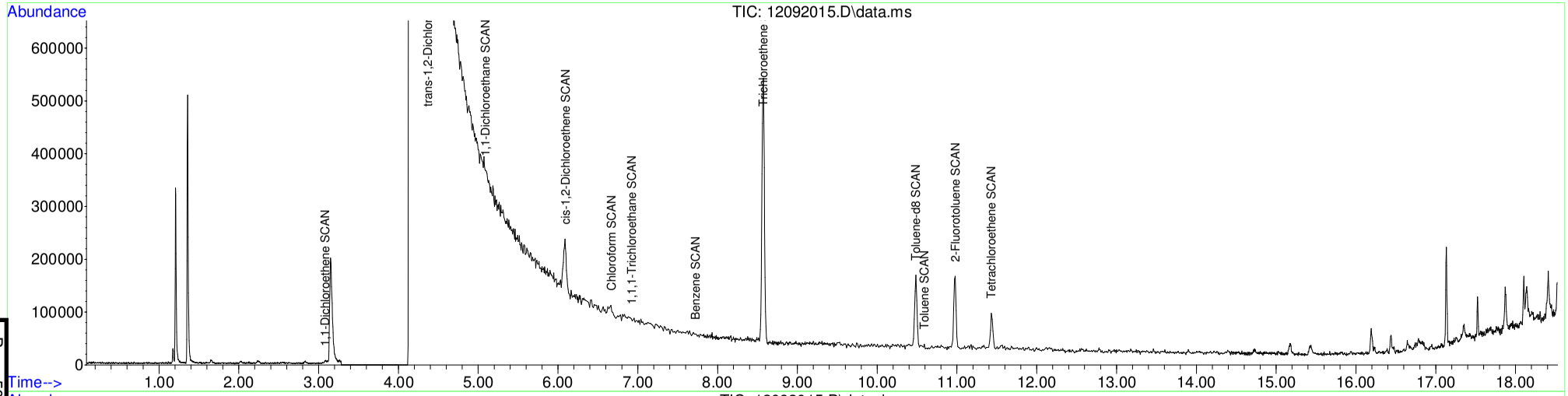
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	190472	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	162063	4393.18 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.86%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	7551m	999.80 ug/L	
3] trans-1,2-Dichloroethene	4.363	61	11898	1249.61 ug/L	99
4] 1,1-Dichloroethane	5.079	63	11077	974.06 ug/L	97
5] cis-1,2-Dichloroethene	6.081	61	113695	9653.19 ug/L	98
6] Chloroform	6.652	83	24944	2204.93 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	4764	392.02 ug/L	99
8] Carbon tetrachloride	7.175	117	387	33.31 ug/L	92
9] Benzene	7.503	78	2956	92.23 ug/L	40
11] Trichloroethene	8.569	130	341385	33735.48 ug/L **OC**	97
13] Toluene	10.582	91	5067	110.32 ug/L	100
15] Tetrachloroethene	11.432	166	44531	3112.67 ug/L	100
19] m&p-Xylene	13.163	91	1434	31.74 ug/L	92
25) 2-Fluorotoluene SCAN	10.979	109	107529	4973.47 ug/L	95
26) 1,1-Dichloroethene SCAN	3.081	61	1411	279.55 ug/L	67
27) trans-1,2-Dichloroethe...	4.361	61	8230	1280.17 ug/L #	48
28) 1,1-Dichloroethane SCAN	5.091	63	6655	877.01 ug/L #	50
29) cis-1,2-Dichloroethene...	6.086	61	76648	10274.79 ug/L #	81
30) Chloroform SCAN	6.663	83	15801	2270.94 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	2404	334.82 ug/L #	72
33) Benzene SCAN	7.721	78	2665	122.69 ug/L	93
35) Trichloroethene SCAN	8.574	130	177879	37555.61 ug/L	85
36) Toluene-d8 SCAN	10.486	98	99538	4908.74 ug/L	93
37) Toluene SCAN	10.591	91	2611	104.58 ug/L #	78
39) Tetrachloroethene SCAN	11.431	166	21664	3857.16 ug/L	93

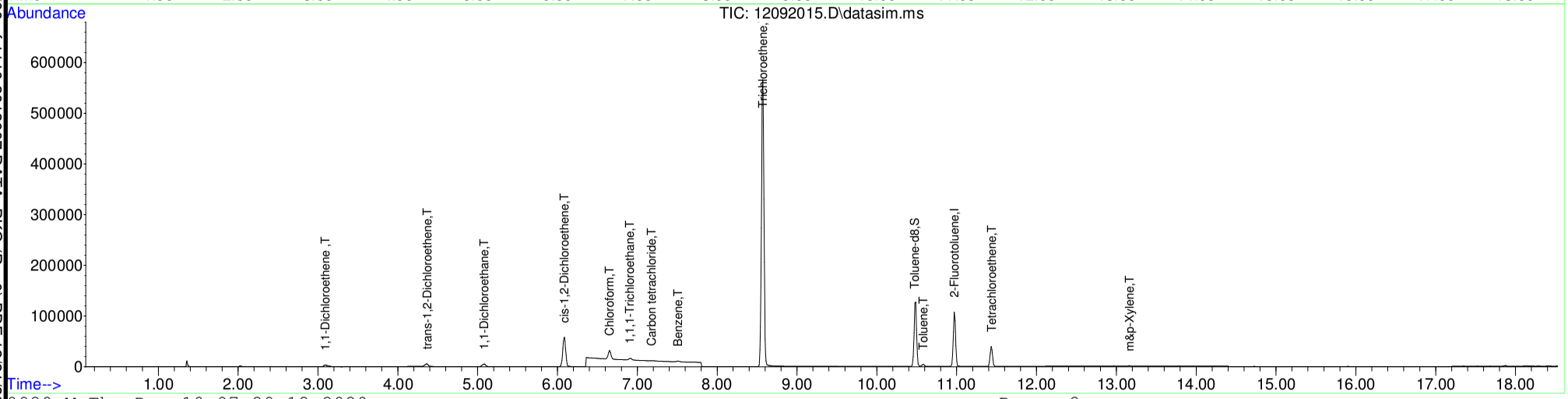
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092015.D
Acq On : 9 Dec 2020 14:24
InstName : AG5975C
Operator : TD
Sample : 2012007-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 10 05:55:27 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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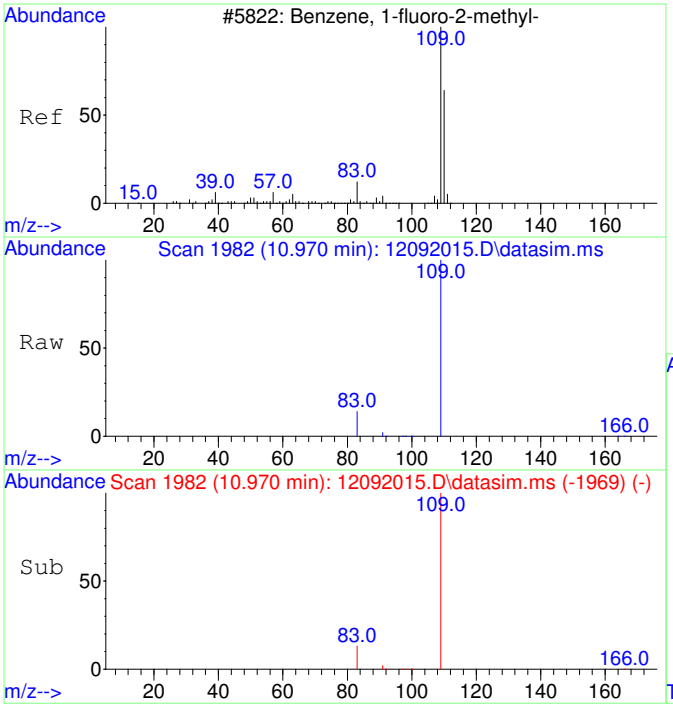
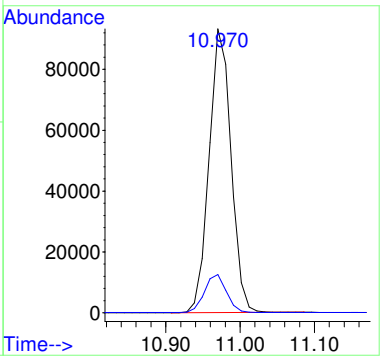
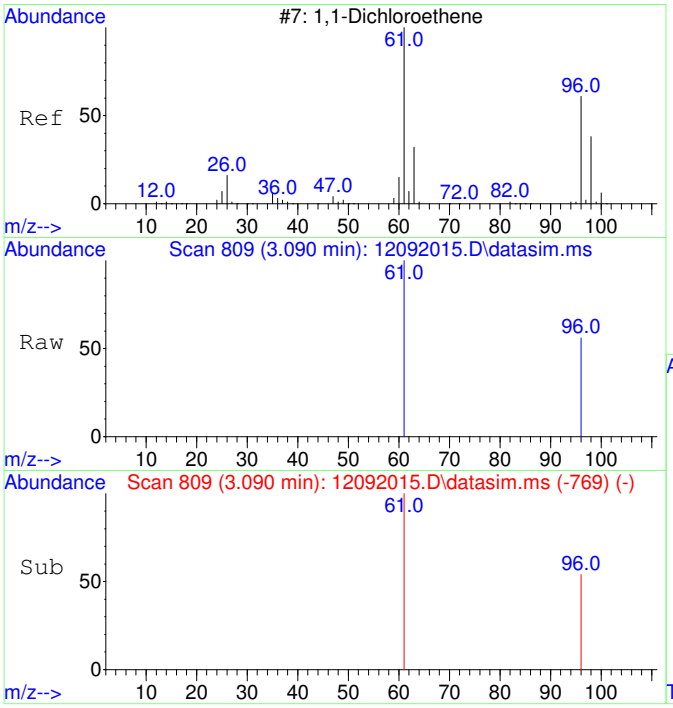


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:109 Resp: 190472

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

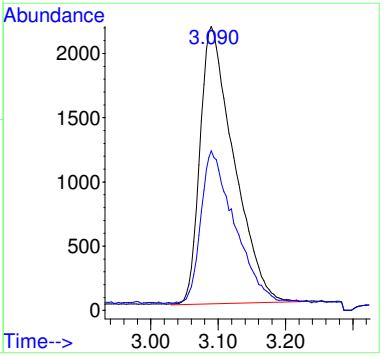


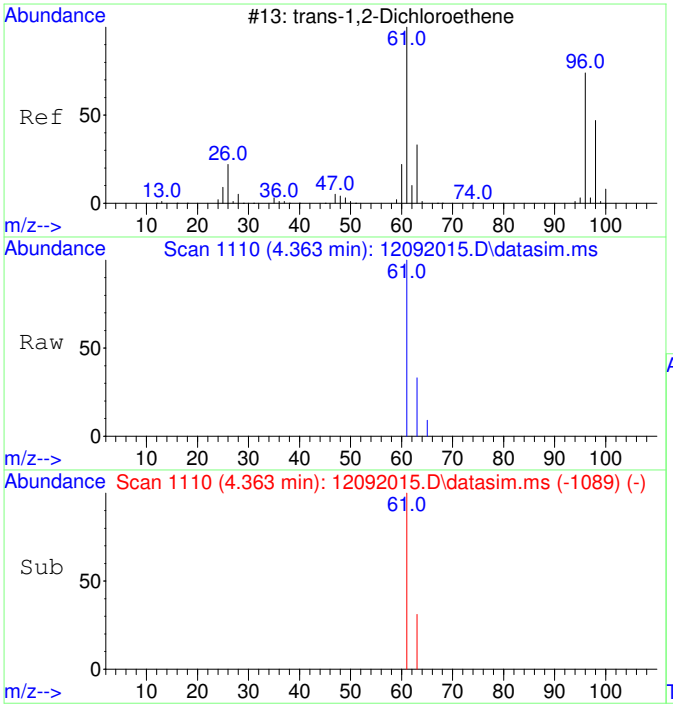


#2
1,1-Dichloroethene
Concen: 999.80 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 7551

Ion	Ratio	Lower	Upper
61	100		
96	54.6	37.2	97.2

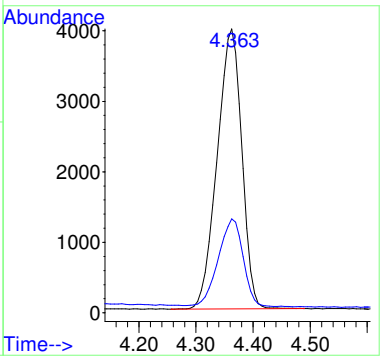


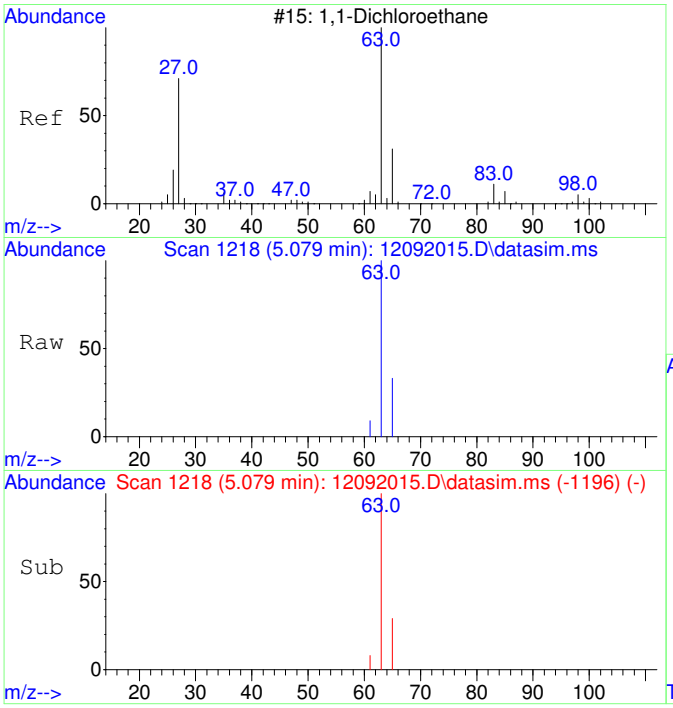


#3
trans-1,2-Dichloroethene
Concen: 1249.61 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 11898

Ion	Ratio	Lower	Upper
61	100		
63	32.0	2.4	62.4

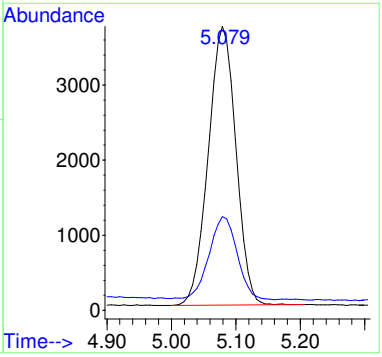


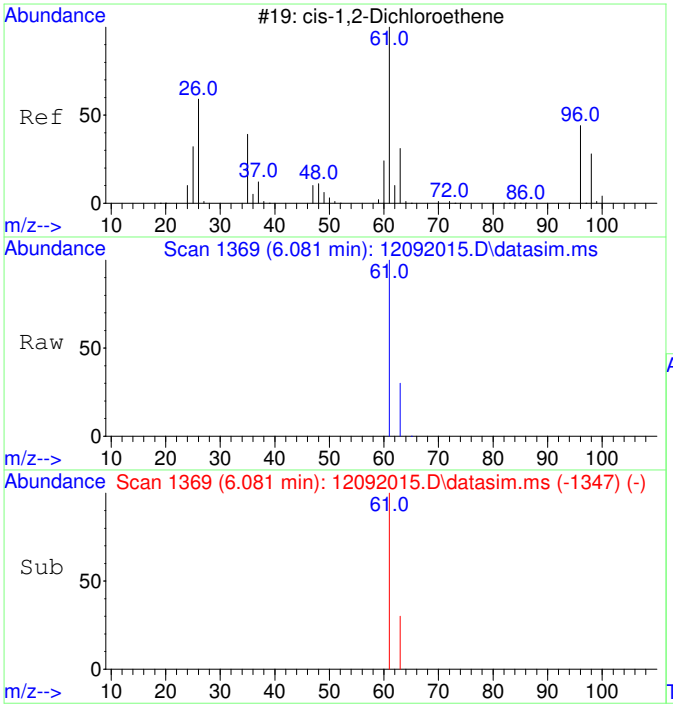


#4
1,1-Dichloroethane
Concen: 974.06 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 63 Resp: 11077

Ion	Ratio	Lower	Upper
63	100		
65	30.4	1.8	61.8

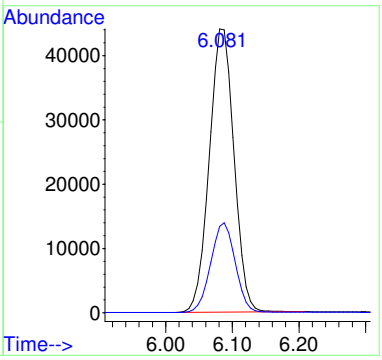


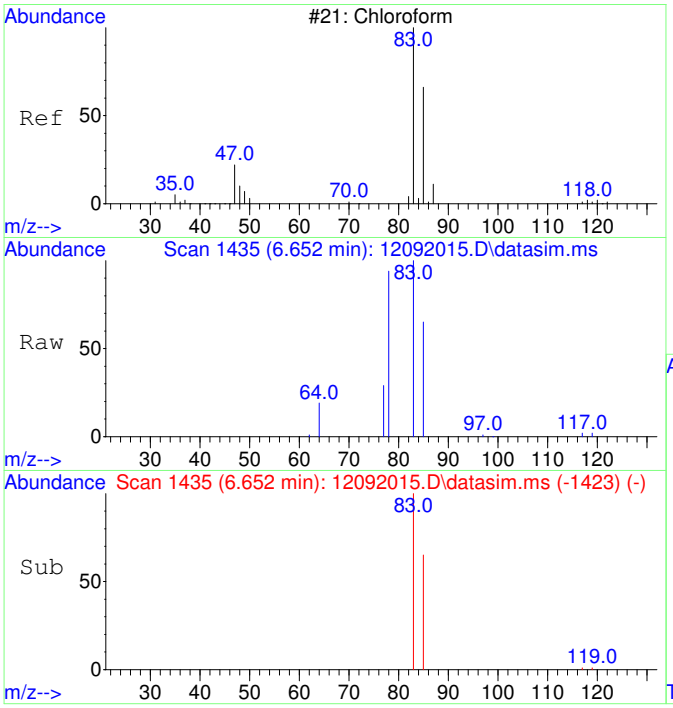


#5
cis-1,2-Dichloroethene
Concen: 9653.19 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 113695

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

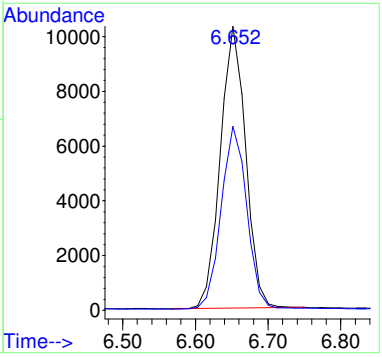


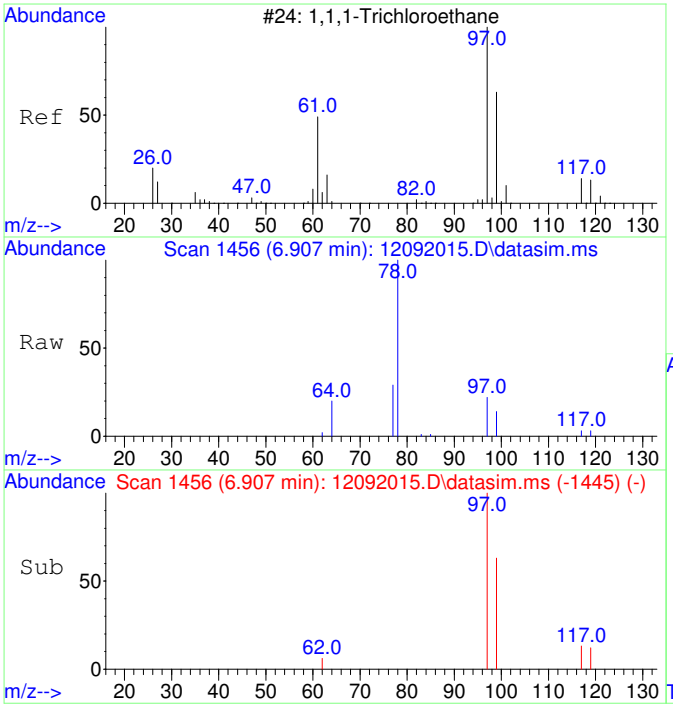


#6
Chloroform
Concen: 2204.93 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 83 Resp: 24944

Ion	Ratio	Lower	Upper
83	100		
85	65.1	35.1	95.1

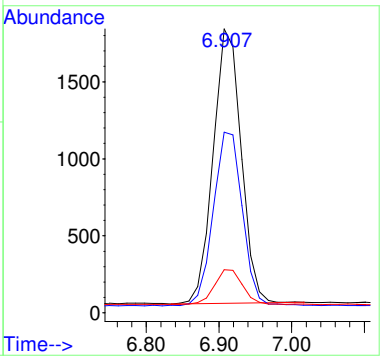


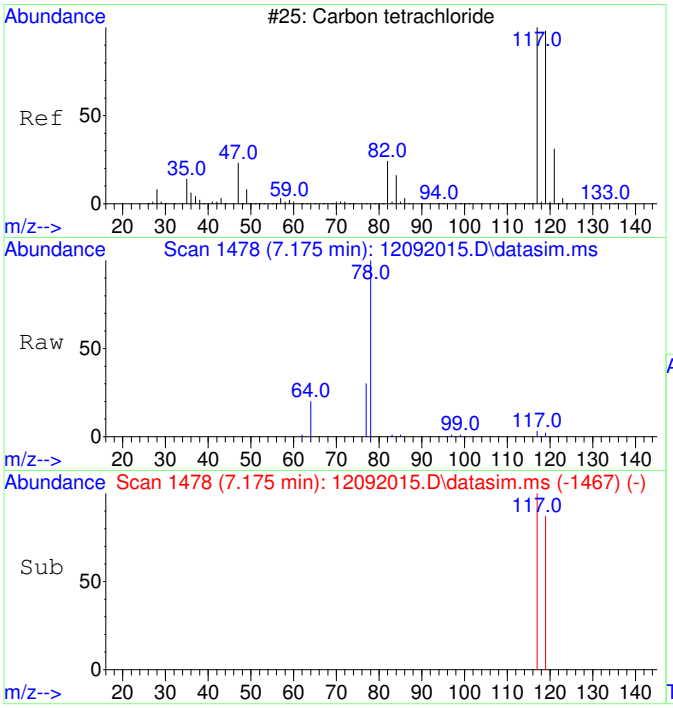


#7
1,1,1-Trichloroethane
Concen: 392.02 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 97 Resp: 4764

Ion	Ratio	Lower	Upper
97	100		
99	65.6	34.6	94.6
117	12.8	0.0	43.2

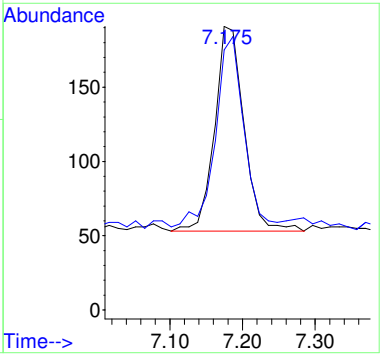


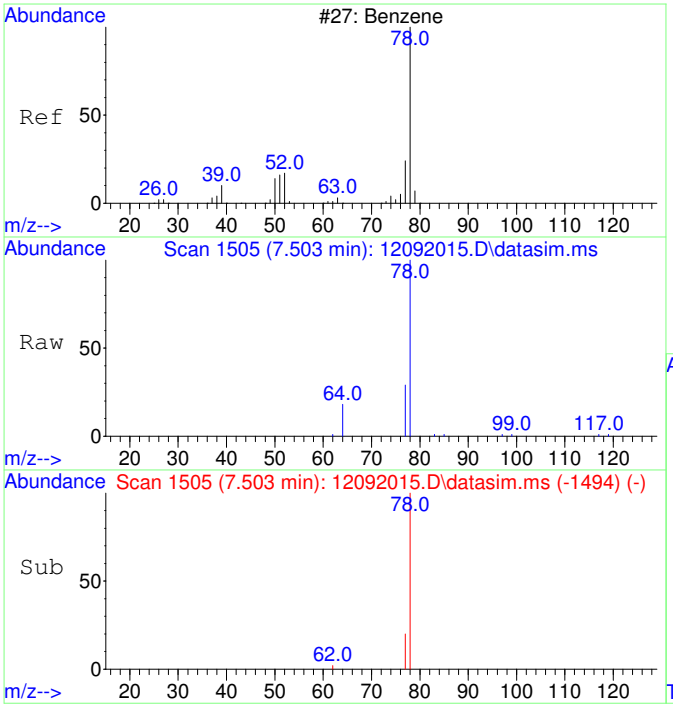


#8
Carbon tetrachloride
Concen: 33.31 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:117 Resp: 387

Ion	Ratio	Lower	Upper
117	100		
119	88.9	66.4	126.4

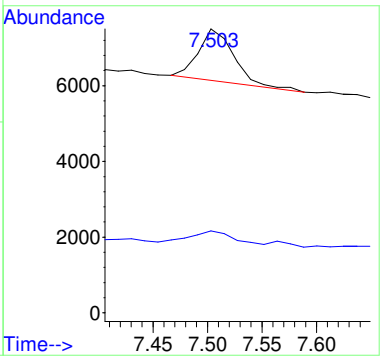


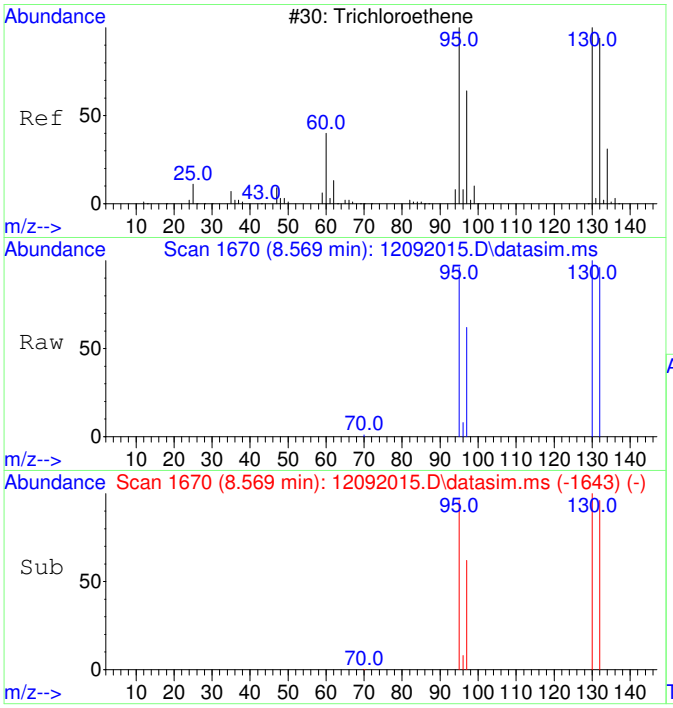


#9
Benzene
Concen: 92.23 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 78 Resp: 2956

Ion	Ratio	Lower	Upper
78	100		
77	52.5	0.0	53.2

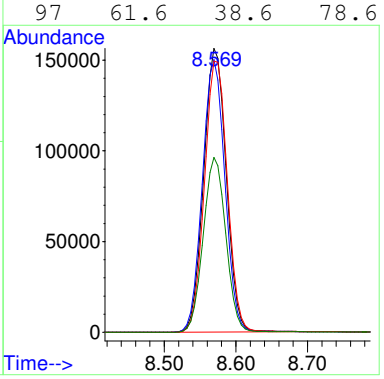


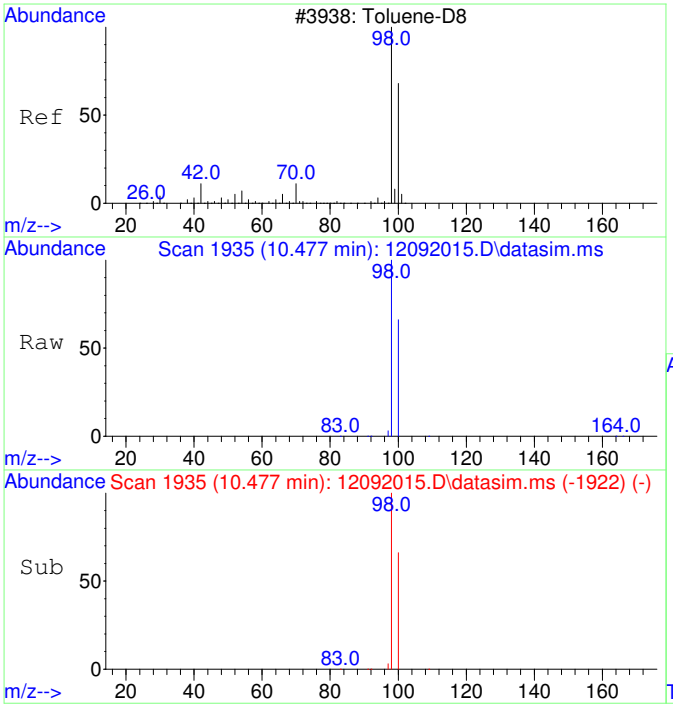


#11
Trichloroethene
Concen: 33735.48 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:130 Resp: 341385

Ion	Ratio	Lower	Upper
130	100		
95	95.8	60.7	120.7
132	96.8	76.0	116.0
97	61.6	38.6	78.6

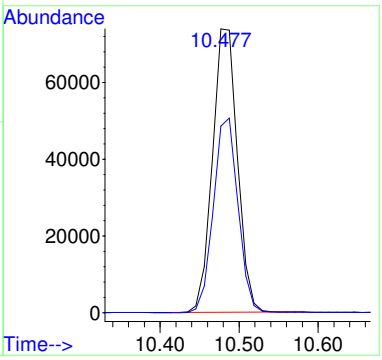


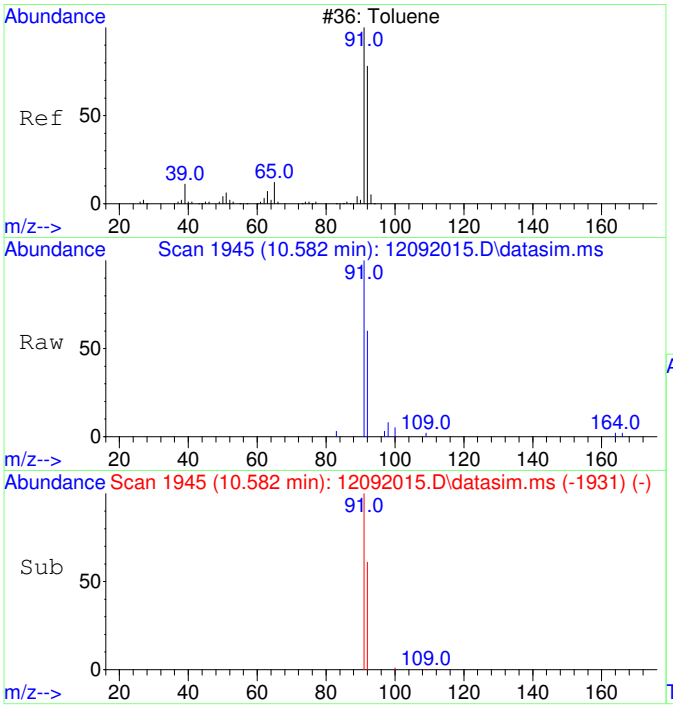


#12
Toluene-d8
Concen: 4393.18 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 98 Resp: 162063

Ion	Ratio	Lower	Upper
98	100		
100	67.4	37.1	97.1

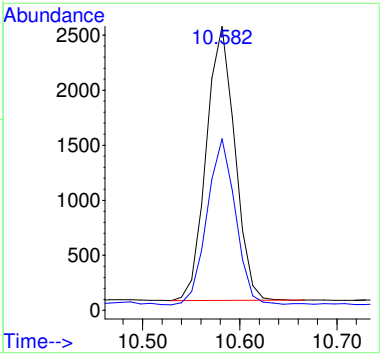


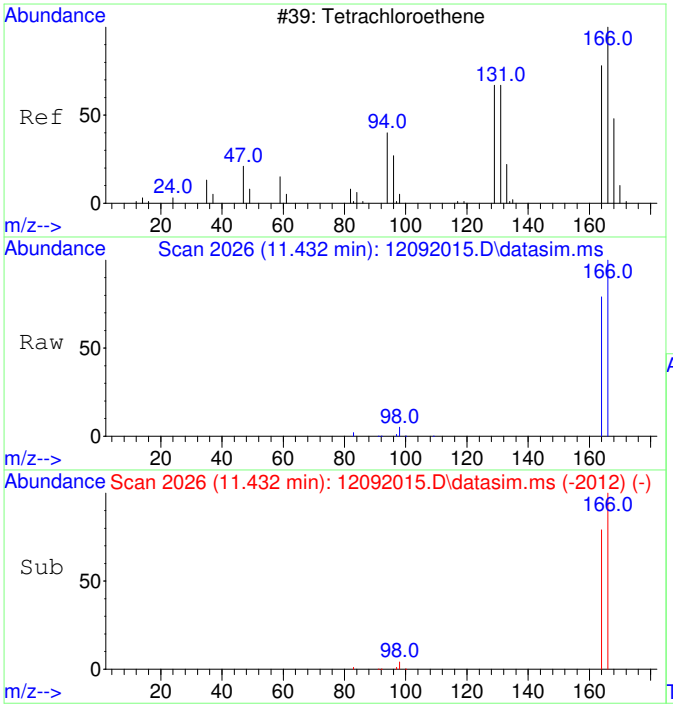


#13
Toluene
Concen: 110.32 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 5067

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

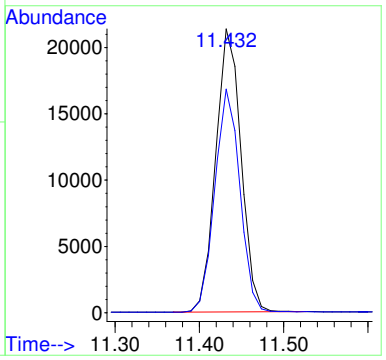


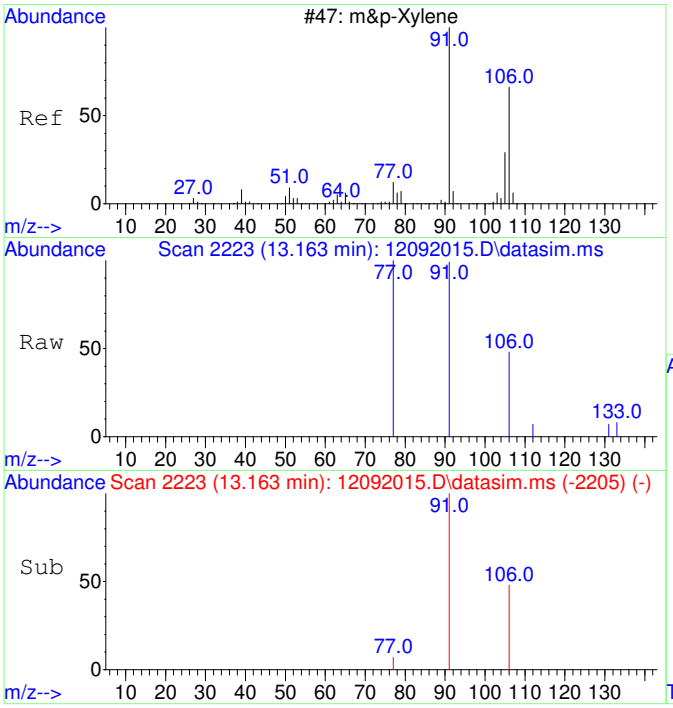


#15
Tetrachloroethene
Concen: 3112.67 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:166 Resp: 44531

Ion	Ratio	Lower	Upper
166	100		
164	77.8	47.8	107.8

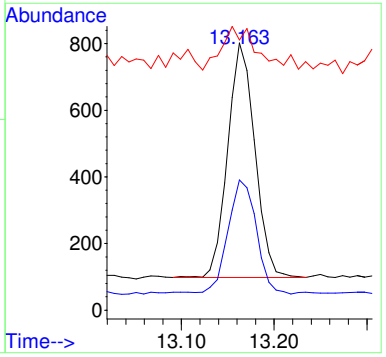


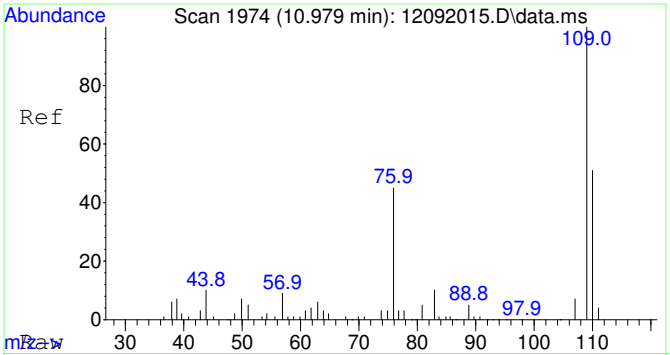


#19
m&p-Xylene
Concen: 31.74 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 1434

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	24.3	0.0	42.4

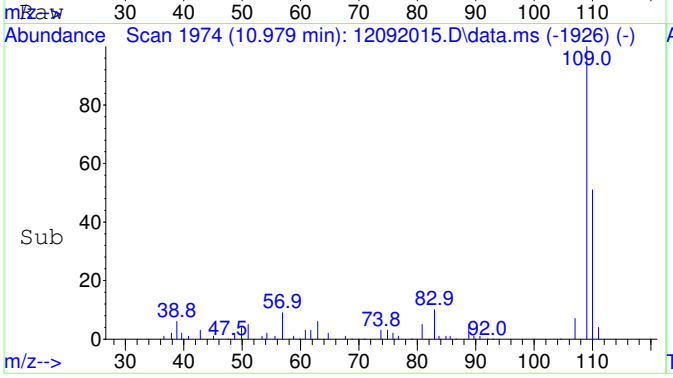


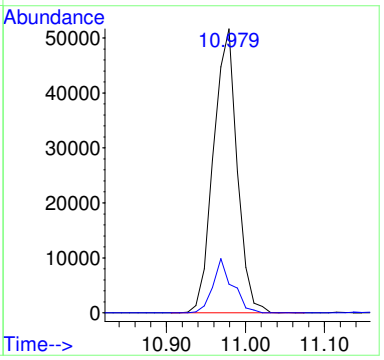


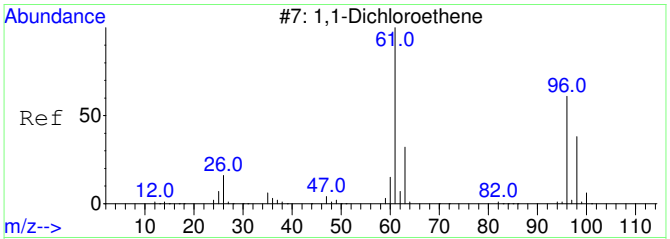
#25
2-Fluorotoluene SCAN
Concen: 4973.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:109 Resp: 107529

Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8



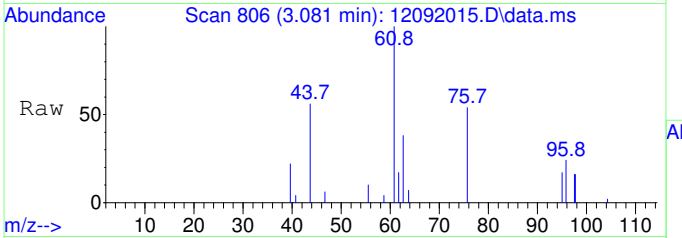


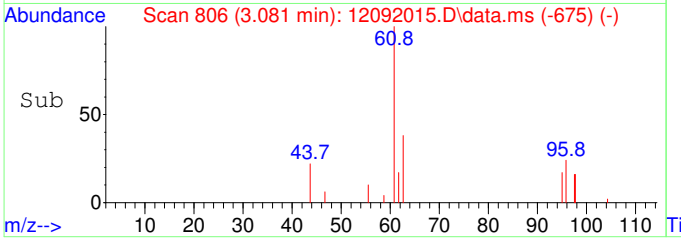


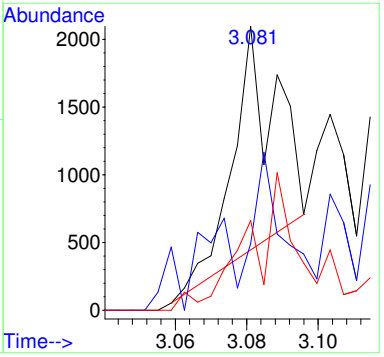
#26
1,1-Dichloroethene SCAN
Concen: 279.55 ug/L
RT: 3.081 min Scan# 806
Delta R.T. -0.015 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

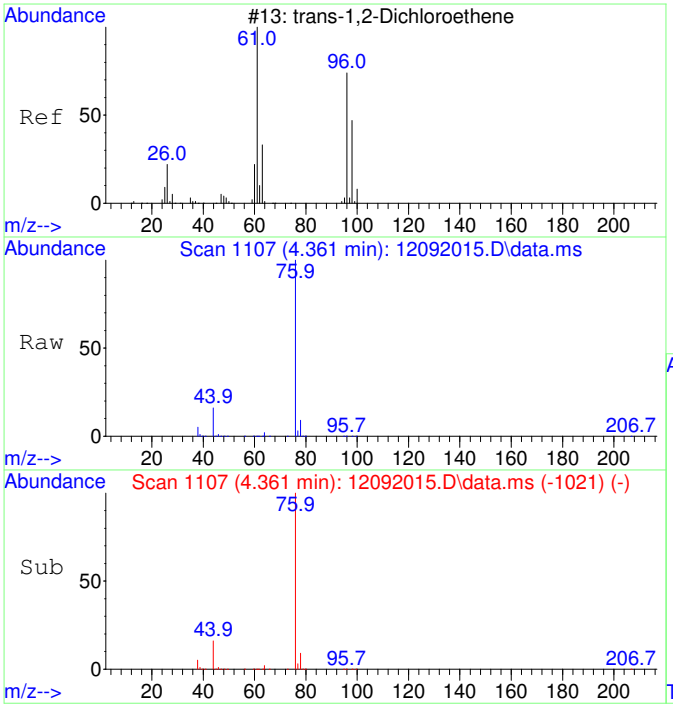
Tgt Ion: 61 Resp: 1411

Ion	Ratio	Lower	Upper
61	100		
96	34.2	33.1	93.1
98	57.9	11.2	71.2





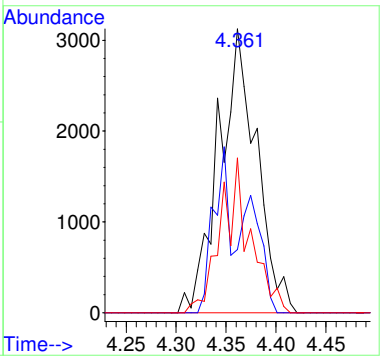


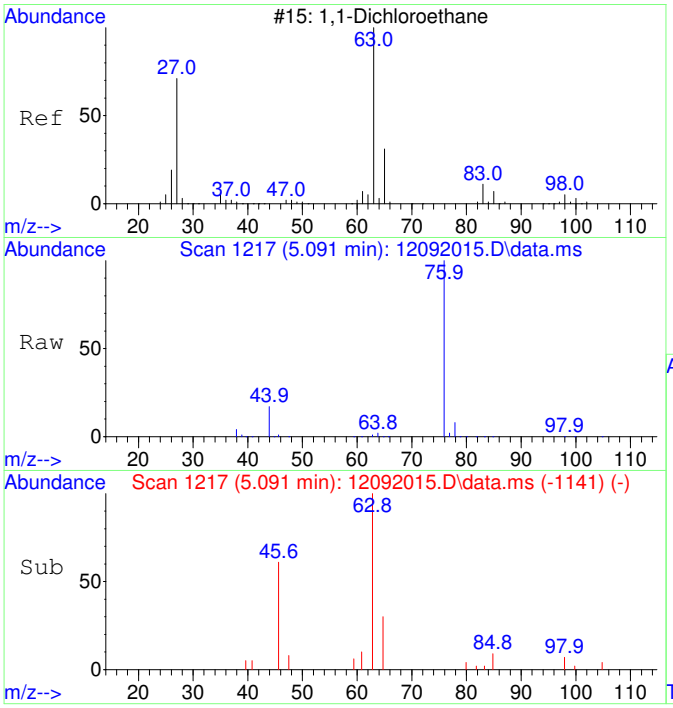


#27
trans-1,2-Dichloroethene SCAN
Concen: 1280.17 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 8230

Ion	Ratio	Lower	Upper
61	100		
96	10.4	49.0	109.0#
98	42.2	20.5	80.5

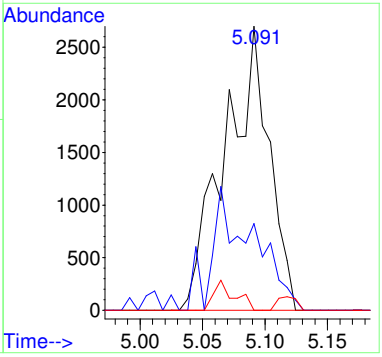


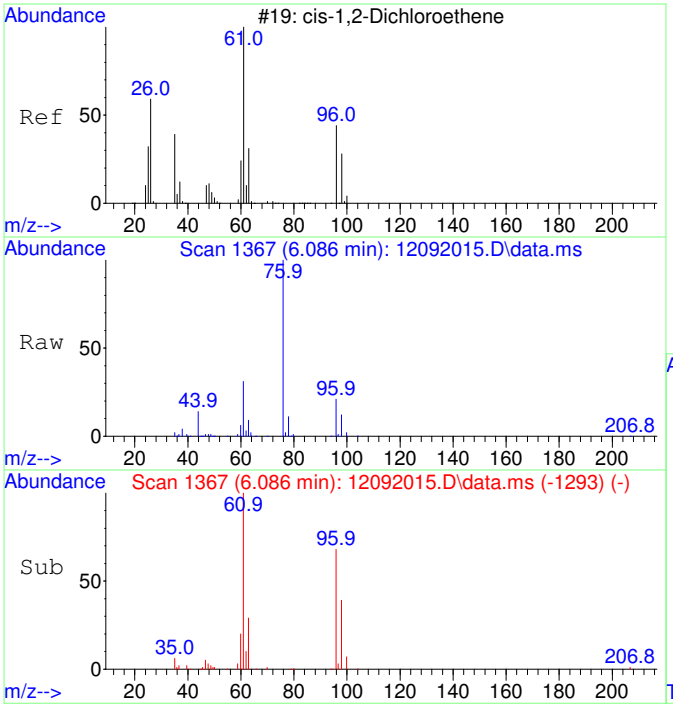


#28
1,1-Dichloroethane SCAN
Concen: 877.01 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. 0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 63 Resp: 6655

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

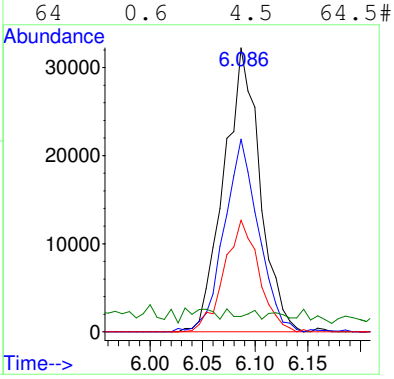


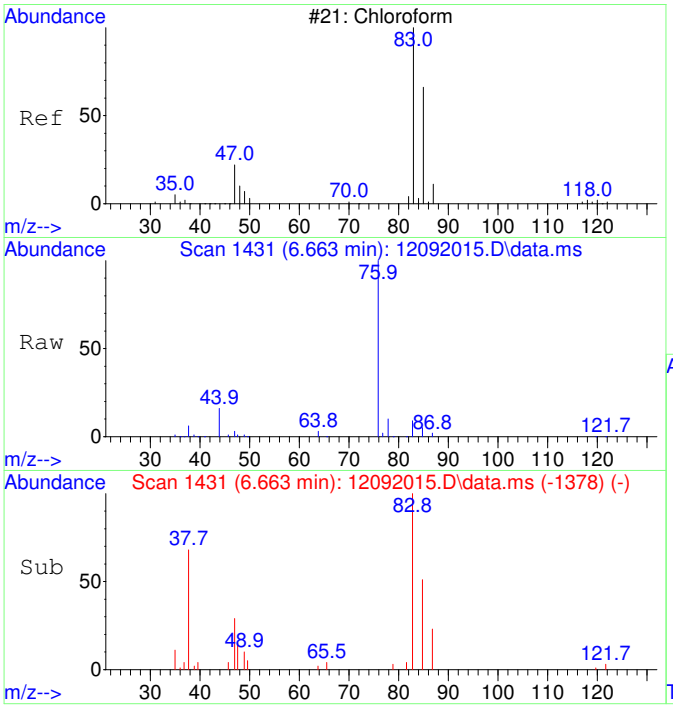


#29
cis-1,2-Dichloroethene SCAN
Concen: 10274.79 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 61 Resp: 76648

Ion	Ratio	Lower	Upper
61	100		
96	64.6	39.9	99.9
98	38.0	13.5	73.5
64	0.6	4.5	64.5#

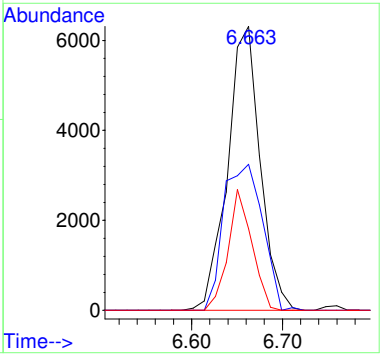


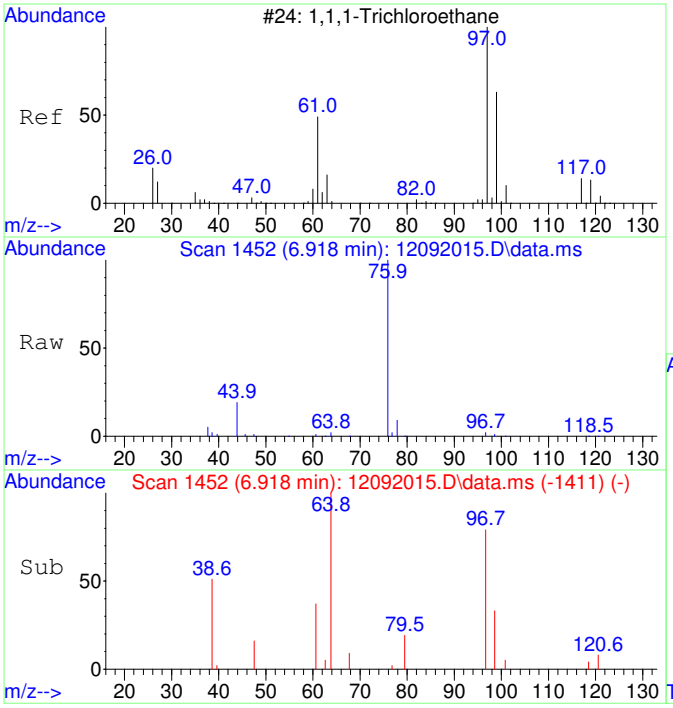


#30
Chloroform SCAN
Concen: 2270.94 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 83 Resp: 15801

Ion	Ratio	Lower	Upper
83	100		
85	61.6	34.6	94.6
47	31.0	0.0	53.4

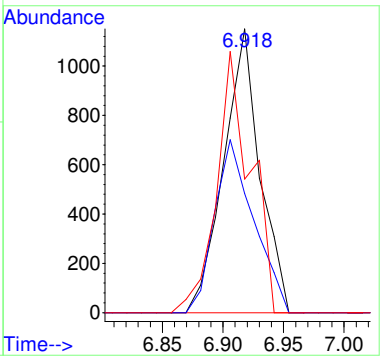


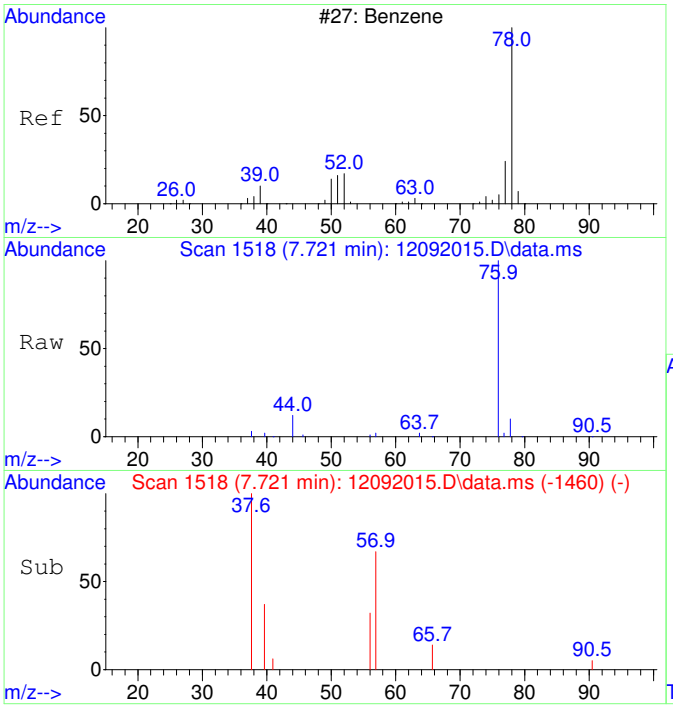


#31
1,1,1-Trichloroethane SCAN
Concen: 334.82 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 97 Resp: 2404

Ion	Ratio	Lower	Upper
97	100		
99	65.9	43.6	103.6
61	86.0	18.0	78.0#

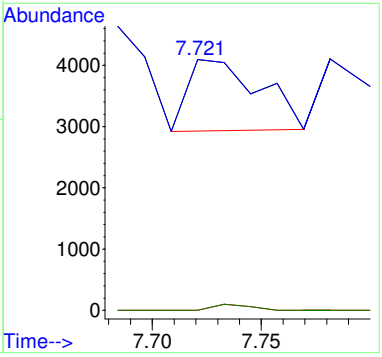


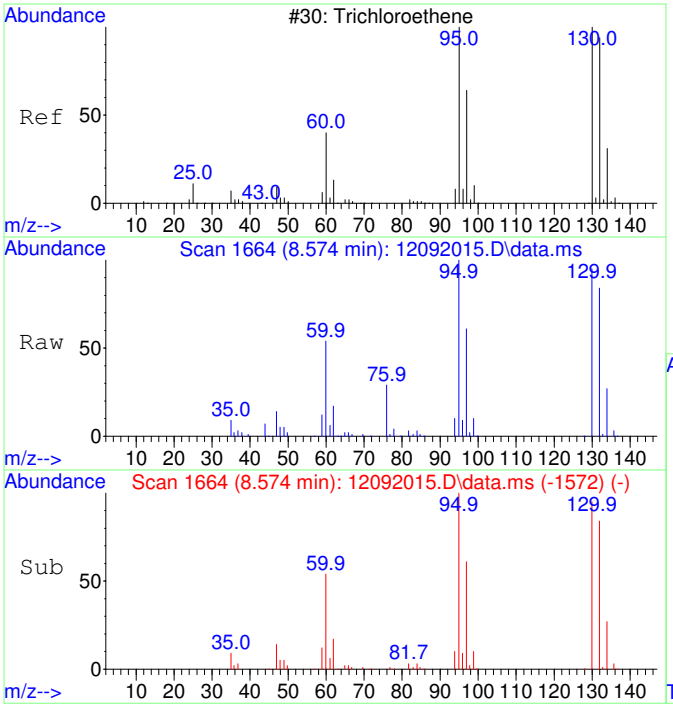


#33
Benzene SCAN
Concen: 122.69 ug/L
RT: 7.721 min Scan# 1518
Delta R.T. 0.207 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 78 Resp: 2665

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

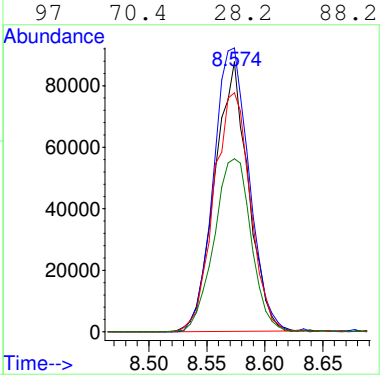


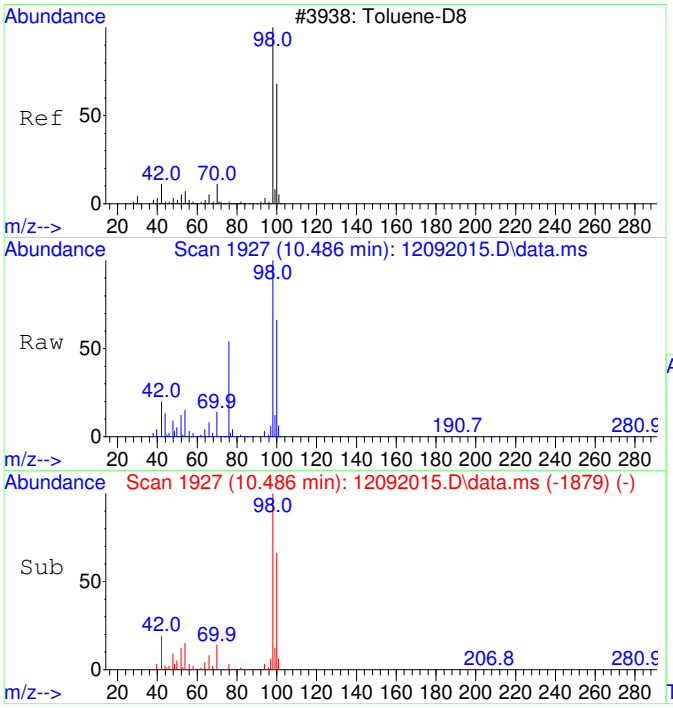


#35
Trichloroethene SCAN
Concen: 37555.61 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:130 Resp: 177879

Ion	Ratio	Lower	Upper
130	100		
95	111.0	60.5	120.5
132	96.4	59.6	119.6
97	70.4	28.2	88.2

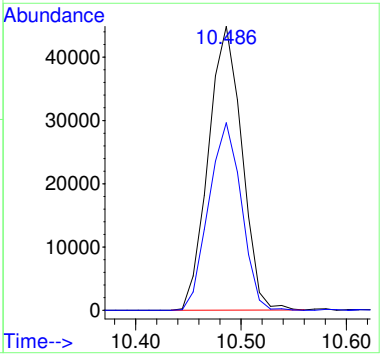


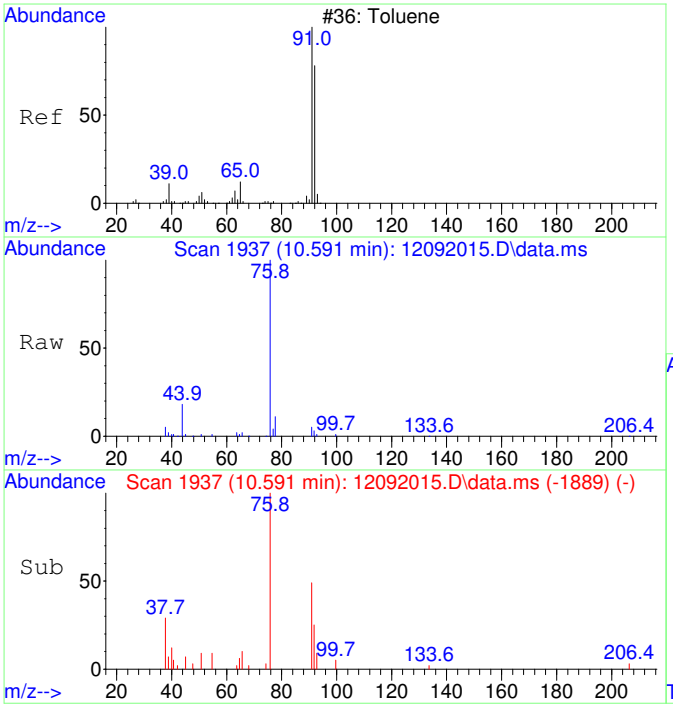


#36
Toluene-d8 SCAN
Concen: 4908.74 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 98 Resp: 99538

Ion	Ratio	Lower	Upper
98	100		
100	64.4	40.0	100.0

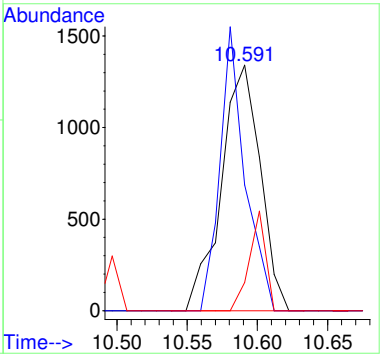


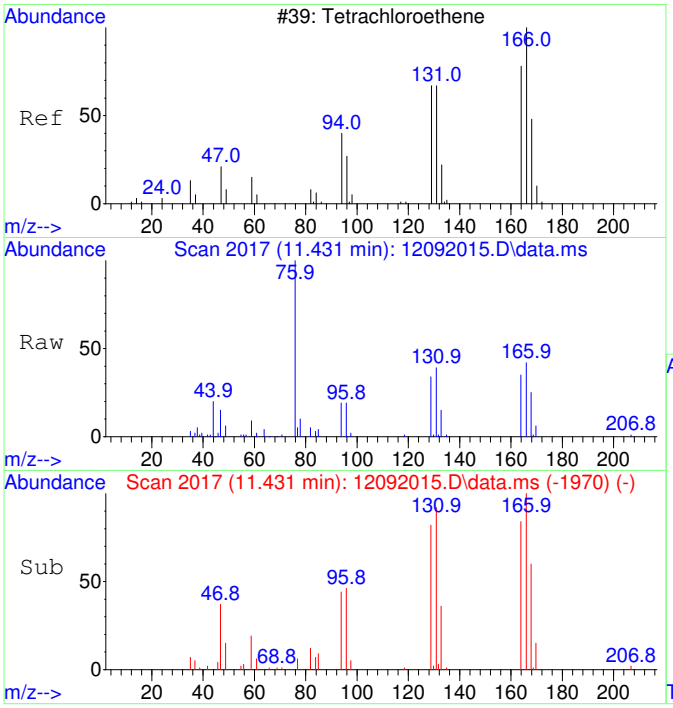


#37
Toluene SCAN
Concen: 104.58 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion: 91 Resp: 2611

Ion	Ratio	Lower	Upper
91	100		
92	74.0	28.3	88.3
65	0.0	0.0	41.0

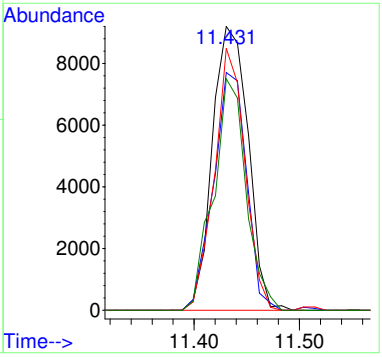




#39
Tetrachloroethene SCAN
Concen: 3857.16 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092015.D
Acq: 9 Dec 2020 14:24

Tgt Ion:166 Resp: 21664

Ion	Ratio	Lower	Upper
166	100		
164	77.8	50.9	110.9
131	79.3	38.7	98.7
129	75.1	41.8	101.8



2012007-09

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092016.D
Acq On : 9 Dec 2020 14:48
InstName : AG5975C
Operator : TD
Sample : 2012007-09
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 10 05:55:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

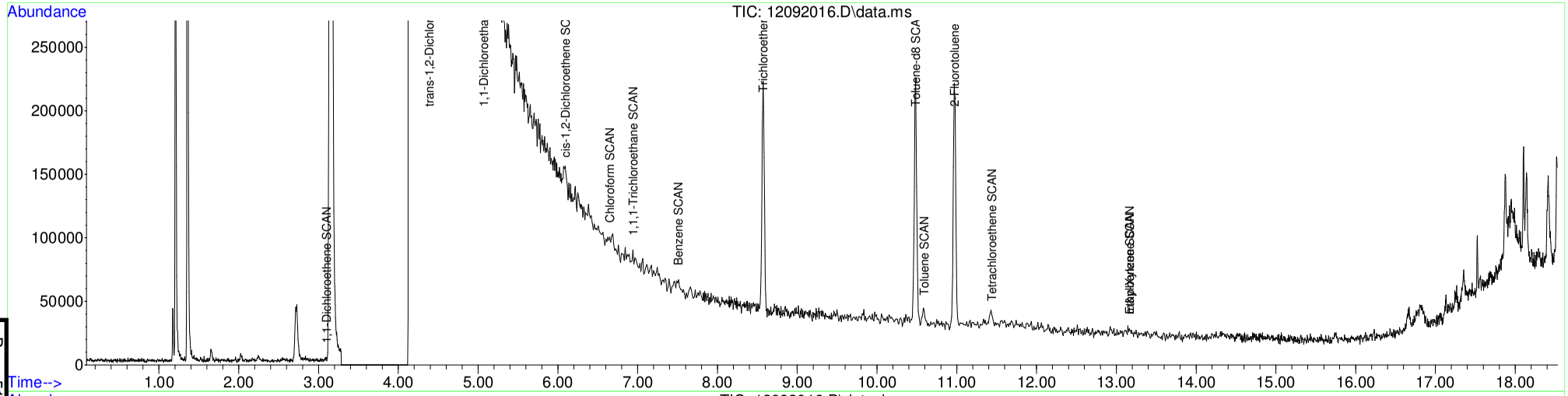
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	277445	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	234076	4356.18	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.12%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.101	61	2523	229.34	ug/L	73
3] trans-1,2-Dichloroethene	4.376	61	1869	134.76	ug/L	95
4] 1,1-Dichloroethane	5.093	63	2641	159.44	ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	16725	974.88	ug/L	98
6] Chloroform	6.652	83	10735	651.46	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	1878	106.09	ug/L	99
8] Carbon tetrachloride	7.187	117	490	28.95	ug/L	100
9] Benzene	7.515	78	4862	104.14	ug/L	66
11] Trichloroethene	8.570	130	120537	8177.43	ug/L	97
13] Toluene	10.582	91	13895	207.69	ug/L	100
15] Tetrachloroethene	11.432	166	8047	386.15	ug/L	99
19] m&p-Xylene	13.163	91	4950	75.22	ug/L	96
20] o-Xylene	13.782	91	1739	24.60	ug/L	93
23] 1,2,4-Trimethylbenzene	15.906	105	1885	23.71	ug/L	88
25) 2-Fluorotoluene SCAN	10.969	109	162484	5159.39	ug/L	98
26) 1,1-Dichloroethene SCAN	3.100	61	537	73.04	ug/L #	47
27) trans-1,2-Dichloroethe...	4.388	61	414	44.21	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	348	31.48	ug/L #	44
29) cis-1,2-Dichloroethene...	6.100	61	10744	988.76	ug/L	98
30) Chloroform SCAN	6.651	83	9558	943.07	ug/L #	36
31) 1,1,1-Trichloroethane ...	6.942	97	522	49.91	ug/L #	34
33) Benzene SCAN	7.514	78	8858	279.96	ug/L	94
35) Trichloroethene SCAN	8.568	130	64645	9369.99	ug/L	89
36) Toluene-d8 SCAN	10.486	98	149739	5069.56	ug/L	91
37) Toluene SCAN	10.591	91	10306	283.39	ug/L #	34
39) Tetrachloroethene SCAN	11.441	166	2566	313.65	ug/L #	45
42) Ethylbenzene SCAN	13.161	91	3724	53.74	ug/L	88
43) m&p-Xylene SCAN	13.161	91	3724	53.74	ug/L	83

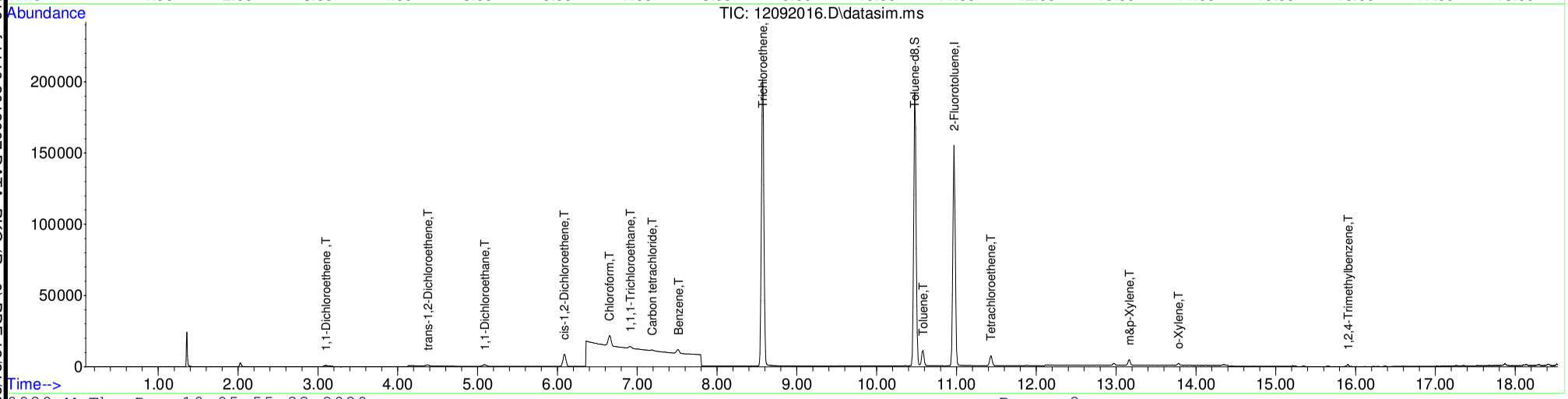
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092016.D
Acq On : 9 Dec 2020 14:48
InstName : AG5975C
Operator : TD
Sample : 2012007-09
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 10 05:55:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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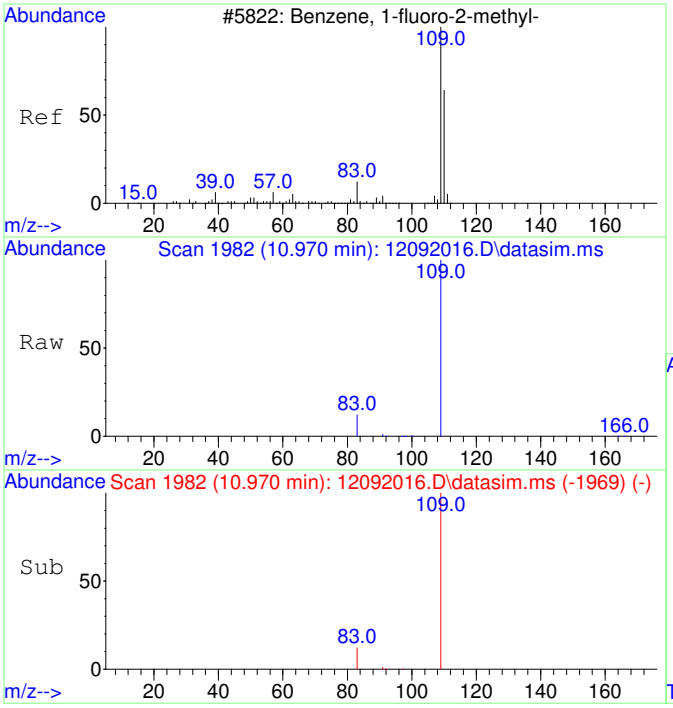
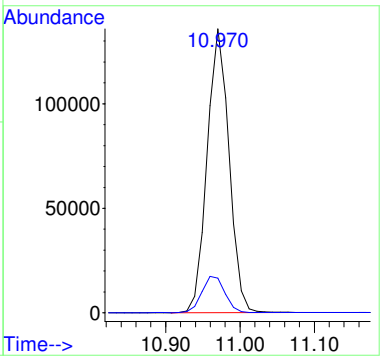
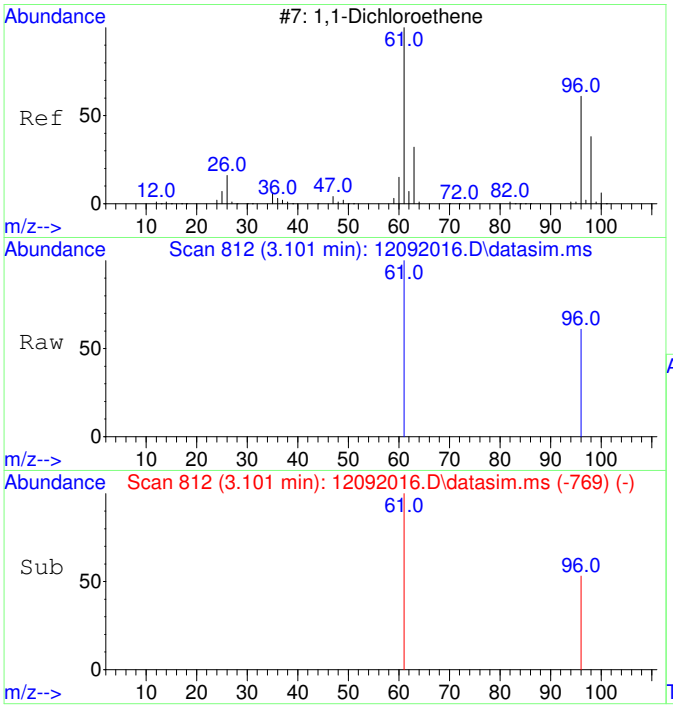


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:109 Resp: 277445

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

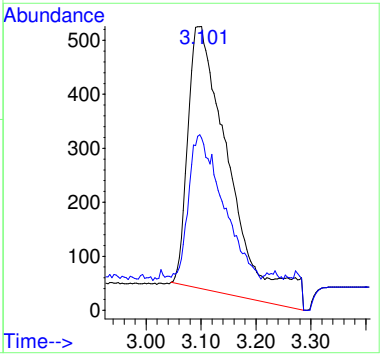




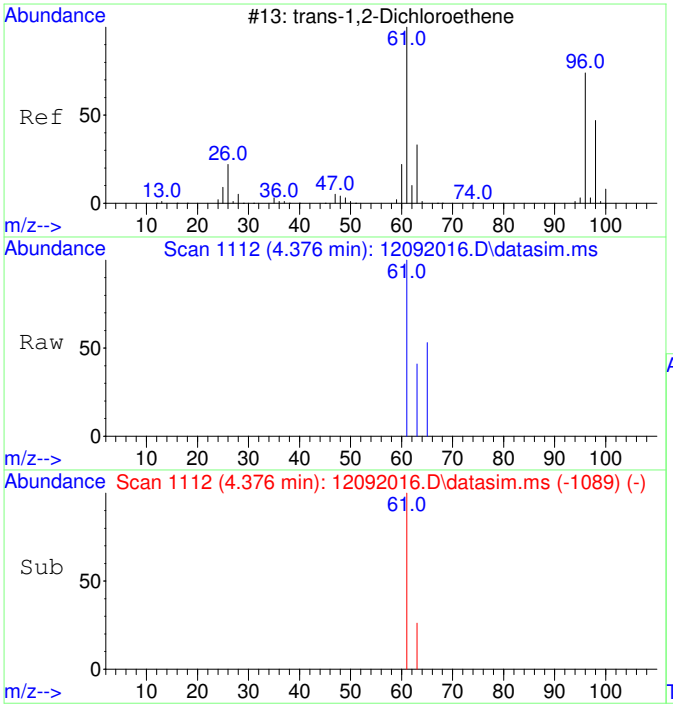
#2
1,1-Dichloroethene
Concen: 229.34 ug/L
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 2523

Ion	Ratio	Lower	Upper
61	100		
96	45.4	37.2	97.2



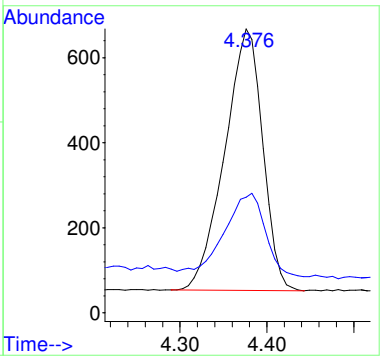
Before MI:
IMPROPER
BASELINE

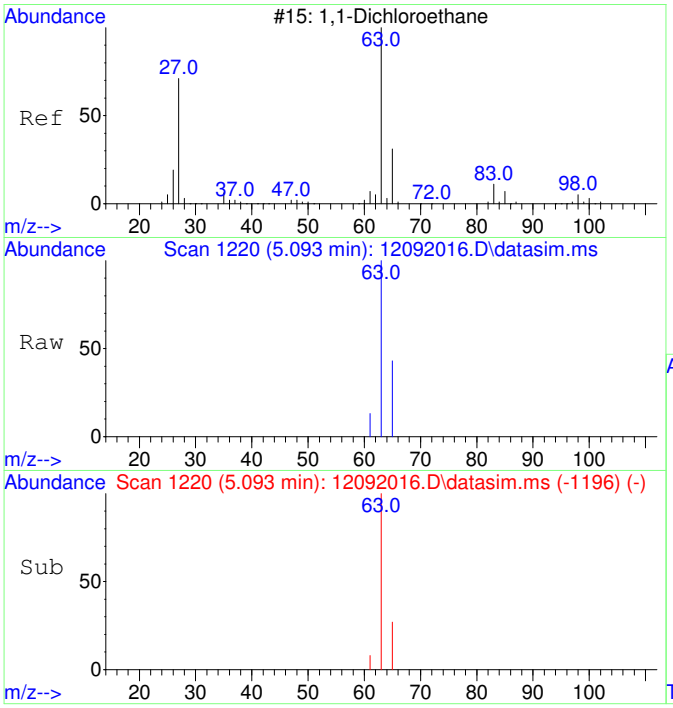


#3
trans-1,2-Dichloroethene
Concen: 134.76 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 1869

Ion	Ratio	Lower	Upper
61	100		
63	34.9	2.4	62.4

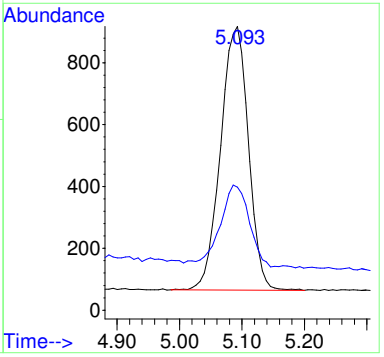


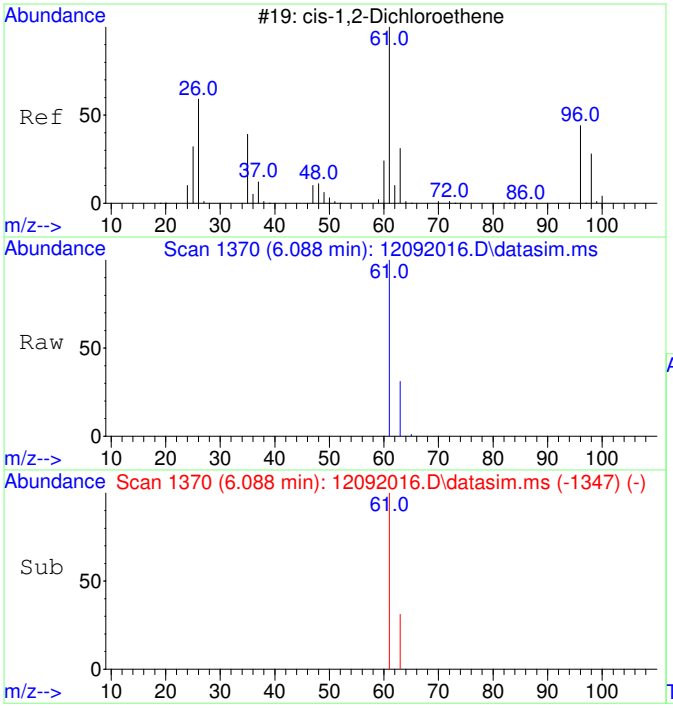


#4
1,1-Dichloroethane
Concen: 159.44 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 63 Resp: 2641

Ion	Ratio	Lower	Upper
63	100		
65	33.0	1.8	61.8

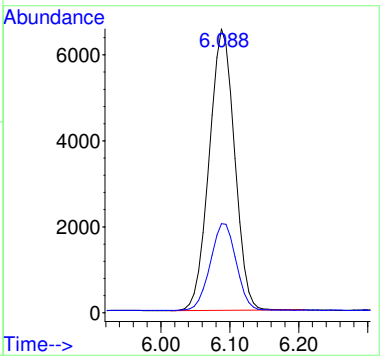


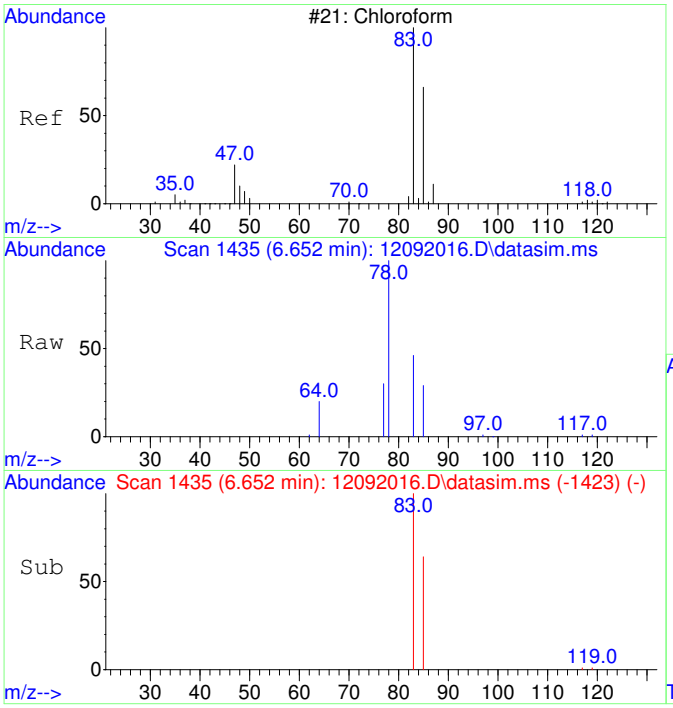


#5
cis-1,2-Dichloroethene
Concen: 974.88 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 16725

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

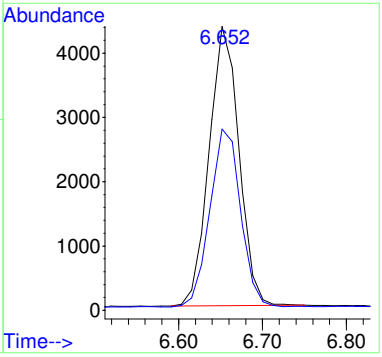


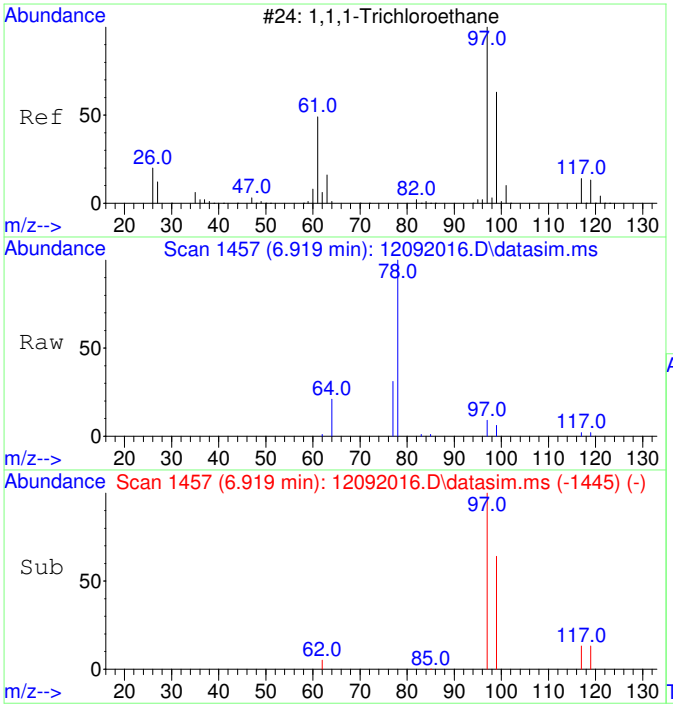


#6
Chloroform
Concen: 651.46 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 83 Resp: 10735

Ion	Ratio	Lower	Upper
83	100		
85	65.2	35.1	95.1

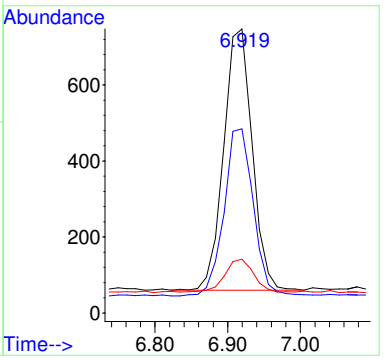


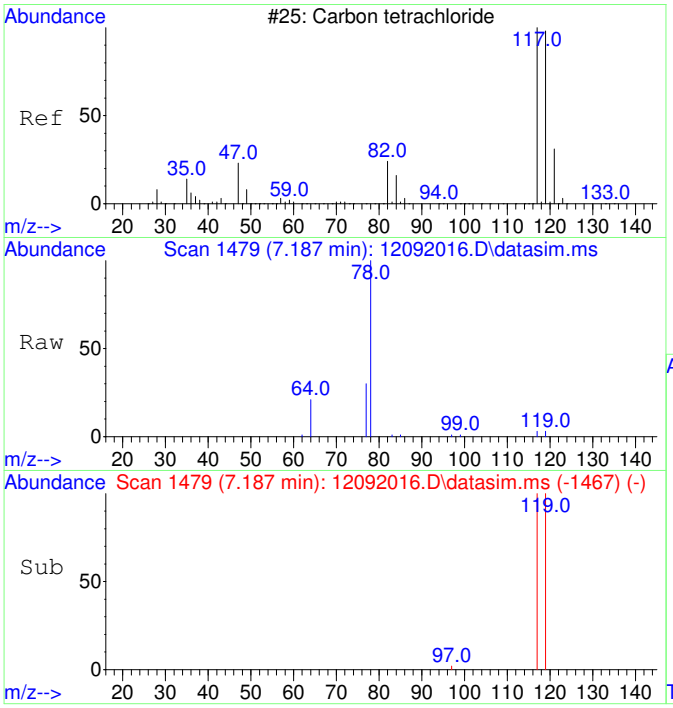


#7
1,1,1-Trichloroethane
Concen: 106.09 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 97 Resp: 1878

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	12.6	0.0	43.2

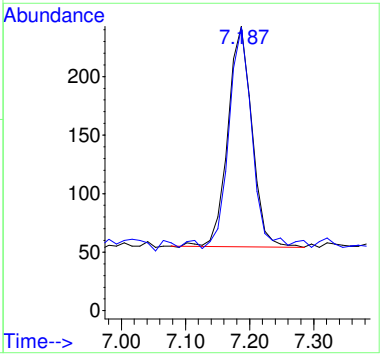


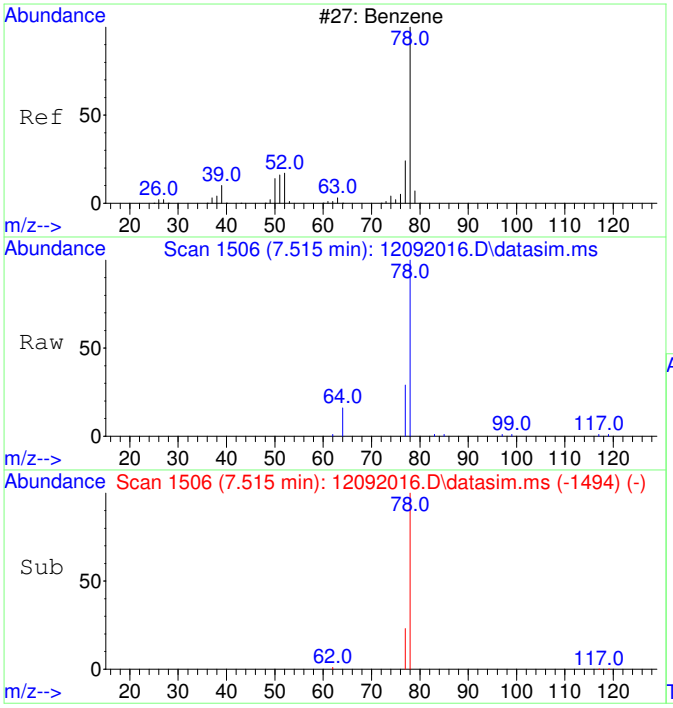


#8
Carbon tetrachloride
Concen: 28.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:117 Resp: 490

Ion	Ratio	Lower	Upper
117	100		
119	96.7	66.4	126.4

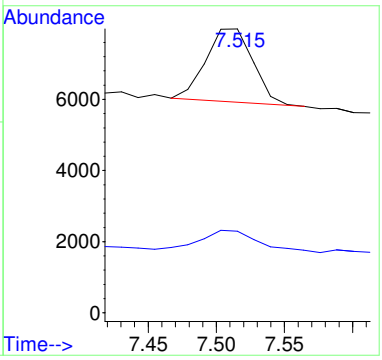


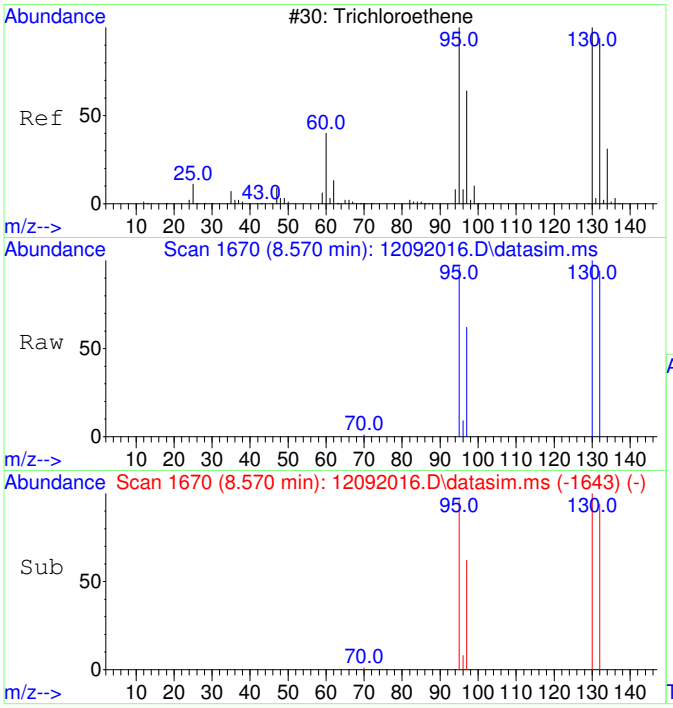


#9
Benzene
Concen: 104.14 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 78 Resp: 4862

Ion	Ratio	Lower	Upper
78	100		
77	39.8	0.0	53.2

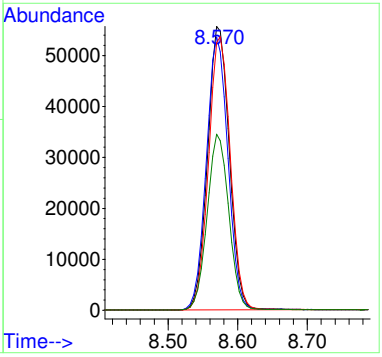


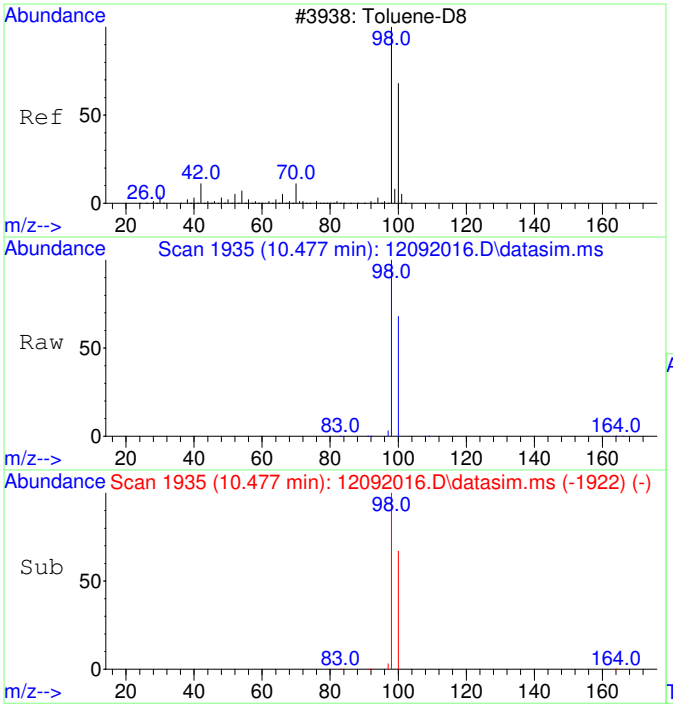


#11
Trichloroethene
Concen: 8177.43 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:130 Resp: 120537

Ion	Ratio	Lower	Upper
130	100		
95	95.5	60.7	120.7
132	96.5	76.0	116.0
97	61.5	38.6	78.6

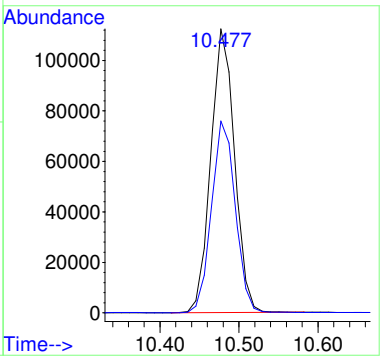


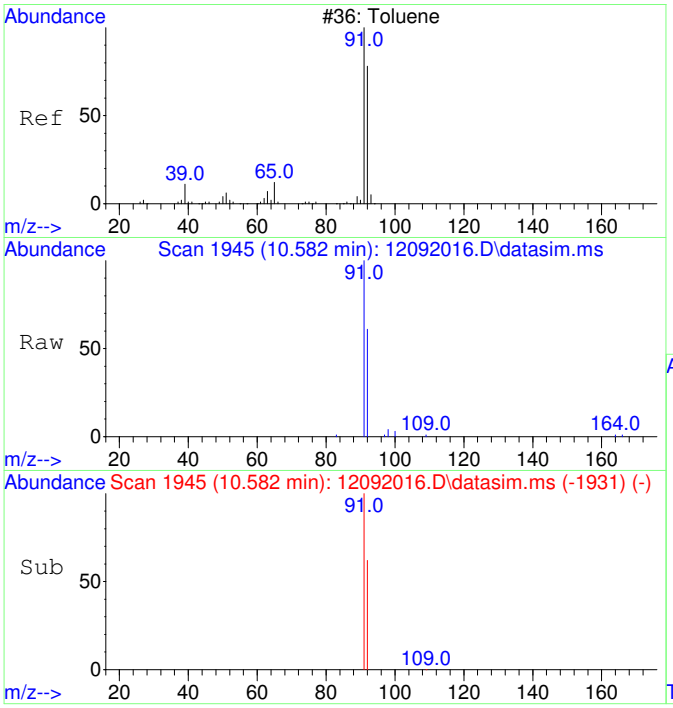


#12
Toluene-d8
Concen: 4356.18 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 98 Resp: 234076

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

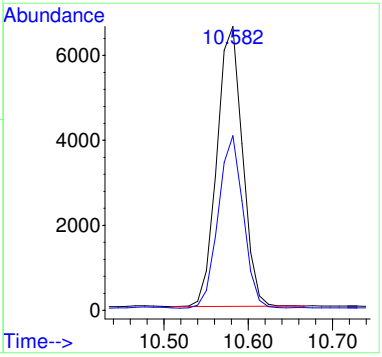


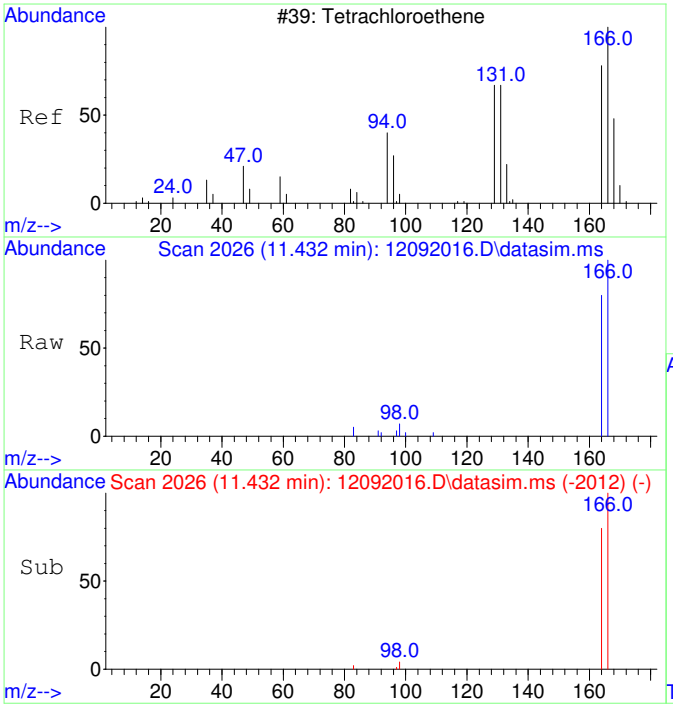


#13
Toluene
Concen: 207.69 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 13895

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

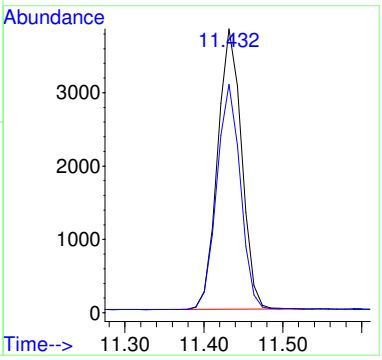


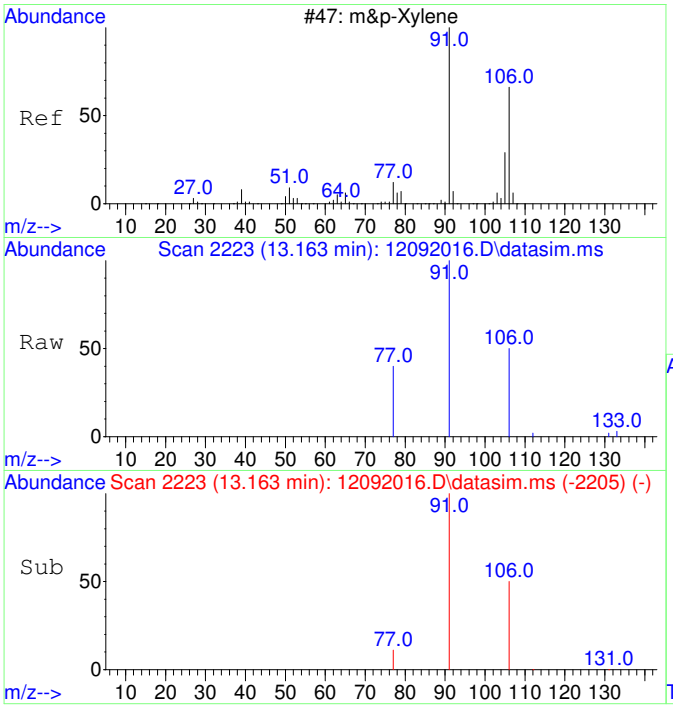


#15
Tetrachloroethene
Concen: 386.15 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:166 Resp: 8047

Ion	Ratio	Lower	Upper
166	100		
164	79.0	47.8	107.8

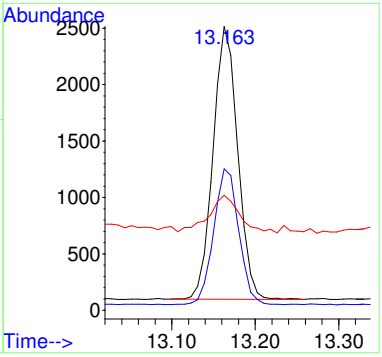


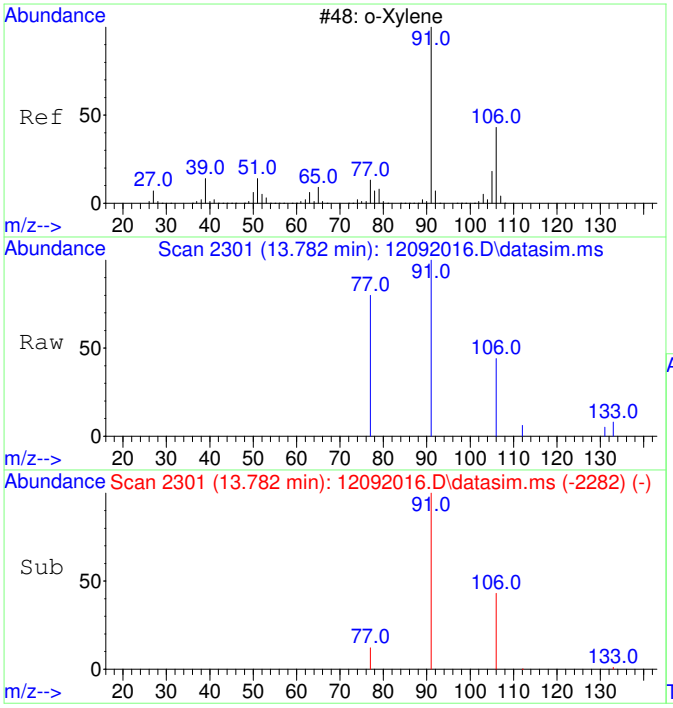


#19
m&p-Xylene
Concen: 75.22 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 4950

Ion	Ratio	Lower	Upper
91	100		
106	50.4	22.2	82.2
77	17.3	0.0	42.4

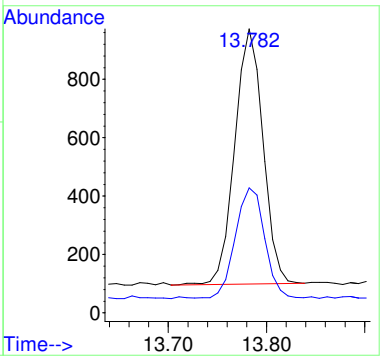


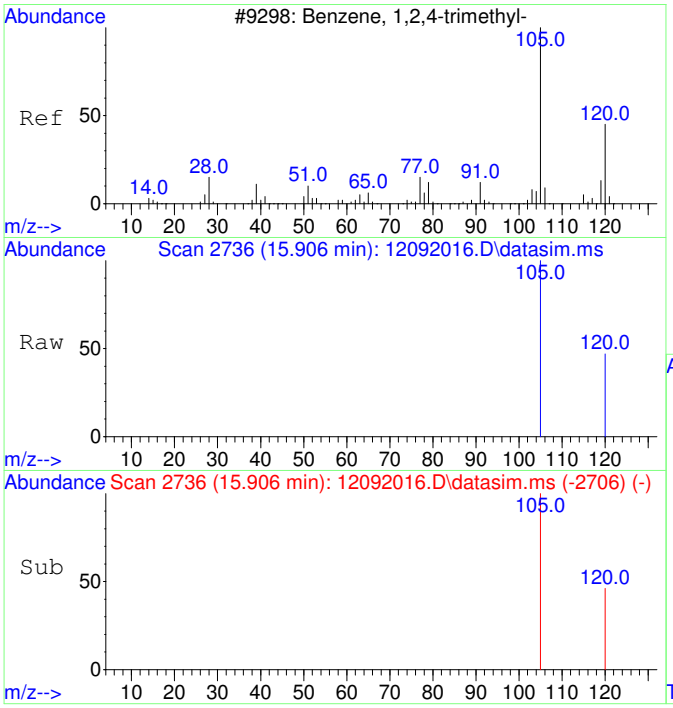


#20
o-Xylene
Concen: 24.60 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 1739

Ion	Ratio	Lower	Upper
91	100		
106	44.3	19.2	79.2

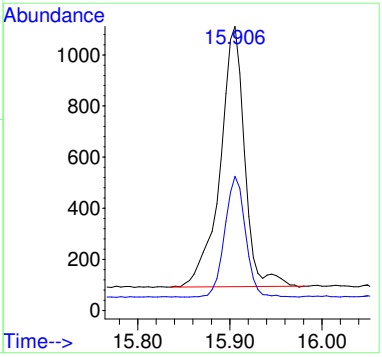


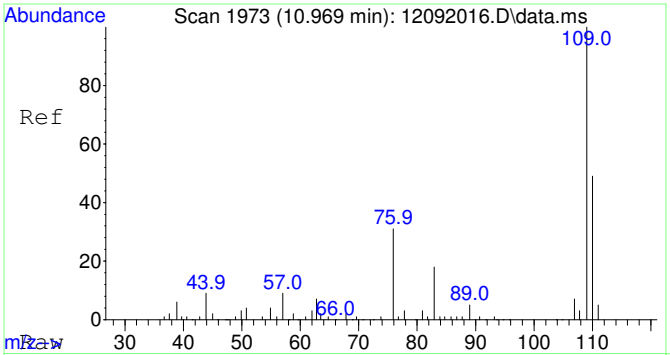


#23
1,2,4-Trimethylbenzene
Concen: 23.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:105 Resp: 1885

Ion	Ratio	Lower	Upper
105	100		
120	39.0	17.2	77.2

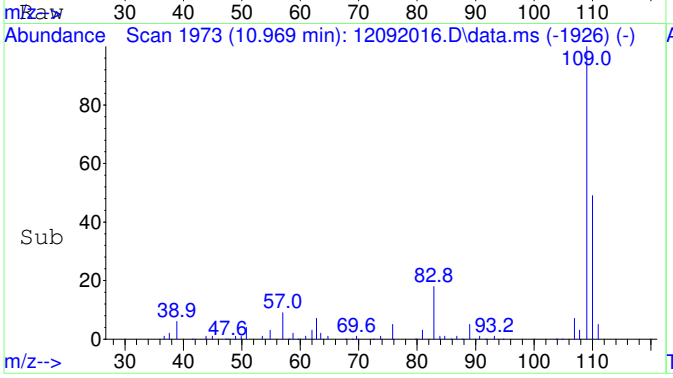


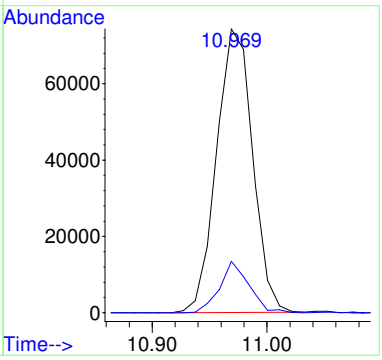


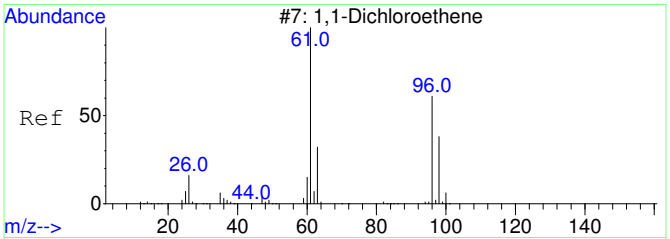
#25
2-Fluorotoluene SCAN
Concen: 5159.39 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:109 Resp: 162484

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



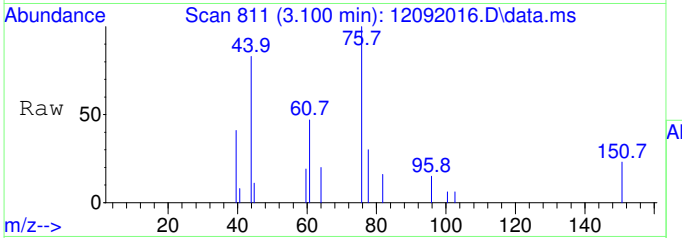


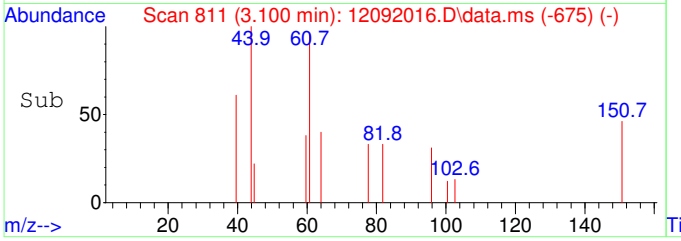


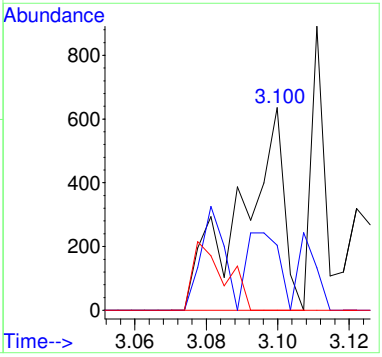
#26
1,1-Dichloroethene SCAN
Concen: 73.04 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

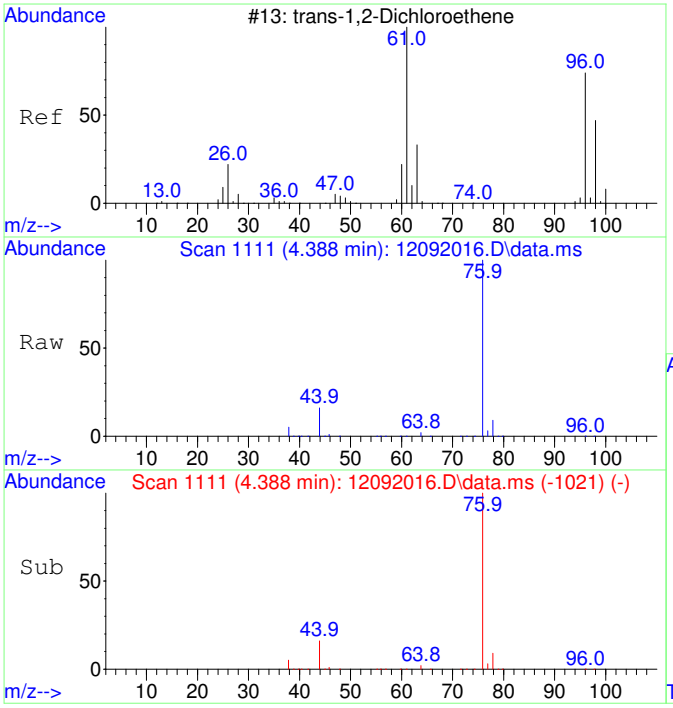
Tgt Ion: 61 Resp: 537

Ion	Ratio	Lower	Upper
61	100		
96	28.7	33.1	93.1#
98	0.0	11.2	71.2#





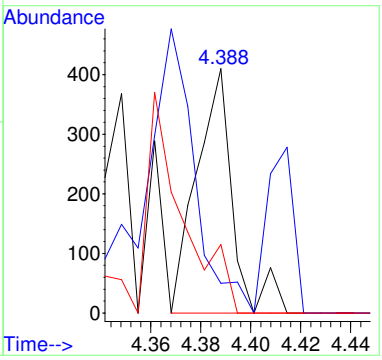


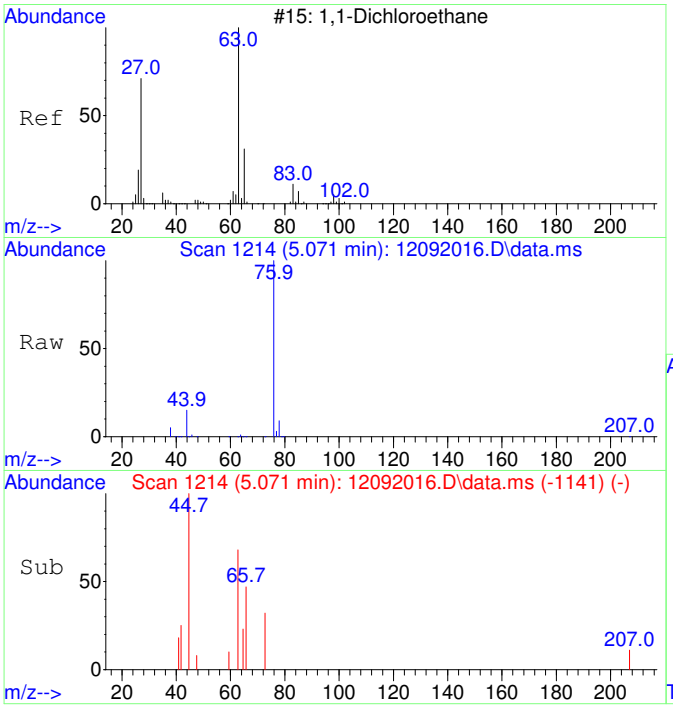


#27
trans-1,2-Dichloroethene SCAN
Concen: 44.21 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 414

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

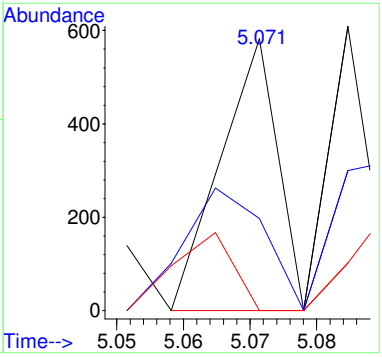


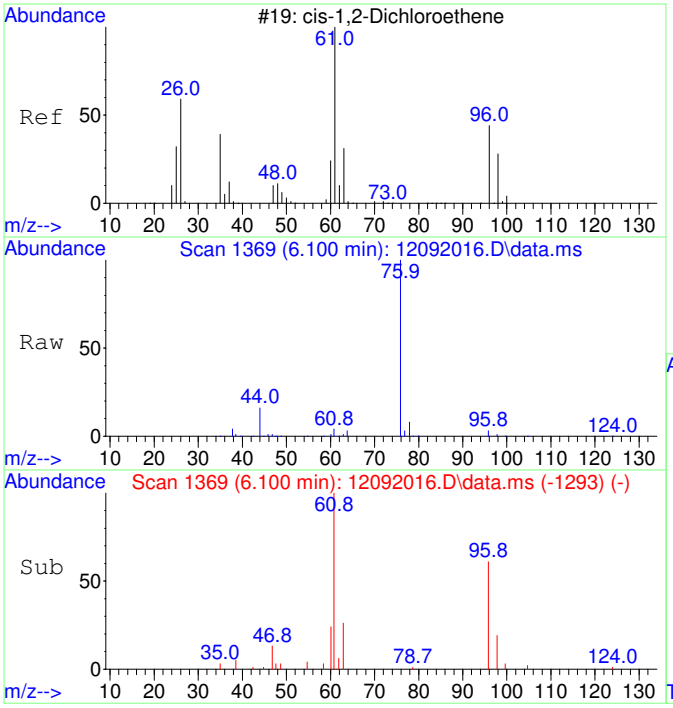


#28
1,1-Dichloroethane SCAN
Concen: 31.48 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 63 Resp: 348

Ion	Ratio	Lower	Upper
63	100		
65	64.1	1.3	61.3#
83	36.2	0.0	45.9

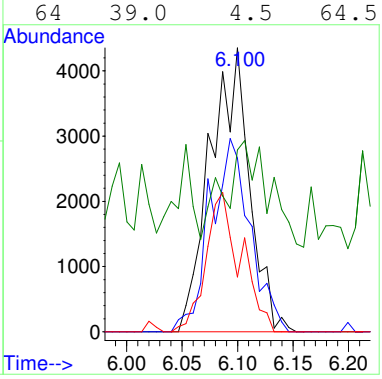


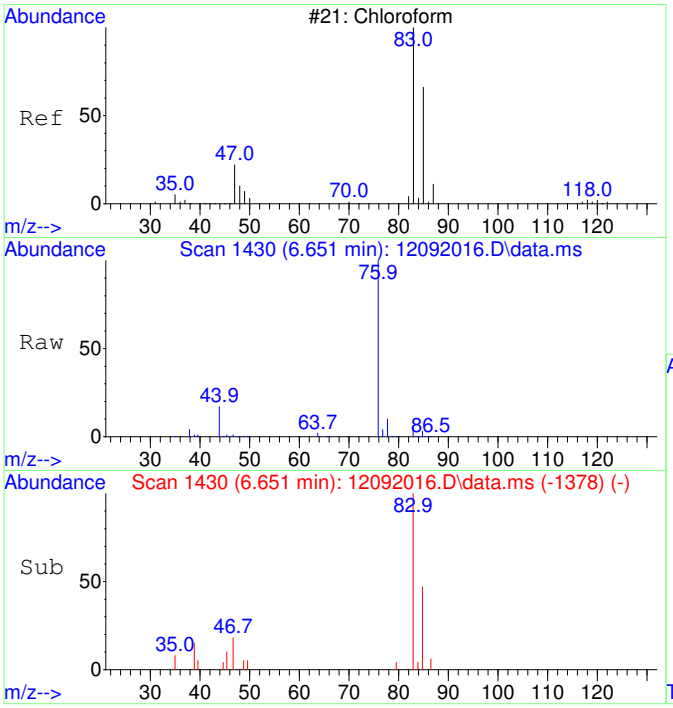


#29
cis-1,2-Dichloroethene SCAN
Concen: 988.76 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 10744

Ion	Ratio	Lower	Upper
61	100		
96	69.2	39.9	99.9
98	43.4	13.5	73.5
64	39.0	4.5	64.5

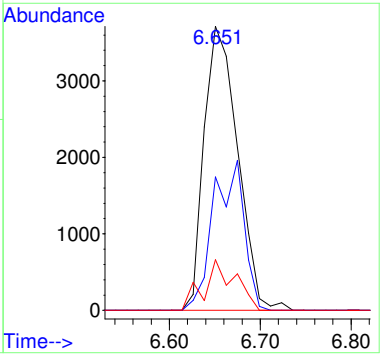


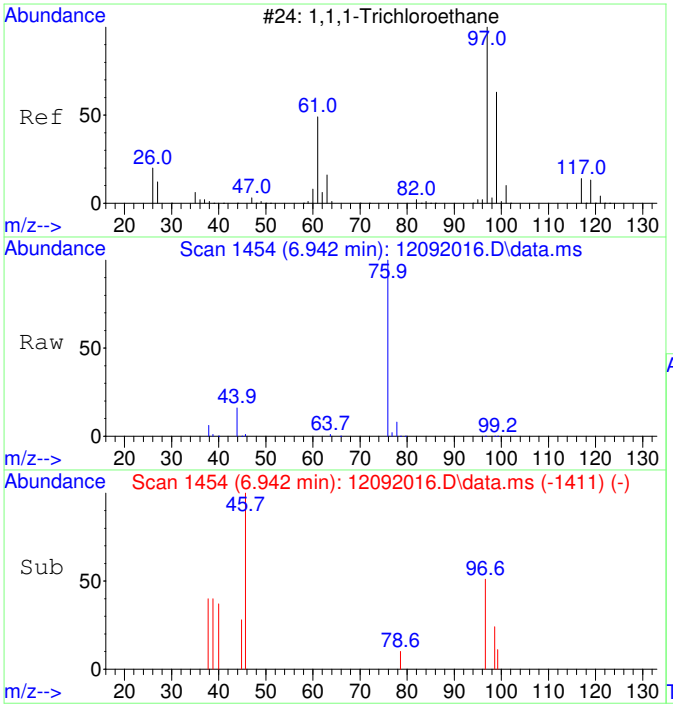


#30
Chloroform SCAN
Concen: 943.07 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 83 Resp: 9558

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	16.6	0.0	53.4

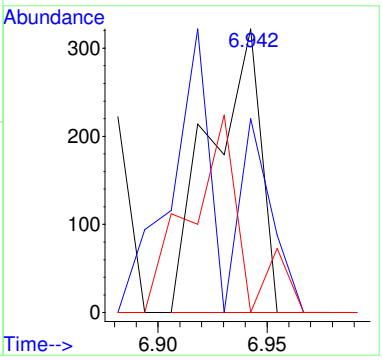


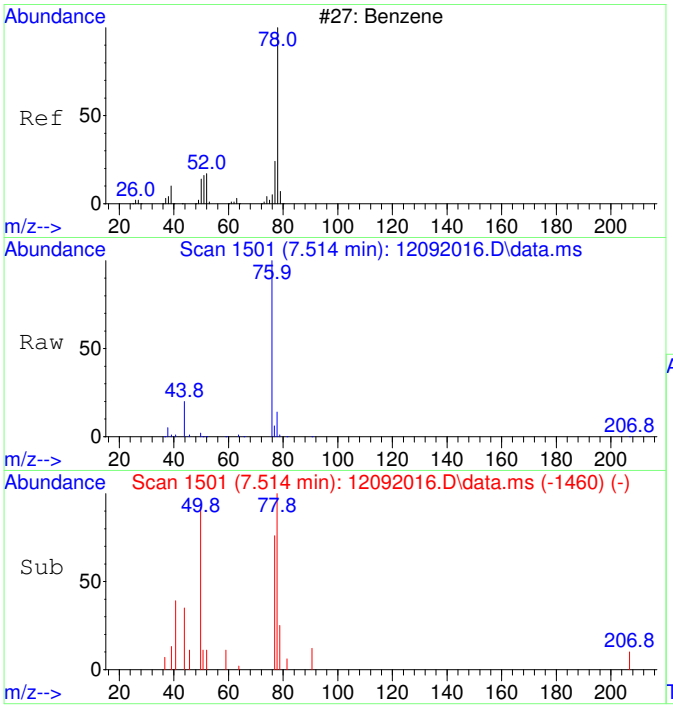


#31
1,1,1-Trichloroethane SCAN
Concen: 49.91 ug/L
RT: 6.942 min Scan# 1454
Delta R.T. 0.025 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	71.3	18.0	78.0

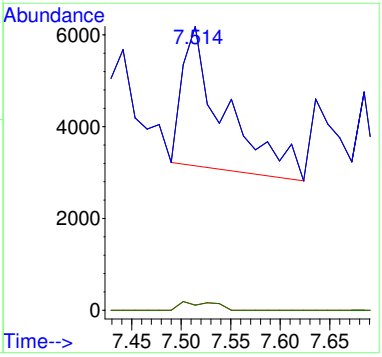


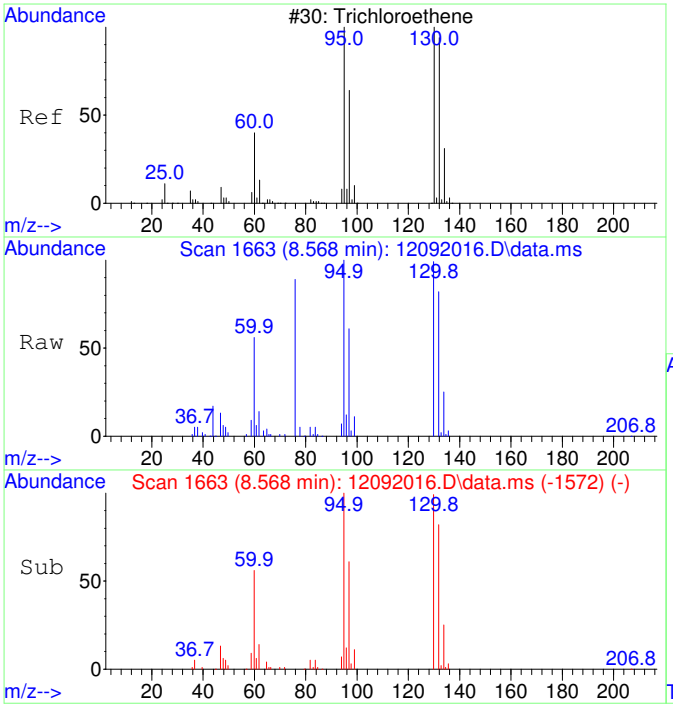


#33
Benzene SCAN
Concen: 279.96 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 78 Resp: 8858

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.0	0.0	47.9
51	5.0	0.0	44.1

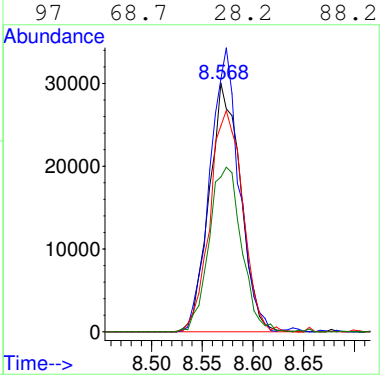


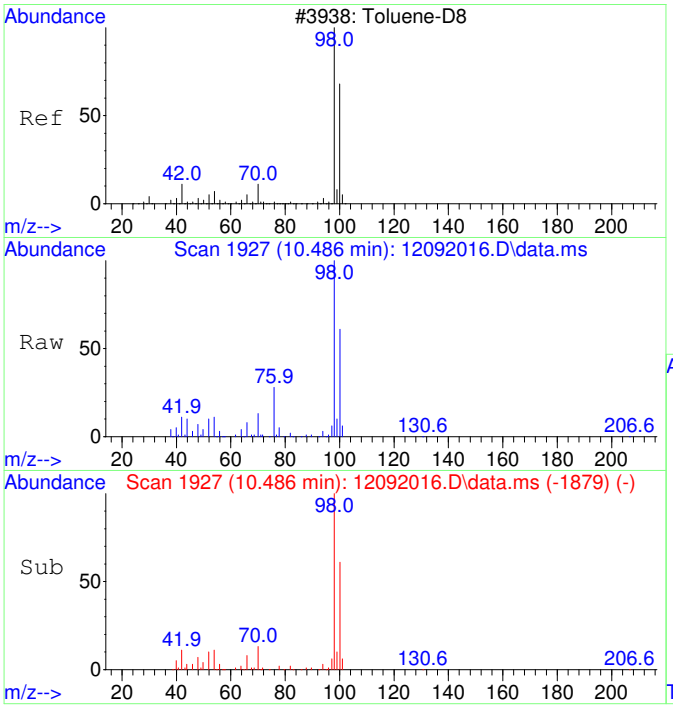


#35
Trichloroethene SCAN
Concen: 9369.99 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:130 Resp: 64645

Ion	Ratio	Lower	Upper
130	100		
95	106.1	60.5	120.5
132	93.0	59.6	119.6
97	68.7	28.2	88.2

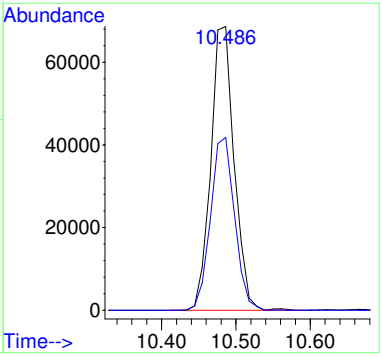


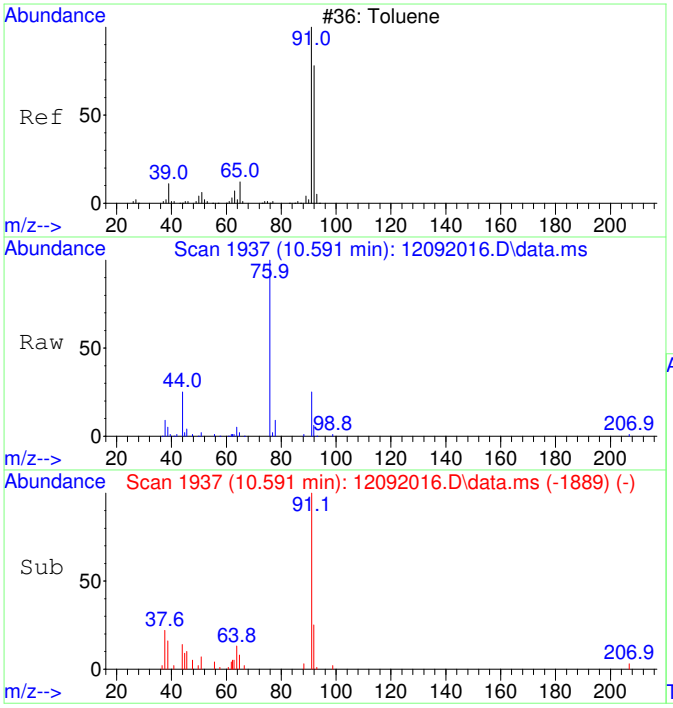


#36
Toluene-d8 SCAN
Concen: 5069.56 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 98 Resp: 149739

Ion	Ratio	Lower	Upper
98	100		
100	62.7	40.0	100.0

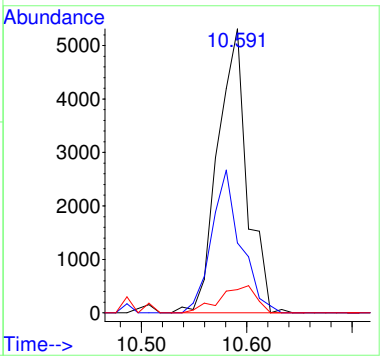


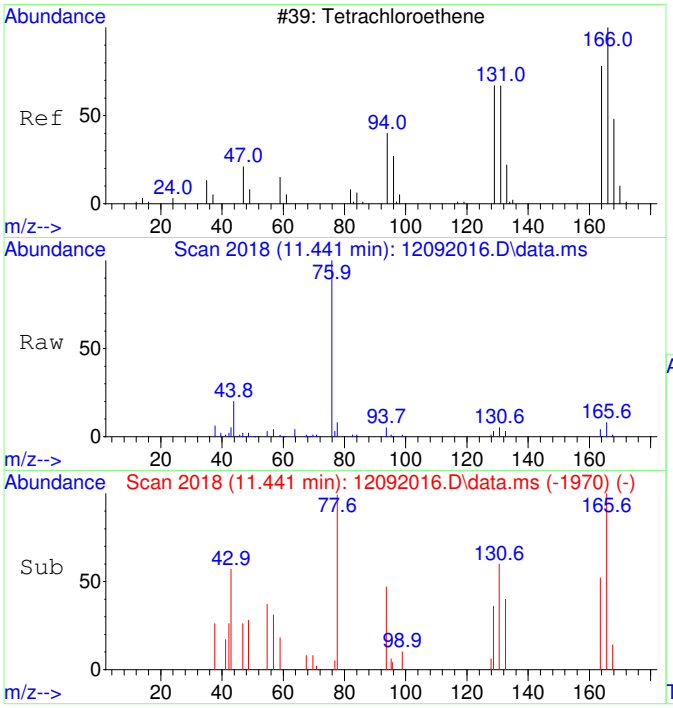


#37
Toluene SCAN
Concen: 283.39 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 10306

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	11.8	0.0	41.0

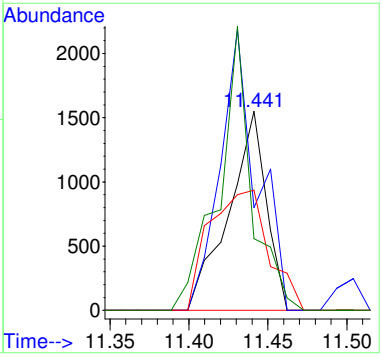


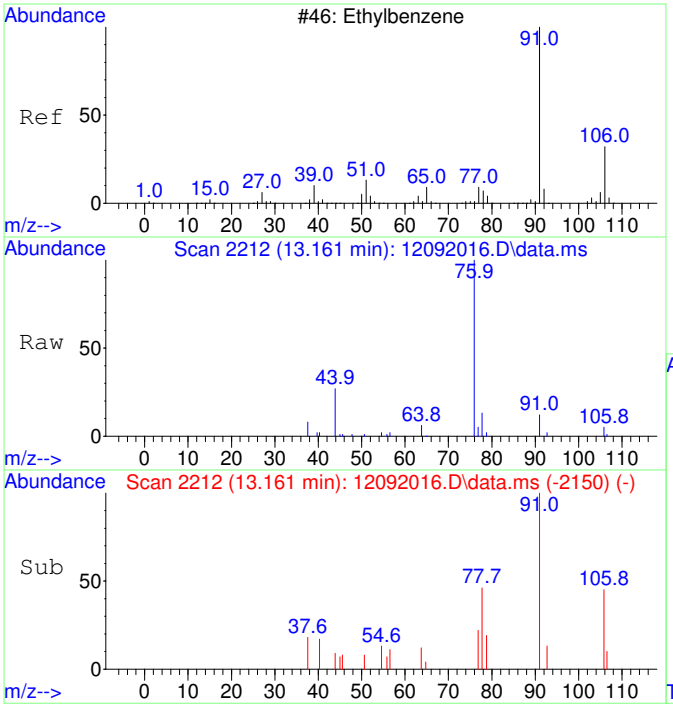


#39
Tetrachloroethene SCAN
Concen: 313.65 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:166 Resp: 2566

Ion	Ratio	Lower	Upper
166	100		
164	138.1	50.9	110.9#
131	95.3	38.7	98.7
129	125.2	41.8	101.8#

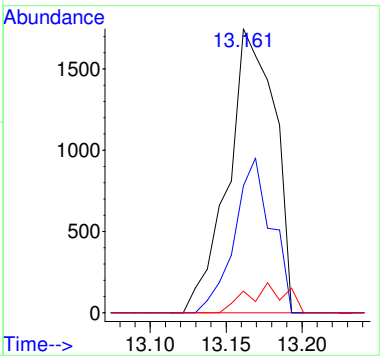


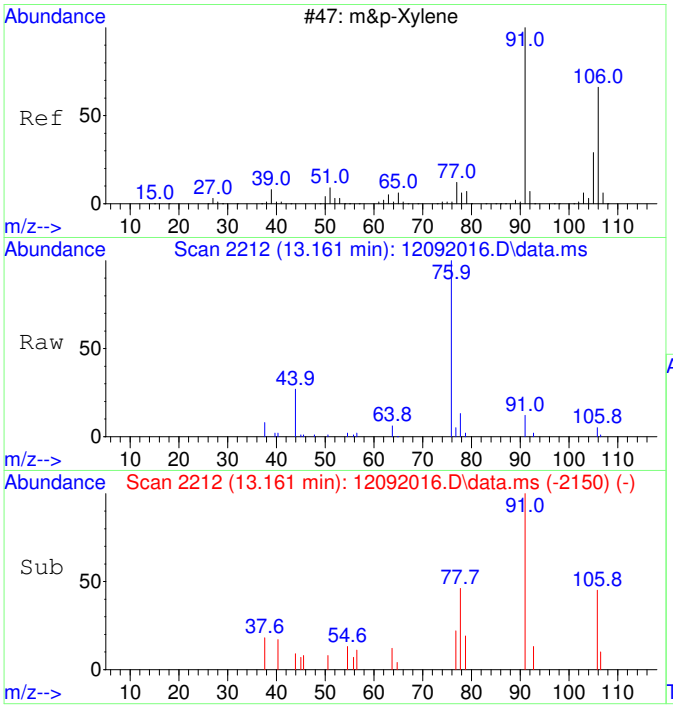


#42
Ethylbenzene SCAN
Concen: 53.74 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 3724

Ion	Ratio	Lower	Upper
91	100		
106	43.4	23.1	83.1
51	8.7	0.0	40.1

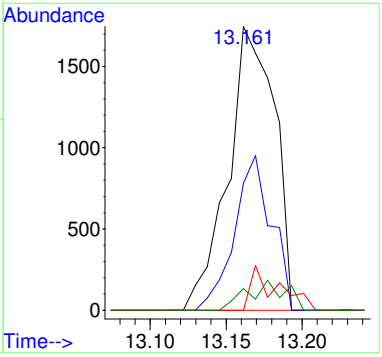




#43
m&p-Xylene SCAN
Concen: 53.74 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 3724

Ion	Ratio	Lower	Upper
91	100		
106	43.4	23.1	83.1
105	9.3	0.0	54.7
51	8.7	0.0	40.1



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092016.D
Acq On : 9 Dec 2020 14:48
InstName : AG5975C
Operator : TD
Sample : 2012007-09
Misc :
ALS Vial : 16 Sample Multiplier: 1

M.I. Performed By:
TD at 9:22 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:02 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	277445	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	234076	4356.18	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.12%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.101	61	2153m	195.71	ug/L	
3] trans-1,2-Dichloroethene	4.376	61	1869	134.76	ug/L	95
4] 1,1-Dichloroethane	5.093	63	2641	159.44	ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	16725	974.88	ug/L	98
6] Chloroform	6.652	83	10735	651.46	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	1878	106.09	ug/L	99
8] Carbon tetrachloride	7.187	117	490	28.95	ug/L	100
9] Benzene	7.515	78	4862	104.14	ug/L	66
11] Trichloroethene	8.570	130	120537	8177.43	ug/L	97
13] Toluene	10.582	91	13895	207.69	ug/L	100
15] Tetrachloroethene	11.432	166	8047	386.15	ug/L	99
19] m&p-Xylene	13.163	91	4950	75.22	ug/L	96
20] o-Xylene	13.782	91	1739	24.60	ug/L	93
23] 1,2,4-Trimethylbenzene	15.906	105	1885	23.71	ug/L	88
25) 2-Fluorotoluene SCAN	10.969	109	162484	5159.39	ug/L	98
26) 1,1-Dichloroethene SCAN	3.100	61	537	73.04	ug/L #	47
27) trans-1,2-Dichloroethe...	4.388	61	414	44.21	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.071	63	348	31.48	ug/L #	44
29) cis-1,2-Dichloroethene...	6.100	61	10744	988.76	ug/L	98
30) Chloroform SCAN	6.651	83	9558	943.07	ug/L #	36
31) 1,1,1-Trichloroethane ...	6.942	97	522	49.91	ug/L #	34
33) Benzene SCAN	7.514	78	8858	279.96	ug/L	94
35) Trichloroethene SCAN	8.568	130	64645	9369.99	ug/L	89
36) Toluene-d8 SCAN	10.486	98	149739	5069.56	ug/L	91
37) Toluene SCAN	10.591	91	10306	283.39	ug/L #	34
39) Tetrachloroethene SCAN	11.441	166	2566	313.65	ug/L #	45
42) Ethylbenzene SCAN	13.161	91	3724	53.74	ug/L	88
43) m&p-Xylene SCAN	13.161	91	3724	53.74	ug/L	83

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092016.D
Acq On : 9 Dec 2020 14:48
InstName : AG5975C
Operator : TD
Sample : 2012007-09
Misc :
ALS Vial : 16 Sample Multiplier: 1

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Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
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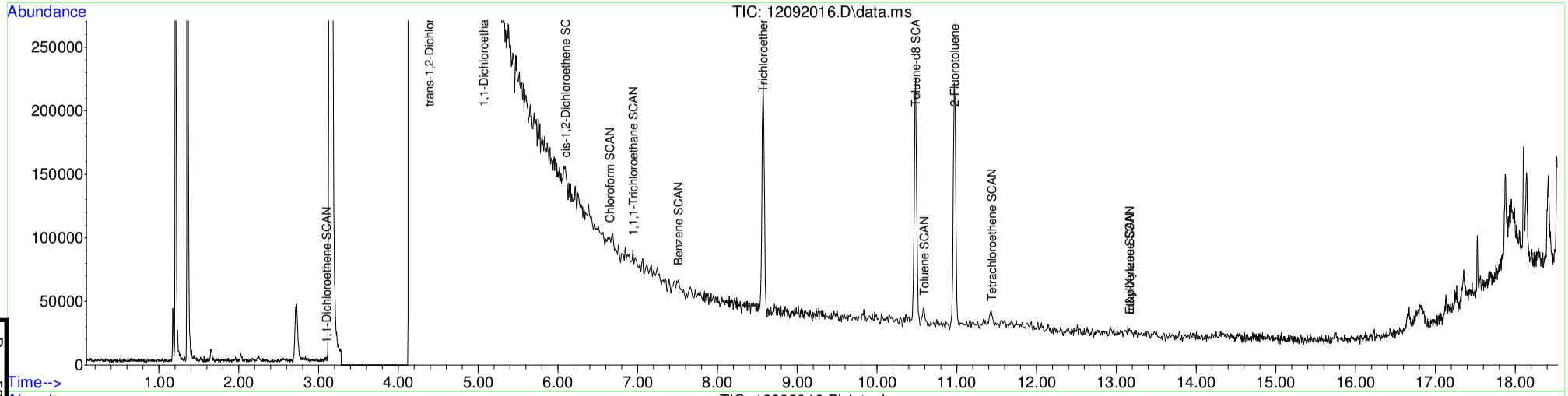
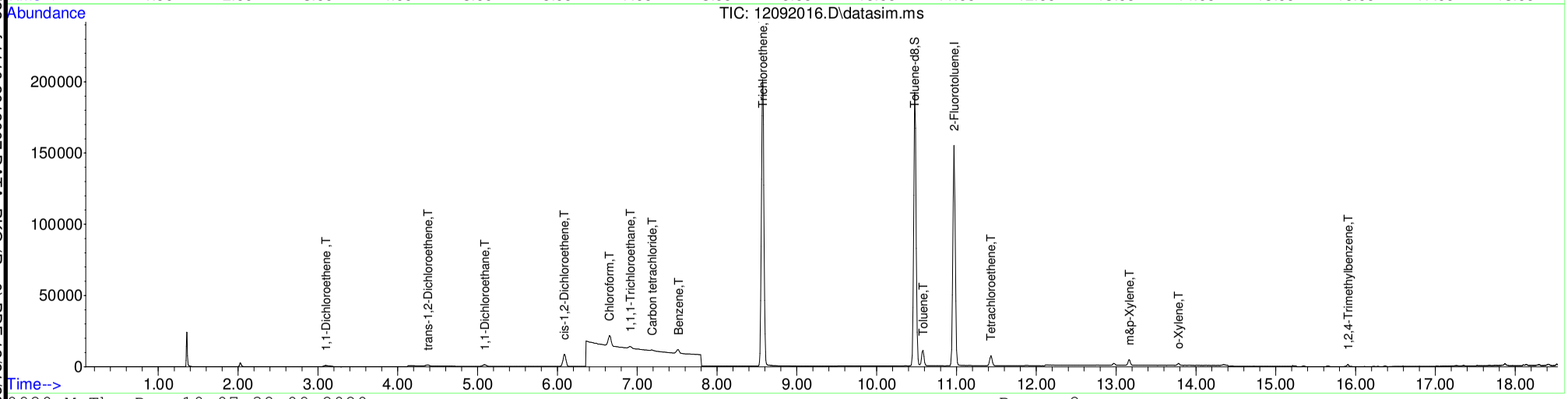
Response via : Initial Calibration





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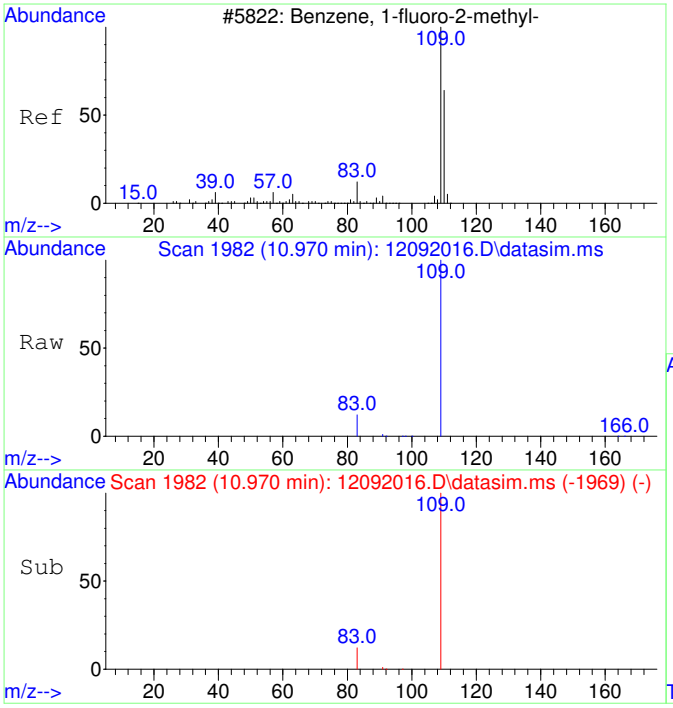
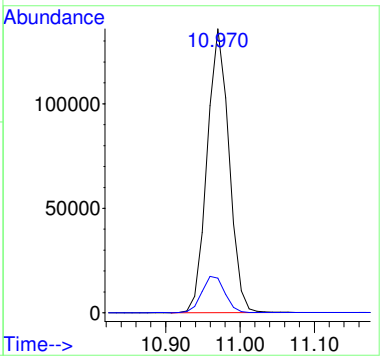
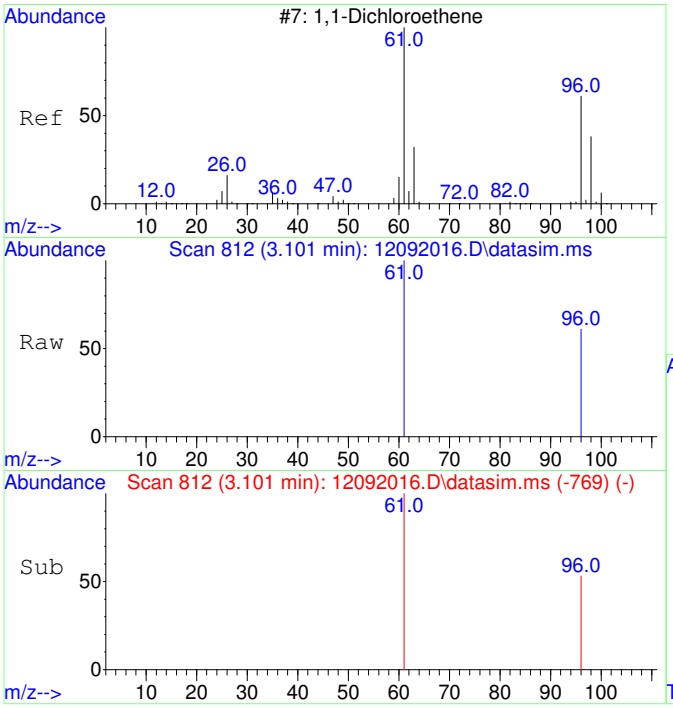


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:109 Resp: 277445

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

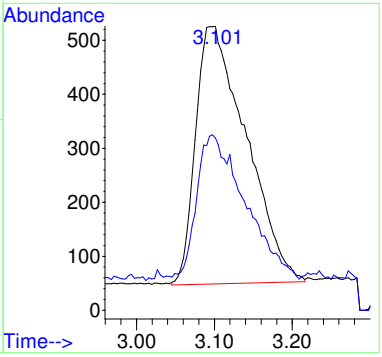


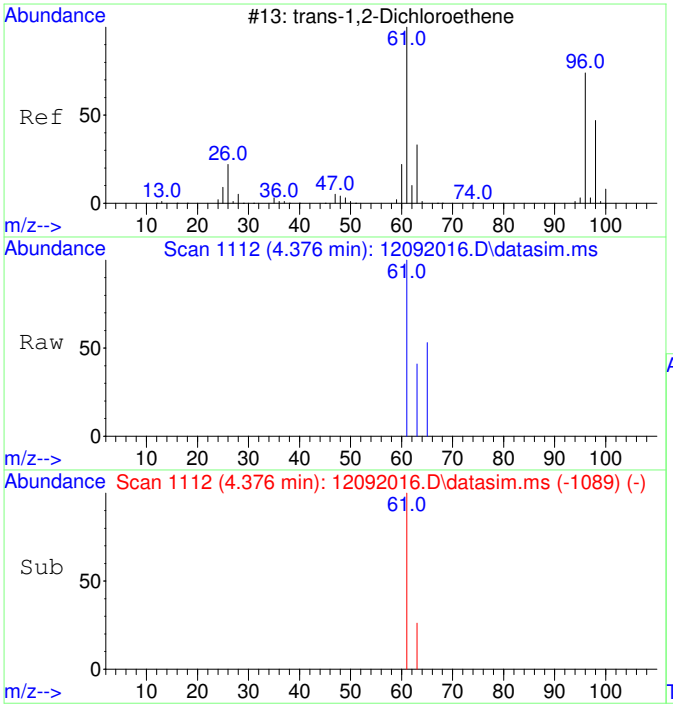


#2
1,1-Dichloroethene
Concen: 195.71 ug/L m
RT: 3.101 min Scan# 812
Delta R.T. 0.011 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 2153

Ion	Ratio	Lower	Upper
61	100		
96	53.2	37.2	97.2

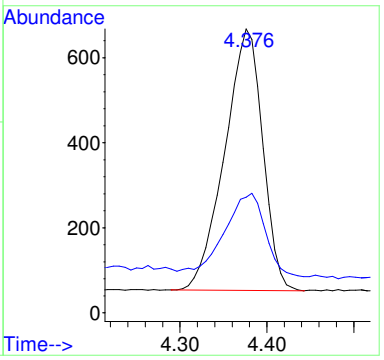


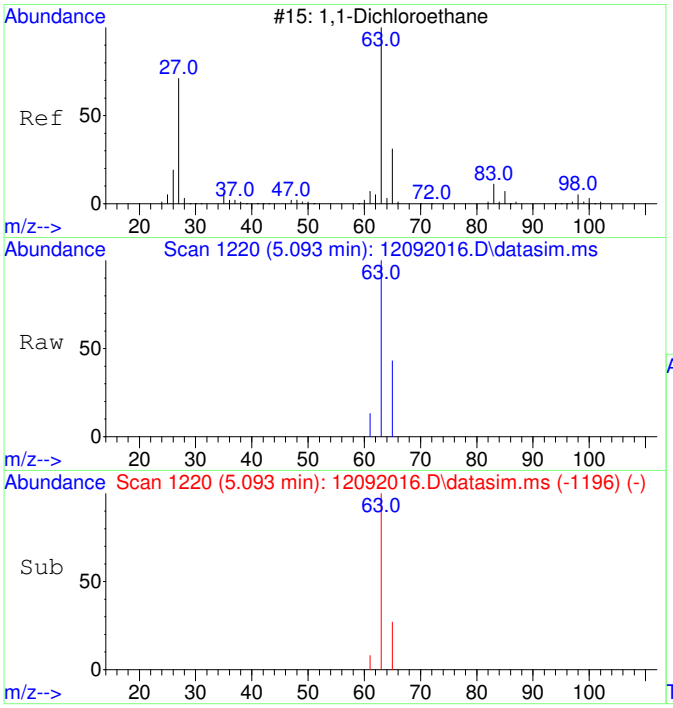


#3
trans-1,2-Dichloroethene
Concen: 134.76 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 1869

Ion	Ratio	Lower	Upper
61	100		
63	34.9	2.4	62.4

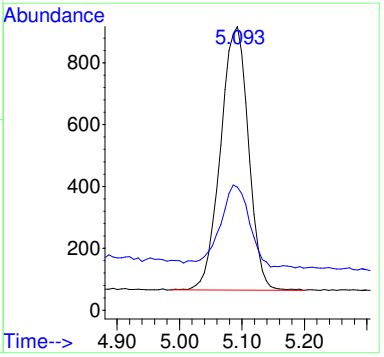


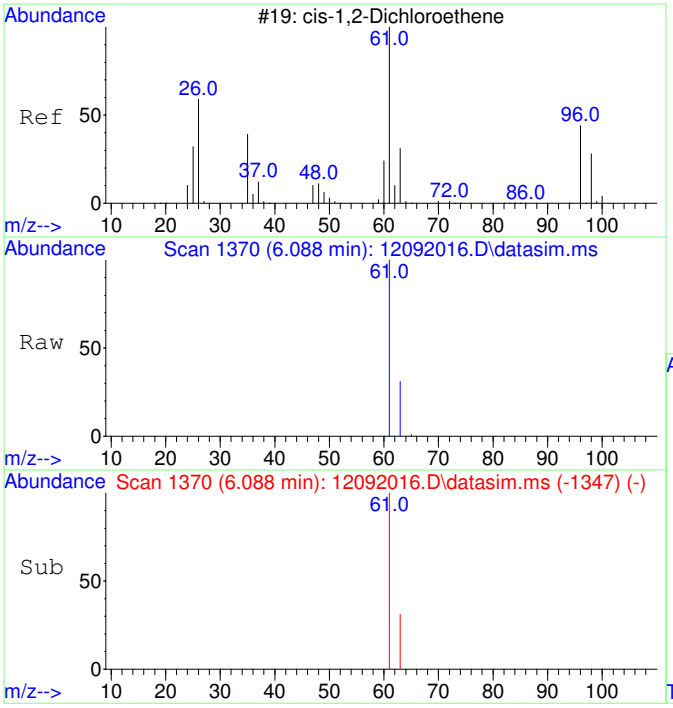


#4
1,1-Dichloroethane
Concen: 159.44 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 63 Resp: 2641

Ion	Ratio	Lower	Upper
63	100		
65	33.0	1.8	61.8

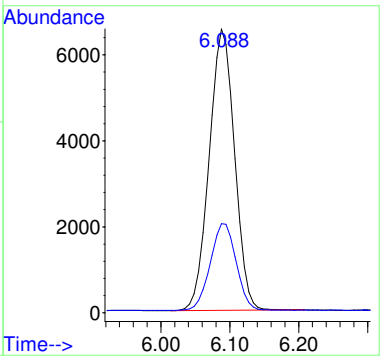


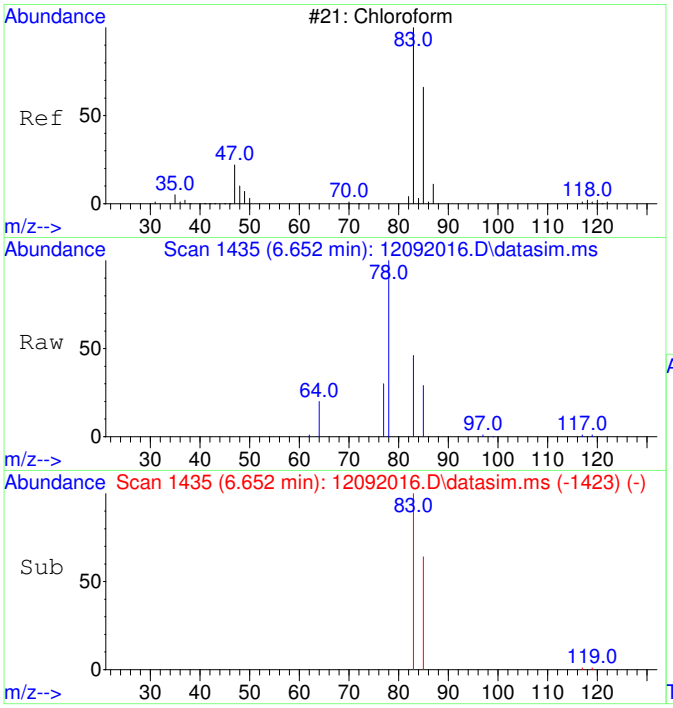


#5
cis-1,2-Dichloroethene
Concen: 974.88 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 16725

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

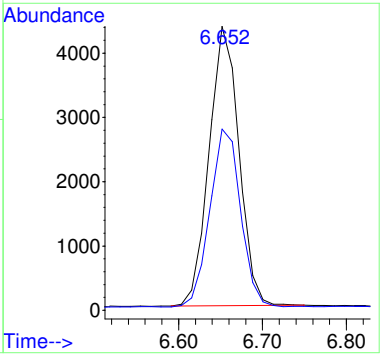


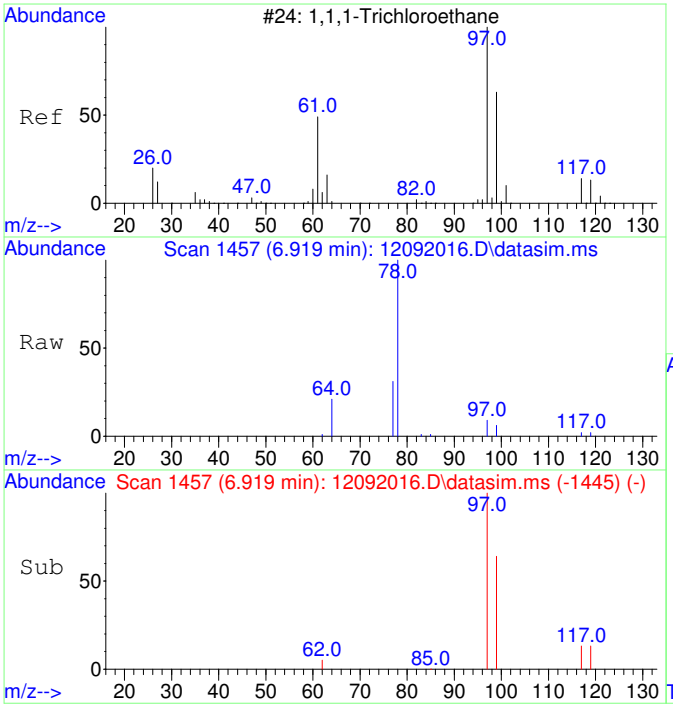


#6
Chloroform
Concen: 651.46 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 83 Resp: 10735

Ion	Ratio	Lower	Upper
83	100		
85	65.2	35.1	95.1

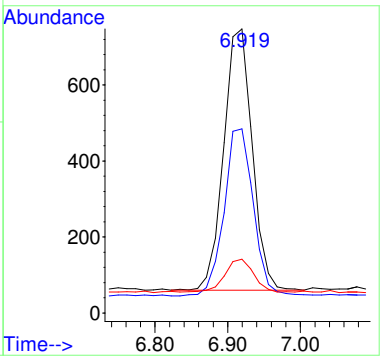


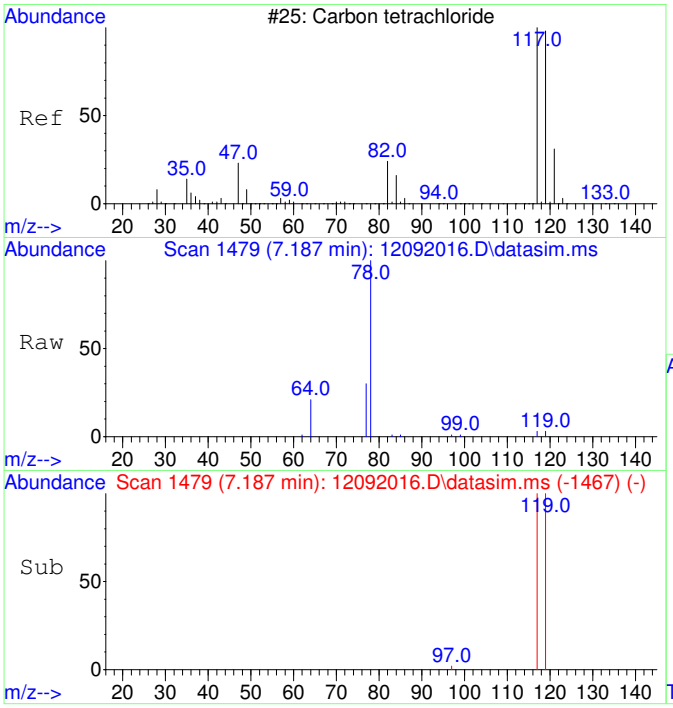


#7
1,1,1-Trichloroethane
Concen: 106.09 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 97 Resp: 1878

Ion	Ratio	Lower	Upper
97	100		
99	65.1	34.6	94.6
117	12.6	0.0	43.2

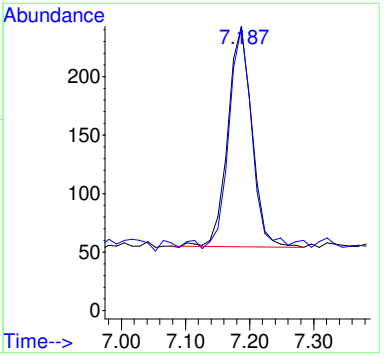


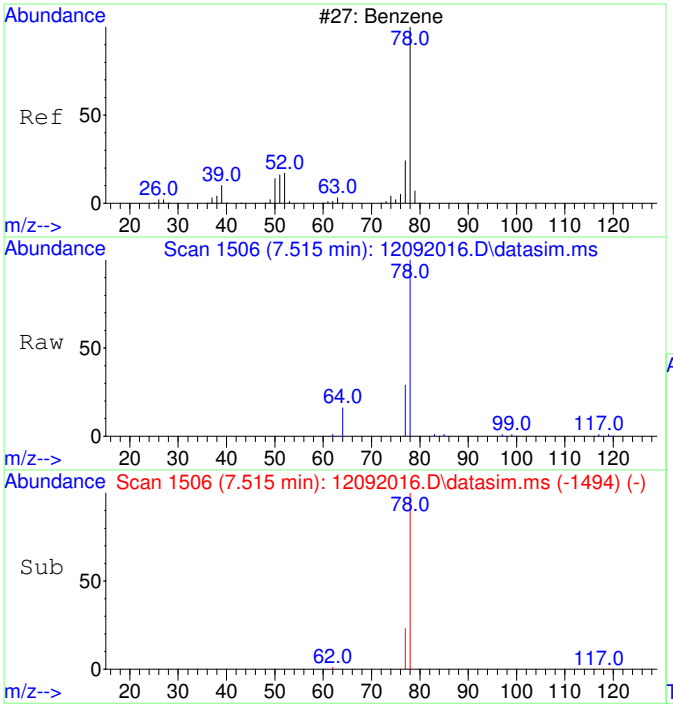


#8
Carbon tetrachloride
Concen: 28.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:117 Resp: 490

Ion	Ratio	Lower	Upper
117	100		
119	96.7	66.4	126.4

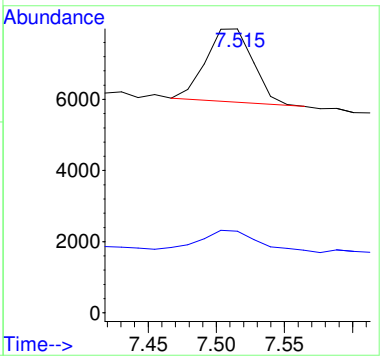


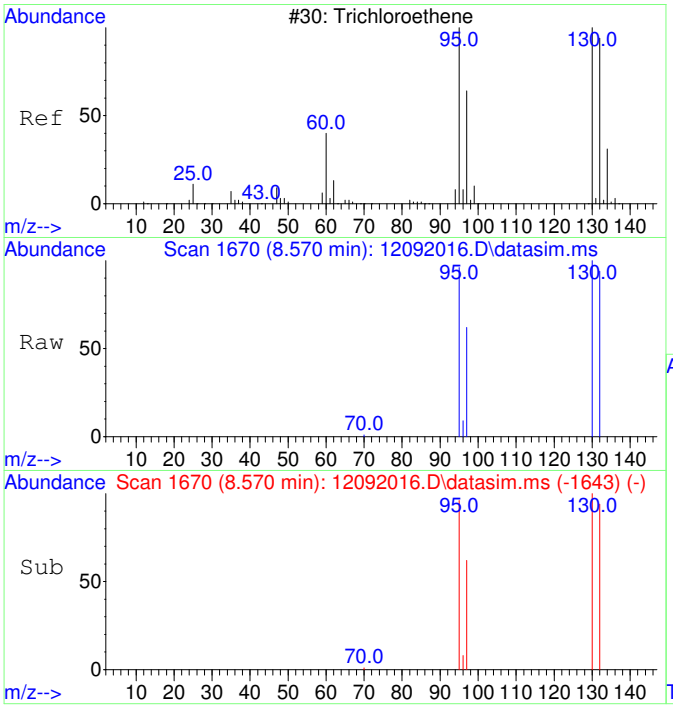


#9
Benzene
Concen: 104.14 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 78 Resp: 4862

Ion	Ratio	Lower	Upper
78	100		
77	39.8	0.0	53.2

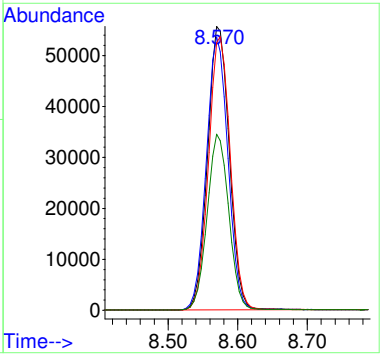


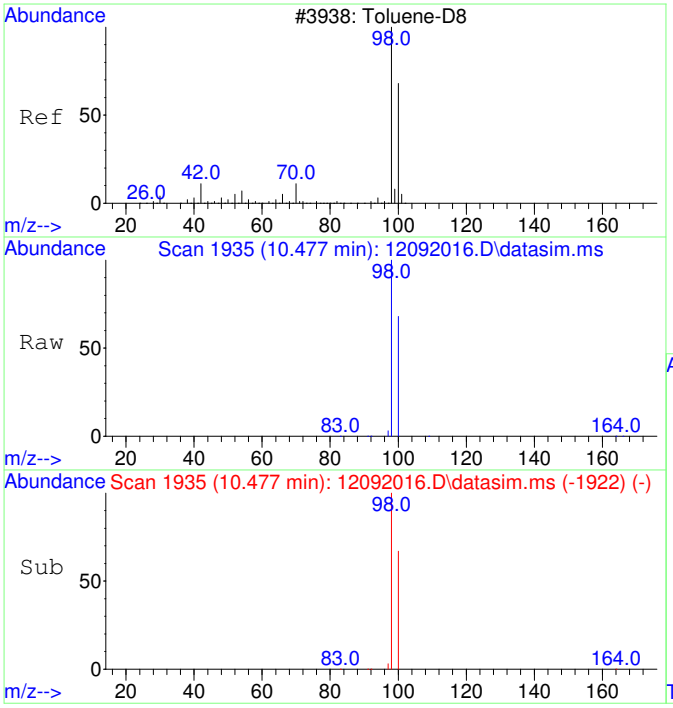


#11
Trichloroethene
Concen: 8177.43 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:130 Resp: 120537

Ion	Ratio	Lower	Upper
130	100		
95	95.5	60.7	120.7
132	96.5	76.0	116.0
97	61.5	38.6	78.6

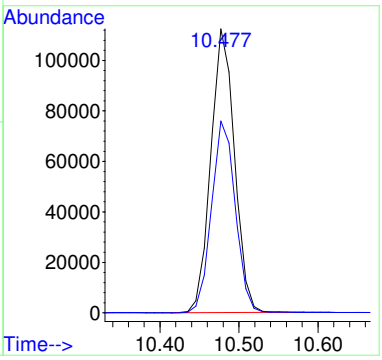


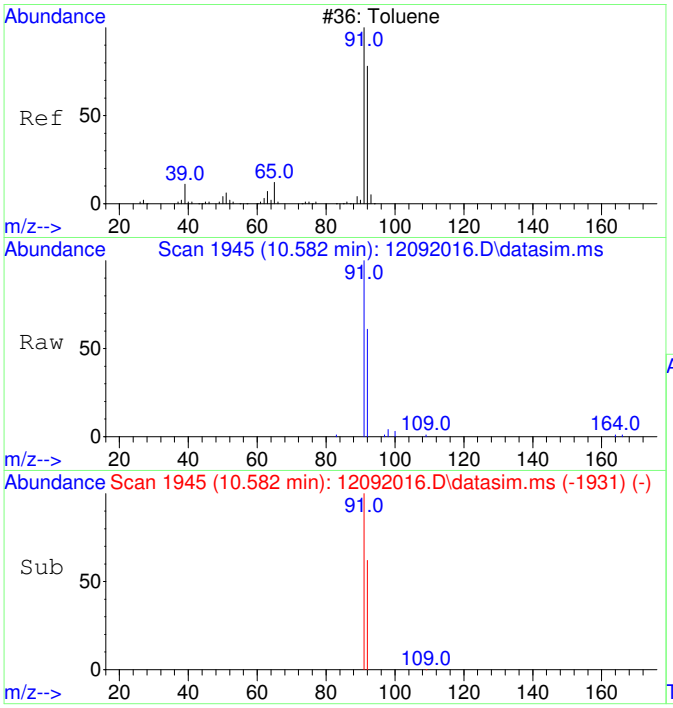


#12
Toluene-d8
Concen: 4356.18 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 98 Resp: 234076

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

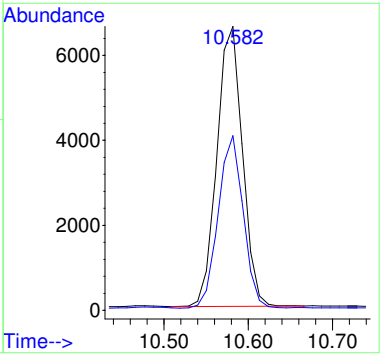


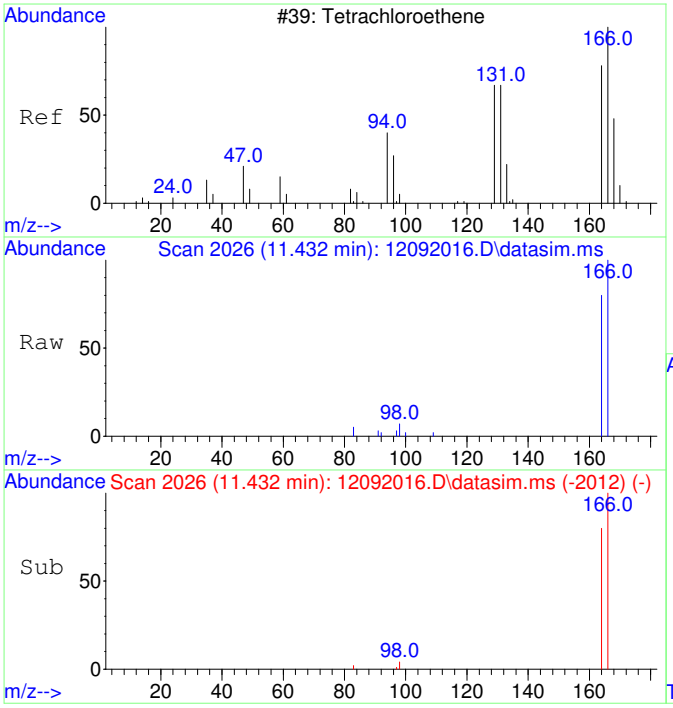


#13
Toluene
Concen: 207.69 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 13895

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

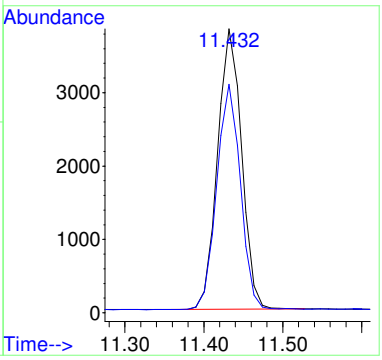


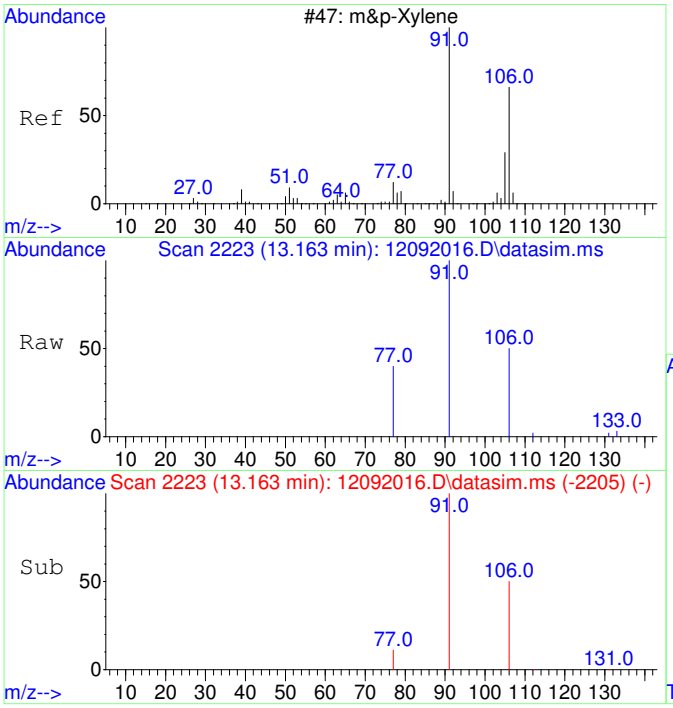


#15
Tetrachloroethene
Concen: 386.15 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:166 Resp: 8047

Ion	Ratio	Lower	Upper
166	100		
164	79.0	47.8	107.8

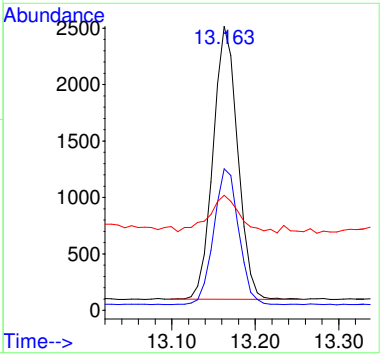


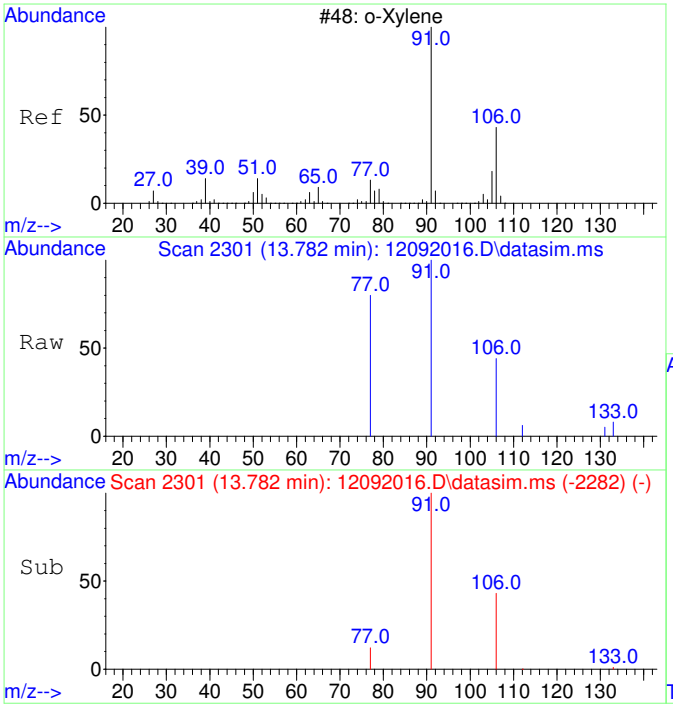


#19
m&p-Xylene
Concen: 75.22 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 4950

Ion	Ratio	Lower	Upper
91	100		
106	50.4	22.2	82.2
77	17.3	0.0	42.4

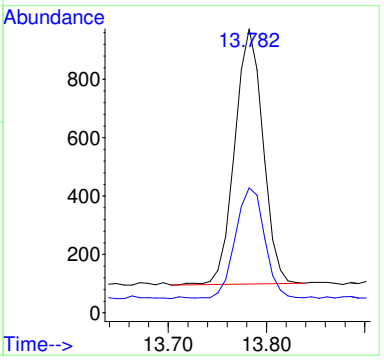


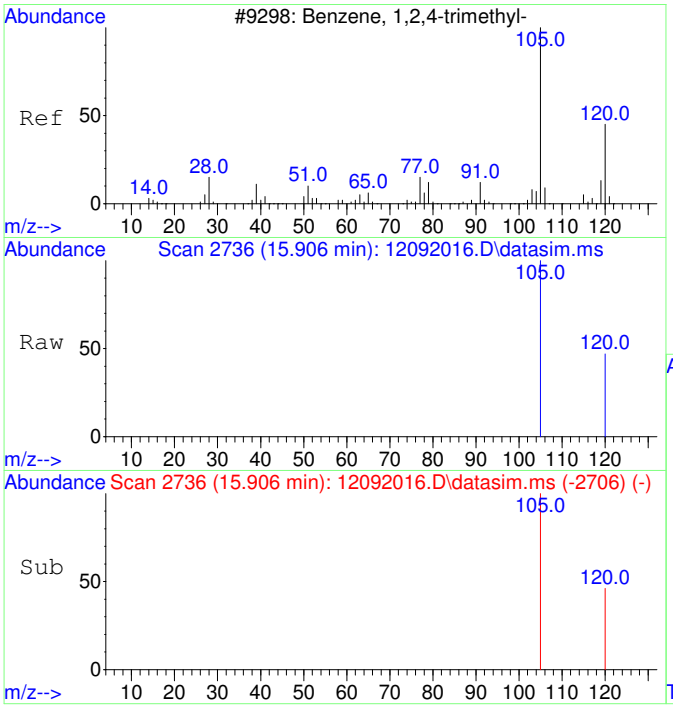


#20
o-Xylene
Concen: 24.60 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 1739

Ion	Ratio	Lower	Upper
91	100		
106	44.3	19.2	79.2

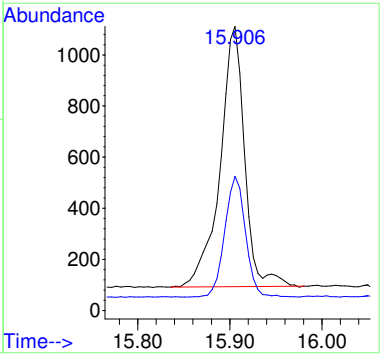


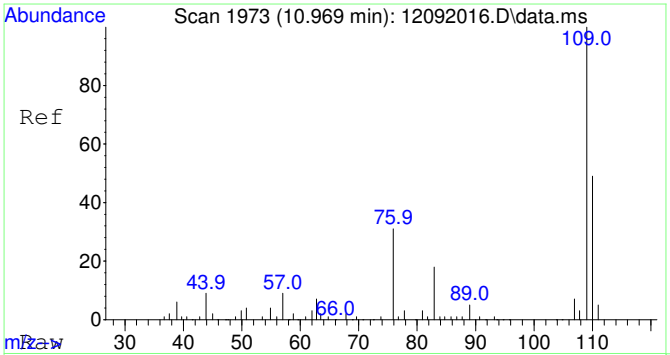


#23
1,2,4-Trimethylbenzene
Concen: 23.71 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:105 Resp: 1885

Ion	Ratio	Lower	Upper
105	100		
120	39.0	17.2	77.2

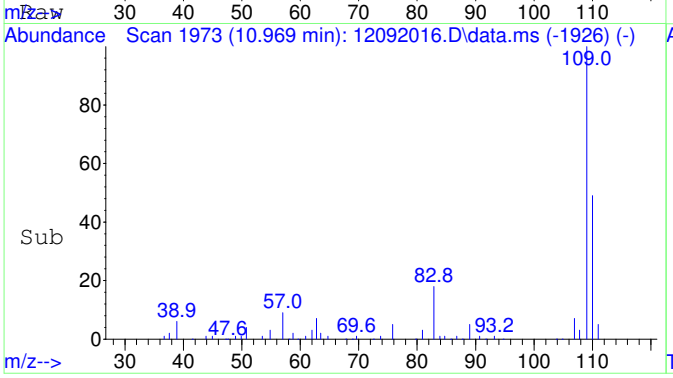


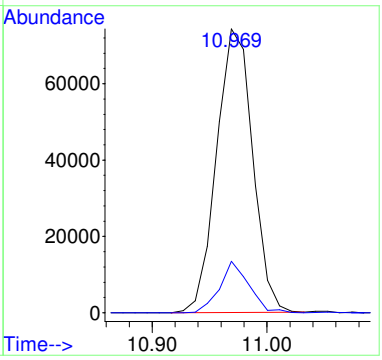


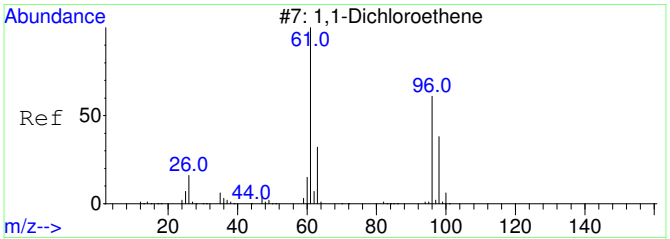
#25
2-Fluorotoluene SCAN
Concen: 5159.39 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:109 Resp: 162484

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8



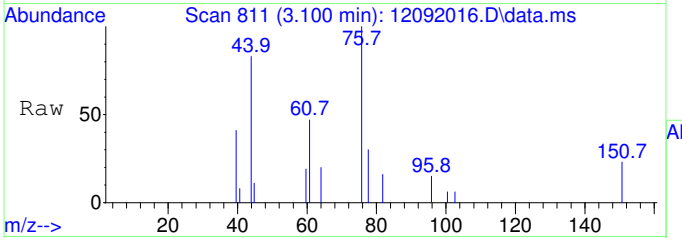


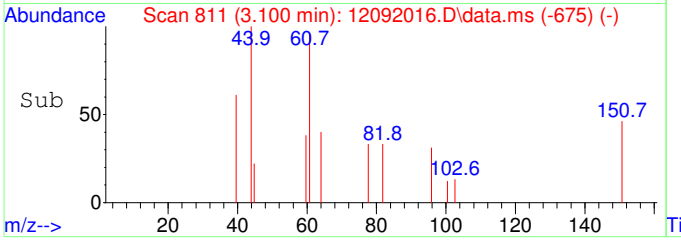


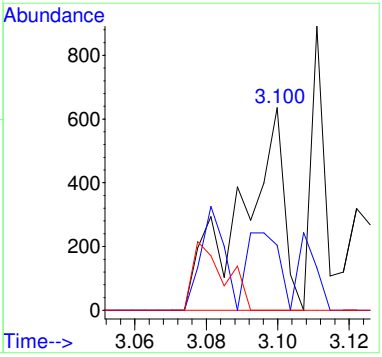
#26
1,1-Dichloroethene SCAN
Concen: 73.04 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

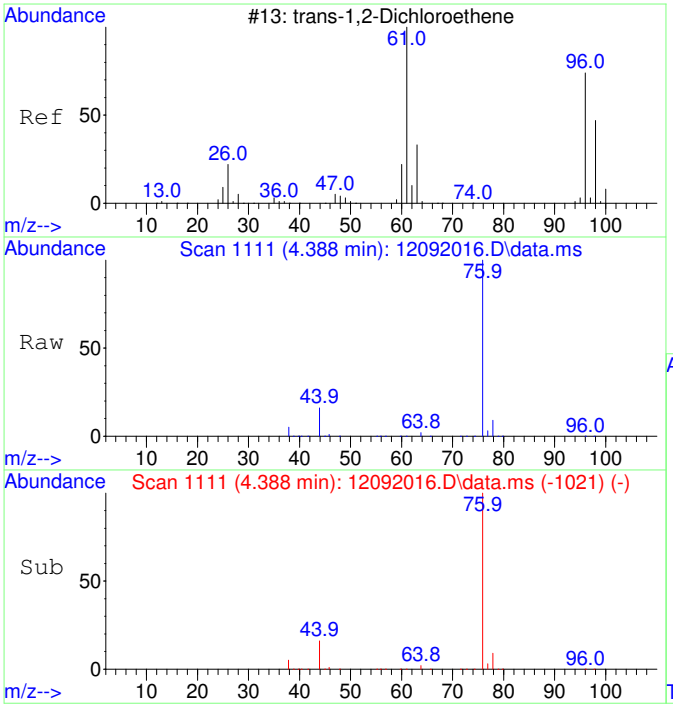
Tgt Ion: 61 Resp: 537

Ion	Ratio	Lower	Upper
61	100		
96	28.7	33.1	93.1#
98	0.0	11.2	71.2#





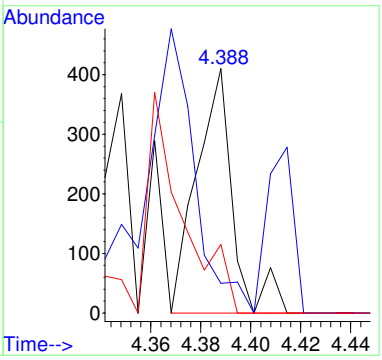


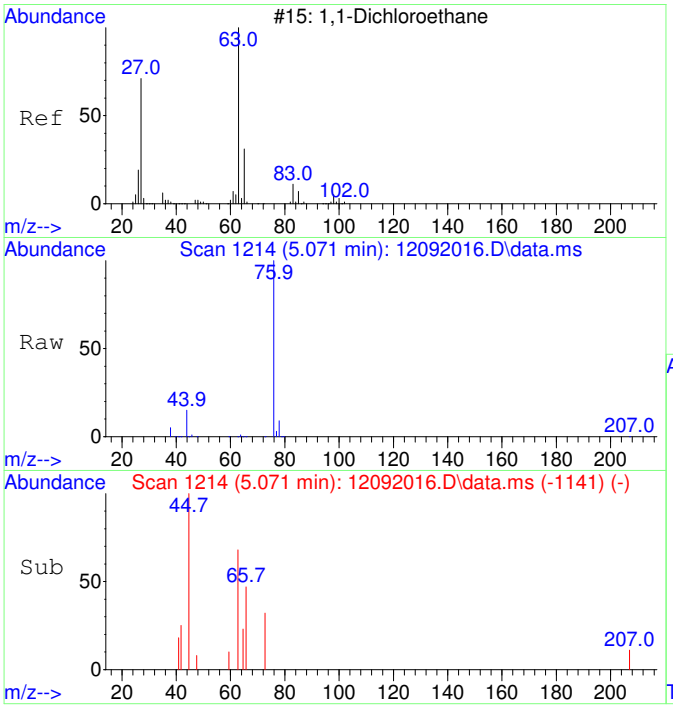


#27
trans-1,2-Dichloroethene SCAN
Concen: 44.21 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 414

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

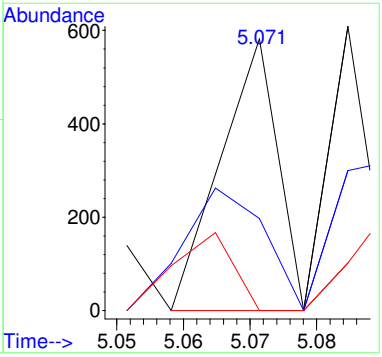


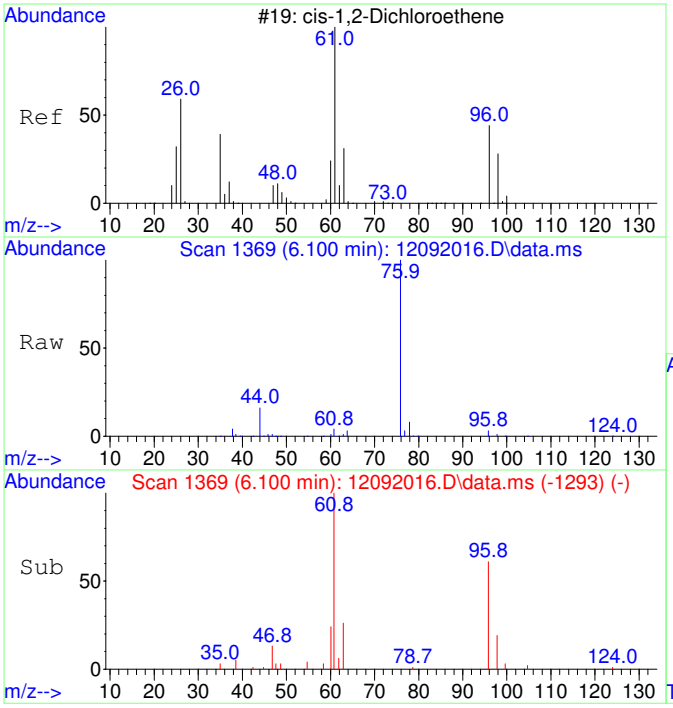


#28
1,1-Dichloroethane SCAN
Concen: 31.48 ug/L
RT: 5.071 min Scan# 1214
Delta R.T. -0.013 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 63 Resp: 348

Ion	Ratio	Lower	Upper
63	100		
65	64.1	1.3	61.3#
83	36.2	0.0	45.9

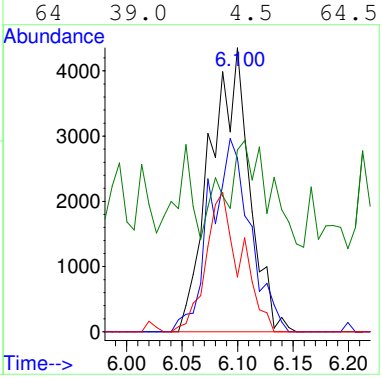


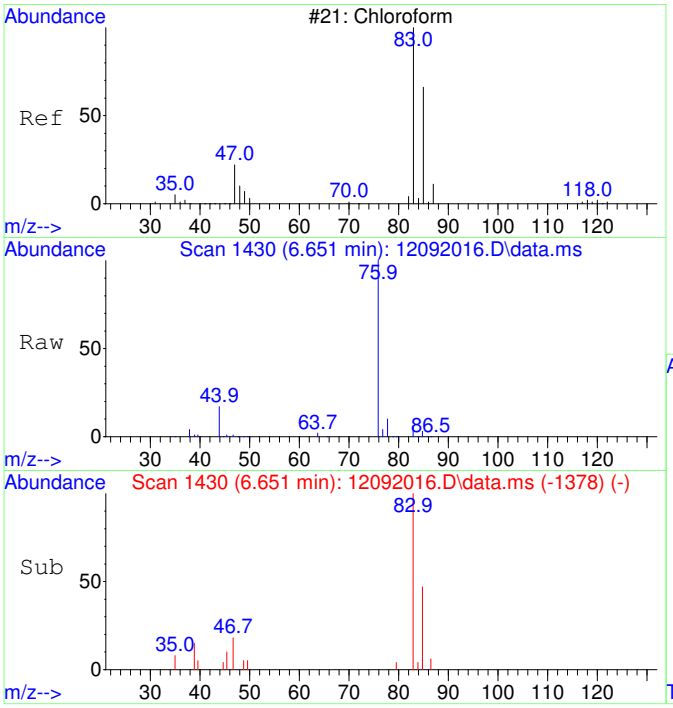


#29
cis-1,2-Dichloroethene SCAN
Concen: 988.76 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 61 Resp: 10744

Ion	Ratio	Lower	Upper
61	100		
96	69.2	39.9	99.9
98	43.4	13.5	73.5
64	39.0	4.5	64.5

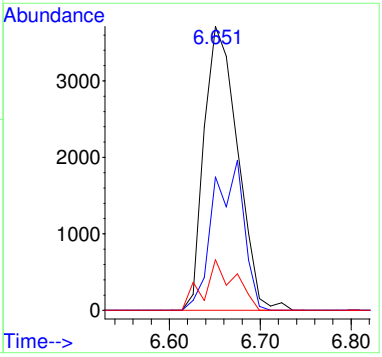


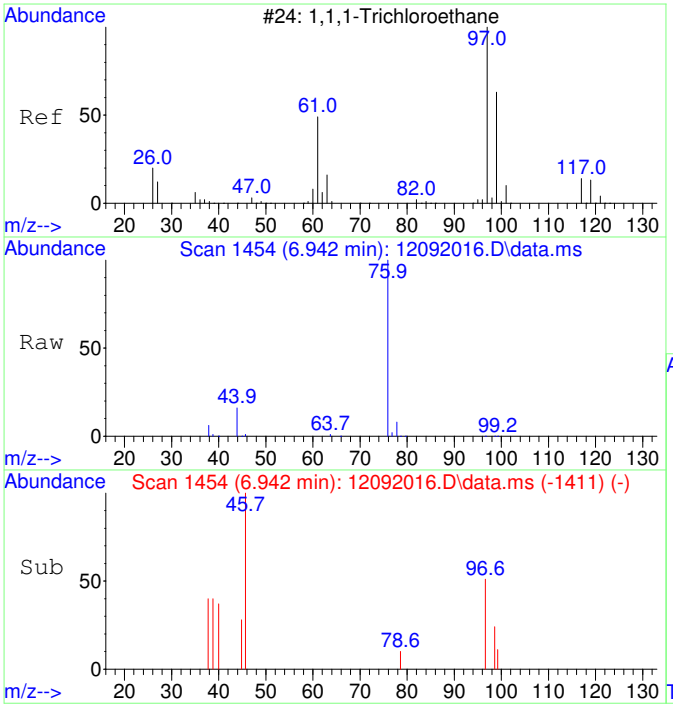


#30
Chloroform SCAN
Concen: 943.07 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 83 Resp: 9558

Ion	Ratio	Lower	Upper
83	100		
85	0.0	34.6	94.6#
47	16.6	0.0	53.4

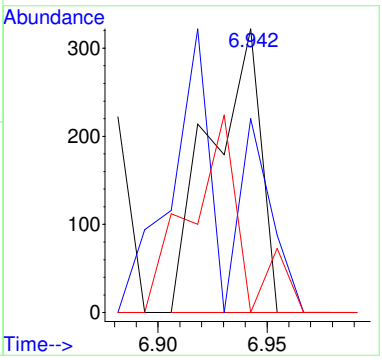


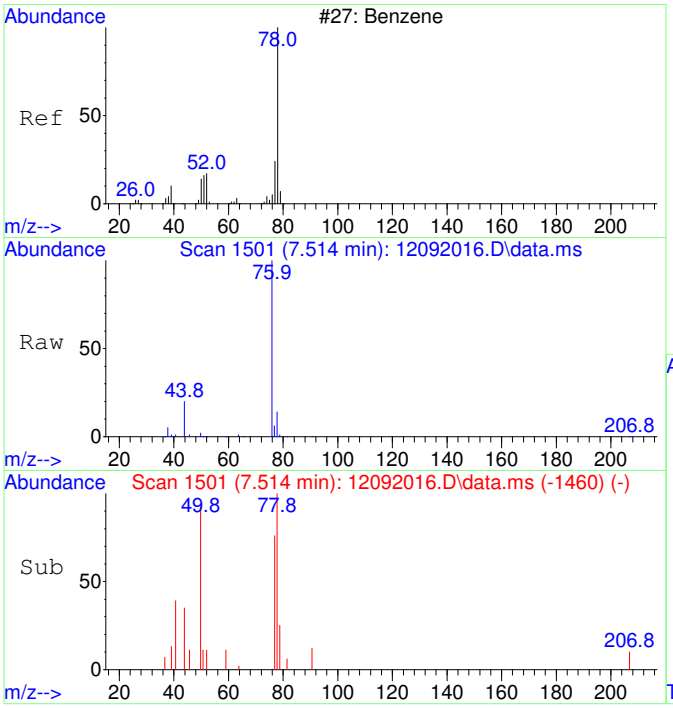


#31
1,1,1-Trichloroethane SCAN
Concen: 49.91 ug/L
RT: 6.942 min Scan# 1454
Delta R.T. 0.025 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 97 Resp: 522

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	71.3	18.0	78.0

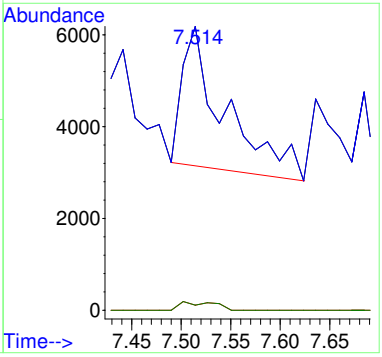


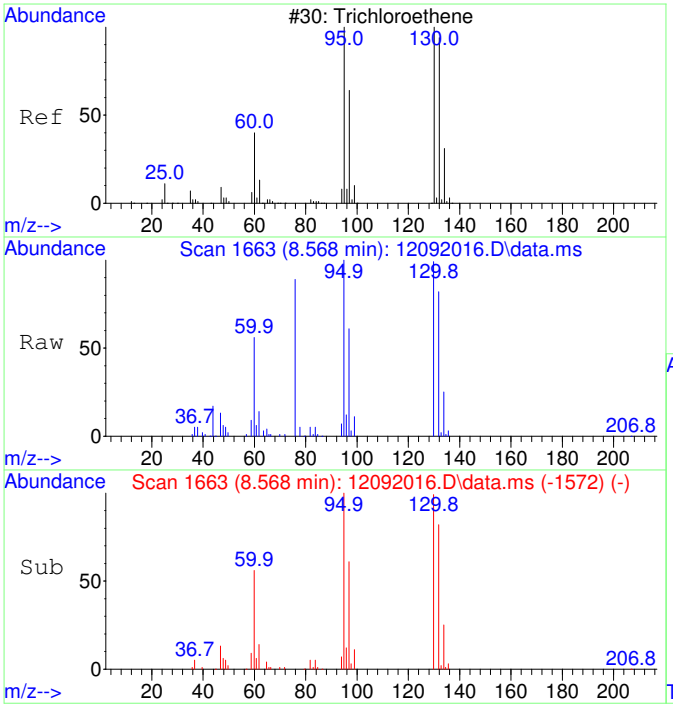


#33
Benzene SCAN
Concen: 279.96 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 78 Resp: 8858

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.0	0.0	47.9
51	5.0	0.0	44.1

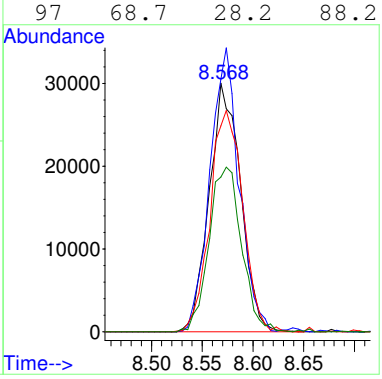


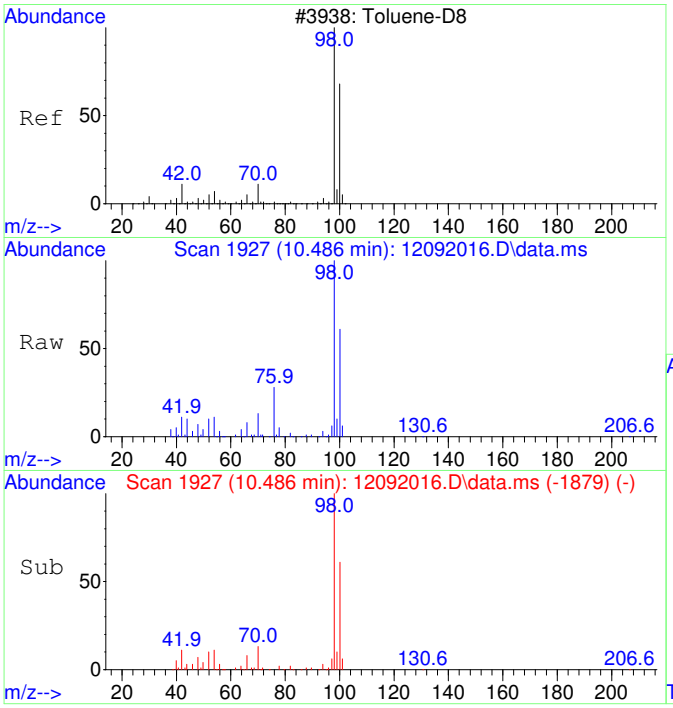


#35
Trichloroethene SCAN
Concen: 9369.99 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:130 Resp: 64645

Ion	Ratio	Lower	Upper
130	100		
95	106.1	60.5	120.5
132	93.0	59.6	119.6
97	68.7	28.2	88.2

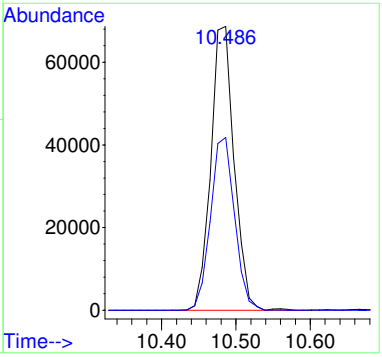


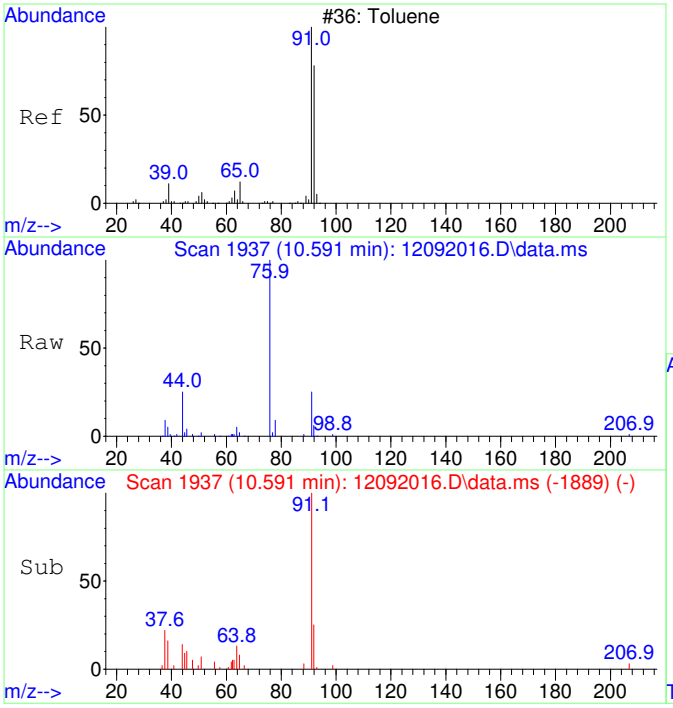


#36
Toluene-d8 SCAN
Concen: 5069.56 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 98 Resp: 149739

Ion	Ratio	Lower	Upper
98	100		
100	62.7	40.0	100.0

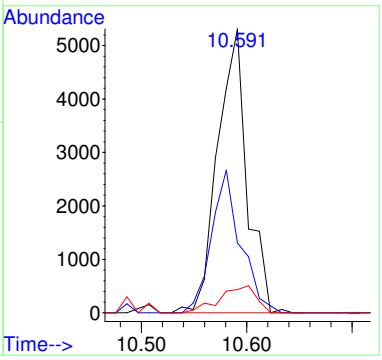


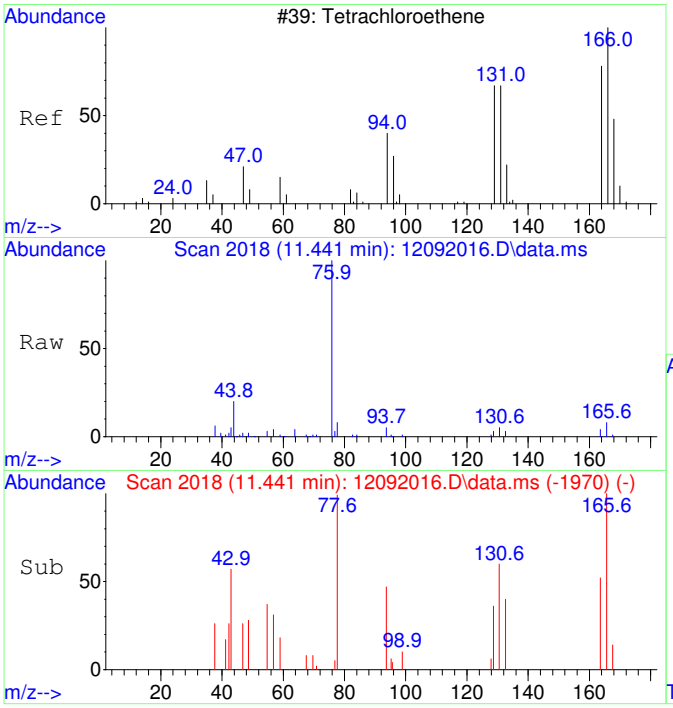


#37
Toluene SCAN
Concen: 283.39 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 10306

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	11.8	0.0	41.0

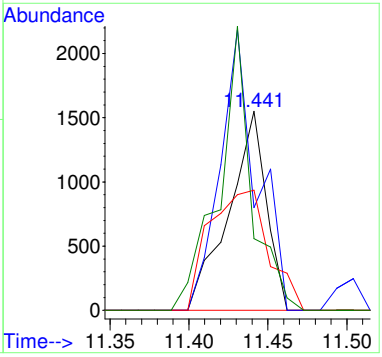


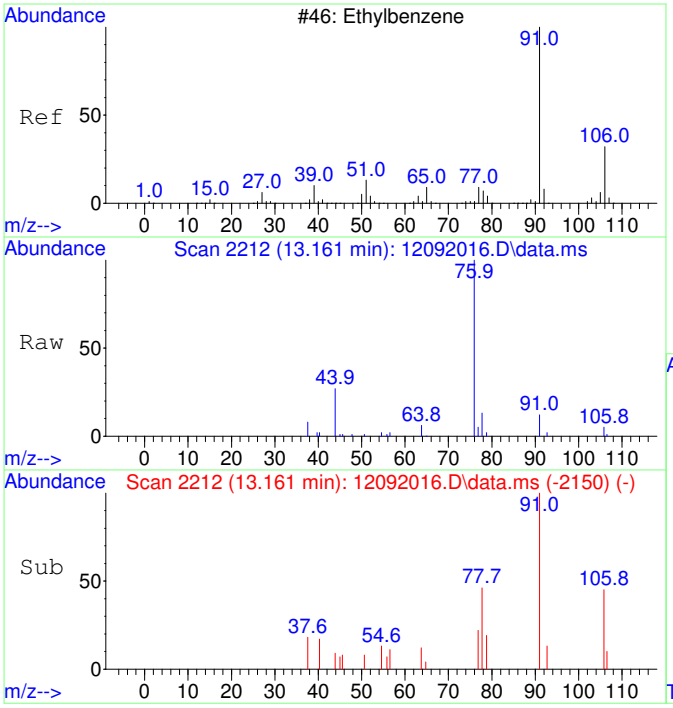


#39
Tetrachloroethene SCAN
Concen: 313.65 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion:166 Resp: 2566

Ion	Ratio	Lower	Upper
166	100		
164	138.1	50.9	110.9#
131	95.3	38.7	98.7
129	125.2	41.8	101.8#

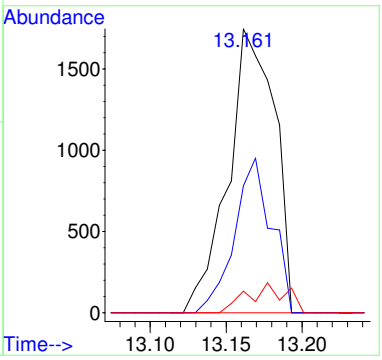


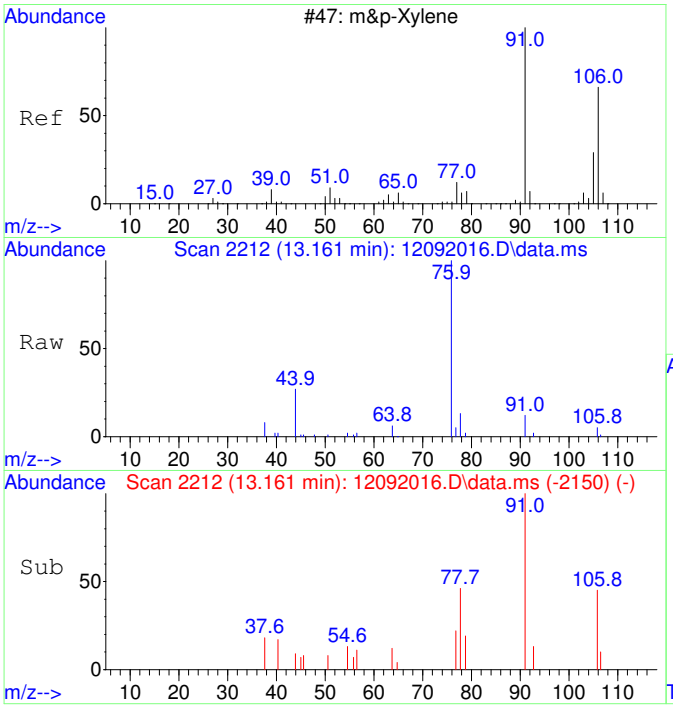


#42
Ethylbenzene SCAN
Concen: 53.74 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 3724

Ion	Ratio	Lower	Upper
91	100		
106	43.4	23.1	83.1
51	8.7	0.0	40.1

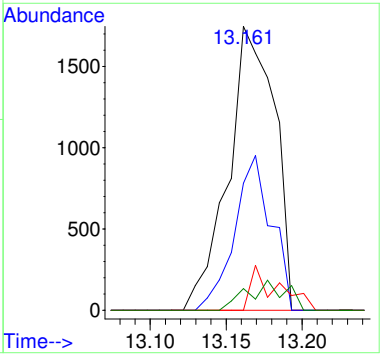




#43
m&p-Xylene SCAN
Concen: 53.74 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092016.D
Acq: 9 Dec 2020 14:48

Tgt Ion: 91 Resp: 3724

Ion	Ratio	Lower	Upper
91	100		
106	43.4	23.1	83.1
105	9.3	0.0	54.7
51	8.7	0.0	40.1



2012007-10

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092017.D
Acq On : 9 Dec 2020 15:11
InstName : AG5975C
Operator : TD
Sample : 2012007-10
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 10 05:55:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

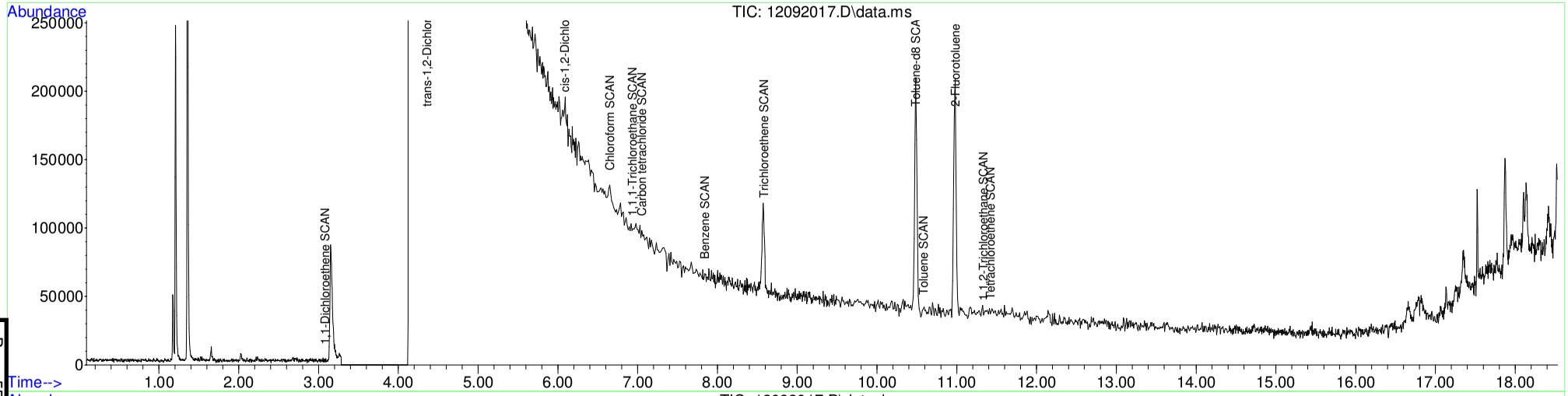
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	236682	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	200222	4367.90	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.36%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	1052	112.10	ug/L #	61
3] trans-1,2-Dichloroethene	4.349	61	818	69.14	ug/L	87
4] 1,1-Dichloroethane	5.079	63	888	62.84	ug/L	83
5] cis-1,2-Dichloroethene	6.081	61	15643	1068.85	ug/L	98
6] Chloroform	6.652	83	15919	1132.43	ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	509	33.71	ug/L	95
9] Benzene	7.503	78	1324	33.24	ug/L #	1
11] Trichloroethene	8.575	130	42365	3369.11	ug/L	98
15] Tetrachloroethene	11.432	166	1414	79.54	ug/L	100
25) 2-Fluorotoluene SCAN	10.979	109	139244	5182.94	ug/L	99
26) 1,1-Dichloroethene SCAN	3.081	61	150	23.92	ug/L #	74
27) trans-1,2-Dichloroethe...	4.361	61	357	44.69	ug/L #	75
29) cis-1,2-Dichloroethene...	6.086	61	11255	1214.18	ug/L	79
30) Chloroform SCAN	6.650	83	9964	1152.45	ug/L	80
31) 1,1,1-Trichloroethane ...	6.930	97	706	79.13	ug/L #	19
32) Carbon tetrachloride SCAN	7.052	117	298	39.09	ug/L #	15
33) Benzene SCAN	7.844	78	2090	77.43	ug/L	95
35) Trichloroethene SCAN	8.579	130	22347	3796.95	ug/L	82
36) Toluene-d8 SCAN	10.486	98	122842	4875.22	ug/L	93
37) Toluene SCAN	10.581	91	755	24.34	ug/L #	31
38) 1,1,2-Trichloroethane ...	11.336	97	313	40.25	ug/L #	13
39) Tetrachloroethene SCAN	11.420	166	473	67.77	ug/L #	12

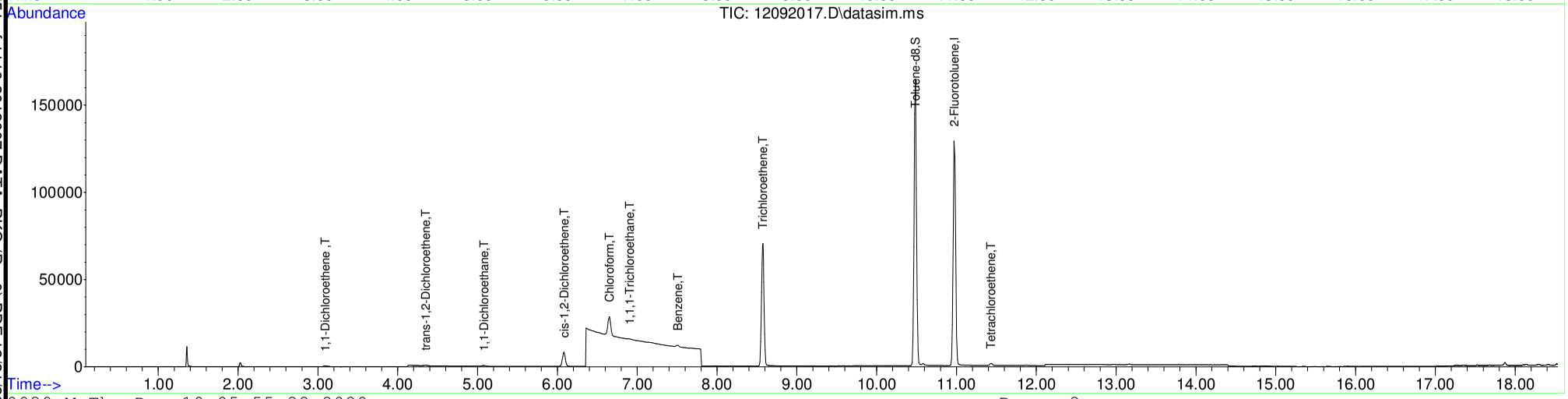
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092017.D
Acq On : 9 Dec 2020 15:11
InstName : AG5975C
Operator : TD
Sample : 2012007-10
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 10 05:55:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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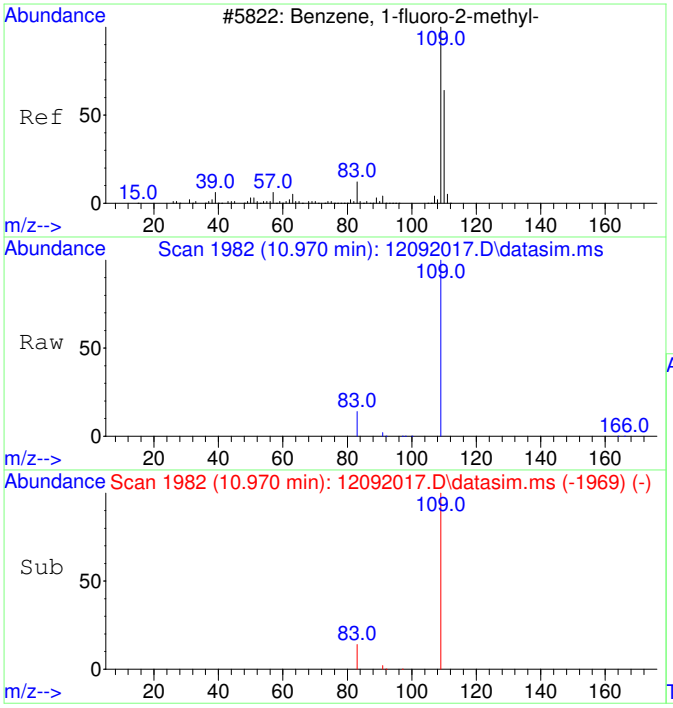
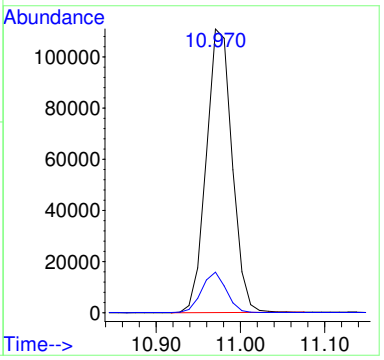
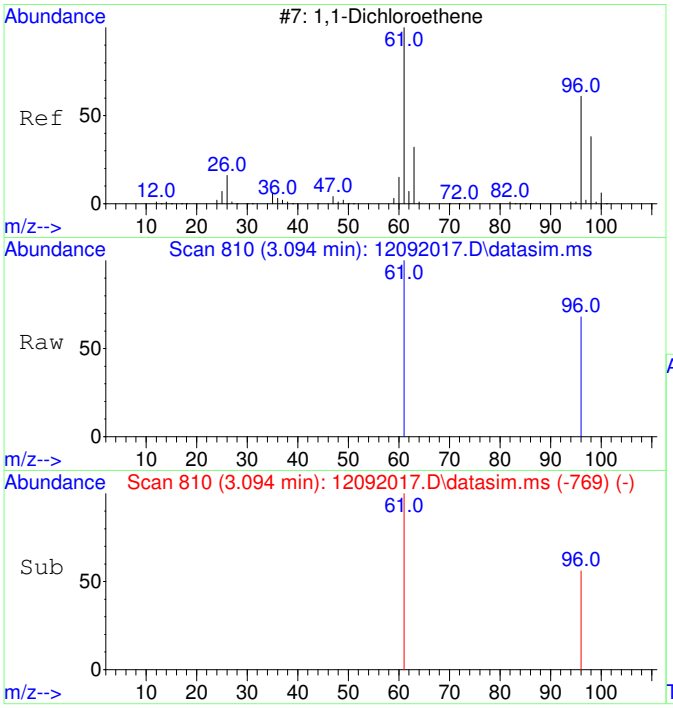


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:109 Resp: 236682

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

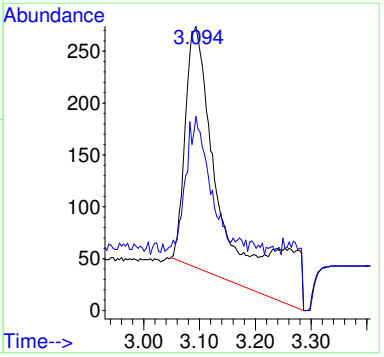




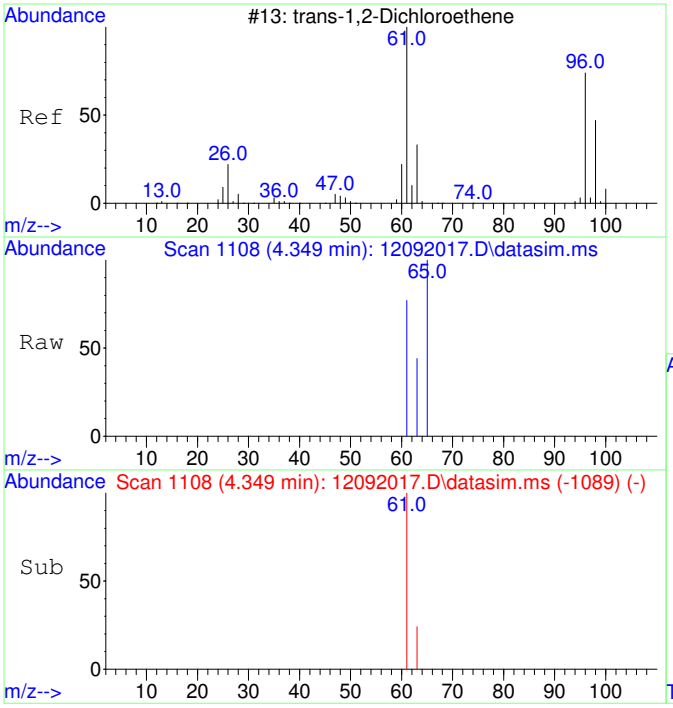
#2
1,1-Dichloroethene
Concen: 112.10 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 1052

Ion	Ratio	Lower	Upper
61	100		
96	36.2	37.2	97.2#



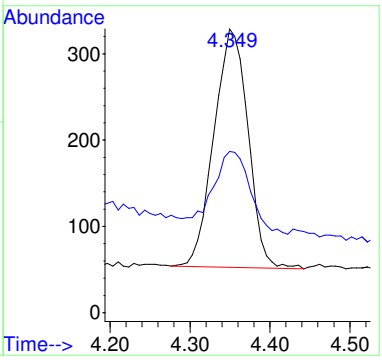
Before MI:
IMPROPER
BASELINE

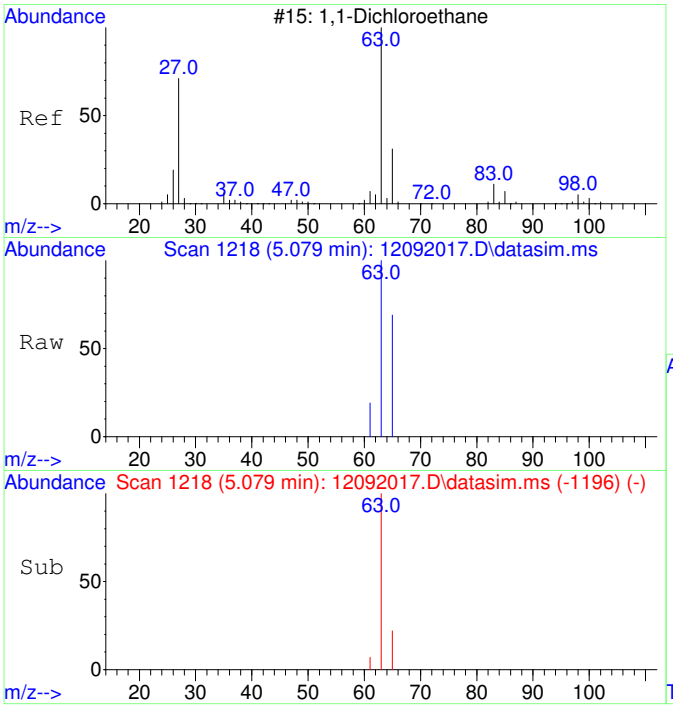


#3
trans-1,2-Dichloroethene
Concen: 69.14 ug/L
RT: 4.349 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 818

Ion	Ratio	Lower	Upper
61	100		
63	39.9	2.4	62.4

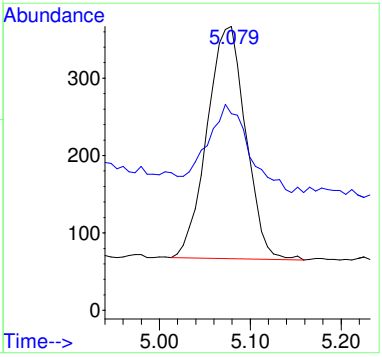


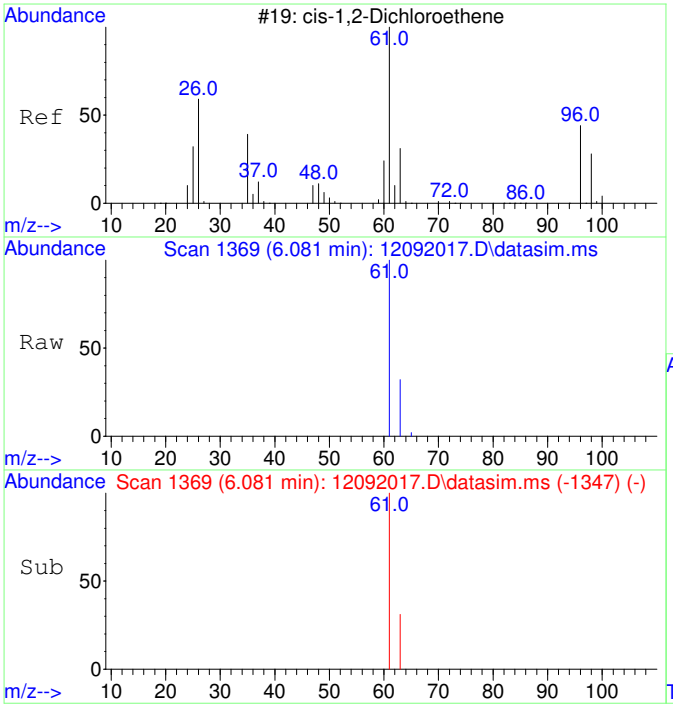


#4
1,1-Dichloroethane
Concen: 62.84 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 63 Resp: 888

Ion	Ratio	Lower	Upper
63	100		
65	41.4	1.8	61.8

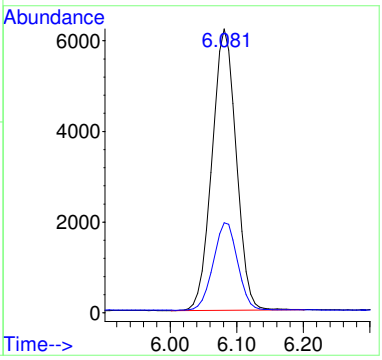


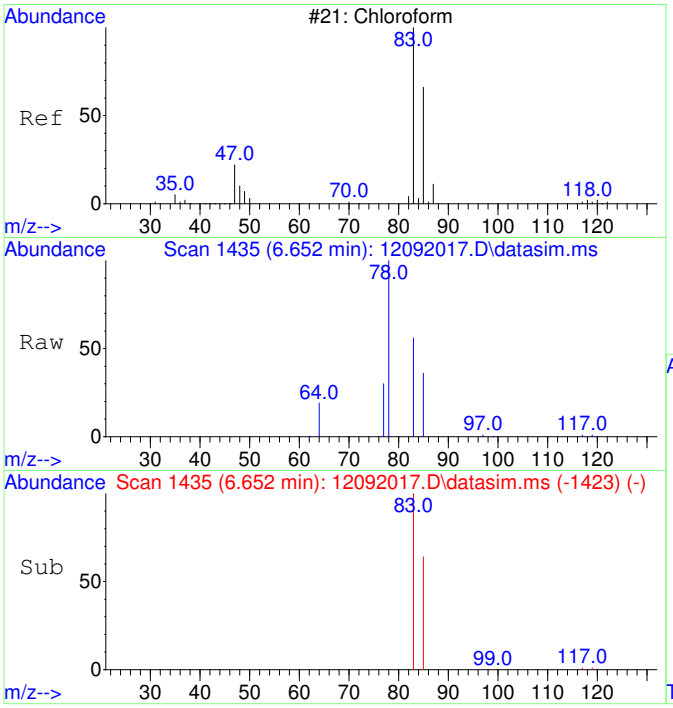


#5
cis-1,2-Dichloroethene
Concen: 1068.85 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 15643

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

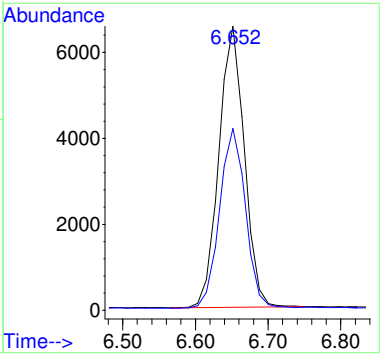


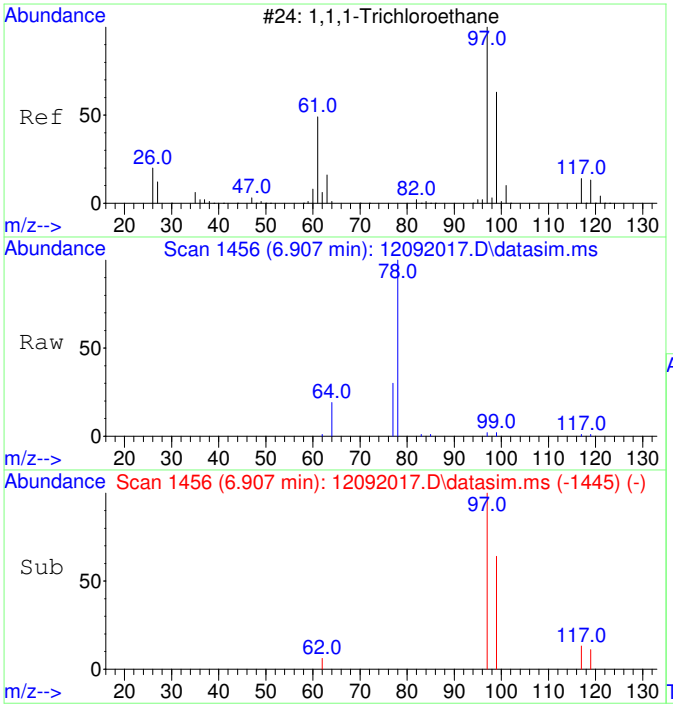


#6
Chloroform
Concen: 1132.43 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 83 Resp: 15919

Ion	Ratio	Lower	Upper
83	100		
85	64.6	35.1	95.1

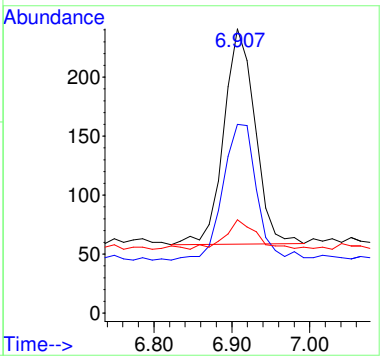


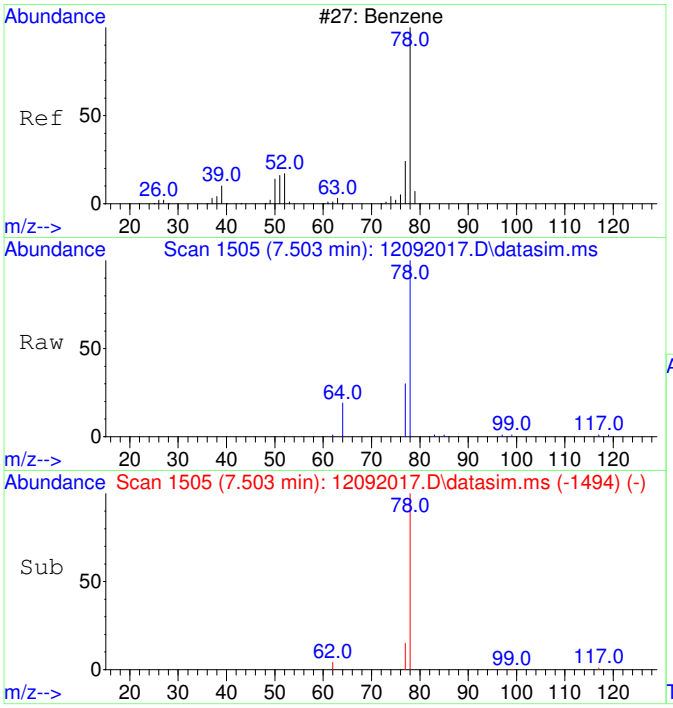


#7
1,1,1-Trichloroethane
Concen: 33.71 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 509

Ion	Ratio	Lower	Upper
97	100		
99	68.8	34.6	94.6
117	14.1	0.0	43.2

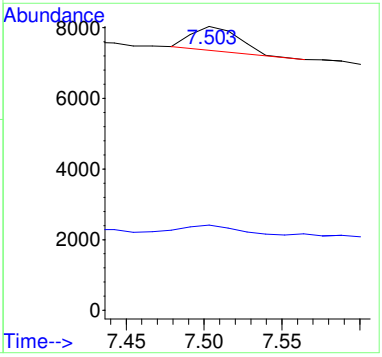


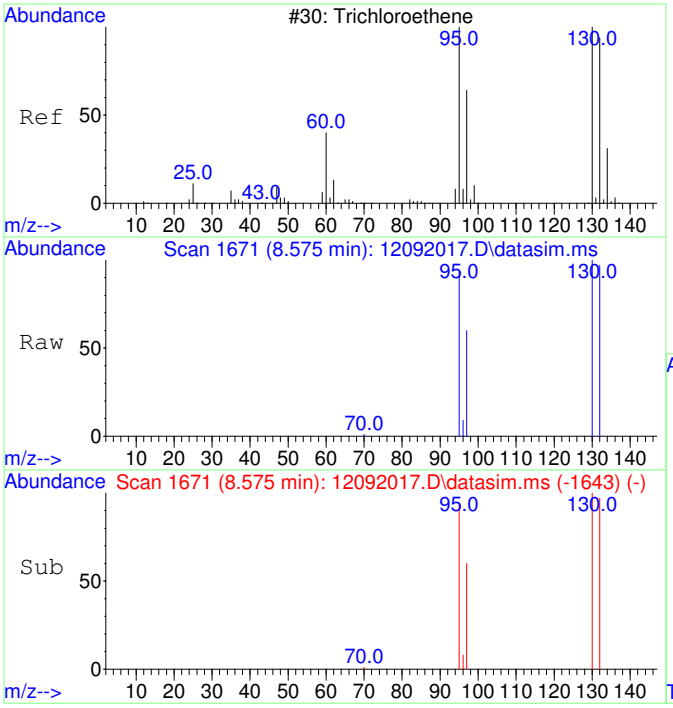


#9
Benzene
Concen: 33.24 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 78 Resp: 1324

Ion	Ratio	Lower	Upper
78	100		
77	89.7	0.0	53.2#

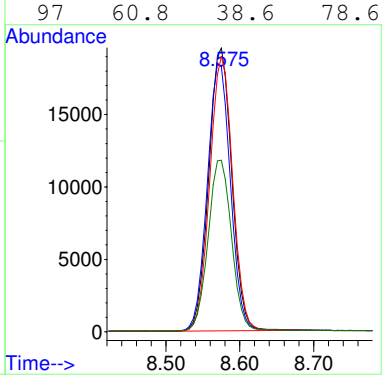


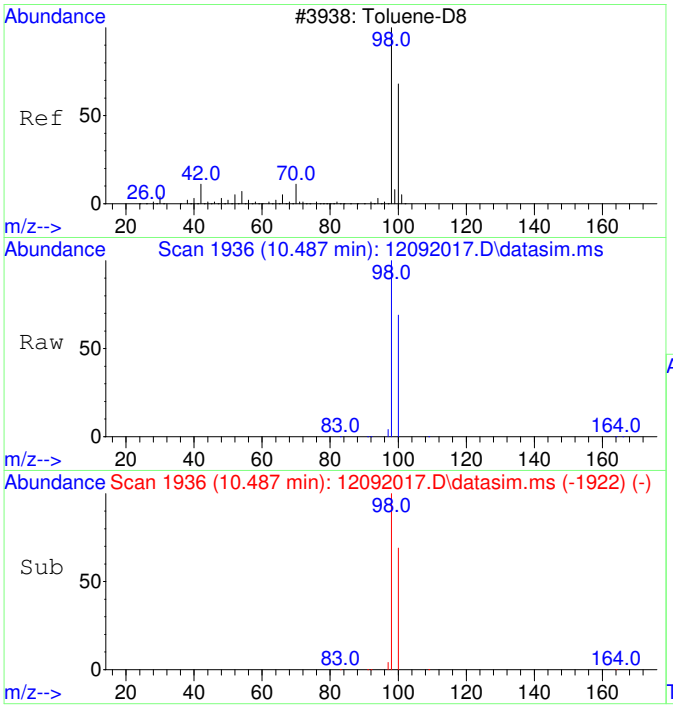


#11
Trichloroethene
Concen: 3369.11 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:130 Resp: 42365

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	96.4	76.0	116.0
97	60.8	38.6	78.6

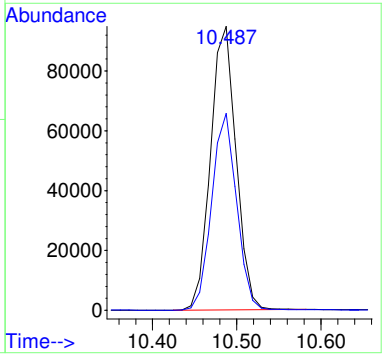


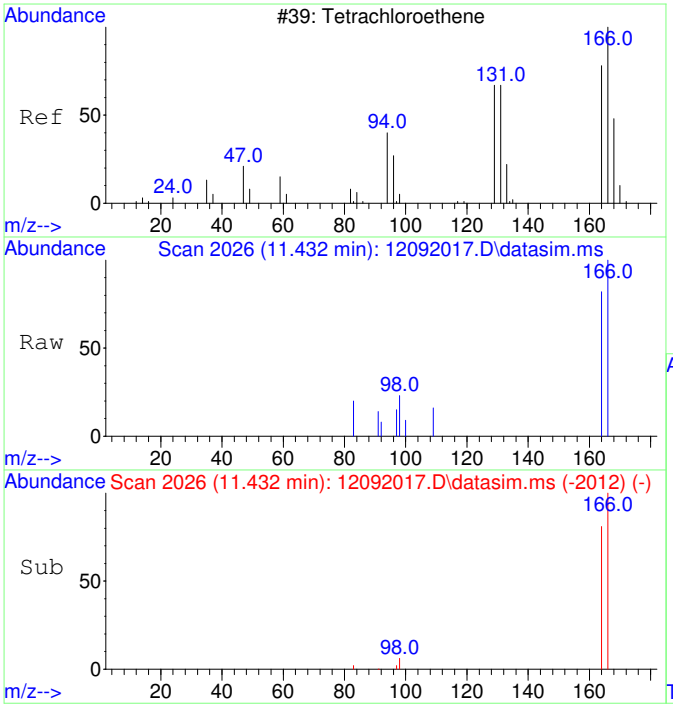


#12
Toluene-d8
Concen: 4367.90 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 98 Resp: 200222

Ion	Ratio	Lower	Upper
98	100		
100	67.5	37.1	97.1

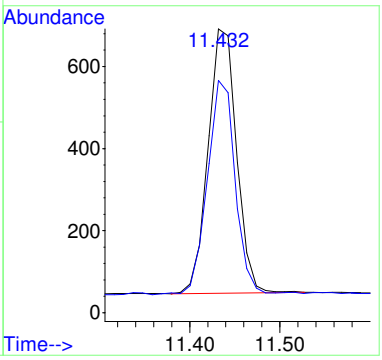


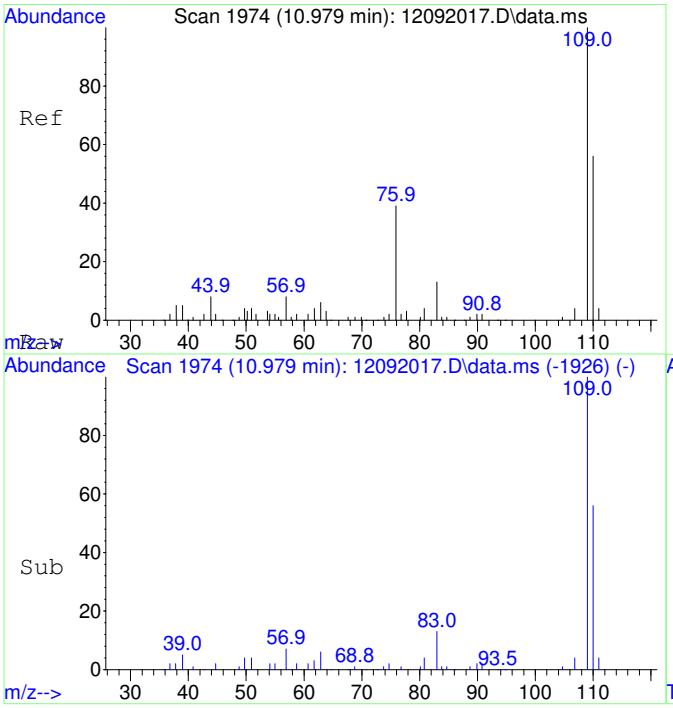


#15
Tetrachloroethene
Concen: 79.54 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:166 Resp: 1414

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

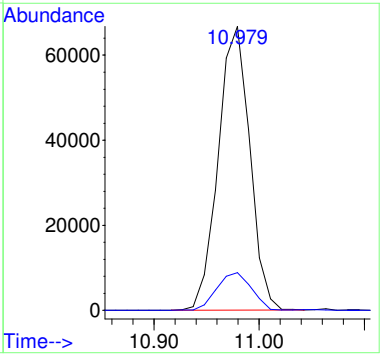


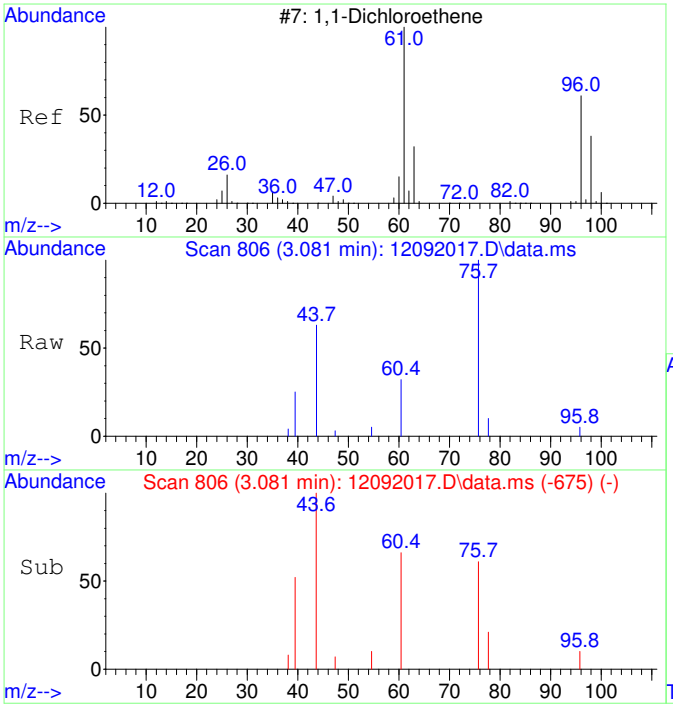


#25
2-Fluorotoluene SCAN
Concen: 5182.94 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:109 Resp: 139244

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8

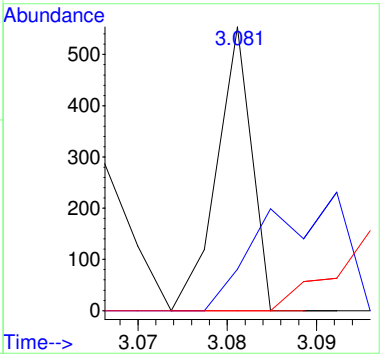


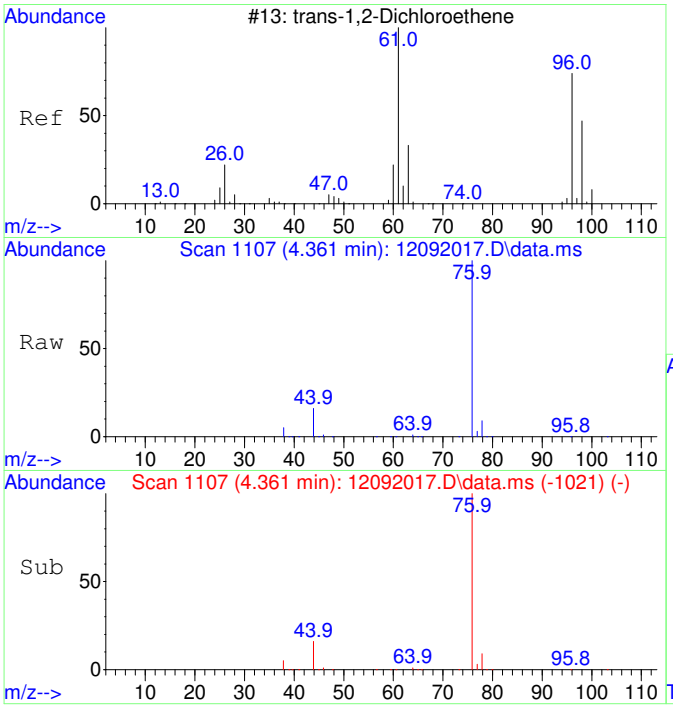


#26
1,1-Dichloroethene SCAN
Concen: 23.92 ug/L
RT: 3.081 min Scan# 806
Delta R.T. -0.015 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 150

Ion	Ratio	Lower	Upper
61	100		
96	96.7	33.1	93.1#
98	40.7	11.2	71.2

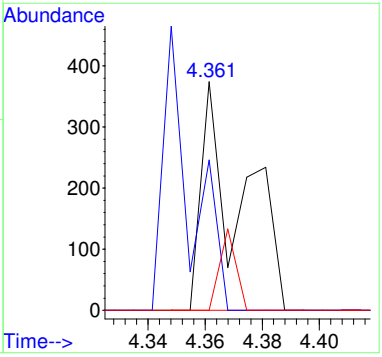


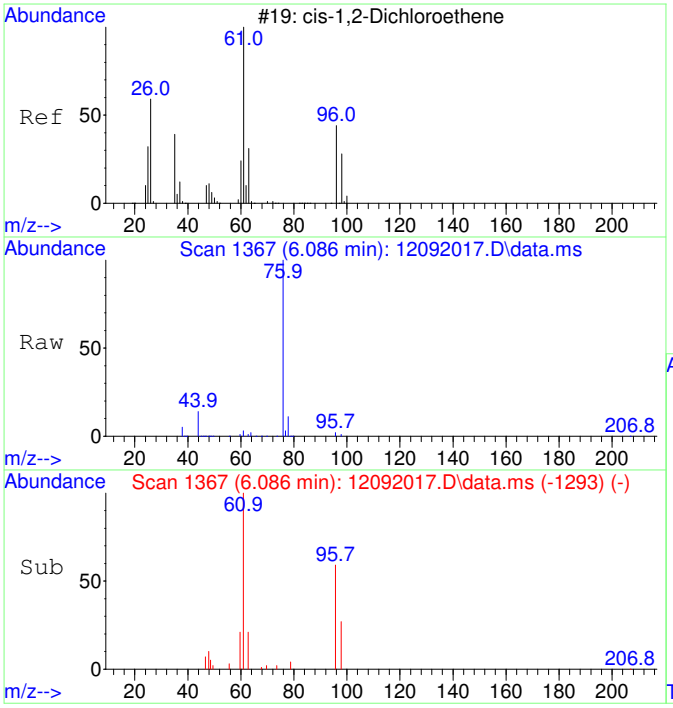


#27
trans-1,2-Dichloroethene SCAN
Concen: 44.69 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	86.3	49.0	109.0
98	14.8	20.5	80.5#

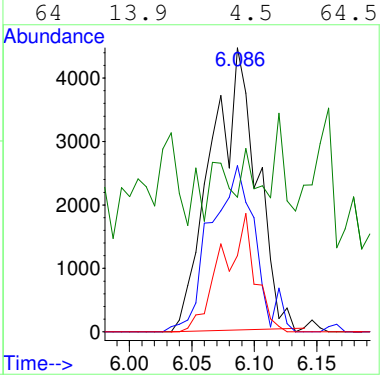


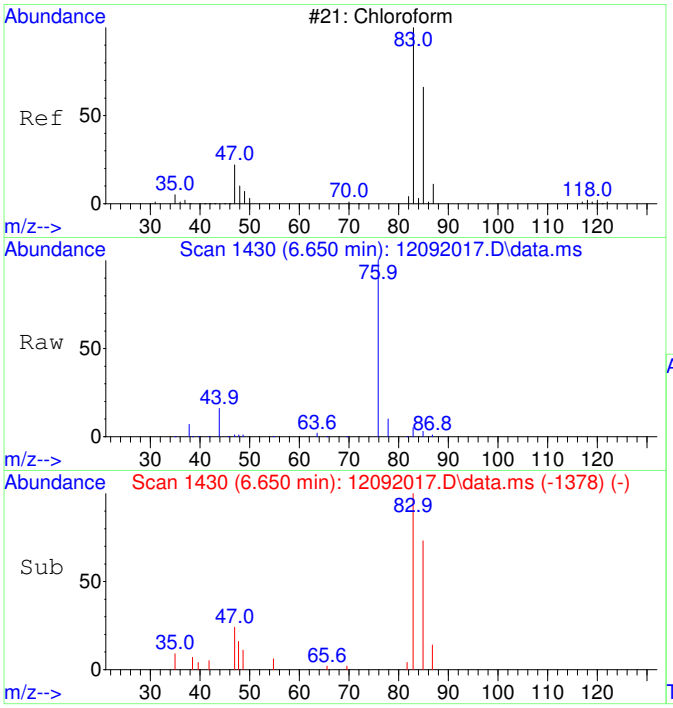


#29
cis-1,2-Dichloroethene SCAN
Concen: 1214.18 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 11255

Ion	Ratio	Lower	Upper
61	100		
96	57.9	39.9	99.9
98	30.5	13.5	73.5
64	13.9	4.5	64.5

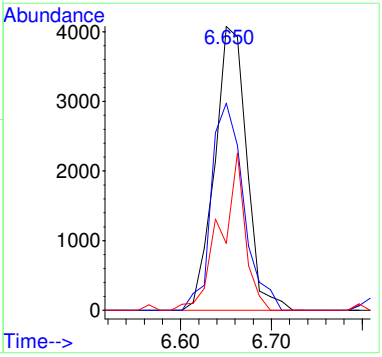


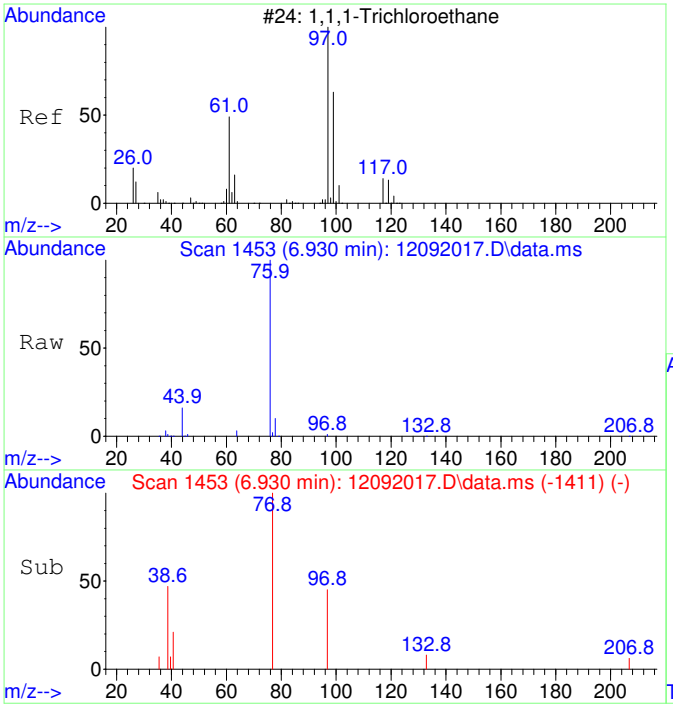


#30
Chloroform SCAN
Concen: 1152.45 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 83 Resp: 9964

Ion	Ratio	Lower	Upper
83	100		
85	74.1	34.6	94.6
47	43.0	0.0	53.4

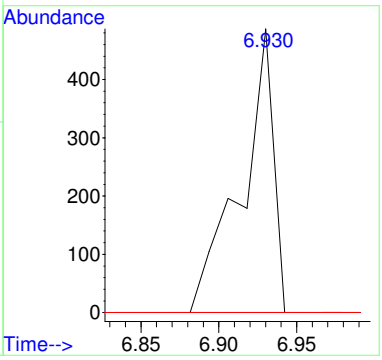


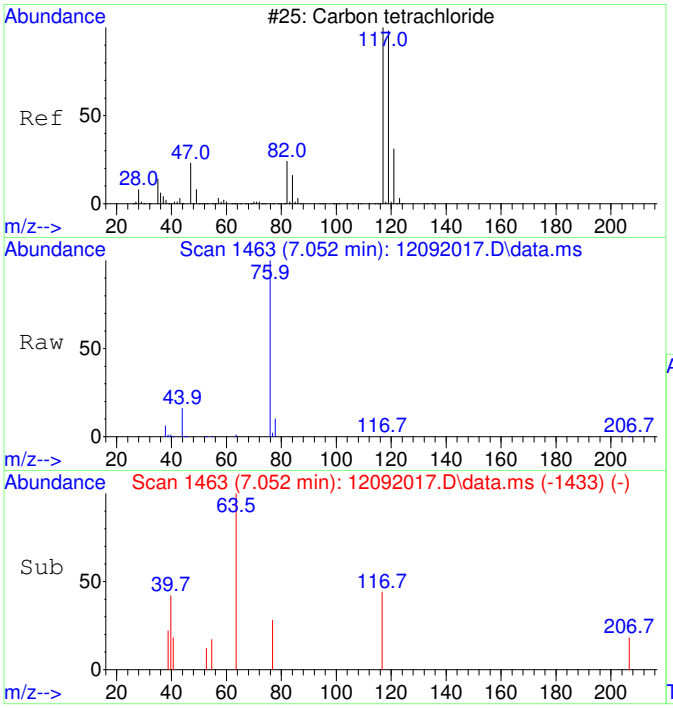


#31
1,1,1-Trichloroethane SCAN
Concen: 79.13 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 706

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

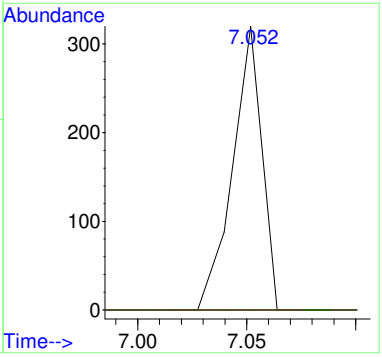


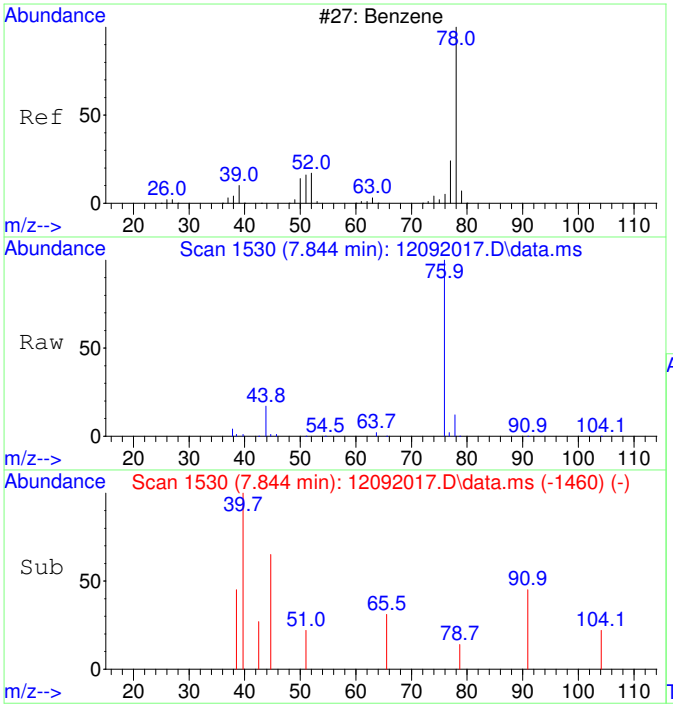


#32
Carbon tetrachloride SCAN
Concen: 39.09 ug/L
RT: 7.052 min Scan# 1463
Delta R.T. -0.134 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:117 Resp: 298

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

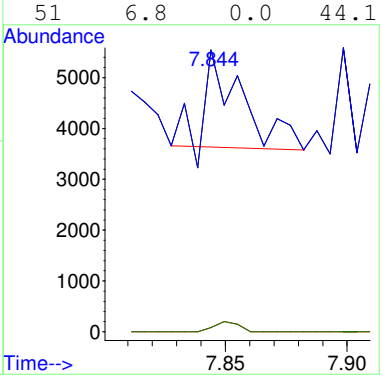


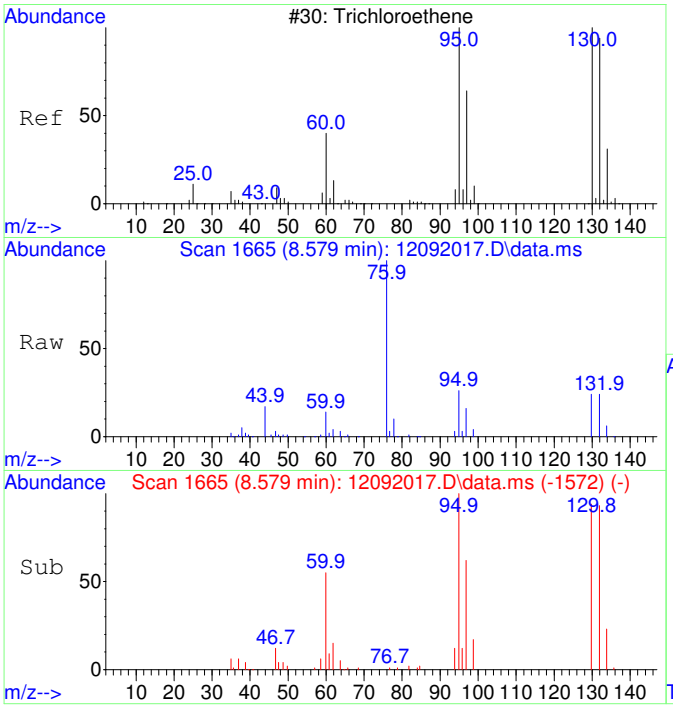


#33
Benzene SCAN
Concen: 77.43 ug/L
RT: 7.844 min Scan# 1530
Delta R.T. 0.330 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 78 Resp: 2090

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

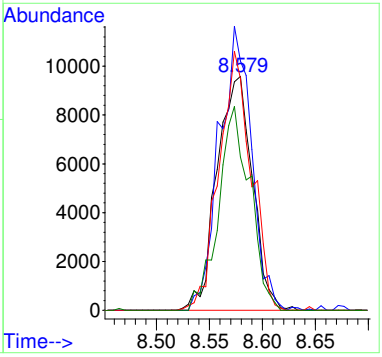


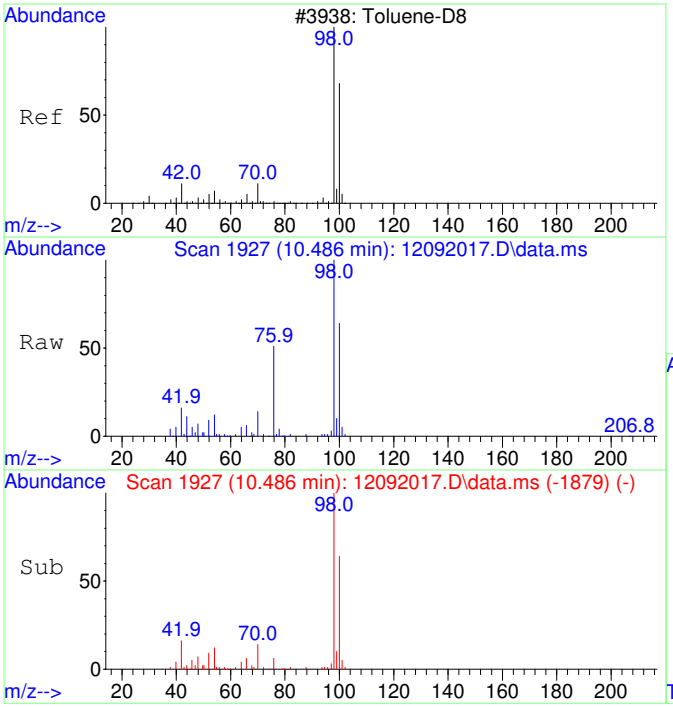


#35
Trichloroethene SCAN
Concen: 3796.95 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:130 Resp: 22347

Ion	Ratio	Lower	Upper
130	100		
95	109.7	60.5	120.5
132	100.7	59.6	119.6
97	77.3	28.2	88.2

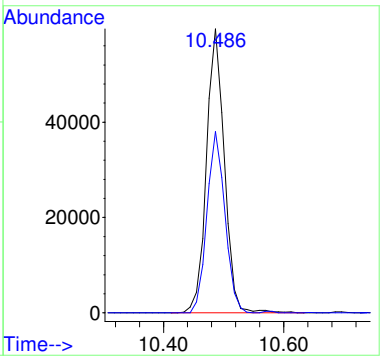


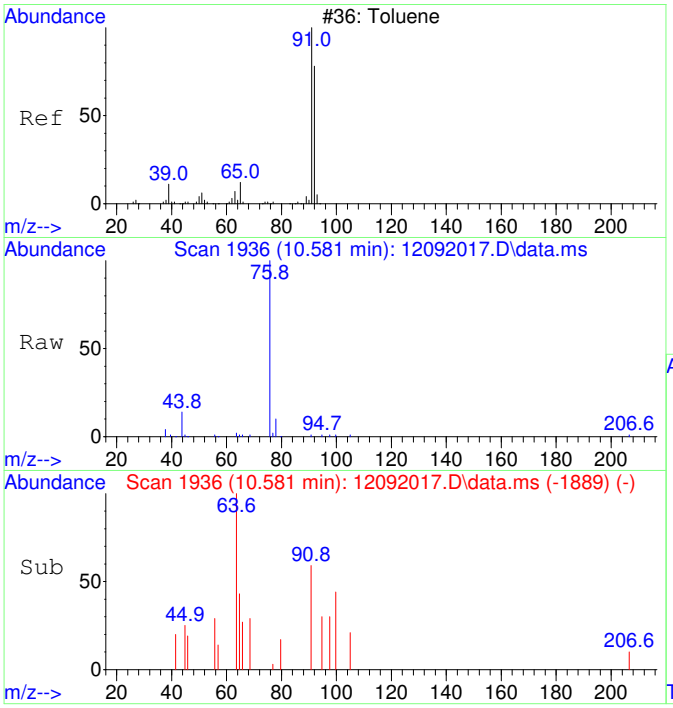


#36
Toluene-d8 SCAN
Concen: 4875.22 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 98 Resp: 122842

Ion	Ratio	Lower	Upper
98	100		
100	64.0	40.0	100.0

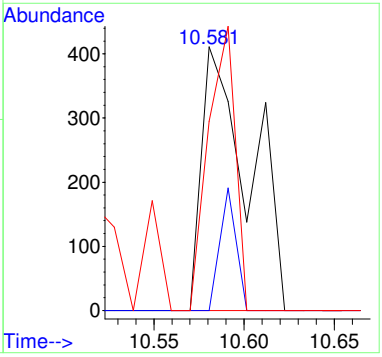


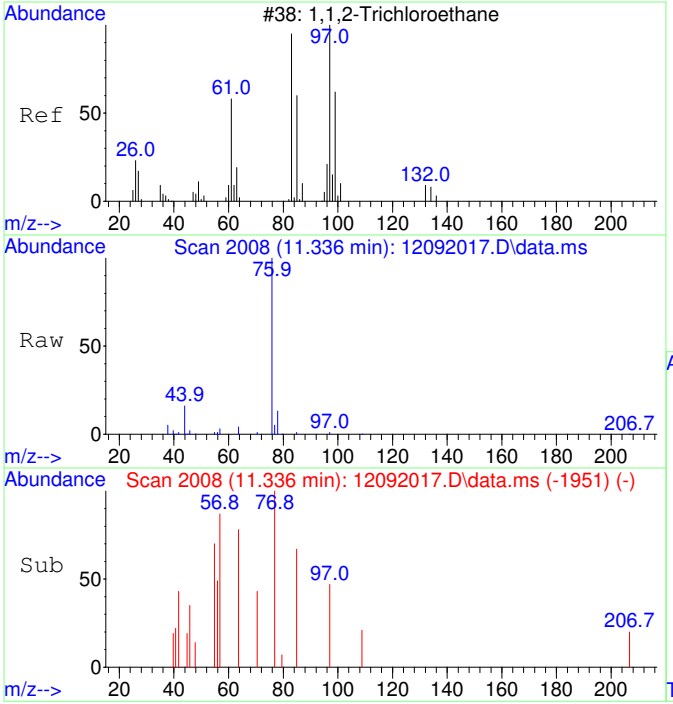


#37
Toluene SCAN
Concen: 24.34 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 91 Resp: 755

Ion	Ratio	Lower	Upper
91	100		
92	15.9	28.3	88.3#
65	61.6	0.0	41.0#

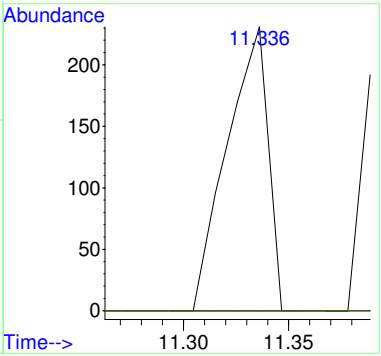


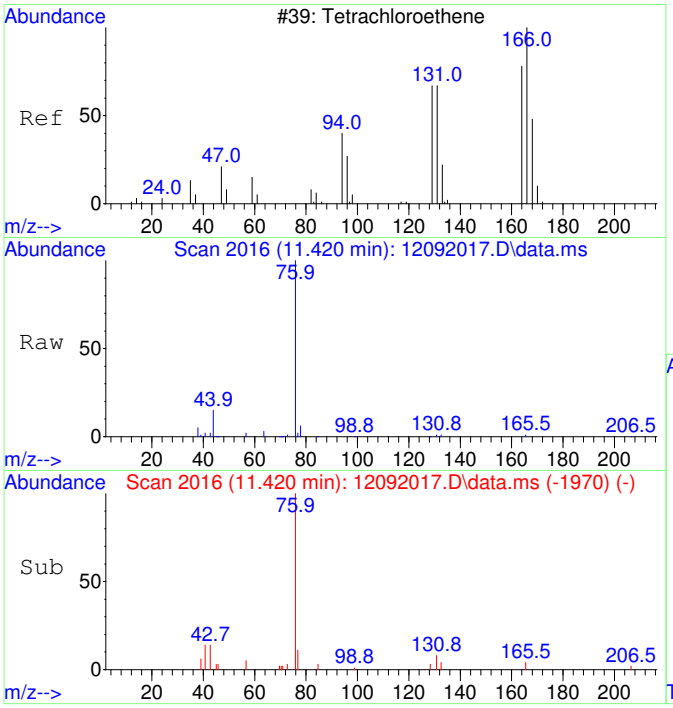


#38
1,1,2-Trichloroethane SCAN
Concen: 40.25 ug/L
RT: 11.336 min Scan# 2008
Delta R.T. 0.095 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 313

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#

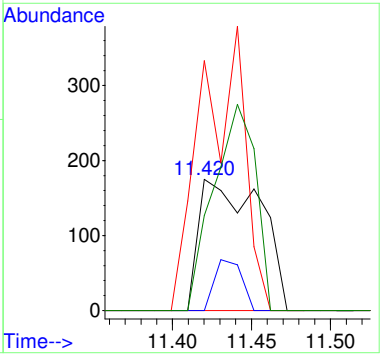




#39
Tetrachloroethene SCAN
Concen: 67.77 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.021 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:166 Resp: 473

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



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 10:20 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:02 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092017.D
Acq On : 9 Dec 2020 15:11
InstName : AG5975C
Operator : TD
Sample : 2012007-10
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 10 05:55:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

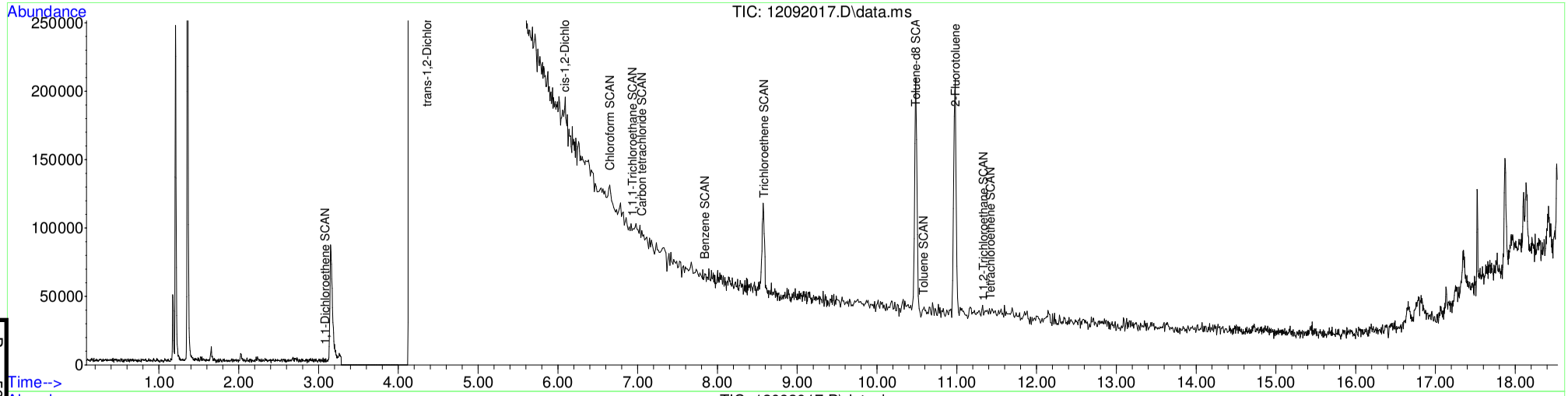
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	236682	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	200222	4367.90	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.36%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	684m	72.88	ug/L	
3] trans-1,2-Dichloroethene	4.349	61	818	69.14	ug/L	87
4] 1,1-Dichloroethane	5.079	63	888	62.84	ug/L	83
5] cis-1,2-Dichloroethene	6.081	61	15643	1068.85	ug/L	98
6] Chloroform	6.652	83	15919	1132.43	ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	509	33.71	ug/L	95
9] Benzene	7.503	78	1324	33.24	ug/L #	1
11] Trichloroethene	8.575	130	42365	3369.11	ug/L	98
15] Tetrachloroethene	11.432	166	1414	79.54	ug/L	100
25) 2-Fluorotoluene SCAN	10.979	109	139244	5182.94	ug/L	99
26) 1,1-Dichloroethene SCAN	3.081	61	150	23.92	ug/L #	74
27) trans-1,2-Dichloroethe...	4.361	61	357	44.69	ug/L #	75
29) cis-1,2-Dichloroethene...	6.086	61	11255	1214.18	ug/L	79
30) Chloroform SCAN	6.650	83	9964	1152.45	ug/L	80
31) 1,1,1-Trichloroethane ...	6.930	97	706	79.13	ug/L #	19
32) Carbon tetrachloride SCAN	7.052	117	298	39.09	ug/L #	15
33) Benzene SCAN	7.844	78	2090	77.43	ug/L	95
35) Trichloroethene SCAN	8.579	130	22347	3796.95	ug/L	82
36) Toluene-d8 SCAN	10.486	98	122842	4875.22	ug/L	93
37) Toluene SCAN	10.581	91	755	24.34	ug/L #	31
38) 1,1,2-Trichloroethane ...	11.336	97	313	40.25	ug/L #	13
39) Tetrachloroethene SCAN	11.420	166	473	67.77	ug/L #	12

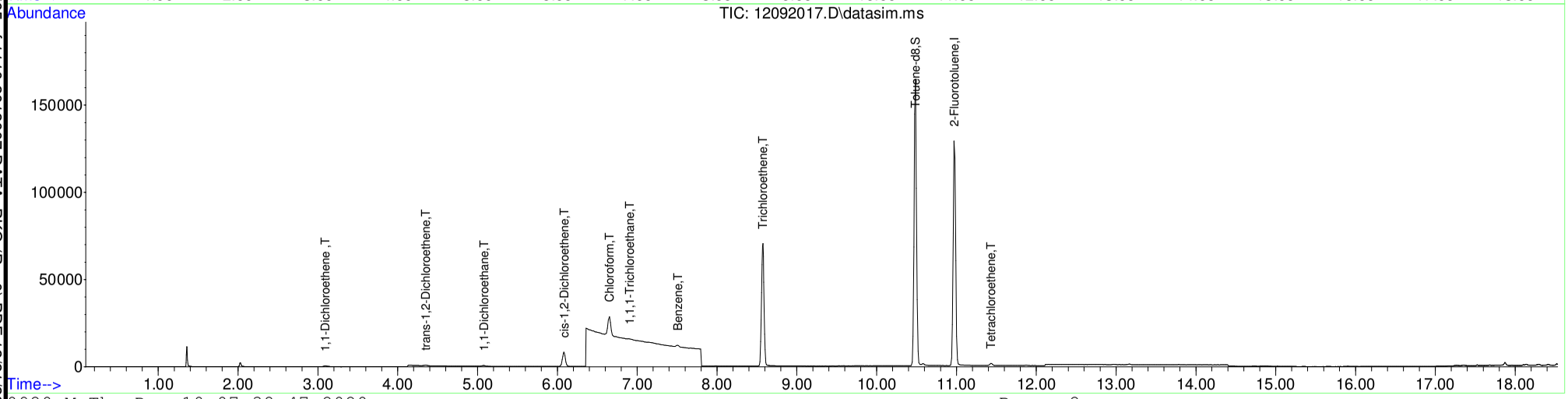
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092017.D
Acq On : 9 Dec 2020 15:11
InstName : AG5975C
Operator : TD
Sample : 2012007-10
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 10 05:55:37 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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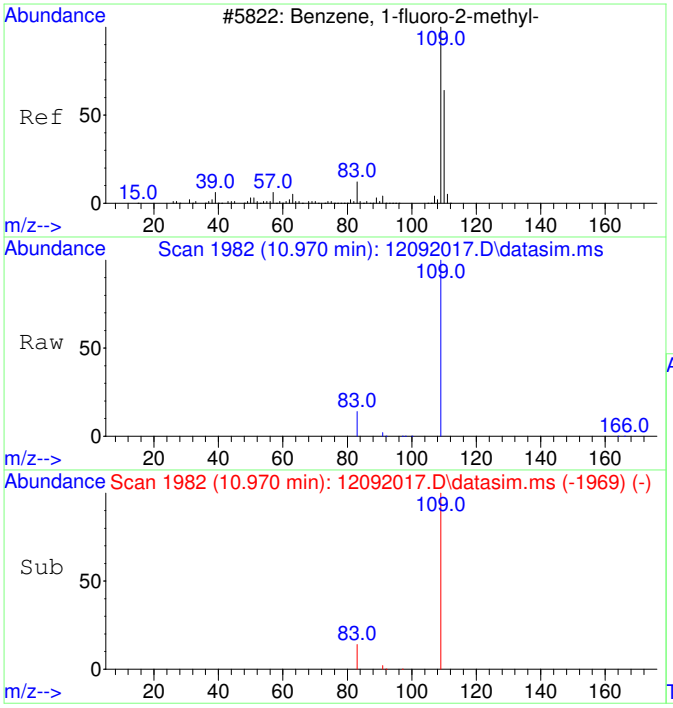
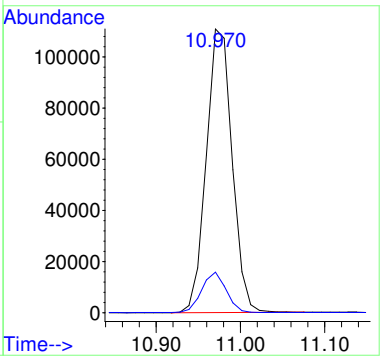
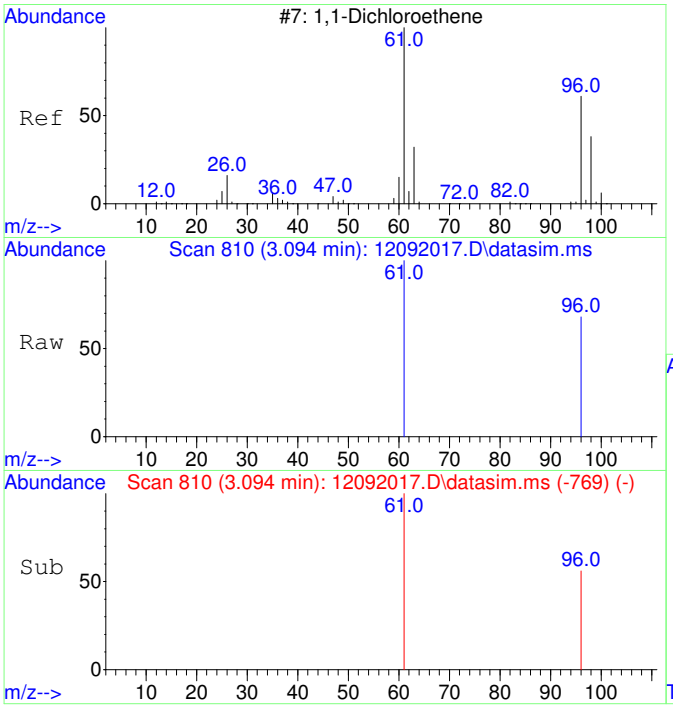


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:109 Resp: 236682

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

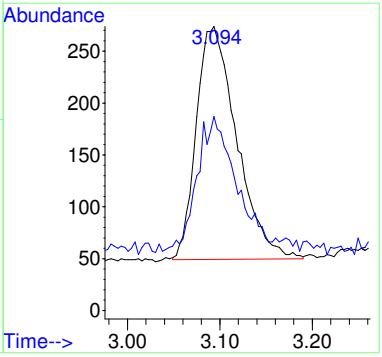


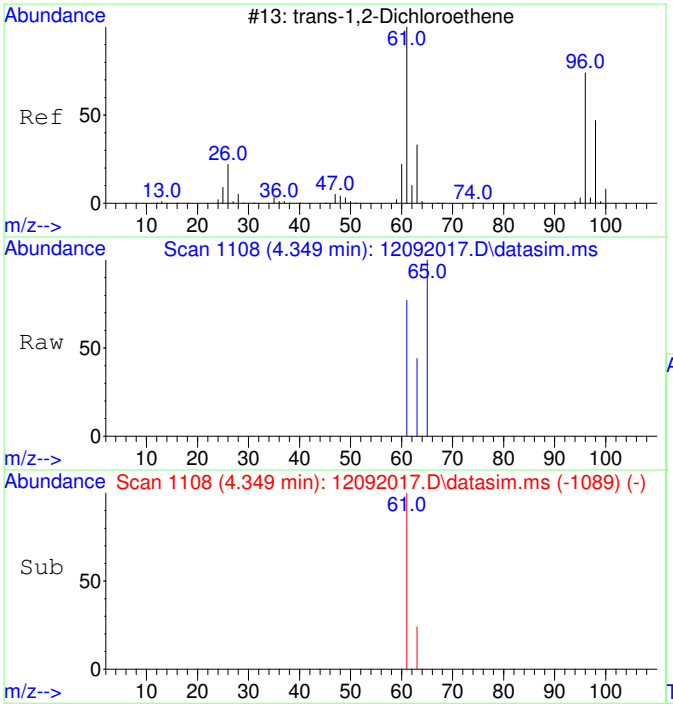


#2
1,1-Dichloroethene
Concen: 72.88 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 684

Ion	Ratio	Lower	Upper
61	100		
96	55.7	37.2	97.2

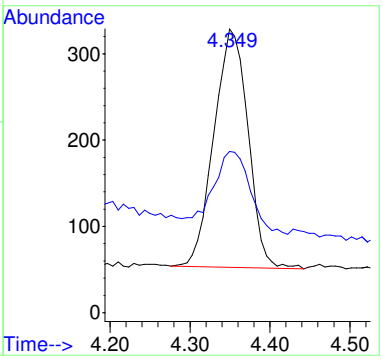


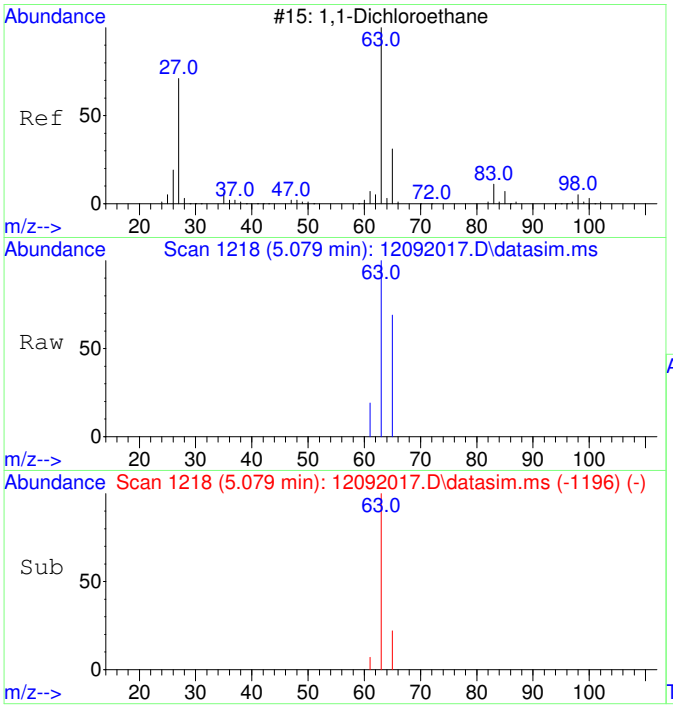


#3
trans-1,2-Dichloroethene
Concen: 69.14 ug/L
RT: 4.349 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 818

Ion	Ratio	Lower	Upper
61	100		
63	39.9	2.4	62.4

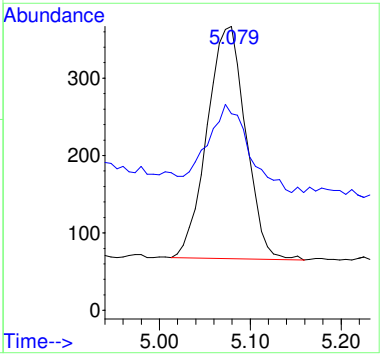


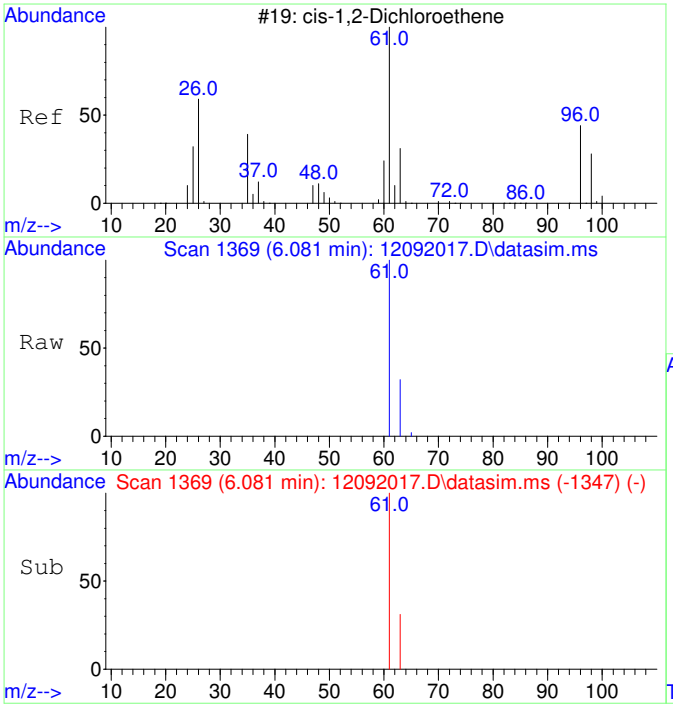


#4
1,1-Dichloroethane
Concen: 62.84 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 63 Resp: 888

Ion	Ratio	Lower	Upper
63	100		
65	41.4	1.8	61.8

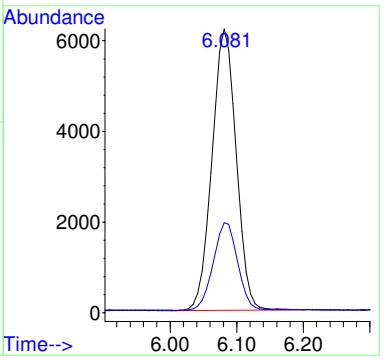


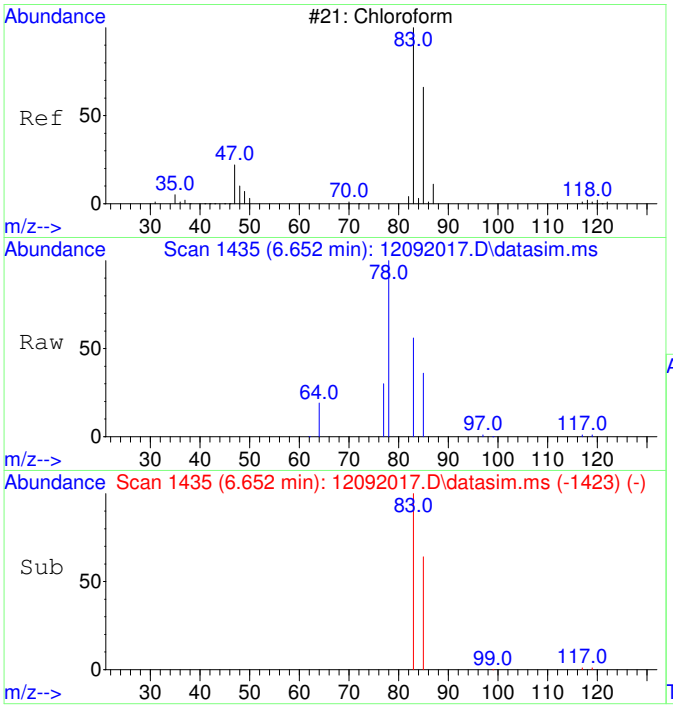


#5
cis-1,2-Dichloroethene
Concen: 1068.85 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 15643

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

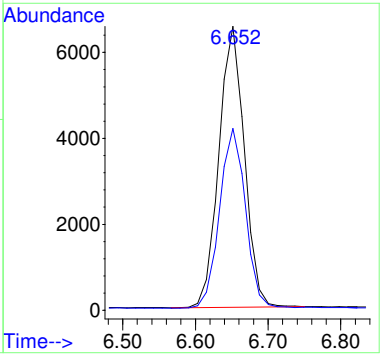


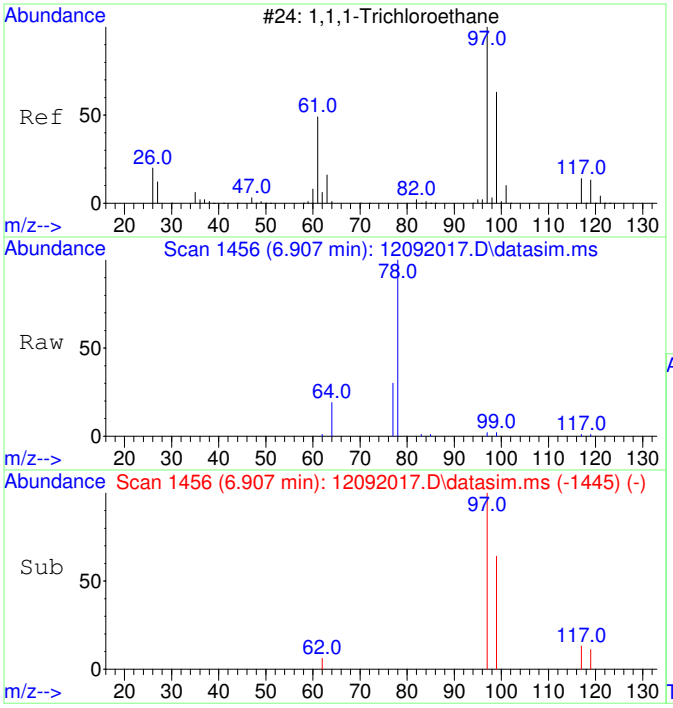


#6
Chloroform
Concen: 1132.43 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 83 Resp: 15919

Ion	Ratio	Lower	Upper
83	100		
85	64.6	35.1	95.1

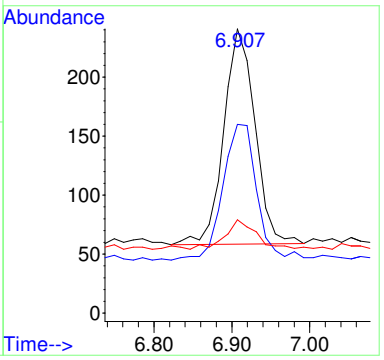


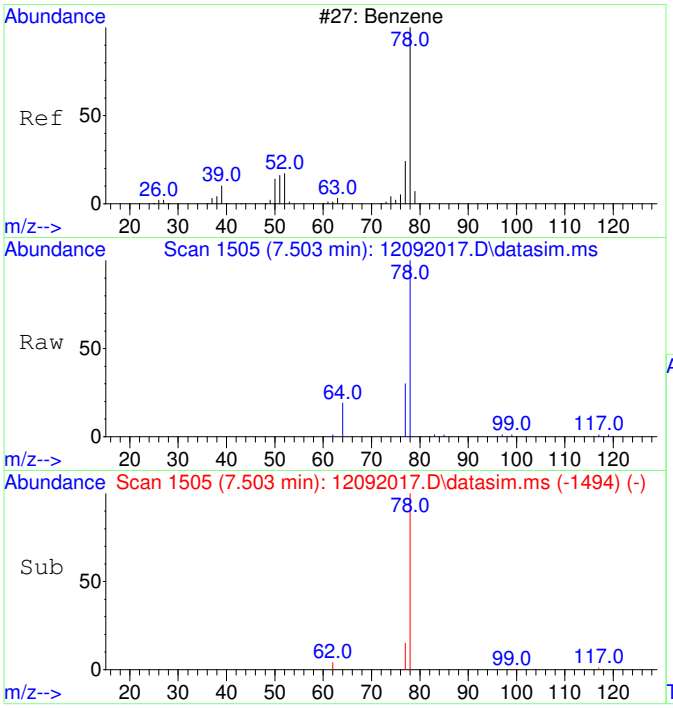


#7
1,1,1-Trichloroethane
Concen: 33.71 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 509

Ion	Ratio	Lower	Upper
97	100		
99	68.8	34.6	94.6
117	14.1	0.0	43.2

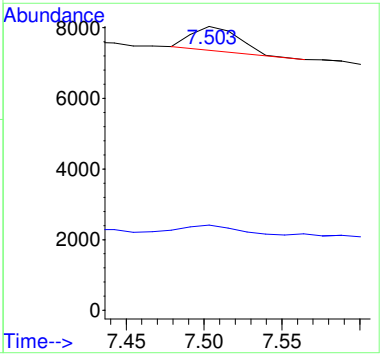


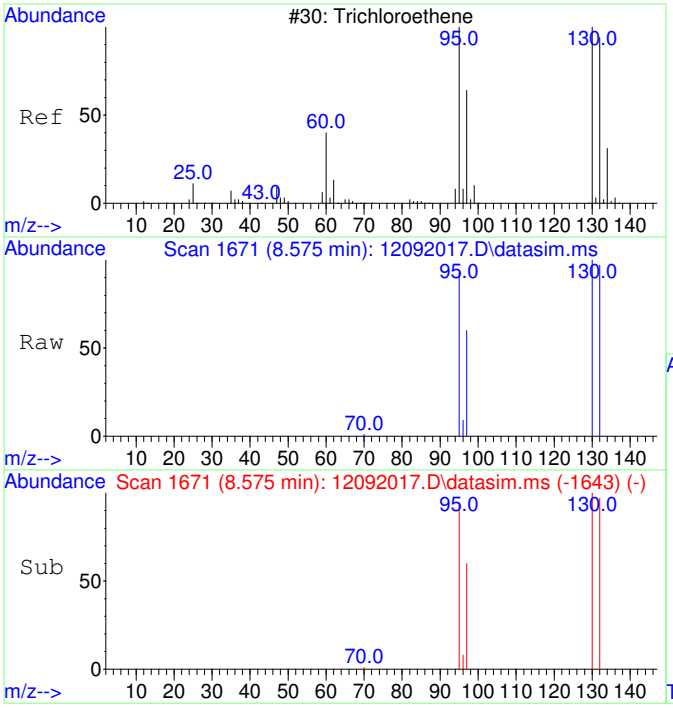


#9
Benzene
Concen: 33.24 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 78 Resp: 1324

Ion	Ratio	Lower	Upper
78	100		
77	89.7	0.0	53.2#

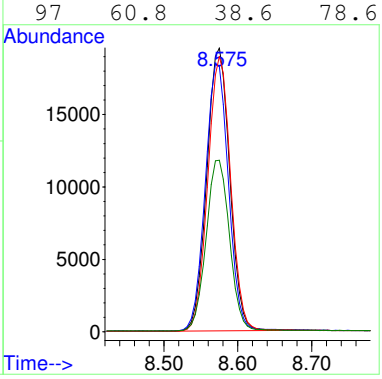


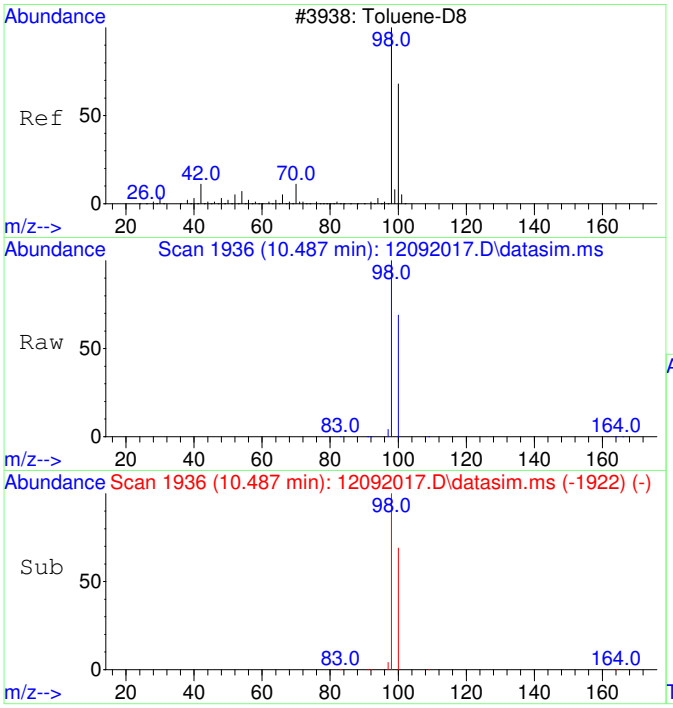


#11
Trichloroethene
Concen: 3369.11 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:130 Resp: 42365

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	96.4	76.0	116.0
97	60.8	38.6	78.6

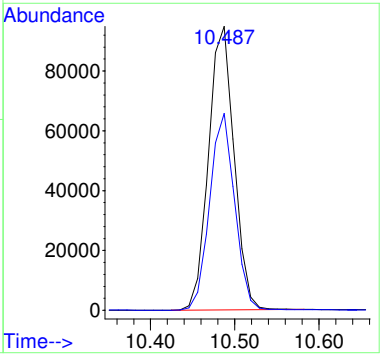


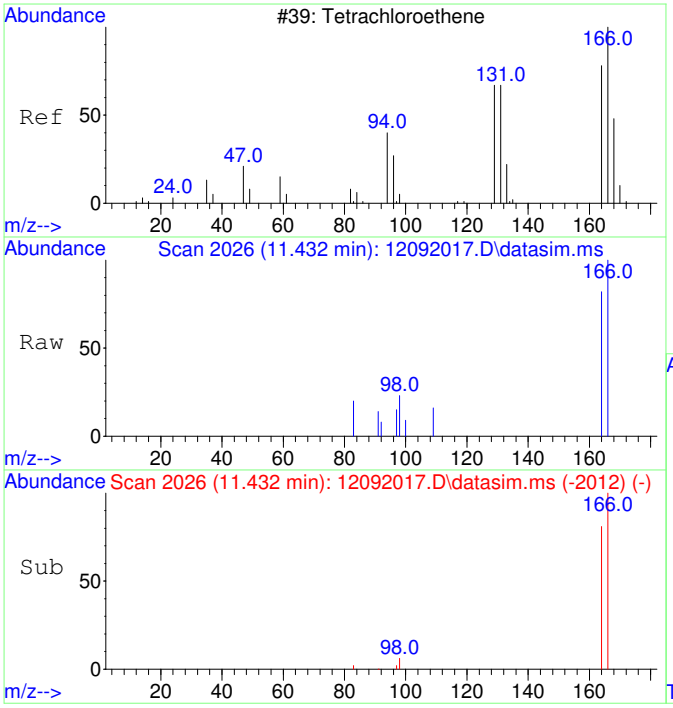


#12
Toluene-d8
Concen: 4367.90 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 98 Resp: 200222

Ion	Ratio	Lower	Upper
98	100		
100	67.5	37.1	97.1

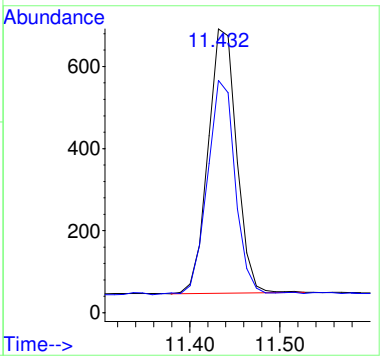


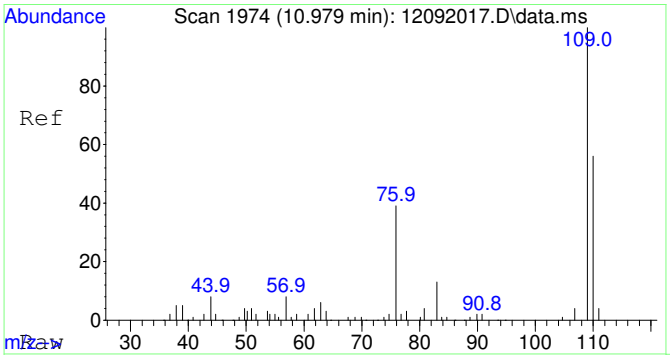


#15
Tetrachloroethene
Concen: 79.54 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:166 Resp: 1414

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

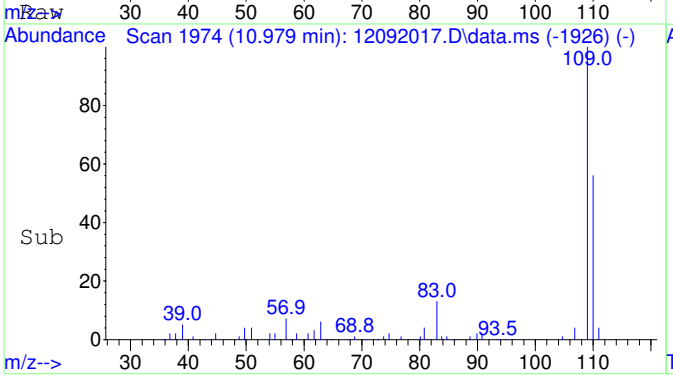


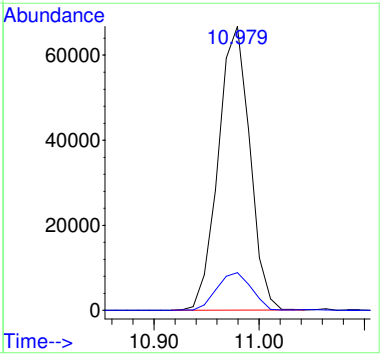


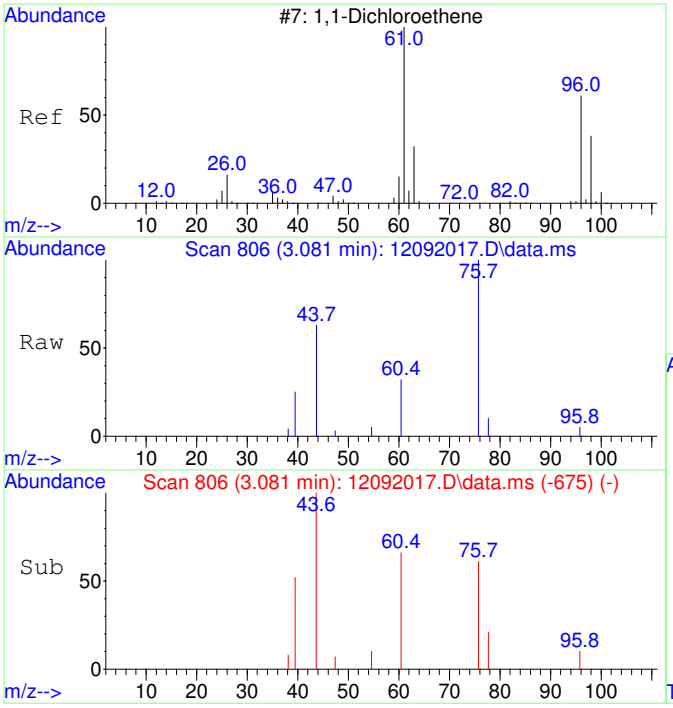
#25
2-Fluorotoluene SCAN
Concen: 5182.94 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:109 Resp: 139244

Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8



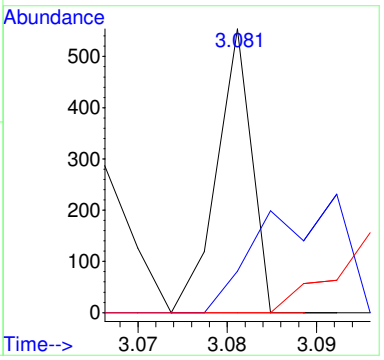


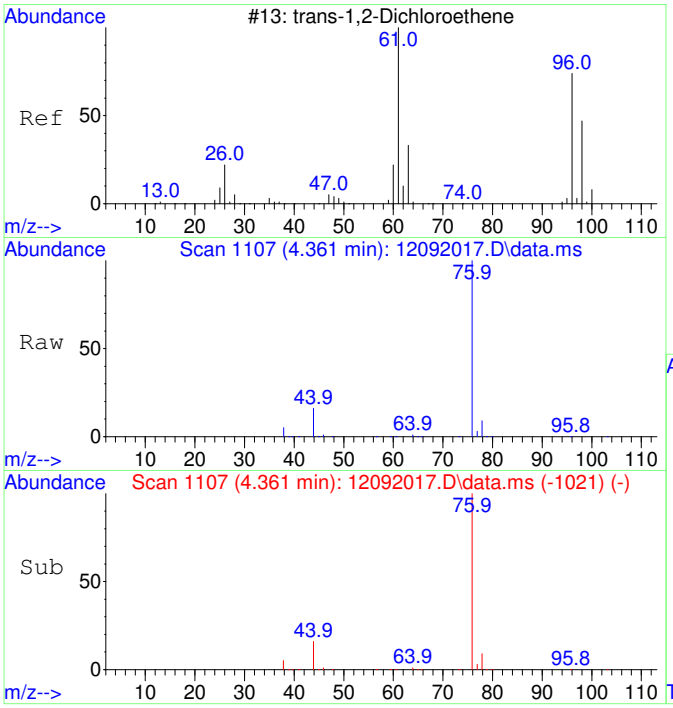


#26
1,1-Dichloroethene SCAN
Concen: 23.92 ug/L
RT: 3.081 min Scan# 806
Delta R.T. -0.015 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 150

Ion	Ratio	Lower	Upper
61	100		
96	96.7	33.1	93.1#
98	40.7	11.2	71.2

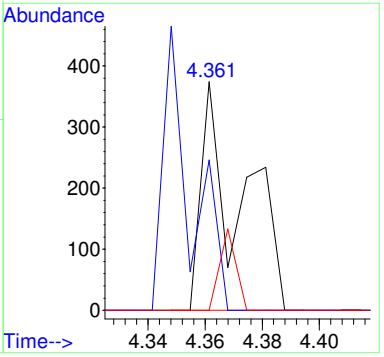


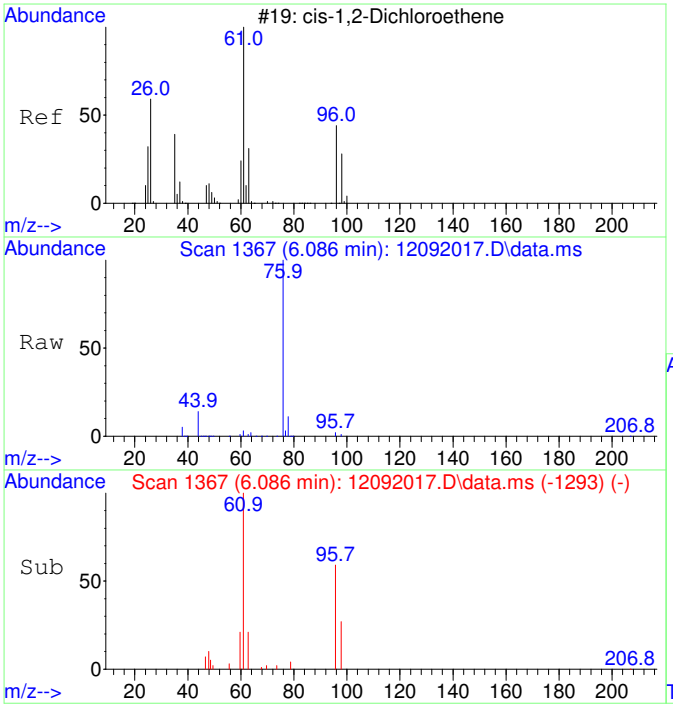


#27
trans-1,2-Dichloroethene SCAN
Concen: 44.69 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 357

Ion	Ratio	Lower	Upper
61	100		
96	86.3	49.0	109.0
98	14.8	20.5	80.5#

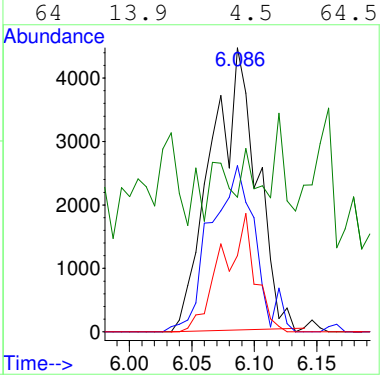


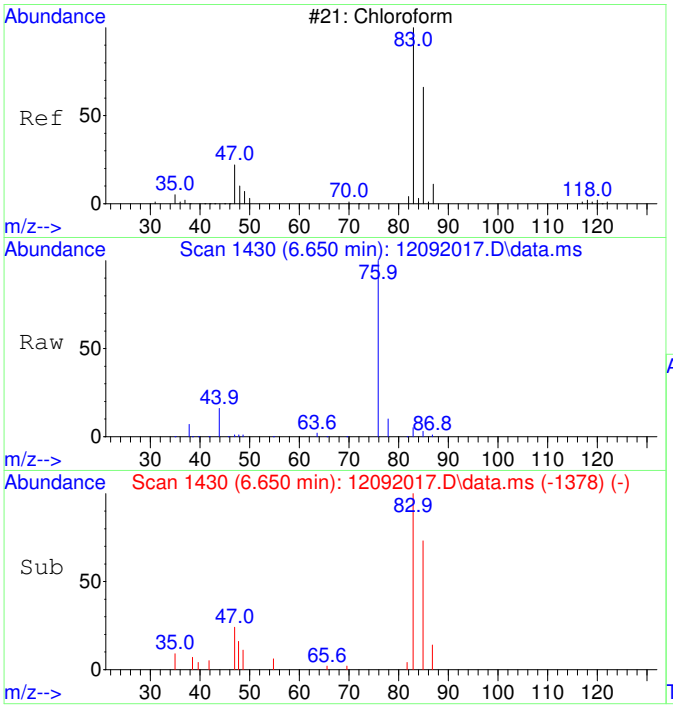


#29
cis-1,2-Dichloroethene SCAN
Concen: 1214.18 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 61 Resp: 11255

Ion	Ratio	Lower	Upper
61	100		
96	57.9	39.9	99.9
98	30.5	13.5	73.5
64	13.9	4.5	64.5

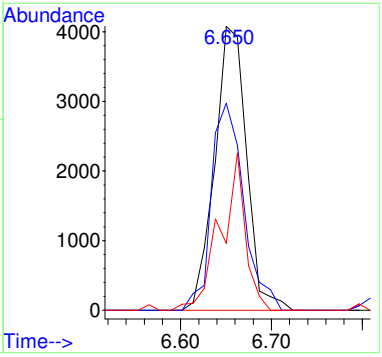


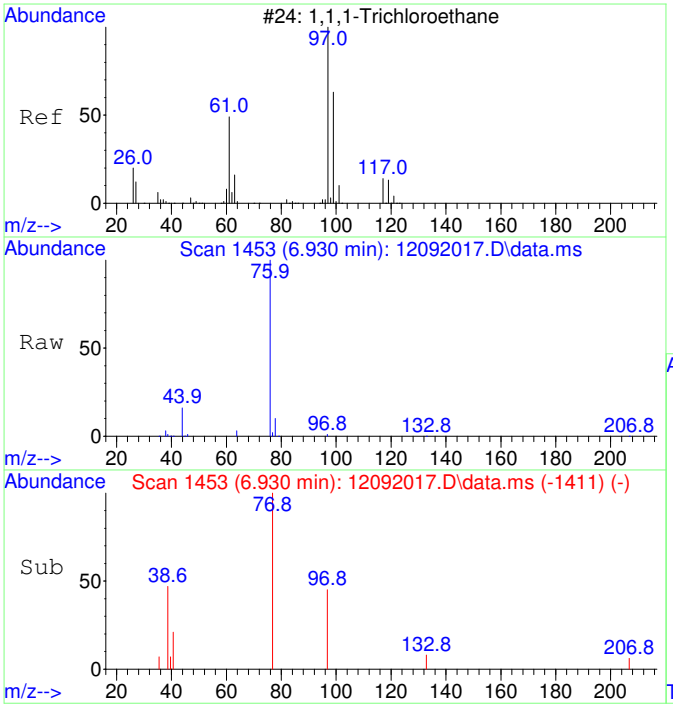


#30
Chloroform SCAN
Concen: 1152.45 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 83 Resp: 9964

Ion	Ratio	Lower	Upper
83	100		
85	74.1	34.6	94.6
47	43.0	0.0	53.4

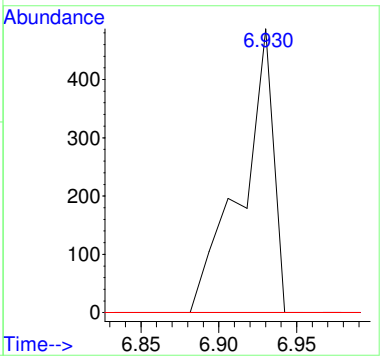


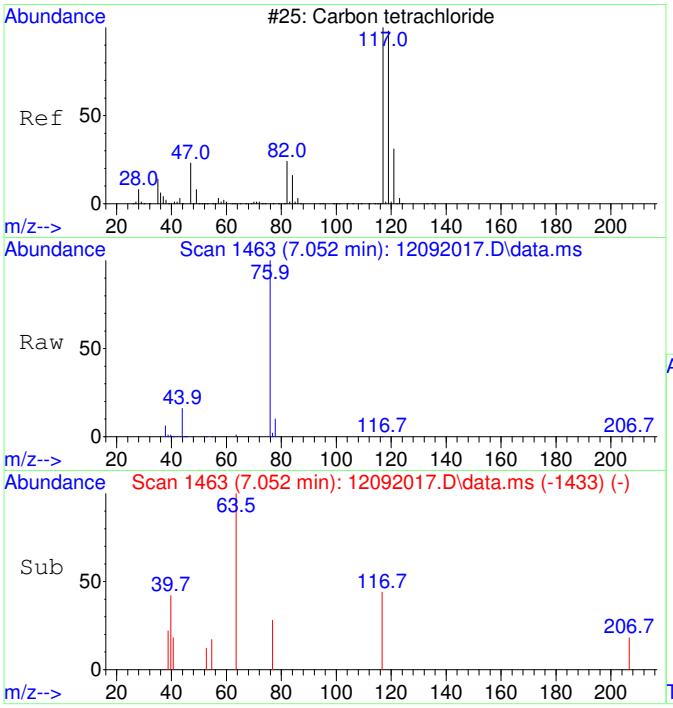


#31
1,1,1-Trichloroethane SCAN
Concen: 79.13 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 706

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

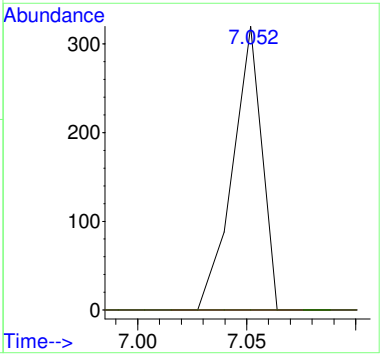


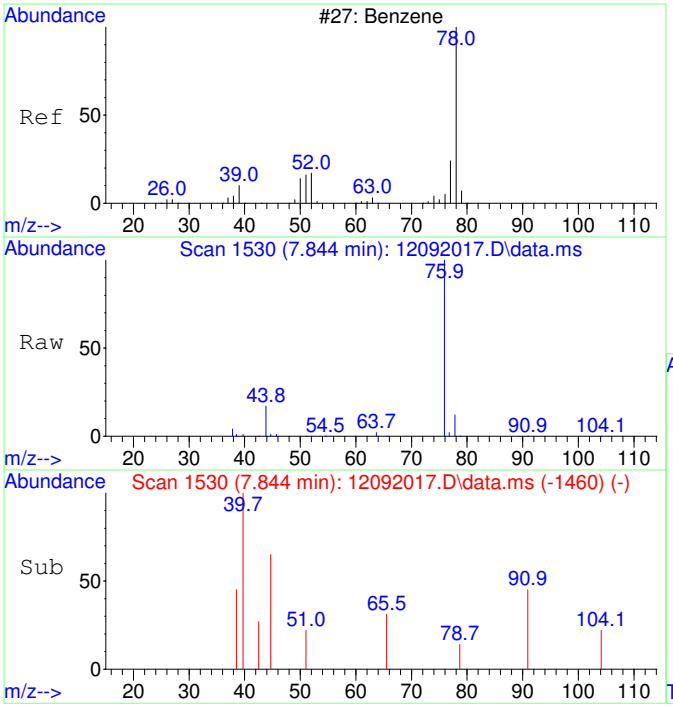


#32
Carbon tetrachloride SCAN
Concen: 39.09 ug/L
RT: 7.052 min Scan# 1463
Delta R.T. -0.134 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:117 Resp: 298

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

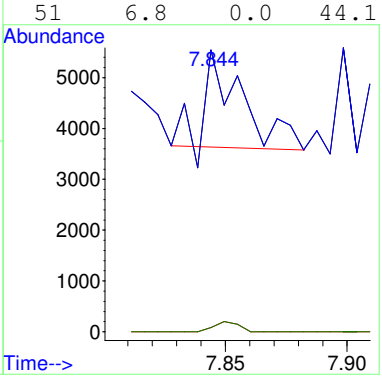


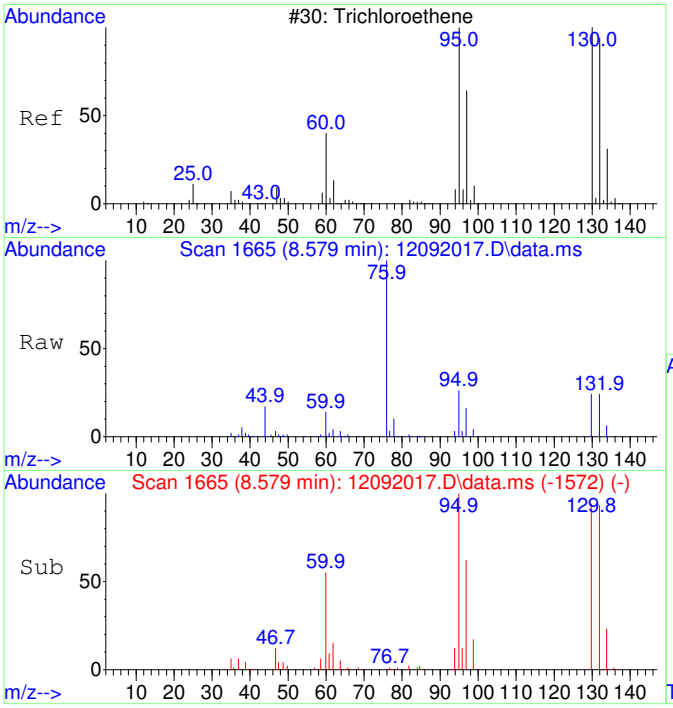


#33
Benzene SCAN
Concen: 77.43 ug/L
RT: 7.844 min Scan# 1530
Delta R.T. 0.330 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 78 Resp: 2090

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

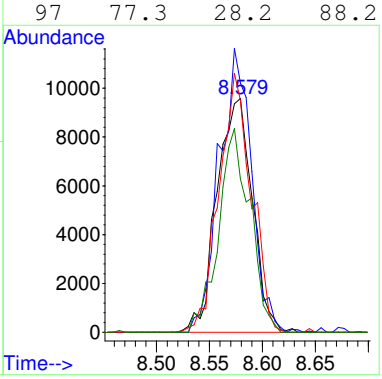


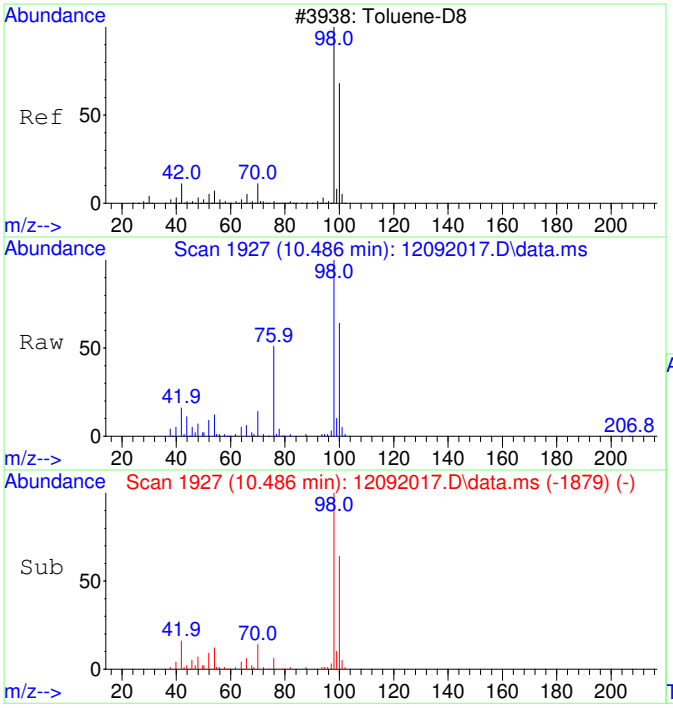


#35
Trichloroethene SCAN
Concen: 3796.95 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.006 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:130 Resp: 22347

Ion	Ratio	Lower	Upper
130	100		
95	109.7	60.5	120.5
132	100.7	59.6	119.6
97	77.3	28.2	88.2

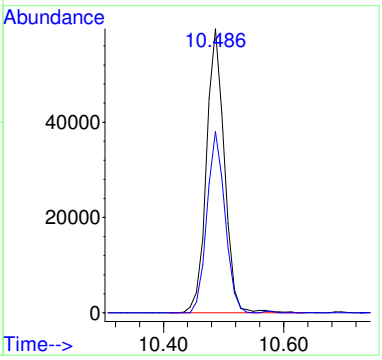


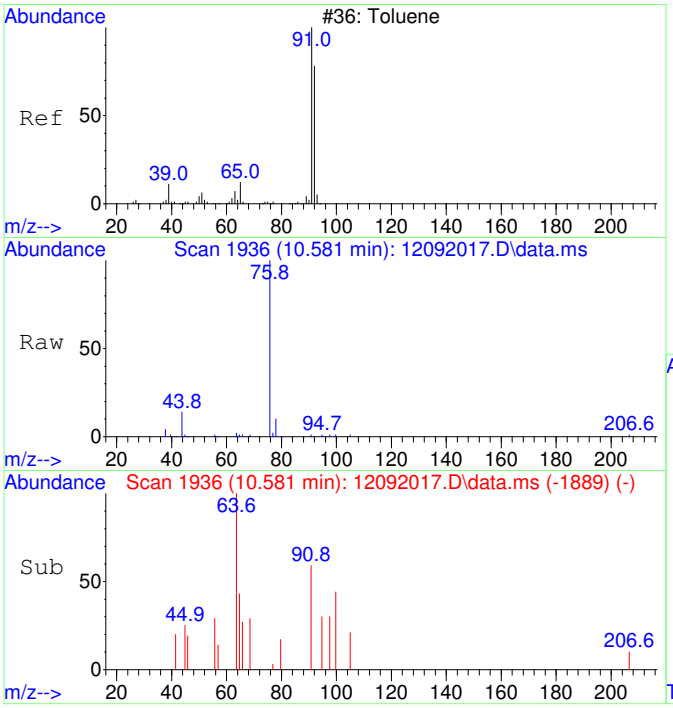


#36
Toluene-d8 SCAN
Concen: 4875.22 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 98 Resp: 122842

Ion	Ratio	Lower	Upper
98	100		
100	64.0	40.0	100.0

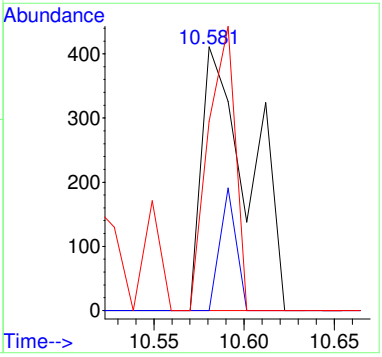


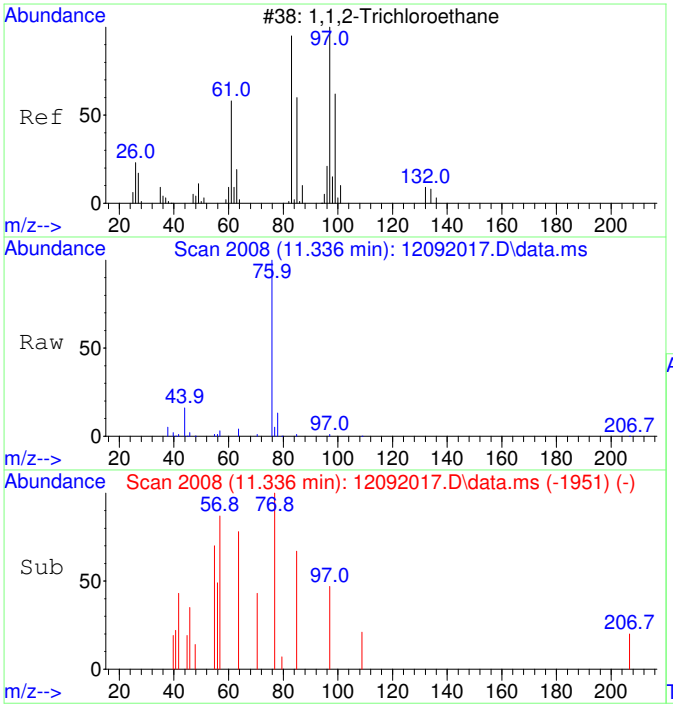


#37
Toluene SCAN
Concen: 24.34 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 91 Resp: 755

Ion	Ratio	Lower	Upper
91	100		
92	15.9	28.3	88.3#
65	61.6	0.0	41.0#

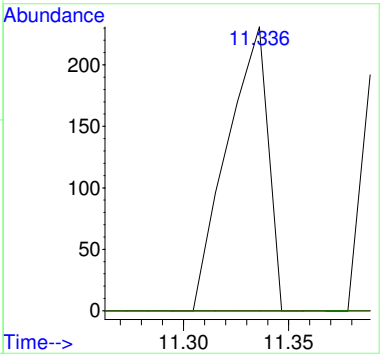


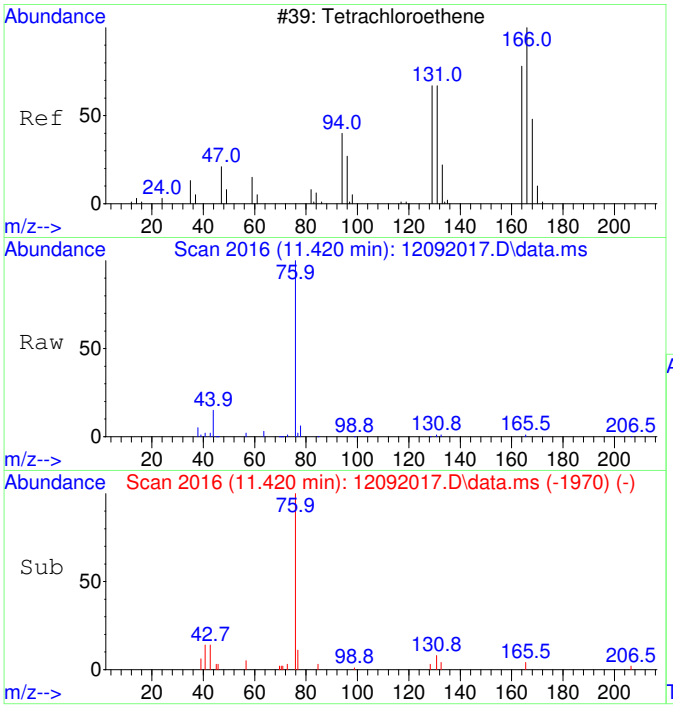


#38
1,1,2-Trichloroethane SCAN
Concen: 40.25 ug/L
RT: 11.336 min Scan# 2008
Delta R.T. 0.095 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion: 97 Resp: 313

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#

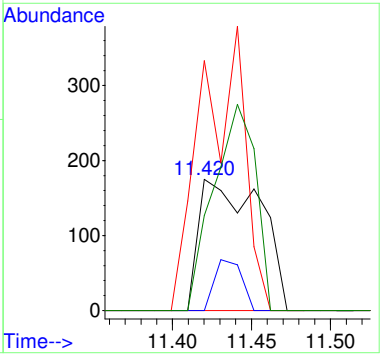




#39
Tetrachloroethene SCAN
Concen: 67.77 ug/L
RT: 11.420 min Scan# 2016
Delta R.T. -0.021 min
Lab File: 12092017.D
Acq: 9 Dec 2020 15:11

Tgt Ion:166 Resp: 473

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



2012007-11

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092018.D
Acq On : 9 Dec 2020 15:35
InstName : AG5975C
Operator : TD
Sample : 2012007-11
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 10 05:55:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

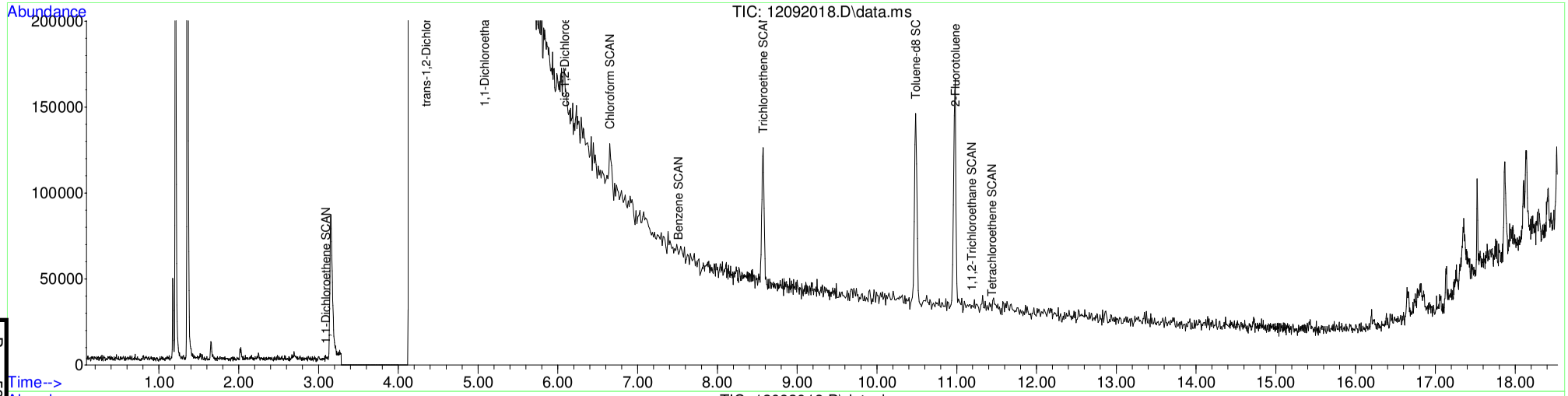
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	166855	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	143010	4425.41	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.51%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	1296	195.89	ug/L	87
3] trans-1,2-Dichloroethene	4.350	61	1032	123.73	ug/L	93
4] 1,1-Dichloroethane	5.073	63	1180	118.45	ug/L	90
5] cis-1,2-Dichloroethene	6.081	61	20261	1963.73	ug/L	98
6] Chloroform	6.652	83	19082	1925.50	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	593	55.70	ug/L	96
9] Benzene	7.503	78	1576	56.13	ug/L	44
11] Trichloroethene	8.570	130	49168	5546.47	ug/L	97
13] Toluene	10.582	91	1015	25.23	ug/L	100
15] Tetrachloroethene	11.432	166	1645	131.26	ug/L	97
22] 1,3,5-Trimethylbenzene	15.211	105	1094	23.40	ug/L #	27
25) 2-Fluorotoluene SCAN	10.980	109	96483	5094.21	ug/L	98
26) 1,1-Dichloroethene SCAN	3.092	61	148	33.47	ug/L	64
27) trans-1,2-Dichloroethe...	4.348	61	446	79.19	ug/L #	62
28) 1,1-Dichloroethane SCAN	5.078	63	164	24.67	ug/L #	1
29) cis-1,2-Dichloroethene...	6.080	61	14159	2166.69	ug/L	80
30) Chloroform SCAN	6.651	83	14388	2360.55	ug/L	94
33) Benzene SCAN	7.514	78	2465	129.54	ug/L #	91
35) Trichloroethene SCAN	8.574	130	27062	6522.32	ug/L	88
36) Toluene-d8 SCAN	10.486	98	81441	4584.76	ug/L	98
38) 1,1,2-Trichloroethane ...	11.189	97	154	28.09	ug/L #	13
39) Tetrachloroethene SCAN	11.441	166	616	125.20	ug/L #	29

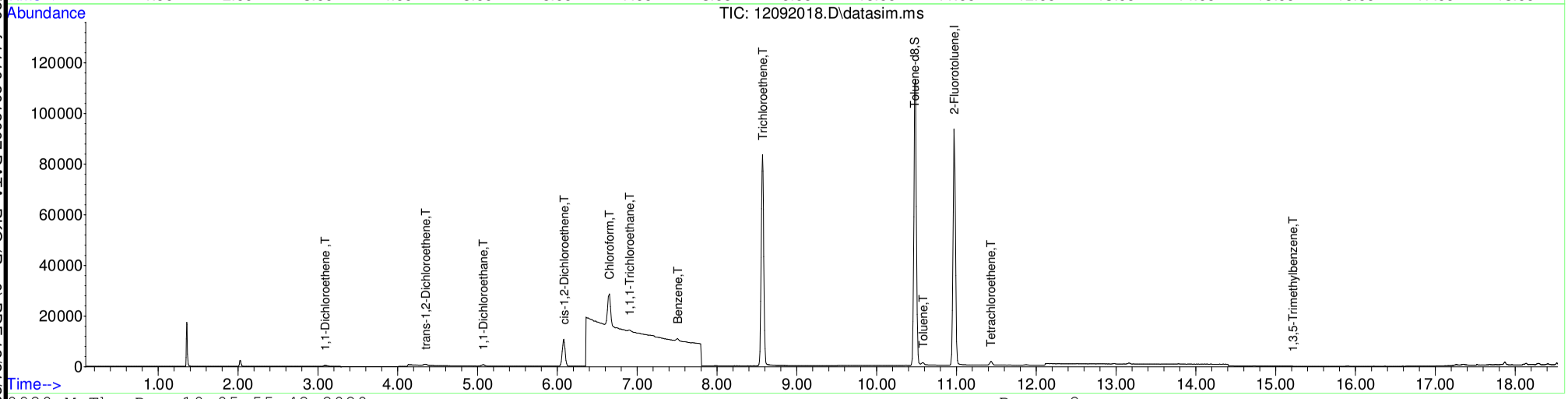
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092018.D
Acq On : 9 Dec 2020 15:35
InstName : AG5975C
Operator : TD
Sample : 2012007-11
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 10 05:55:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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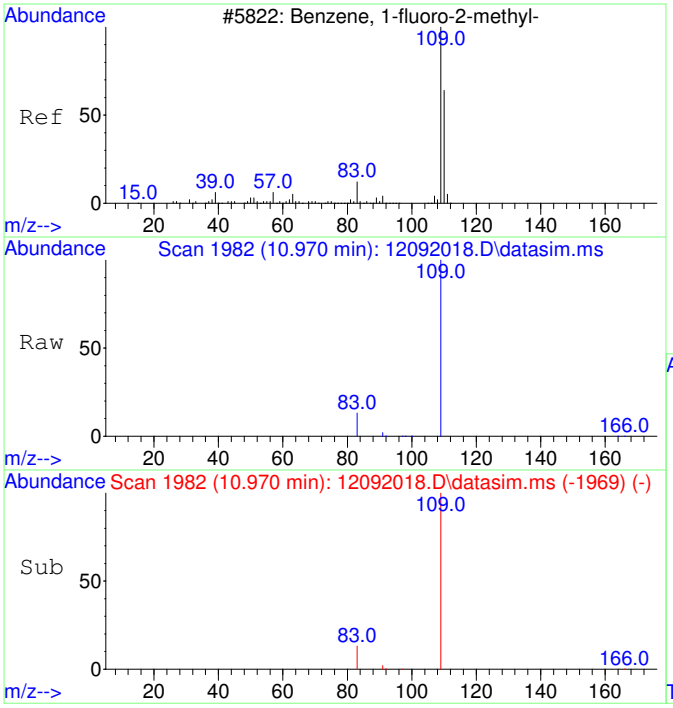
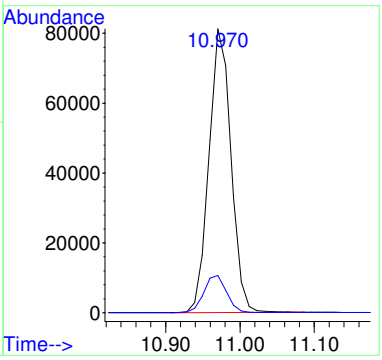
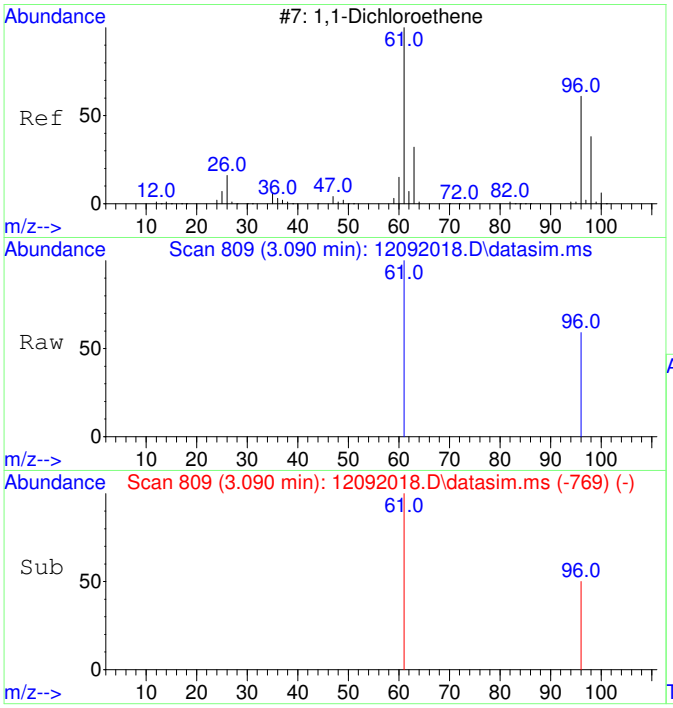


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:109 Resp: 166855

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

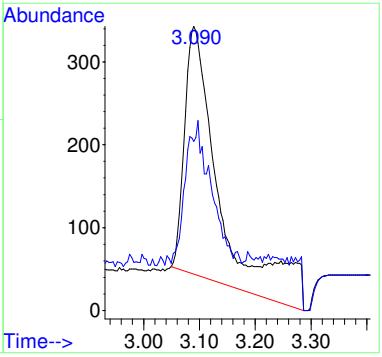




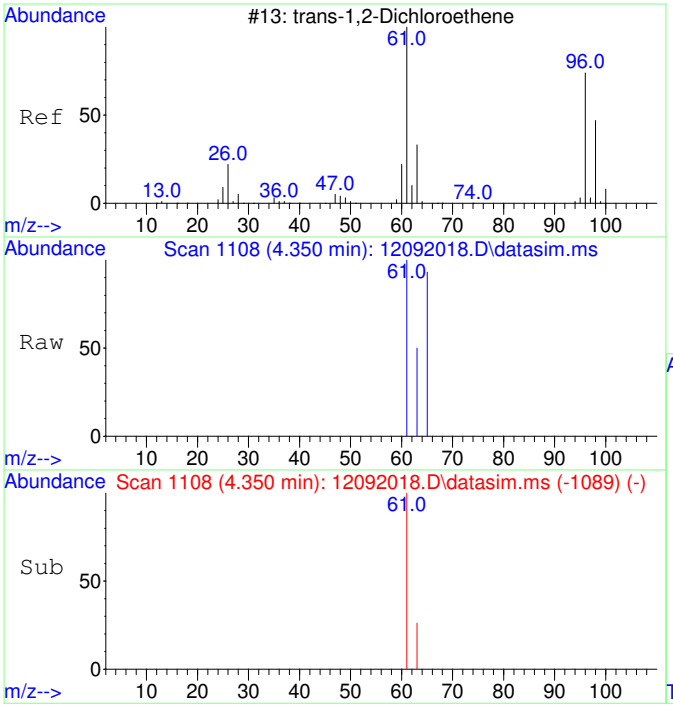
#2
1,1-Dichloroethene
Concen: 195.89 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 1296

Ion	Ratio	Lower	Upper
61	100		
96	56.9	37.2	97.2



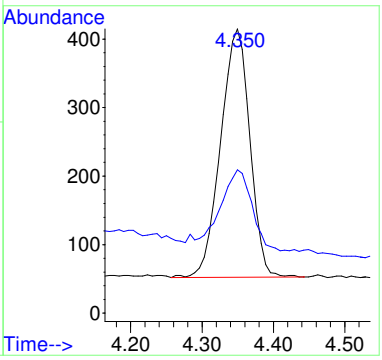
Before MI:
IMPROPER
BASELINE

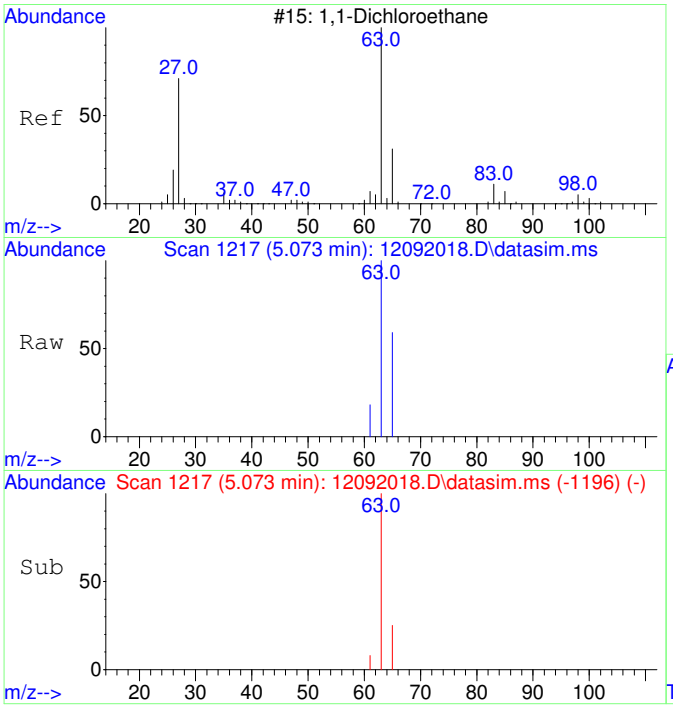


#3
trans-1,2-Dichloroethene
Concen: 123.73 ug/L
RT: 4.350 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 1032

Ion	Ratio	Lower	Upper
61	100		
63	36.0	2.4	62.4

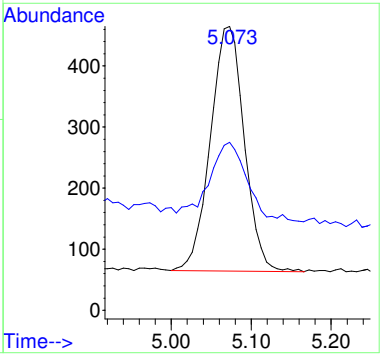


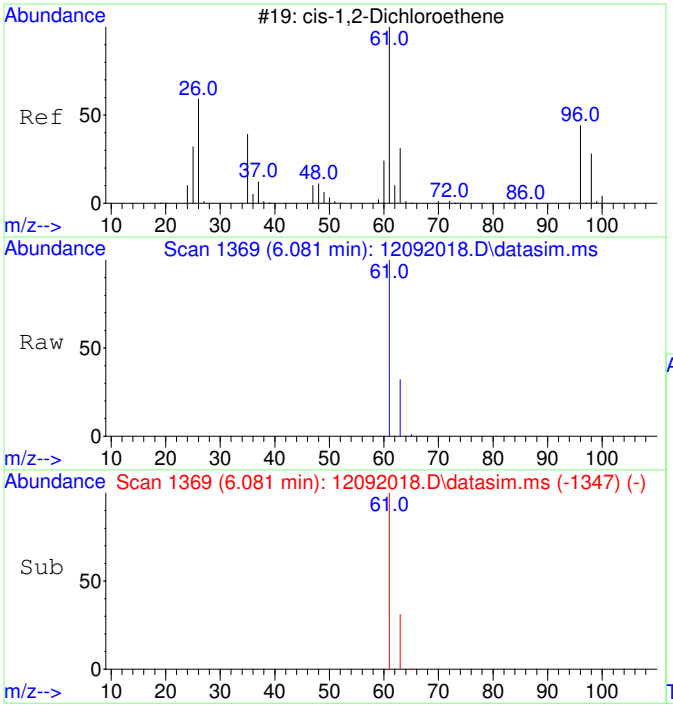


#4
1,1-Dichloroethane
Concen: 118.45 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 63 Resp: 1180

Ion	Ratio	Lower	Upper
63	100		
65	37.4	1.8	61.8

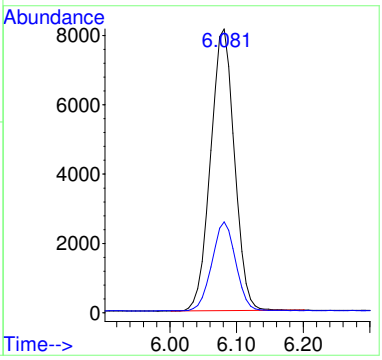


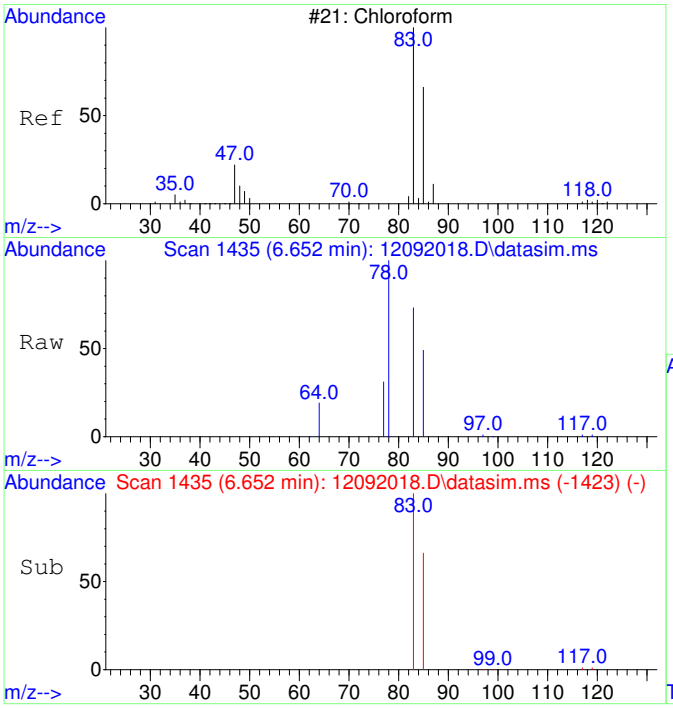


#5
cis-1,2-Dichloroethene
Concen: 1963.73 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 20261

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

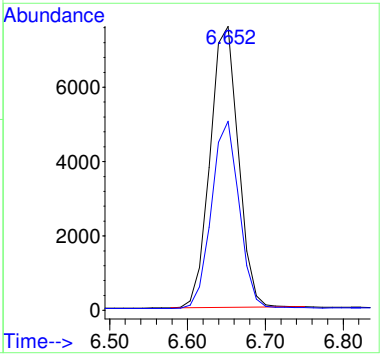


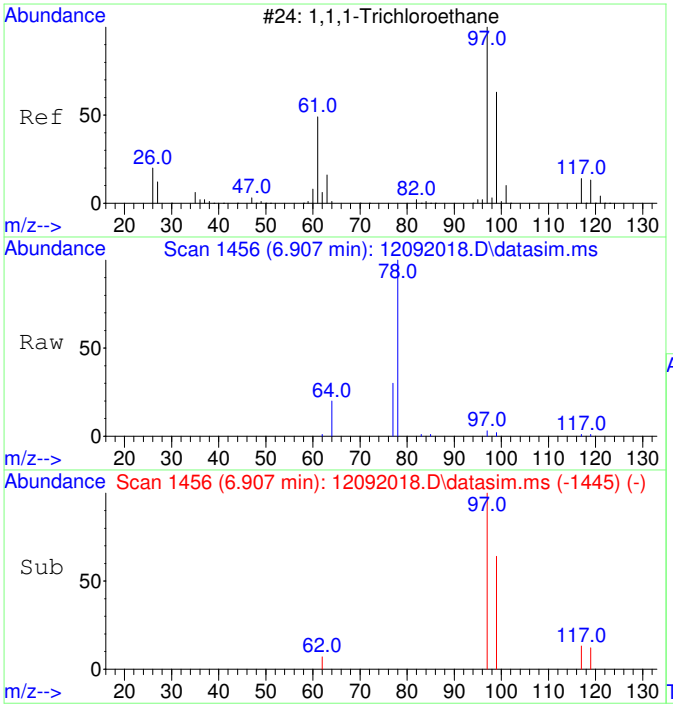


#6
Chloroform
Concen: 1925.50 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 83 Resp: 19082

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

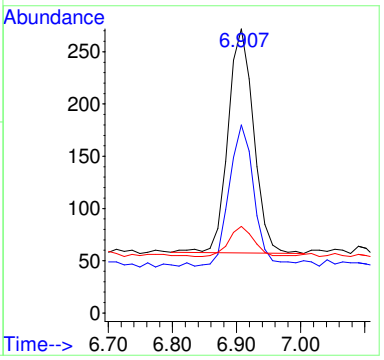


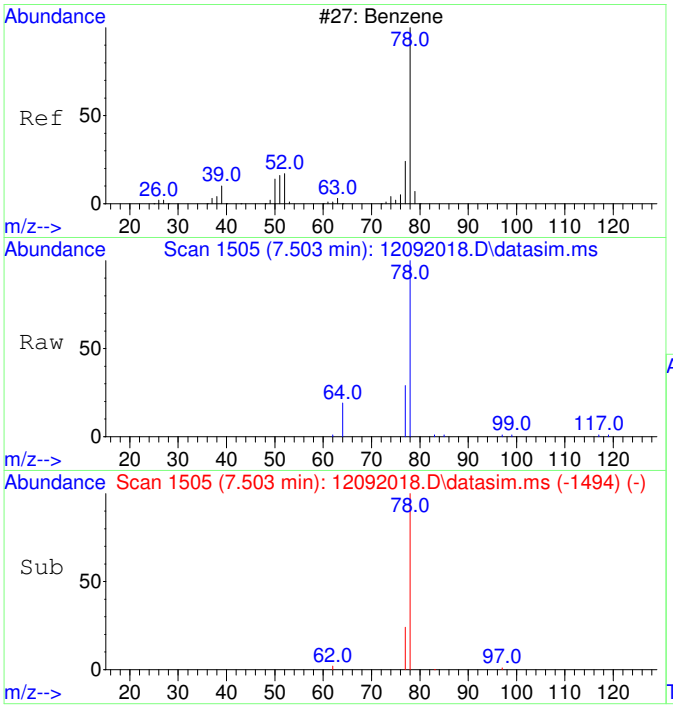


#7
1,1,1-Trichloroethane
Concen: 55.70 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 97 Resp: 593

Ion	Ratio	Lower	Upper
97	100		
99	61.2	34.6	94.6
117	13.2	0.0	43.2

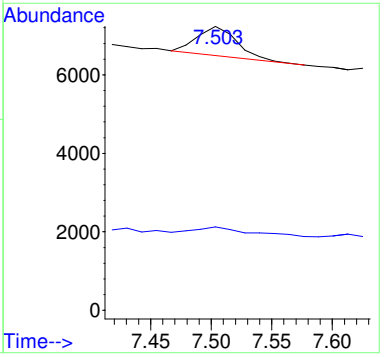


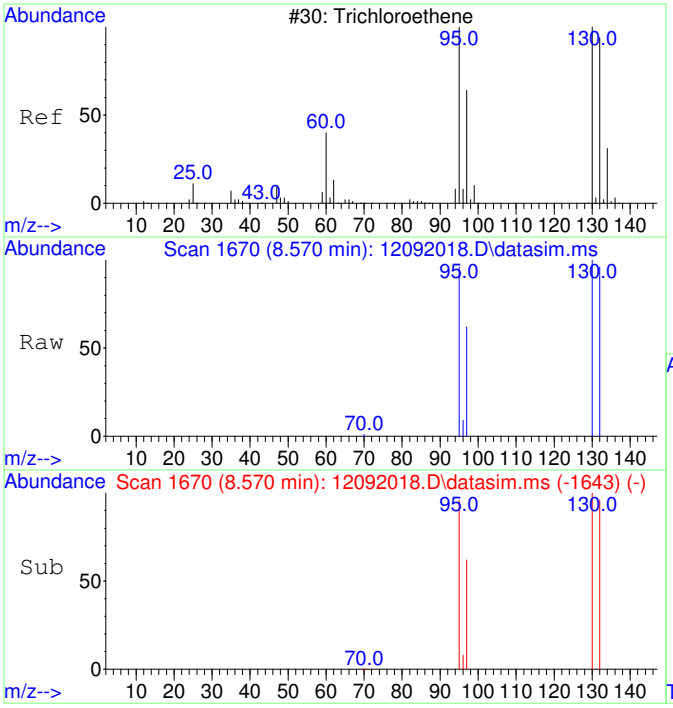


#9
Benzene
Concen: 56.13 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 78 Resp: 1576

Ion	Ratio	Lower	Upper
78	100		
77	50.3	0.0	53.2

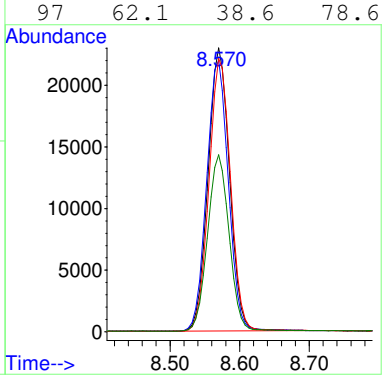


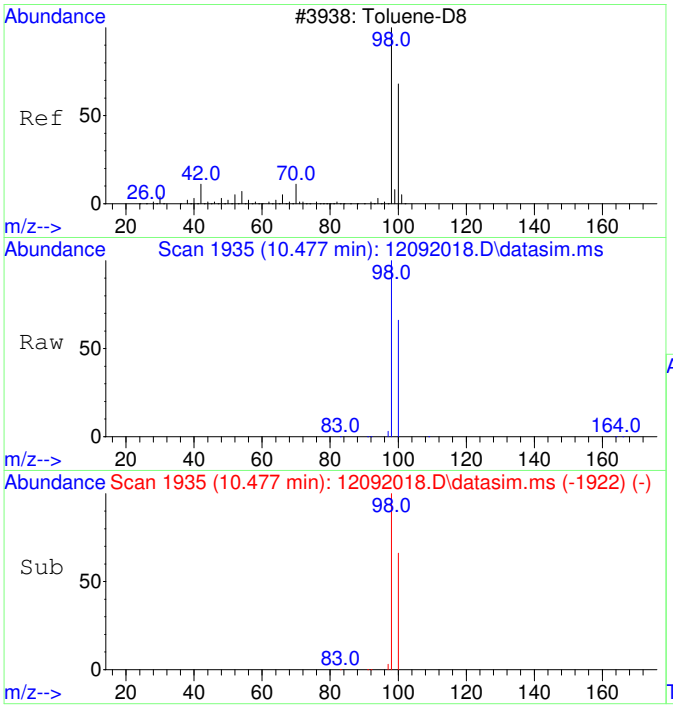


#11
Trichloroethene
Concen: 5546.47 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:130 Resp: 49168

Ion	Ratio	Lower	Upper
130	100		
95	96.4	60.7	120.7
132	96.2	76.0	116.0
97	62.1	38.6	78.6

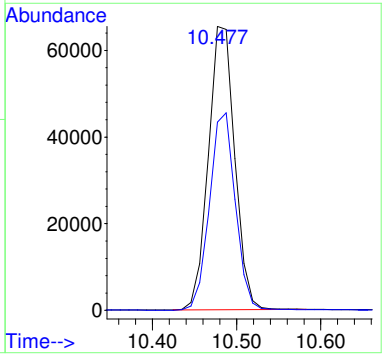


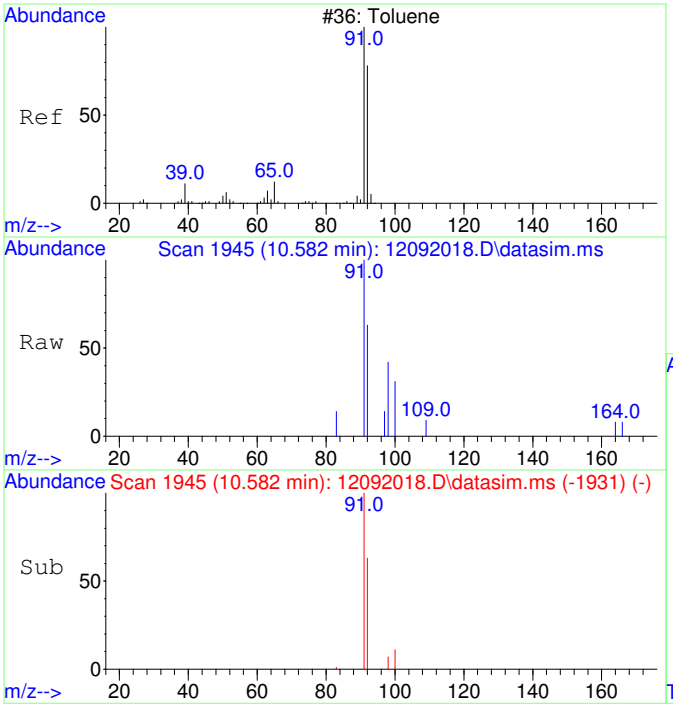


#12
Toluene-d8
Concen: 4425.41 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 98 Resp: 143010

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

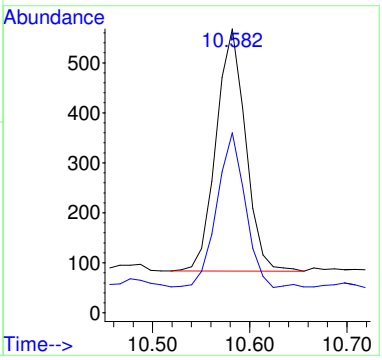


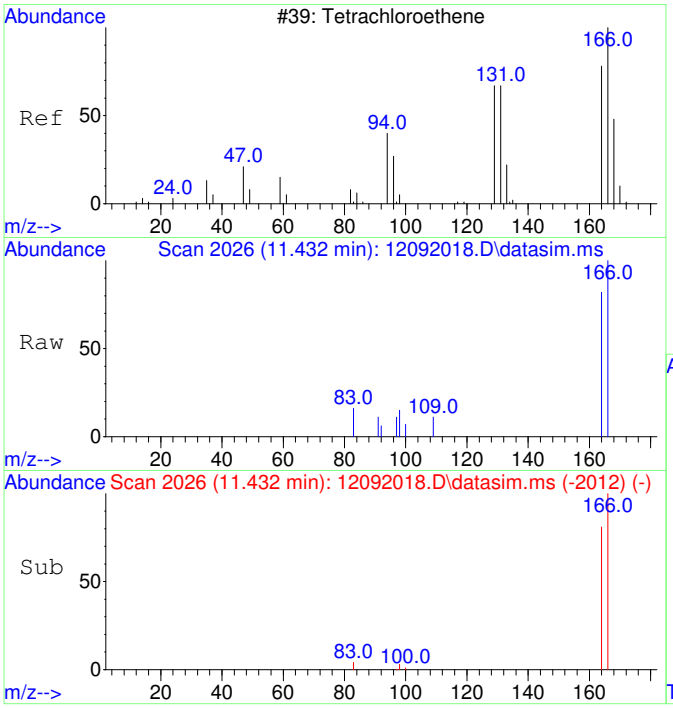


#13
Toluene
Concen: 25.23 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 91 Resp: 1015

Ion	Ratio	Lower	Upper
91	100		
92	60.1	29.9	89.9

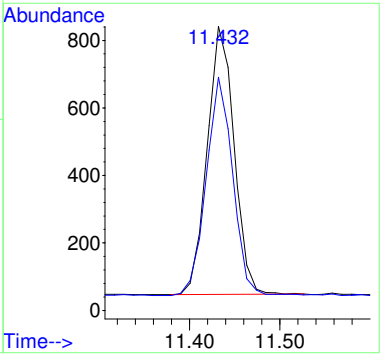


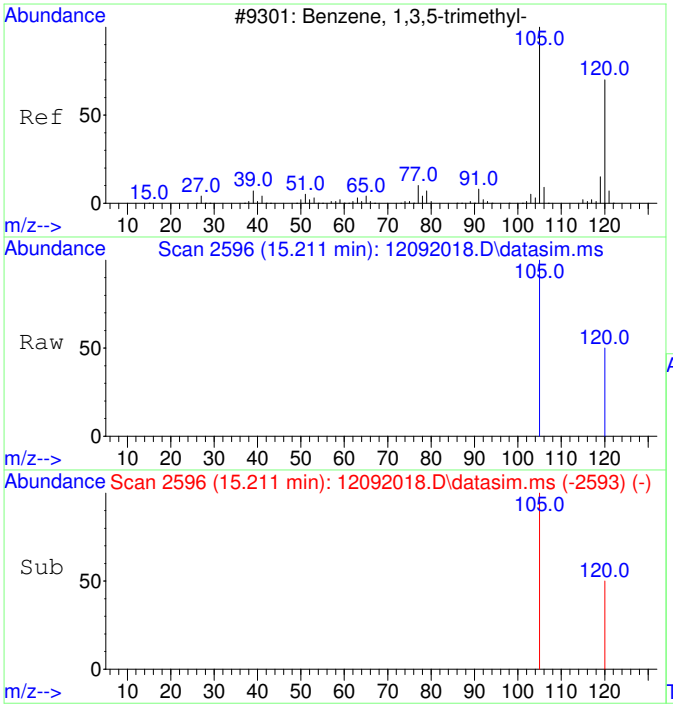


#15
Tetrachloroethene
Concen: 131.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:166 Resp: 1645

Ion	Ratio	Lower	Upper
166	100		
164	80.0	47.8	107.8

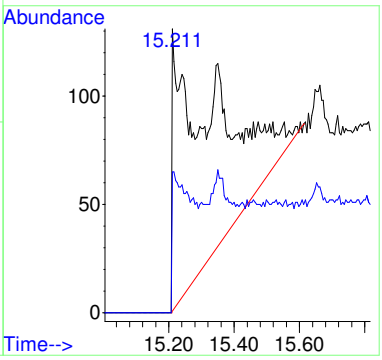


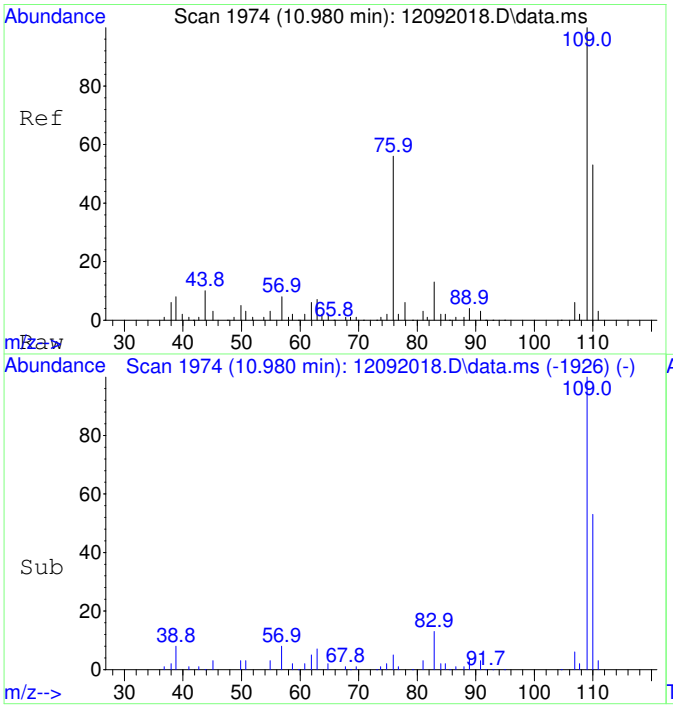


#22
1,3,5-Trimethylbenzene
Concen: 23.40 ug/L
RT: 15.211 min Scan# 2596
Delta R.T. -0.139 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:105 Resp: 1094

Ion	Ratio	Lower	Upper
105	100		
120	0.0	21.1	81.1#

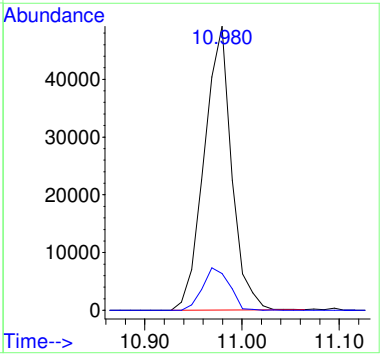


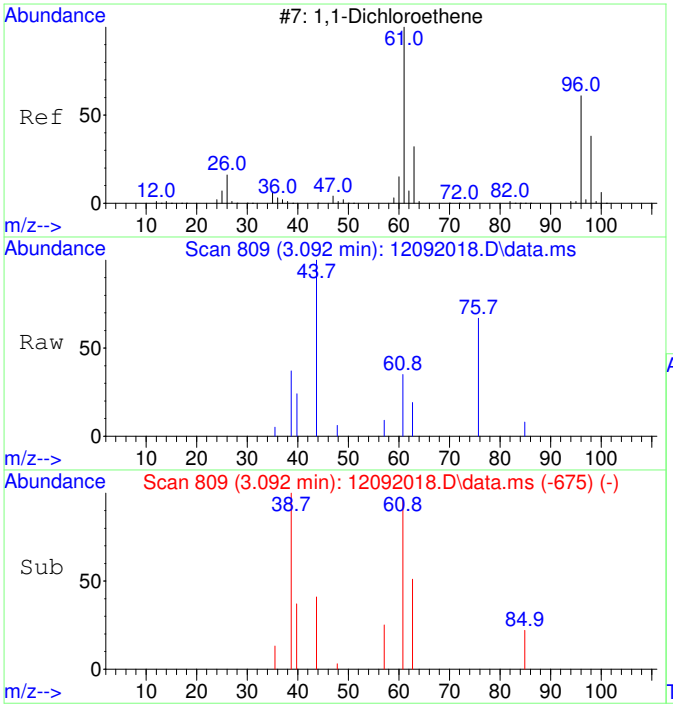


#25
2-Fluorotoluene SCAN
Concen: 5094.21 ug/L
RT: 10.980 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:109 Resp: 96483

Ion	Ratio	Lower	Upper
109	100		
83	14.7	0.0	43.8

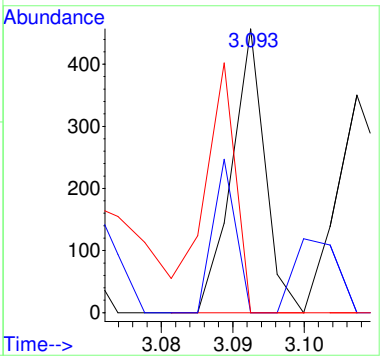


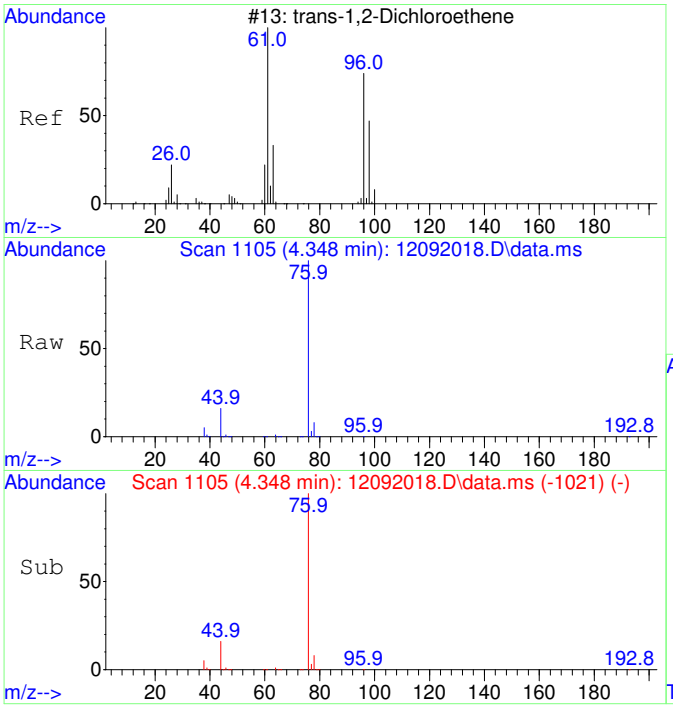


#26
1,1-Dichloroethene SCAN
Concen: 33.47 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.003 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 148

Ion	Ratio	Lower	Upper
61	100		
96	37.2	33.1	93.1
98	66.9	11.2	71.2

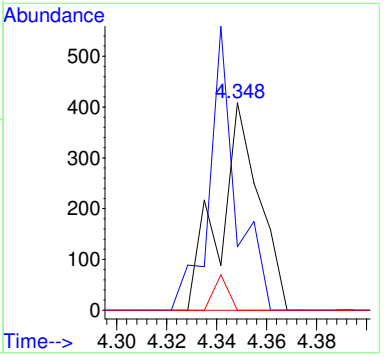


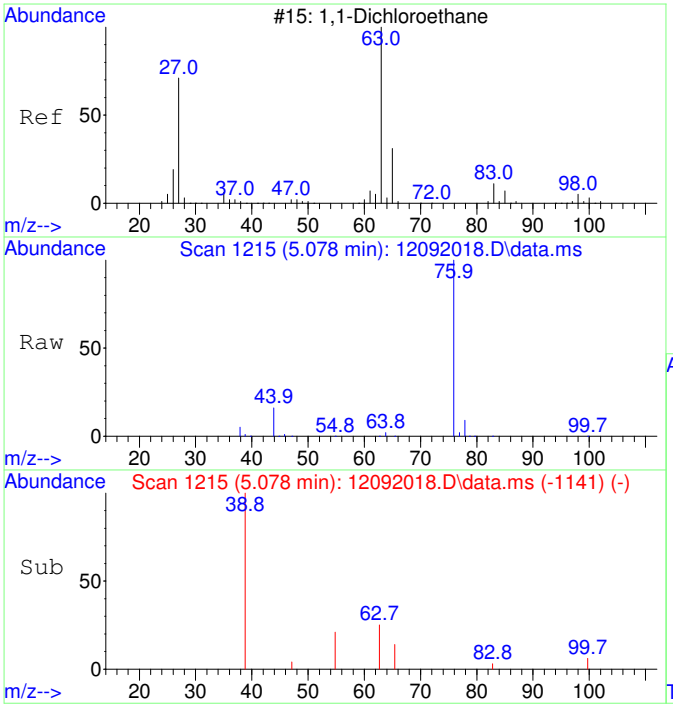


#27
trans-1,2-Dichloroethene SCAN
Concen: 79.19 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 446

Ion	Ratio	Lower	Upper
61	100		
96	92.4	49.0	109.0
98	0.0	20.5	80.5#

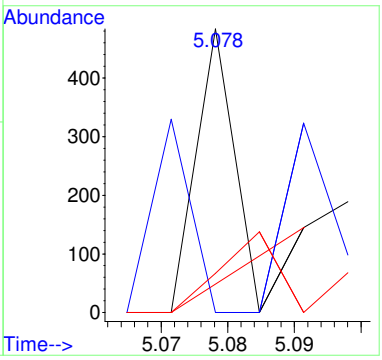


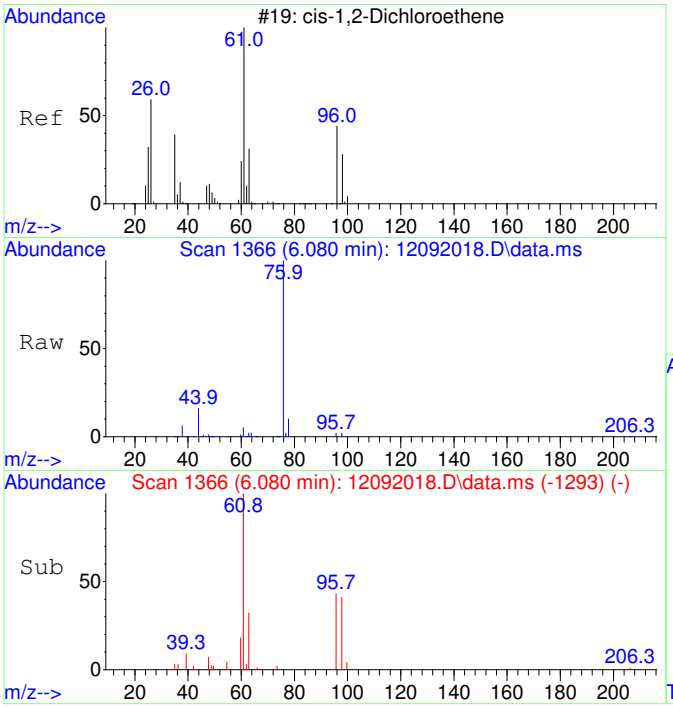


#28
1,1-Dichloroethane SCAN
Concen: 24.67 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 63 Resp: 164

Ion	Ratio	Lower	Upper
63	100		
65	136.0	1.3	61.3#
83	66.5	0.0	45.9#

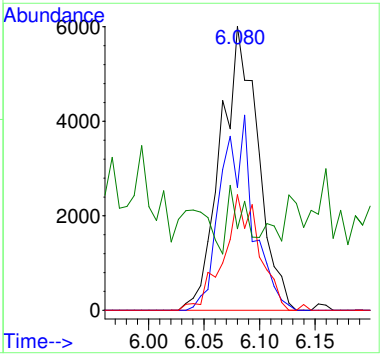


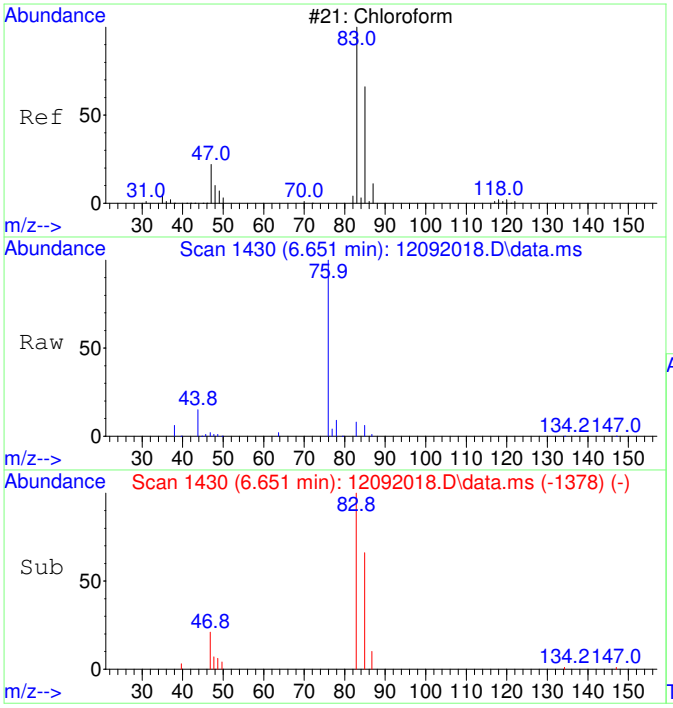


#29
cis-1,2-Dichloroethene SCAN
Concen: 2166.69 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 14159

Ion	Ratio	Lower	Upper
61	100		
96	58.5	39.9	99.9
98	38.3	13.5	73.5
64	8.3	4.5	64.5

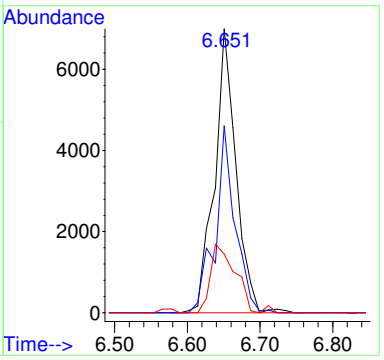


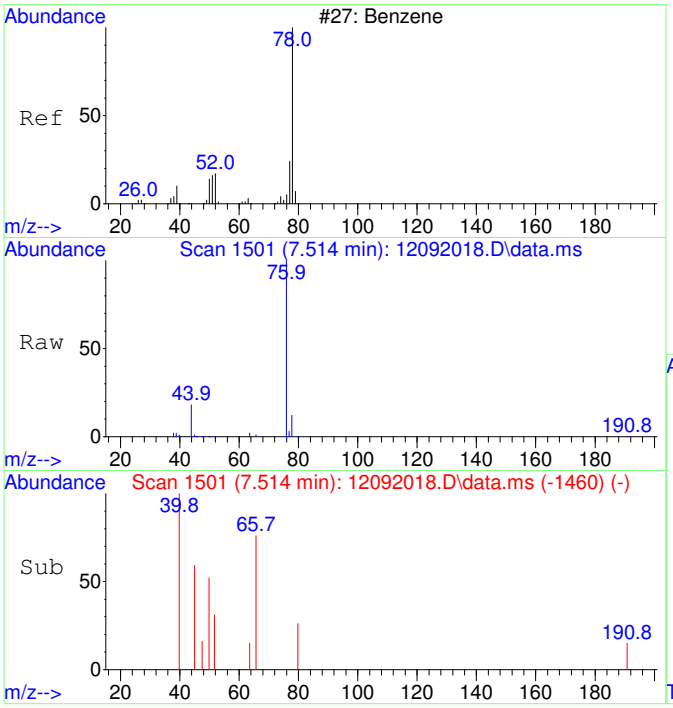


#30
Chloroform SCAN
Concen: 2360.55 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 83 Resp: 14388

Ion	Ratio	Lower	Upper
83	100		
85	60.7	34.6	94.6
47	27.7	0.0	53.4

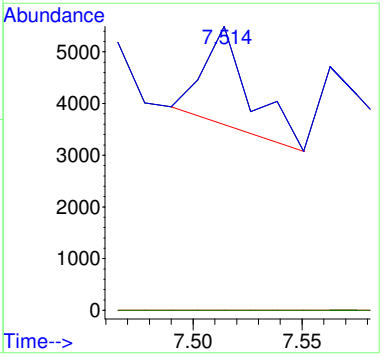


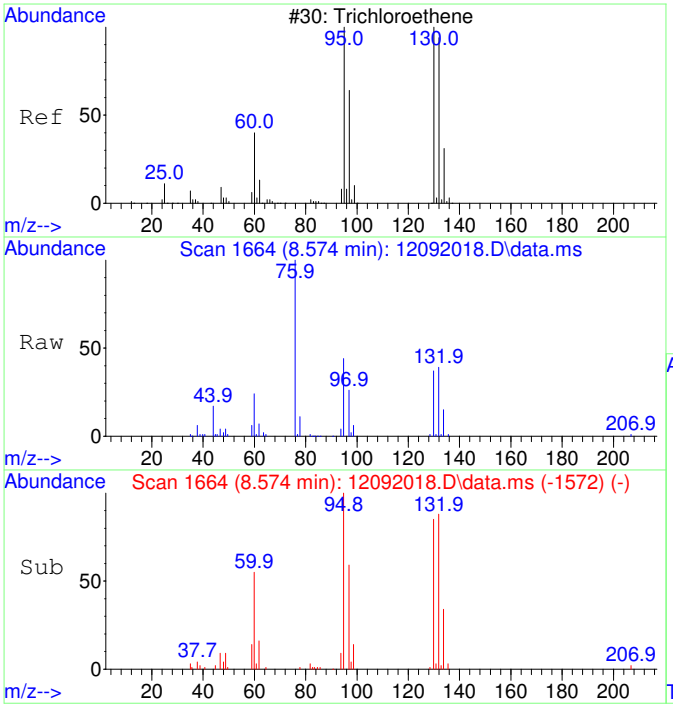


#33
Benzene SCAN
Concen: 129.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 78 Resp: 2465

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

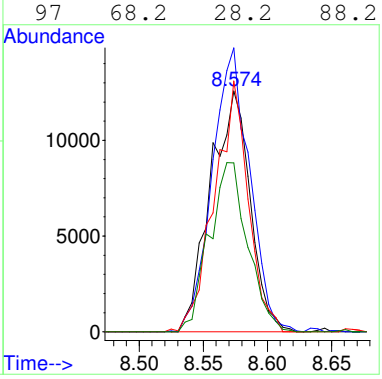


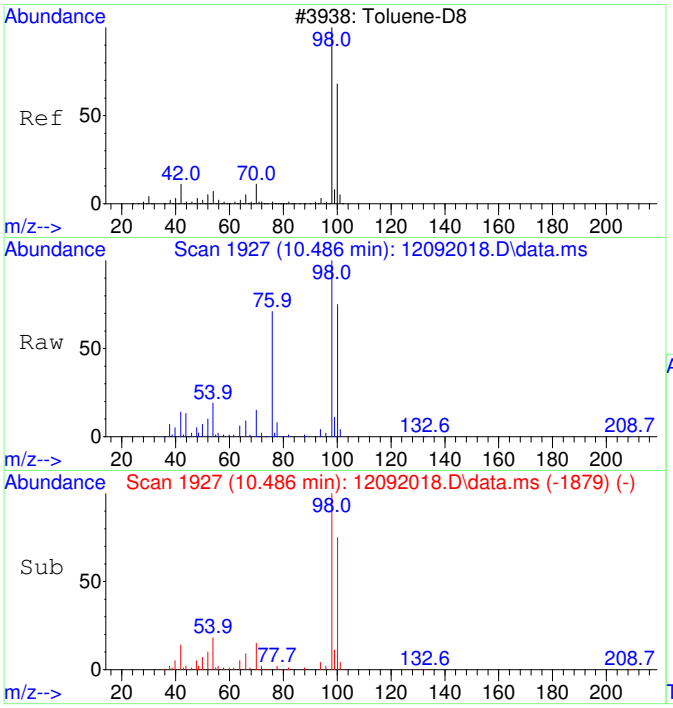


#35
Trichloroethene SCAN
Concen: 6522.32 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:130 Resp: 27062

Ion	Ratio	Lower	Upper
130	100		
95	111.2	60.5	120.5
132	89.0	59.6	119.6
97	68.2	28.2	88.2

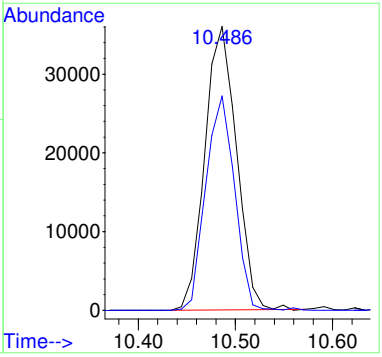


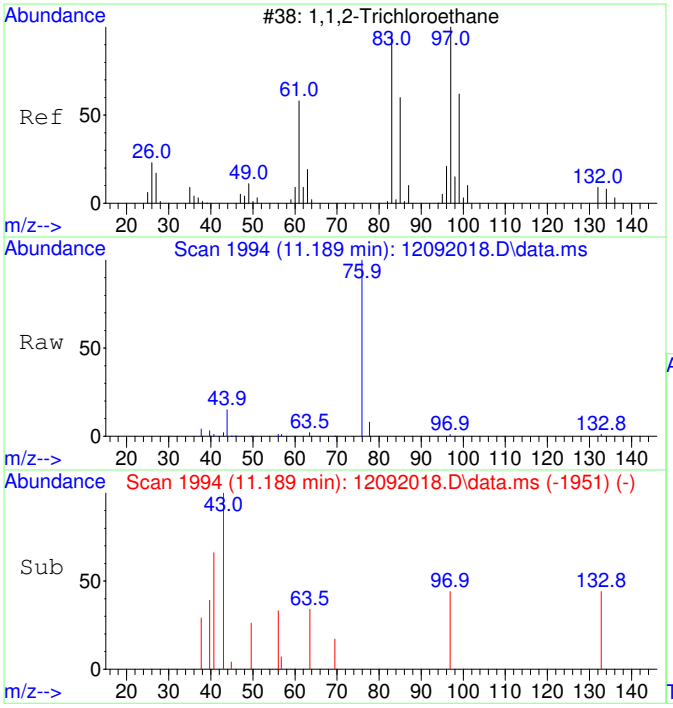


#36
Toluene-d8 SCAN
Concen: 4584.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 98 Resp: 81441

Ion	Ratio	Lower	Upper
98	100		
100	68.4	40.0	100.0

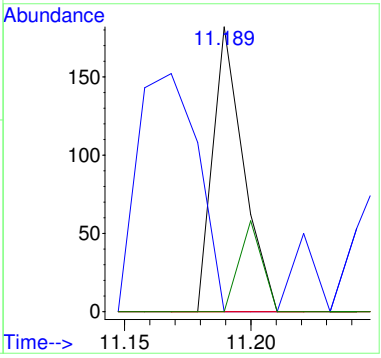


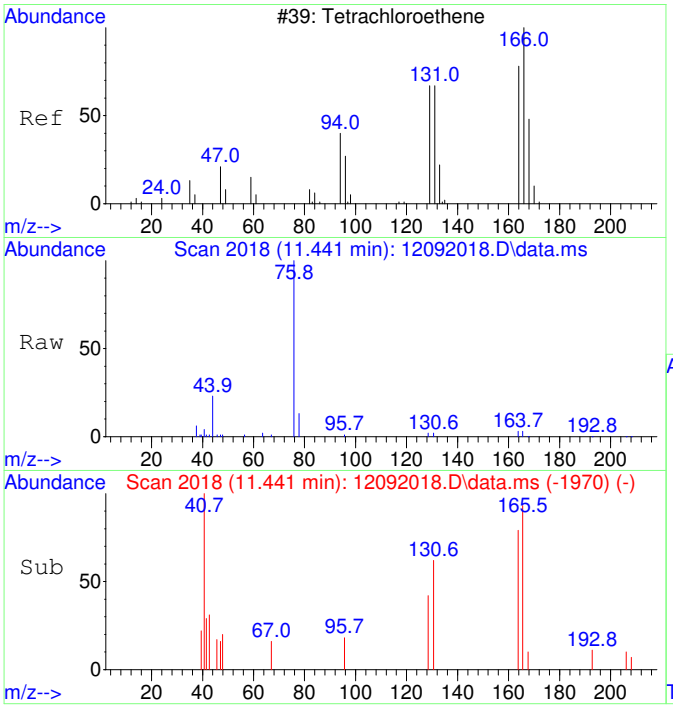


#38
1,1,2-Trichloroethane SCAN
Concen: 28.09 ug/L
RT: 11.189 min Scan# 1994
Delta R.T. -0.052 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 97 Resp: 154

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#

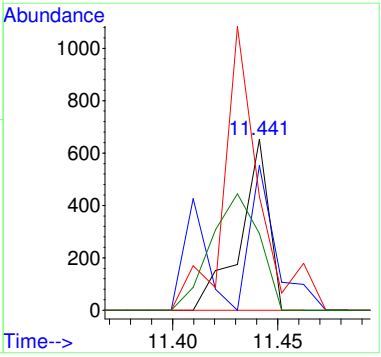




#39
Tetrachloroethene SCAN
Concen: 125.20 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:166 Resp: 616

Ion	Ratio	Lower	Upper
166	100		
164	77.6	50.9	110.9
131	206.3	38.7	98.7#
129	115.6	41.8	101.8#



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092018.D
Acq On : 9 Dec 2020 15:35
InstName : AG5975C
Operator : TD
Sample : 2012007-11
Misc :
ALS Vial : 18 Sample Multiplier: 1

M.I. Performed By:
TD at 10:20 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:03 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

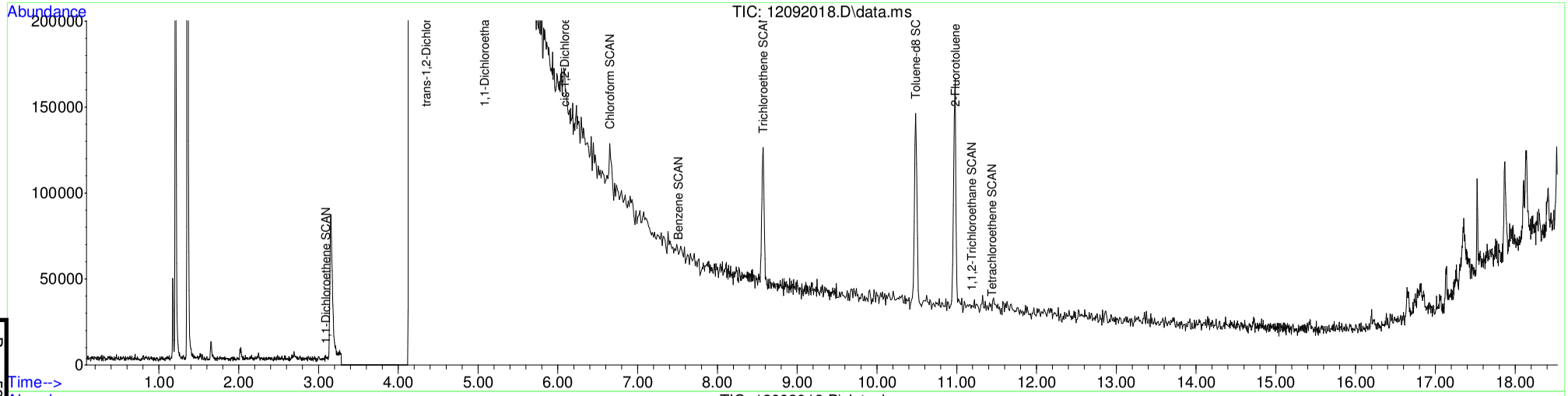
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	166855	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	143010	4425.41	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.51%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	954m	144.19	ug/L	
3] trans-1,2-Dichloroethene	4.350	61	1032	123.73	ug/L	93
4] 1,1-Dichloroethane	5.073	63	1180	118.45	ug/L	90
5] cis-1,2-Dichloroethene	6.081	61	20261	1963.73	ug/L	98
6] Chloroform	6.652	83	19082	1925.50	ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	593	55.70	ug/L	96
9] Benzene	7.503	78	1576	56.13	ug/L	44
11] Trichloroethene	8.570	130	49168	5546.47	ug/L	97
13] Toluene	10.582	91	1015	25.23	ug/L	100
15] Tetrachloroethene	11.432	166	1645	131.26	ug/L	97
22] 1,3,5-Trimethylbenzene	15.211	105	1094	23.40	ug/L #	27
25) 2-Fluorotoluene SCAN	10.980	109	96483	5094.21	ug/L	98
26) 1,1-Dichloroethene SCAN	3.092	61	148	33.47	ug/L	64
27) trans-1,2-Dichloroethe...	4.348	61	446	79.19	ug/L #	62
28) 1,1-Dichloroethane SCAN	5.078	63	164	24.67	ug/L #	1
29) cis-1,2-Dichloroethene...	6.080	61	14159	2166.69	ug/L	80
30) Chloroform SCAN	6.651	83	14388	2360.55	ug/L	94
33) Benzene SCAN	7.514	78	2465	129.54	ug/L #	91
35) Trichloroethene SCAN	8.574	130	27062	6522.32	ug/L	88
36) Toluene-d8 SCAN	10.486	98	81441	4584.76	ug/L	98
38) 1,1,2-Trichloroethane ...	11.189	97	154	28.09	ug/L #	13
39) Tetrachloroethene SCAN	11.441	166	616	125.20	ug/L #	29

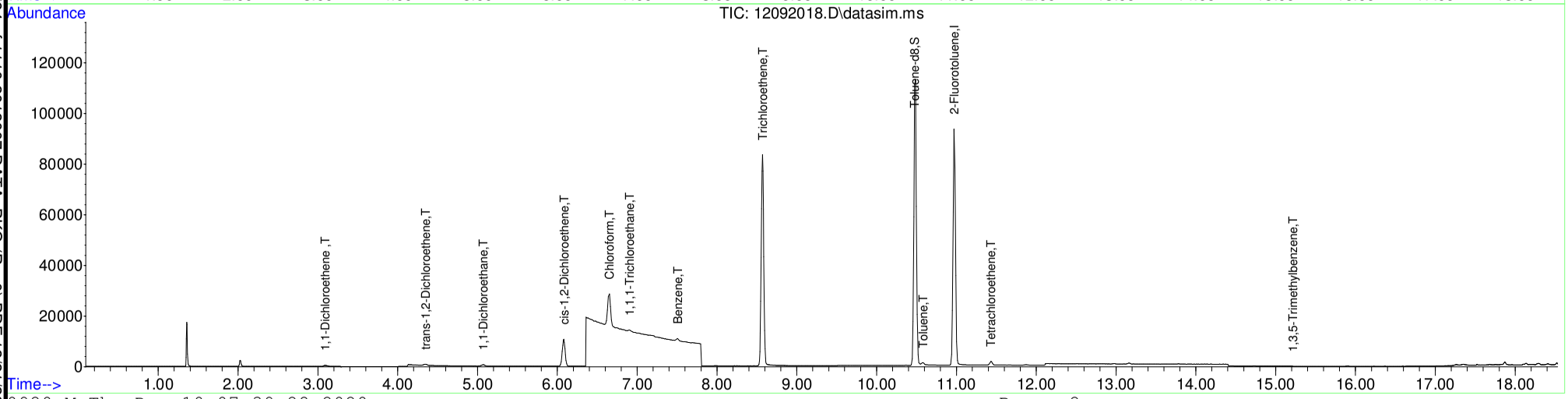
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092018.D
Acq On : 9 Dec 2020 15:35
InstName : AG5975C
Operator : TD
Sample : 2012007-11
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 10 05:55:41 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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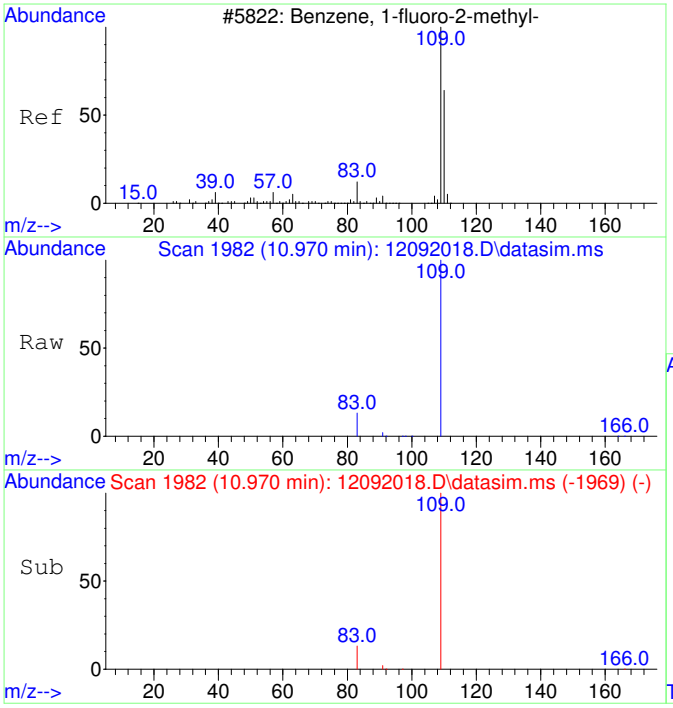
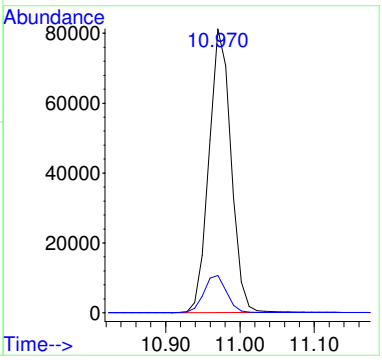
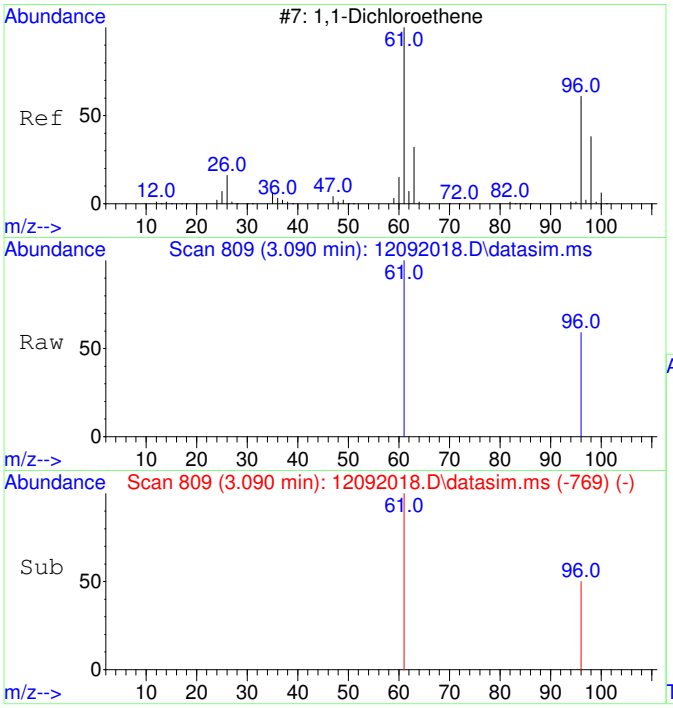


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:109 Resp: 166855

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

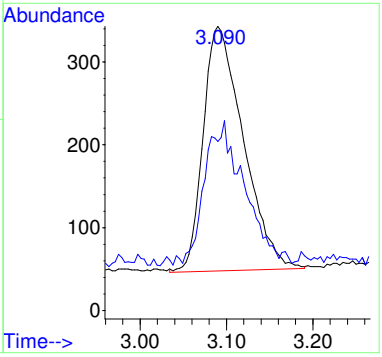


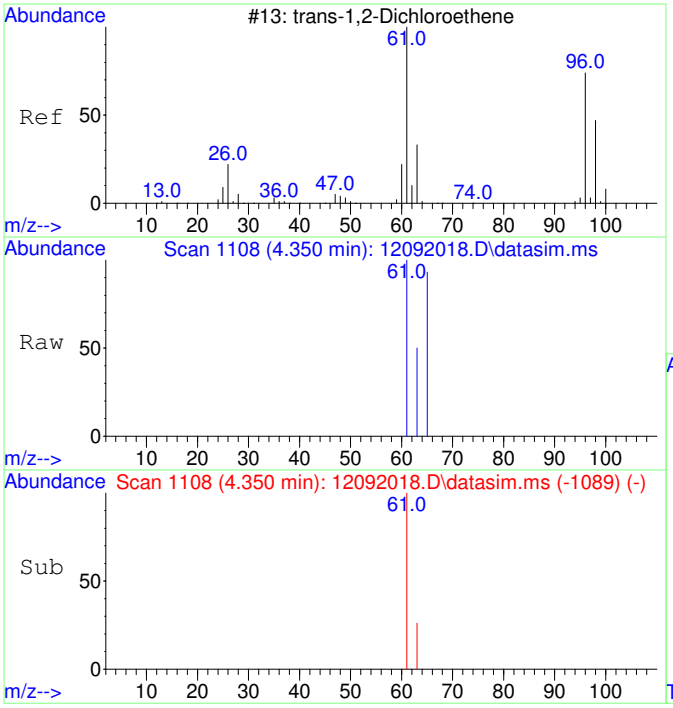


#2
1,1-Dichloroethene
Concen: 144.19 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 954

Ion	Ratio	Lower	Upper
61	100		
96	77.4	37.2	97.2

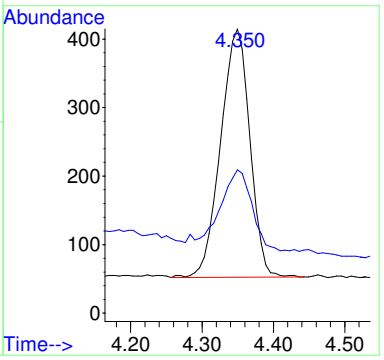


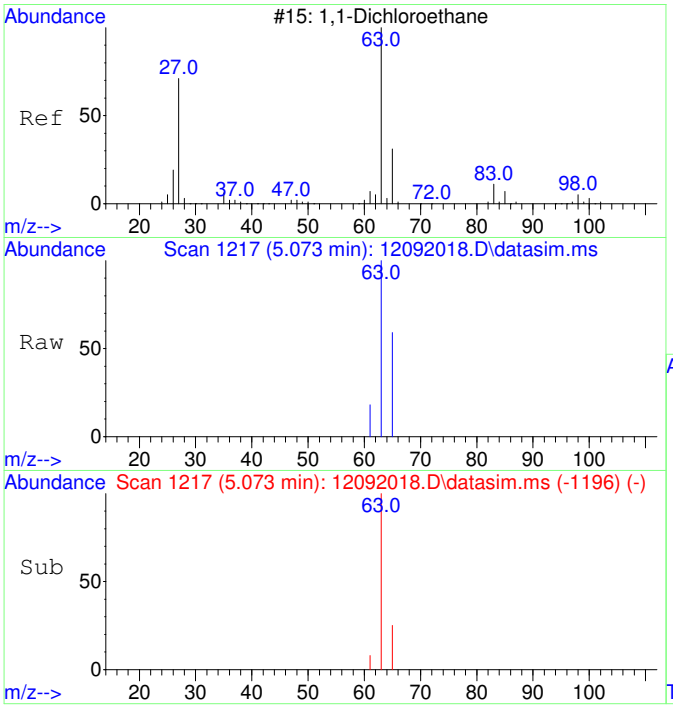


#3
trans-1,2-Dichloroethene
Concen: 123.73 ug/L
RT: 4.350 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 1032

Ion	Ratio	Lower	Upper
61	100		
63	36.0	2.4	62.4

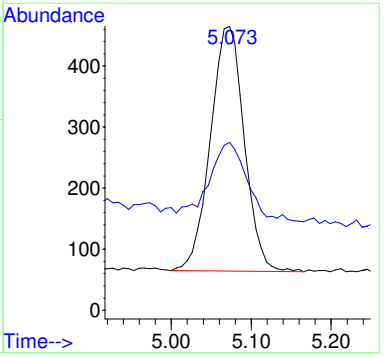


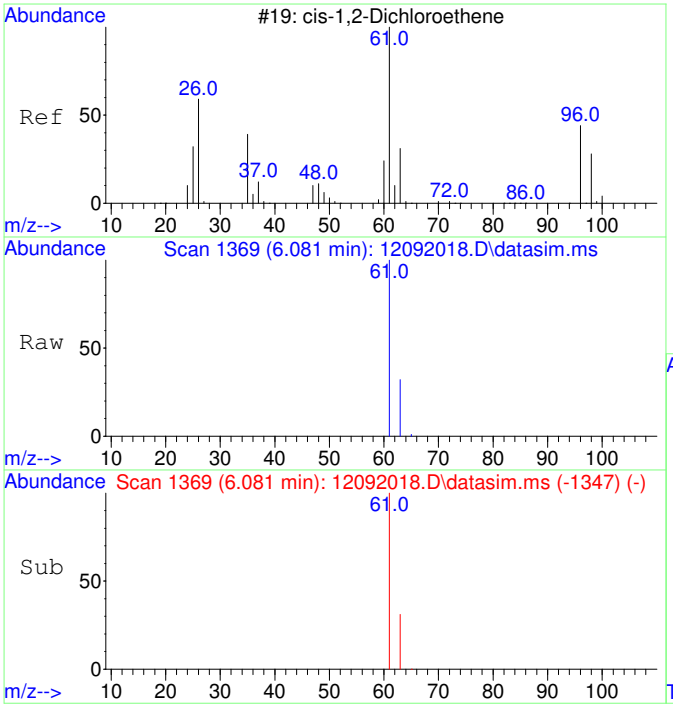


#4
1,1-Dichloroethane
Concen: 118.45 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 63 Resp: 1180

Ion	Ratio	Lower	Upper
63	100		
65	37.4	1.8	61.8

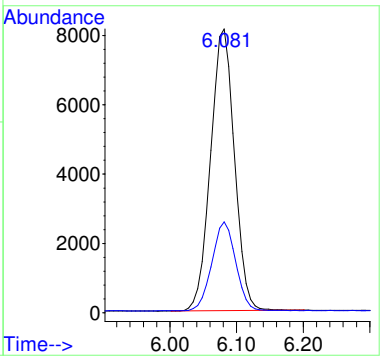


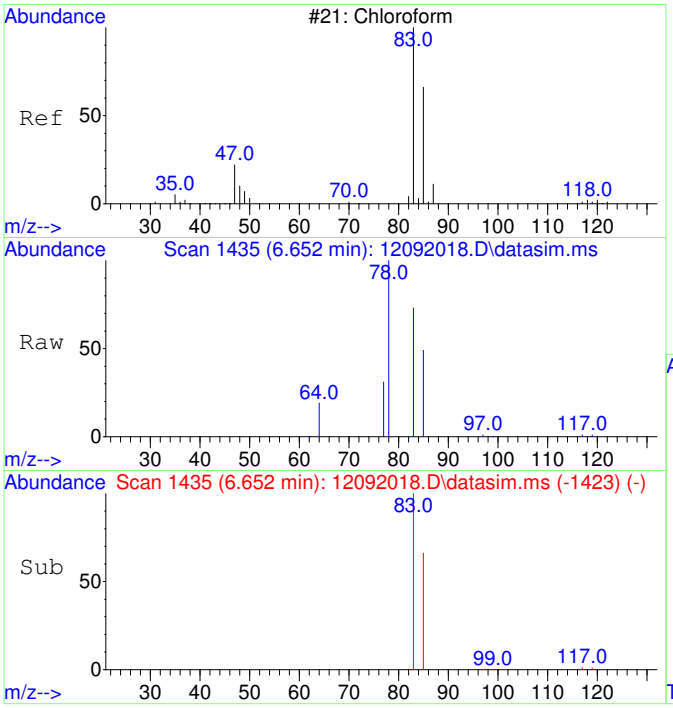


#5
cis-1,2-Dichloroethene
Concen: 1963.73 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 20261

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

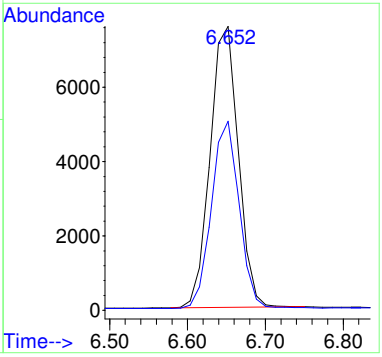


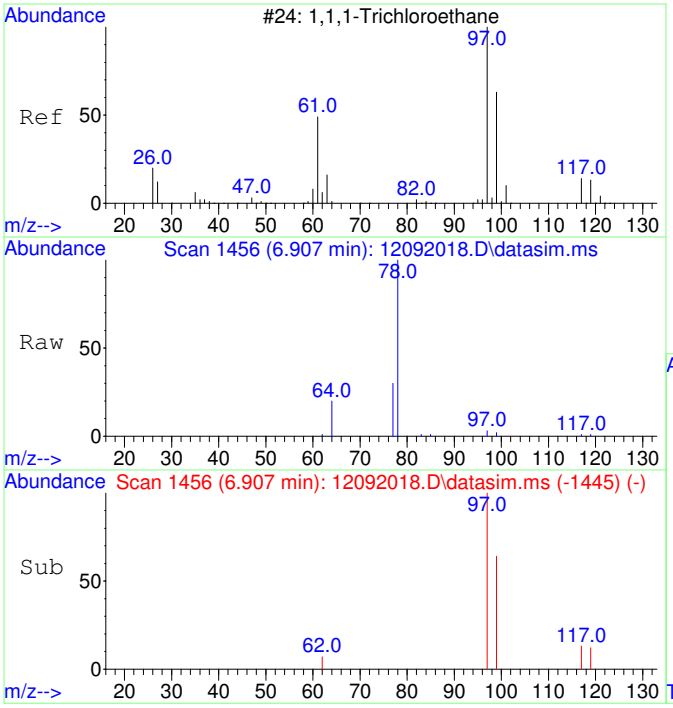


#6
Chloroform
Concen: 1925.50 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 83 Resp: 19082

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

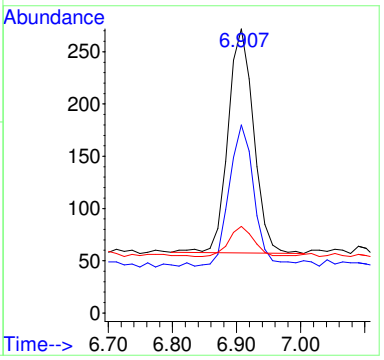


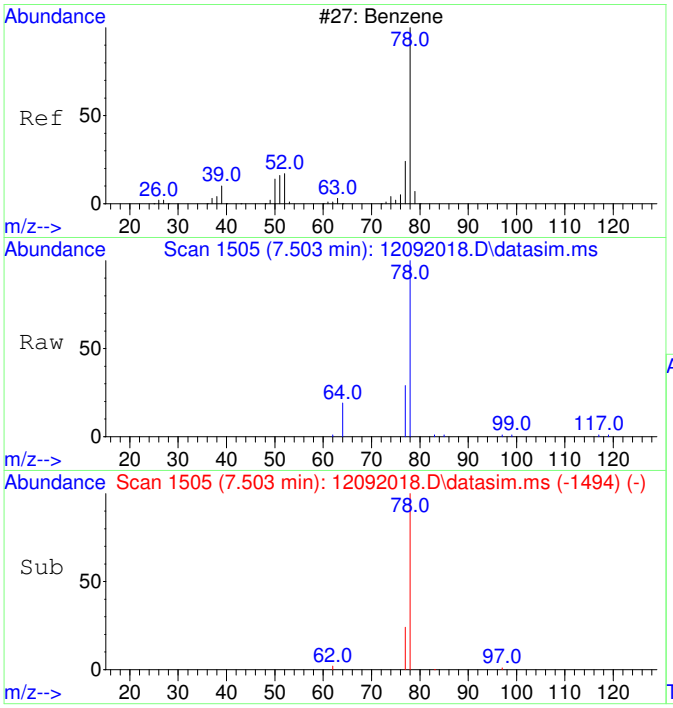


#7
1,1,1-Trichloroethane
Concen: 55.70 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 97 Resp: 593

Ion	Ratio	Lower	Upper
97	100		
99	61.2	34.6	94.6
117	13.2	0.0	43.2

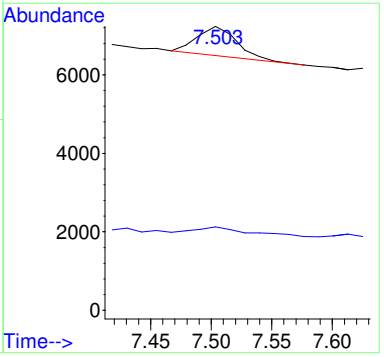


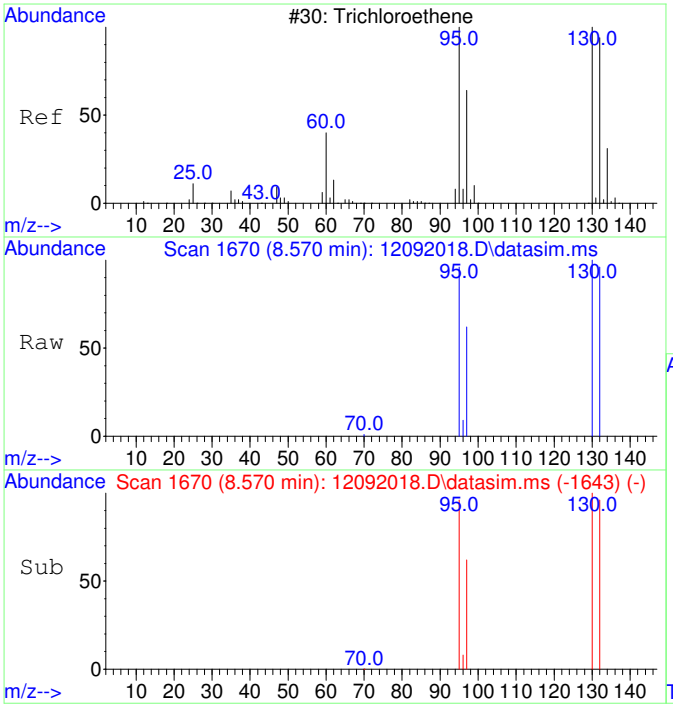


#9
Benzene
Concen: 56.13 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 78 Resp: 1576

Ion	Ratio	Lower	Upper
78	100		
77	50.3	0.0	53.2

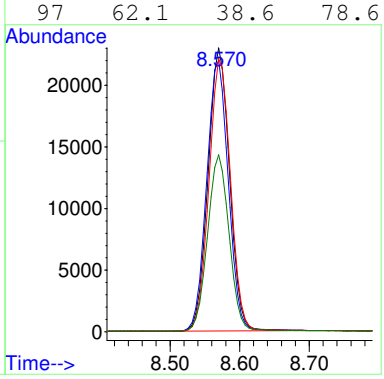


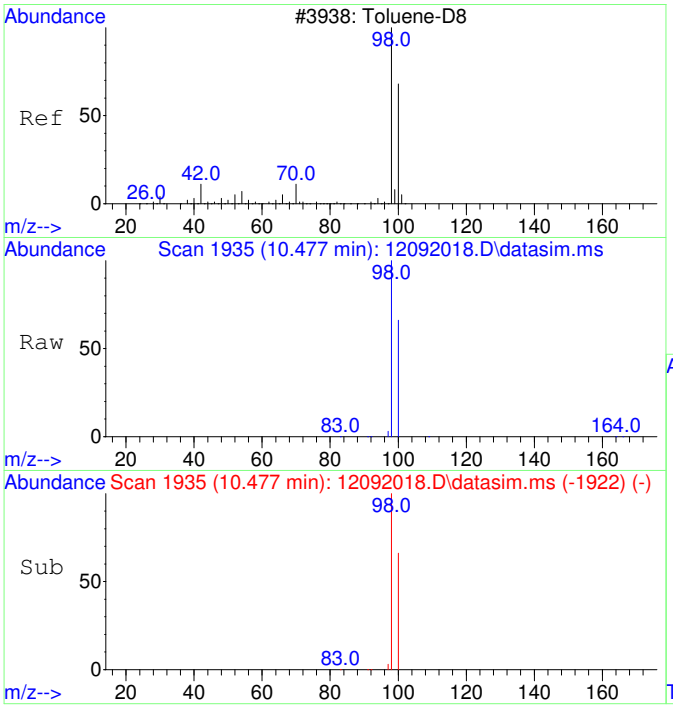


#11
Trichloroethene
Concen: 5546.47 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:130 Resp: 49168

Ion	Ratio	Lower	Upper
130	100		
95	96.4	60.7	120.7
132	96.2	76.0	116.0
97	62.1	38.6	78.6

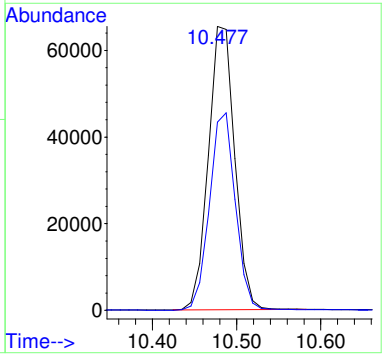


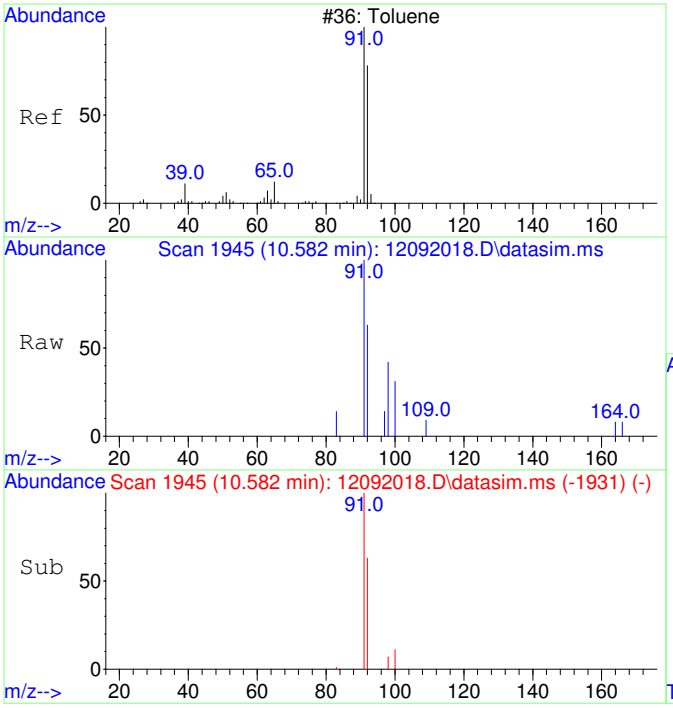


#12
Toluene-d8
Concen: 4425.41 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 98 Resp: 143010

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

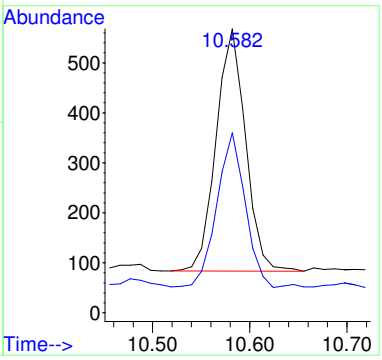


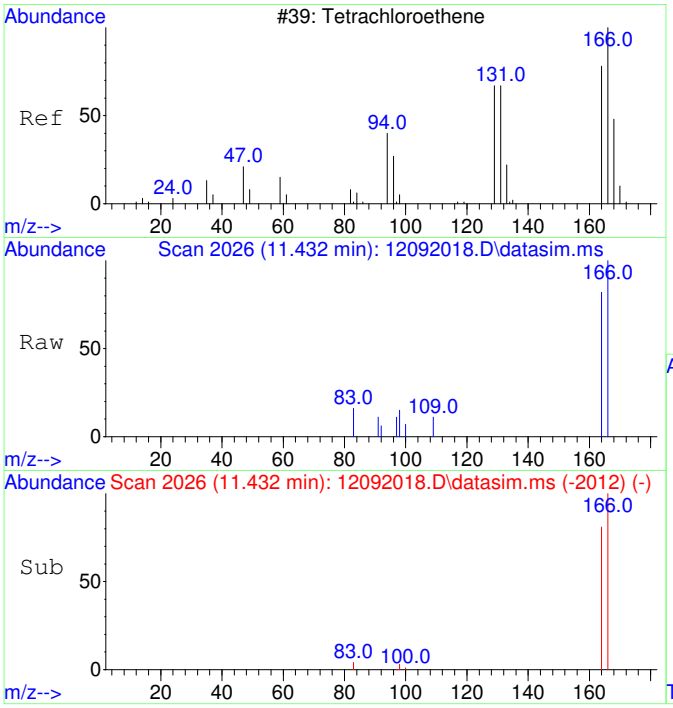


#13
Toluene
Concen: 25.23 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 91 Resp: 1015

Ion	Ratio	Lower	Upper
91	100		
92	60.1	29.9	89.9

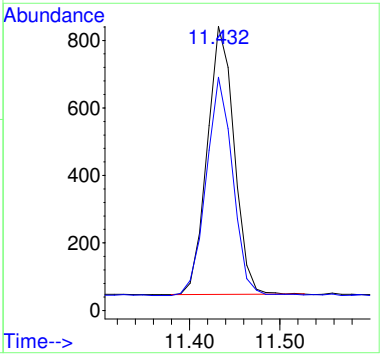


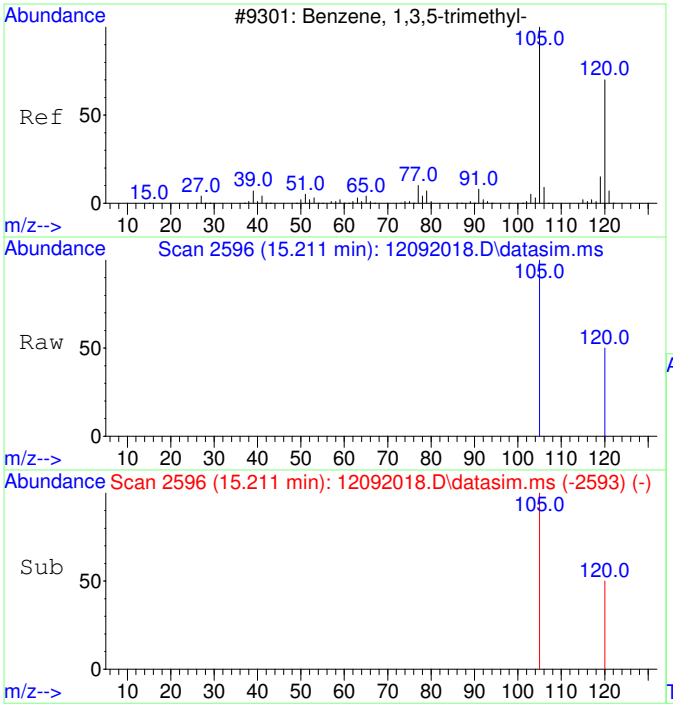


#15
Tetrachloroethene
Concen: 131.26 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:166 Resp: 1645

Ion	Ratio	Lower	Upper
166	100		
164	80.0	47.8	107.8

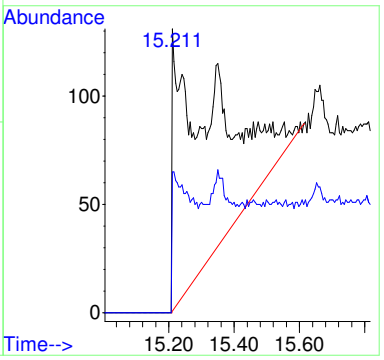


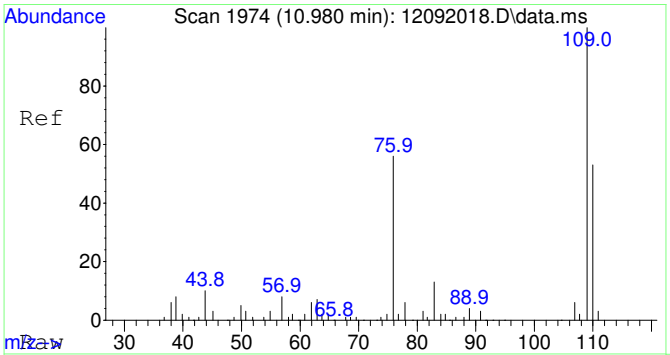


#22
1,3,5-Trimethylbenzene
Concen: 23.40 ug/L
RT: 15.211 min Scan# 2596
Delta R.T. -0.139 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:105 Resp: 1094

Ion	Ratio	Lower	Upper
105	100		
120	0.0	21.1	81.1#

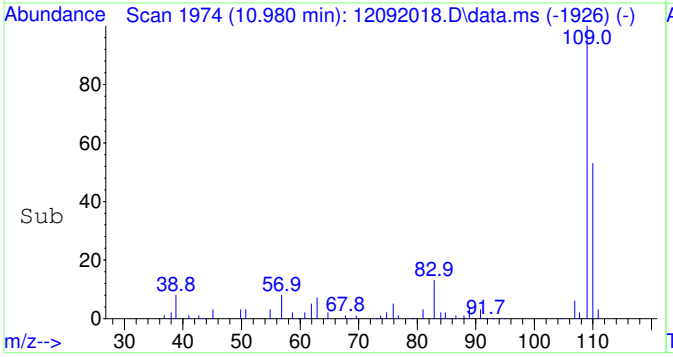


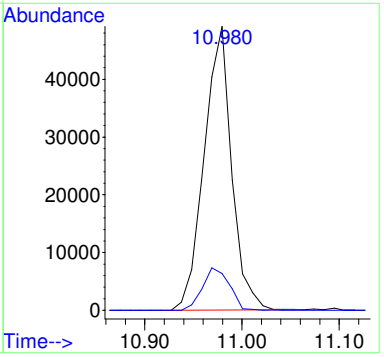


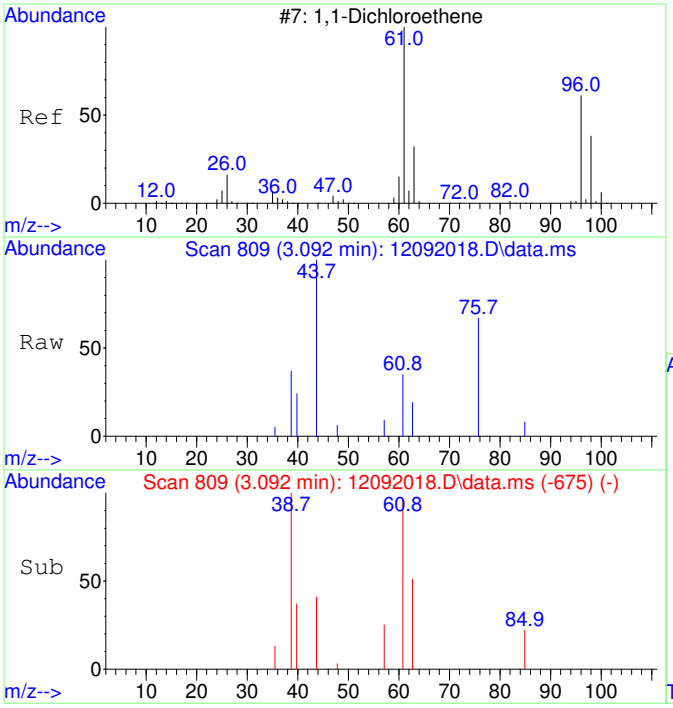
#25
2-Fluorotoluene SCAN
Concen: 5094.21 ug/L
RT: 10.980 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:109 Resp: 96483

Ion	Ratio	Lower	Upper
109	100		
83	14.7	0.0	43.8



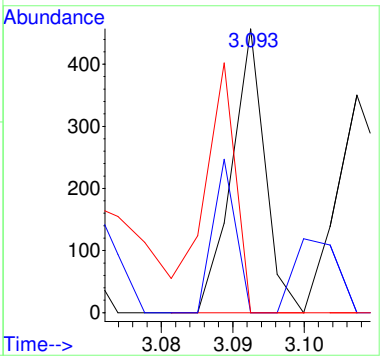


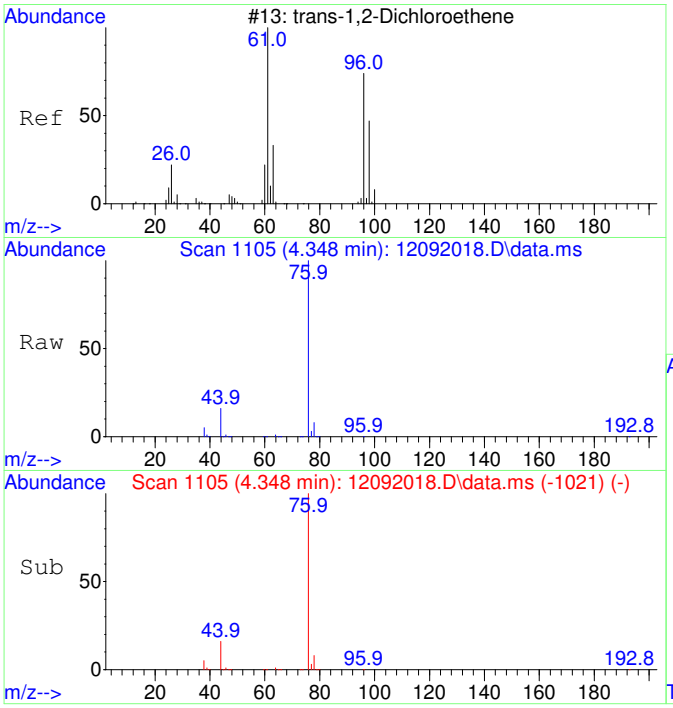


#26
1,1-Dichloroethene SCAN
Concen: 33.47 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.003 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 148

Ion	Ratio	Lower	Upper
61	100		
96	37.2	33.1	93.1
98	66.9	11.2	71.2

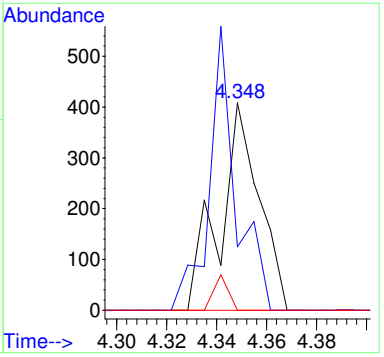


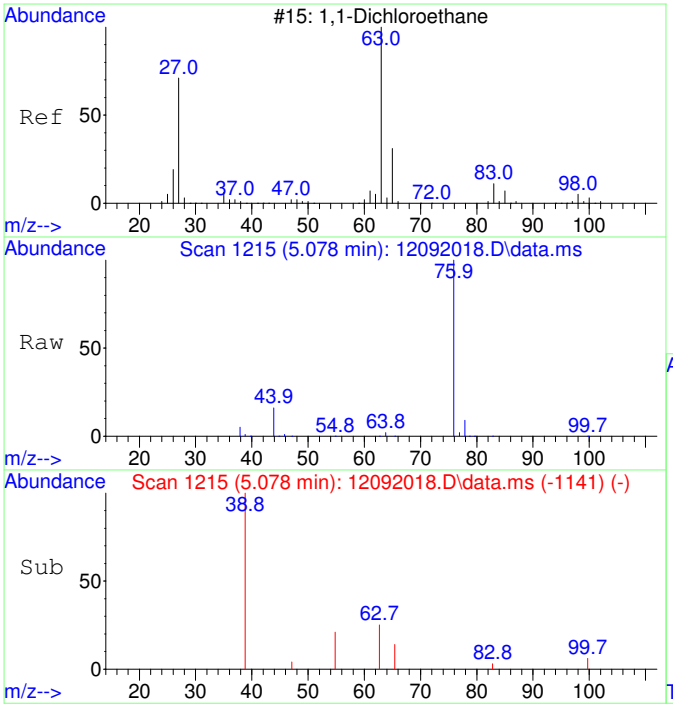


#27
trans-1,2-Dichloroethene SCAN
Concen: 79.19 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 446

Ion	Ratio	Lower	Upper
61	100		
96	92.4	49.0	109.0
98	0.0	20.5	80.5#

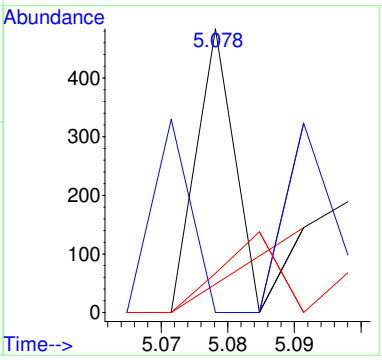


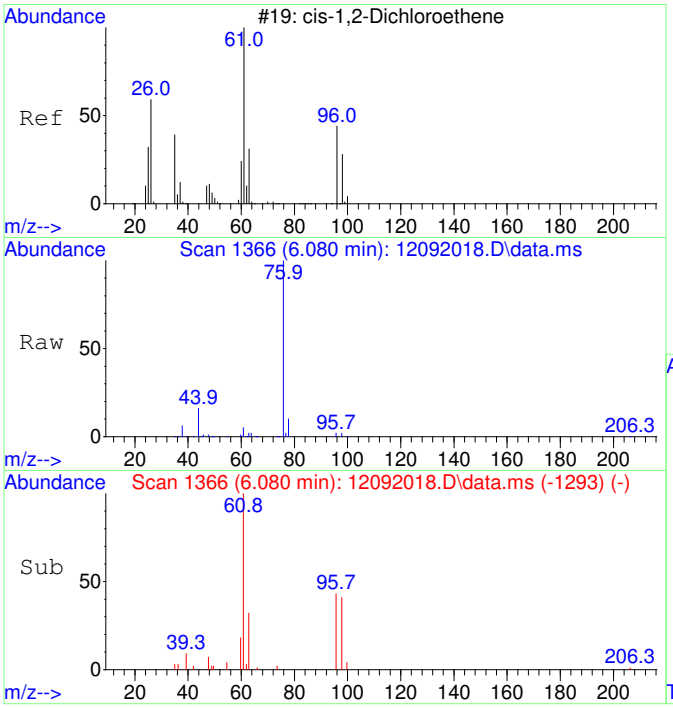


#28
1,1-Dichloroethane SCAN
Concen: 24.67 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 63 Resp: 164

Ion	Ratio	Lower	Upper
63	100		
65	136.0	1.3	61.3#
83	66.5	0.0	45.9#

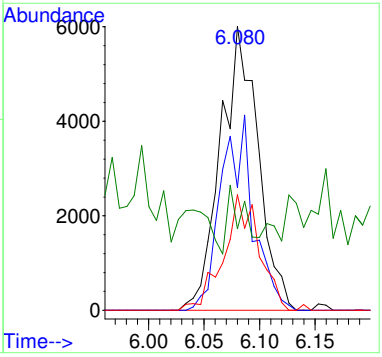


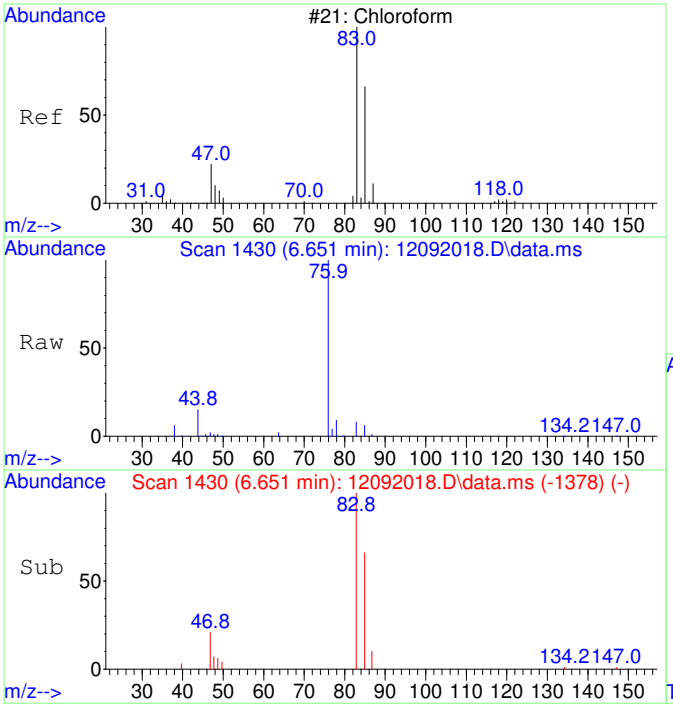


#29
cis-1,2-Dichloroethene SCAN
Concen: 2166.69 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 61 Resp: 14159

Ion	Ratio	Lower	Upper
61	100		
96	58.5	39.9	99.9
98	38.3	13.5	73.5
64	8.3	4.5	64.5

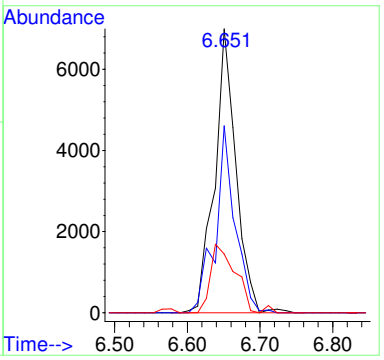


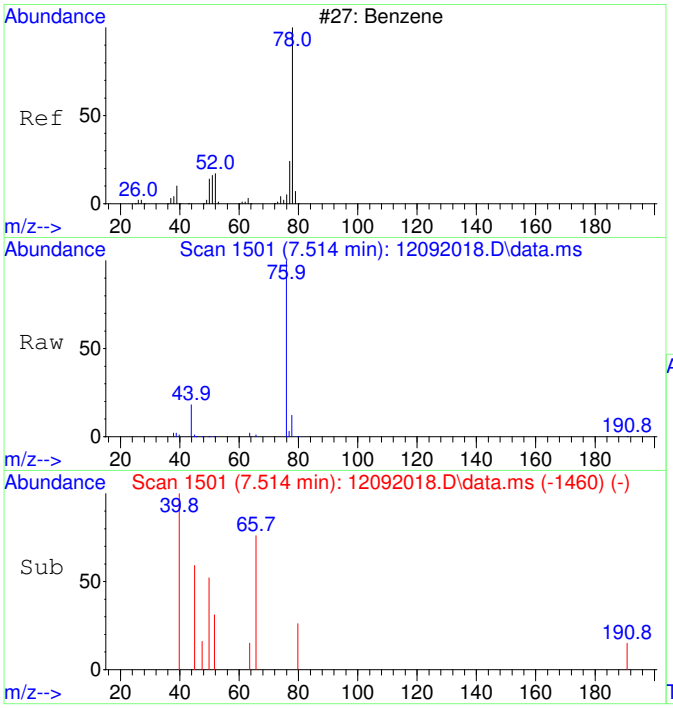


#30
Chloroform SCAN
Concen: 2360.55 ug/L
RT: 6.651 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 83 Resp: 14388

Ion	Ratio	Lower	Upper
83	100		
85	60.7	34.6	94.6
47	27.7	0.0	53.4

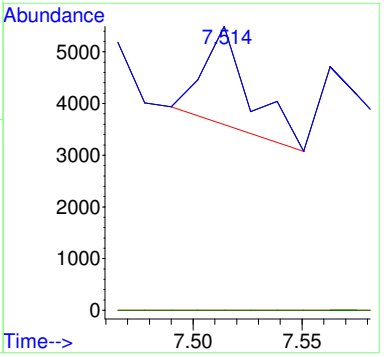


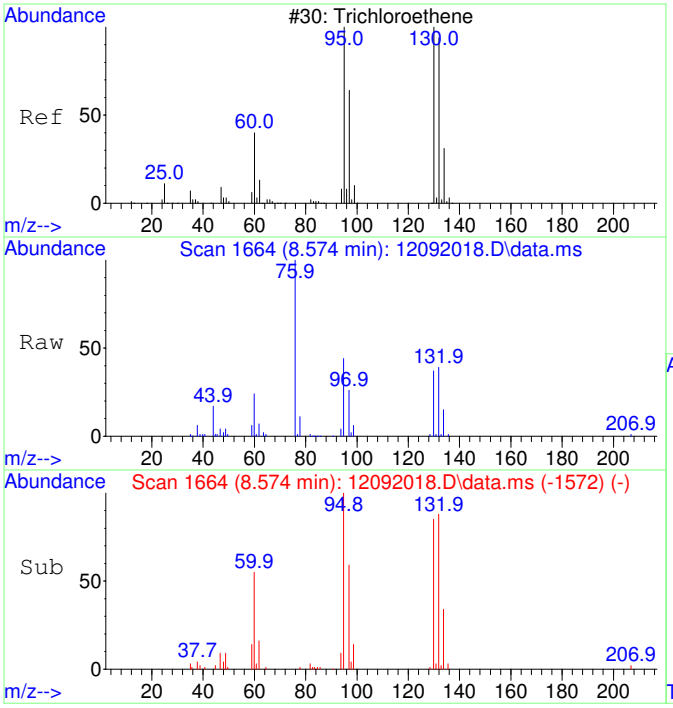


#33
Benzene SCAN
Concen: 129.54 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 78 Resp: 2465

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

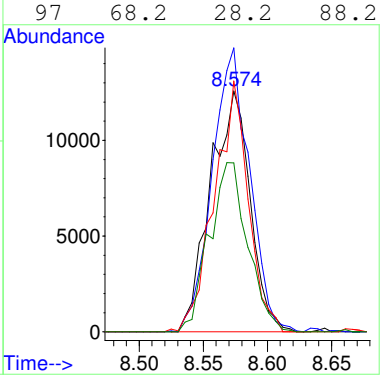


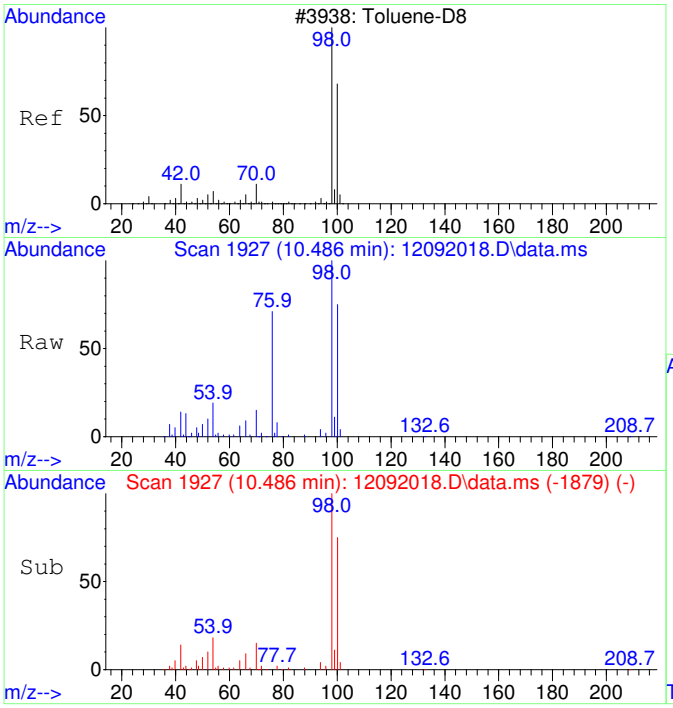


#35
Trichloroethene SCAN
Concen: 6522.32 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:130 Resp: 27062

Ion	Ratio	Lower	Upper
130	100		
95	111.2	60.5	120.5
132	89.0	59.6	119.6
97	68.2	28.2	88.2

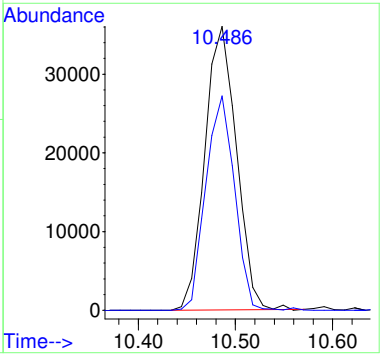


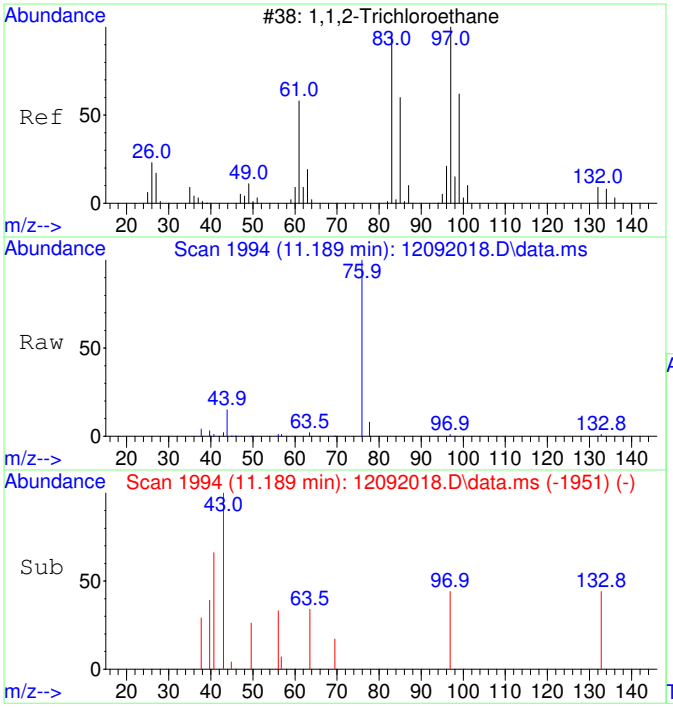


#36
Toluene-d8 SCAN
Concen: 4584.76 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 98 Resp: 81441

Ion	Ratio	Lower	Upper
98	100		
100	68.4	40.0	100.0

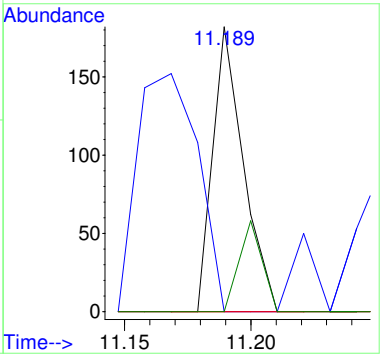


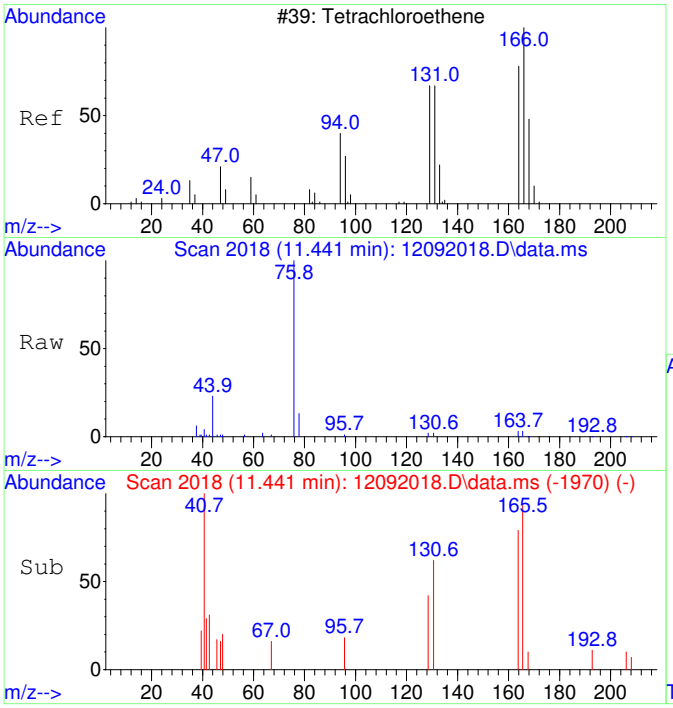


#38
1,1,2-Trichloroethane SCAN
Concen: 28.09 ug/L
RT: 11.189 min Scan# 1994
Delta R.T. -0.052 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion: 97 Resp: 154

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#

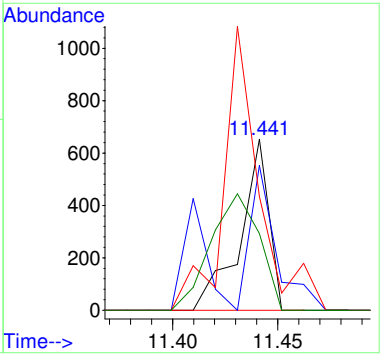




#39
Tetrachloroethene SCAN
Concen: 125.20 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092018.D
Acq: 9 Dec 2020 15:35

Tgt Ion:166 Resp: 616

Ion	Ratio	Lower	Upper
166	100		
164	77.6	50.9	110.9
131	206.3	38.7	98.7#
129	115.6	41.8	101.8#



2012007-12

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092019.D
Acq On : 9 Dec 2020 15:59
InstName : AG5975C
Operator : TD
Sample : 2012007-12
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 10 05:55:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

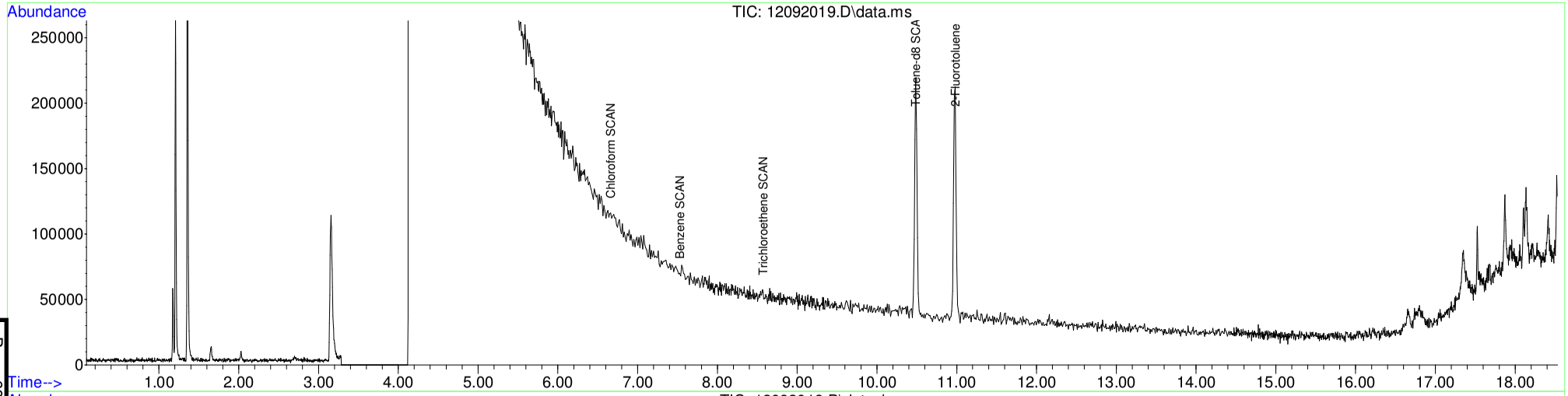
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	264329	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	223197	4359.83	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.20%			
Target Compounds						Qvalue
6] Chloroform	6.652	83	654	41.66	ug/L	87
9] Benzene	7.515	78	2262	50.86	ug/L	44
11] Trichloroethene	8.575	130	584	41.59	ug/L	95
25) 2-Fluorotoluene SCAN	10.979	109	143027	4766.92	ug/L	95
30) Chloroform SCAN	6.663	83	718	74.36	ug/L #	39
33) Benzene SCAN	7.526	78	1175	38.98	ug/L #	63
35) Trichloroethene SCAN	8.568	130	358	54.47	ug/L #	57
36) Toluene-d8 SCAN	10.486	98	133399	4740.46	ug/L	96

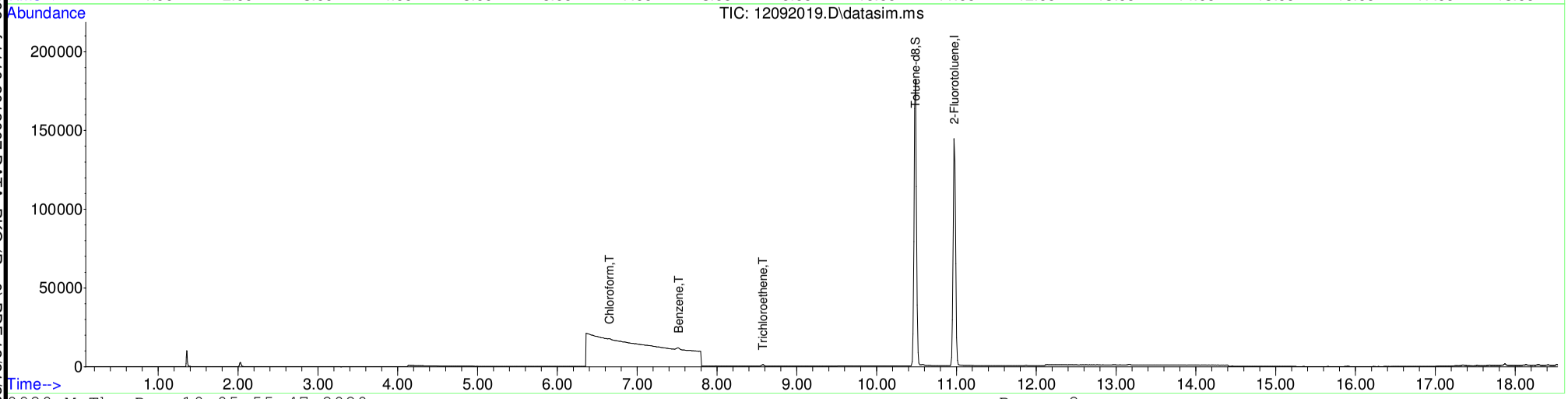
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092019.D
Acq On : 9 Dec 2020 15:59
InstName : AG5975C
Operator : TD
Sample : 2012007-12
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 10 05:55:46 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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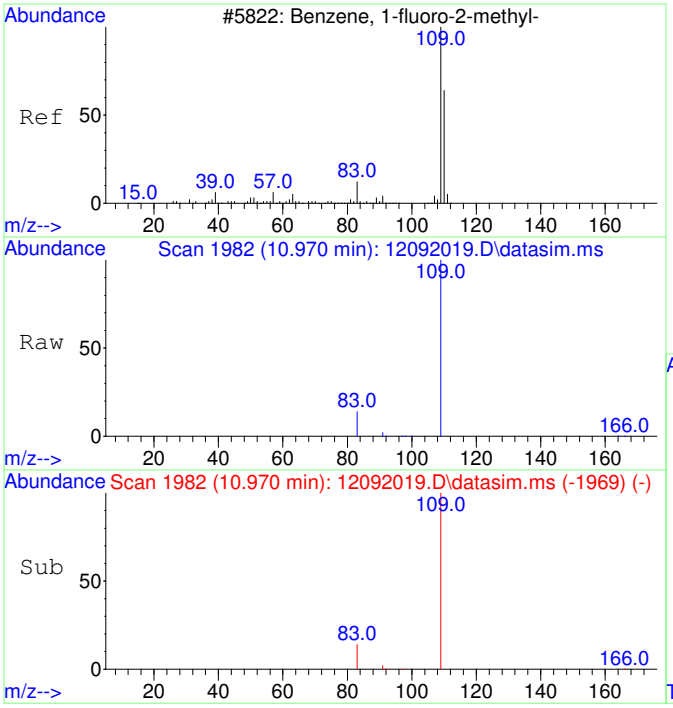
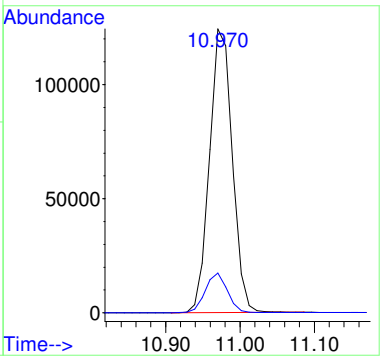
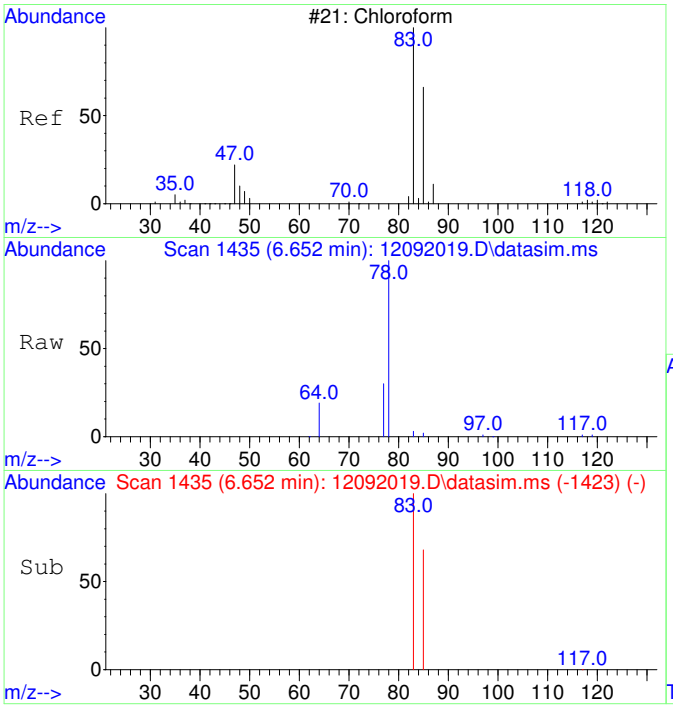


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion:109 Resp: 264329

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

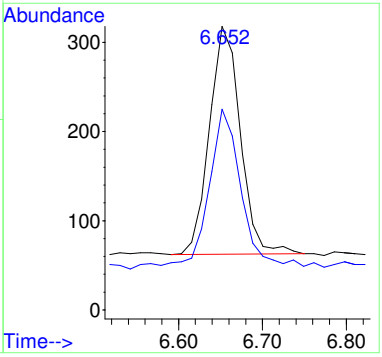


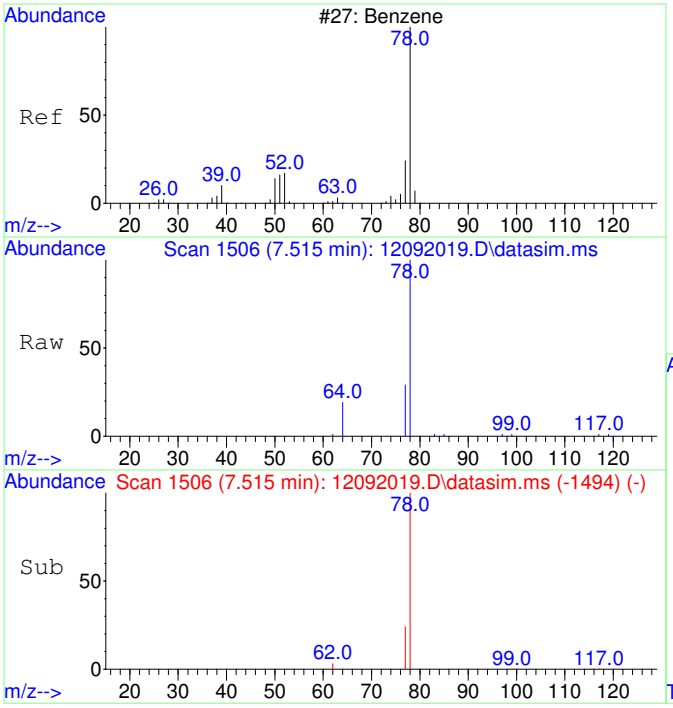


#6
Chloroform
Concen: 41.66 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 83 Resp: 654

Ion	Ratio	Lower	Upper
83	100		
85	75.4	35.1	95.1

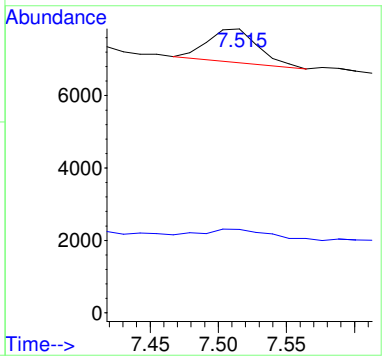


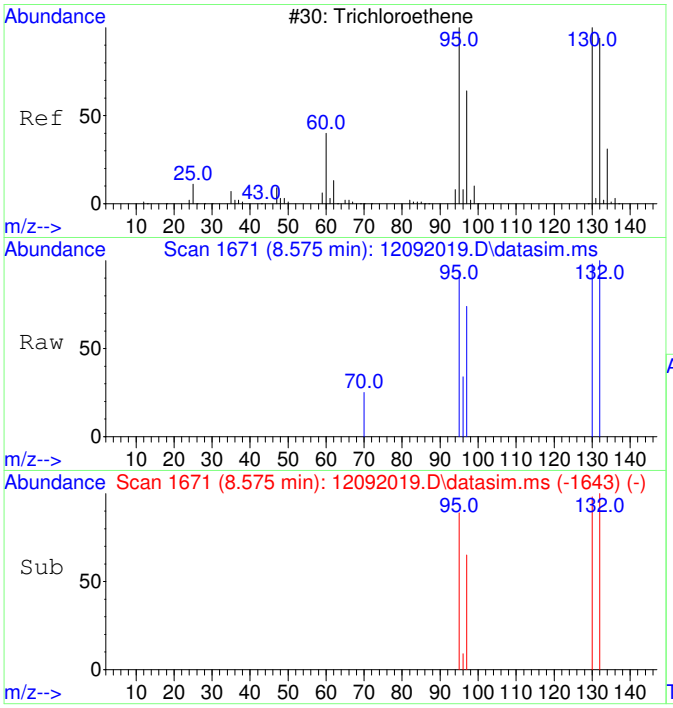


#9
Benzene
Concen: 50.86 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 78 Resp: 2262

Ion	Ratio	Lower	Upper
78	100		
77	50.6	0.0	53.2

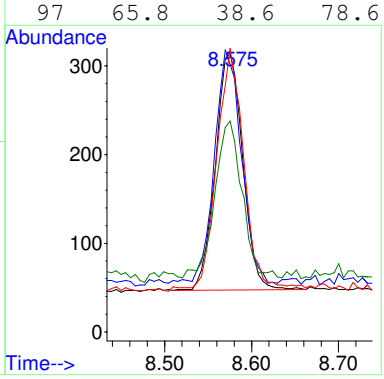


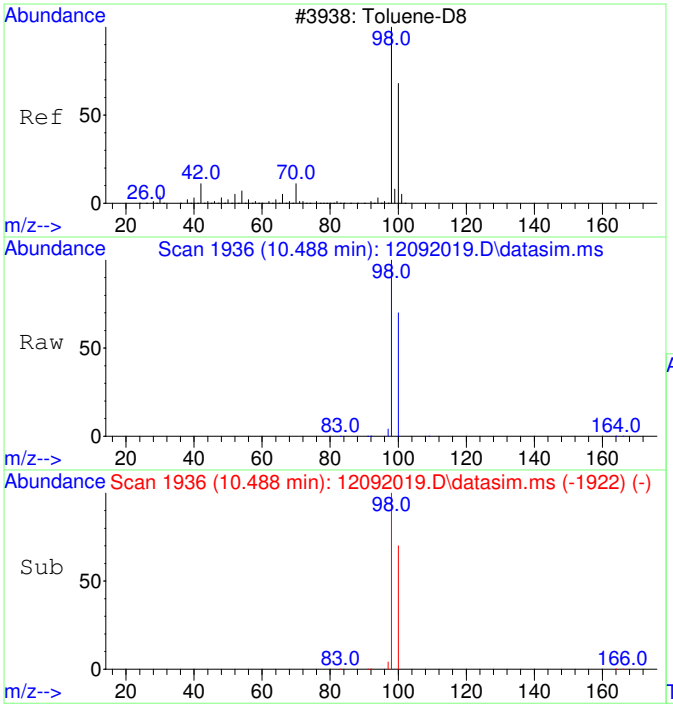


#11
Trichloroethene
Concen: 41.59 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion:130 Resp: 584

Ion	Ratio	Lower	Upper
130	100		
95	96.7	60.7	120.7
132	95.0	76.0	116.0
97	65.8	38.6	78.6

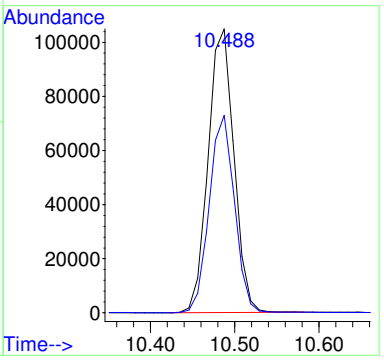


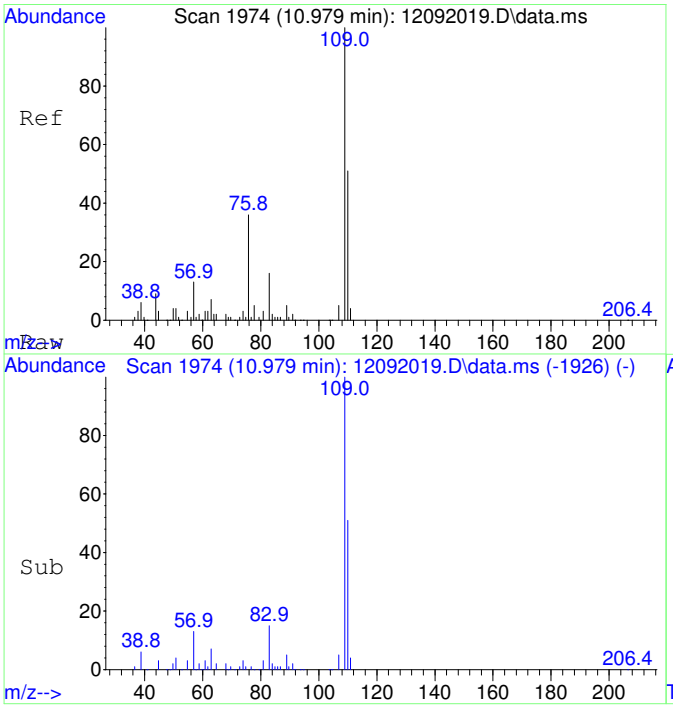


#12
Toluene-d8
Concen: 4359.83 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 98 Resp: 223197

Ion	Ratio	Lower	Upper
98	100		
100	68.0	37.1	97.1

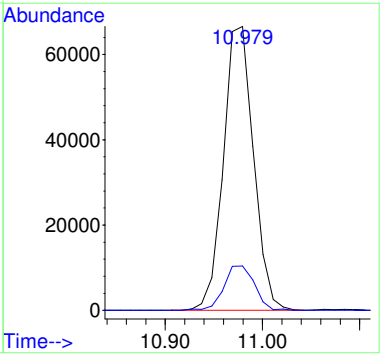


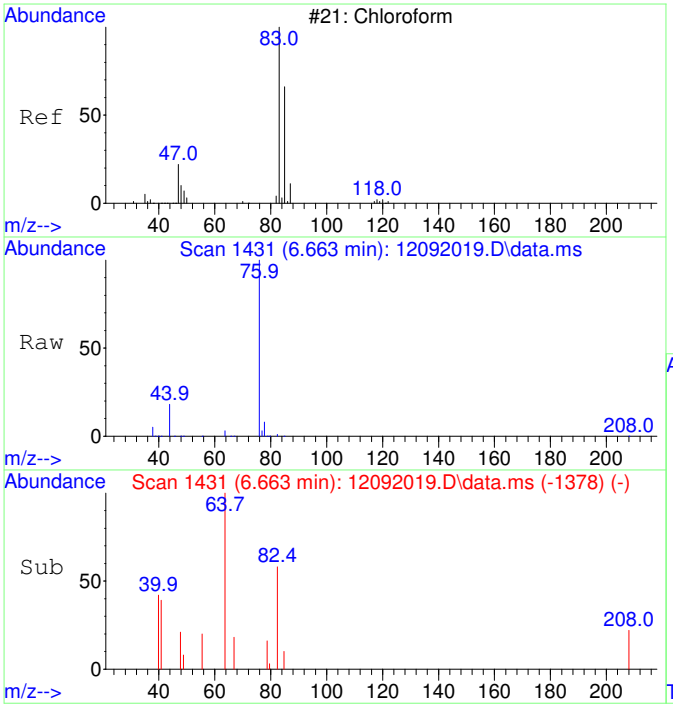


#25
2-Fluorotoluene SCAN
Concen: 4766.92 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion:109 Resp: 143027

Ion	Ratio	Lower	Upper
109	100		
83	16.0	0.0	43.8

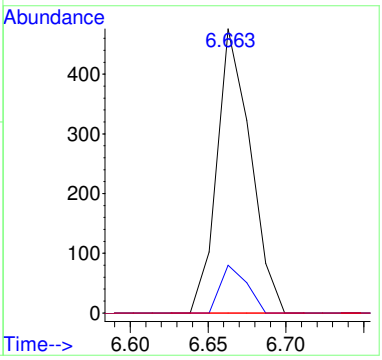


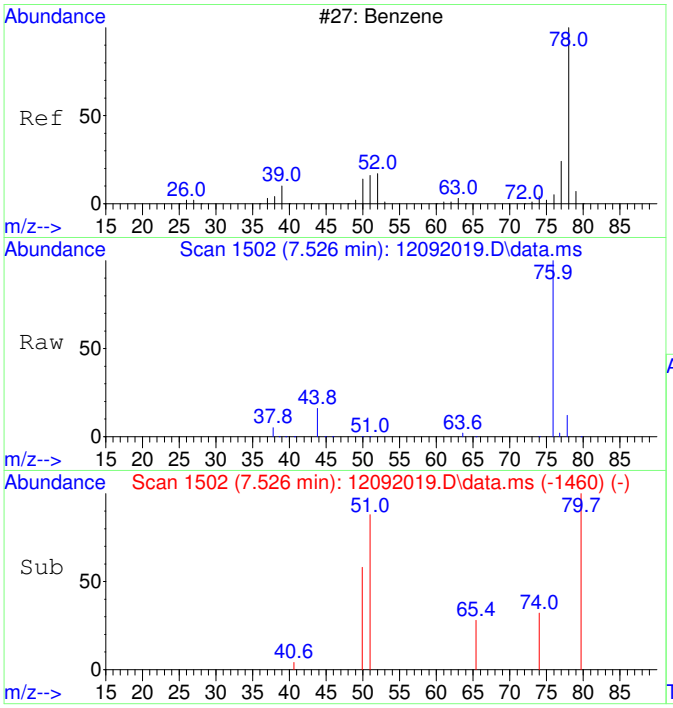


#30
Chloroform SCAN
Concen: 74.36 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 83 Resp: 718

Ion	Ratio	Lower	Upper
83	100		
85	13.4	34.6	94.6#
47	0.0	0.0	53.4

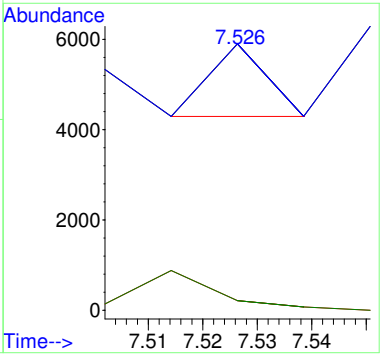


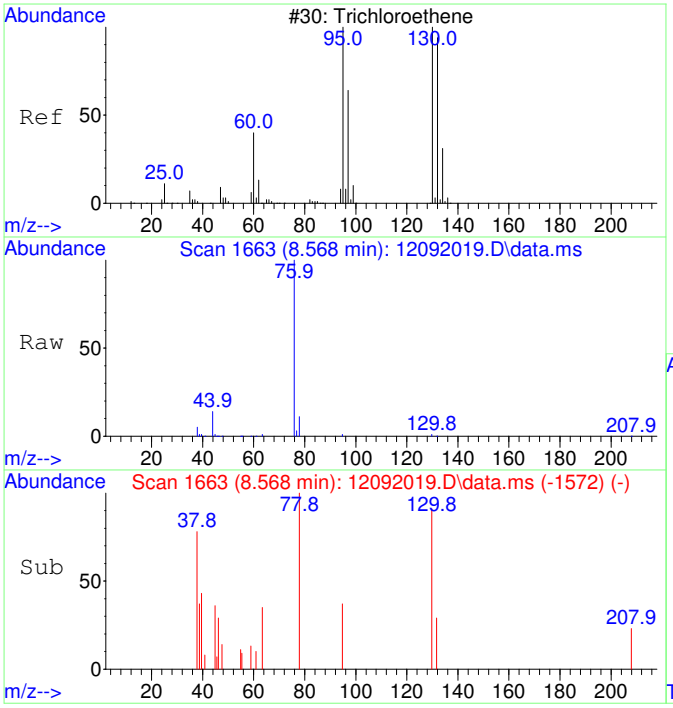


#33
Benzene SCAN
Concen: 38.98 ug/L
RT: 7.526 min Scan# 1502
Delta R.T. 0.012 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 78 Resp: 1175

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	81.1	0.0	47.9#
51	81.1	0.0	44.1#

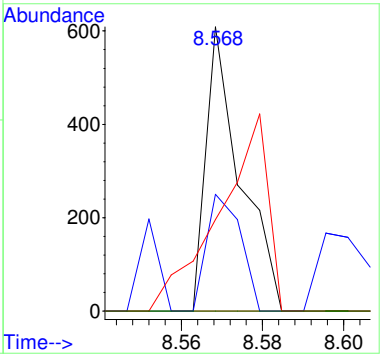


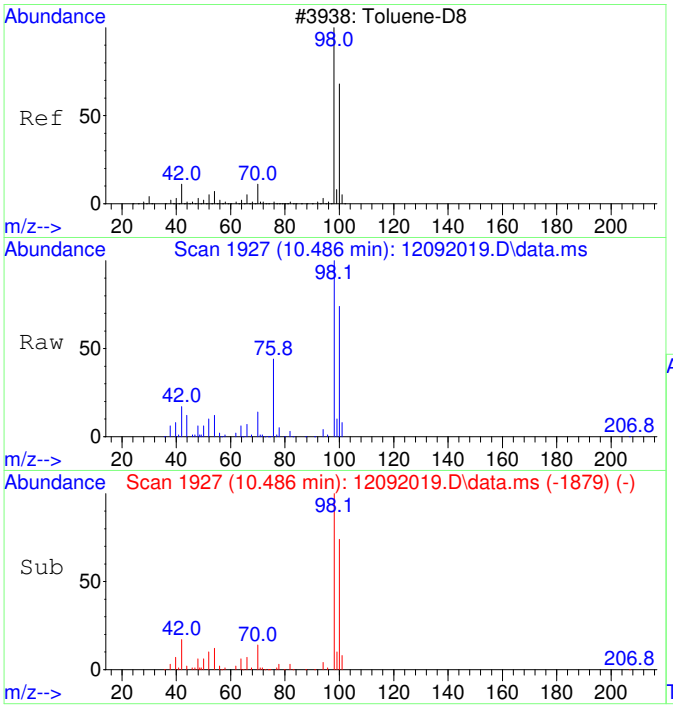


#35
Trichloroethene SCAN
Concen: 54.47 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion:130 Resp: 358

Ion	Ratio	Lower	Upper
130	100		
95	40.8	60.5	120.5#
132	98.3	59.6	119.6
97	0.0	28.2	88.2#

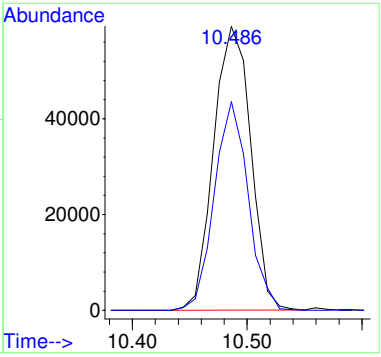




#36
Toluene-d8 SCAN
Concen: 4740.46 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092019.D
Acq: 9 Dec 2020 15:59

Tgt Ion: 98 Resp: 133399

Ion	Ratio	Lower	Upper
98	100		
100	67.0	40.0	100.0



2012007-13

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092020.D
Acq On : 9 Dec 2020 16:22
InstName : AG5975C
Operator : TD
Sample : 2012007-13
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 10 05:55:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

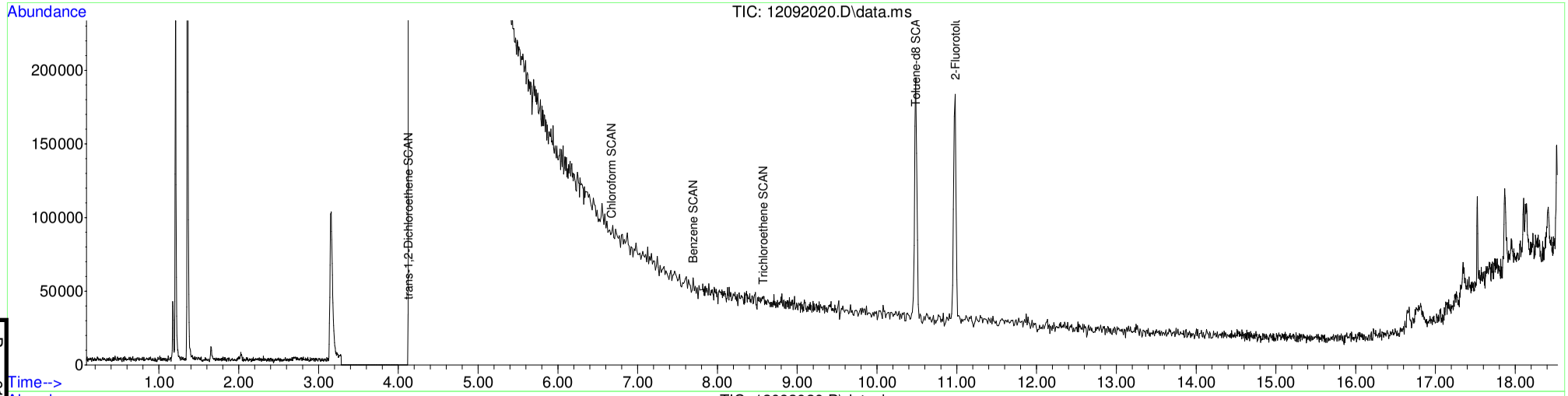
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	224126	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	192262	4429.22	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.58%			
Target Compounds						Qvalue
6] Chloroform	6.652	83	1704	128.01	ug/L	98
9] Benzene	7.503	78	2100	55.68	ug/L	57
11] Trichloroethene	8.575	130	451	37.88	ug/L	93
25) 2-Fluorotoluene SCAN	10.979	109	120579	4739.63	ug/L	95
27) trans-1,2-Dichloroethe...	4.123	61	319	42.17	ug/L #	17
30) Chloroform SCAN	6.675	83	855	104.43	ug/L #	27
33) Benzene SCAN	7.697	78	1895	74.14	ug/L	94
35) Trichloroethene SCAN	8.574	130	251	45.04	ug/L #	33
36) Toluene-d8 SCAN	10.486	98	116567	4885.35	ug/L	99

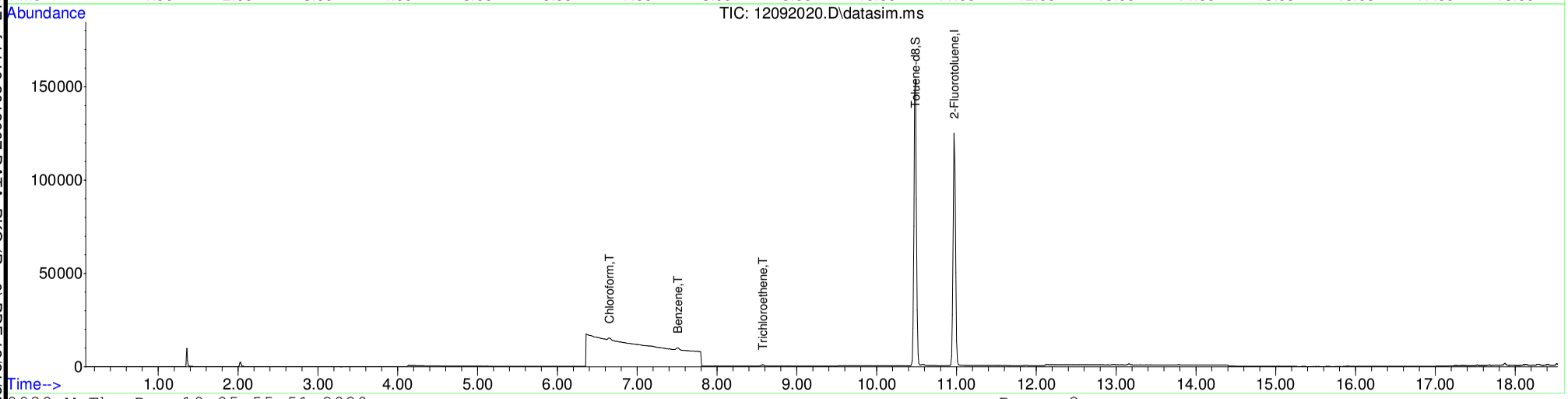
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092020.D
Acq On : 9 Dec 2020 16:22
InstName : AG5975C
Operator : TD
Sample : 2012007-13
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 10 05:55:50 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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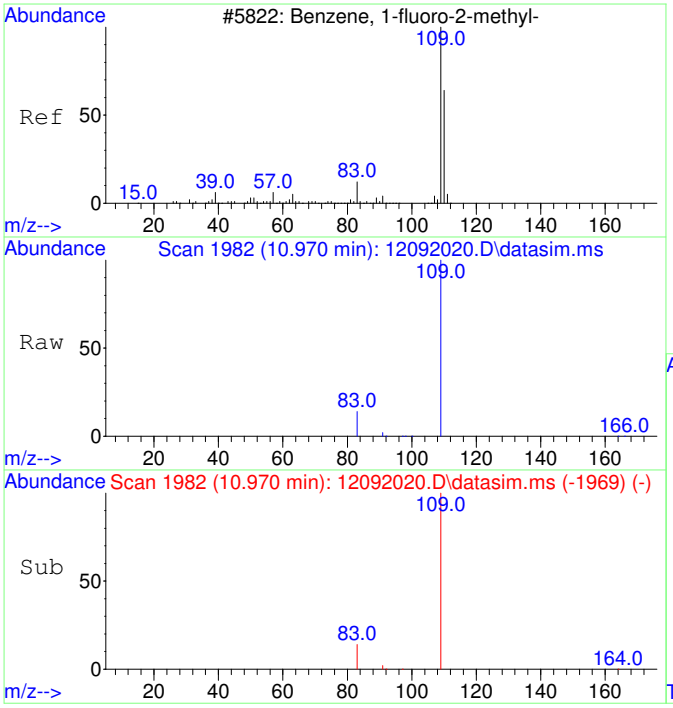
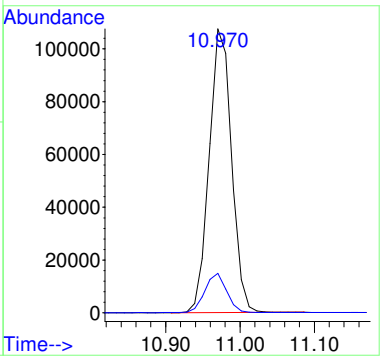
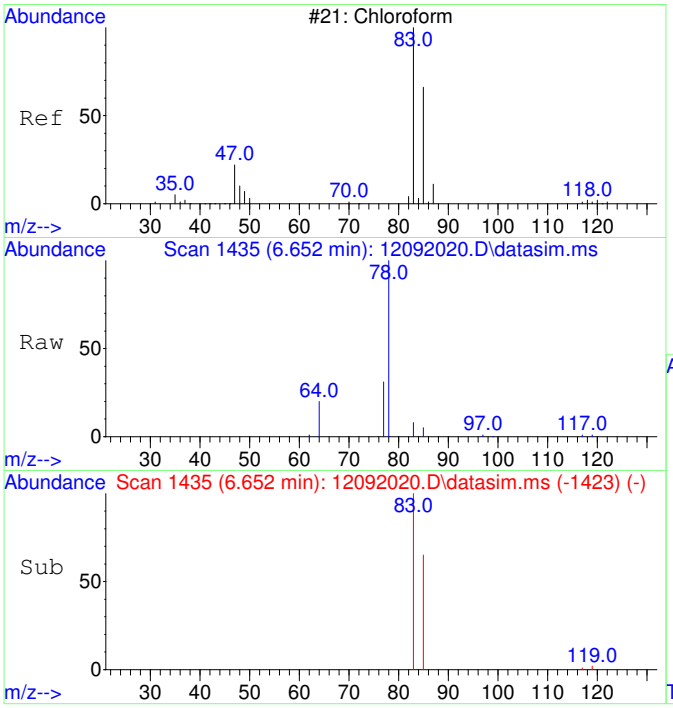


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion:109 Resp: 224126

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

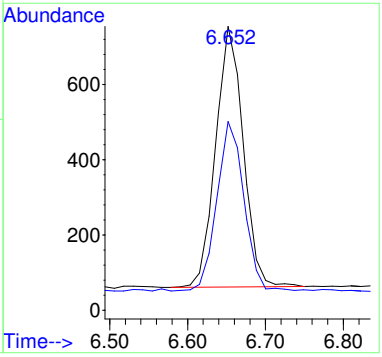


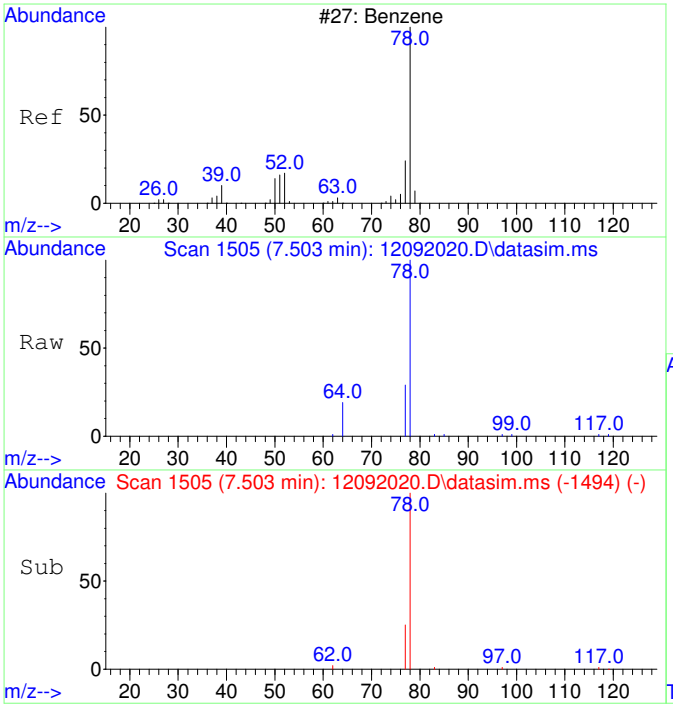


#6
Chloroform
Concen: 128.01 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 83 Resp: 1704

Ion	Ratio	Lower	Upper
83	100		
85	63.6	35.1	95.1

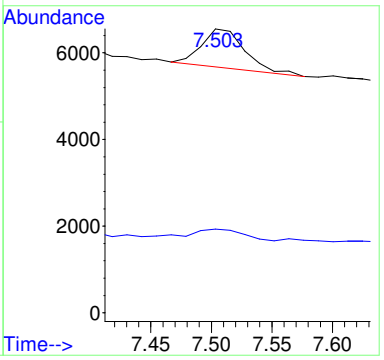


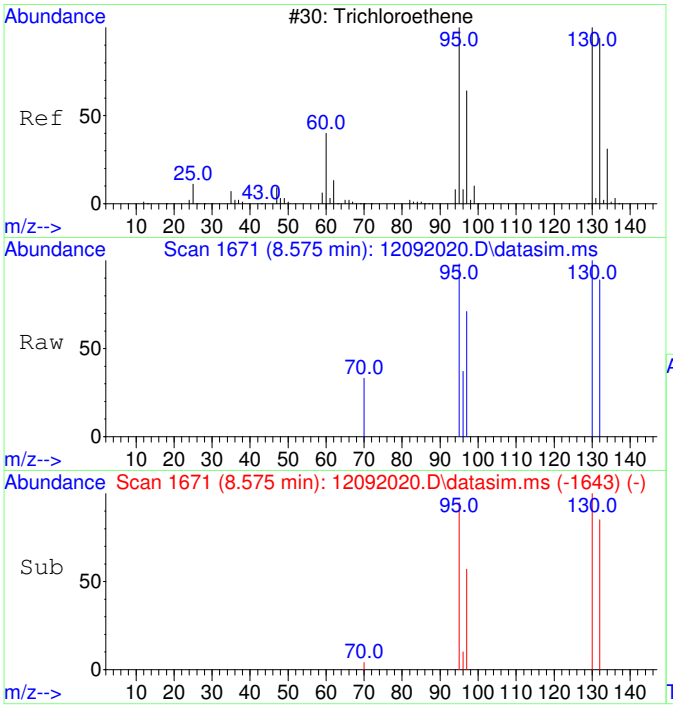


#9
Benzene
Concen: 55.68 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 78 Resp: 2100

Ion	Ratio	Lower	Upper
78	100		
77	44.0	0.0	53.2

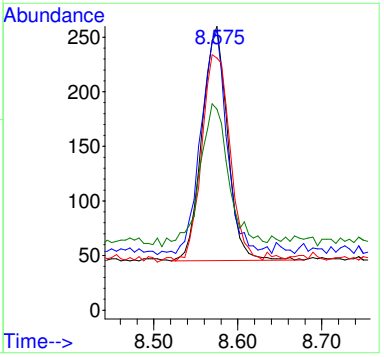


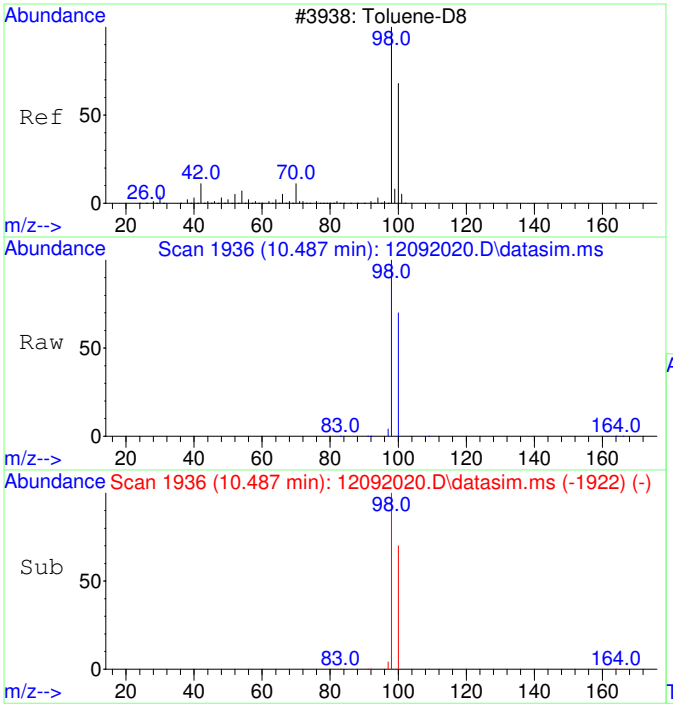


#11
Trichloroethene
Concen: 37.88 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion:130 Resp: 451

Ion	Ratio	Lower	Upper
130	100		
95	98.2	60.7	120.7
132	96.5	76.0	116.0
97	70.1	38.6	78.6

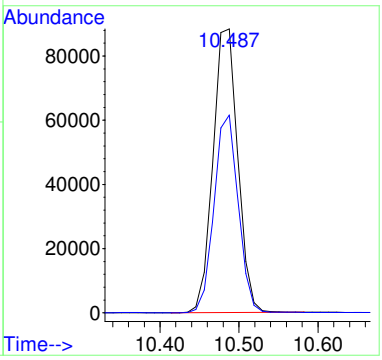


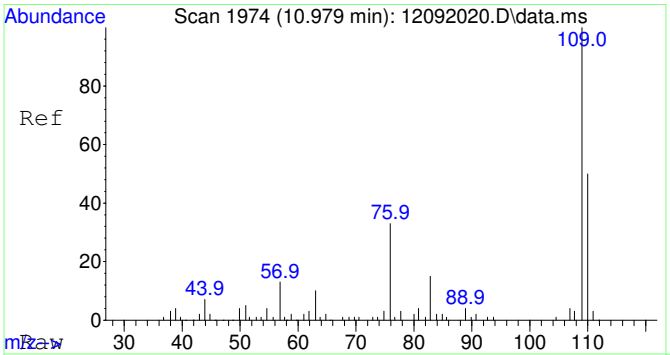


#12
Toluene-d8
Concen: 4429.22 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 98 Resp: 192262

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

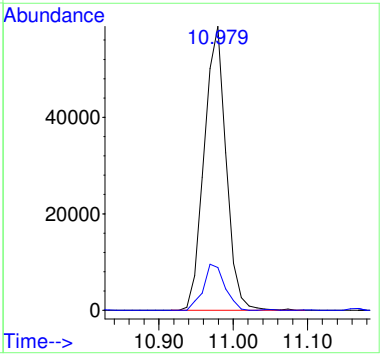


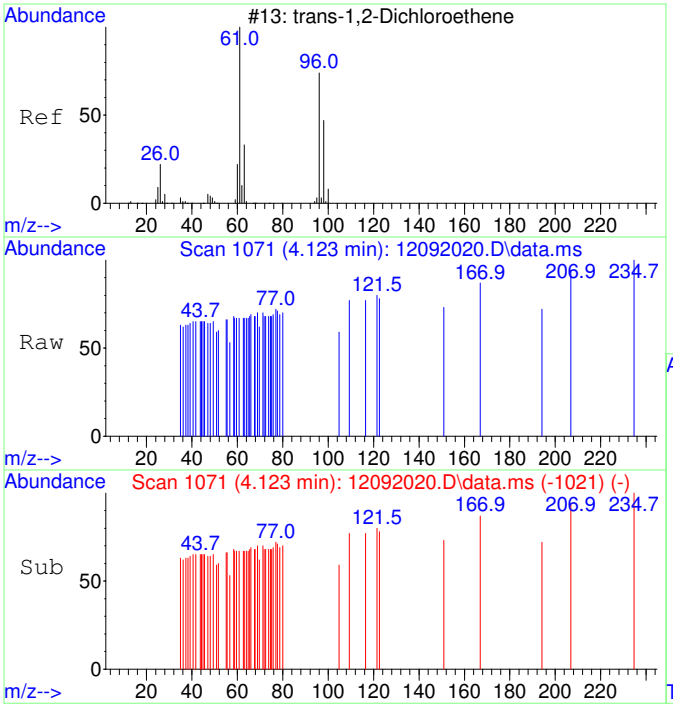


#25
2-Fluorotoluene SCAN
Concen: 4739.63 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion:109 Resp: 120579

Ion	Ratio	Lower	Upper
109	100		
83	16.0	0.0	43.8

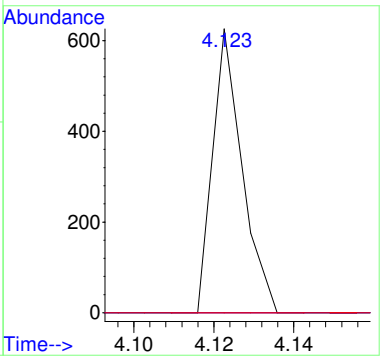


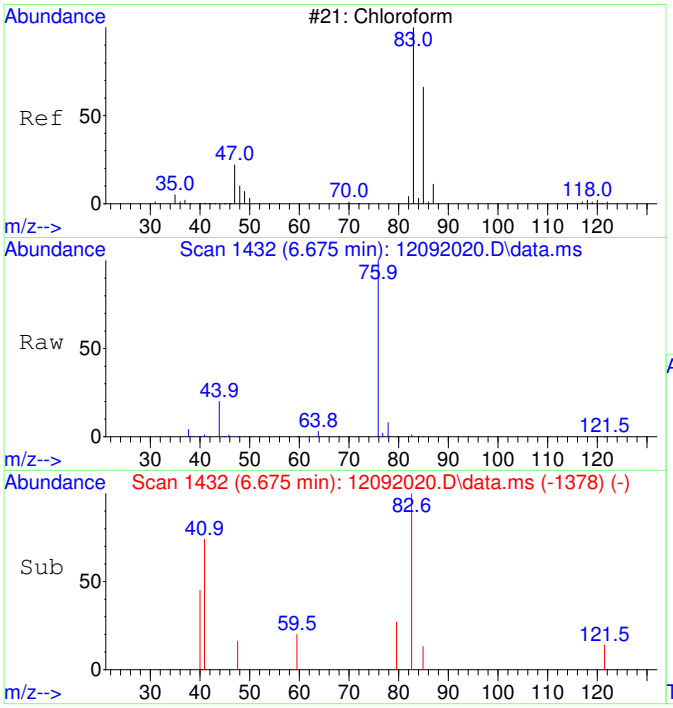


#27
trans-1,2-Dichloroethene SCAN
Concen: 42.17 ug/L
RT: 4.123 min Scan# 1071
Delta R.T. -0.259 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 61 Resp: 319

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

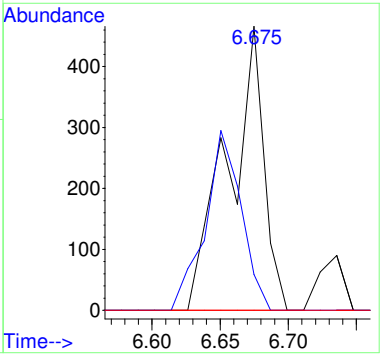


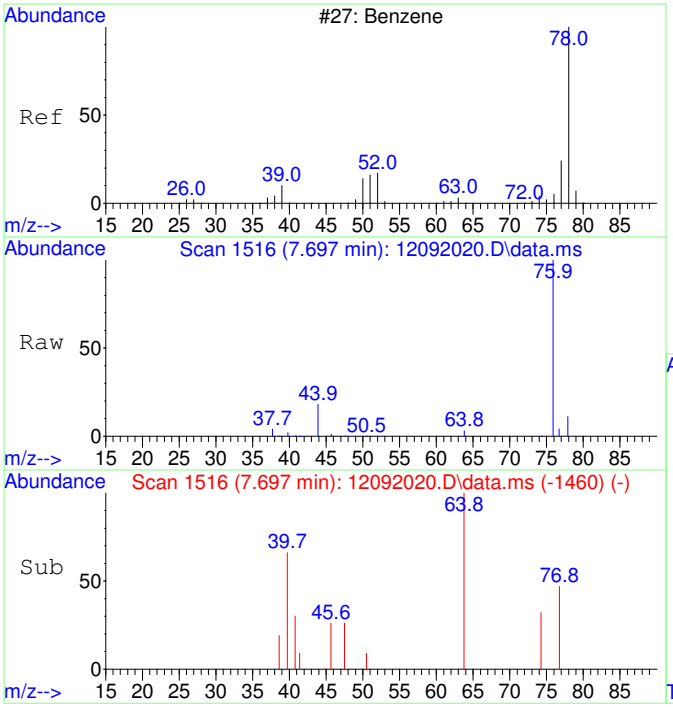


#30
Chloroform SCAN
Concen: 104.43 ug/L
RT: 6.675 min Scan# 1432
Delta R.T. 0.012 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 83 Resp: 855

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

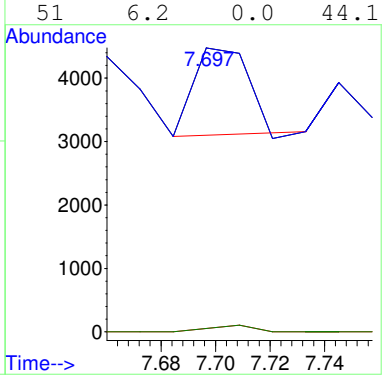


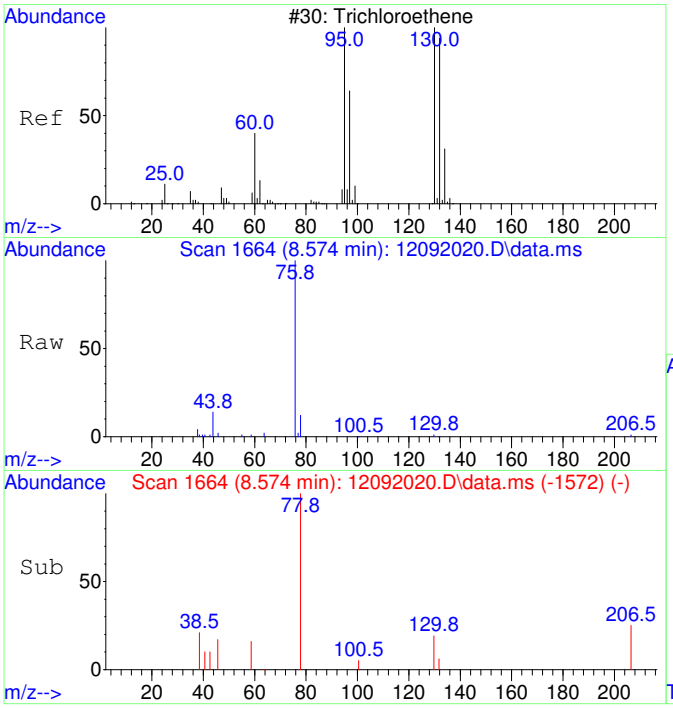


#33
Benzene SCAN
Concen: 74.14 ug/L
RT: 7.697 min Scan# 1516
Delta R.T. 0.183 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 78 Resp: 1895

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	6.2	0.0	47.9
51	6.2	0.0	44.1

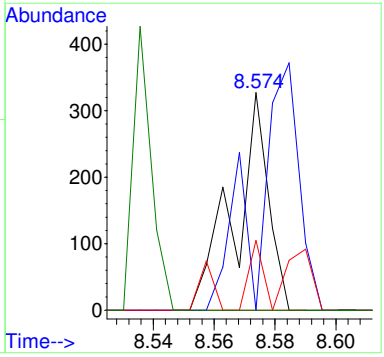


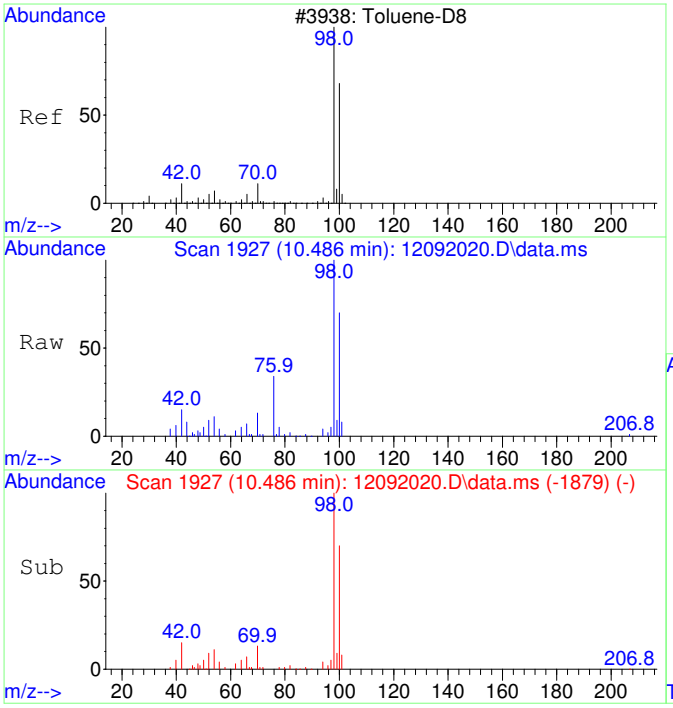


#35
Trichloroethene SCAN
Concen: 45.04 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion:130 Resp: 251

Ion	Ratio	Lower	Upper
130	100		
95	141.4	60.5	120.5#
132	21.9	59.6	119.6#
97	0.0	28.2	88.2#

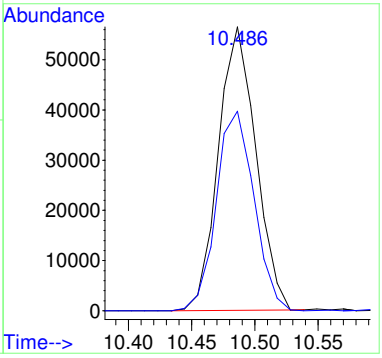




#36
Toluene-d8 SCAN
Concen: 4885.35 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092020.D
Acq: 9 Dec 2020 16:22

Tgt Ion: 98 Resp: 116567

Ion	Ratio	Lower	Upper
98	100		
100	71.1	40.0	100.0



2012007-14

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092021.D
Acq On : 9 Dec 2020 16:46
InstName : AG5975C
Operator : TD
Sample : 2012007-14
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 10 05:55:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

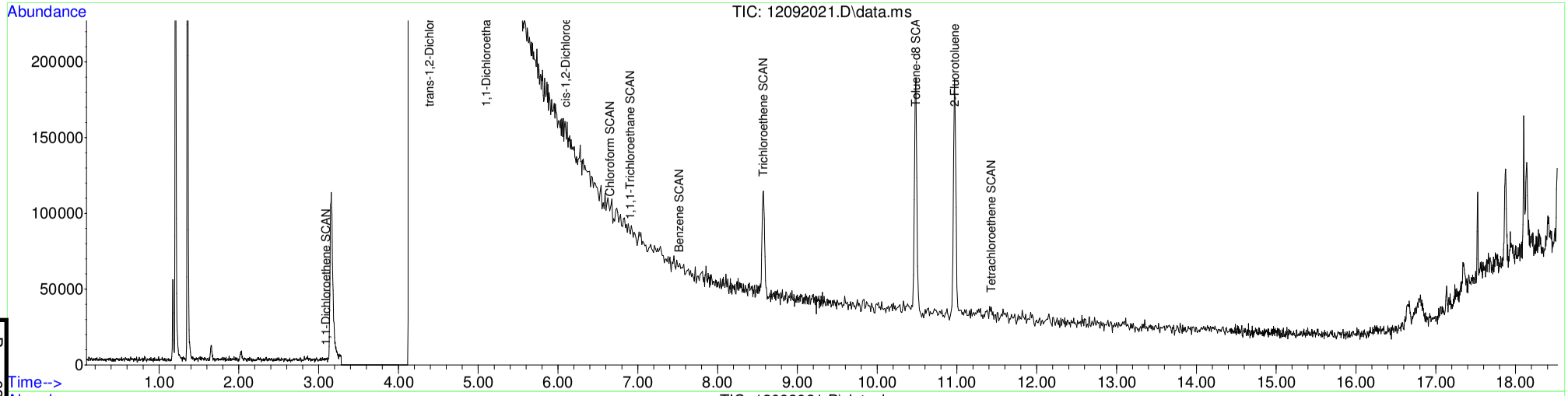
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	223614	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	191314	4417.47	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.35%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	1728	194.89	ug/L	70
3] trans-1,2-Dichloroethene	4.383	61	1592	142.42	ug/L	95
4] 1,1-Dichloroethane	5.092	63	1728	129.43	ug/L	95
5] cis-1,2-Dichloroethene	6.094	61	17046	1232.78	ug/L	98
6] Chloroform	6.652	83	3209	241.62	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	580	40.65	ug/L	98
9] Benzene	7.515	78	1935	51.42	ug/L #	24
11] Trichloroethene	8.570	130	47130	3967.09	ug/L	97
15] Tetrachloroethene	11.432	166	3284	195.53	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	129208	5090.44	ug/L	93
26) 1,1-Dichloroethene SCAN	3.092	61	329	55.52	ug/L #	25
27) trans-1,2-Dichloroethe...	4.388	61	702	93.01	ug/L	91
28) 1,1-Dichloroethane SCAN	5.098	63	527	59.16	ug/L #	18
29) cis-1,2-Dichloroethene...	6.086	61	11211	1280.11	ug/L	89
30) Chloroform SCAN	6.650	83	2760	337.88	ug/L #	64
31) 1,1,1-Trichloroethane ...	6.906	97	322	38.20	ug/L #	19
33) Benzene SCAN	7.514	78	8599	337.20	ug/L	95
35) Trichloroethene SCAN	8.574	130	24548	4414.67	ug/L	79
36) Toluene-d8 SCAN	10.486	98	114507	4810.00	ug/L	97
39) Tetrachloroethene SCAN	11.431	166	1412	214.14	ug/L #	68

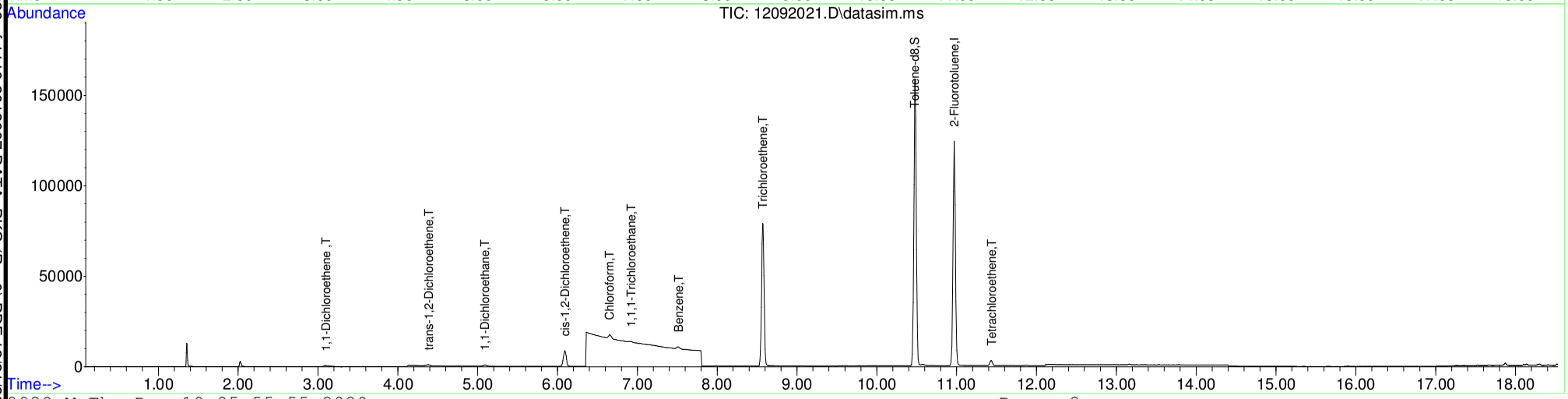
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092021.D
Acq On : 9 Dec 2020 16:46
InstName : AG5975C
Operator : TD
Sample : 2012007-14
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 10 05:55:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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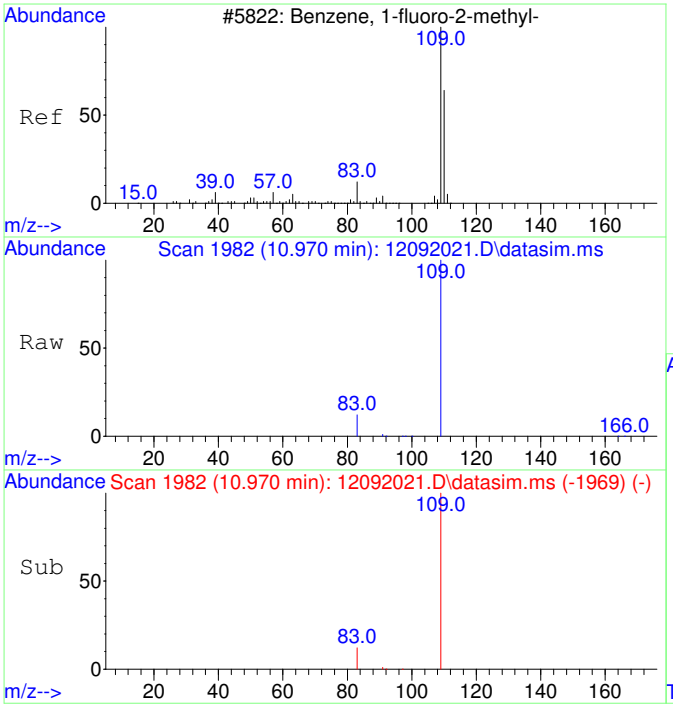
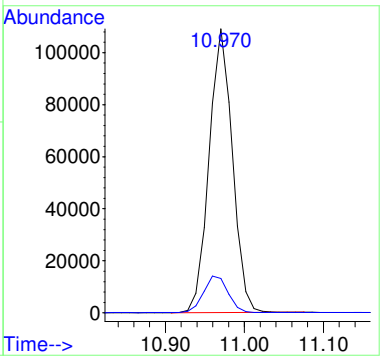
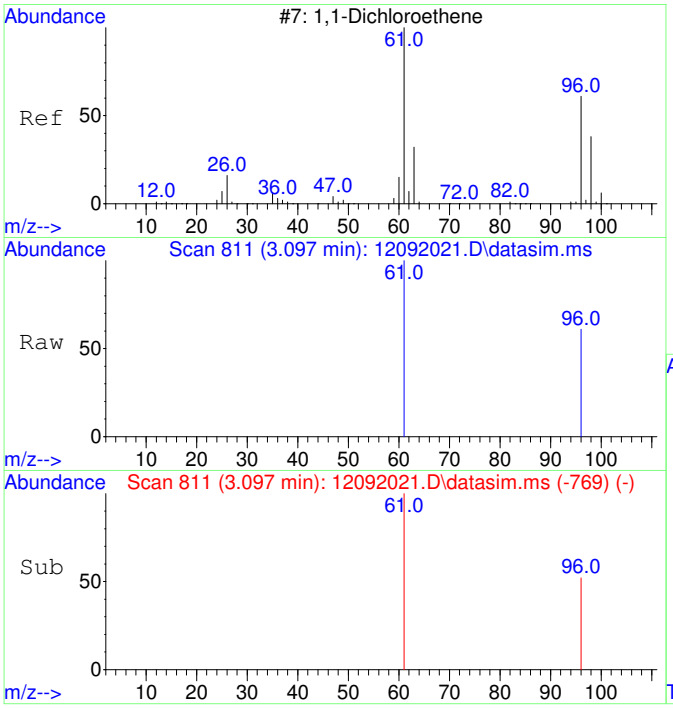


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:109 Resp: 223614

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

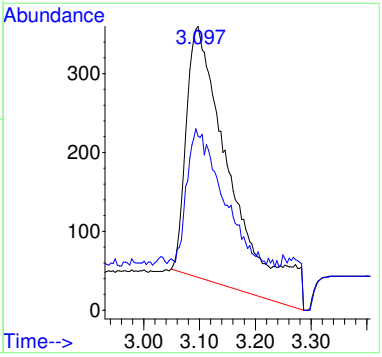




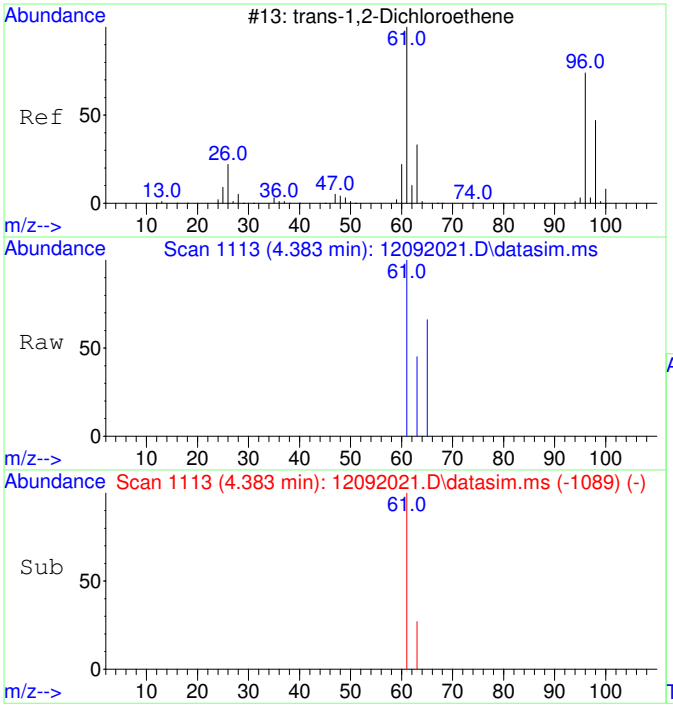
#2
1,1-Dichloroethene
Concen: 194.89 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 1728

Ion	Ratio	Lower	Upper
61	100		
96	43.2	37.2	97.2



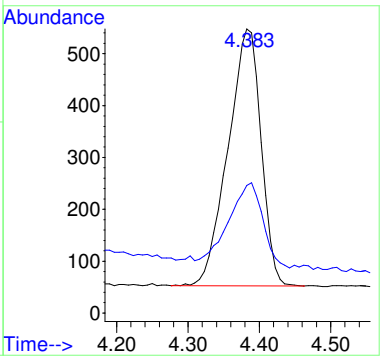
Before MI:
IMPROPER
BASELINE

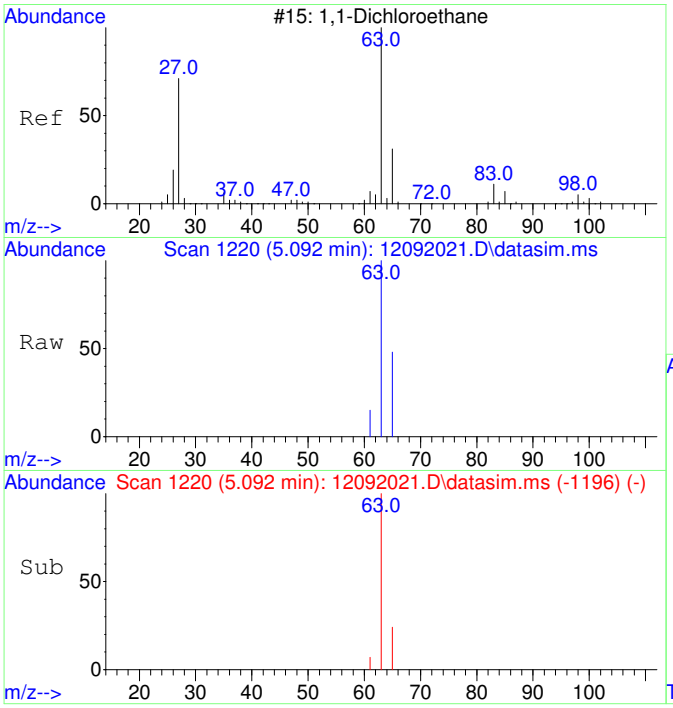


#3
trans-1,2-Dichloroethene
Concen: 142.42 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 1592

Ion	Ratio	Lower	Upper
61	100		
63	35.3	2.4	62.4

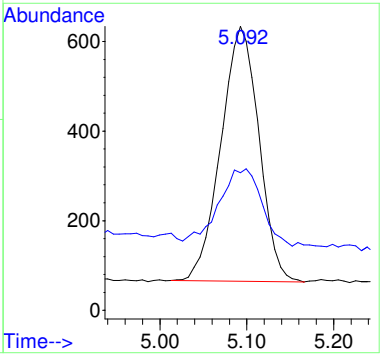


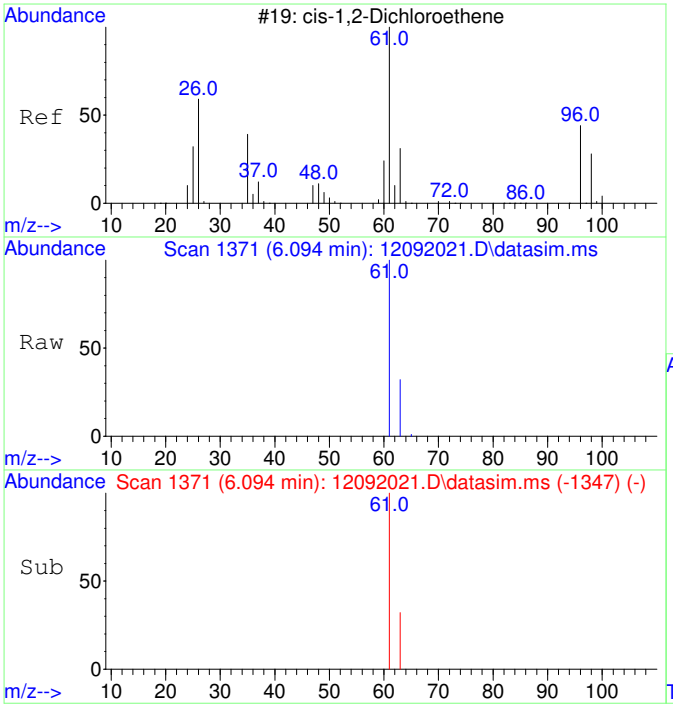


#4
1,1-Dichloroethane
Concen: 129.43 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 63 Resp: 1728

Ion	Ratio	Lower	Upper
63	100		
65	34.7	1.8	61.8

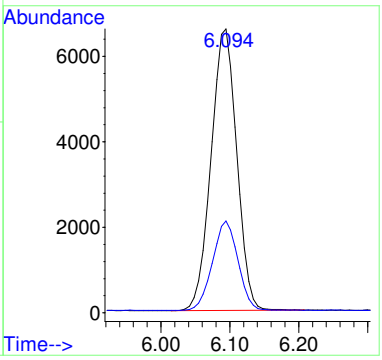


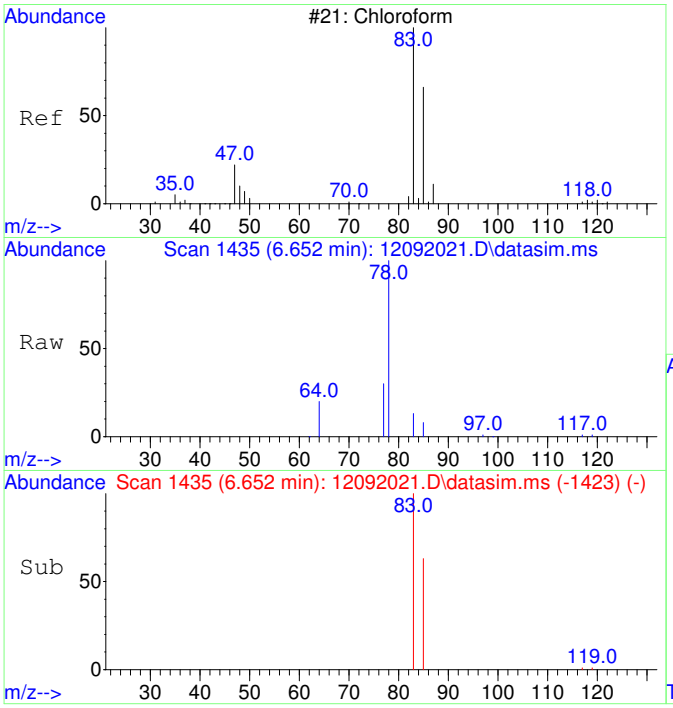


#5
cis-1,2-Dichloroethene
Concen: 1232.78 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 17046

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

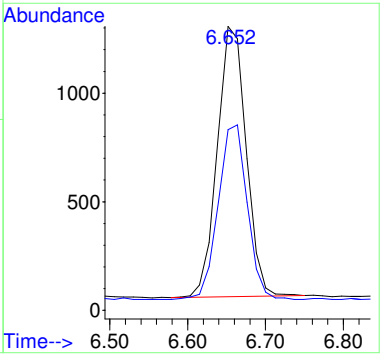


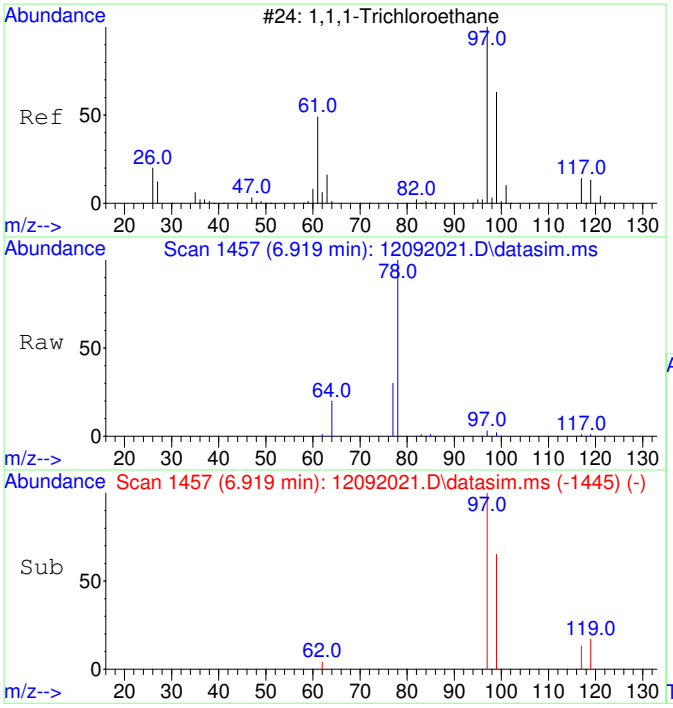


#6
Chloroform
Concen: 241.62 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 83 Resp: 3209

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

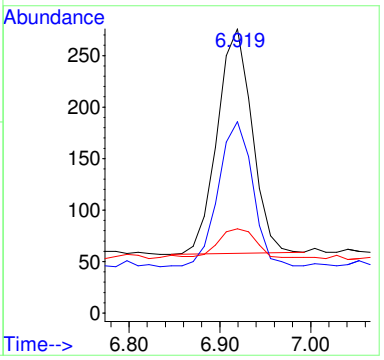


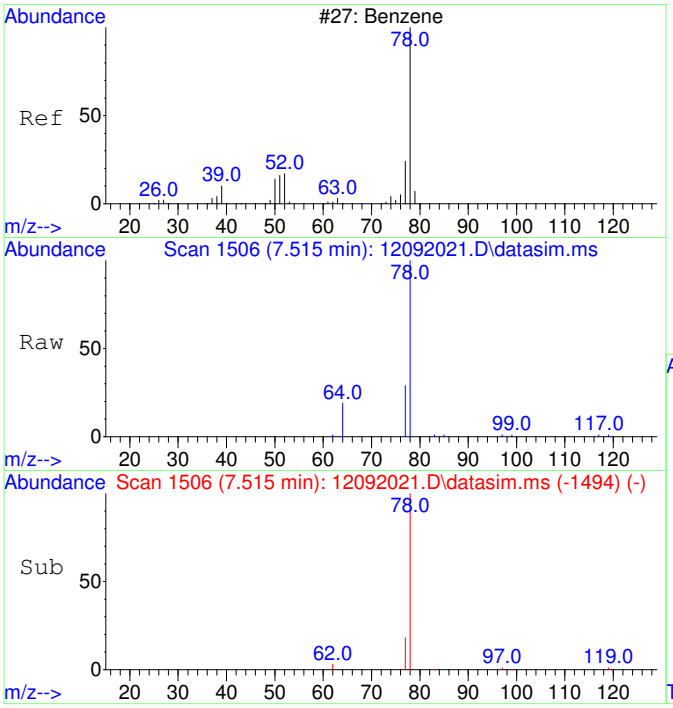


#7
1,1,1-Trichloroethane
Concen: 40.65 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 97 Resp: 580

Ion	Ratio	Lower	Upper
97	100		
99	63.6	34.6	94.6
117	15.5	0.0	43.2

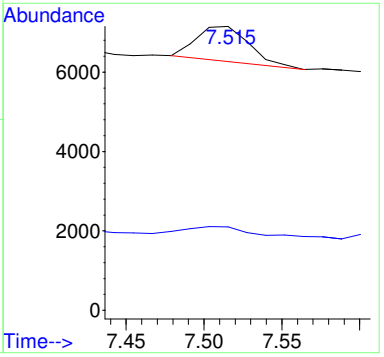


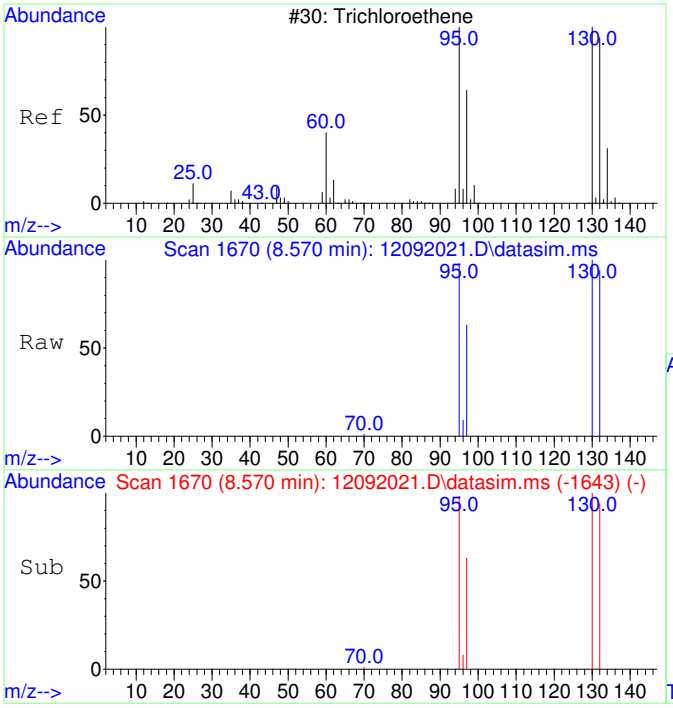


#9
Benzene
Concen: 51.42 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 78 Resp: 1935

Ion	Ratio	Lower	Upper
78	100		
77	60.3	0.0	53.2#

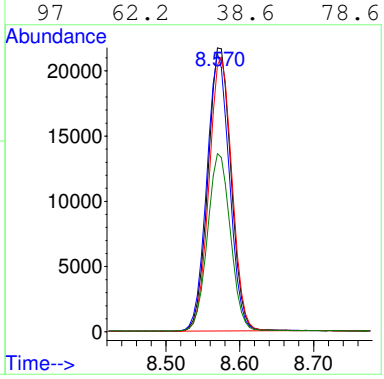


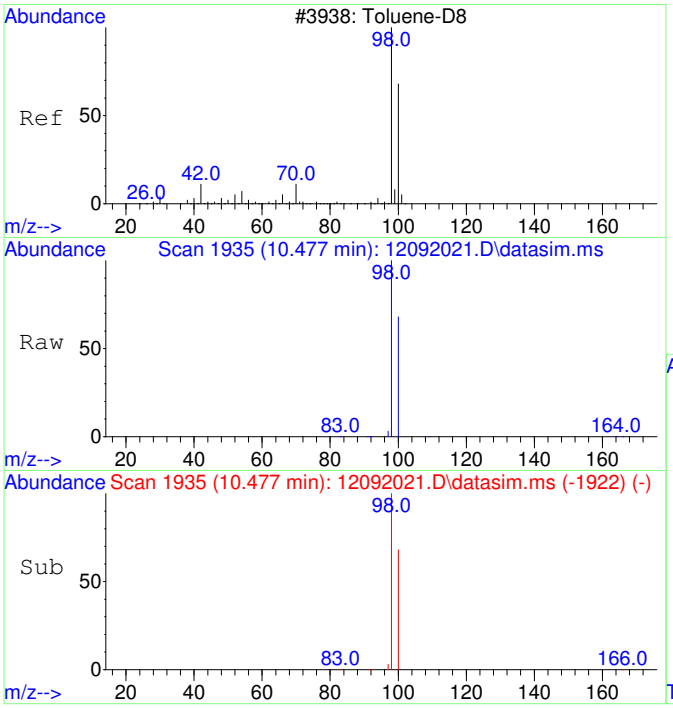


#11
Trichloroethene
Concen: 3967.09 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:130 Resp: 47130

Ion	Ratio	Lower	Upper
130	100		
95	96.2	60.7	120.7
132	96.1	76.0	116.0
97	62.2	38.6	78.6

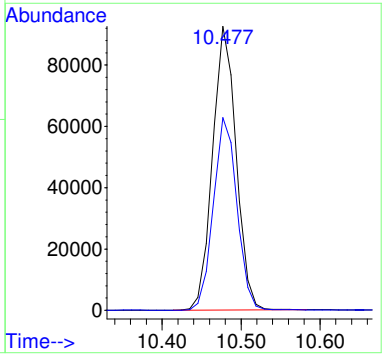


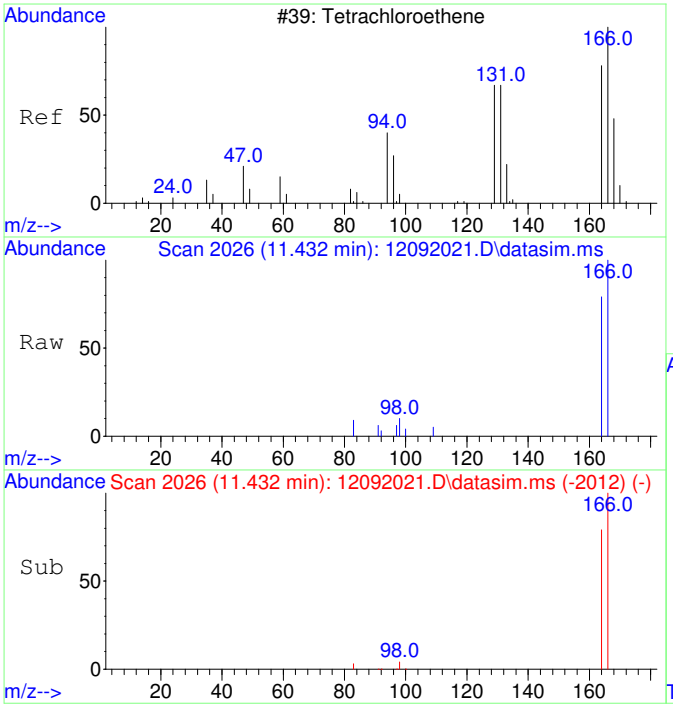


#12
Toluene-d8
Concen: 4417.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 98 Resp: 191314

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

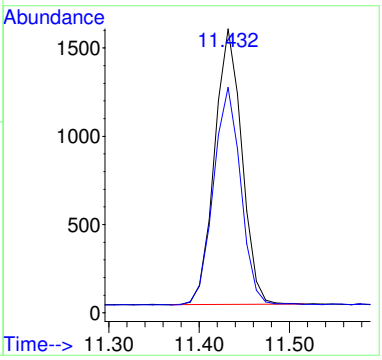


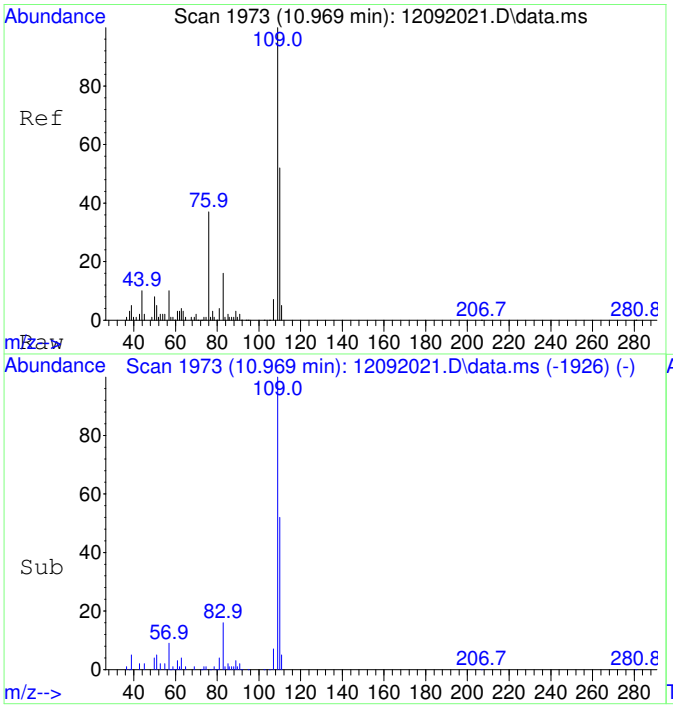


#15
Tetrachloroethene
Concen: 195.53 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:166 Resp: 3284

Ion	Ratio	Lower	Upper
166	100		
164	78.7	47.8	107.8

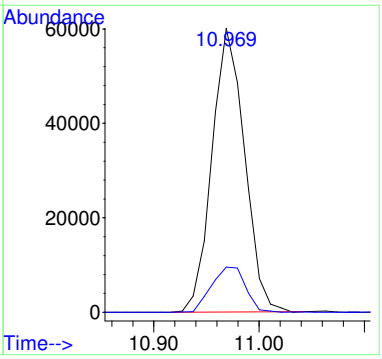


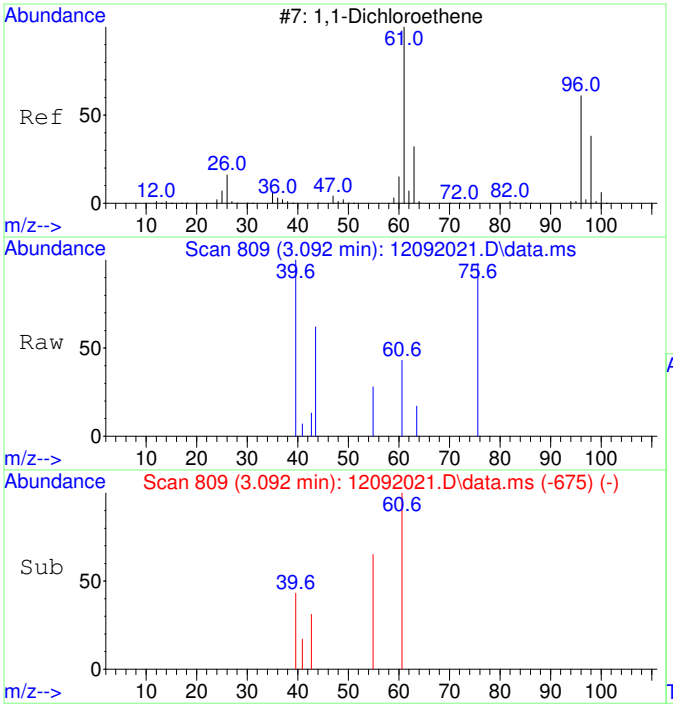


#25
2-Fluorotoluene SCAN
Concen: 5090.44 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:109 Resp: 129208

Ion	Ratio	Lower	Upper
109	100		
83	16.8	0.0	43.8

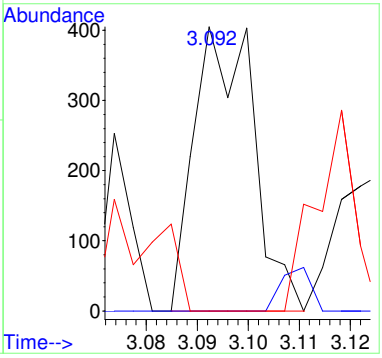


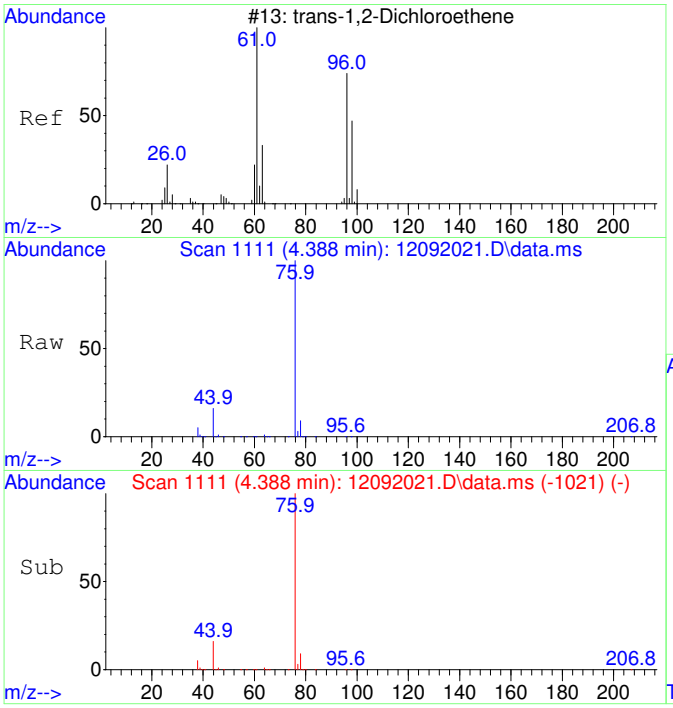


#26
1,1-Dichloroethene SCAN
Concen: 55.52 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.004 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 329

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

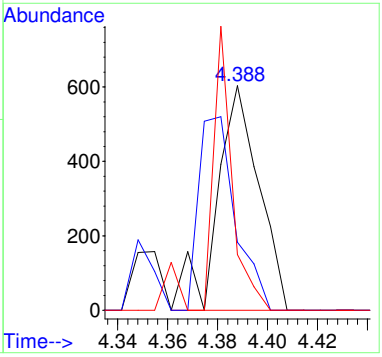


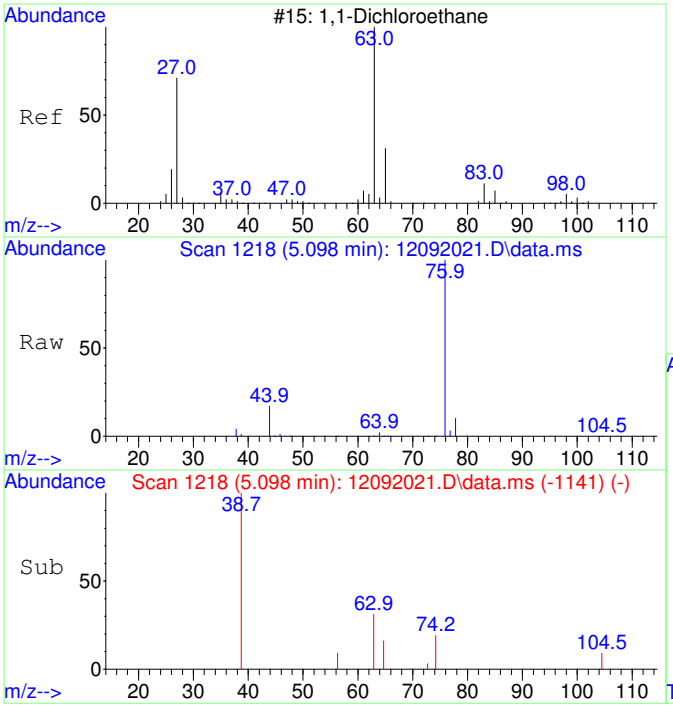


#27
trans-1,2-Dichloroethene SCAN
Concen: 93.01 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 702

Ion	Ratio	Lower	Upper
61	100		
96	75.8	49.0	109.0
98	62.7	20.5	80.5

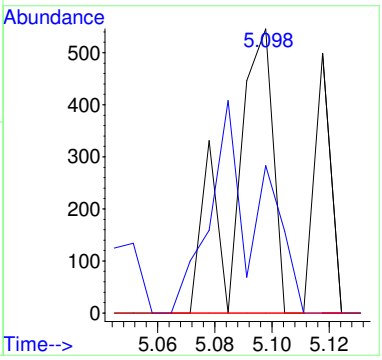


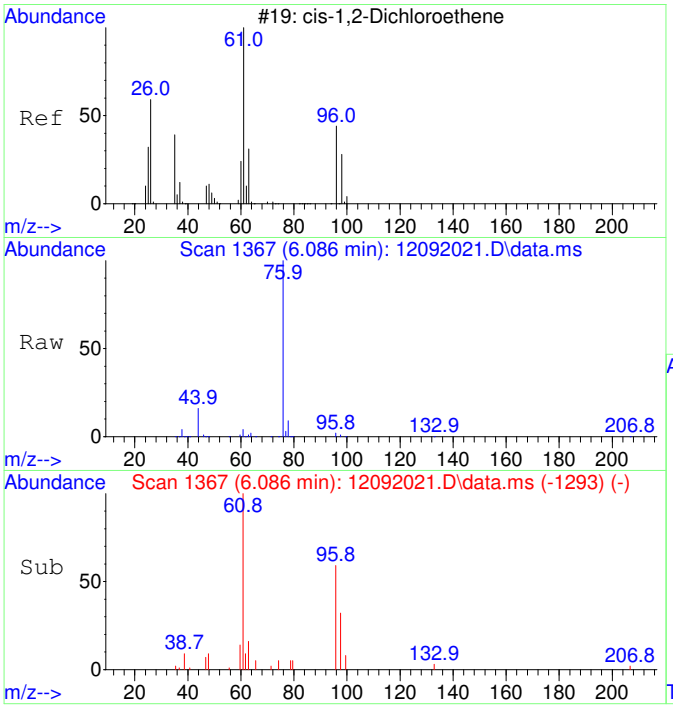


#28
1,1-Dichloroethane SCAN
Concen: 59.16 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.013 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 63 Resp: 527

Ion	Ratio	Lower	Upper
63	100		
65	88.8	1.3	61.3#
83	0.0	0.0	45.9

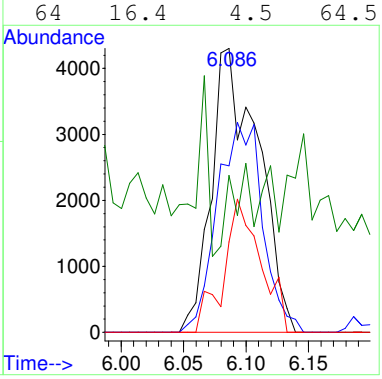


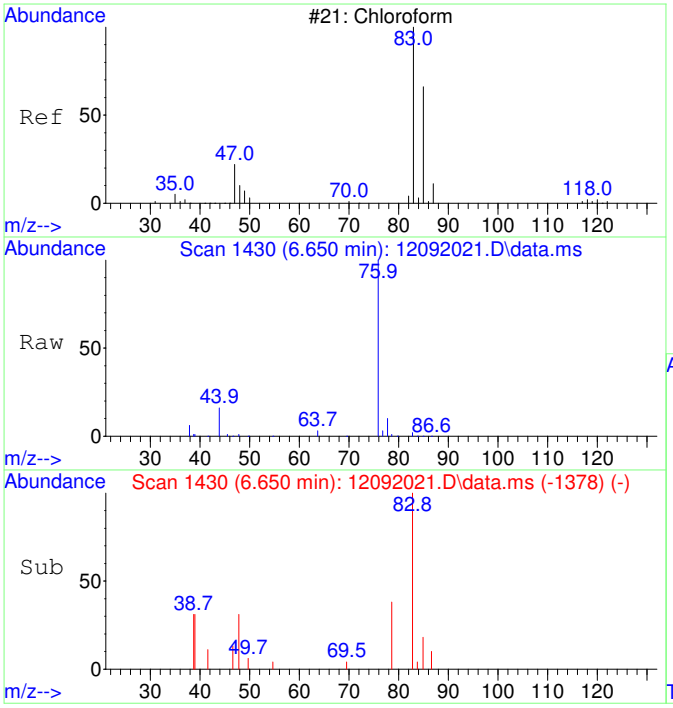


#29
cis-1,2-Dichloroethene SCAN
Concen: 1280.11 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 11211

Ion	Ratio	Lower	Upper
61	100		
96	71.7	39.9	99.9
98	37.0	13.5	73.5
64	16.4	4.5	64.5

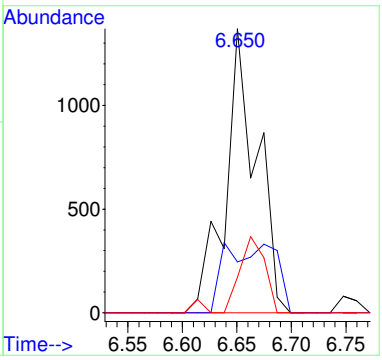


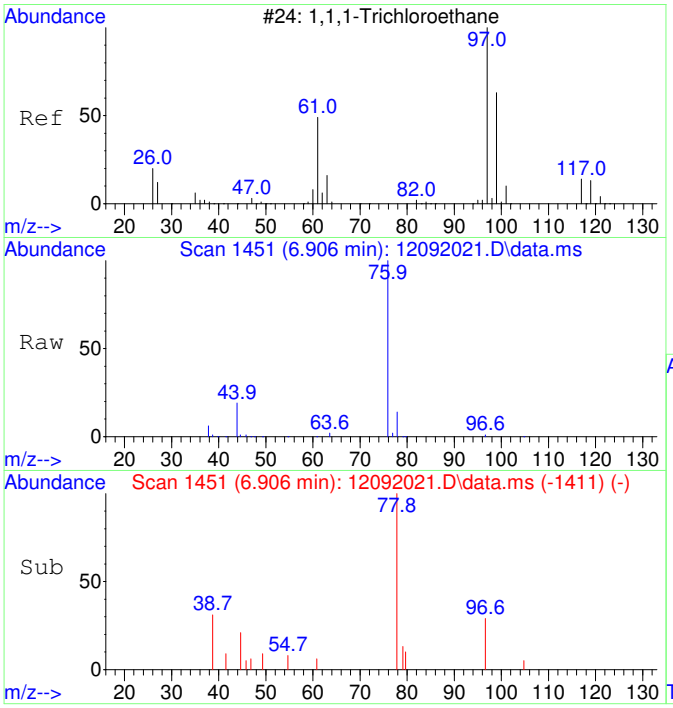


#30
Chloroform SCAN
Concen: 337.88 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 83 Resp: 2760

Ion	Ratio	Lower	Upper
83	100		
85	39.3	34.6	94.6
47	0.0	0.0	53.4

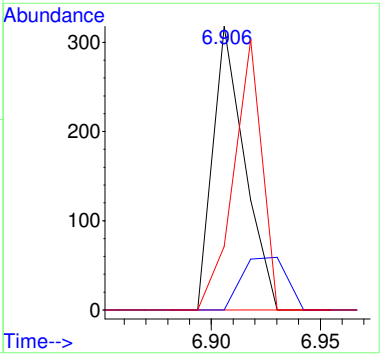


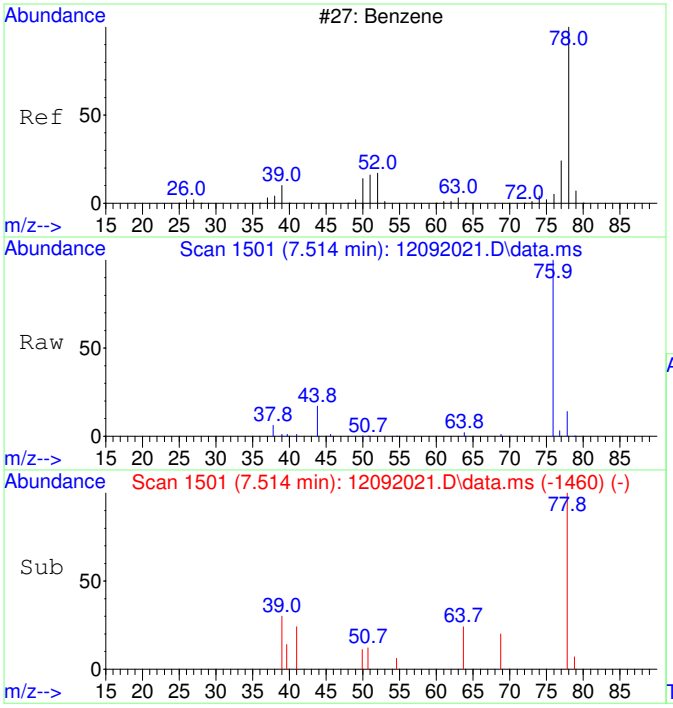


#31
1,1,1-Trichloroethane SCAN
Concen: 38.20 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 97 Resp: 322

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

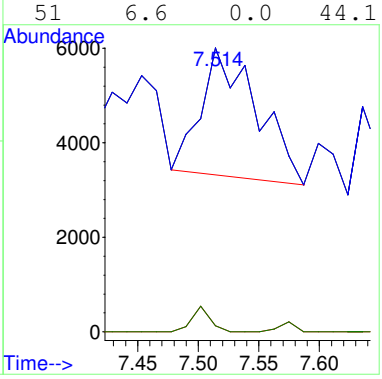


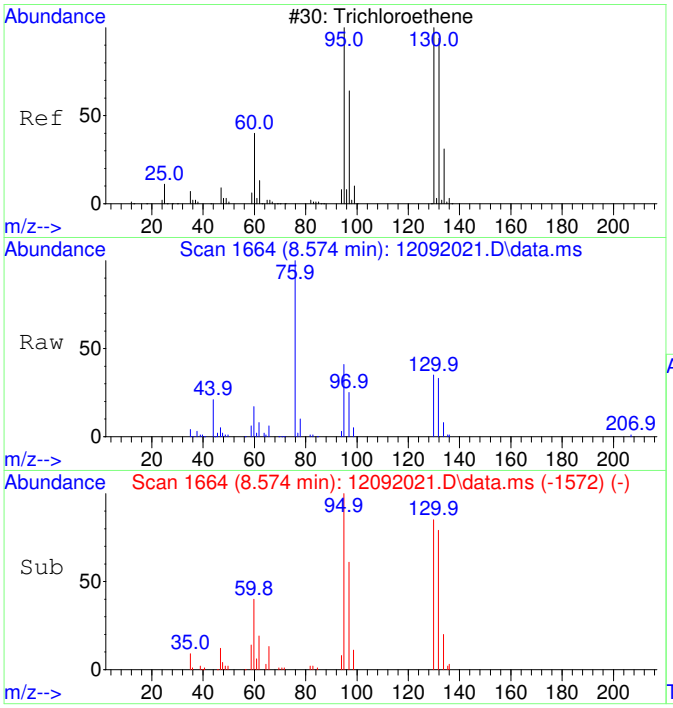


#33
Benzene SCAN
Concen: 337.20 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 78 Resp: 8599

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

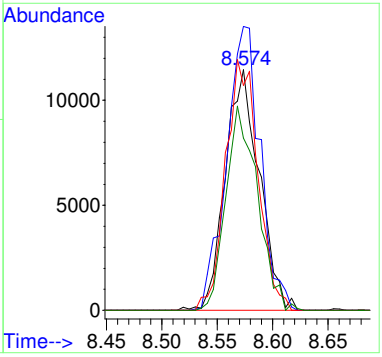


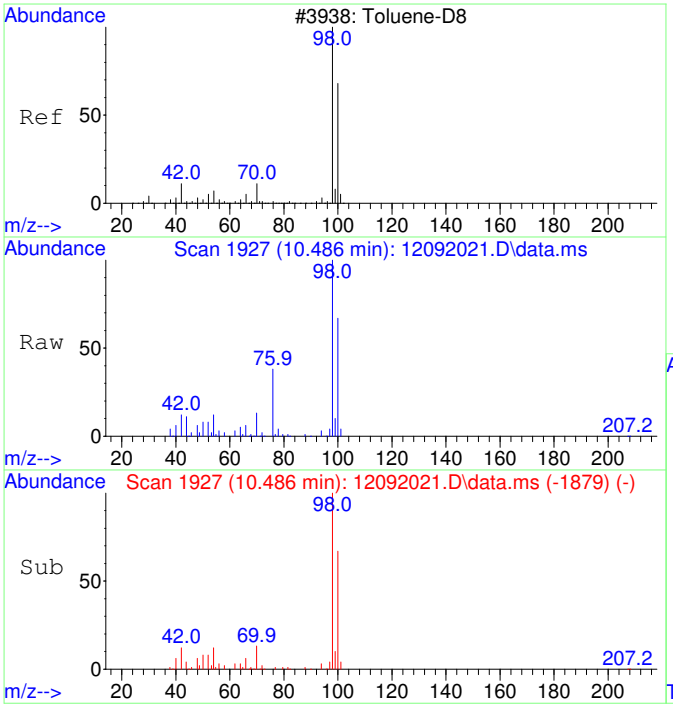


#35
Trichloroethene SCAN
Concen: 4414.67 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:130 Resp: 24548

Ion	Ratio	Lower	Upper
130	100		
95	117.0	60.5	120.5
132	99.0	59.6	119.6
97	78.7	28.2	88.2

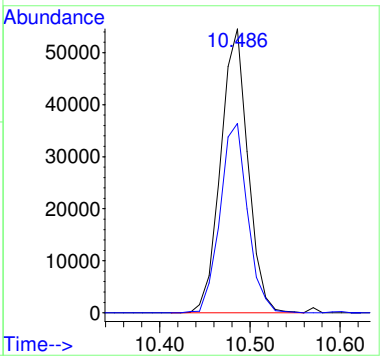


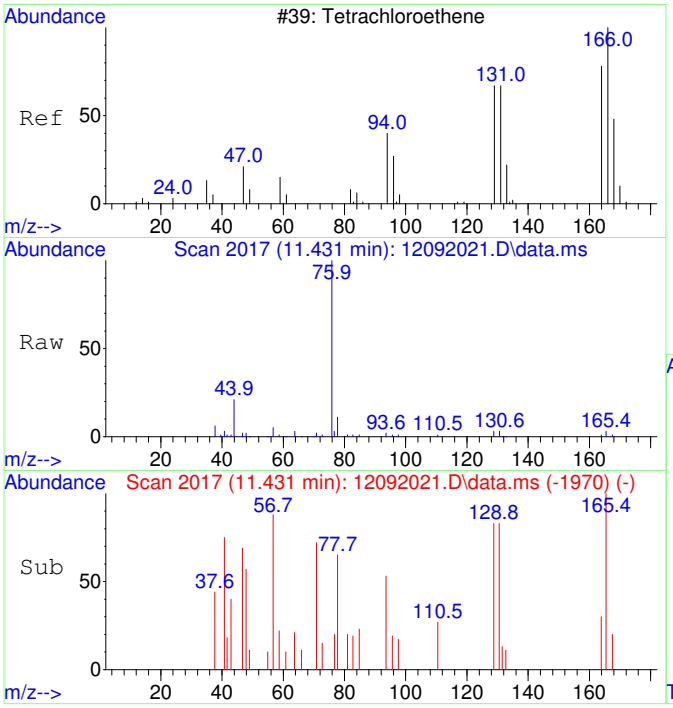


#36
Toluene-d8 SCAN
Concen: 4810.00 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 98 Resp: 114507

Ion	Ratio	Lower	Upper
98	100		
100	67.7	40.0	100.0

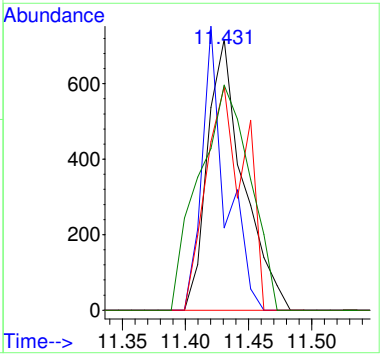




#39
Tetrachloroethene SCAN
Concen: 214.14 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:166 Resp: 1412

Ion	Ratio	Lower	Upper
166	100		
164	69.5	50.9	110.9
131	90.8	38.7	98.7
129	119.2	41.8	101.8#



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092021.D
Acq On : 9 Dec 2020 16:46
InstName : AG5975C
Operator : TD
Sample : 2012007-14
Misc :
ALS Vial : 21 Sample Multiplier: 1

M.I. Performed By:
TD at 10:21 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:03 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

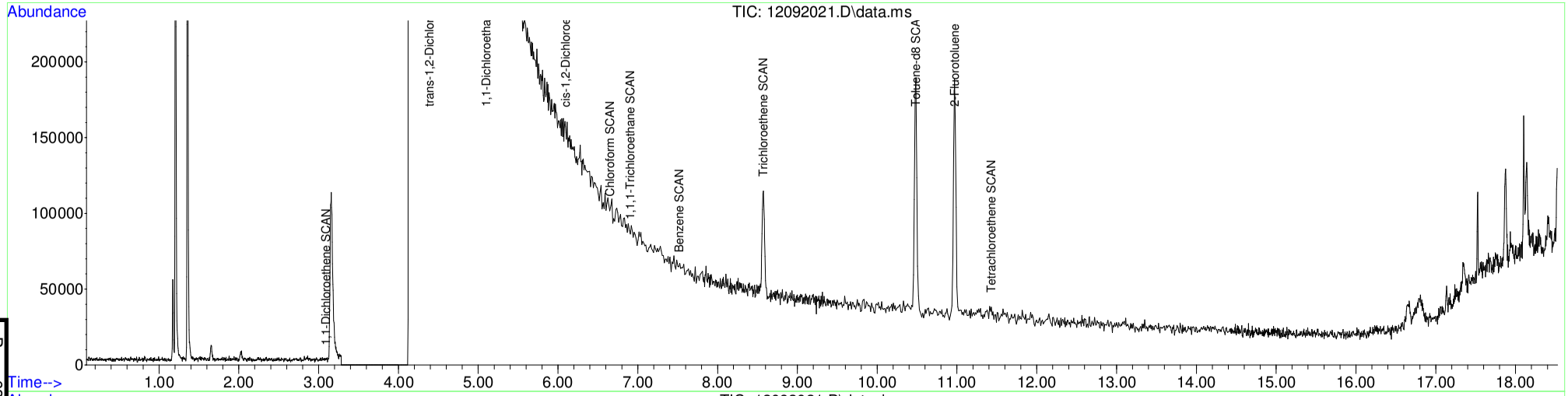
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	223614	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	191314	4417.47	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.35%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	1397m	157.56	ug/L	
3] trans-1,2-Dichloroethene	4.383	61	1592	142.42	ug/L	95
4] 1,1-Dichloroethane	5.092	63	1728	129.43	ug/L	95
5] cis-1,2-Dichloroethene	6.094	61	17046	1232.78	ug/L	98
6] Chloroform	6.652	83	3209	241.62	ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	580	40.65	ug/L	98
9] Benzene	7.515	78	1935	51.42	ug/L #	24
11] Trichloroethene	8.570	130	47130	3967.09	ug/L	97
15] Tetrachloroethene	11.432	166	3284	195.53	ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	129208	5090.44	ug/L	93
26) 1,1-Dichloroethene SCAN	3.092	61	329	55.52	ug/L #	25
27) trans-1,2-Dichloroethe...	4.388	61	702	93.01	ug/L	91
28) 1,1-Dichloroethane SCAN	5.098	63	527	59.16	ug/L #	18
29) cis-1,2-Dichloroethene...	6.086	61	11211	1280.11	ug/L	89
30) Chloroform SCAN	6.650	83	2760	337.88	ug/L #	64
31) 1,1,1-Trichloroethane ...	6.906	97	322	38.20	ug/L #	19
33) Benzene SCAN	7.514	78	8599	337.20	ug/L	95
35) Trichloroethene SCAN	8.574	130	24548	4414.67	ug/L	79
36) Toluene-d8 SCAN	10.486	98	114507	4810.00	ug/L	97
39) Tetrachloroethene SCAN	11.431	166	1412	214.14	ug/L #	68

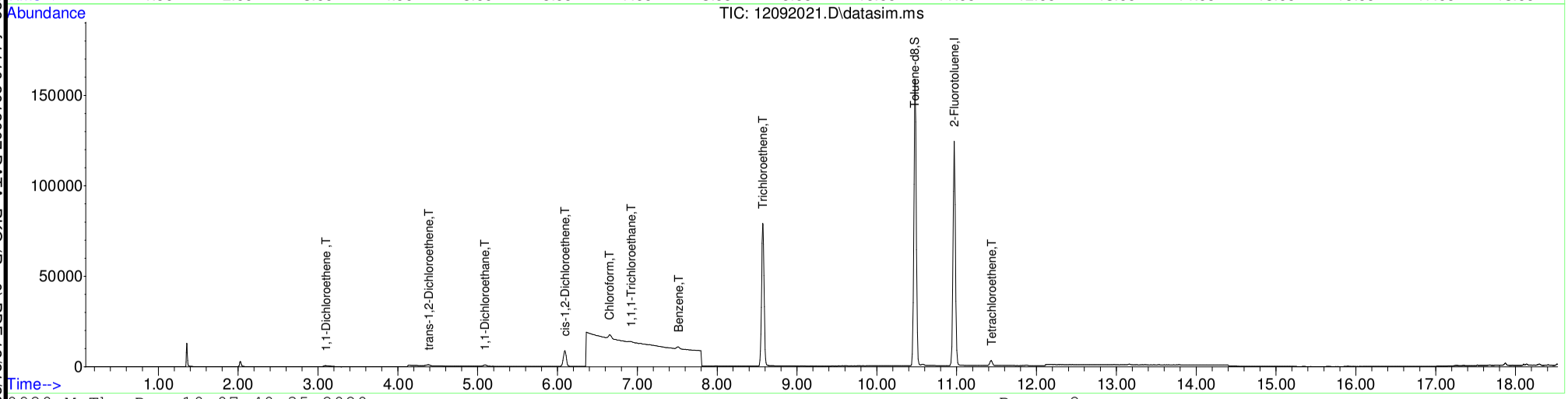
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092021.D
Acq On : 9 Dec 2020 16:46
InstName : AG5975C
Operator : TD
Sample : 2012007-14
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 10 05:55:54 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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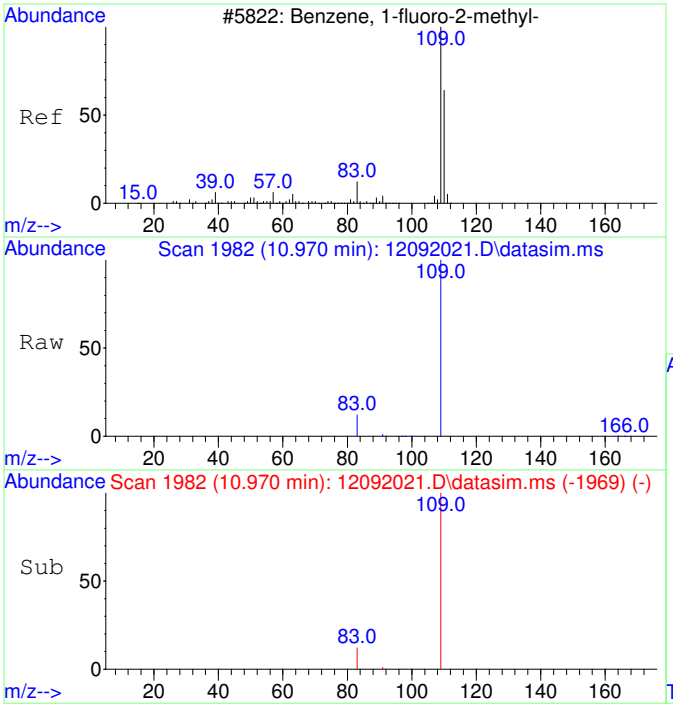
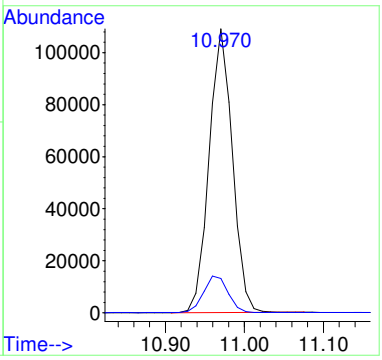
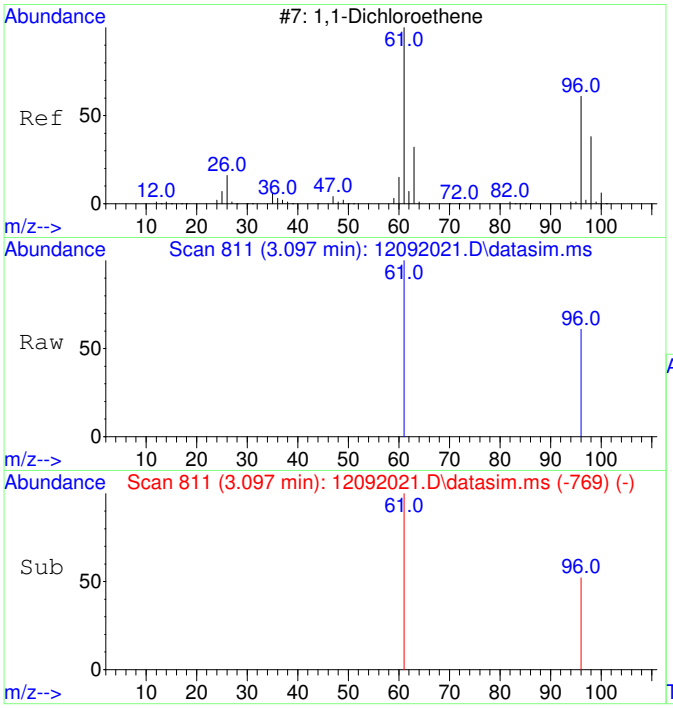


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:109 Resp: 223614

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

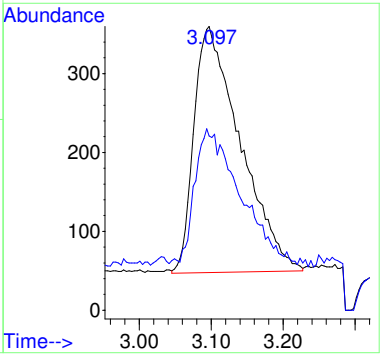


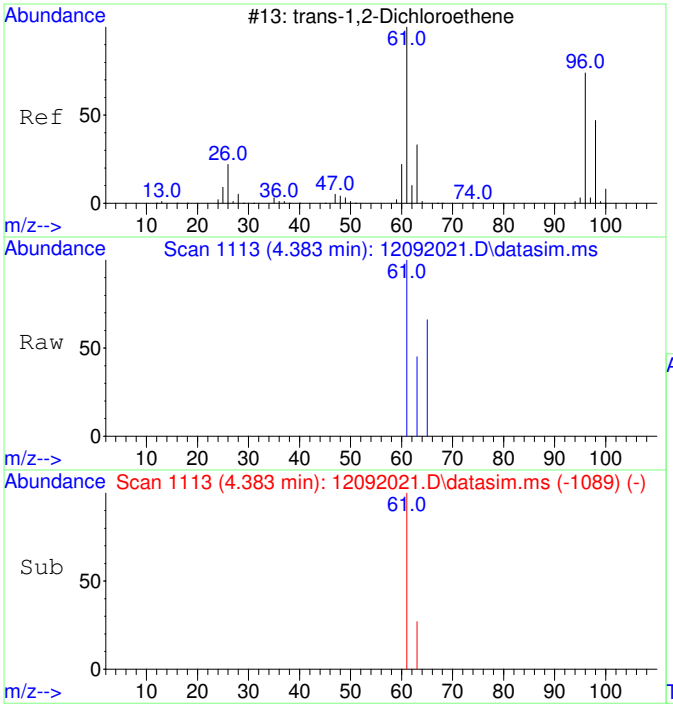


#2
1,1-Dichloroethene
Concen: 157.56 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 1397

Ion	Ratio	Lower	Upper
61	100		
96	53.4	37.2	97.2

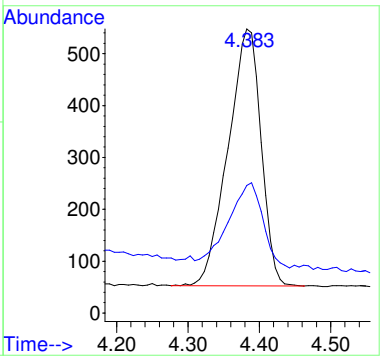


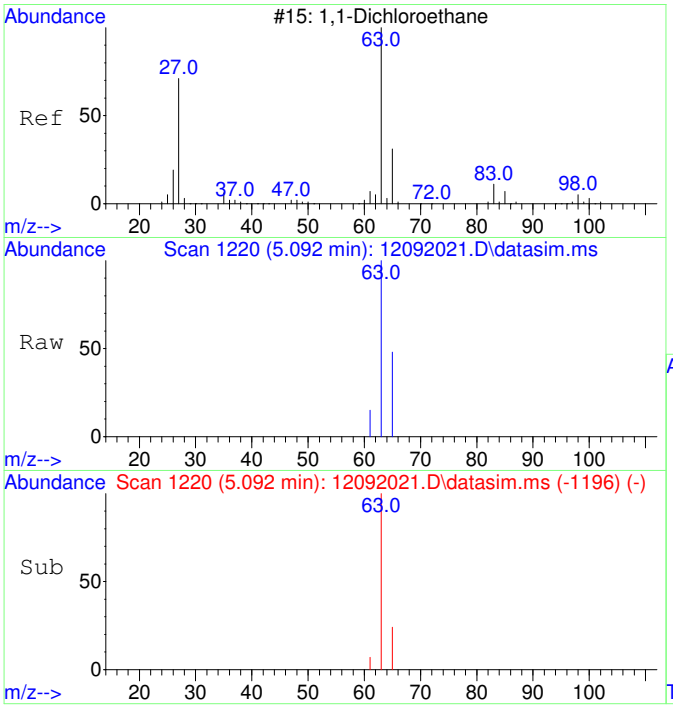


#3
trans-1,2-Dichloroethene
Concen: 142.42 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 1592

Ion	Ratio	Lower	Upper
61	100		
63	35.3	2.4	62.4

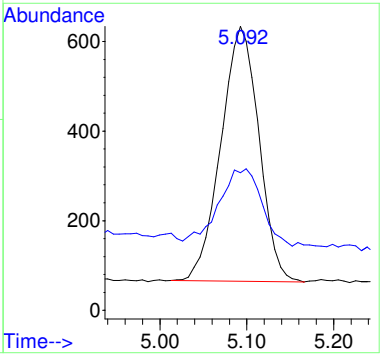


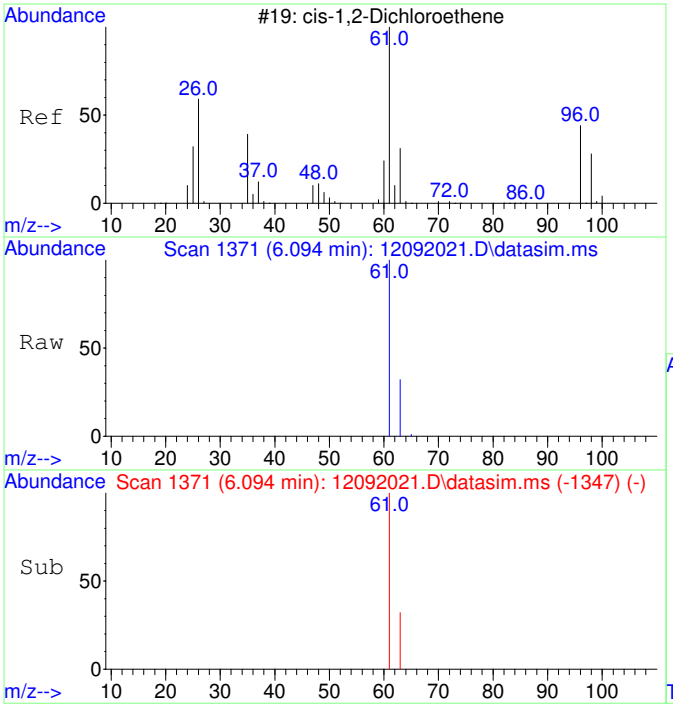


#4
1,1-Dichloroethane
Concen: 129.43 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 63 Resp: 1728

Ion	Ratio	Lower	Upper
63	100		
65	34.7	1.8	61.8

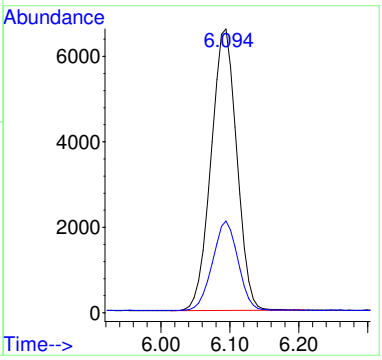


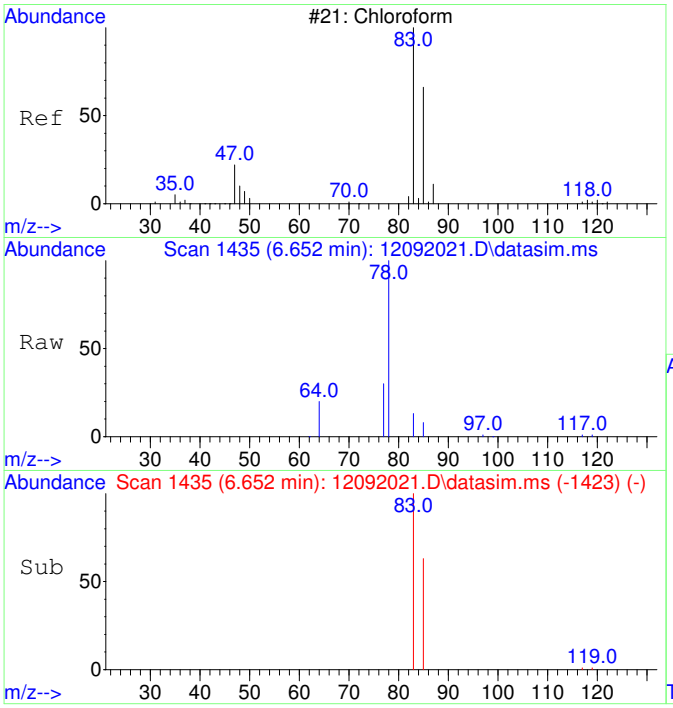


#5
cis-1,2-Dichloroethene
Concen: 1232.78 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 17046

Ion	Ratio	Lower	Upper
61	100		
63	31.4	2.5	62.5

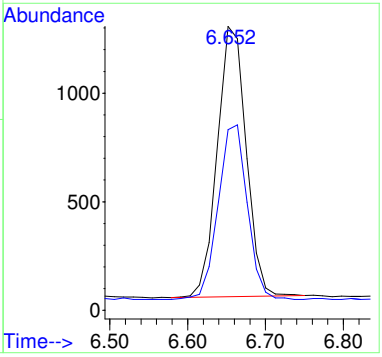


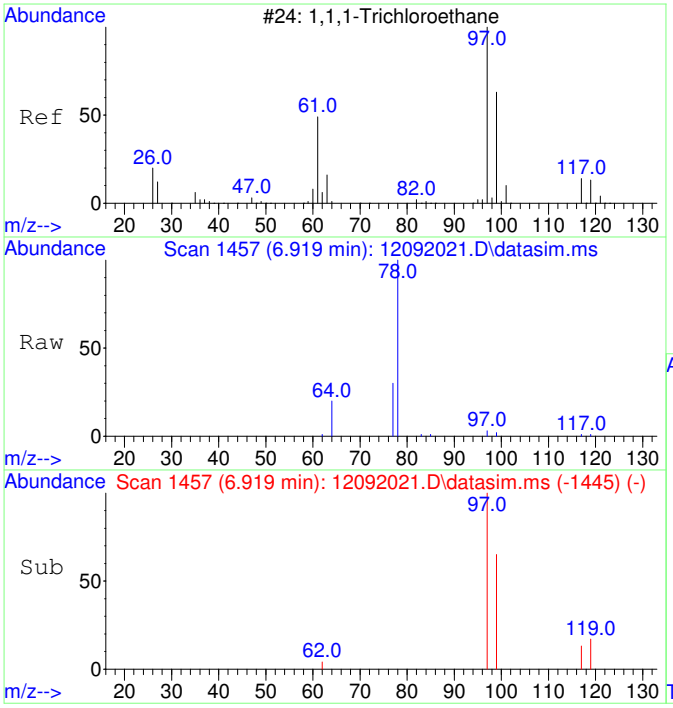


#6
Chloroform
Concen: 241.62 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 83 Resp: 3209

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

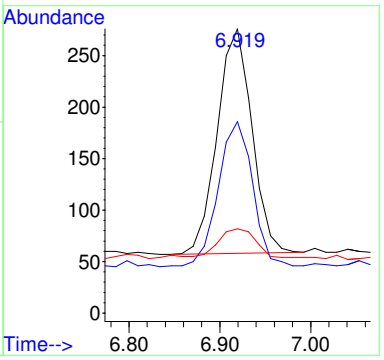


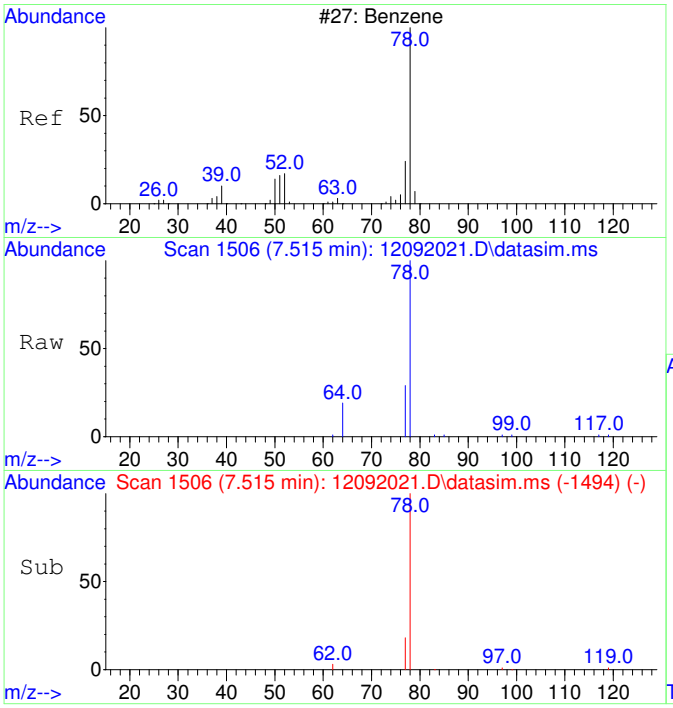


#7
1,1,1-Trichloroethane
Concen: 40.65 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 97 Resp: 580

Ion	Ratio	Lower	Upper
97	100		
99	63.6	34.6	94.6
117	15.5	0.0	43.2

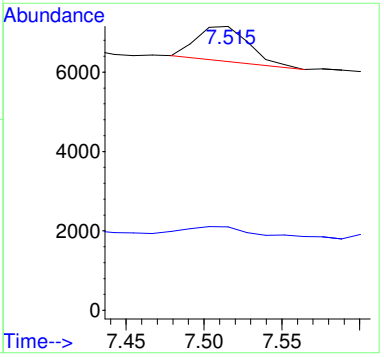


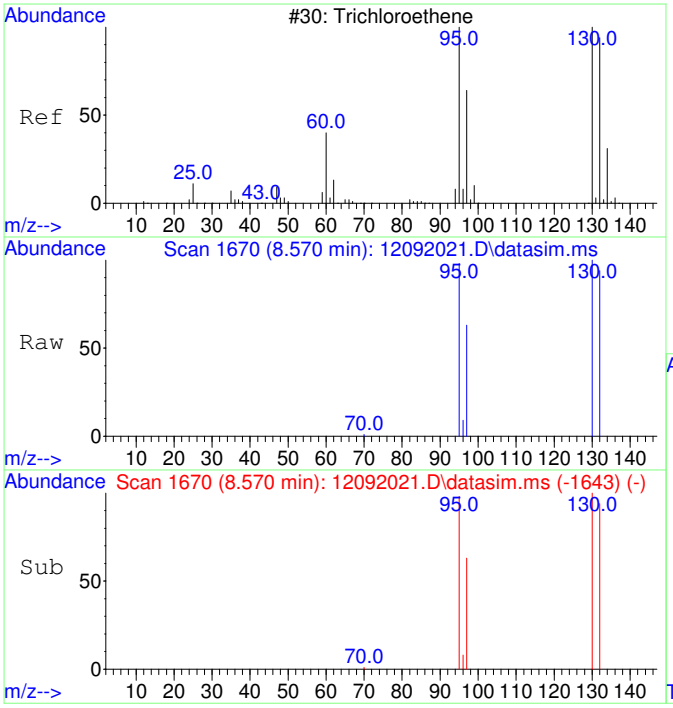


#9
Benzene
Concen: 51.42 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 78 Resp: 1935

Ion	Ratio	Lower	Upper
78	100		
77	60.3	0.0	53.2#

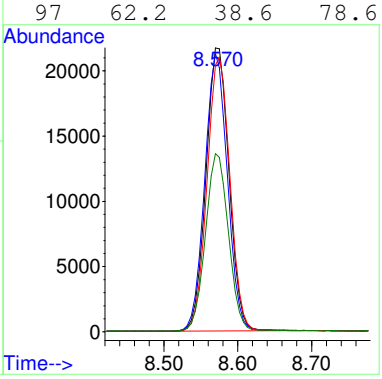


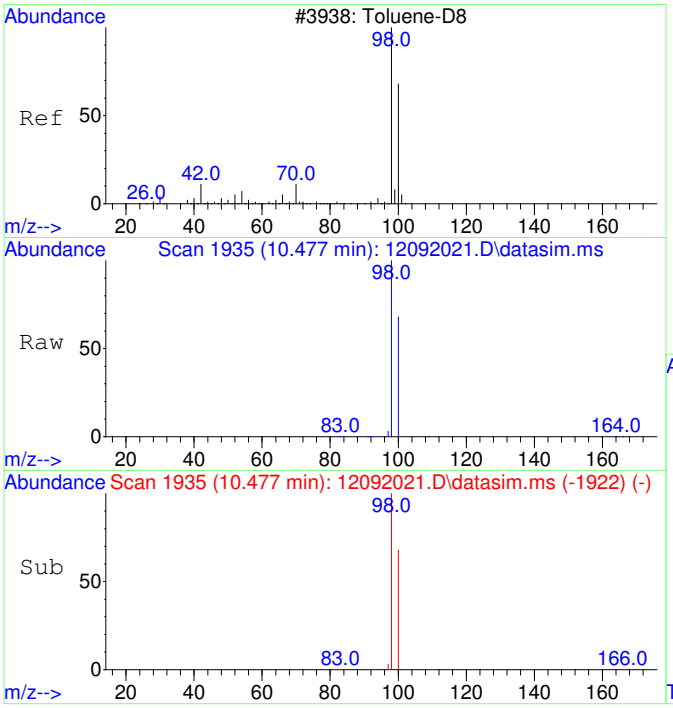


#11
Trichloroethene
Concen: 3967.09 ug/L
RT: 8.570 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:130 Resp: 47130

Ion	Ratio	Lower	Upper
130	100		
95	96.2	60.7	120.7
132	96.1	76.0	116.0
97	62.2	38.6	78.6

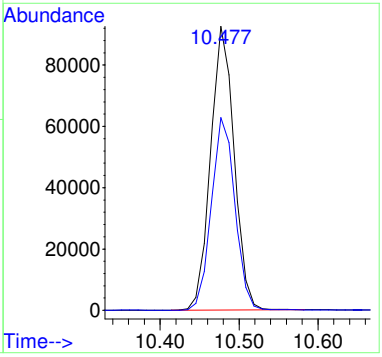


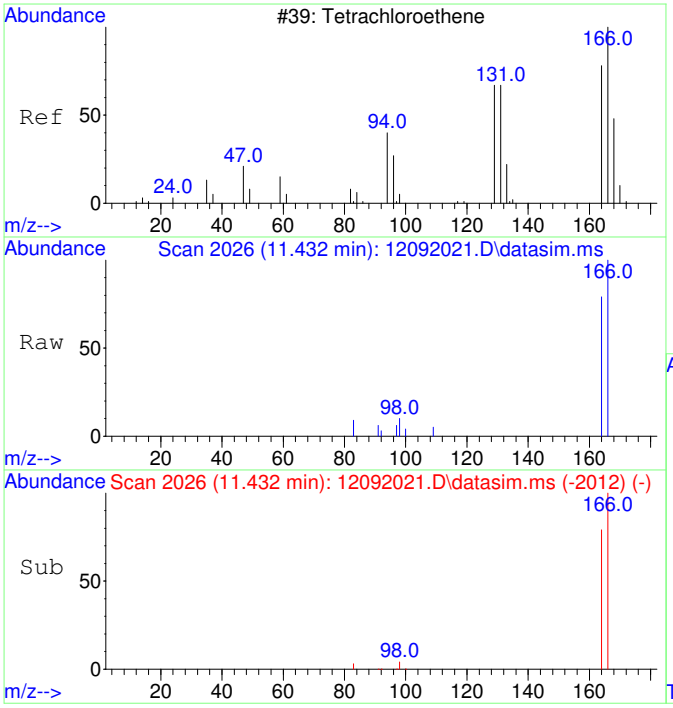


#12
Toluene-d8
Concen: 4417.47 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 98 Resp: 191314

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

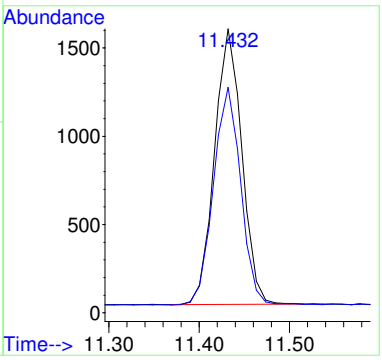


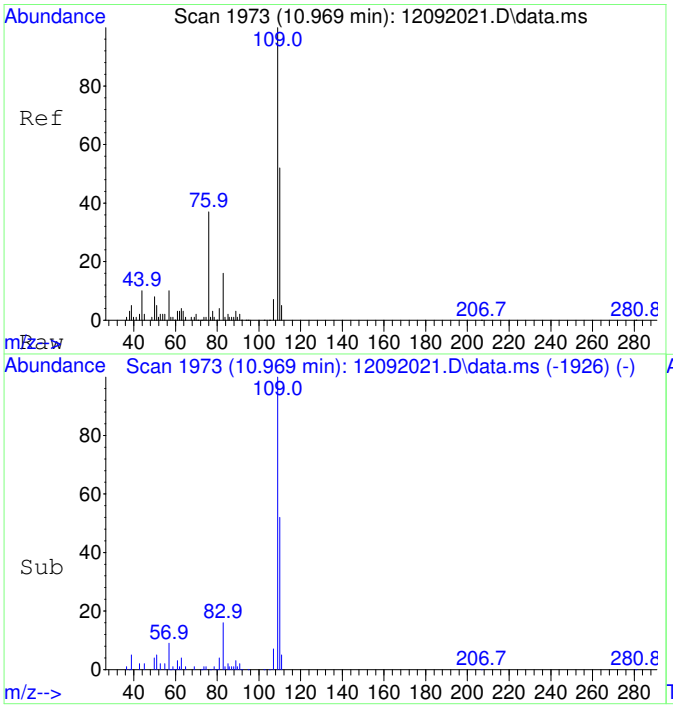


#15
Tetrachloroethene
Concen: 195.53 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:166 Resp: 3284

Ion	Ratio	Lower	Upper
166	100		
164	78.7	47.8	107.8

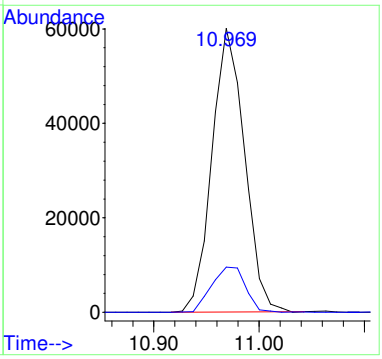


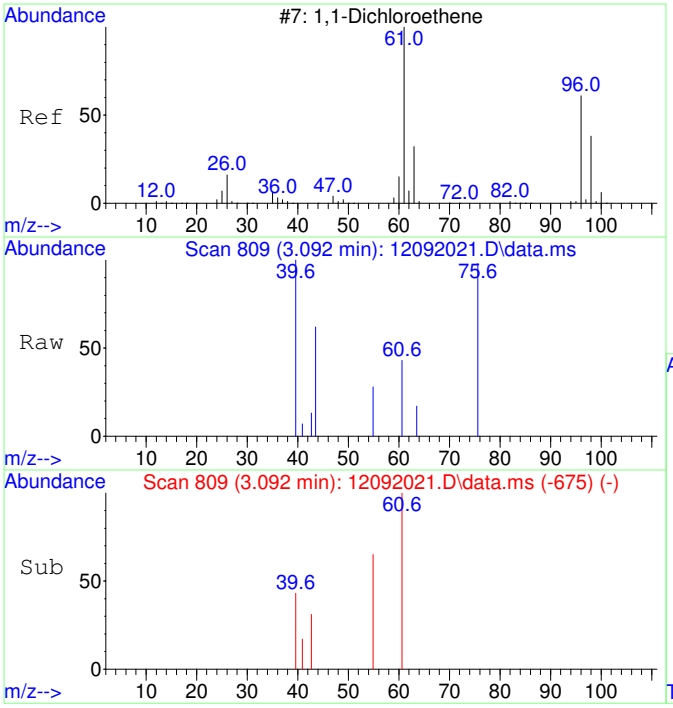


#25
2-Fluorotoluene SCAN
Concen: 5090.44 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:109 Resp: 129208

Ion	Ratio	Lower	Upper
109	100		
83	16.8	0.0	43.8

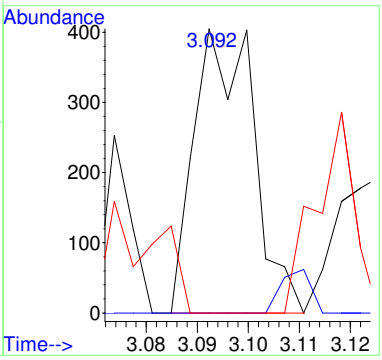


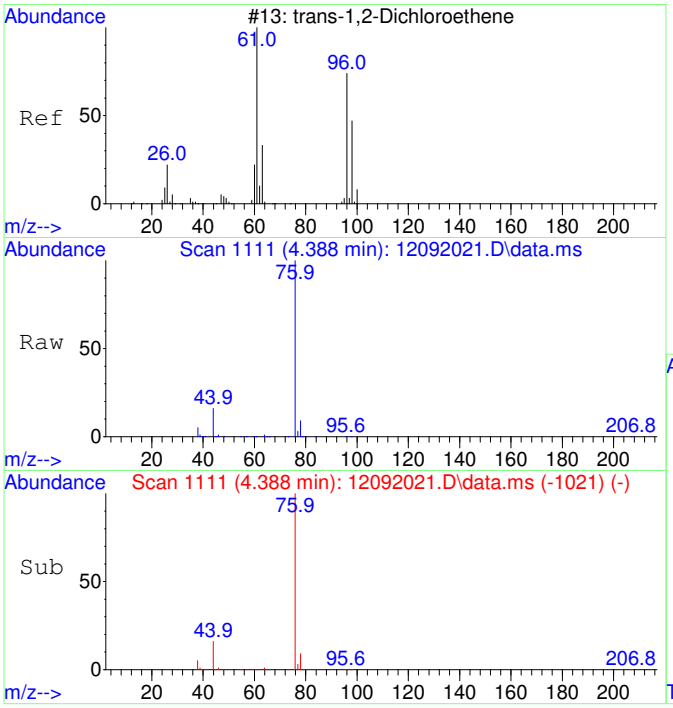


#26
1,1-Dichloroethene SCAN
Concen: 55.52 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.004 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 329

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

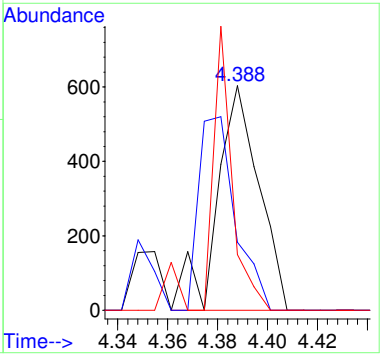


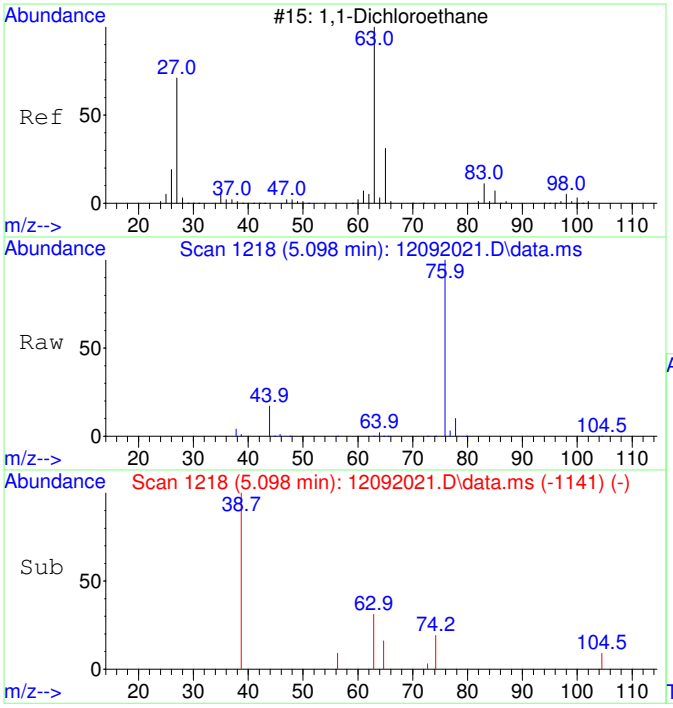


#27
trans-1,2-Dichloroethene SCAN
Concen: 93.01 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 702

Ion	Ratio	Lower	Upper
61	100		
96	75.8	49.0	109.0
98	62.7	20.5	80.5

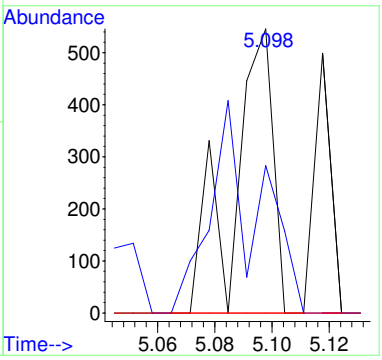


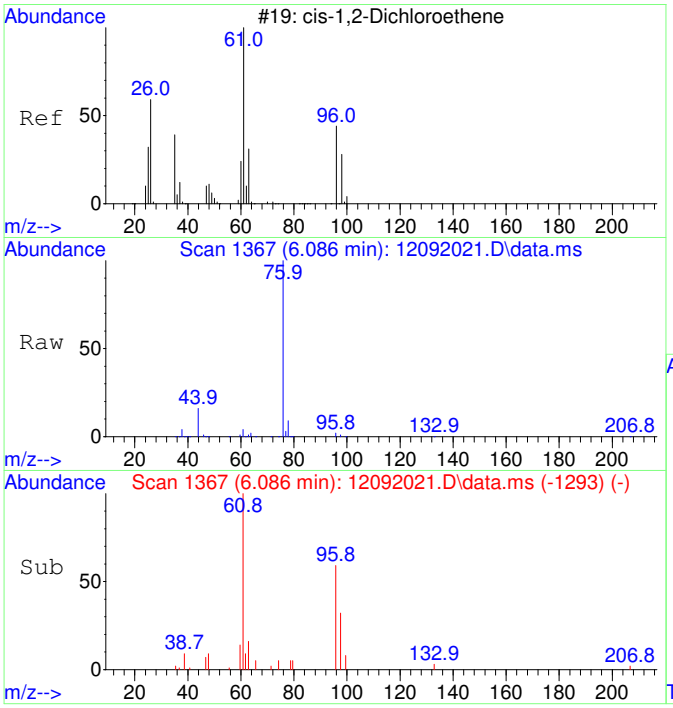


#28
1,1-Dichloroethane SCAN
Concen: 59.16 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.013 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 63 Resp: 527

Ion	Ratio	Lower	Upper
63	100		
65	88.8	1.3	61.3#
83	0.0	0.0	45.9

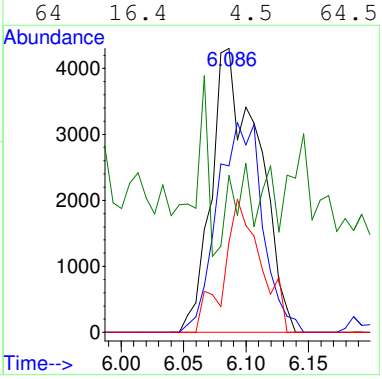


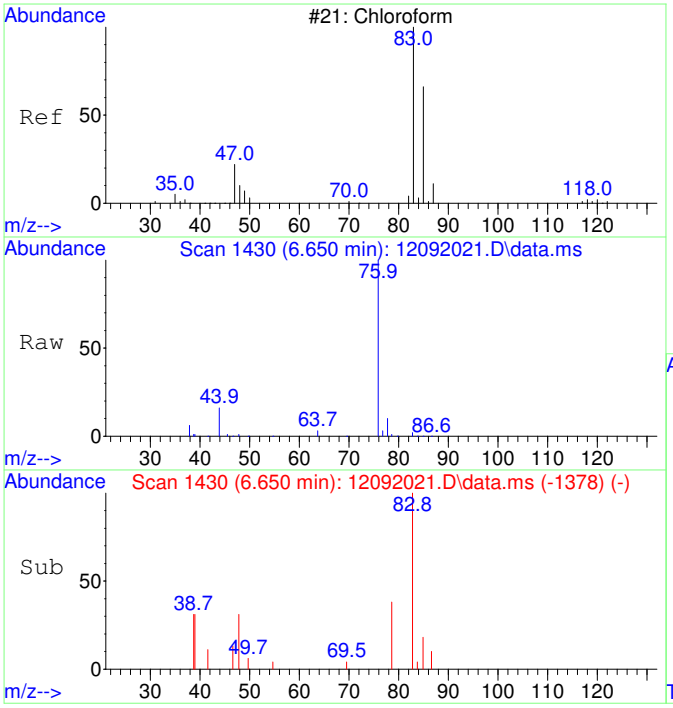


#29
cis-1,2-Dichloroethene SCAN
Concen: 1280.11 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 61 Resp: 11211

Ion	Ratio	Lower	Upper
61	100		
96	71.7	39.9	99.9
98	37.0	13.5	73.5
64	16.4	4.5	64.5

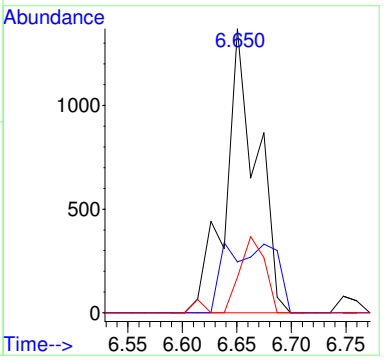


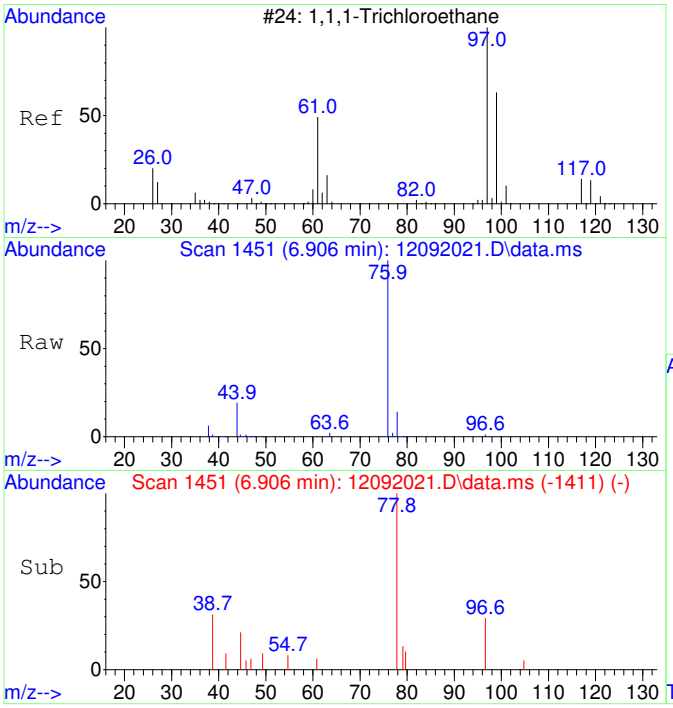


#30
Chloroform SCAN
Concen: 337.88 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 83 Resp: 2760

Ion	Ratio	Lower	Upper
83	100		
85	39.3	34.6	94.6
47	0.0	0.0	53.4

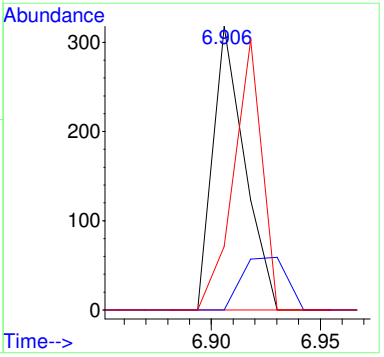


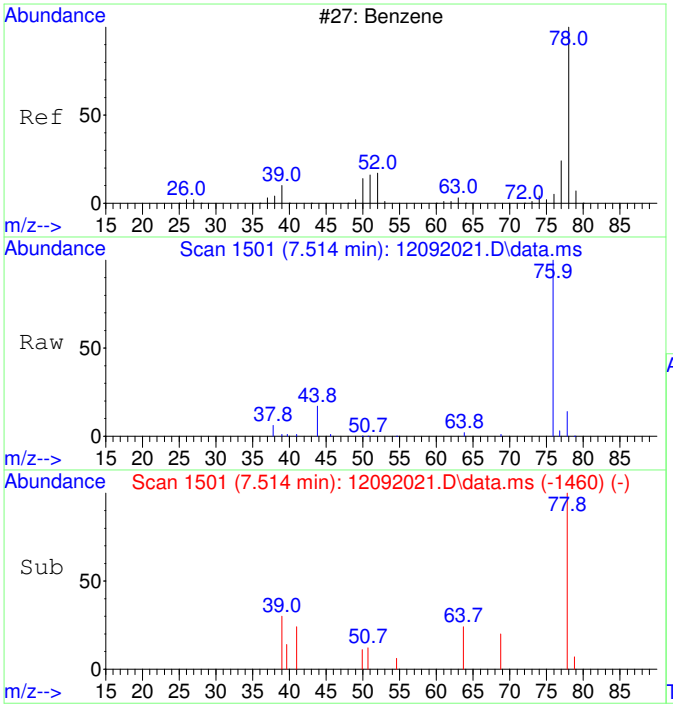


#31
1,1,1-Trichloroethane SCAN
Concen: 38.20 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 97 Resp: 322

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

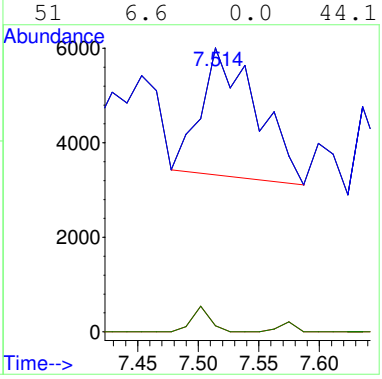


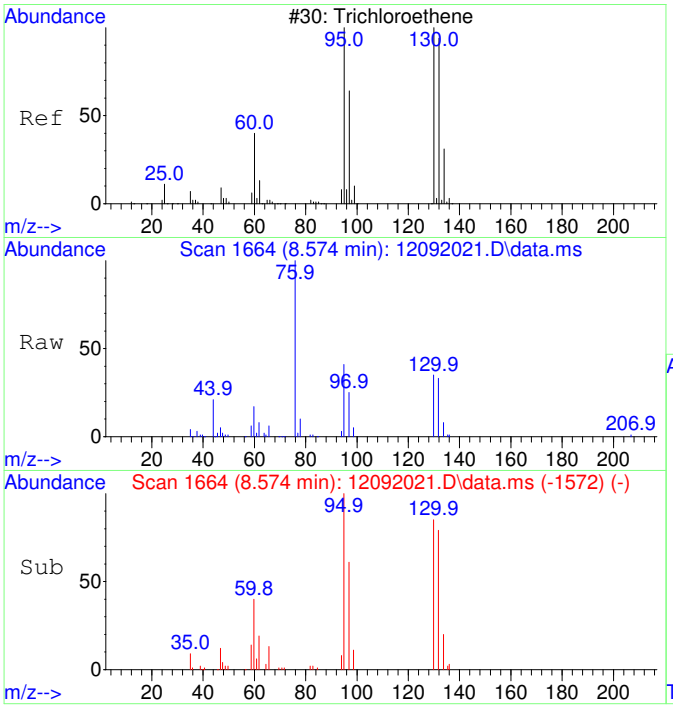


#33
Benzene SCAN
Concen: 337.20 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 78 Resp: 8599

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

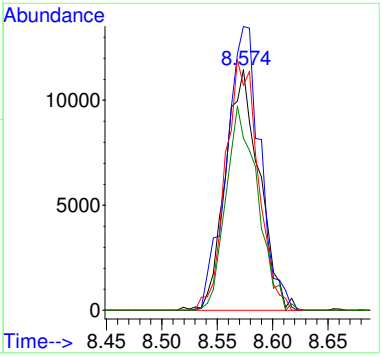


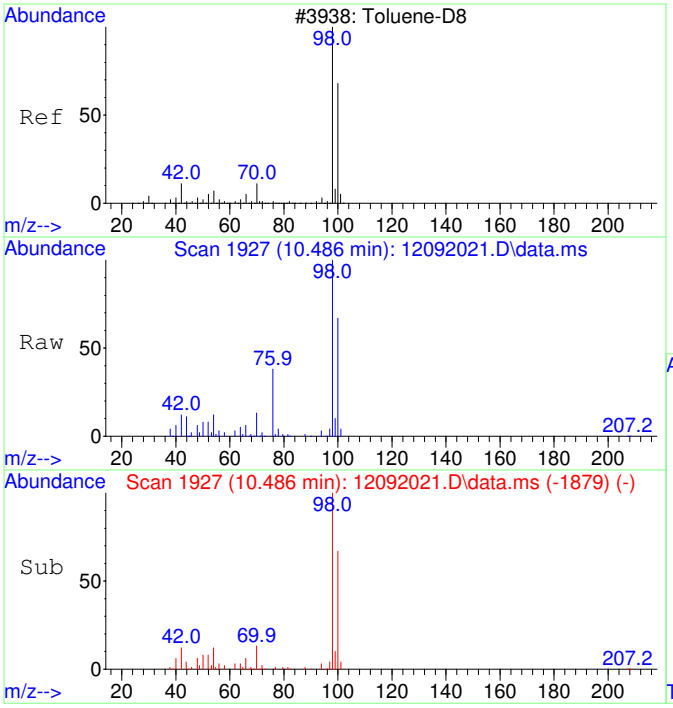


#35
Trichloroethene SCAN
Concen: 4414.67 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:130 Resp: 24548

Ion	Ratio	Lower	Upper
130	100		
95	117.0	60.5	120.5
132	99.0	59.6	119.6
97	78.7	28.2	88.2

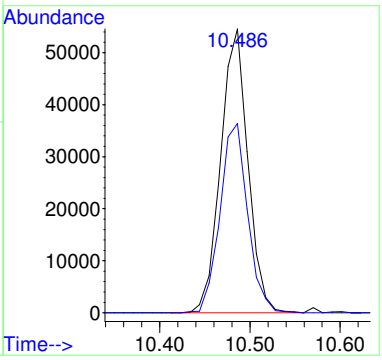


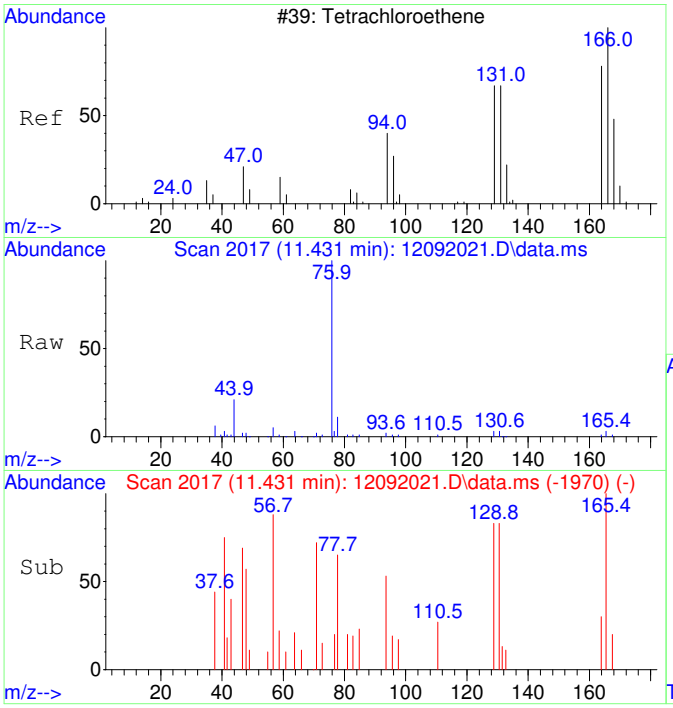


#36
Toluene-d8 SCAN
Concen: 4810.00 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion: 98 Resp: 114507

Ion	Ratio	Lower	Upper
98	100		
100	67.7	40.0	100.0

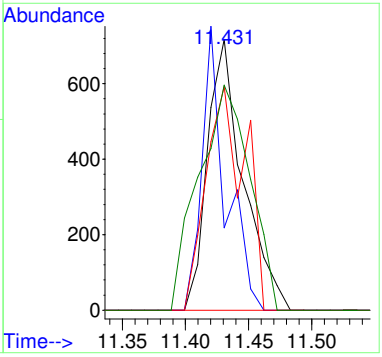




#39
Tetrachloroethene SCAN
Concen: 214.14 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092021.D
Acq: 9 Dec 2020 16:46

Tgt Ion:166 Resp: 1412

Ion	Ratio	Lower	Upper
166	100		
164	69.5	50.9	110.9
131	90.8	38.7	98.7
129	119.2	41.8	101.8#



2012007-15

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092022.D
Acq On : 9 Dec 2020 17:10
InstName : AG5975C
Operator : TD
Sample : 2012007-15
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 10 05:55:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

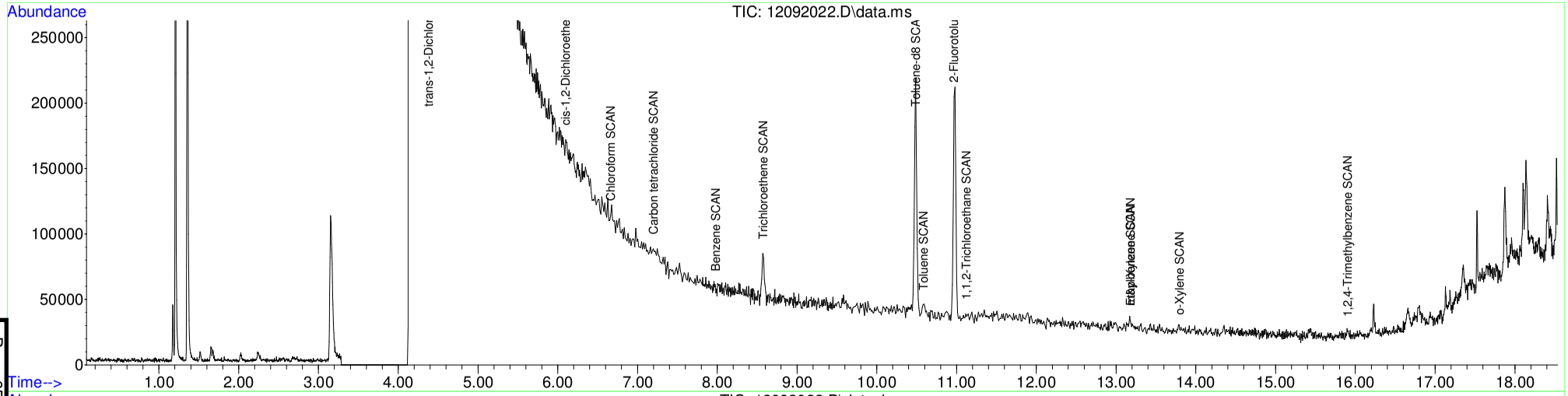
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	251010	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.488	98	213493	4391.56 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.83%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.094	61	661	66.41 ug/L #	38
3] trans-1,2-Dichloroethene	4.389	61	482	38.41 ug/L	69
4] 1,1-Dichloroethane	5.099	63	455	30.36 ug/L	78
5] cis-1,2-Dichloroethene	6.095	61	7139	459.95 ug/L	98
6] Chloroform	6.664	83	8945	600.00 ug/L	99
8] Carbon tetrachloride	7.187	117	454	29.65 ug/L	91
9] Benzene	7.516	78	5802	137.36 ug/L	78
11] Trichloroethene	8.575	130	21374	1602.76 ug/L	97
13] Toluene	10.582	91	9902	163.59 ug/L	100
15] Tetrachloroethene	11.432	166	940	49.86 ug/L	99
18] Ethylbenzene	12.972	91	2931	37.91 ug/L	96
19] m&p-Xylene	13.163	91	7608	127.79 ug/L	97
20] o-Xylene	13.782	91	2674	41.82 ug/L	98
23] 1,2,4-Trimethylbenzene	15.906	105	3459	48.09 ug/L	92
25) 2-Fluorotoluene SCAN	10.969	109	149490	5246.70 ug/L	99
27) trans-1,2-Dichloroethe...	4.381	61	248	29.27 ug/L #	47
29) cis-1,2-Dichloroethene...	6.100	61	5517	561.20 ug/L #	34
30) Chloroform SCAN	6.663	83	6402	698.20 ug/L	98
32) Carbon tetrachloride SCAN	7.198	117	312	38.59 ug/L #	15
33) Benzene SCAN	7.975	78	1099	38.39 ug/L	97
35) Trichloroethene SCAN	8.574	130	11847	1898.01 ug/L	90
36) Toluene-d8 SCAN	10.486	98	128452	4806.87 ug/L	94
37) Toluene SCAN	10.581	91	7015	213.21 ug/L #	30
38) 1,1,2-Trichloroethane ...	11.116	97	326	39.53 ug/L #	13
42) Ethylbenzene SCAN	13.177	91	5234	83.48 ug/L	84
43) m&p-Xylene SCAN	13.177	91	5234	83.48 ug/L	89
44) o-Xylene SCAN	13.797	91	2369	69.19 ug/L	74
47) 1,2,4-Trimethylbenzene...	15.905	105	2256	61.13 ug/L #	65

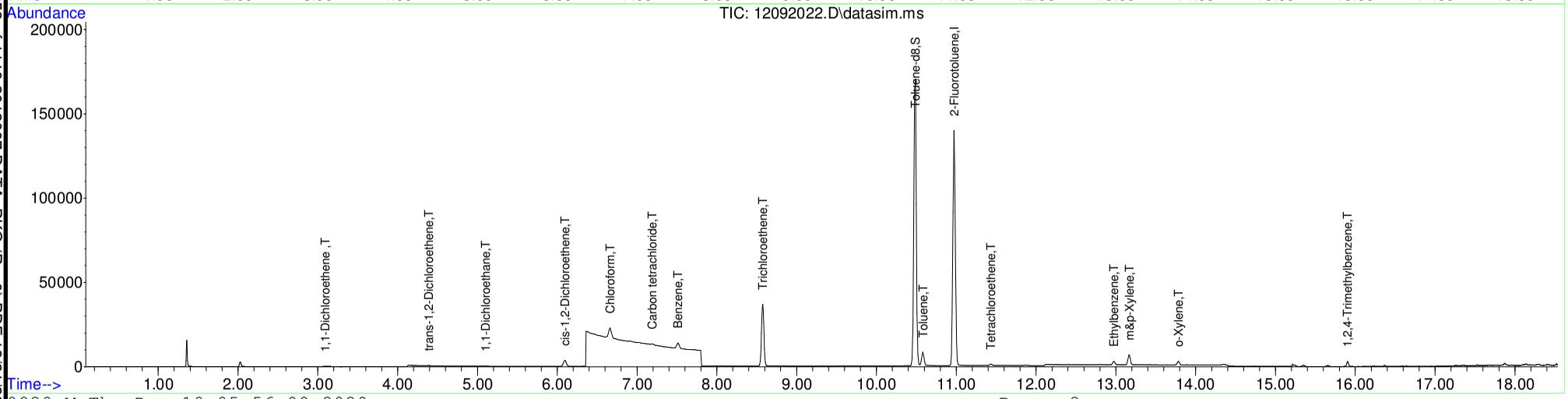
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092022.D
Acq On : 9 Dec 2020 17:10
InstName : AG5975C
Operator : TD
Sample : 2012007-15
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 10 05:55:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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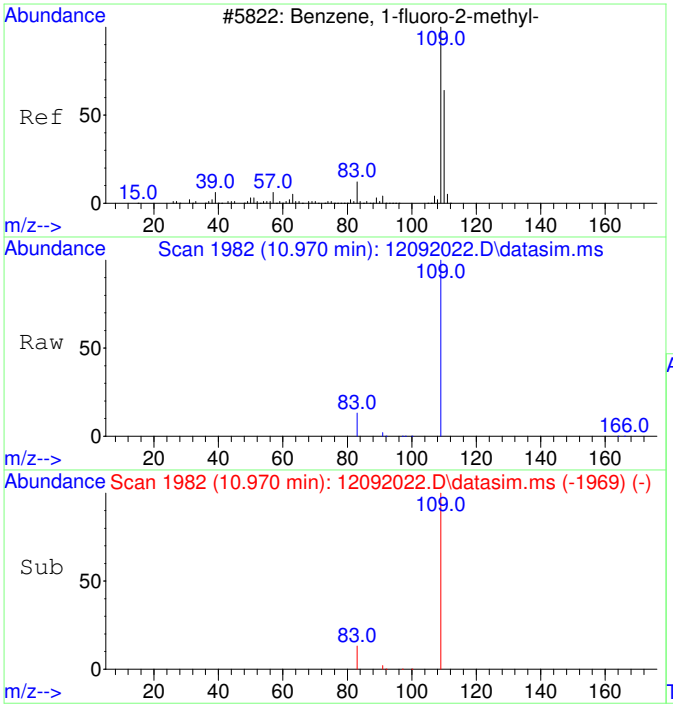
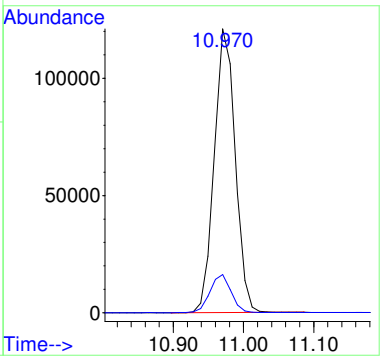
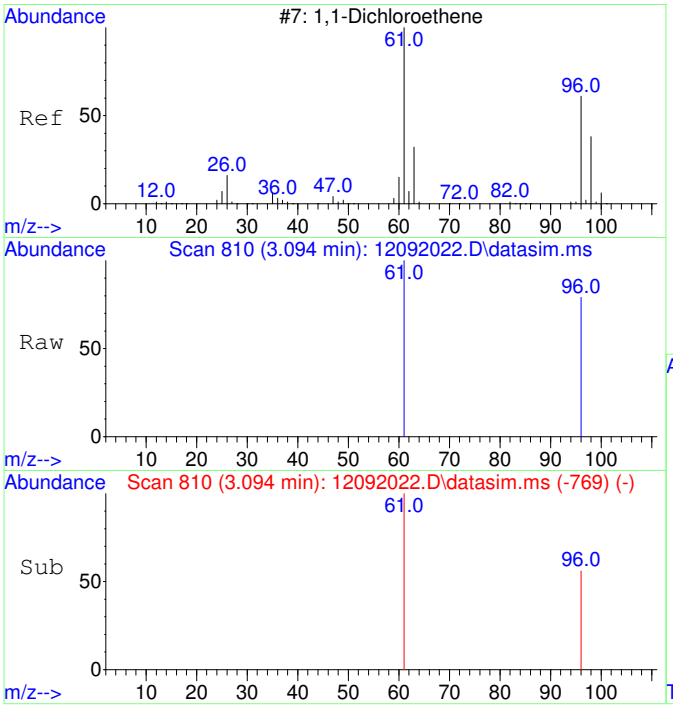


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:109 Resp: 251010

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

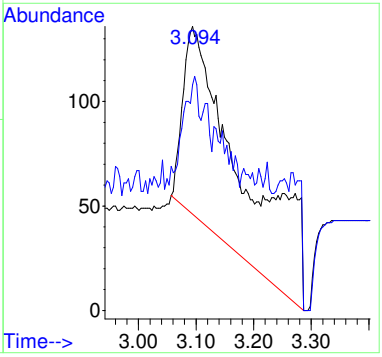




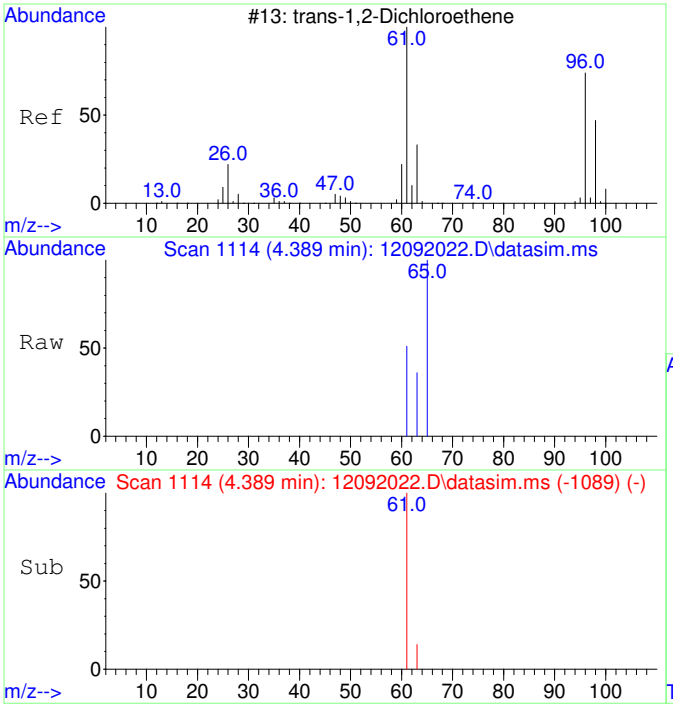
#2
1,1-Dichloroethene
Concen: 66.41 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 661

Ion	Ratio	Lower	Upper
61	100		
96	17.4	37.2	97.2#



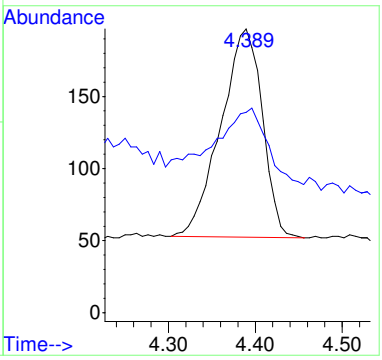
Before MI:
IMPROPER
BASELINE

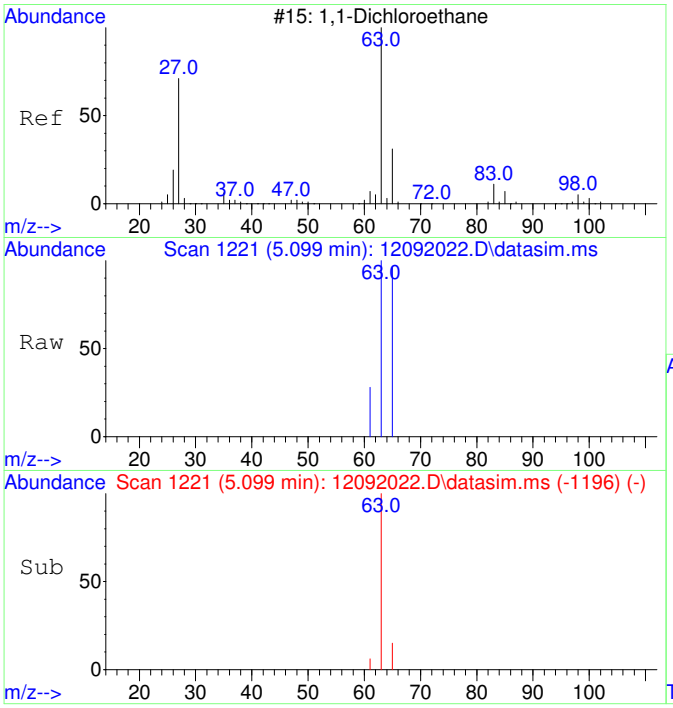


#3
trans-1,2-Dichloroethene
Concen: 38.41 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 482

Ion	Ratio	Lower	Upper
61	100		
63	49.8	2.4	62.4

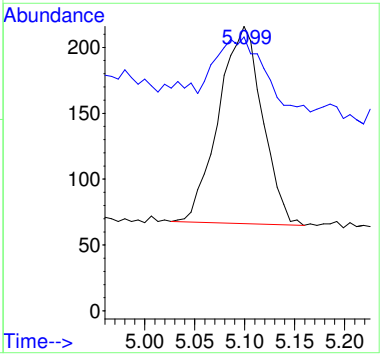


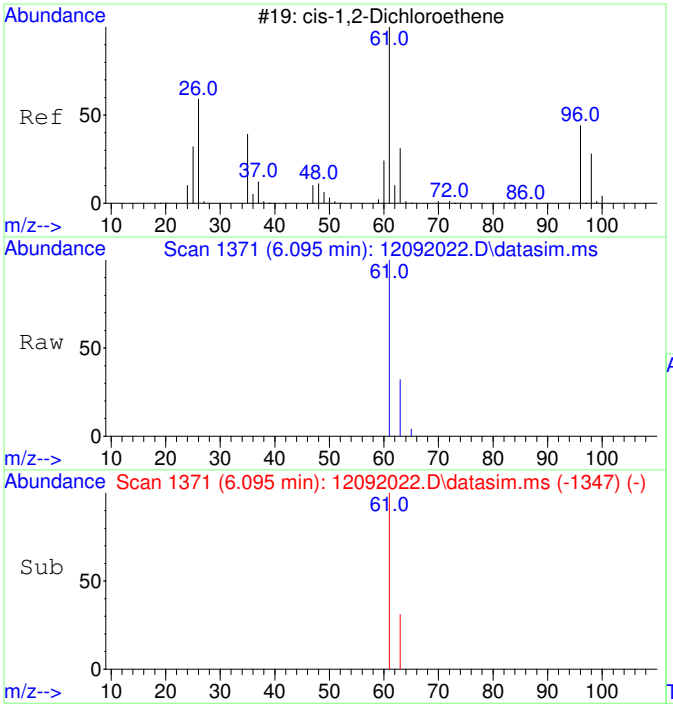


#4
1,1-Dichloroethane
Concen: 30.36 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 63 Resp: 455

Ion	Ratio	Lower	Upper
63	100		
65	44.2	1.8	61.8

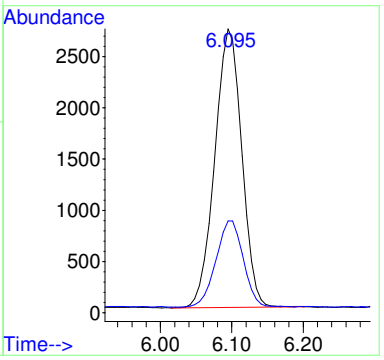


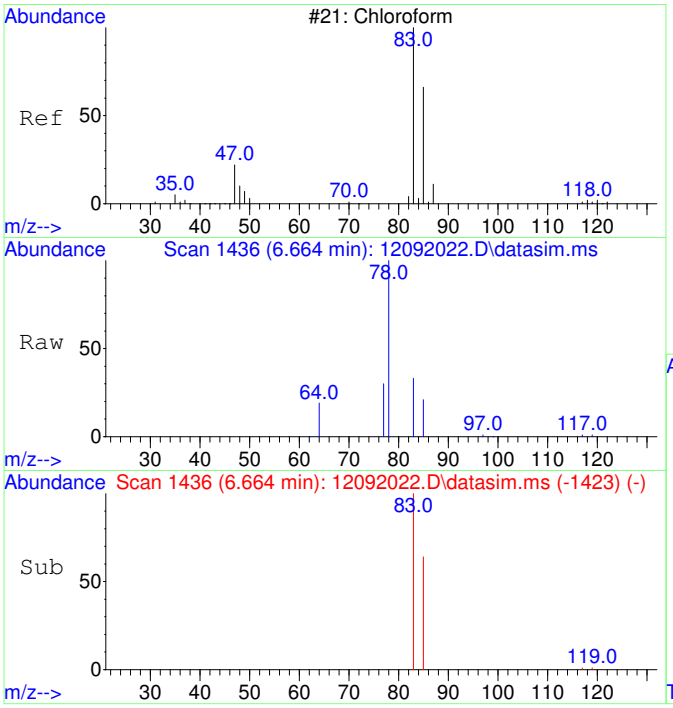


#5
cis-1,2-Dichloroethene
Concen: 459.95 ug/L
RT: 6.095 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 7139

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

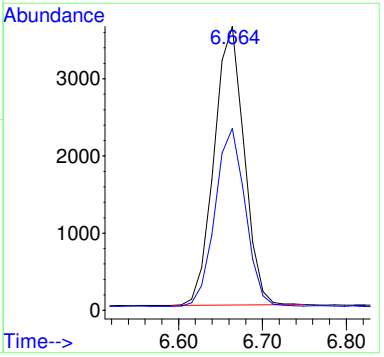


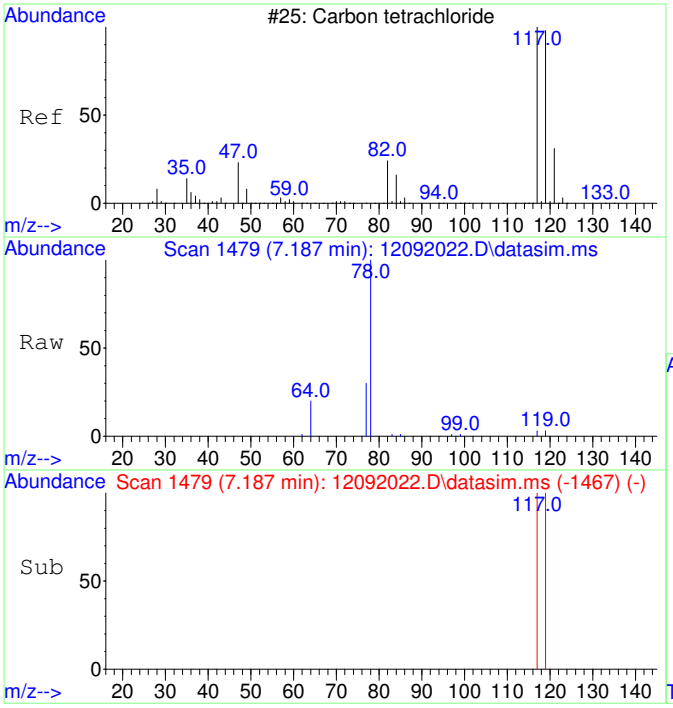


#6
Chloroform
Concen: 600.00 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.013 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 83 Resp: 8945

Ion	Ratio	Lower	Upper
83	100		
85	64.2	35.1	95.1

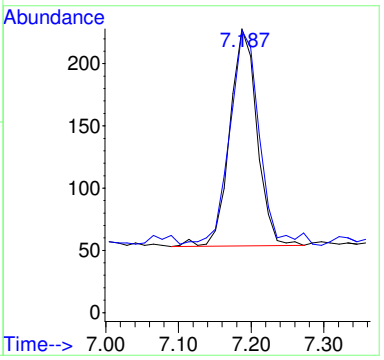


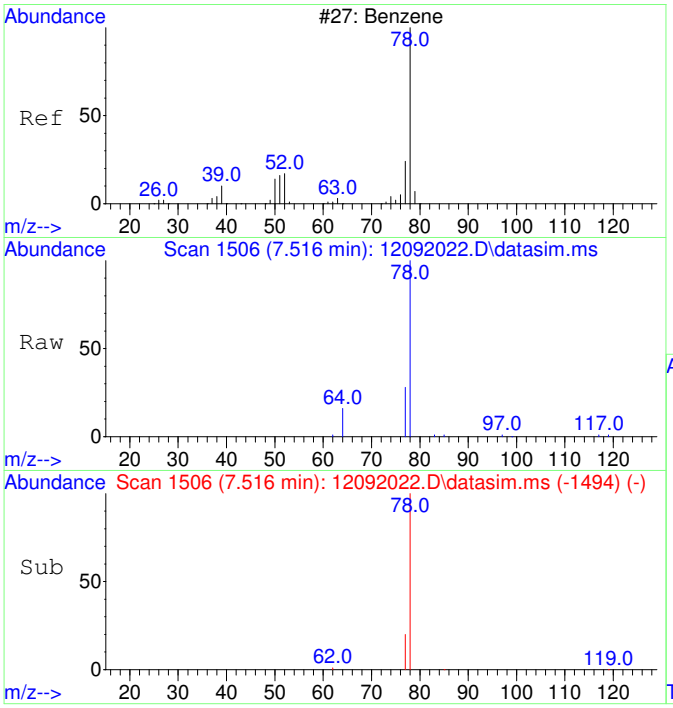


#8
Carbon tetrachloride
Concen: 29.65 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:117 Resp: 454

Ion	Ratio	Lower	Upper
117	100		
119	105.3	66.4	126.4

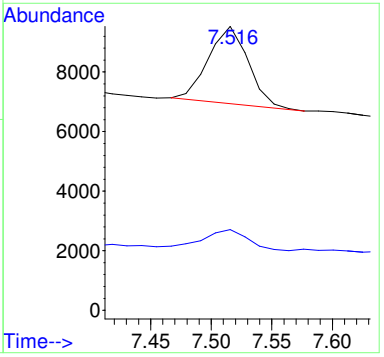


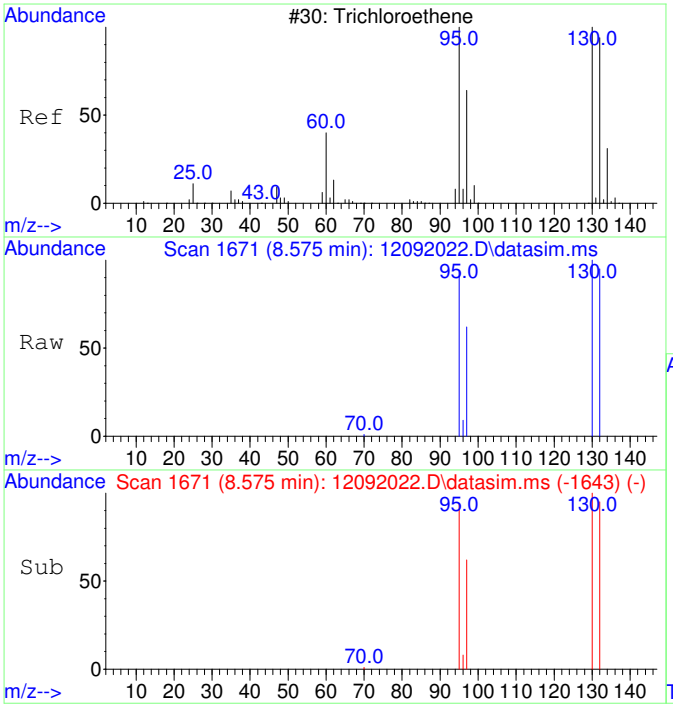


#9
Benzene
Concen: 137.36 ug/L
RT: 7.516 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 78 Resp: 5802

Ion	Ratio	Lower	Upper
78	100		
77	34.1	0.0	53.2

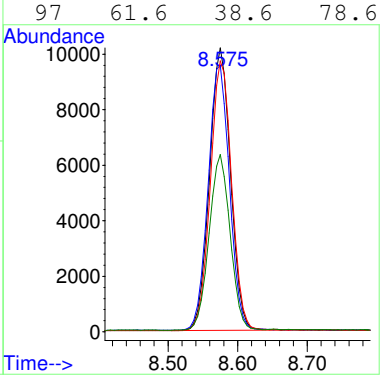


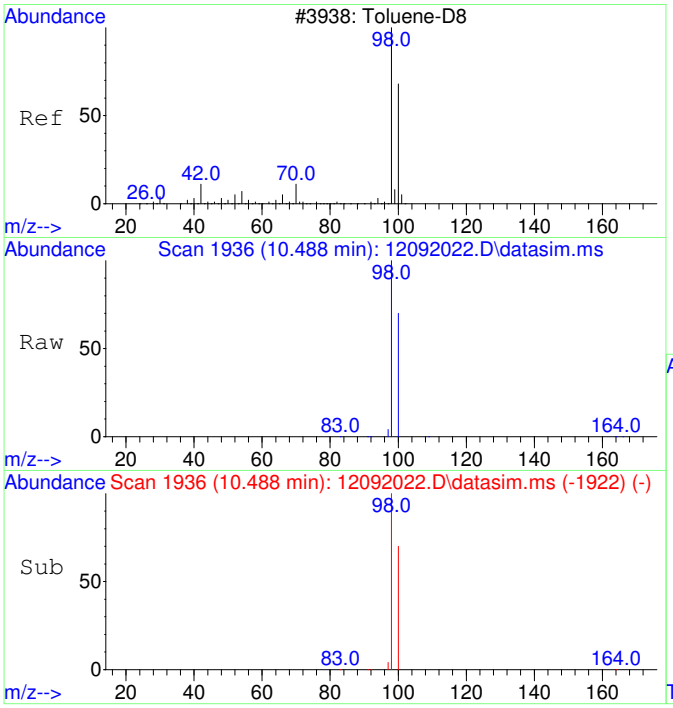


#11
Trichloroethene
Concen: 1602.76 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:130 Resp: 21374

Ion	Ratio	Lower	Upper
130	100		
95	95.1	60.7	120.7
132	95.9	76.0	116.0
97	61.6	38.6	78.6

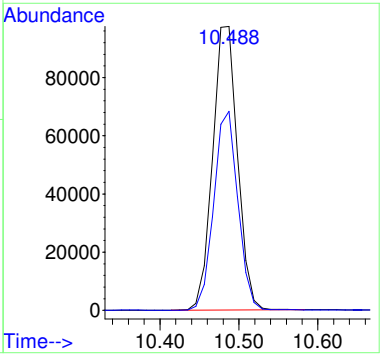


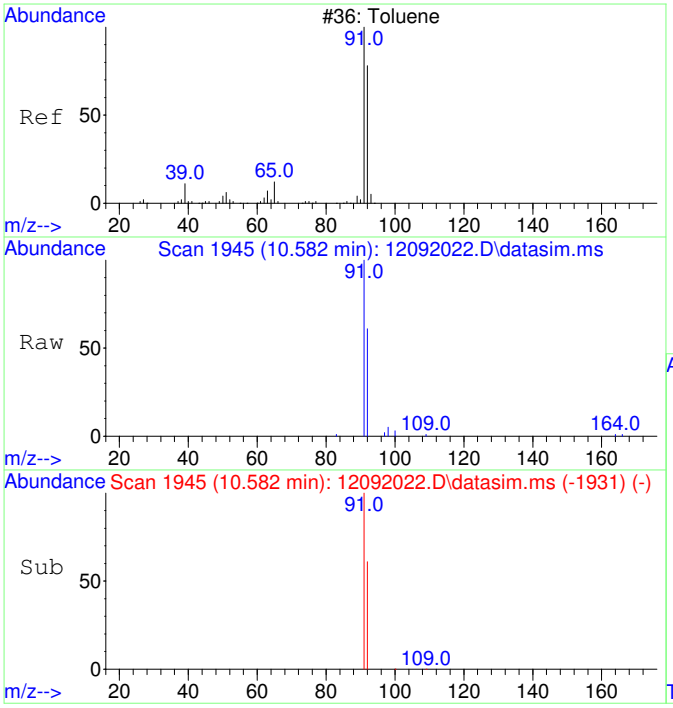


#12
Toluene-d8
Concen: 4391.56 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 98 Resp: 213493

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

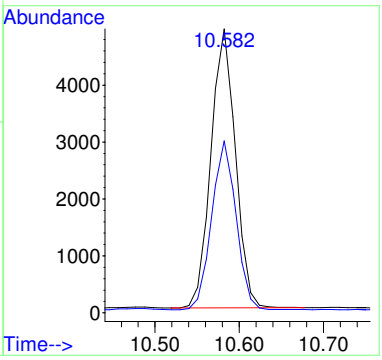


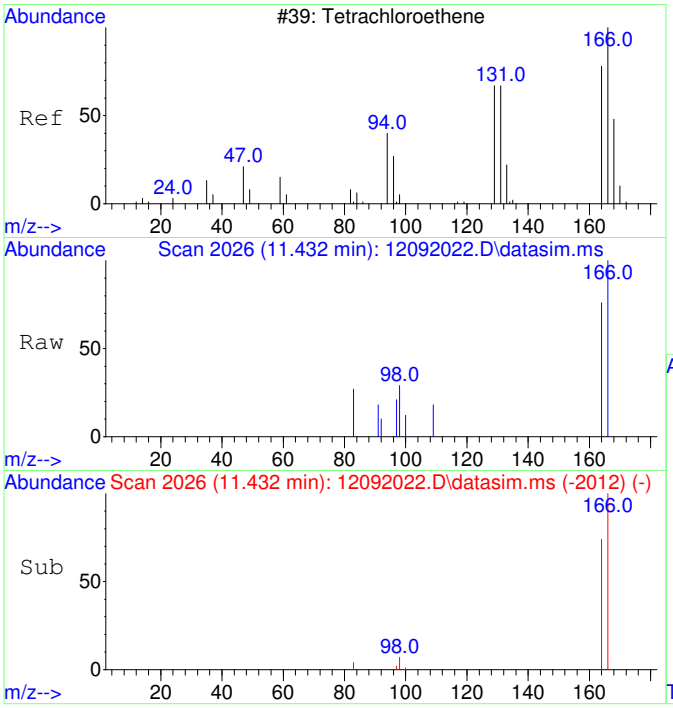


#13
Toluene
Concen: 163.59 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 9902

Ion	Ratio	Lower	Upper
91	100		
92	60.0	29.9	89.9

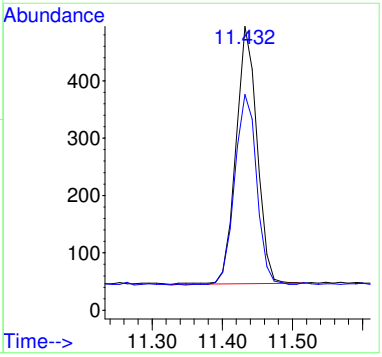


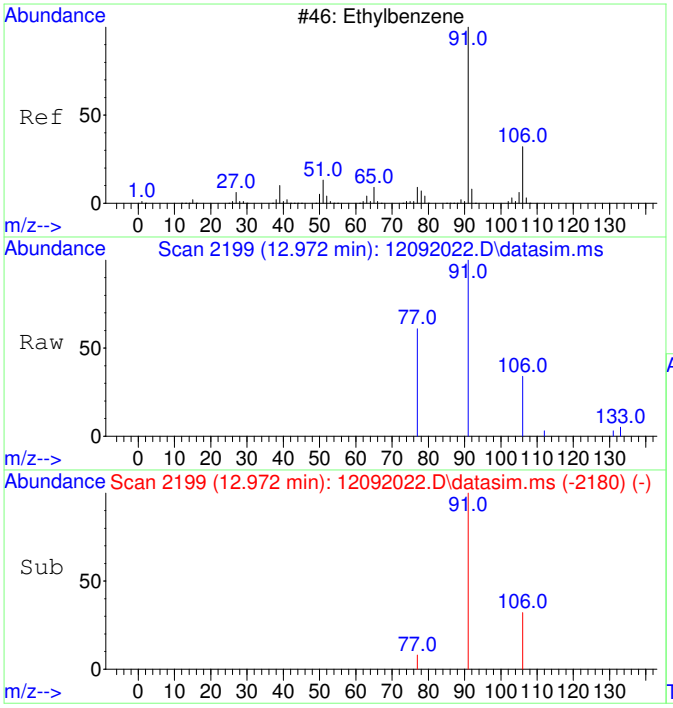


#15
Tetrachloroethene
Concen: 49.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:166 Resp: 940

Ion	Ratio	Lower	Upper
166	100		
164	76.9	47.8	107.8

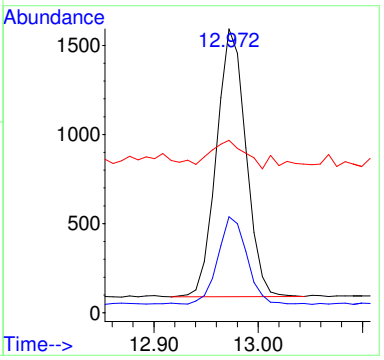


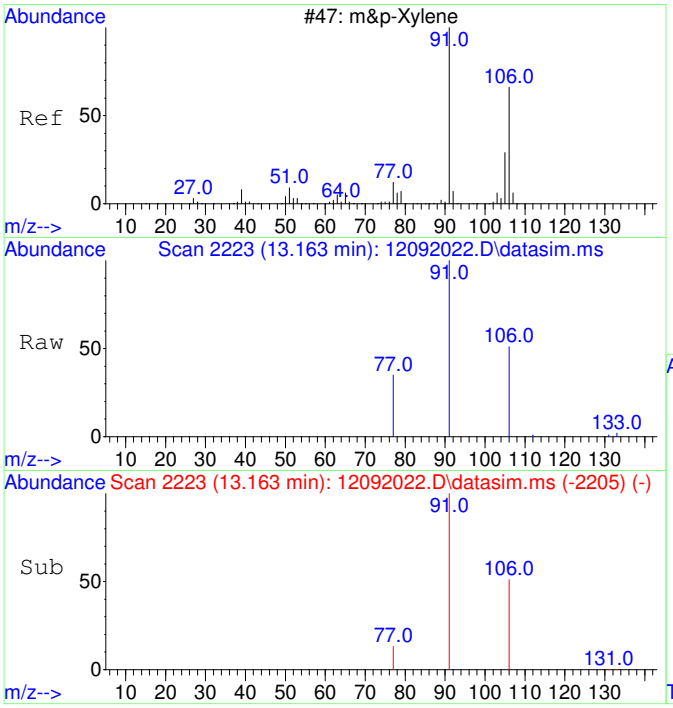


#18
Ethylbenzene
Concen: 37.91 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2931

Ion	Ratio	Lower	Upper
91	100		
106	31.8	3.0	63.0
77	13.0	0.0	38.2

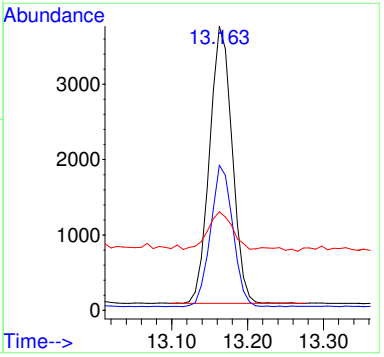


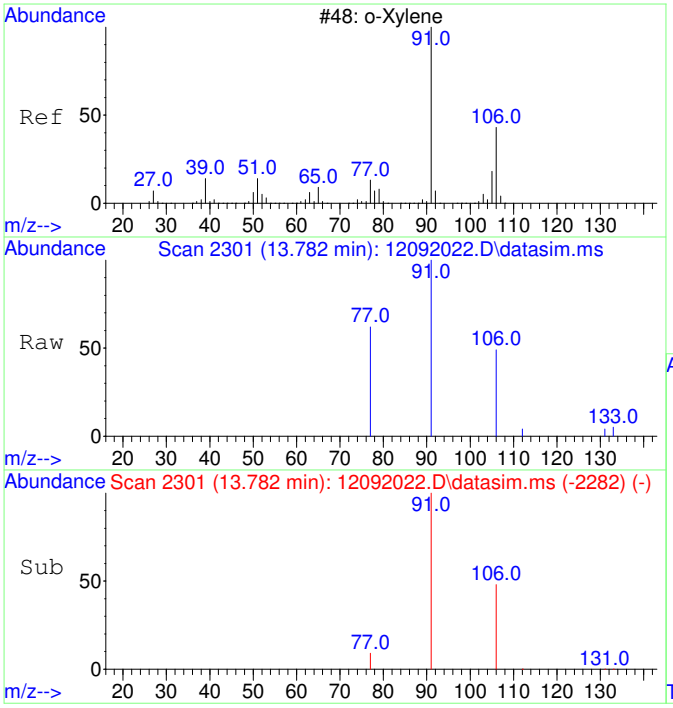


#19
m&p-Xylene
Concen: 127.79 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 7608

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.9	0.0	42.4

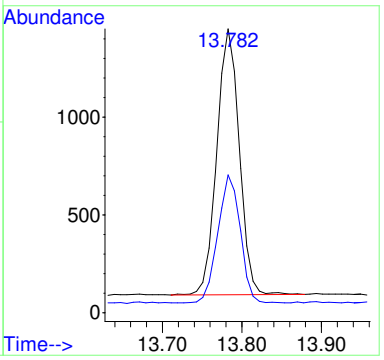


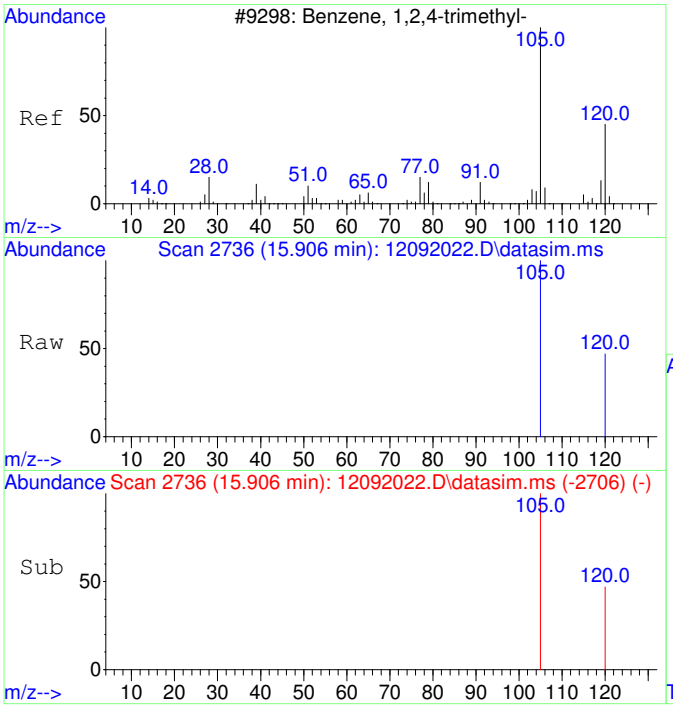


#20
o-Xylene
Concen: 41.82 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2674

Ion	Ratio	Lower	Upper
91	100		
106	47.9	19.2	79.2

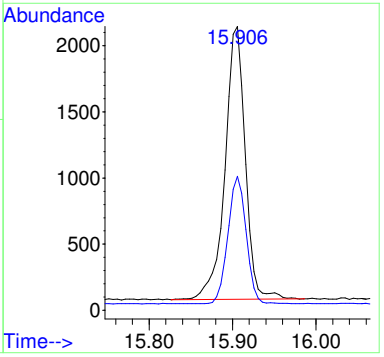


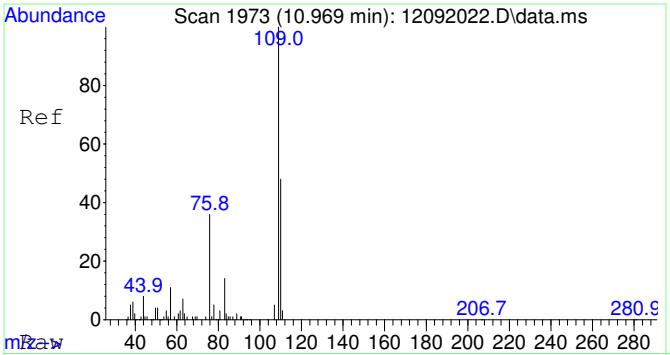


#23
1,2,4-Trimethylbenzene
Concen: 48.09 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:105 Resp: 3459

Ion	Ratio	Lower	Upper
105	100		
120	42.1	17.2	77.2

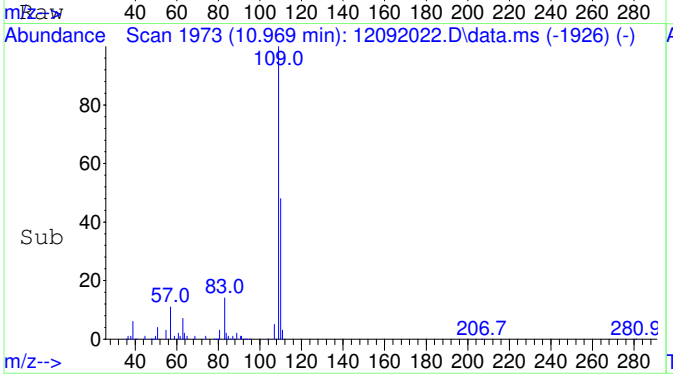


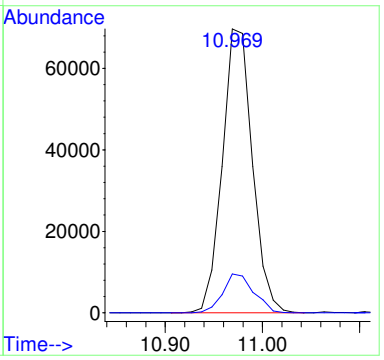


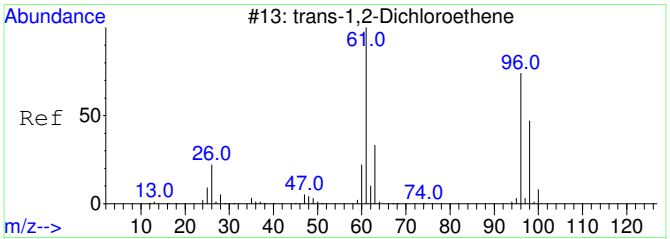
#25
2-Fluorotoluene SCAN
Concen: 5246.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:109 Resp: 149490

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



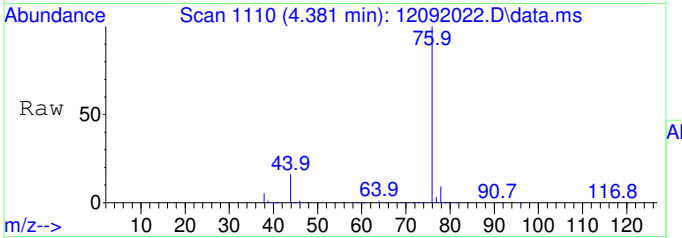


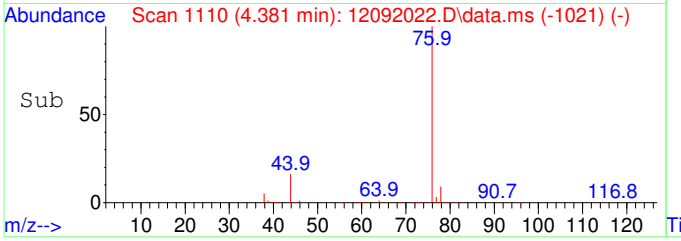


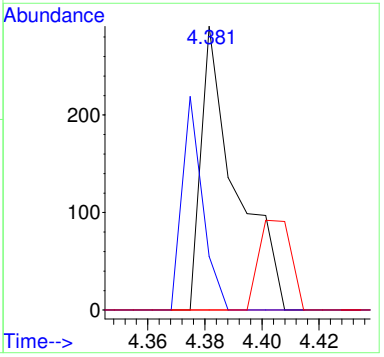
#27
trans-1,2-Dichloroethene SCAN
Concen: 29.27 ug/L
RT: 4.381 min Scan# 1110
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

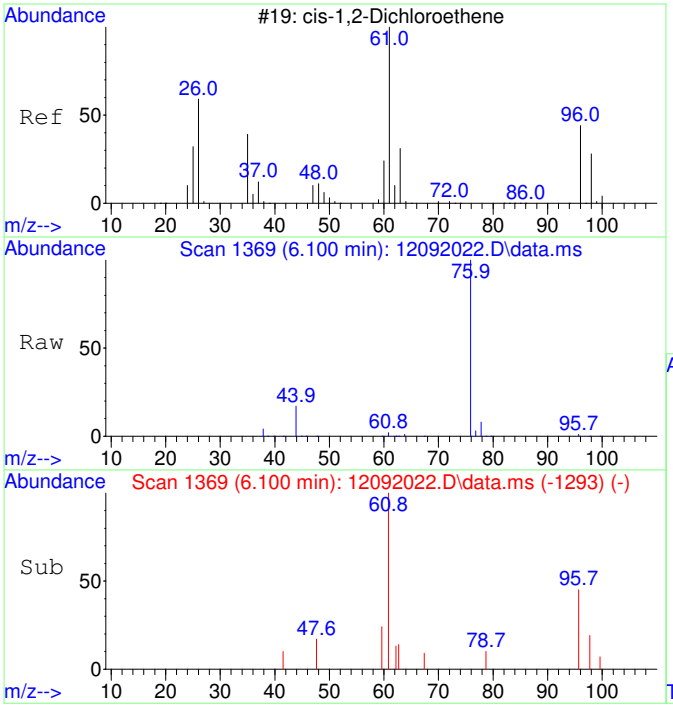
Tgt Ion: 61 Resp: 248

Ion	Ratio	Lower	Upper
61	100		
96	44.0	49.0	109.0#
98	0.0	20.5	80.5#





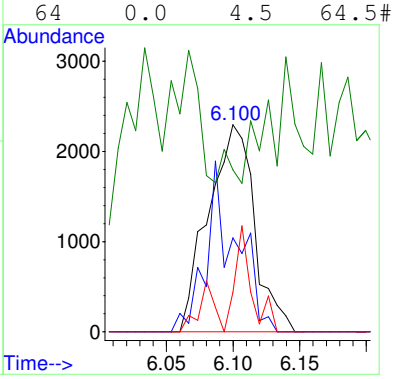


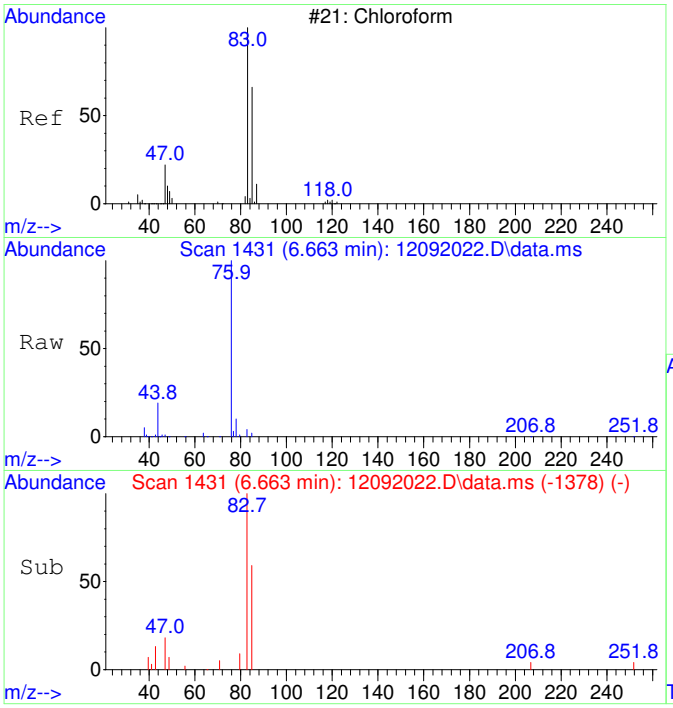


#29
cis-1,2-Dichloroethene SCAN
Concen: 561.20 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 5517

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	18.3	13.5	73.5
64	0.0	4.5	64.5#

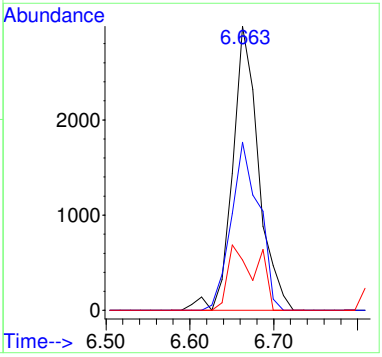


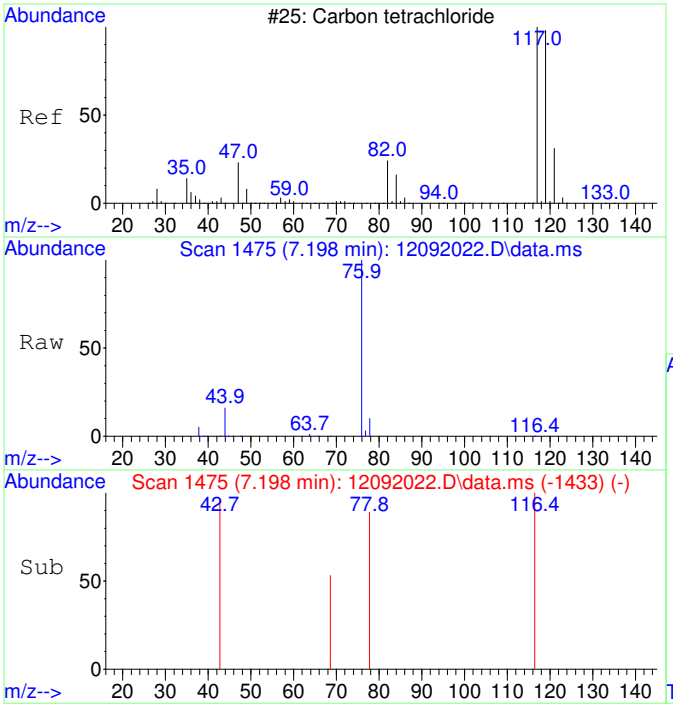


#30
Chloroform SCAN
Concen: 698.20 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 83 Resp: 6402

Ion	Ratio	Lower	Upper
83	100		
85	63.7	34.6	94.6
47	25.7	0.0	53.4

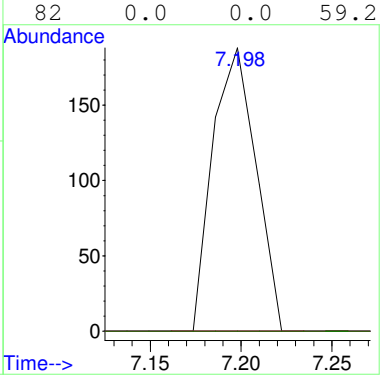


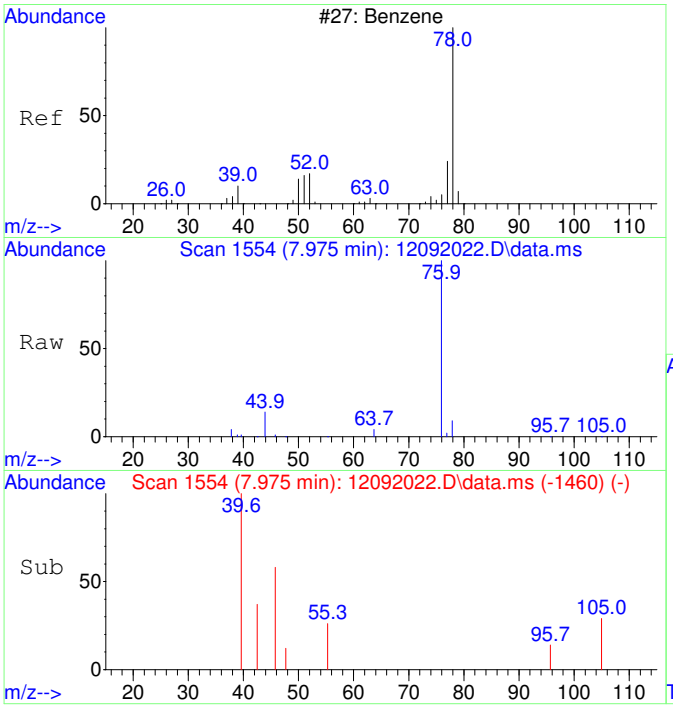


#32
Carbon tetrachloride SCAN
Concen: 38.59 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.013 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:117 Resp: 312

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

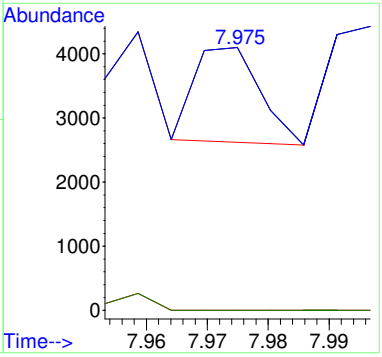


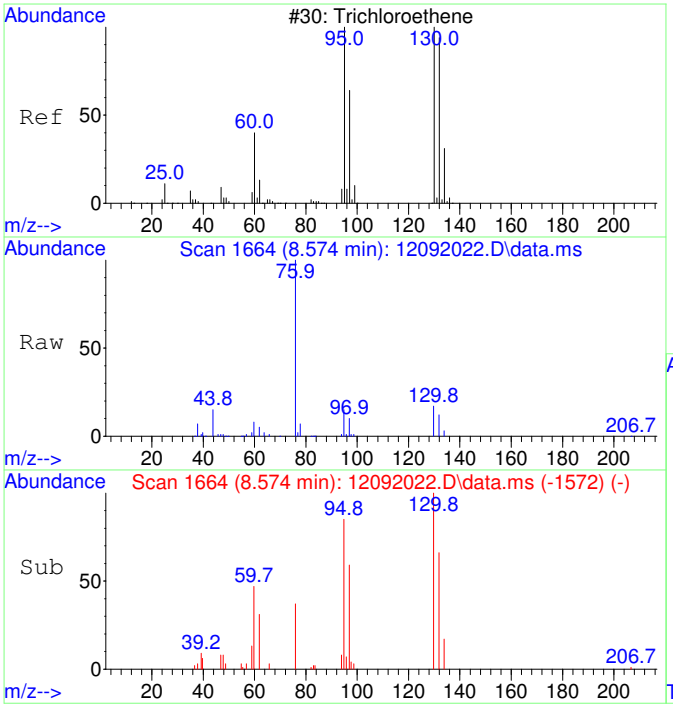


#33
Benzene SCAN
Concen: 38.39 ug/L
RT: 7.975 min Scan# 1554
Delta R.T. 0.461 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 78 Resp: 1099

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.9	0.0	47.9
51	10.9	0.0	44.1

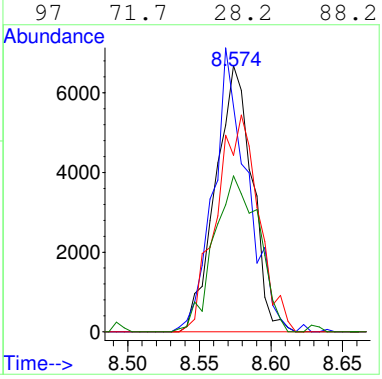


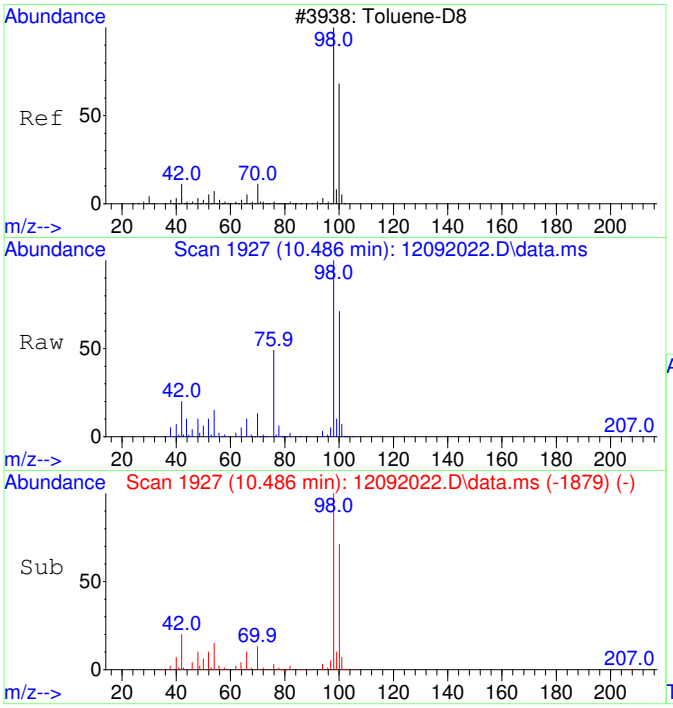


#35
Trichloroethene SCAN
Concen: 1898.01 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:130 Resp: 11847

Ion	Ratio	Lower	Upper
130	100		
95	99.0	60.5	120.5
132	94.2	59.6	119.6
97	71.7	28.2	88.2

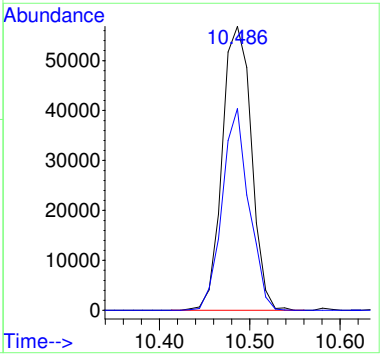


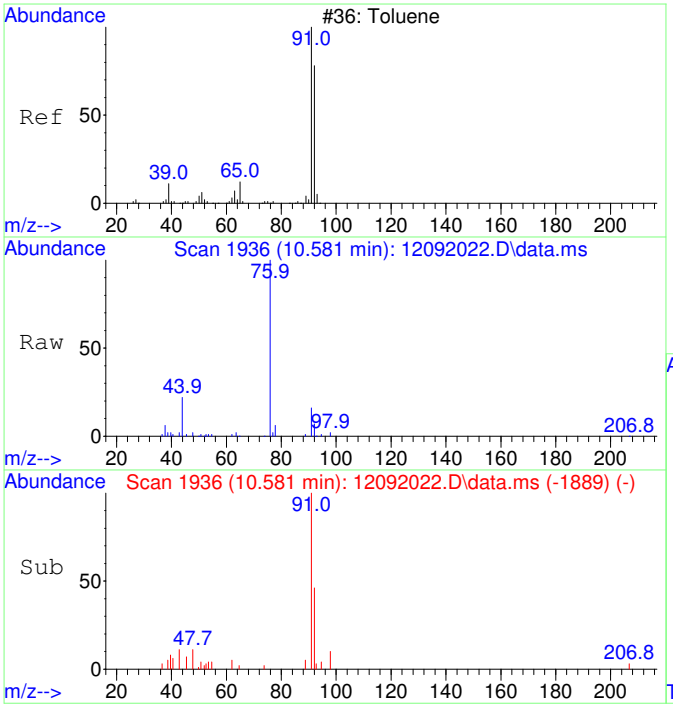


#36
Toluene-d8 SCAN
Concen: 4806.87 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 98 Resp: 128452

Ion	Ratio	Lower	Upper
98	100		
100	65.2	40.0	100.0

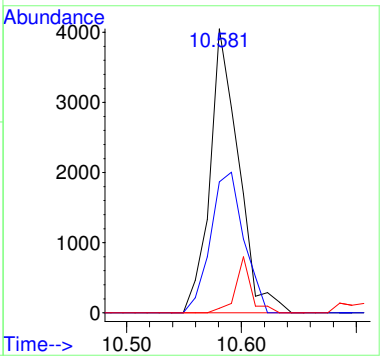


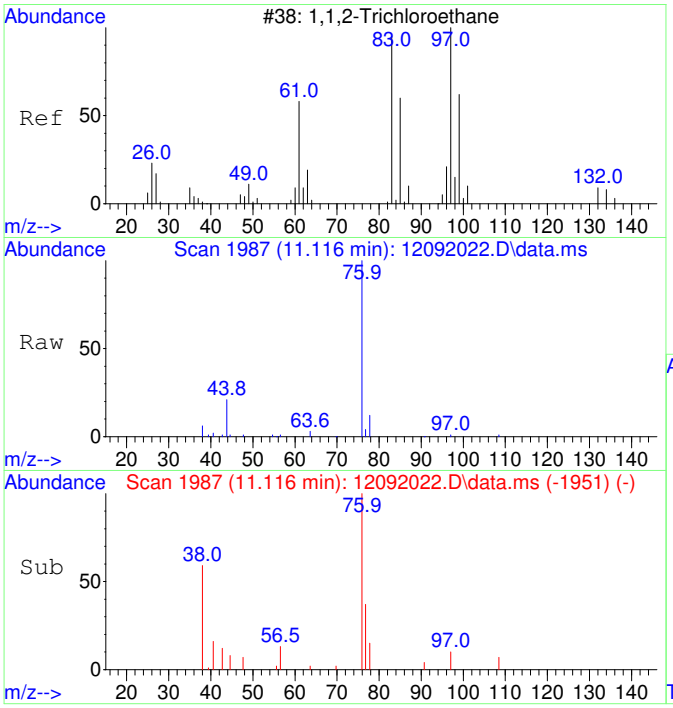


#37
Toluene SCAN
Concen: 213.21 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 7015

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

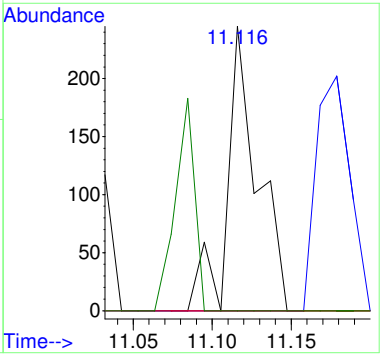


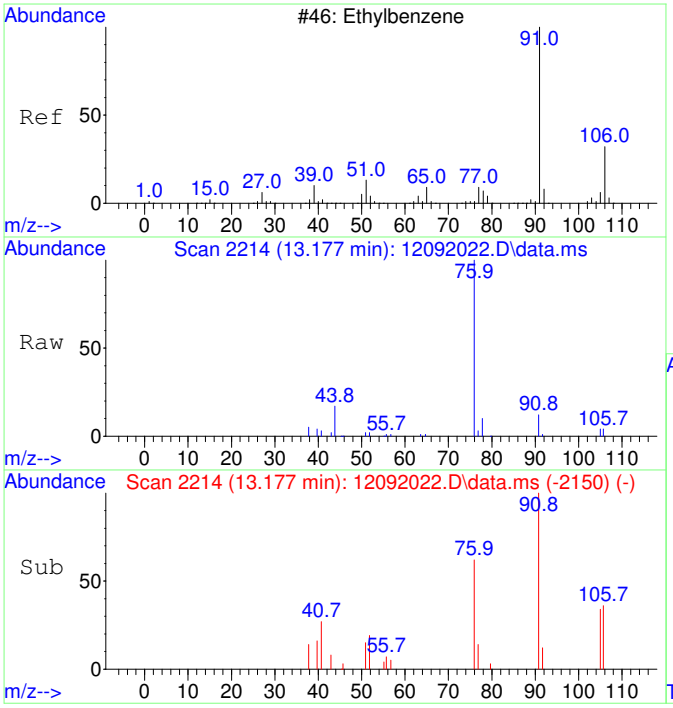


#38
1,1,2-Trichloroethane SCAN
Concen: 39.53 ug/L
RT: 11.116 min Scan# 1987
Delta R.T. -0.126 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 97 Resp: 326

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

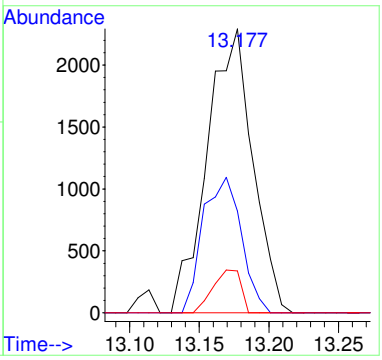


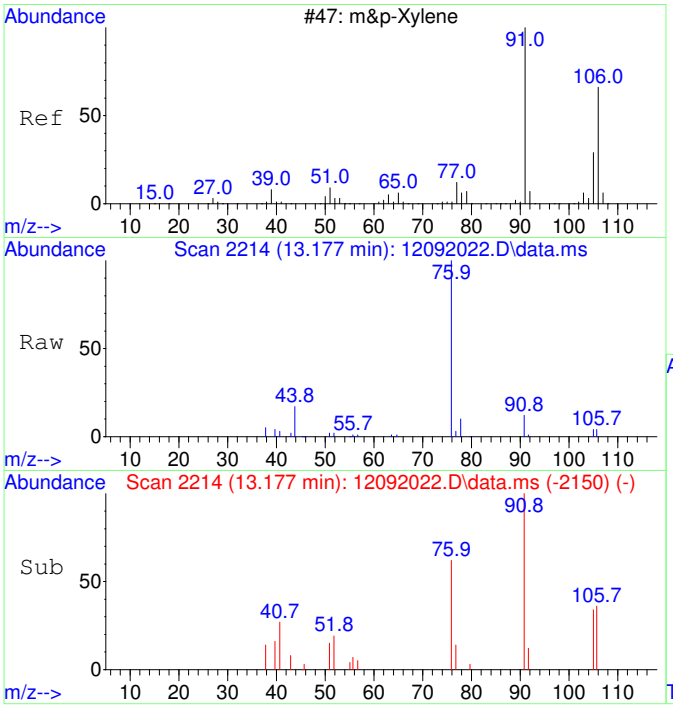


#42
Ethylbenzene SCAN
Concen: 83.48 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 5234

Ion	Ratio	Lower	Upper
91	100		
106	40.1	23.1	83.1
51	9.3	0.0	40.1

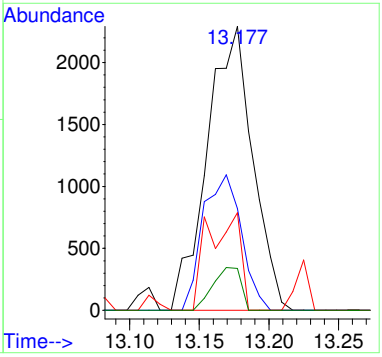


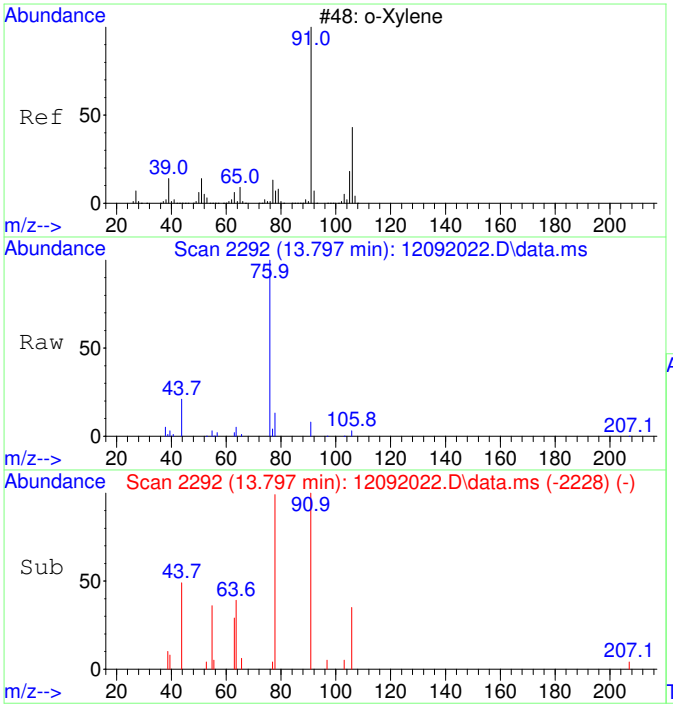


#43
m&p-Xylene SCAN
Concen: 83.48 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 5234

Ion	Ratio	Lower	Upper
91	100		
106	40.1	23.1	83.1
105	24.3	0.0	54.7
51	9.3	0.0	40.1

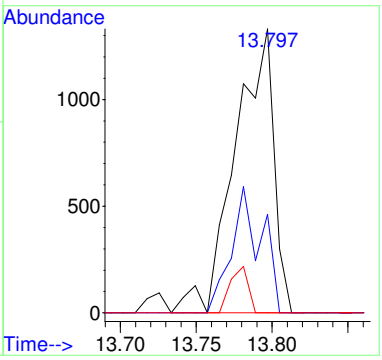


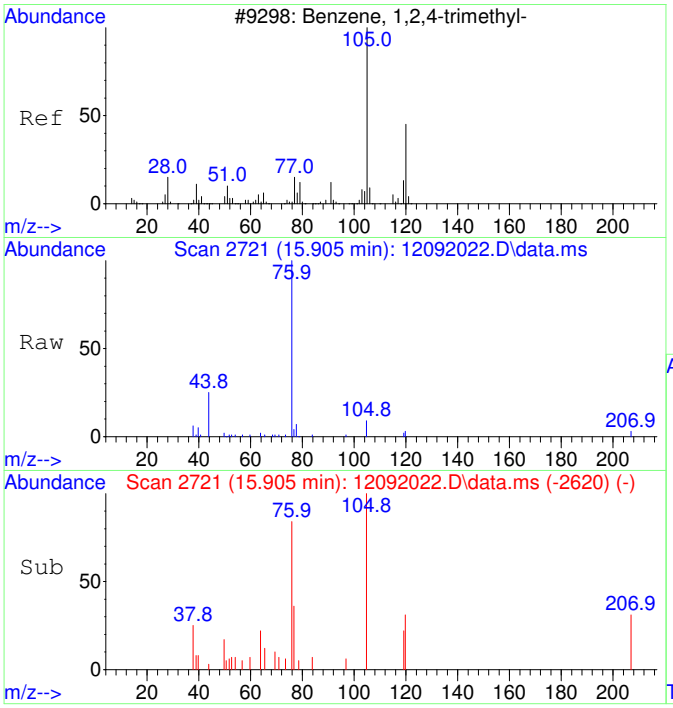


#44
o-Xylene SCAN
Concen: 69.19 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2369

Ion	Ratio	Lower	Upper
91	100		
106	34.4	18.0	78.0
105	7.6	0.0	56.6

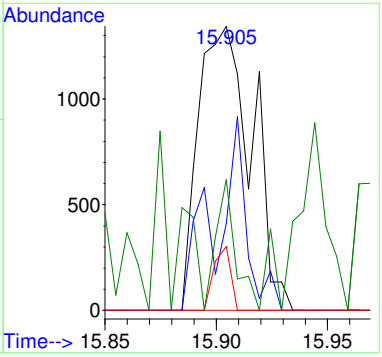




#47
1,2,4-Trimethylbenzene SCAN
Concen: 61.13 ug/L
RT: 15.905 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:105 Resp: 2256

Ion	Ratio	Lower	Upper
105	100		
120	15.6	16.9	76.9#
119	7.0	0.0	41.9
77	16.9	0.0	42.3



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092022.D
Acq On : 9 Dec 2020 17:10
InstName : AG5975C
Operator : TD
Sample : 2012007-15
Misc :
ALS Vial : 22 Sample Multiplier: 1

M.I. Performed By:
TD at 10:21 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:03 pm, Dec 14, 2020

Quant Time: Dec 10 05:55:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

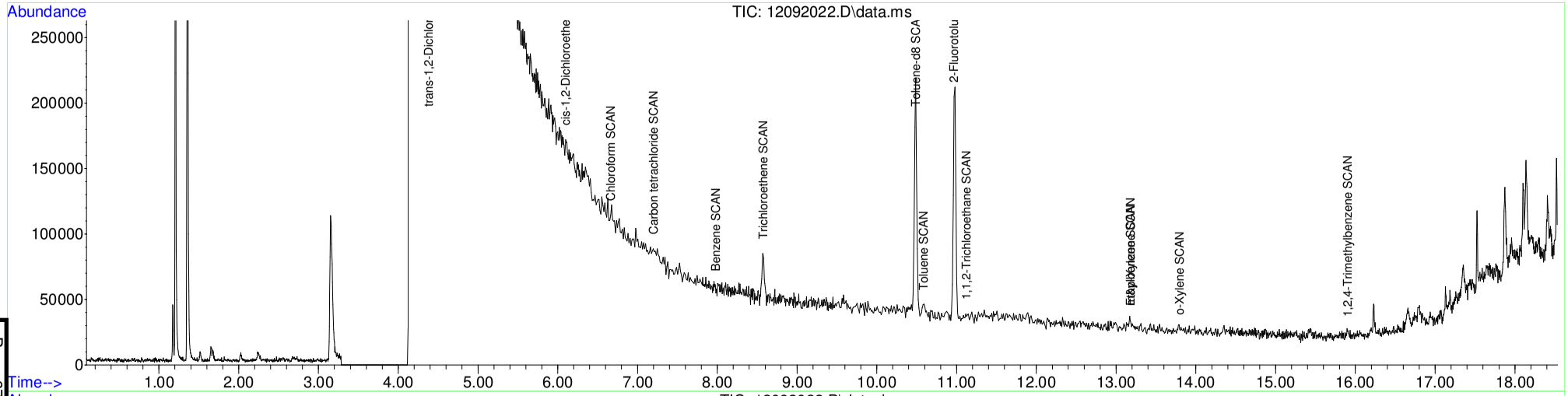
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	251010	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	213493	4391.56	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.83%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	363m	36.47	ug/L	
3] trans-1,2-Dichloroethene	4.389	61	482	38.41	ug/L	69
4] 1,1-Dichloroethane	5.099	63	455	30.36	ug/L	78
5] cis-1,2-Dichloroethene	6.095	61	7139	459.95	ug/L	98
6] Chloroform	6.664	83	8945	600.00	ug/L	99
8] Carbon tetrachloride	7.187	117	454	29.65	ug/L	91
9] Benzene	7.516	78	5802	137.36	ug/L	78
11] Trichloroethene	8.575	130	21374	1602.76	ug/L	97
13] Toluene	10.582	91	9902	163.59	ug/L	100
15] Tetrachloroethene	11.432	166	940	49.86	ug/L	99
18] Ethylbenzene	12.972	91	2931	37.91	ug/L	96
19] m&p-Xylene	13.163	91	7608	127.79	ug/L	97
20] o-Xylene	13.782	91	2674	41.82	ug/L	98
23] 1,2,4-Trimethylbenzene	15.906	105	3459	48.09	ug/L	92
25) 2-Fluorotoluene SCAN	10.969	109	149490	5246.70	ug/L	99
27) trans-1,2-Dichloroethe...	4.381	61	248	29.27	ug/L #	47
29) cis-1,2-Dichloroethene...	6.100	61	5517	561.20	ug/L #	34
30) Chloroform SCAN	6.663	83	6402	698.20	ug/L	98
32) Carbon tetrachloride SCAN	7.198	117	312	38.59	ug/L #	15
33) Benzene SCAN	7.975	78	1099	38.39	ug/L	97
35) Trichloroethene SCAN	8.574	130	11847	1898.01	ug/L	90
36) Toluene-d8 SCAN	10.486	98	128452	4806.87	ug/L	94
37) Toluene SCAN	10.581	91	7015	213.21	ug/L #	30
38) 1,1,2-Trichloroethane ...	11.116	97	326	39.53	ug/L #	13
42) Ethylbenzene SCAN	13.177	91	5234	83.48	ug/L	84
43) m&p-Xylene SCAN	13.177	91	5234	83.48	ug/L	89
44) o-Xylene SCAN	13.797	91	2369	69.19	ug/L	74
47) 1,2,4-Trimethylbenzene...	15.905	105	2256	61.13	ug/L #	65

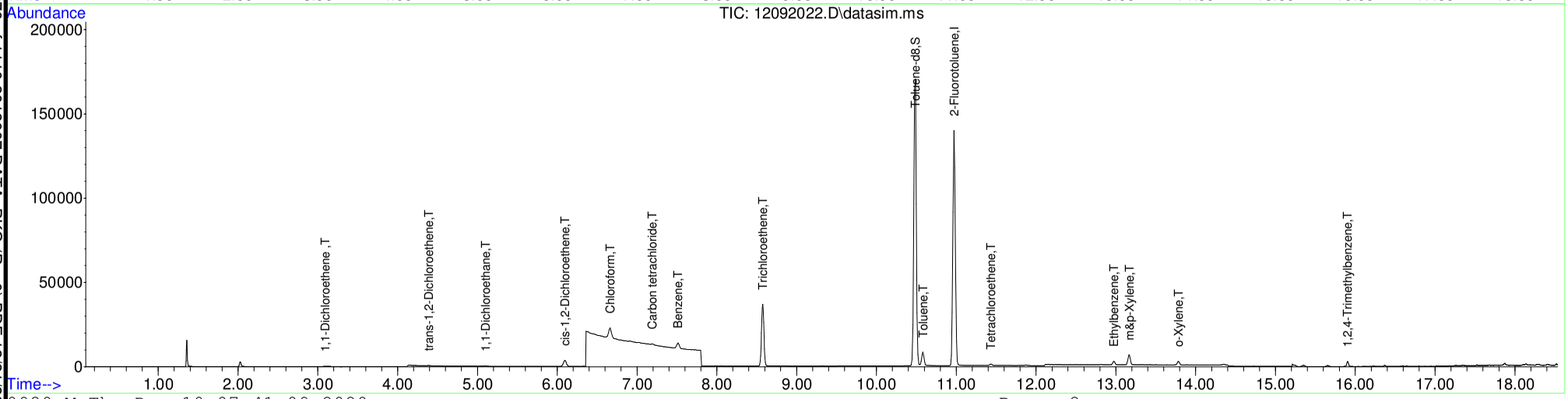
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092022.D
Acq On : 9 Dec 2020 17:10
InstName : AG5975C
Operator : TD
Sample : 2012007-15
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Dec 10 05:55:59 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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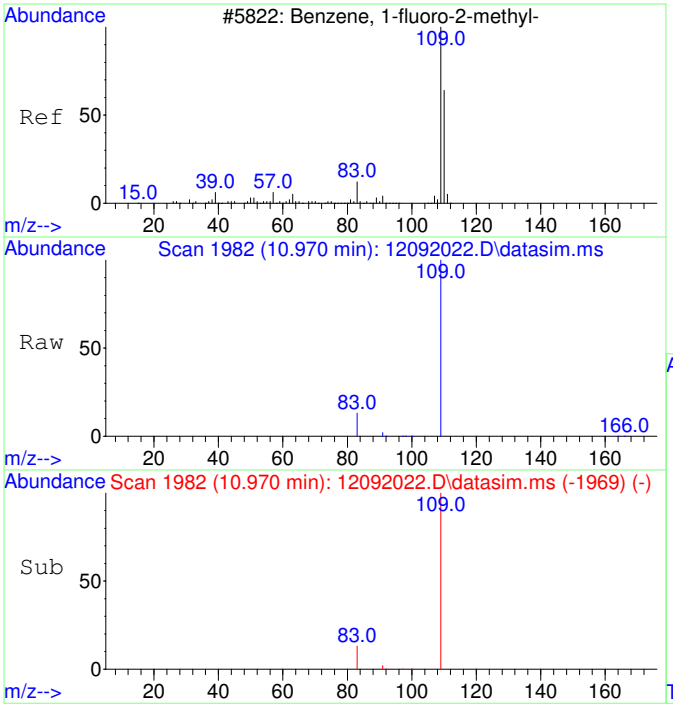
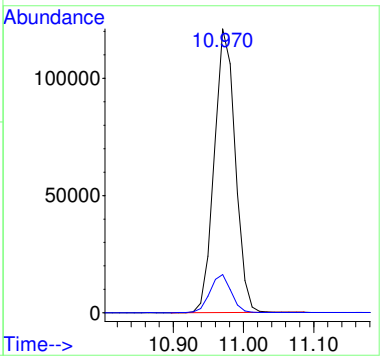
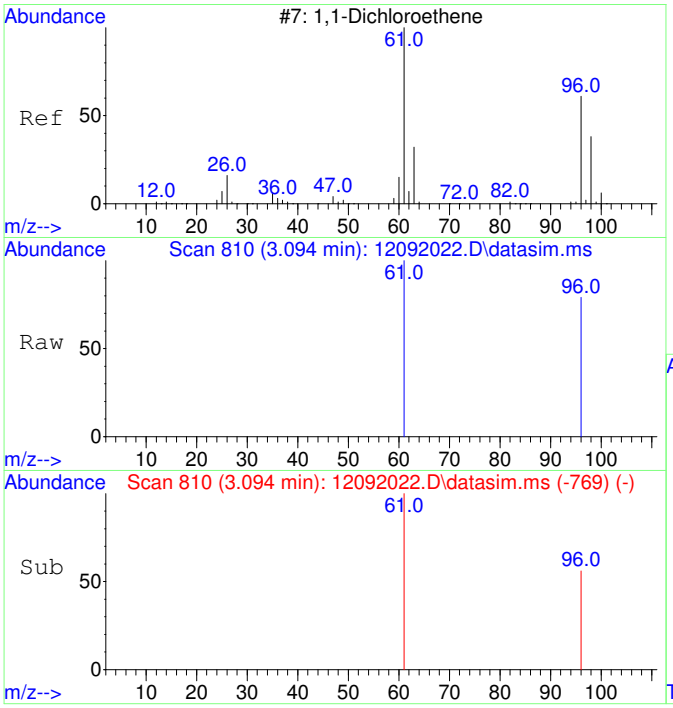


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:109 Resp: 251010

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

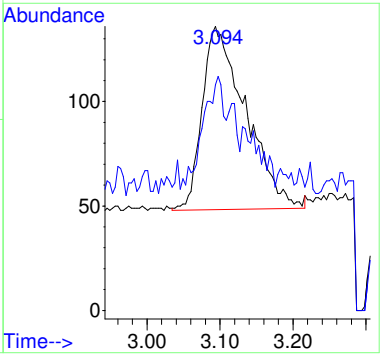


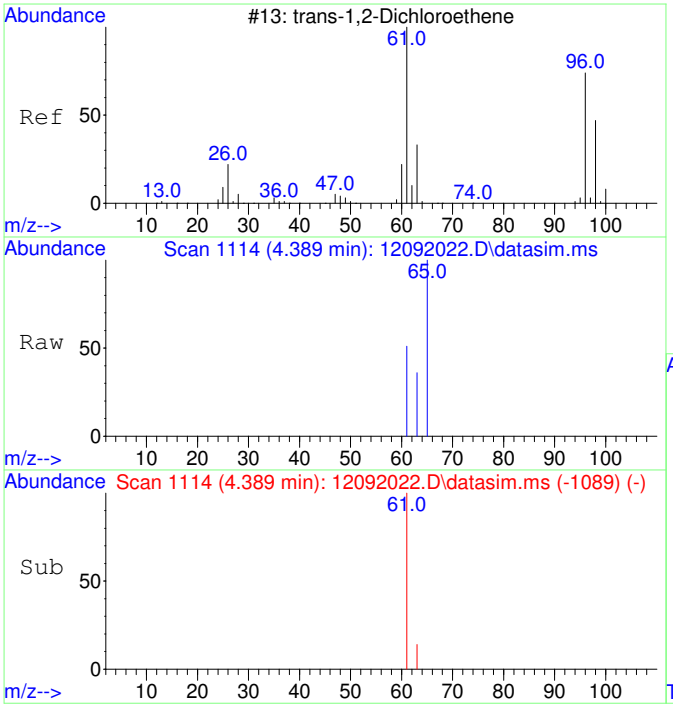


#2
1,1-Dichloroethene
Concen: 36.47 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 363

Ion	Ratio	Lower	Upper
61	100		
96	31.7	37.2	97.2#

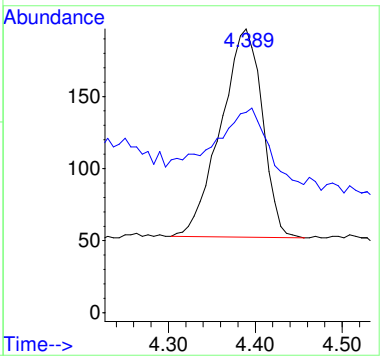


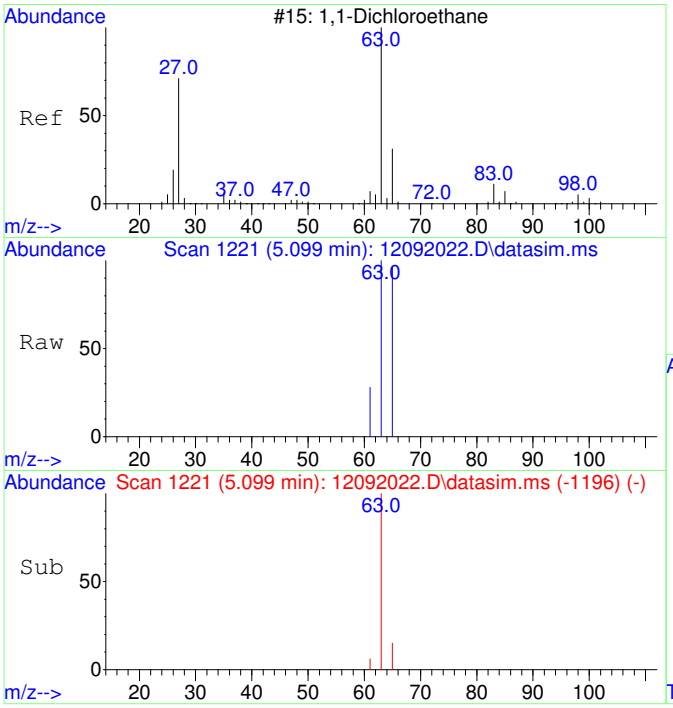


#3
trans-1,2-Dichloroethene
Concen: 38.41 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 482

Ion	Ratio	Lower	Upper
61	100		
63	49.8	2.4	62.4

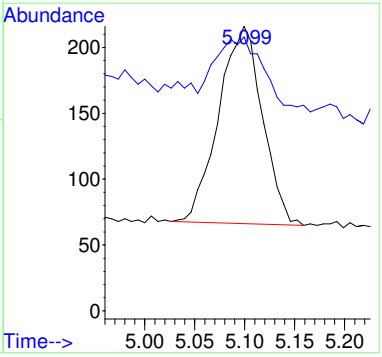


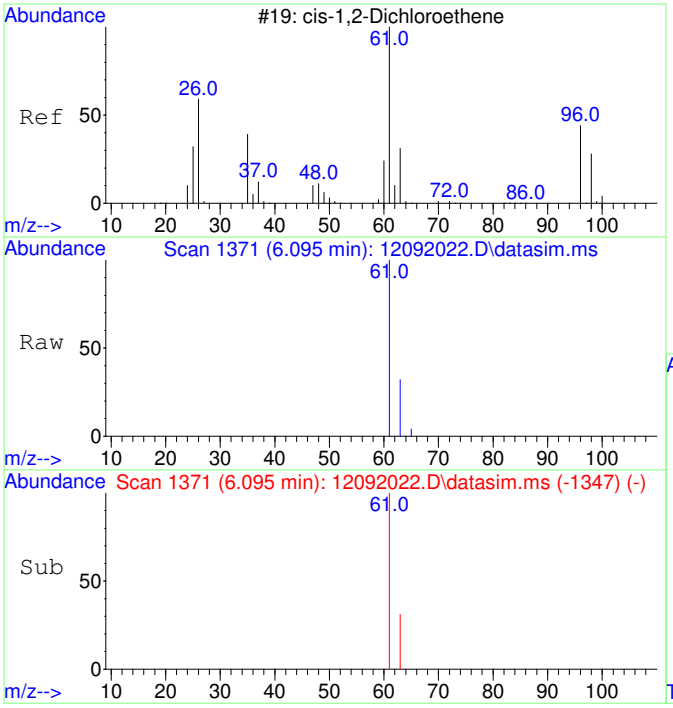


#4
1,1-Dichloroethane
Concen: 30.36 ug/L
RT: 5.099 min Scan# 1221
Delta R.T. 0.014 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 63 Resp: 455

Ion	Ratio	Lower	Upper
63	100		
65	44.2	1.8	61.8

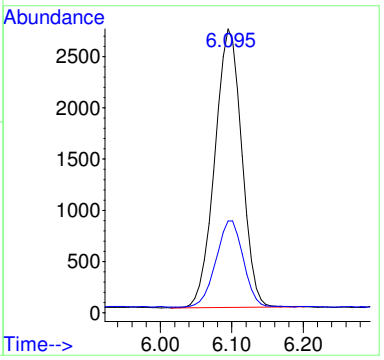


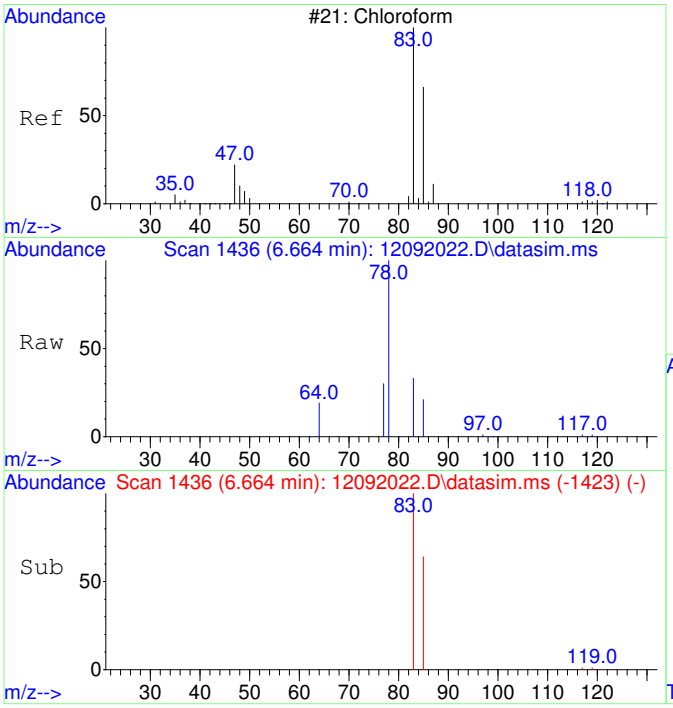


#5
cis-1,2-Dichloroethene
Concen: 459.95 ug/L
RT: 6.095 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 7139

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

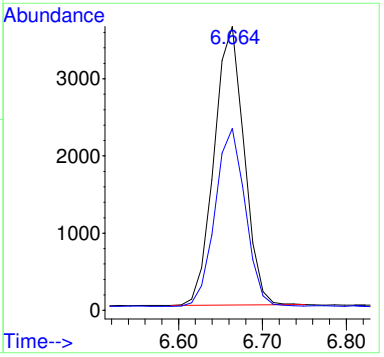


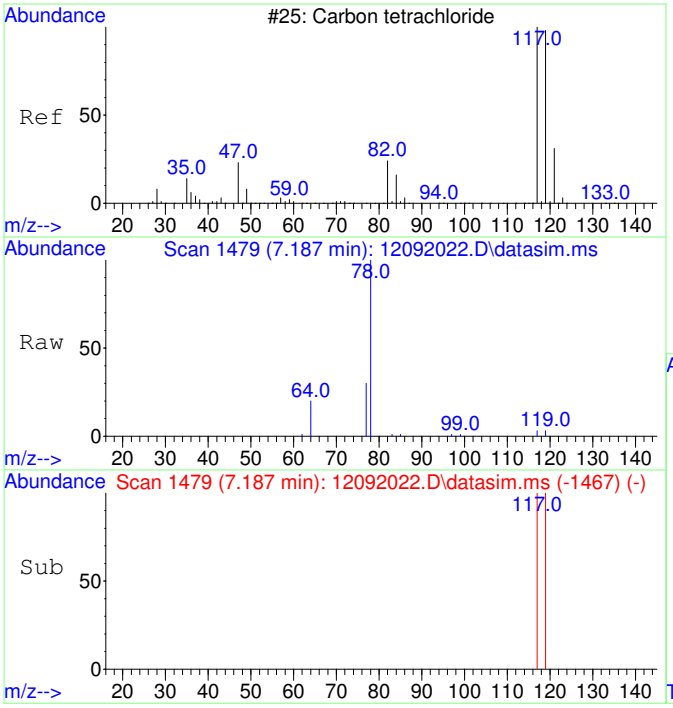


#6
Chloroform
Concen: 600.00 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.013 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 83 Resp: 8945

Ion	Ratio	Lower	Upper
83	100		
85	64.2	35.1	95.1

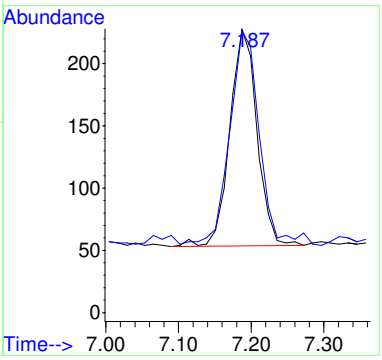


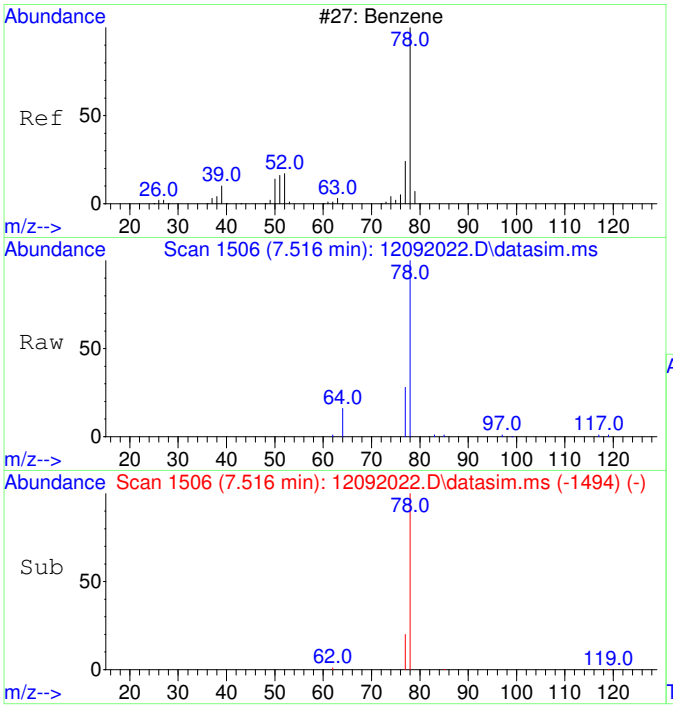


#8
Carbon tetrachloride
Concen: 29.65 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:117 Resp: 454

Ion	Ratio	Lower	Upper
117	100		
119	105.3	66.4	126.4

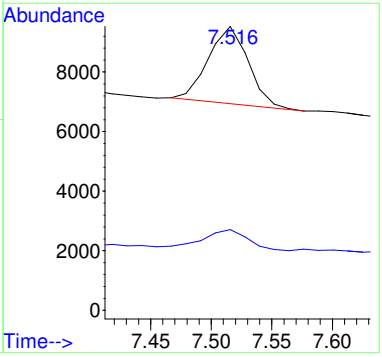


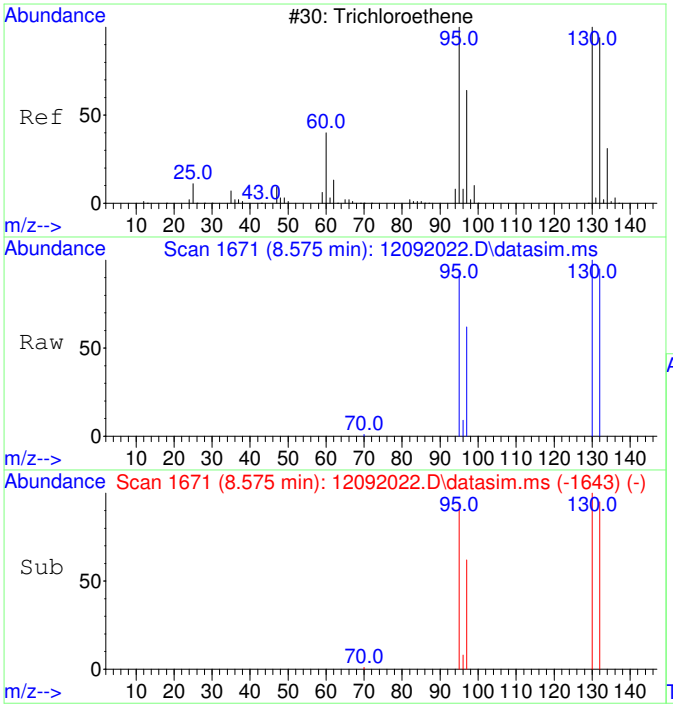


#9
Benzene
Concen: 137.36 ug/L
RT: 7.516 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 78 Resp: 5802

Ion	Ratio	Lower	Upper
78	100		
77	34.1	0.0	53.2

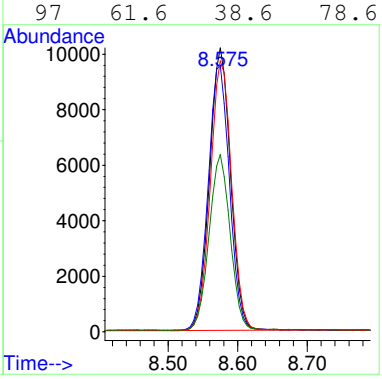


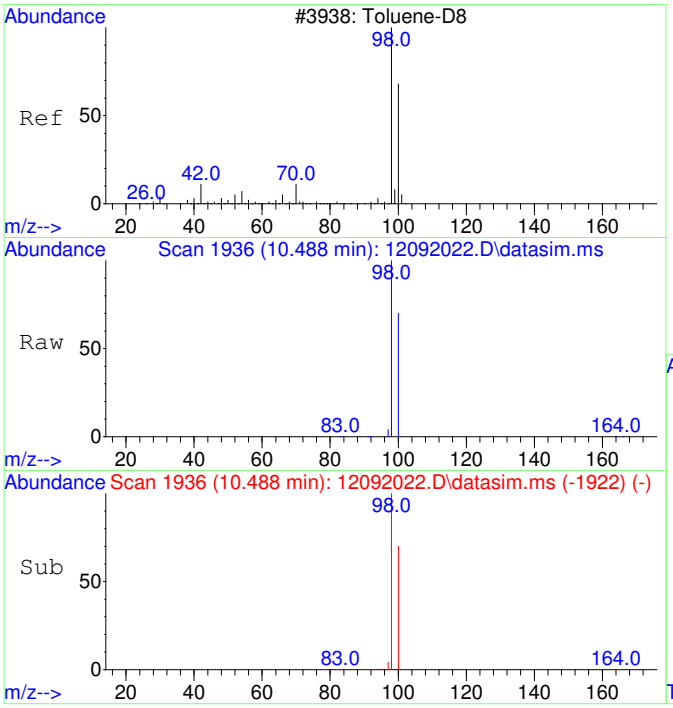


#11
Trichloroethene
Concen: 1602.76 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:130 Resp: 21374

Ion	Ratio	Lower	Upper
130	100		
95	95.1	60.7	120.7
132	95.9	76.0	116.0
97	61.6	38.6	78.6

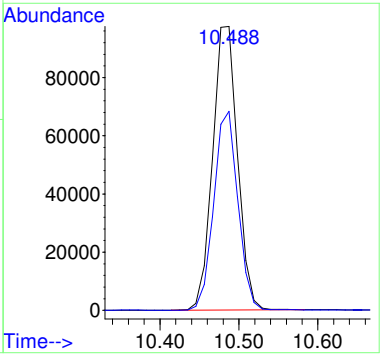


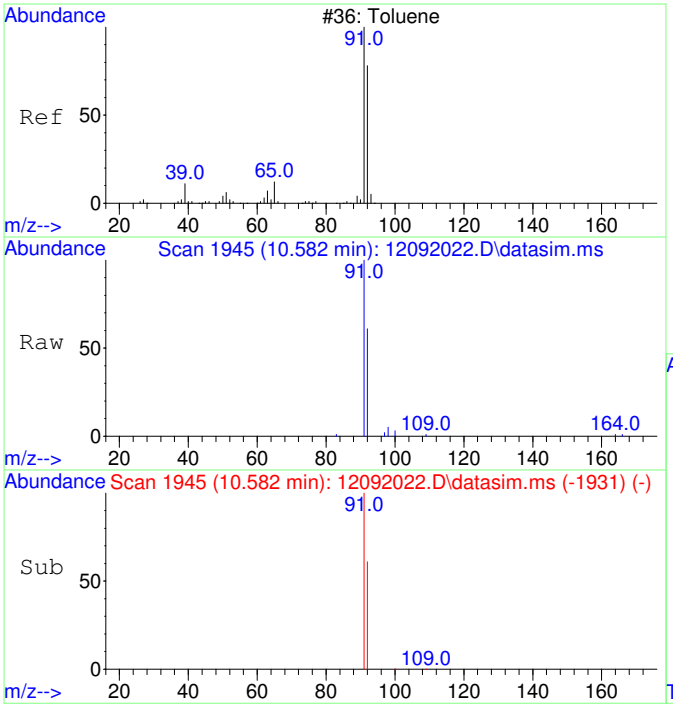


#12
Toluene-d8
Concen: 4391.56 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 98 Resp: 213493

Ion	Ratio	Lower	Upper
98	100		
100	67.7	37.1	97.1

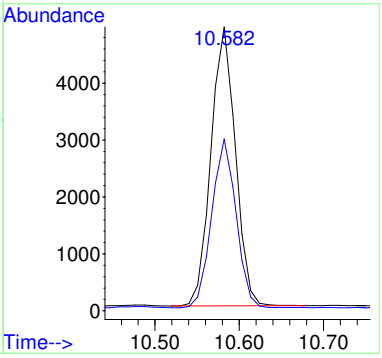


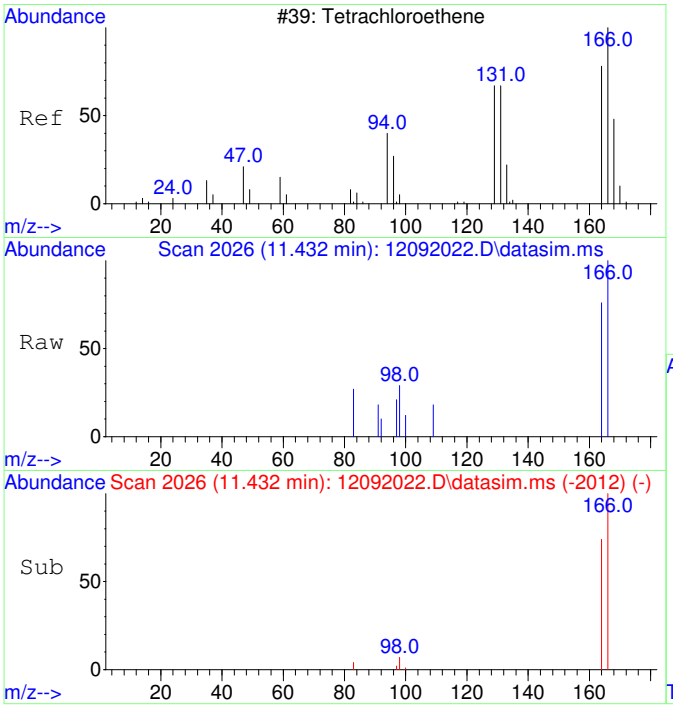


#13
Toluene
Concen: 163.59 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 9902

Ion	Ratio	Lower	Upper
91	100		
92	60.0	29.9	89.9

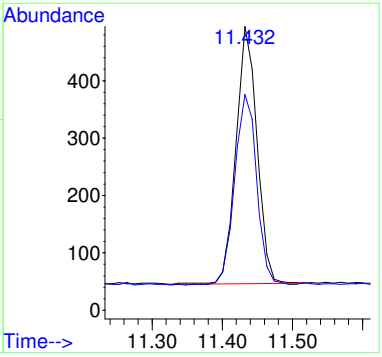


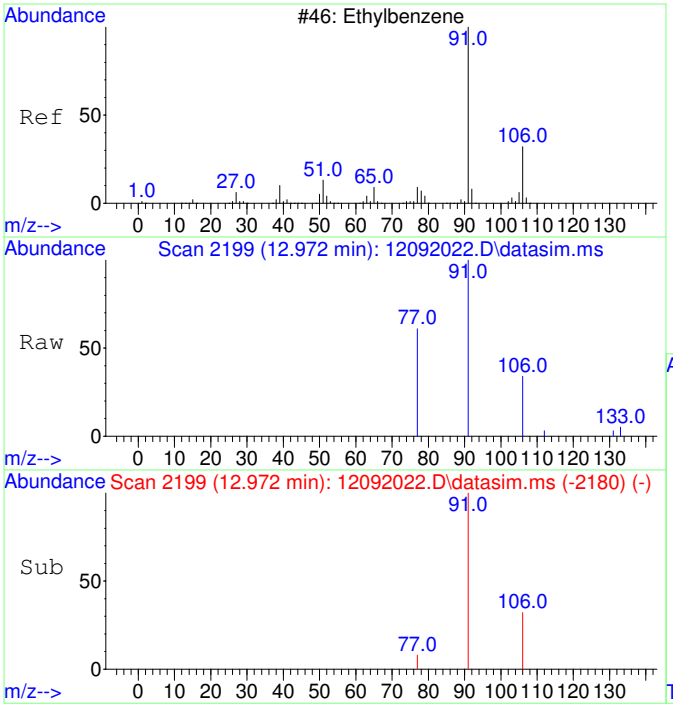


#15
Tetrachloroethene
Concen: 49.86 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:166 Resp: 940

Ion	Ratio	Lower	Upper
166	100		
164	76.9	47.8	107.8

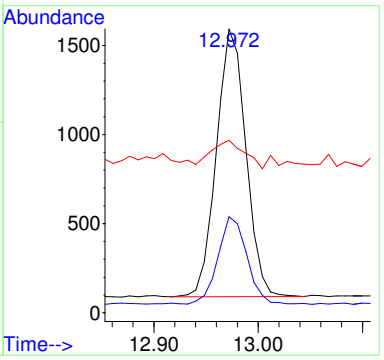


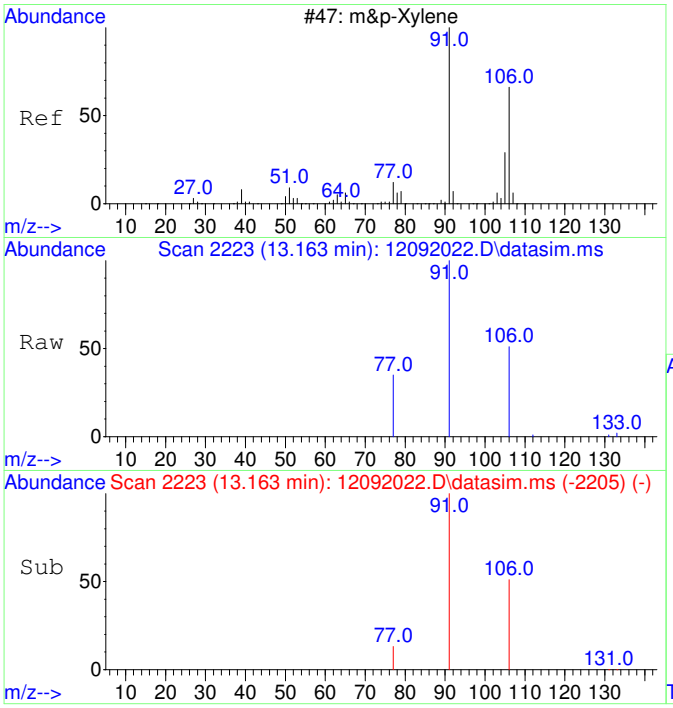


#18
Ethylbenzene
Concen: 37.91 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2931

Ion	Ratio	Lower	Upper
91	100		
106	31.8	3.0	63.0
77	13.0	0.0	38.2

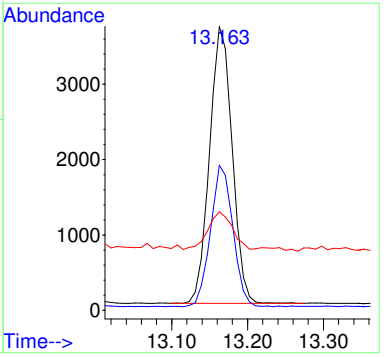


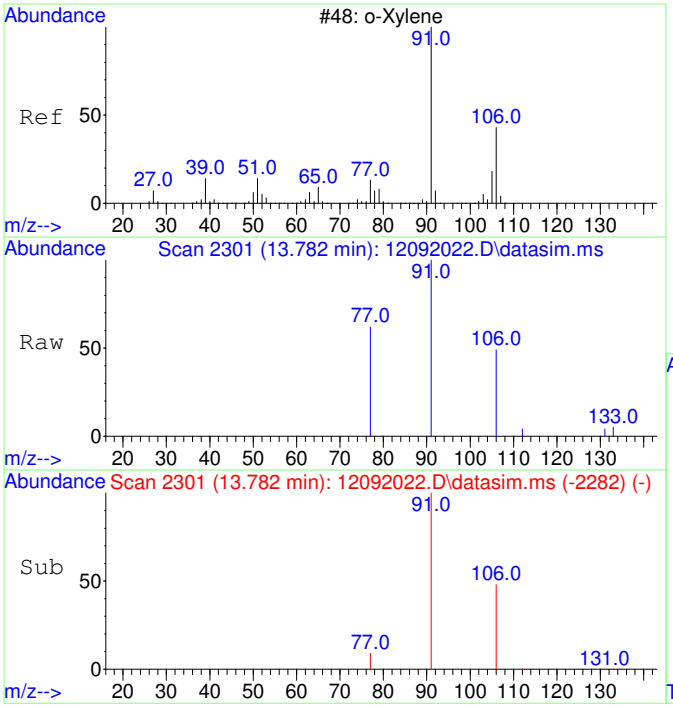


#19
m&p-Xylene
Concen: 127.79 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 7608

Ion	Ratio	Lower	Upper
91	100		
106	50.6	22.2	82.2
77	14.9	0.0	42.4

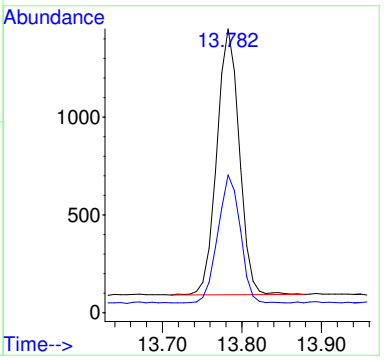


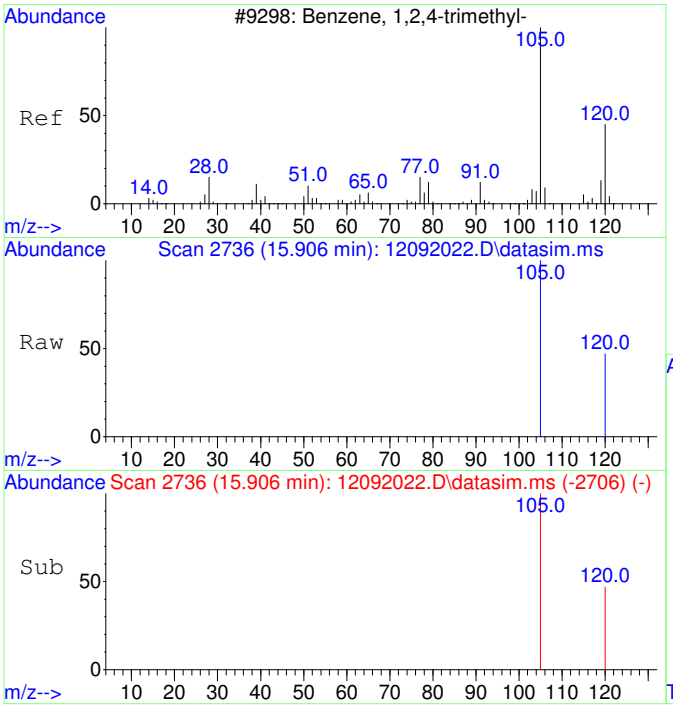


#20
o-Xylene
Concen: 41.82 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2674

Ion	Ratio	Lower	Upper
91	100		
106	47.9	19.2	79.2

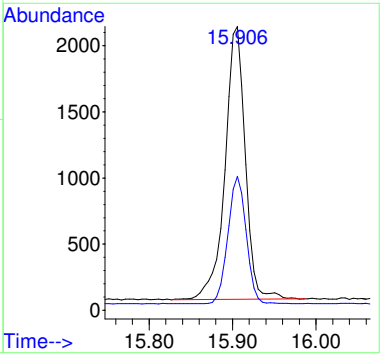


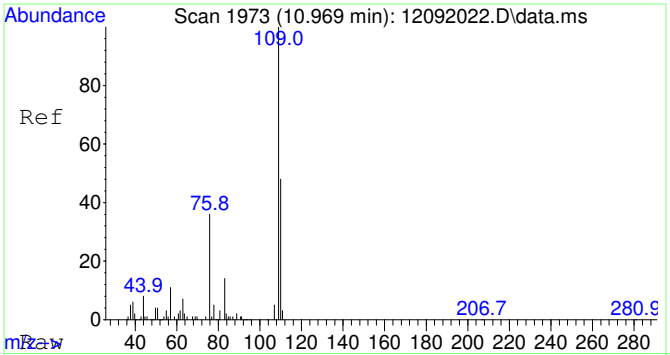


#23
1,2,4-Trimethylbenzene
Concen: 48.09 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:105 Resp: 3459

Ion	Ratio	Lower	Upper
105	100		
120	42.1	17.2	77.2

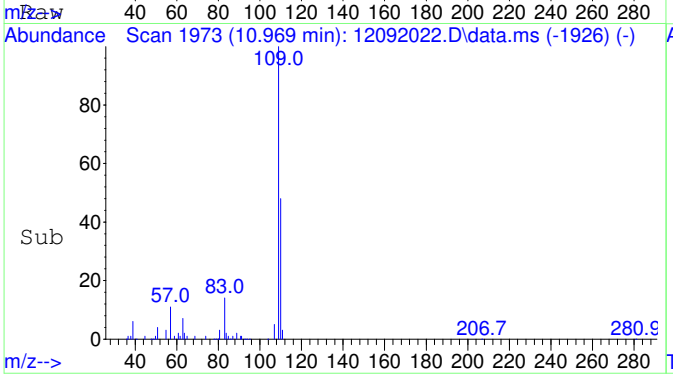


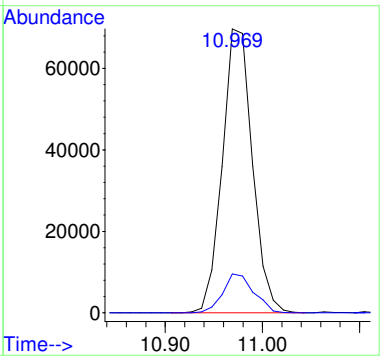


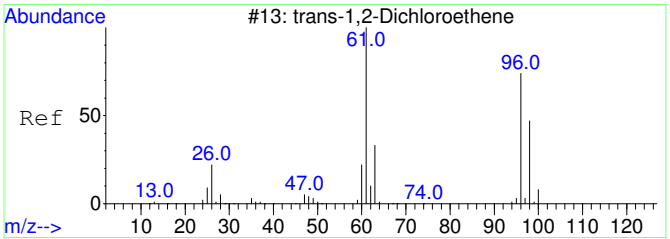
#25
2-Fluorotoluene SCAN
Concen: 5246.70 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:109 Resp: 149490

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



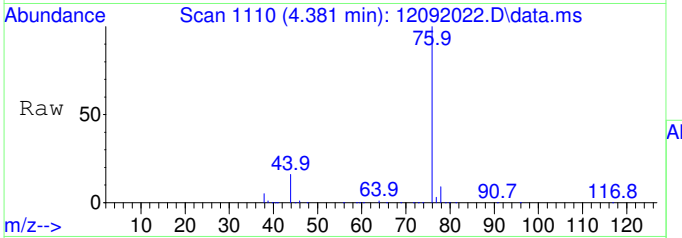


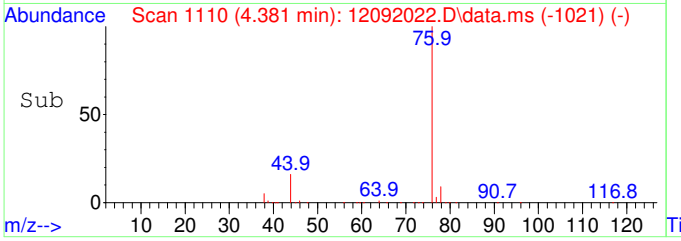


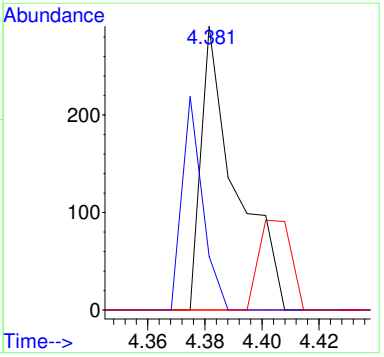
#27
trans-1,2-Dichloroethene SCAN
Concen: 29.27 ug/L
RT: 4.381 min Scan# 1110
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

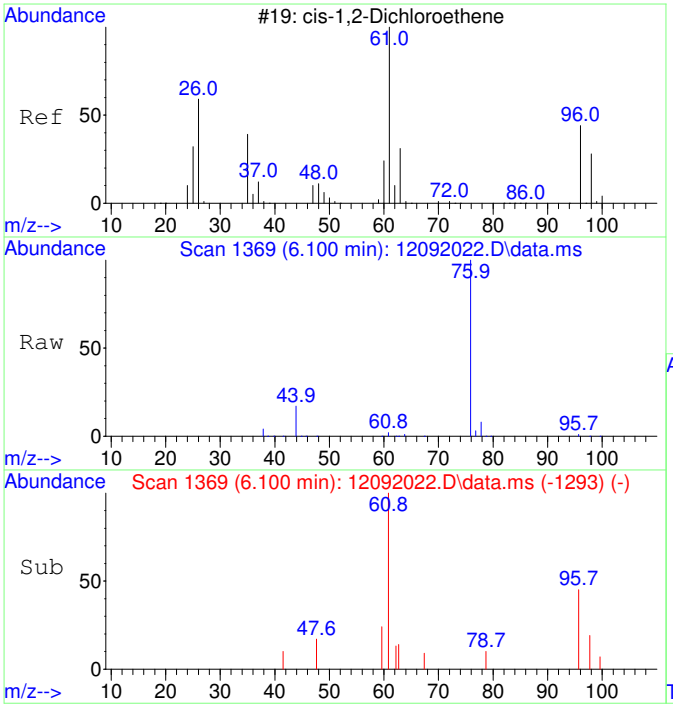
Tgt Ion: 61 Resp: 248

Ion	Ratio	Lower	Upper
61	100		
96	44.0	49.0	109.0#
98	0.0	20.5	80.5#





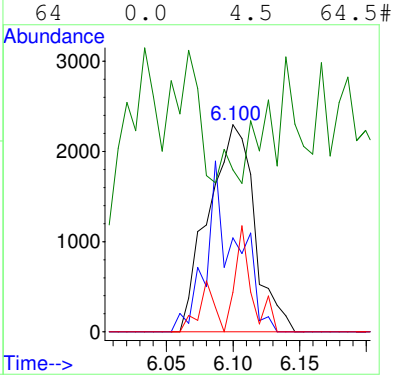


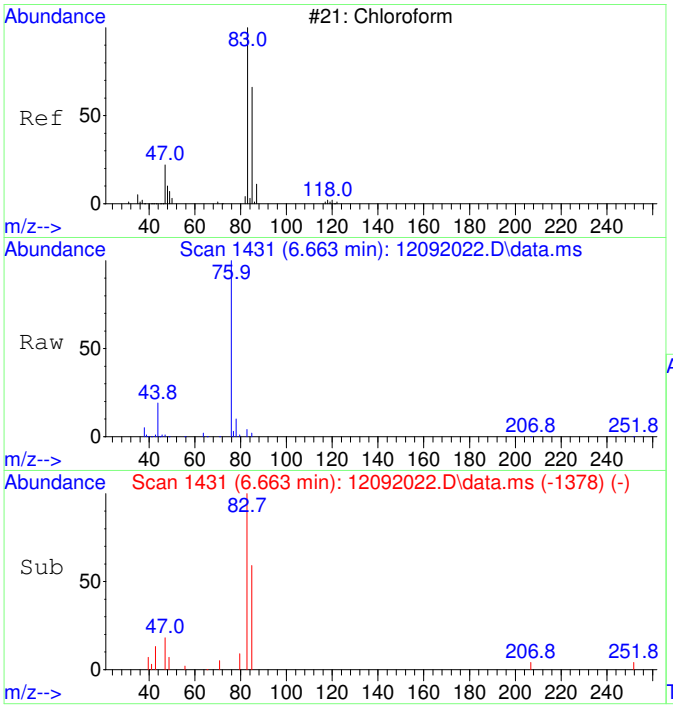


#29
cis-1,2-Dichloroethene SCAN
Concen: 561.20 ug/L
RT: 6.100 min Scan# 1369
Delta R.T. 0.007 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 61 Resp: 5517

Ion	Ratio	Lower	Upper
61	100		
96	0.0	39.9	99.9#
98	18.3	13.5	73.5
64	0.0	4.5	64.5#

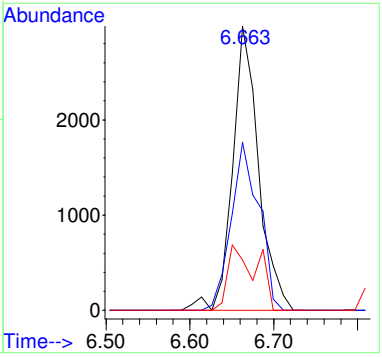


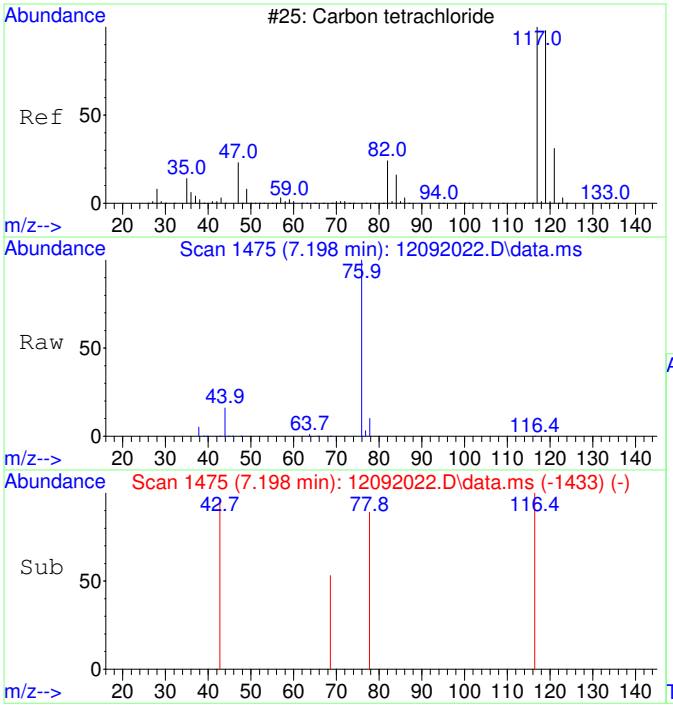


#30
Chloroform SCAN
Concen: 698.20 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 83 Resp: 6402

Ion	Ratio	Lower	Upper
83	100		
85	63.7	34.6	94.6
47	25.7	0.0	53.4

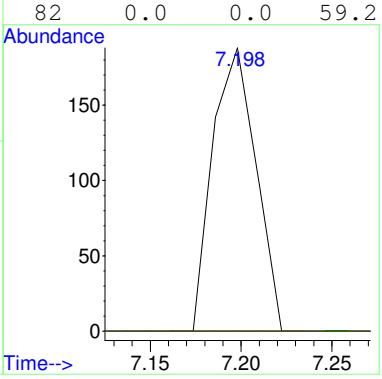


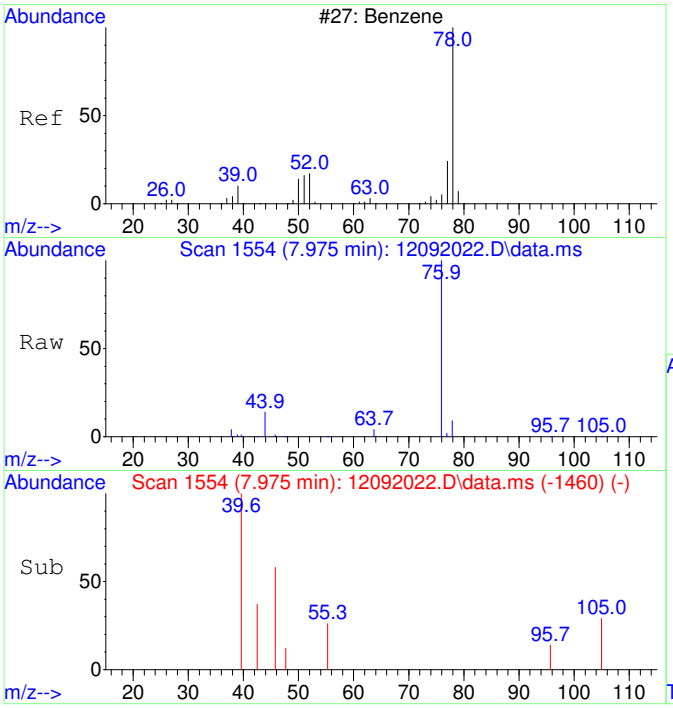


#32
Carbon tetrachloride SCAN
Concen: 38.59 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.013 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:117 Resp: 312

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

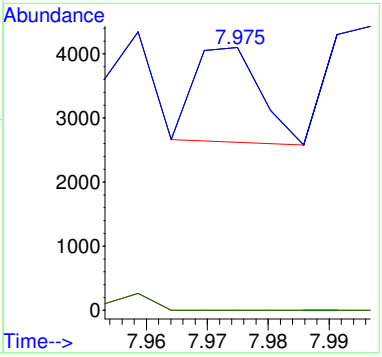


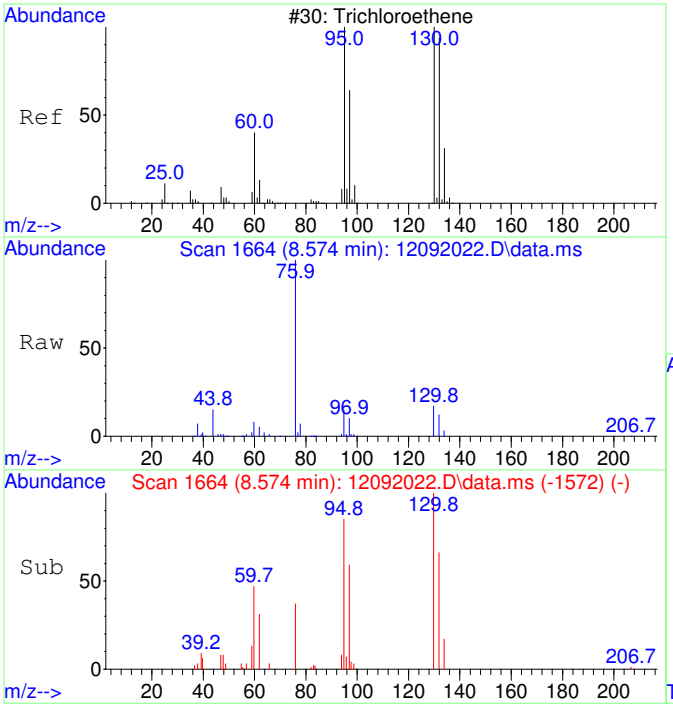


#33
Benzene SCAN
Concen: 38.39 ug/L
RT: 7.975 min Scan# 1554
Delta R.T. 0.461 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 78 Resp: 1099

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.9	0.0	47.9
51	10.9	0.0	44.1

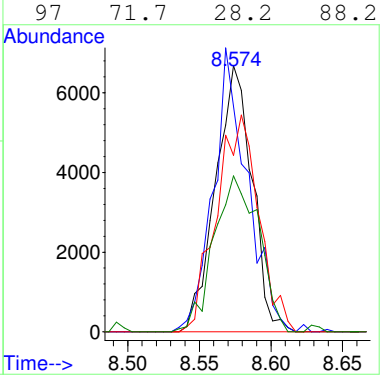


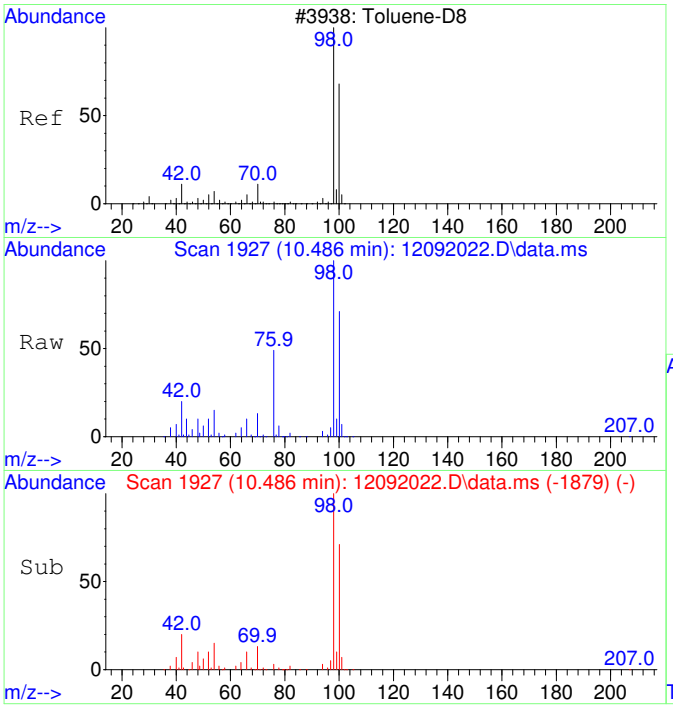


#35
Trichloroethene SCAN
Concen: 1898.01 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:130 Resp: 11847

Ion	Ratio	Lower	Upper
130	100		
95	99.0	60.5	120.5
132	94.2	59.6	119.6
97	71.7	28.2	88.2

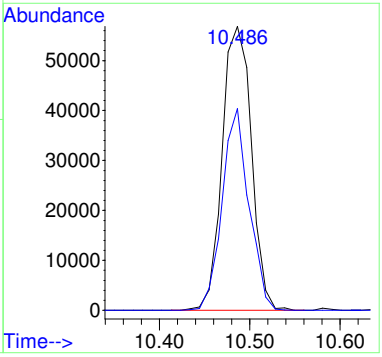


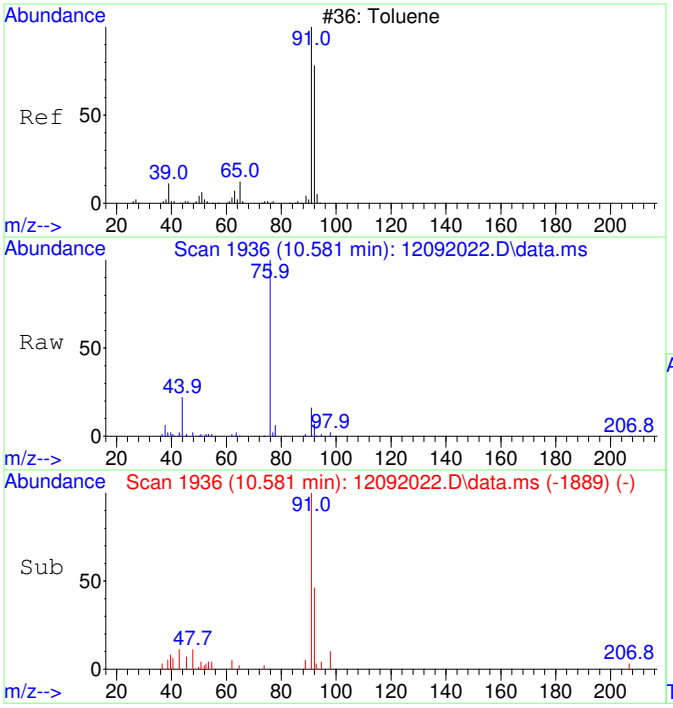


#36
Toluene-d8 SCAN
Concen: 4806.87 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 98 Resp: 128452

Ion	Ratio	Lower	Upper
98	100		
100	65.2	40.0	100.0

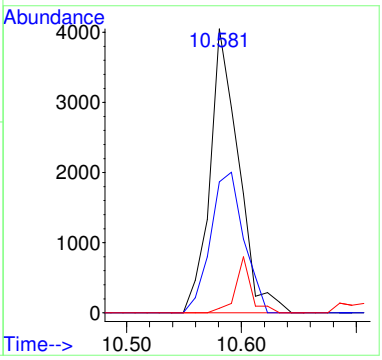


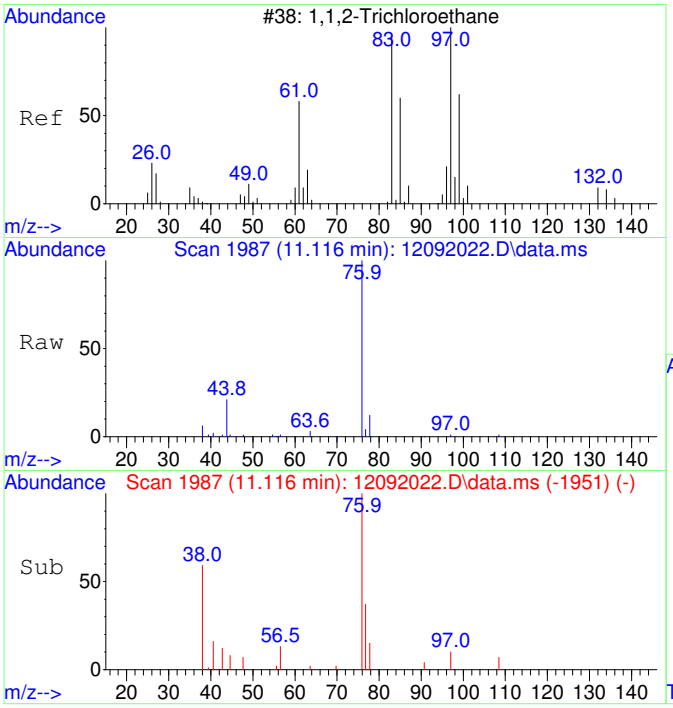


#37
Toluene SCAN
Concen: 213.21 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 7015

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

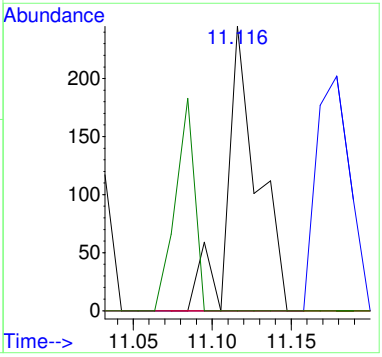


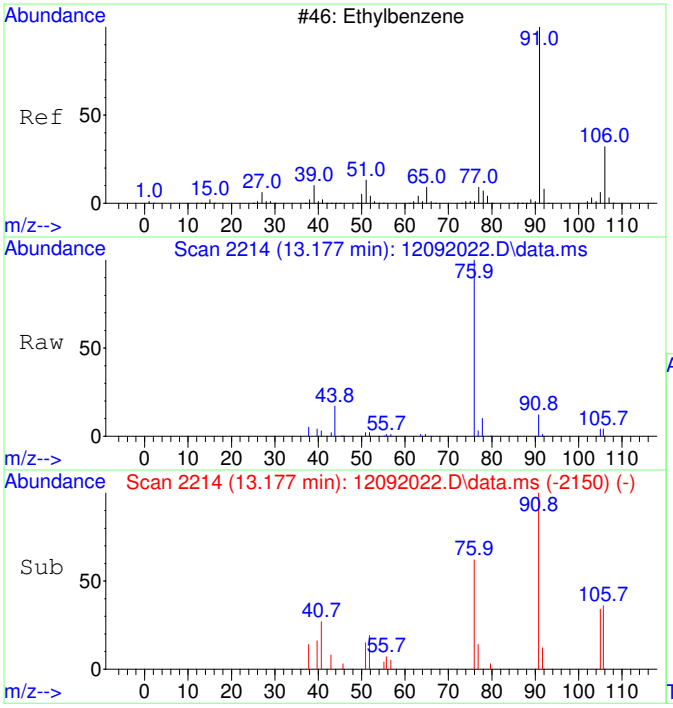


#38
1,1,2-Trichloroethane SCAN
Concen: 39.53 ug/L
RT: 11.116 min Scan# 1987
Delta R.T. -0.126 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 97 Resp: 326

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

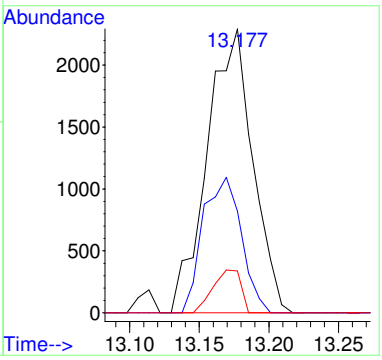


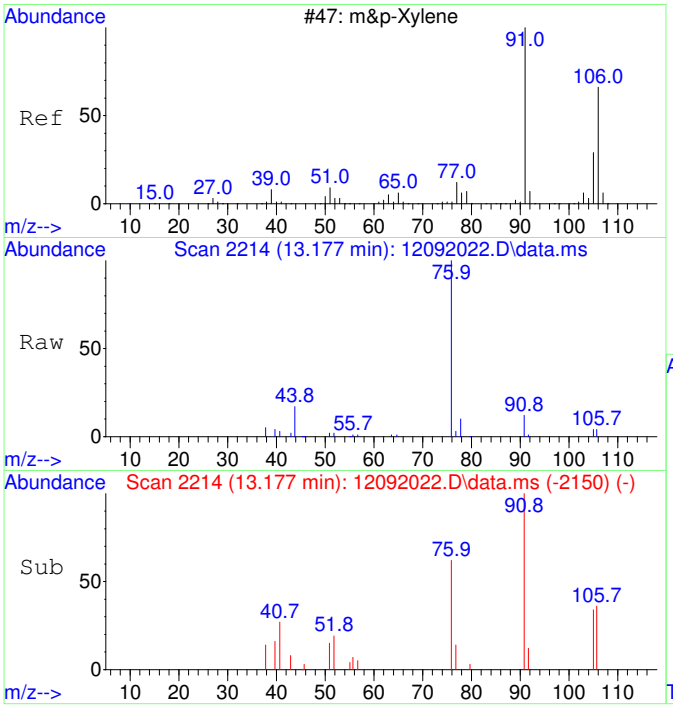


#42
Ethylbenzene SCAN
Concen: 83.48 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 5234

Ion	Ratio	Lower	Upper
91	100		
106	40.1	23.1	83.1
51	9.3	0.0	40.1

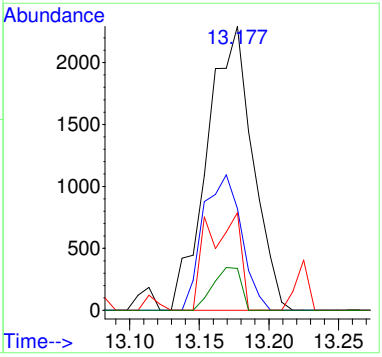


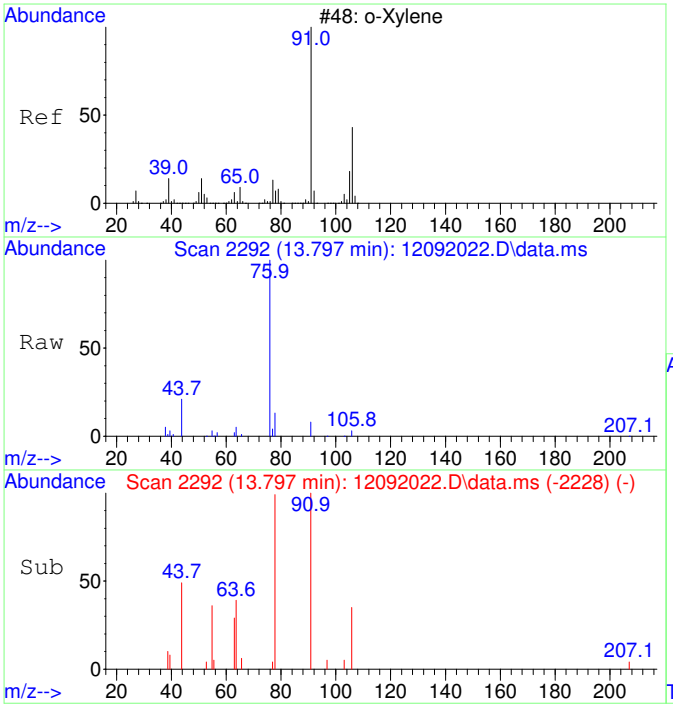


#43
m&p-Xylene SCAN
Concen: 83.48 ug/L
RT: 13.177 min Scan# 2214
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 5234

Ion	Ratio	Lower	Upper
91	100		
106	40.1	23.1	83.1
105	24.3	0.0	54.7
51	9.3	0.0	40.1

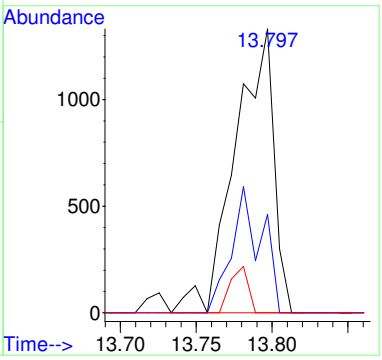


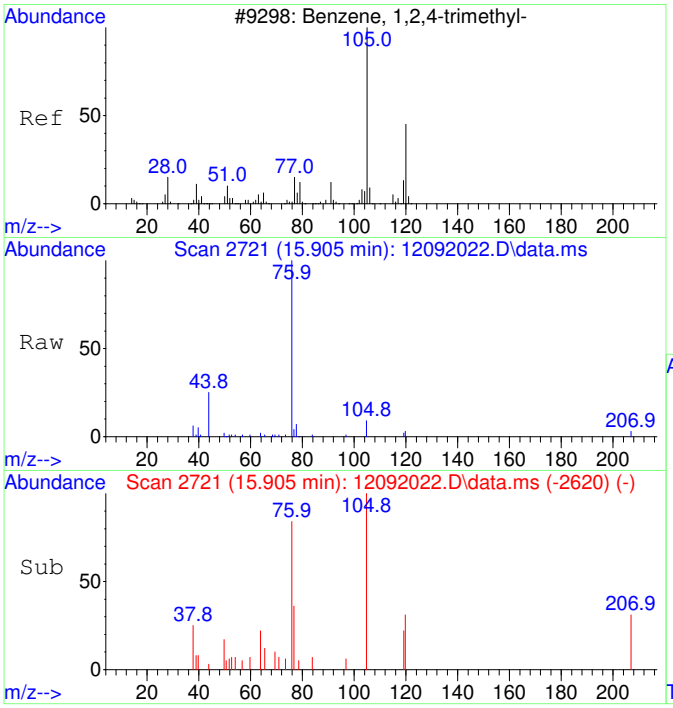


#44
o-Xylene SCAN
Concen: 69.19 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion: 91 Resp: 2369

Ion	Ratio	Lower	Upper
91	100		
106	34.4	18.0	78.0
105	7.6	0.0	56.6

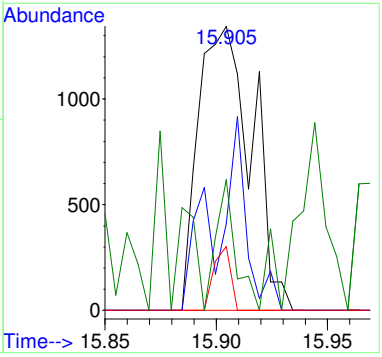




#47
1,2,4-Trimethylbenzene SCAN
Concen: 61.13 ug/L
RT: 15.905 min Scan# 2721
Delta R.T. 0.000 min
Lab File: 12092022.D
Acq: 9 Dec 2020 17:10

Tgt Ion:105 Resp: 2256

Ion	Ratio	Lower	Upper
105	100		
120	15.6	16.9	76.9#
119	7.0	0.0	41.9
77	16.9	0.0	42.3



2012007-16

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092023.D
Acq On : 9 Dec 2020 17:33
InstName : AG5975C
Operator : TD
Sample : 2012007-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 10 05:56:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

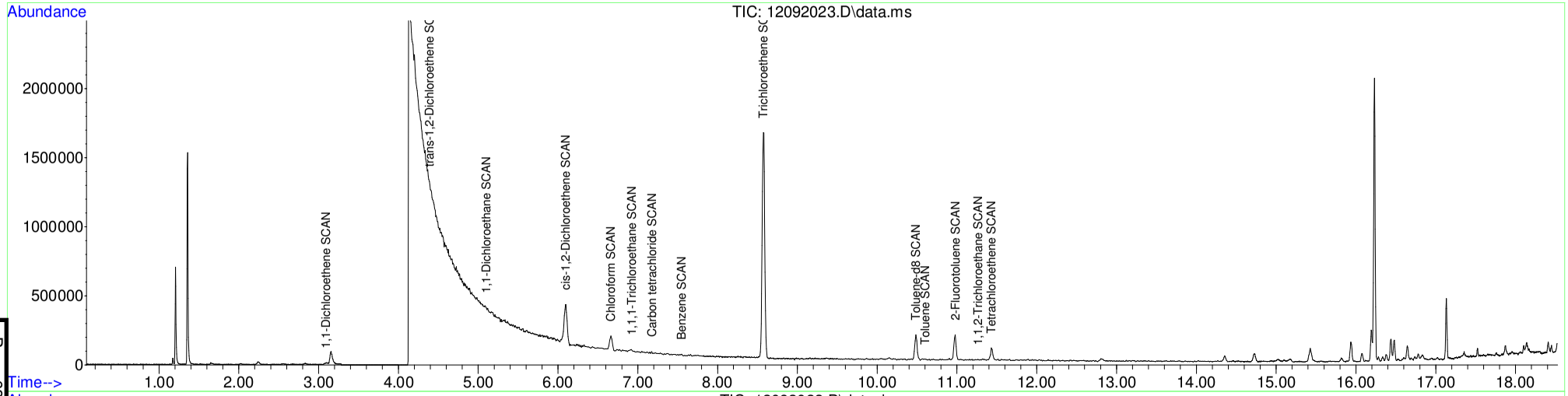
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	252665	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	212828	4349.20 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.98%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.094	61	19439	1940.30 ug/L	82
3] trans-1,2-Dichloroethene	4.383	61	23362	1849.69 ug/L	97
4] 1,1-Dichloroethane	5.093	63	21544	1428.16 ug/L	96
5] cis-1,2-Dichloroethene	6.094	61	377814	24182.08 ug/L	98
6] Chloroform	6.664	83	135761	9046.69 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	13121	813.93 ug/L	99
8] Carbon tetrachloride	7.187	117	620	40.23 ug/L	94
9] Benzene	7.515	78	3185	74.91 ug/L	44
11] Trichloroethene	8.575	130	1149178	85608.29 ug/L **oc**	96
13] Toluene	10.582	91	8360	137.21 ug/L	100
15] Tetrachloroethene	11.432	166	55513	2925.17 ug/L	99
17] 1,1,1,2-Tetrachloroethane	12.813	131	698	42.25 ug/L #	1
19] m&p-Xylene	13.163	91	1618	27.00 ug/L	96
25) 2-Fluorotoluene SCAN	10.979	109	145371	5068.71 ug/L	97
26) 1,1-Dichloroethene SCAN	3.092	61	12735	1902.05 ug/L #	37
27) trans-1,2-Dichloroethe...	4.388	61	17352	2034.71 ug/L	77
28) 1,1-Dichloroethane SCAN	5.098	63	15416	1531.49 ug/L	89
29) cis-1,2-Dichloroethene...	6.093	61	255230	25792.30 ug/L #	80
30) Chloroform SCAN	6.663	83	89499	9696.74 ug/L	95
31) 1,1,1-Trichloroethane ...	6.918	97	9939	1043.54 ug/L	79
32) Carbon tetrachloride SCAN	7.173	117	380	46.69 ug/L #	15
33) Benzene SCAN	7.551	78	12524	434.65 ug/L #	91
35) Trichloroethene SCAN	8.574	130	618959	98514.03 ug/L	87
36) Toluene-d8 SCAN	10.486	98	130730	4860.07 ug/L	96
37) Toluene SCAN	10.602	91	6441	194.48 ug/L #	66
38) 1,1,2-Trichloroethane ...	11.263	97	267	32.16 ug/L #	34
39) Tetrachloroethene SCAN	11.431	166	27280	3661.50 ug/L	93

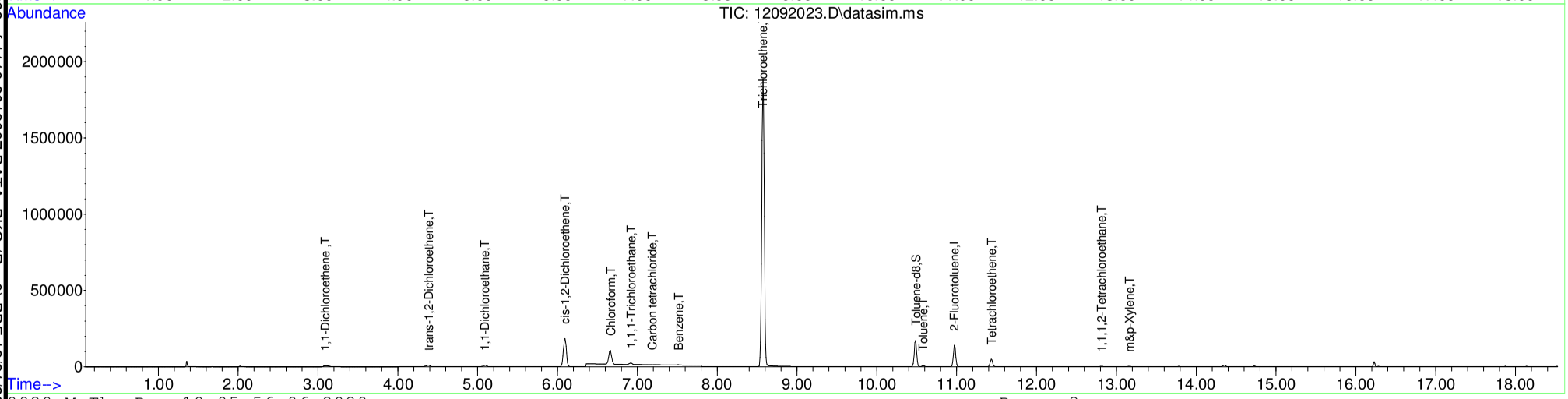
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092023.D
Acq On : 9 Dec 2020 17:33
InstName : AG5975C
Operator : TD
Sample : 2012007-16
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 10 05:56:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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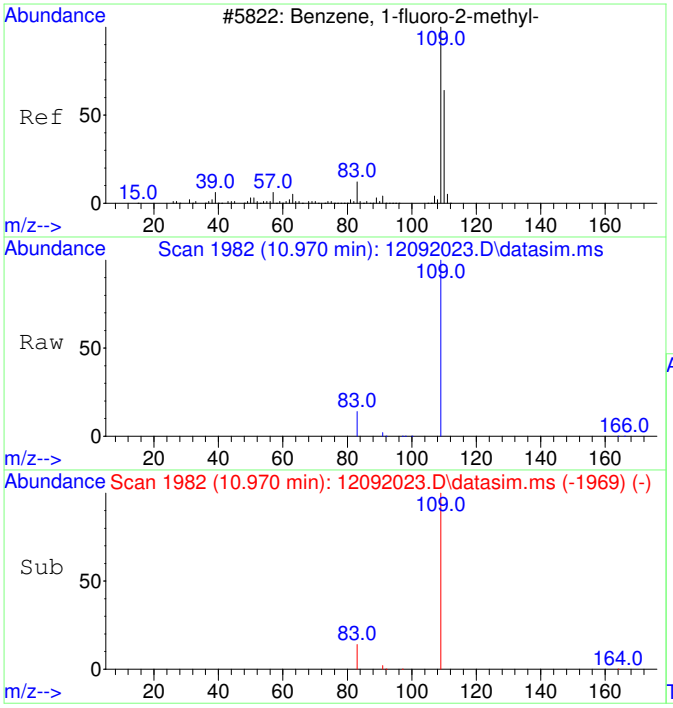
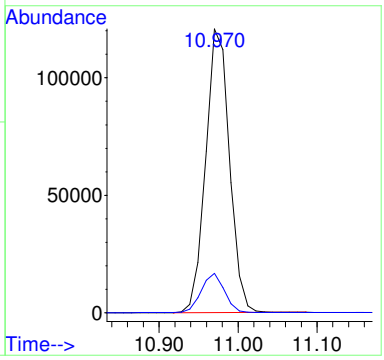
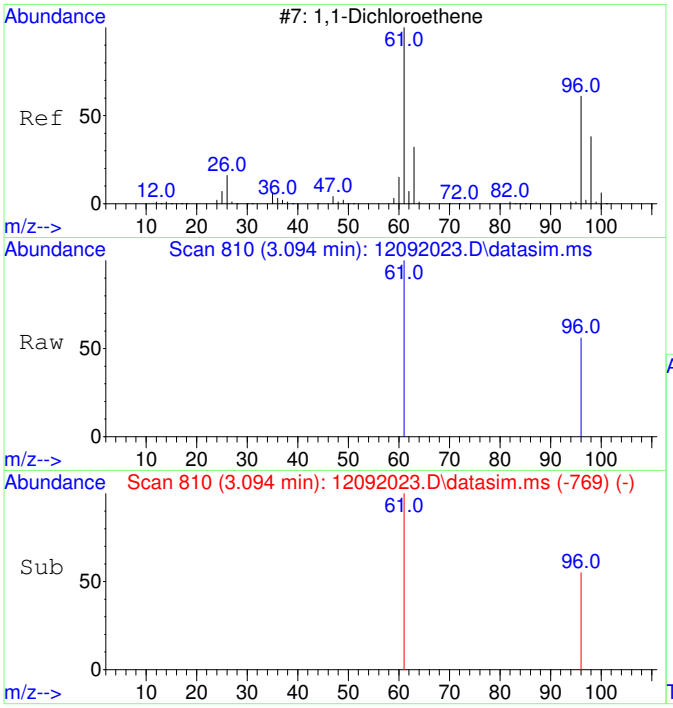


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:109 Resp: 252665

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

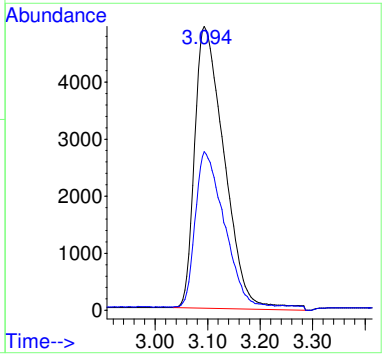


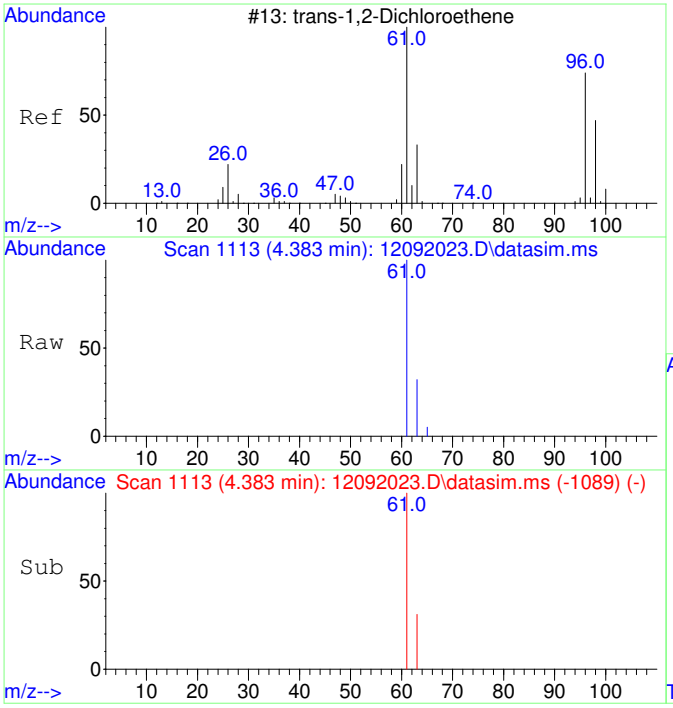


#2
1,1-Dichloroethene
Concen: 1940.30 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 19439

Ion	Ratio	Lower	Upper
61	100		
96	52.6	37.2	97.2

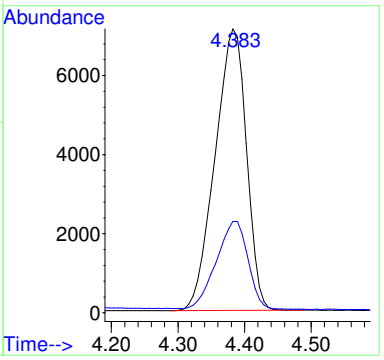


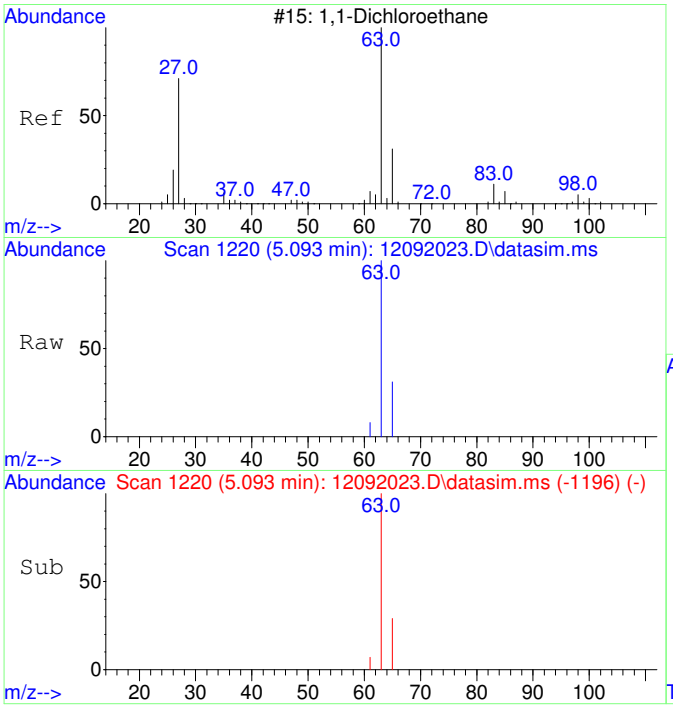


#3
trans-1,2-Dichloroethene
Concen: 1849.69 ug/L
RT: 4.383 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 23362

Ion	Ratio	Lower	Upper
61	100		
63	31.0	2.4	62.4

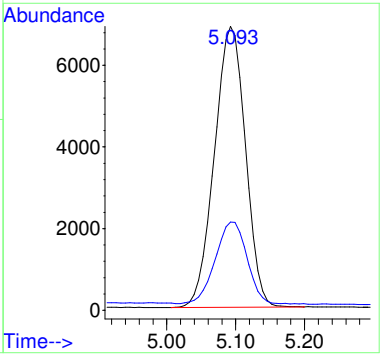


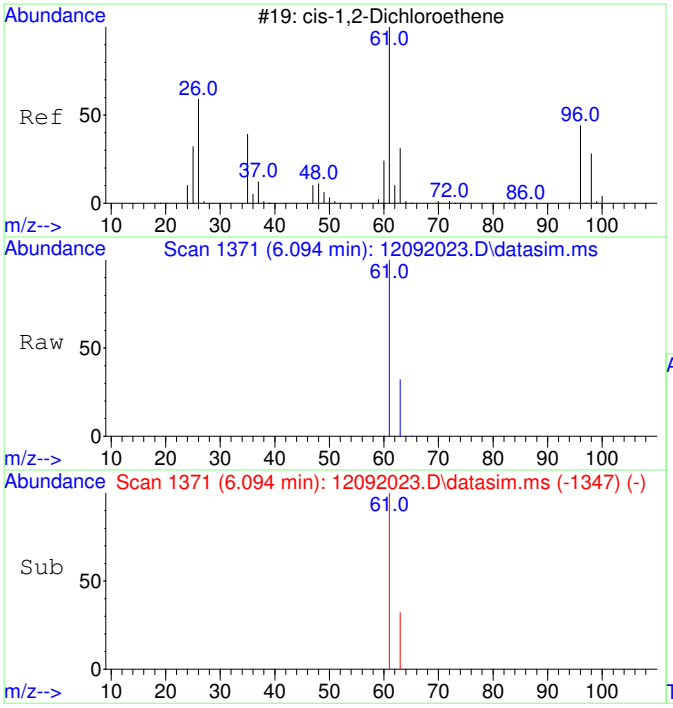


#4
1,1-Dichloroethane
Concen: 1428.16 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 63 Resp: 21544

Ion	Ratio	Lower	Upper
63	100		
65	29.6	1.8	61.8

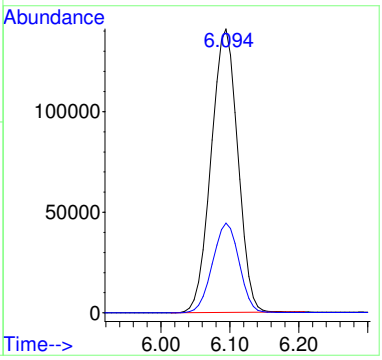


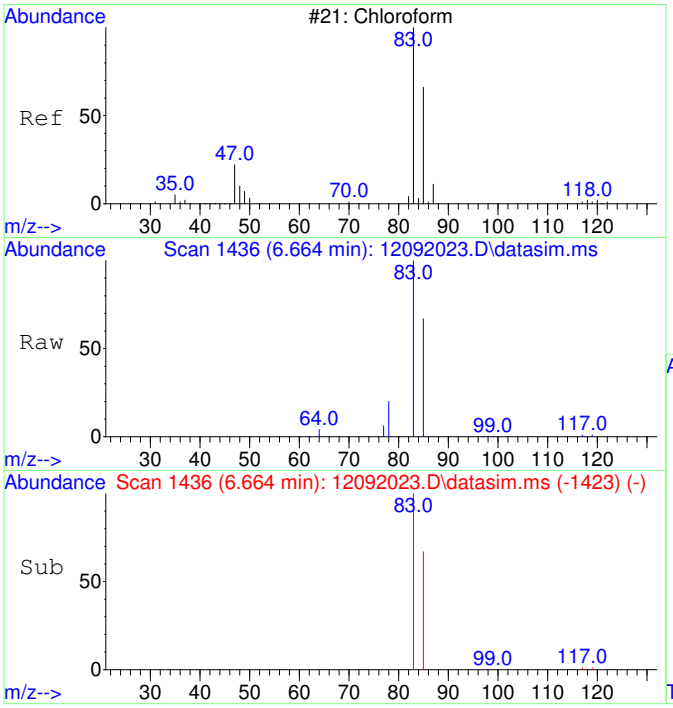


#5
cis-1,2-Dichloroethene
Concen: 24182.08 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 377814

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

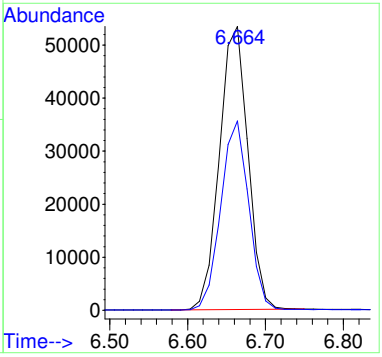


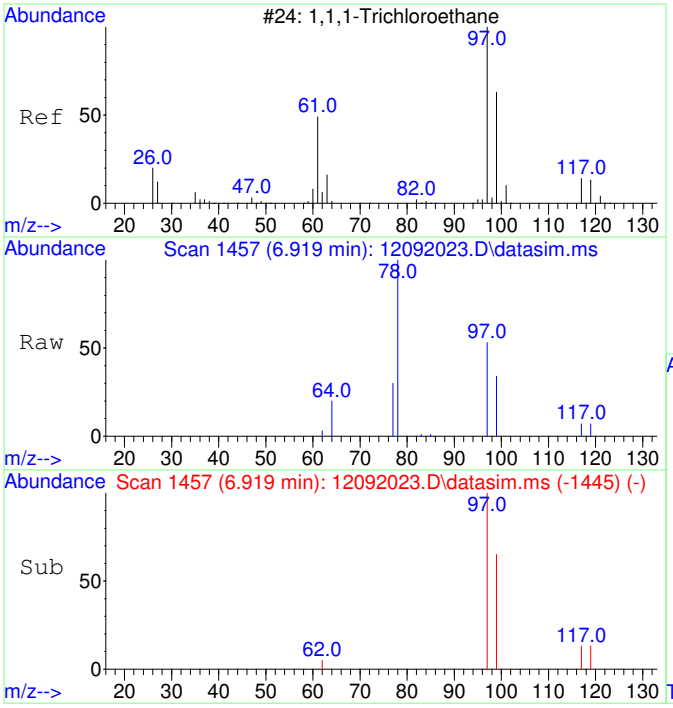


#6
Chloroform
Concen: 9046.69 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 83 Resp: 135761

Ion	Ratio	Lower	Upper
83	100		
85	65.2	35.1	95.1

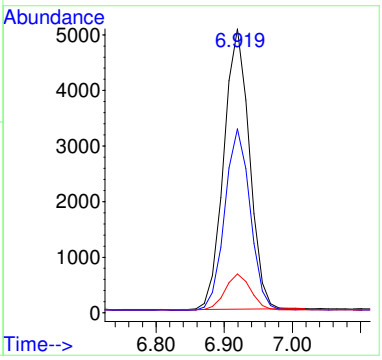


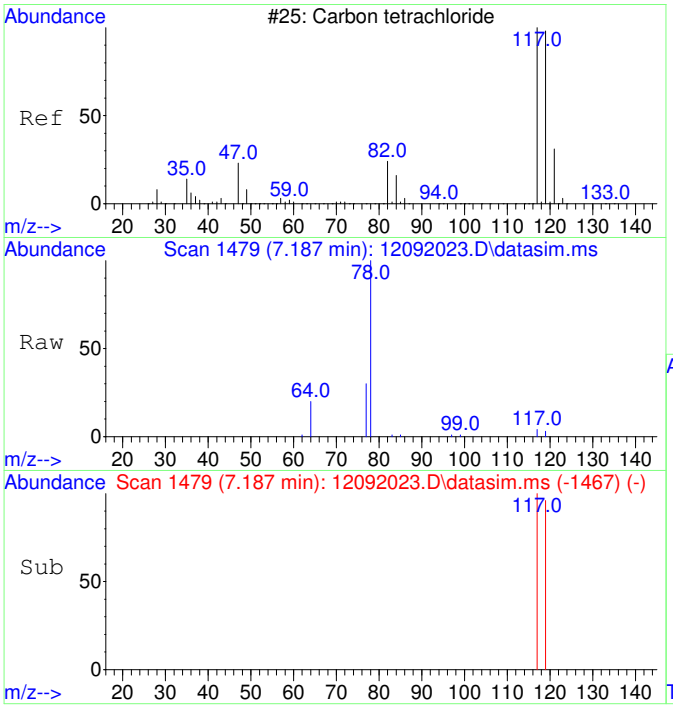


#7
1,1,1-Trichloroethane
Concen: 813.93 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 97 Resp: 13121

Ion	Ratio	Lower	Upper
97	100		
99	63.9	34.6	94.6
117	12.8	0.0	43.2

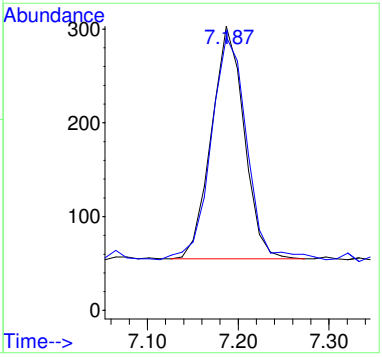


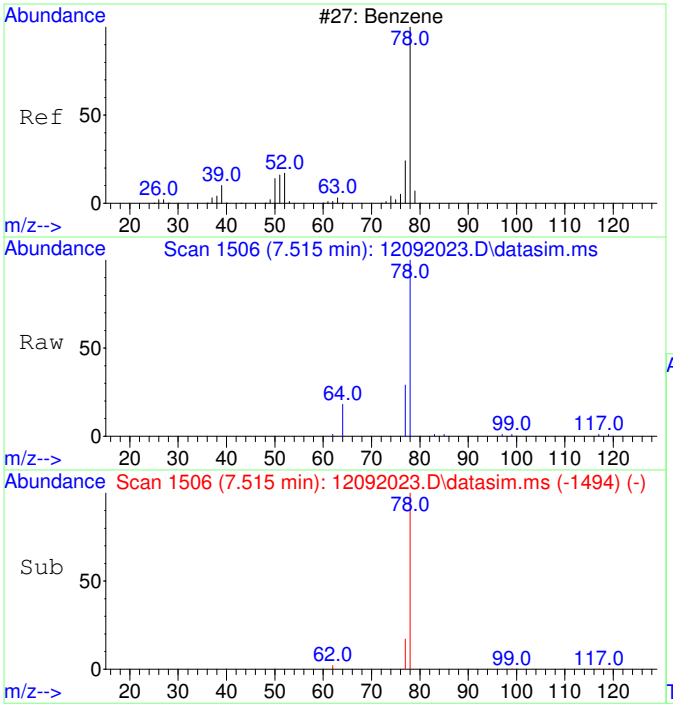


#8
Carbon tetrachloride
Concen: 40.23 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:117 Resp: 620

Ion	Ratio	Lower	Upper
117	100		
119	102.3	66.4	126.4

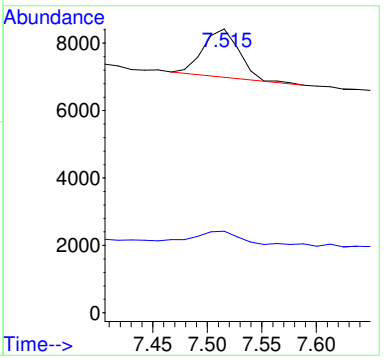


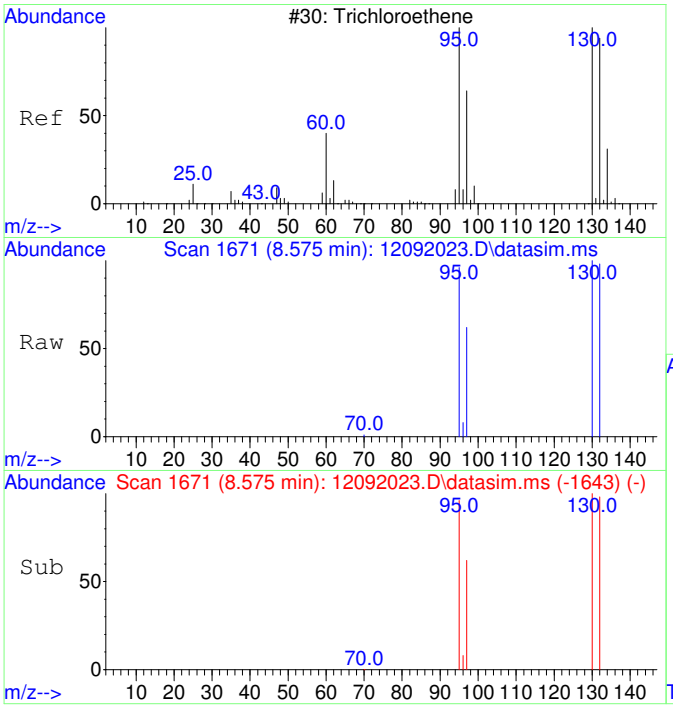


#9
Benzene
Concen: 74.91 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 78 Resp: 3185

Ion	Ratio	Lower	Upper
78	100		
77	50.4	0.0	53.2

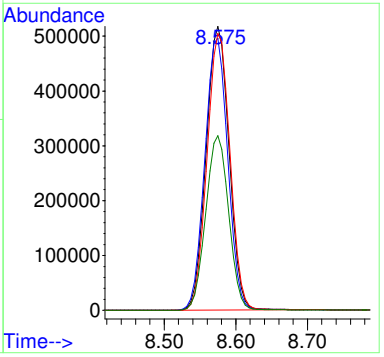


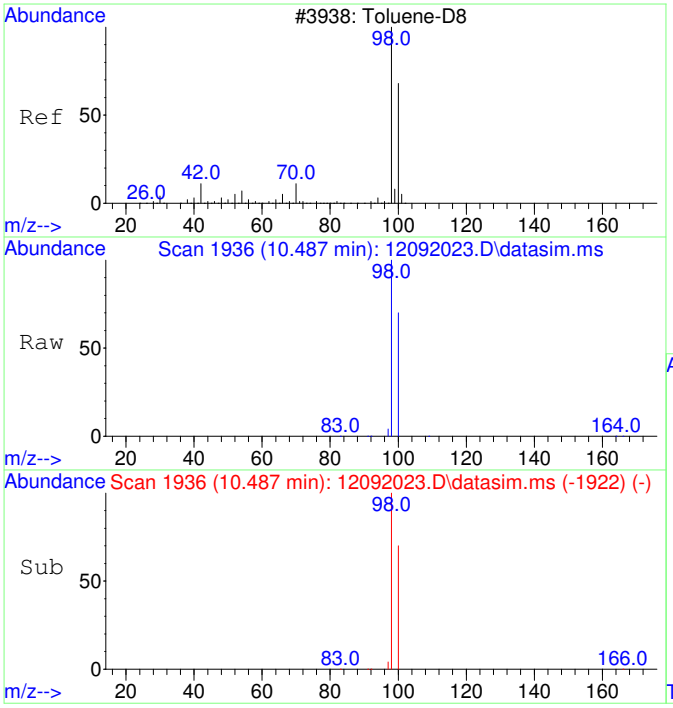


#11
Trichloroethene
Concen: 85608.29 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:130 Resp: 1149178

Ion	Ratio	Lower	Upper
130	100		
95	96.0	60.7	120.7
132	97.5	76.0	116.0
97	61.6	38.6	78.6

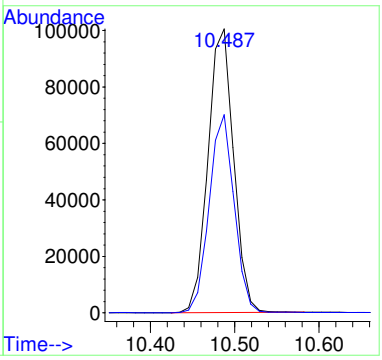


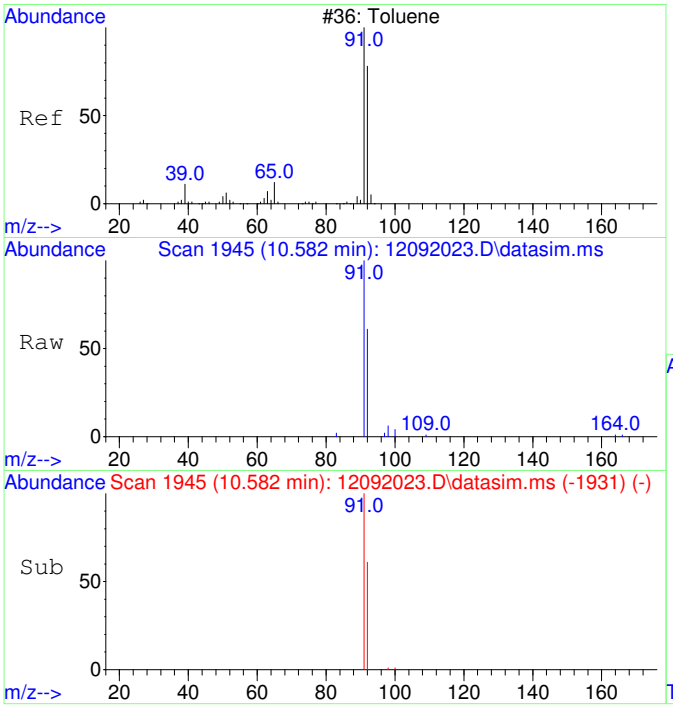


#12
Toluene-d8
Concen: 4349.20 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 98 Resp: 212828

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

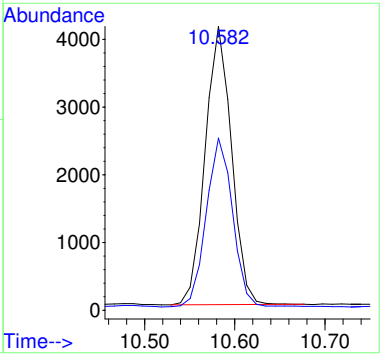


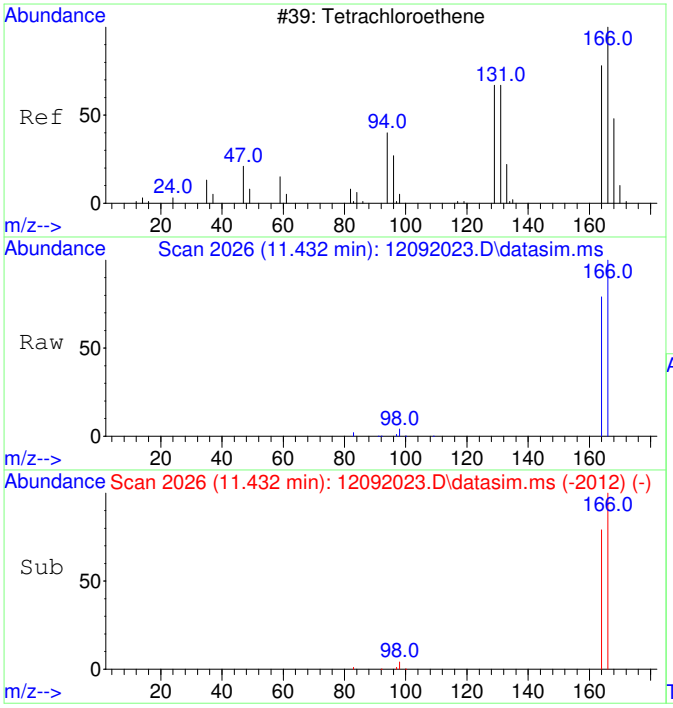


#13
Toluene
Concen: 137.21 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 91 Resp: 8360

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

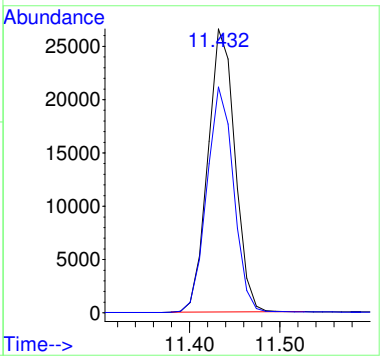


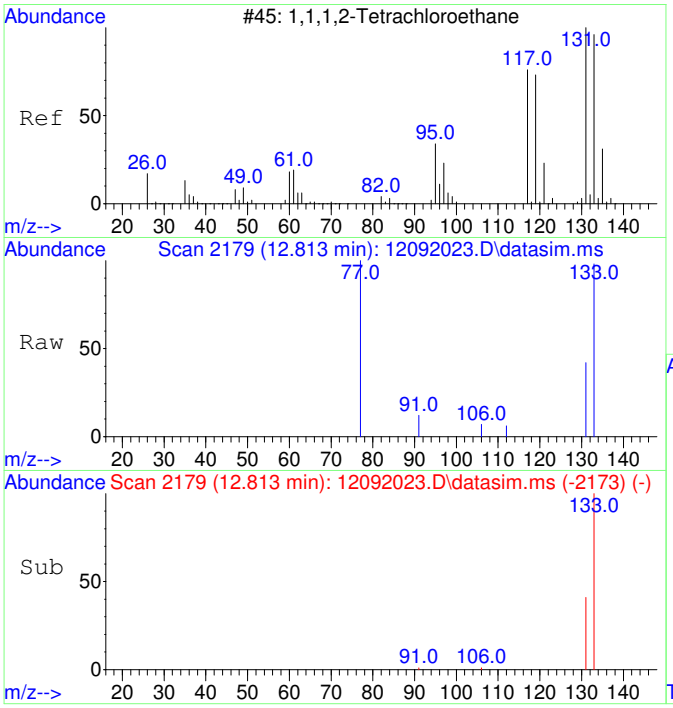


#15
Tetrachloroethene
Concen: 2925.17 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:166 Resp: 55513

Ion	Ratio	Lower	Upper
166	100		
164	78.5	47.8	107.8

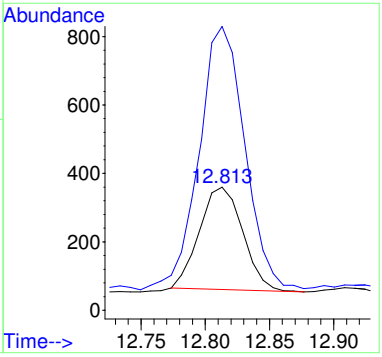


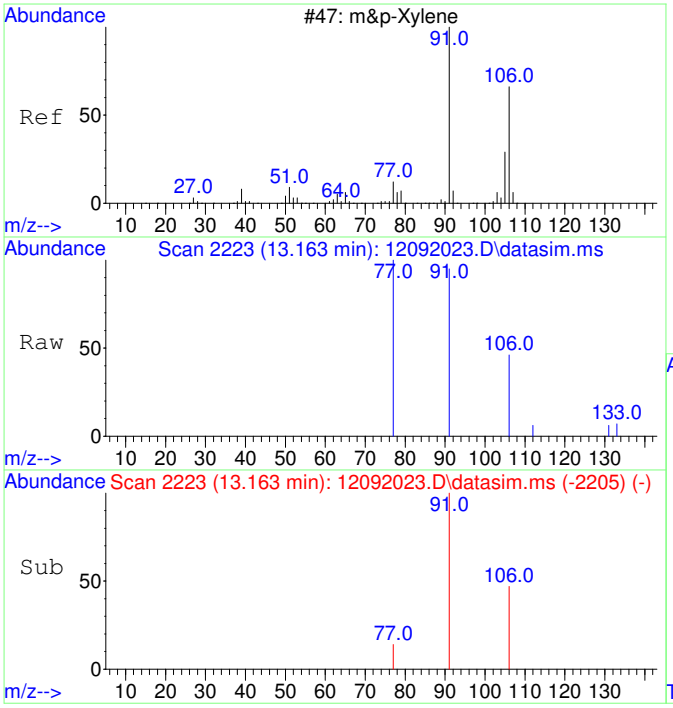


#17
1,1,1,2-Tetrachloroethane
Concen: 42.25 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:131 Resp: 698

Ion	Ratio	Lower	Upper
131	100		
133	265.3	66.3	126.3#

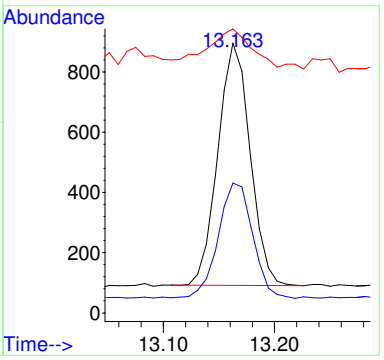


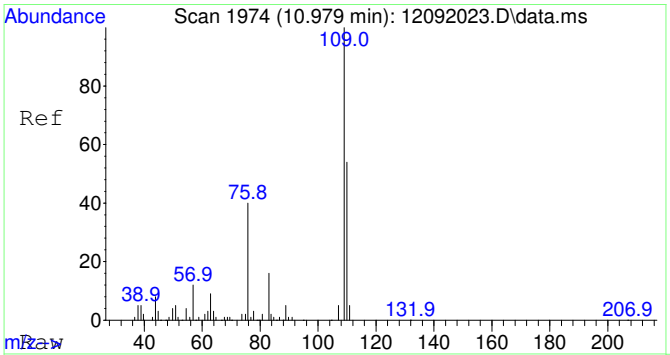


#19
m&p-Xylene
Concen: 27.00 ug/L
RT: 13.163 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 91 Resp: 1618

Ion	Ratio	Lower	Upper
91	100		
106	50.9	22.2	82.2
77	17.9	0.0	42.4

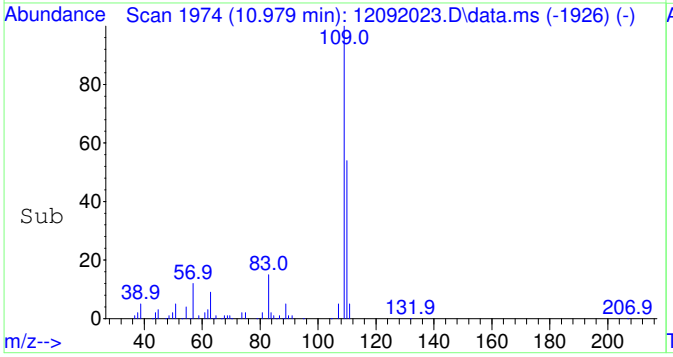


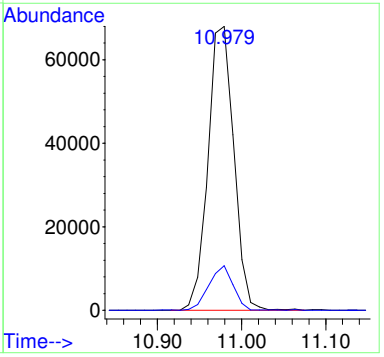


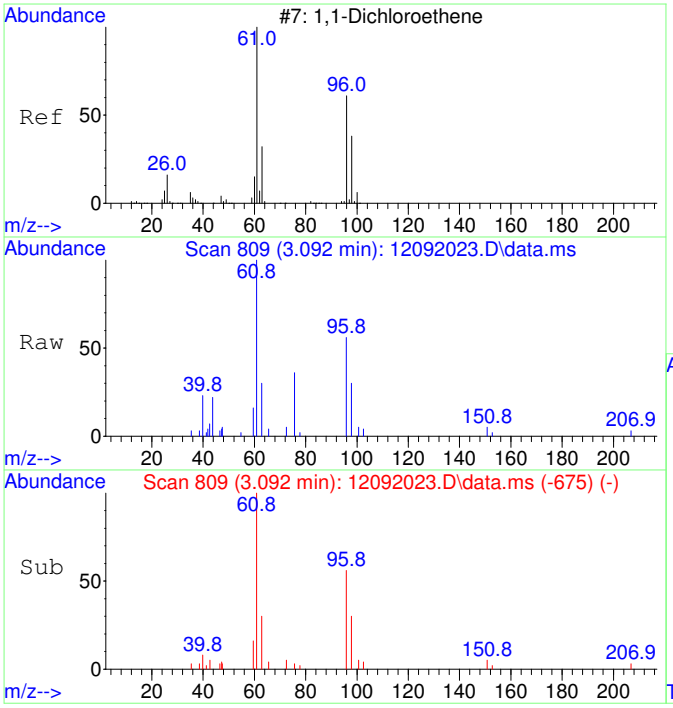
#25
2-Fluorotoluene SCAN
Concen: 5068.71 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:109 Resp: 145371

Ion	Ratio	Lower	Upper
109	100		
83	14.9	0.0	43.8



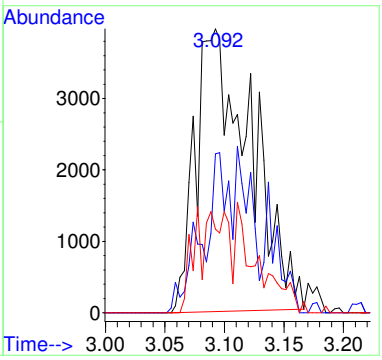


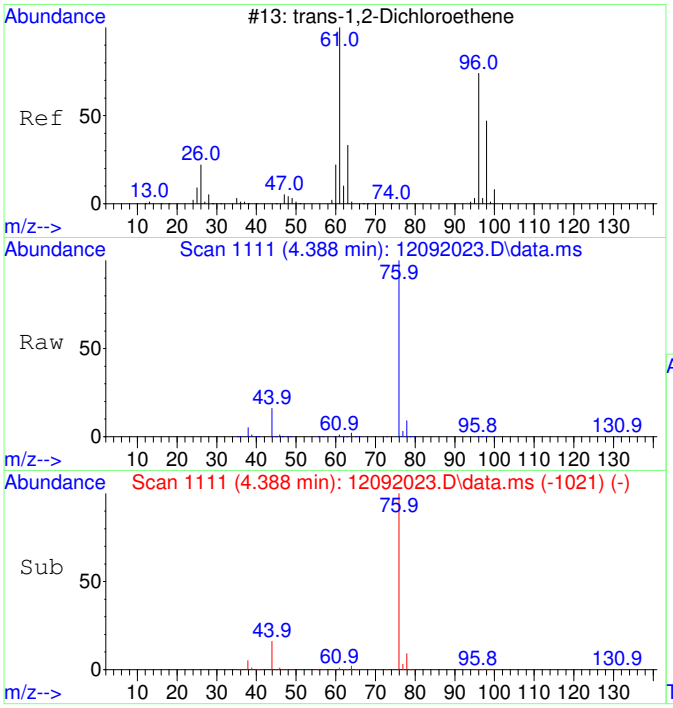


#26
1,1-Dichloroethene SCAN
Concen: 1902.05 ug/L
RT: 3.092 min Scan# 809
Delta R.T. -0.003 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 12735

Ion	Ratio	Lower	Upper
61	100		
96	8.1	33.1	93.1#
98	8.7	11.2	71.2#

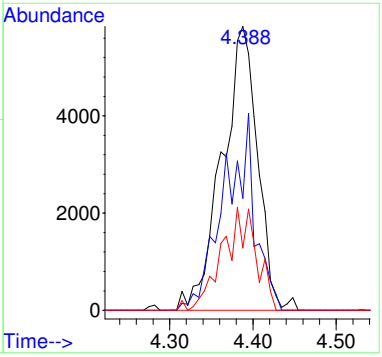


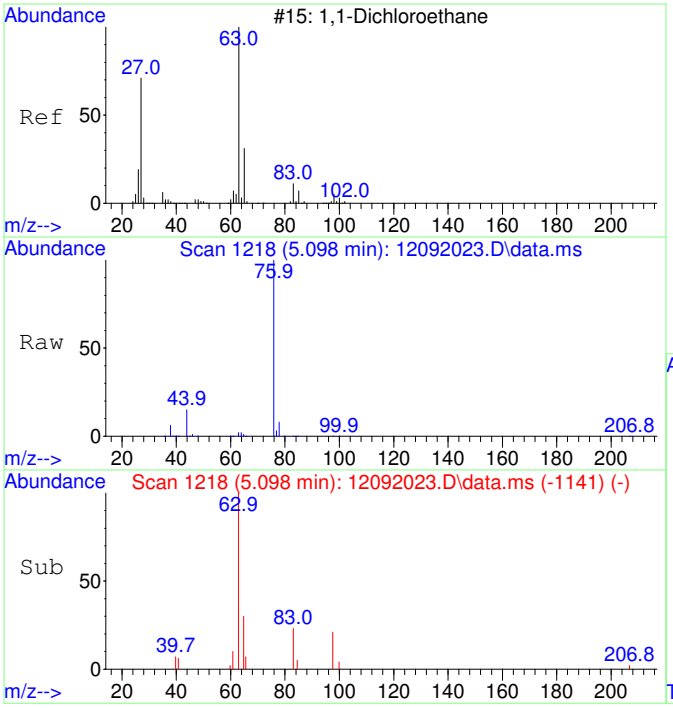


#27
trans-1,2-Dichloroethene SCAN
Concen: 2034.71 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 17352

Ion	Ratio	Lower	Upper
61	100		
96	59.9	49.0	109.0
98	33.9	20.5	80.5

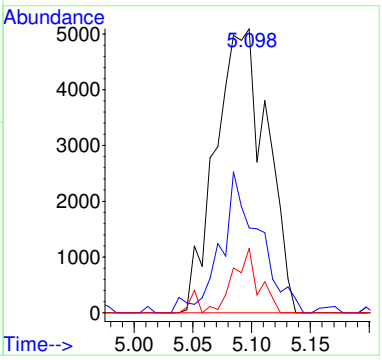


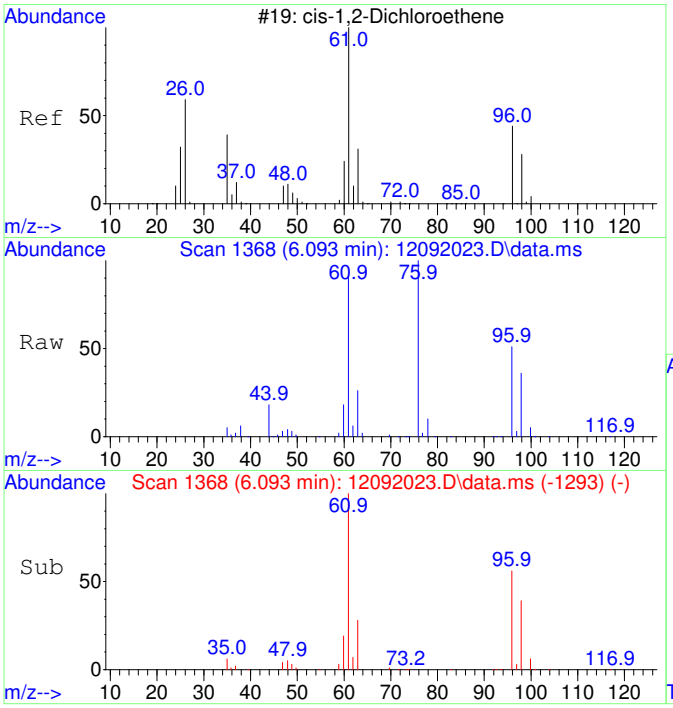


#28
1,1-Dichloroethane SCAN
Concen: 1531.49 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.013 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 63 Resp: 15416

Ion	Ratio	Lower	Upper
63	100		
65	37.0	1.3	61.3
83	10.1	0.0	45.9

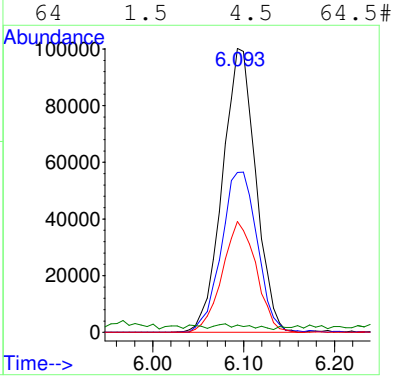


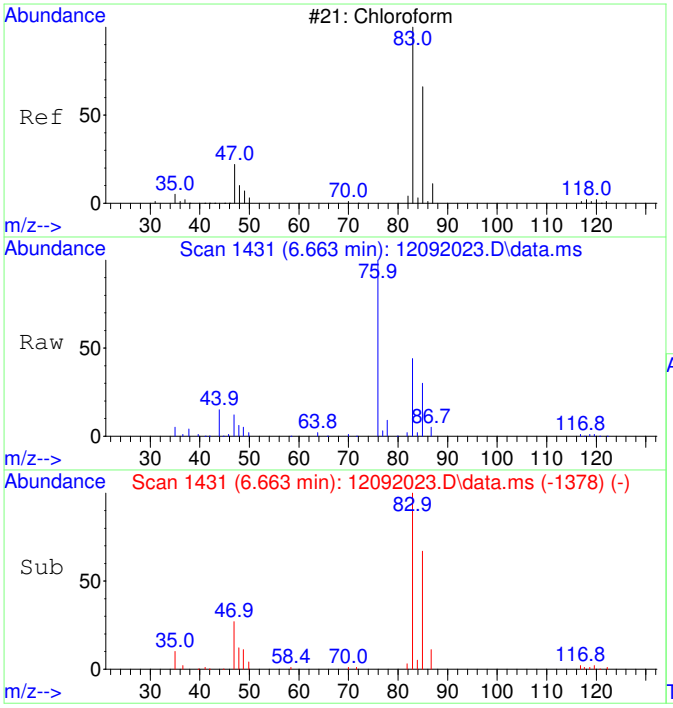


#29
cis-1,2-Dichloroethene SCAN
Concen: 25792.30 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 61 Resp: 255230

Ion	Ratio	Lower	Upper
61	100		
96	60.5	39.9	99.9
98	39.9	13.5	73.5
64	1.5	4.5	64.5#

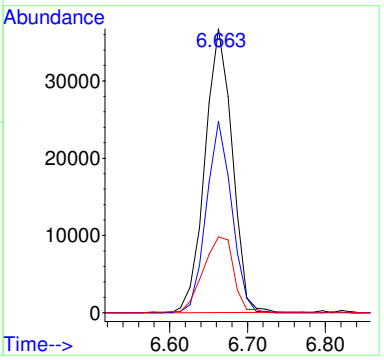


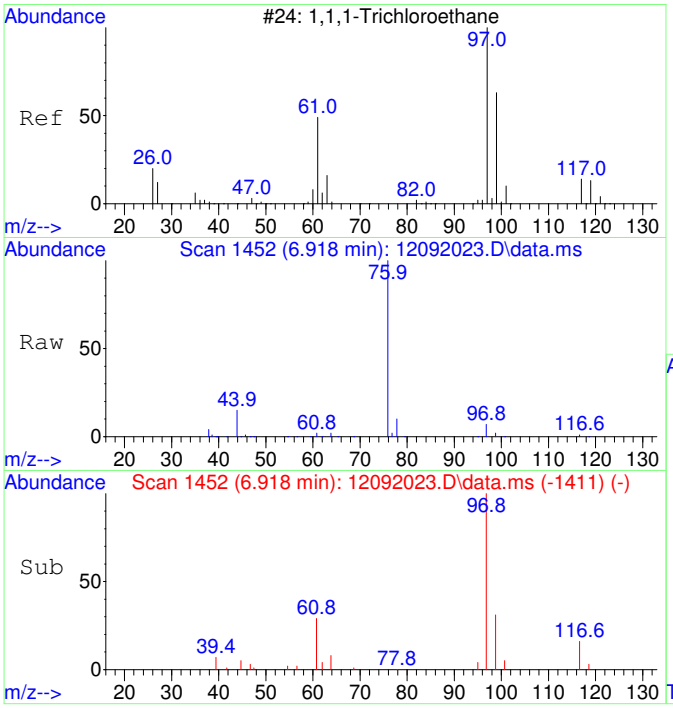


#30
Chloroform SCAN
Concen: 9696.74 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 83 Resp: 89499

Ion	Ratio	Lower	Upper
83	100		
85	62.7	34.6	94.6
47	30.1	0.0	53.4

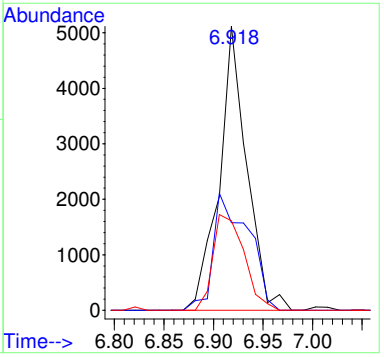


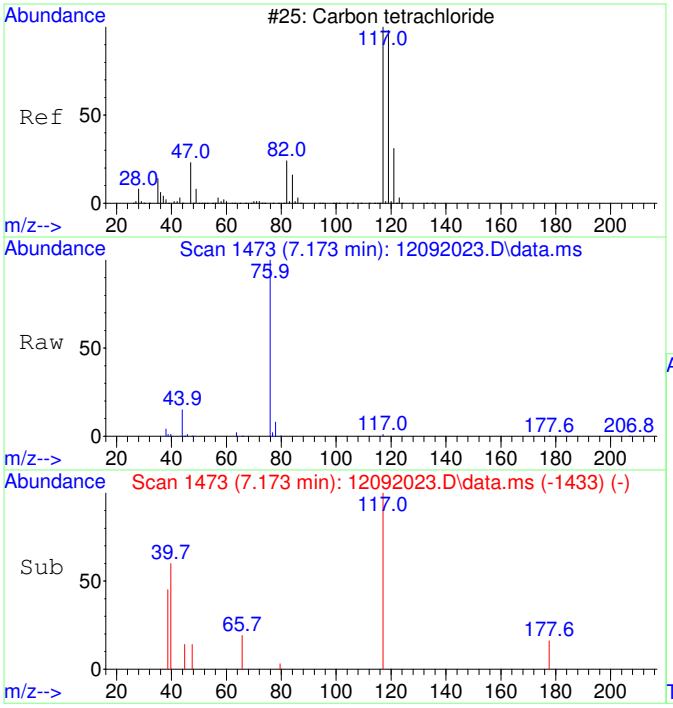


#31
1,1,1-Trichloroethane SCAN
Concen: 1043.54 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 97 Resp: 9939

Ion	Ratio	Lower	Upper
97	100		
99	52.4	43.6	103.6
61	38.0	18.0	78.0

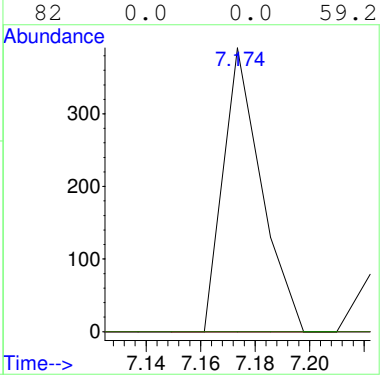


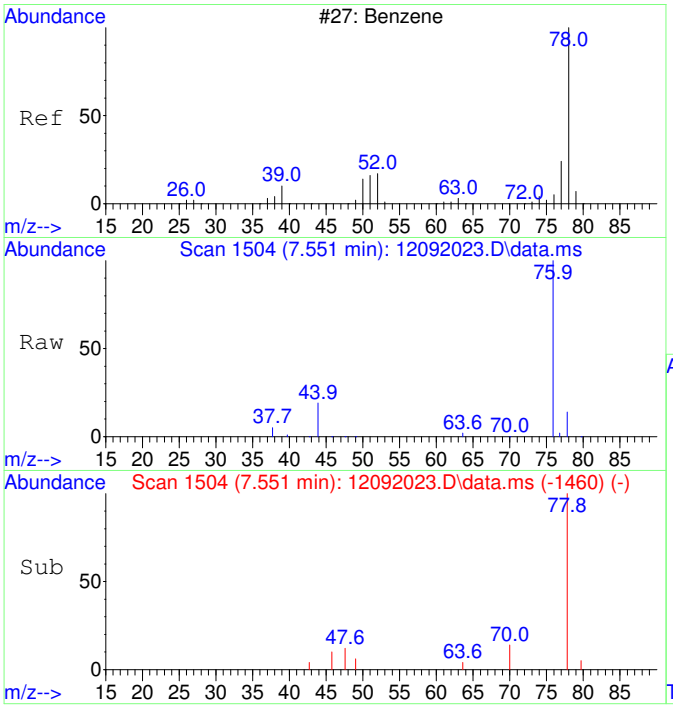


#32
Carbon tetrachloride SCAN
Concen: 46.69 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:117 Resp: 380

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

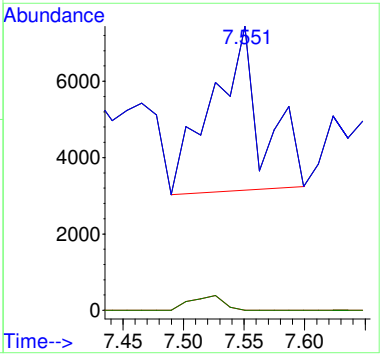


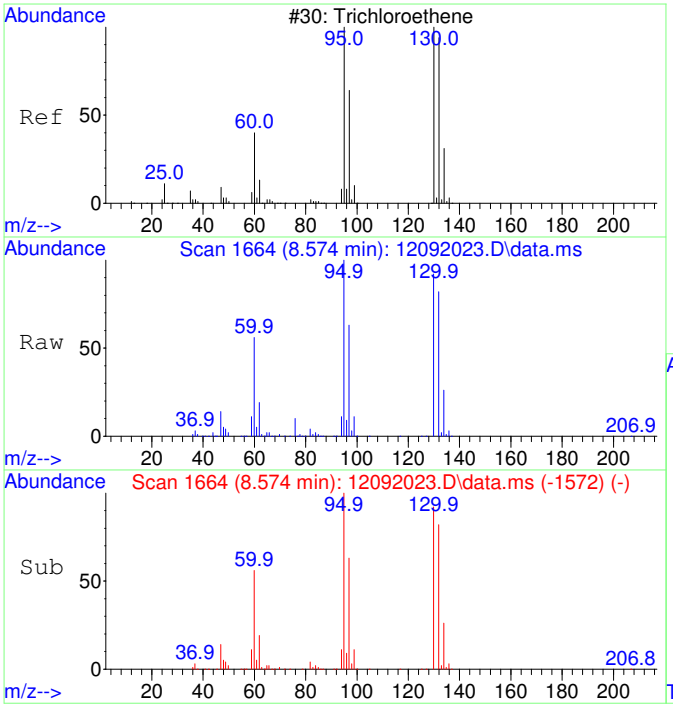


#33
Benzene SCAN
Concen: 434.65 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. 0.037 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 78 Resp: 12524

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

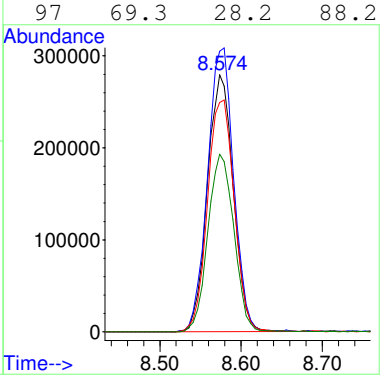


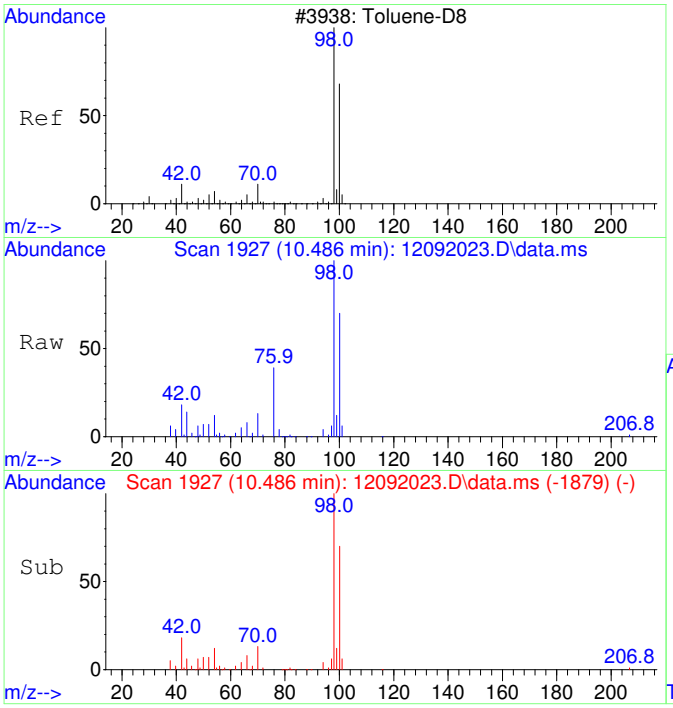


#35
Trichloroethene SCAN
Concen: 98514.03 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:130 Resp: 618959

Ion	Ratio	Lower	Upper
130	100		
95	111.0	60.5	120.5
132	92.7	59.6	119.6
97	69.3	28.2	88.2

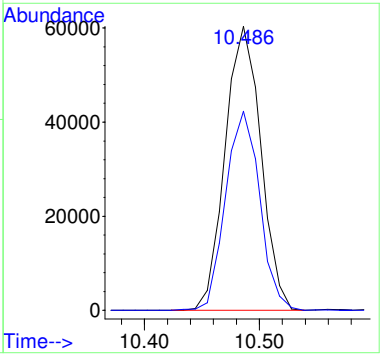


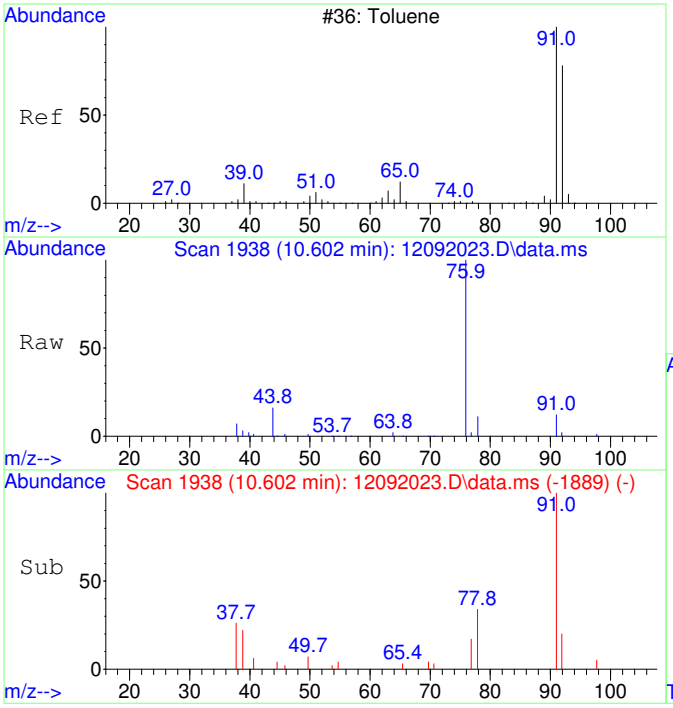


#36
Toluene-d8 SCAN
Concen: 4860.07 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 98 Resp: 130730

Ion	Ratio	Lower	Upper
98	100		
100	67.0	40.0	100.0

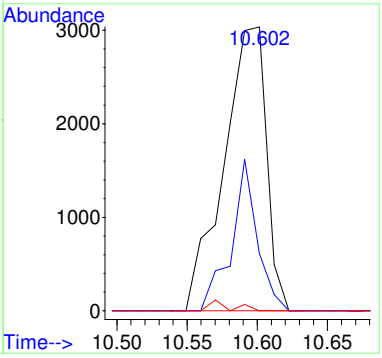


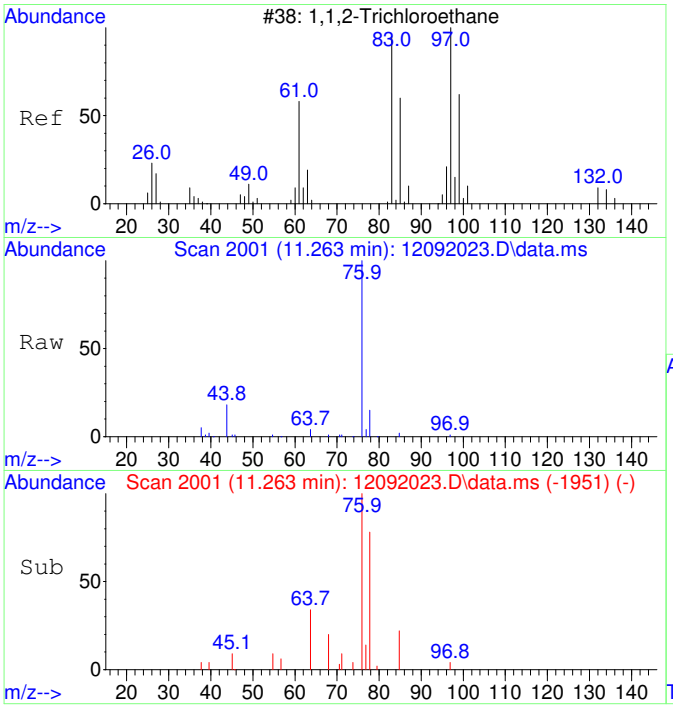


#37
Toluene SCAN
Concen: 194.48 ug/L
RT: 10.602 min Scan# 1938
Delta R.T. 0.011 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 91 Resp: 6441

Ion	Ratio	Lower	Upper
91	100		
92	32.4	28.3	88.3
65	0.0	0.0	41.0

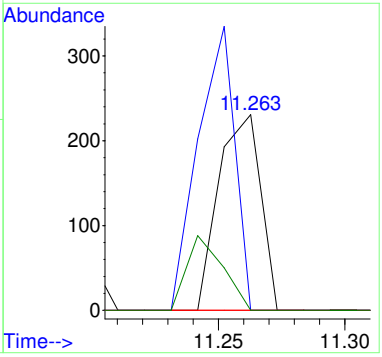


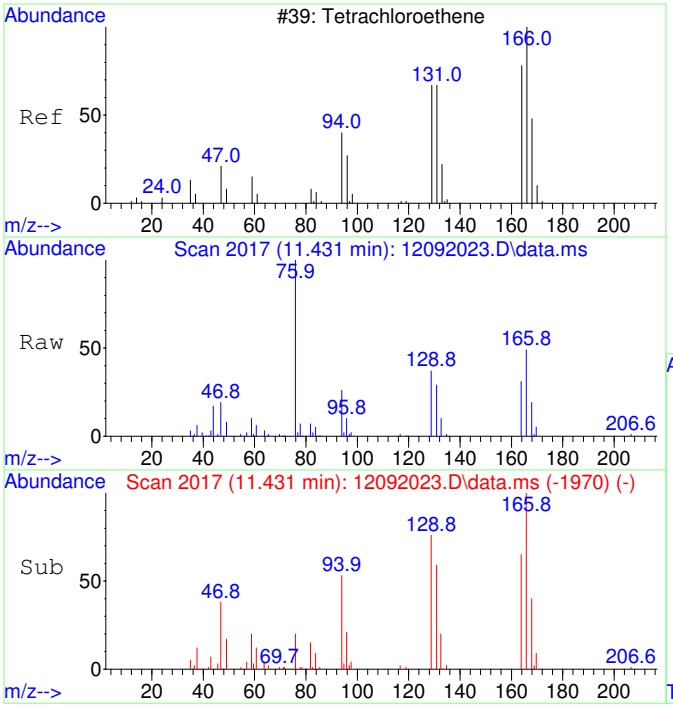


#38
1,1,2-Trichloroethane SCAN
Concen: 32.16 ug/L
RT: 11.263 min Scan# 2001
Delta R.T. 0.021 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion: 97 Resp: 267

Ion	Ratio	Lower	Upper
97	100		
83	126.6	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

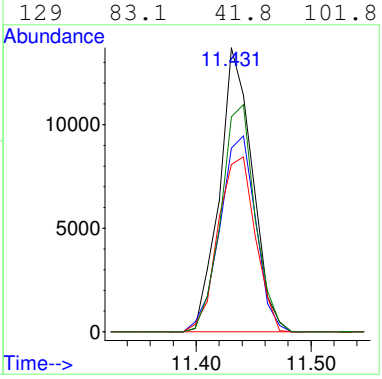




#39
Tetrachloroethene SCAN
Concen: 3661.50 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092023.D
Acq: 9 Dec 2020 17:33

Tgt Ion:166 Resp: 27280

Ion	Ratio	Lower	Upper
166	100		
164	75.1	50.9	110.9
131	69.8	38.7	98.7
129	83.1	41.8	101.8



2012007-17

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092024.D
Acq On : 9 Dec 2020 17:57
InstName : AG5975C
Operator : TD
Sample : 2012007-17
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 10 05:56:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

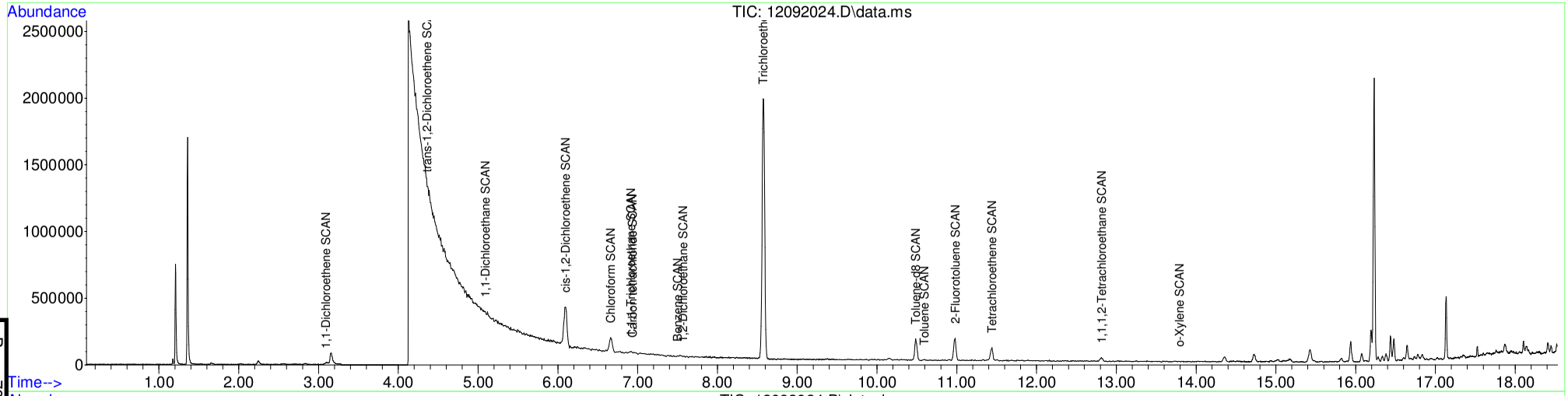
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	233354	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	197684	4374.04 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.48%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	21443	2317.45 ug/L	81
3] trans-1,2-Dichloroethene	4.382	61	26413	2264.31 ug/L	98
4] 1,1-Dichloroethane	5.092	63	23677	1699.44 ug/L	96
5] cis-1,2-Dichloroethene	6.094	61	417020	28900.29 ug/L OC	98
6] Chloroform	6.664	83	162336	11712.77 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	15327	1029.45 ug/L	99
8] Carbon tetrachloride	7.187	117	780	54.80 ug/L	99
9] Benzene	7.515	78	3536	90.05 ug/L	64
11] Trichloroethene	8.575	130	1357431	109490.42 ug/L OC	96
13] Toluene	10.582	91	6683	118.76 ug/L	100
15] Tetrachloroethene	11.432	166	66983	3821.65 ug/L	100
17] 1,1,1,2-Tetrachloroethane	12.813	131	1153	75.57 ug/L #	1
19] m&p-Xylene	13.162	91	1933	34.92 ug/L	93
25) 2-Fluorotoluene SCAN	10.979	109	137872	5205.06 ug/L	99
26) 1,1-Dichloroethene SCAN	3.088	61	15127	2446.28 ug/L #	50
27) trans-1,2-Dichloroethe...	4.361	61	18494	2348.09 ug/L #	33
28) 1,1-Dichloroethane SCAN	5.091	63	17043	1833.23 ug/L	95
29) cis-1,2-Dichloroethene...	6.093	61	285883	31280.70 ug/L #	77
30) Chloroform SCAN	6.662	83	105783	12409.48 ug/L	93
31) 1,1,1-Trichloroethane ...	6.918	97	9975	1133.99 ug/L	91
32) Carbon tetrachloride SCAN	6.930	117	1078	143.41 ug/L #	15
33) Benzene SCAN	7.502	78	9173	344.69 ug/L	92
34) 1,2-Dichloroethane SCAN	7.563	62	257	30.87 ug/L #	40
35) Trichloroethene SCAN	8.574	130	728888	125610.75 ug/L	85
36) Toluene-d8 SCAN	10.486	98	116149	4675.33 ug/L	98
37) Toluene SCAN	10.591	91	4441	145.19 ug/L #	61
39) Tetrachloroethene SCAN	11.441	166	31162	4528.67 ug/L	95
41) 1,1,1,2-Tetrachloroeth...	12.812	131	649	85.62 ug/L #	1
44) o-Xylene SCAN	13.789	91	1512	47.50 ug/L	66

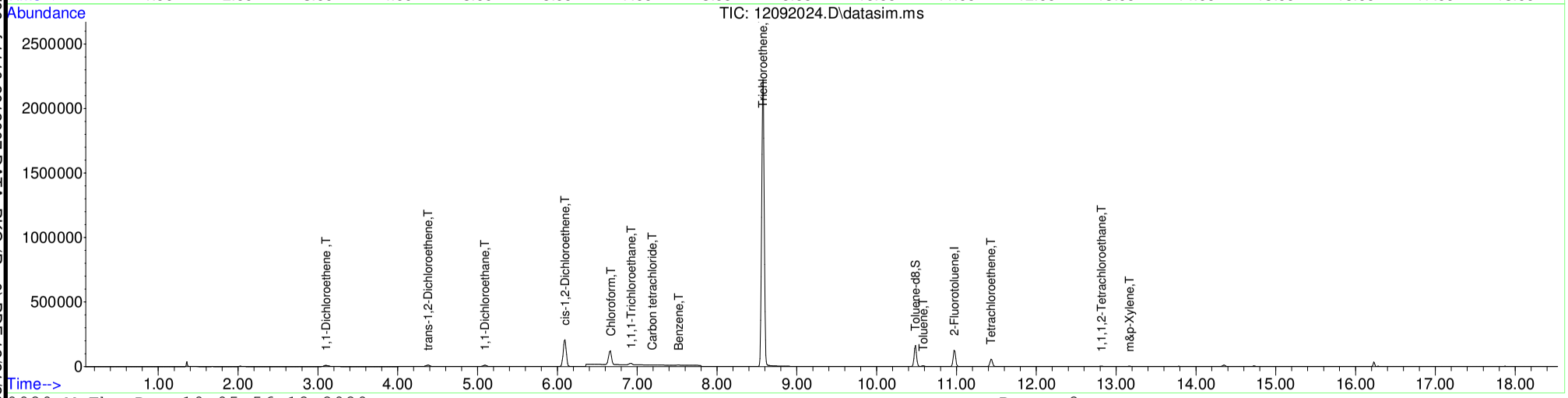
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092024.D
Acq On : 9 Dec 2020 17:57
InstName : AG5975C
Operator : TD
Sample : 2012007-17
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 10 05:56:11 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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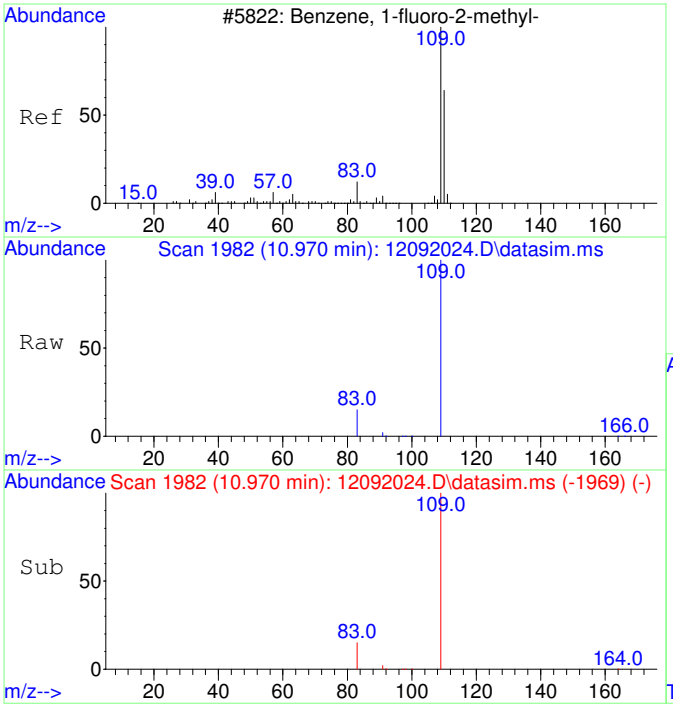
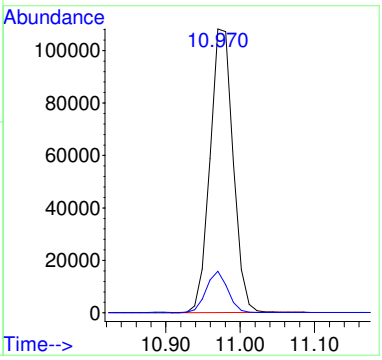
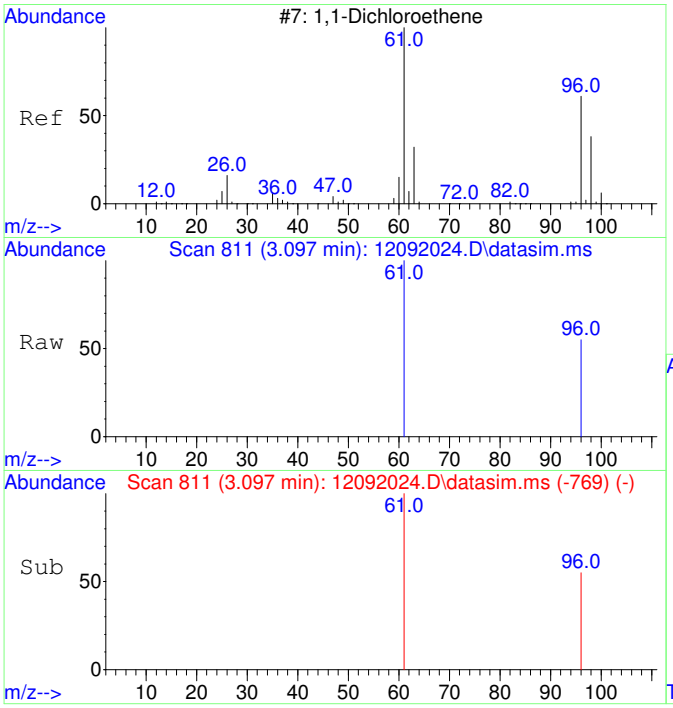


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:109 Resp: 233354

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

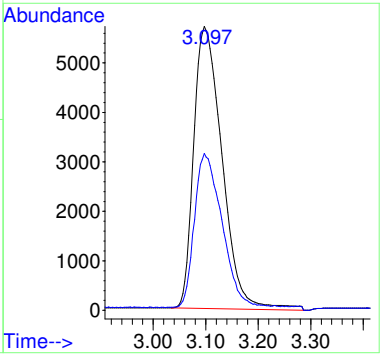


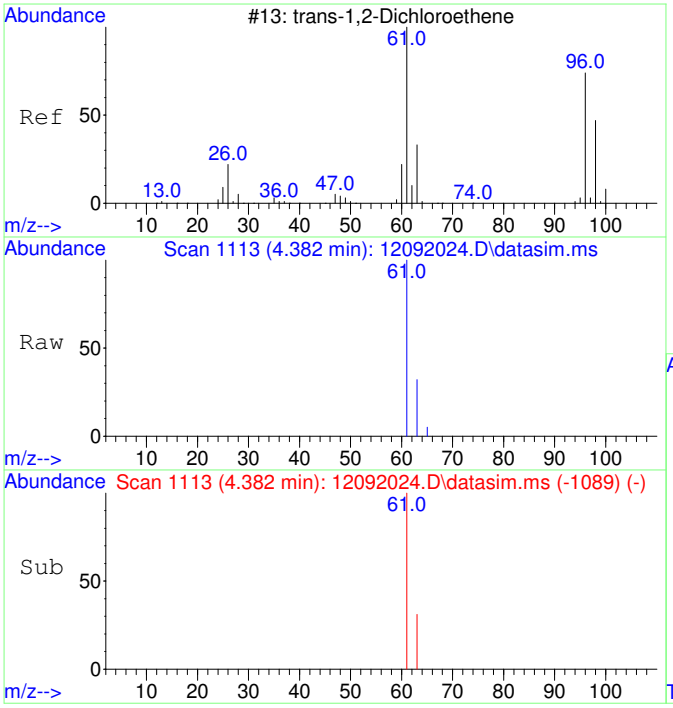


#2
1,1-Dichloroethene
Concen: 2317.45 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 21443

Ion	Ratio	Lower	Upper
61	100		
96	52.1	37.2	97.2

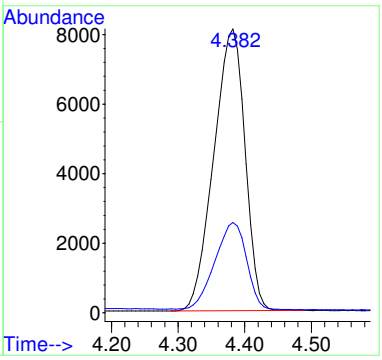


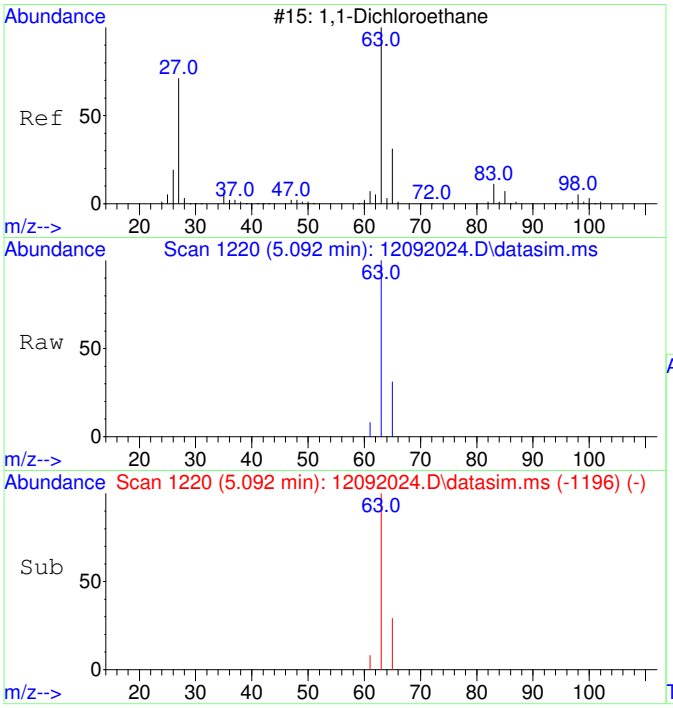


#3
trans-1,2-Dichloroethene
Concen: 2264.31 ug/L
RT: 4.382 min Scan# 1113
Delta R.T. 0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 26413

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.4	62.4

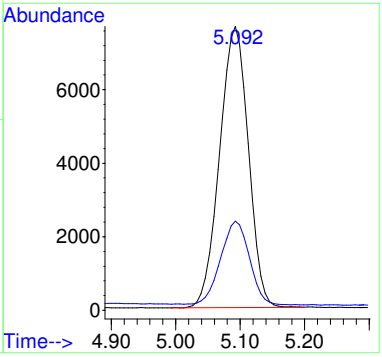


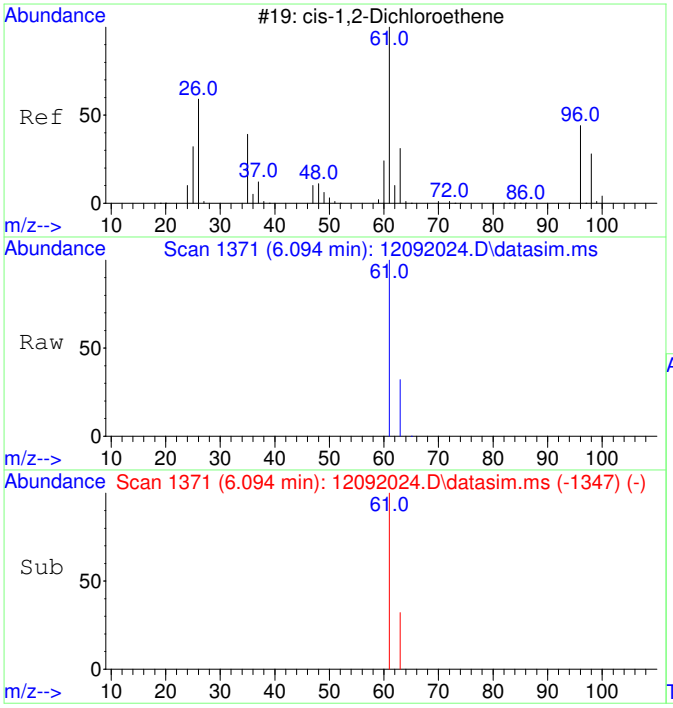


#4
1,1-Dichloroethane
Concen: 1699.44 ug/L
RT: 5.092 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 63 Resp: 23677

Ion	Ratio	Lower	Upper
63	100		
65	29.5	1.8	61.8

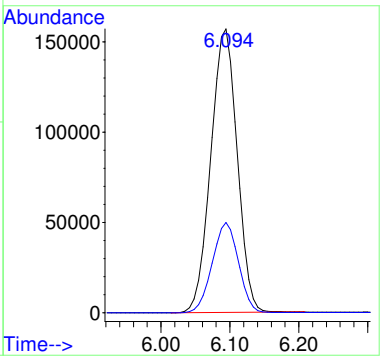


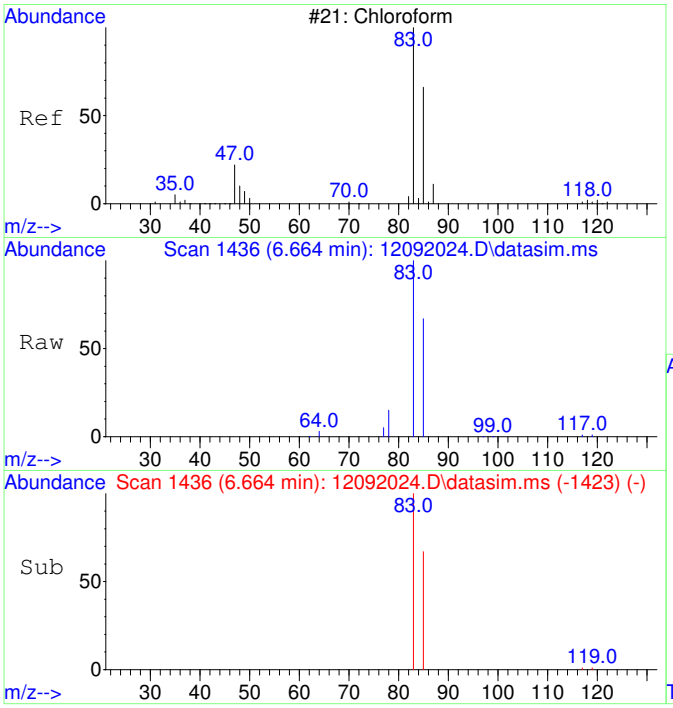


#5
cis-1,2-Dichloroethene
Concen: 28900.29 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 417020

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

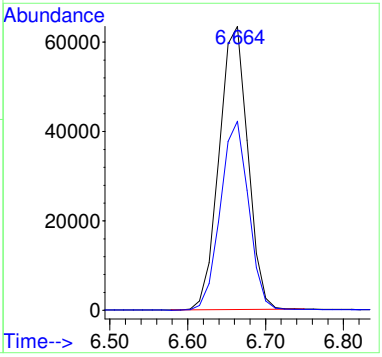


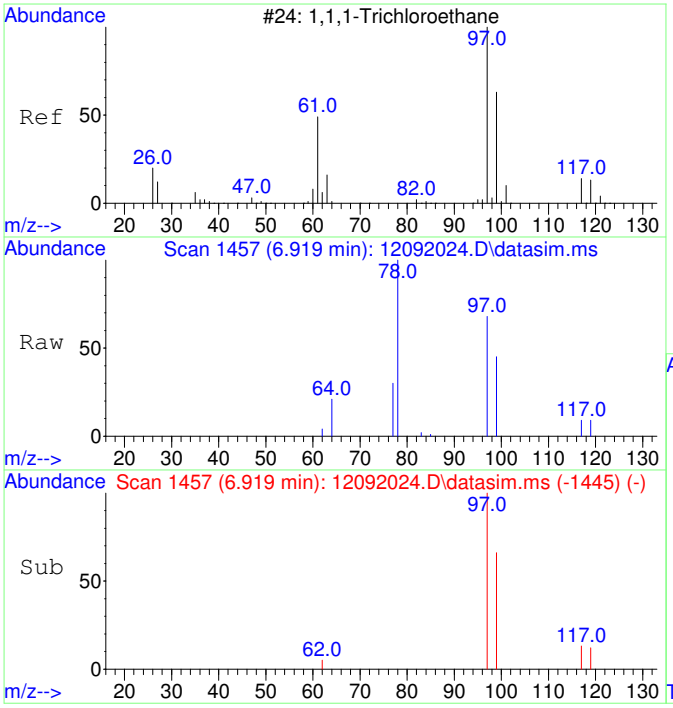


#6
Chloroform
Concen: 11712.77 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 83 Resp: 162336

Ion	Ratio	Lower	Upper
83	100		
85	65.3	35.1	95.1

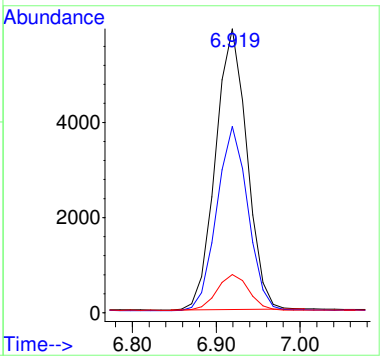


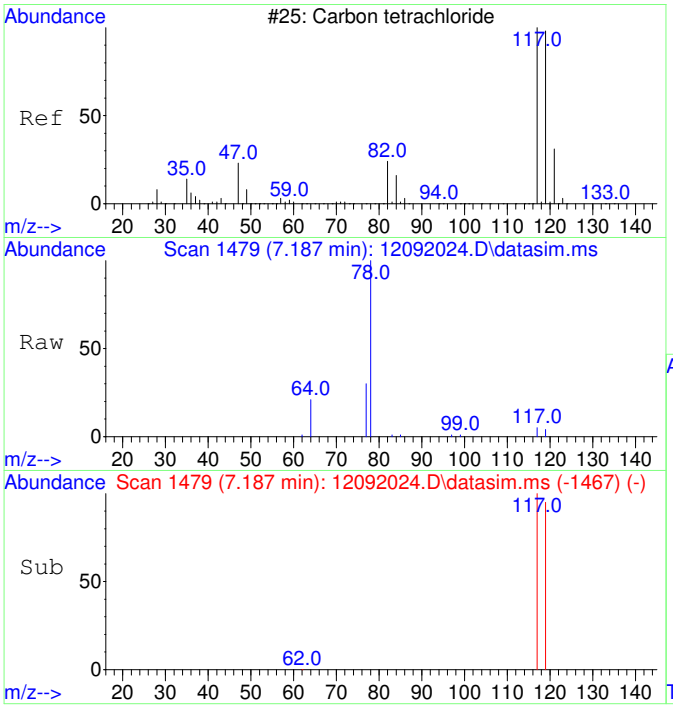


#7
1,1,1-Trichloroethane
Concen: 1029.45 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 97 Resp: 15327

Ion	Ratio	Lower	Upper
97	100		
99	65.0	34.6	94.6
117	12.9	0.0	43.2

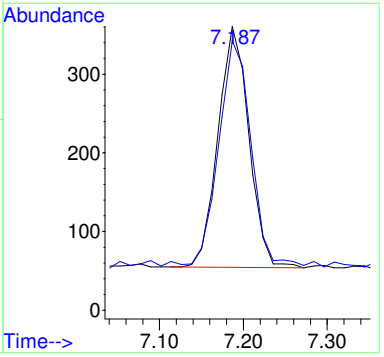


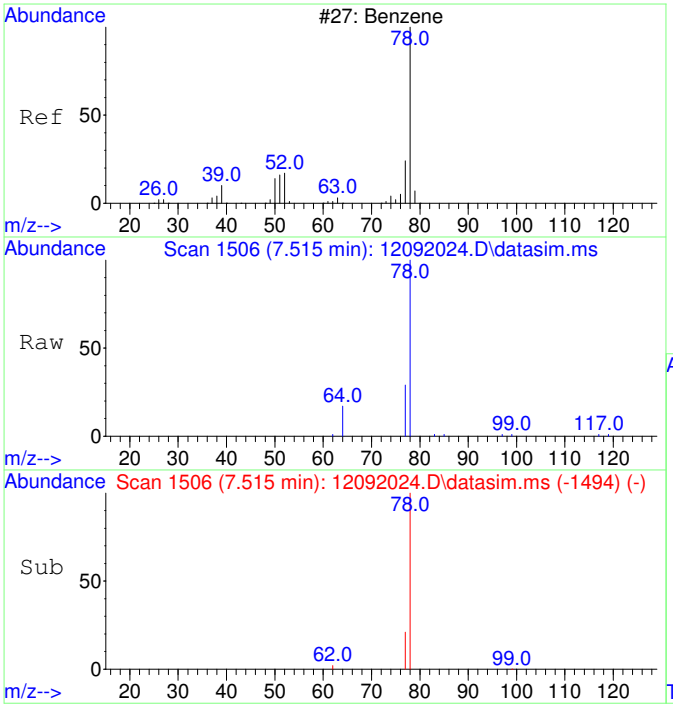


#8
Carbon tetrachloride
Concen: 54.80 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:117 Resp: 780

Ion	Ratio	Lower	Upper
117	100		
119	97.3	66.4	126.4

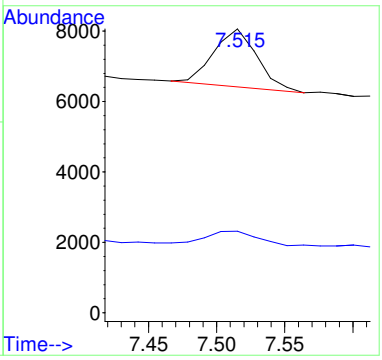


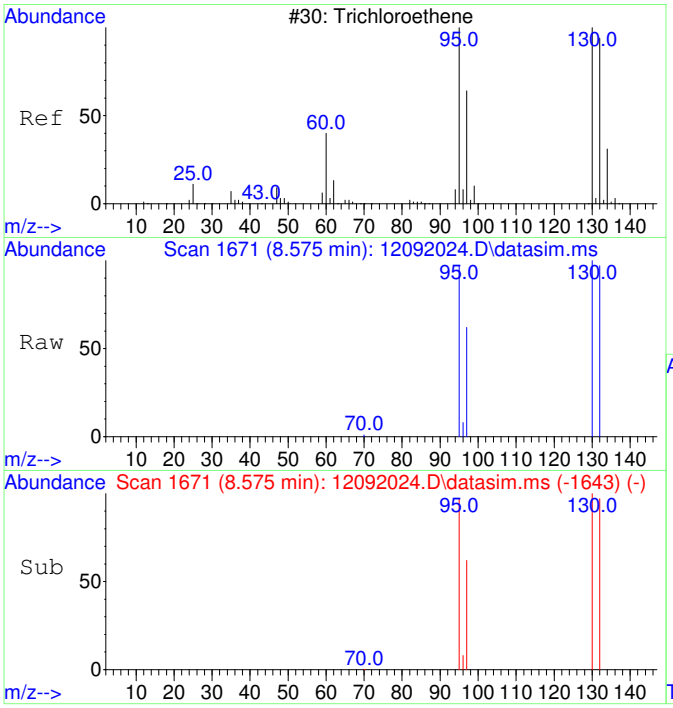


#9
Benzene
Concen: 90.05 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 78 Resp: 3536

Ion	Ratio	Lower	Upper
78	100		
77	40.7	0.0	53.2

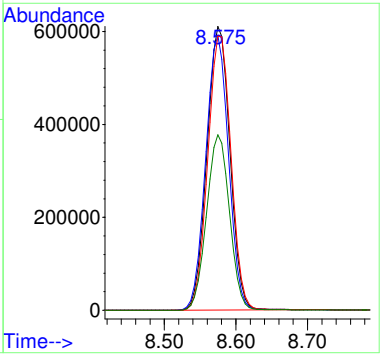


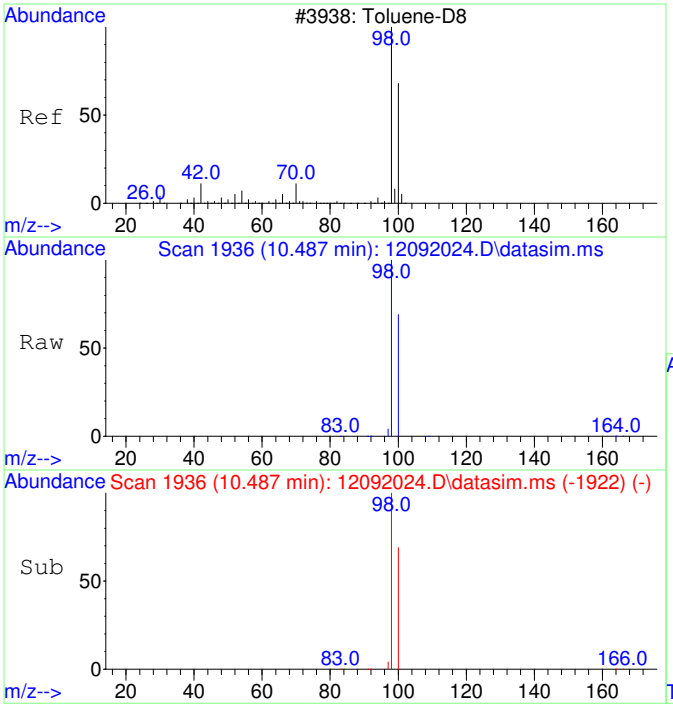


#11
Trichloroethene
Concen: 109490.42 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:130 Resp: 1357431

Ion	Ratio	Lower	Upper
130	100		
95	95.9	60.7	120.7
132	97.5	76.0	116.0
97	61.5	38.6	78.6

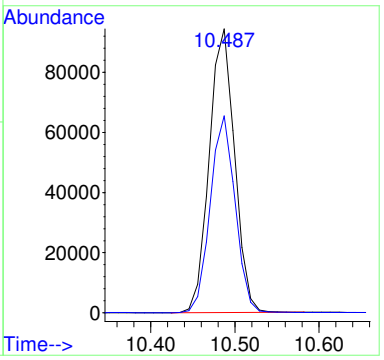


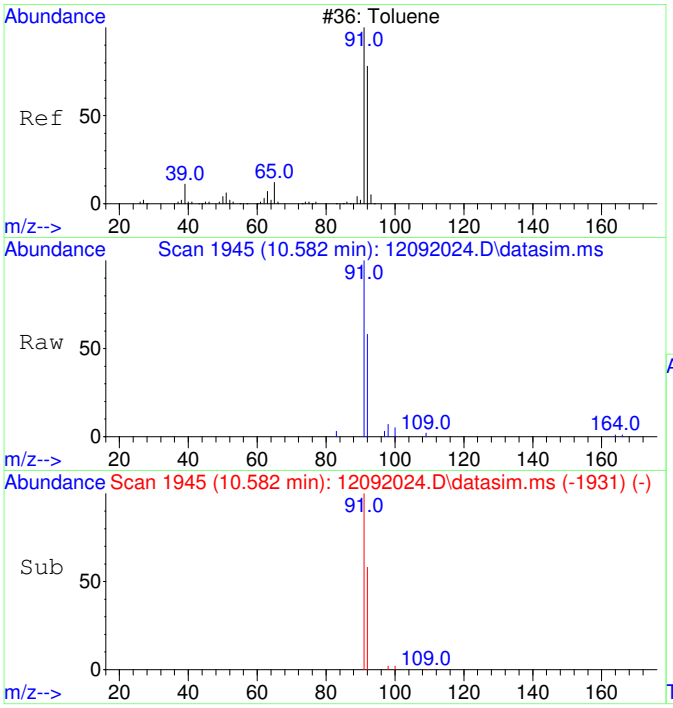


#12
Toluene-d8
Concen: 4374.04 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 98 Resp: 197684

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

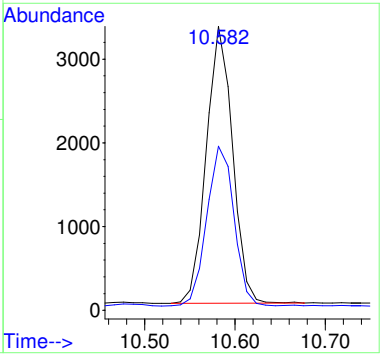


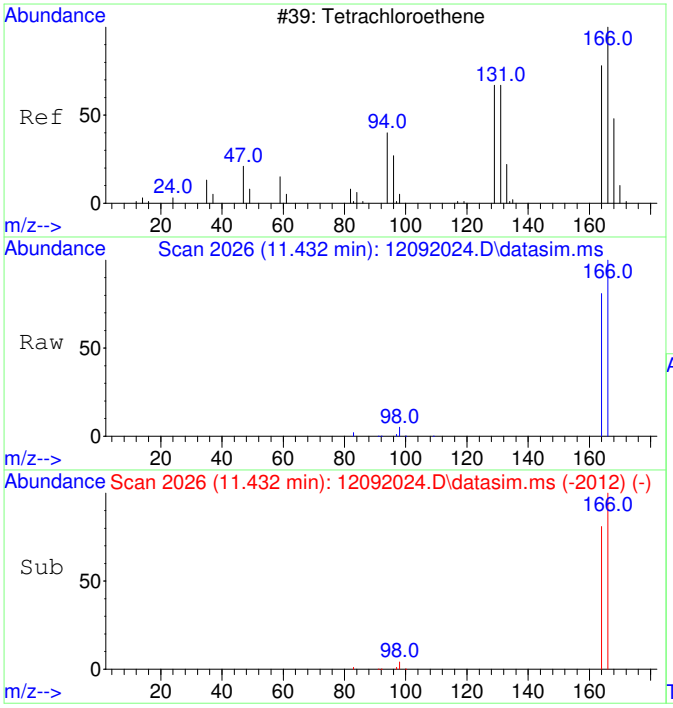


#13
Toluene
Concen: 118.76 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 91 Resp: 6683

Ion	Ratio	Lower	Upper
91	100		
92	59.9	29.9	89.9

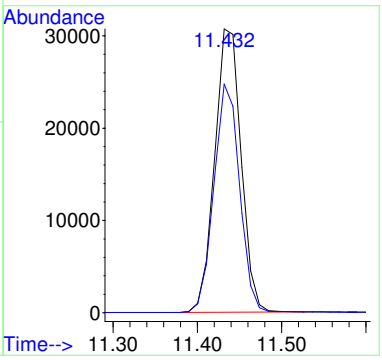


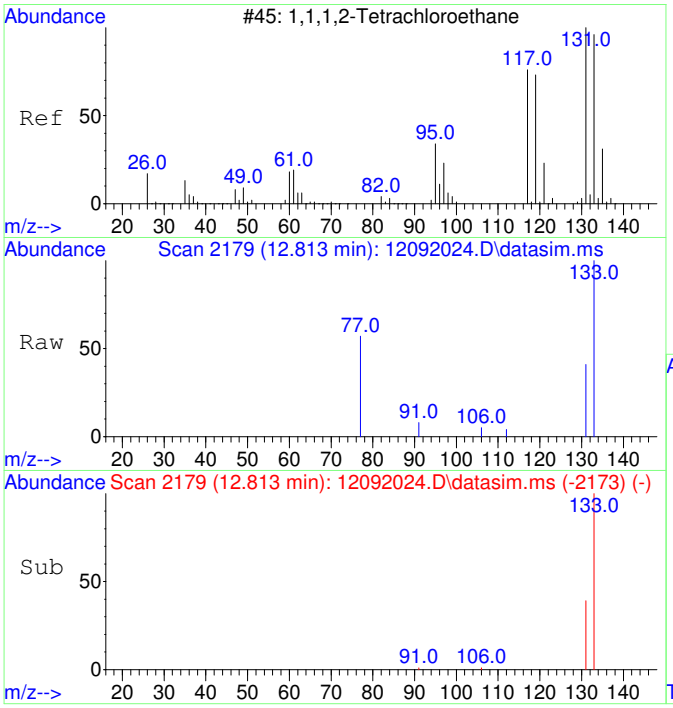


#15
Tetrachloroethene
Concen: 3821.65 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:166 Resp: 66983

Ion	Ratio	Lower	Upper
166	100		
164	78.1	47.8	107.8

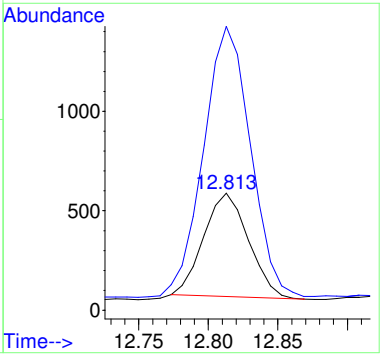


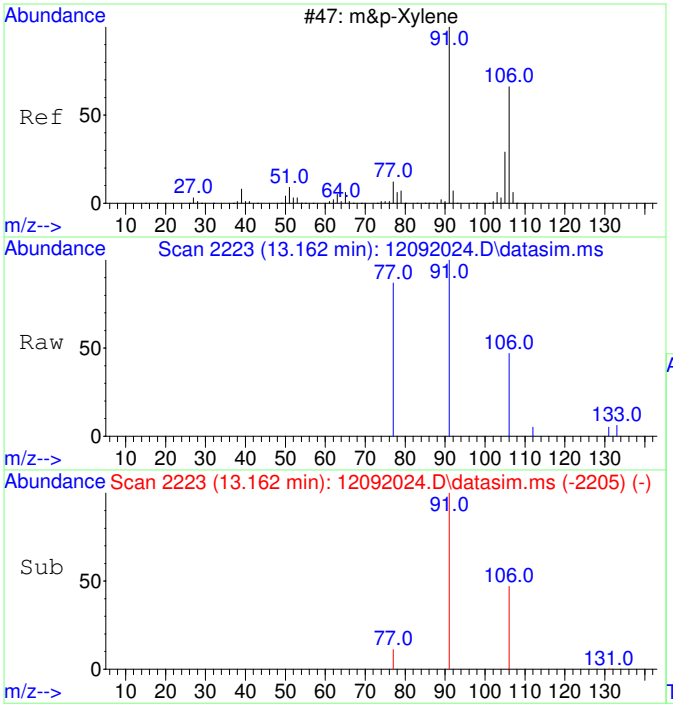


#17
1,1,1,2-Tetrachloroethane
Concen: 75.57 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:131 Resp: 1153

Ion	Ratio	Lower	Upper
131	100		
133	272.8	66.3	126.3#

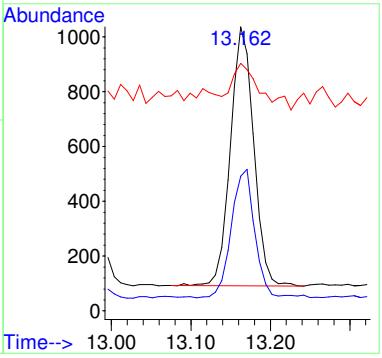


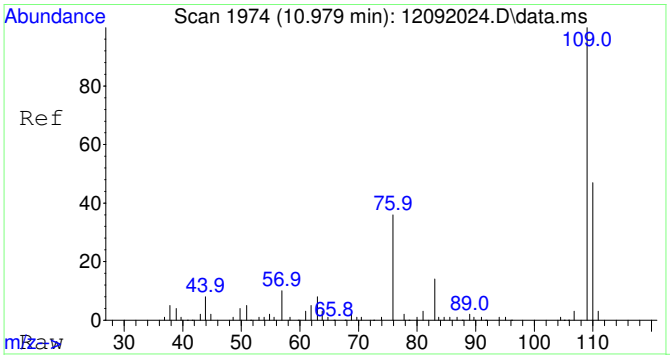


#19
m&p-Xylene
Concen: 34.92 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 91 Resp: 1933

Ion	Ratio	Lower	Upper
91	100		
106	49.6	22.2	82.2
77	21.6	0.0	42.4

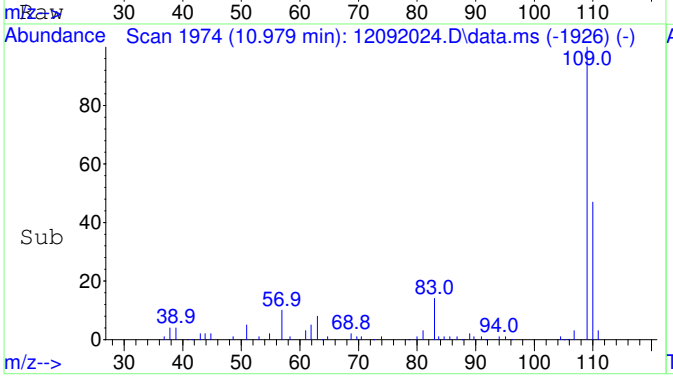


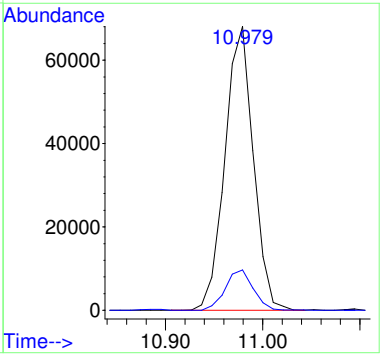


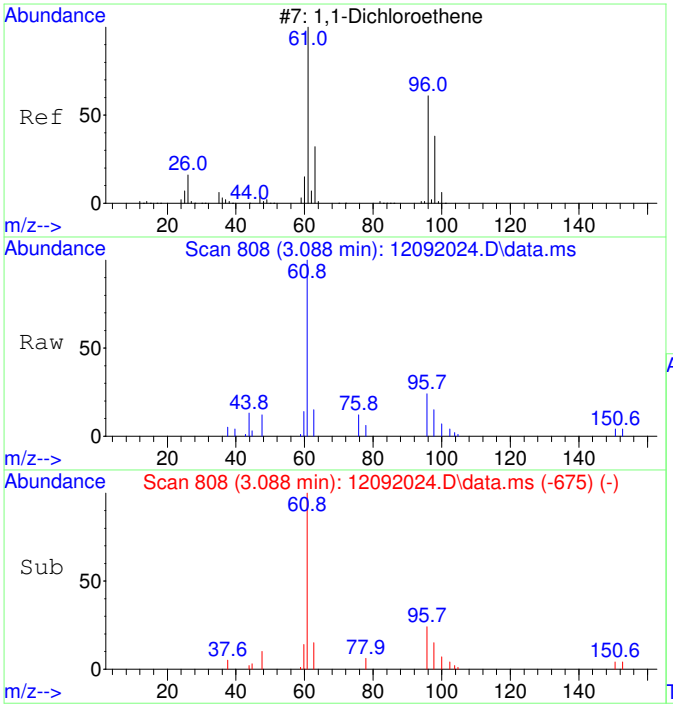
#25
2-Fluorotoluene SCAN
Concen: 5205.06 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:109 Resp: 137872

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8



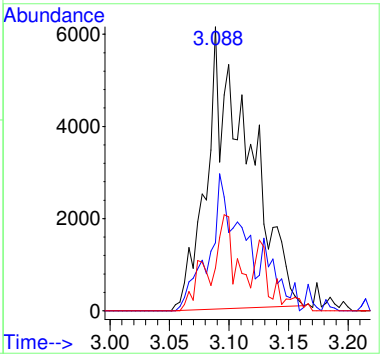


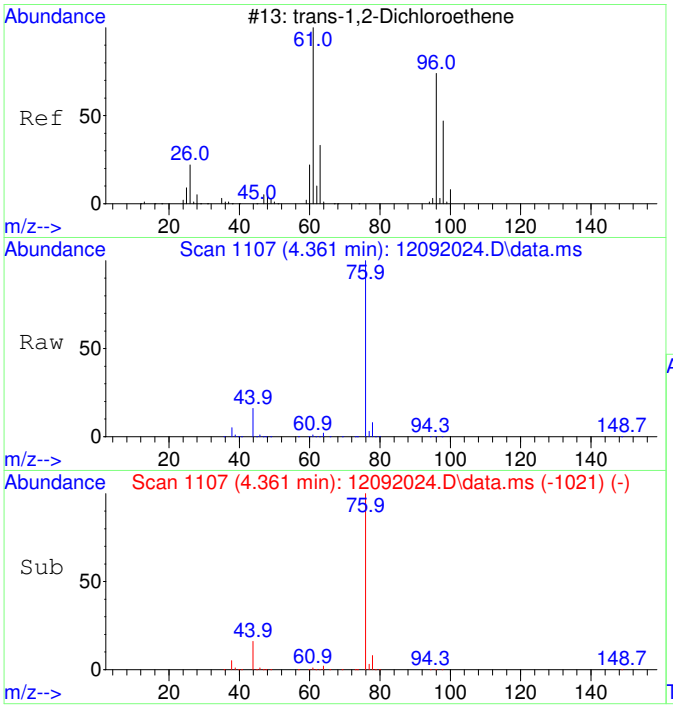


#26
1,1-Dichloroethene SCAN
Concen: 2446.28 ug/L
RT: 3.088 min Scan# 808
Delta R.T. -0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 15127

Ion	Ratio	Lower	Upper
61	100		
96	25.5	33.1	93.1#
98	8.5	11.2	71.2#

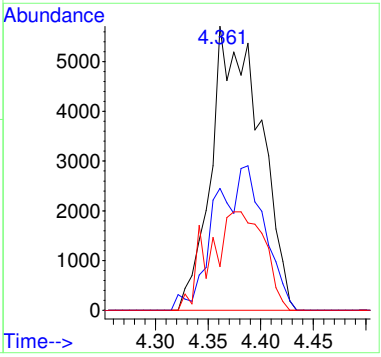


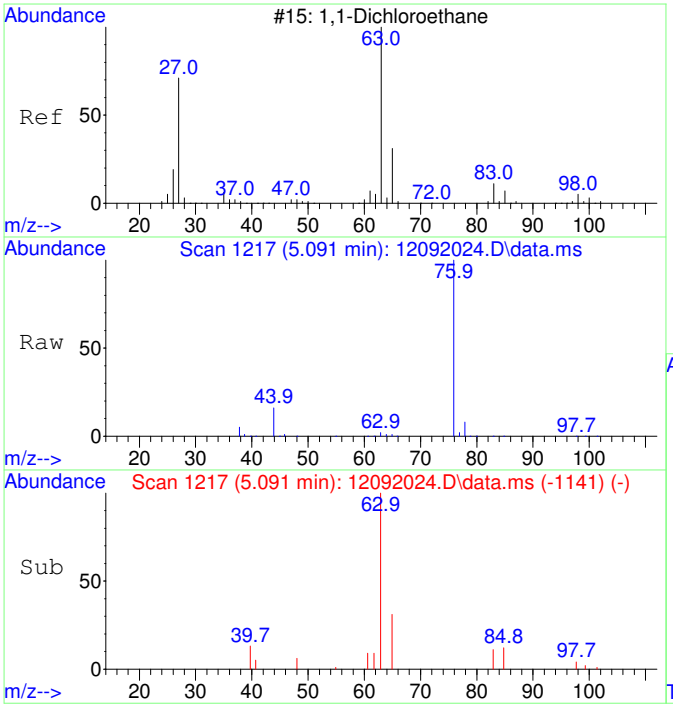


#27
trans-1,2-Dichloroethene SCAN
Concen: 2348.09 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 18494

Ion	Ratio	Lower	Upper
61	100		
96	8.9	49.0	109.0#
98	18.0	20.5	80.5#

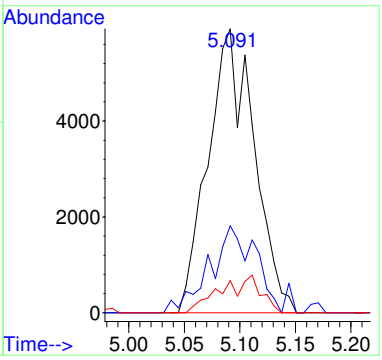


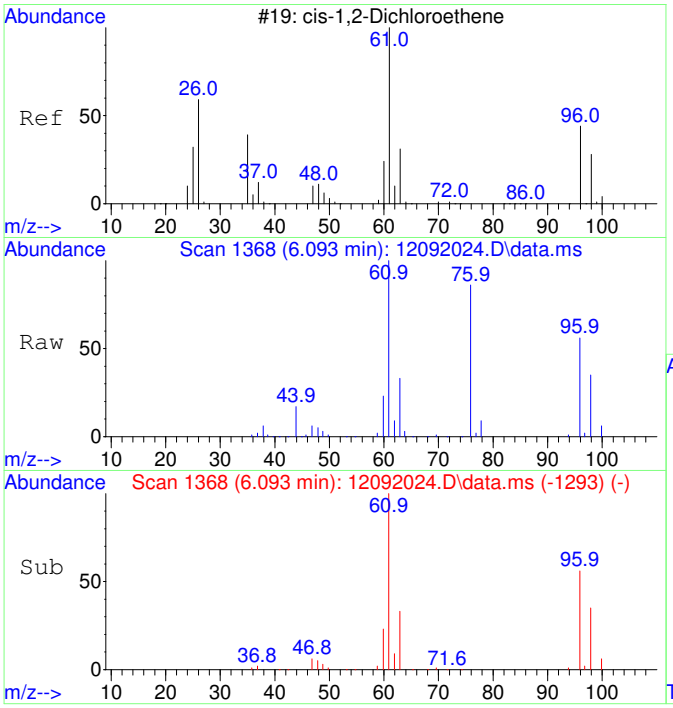


#28
1,1-Dichloroethane SCAN
Concen: 1833.23 ug/L
RT: 5.091 min Scan# 1217
Delta R.T. 0.007 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 63 Resp: 17043

Ion	Ratio	Lower	Upper
63	100		
65	30.4	1.3	61.3
83	11.6	0.0	45.9

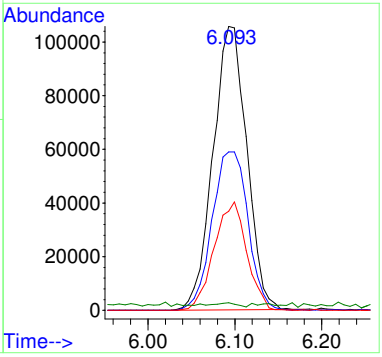


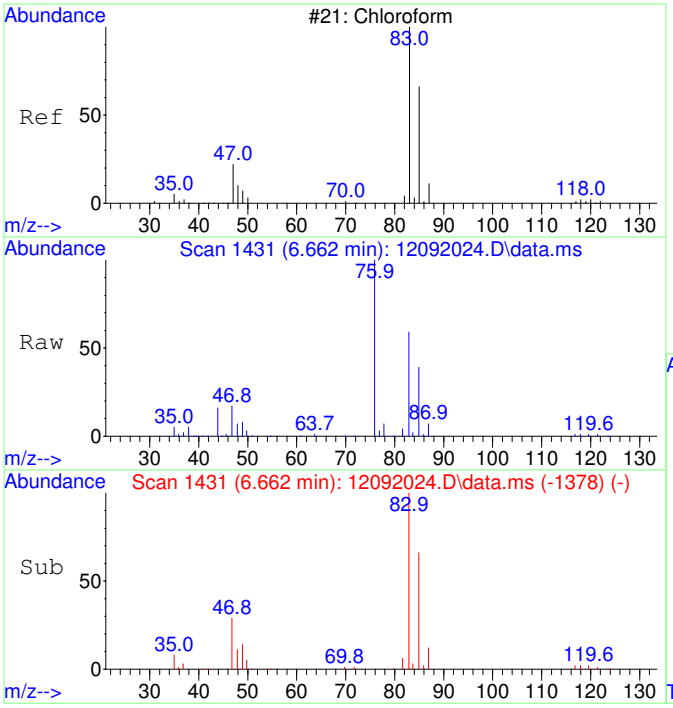


#29
cis-1,2-Dichloroethene SCAN
Concen: 31280.70 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 61 Resp: 285883

Ion	Ratio	Lower	Upper
61	100		
96	59.3	39.9	99.9
98	36.9	13.5	73.5
64	0.4	4.5	64.5#

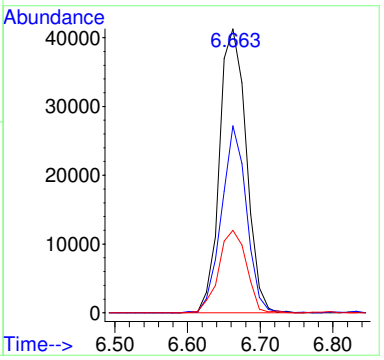


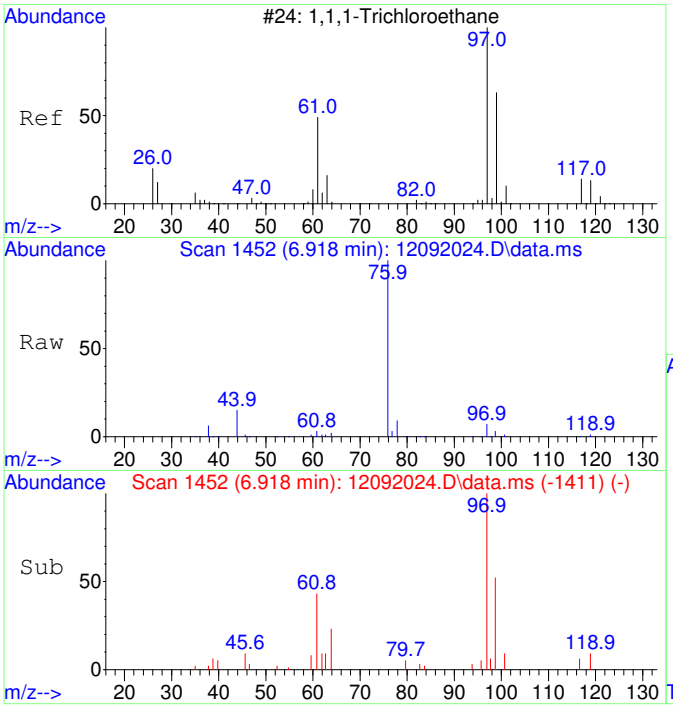


#30
Chloroform SCAN
Concen: 12409.48 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 83 Resp: 105783

Ion	Ratio	Lower	Upper
83	100		
85	61.6	34.6	94.6
47	30.3	0.0	53.4

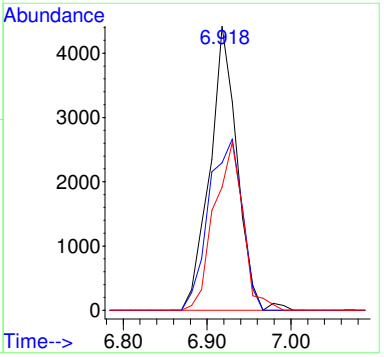


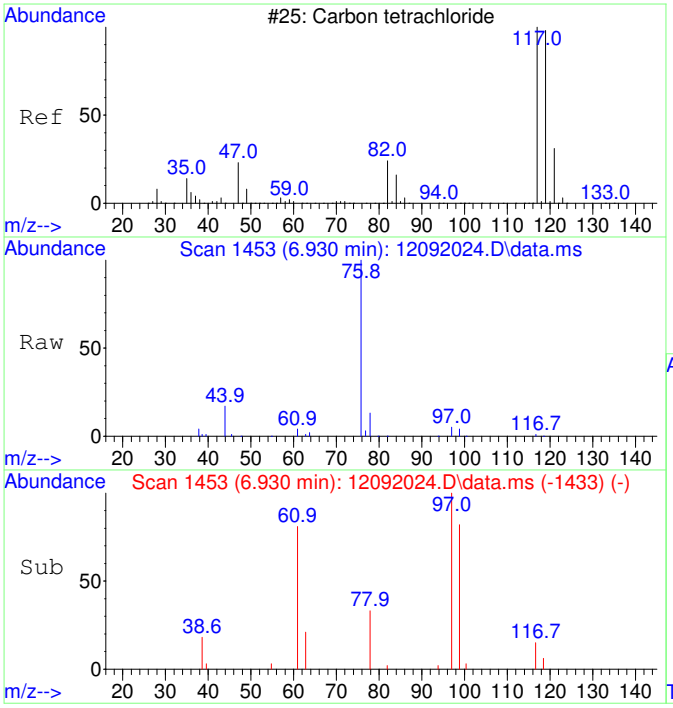


#31
1,1,1-Trichloroethane SCAN
Concen: 1133.99 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 97 Resp: 9975

Ion	Ratio	Lower	Upper
97	100		
99	74.0	43.6	103.6
61	62.5	18.0	78.0

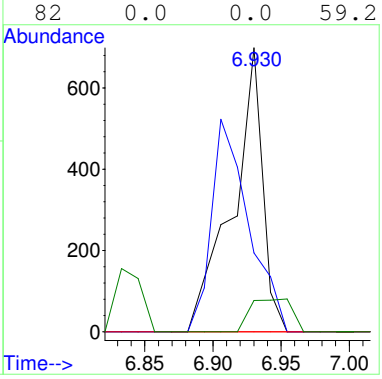


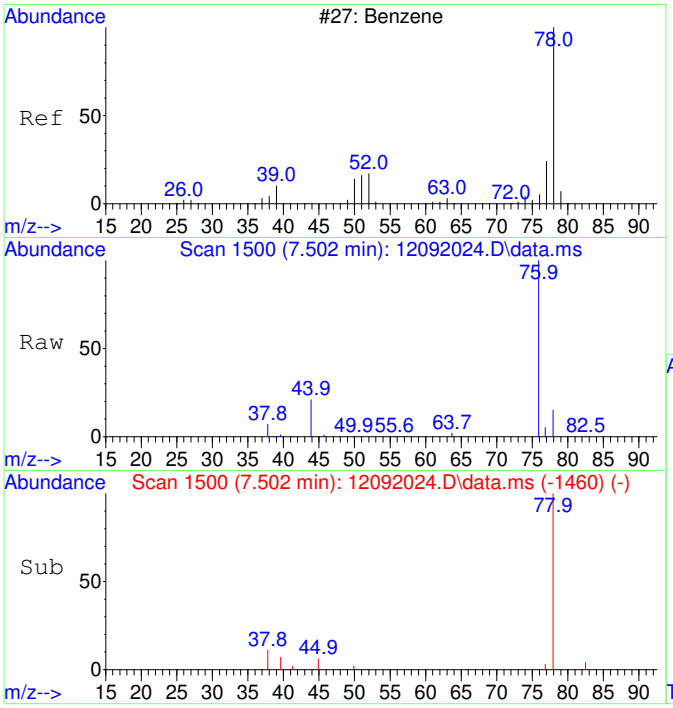


#32
Carbon tetrachloride SCAN
Concen: 143.41 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. -0.255 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:117 Resp: 1078

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

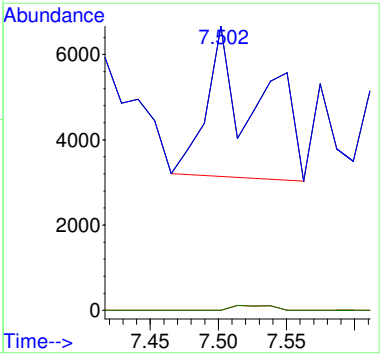


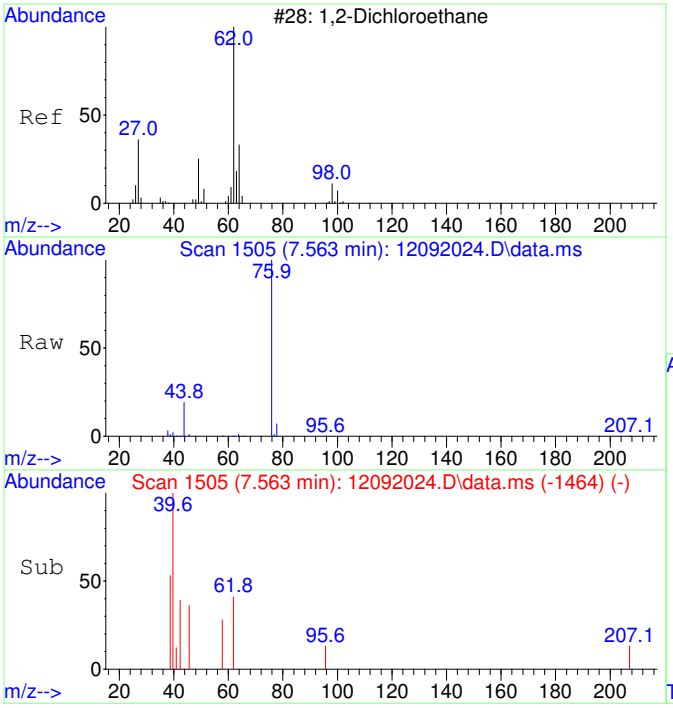


#33
Benzene SCAN
Concen: 344.69 ug/L
RT: 7.502 min Scan# 1500
Delta R.T. -0.012 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 78 Resp: 9173

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.6	0.0	47.9
51	2.6	0.0	44.1

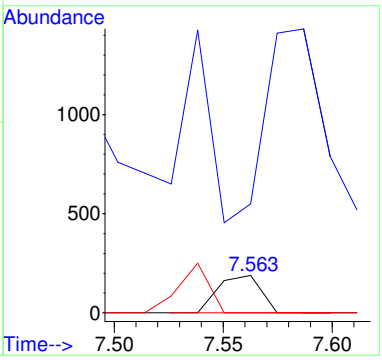


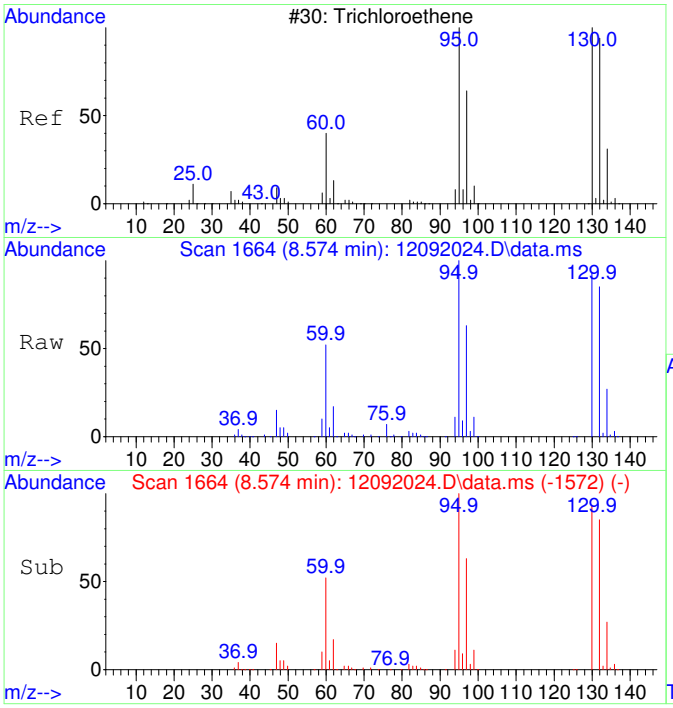


#34
1,2-Dichloroethane SCAN
Concen: 30.87 ug/L
RT: 7.563 min Scan# 1505
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 62 Resp: 257

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

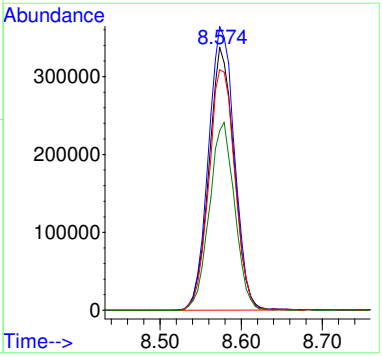


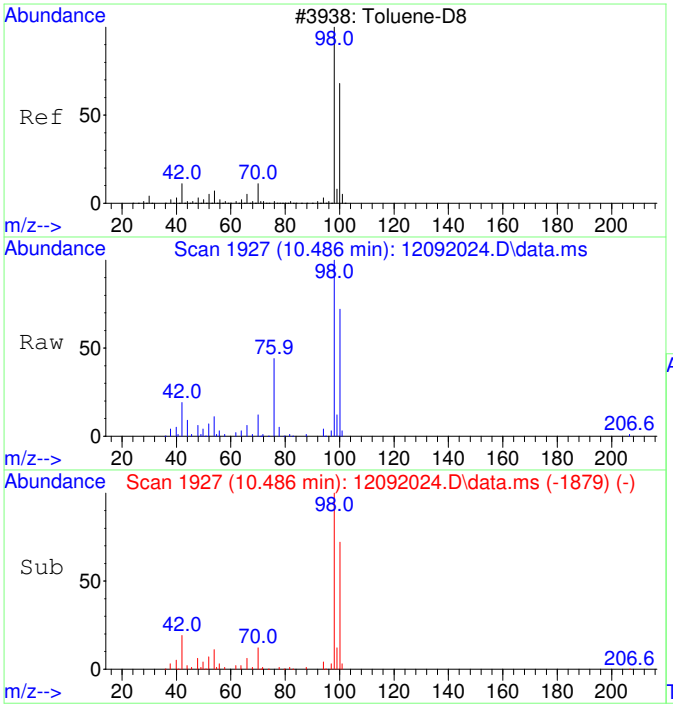


#35
Trichloroethene SCAN
Concen: 125610.75 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:130 Resp: 728888

Ion	Ratio	Lower	Upper
130	100		
95	111.1	60.5	120.5
132	94.7	59.6	119.6
97	71.4	28.2	88.2

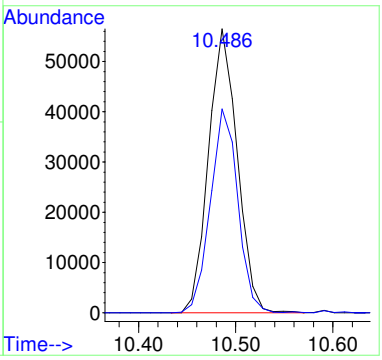


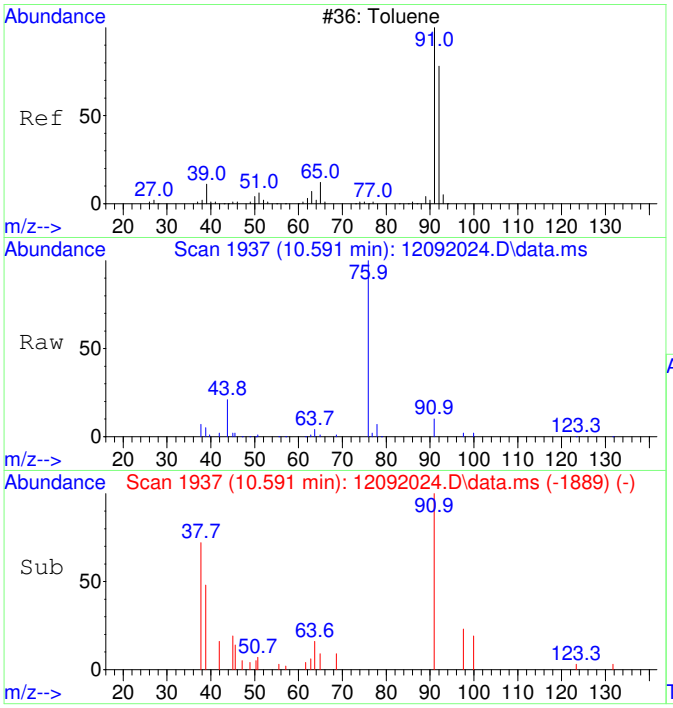


#36
Toluene-d8 SCAN
Concen: 4675.33 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 98 Resp: 116149

Ion	Ratio	Lower	Upper
98	100		
100	68.3	40.0	100.0

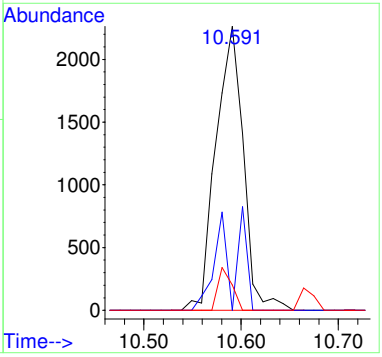


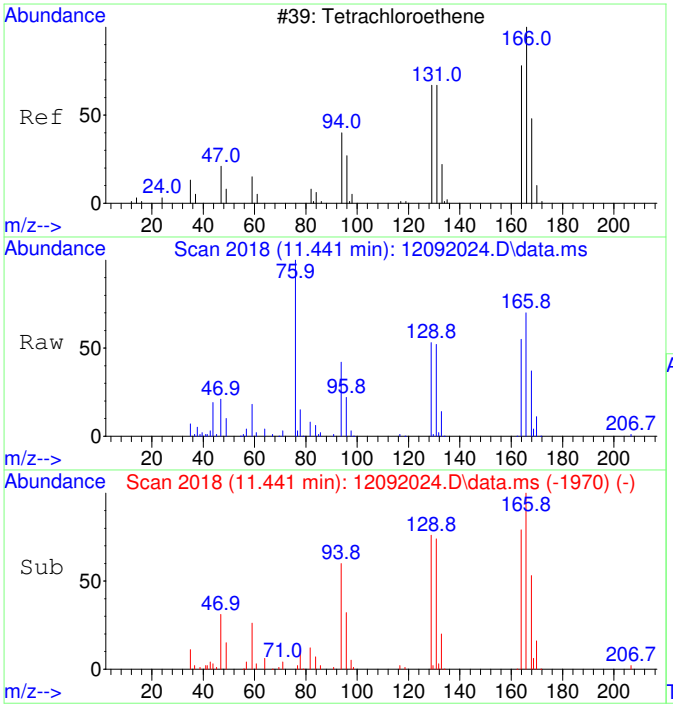


#37
Toluene SCAN
Concen: 145.19 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 91 Resp: 4441

Ion	Ratio	Lower	Upper
91	100		
92	27.9	28.3	88.3#
65	0.0	0.0	41.0

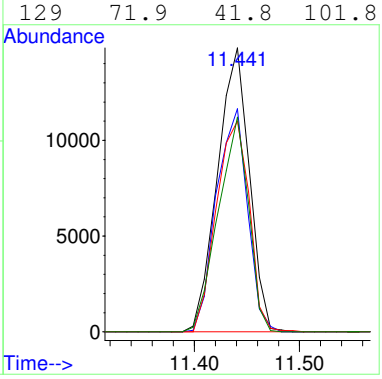


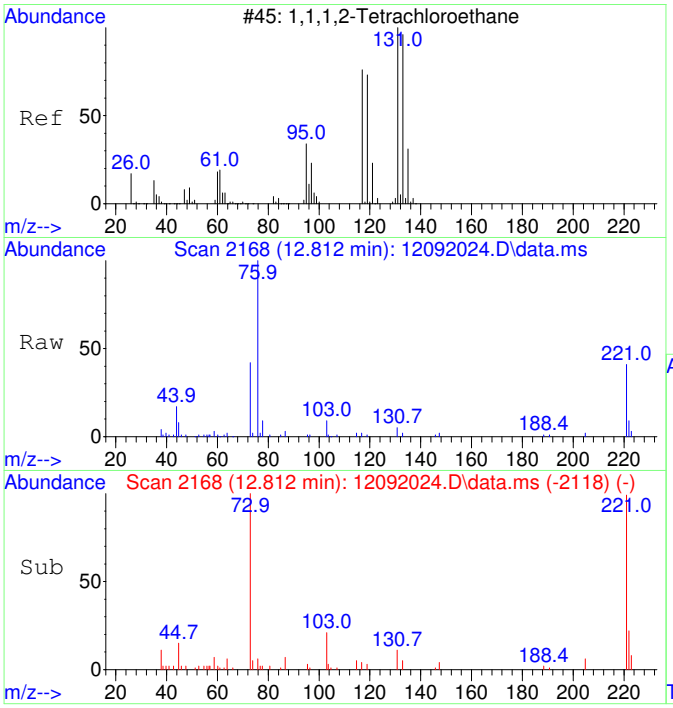


#39
Tetrachloroethene SCAN
Concen: 4528.67 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:166 Resp: 31162

Ion	Ratio	Lower	Upper
166	100		
164	76.9	50.9	110.9
131	76.9	38.7	98.7
129	71.9	41.8	101.8

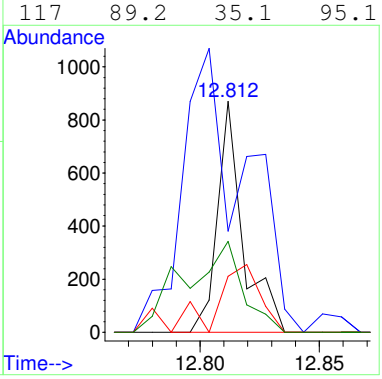


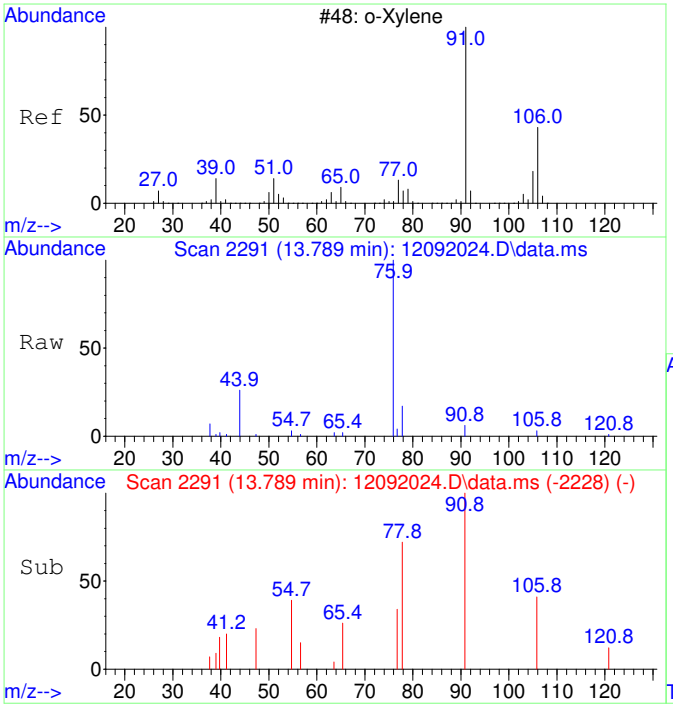


#41
1,1,1,2-Tetrachloroethane SCAN
Concen: 85.62 ug/L
RT: 12.812 min Scan# 2168
Delta R.T. -0.103 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion:131 Resp: 649

Ion	Ratio	Lower	Upper
131	100		
133	298.3	66.9	126.9#
119	49.9	40.4	100.4
117	89.2	35.1	95.1

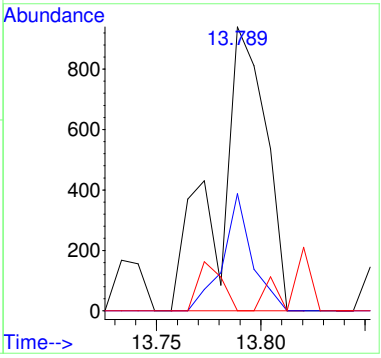




#44
o-Xylene SCAN
Concen: 47.50 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12092024.D
Acq: 9 Dec 2020 17:57

Tgt Ion: 91 Resp: 1512

Ion	Ratio	Lower	Upper
91	100		
106	24.9	18.0	78.0
105	8.7	0.0	56.6



2012007-18

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092025.D
Acq On : 9 Dec 2020 18:21
InstName : AG5975C
Operator : TD
Sample : 2012007-18
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 10 05:56:18 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

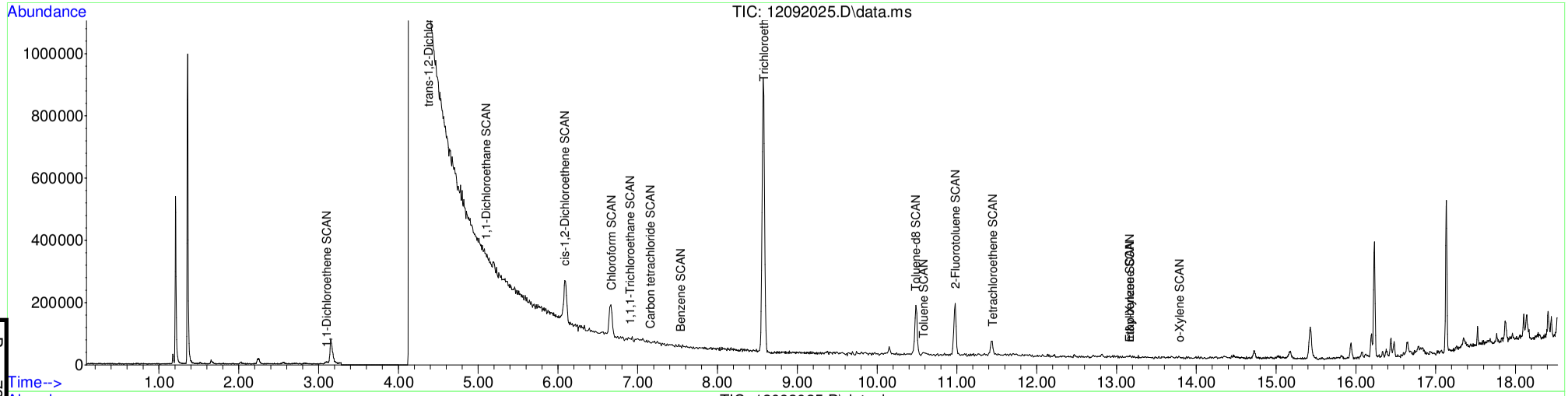
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	229464	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	194130	4368.22 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.36%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	8947	983.34 ug/L	80
3] trans-1,2-Dichloroethene	4.369	61	10393	906.07 ug/L	99
4] 1,1-Dichloroethane	5.086	63	9338	681.61 ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	176971	12472.35 ug/L	98
6] Chloroform	6.652	83	154109	11307.68 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	6089	415.91 ug/L	100
8] Carbon tetrachloride	7.187	117	1158	82.73 ug/L	99
9] Benzene	7.515	78	3787	98.08 ug/L	67
11] Trichloroethene	8.575	130	587901	48224.00 ug/L OC	97
13] Toluene	10.582	91	8385	151.54 ug/L	99
15] Tetrachloroethene	11.432	166	32855	1906.29 ug/L	100
17] 1,1,1,2-Tetrachloroethane	12.813	131	357	23.79 ug/L #	1
19] m&p-Xylene	13.162	91	4038	74.19 ug/L	97
20] o-Xylene	13.782	91	2248	38.46 ug/L	98
25) 2-Fluorotoluene SCAN	10.979	109	133450	5123.53 ug/L	94
26) 1,1-Dichloroethene SCAN	3.100	61	2030	333.85 ug/L	78
27) trans-1,2-Dichloroethe...	4.374	61	7530	972.25 ug/L #	72
28) 1,1-Dichloroethane SCAN	5.098	63	7323	801.05 ug/L	90
29) cis-1,2-Dichloroethene...	6.086	61	122418	13621.79 ug/L #	78
30) Chloroform SCAN	6.662	83	104946	12520.00 ug/L	96
31) 1,1,1-Trichloroethane ...	6.906	97	3865	446.83 ug/L #	19
32) Carbon tetrachloride SCAN	7.161	117	225	30.44 ug/L #	15
33) Benzene SCAN	7.538	78	11174	427.00 ug/L #	91
35) Trichloroethene SCAN	8.579	130	307565	53901.84 ug/L	83
36) Toluene-d8 SCAN	10.486	98	117298	4801.63 ug/L	96
37) Toluene SCAN	10.580	91	6585	218.93 ug/L	83
39) Tetrachloroethene SCAN	11.441	166	14466	2137.93 ug/L	88
42) Ethylbenzene SCAN	13.161	91	2916	50.87 ug/L	71
43) m&p-Xylene SCAN	13.161	91	2916	50.87 ug/L #	65
44) o-Xylene SCAN	13.789	91	1686	53.87 ug/L #	36

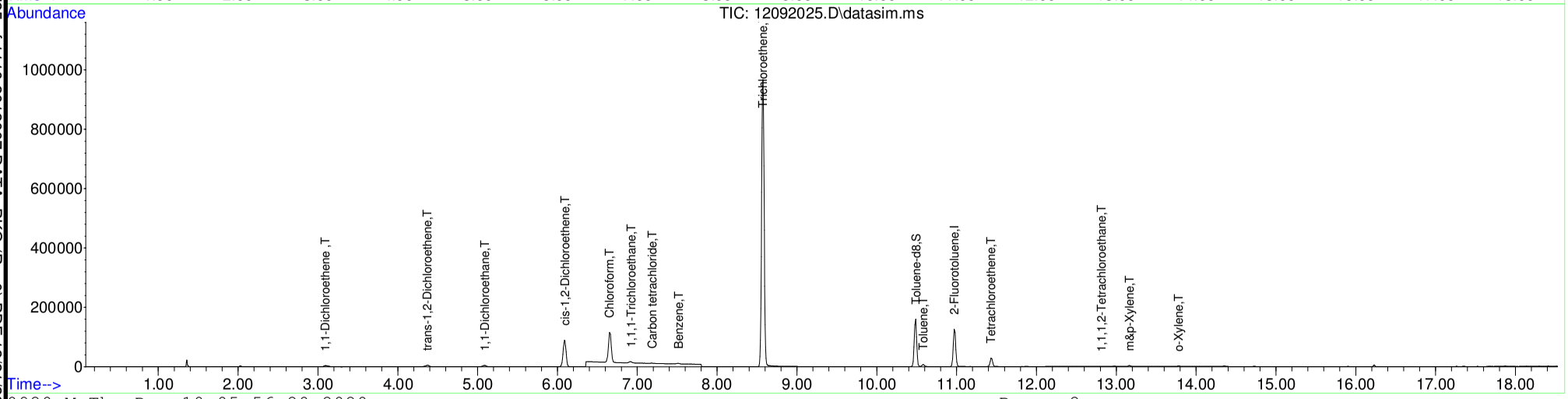
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092025.D
Acq On : 9 Dec 2020 18:21
InstName : AG5975C
Operator : TD
Sample : 2012007-18
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 10 05:56:18 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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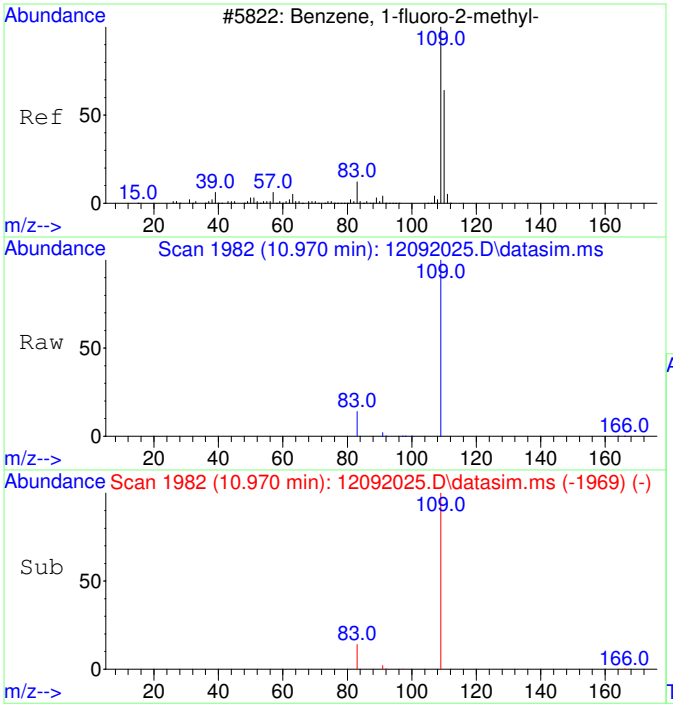
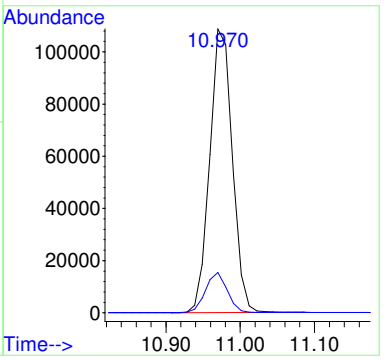
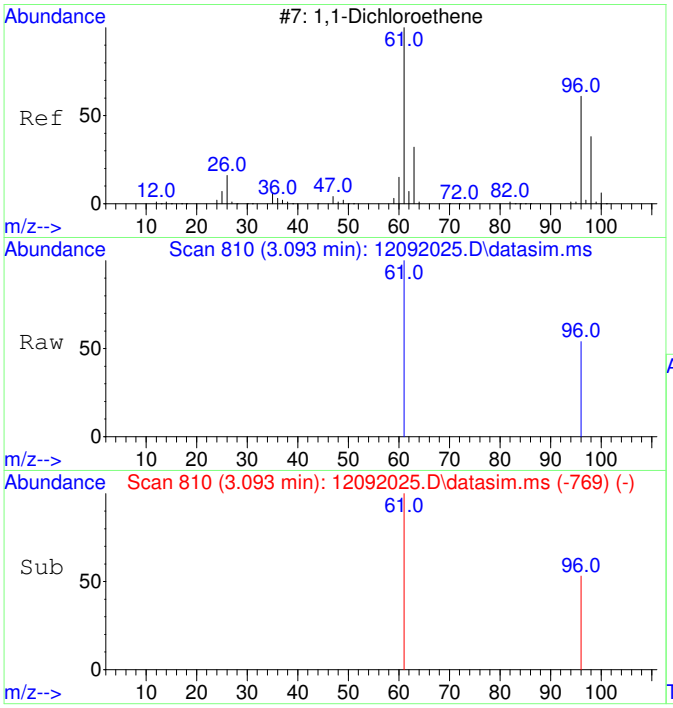


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:109 Resp: 229464

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

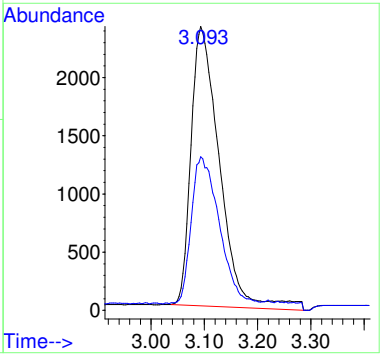




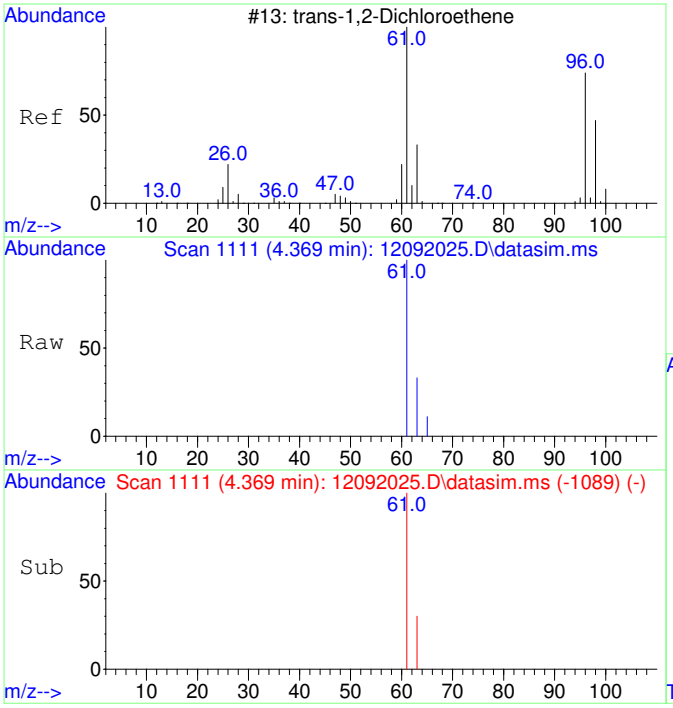
#2
1,1-Dichloroethene
Concen: 983.34 ug/L
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 8947

Ion	Ratio	Lower	Upper
61	100		
96	51.3	37.2	97.2



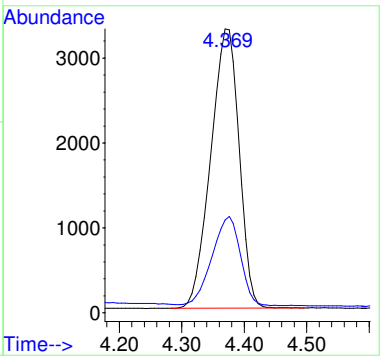
Before MI:
IMPROPER
BASELINE

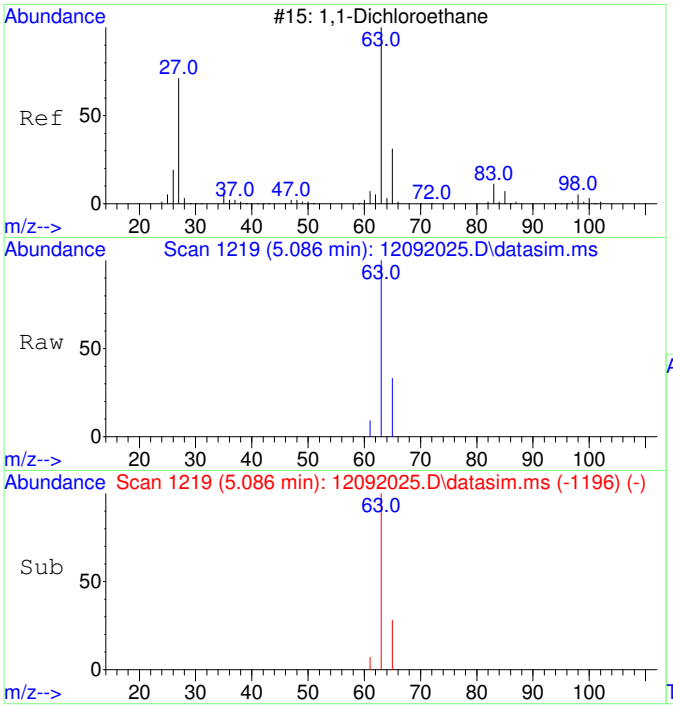


#3
trans-1,2-Dichloroethene
Concen: 906.07 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 10393

Ion	Ratio	Lower	Upper
61	100		
63	31.8	2.4	62.4

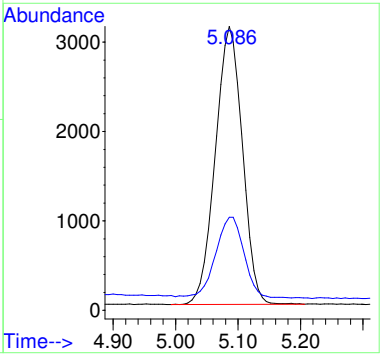


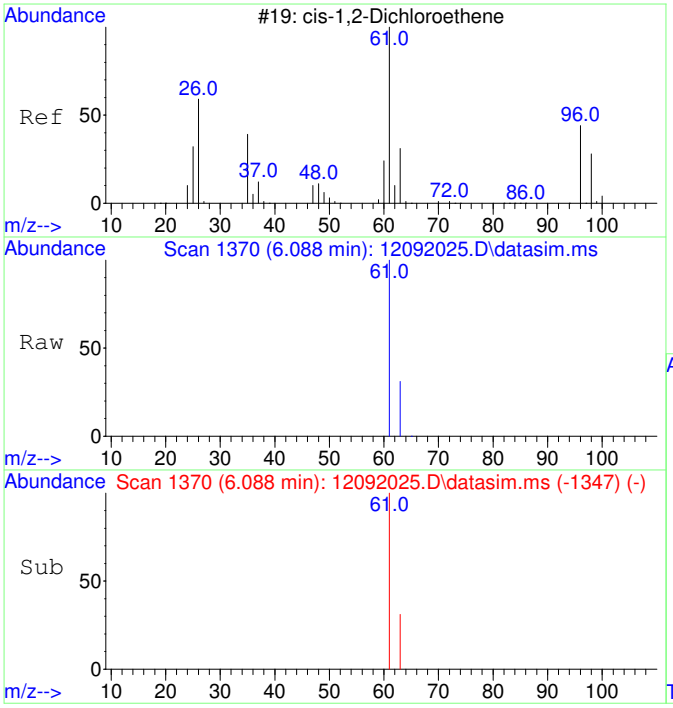


#4
1,1-Dichloroethane
Concen: 681.61 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 63 Resp: 9338

Ion	Ratio	Lower	Upper
63	100		
65	30.5	1.8	61.8

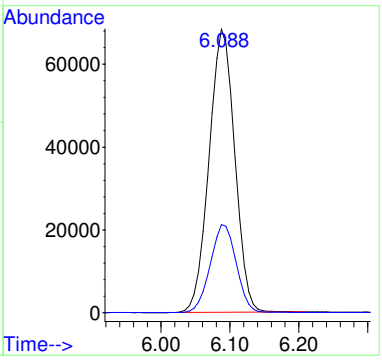


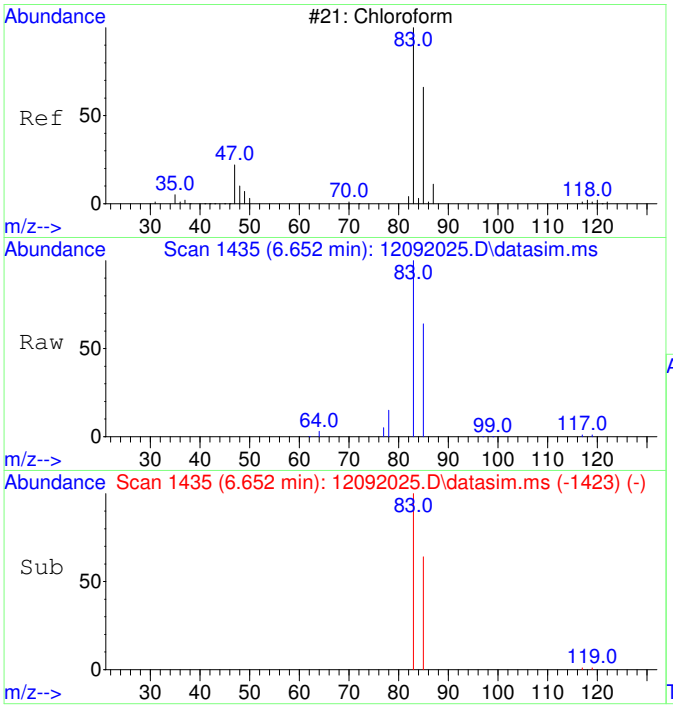


#5
cis-1,2-Dichloroethene
Concen: 12472.35 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 176971

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

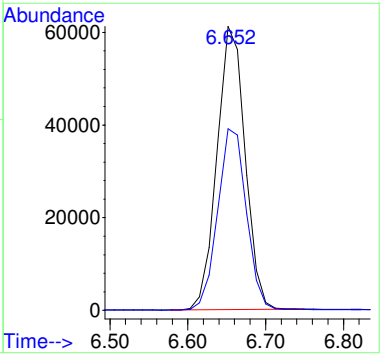


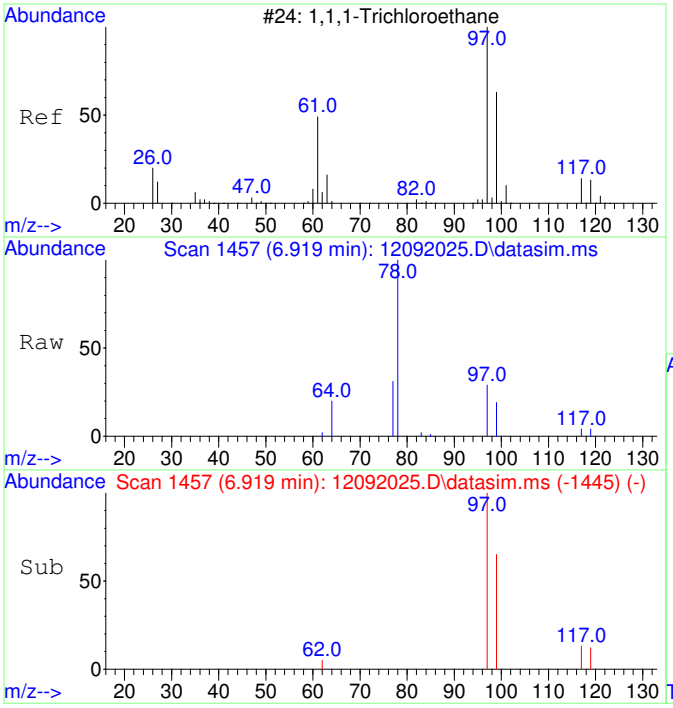


#6
Chloroform
Concen: 11307.68 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 83 Resp: 154109

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

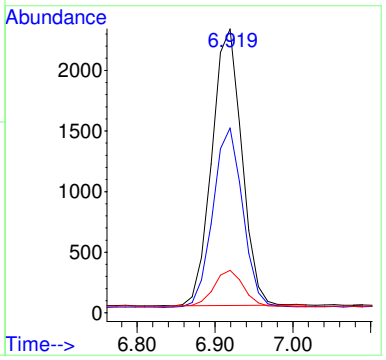


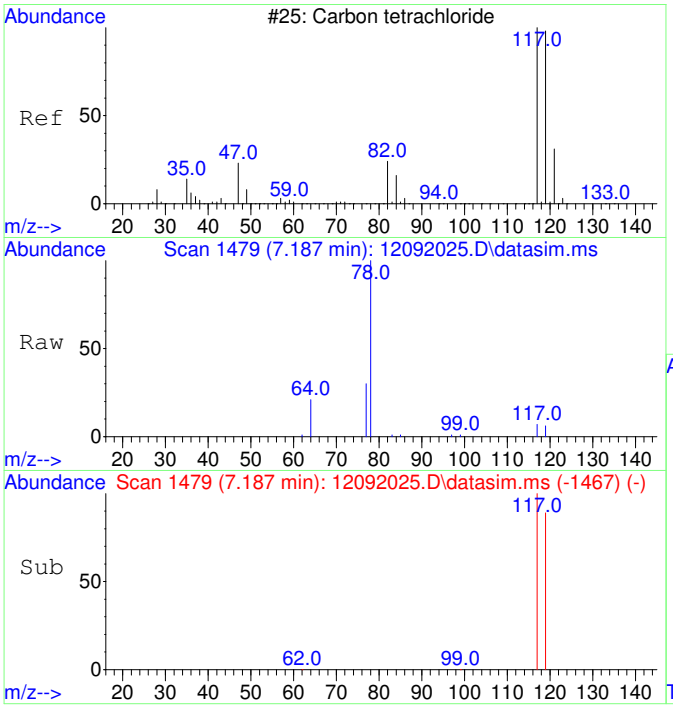


#7
1,1,1-Trichloroethane
Concen: 415.91 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 97 Resp: 6089

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

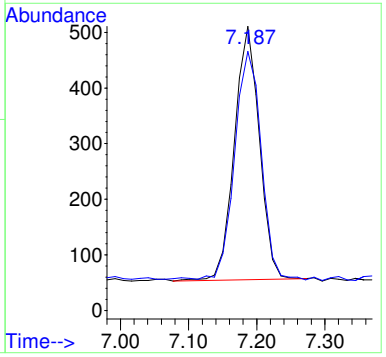


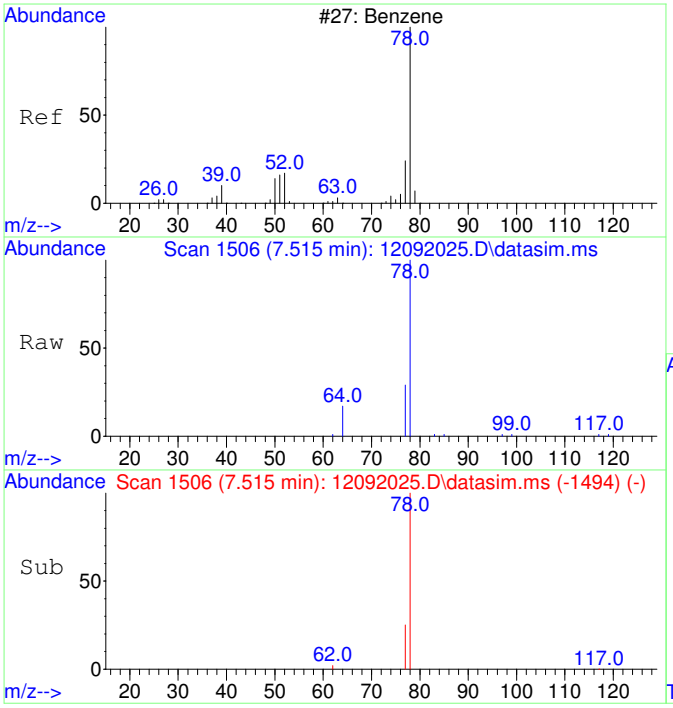


#8
Carbon tetrachloride
Concen: 82.73 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:117 Resp: 1158

Ion	Ratio	Lower	Upper
117	100		
119	95.9	66.4	126.4

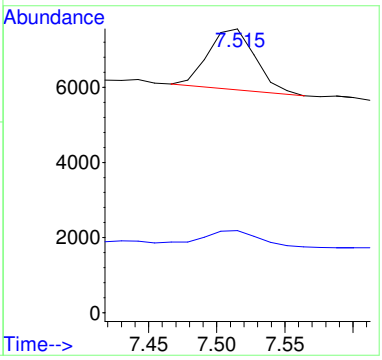


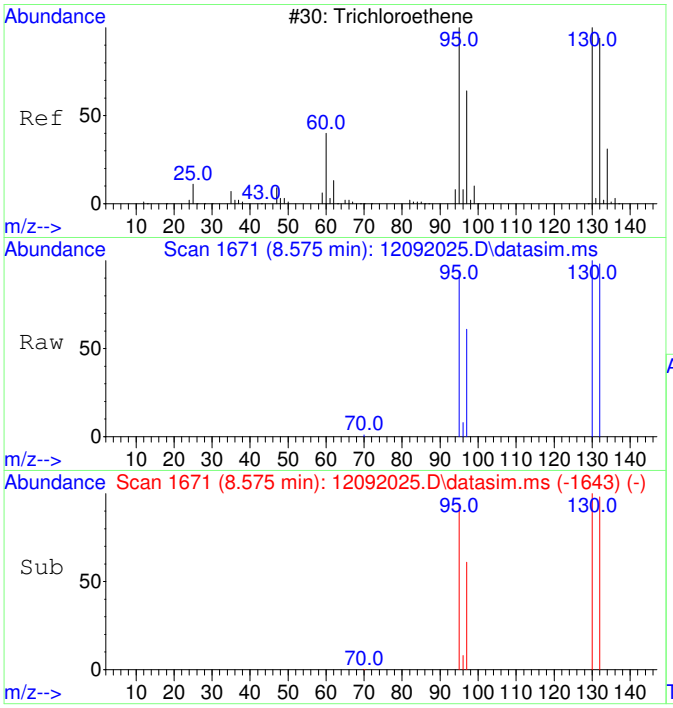


#9
Benzene
Concen: 98.08 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 78 Resp: 3787

Ion	Ratio	Lower	Upper
78	100		
77	39.1	0.0	53.2

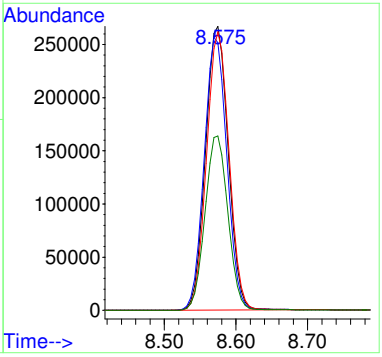


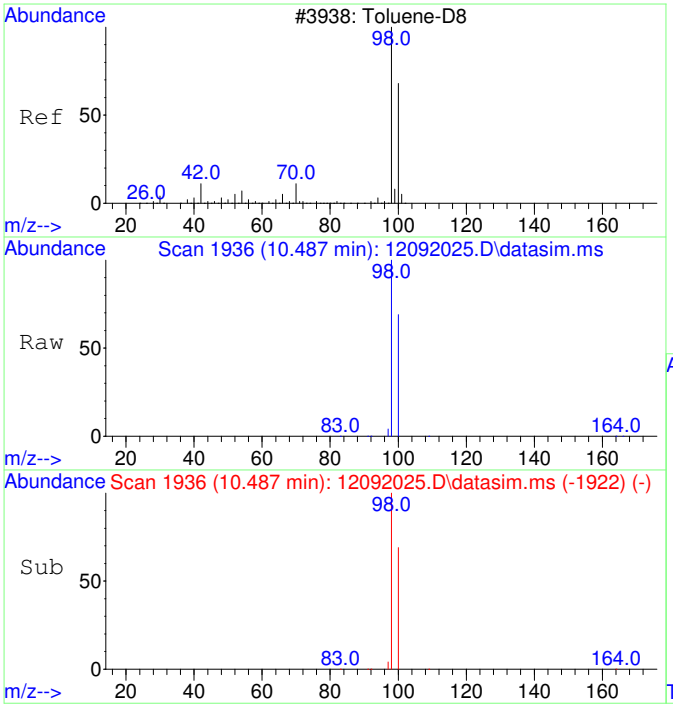


#11
Trichloroethene
Concen: 48224.00 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:130 Resp: 587901

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	96.9	76.0	116.0
97	61.7	38.6	78.6

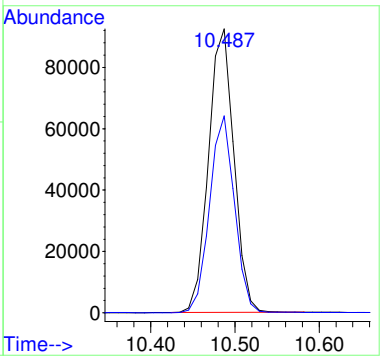


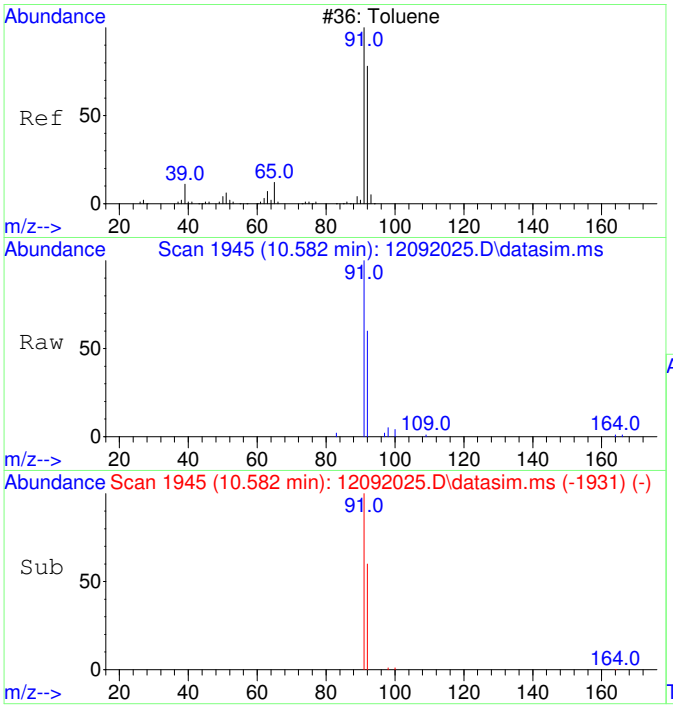


#12
Toluene-d8
Concen: 4368.22 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 98 Resp: 194130

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

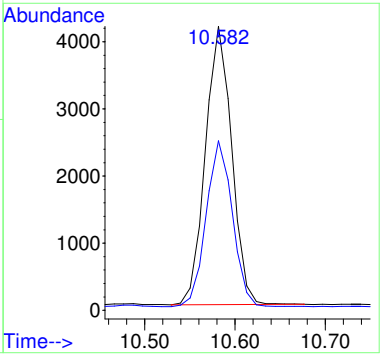


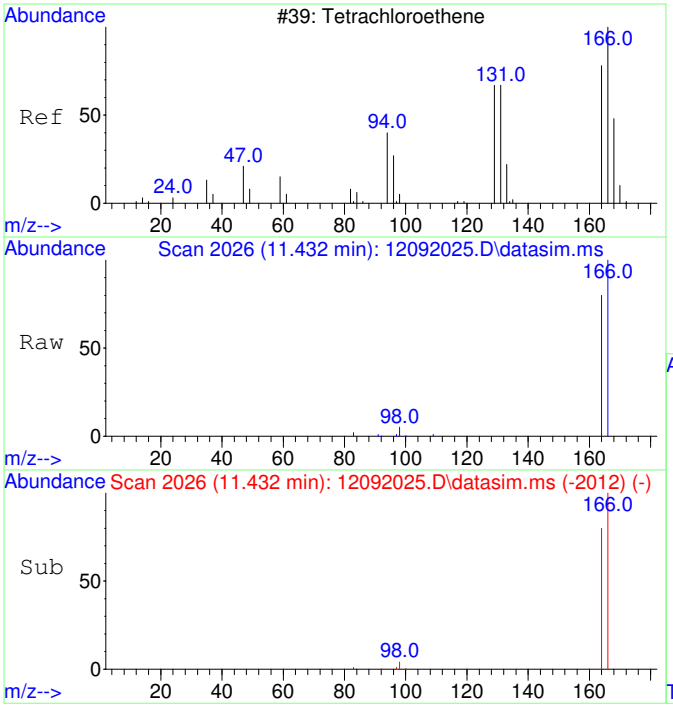


#13
Toluene
Concen: 151.54 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 8385

Ion	Ratio	Lower	Upper
91	100		
92	59.4	29.9	89.9

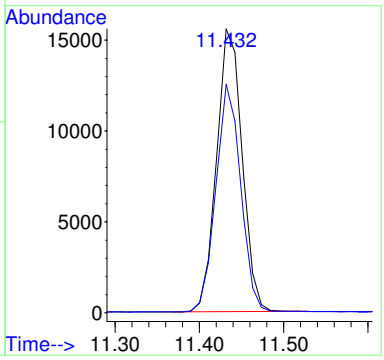


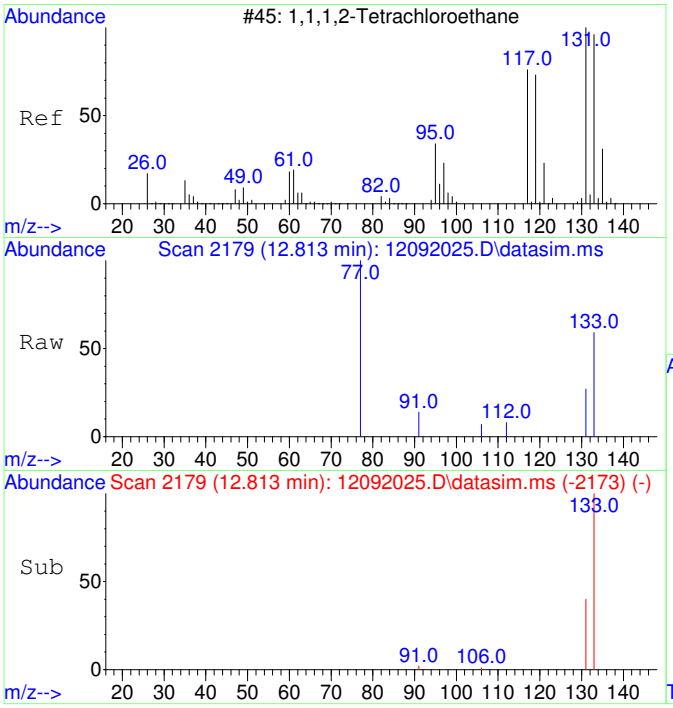


#15
Tetrachloroethene
Concen: 1906.29 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:166 Resp: 32855

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

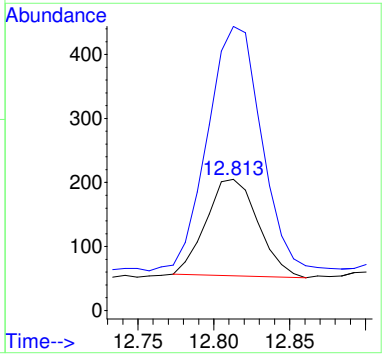


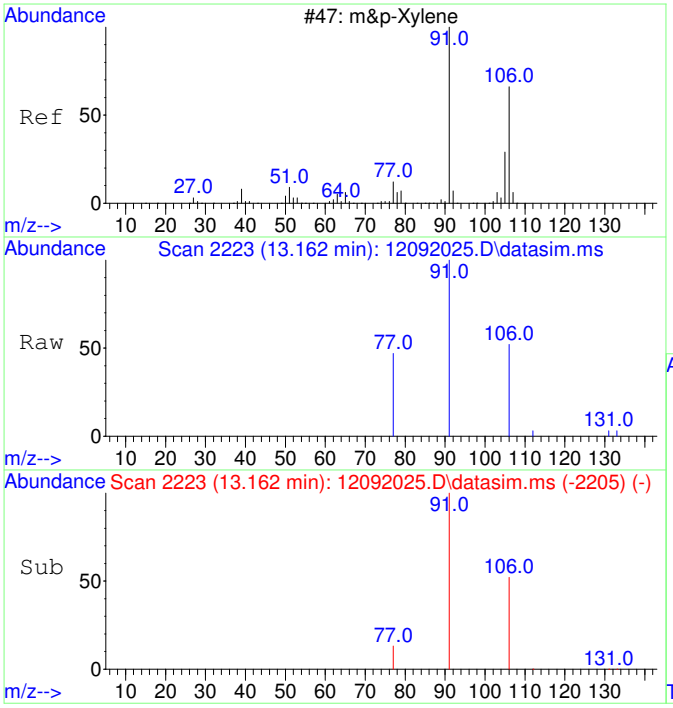


#17
1,1,1,2-Tetrachloroethane
Concen: 23.79 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:131 Resp: 357

Ion	Ratio	Lower	Upper
131	100		
133	256.9	66.3	126.3#

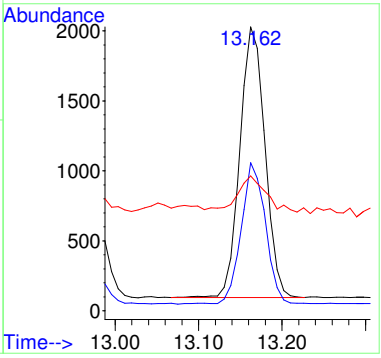


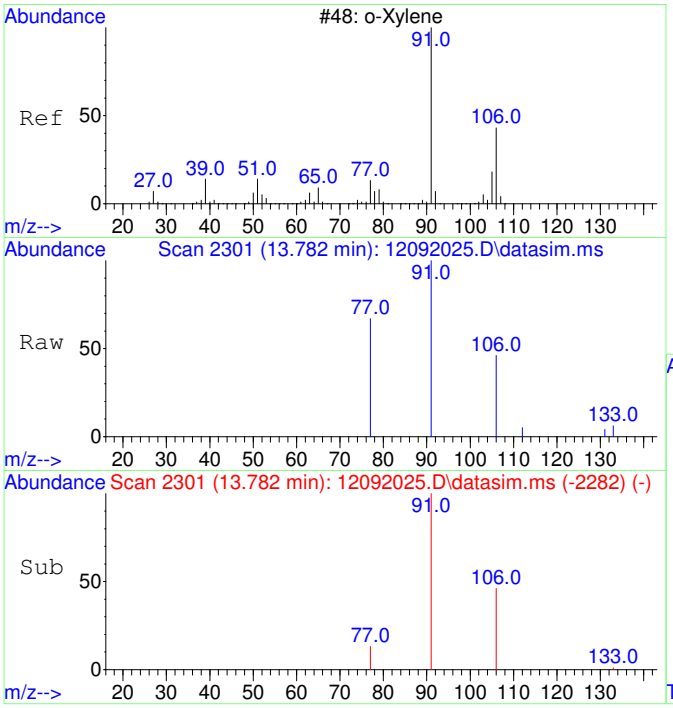


#19
m&p-Xylene
Concen: 74.19 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 4038

Ion	Ratio	Lower	Upper
91	100		
106	50.5	22.2	82.2
77	15.3	0.0	42.4

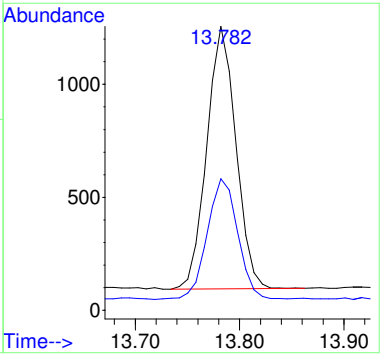


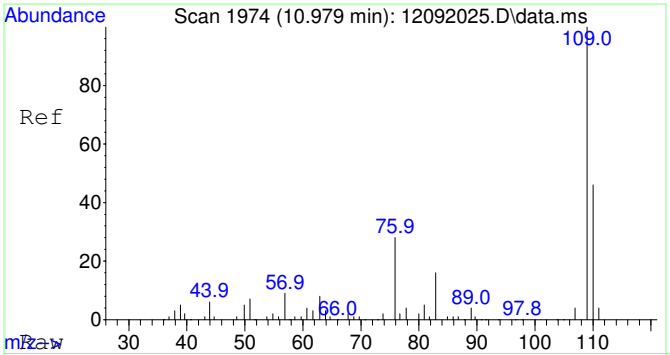


#20
o-Xylene
Concen: 38.46 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2248

Ion	Ratio	Lower	Upper
91	100		
106	47.7	19.2	79.2

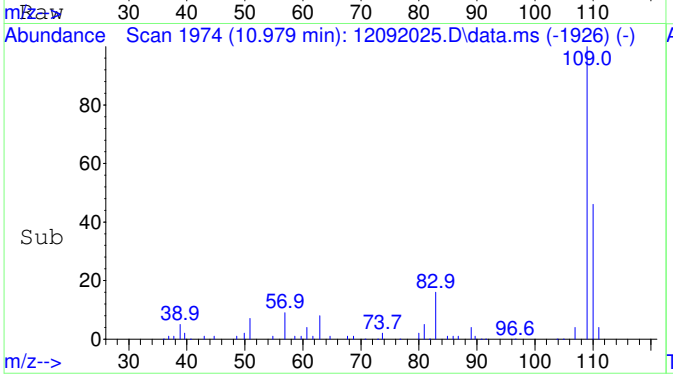


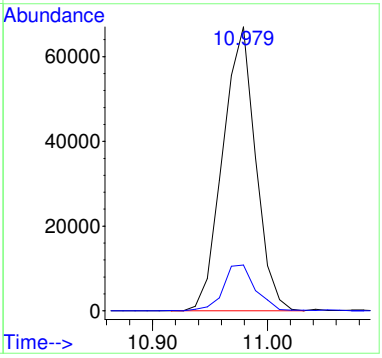


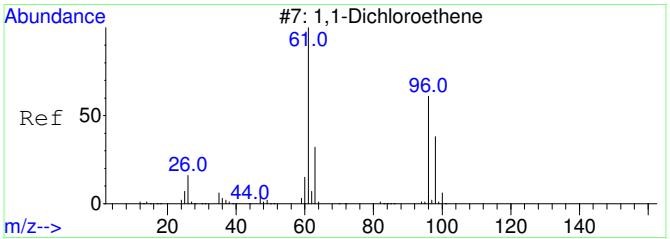
#25
2-Fluorotoluene SCAN
Concen: 5123.53 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:109 Resp: 133450

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



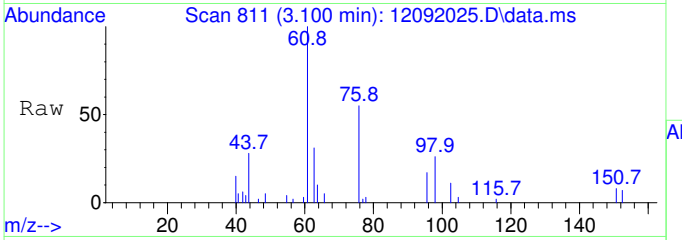


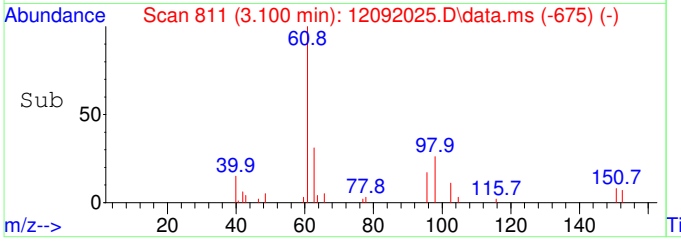


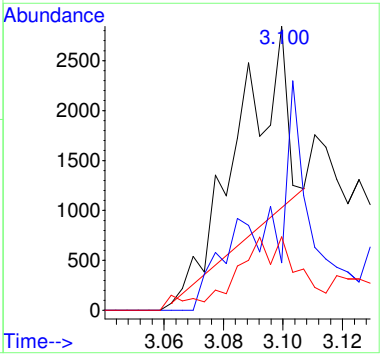
#26
1,1-Dichloroethene SCAN
Concen: 333.85 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

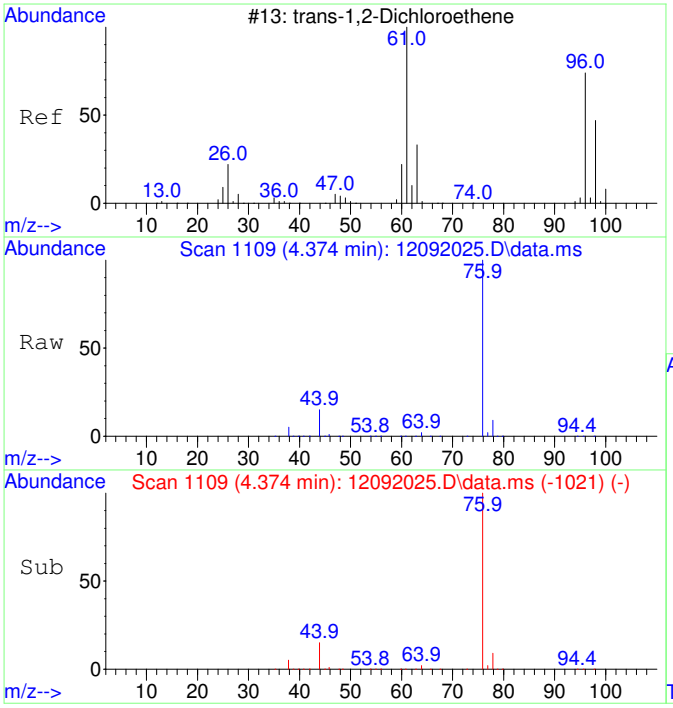
Tgt Ion: 61 Resp: 2030

Ion	Ratio	Lower	Upper
61	100		
96	36.1	33.1	93.1
98	39.5	11.2	71.2





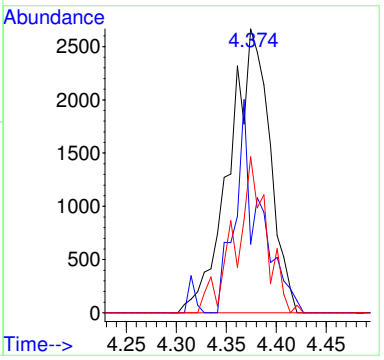


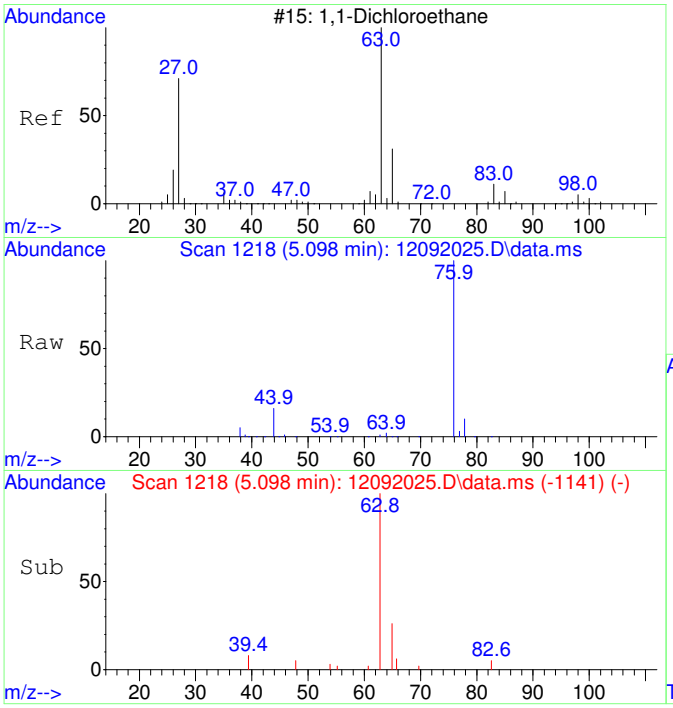


#27
trans-1,2-Dichloroethene SCAN
Concen: 972.25 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 7530

Ion	Ratio	Lower	Upper
61	100		
96	45.1	49.0	109.0#
98	41.8	20.5	80.5

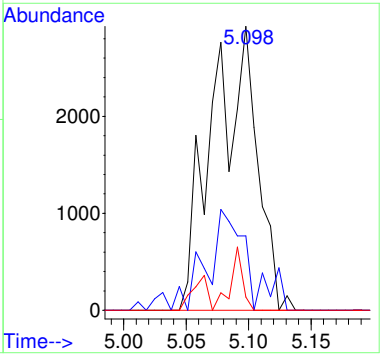


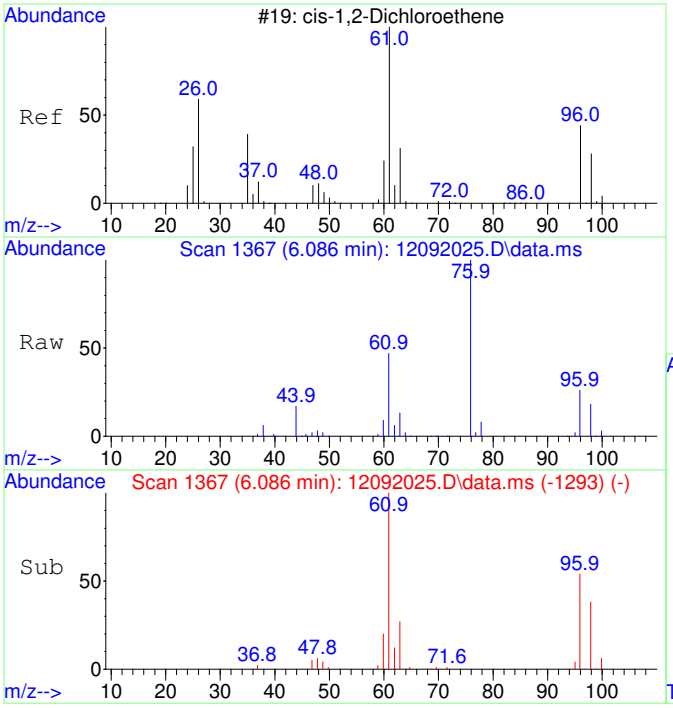


#28
1,1-Dichloroethane SCAN
Concen: 801.05 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.013 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 63 Resp: 7323

Ion	Ratio	Lower	Upper
63	100		
65	32.6	1.3	61.3
83	5.9	0.0	45.9

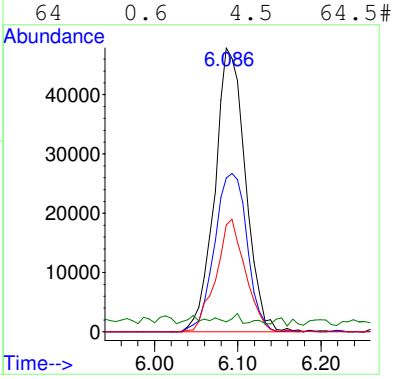


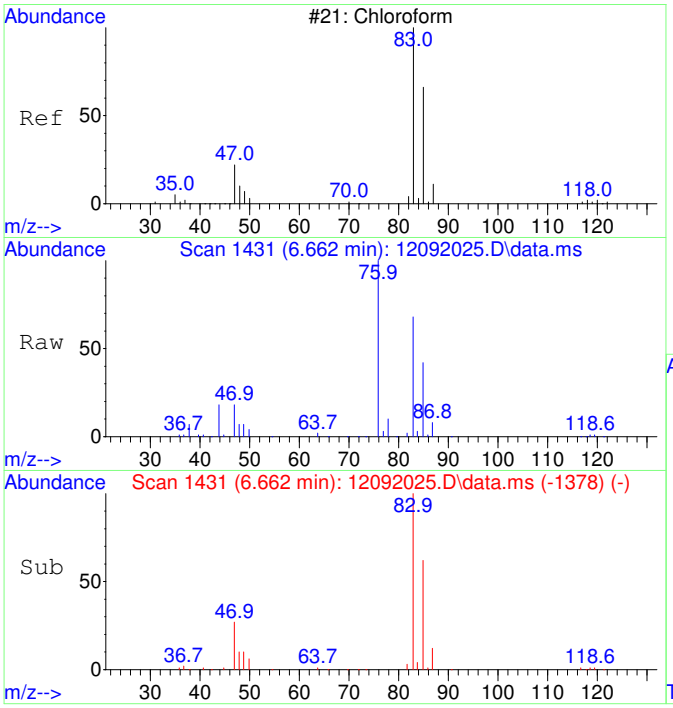


#29
cis-1,2-Dichloroethene SCAN
Concen: 13621.79 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 122418

Ion	Ratio	Lower	Upper
61	100		
96	59.1	39.9	99.9
98	38.0	13.5	73.5
64	0.6	4.5	64.5#

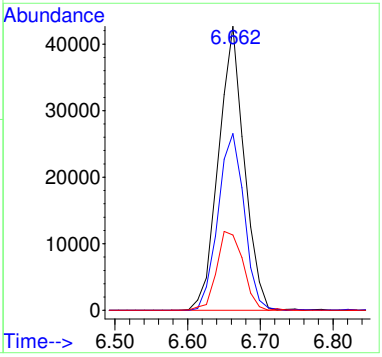


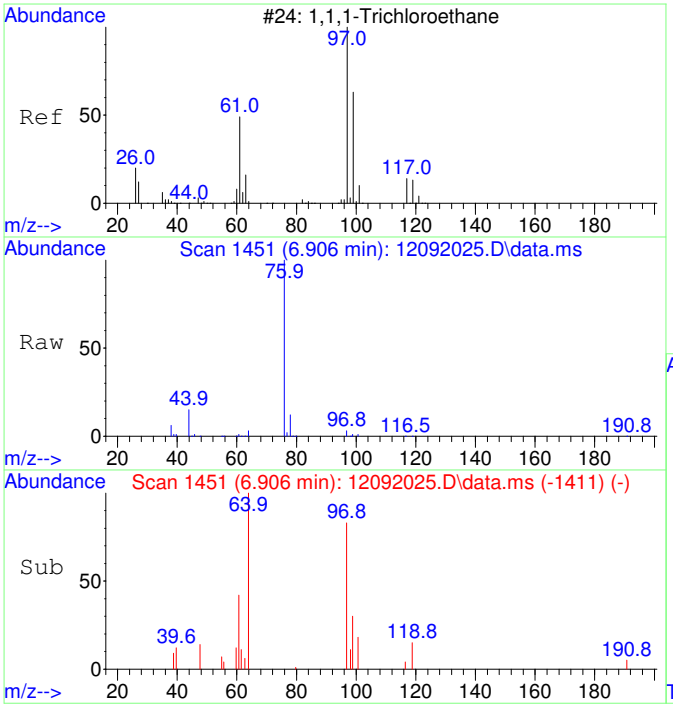


#30
Chloroform SCAN
Concen: 12520.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 83 Resp: 104946

Ion	Ratio	Lower	Upper
83	100		
85	63.4	34.6	94.6
47	28.8	0.0	53.4

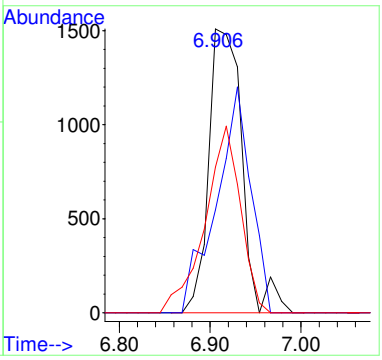


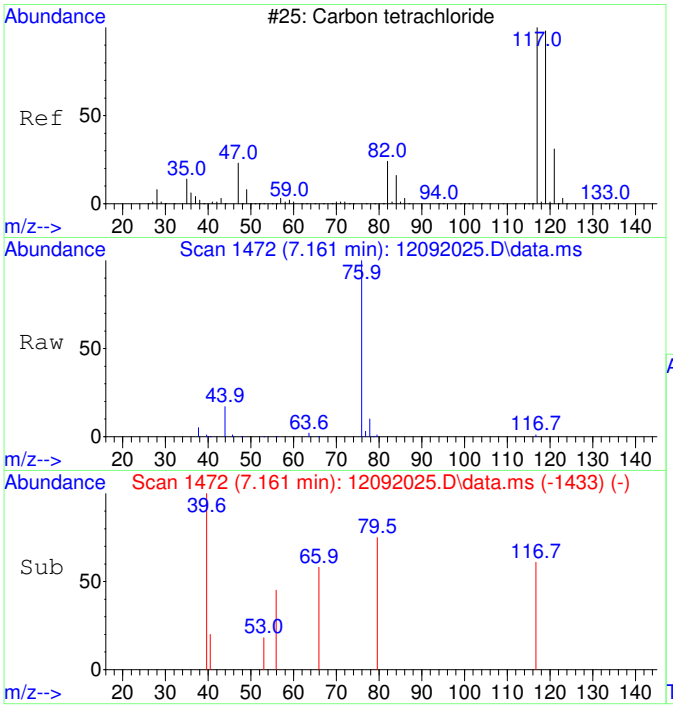


#31
1,1,1-Trichloroethane SCAN
Concen: 446.83 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 97 Resp: 3865

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

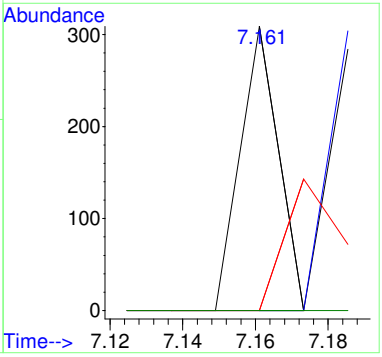


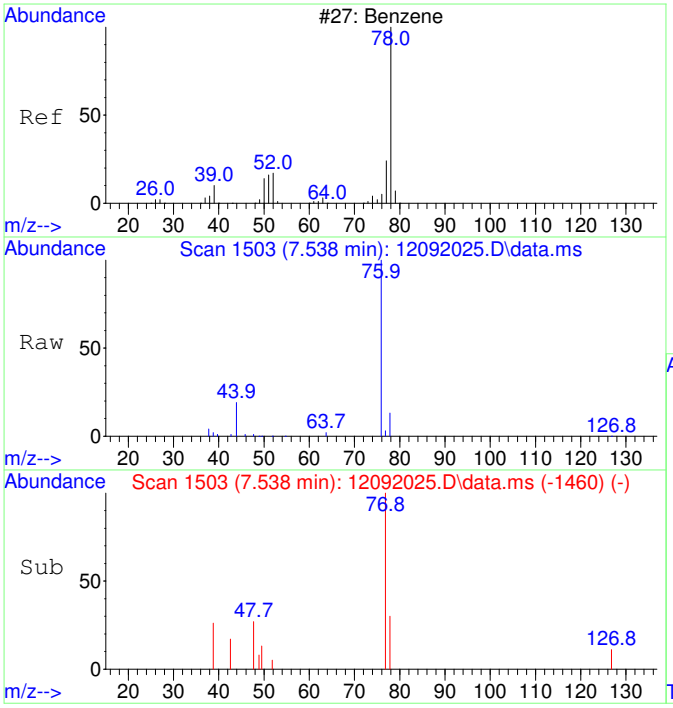


#32
Carbon tetrachloride SCAN
Concen: 30.44 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:117 Resp: 225

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

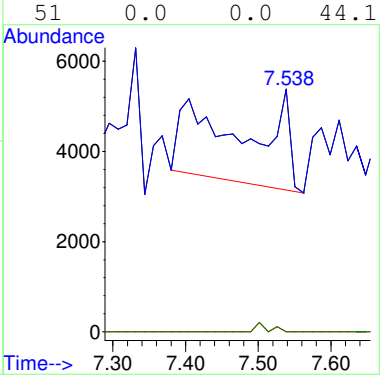


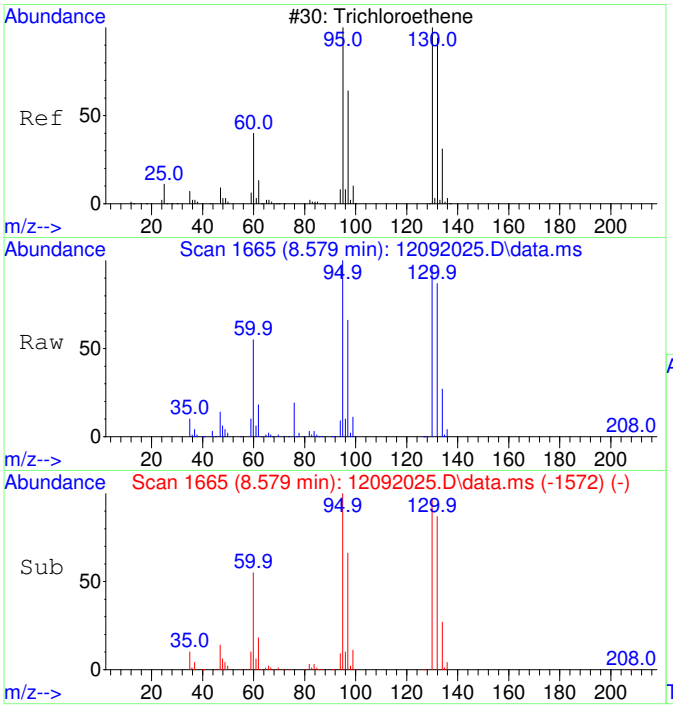


#33
Benzene SCAN
Concen: 427.00 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 78 Resp: 11174

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

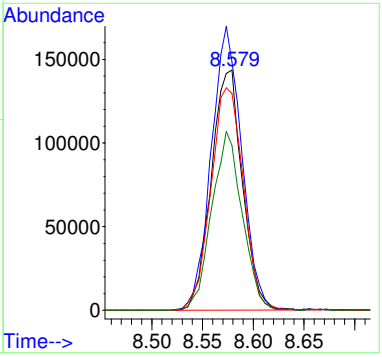


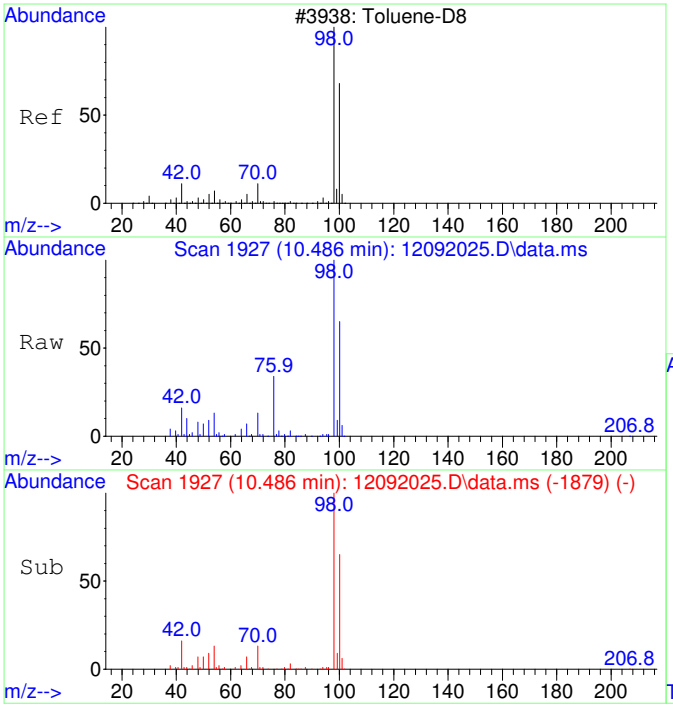


#35
Trichloroethene SCAN
Concen: 53901.84 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.005 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:130 Resp: 307565

Ion	Ratio	Lower	Upper
130	100		
95	115.5	60.5	120.5
132	96.0	59.6	119.6
97	72.5	28.2	88.2

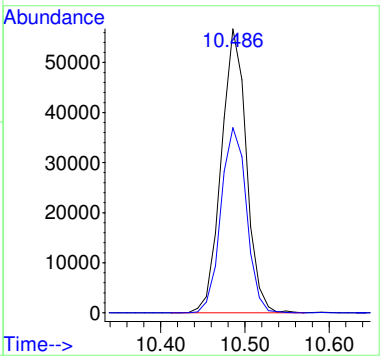


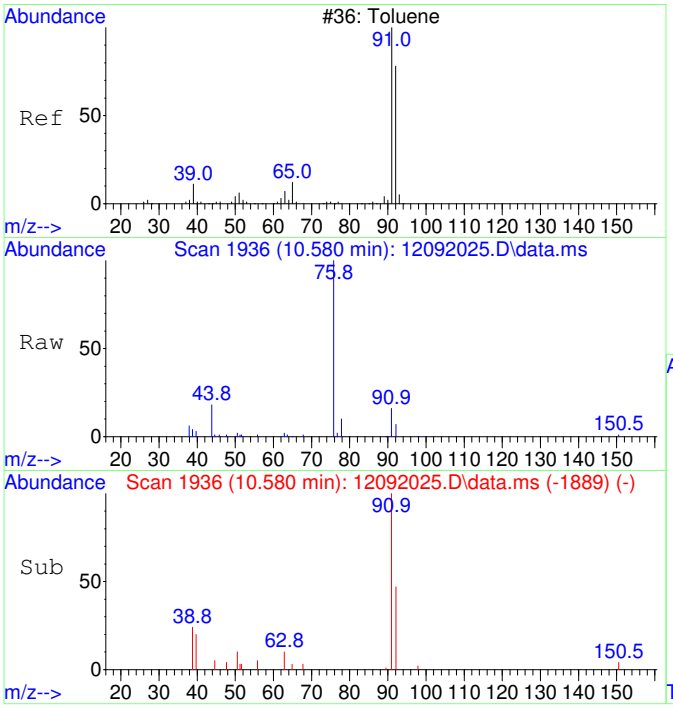


#36
Toluene-d8 SCAN
Concen: 4801.63 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 98 Resp: 117298

Ion	Ratio	Lower	Upper
98	100		
100	66.4	40.0	100.0

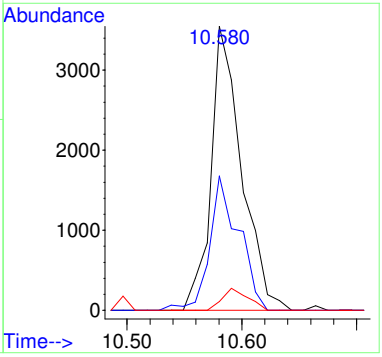


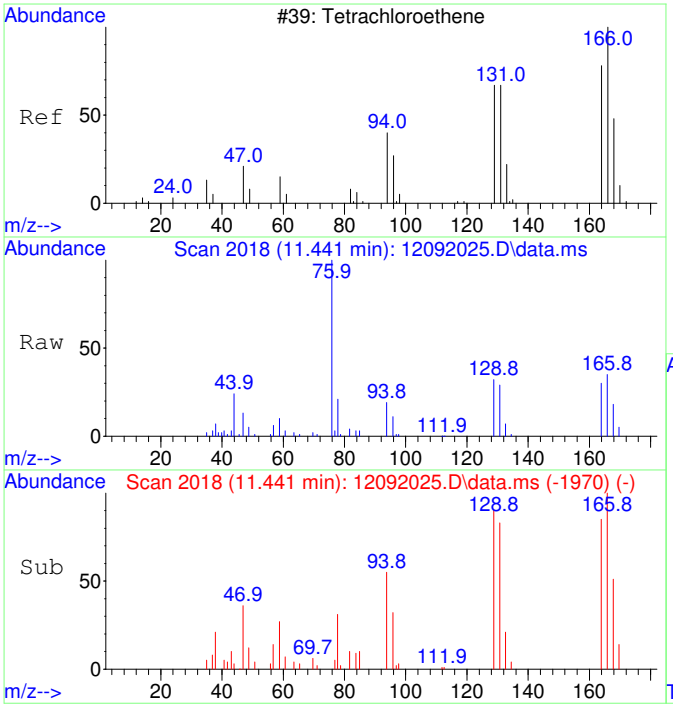


#37
Toluene SCAN
Concen: 218.93 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.011 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 6585

Ion	Ratio	Lower	Upper
91	100		
92	45.0	28.3	88.3
65	6.5	0.0	41.0

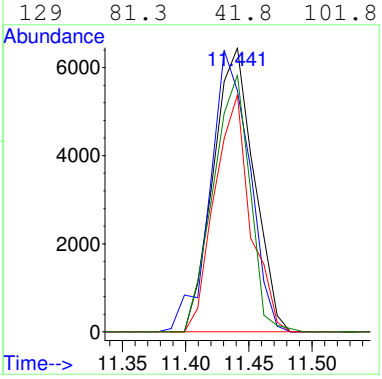


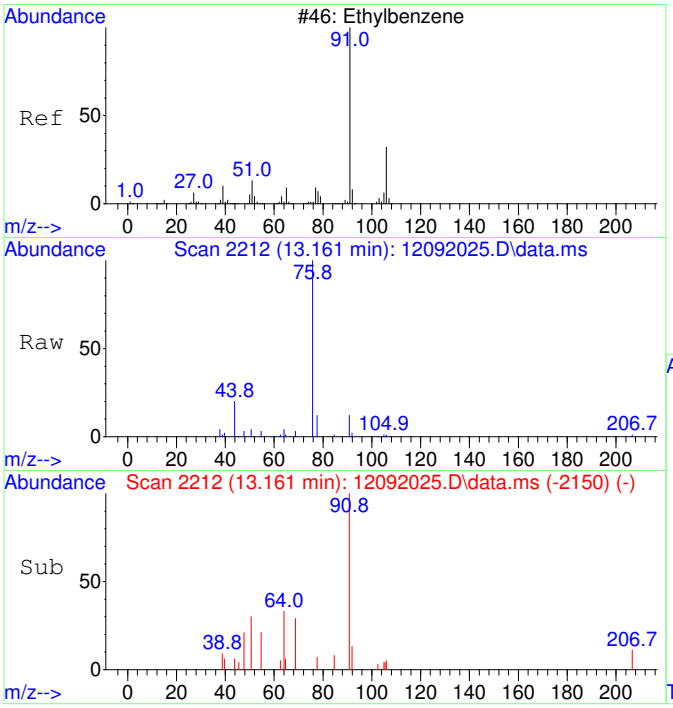


#39
Tetrachloroethene SCAN
Concen: 2137.93 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:166 Resp: 14466

Ion	Ratio	Lower	Upper
166	100		
164	95.5	50.9	110.9
131	73.6	38.7	98.7
129	81.3	41.8	101.8

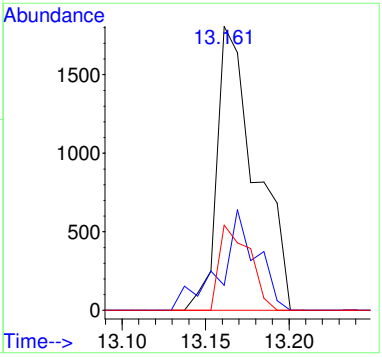


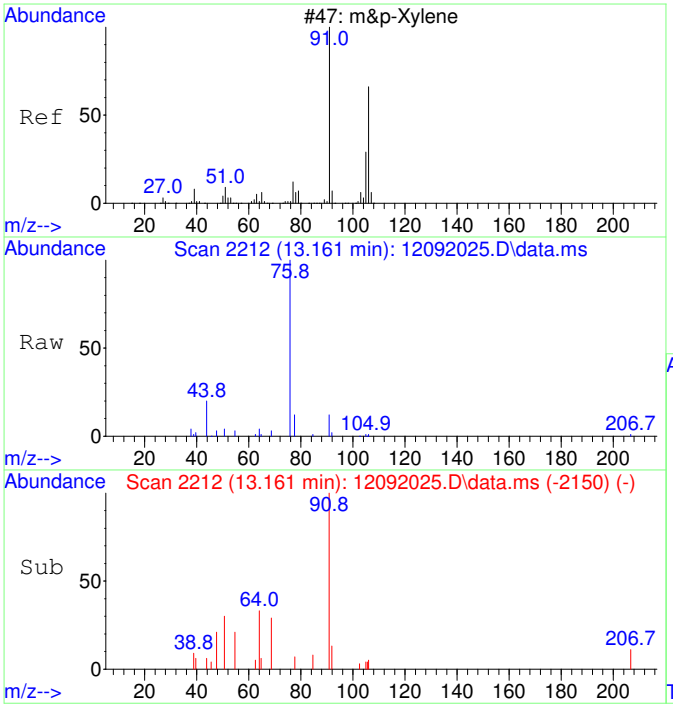


#42
Ethylbenzene SCAN
Concen: 50.87 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2916

Ion	Ratio	Lower	Upper
91	100		
106	33.5	23.1	83.1
51	23.6	0.0	40.1

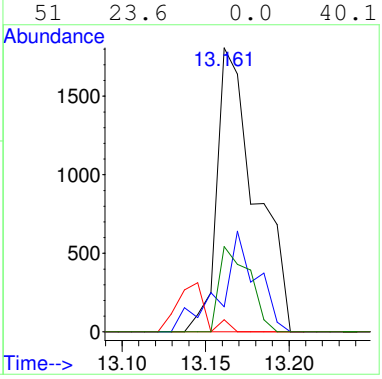


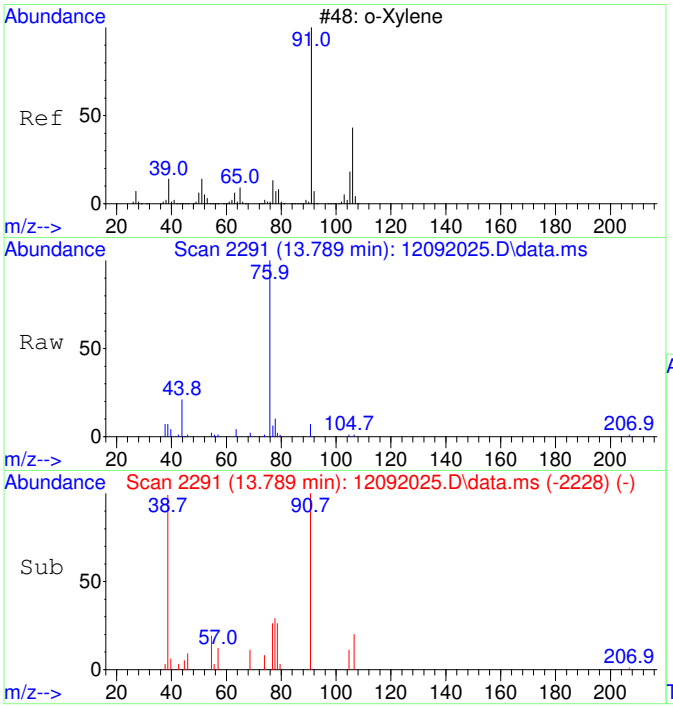


#43
m&p-Xylene SCAN
Concen: 50.87 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2916

Ion	Ratio	Lower	Upper
91	100		
106	33.5	23.1	83.1
105	0.0	0.0	54.7
51	23.6	0.0	40.1

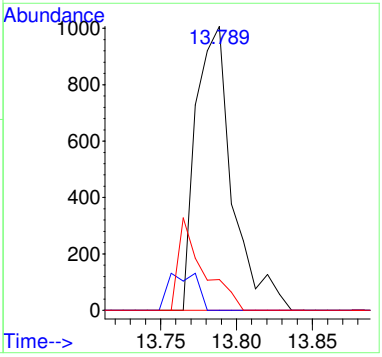




#44
o-Xylene SCAN
Concen: 53.87 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 1686

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



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092025.D
Acq On : 9 Dec 2020 18:21
InstName : AG5975C
Operator : TD
Sample : 2012007-18
Misc :
ALS Vial : 25 Sample Multiplier: 1

M.I. Performed By:
TD at 10:22 am, Dec 10, 2020

M.I. Approved By:
ZAR at 3:04 pm, Dec 14, 2020

Quant Time: Dec 10 05:56:18 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

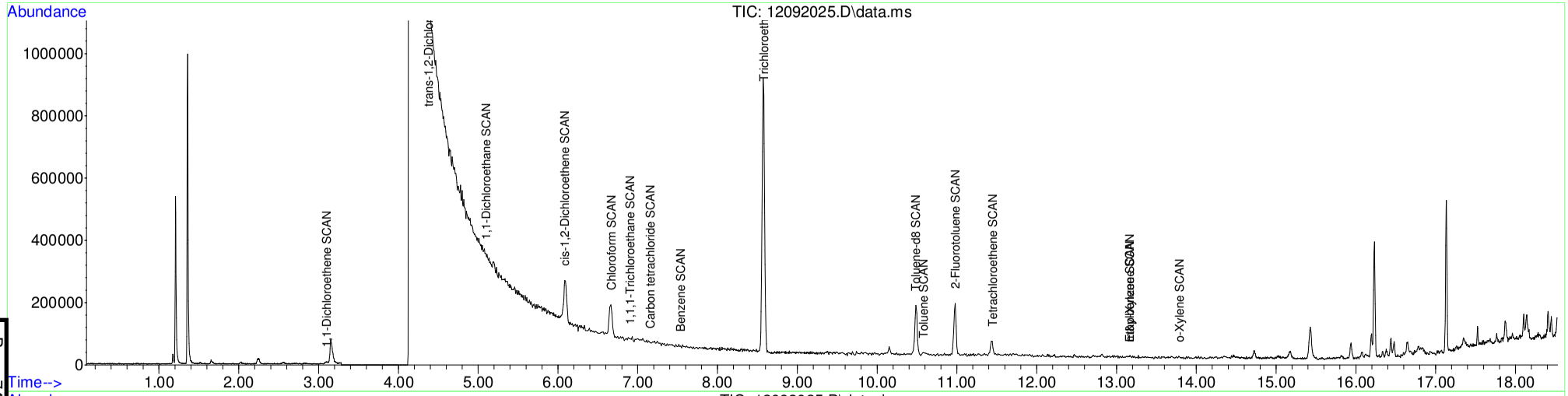
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	229464	5000.00 ug/L	-0.01
System Monitoring Compounds					
12) Toluene-d8	10.487	98	194130	4368.22 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 87.36%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.093	61	8477m	931.68 ug/L	
3] trans-1,2-Dichloroethene	4.369	61	10393	906.07 ug/L	99
4] 1,1-Dichloroethane	5.086	63	9338	681.61 ug/L	98
5] cis-1,2-Dichloroethene	6.088	61	176971	12472.35 ug/L	98
6] Chloroform	6.652	83	154109	11307.68 ug/L	100
7] 1,1,1-Trichloroethane	6.919	97	6089	415.91 ug/L	100
8] Carbon tetrachloride	7.187	117	1158	82.73 ug/L	99
9] Benzene	7.515	78	3787	98.08 ug/L	67
11] Trichloroethene	8.575	130	587901	48224.00 ug/L **oc**	97
13] Toluene	10.582	91	8385	151.54 ug/L	99
15] Tetrachloroethene	11.432	166	32855	1906.29 ug/L	100
17] 1,1,1,2-Tetrachloroethane	12.813	131	357	23.79 ug/L #	1
19] m&p-Xylene	13.162	91	4038	74.19 ug/L	97
20] o-Xylene	13.782	91	2248	38.46 ug/L	98
25) 2-Fluorotoluene SCAN	10.979	109	133450	5123.53 ug/L	94
26) 1,1-Dichloroethene SCAN	3.100	61	2030	333.85 ug/L	78
27) trans-1,2-Dichloroethe...	4.374	61	7530	972.25 ug/L #	72
28) 1,1-Dichloroethane SCAN	5.098	63	7323	801.05 ug/L	90
29) cis-1,2-Dichloroethene...	6.086	61	122418	13621.79 ug/L #	78
30) Chloroform SCAN	6.662	83	104946	12520.00 ug/L	96
31) 1,1,1-Trichloroethane ...	6.906	97	3865	446.83 ug/L #	19
32) Carbon tetrachloride SCAN	7.161	117	225	30.44 ug/L #	15
33) Benzene SCAN	7.538	78	11174	427.00 ug/L #	91
35) Trichloroethene SCAN	8.579	130	307565	53901.84 ug/L	83
36) Toluene-d8 SCAN	10.486	98	117298	4801.63 ug/L	96
37) Toluene SCAN	10.580	91	6585	218.93 ug/L	83
39) Tetrachloroethene SCAN	11.441	166	14466	2137.93 ug/L	88
42) Ethylbenzene SCAN	13.161	91	2916	50.87 ug/L	71
43) m&p-Xylene SCAN	13.161	91	2916	50.87 ug/L #	65
44) o-Xylene SCAN	13.789	91	1686	53.87 ug/L #	36

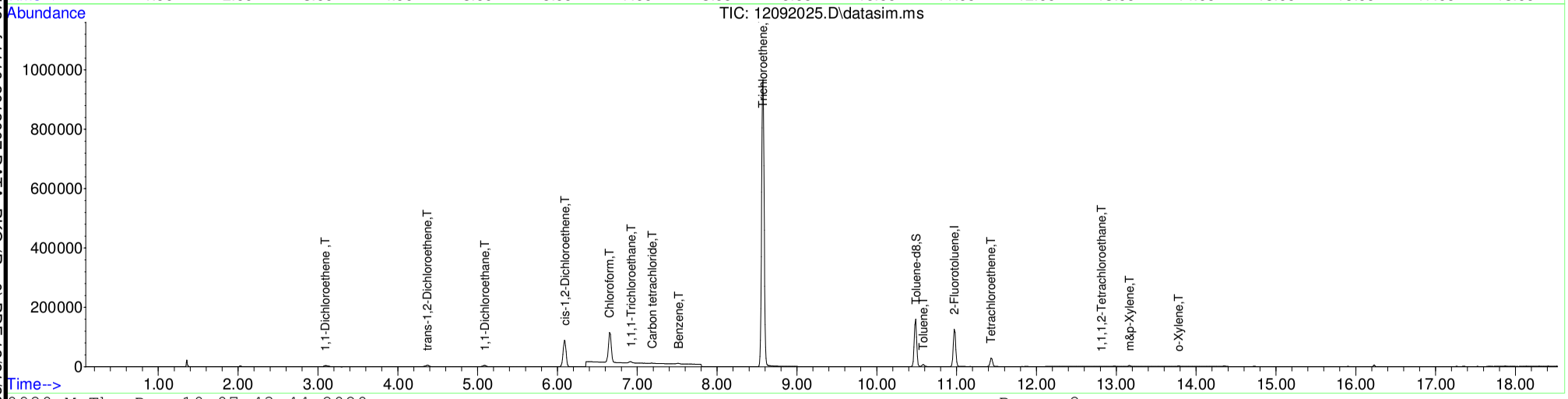
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092025.D
Acq On : 9 Dec 2020 18:21
InstName : AG5975C
Operator : TD
Sample : 2012007-18
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 10 05:56:18 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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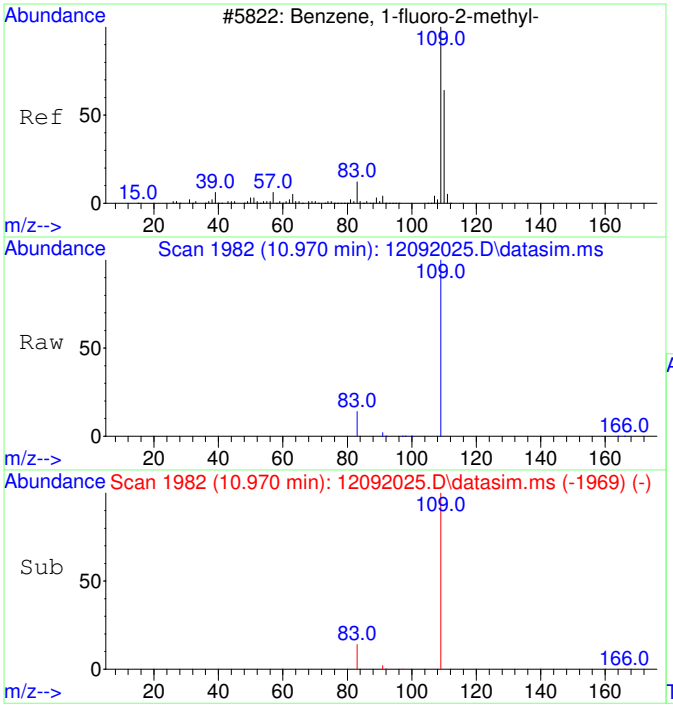
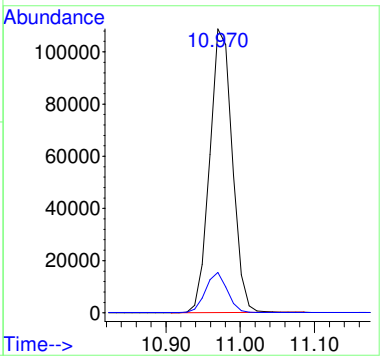
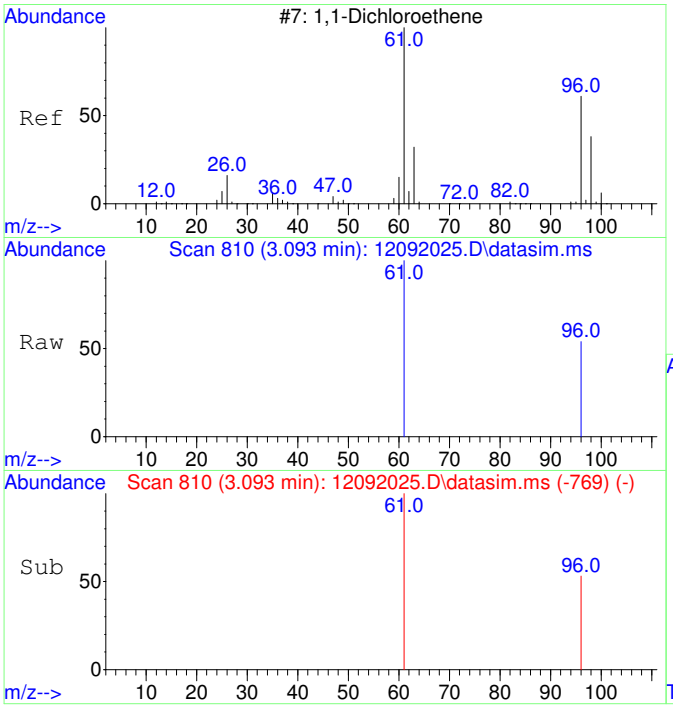


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:109 Resp: 229464

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

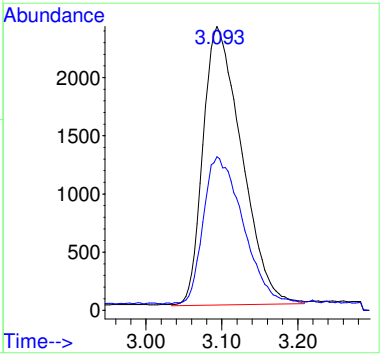


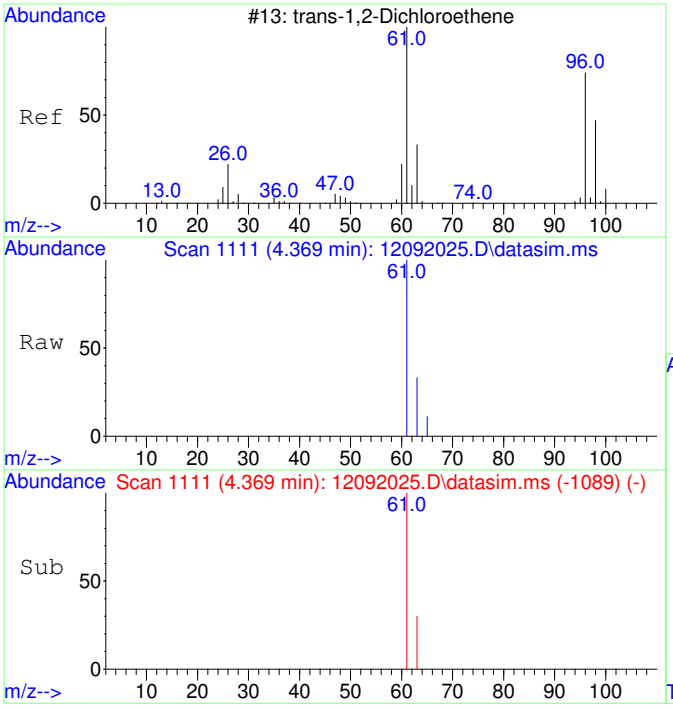


#2
1,1-Dichloroethene
Concen: 931.68 ug/L m
RT: 3.093 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 8477

Ion	Ratio	Lower	Upper
61	100		
96	54.1	37.2	97.2

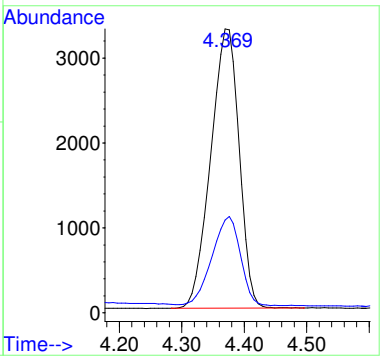


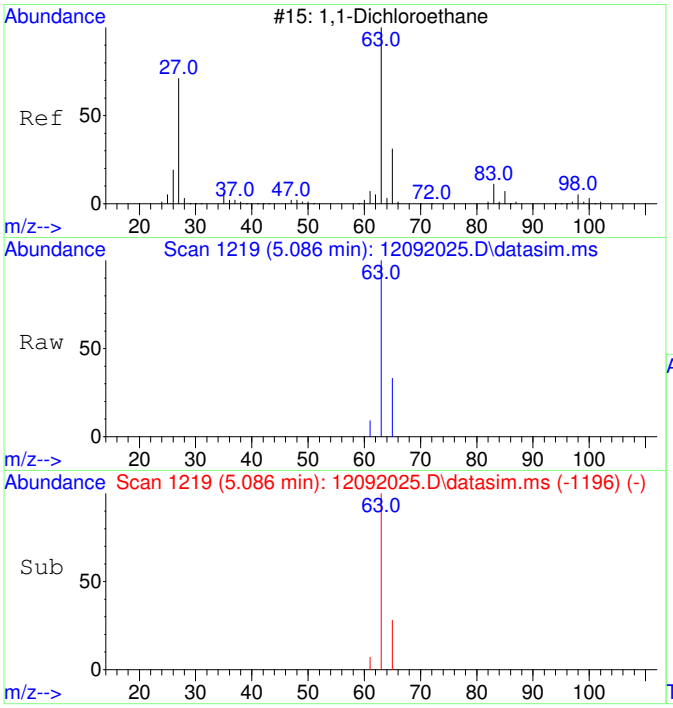


#3
trans-1,2-Dichloroethene
Concen: 906.07 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 10393

Ion	Ratio	Lower	Upper
61	100		
63	31.8	2.4	62.4

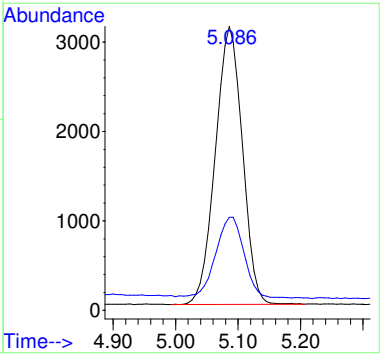


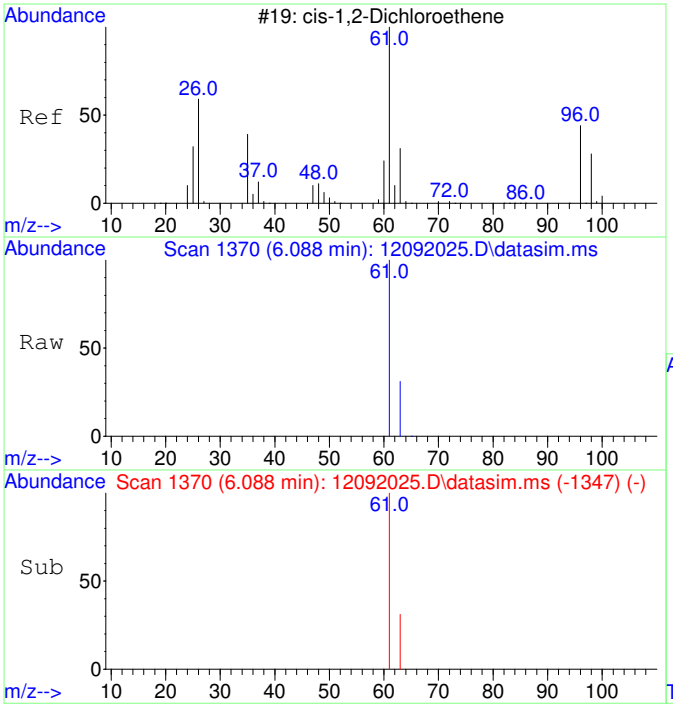


#4
1,1-Dichloroethane
Concen: 681.61 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 63 Resp: 9338

Ion	Ratio	Lower	Upper
63	100		
65	30.5	1.8	61.8

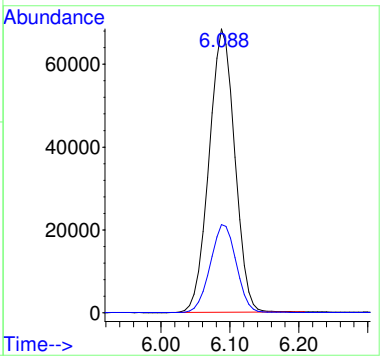


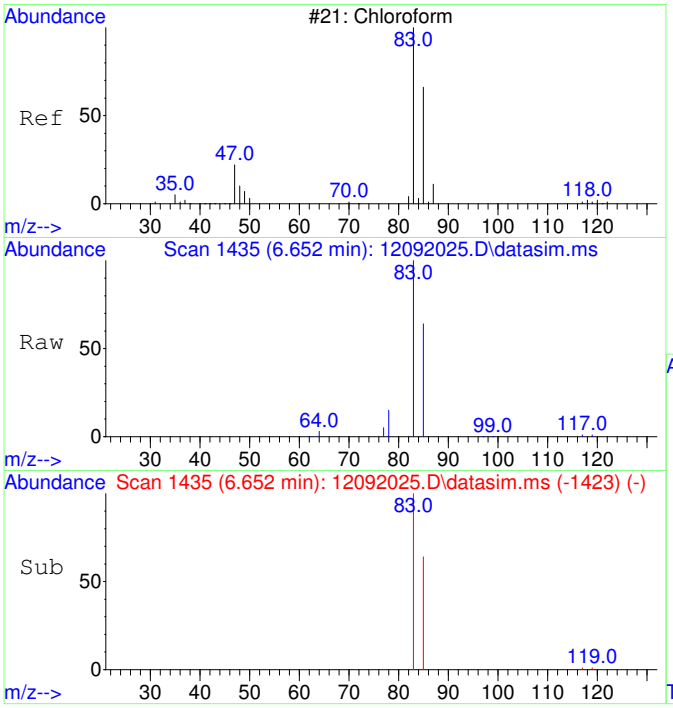


#5
cis-1,2-Dichloroethene
Concen: 12472.35 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 176971

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

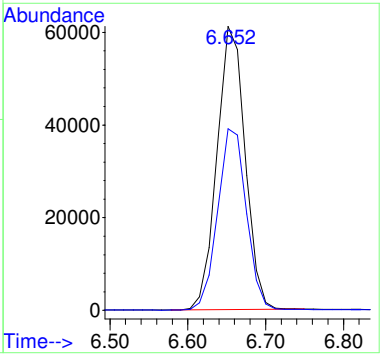


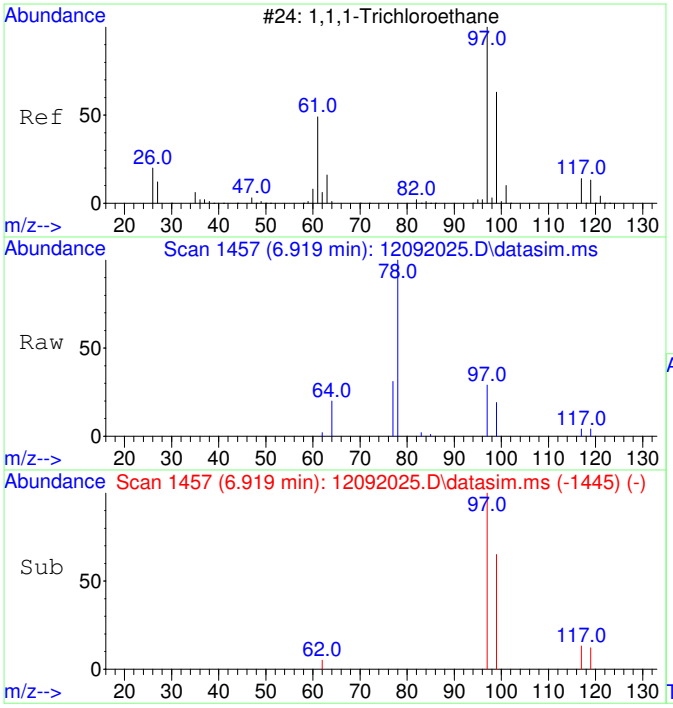


#6
Chloroform
Concen: 11307.68 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 83 Resp: 154109

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

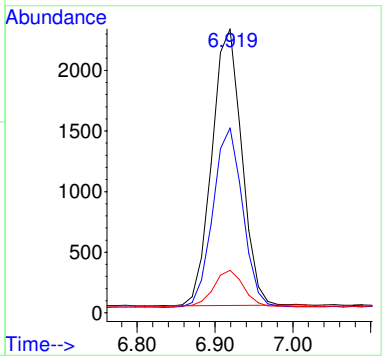


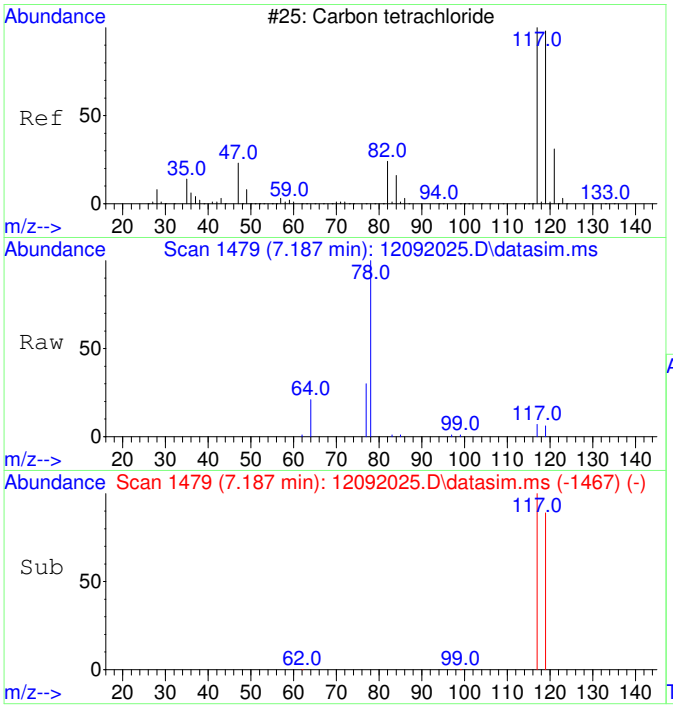


#7
1,1,1-Trichloroethane
Concen: 415.91 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 97 Resp: 6089

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

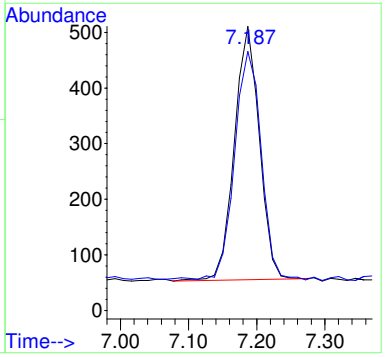


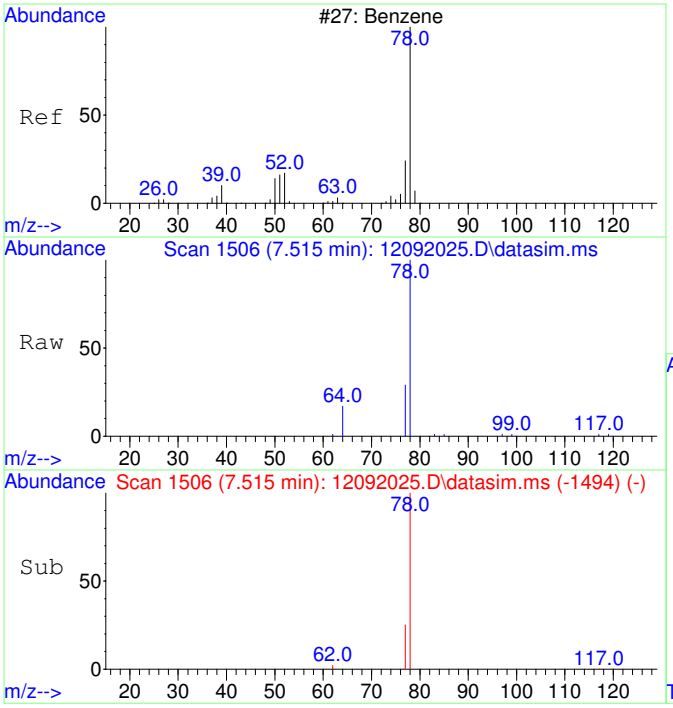


#8
Carbon tetrachloride
Concen: 82.73 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:117 Resp: 1158

Ion	Ratio	Lower	Upper
117	100		
119	95.9	66.4	126.4

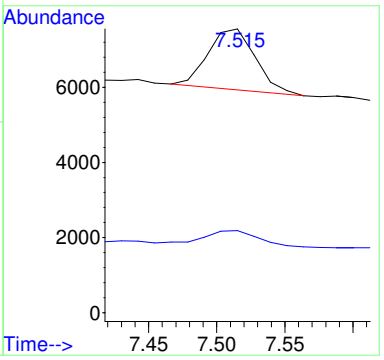


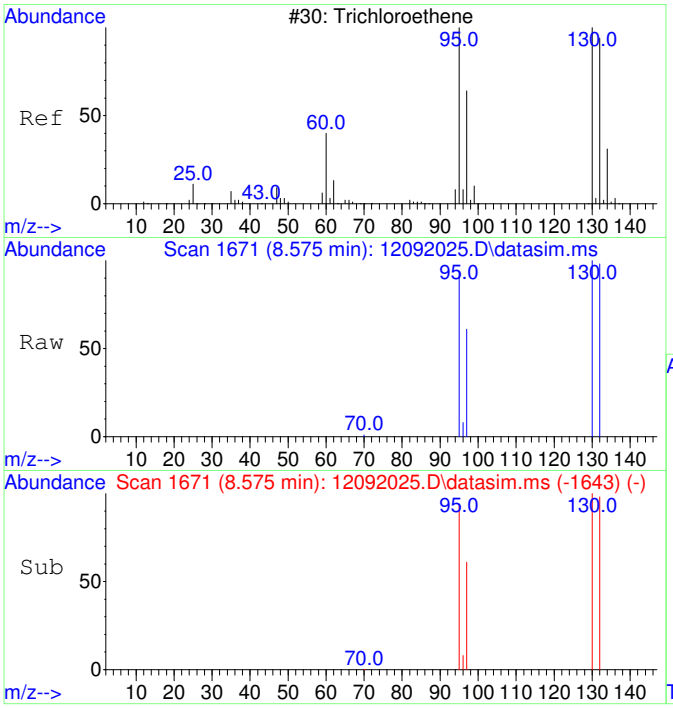


#9
Benzene
Concen: 98.08 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 78 Resp: 3787

Ion	Ratio	Lower	Upper
78	100		
77	39.1	0.0	53.2

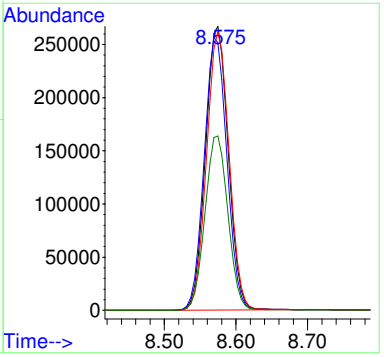


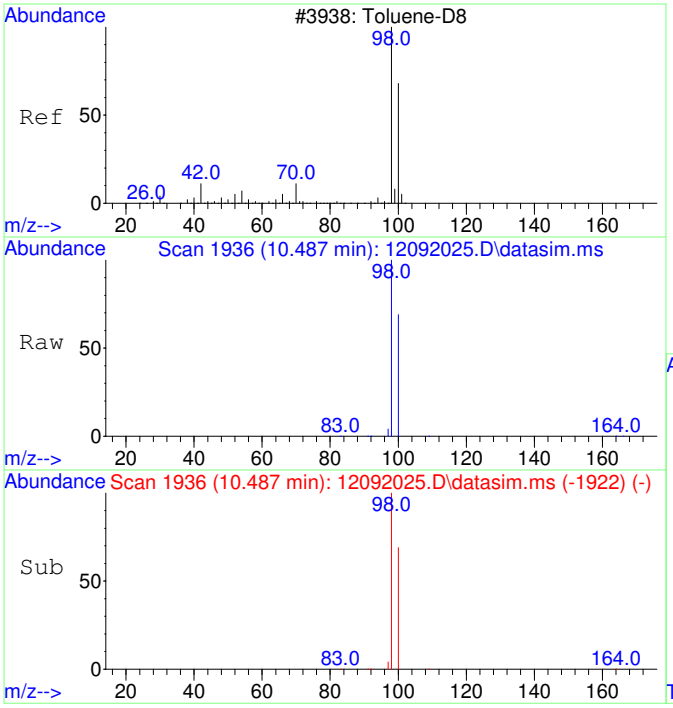


#11
Trichloroethene
Concen: 48224.00 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:130 Resp: 587901

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	96.9	76.0	116.0
97	61.7	38.6	78.6

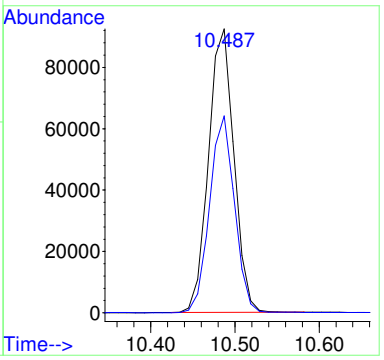


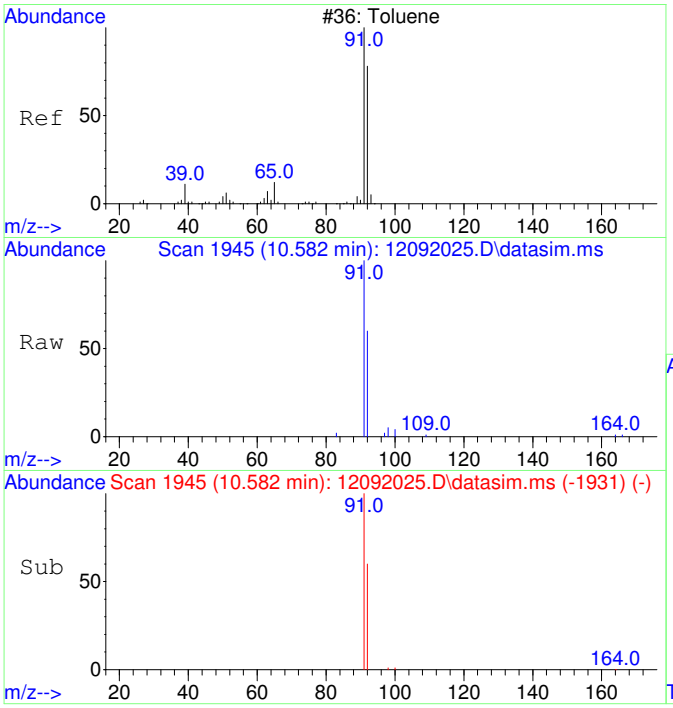


#12
Toluene-d8
Concen: 4368.22 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 98 Resp: 194130

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

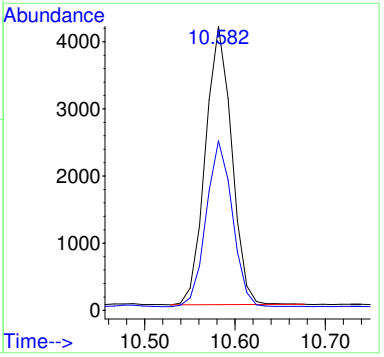


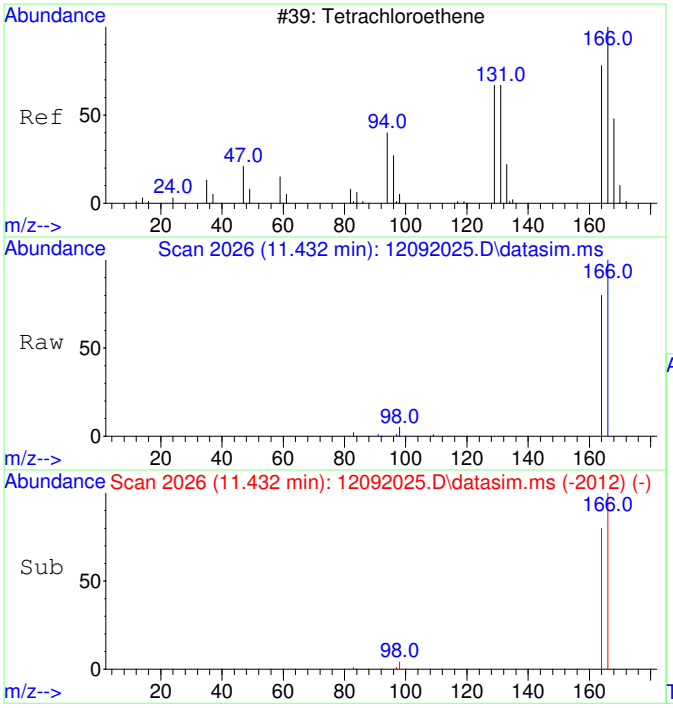


#13
Toluene
Concen: 151.54 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 8385

Ion	Ratio	Lower	Upper
91	100		
92	59.4	29.9	89.9

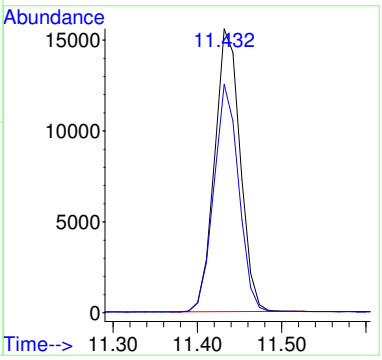


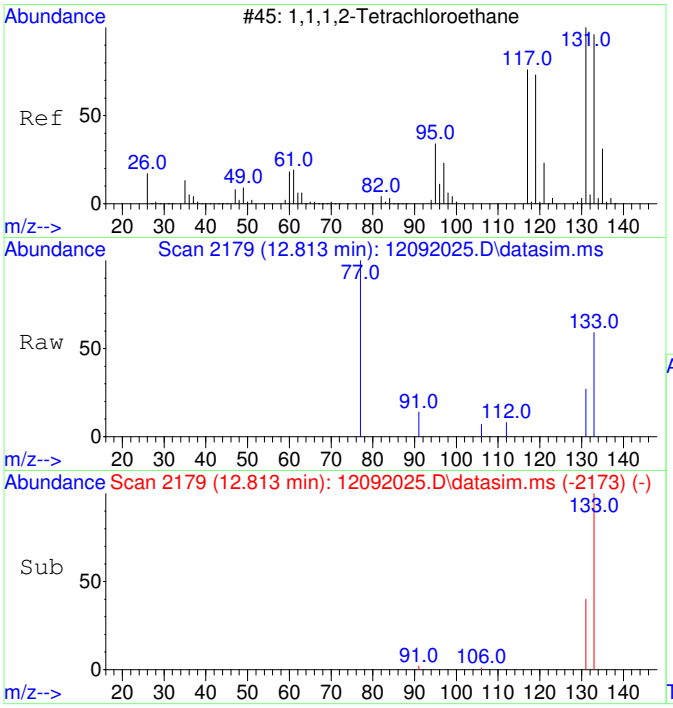


#15
Tetrachloroethene
Concen: 1906.29 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:166 Resp: 32855

Ion	Ratio	Lower	Upper
166	100		
164	78.2	47.8	107.8

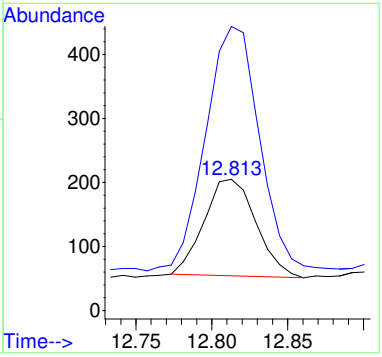


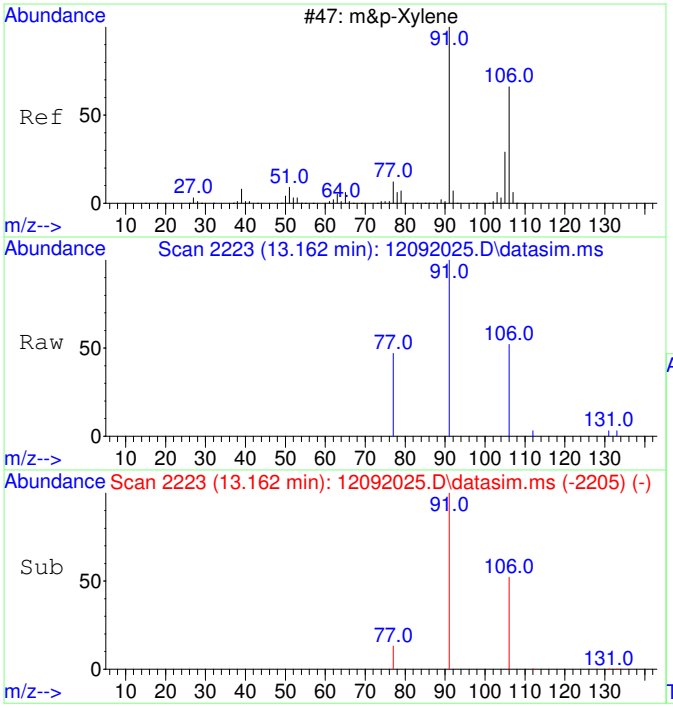


#17
1,1,1,2-Tetrachloroethane
Concen: 23.79 ug/L
RT: 12.813 min Scan# 2179
Delta R.T. -0.103 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:131 Resp: 357

Ion	Ratio	Lower	Upper
131	100		
133	256.9	66.3	126.3#

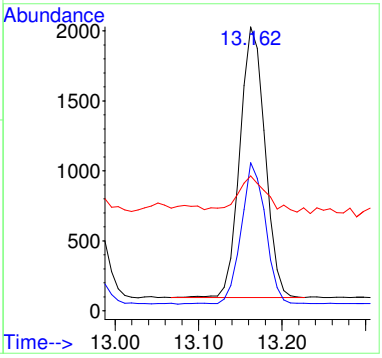


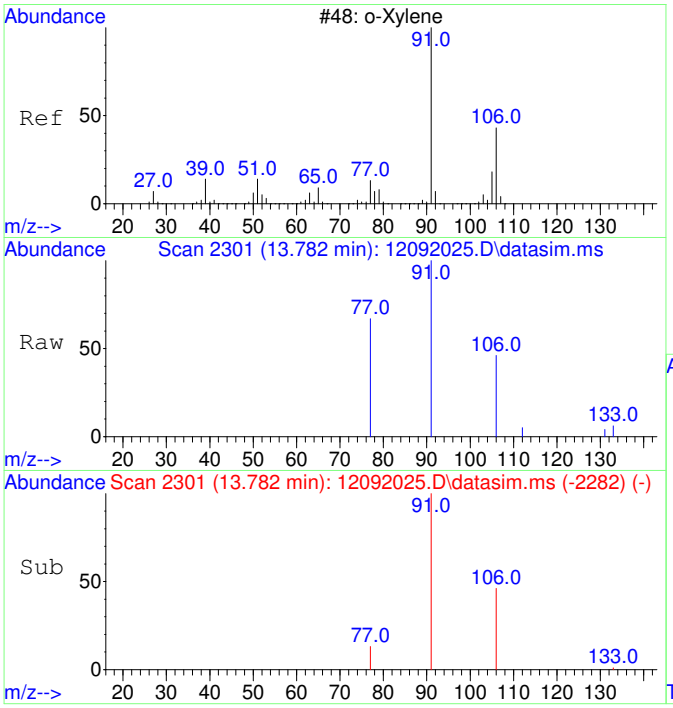


#19
m&p-Xylene
Concen: 74.19 ug/L
RT: 13.162 min Scan# 2223
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 4038

Ion	Ratio	Lower	Upper
91	100		
106	50.5	22.2	82.2
77	15.3	0.0	42.4

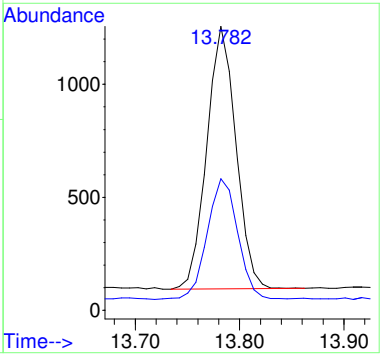


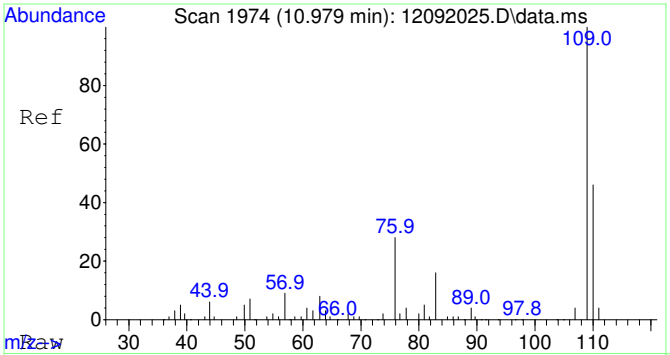


#20
o-Xylene
Concen: 38.46 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2248

Ion	Ratio	Lower	Upper
91	100		
106	47.7	19.2	79.2

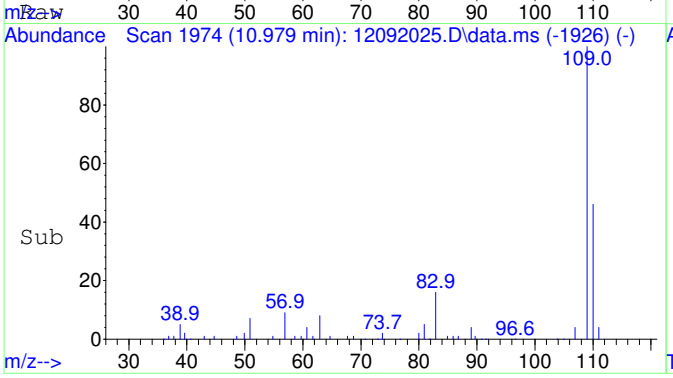


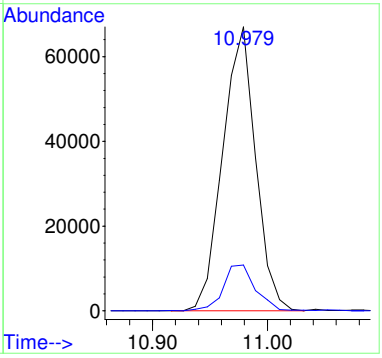


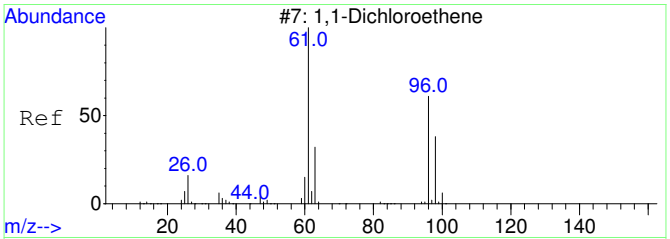
#25
2-Fluorotoluene SCAN
Concen: 5123.53 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:109 Resp: 133450

Ion	Ratio	Lower	Upper
109	100		
83	16.2	0.0	43.8



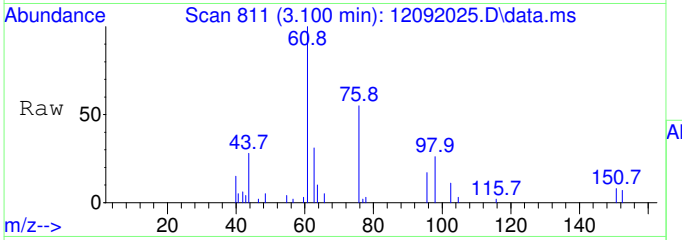


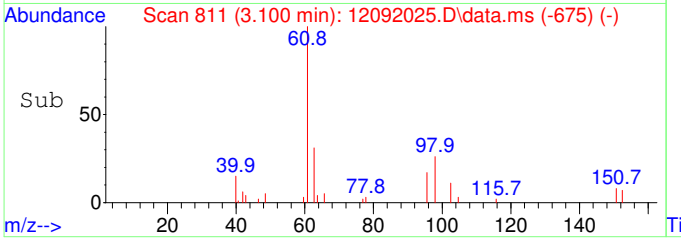


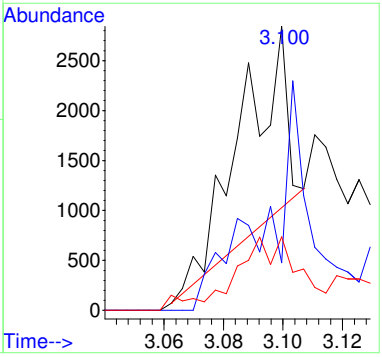
#26
1,1-Dichloroethene SCAN
Concen: 333.85 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

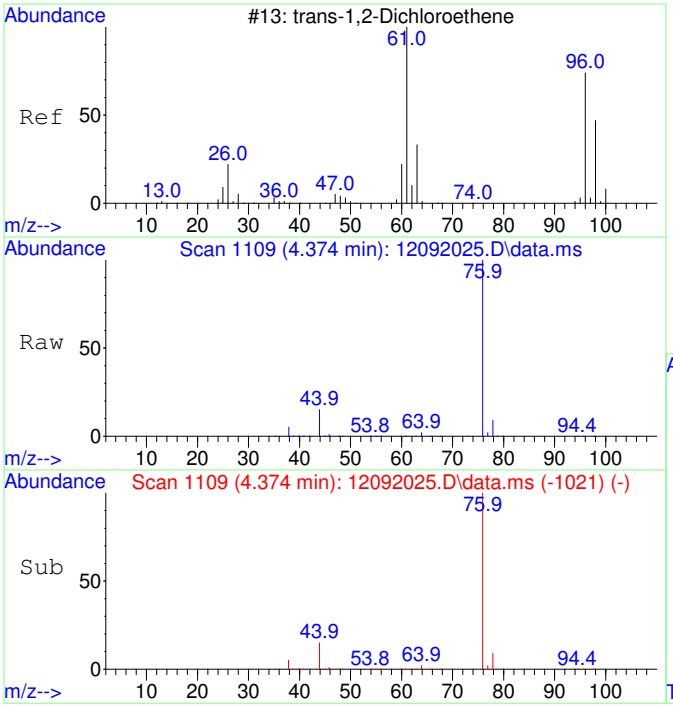
Tgt Ion: 61 Resp: 2030

Ion	Ratio	Lower	Upper
61	100		
96	36.1	33.1	93.1
98	39.5	11.2	71.2





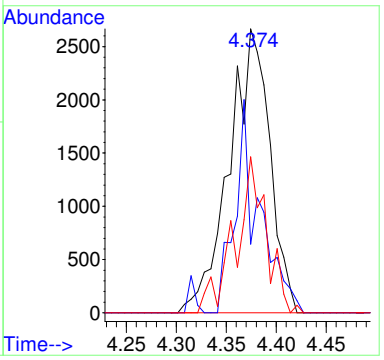


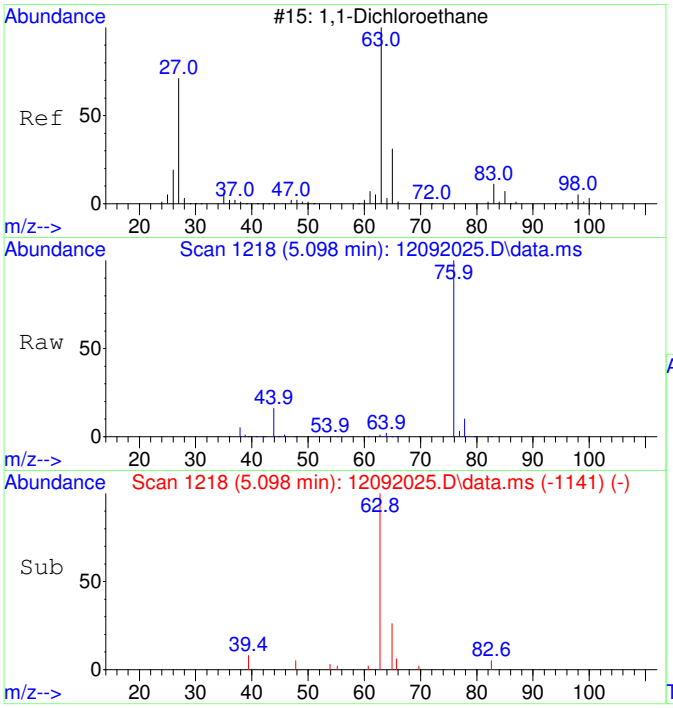


#27
trans-1,2-Dichloroethene SCAN
Concen: 972.25 ug/L
RT: 4.374 min Scan# 1109
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 7530

Ion	Ratio	Lower	Upper
61	100		
96	45.1	49.0	109.0#
98	41.8	20.5	80.5

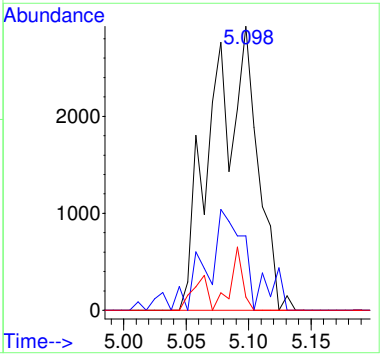


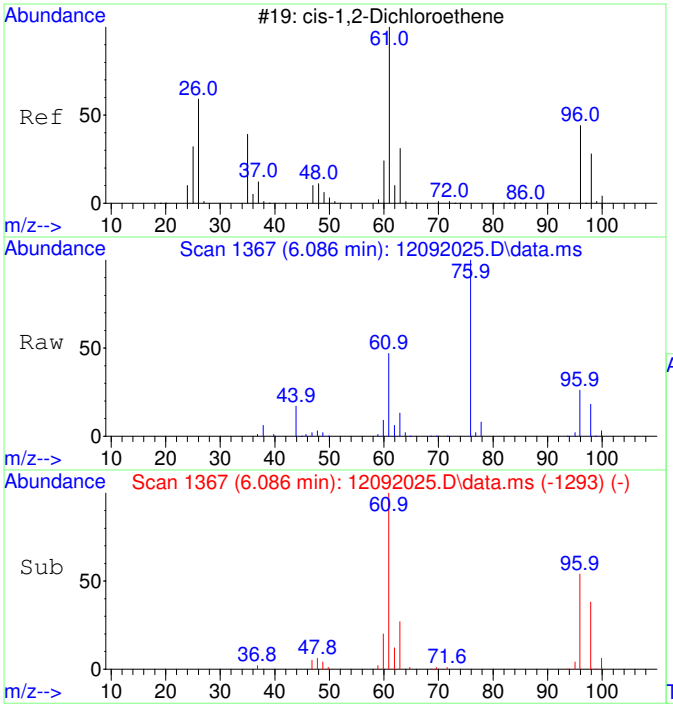


#28
1,1-Dichloroethane SCAN
Concen: 801.05 ug/L
RT: 5.098 min Scan# 1218
Delta R.T. 0.013 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 63 Resp: 7323

Ion	Ratio	Lower	Upper
63	100		
65	32.6	1.3	61.3
83	5.9	0.0	45.9

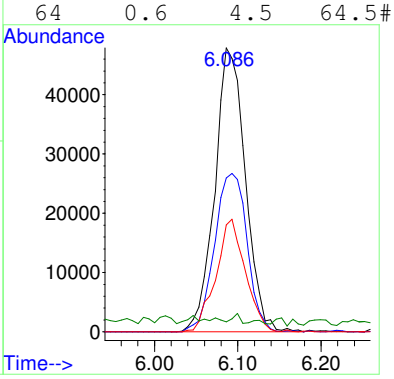


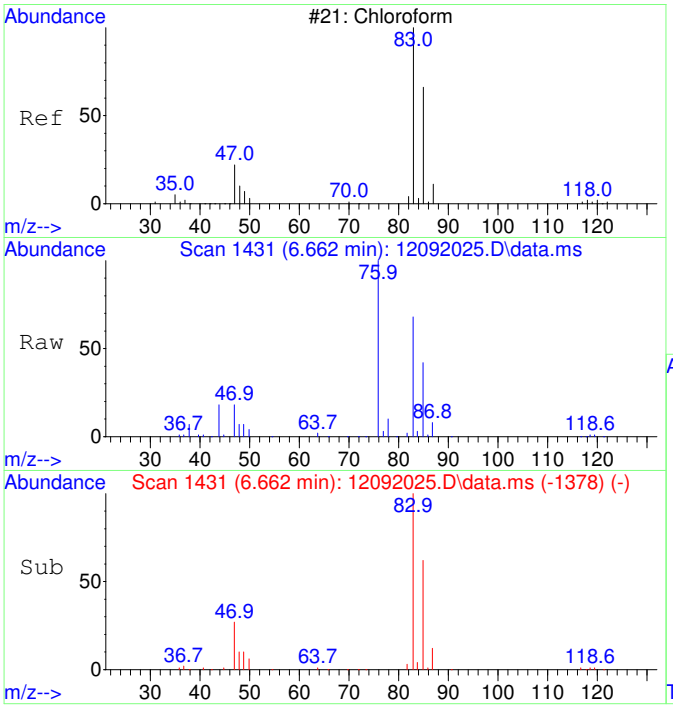


#29
cis-1,2-Dichloroethene SCAN
Concen: 13621.79 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 61 Resp: 122418

Ion	Ratio	Lower	Upper
61	100		
96	59.1	39.9	99.9
98	38.0	13.5	73.5
64	0.6	4.5	64.5#

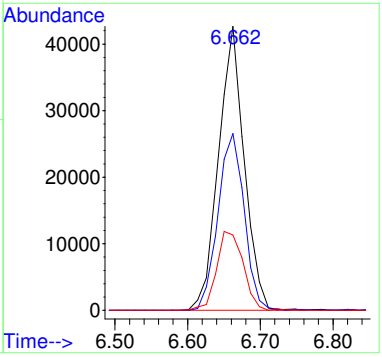


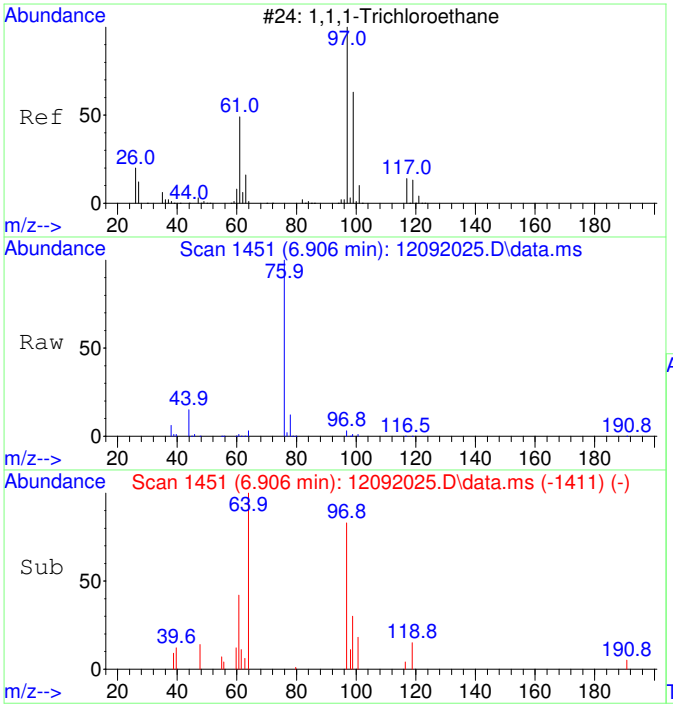


#30
Chloroform SCAN
Concen: 12520.00 ug/L
RT: 6.662 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 83 Resp: 104946

Ion	Ratio	Lower	Upper
83	100		
85	63.4	34.6	94.6
47	28.8	0.0	53.4

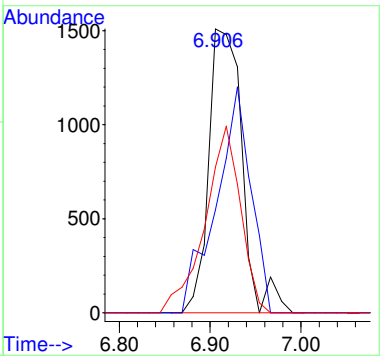


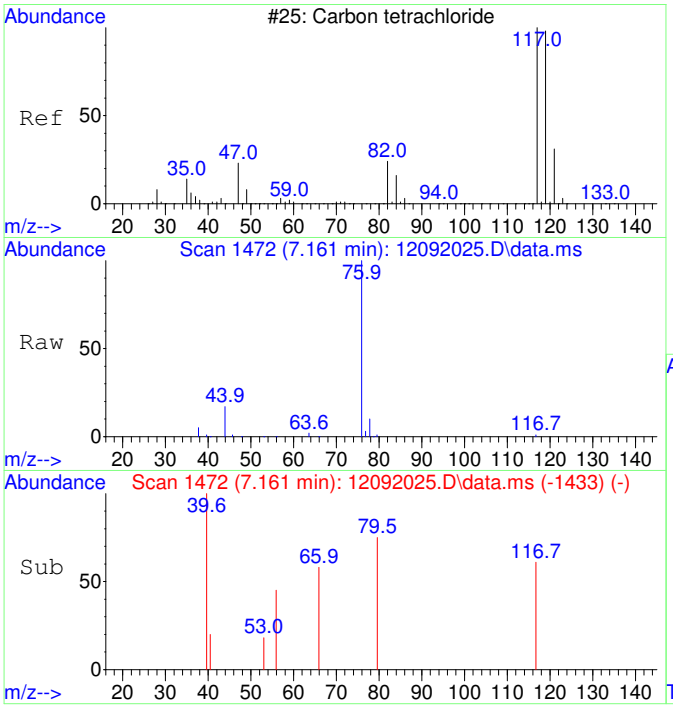


#31
1,1,1-Trichloroethane SCAN
Concen: 446.83 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 97 Resp: 3865

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

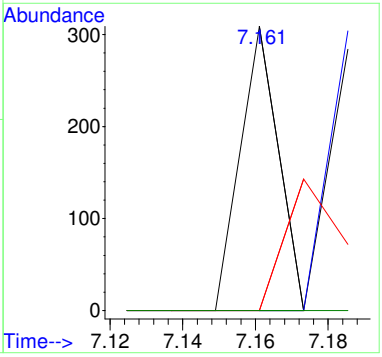


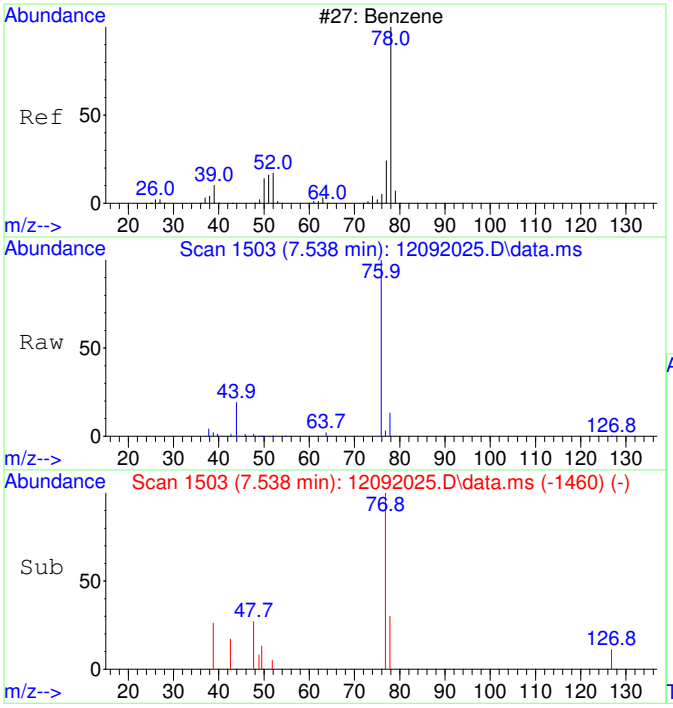


#32
Carbon tetrachloride SCAN
Concen: 30.44 ug/L
RT: 7.161 min Scan# 1472
Delta R.T. -0.024 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:117 Resp: 225

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

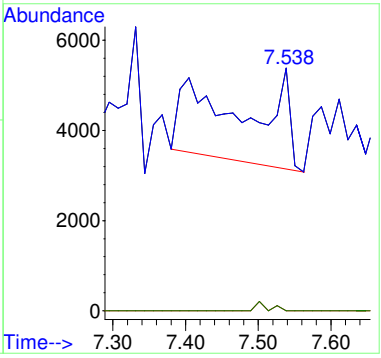


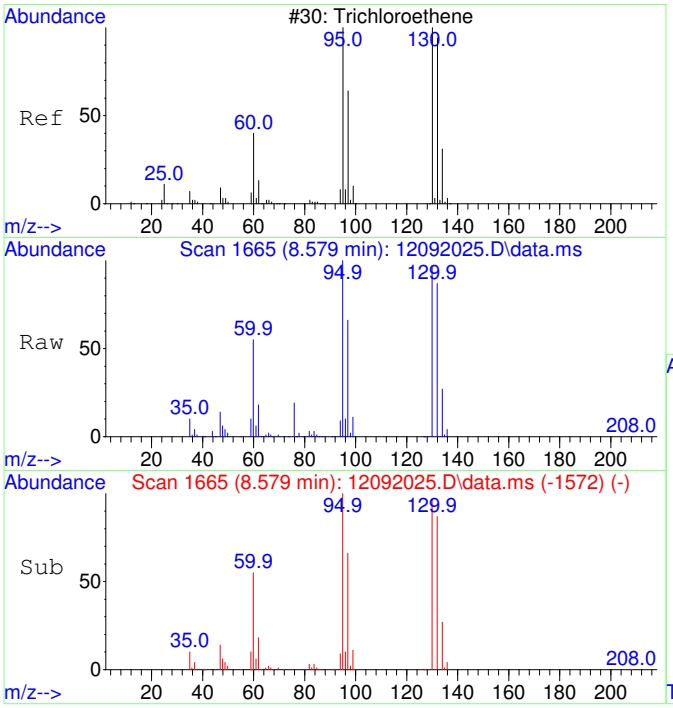


#33
Benzene SCAN
Concen: 427.00 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.024 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 78 Resp: 11174

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

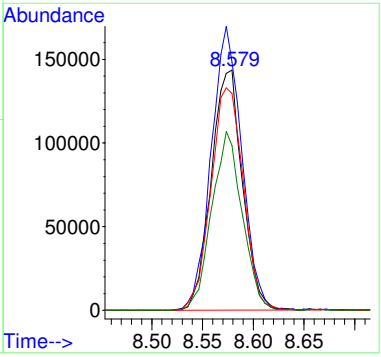


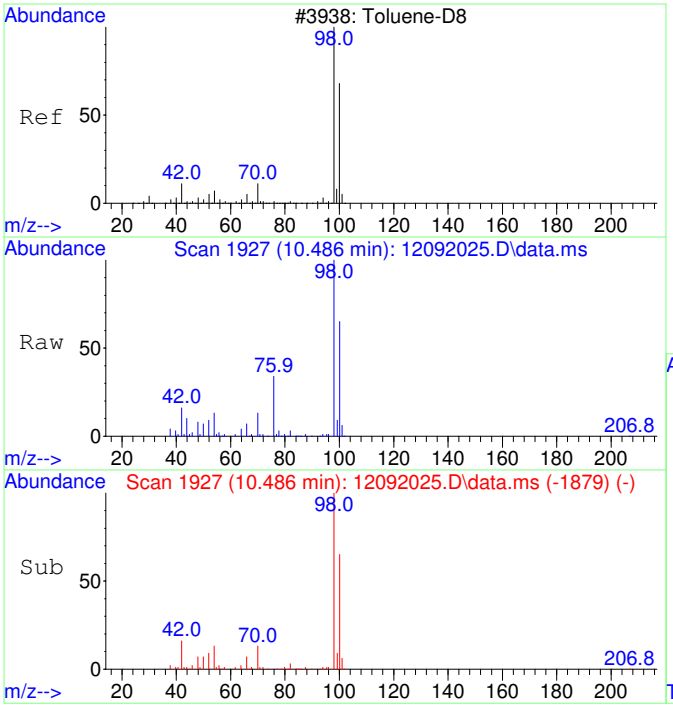


#35
Trichloroethene SCAN
Concen: 53901.84 ug/L
RT: 8.579 min Scan# 1665
Delta R.T. 0.005 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:130 Resp: 307565

Ion	Ratio	Lower	Upper
130	100		
95	115.5	60.5	120.5
132	96.0	59.6	119.6
97	72.5	28.2	88.2

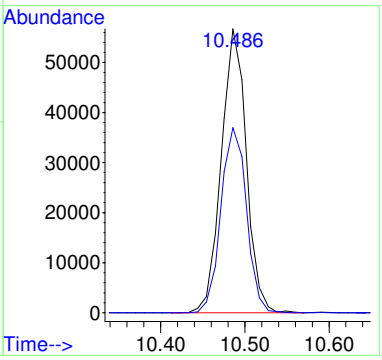


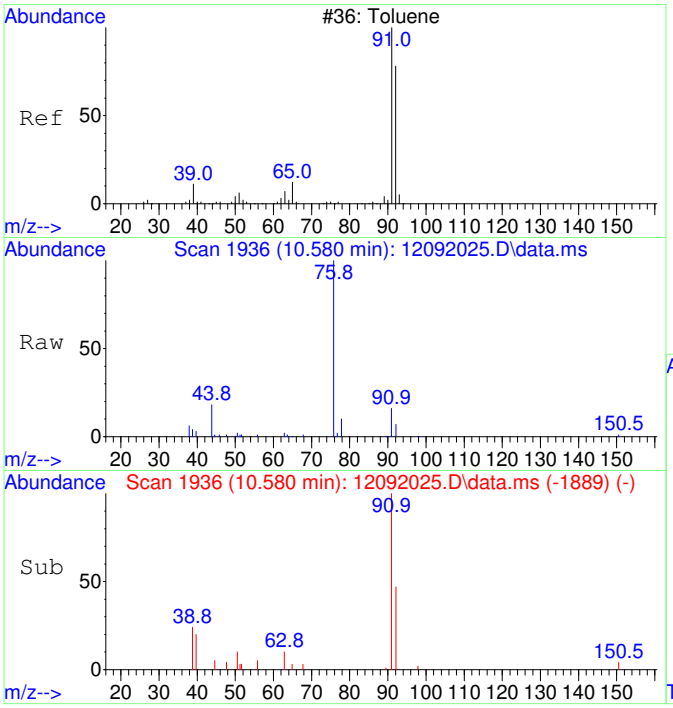


#36
Toluene-d8 SCAN
Concen: 4801.63 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 98 Resp: 117298

Ion	Ratio	Lower	Upper
98	100		
100	66.4	40.0	100.0

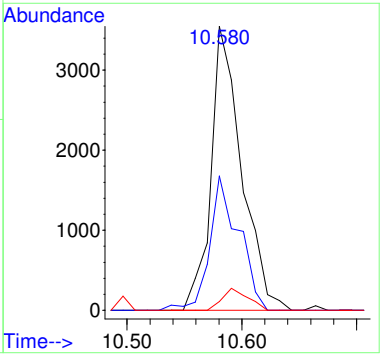


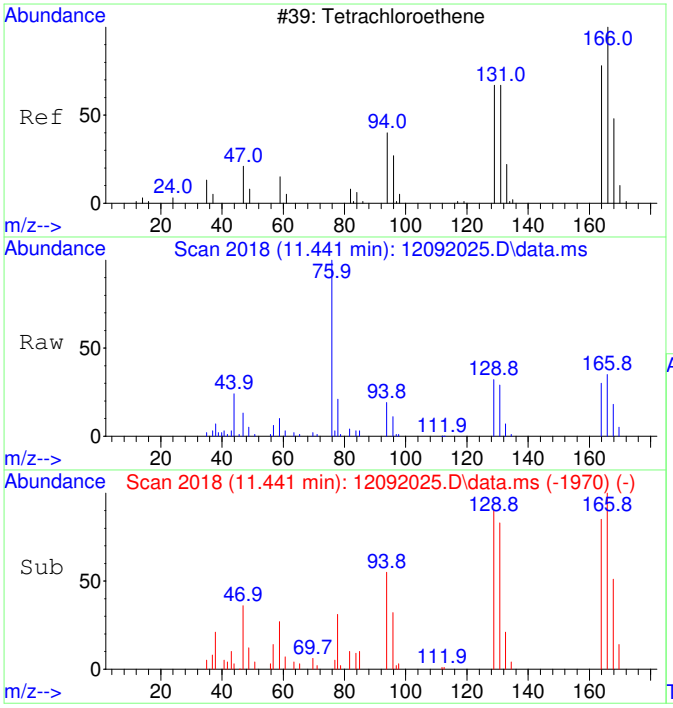


#37
Toluene SCAN
Concen: 218.93 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.011 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 6585

Ion	Ratio	Lower	Upper
91	100		
92	45.0	28.3	88.3
65	6.5	0.0	41.0

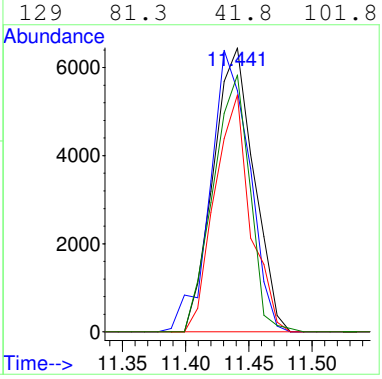


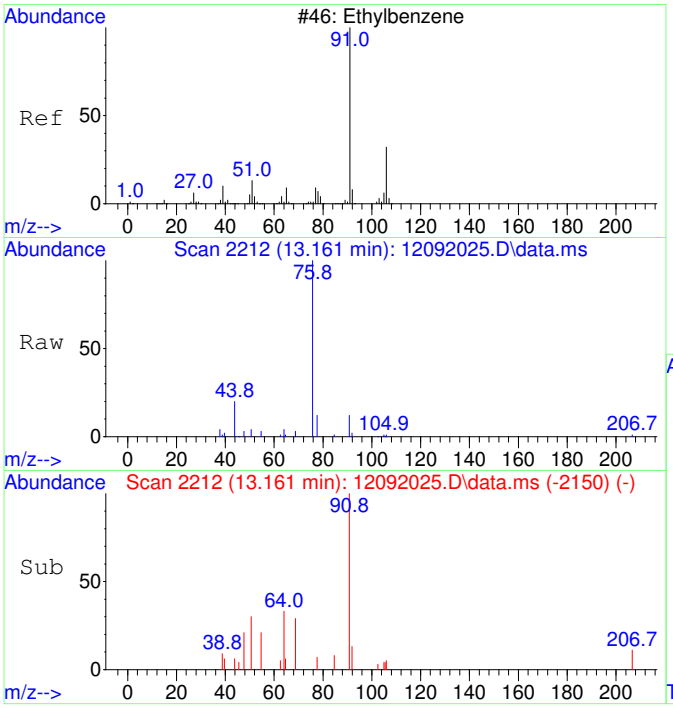


#39
Tetrachloroethene SCAN
Concen: 2137.93 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. -0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion:166 Resp: 14466

Ion	Ratio	Lower	Upper
166	100		
164	95.5	50.9	110.9
131	73.6	38.7	98.7
129	81.3	41.8	101.8

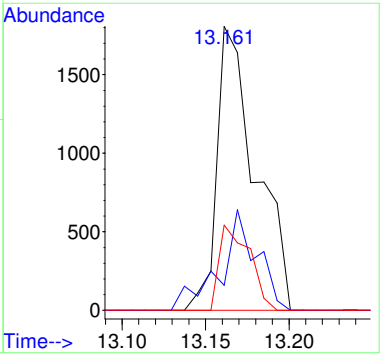


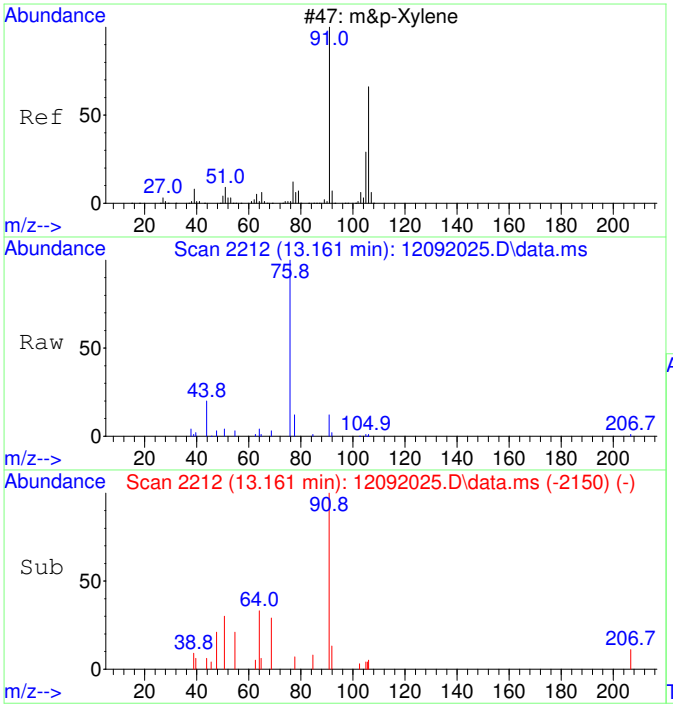


#42
Ethylbenzene SCAN
Concen: 50.87 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2916

Ion	Ratio	Lower	Upper
91	100		
106	33.5	23.1	83.1
51	23.6	0.0	40.1

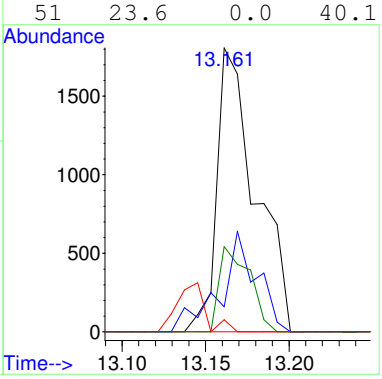


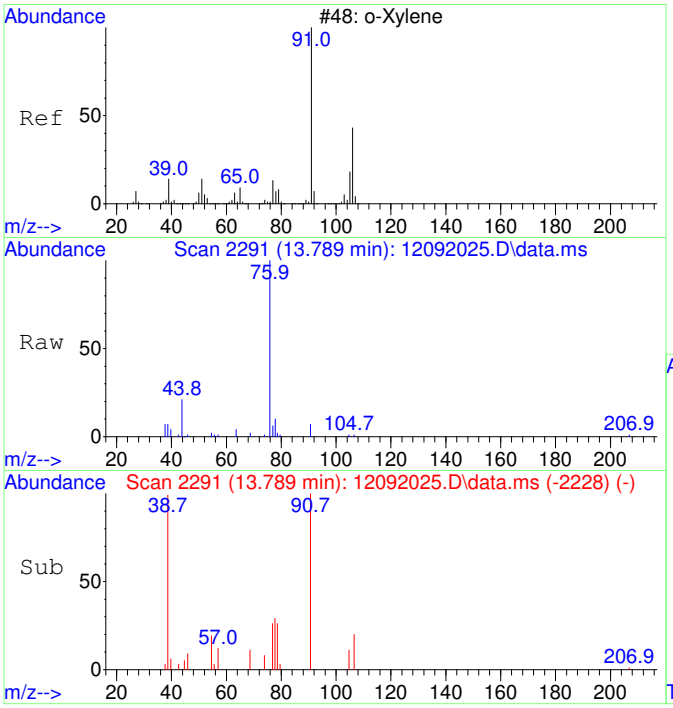


#43
m&p-Xylene SCAN
Concen: 50.87 ug/L
RT: 13.161 min Scan# 2212
Delta R.T. -0.008 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 2916

Ion	Ratio	Lower	Upper
91	100		
106	33.5	23.1	83.1
105	0.0	0.0	54.7
51	23.6	0.0	40.1

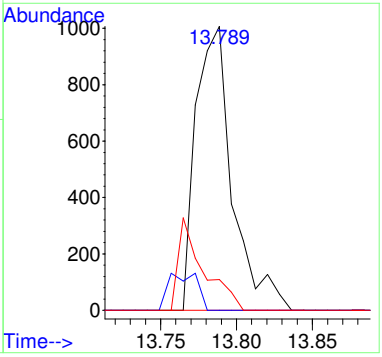




#44
o-Xylene SCAN
Concen: 53.87 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12092025.D
Acq: 9 Dec 2020 18:21

Tgt Ion: 91 Resp: 1686

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



SEQUENCE

S20L031

Sequence Date: 12/10/2020

Instrument: AG5975CV

Sequence Analyses:

VOCs, Passive Samplers

ANALYST / REVIEWER - DATA REVIEW CHECKLIST

BATCH #:	B20L016	SEQUENCE #:	S20L031 12/09/20
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.	Tue Dec 08 06:26:34 2020			
	Initial Calibration ID (LIMS number):	2012007			
	ICAL within QC criteria?	✔			
	SCV within QC criteria?	✔			
INSTRUMENT / QC CHECKS	Tune or degradation checks within QC criteria?	☐	Y	Y	
	CCV(s) within QC criteria?	☐	Y	Y	
	QLS(s) within QC criteria?	☐	Y	Y	
	CB(s) or storage blank(s) within QC criteria?	✔			
	Other instrument checks within QC criteria? Specify if applicable.	✔			
BATCH QCs	Method blanks < 1/2 QL?	✔			
	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 #:	B20L016	SEQUENCE #:	S20L031 12/09/20
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?	☐	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 12/11/20
	REVIEWED BY:	ZIYAD RAJABI (Affiliate) Digitally signed by ZIYAD RAJABI (Affiliate) Date: 2020.12.16 12:38:12 -08'00' SIGN HERE

COMMENTS

Custom analyte list.

Injection Log

Operator: TD
Directory: C:\msdchem\1\Ravioli Data\2020\121020\

Vial	File Name	Mult	Sample Info	Misc Info	Date Acquired
1	12102001.D	1	S20L031-IBL1		10 Dec 2020 8:48
2	12102002.D	1	S20L031-TUN1	BFB 2040028	10 Dec 2020 9:10
3	12102003.D	1	S20L031-CCV1	2030070 5 mg/L	10 Dec 2020 9:19
4	12102004.D	1	S20L031-CRL1	2030073 0.05 mg/L	10 Dec 2020 9:43
5	12102005.D	10	2012007-01RE1	10X DL (180-20)	10 Dec 2020 11:42
6	12102006.D	10	2012007-07RE1	10X DL (180-20)	10 Dec 2020 12:06
7	12102007.D	5	2012007-08RE1	5X DL (160-40)	10 Dec 2020 12:29
8	12102008.D	10	2012007-16RE1	10X DL (180-20)	10 Dec 2020 12:53
9	12102009.D	10	2012007-17RE1	10X DL (180-20)	10 Dec 2020 13:16
10	12102010.D	5	2012007-18RE1	5X DL (160-40)	10 Dec 2020 13:40

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\Ravioli Data\2020\121020\12102002.D
Tune Time : 10 Dec 2020 9:10

Daily Calibration File : C:\msdchem\1\Ravioli Data\2020\121020\12102003.D

File	Sample	Surrogate Recovery %	Internal Standard Responses
			207017
12102003.D	S20L031-CC	96	207017
12102004.D	S20L031-CR	1*	204465
12102005.D	2012007-01RE1	84*	231574
12102006.D	2012007-07RE1	84*	232329
12102007.D	2012007-08RE1	85*	221037
12102008.D	2012007-16RE1	85*	198534
12102009.D	2012007-17RE1	84*	215759
12102010.D	2012007-18RE1	85*	216373

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

Created: Fri Dec 11 06:56:29 2020 AG5975C

Analysis Sequence

S20L031

Project: R21S04
Analysis: VOCs, Passive Samplers

Instrument: AG5975CV **Calibration ID:** 2012007 Printed: 12/11/2020 12:30 pm

Lab Number	Sample Name	Order	Analyzed Date	STD ID	ISTD ID	Sequenced By	File ID	Comments
S20L031-IBL1	Instrument Blank	1	12/10/20 8:48			TD	12102001.D	
S20L031-TUN1	BFB	2	12/10/20 9:10	2040028		TD	12102002.D	
S20L031-CCV1	Calibration Check	3	12/10/20 9:19	2030070		TD	12102003.D	
S20L031-CRL1	Instrument RL Check	4	12/10/20 9:43	2030073		TD	12102004.D	
2012007-01RE1 A	F6-010-3ft-2d-R	5	12/10/20 11:42			TD	12102005.D	
2012007-07RE1 A	F6-008-3ft-2d-R	6	12/10/20 12:06			TD	12102006.D	
2012007-08RE1 A	F6-031-3ft-2d-R	7	12/10/20 12:29			TD	12102007.D	
2012007-16RE1 A	Classics-MH1-2ft-2d-R	8	12/10/20 12:53			TD	12102008.D	
2012007-17RE1 A	Classics-MH2-2ft-2d-R	9	12/10/20 13:16			TD	12102009.D	
2012007-18RE1 A	6Sixty-MH3-2ft-2d-R	10	12/10/20 13:40			TD	12102010.D	

Sequence Comments

Reagents

Reagent #	Description

SEQUENCE DATA

S20L031

S20L031-IBL1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102001.D
Acq On : 10 Dec 2020 8:48
InstName : AG5975C
Operator : TD
Sample : S20L031-IBL1 (Sig #1); S20L031IBL1 (Sig #2)
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 10 09:15:06 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

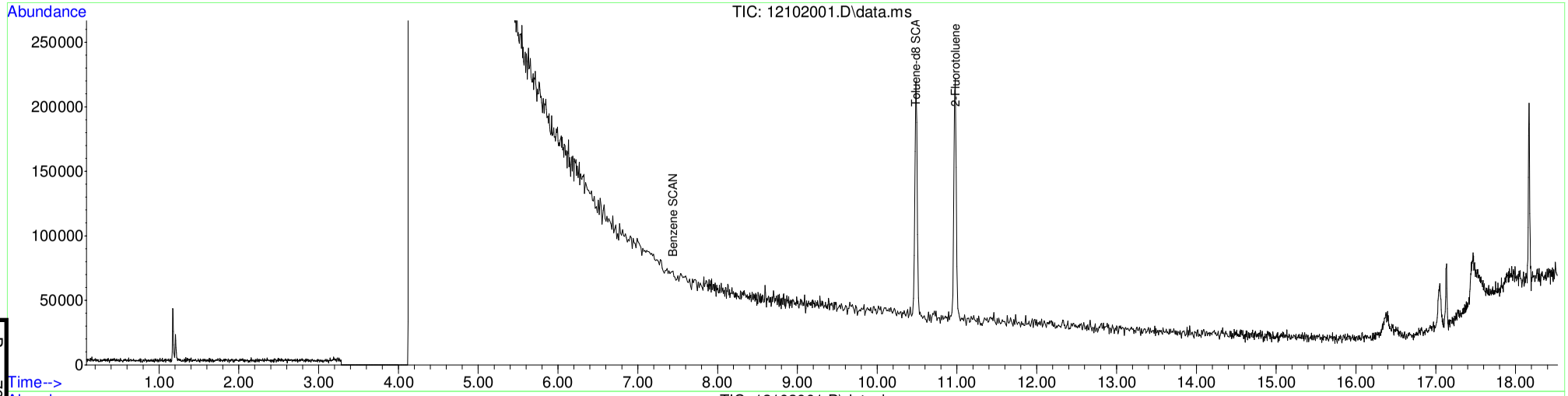
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	278774	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	223784	4144.79	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 82.90%#			
Target Compounds						Qvalue
25) 2-Fluorotoluene SCAN	10.979	109	156754	4953.72	ug/L	98
33) Benzene SCAN	7.441	78	3374	106.13	ug/L #	91
36) Toluene-d8 SCAN	10.486	98	128953	4345.02	ug/L	93

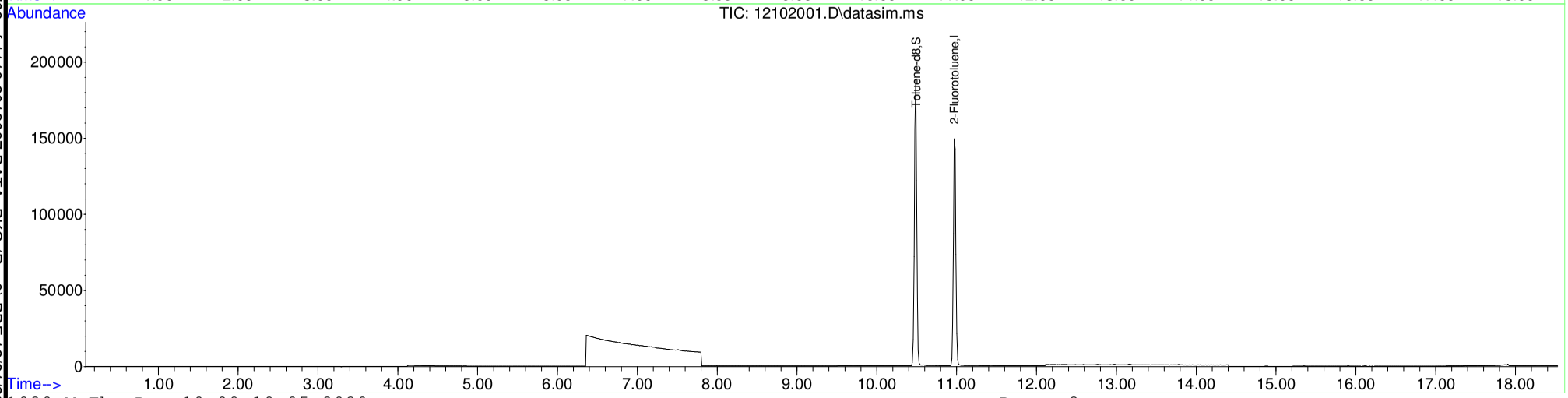
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102001.D
Acq On : 10 Dec 2020 8:48
InstName : AG5975C
Operator : TD
Sample : S20L031-IBL1 (Sig #1); S20L031IBL1 (Sig #2)
Misc :
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Dec 10 09:15:06 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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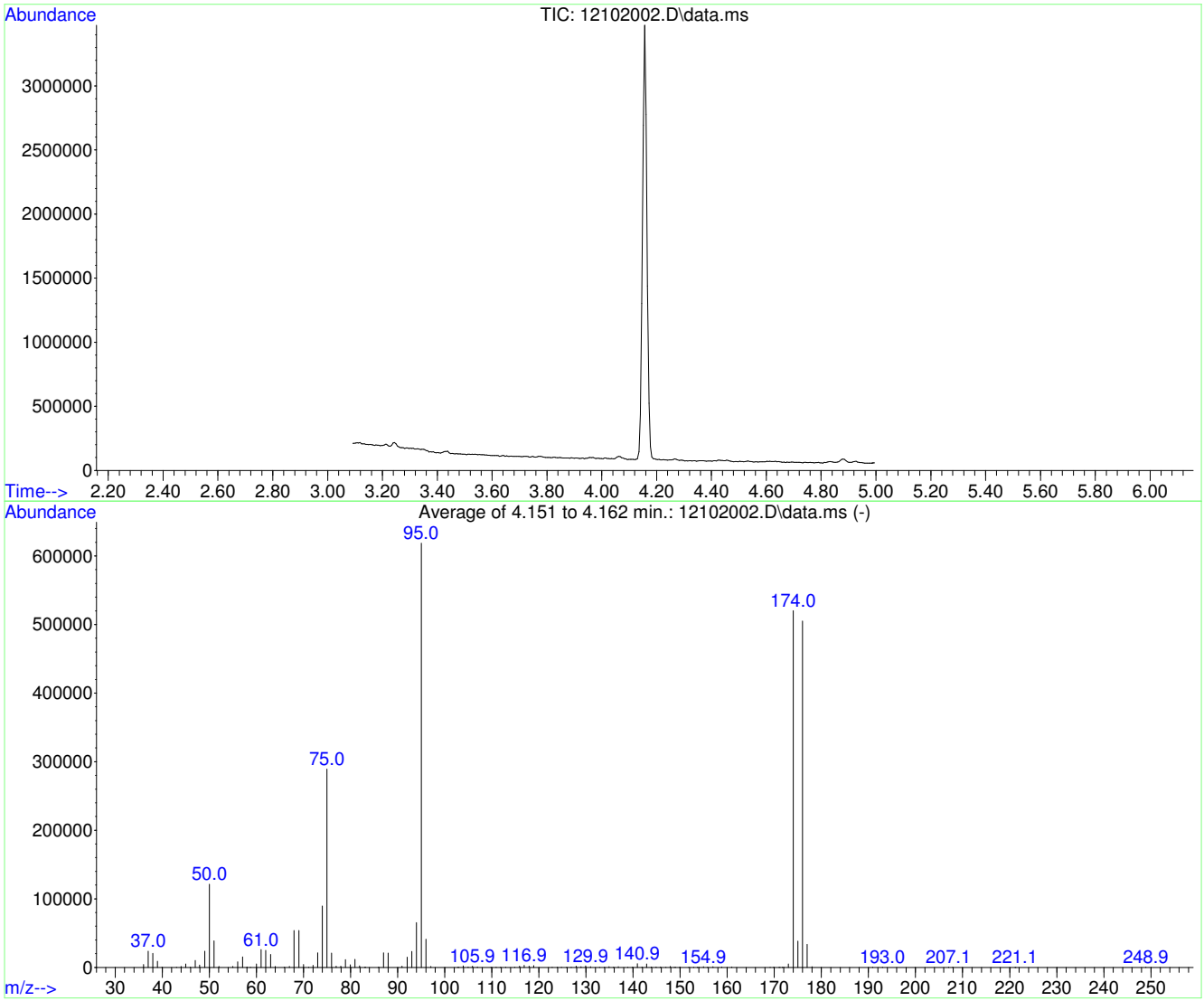
S20L031-TUN1

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102002.D
Acq On : 10 Dec 2020 9:10
Operator : TD
Sample : S20L031-TUN1
Misc : BFB 2040028
ALS Vial : 2 Sample Multiplier: 1
InstName : AG5975C

Integration File: Ravioli.P

Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Title : Volatile Organic Analysis - Passive samplers
Last Update : Tue Dec 08 06:26:34 2020



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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.6	121280	PASS
75	95	30	60	46.8	289397	PASS
95	95	100	100	100.0	618517	PASS
96	95	5	9	6.6	41053	PASS
173	174	0.00	2	1.0	4959	PASS
174	95	50	120	84.1	520320	PASS
175	174	5	9	7.3	38189	PASS
176	174	95	101	97.1	505109	PASS
177	176	5	9	6.6	33547	PASS

Average of 4.151 to 4.162 min.: 12102002.D\data.ms
S20L031-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	4167	49.00	23621	62.00	24952	74.00	89613
37.00	23525	50.00	121280	63.00	18877	75.00	289397
38.00	20544	51.00	38789	64.00	1217	75.95	20709
39.00	8771	52.05	1562	65.90	108	76.95	1984
39.95	323	55.00	1230	67.00	1409	77.90	1685
43.00	317	56.00	8104	68.00	53875	78.90	11406
44.00	1580	57.05	15330	69.00	53693	79.95	3675
45.00	4929	58.00	646	70.00	4343	80.90	11853
45.95	198	58.75	171	71.10	207	81.90	2304
47.00	9964	60.00	5107	72.00	2844	83.00	160
47.95	3279	61.00	26059	73.00	21300	83.20	55

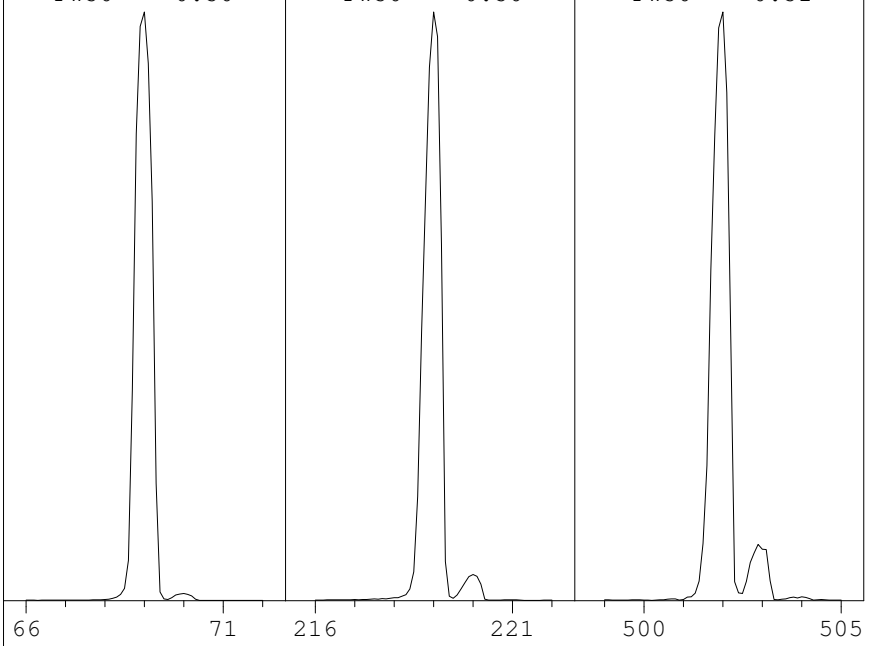
Average of 4.151 to 4.162 min.: 12102002.D\data.ms
S20L031-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.95	689	103.00	107	116.90	3173	130.95	850
87.00	21405	103.90	2162	117.90	1779	132.90	60
87.95	20749	104.95	805	118.90	2449	133.90	54
90.95	1693	105.90	1992	122.80	164	134.90	848
92.00	14734	106.95	609	123.90	361	135.85	194
93.00	23397	109.85	253	124.80	73	136.85	998
94.00	65397	110.90	393	125.90	185	138.90	117
95.00	618517	111.85	374	126.85	150	139.90	390
96.00	41053	112.95	386	127.90	1674	140.90	5249
97.05	1285	114.85	393	128.95	981	141.90	687
102.75	138	115.90	1692	129.95	2093	142.90	4921

Average of 4.151 to 4.162 min.: 12102002.D\data.ms
S20L031-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.85	428	153.95	205	172.00	181	221.10	17
144.90	483	154.95	1212	173.00	4959	248.95	186
145.85	795	155.80	73	174.00	520320		
147.00	396	156.95	1095	175.00	38189		
147.90	1397	158.85	749	176.00	505109		
148.80	259	160.95	731	177.00	33547		
149.00	157	169.10	55	178.00	988		
149.90	639	169.85	130	190.90	139		
151.85	184	171.00	66	193.00	196		
152.90	375	171.20	114	207.05	124		
153.70	104	171.70	143	207.90	51		

Mass	69.00	Mass	219.00	Mass	502.00
Ab	481118	Ab	336813	Ab	15869
Pw50	0.50	Pw50	0.50	Pw50	0.51

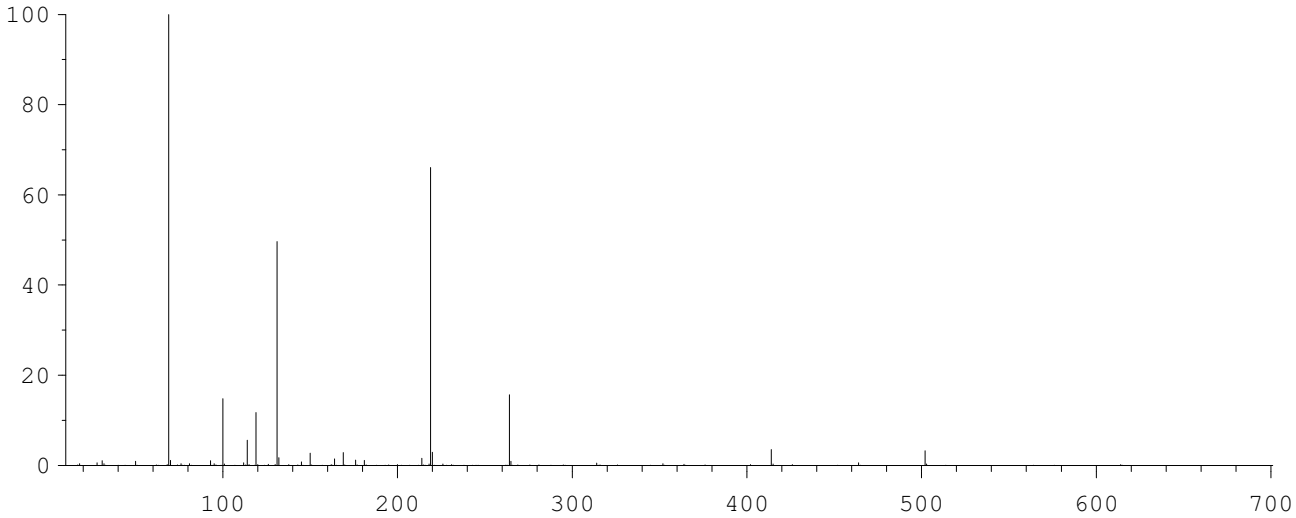


Ion Pol	Pos	MassGain	-1184
		MassOffs	-40
Emission	34.6	AmuGain	984
EIEnrgy	69.9	AmuOffs	128.50
Filament	1	Wid219	-0.003
		DC Pol	Pos
Repeller	22.25		
IonFcus	68.3	HEDEnab	On
EntLens	0.0	EMVolts	1424
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

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

Scan: 10.00 - 701.00 Samples: 8 Thresh: 100 Step: 0.10
117 peaks Base: 69.00 Abundance: 454336



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.00	454336	100.00	70.00	5043	1.11
219.00	300096	66.05	220.00	13180	4.39
502.00	14717	3.24	503.00	1453	9.87

Air/Water Check: H20~0.38% N2~0.59% O2~0.34% CO2~0.06% N2/H2O~155.03%

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 91028
Repeller Maximum 30 volts using ion 219; Gain Factor 0.91

MassGain Values(Samples): -1174(3) -1167(2) -1145(1) -1104(0) -1017(FS)

TARGET MASS:	50	69	131	219	414	502	1050
Amu Offset:	128.5	128.5	128.5	128.5	128.5	128.5	128.5
Entrance Lens Offset:	14.8	11.3	11.3	13.1	14.8	16.1	16.1
Target Abund(%):	1.0	100.0	45.0	55.0	2.5	2.0	
Actual Tune Abund(%):	0.9	100.0	49.6	66.1	3.5	3.2	

S20L031-CCV1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102003.D
Acq On : 10 Dec 2020 9:19
InstName : AG5975C
Operator : TD
Sample : S20L031-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 09:38:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	2-Fluorotoluene	1.000	1.000	0.0	101	0.00
2	T	1,1-Dichloroethene	0.198	0.221	-11.6	110	0.00
3	T	trans-1,2-Dichloroethene	0.250	0.256	-2.4	102	0.02
4	T	1,1-Dichloroethane	0.299	0.306	-2.3	104	0.02
5	T	cis-1,2-Dichloroethene	0.309	0.314	-1.6	106	0.01
6	T	Chloroform	0.297	0.300	-1.0	106	0.01
7	T	1,1,1-Trichloroethane	0.319	0.323	-1.3	106	0.00
8	T	Carbon tetrachloride	0.305	0.304	0.3	105	0.00
9	T	Benzene	0.841	0.813	3.3	102	0.00
10	T	1,2-Dichloroethane	0.287	0.298	-3.8	107	0.00
11	T	Trichloroethene	0.266	0.257	3.4	101	0.00
12	S	Toluene-d8	0.968	0.932	3.7	103	0.00
13	T	Toluene	1.206	1.130	6.3	103	0.00
14	T	1,1,2-Trichloroethane	0.279	0.261	6.5	99	0.00
15	T	Tetrachloroethene	0.376	0.362	3.7	101	0.00
16	T	Chlorobenzene	0.934	0.876	6.2	99	0.00
17	T	1,1,1,2-Tetrachloroethane	0.327	0.302	7.6	98	0.00
18	T	Ethylbenzene	1.540	1.411	8.4	97	0.00
19	T	m&p-Xylene	1.186	1.084	8.6	99	0.00
20	T	o-Xylene	1.274	1.162	8.8	97	0.00
21	T	1,1,2,2-Tetrachloroethane	0.594	0.526	11.4	93	0.00
22	T	1,3,5-Trimethylbenzene	1.401	1.270	9.4	96	0.00
23	T	1,2,4-Trimethylbenzene	1.433	1.278	10.8	96	0.00
24	T	Naphthalene	2.321	2.055	11.5	91	0.00
25		2-Fluorotoluene SCAN	0.568	0.570	-0.4	101	-0.01
26		1,1-Dichloroethene SCAN	0.132	0.158	-19.7	120	0.00
27		trans-1,2-Dichloroethene SC	0.169	0.169	0.0	101	0.03
28		1,1-Dichloroethane SCAN	0.199	0.213	-7.0	108	0.01
29		cis-1,2-Dichloroethene SCAN	0.196	0.227	-15.8	117	0.01
30		Chloroform SCAN	0.183	0.215	-17.5	119	0.00
31		1,1,1-Trichloroethane SCAN	0.188	0.214	-13.8	115	0.01
32		Carbon tetrachloride SCAN	0.161	0.181	-12.4	114	0.01
33		Benzene SCAN	0.570	0.526	7.7	93	0.01
34		1,2-Dichloroethane SCAN	0.178	0.199	-11.8	113	0.00
35		Trichloroethene SCAN	0.124	0.139	-12.1	113	0.00
36		Toluene-d8 SCAN	0.532	0.553	-3.9	105	0.00
37		Toluene SCAN	0.655	0.700	-6.9	108	0.00
38		1,1,2-Trichloroethane SCAN	0.164	0.168	-2.4	103	-0.01
39		Tetrachloroethene SCAN	0.147	0.146	0.7	100	0.00
40		Chlorobenzene SCAN	0.471	0.480	-1.9	103	0.00
41		1,1,1,2-Tetrachloroethane S	0.162	0.165	-1.9	103	0.00
42		Ethylbenzene SCAN	1.249	1.295	-3.7	105	0.00
43		m&p-Xylene SCAN	1.249	1.295	-3.7	105	0.00
44		o-Xylene SCAN	0.682	0.717	-5.1	106	0.00
45		1,1,2,2-Tetrachloroethane S	0.355	0.345	2.8	98	0.00
46		1,3,5-Trimethylbenzene SCAN	0.719	0.729	-1.4	102	0.00
47		1,2,4-Trimethylbenzene SCAN	0.735	0.744	-1.2	102	0.00
48		Naphthalene SCAN	1.103	1.033	6.3	95	0.00

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102003.D
Acq On : 10 Dec 2020 9:19
InstName : AG5975C
Operator : TD
Sample : S20L031-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 09:38:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

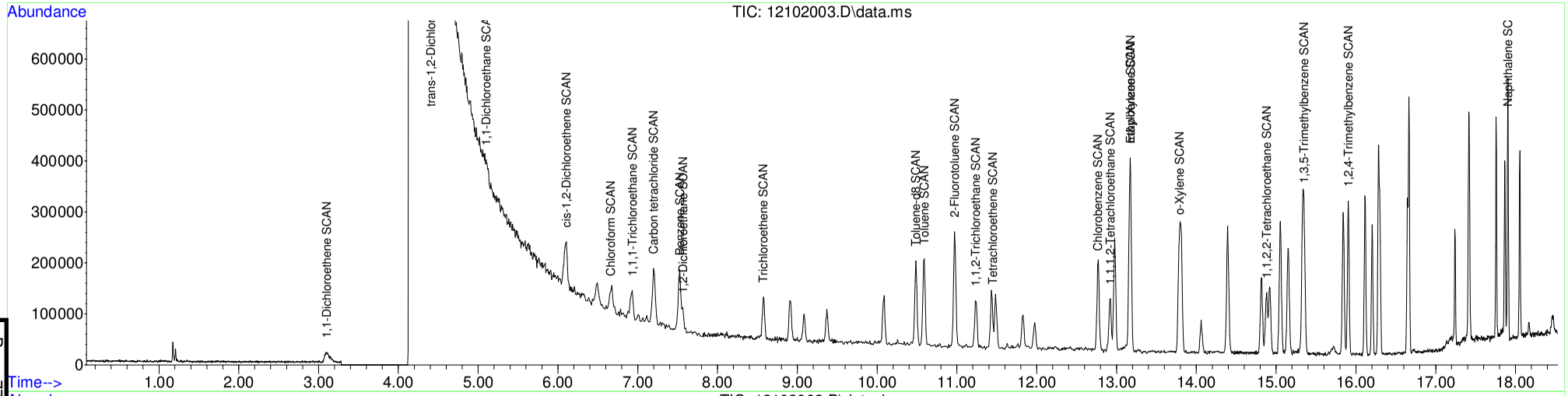
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	207017	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.488	98	192845	4809.82 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 96.20%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.094	61	45786	5577.85 ug/L	82
3] trans-1,2-Dichloroethene	4.396	61	52907	5112.58 ug/L	98
4] 1,1-Dichloroethane	5.106	63	63361	5126.37 ug/L	95
5] cis-1,2-Dichloroethene	6.101	61	65017	5079.04 ug/L	98
6] Chloroform	6.664	83	62195	5058.36 ug/L	100
7] 1,1,1-Trichloroethane	6.920	97	66901	5065.14 ug/L	100
8] Carbon tetrachloride	7.187	117	62975	4987.04 ug/L	100
9] Benzene	7.516	78	168241	4829.64 ug/L	99
10] 1,2-Dichloroethane	7.552	62	61592	5182.90 ug/L	97
11] Trichloroethene	8.575	130	53173	4834.58 ug/L	97
13] Toluene	10.582	91	233949	4686.42 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	54051	4674.65 ug/L	99
15] Tetrachloroethene	11.432	166	75036	4825.76 ug/L	100
16] Chlorobenzene	12.766	112	181407	4690.72 ug/L	97
17] 1,1,1,2-Tetrachloroethane	12.917	131	62517	4618.73 ug/L	100
18] Ethylbenzene	12.972	91	292073	4580.71 ug/L	99
19] m&p-Xylene	13.163	91	448776	9139.91 ug/L	98
20] o-Xylene	13.782	91	240539	4561.02 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.877	83	108926	4432.69 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	262989	4534.61 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	264627	4461.04 ug/L	97
24] Naphthalene	17.903	128	425352	4425.77 ug/L	99
25) 2-Fluorotoluene SCAN	10.969	109	117991	5021.20 ug/L	92
26) 1,1-Dichloroethene SCAN	3.100	61	32609	5944.29 ug/L #	30
27) trans-1,2-Dichloroethe...	4.408	61	34926	4998.52 ug/L	80
28) 1,1-Dichloroethane SCAN	5.098	63	44177	5356.44 ug/L	94
29) cis-1,2-Dichloroethene...	6.107	61	47049	5802.94 ug/L	75
30) Chloroform SCAN	6.663	83	44419	5873.75 ug/L	93
31) 1,1,1-Trichloroethane ...	6.930	97	44367	5685.45 ug/L	90
32) Carbon tetrachloride SCAN	7.198	117	37553	5631.37 ug/L	95
33) Benzene SCAN	7.526	78	108916	4613.42 ug/L	93
34) 1,2-Dichloroethane SCAN	7.563	62	41154	5572.93 ug/L	87
35) Trichloroethene SCAN	8.574	130	28782	5591.09 ug/L	84
36) Toluene-d8 SCAN	10.486	98	114578	5198.85 ug/L	95
37) Toluene SCAN	10.591	91	144956	5341.99 ug/L	97
38) 1,1,2-Trichloroethane ...	11.231	97	34685	5099.59 ug/L	93
39) Tetrachloroethene SCAN	11.441	166	30280	4960.32 ug/L	78
40) Chlorobenzene SCAN	12.764	112	99345	5097.22 ug/L	88
41) 1,1,1,2-Tetrachloroeth...	12.915	131	34202	5086.46 ug/L	95
42) Ethylbenzene SCAN	13.169	91	268110	5184.82 ug/L	92
43) m&p-Xylene SCAN	13.169	91	268110	5184.82 ug/L	93
44) o-Xylene SCAN	13.789	91	148353	5253.87 ug/L	95
45) 1,1,2,2-Tetrachloroeth...	14.883	83	71384	4862.09 ug/L	100
46) 1,3,5-Trimethylbenzene...	15.349	105	151007	5069.16 ug/L	96
47) 1,2,4-Trimethylbenzene...	15.905	105	153954	5058.30 ug/L	94
48) Naphthalene SCAN	17.905	128	213912	4682.37 ug/L	98

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

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102003.D
Acq On : 10 Dec 2020 9:19
InstName : AG5975C
Operator : TD
Sample : S20L031-CCV1
Misc : 2030070 5 mg/L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 10 09:38:32 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration



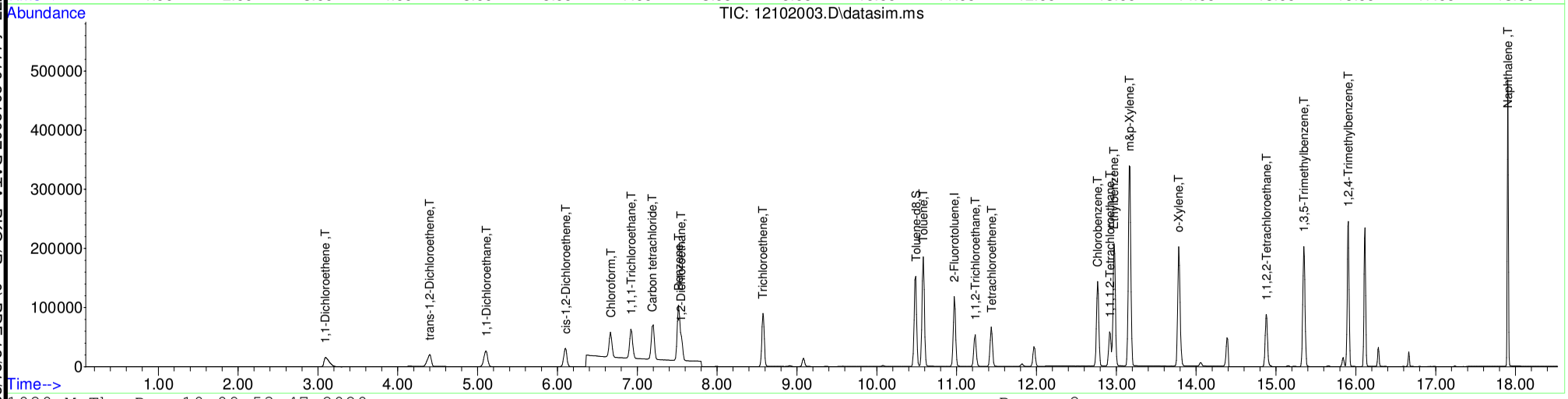


Table of Contents

S20L031-CRL1

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20L031-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 12/10/20 9:43
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	55.88	112%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	49.90	100%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	52.02	104%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	49.75	99%	60	140	pass
6)	Chloroform	6.652	50.0	51.55	103%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	51.90	104%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	49.95	100%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	52.23	104%	60	140	pass
11)	Trichloroethene	8.575	50.0	49.25	99%	60	140	pass
12)	Toluene-d8	10.487	50.0	51.14	102%	60	140	pass
13)	Toluene	10.582	50.0	52.92	106%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	49.82	100%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	52.61	105%	60	140	pass
16)	Chlorobenzene	12.773	50.0	51.71	103%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	50.19	100%	60	140	pass
18)	Ethylbenzene	12.972	50.0	53.97	108%	60	140	pass
19)	m&p-Xylene	13.170	100.0	110.86	111%	60	140	pass
20)	o-Xylene	13.782	50.0	53.18	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	52.04	104%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	57.12	114%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	58.13	116%	60	140	pass
24)	Naphthalene	17.904	50.0	55.01	110%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

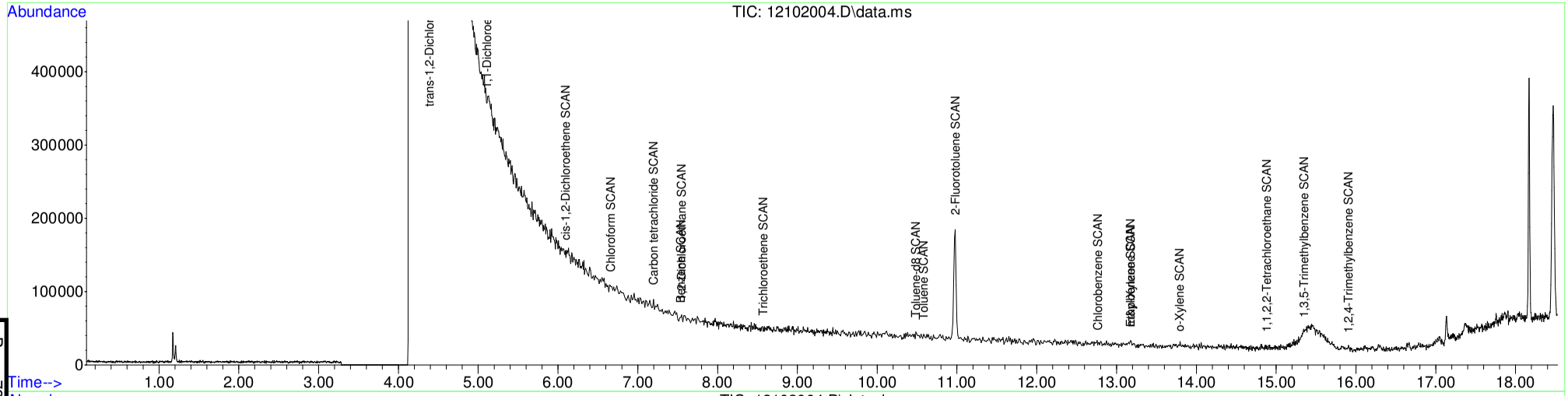
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	204465	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	2025	51.14 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.097	61	752	92.76 ug/L #	34
3] trans-1,2-Dichloroethene	4.389	61	510	49.90 ug/L	72
4] 1,1-Dichloroethane	5.093	63	635	52.02 ug/L	83
5] cis-1,2-Dichloroethene	6.094	61	629	49.75 ug/L	98
6] Chloroform	6.664	83	626	51.55 ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	677	51.90 ug/L	97
8] Carbon tetrachloride	7.187	117	623	49.95 ug/L	91
9] Benzene	7.515	78	1917	55.72 ug/L	57
10] 1,2-Dichloroethane	7.552	62	613	52.23 ug/L	67
11] Trichloroethene	8.575	130	535	49.25 ug/L	94
13] Toluene	10.582	91	2609	52.92 ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	569	49.82 ug/L	85
15] Tetrachloroethene	11.432	166	808	52.61 ug/L	100
16] Chlorobenzene	12.765	112	1975	51.71 ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.916	131	671	50.19 ug/L	97
18] Ethylbenzene	12.972	91	3399	53.97 ug/L	95
19] m&p-Xylene	13.171	91	5376	110.86 ug/L	95
20] o-Xylene	13.782	91	2770	53.18 ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	1263	52.04 ug/L	99
22] 1,3,5-Trimethylbenzene	15.348	105	3272	57.12 ug/L	96
23] 1,2,4-Trimethylbenzene	15.904	105	3406	58.13 ug/L	94
24] Naphthalene	17.906	128	4712	49.64 ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	119951	5168.33 ug/L	99
27) trans-1,2-Dichloroethe...	4.388	61	175	25.36 ug/L #	17
28) 1,1-Dichloroethane SCAN	5.111	63	190	23.32 ug/L #	15
29) cis-1,2-Dichloroethene...	6.087	61	269	33.59 ug/L #	58
30) Chloroform SCAN	6.663	83	430	57.57 ug/L #	23
32) Carbon tetrachloride SCAN	7.198	117	247	37.50 ug/L #	9
33) Benzene SCAN	7.538	78	4359	186.94 ug/L	94
34) 1,2-Dichloroethane SCAN	7.551	62	271	37.16 ug/L #	40
35) Trichloroethene SCAN	8.568	130	144	28.32 ug/L #	25
36) Toluene-d8 SCAN	10.486	98	2152	98.86 ug/L #	15
37) Toluene SCAN	10.581	91	674	25.15 ug/L #	1
40) Chlorobenzene SCAN	12.764	112	1038	53.92 ug/L #	65
42) Ethylbenzene SCAN	13.169	91	3758	73.58 ug/L	84
43) m&p-Xylene SCAN	13.169	91	3758	73.58 ug/L	84
44) o-Xylene SCAN	13.789	91	2125	76.20 ug/L #	56
45) 1,1,2,2-Tetrachloroeth...	14.879	83	833	57.45 ug/L #	49
46) 1,3,5-Trimethylbenzene...	15.352	105	2420	82.25 ug/L	83
47) 1,2,4-Trimethylbenzene...	15.903	105	1880	62.54 ug/L #	60

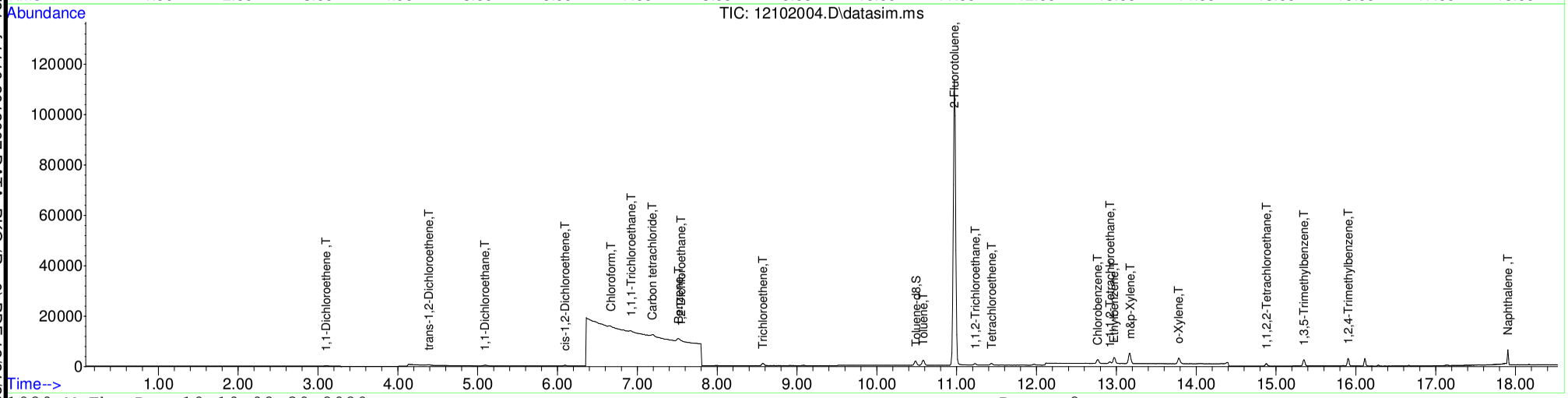
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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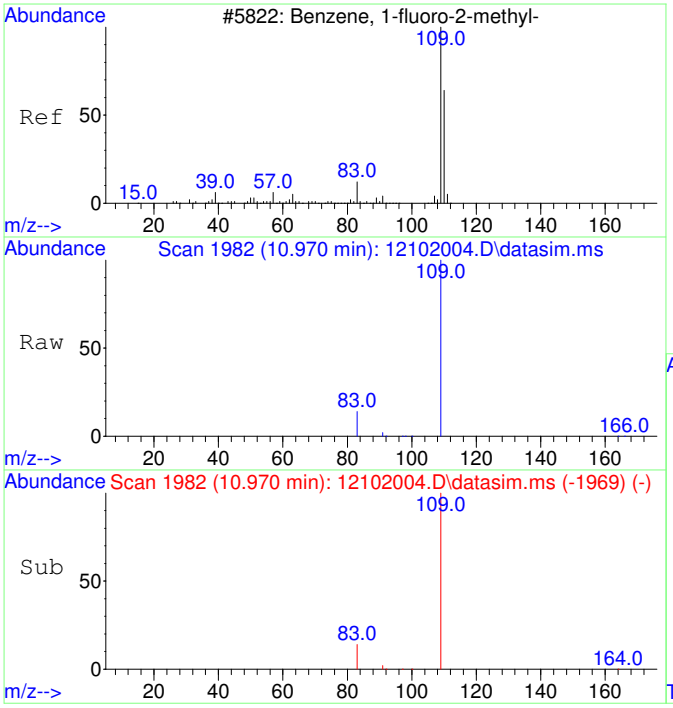
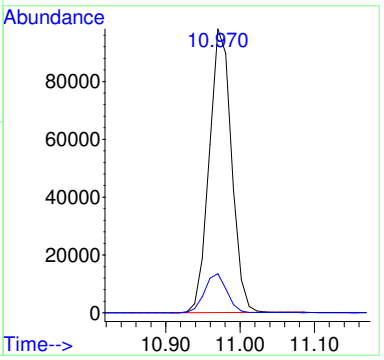
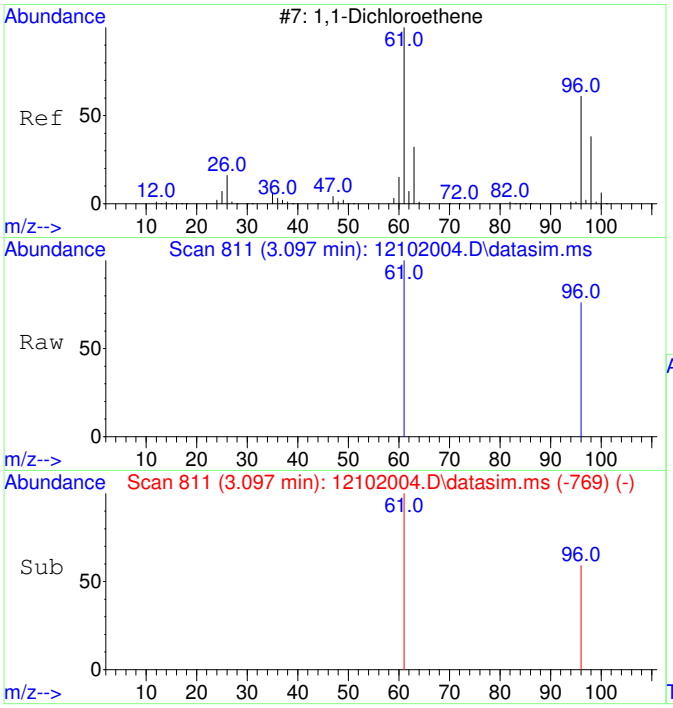


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:109 Resp: 204465

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

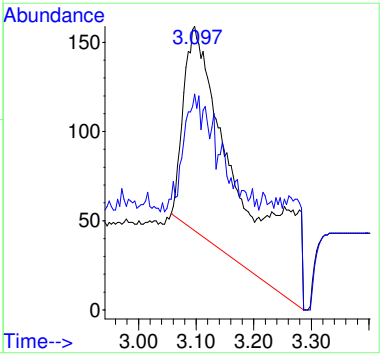




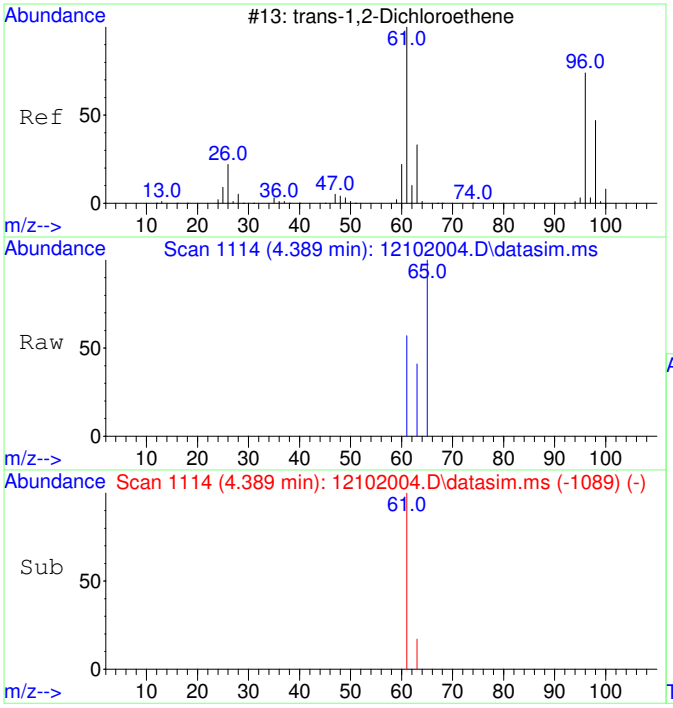
#2
1,1-Dichloroethene
Concen: 92.76 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 752

Ion	Ratio	Lower	Upper
61	100		
96	13.8	37.2	97.2#



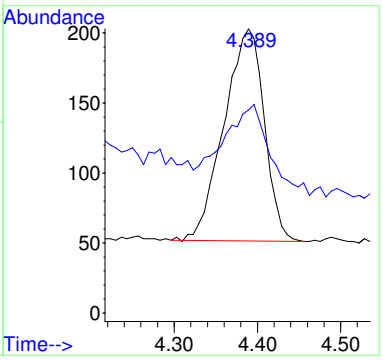
Before MI:
IMPROPER
BASELINE

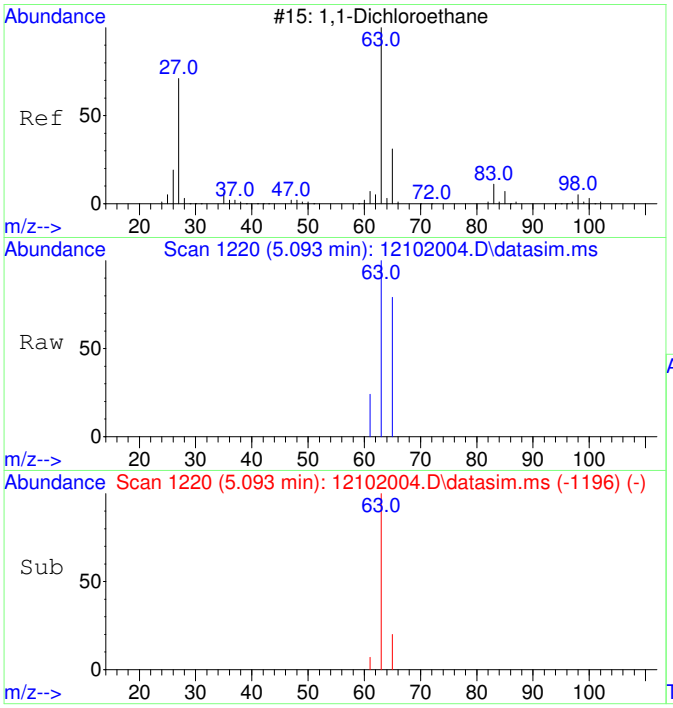


#3
trans-1,2-Dichloroethene
Concen: 49.90 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 510

Ion	Ratio	Lower	Upper
61	100		
63	48.2	2.4	62.4

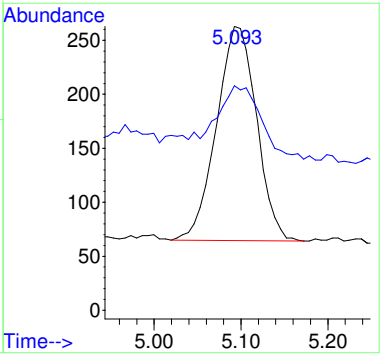


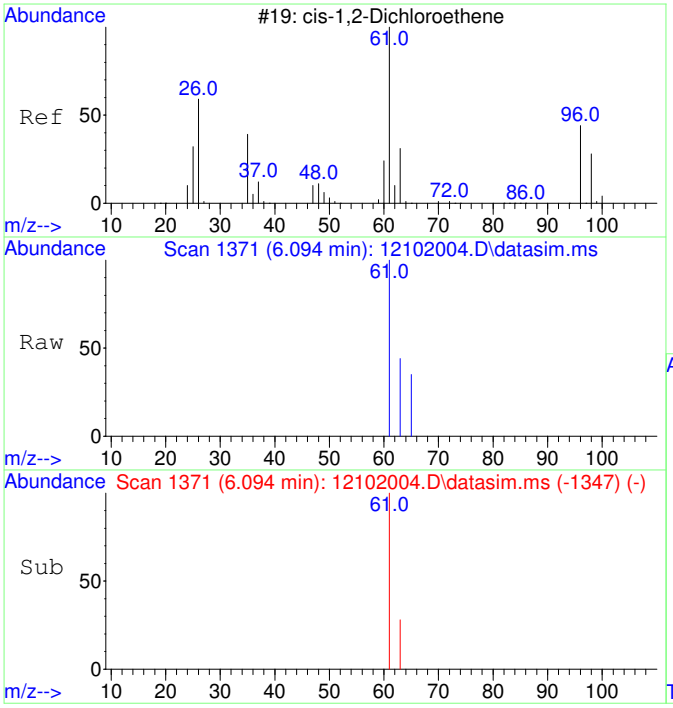


#4
1,1-Dichloroethane
Concen: 52.02 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 635

Ion	Ratio	Lower	Upper
63	100		
65	41.3	1.8	61.8

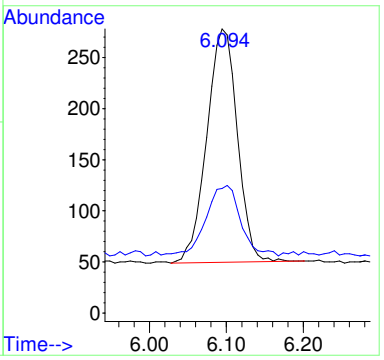


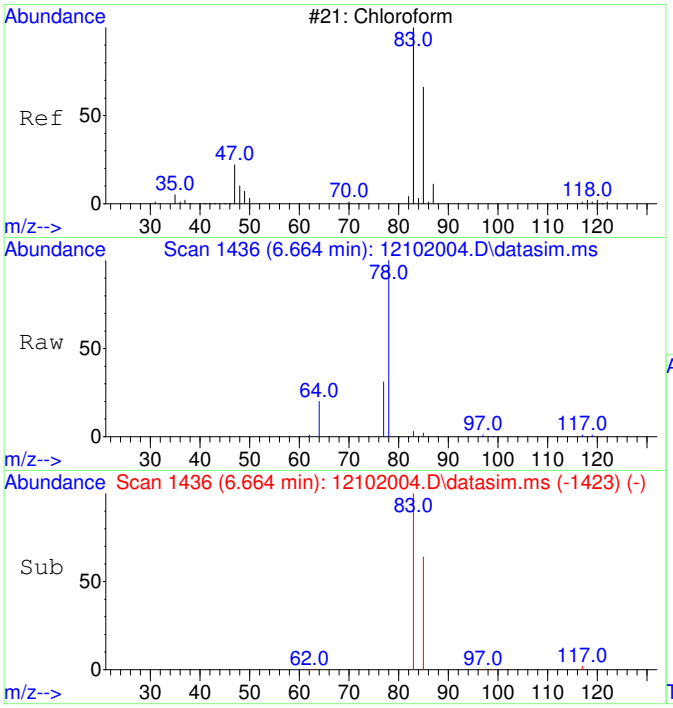


#5
cis-1,2-Dichloroethene
Concen: 49.75 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 629

Ion	Ratio	Lower	Upper
61	100		
63	33.7	2.5	62.5

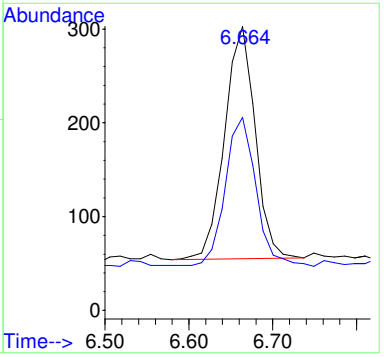


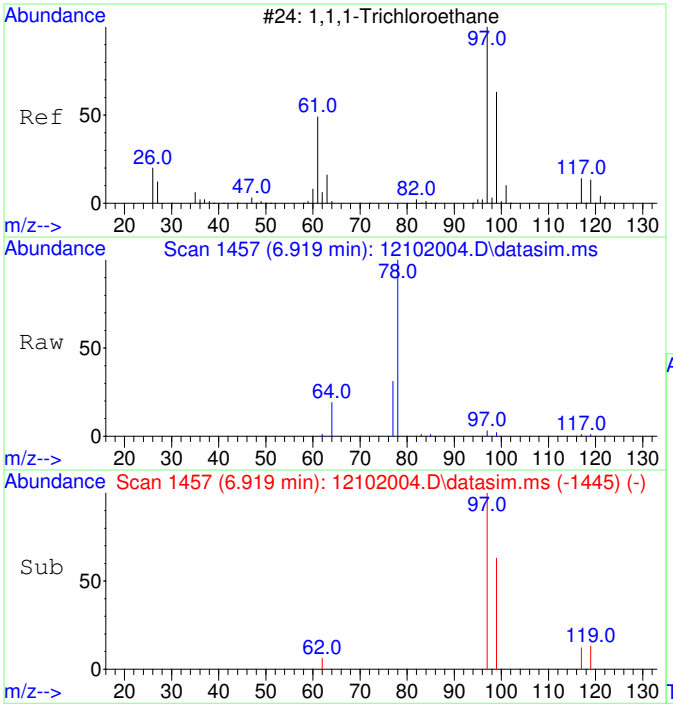


#6
Chloroform
Concen: 51.55 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 626

Ion	Ratio	Lower	Upper
83	100		
85	63.9	35.1	95.1

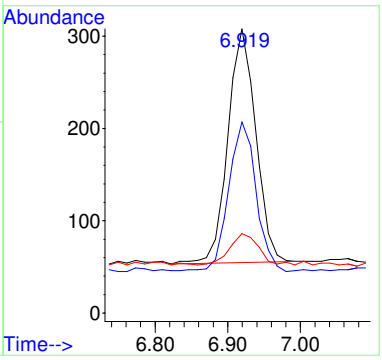


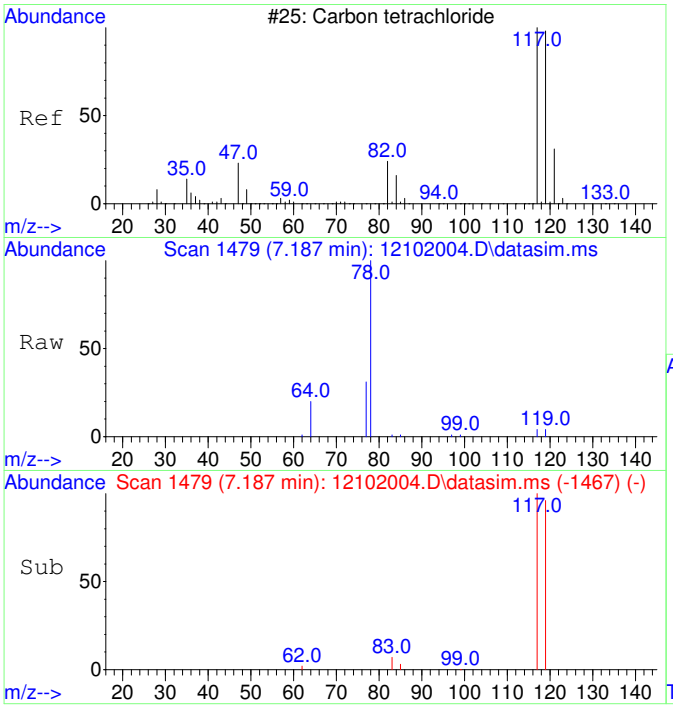


#7
1,1,1-Trichloroethane
Concen: 51.90 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 677

Ion	Ratio	Lower	Upper
97	100		
99	61.6	34.6	94.6
117	13.9	0.0	43.2

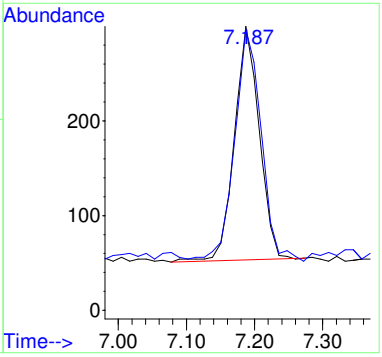


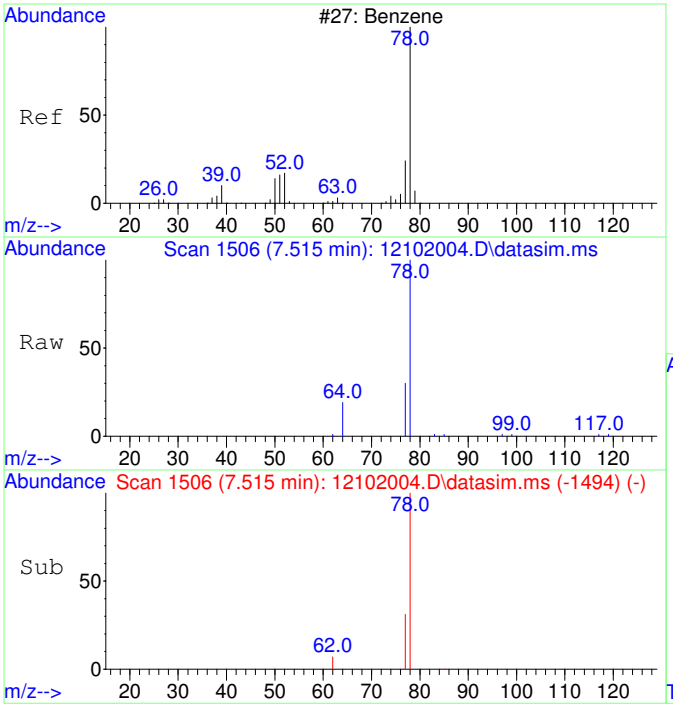


#8
Carbon tetrachloride
Concen: 49.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 623

Ion	Ratio	Lower	Upper
117	100		
119	105.0	66.4	126.4

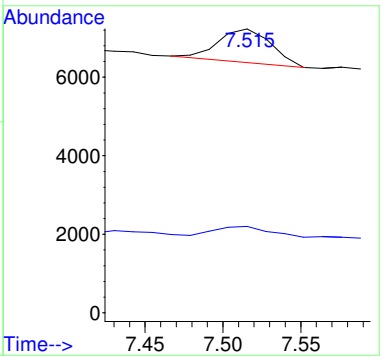


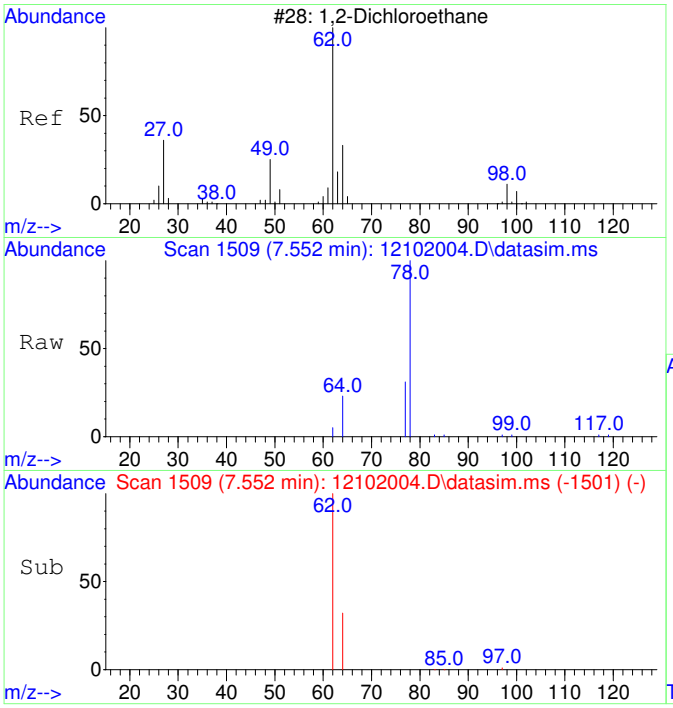


#9
Benzene
Concen: 55.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 1917

Ion	Ratio	Lower	Upper
78	100		
77	44.3	0.0	53.2

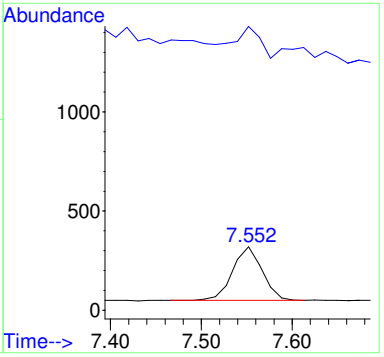


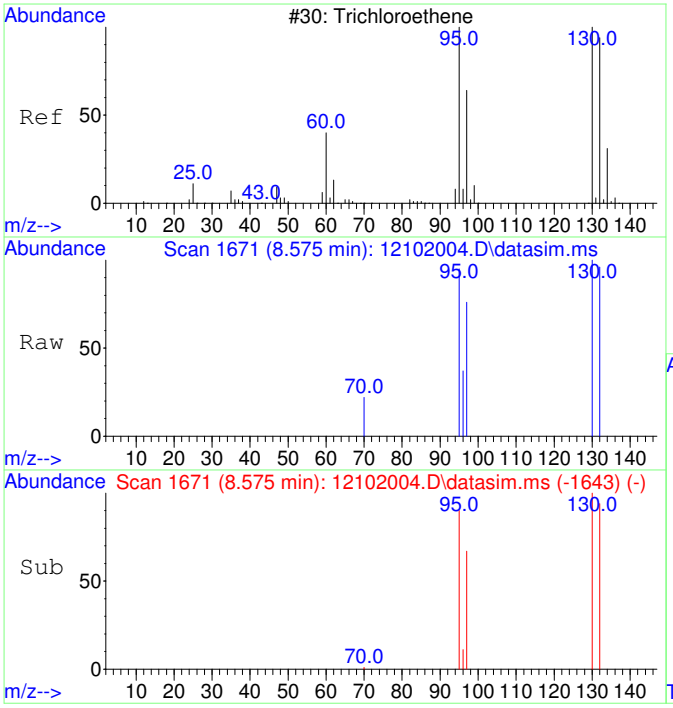


#10
1,2-Dichloroethane
Concen: 52.23 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 613

Ion	Ratio	Lower	Upper
62	100		
64	50.9	2.3	62.3

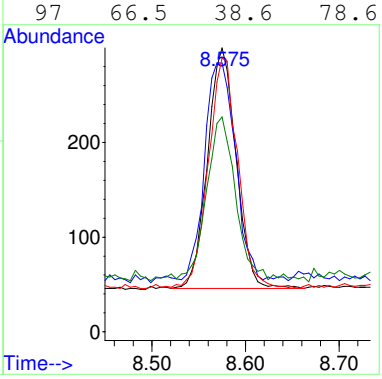


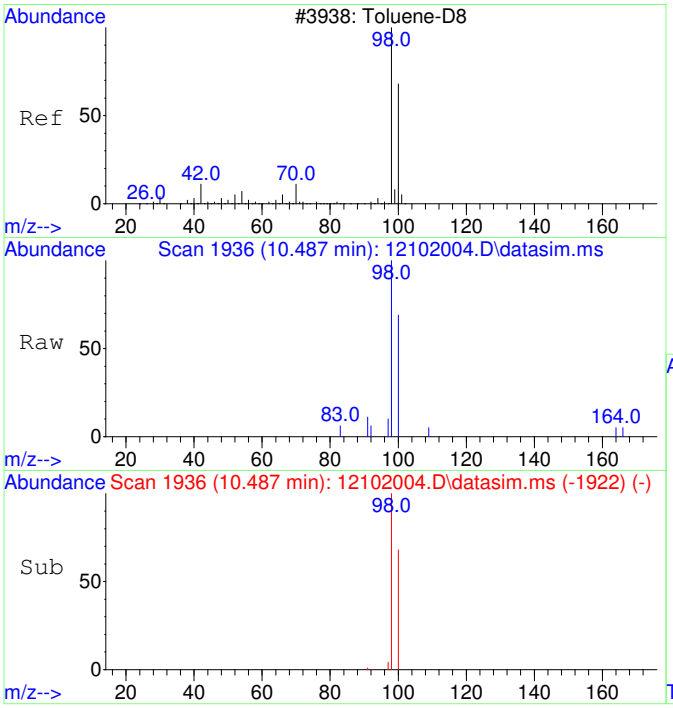


#11
Trichloroethene
Concen: 49.25 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 535

Ion	Ratio	Lower	Upper
130	100		
95	96.6	60.7	120.7
132	98.5	76.0	116.0
97	66.5	38.6	78.6

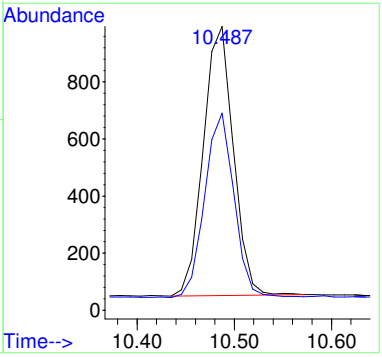


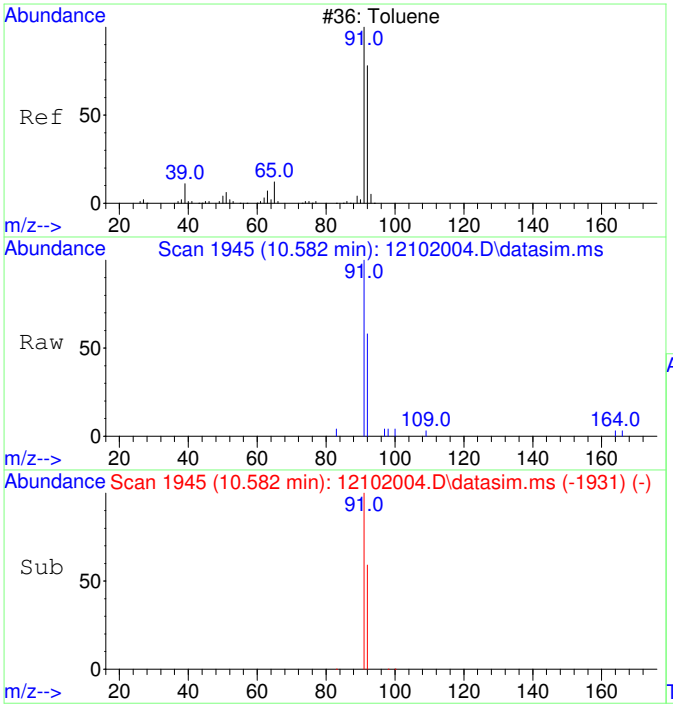


#12
Toluene-d8
Concen: 51.14 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2025

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

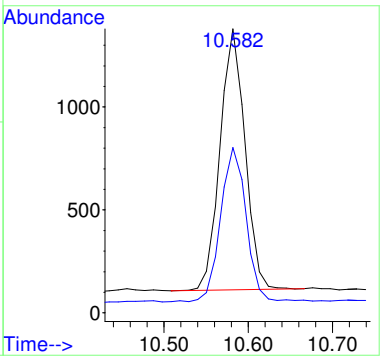


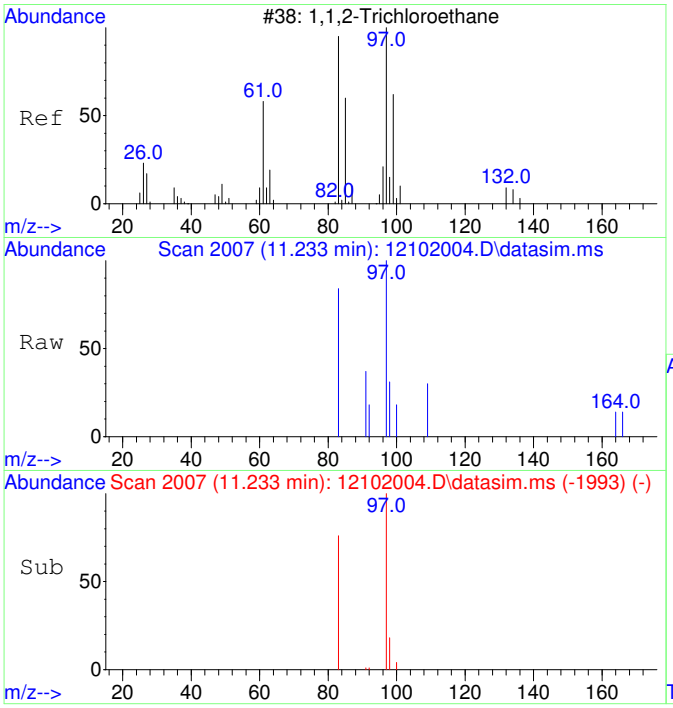


#13
Toluene
Concen: 52.92 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2609

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

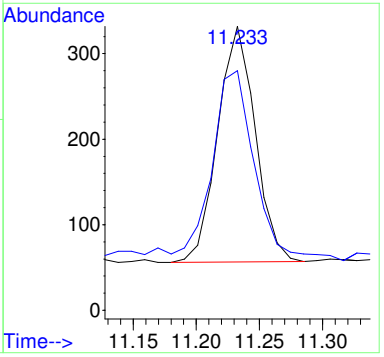


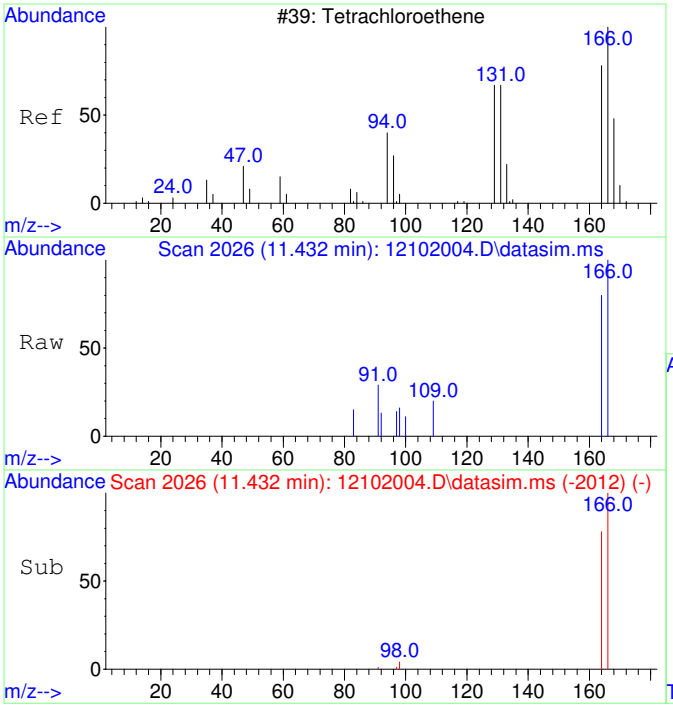


#14
1,1,2-Trichloroethane
Concen: 49.82 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 569

Ion	Ratio	Lower	Upper
97	100		
83	94.4	51.2	111.2

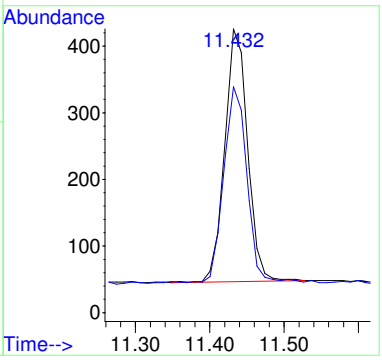


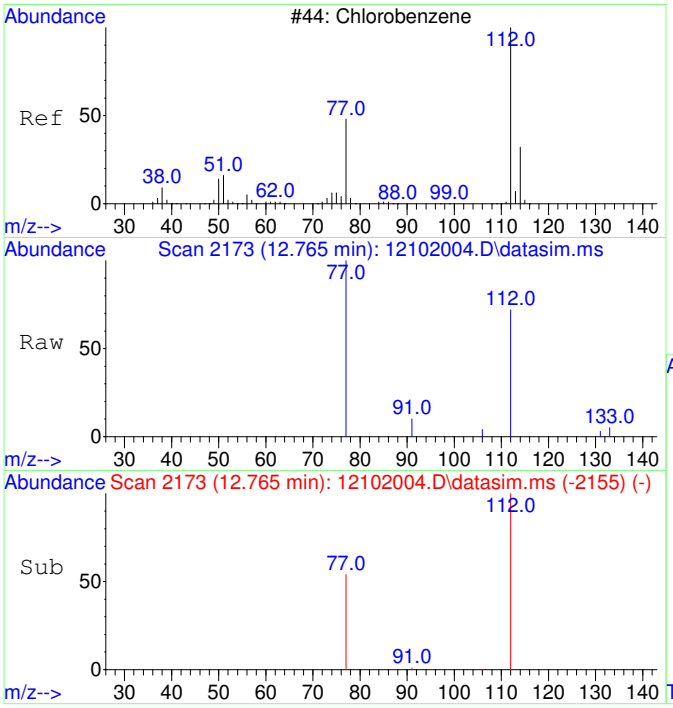


#15
Tetrachloroethene
Concen: 52.61 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:166 Resp: 808

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

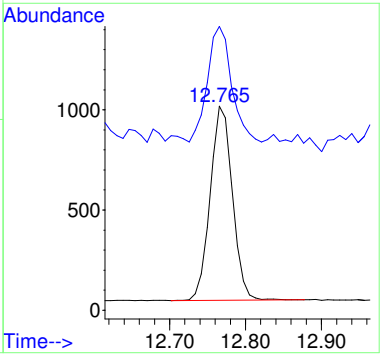


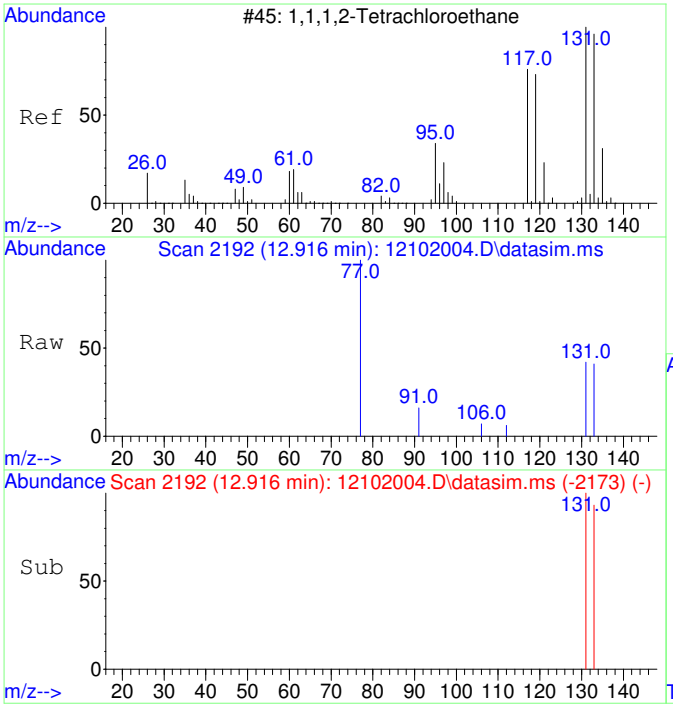


#16
Chlorobenzene
Concen: 51.71 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1975

Ion	Ratio	Lower	Upper
112	100		
77	64.6	23.6	83.6

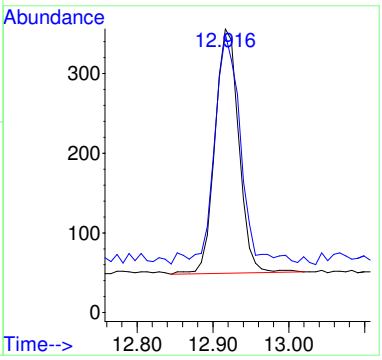


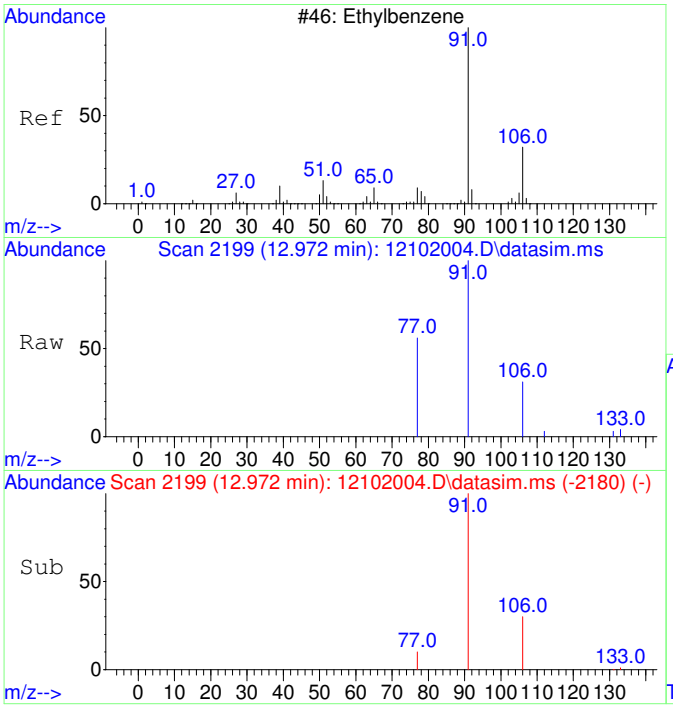


#17
1,1,1,2-Tetrachloroethane
Concen: 50.19 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:131 Resp: 671

Ion	Ratio	Lower	Upper
131	100		
133	99.1	66.3	126.3

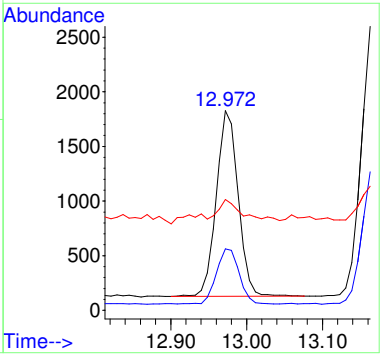


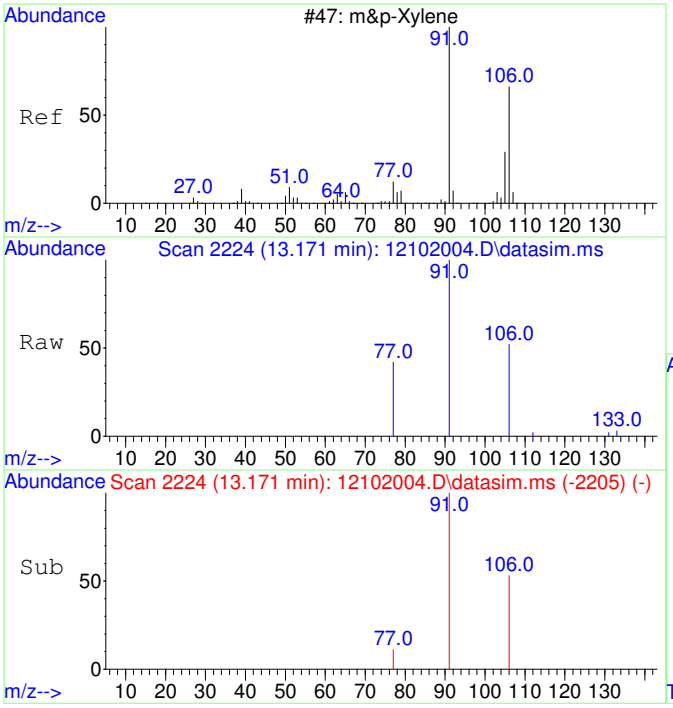


#18
Ethylbenzene
Concen: 53.97 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3399

Ion	Ratio	Lower	Upper
91	100		
106	30.8	3.0	63.0
77	10.9	0.0	38.2

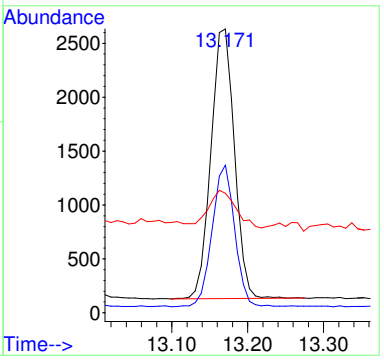


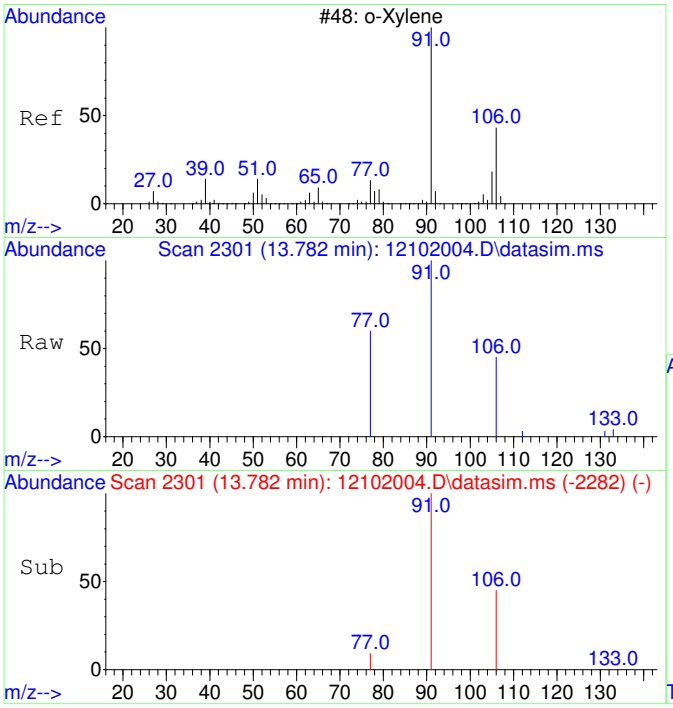


#19
m&p-Xylene
Concen: 110.86 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 5376

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	16.7	0.0	42.4

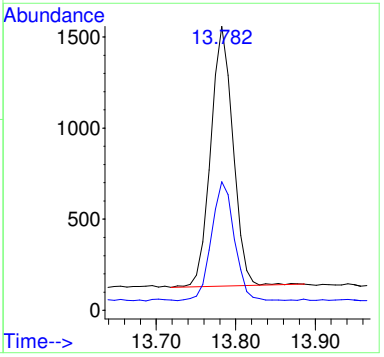


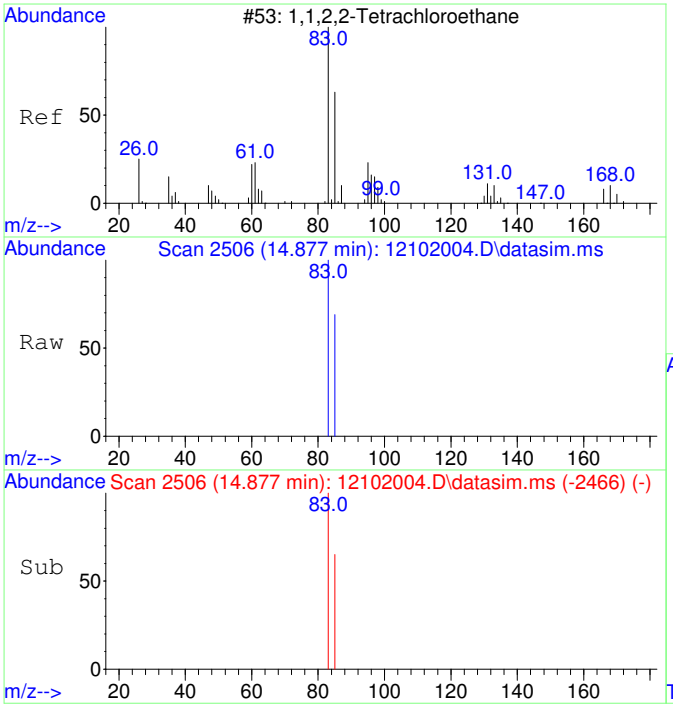


#20
o-Xylene
Concen: 53.18 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2770

Ion	Ratio	Lower	Upper
91	100		
106	46.9	19.2	79.2

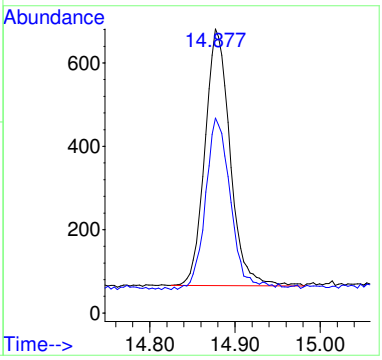


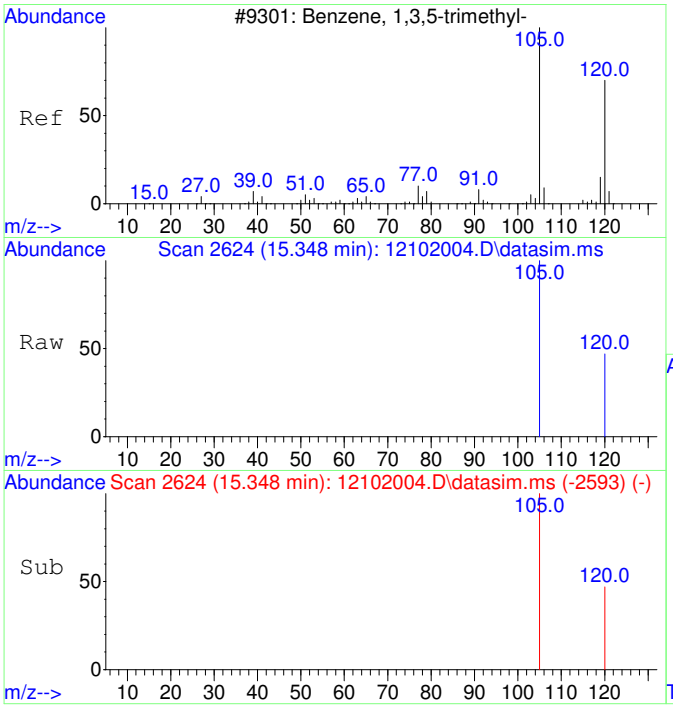


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 1263

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

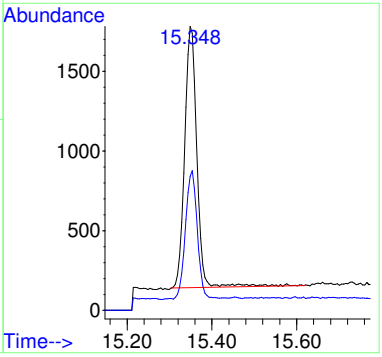


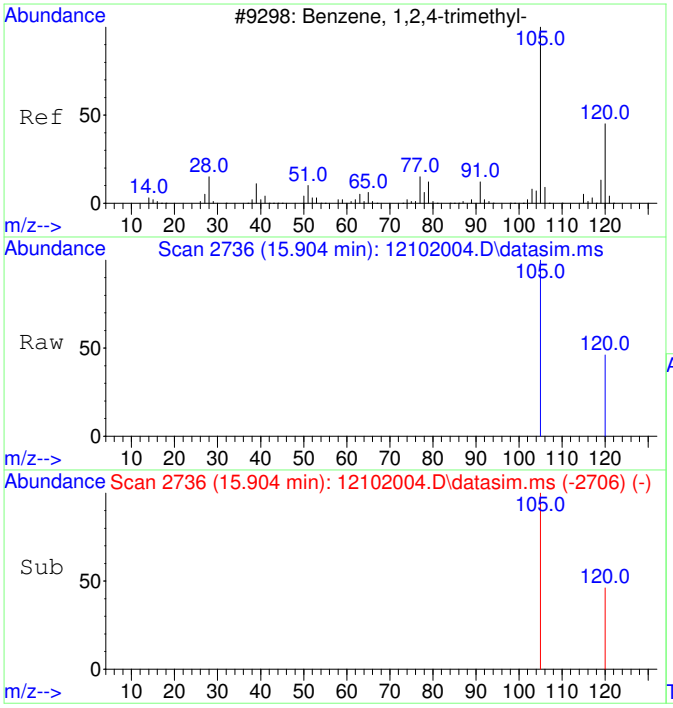


#22
1,3,5-Trimethylbenzene
Concen: 57.12 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3272

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

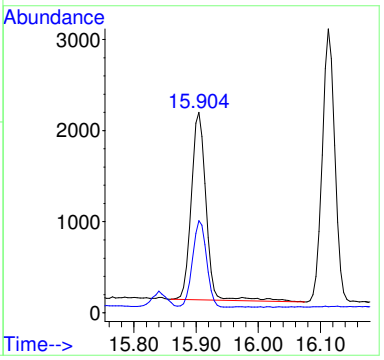


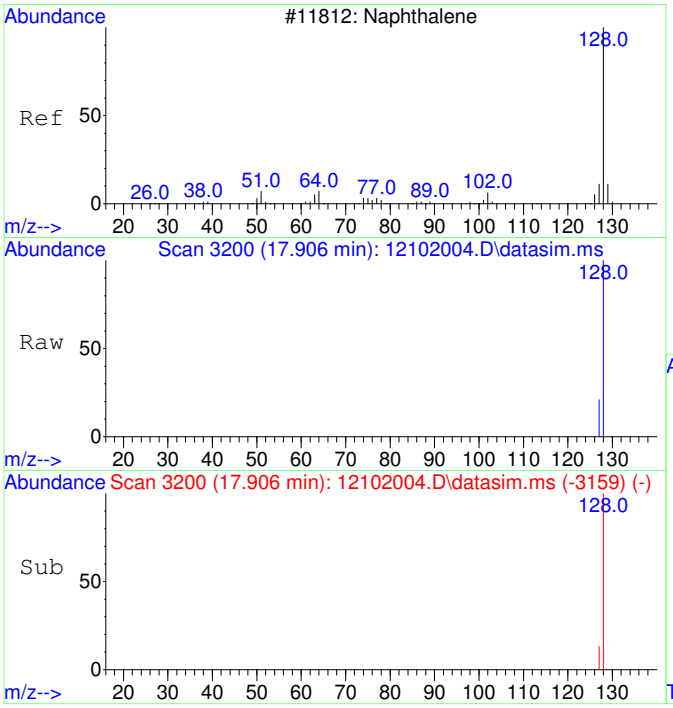


#23
1,2,4-Trimethylbenzene
Concen: 58.13 ug/L
RT: 15.904 min Scan# 2736
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3406

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

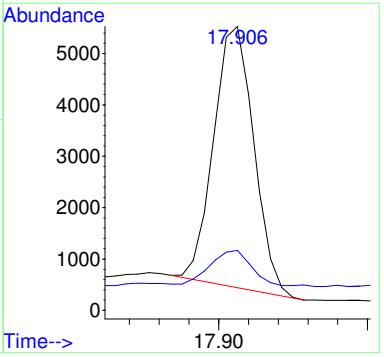




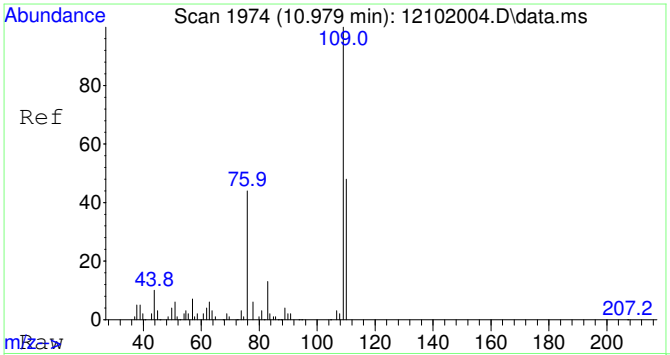
#24
Naphthalene
Concen: 49.64 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:128 Resp: 4712

Ion	Ratio	Lower	Upper
128	100		
127	13.6	0.0	42.5



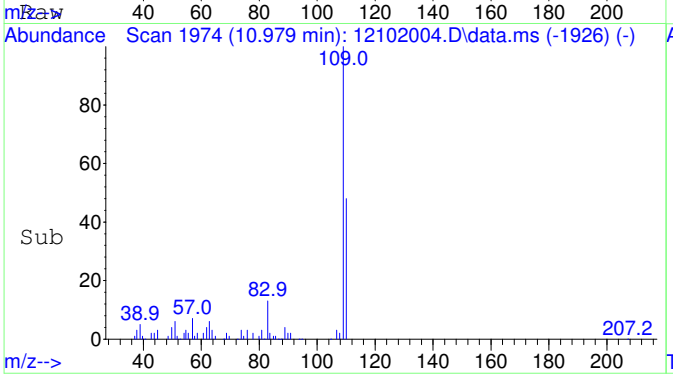
Before MI:
IMPROPER
BASELINE

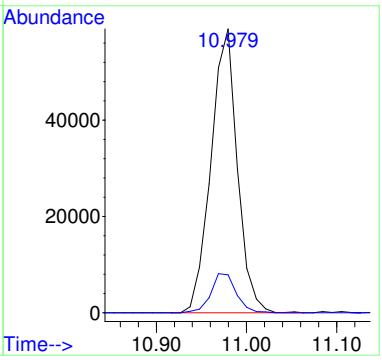


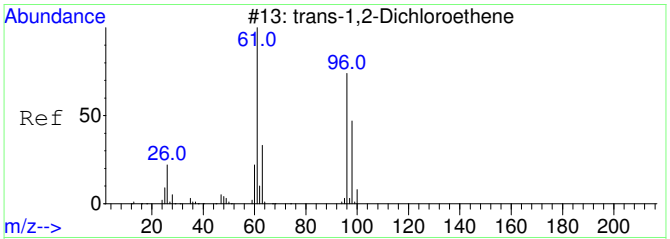
#25
2-Fluorotoluene SCAN
Concen: 5168.33 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

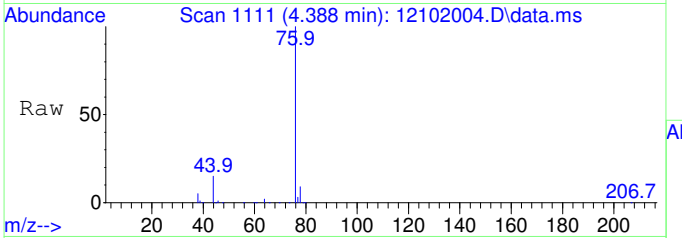
Tgt Ion:109 Resp: 119951

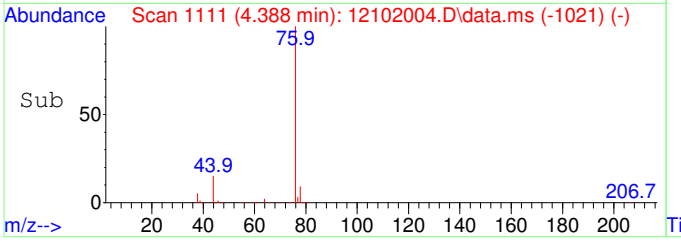
Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	43.8







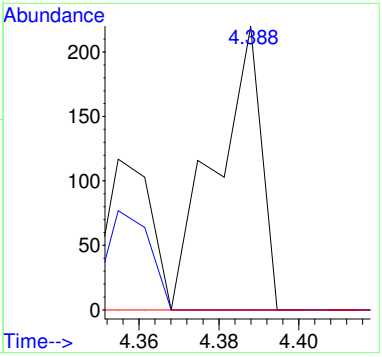


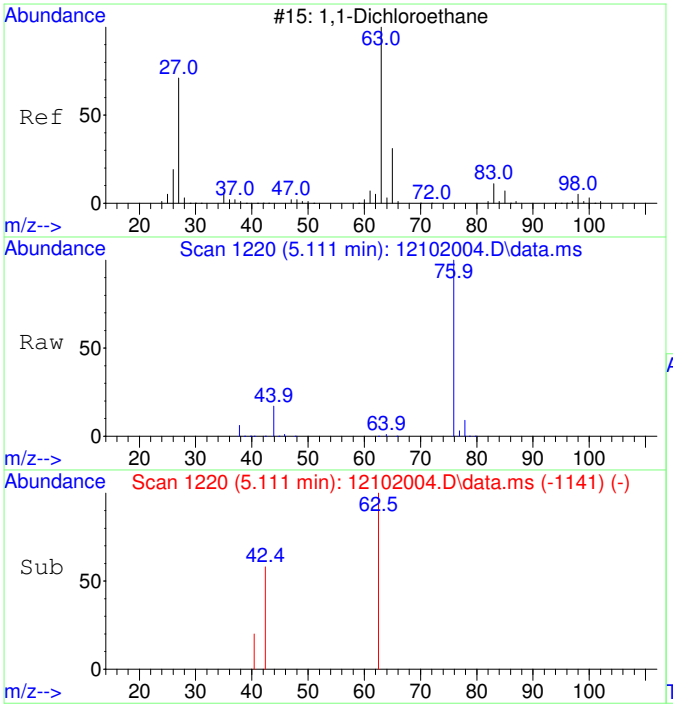


#27
trans-1,2-Dichloroethene SCAN
Concen: 25.36 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 175

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

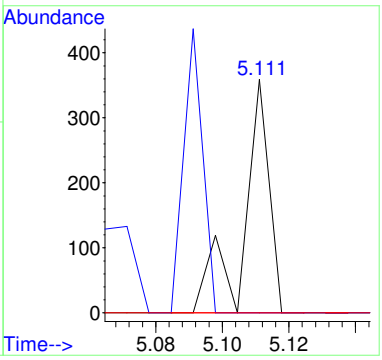


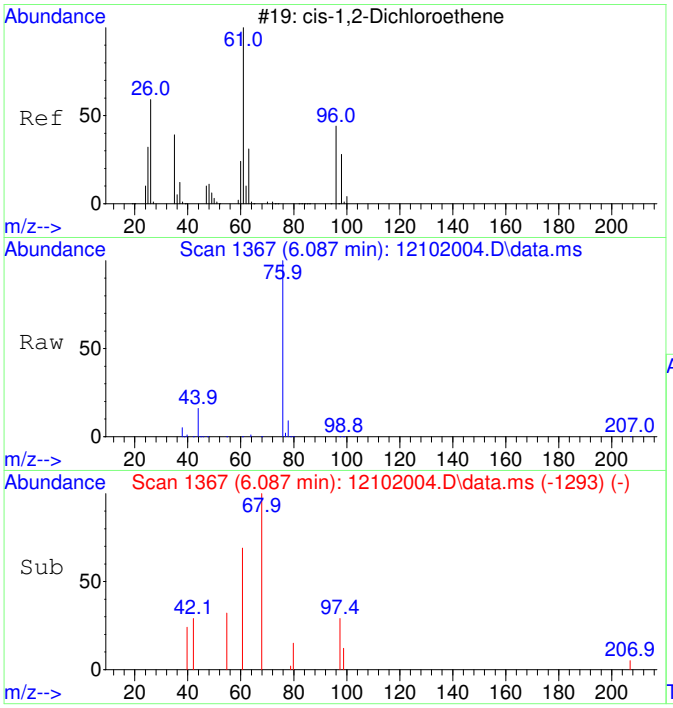


#28
1,1-Dichloroethane SCAN
Concen: 23.32 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.027 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 190

Ion	Ratio	Lower	Upper
63	100		
65	91.6	1.3	61.3#
83	0.0	0.0	45.9

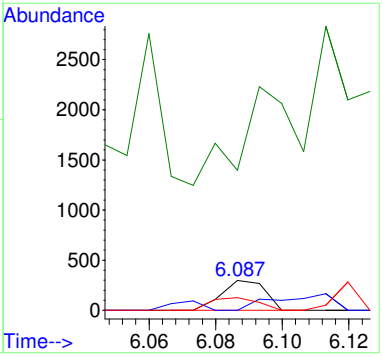


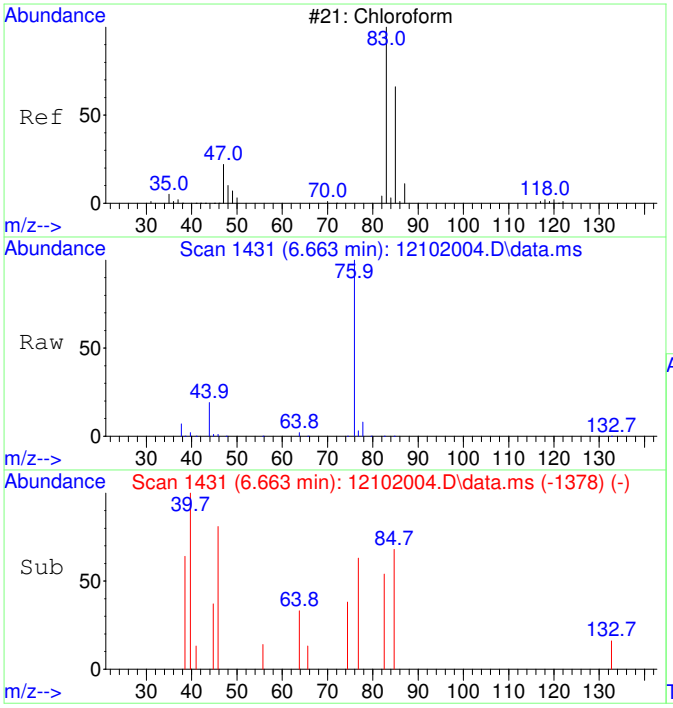


#29
cis-1,2-Dichloroethene SCAN
Concen: 33.59 ug/L
RT: 6.087 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 269

Ion	Ratio	Lower	Upper
61	100		
96	23.8	39.9	99.9#
98	46.5	13.5	73.5
64	0.0	4.5	64.5#

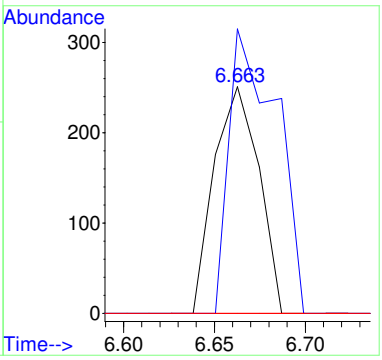


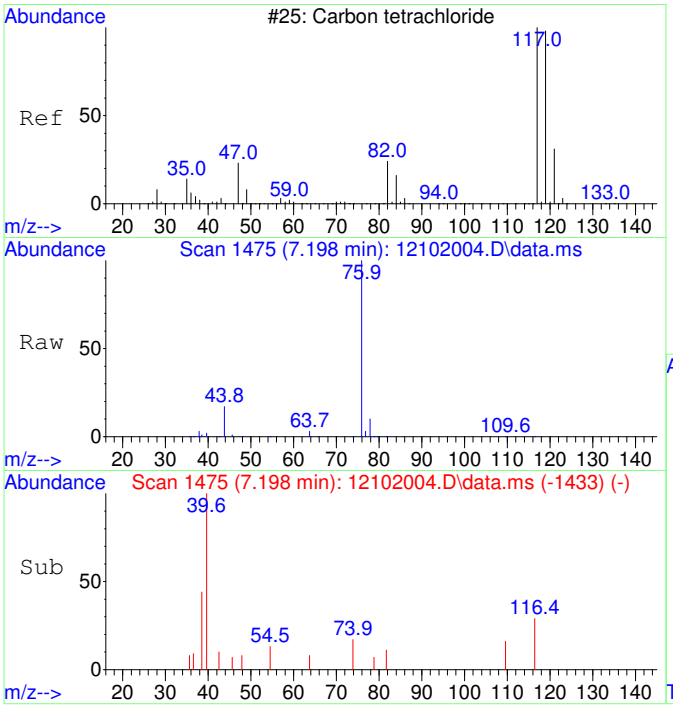


#30
Chloroform SCAN
Concen: 57.57 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 430

Ion	Ratio	Lower	Upper
83	100		
85	133.5	34.6	94.6#
47	0.0	0.0	53.4

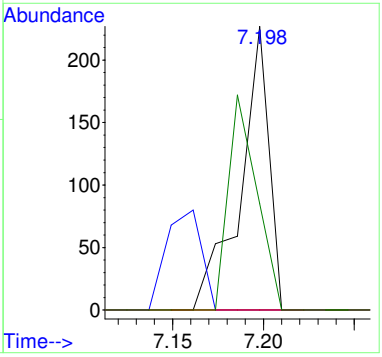


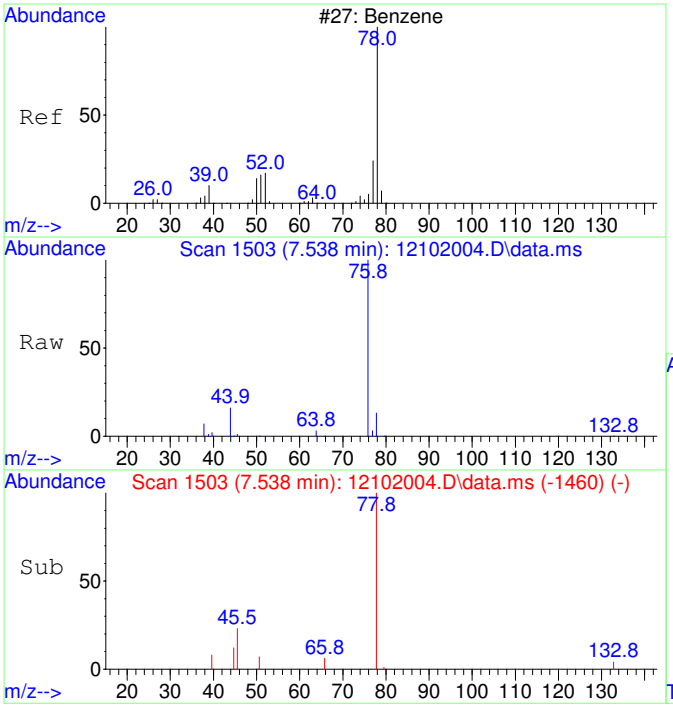


#32
Carbon tetrachloride SCAN
Concen: 37.50 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 247

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	76.1	0.0	59.2#

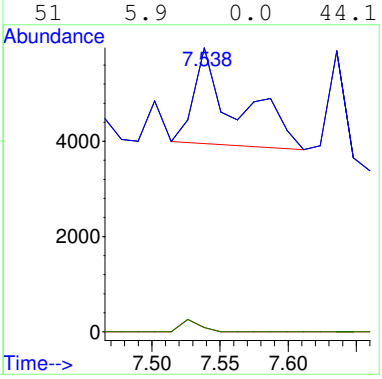


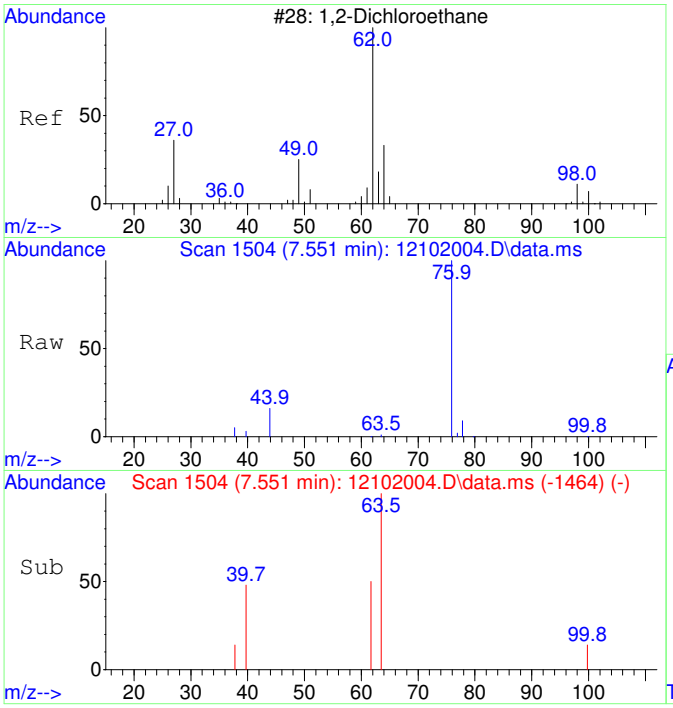


#33
Benzene SCAN
Concen: 186.94 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.025 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 4359

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

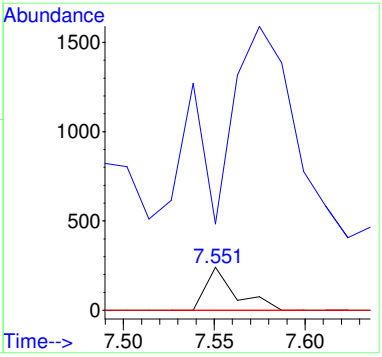


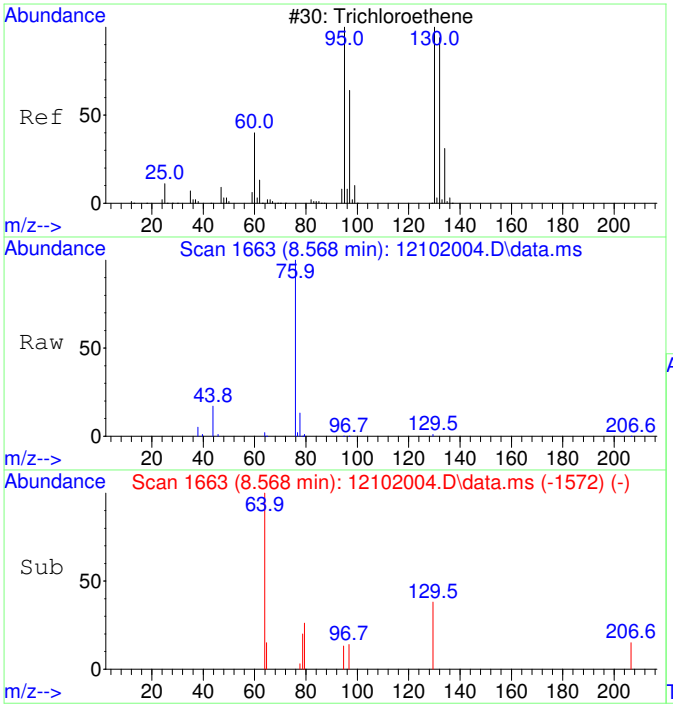


#34
1,2-Dichloroethane SCAN
Concen: 37.16 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 271

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

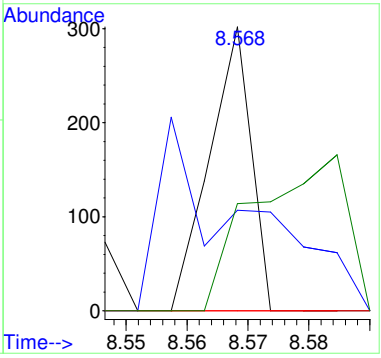


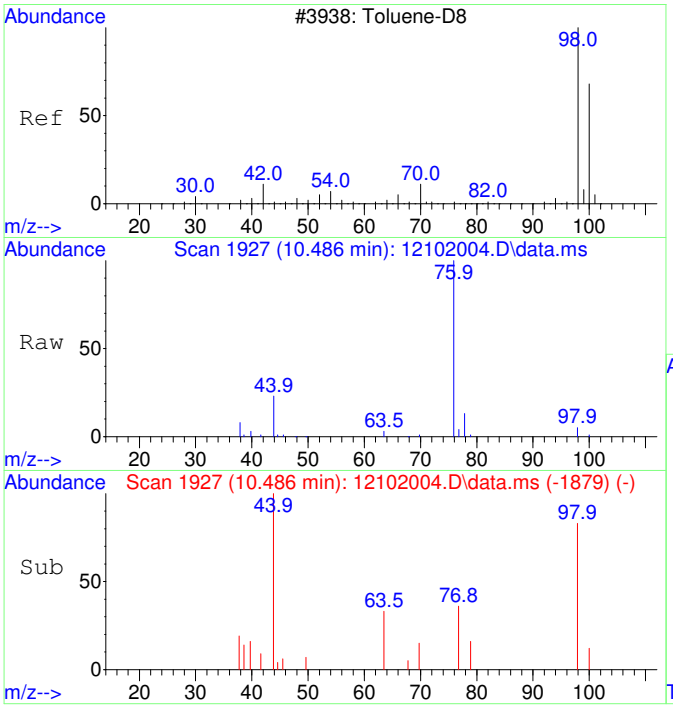


#35
Trichloroethene SCAN
Concen: 28.32 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 144

Ion	Ratio	Lower	Upper
130	100		
95	140.3	60.5	120.5#
132	0.0	59.6	119.6#
97	0.0	28.2	88.2#

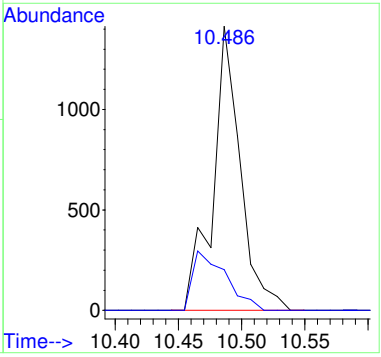


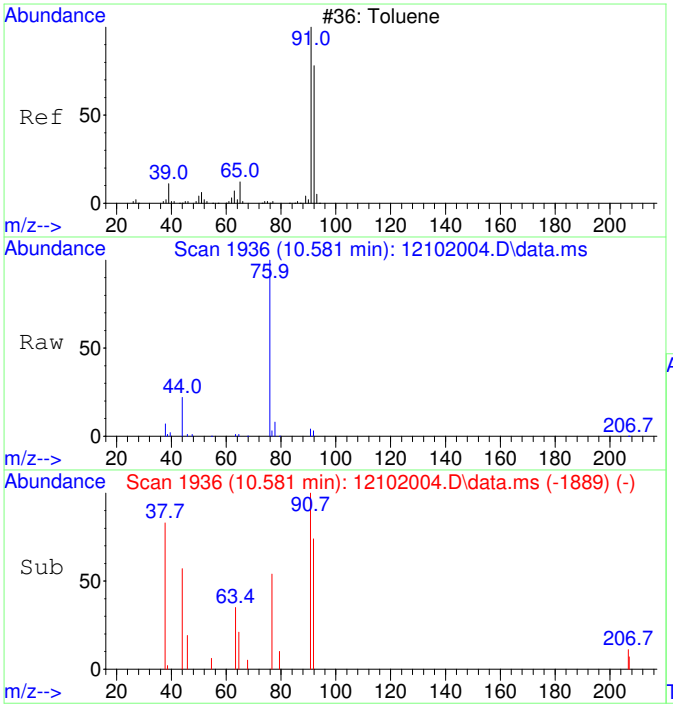


#36
Toluene-d8 SCAN
Concen: 98.86 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2152

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

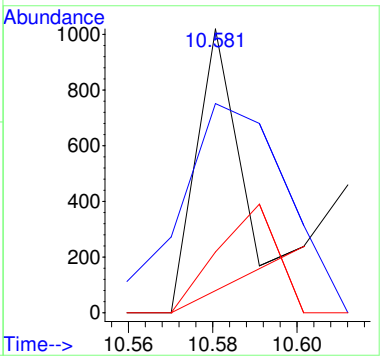


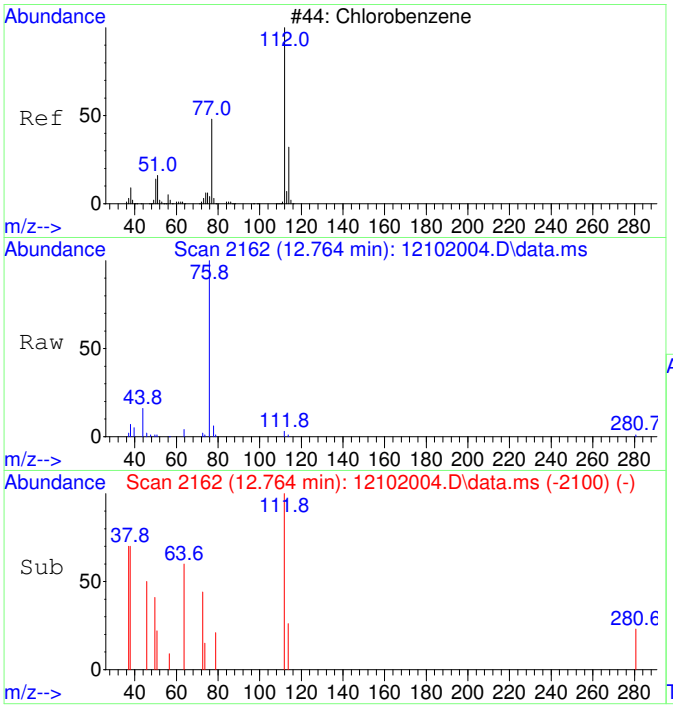


#37
Toluene SCAN
Concen: 25.15 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 674

Ion	Ratio	Lower	Upper
91	100		
92	199.0	28.3	88.3#
65	56.8	0.0	41.0#

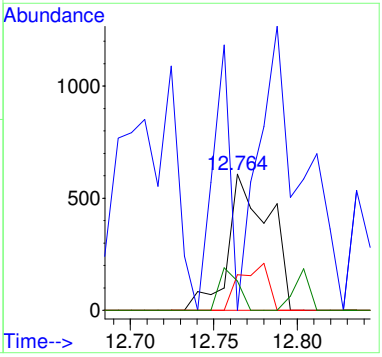


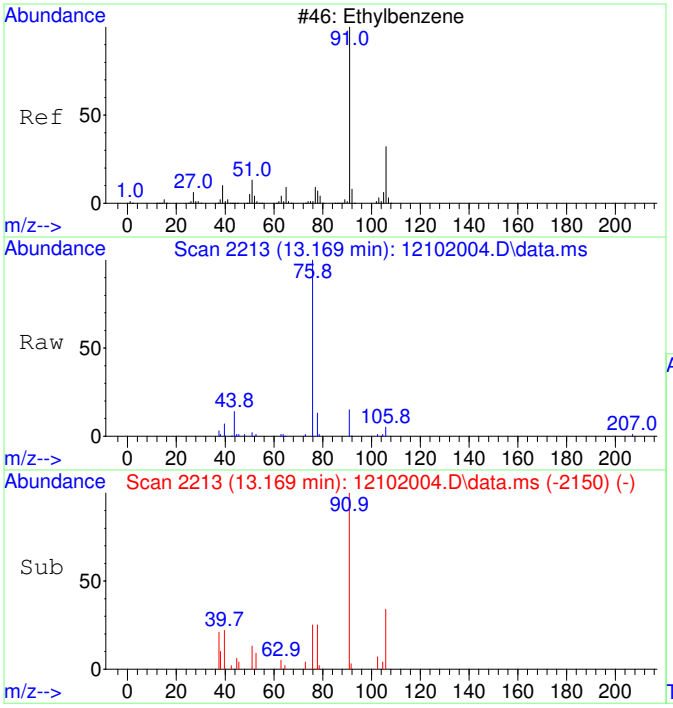


#40
Chlorobenzene SCAN
Concen: 53.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1038

Ion	Ratio	Lower	Upper
112	100		
77	80.5	28.2	88.2
114	0.0	2.3	62.3#
51	14.7	0.0	50.1

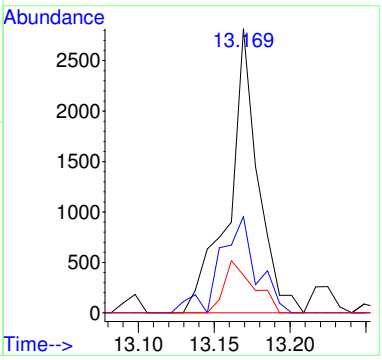


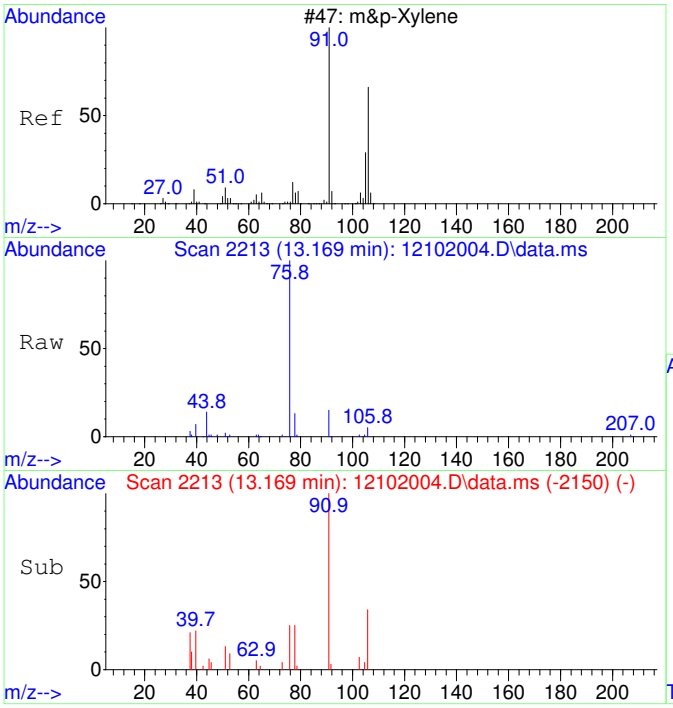


#42
Ethylbenzene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
51	18.7	0.0	40.1

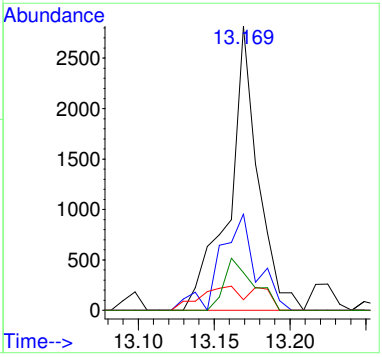


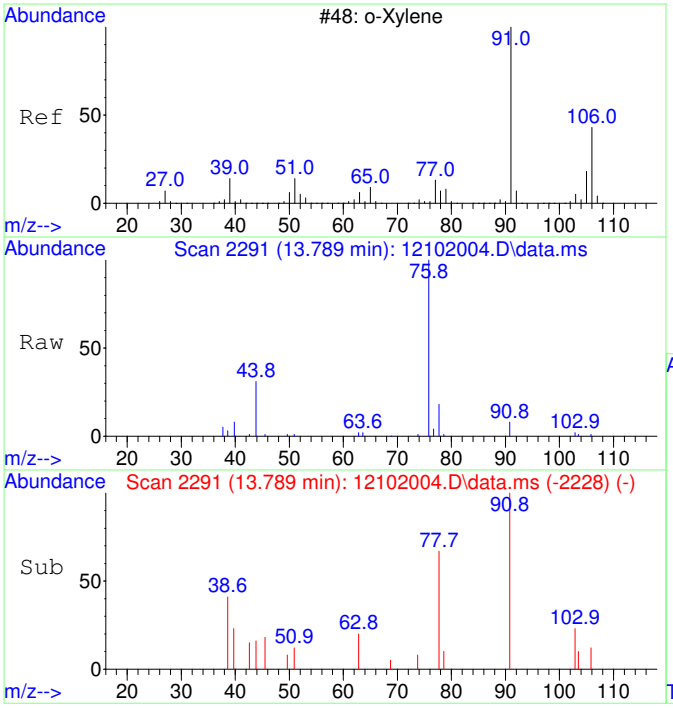


#43
m&p-Xylene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
105	17.4	0.0	54.7
51	18.7	0.0	40.1

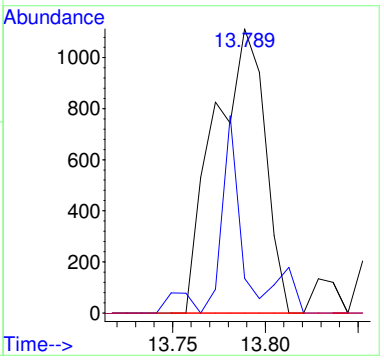


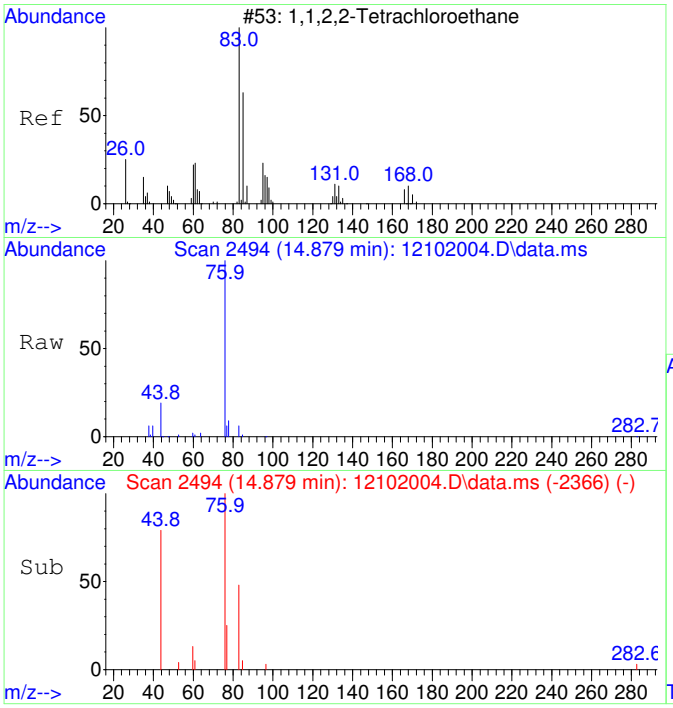


#44
o-Xylene SCAN
Concen: 76.20 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2125

Ion	Ratio	Lower	Upper
91	100		
106	21.2	18.0	78.0
105	0.0	0.0	56.6

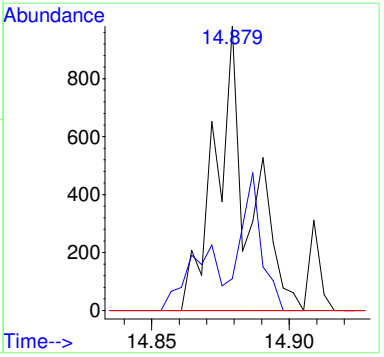


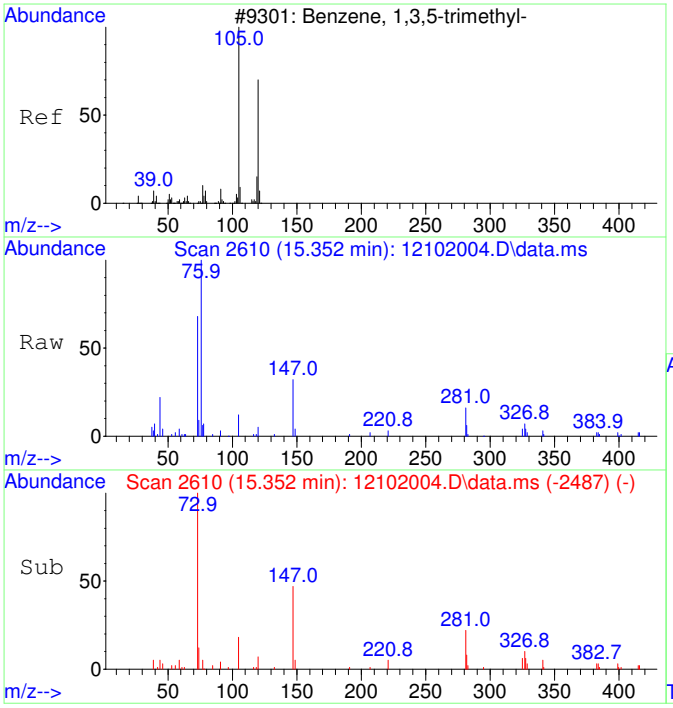


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 57.45 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 833

Ion	Ratio	Lower	Upper
83	100		
85	23.3	35.9	95.9#
95	0.0	0.0	47.4

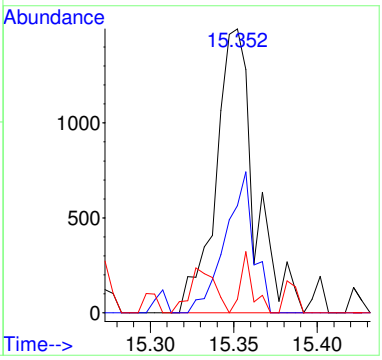


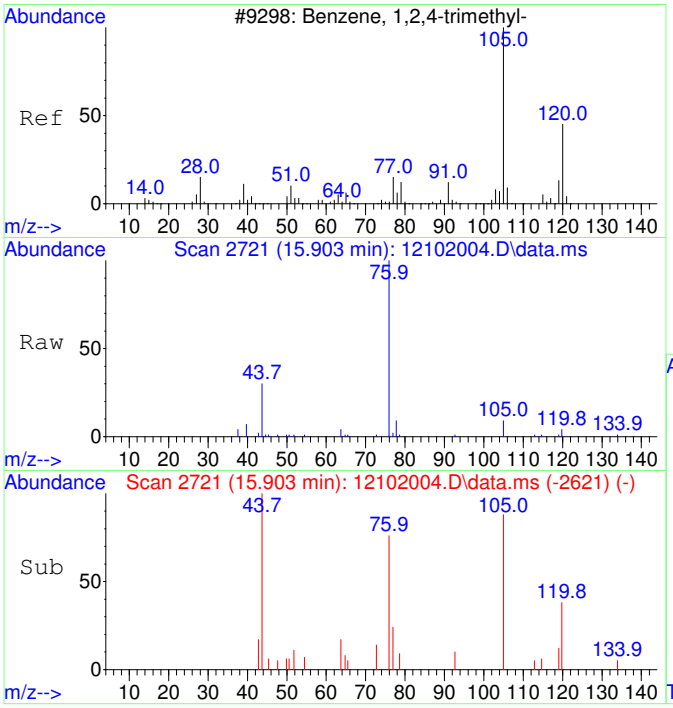


#46
1,3,5-Trimethylbenzene SCAN
Concen: 82.25 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 2420

Ion	Ratio	Lower	Upper
105	100		
120	36.2	18.3	78.3
119	6.7	0.0	43.1

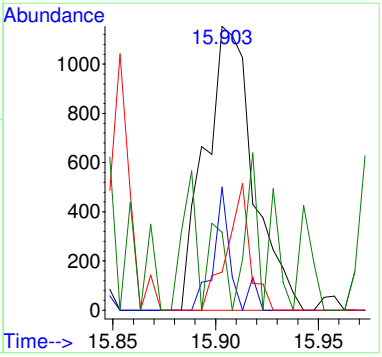




#47
1,2,4-Trimethylbenzene SCAN
Concen: 62.54 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 1880

Ion	Ratio	Lower	Upper
105	100		
120	15.9	16.9	76.9#
119	21.4	0.0	41.9
77	23.0	0.0	42.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:20 am, Dec 10, 2020

M.I. Approved By:
ZR at 12:25 pm, Dec 16, 2020

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

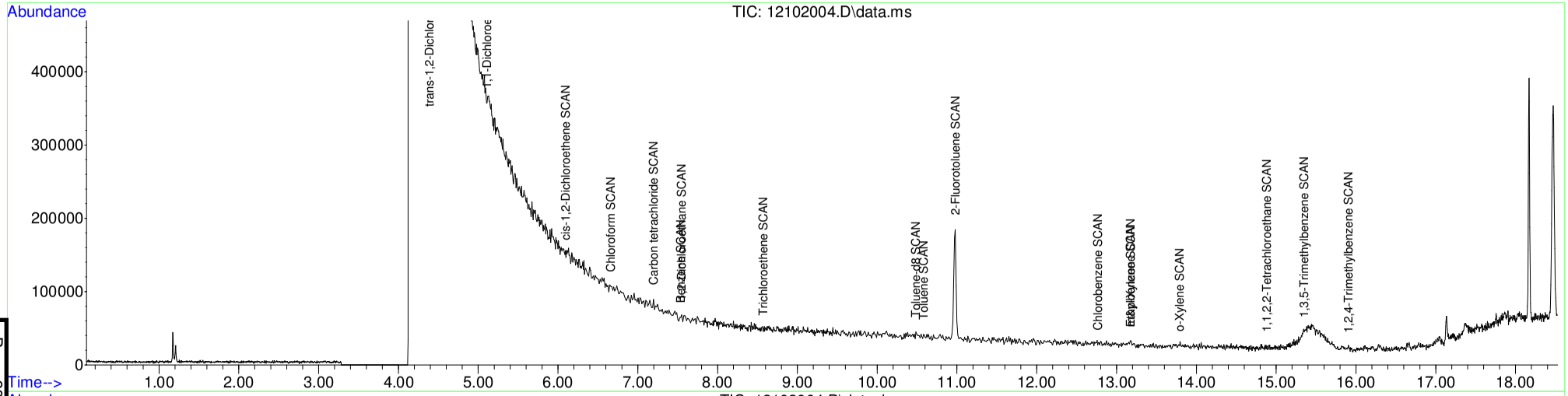
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204465	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	2025	51.14	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.02%#		
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	453m	55.88	ug/L	
3] trans-1,2-Dichloroethene	4.389	61	510	49.90	ug/L	72
4] 1,1-Dichloroethane	5.093	63	635	52.02	ug/L	83
5] cis-1,2-Dichloroethene	6.094	61	629	49.75	ug/L	98
6] Chloroform	6.664	83	626	51.55	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	677	51.90	ug/L	97
8] Carbon tetrachloride	7.187	117	623	49.95	ug/L	91
9] Benzene	7.515	78	1917	55.72	ug/L	57
10] 1,2-Dichloroethane	7.552	62	613	52.23	ug/L	67
11] Trichloroethene	8.575	130	535	49.25	ug/L	94
13] Toluene	10.582	91	2609	52.92	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	569	49.82	ug/L	85
15] Tetrachloroethene	11.432	166	808	52.61	ug/L	100
16] Chlorobenzene	12.765	112	1975	51.71	ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.916	131	671	50.19	ug/L	97
18] Ethylbenzene	12.972	91	3399	53.97	ug/L	95
19] m&p-Xylene	13.171	91	5376	110.86	ug/L	95
20] o-Xylene	13.782	91	2770	53.18	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	1263	52.04	ug/L	99
22] 1,3,5-Trimethylbenzene	15.348	105	3272	57.12	ug/L	96
23] 1,2,4-Trimethylbenzene	15.904	105	3406	58.13	ug/L	94
24] Naphthalene	17.906	128	5222m	55.01	ug/L	
25) 2-Fluorotoluene SCAN	10.979	109	119951	5168.33	ug/L	99
27) trans-1,2-Dichloroethe...	4.388	61	175	25.36	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.111	63	190	23.32	ug/L #	15
29) cis-1,2-Dichloroethene...	6.087	61	269	33.59	ug/L #	58
30) Chloroform SCAN	6.663	83	430	57.57	ug/L #	23
32) Carbon tetrachloride SCAN	7.198	117	247	37.50	ug/L #	9
33) Benzene SCAN	7.538	78	4359	186.94	ug/L	94
34) 1,2-Dichloroethane SCAN	7.551	62	271	37.16	ug/L #	40
35) Trichloroethene SCAN	8.568	130	144	28.32	ug/L #	25
36) Toluene-d8 SCAN	10.486	98	2152	98.86	ug/L #	15
37) Toluene SCAN	10.581	91	674	25.15	ug/L #	1
40) Chlorobenzene SCAN	12.764	112	1038	53.92	ug/L #	65
42) Ethylbenzene SCAN	13.169	91	3758	73.58	ug/L	84
43) m&p-Xylene SCAN	13.169	91	3758	73.58	ug/L	84
44) o-Xylene SCAN	13.789	91	2125	76.20	ug/L #	56
45) 1,1,2,2-Tetrachloroeth...	14.879	83	833	57.45	ug/L #	49
46) 1,3,5-Trimethylbenzene...	15.352	105	2420	82.25	ug/L	83
47) 1,2,4-Trimethylbenzene...	15.903	105	1880	62.54	ug/L #	60

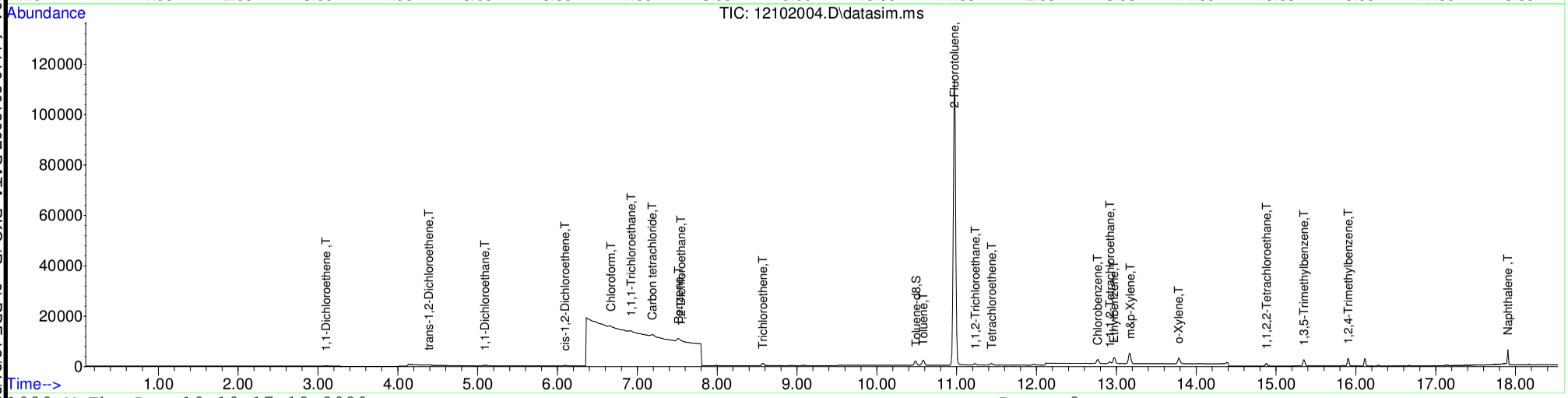
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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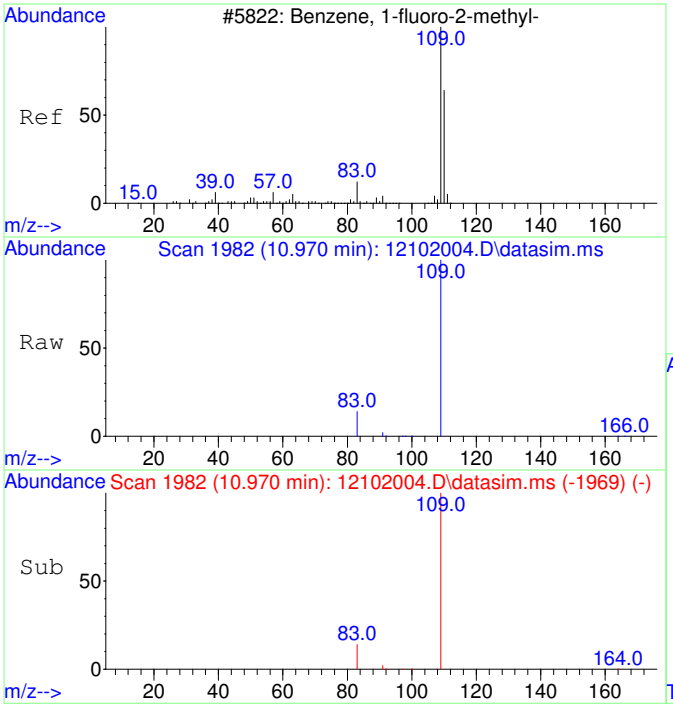
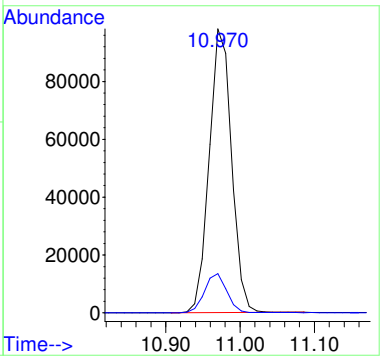
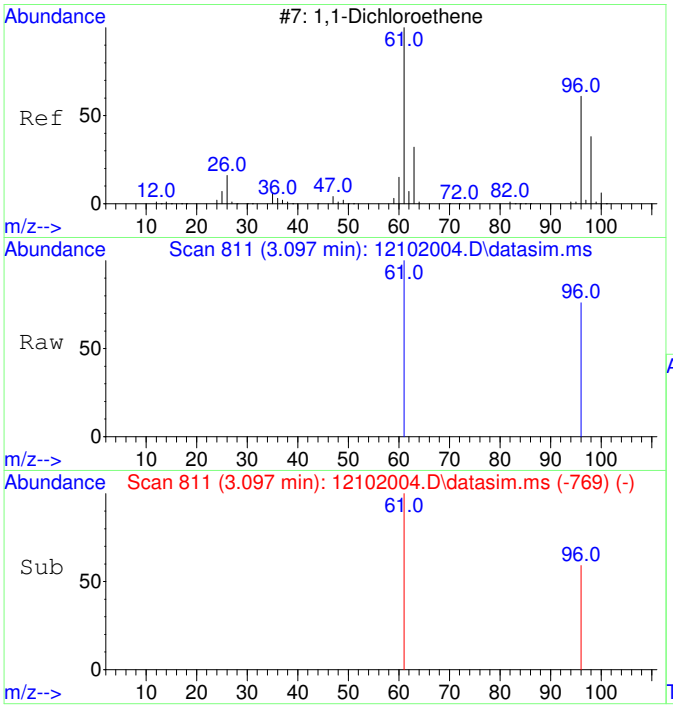


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:109 Resp: 204465

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

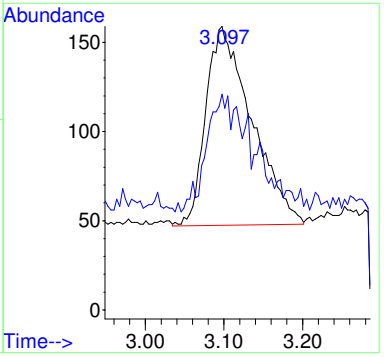


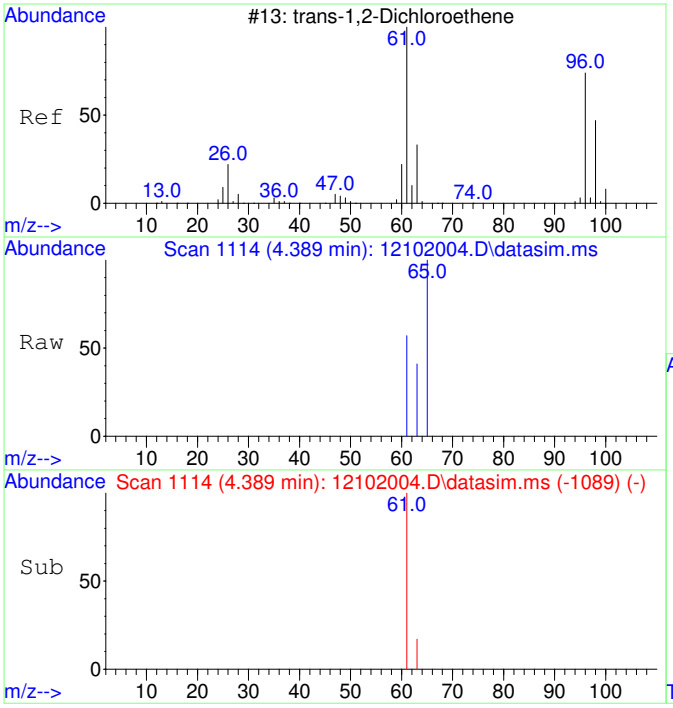


#2
1,1-Dichloroethene
Concen: 55.88 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 453

Ion	Ratio	Lower	Upper
61	100		
96	23.0	37.2	97.2#

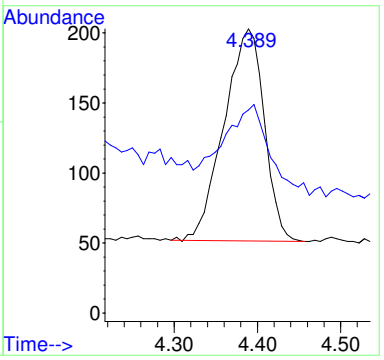


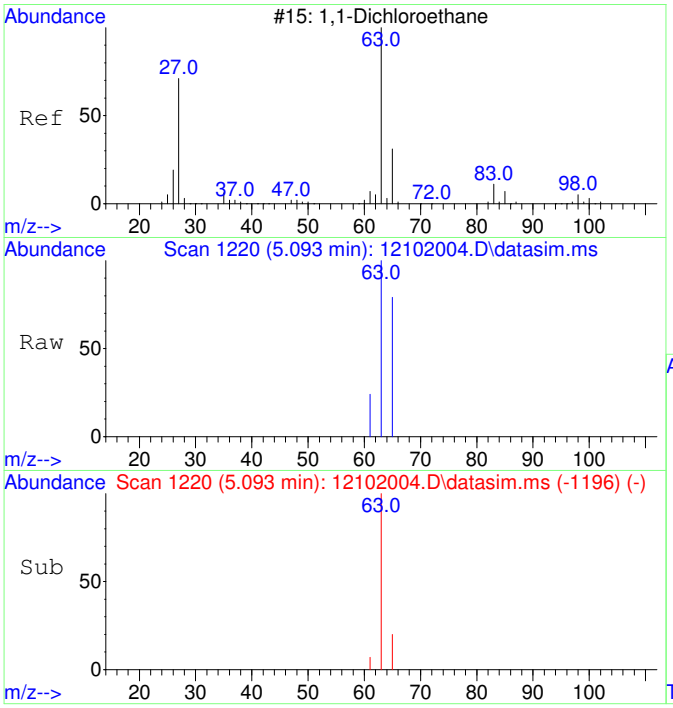


#3
trans-1,2-Dichloroethene
Concen: 49.90 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 510

Ion	Ratio	Lower	Upper
61	100		
63	48.2	2.4	62.4

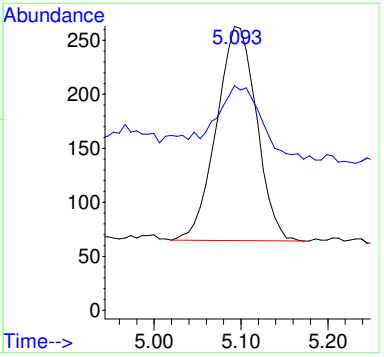


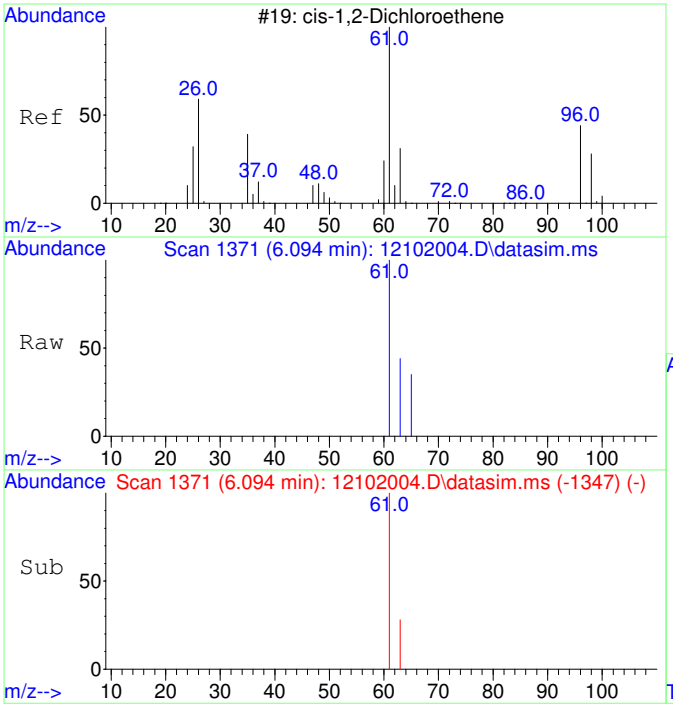


#4
1,1-Dichloroethane
Concen: 52.02 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 635

Ion	Ratio	Lower	Upper
63	100		
65	41.3	1.8	61.8

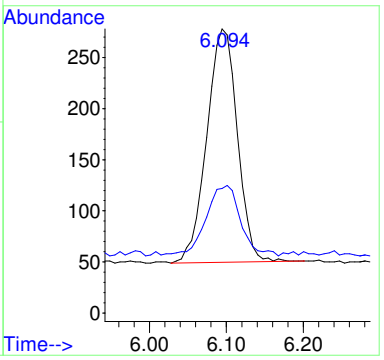


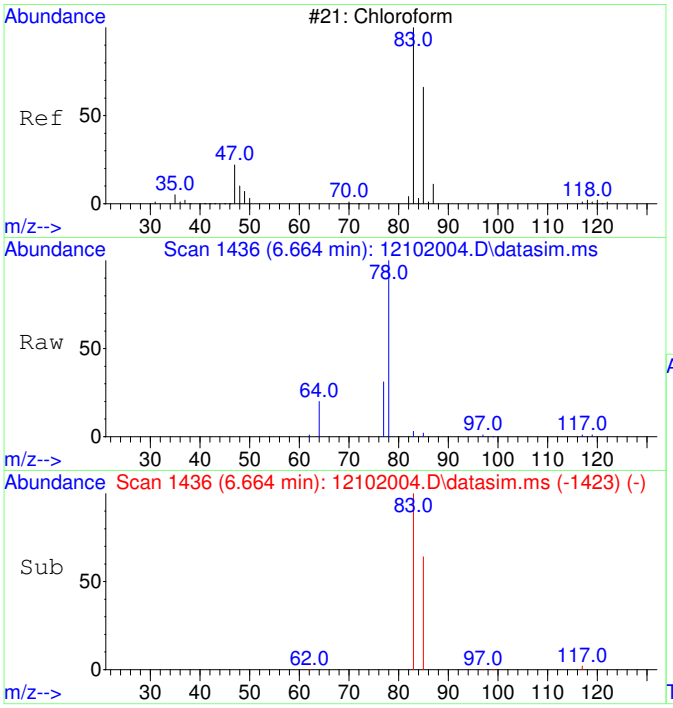


#5
cis-1,2-Dichloroethene
Concen: 49.75 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 629

Ion	Ratio	Lower	Upper
61	100		
63	33.7	2.5	62.5

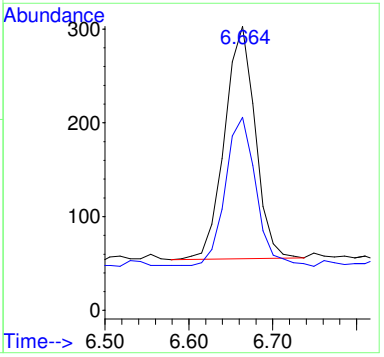


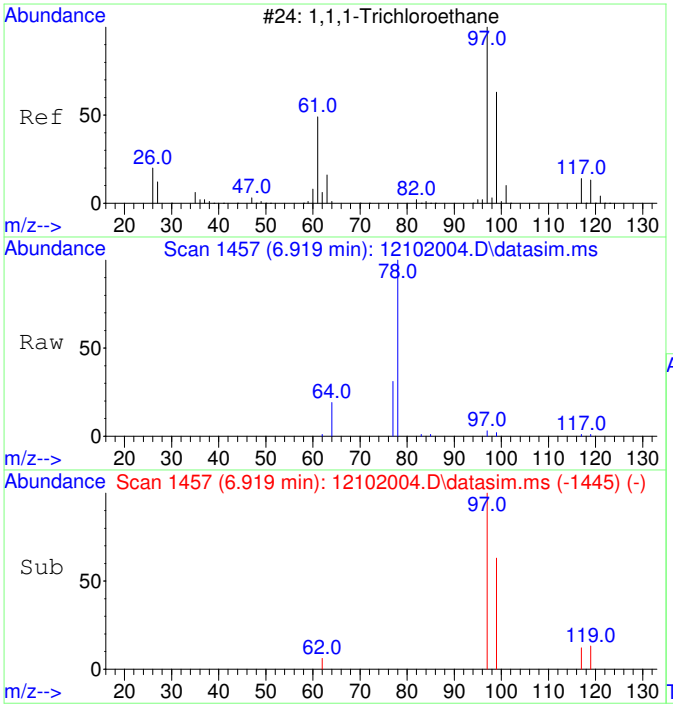


#6
Chloroform
Concen: 51.55 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 626

Ion	Ratio	Lower	Upper
83	100		
85	63.9	35.1	95.1

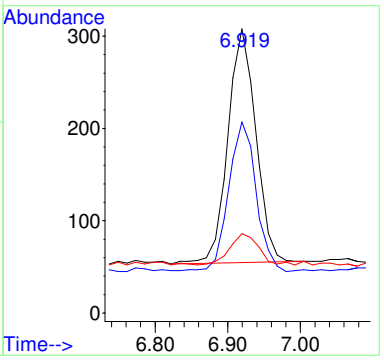


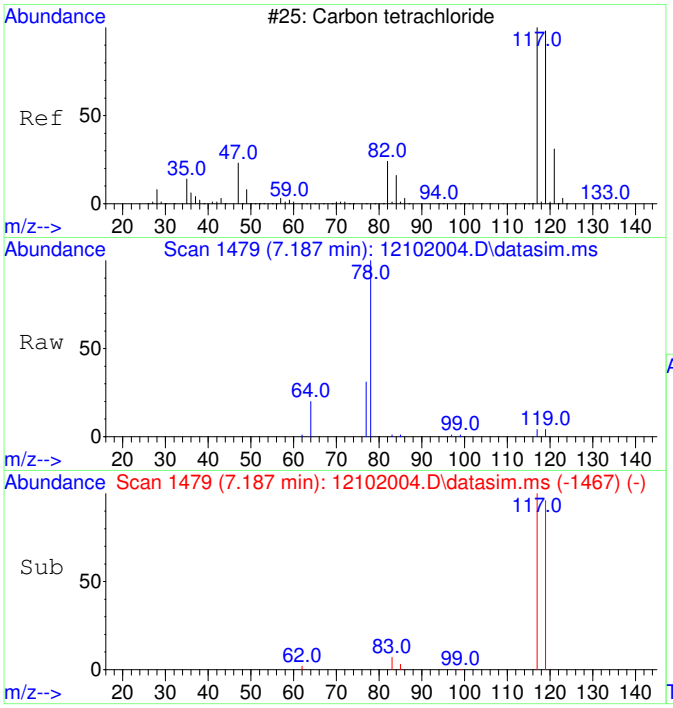


#7
1,1,1-Trichloroethane
Concen: 51.90 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 677

Ion	Ratio	Lower	Upper
97	100		
99	61.6	34.6	94.6
117	13.9	0.0	43.2

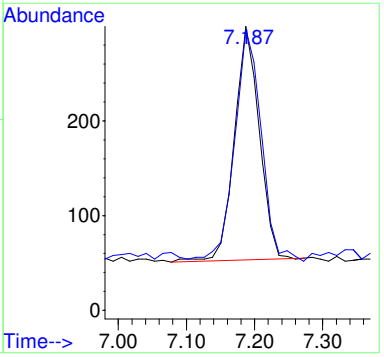


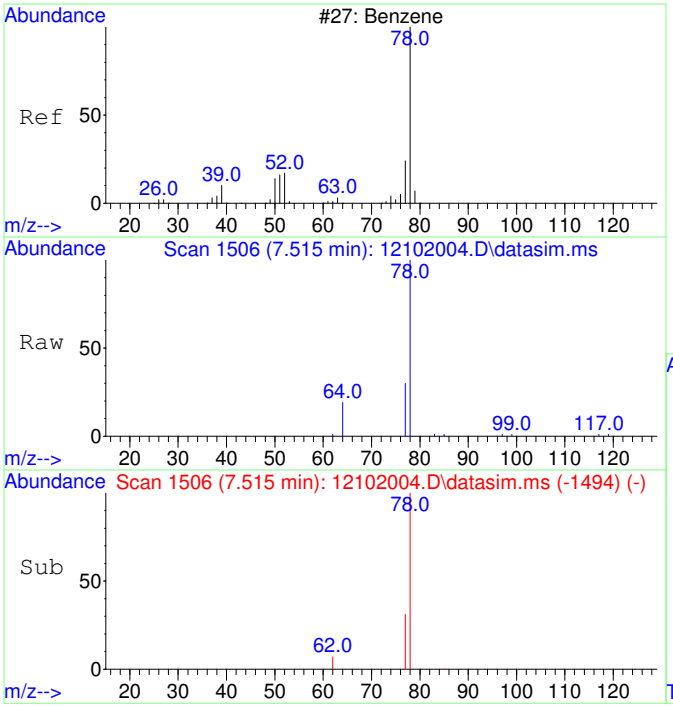


#8
Carbon tetrachloride
Concen: 49.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 623

Ion	Ratio	Lower	Upper
117	100		
119	105.0	66.4	126.4

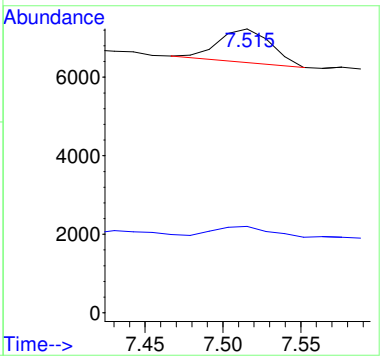


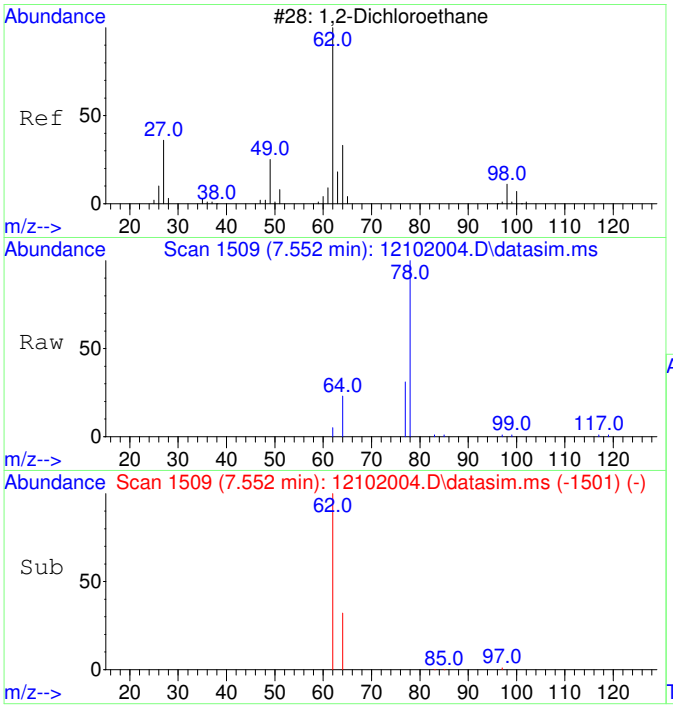


#9
Benzene
Concen: 55.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 1917

Ion	Ratio	Lower	Upper
78	100		
77	44.3	0.0	53.2

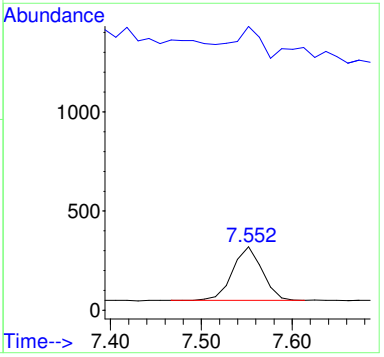


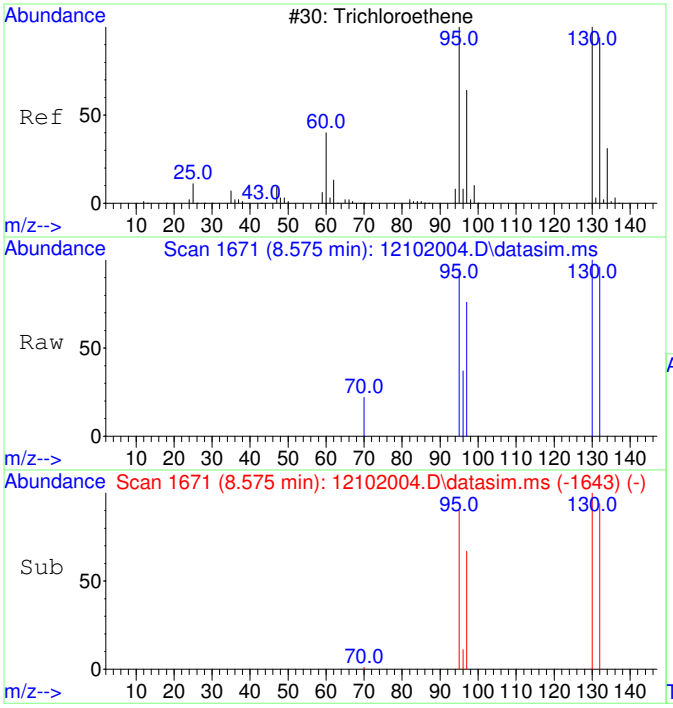


#10
1,2-Dichloroethane
Concen: 52.23 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 613

Ion	Ratio	Lower	Upper
62	100		
64	50.9	2.3	62.3

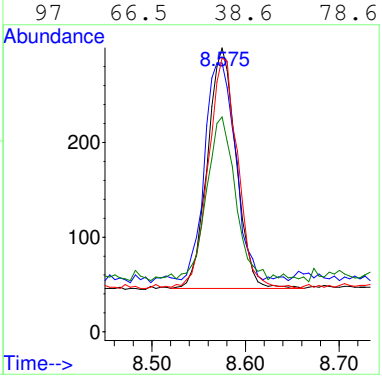


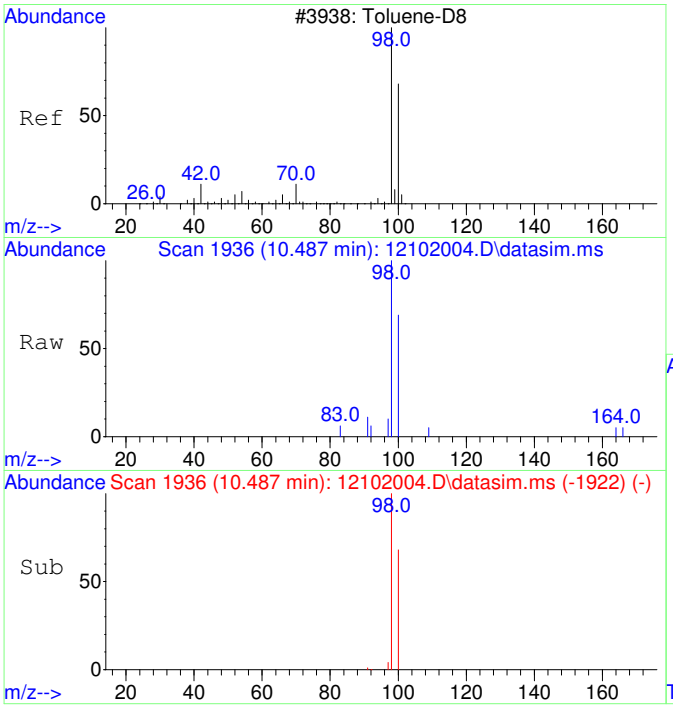


#11
Trichloroethene
Concen: 49.25 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 535

Ion	Ratio	Lower	Upper
130	100		
95	96.6	60.7	120.7
132	98.5	76.0	116.0
97	66.5	38.6	78.6

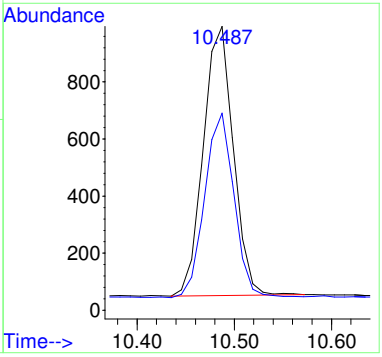


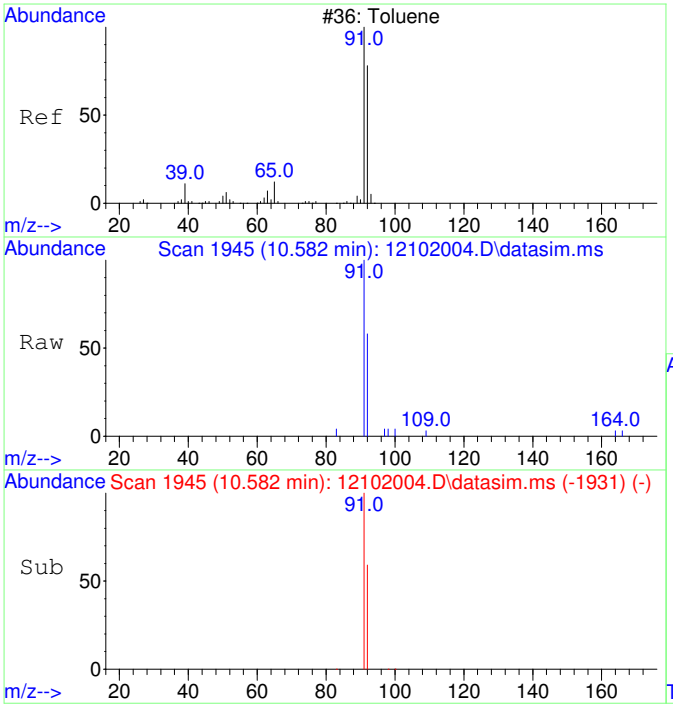


#12
Toluene-d8
Concen: 51.14 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2025

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

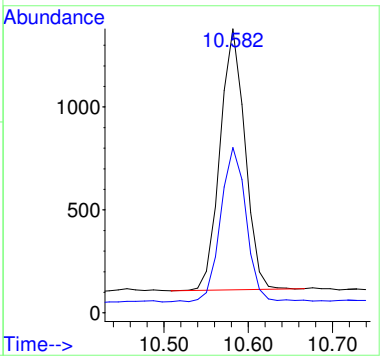


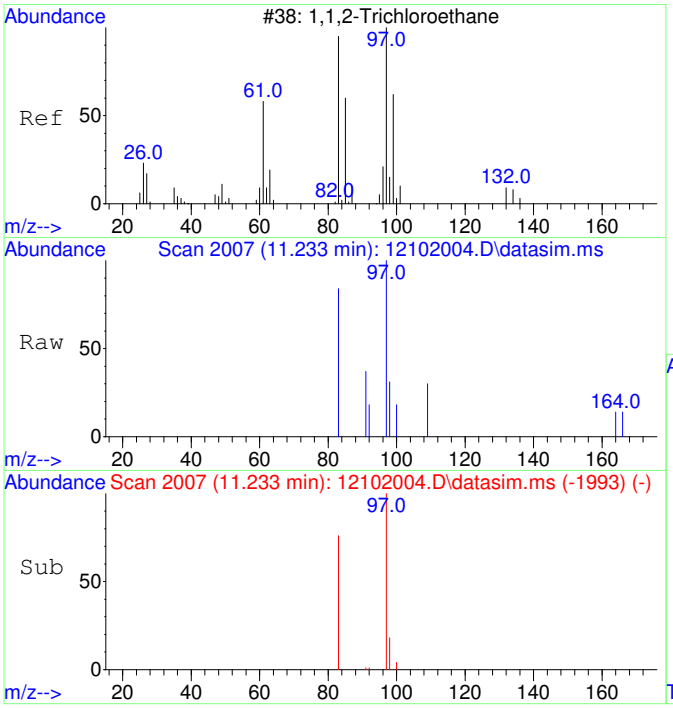


#13
Toluene
Concen: 52.92 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2609

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

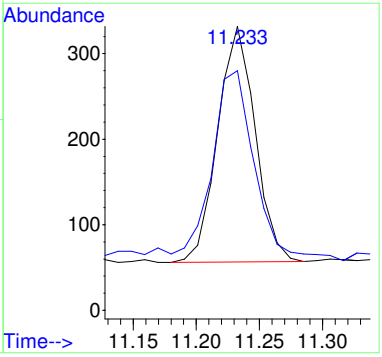


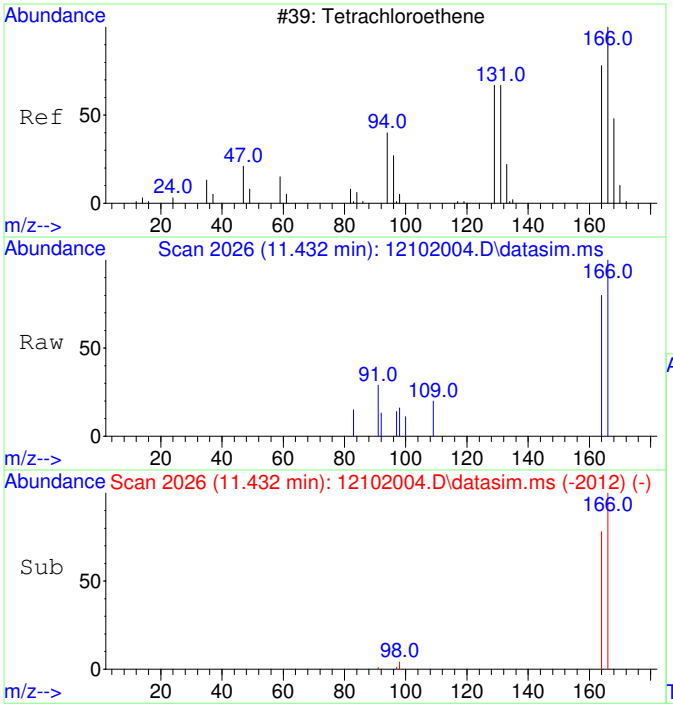


#14
1,1,2-Trichloroethane
Concen: 49.82 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 569

Ion	Ratio	Lower	Upper
97	100		
83	94.4	51.2	111.2

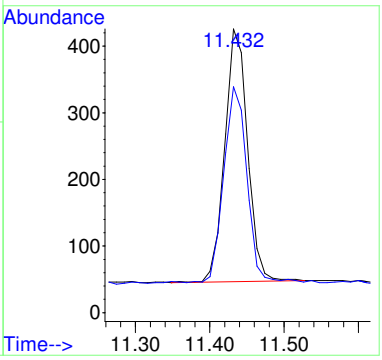


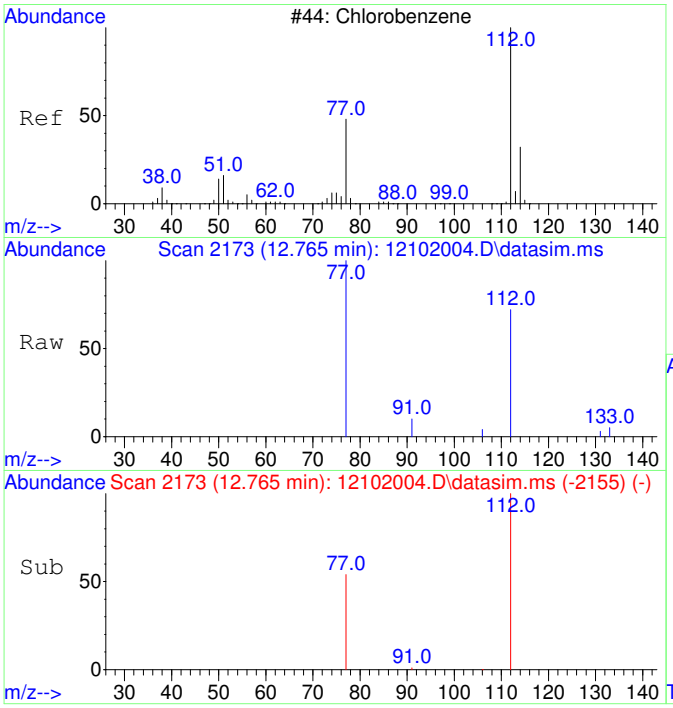


#15
Tetrachloroethene
Concen: 52.61 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:166 Resp: 808

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

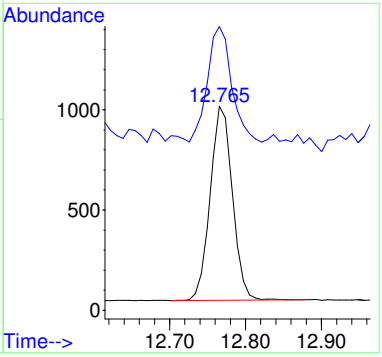


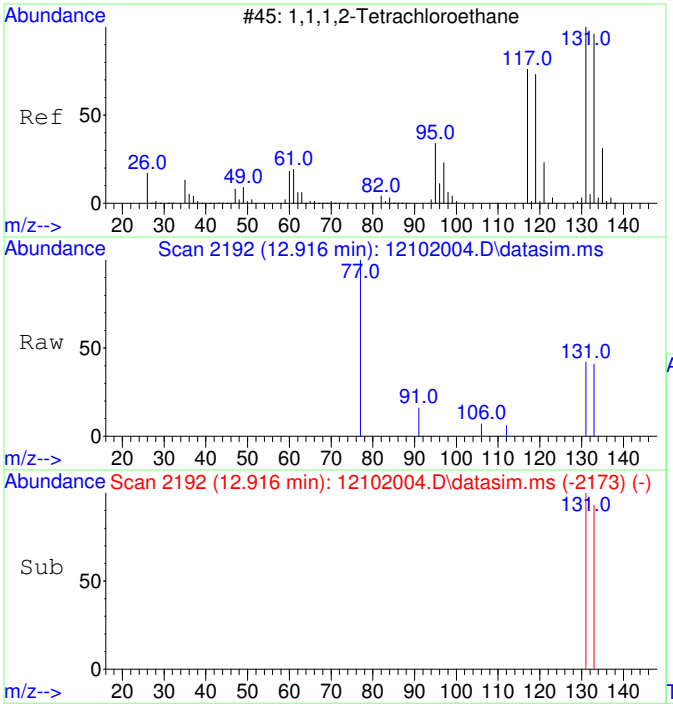


#16
Chlorobenzene
Concen: 51.71 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1975

Ion	Ratio	Lower	Upper
112	100		
77	64.6	23.6	83.6

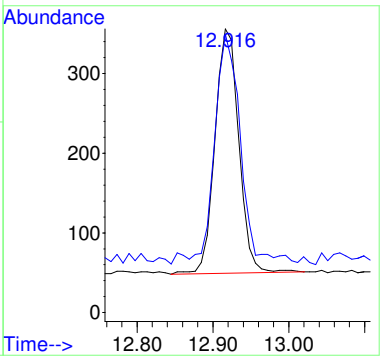


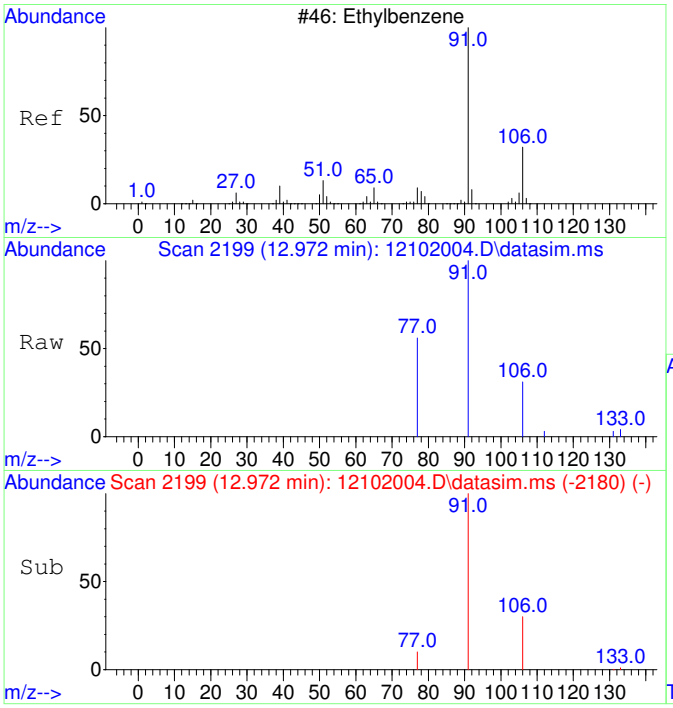


#17
1,1,1,2-Tetrachloroethane
Concen: 50.19 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:131 Resp: 671

Ion	Ratio	Lower	Upper
131	100		
133	99.1	66.3	126.3

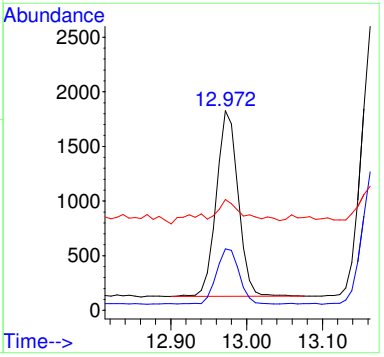


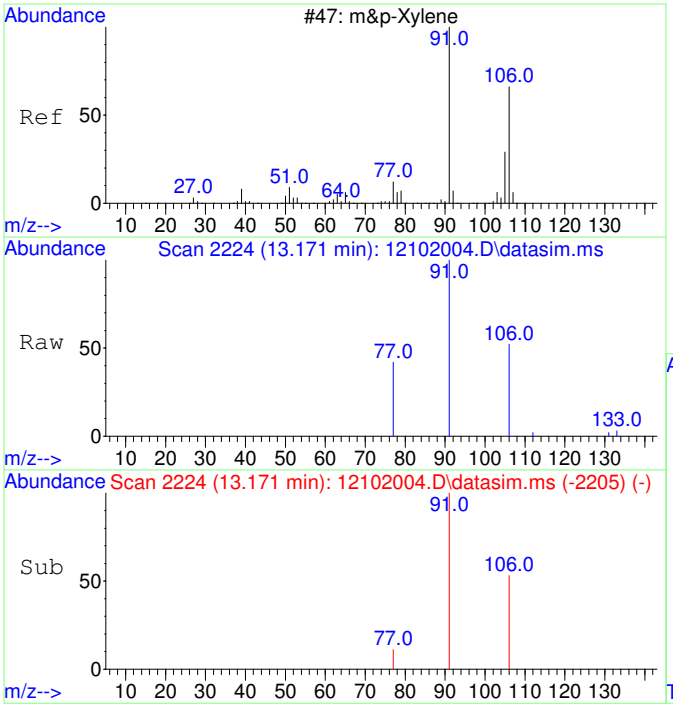


#18
Ethylbenzene
Concen: 53.97 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3399

Ion	Ratio	Lower	Upper
91	100		
106	30.8	3.0	63.0
77	10.9	0.0	38.2

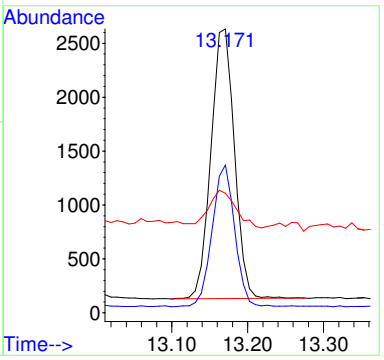


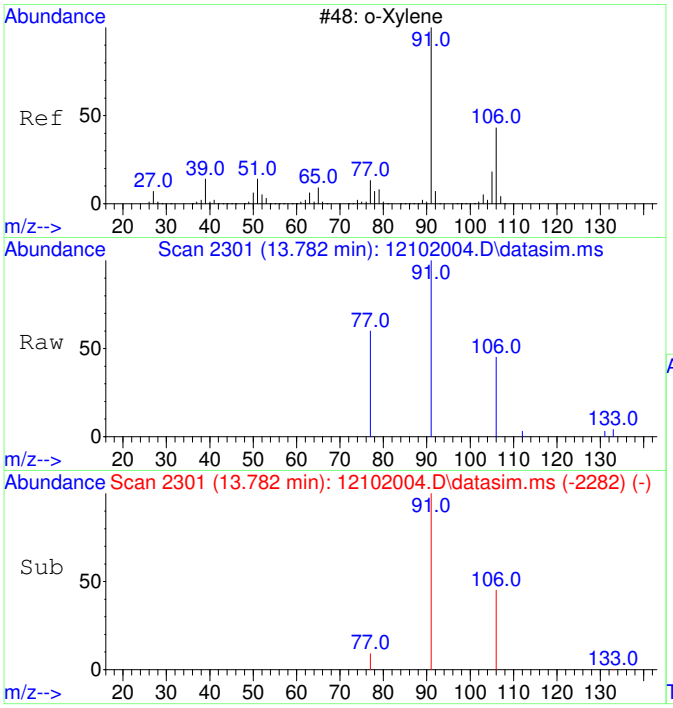


#19
m&p-Xylene
Concen: 110.86 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 5376

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	16.7	0.0	42.4

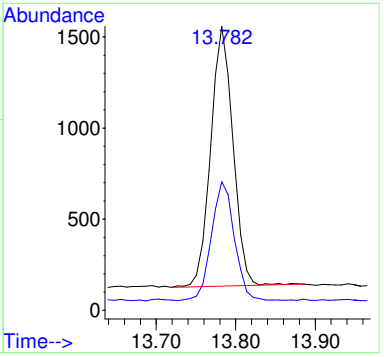


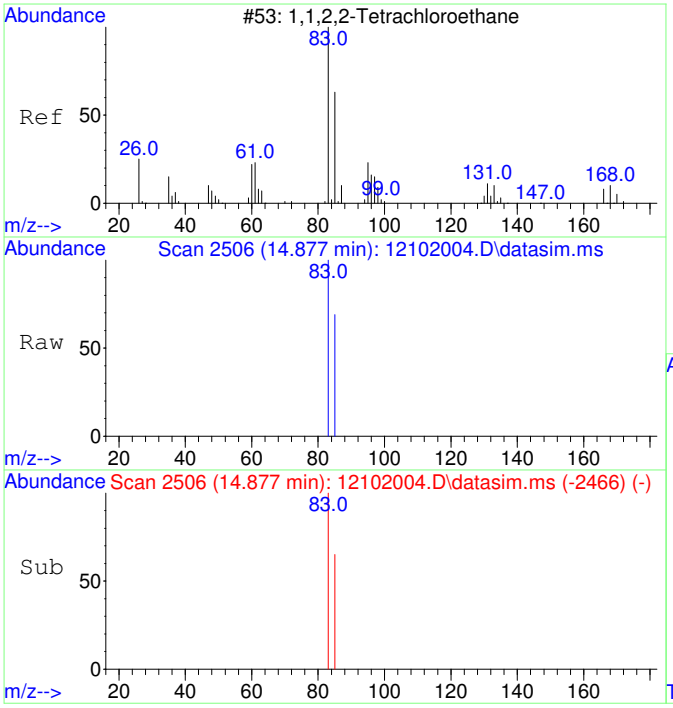


#20
o-Xylene
Concen: 53.18 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2770

Ion	Ratio	Lower	Upper
91	100		
106	46.9	19.2	79.2

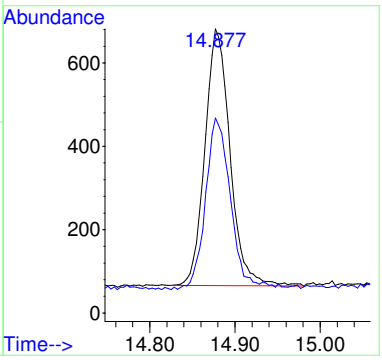


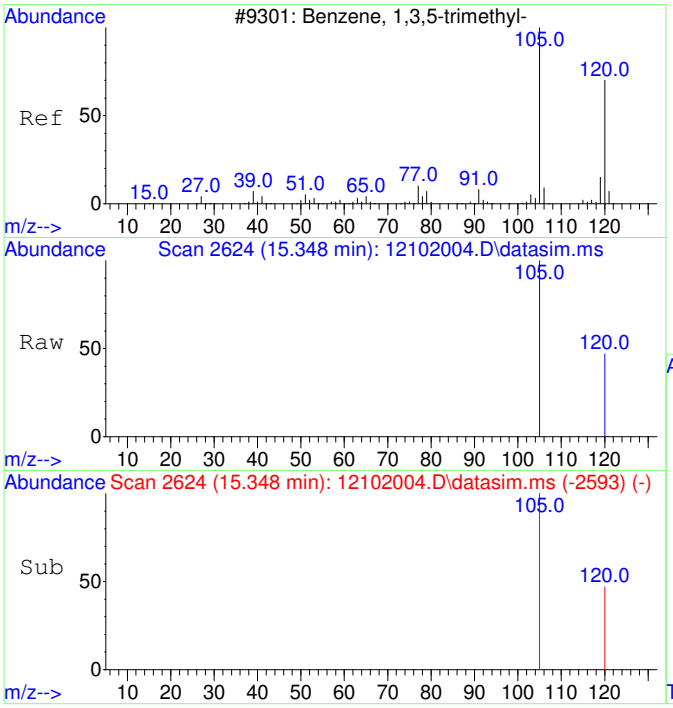


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 1263

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

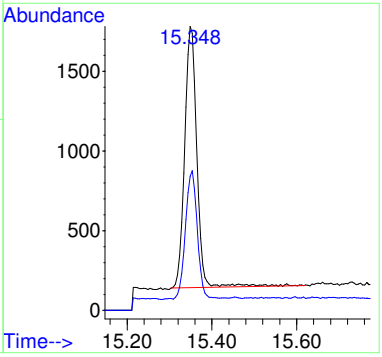


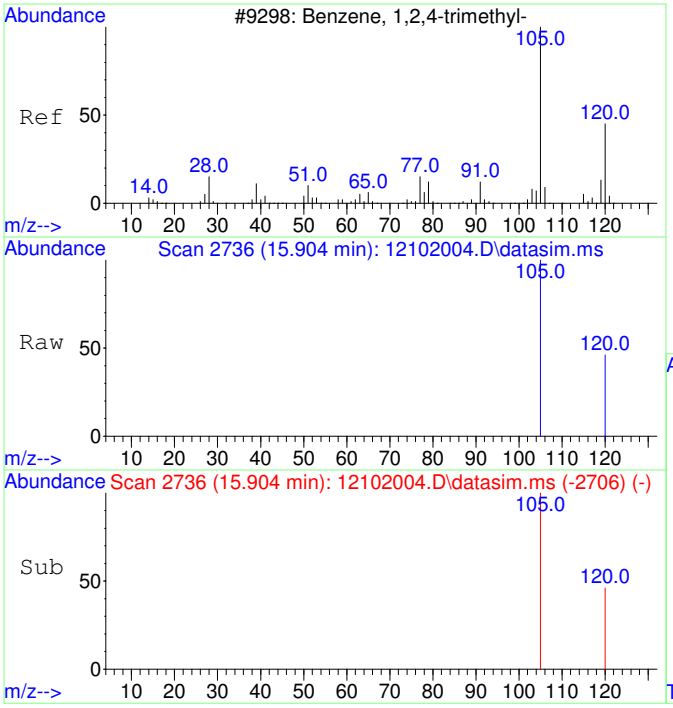


#22
1,3,5-Trimethylbenzene
Concen: 57.12 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3272

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

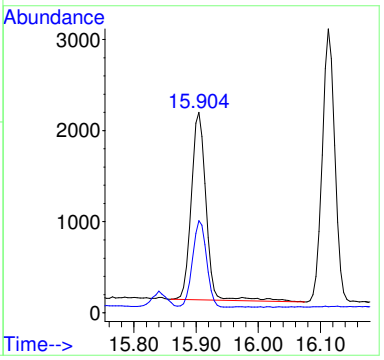


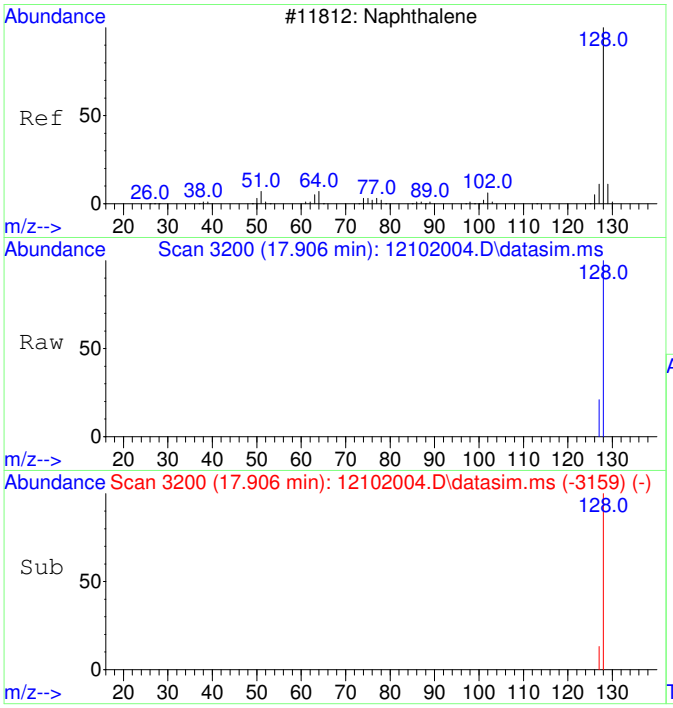


#23
1,2,4-Trimethylbenzene
Concen: 58.13 ug/L
RT: 15.904 min Scan# 2736
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3406

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

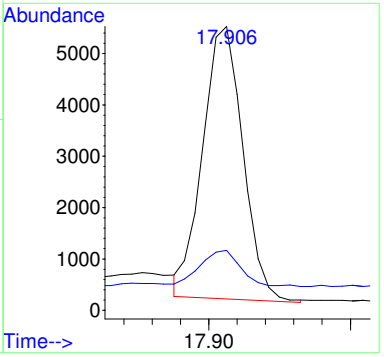


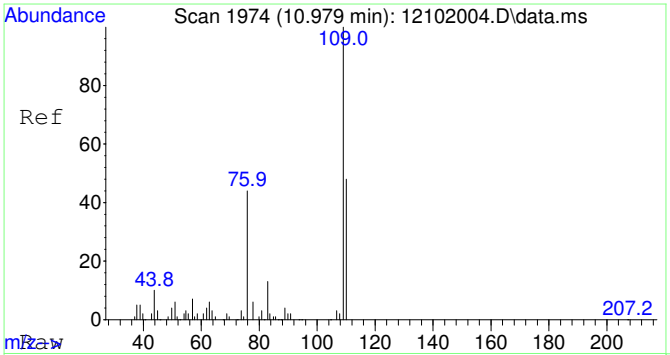


#24
Naphthalene
Concen: 55.01 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:128 Resp: 5222

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

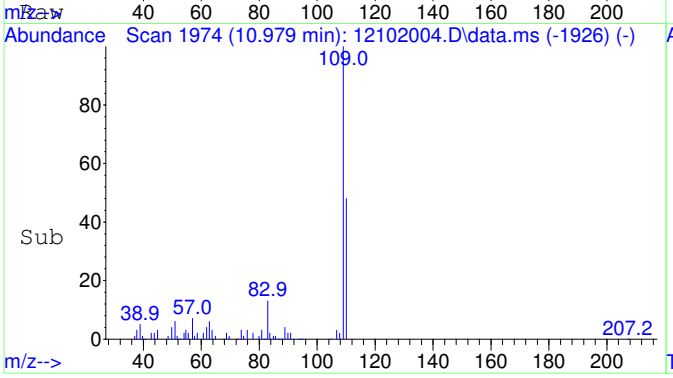


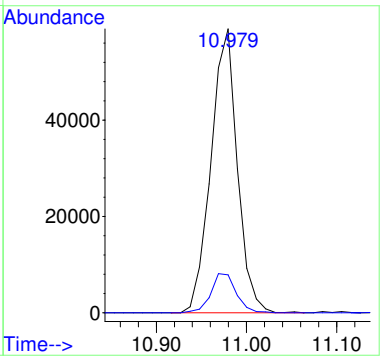


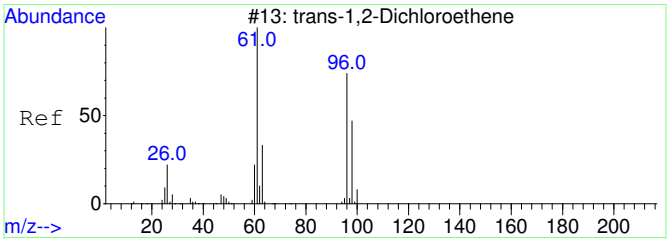
#25
2-Fluorotoluene SCAN
Concen: 5168.33 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

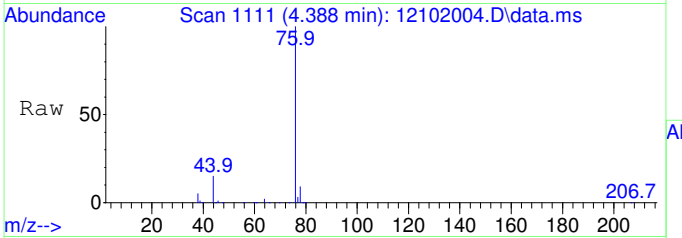
Tgt Ion:109 Resp: 119951

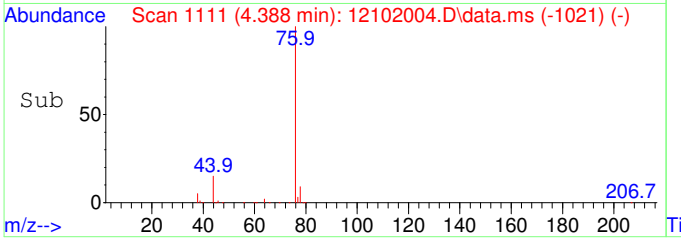
Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	43.8







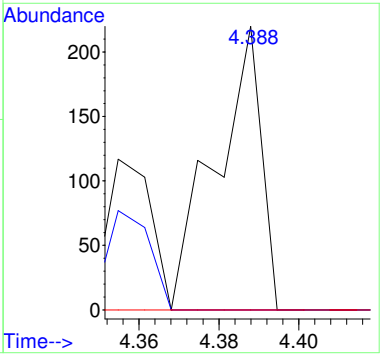


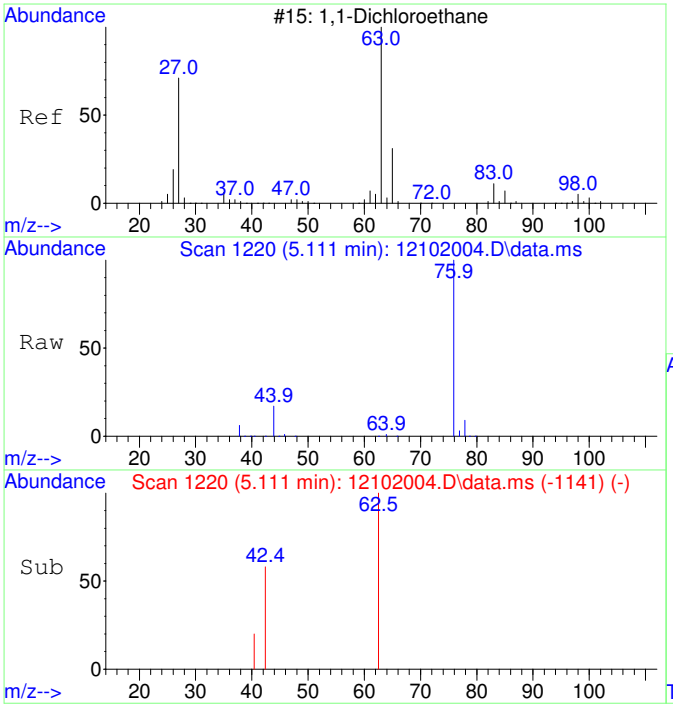


#27
trans-1,2-Dichloroethene SCAN
Concen: 25.36 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 175

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

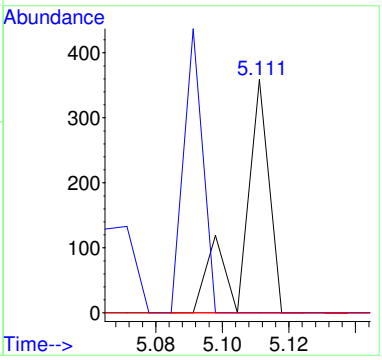


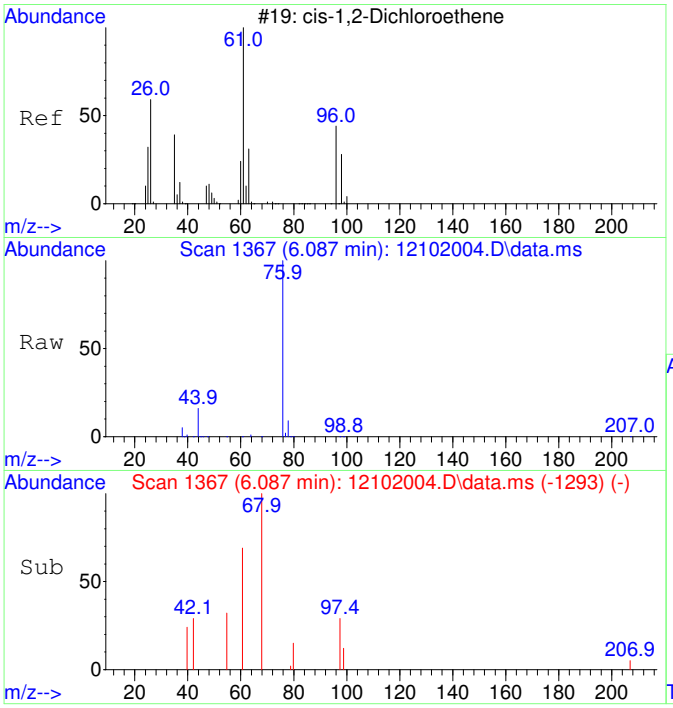


#28
1,1-Dichloroethane SCAN
Concen: 23.32 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.027 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 190

Ion	Ratio	Lower	Upper
63	100		
65	91.6	1.3	61.3#
83	0.0	0.0	45.9

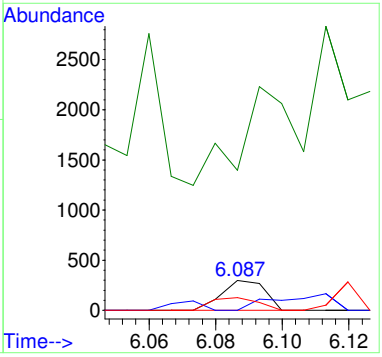


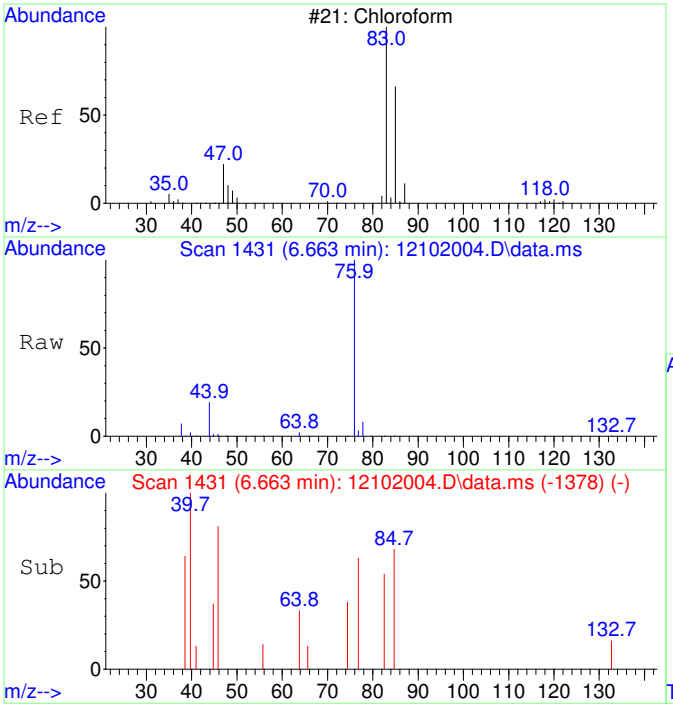


#29
cis-1,2-Dichloroethene SCAN
Concen: 33.59 ug/L
RT: 6.087 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 269

Ion	Ratio	Lower	Upper
61	100		
96	23.8	39.9	99.9#
98	46.5	13.5	73.5
64	0.0	4.5	64.5#

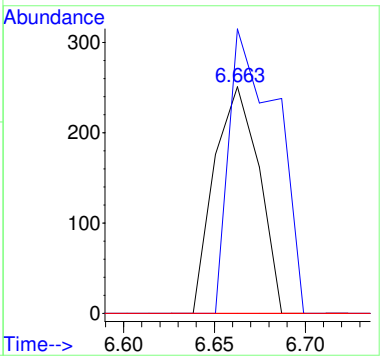


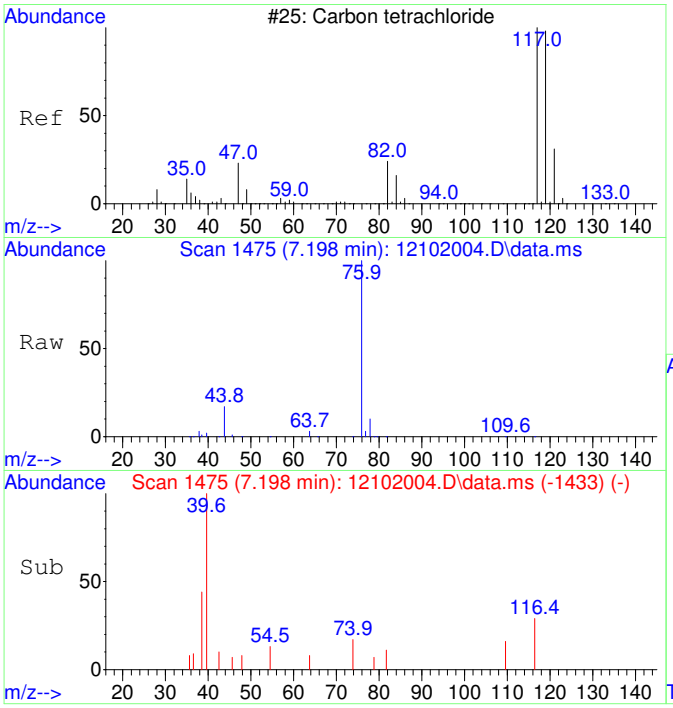


#30
Chloroform SCAN
Concen: 57.57 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 430

Ion	Ratio	Lower	Upper
83	100		
85	133.5	34.6	94.6#
47	0.0	0.0	53.4

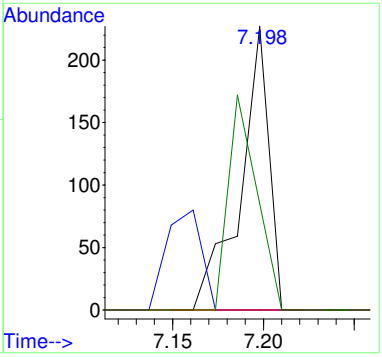


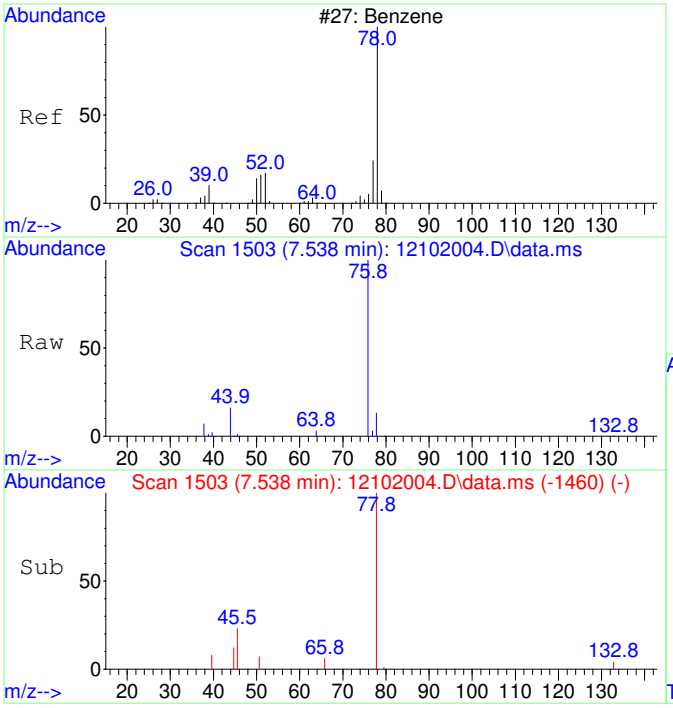


#32
Carbon tetrachloride SCAN
Concen: 37.50 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 247

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	76.1	0.0	59.2#

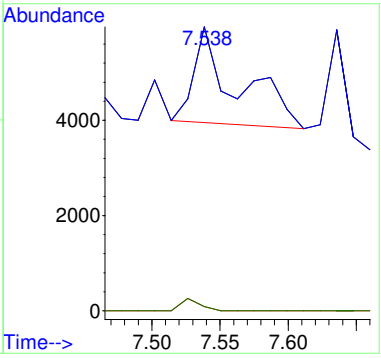


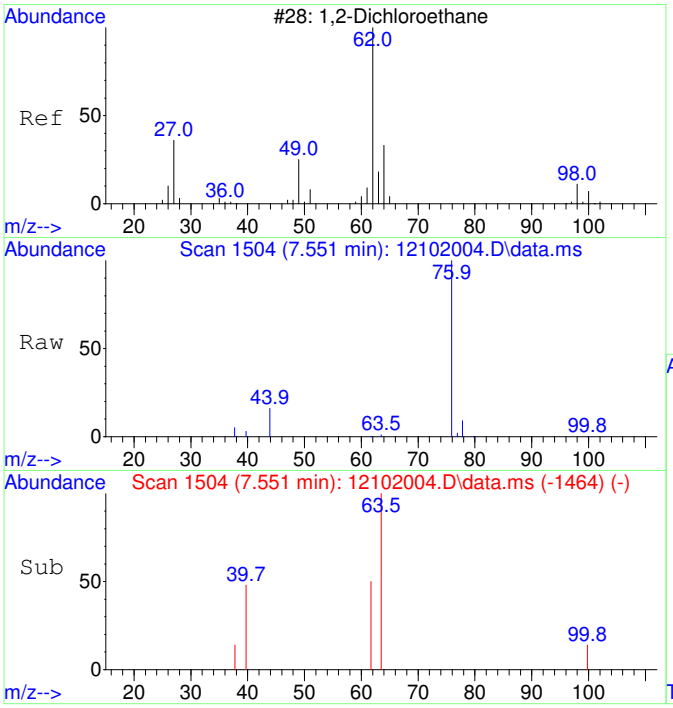


#33
Benzene SCAN
Concen: 186.94 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.025 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 4359

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

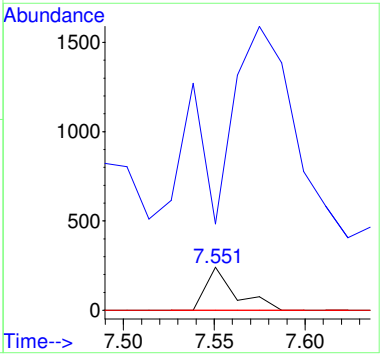


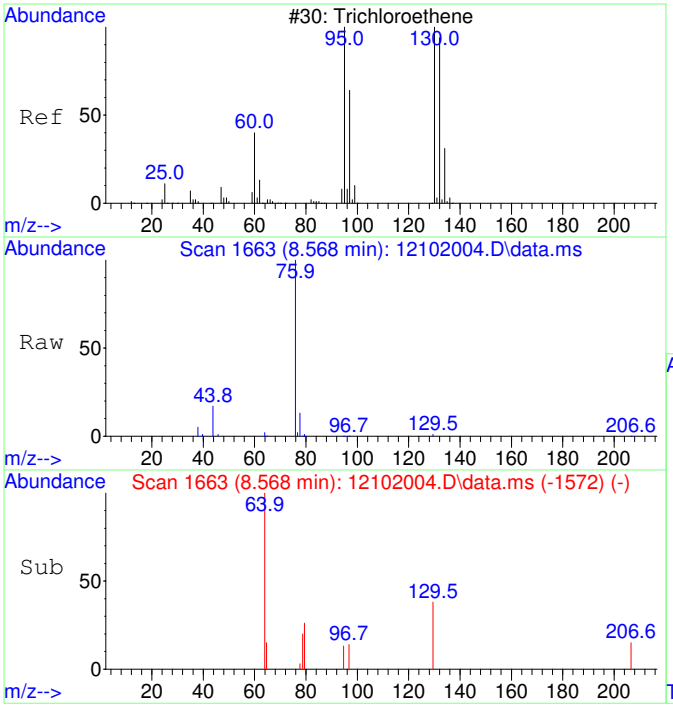


#34
1,2-Dichloroethane SCAN
Concen: 37.16 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 271

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

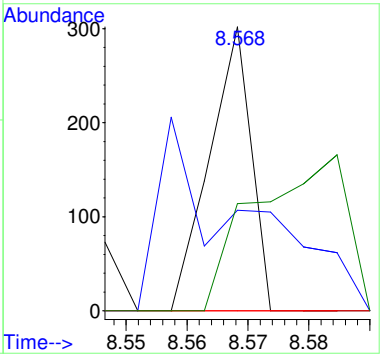


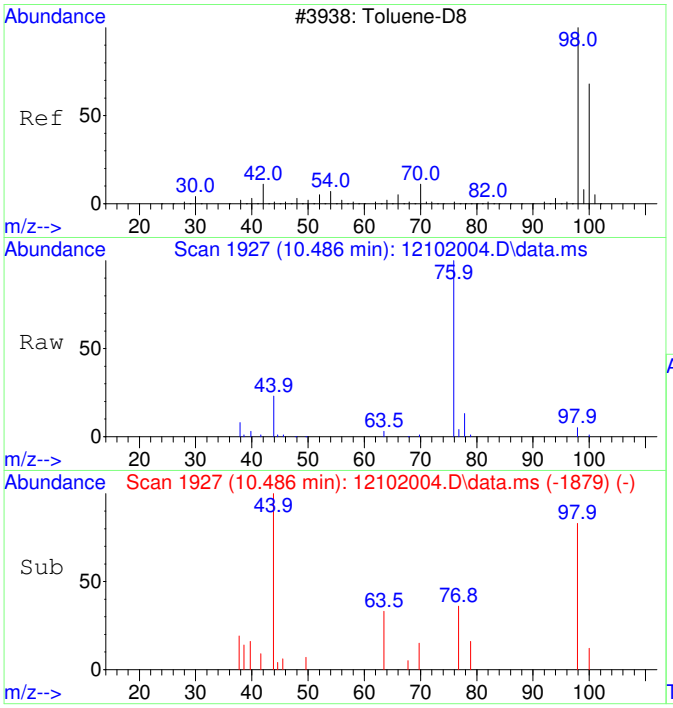


#35
Trichloroethene SCAN
Concen: 28.32 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 144

Ion	Ratio	Lower	Upper
130	100		
95	140.3	60.5	120.5#
132	0.0	59.6	119.6#
97	0.0	28.2	88.2#

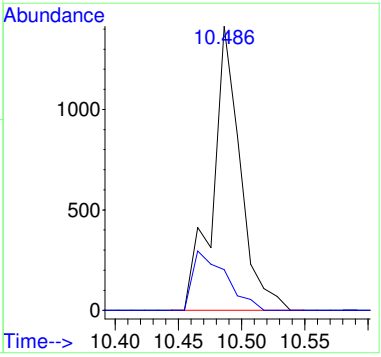


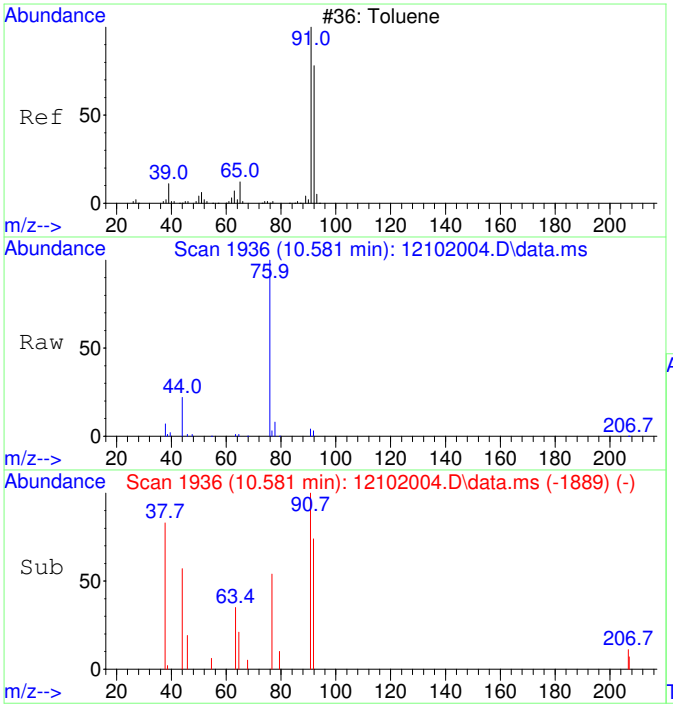


#36
Toluene-d8 SCAN
Concen: 98.86 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2152

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

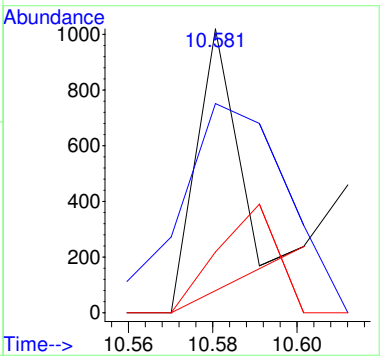


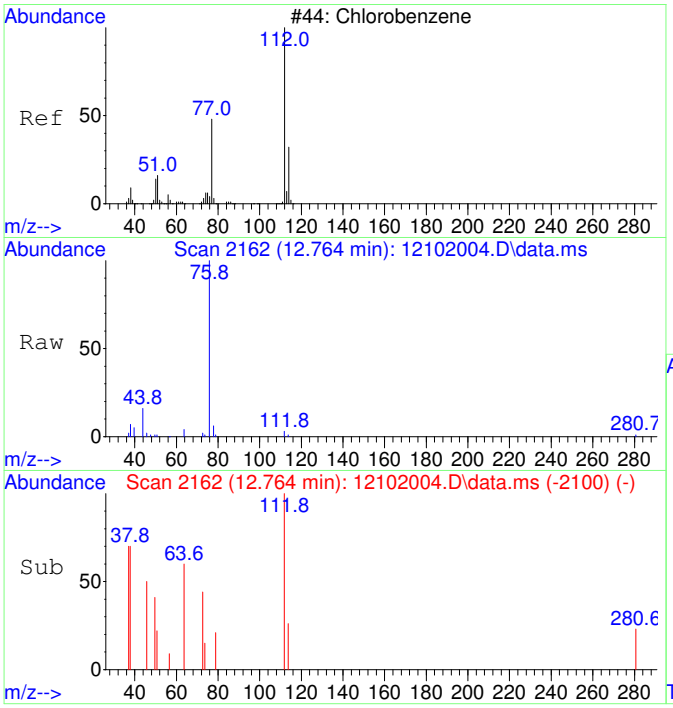


#37
Toluene SCAN
Concen: 25.15 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 674

Ion	Ratio	Lower	Upper
91	100		
92	199.0	28.3	88.3#
65	56.8	0.0	41.0#

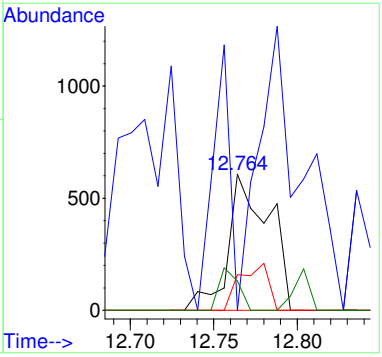


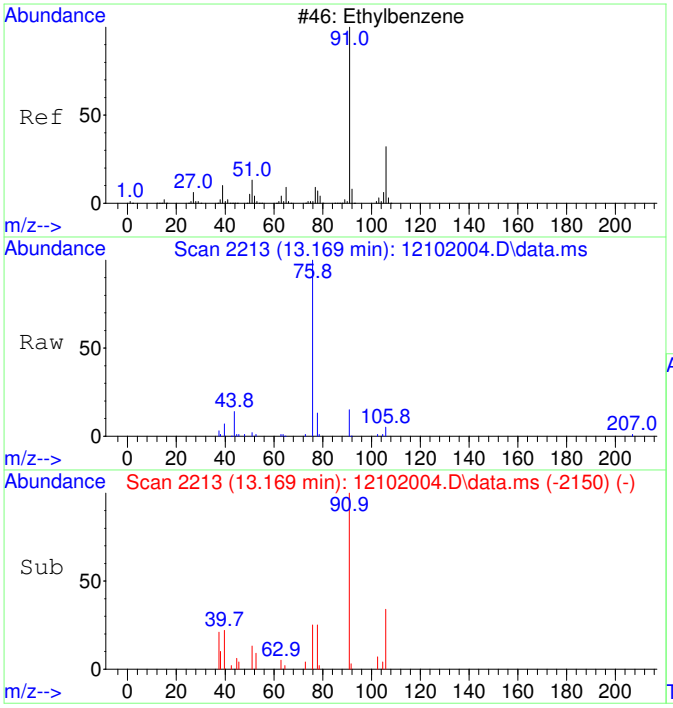


#40
Chlorobenzene SCAN
Concen: 53.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1038

Ion	Ratio	Lower	Upper
112	100		
77	80.5	28.2	88.2
114	0.0	2.3	62.3#
51	14.7	0.0	50.1

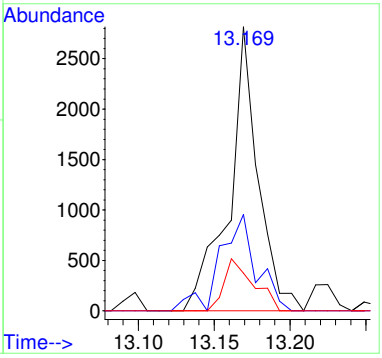


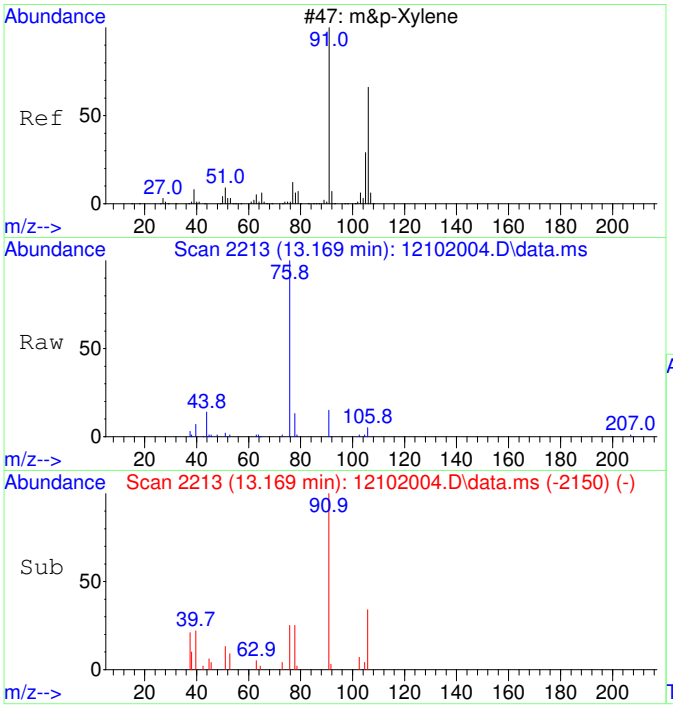


#42
Ethylbenzene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
51	18.7	0.0	40.1

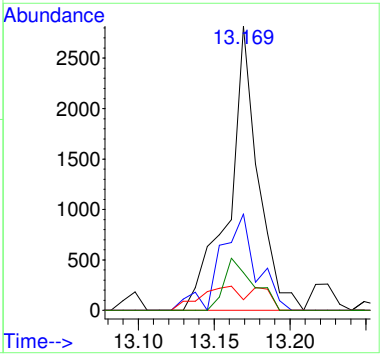


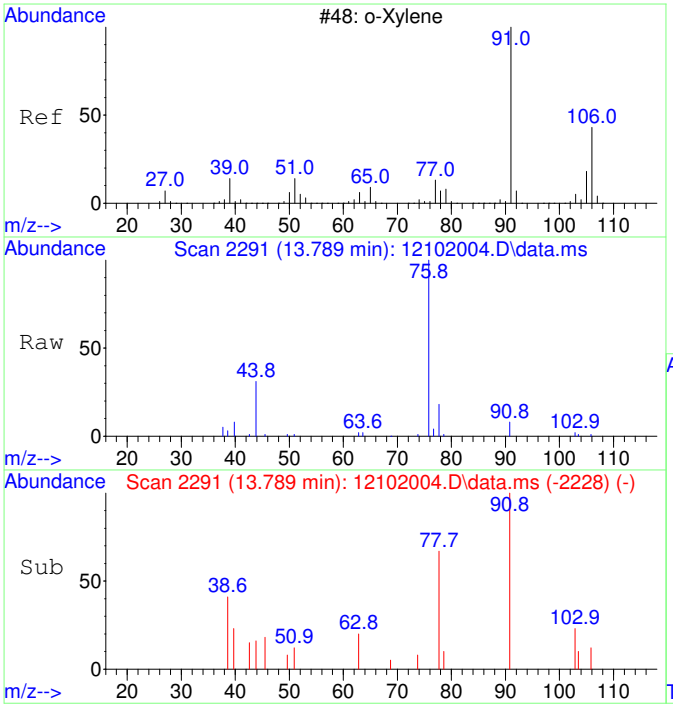


#43
m&p-Xylene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
105	17.4	0.0	54.7
51	18.7	0.0	40.1

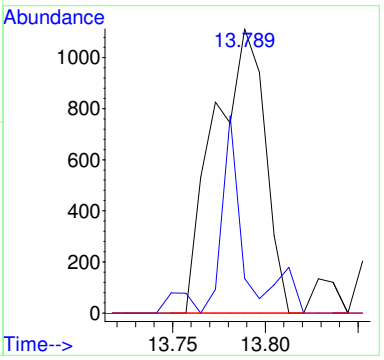


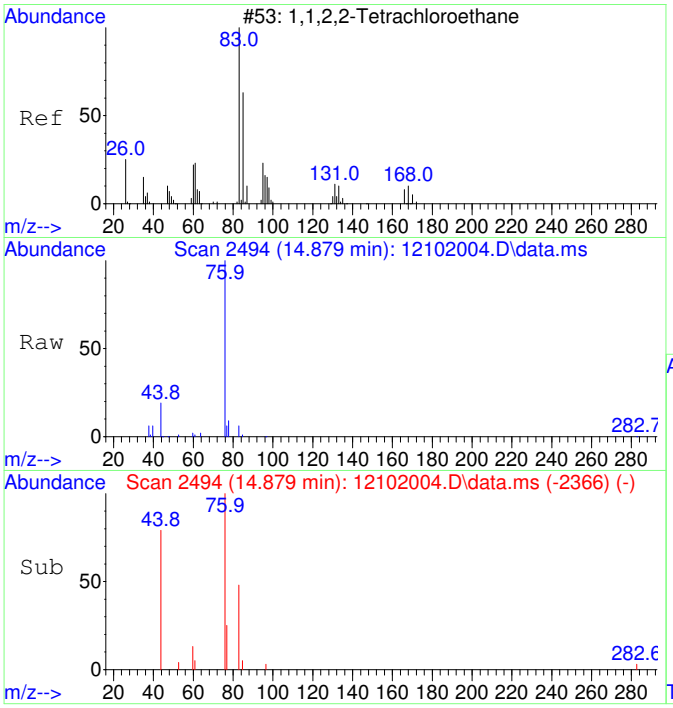


#44
o-Xylene SCAN
Concen: 76.20 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2125

Ion	Ratio	Lower	Upper
91	100		
106	21.2	18.0	78.0
105	0.0	0.0	56.6

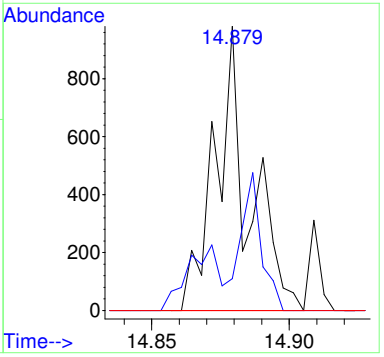


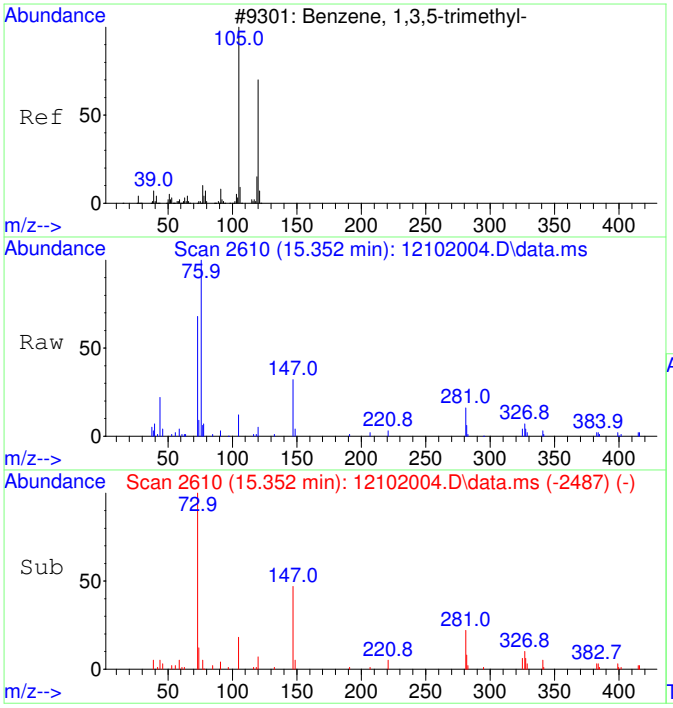


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 57.45 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 833

Ion	Ratio	Lower	Upper
83	100		
85	23.3	35.9	95.9#
95	0.0	0.0	47.4

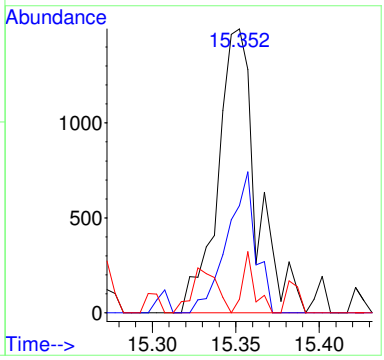


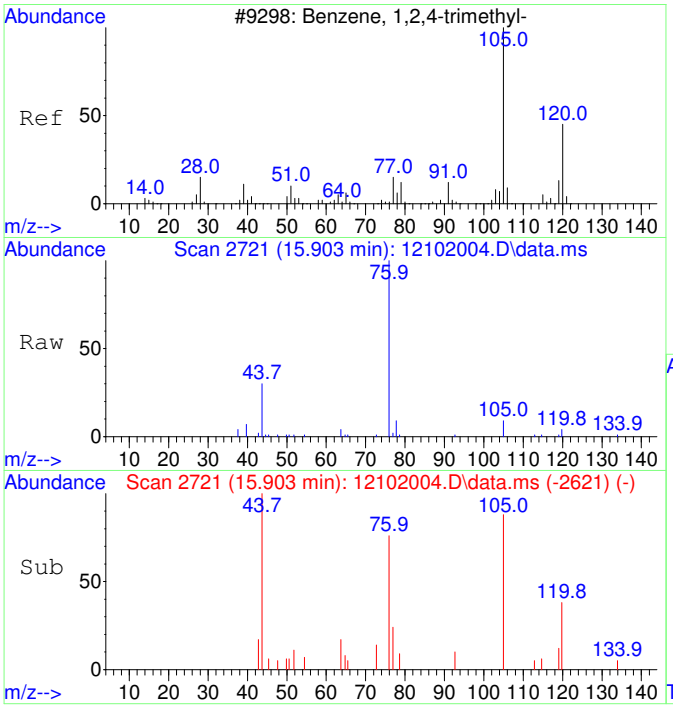


#46
1,3,5-Trimethylbenzene SCAN
Concen: 82.25 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 2420

Ion	Ratio	Lower	Upper
105	100		
120	36.2	18.3	78.3
119	6.7	0.0	43.1

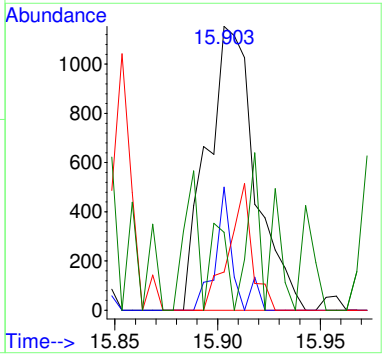




#47
1,2,4-Trimethylbenzene SCAN
Concen: 62.54 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 1880

Ion	Ratio	Lower	Upper
105	100		
120	15.9	16.9	76.9#
119	21.4	0.0	41.9
77	23.0	0.0	42.3



2012007-01RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102005.D
Acq On : 10 Dec 2020 11:42
InstName : AG5975C
Operator : TD
Sample : 2012007-01RE1
Misc : 10X DL (180-20)
ALS Vial : 5 Sample Multiplier: 10

Quant Time: Dec 10 13:36:22 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

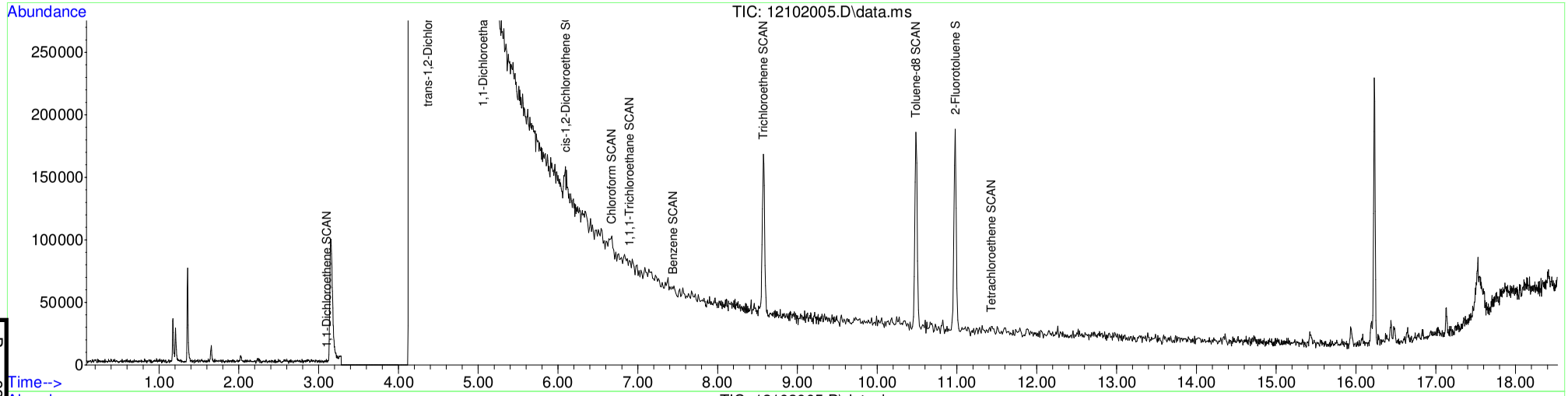
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.970	109	231574	5000.00	ug/L		0.00
System Monitoring Compounds							
12) Toluene-d8	10.487	98	188289	4198.18	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 83.96%#				
Target Compounds							Qvalue
2] 1,1-Dichloroethene	3.097	61	1322	143.97	ug/L		64
3] trans-1,2-Dichloroethene	4.376	61	1245	107.55	ug/L		90
4] 1,1-Dichloroethane	5.086	63	1143	82.67	ug/L		91
5] cis-1,2-Dichloroethene	6.088	61	22032	1538.60	ug/L		98
6] Chloroform	6.652	83	9082	660.32	ug/L		99
7] 1,1,1-Trichloroethane	6.919	97	766	51.84	ug/L		99
9] Benzene	7.515	78	2300	59.02	ug/L	#	13
11] Trichloroethene	8.575	130	80294	6526.30	ug/L	RPT	97
15] Tetrachloroethene	11.432	166	3585	206.11	ug/L		99
25) 2-Fluorotoluene SCAN	10.979	109	128936	4905.12	ug/L		99
26) 1,1-Dichloroethene SCAN	3.100	61	373	60.78	ug/L	#	37
27) trans-1,2-Dichloroethe...	4.368	61	544	69.60	ug/L	#	45
28) 1,1-Dichloroethane SCAN	5.065	63	292	31.65	ug/L	#	1
29) cis-1,2-Dichloroethene...	6.093	61	15341	1691.48	ug/L		84
30) Chloroform SCAN	6.663	83	6034	713.29	ug/L		83
31) 1,1,1-Trichloroethane ...	6.894	97	614	70.34	ug/L	#	19
33) Benzene SCAN	7.441	78	8425	319.02	ug/L	#	91
35) Trichloroethene SCAN	8.574	130	41391	7187.82	ug/L	#	77
36) Toluene-d8 SCAN	10.486	98	112592	4566.99	ug/L		98
39) Tetrachloroethene SCAN	11.431	166	1976	289.37	ug/L	#	72

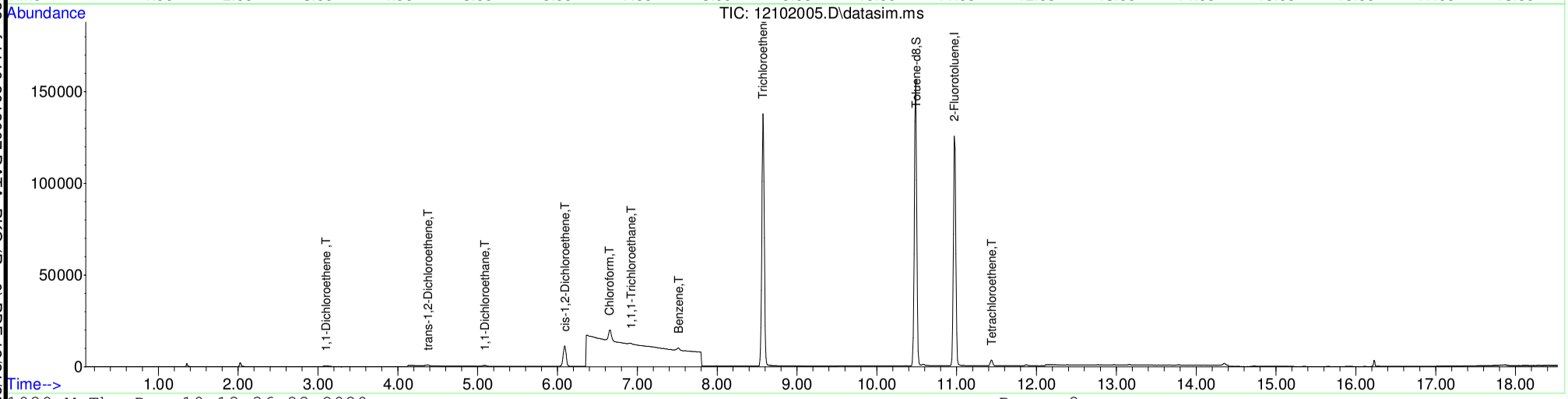
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102005.D
Acq On : 10 Dec 2020 11:42
InstName : AG5975C
Operator : TD
Sample : 2012007-01RE1
Misc : 10X DL (180-20)
ALS Vial : 5 Sample Multiplier: 10

Quant Time: Dec 10 13:36:22 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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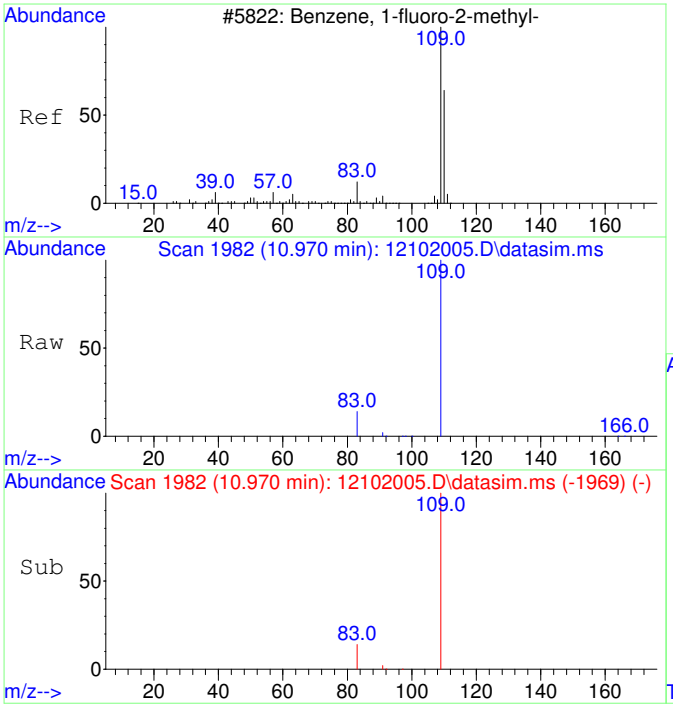
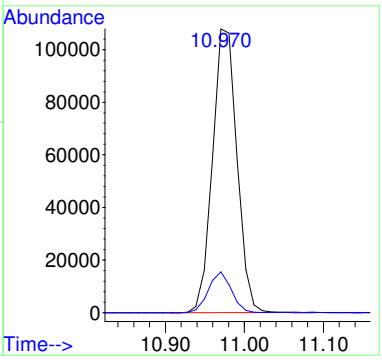
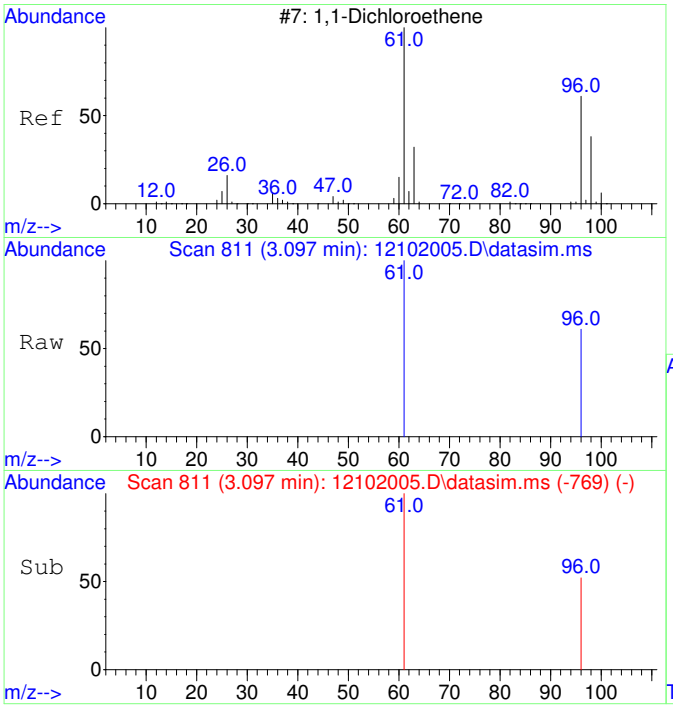


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:109 Resp: 231574

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

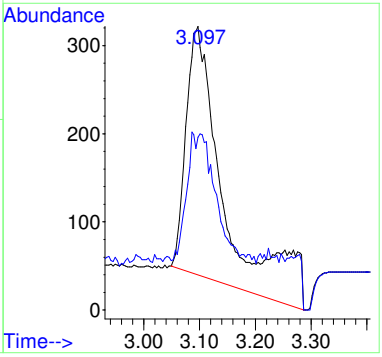


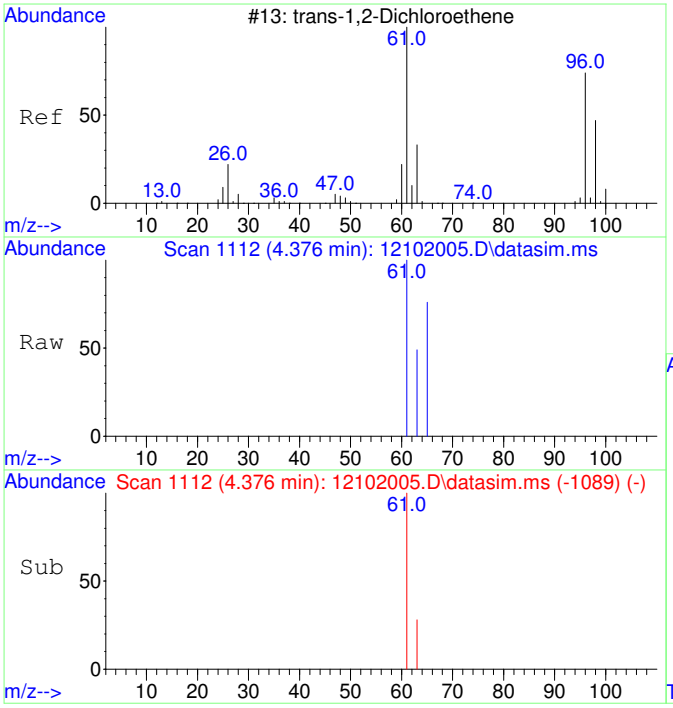


#2
1,1-Dichloroethene
Concen: 143.97 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 1322

Ion	Ratio	Lower	Upper
61	100		
96	38.2	37.2	97.2

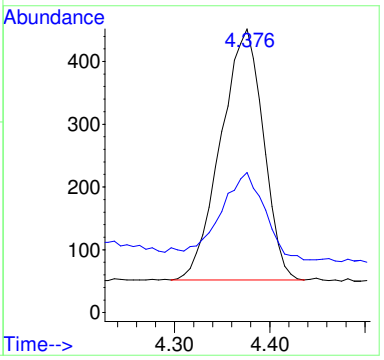


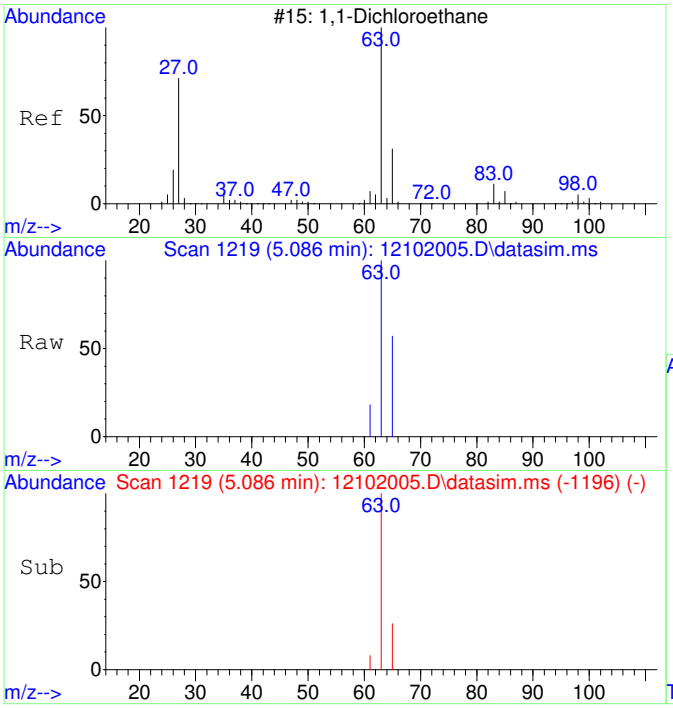


#3
trans-1,2-Dichloroethene
Concen: 107.55 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 1245

Ion	Ratio	Lower	Upper
61	100		
63	37.8	2.4	62.4

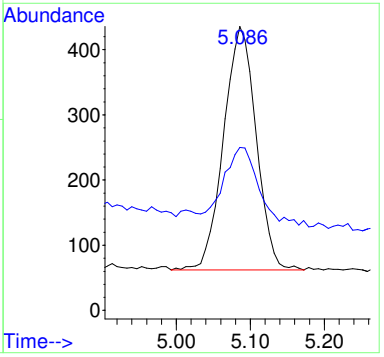


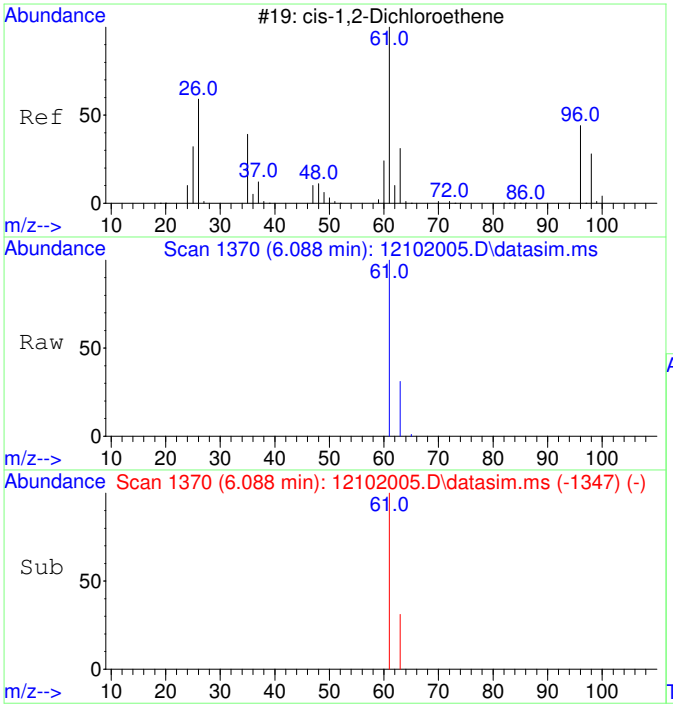


#4
1,1-Dichloroethane
Concen: 82.67 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 63 Resp: 1143

Ion	Ratio	Lower	Upper
63	100		
65	36.9	1.8	61.8

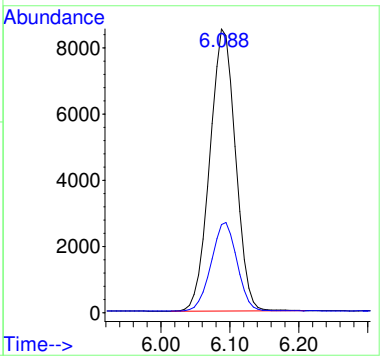


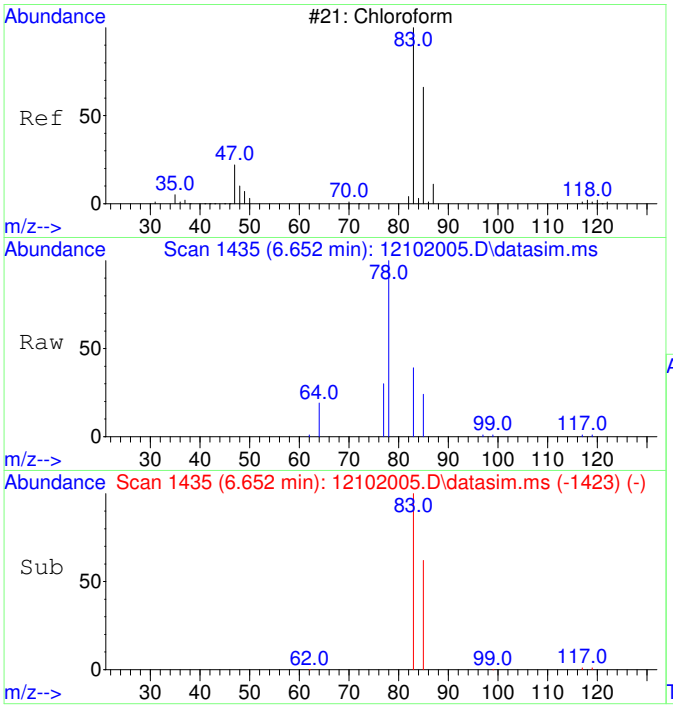


#5
cis-1,2-Dichloroethene
Concen: 1538.60 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 22032

Ion	Ratio	Lower	Upper
61	100		
63	31.3	2.5	62.5

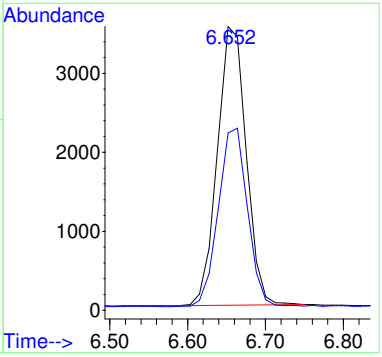


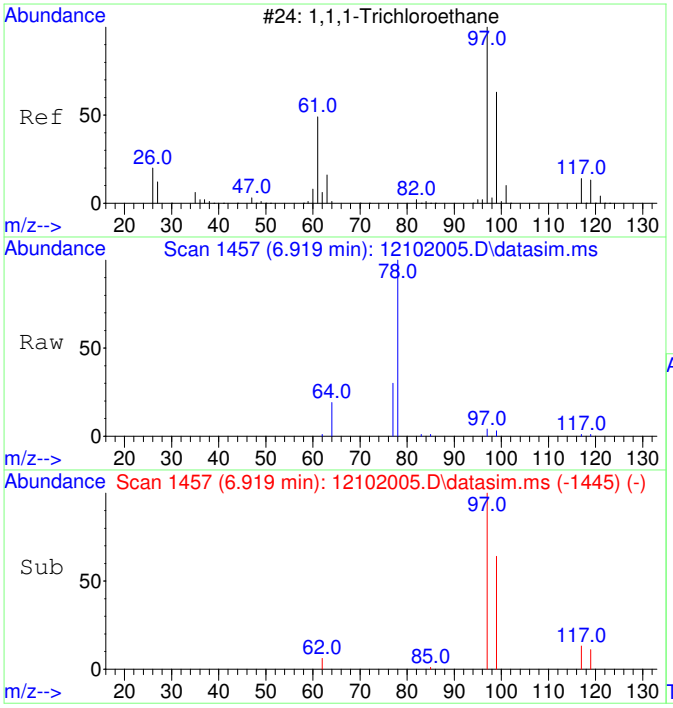


#6
Chloroform
Concen: 660.32 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 83 Resp: 9082

Ion	Ratio	Lower	Upper
83	100		
85	64.5	35.1	95.1

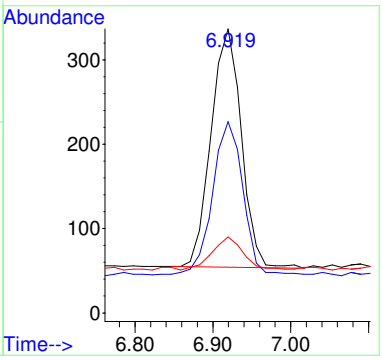


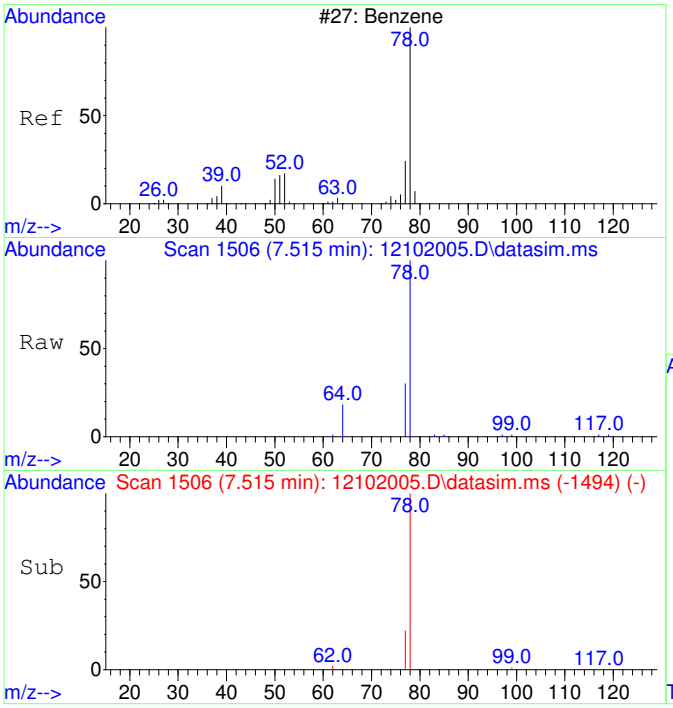


#7
1,1,1-Trichloroethane
Concen: 51.84 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 97 Resp: 766

Ion	Ratio	Lower	Upper
97	100		
99	63.8	34.6	94.6
117	14.2	0.0	43.2

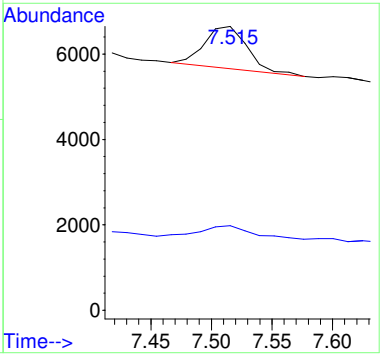


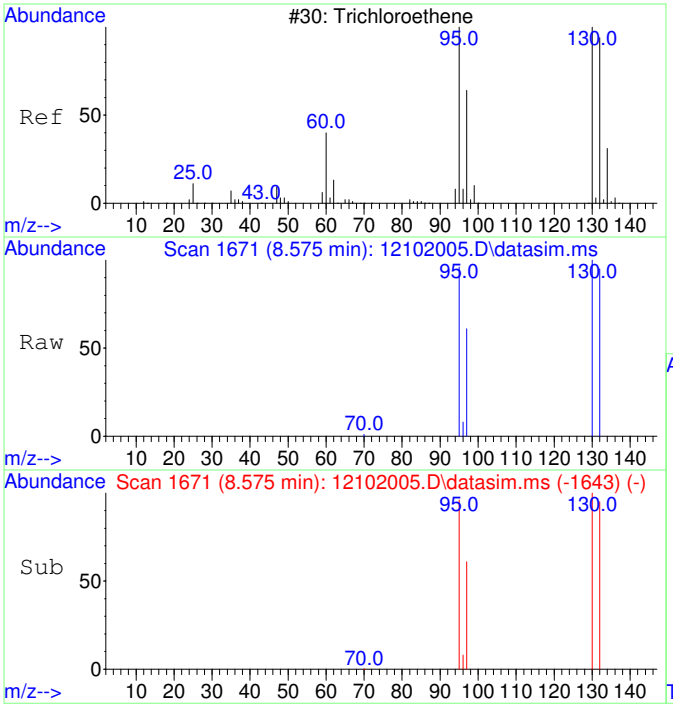


#9
Benzene
Concen: 59.02 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 78 Resp: 2300

Ion	Ratio	Lower	Upper
78	100		
77	65.6	0.0	53.2#

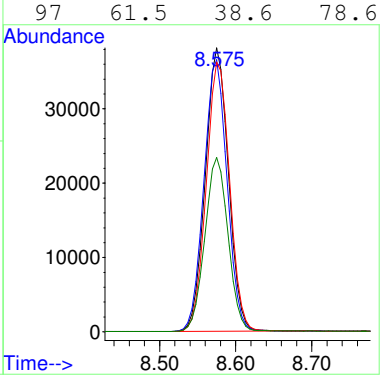


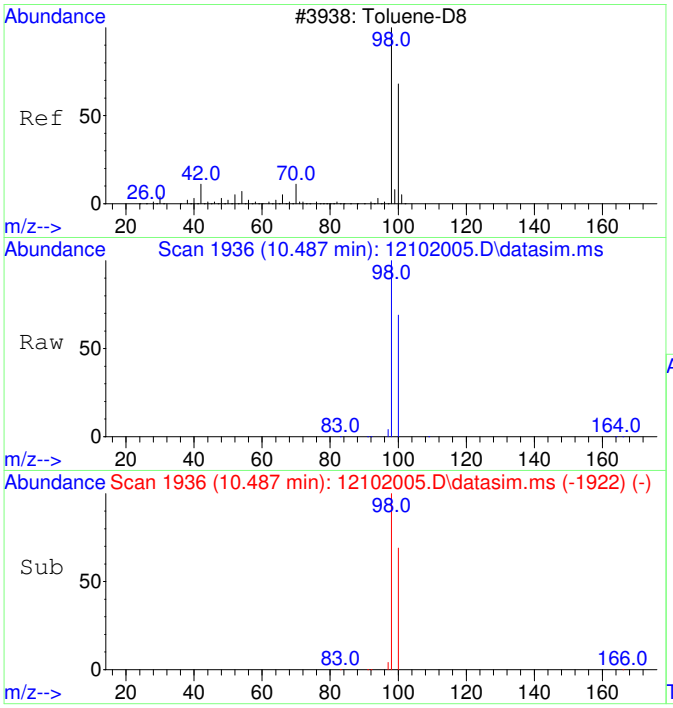


#11
Trichloroethene
Concen: 6526.30 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:130 Resp: 80294

Ion	Ratio	Lower	Upper
130	100		
95	96.1	60.7	120.7
132	96.0	76.0	116.0
97	61.5	38.6	78.6

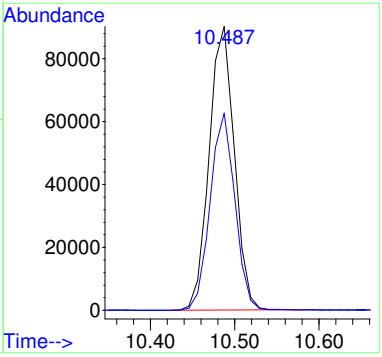


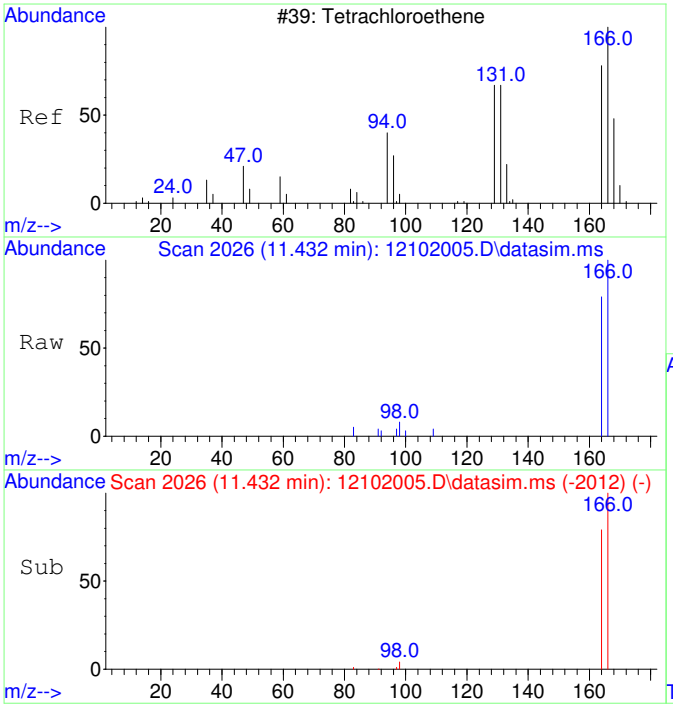


#12
Toluene-d8
Concen: 4198.18 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 98 Resp: 188289

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

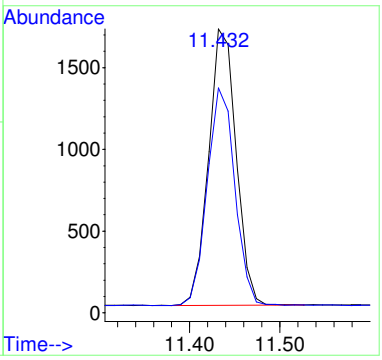


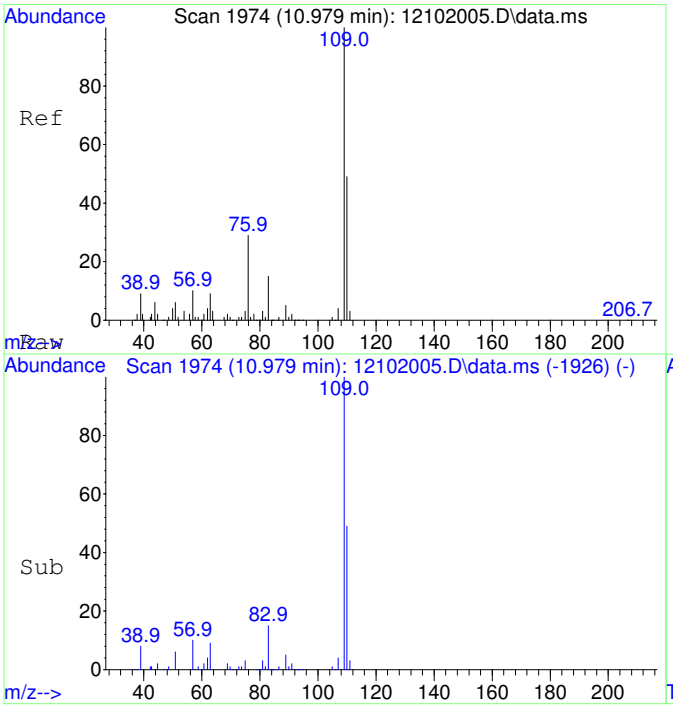


#15
Tetrachloroethene
Concen: 206.11 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:166 Resp: 3585

Ion	Ratio	Lower	Upper
166	100		
164	78.7	47.8	107.8

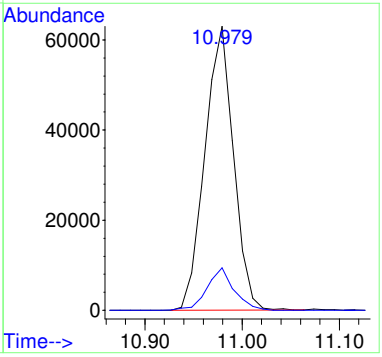


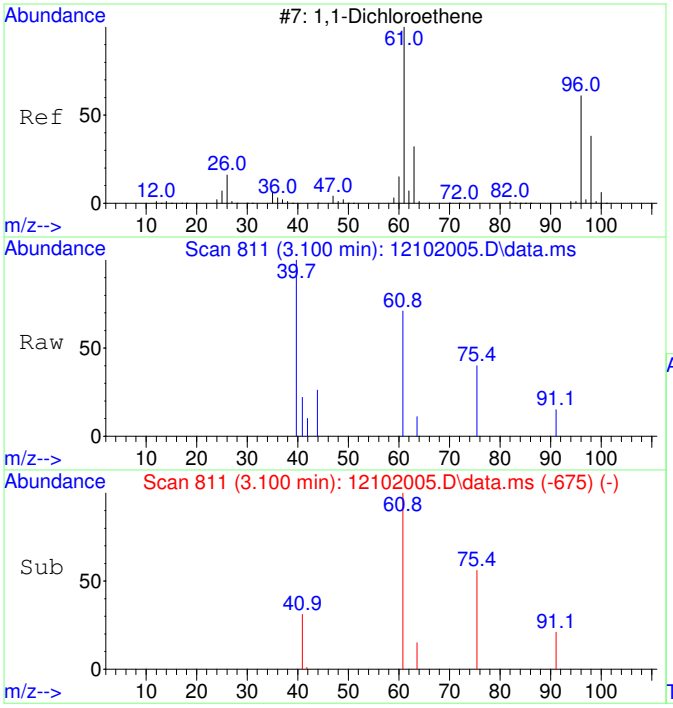


#25
2-Fluorotoluene SCAN
Concen: 4905.12 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:109 Resp: 128936

Ion	Ratio	Lower	Upper
109	100		
83	14.1	0.0	43.8

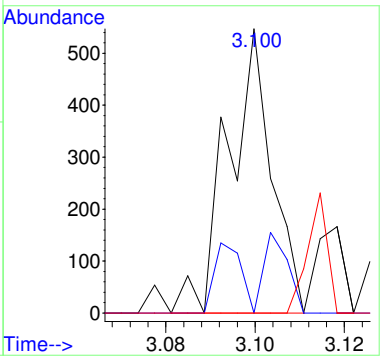


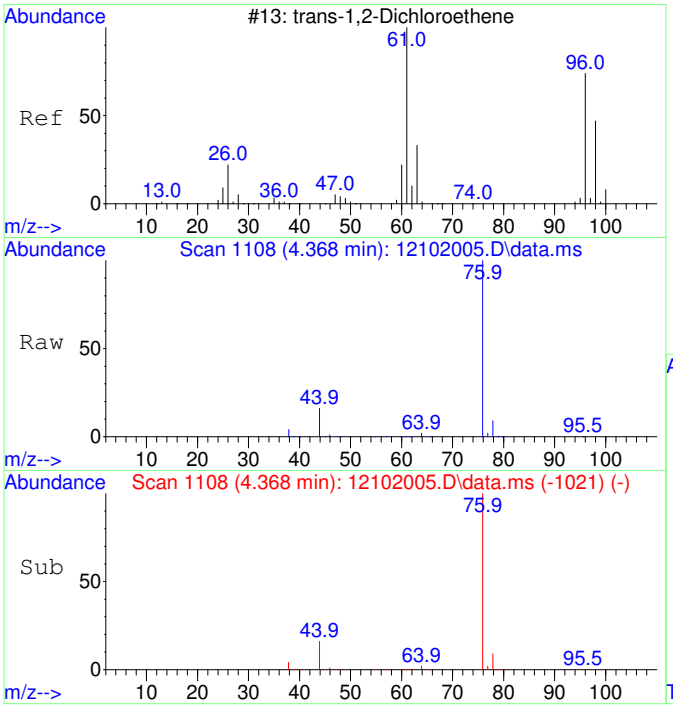


#26
1,1-Dichloroethene SCAN
Concen: 60.78 ug/L
RT: 3.100 min Scan# 811
Delta R.T. 0.004 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 373

Ion	Ratio	Lower	Upper
61	100		
96	15.3	33.1	93.1#
98	0.0	11.2	71.2#

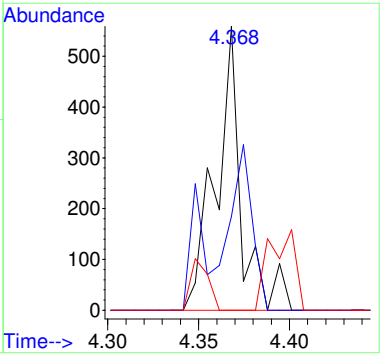


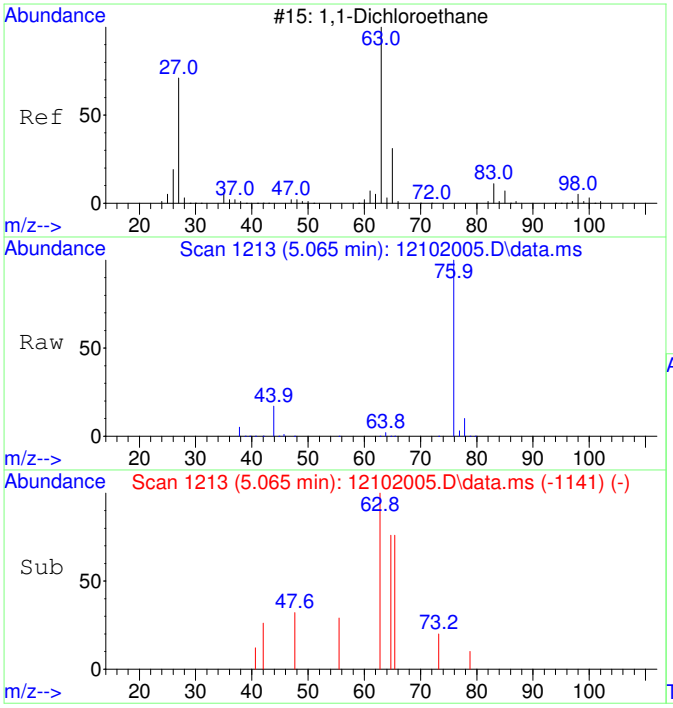


#27
trans-1,2-Dichloroethene SCAN
Concen: 69.60 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 544

Ion	Ratio	Lower	Upper
61	100		
96	40.3	49.0	109.0#
98	0.0	20.5	80.5#

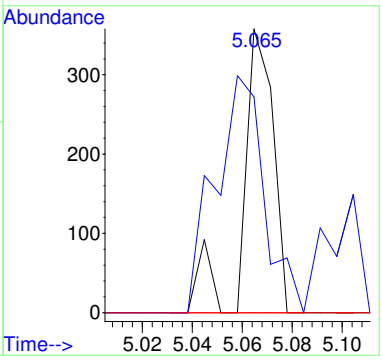


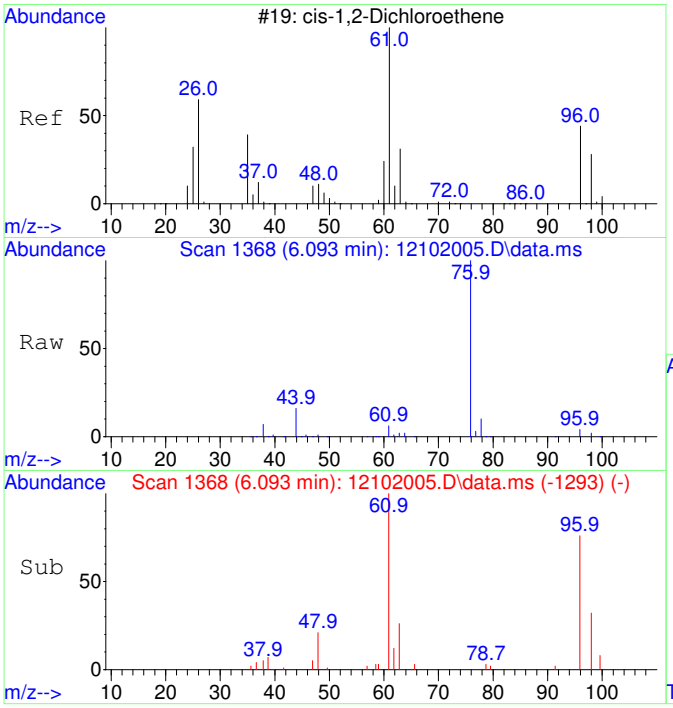


#28
1,1-Dichloroethane SCAN
Concen: 31.65 ug/L
RT: 5.065 min Scan# 1213
Delta R.T. -0.020 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 63 Resp: 292

Ion	Ratio	Lower	Upper
63	100		
65	139.4	1.3	61.3#
83	0.0	0.0	45.9

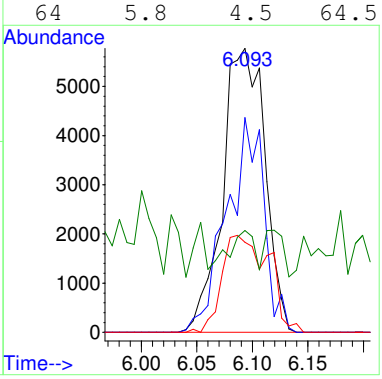


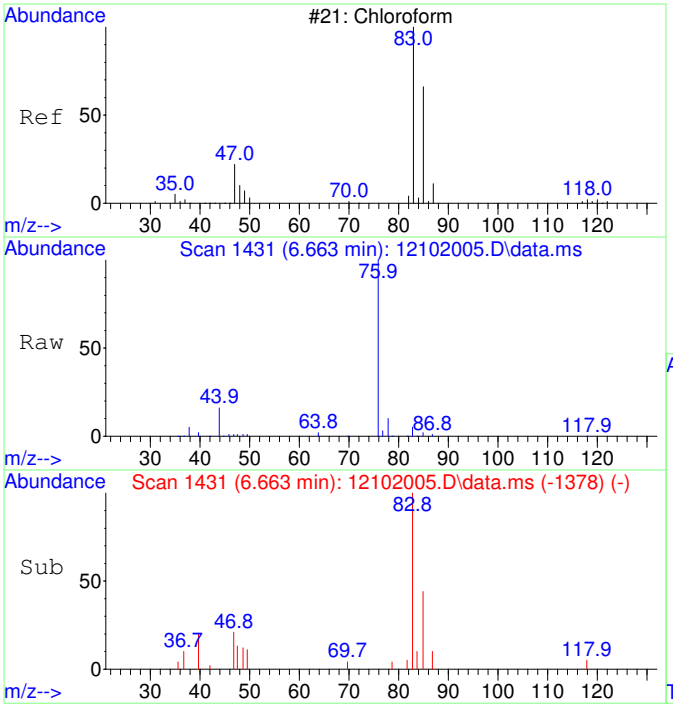


#29
cis-1,2-Dichloroethene SCAN
Concen: 1691.48 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 61 Resp: 15341

Ion	Ratio	Lower	Upper
61	100		
96	66.5	39.9	99.9
98	37.7	13.5	73.5
64	5.8	4.5	64.5

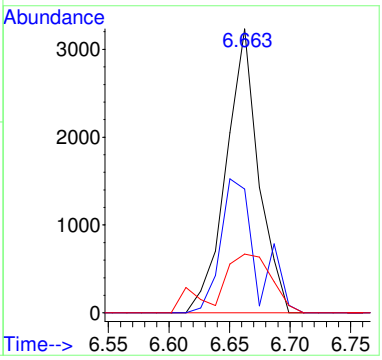


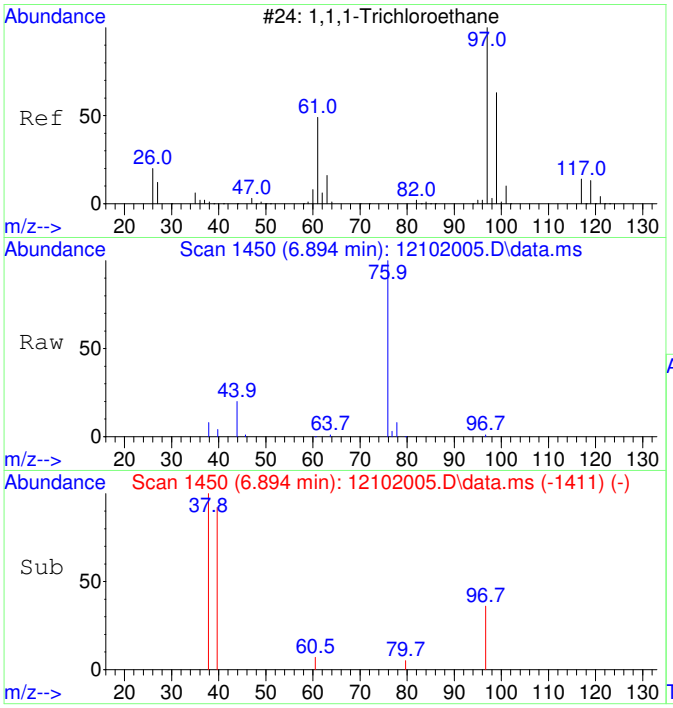


#30
Chloroform SCAN
Concen: 713.29 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 83 Resp: 6034

Ion	Ratio	Lower	Upper
83	100		
85	52.9	34.6	94.6
47	34.1	0.0	53.4

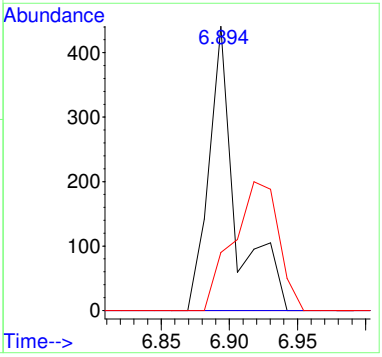


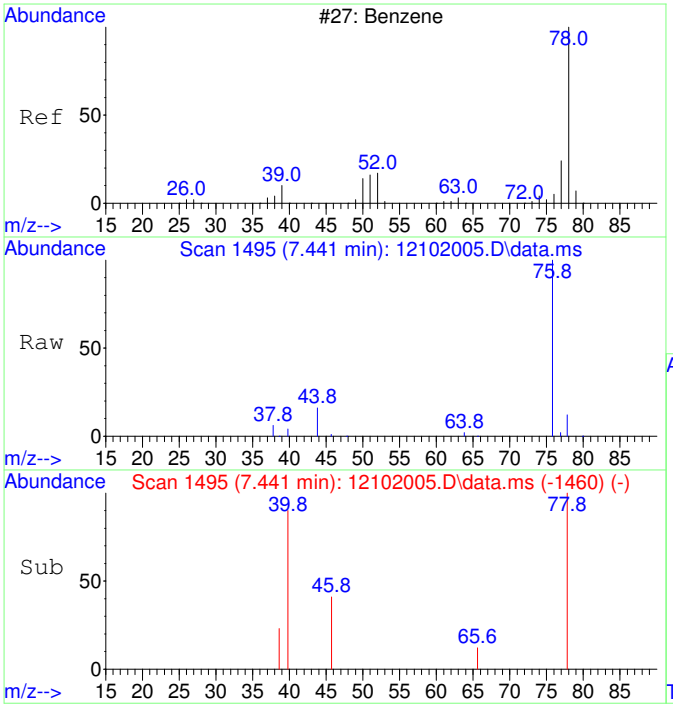


#31
1,1,1-Trichloroethane SCAN
Concen: 70.34 ug/L
RT: 6.894 min Scan# 1450
Delta R.T. -0.024 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 97 Resp: 614

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

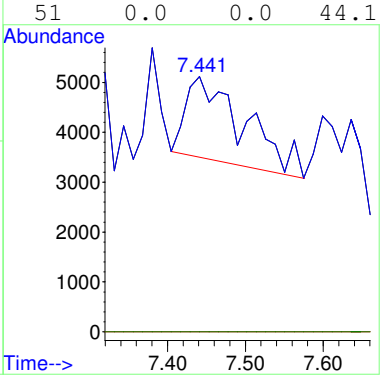


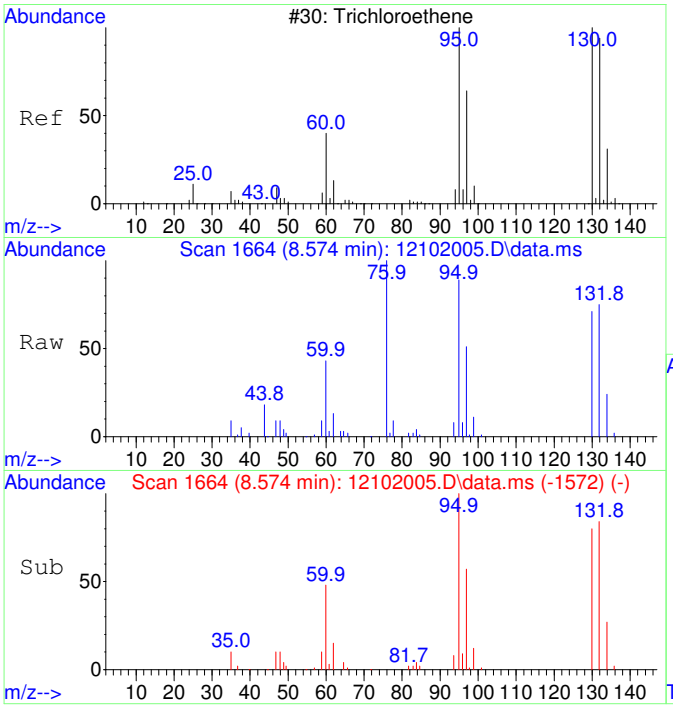


#33
Benzene SCAN
Concen: 319.02 ug/L
RT: 7.441 min Scan# 1495
Delta R.T. -0.073 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 78 Resp: 8425

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

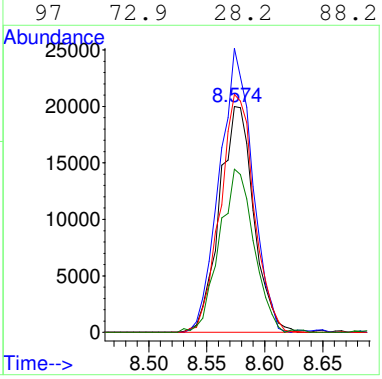


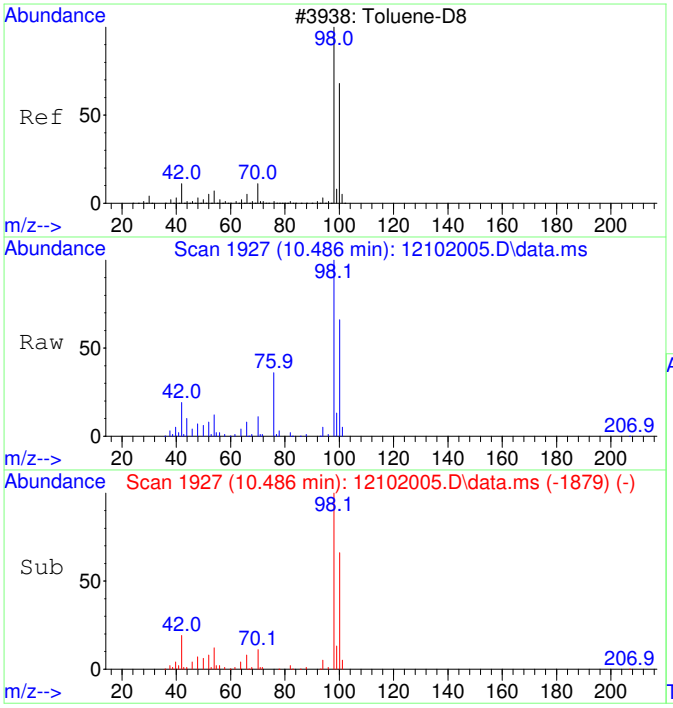


#35
Trichloroethene SCAN
Concen: 7187.82 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:130 Resp: 41391

Ion	Ratio	Lower	Upper
130	100		
95	120.7	60.5	120.5#
132	104.3	59.6	119.6
97	72.9	28.2	88.2

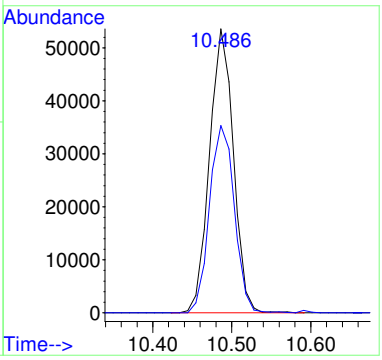


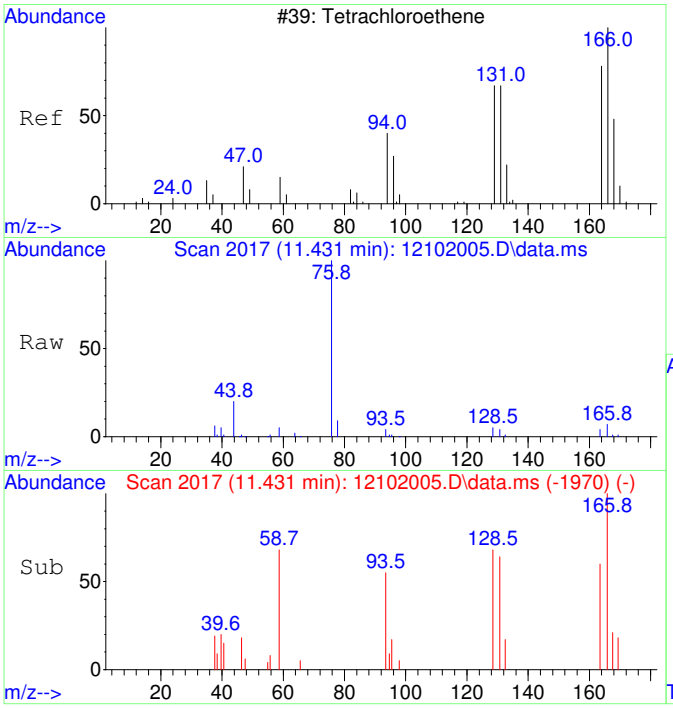


#36
Toluene-d8 SCAN
Concen: 4566.99 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion: 98 Resp: 112592

Ion	Ratio	Lower	Upper
98	100		
100	68.7	40.0	100.0

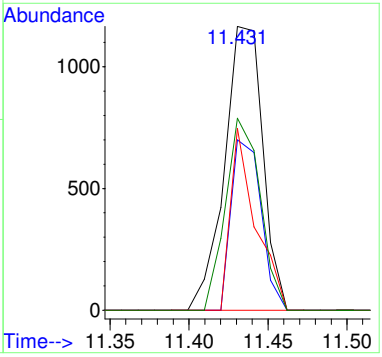




#39
Tetrachloroethene SCAN
Concen: 289.37 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12102005.D
Acq: 10 Dec 2020 11:42

Tgt Ion:166 Resp: 1976

Ion	Ratio	Lower	Upper
166	100		
164	46.9	50.9	110.9#
131	41.9	38.7	98.7
129	60.9	41.8	101.8



2012007-07RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102006.D
Acq On : 10 Dec 2020 12:06
InstName : AG5975C
Operator : TD
Sample : 2012007-07RE1
Misc : 10X DL (180-20)
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Dec 10 13:36:28 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

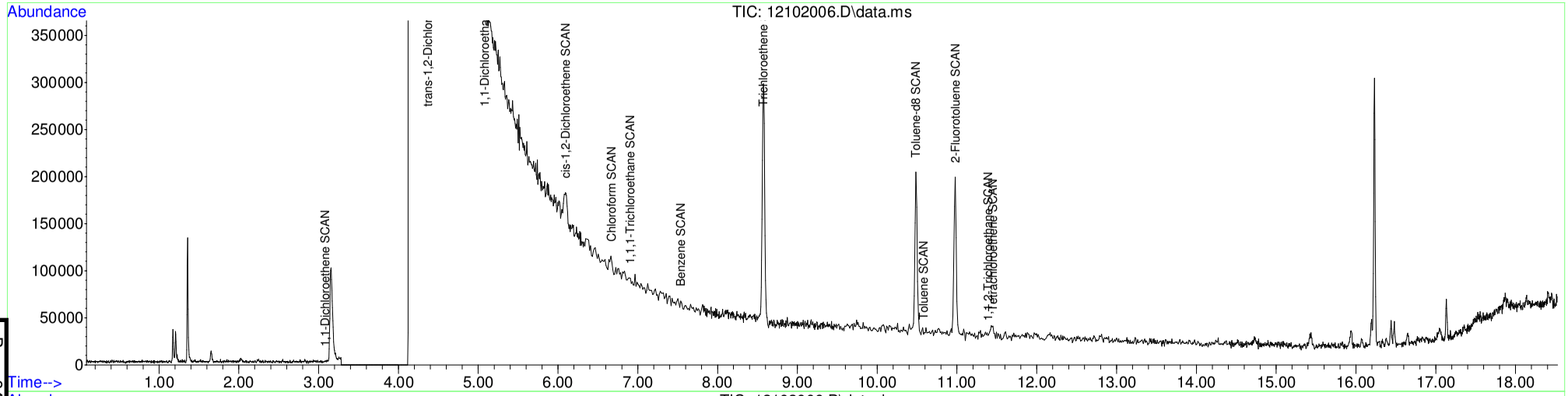
Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.981	109	232329	5000.00 ug/L		0.00
System Monitoring Compounds						
12) Toluene-d8	10.488	98	189904	4220.43 ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 84.41%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	2150	233.39 ug/L		87
3] trans-1,2-Dichloroethene	4.376	61	2486	214.06 ug/L		94
4] 1,1-Dichloroethane	5.086	63	2155	155.36 ug/L		93
5] cis-1,2-Dichloroethene	6.088	61	44195	3076.31 ug/L	RPT	98
6] Chloroform	6.652	83	14528	1052.84 ug/L		100
7] 1,1,1-Trichloroethane	6.919	97	1537	103.69 ug/L		99
9] Benzene	7.515	78	2202	56.33 ug/L		58
11] Trichloroethene	8.575	130	169215	13709.10 ug/L	RPT	97
13] Toluene	10.582	91	1478	26.38 ug/L		100
15] Tetrachloroethene	11.432	166	7450	426.93 ug/L		99
25) 2-Fluorotoluene SCAN	10.979	109	137419	5210.85 ug/L		99
26) 1,1-Dichloroethene SCAN	3.081	61	387	62.86 ug/L		95
27) trans-1,2-Dichloroethe...	4.368	61	999	127.40 ug/L		93
28) 1,1-Dichloroethane SCAN	5.078	63	1502	162.28 ug/L #		76
29) cis-1,2-Dichloroethene...	6.093	61	32379	3558.47 ug/L		80
30) Chloroform SCAN	6.663	83	9247	1089.56 ug/L		81
31) 1,1,1-Trichloroethane ...	6.906	97	1314	150.04 ug/L		84
33) Benzene SCAN	7.539	78	3084	116.40 ug/L		96
35) Trichloroethene SCAN	8.574	130	92371	15988.71 ug/L		88
36) Toluene-d8 SCAN	10.486	98	117718	4759.40 ug/L		95
37) Toluene SCAN	10.581	91	1129	37.07 ug/L #		57
38) 1,1,2-Trichloroethane ...	11.389	97	262	34.32 ug/L #		13
39) Tetrachloroethene SCAN	11.452	166	2566	374.55 ug/L #		22

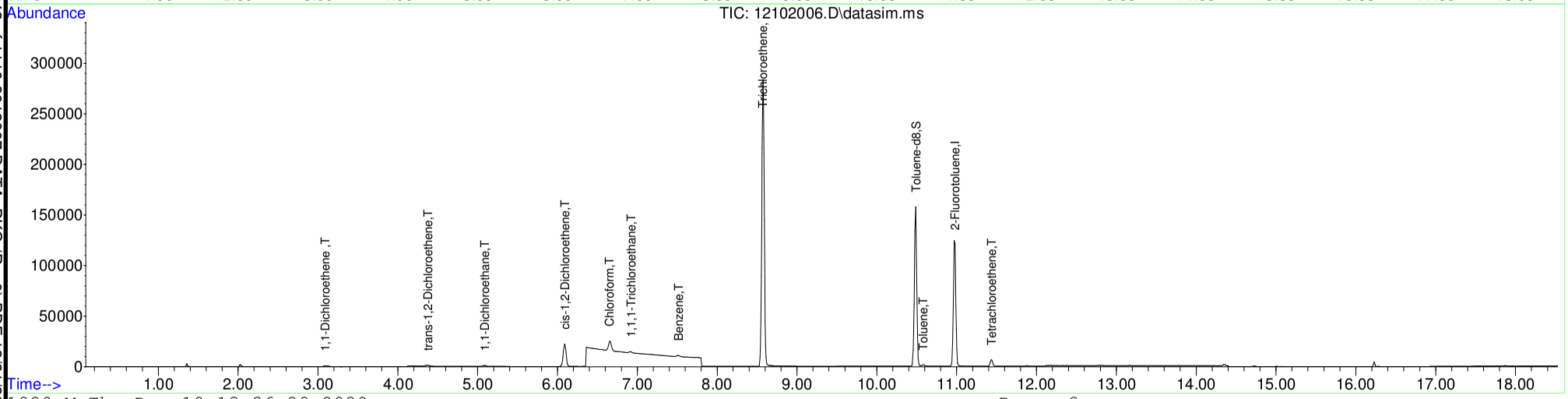
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102006.D
Acq On : 10 Dec 2020 12:06
InstName : AG5975C
Operator : TD
Sample : 2012007-07RE1
Misc : 10X DL (180-20)
ALS Vial : 6 Sample Multiplier: 10

Quant Time: Dec 10 13:36:28 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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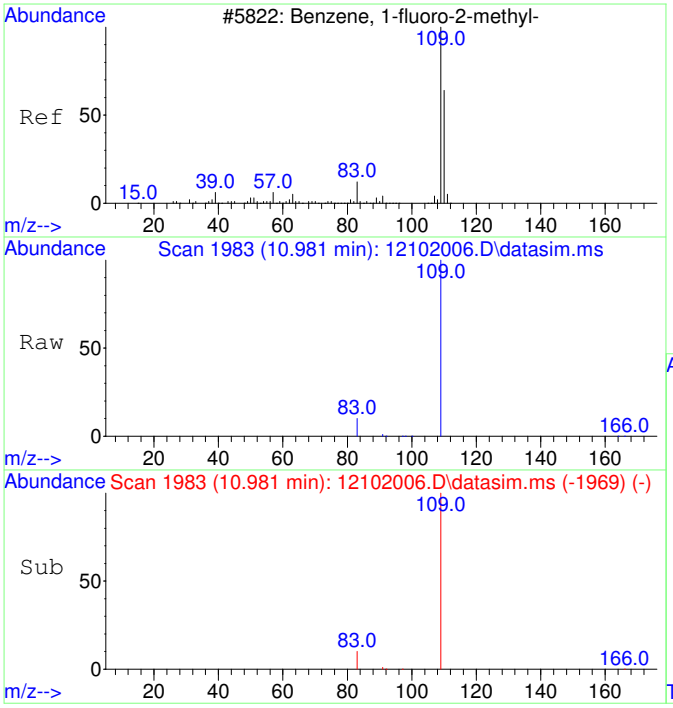
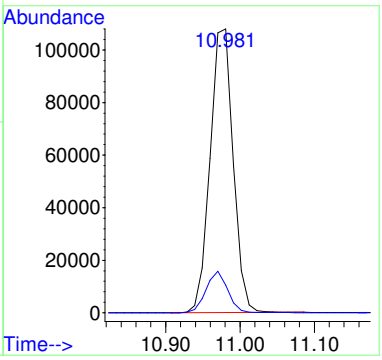
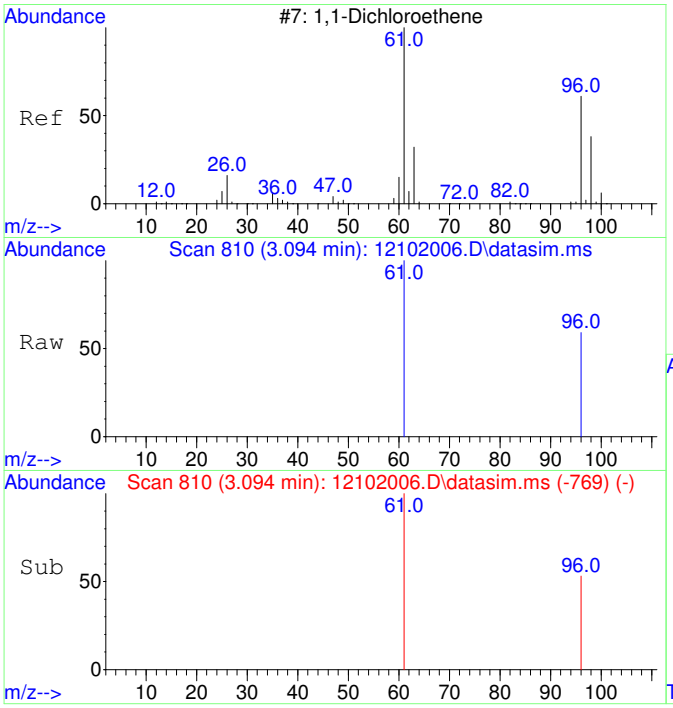


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.981 min Scan# 1983
Delta R.T. 0.001 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion:109 Resp: 232329

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

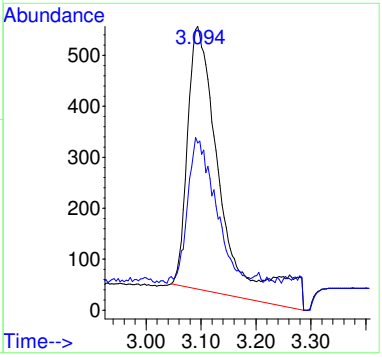


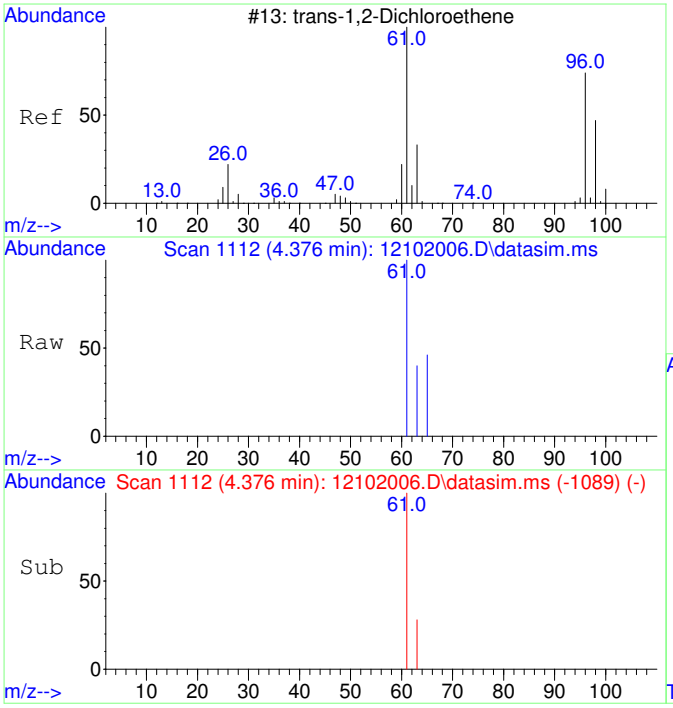


#2
1,1-Dichloroethene
Concen: 233.39 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 2150

Ion	Ratio	Lower	Upper
61	100		
96	56.5	37.2	97.2

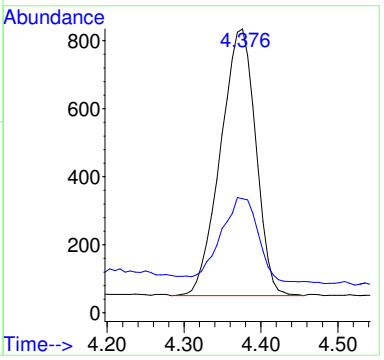


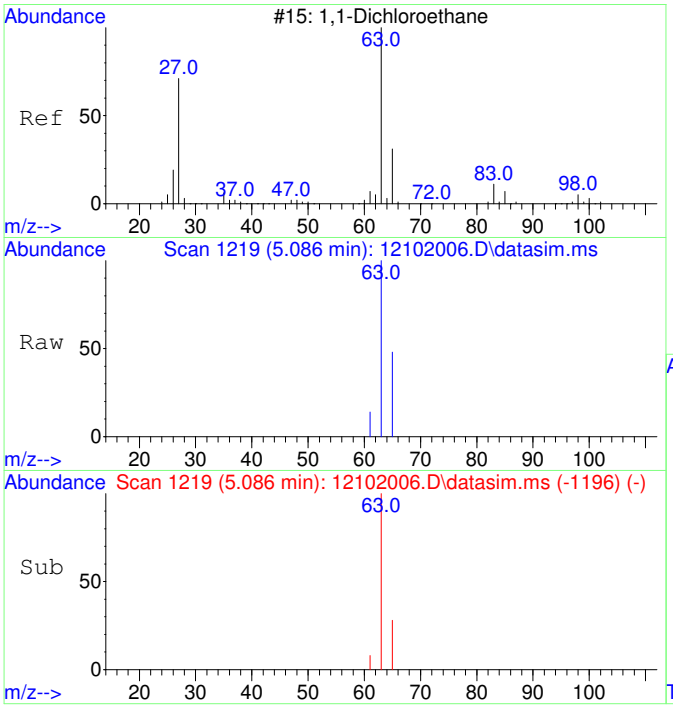


#3
trans-1,2-Dichloroethene
Concen: 214.06 ug/L
RT: 4.376 min Scan# 1112
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 2486

Ion	Ratio	Lower	Upper
61	100		
63	35.5	2.4	62.4

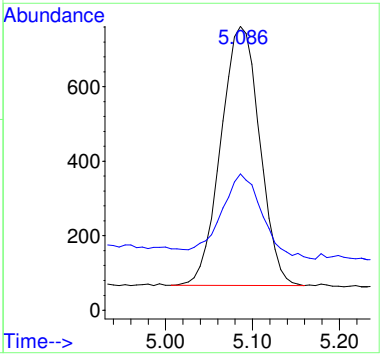


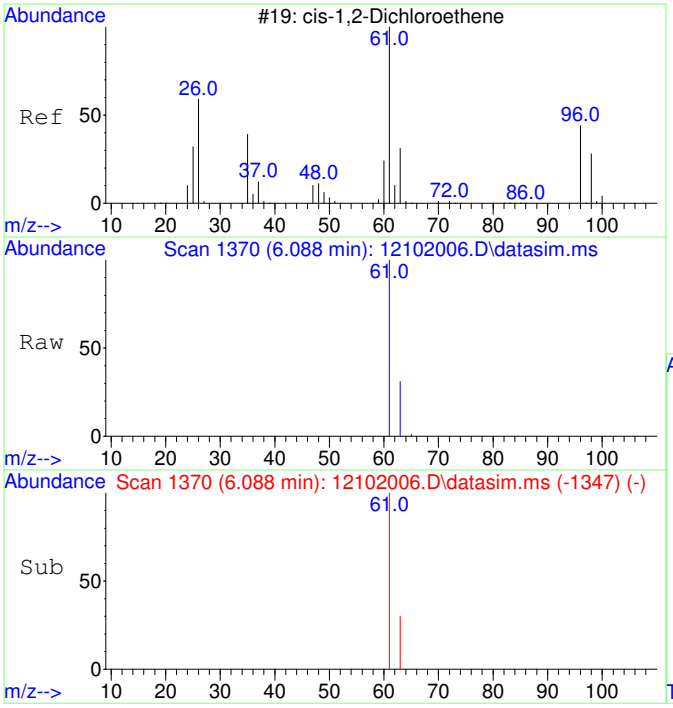


#4
1,1-Dichloroethane
Concen: 155.36 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 63 Resp: 2155

Ion	Ratio	Lower	Upper
63	100		
65	35.5	1.8	61.8

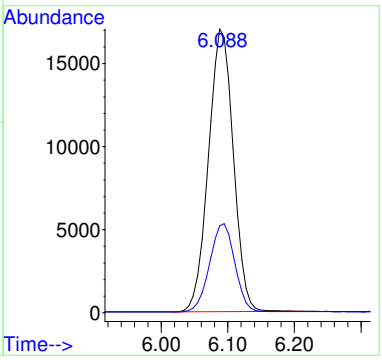


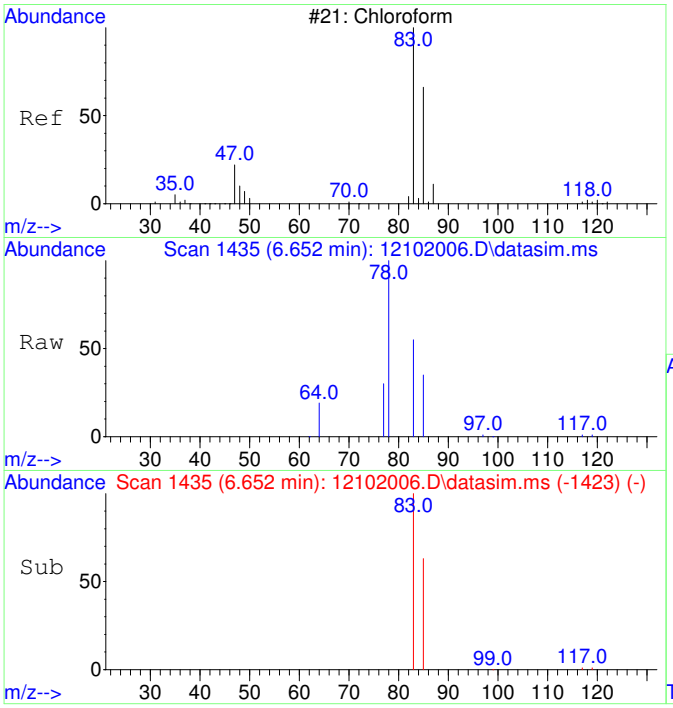


#5
cis-1,2-Dichloroethene
Concen: 3076.31 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 44195

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

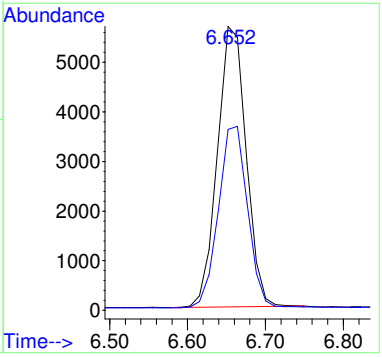


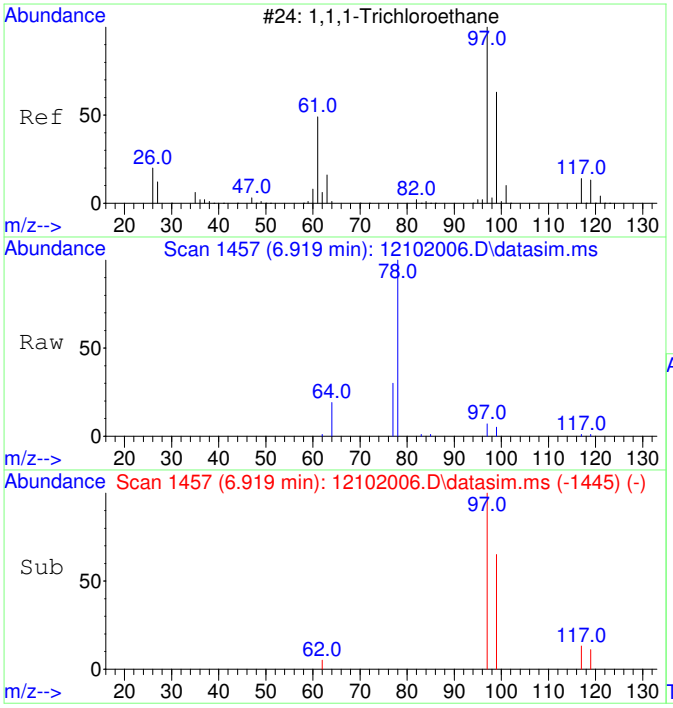


#6
Chloroform
Concen: 1052.84 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 83 Resp: 14528

Ion	Ratio	Lower	Upper
83	100		
85	65.3	35.1	95.1

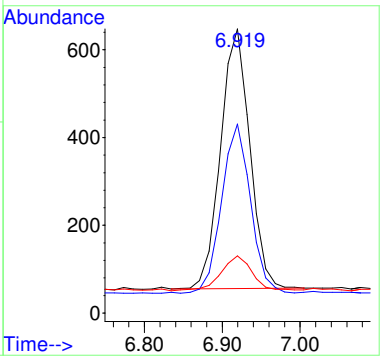


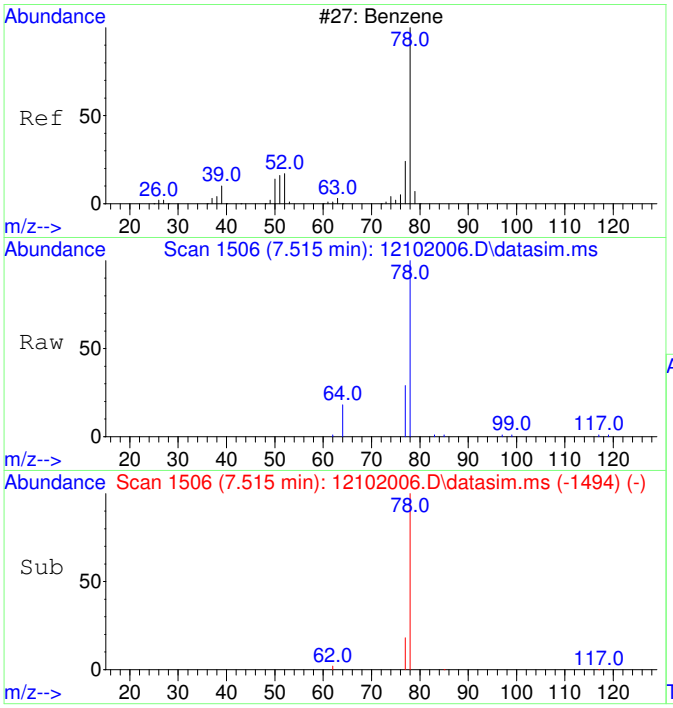


#7
1,1,1-Trichloroethane
Concen: 103.69 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 97 Resp: 1537

Ion	Ratio	Lower	Upper
97	100		
99	64.4	34.6	94.6
117	14.2	0.0	43.2

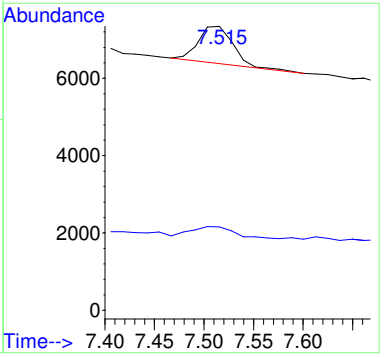


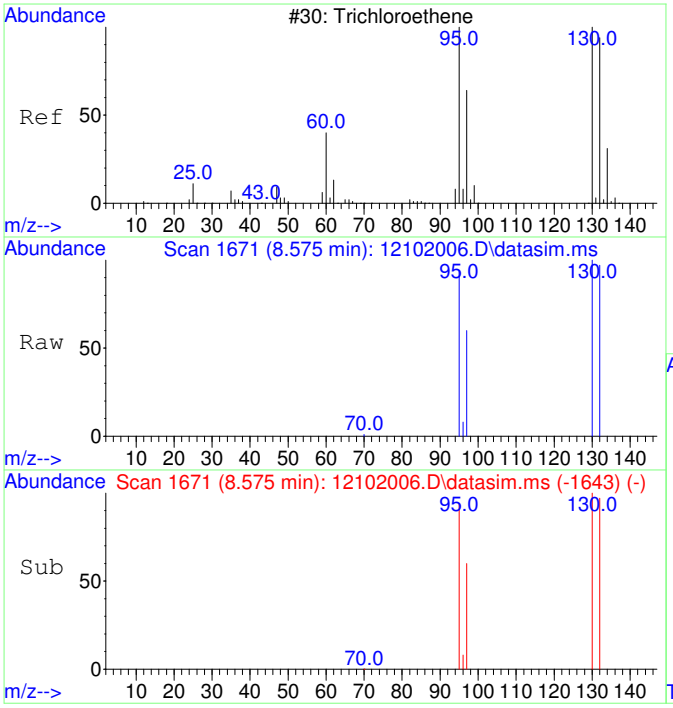


#9
Benzene
Concen: 56.33 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 78 Resp: 2202

Ion	Ratio	Lower	Upper
78	100		
77	43.5	0.0	53.2

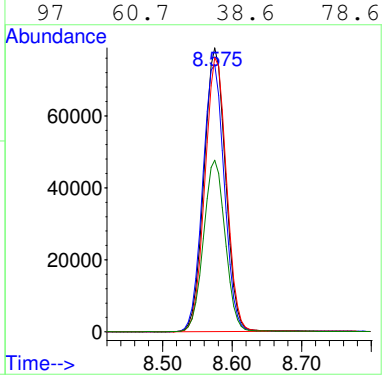


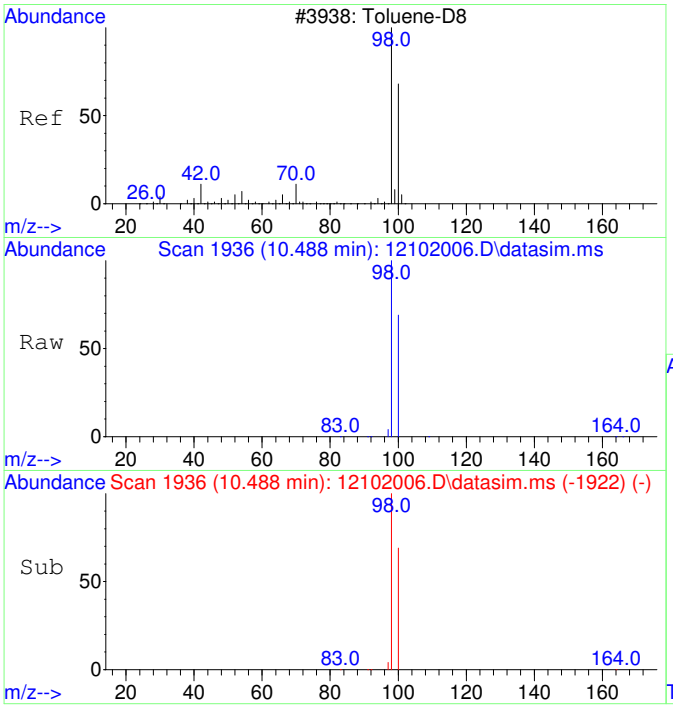


#11
Trichloroethene
Concen: 13709.10 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion:130 Resp: 169215

Ion	Ratio	Lower	Upper
130	100		
95	94.8	60.7	120.7
132	96.7	76.0	116.0
97	60.7	38.6	78.6

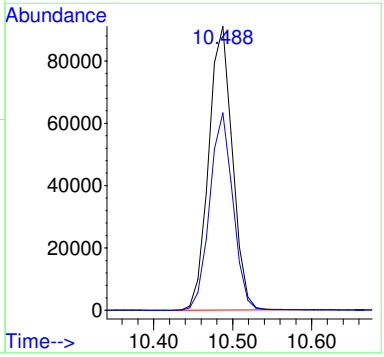


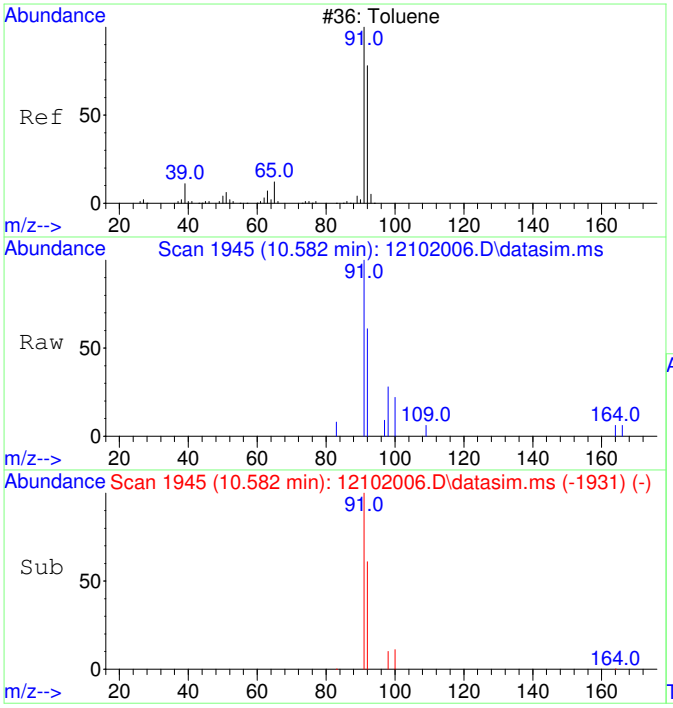


#12
Toluene-d8
Concen: 4220.43 ug/L
RT: 10.488 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 98 Resp: 189904

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

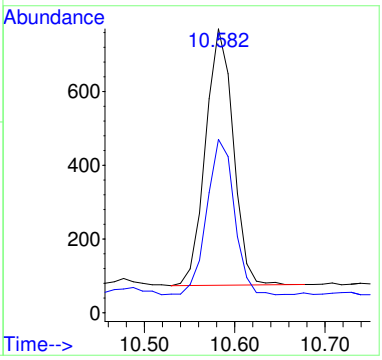


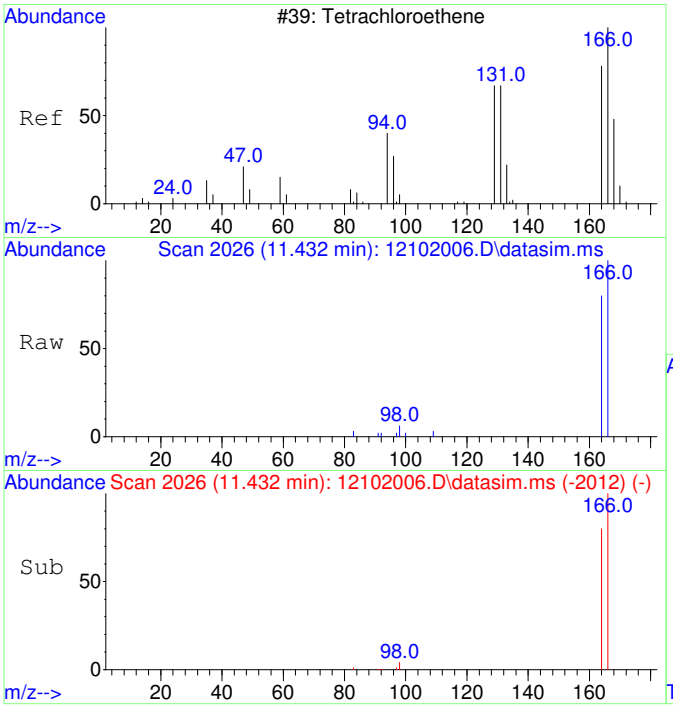


#13
Toluene
Concen: 26.38 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 91 Resp: 1478

Ion	Ratio	Lower	Upper
91	100		
92	60.1	29.9	89.9

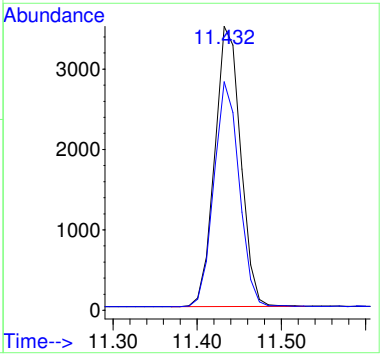


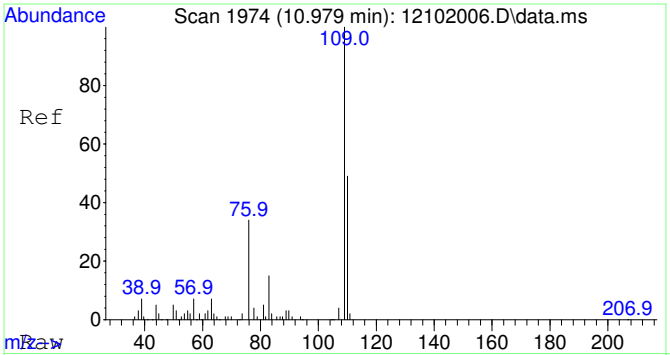


#15
Tetrachloroethene
Concen: 426.93 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion:166 Resp: 7450

Ion	Ratio	Lower	Upper
166	100		
164	78.4	47.8	107.8

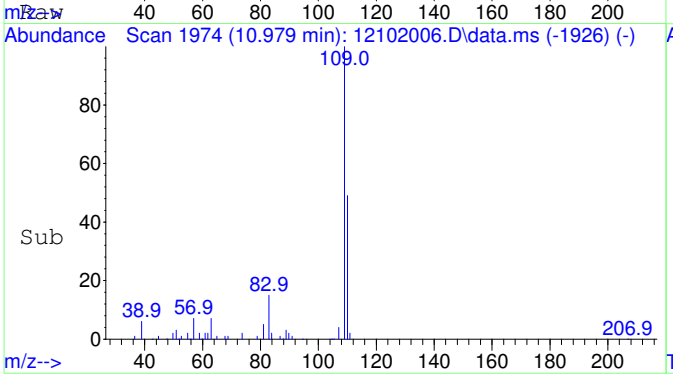


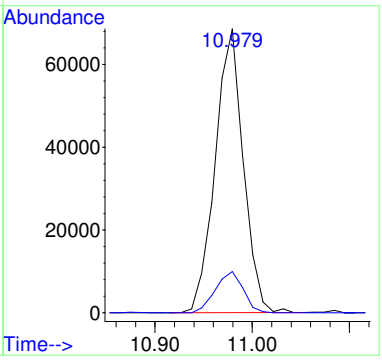


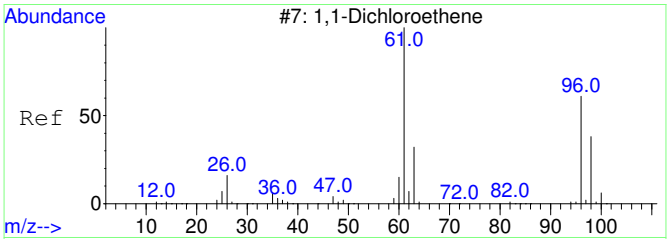
#25
2-Fluorotoluene SCAN
Concen: 5210.85 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

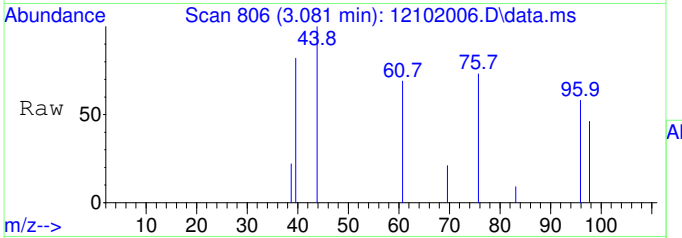
Tgt Ion:109 Resp: 137419

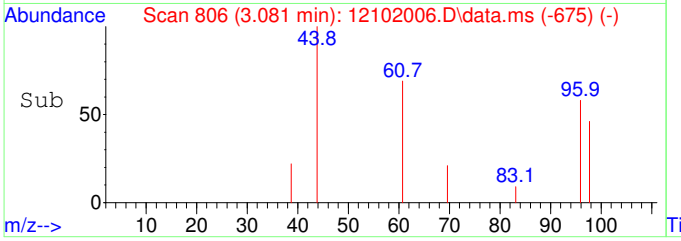
Ion	Ratio	Lower	Upper
109	100		
83	14.3	0.0	43.8







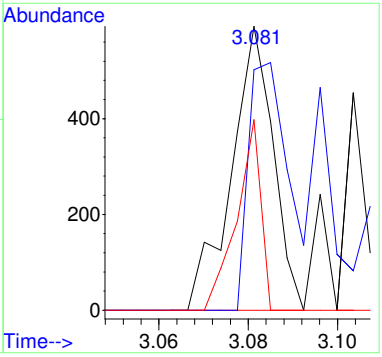


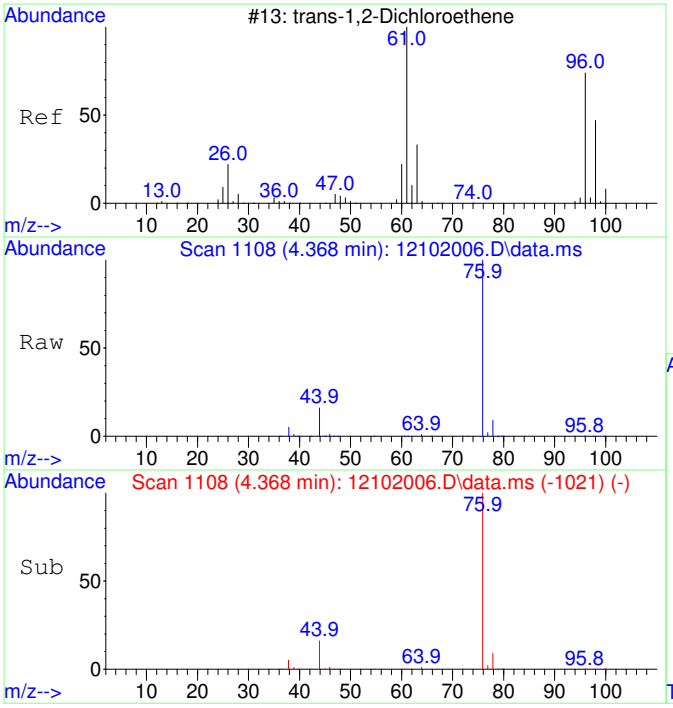


#26
1,1-Dichloroethene SCAN
Concen: 62.86 ug/L
RT: 3.081 min Scan# 806
Delta R.T. -0.015 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 387

Ion	Ratio	Lower	Upper
61	100		
96	67.7	33.1	93.1
98	38.8	11.2	71.2

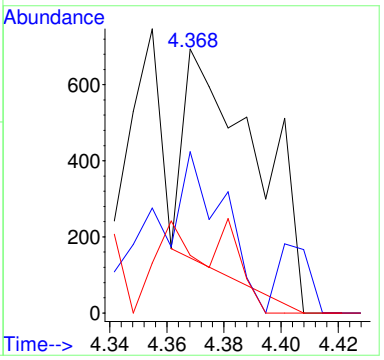


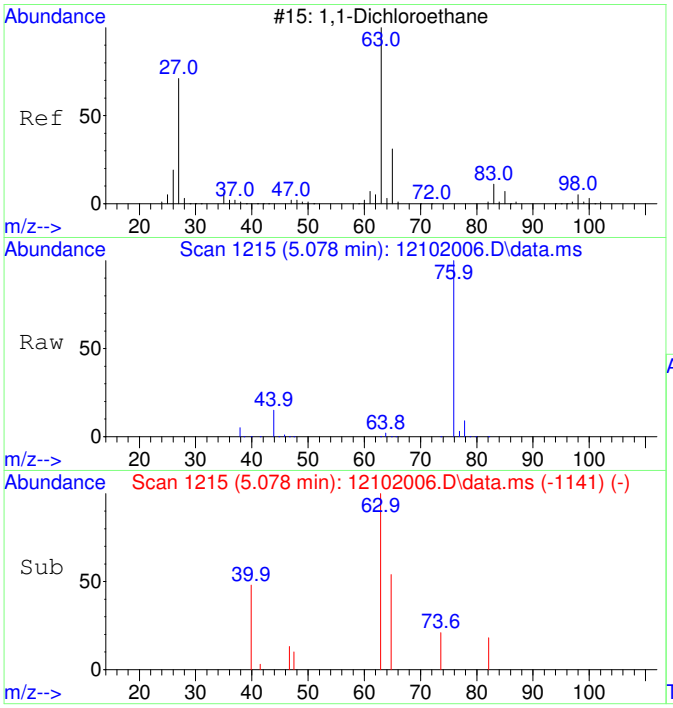


#27
trans-1,2-Dichloroethene SCAN
Concen: 127.40 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 999

Ion	Ratio	Lower	Upper
61	100		
96	78.3	49.0	109.0
98	39.1	20.5	80.5

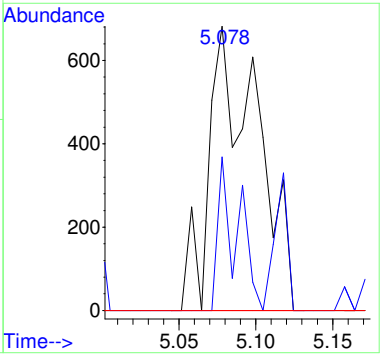


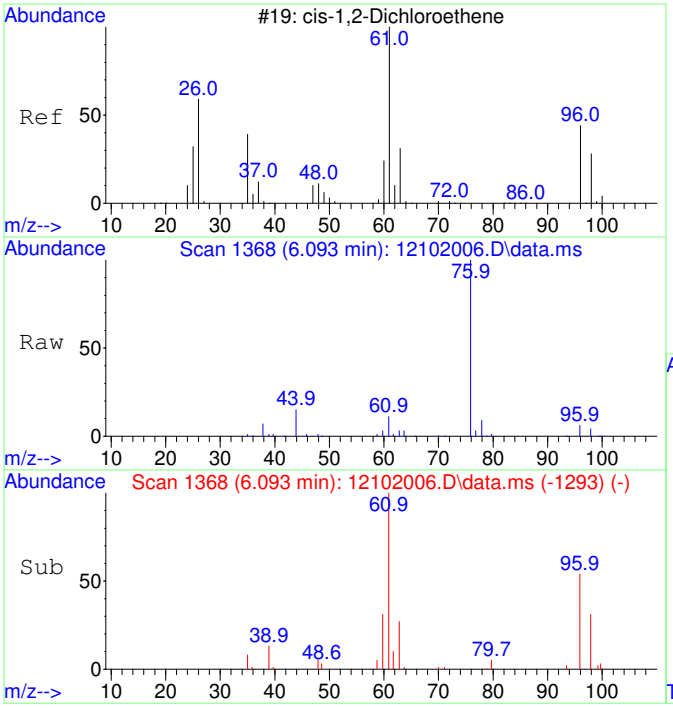


#28
1,1-Dichloroethane SCAN
Concen: 162.28 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 63 Resp: 1502

Ion	Ratio	Lower	Upper
63	100		
65	21.6	1.3	61.3
83	0.0	0.0	45.9

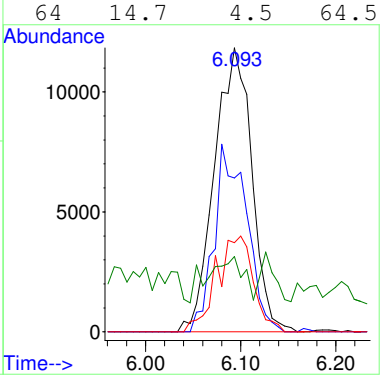


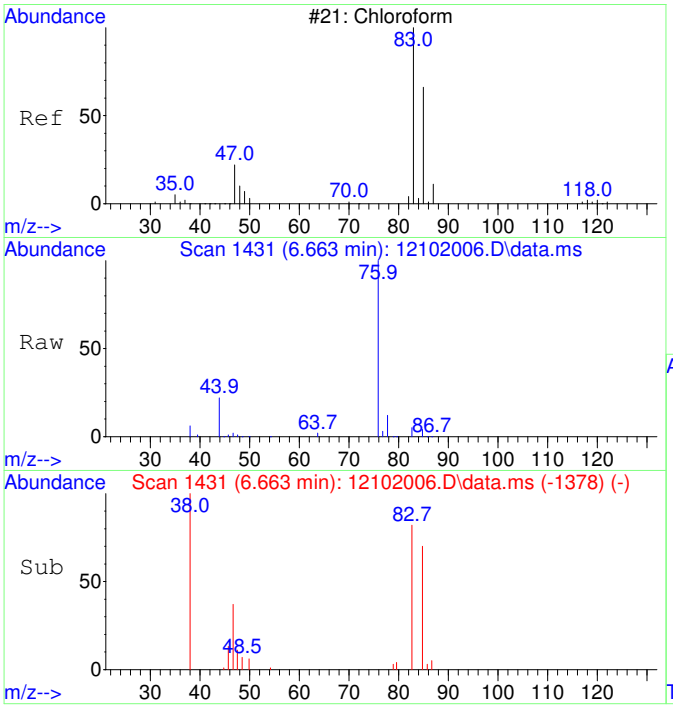


#29
cis-1,2-Dichloroethene SCAN
Concen: 3558.47 ug/L
RT: 6.093 min Scan# 1368
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 61 Resp: 32379

Ion	Ratio	Lower	Upper
61	100		
96	57.5	39.9	99.9
98	33.5	13.5	73.5
64	14.7	4.5	64.5

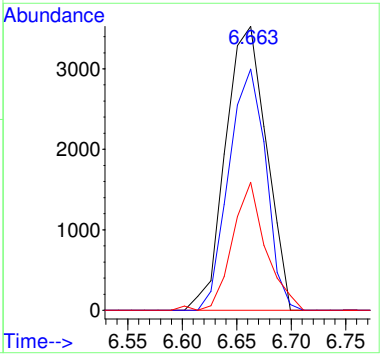


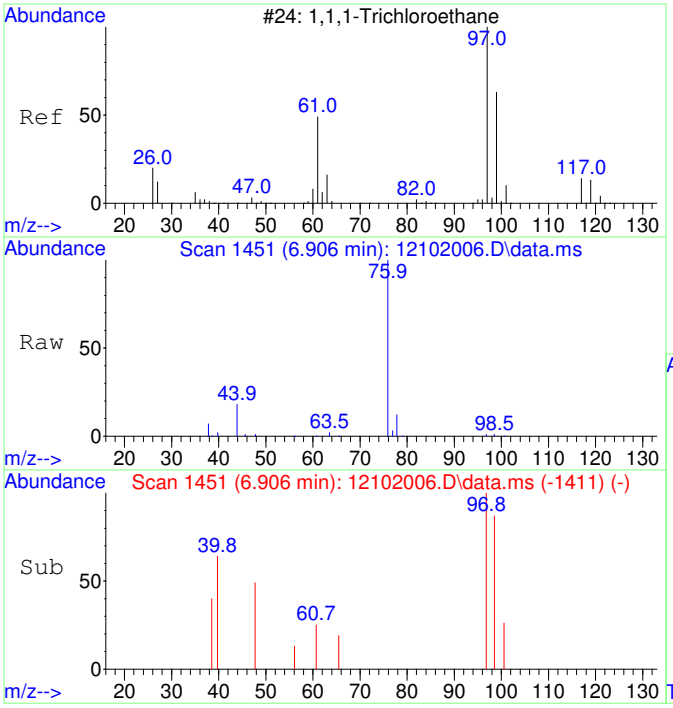


#30
Chloroform SCAN
Concen: 1089.56 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 83 Resp: 9247

Ion	Ratio	Lower	Upper
83	100		
85	76.9	34.6	94.6
47	36.9	0.0	53.4

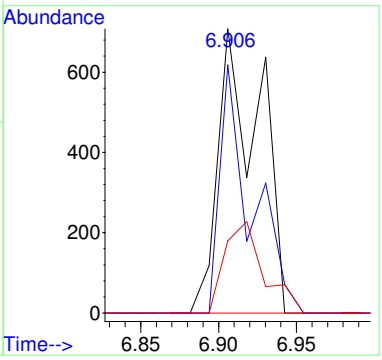


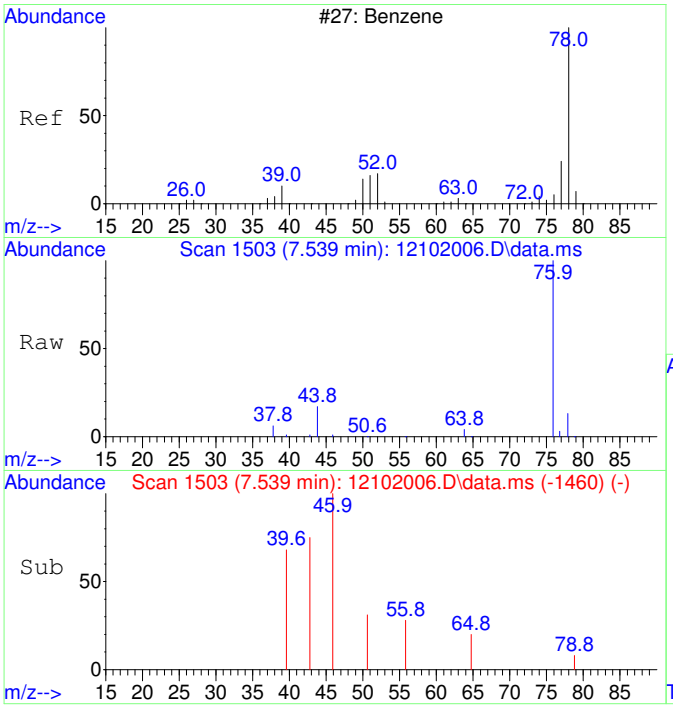


#31
1,1,1-Trichloroethane SCAN
Concen: 150.04 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 97 Resp: 1314

Ion	Ratio	Lower	Upper
97	100		
99	66.1	43.6	103.6
61	30.2	18.0	78.0

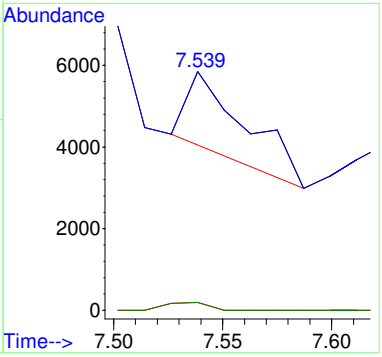


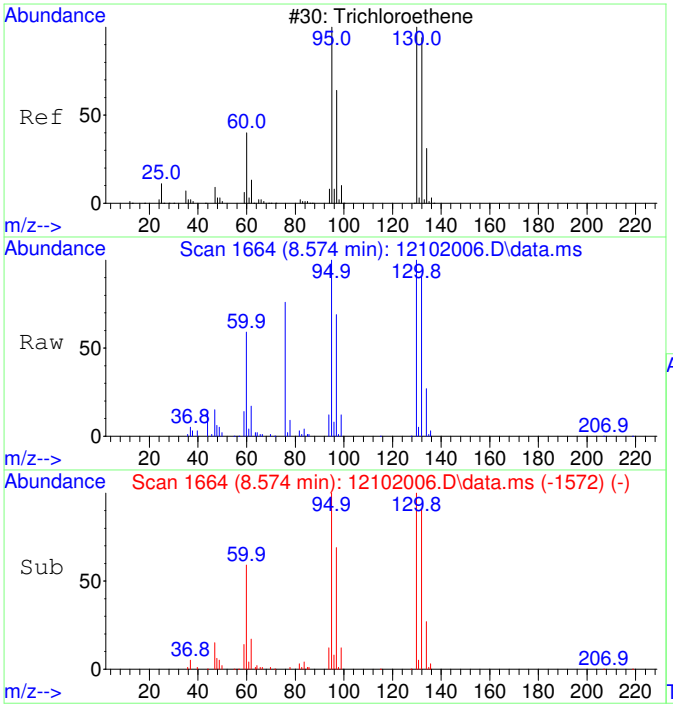


#33
Benzene SCAN
Concen: 116.40 ug/L
RT: 7.539 min Scan# 1503
Delta R.T. 0.025 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 78 Resp: 3084

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	8.7	0.0	47.9
51	8.7	0.0	44.1

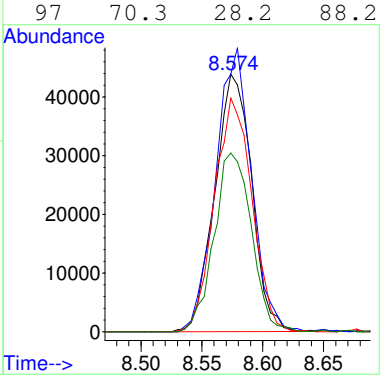


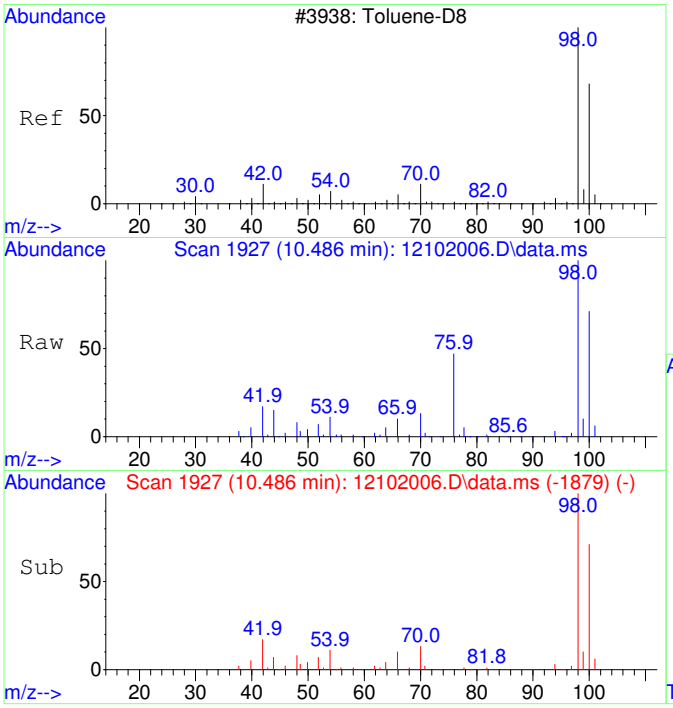


#35
Trichloroethene SCAN
Concen: 15988.71 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion:130 Resp: 92371

Ion	Ratio	Lower	Upper
130	100		
95	107.3	60.5	120.5
132	92.7	59.6	119.6
97	70.3	28.2	88.2

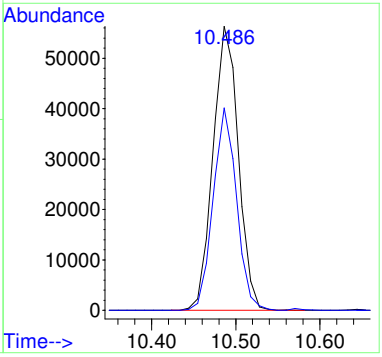


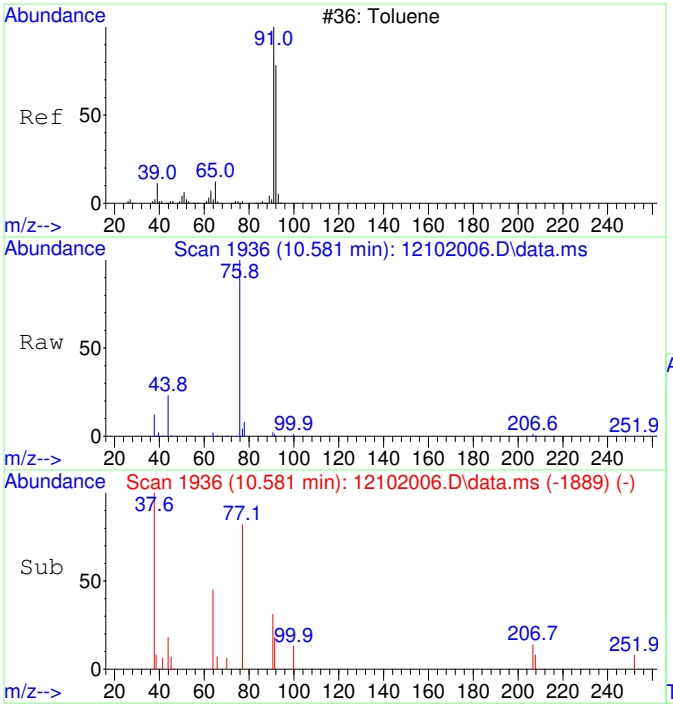


#36
Toluene-d8 SCAN
Concen: 4759.40 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 98 Resp: 117718

Ion	Ratio	Lower	Upper
98	100		
100	65.8	40.0	100.0

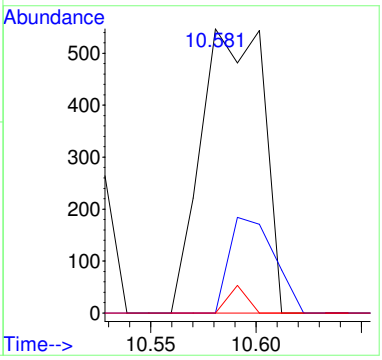


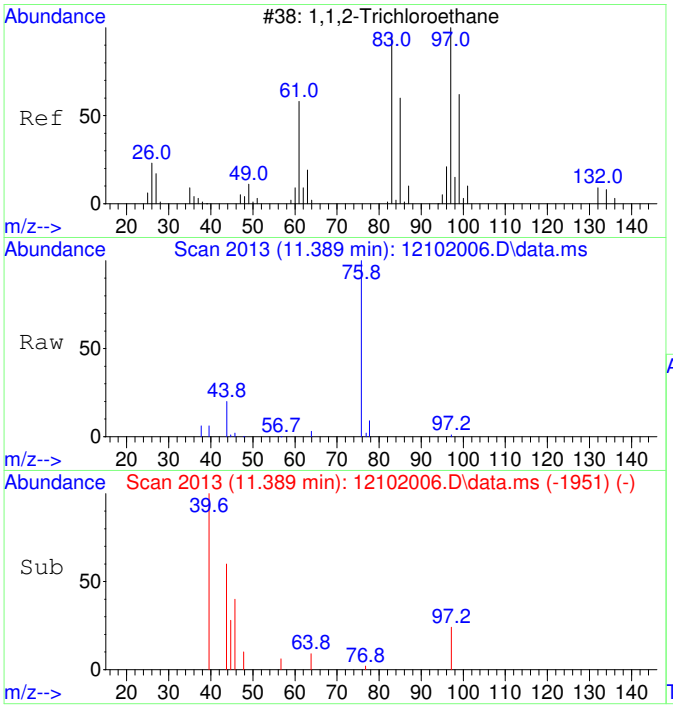


#37
Toluene SCAN
Concen: 37.07 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 91 Resp: 1129

Ion	Ratio	Lower	Upper
91	100		
92	24.4	28.3	88.3#
65	0.0	0.0	41.0

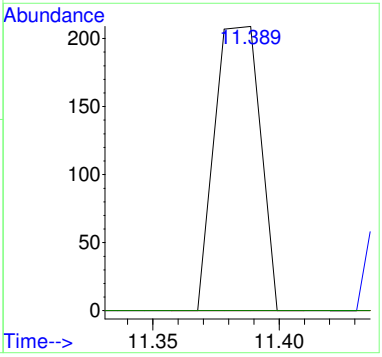


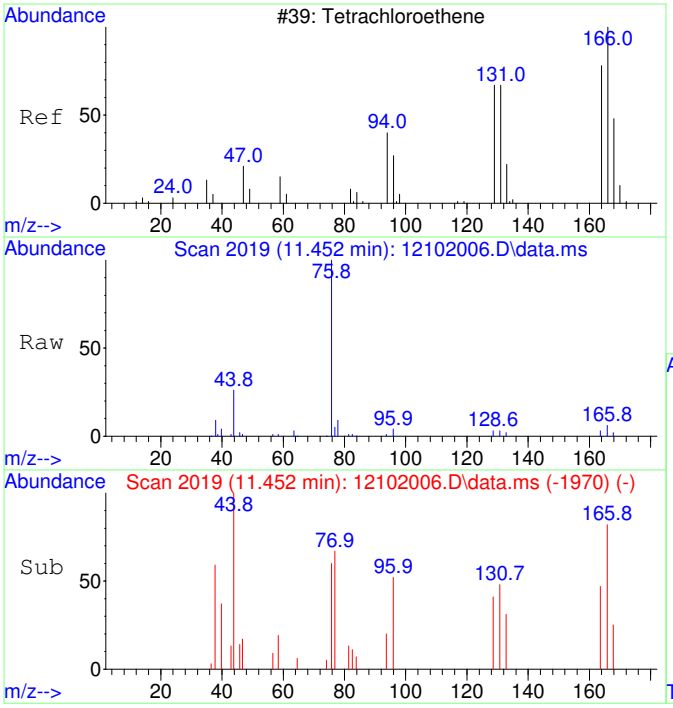


#38
1,1,2-Trichloroethane SCAN
Concen: 34.32 ug/L
RT: 11.389 min Scan# 2013
Delta R.T. 0.147 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion: 97 Resp: 262

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#

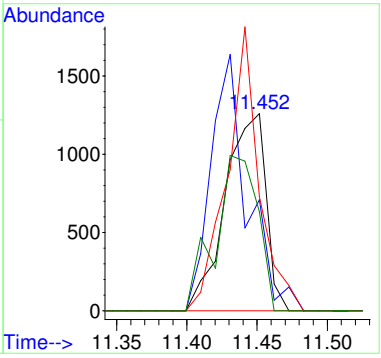




#39
Tetrachloroethene SCAN
Concen: 374.55 ug/L
RT: 11.452 min Scan# 2019
Delta R.T. 0.011 min
Lab File: 12102006.D
Acq: 10 Dec 2020 12:06

Tgt Ion:166 Resp: 2566

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	112.6	38.7	98.7#
129	0.0	41.8	101.8#



2012007-08RE1

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102007.D
Acq On : 10 Dec 2020 12:29
InstName : AG5975C
Operator : TD
Sample : 2012007-08RE1
Misc : 5X DL (160-40)
ALS Vial : 7 Sample Multiplier: 5

Quant Time: Dec 10 13:36:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

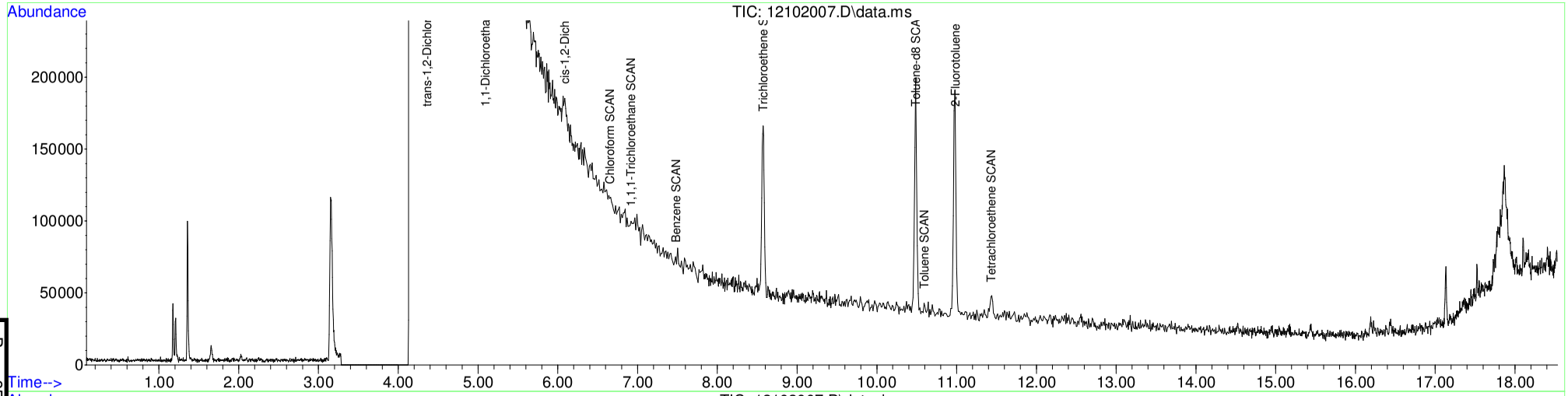
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.970	109	221037	5000.00	ug/L		-0.01
System Monitoring Compounds							
12) Toluene-d8	10.487	98	181123	4230.92	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 84.62%#				
Target Compounds							Qvalue
2] 1,1-Dichloroethene	3.097	61	1974	225.23	ug/L		88
3] trans-1,2-Dichloroethene	4.362	61	2437	220.56	ug/L		93
4] 1,1-Dichloroethane	5.079	63	2336	177.01	ug/L		98
5] cis-1,2-Dichloroethene	6.088	61	24123	1764.93	ug/L		98
6] Chloroform	6.652	83	5362	408.43	ug/L		99
7] 1,1,1-Trichloroethane	6.907	97	1034	73.32	ug/L		97
9] Benzene	7.503	78	1926	51.78	ug/L	#	14
11] Trichloroethene	8.575	130	81300	6923.08	ug/L	RPT	98
13] Toluene	10.582	91	1295	24.30	ug/L		98
15] Tetrachloroethene	11.432	166	10309	620.95	ug/L		100
25) 2-Fluorotoluene SCAN	10.979	109	132545	5282.79	ug/L		100
27) trans-1,2-Dichloroethe...	4.361	61	2510	336.44	ug/L	#	50
28) 1,1-Dichloroethane SCAN	5.084	63	1017	115.49	ug/L	#	62
29) cis-1,2-Dichloroethene...	6.086	61	18741	2164.87	ug/L	#	74
30) Chloroform SCAN	6.650	83	2955	365.97	ug/L	#	67
31) 1,1,1-Trichloroethane ...	6.918	97	974	116.90	ug/L	#	65
33) Benzene SCAN	7.477	78	5874	233.03	ug/L	#	91
35) Trichloroethene SCAN	8.573	130	44021	8008.96	ug/L		88
36) Toluene-d8 SCAN	10.486	98	107367	4562.66	ug/L		96
37) Toluene SCAN	10.591	91	1008	34.79	ug/L	#	57
39) Tetrachloroethene SCAN	11.430	166	4933	756.84	ug/L	#	62

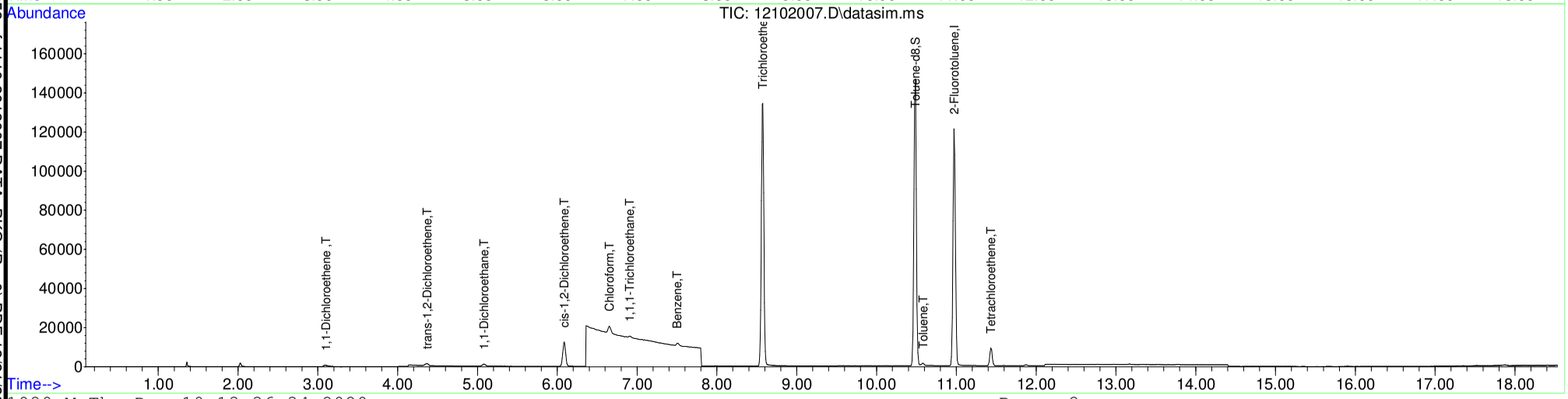
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102007.D
Acq On : 10 Dec 2020 12:29
InstName : AG5975C
Operator : TD
Sample : 2012007-08RE1
Misc : 5X DL (160-40)
ALS Vial : 7 Sample Multiplier: 5

Quant Time: Dec 10 13:36:33 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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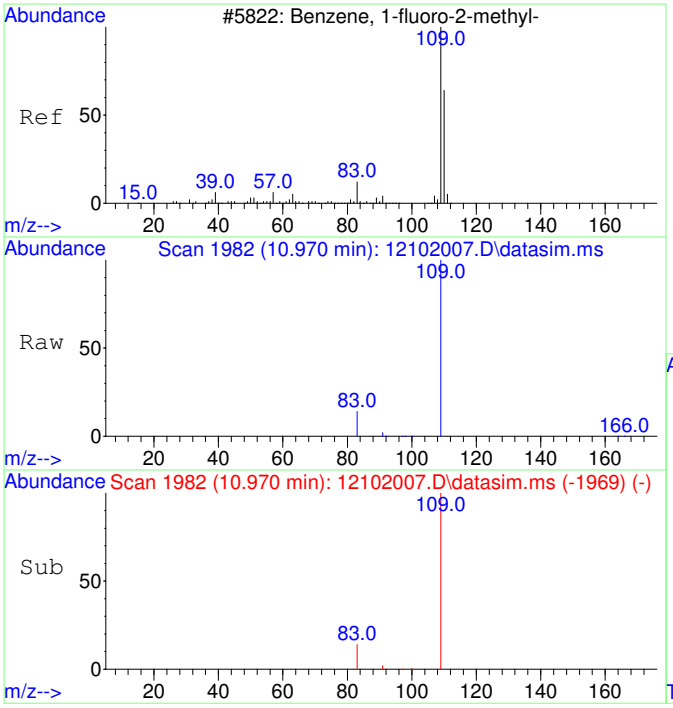
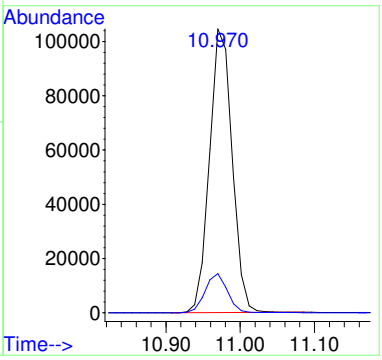
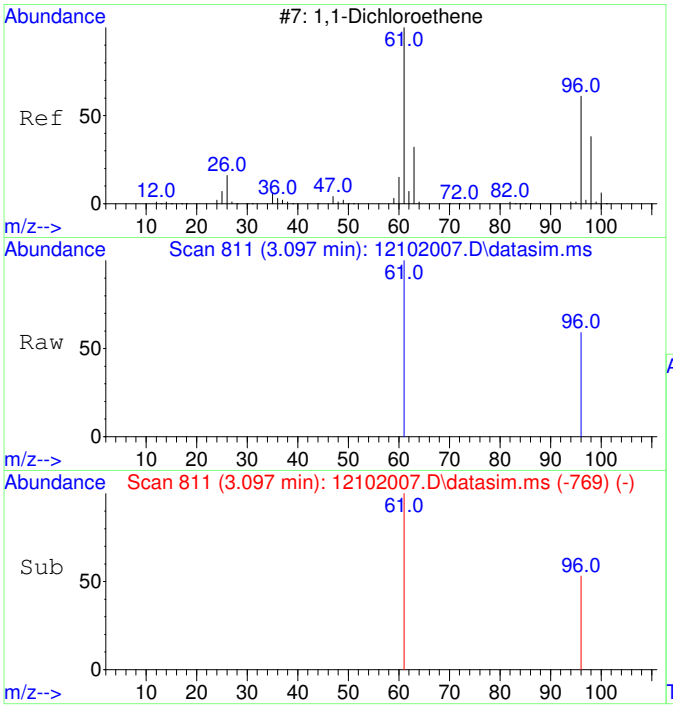


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:109 Resp: 221037

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

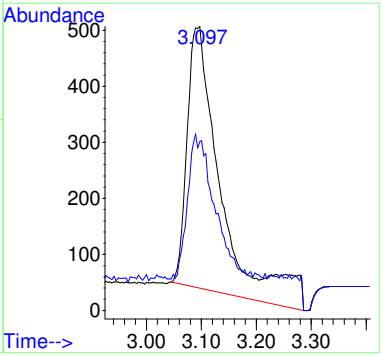


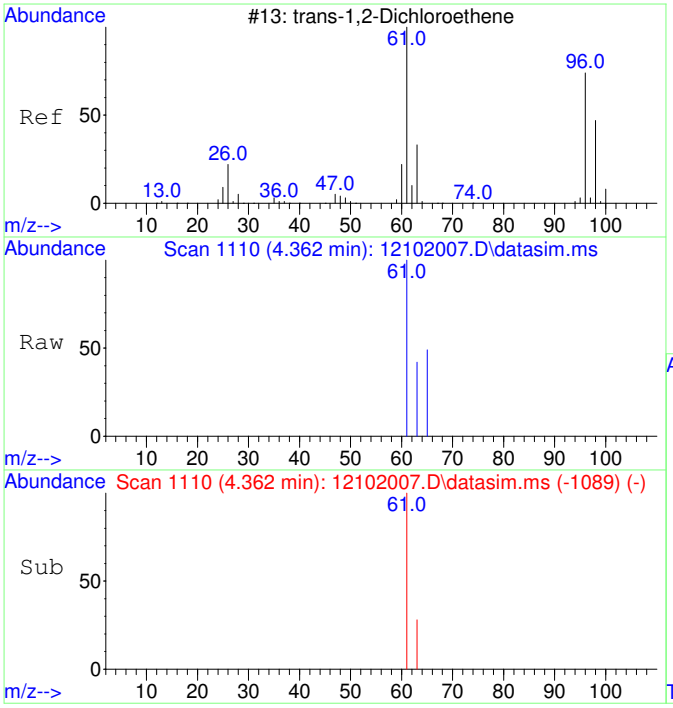


#2
1,1-Dichloroethene
Concen: 225.23 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.007 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 61 Resp: 1974

Ion	Ratio	Lower	Upper
61	100		
96	57.6	37.2	97.2

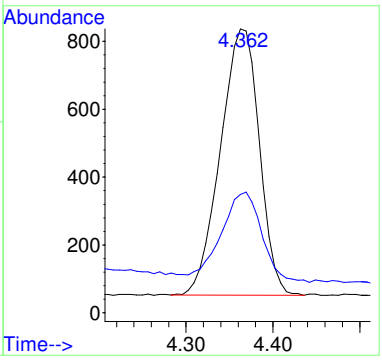


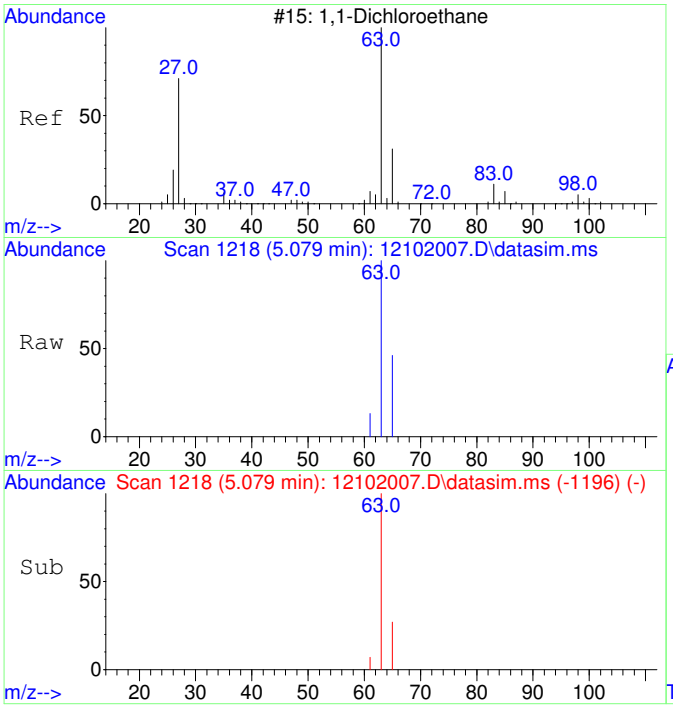


#3
trans-1,2-Dichloroethene
Concen: 220.56 ug/L
RT: 4.362 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 61 Resp: 2437

Ion	Ratio	Lower	Upper
61	100		
63	36.2	2.4	62.4

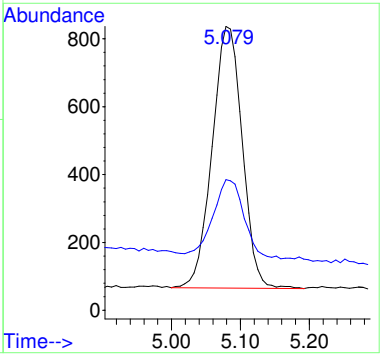


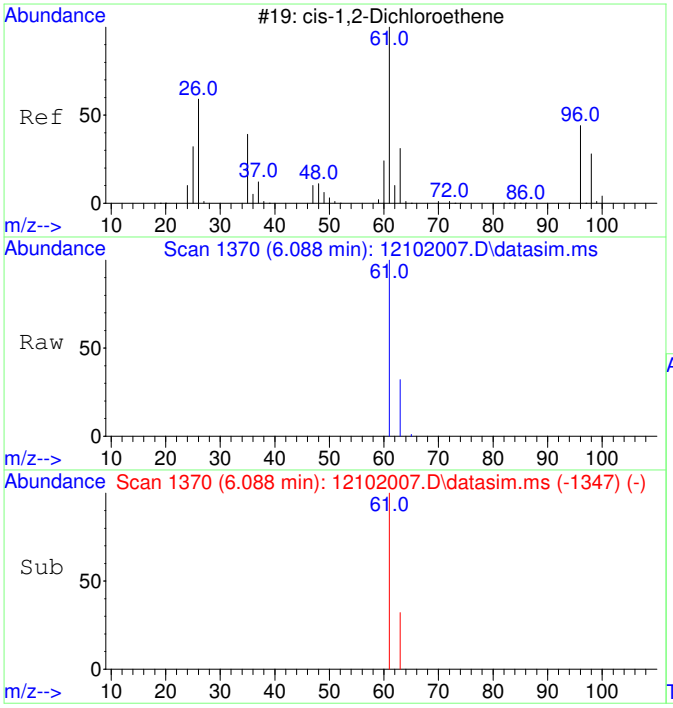


#4
1,1-Dichloroethane
Concen: 177.01 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.007 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 63 Resp: 2336

Ion	Ratio	Lower	Upper
63	100		
65	31.0	1.8	61.8

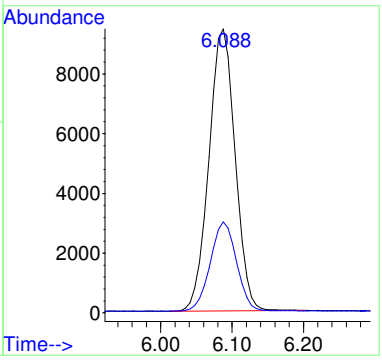


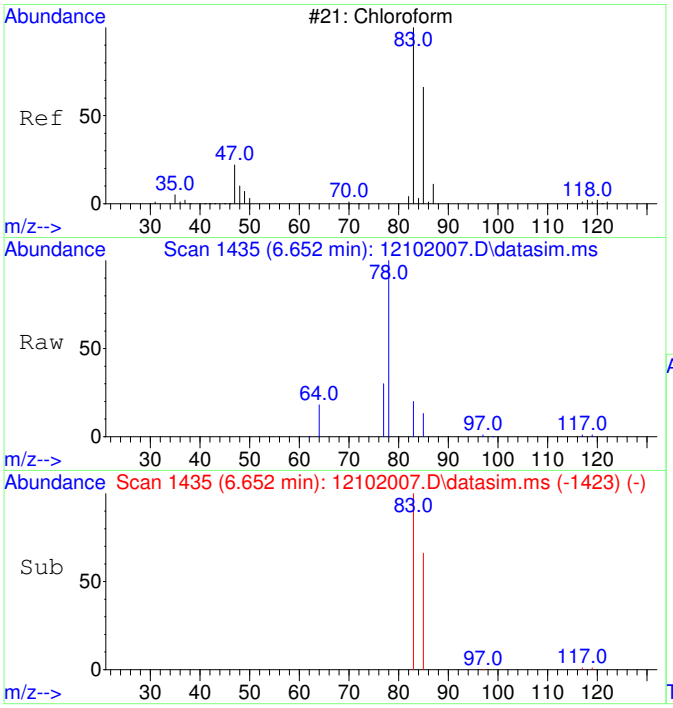


#5
cis-1,2-Dichloroethene
Concen: 1764.93 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 61 Resp: 24123

Ion	Ratio	Lower	Upper
61	100		
63	31.5	2.5	62.5

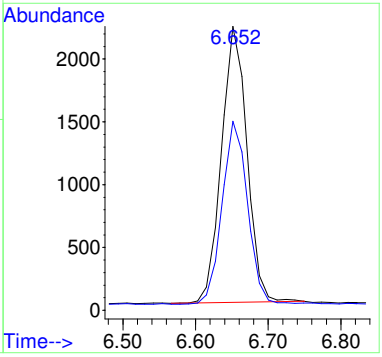


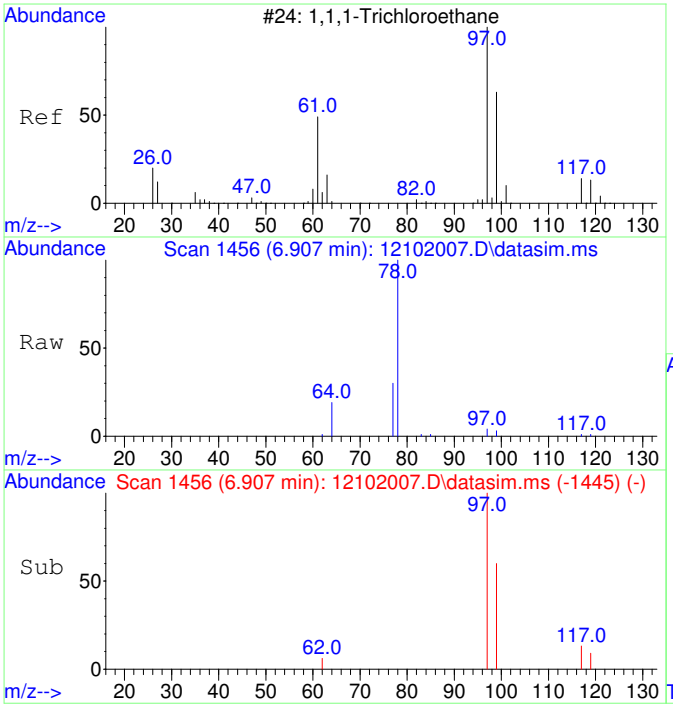


#6
Chloroform
Concen: 408.43 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 83 Resp: 5362

Ion	Ratio	Lower	Upper
83	100		
85	65.7	35.1	95.1

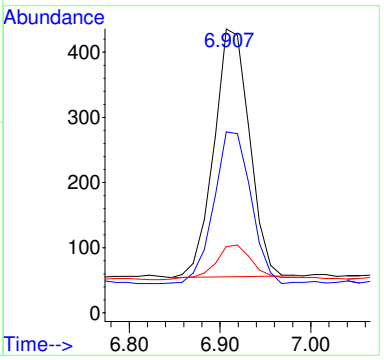


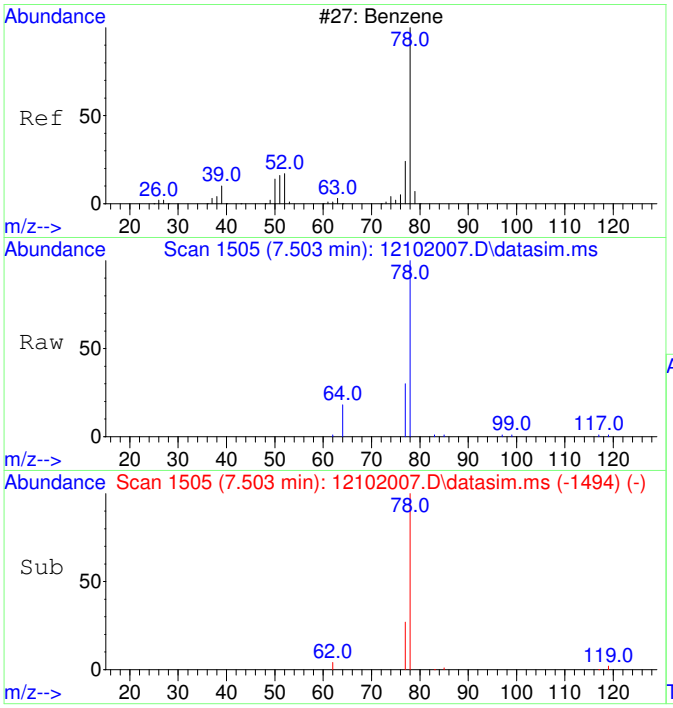


#7
1,1,1-Trichloroethane
Concen: 73.32 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 97 Resp: 1034

Ion	Ratio	Lower	Upper
97	100		
99	63.1	34.6	94.6
117	15.5	0.0	43.2

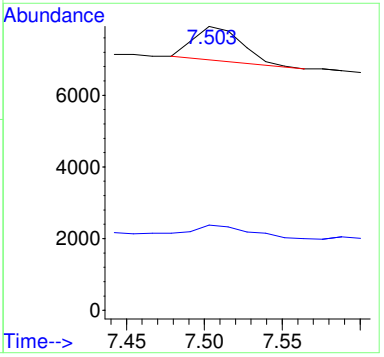


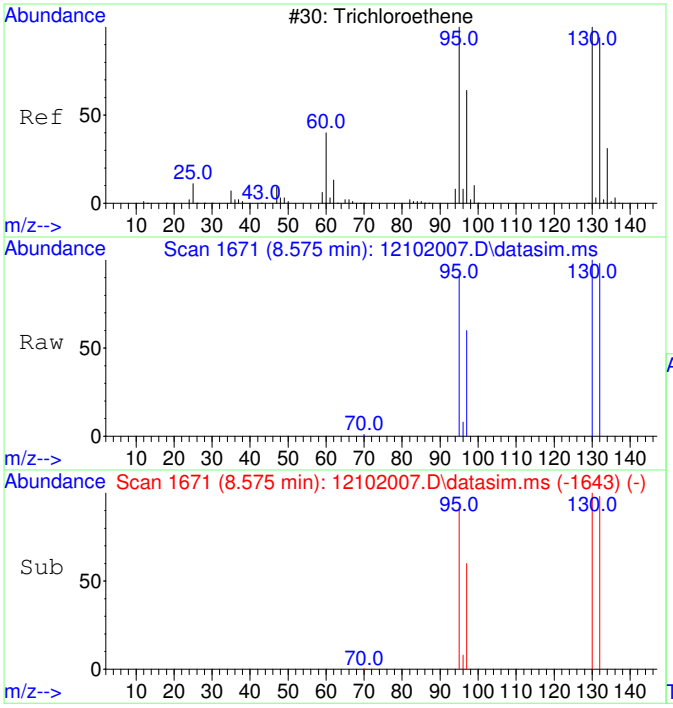


#9
Benzene
Concen: 51.78 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 78 Resp: 1926

Ion	Ratio	Lower	Upper
78	100		
77	65.0	0.0	53.2#

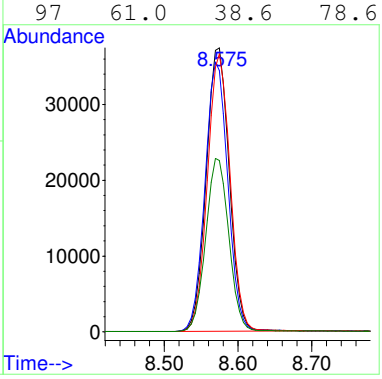


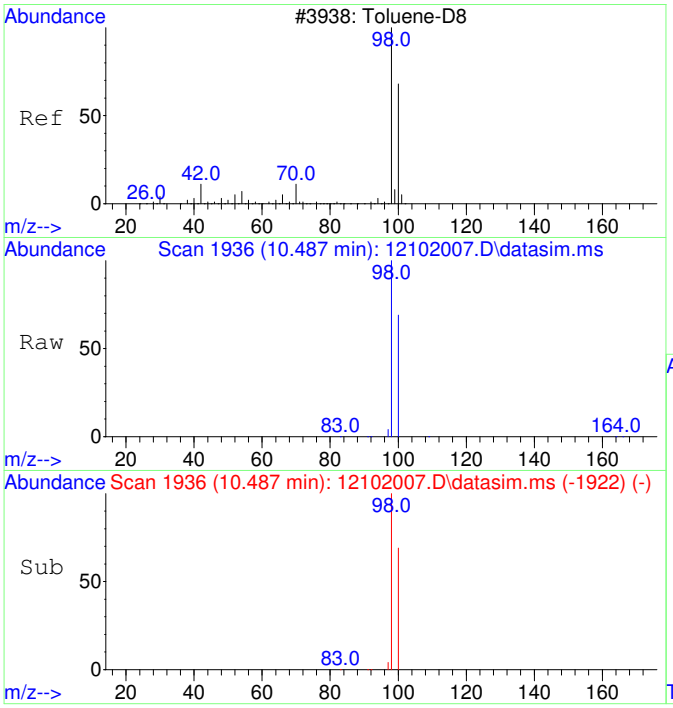


#11
Trichloroethene
Concen: 6923.08 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:130 Resp: 81300

Ion	Ratio	Lower	Upper
130	100		
95	94.2	60.7	120.7
132	96.2	76.0	116.0
97	61.0	38.6	78.6

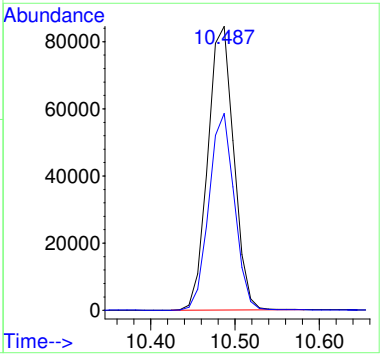


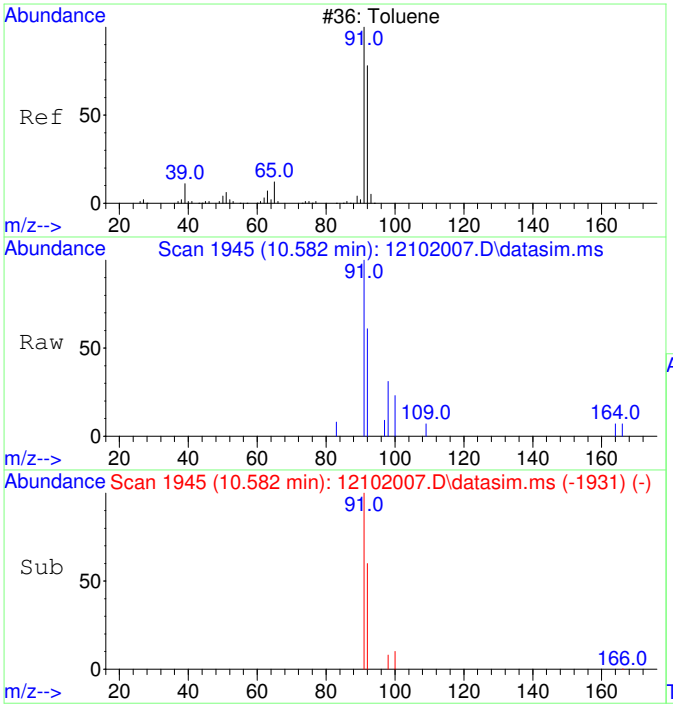


#12
Toluene-d8
Concen: 4230.92 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 98 Resp: 181123

Ion	Ratio	Lower	Upper
98	100		
100	67.8	37.1	97.1

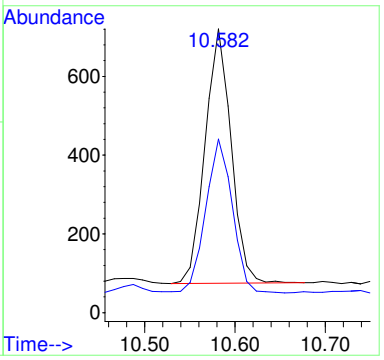


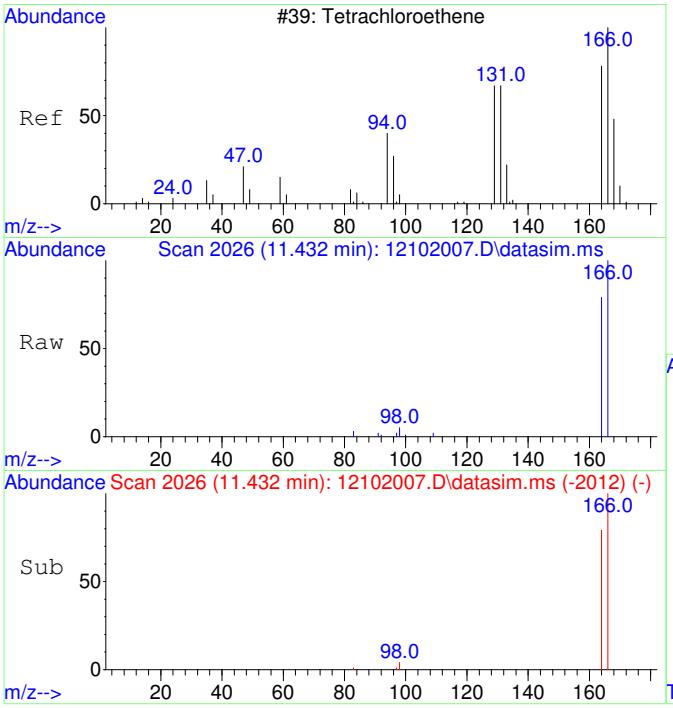


#13
Toluene
Concen: 24.30 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 91 Resp: 1295

Ion	Ratio	Lower	Upper
91	100		
92	61.1	29.9	89.9

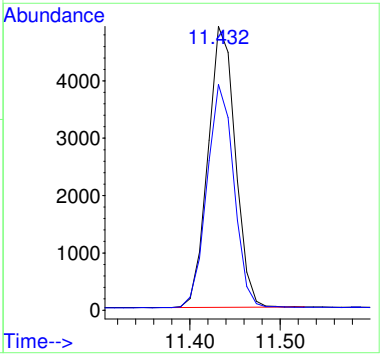


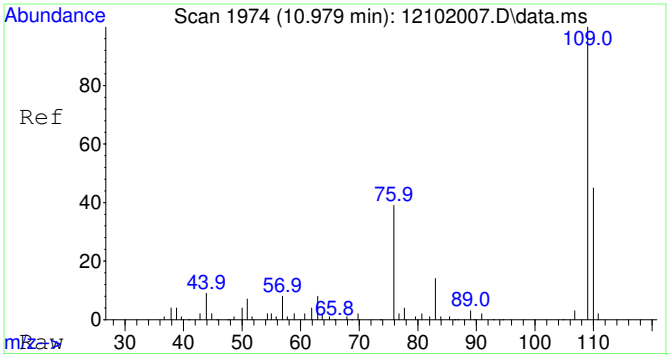


#15
Tetrachloroethene
Concen: 620.95 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:166 Resp: 10309

Ion	Ratio	Lower	Upper
166	100		
164	78.1	47.8	107.8

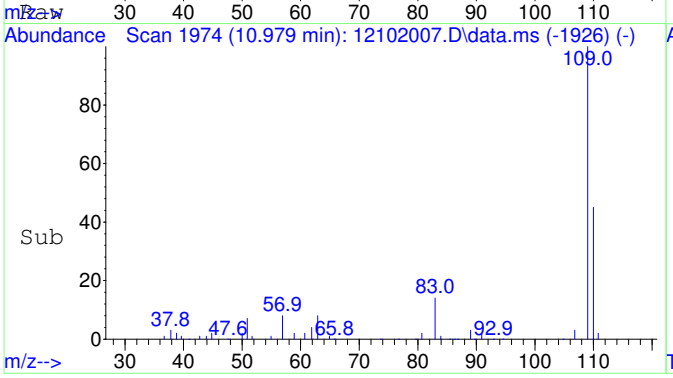


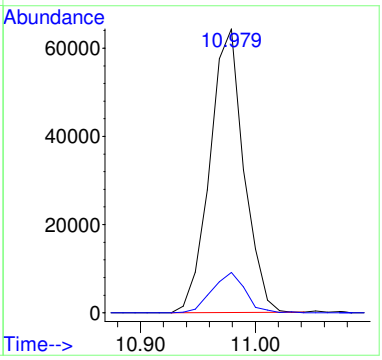


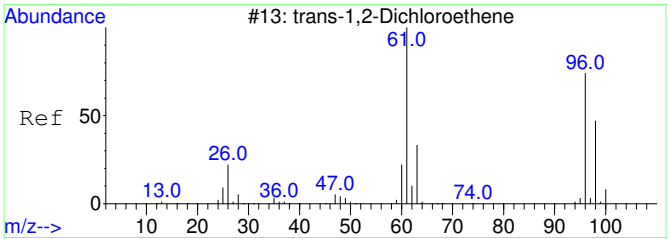
#25
2-Fluorotoluene SCAN
Concen: 5282.79 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:109 Resp: 132545

Ion	Ratio	Lower	Upper
109	100		
83	13.9	0.0	43.8



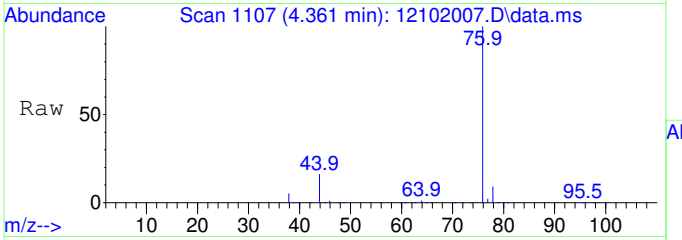


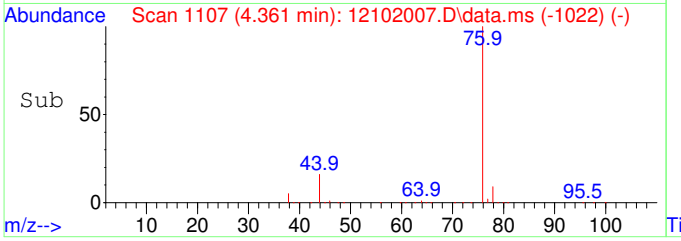


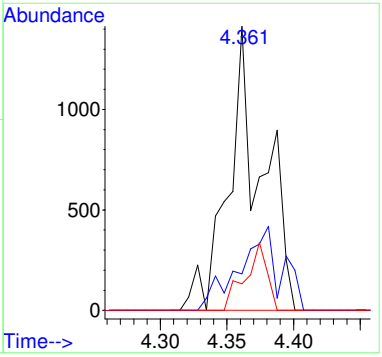
#27
trans-1,2-Dichloroethene SCAN
Concen: 336.44 ug/L
RT: 4.361 min Scan# 1107
Delta R.T. -0.020 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

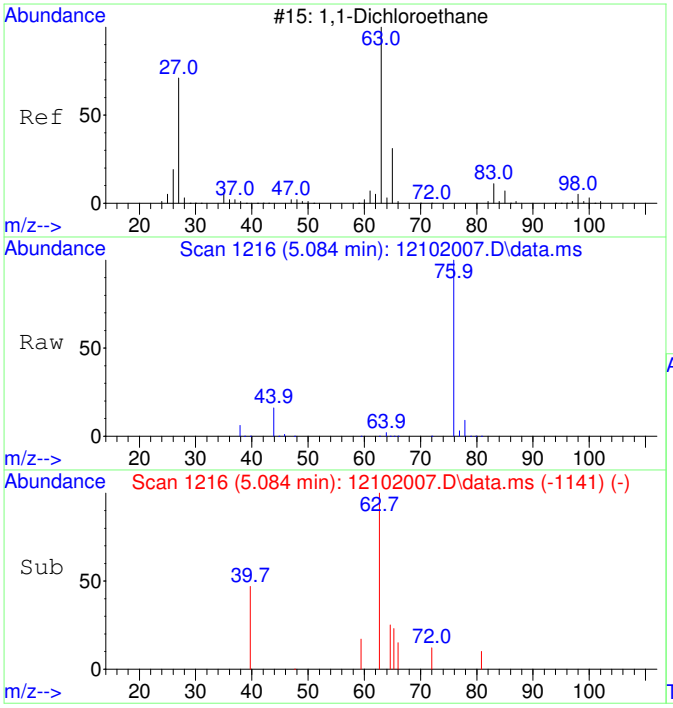
Tgt Ion: 61 Resp: 2510

Ion	Ratio	Lower	Upper
61	100		
96	36.2	49.0	109.0#
98	15.3	20.5	80.5#





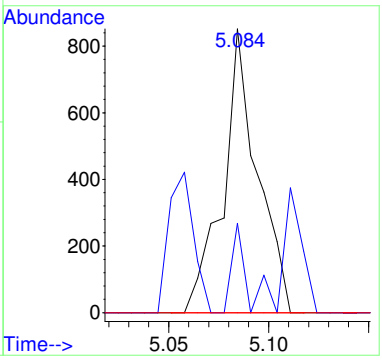


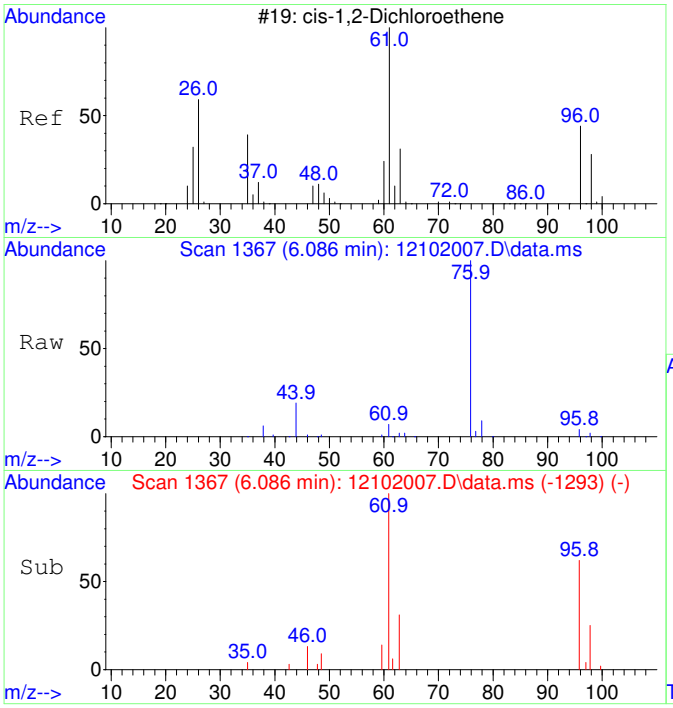


#28
1,1-Dichloroethane SCAN
Concen: 115.49 ug/L
RT: 5.084 min Scan# 1216
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 63 Resp: 1017

Ion	Ratio	Lower	Upper
63	100		
65	10.5	1.3	61.3
83	0.0	0.0	45.9

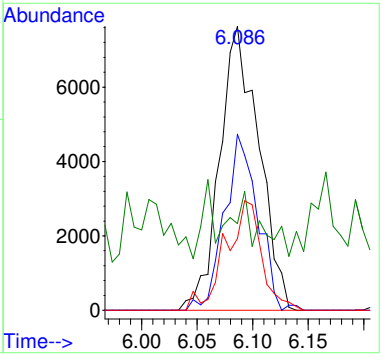


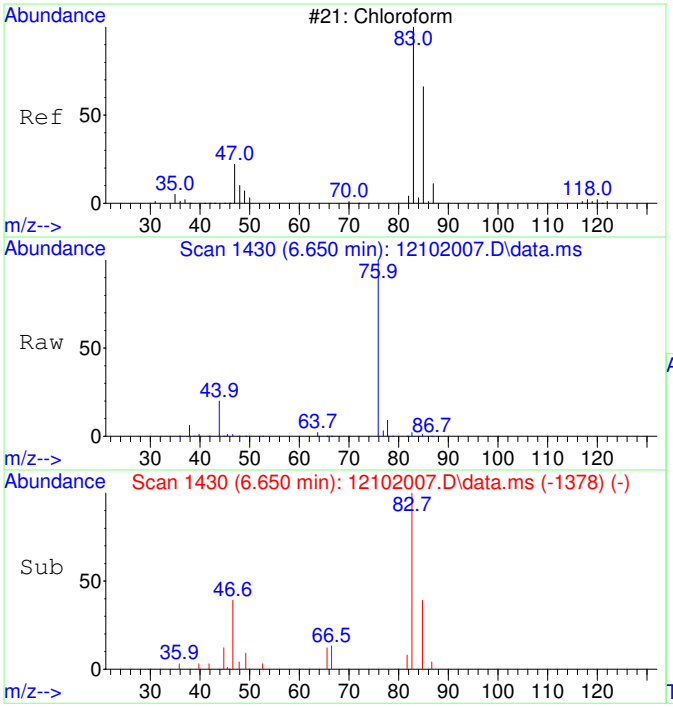


#29
cis-1,2-Dichloroethene SCAN
Concen: 2164.87 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 61 Resp: 18741

Ion	Ratio	Lower	Upper
61	100		
96	52.8	39.9	99.9
98	35.5	13.5	73.5
64	3.7	4.5	64.5#

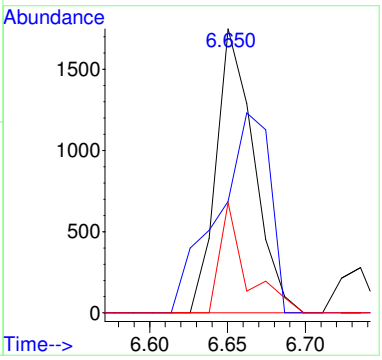


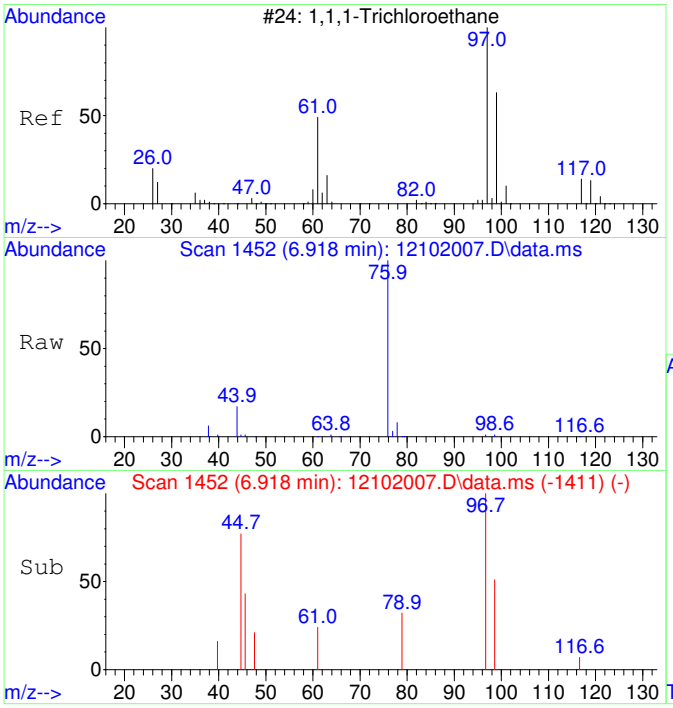


#30
Chloroform SCAN
Concen: 365.97 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 83 Resp: 2955

Ion	Ratio	Lower	Upper
83	100		
85	97.7	34.6	94.6#
47	27.2	0.0	53.4

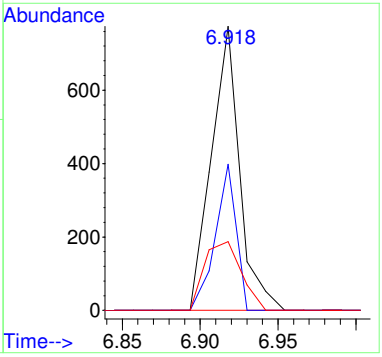


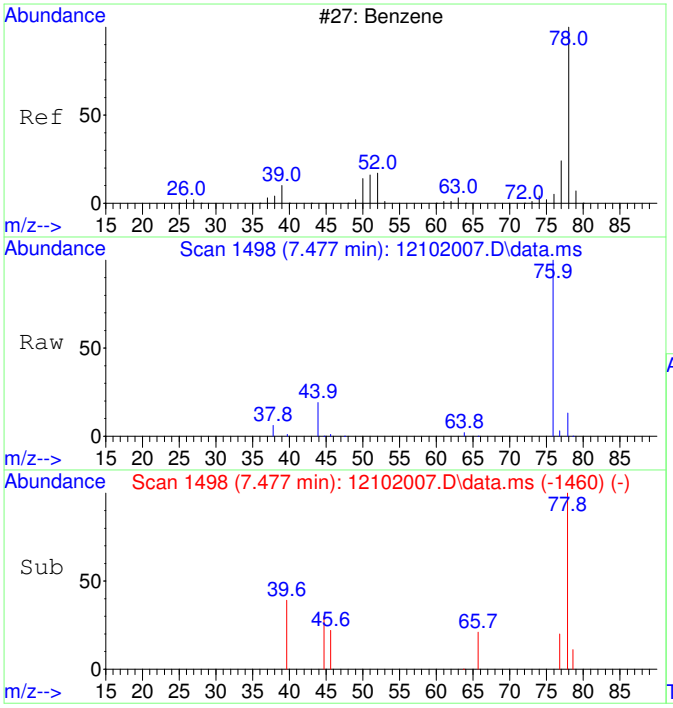


#31
1,1,1-Trichloroethane SCAN
Concen: 116.90 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 97 Resp: 974

Ion	Ratio	Lower	Upper
97	100		
99	37.9	43.6	103.6#
61	31.5	18.0	78.0

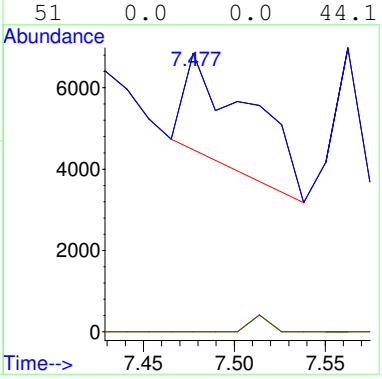


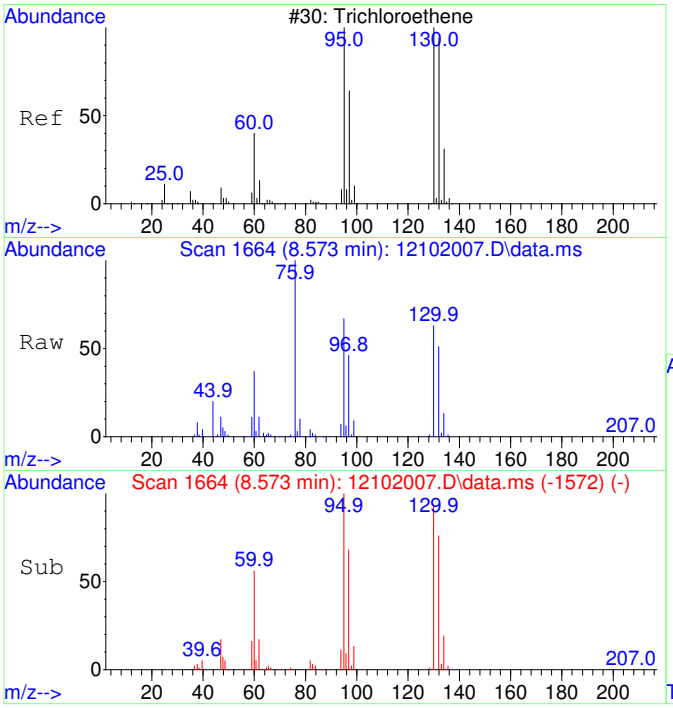


#33
Benzene SCAN
Concen: 233.03 ug/L
RT: 7.477 min Scan# 1498
Delta R.T. -0.037 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 78 Resp: 5874

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

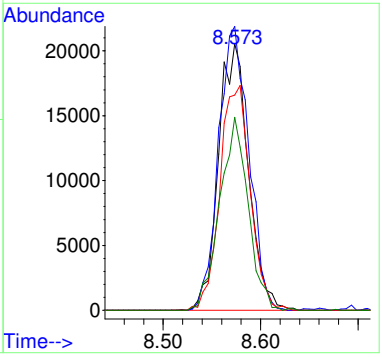


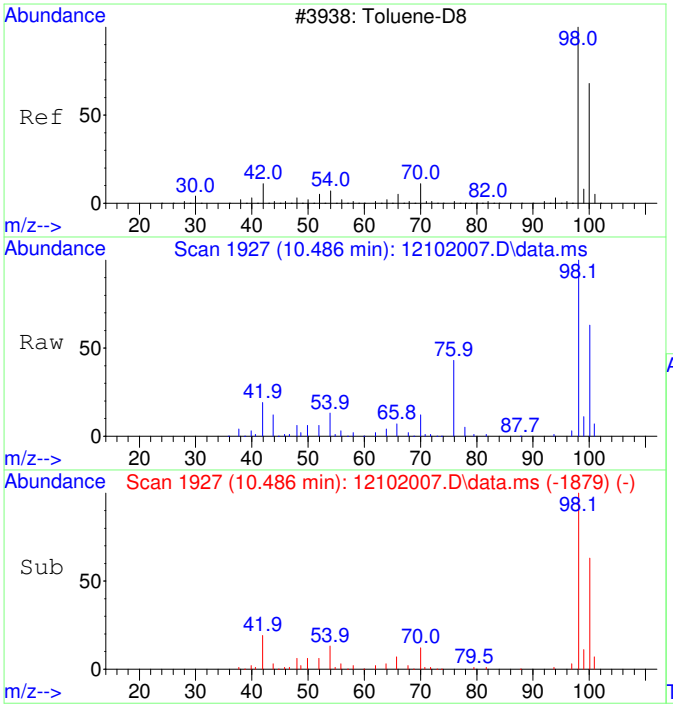


#35
Trichloroethene SCAN
Concen: 8008.96 ug/L
RT: 8.573 min Scan# 1664
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:130 Resp: 44021

Ion	Ratio	Lower	Upper
130	100		
95	107.7	60.5	120.5
132	85.1	59.6	119.6
97	68.6	28.2	88.2

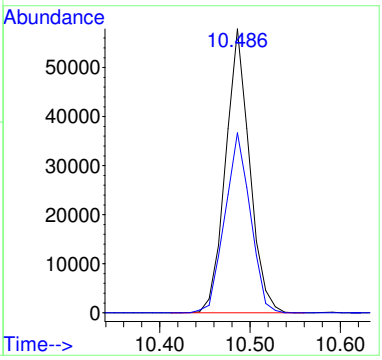


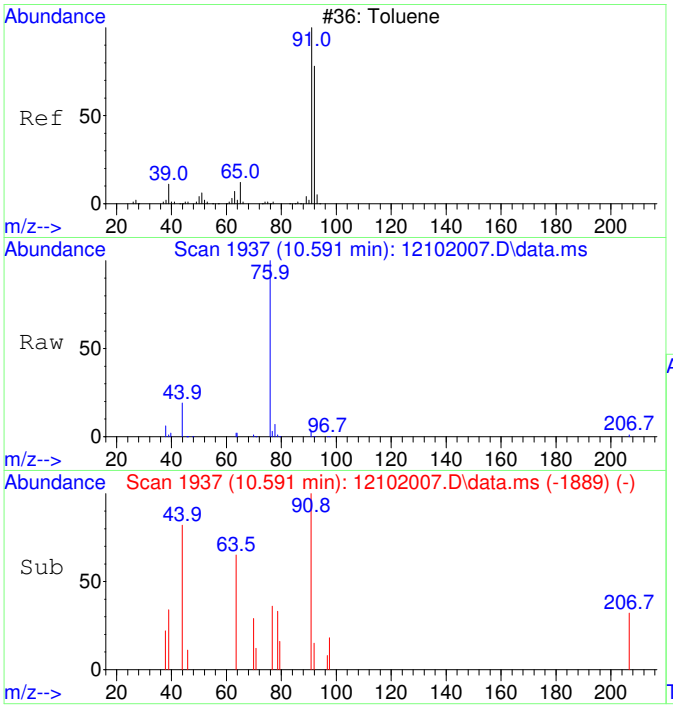


#36
Toluene-d8 SCAN
Concen: 4562.66 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 98 Resp: 107367

Ion	Ratio	Lower	Upper
98	100		
100	67.0	40.0	100.0

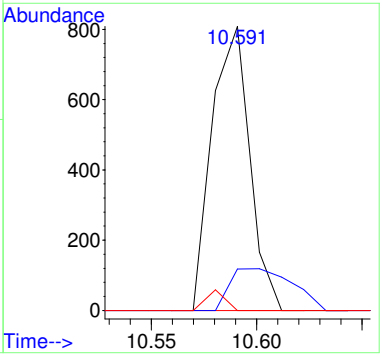


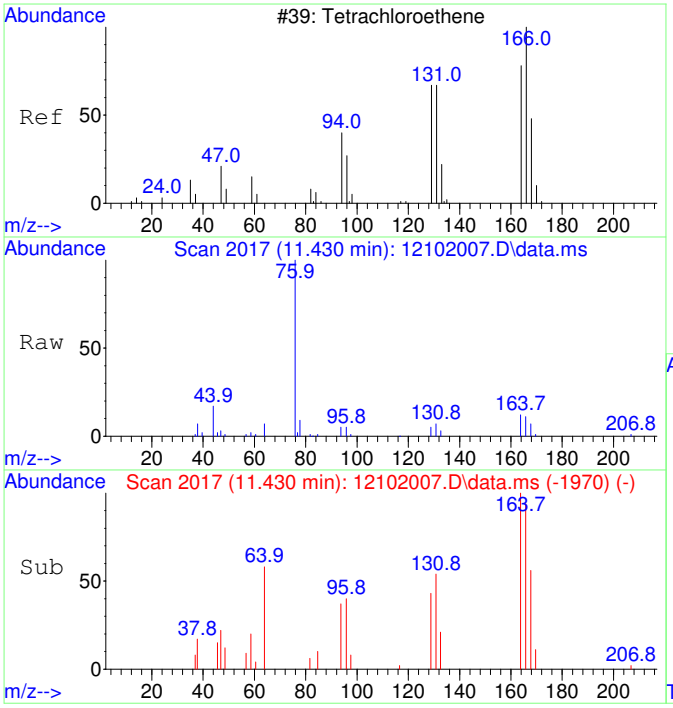


#37
Toluene SCAN
Concen: 34.79 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. -0.000 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion: 91 Resp: 1008

Ion	Ratio	Lower	Upper
91	100		
92	24.5	28.3	88.3#
65	0.0	0.0	41.0

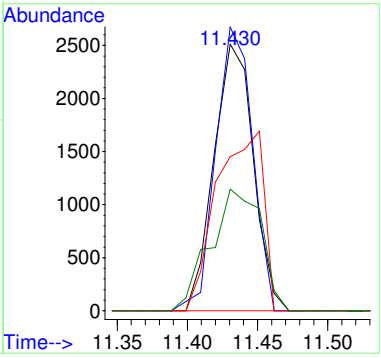




#39
Tetrachloroethene SCAN
Concen: 756.84 ug/L
RT: 11.430 min Scan# 2017
Delta R.T. -0.011 min
Lab File: 12102007.D
Acq: 10 Dec 2020 12:29

Tgt Ion:166 Resp: 4933

Ion	Ratio	Lower	Upper
166	100		
164	98.7	50.9	110.9
131	0.0	38.7	98.7#
129	59.2	41.8	101.8



2012007-16RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102008.D
Acq On : 10 Dec 2020 12:53
InstName : AG5975C
Operator : TD
Sample : 2012007-16RE1
Misc : 10X DL (180-20)
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Dec 10 13:36:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

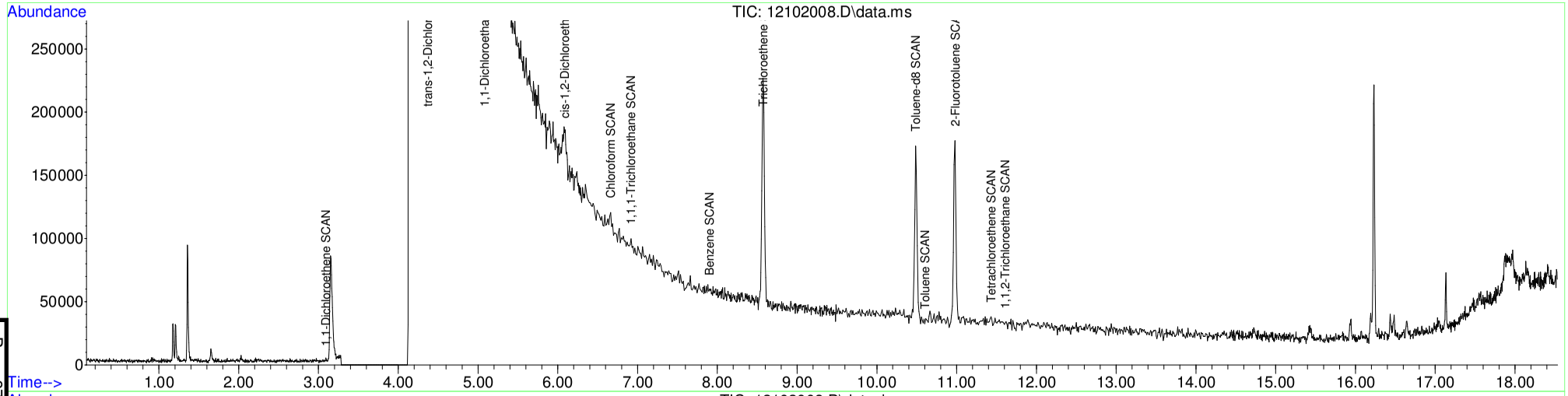
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	198534	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	162841	4235.01 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 84.70%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	1845	234.37 ug/L	69
3] trans-1,2-Dichloroethene	4.349	61	1897	191.15 ug/L	95
4] 1,1-Dichloroethane	5.073	63	1764	148.82 ug/L	96
5] cis-1,2-Dichloroethene	6.081	61	34023	2771.39 ug/L	98
6] Chloroform	6.652	83	12003	1017.92 ug/L	100
7] 1,1,1-Trichloroethane	6.907	97	1166	92.05 ug/L	99
9] Benzene	7.503	78	2021	60.50 ug/L #	35
11] Trichloroethene	8.575	130	123482	11706.91 ug/L RPT	97
15] Tetrachloroethene	11.432	166	5261	352.81 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	109575	4862.30 ug/L	95
26) 1,1-Dichloroethene SCAN	3.085	61	368	69.95 ug/L	71
27) trans-1,2-Dichloroethe...	4.368	61	499	74.47 ug/L #	43
28) 1,1-Dichloroethane SCAN	5.078	63	788	99.63 ug/L #	53
29) cis-1,2-Dichloroethene...	6.086	61	25605	3293.01 ug/L #	75
30) Chloroform SCAN	6.663	83	7615	1050.00 ug/L	72
31) 1,1,1-Trichloroethane ...	6.918	97	596	79.64 ug/L #	35
33) Benzene SCAN	7.899	78	2338	103.26 ug/L	92
35) Trichloroethene SCAN	8.574	130	62266	12612.39 ug/L	78
36) Toluene-d8 SCAN	10.486	98	98771	4673.12 ug/L	98
37) Toluene SCAN	10.602	91	817	31.39 ug/L #	30
38) 1,1,2-Trichloroethane ...	11.609	97	295	45.23 ug/L #	13
39) Tetrachloroethene SCAN	11.431	166	1652	282.19 ug/L #	64

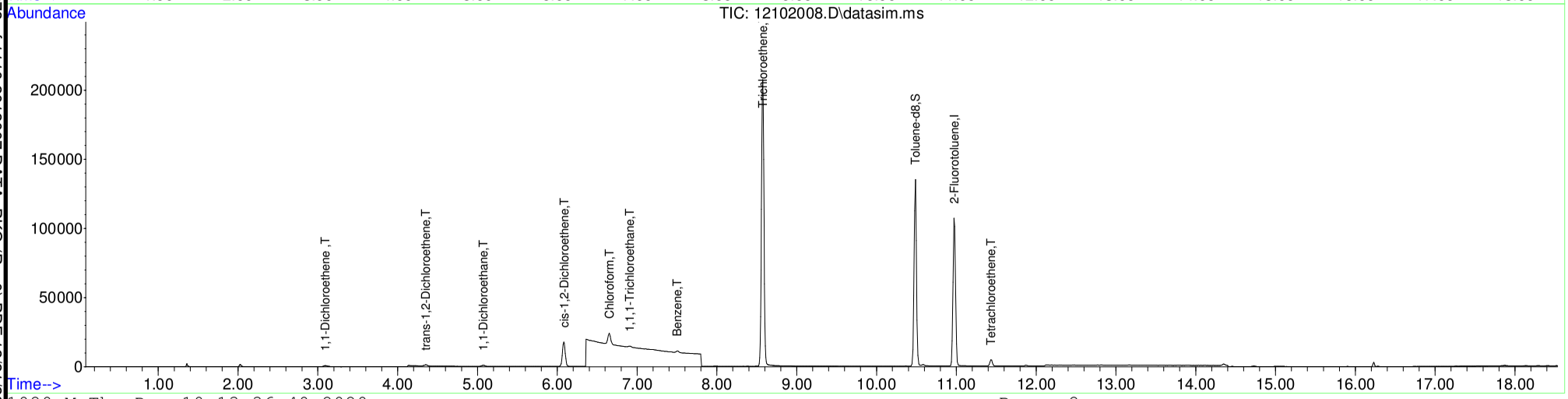
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102008.D
Acq On : 10 Dec 2020 12:53
InstName : AG5975C
Operator : TD
Sample : 2012007-16RE1
Misc : 10X DL (180-20)
ALS Vial : 8 Sample Multiplier: 10

Quant Time: Dec 10 13:36:39 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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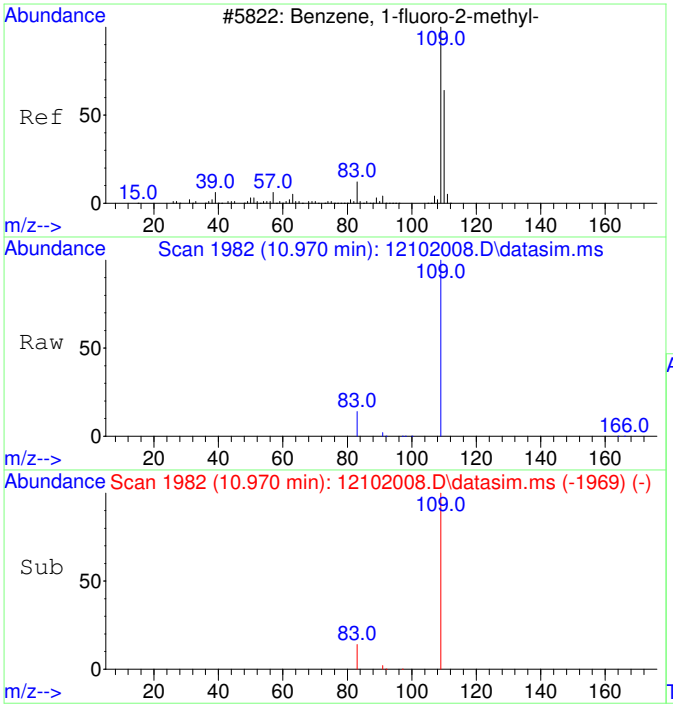
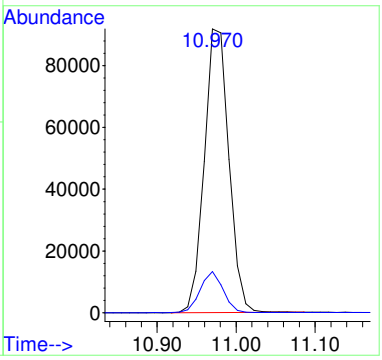
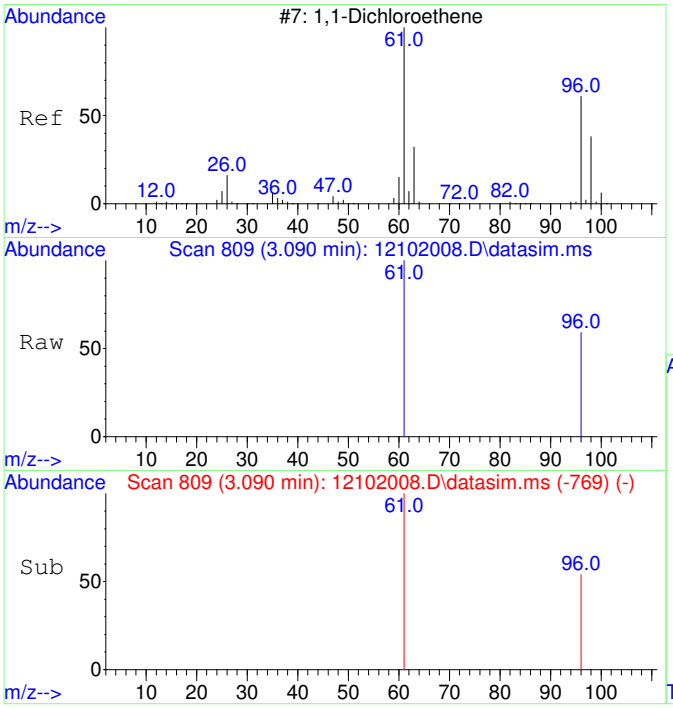


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:109 Resp: 198534

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

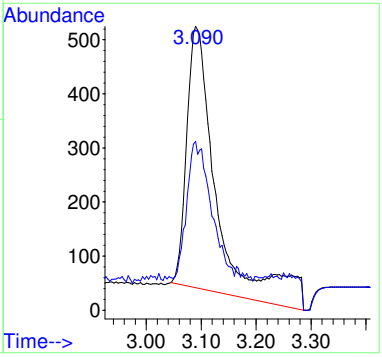


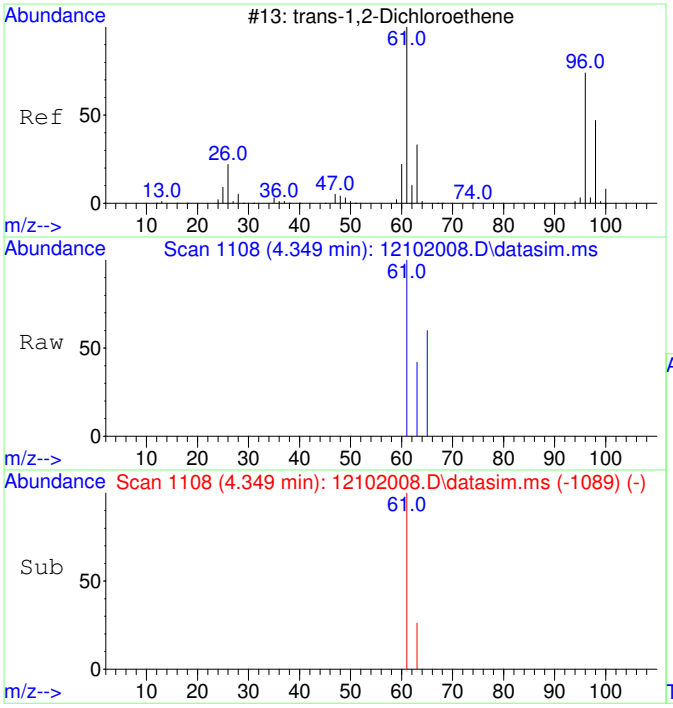


#2
1,1-Dichloroethene
Concen: 234.37 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 1845

Ion	Ratio	Lower	Upper
61	100		
96	42.0	37.2	97.2

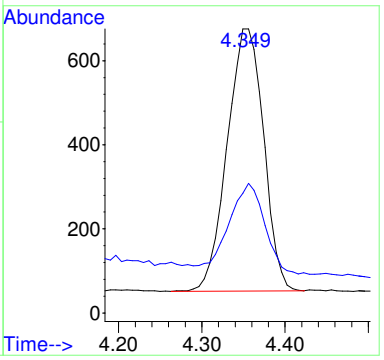


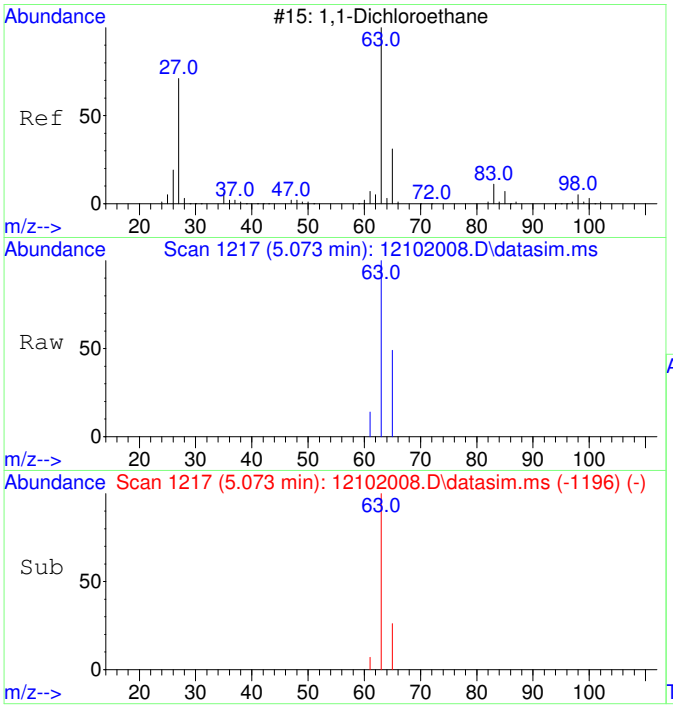


#3
trans-1,2-Dichloroethene
Concen: 191.15 ug/L
RT: 4.349 min Scan# 1108
Delta R.T. -0.026 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 1897

Ion	Ratio	Lower	Upper
61	100		
63	34.9	2.4	62.4

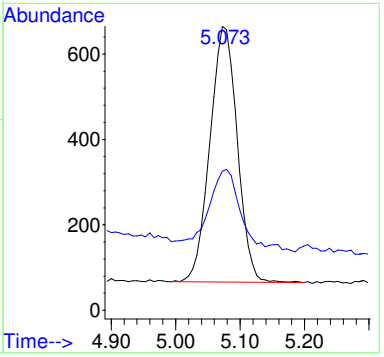


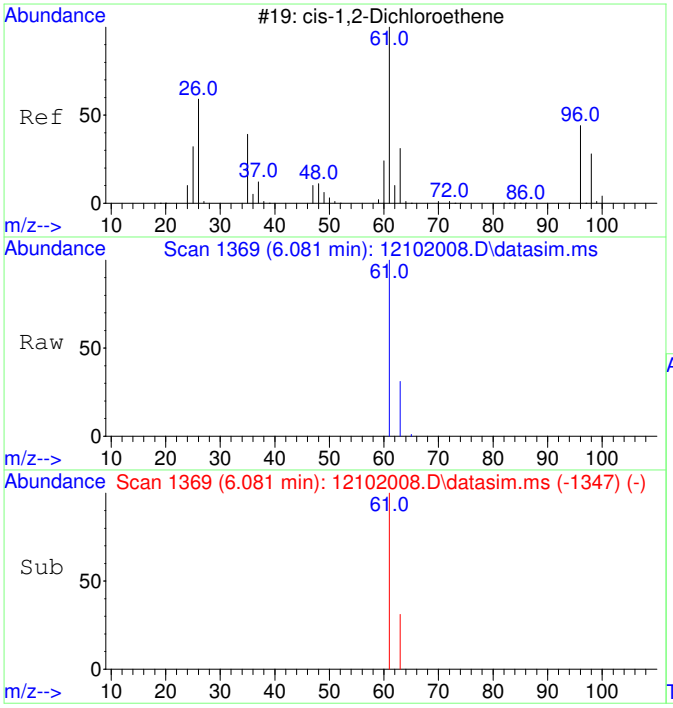


#4
1,1-Dichloroethane
Concen: 148.82 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 63 Resp: 1764

Ion	Ratio	Lower	Upper
63	100		
65	34.1	1.8	61.8

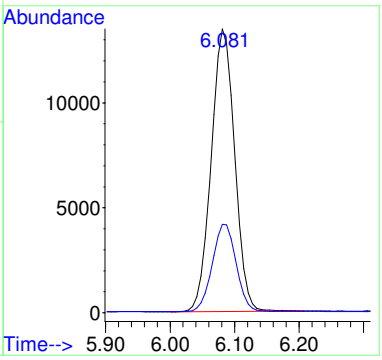


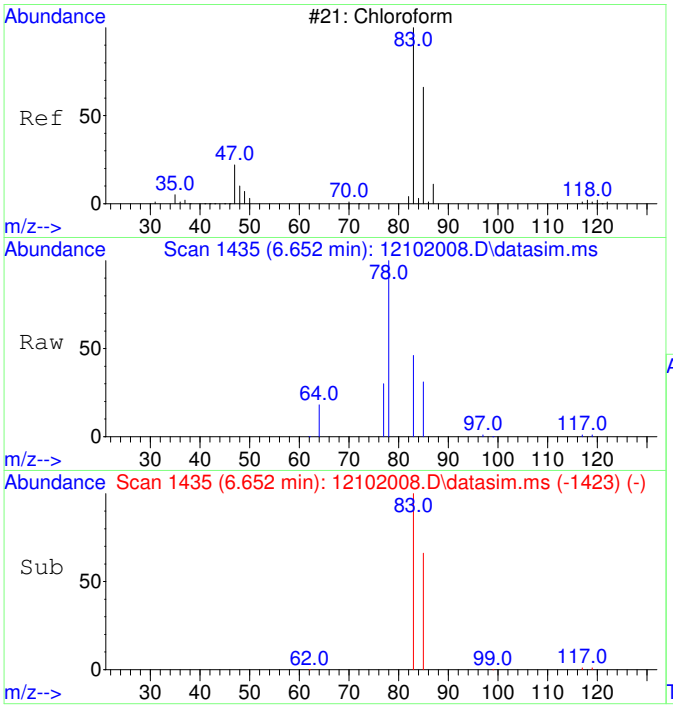


#5
cis-1,2-Dichloroethene
Concen: 2771.39 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 34023

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

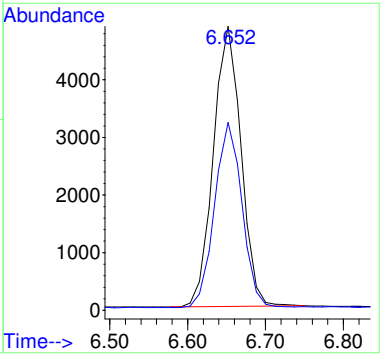


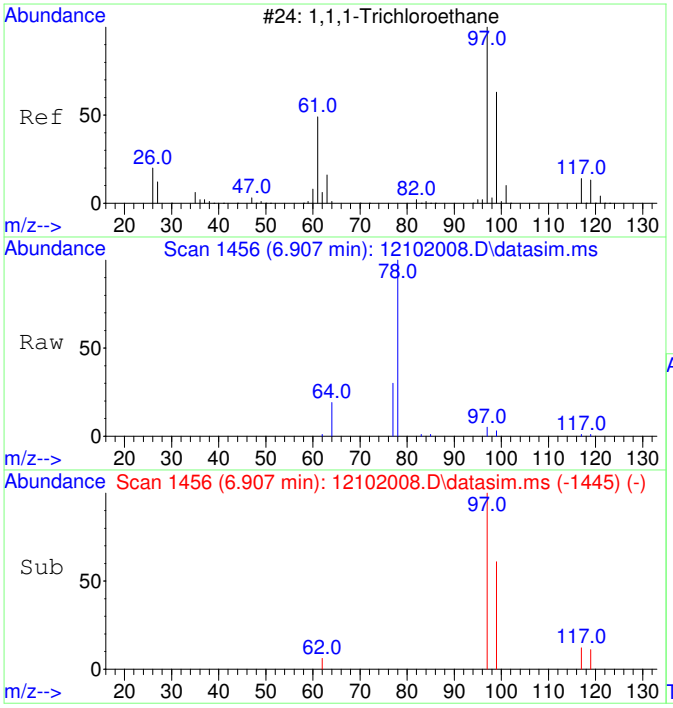


#6
Chloroform
Concen: 1017.92 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 83 Resp: 12003

Ion	Ratio	Lower	Upper
83	100		
85	65.0	35.1	95.1

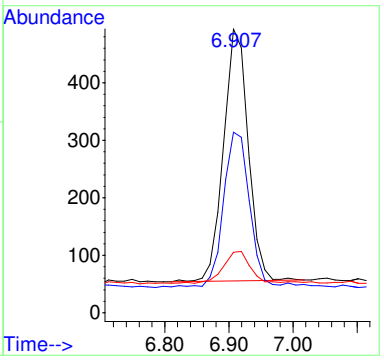


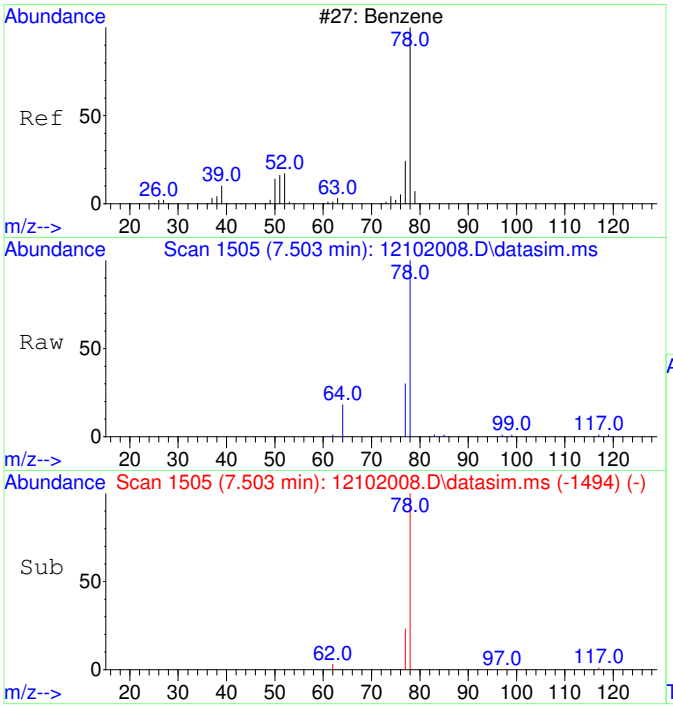


#7
1,1,1-Trichloroethane
Concen: 92.05 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 97 Resp: 1166

Ion	Ratio	Lower	Upper
97	100		
99	65.2	34.6	94.6
117	14.2	0.0	43.2

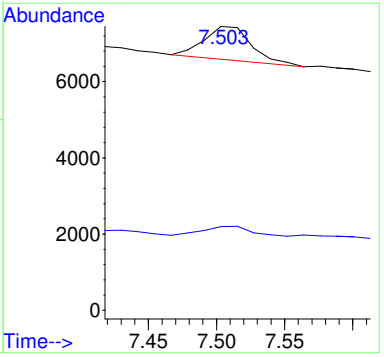


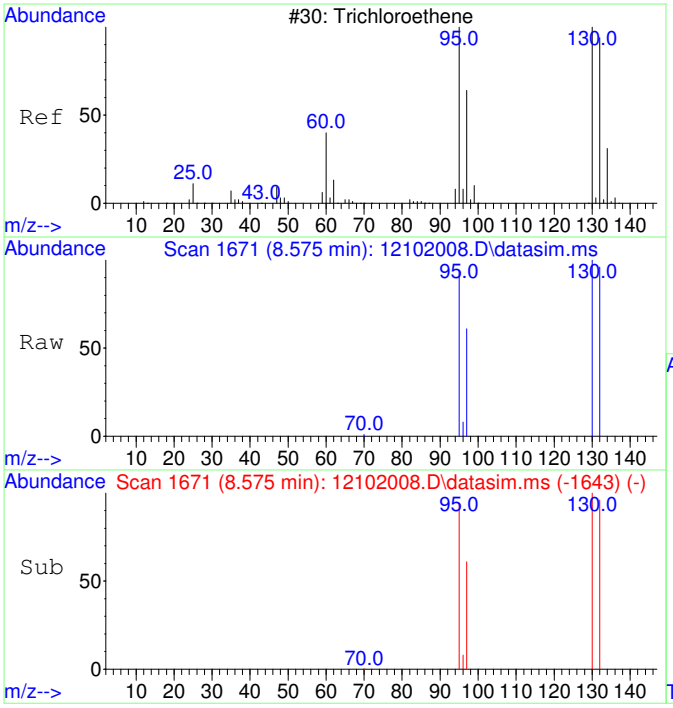


#9
Benzene
Concen: 60.50 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 78 Resp: 2021

Ion	Ratio	Lower	Upper
78	100		
77	55.0	0.0	53.2#

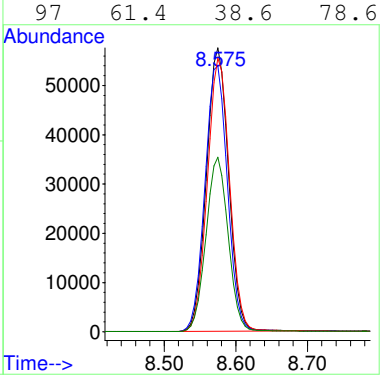


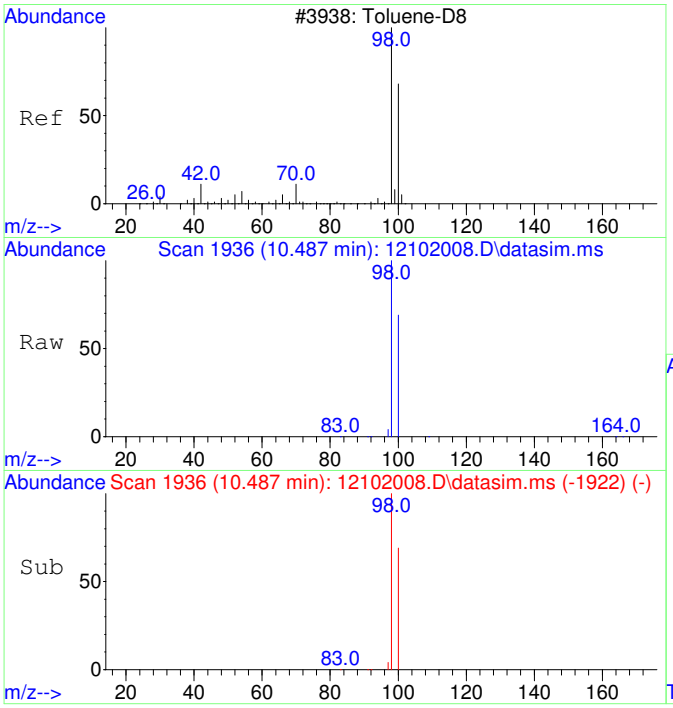


#11
Trichloroethene
Concen: 11706.91 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:130 Resp: 123482

Ion	Ratio	Lower	Upper
130	100		
95	95.0	60.7	120.7
132	96.4	76.0	116.0
97	61.4	38.6	78.6

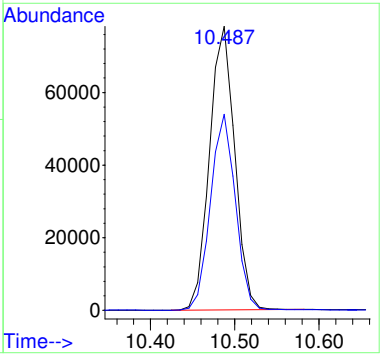


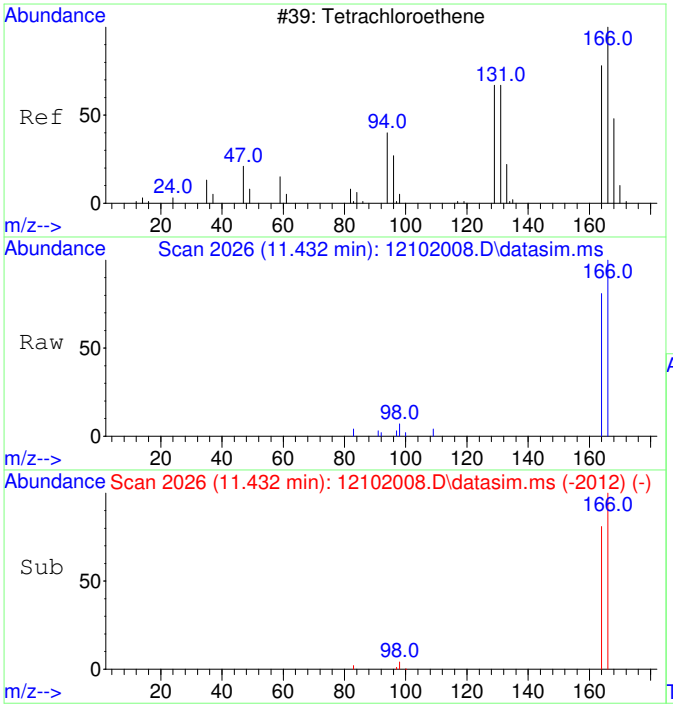


#12
Toluene-d8
Concen: 4235.01 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 98 Resp: 162841

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

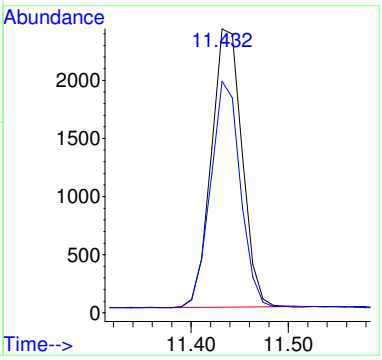


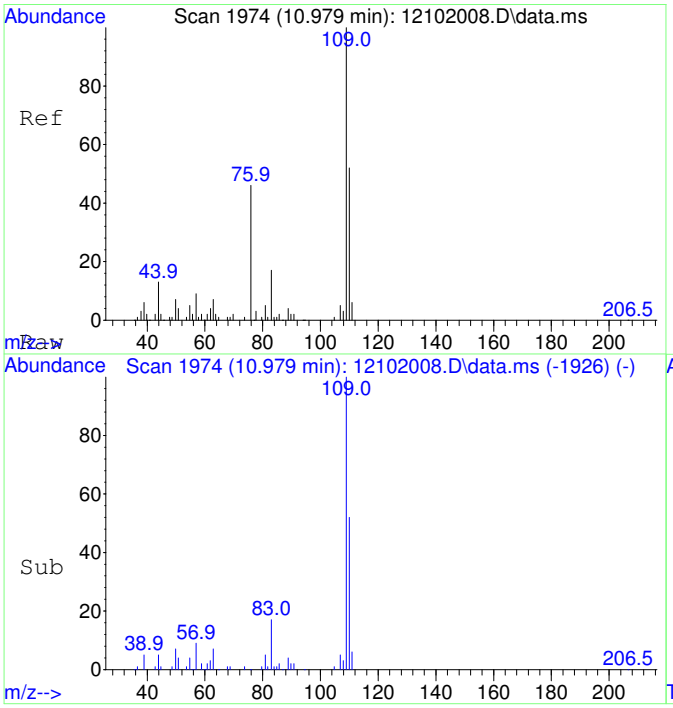


#15
Tetrachloroethene
Concen: 352.81 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:166 Resp: 5261

Ion	Ratio	Lower	Upper
166	100		
164	78.8	47.8	107.8

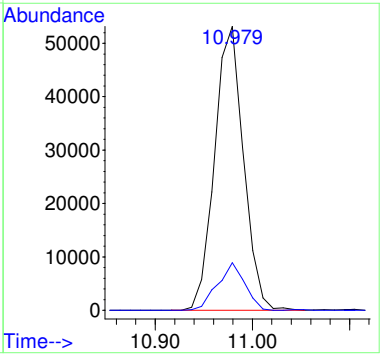


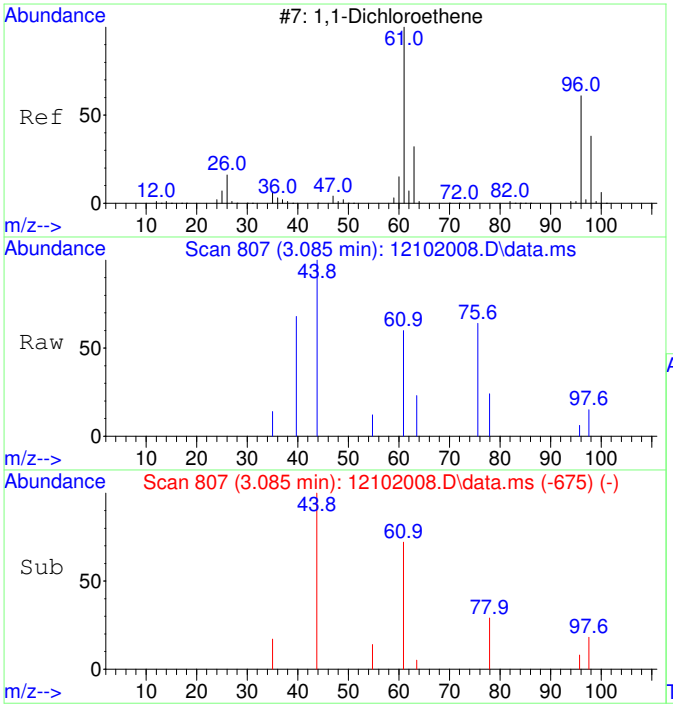


#25
2-Fluorotoluene SCAN
Concen: 4862.30 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:109 Resp: 109575

Ion	Ratio	Lower	Upper
109	100		
83	15.8	0.0	43.8

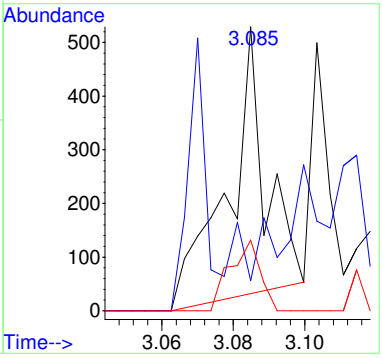


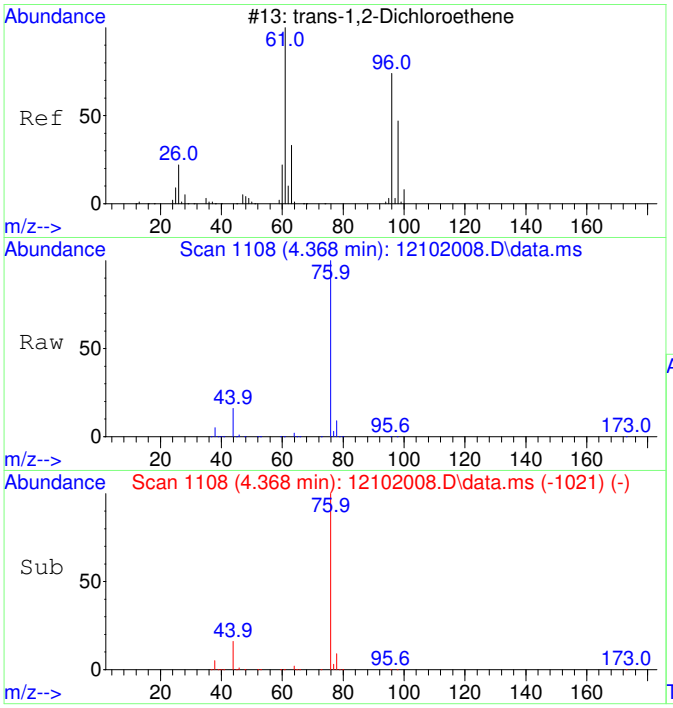


#26
1,1-Dichloroethene SCAN
Concen: 69.95 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 368

Ion	Ratio	Lower	Upper
61	100		
96	42.1	33.1	93.1
98	21.2	11.2	71.2

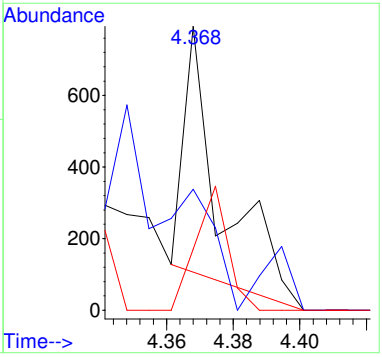


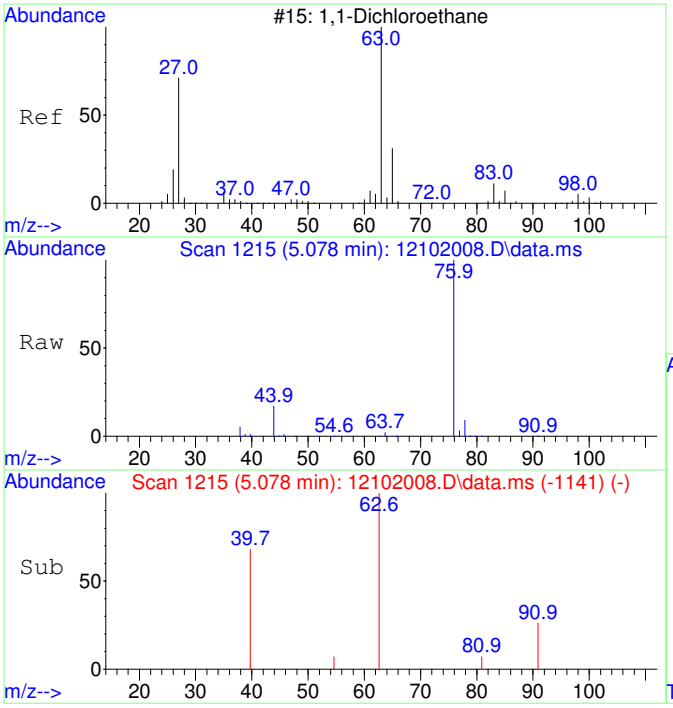


#27
trans-1,2-Dichloroethene SCAN
Concen: 74.47 ug/L
RT: 4.368 min Scan# 1108
Delta R.T. -0.013 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 499

Ion	Ratio	Lower	Upper
61	100		
96	0.0	49.0	109.0#
98	46.1	20.5	80.5

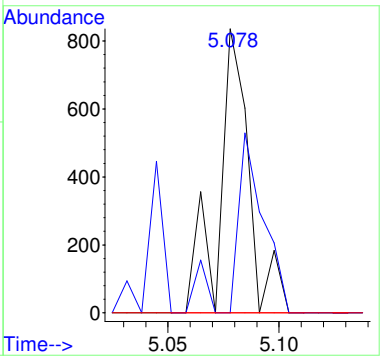


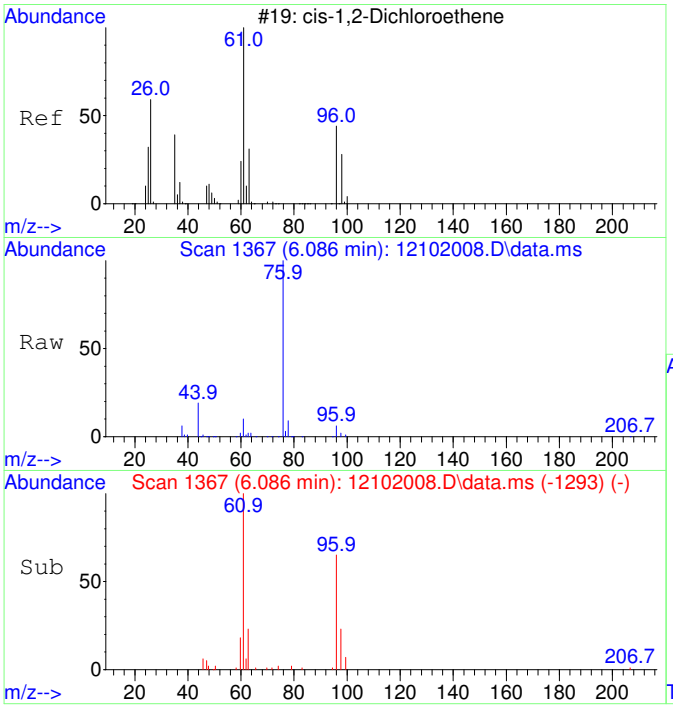


#28
1,1-Dichloroethane SCAN
Concen: 99.63 ug/L
RT: 5.078 min Scan# 1215
Delta R.T. -0.006 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 63 Resp: 788

Ion	Ratio	Lower	Upper
63	100		
65	59.9	1.3	61.3
83	0.0	0.0	45.9

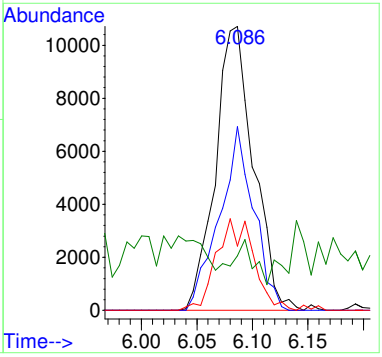


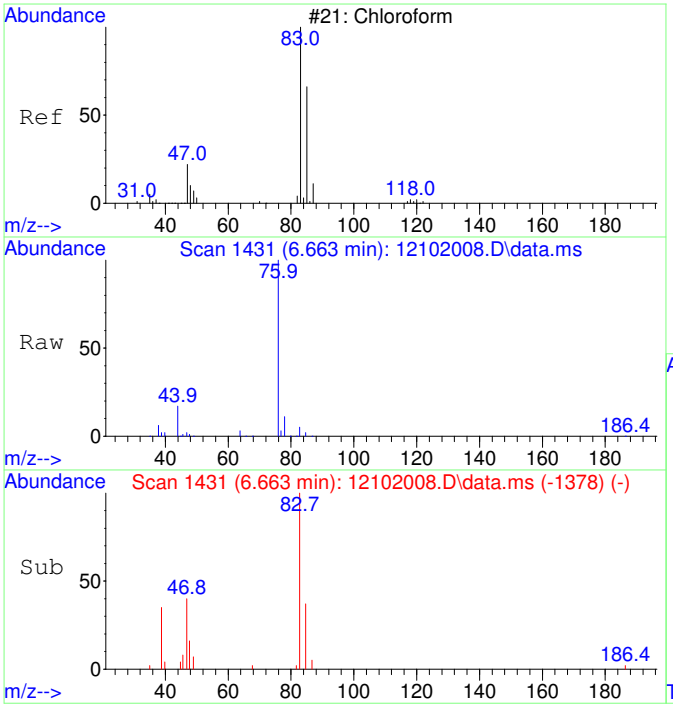


#29
cis-1,2-Dichloroethene SCAN
Concen: 3293.01 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 61 Resp: 25605

Ion	Ratio	Lower	Upper
61	100		
96	58.1	39.9	99.9
98	31.2	13.5	73.5
64	3.9	4.5	64.5#

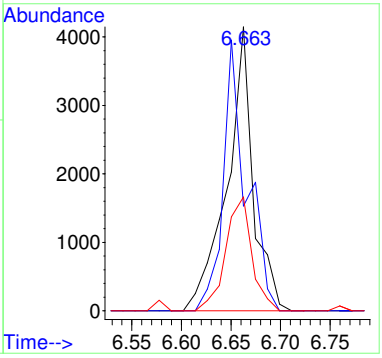


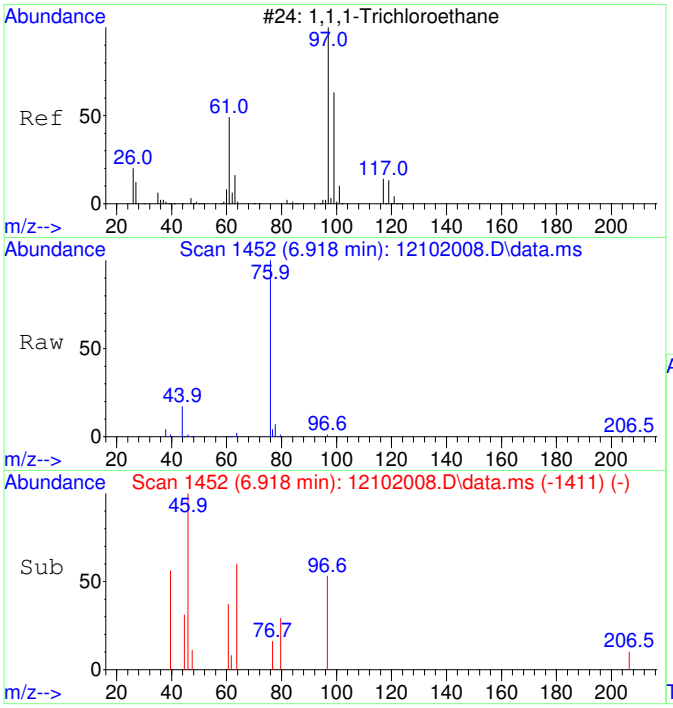


#30
Chloroform SCAN
Concen: 1050.00 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 83 Resp: 7615

Ion	Ratio	Lower	Upper
83	100		
85	85.2	34.6	94.6
47	40.2	0.0	53.4

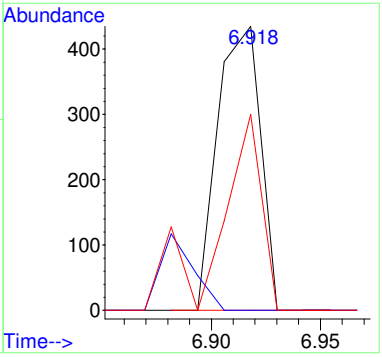


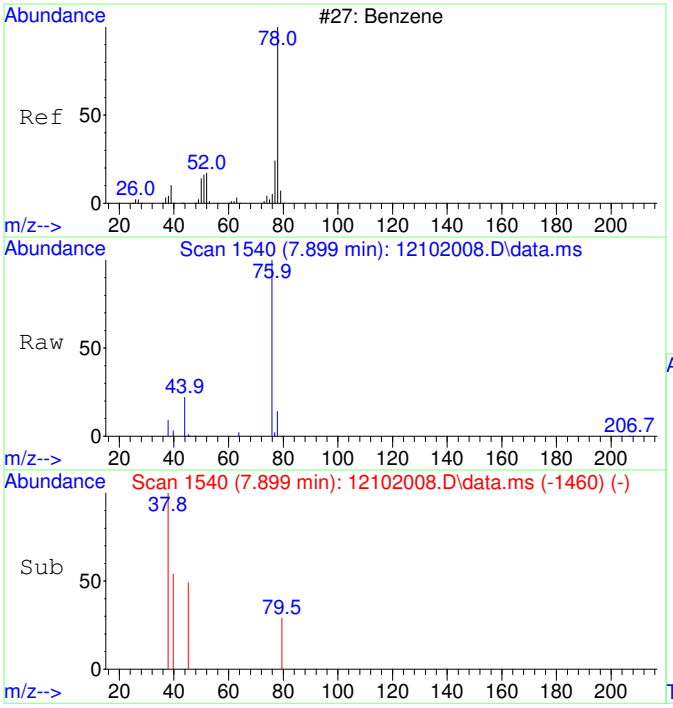


#31
1,1,1-Trichloroethane SCAN
Concen: 79.64 ug/L
RT: 6.918 min Scan# 1452
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 97 Resp: 596

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	69.1	18.0	78.0

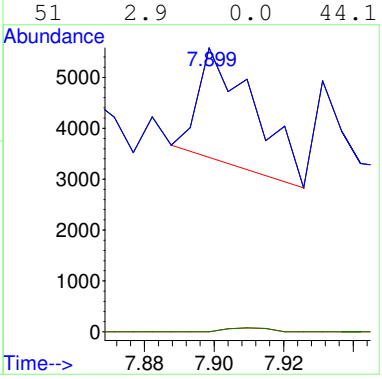


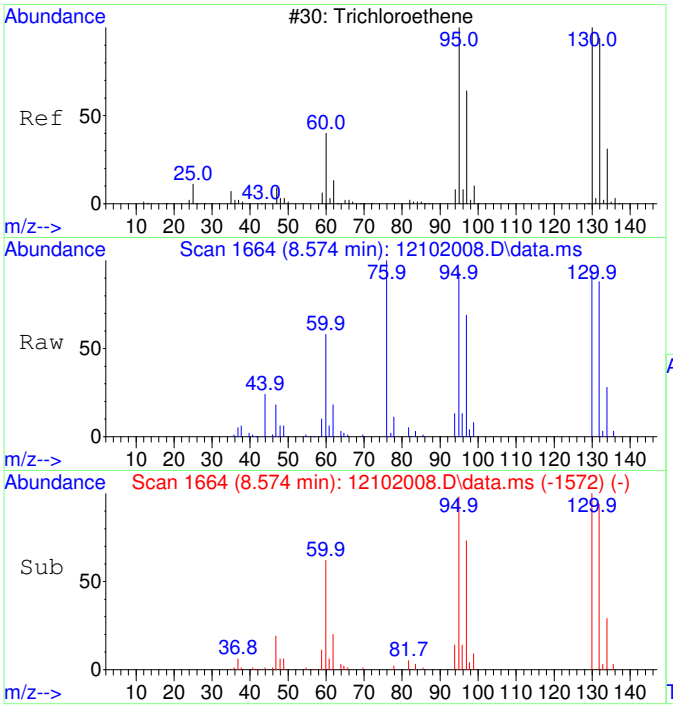


#33
Benzene SCAN
Concen: 103.26 ug/L
RT: 7.899 min Scan# 1540
Delta R.T. 0.385 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 78 Resp: 2338

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	2.9	0.0	47.9
51	2.9	0.0	44.1

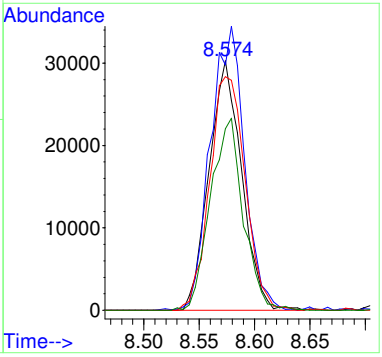


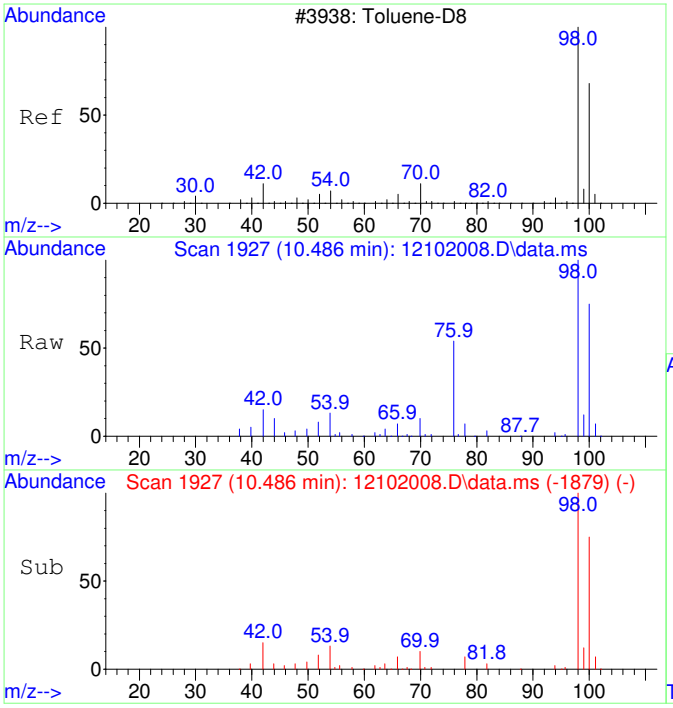


#35
Trichloroethene SCAN
Concen: 12612.39 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:130 Resp: 62266

Ion	Ratio	Lower	Upper
130	100		
95	118.3	60.5	120.5
132	101.7	59.6	119.6
97	77.2	28.2	88.2

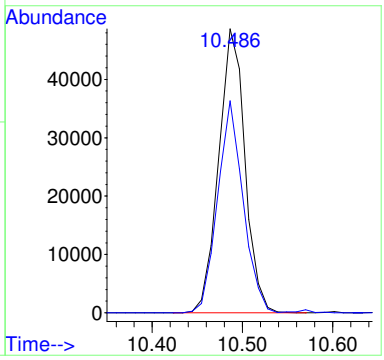


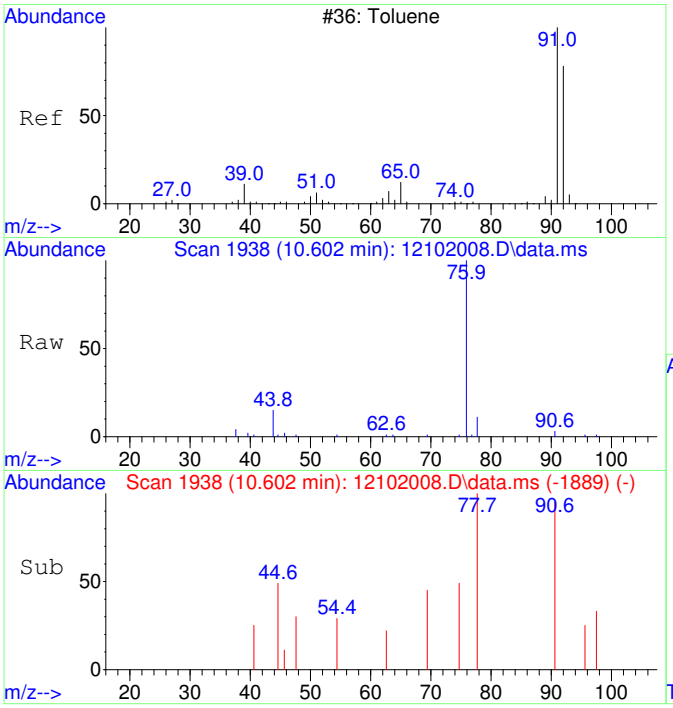


#36
Toluene-d8 SCAN
Concen: 4673.12 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 98 Resp: 98771

Ion	Ratio	Lower	Upper
98	100		
100	71.9	40.0	100.0

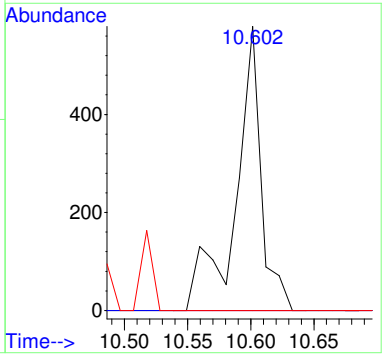


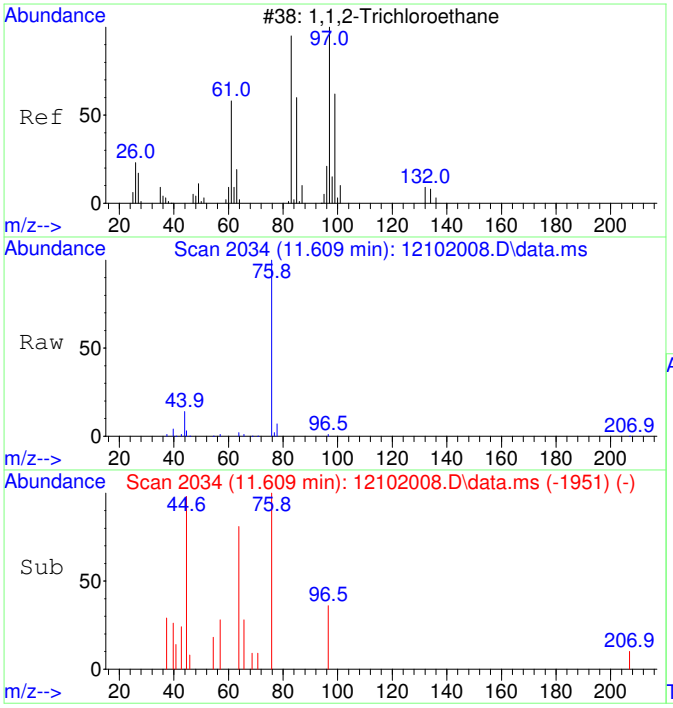


#37
Toluene SCAN
Concen: 31.39 ug/L
RT: 10.602 min Scan# 1938
Delta R.T. 0.011 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 91 Resp: 817

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

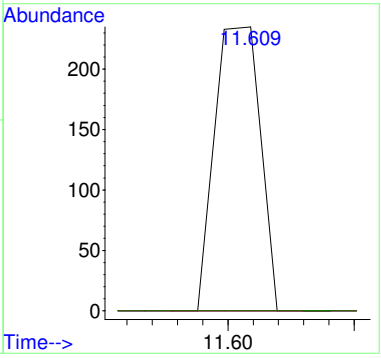


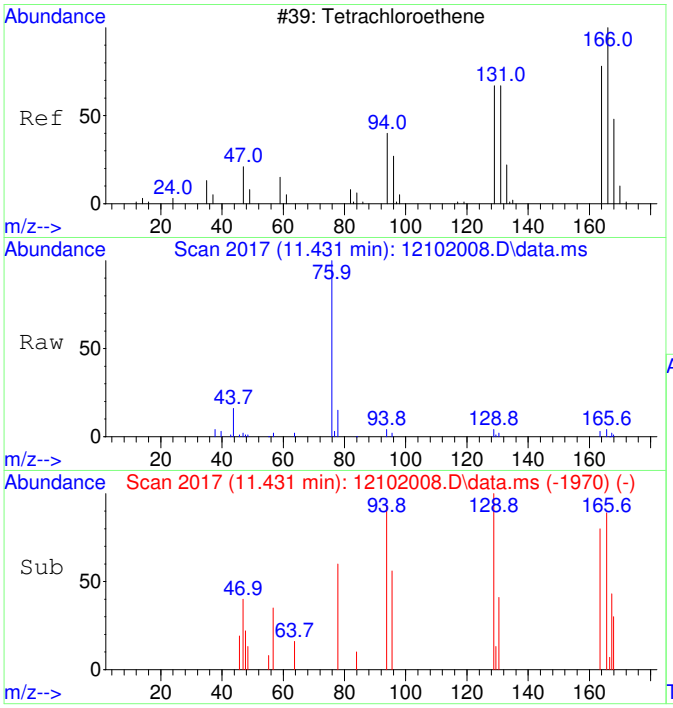


#38
1,1,2-Trichloroethane SCAN
Concen: 45.23 ug/L
RT: 11.609 min Scan# 2034
Delta R.T. 0.367 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion: 97 Resp: 295

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#

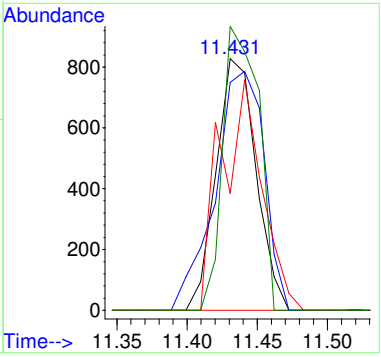




#39
Tetrachloroethene SCAN
Concen: 282.19 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12102008.D
Acq: 10 Dec 2020 12:53

Tgt Ion:166 Resp: 1652

Ion	Ratio	Lower	Upper
166	100		
164	116.3	50.9	110.9#
131	94.2	38.7	98.7
129	101.9	41.8	101.8#



2012007-17RE1

Quantitation Report (Not Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102009.D
Acq On : 10 Dec 2020 13:16
InstName : AG5975C
Operator : TD
Sample : 2012007-17RE1
Misc : 10X DL (180-20)
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Dec 10 13:36:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

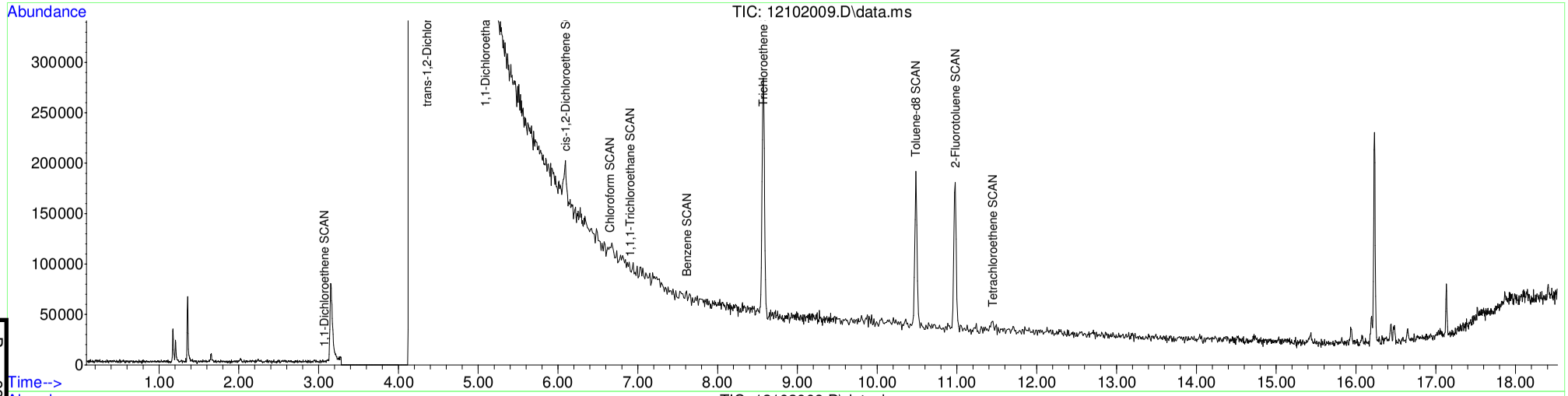
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 2-Fluorotoluene	10.970	109	215759	5000.00	ug/L		0.00
System Monitoring Compounds							
12) Toluene-d8	10.487	98	175108	4190.47	ug/L		0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 83.81%#				
Target Compounds							Qvalue
2] 1,1-Dichloroethene	3.090	61	2114	247.10	ug/L		71
3] trans-1,2-Dichloroethene	4.369	61	2369	219.65	ug/L		95
4] 1,1-Dichloroethane	5.079	63	2152	167.06	ug/L		96
5] cis-1,2-Dichloroethene	6.088	61	42314	3171.58	ug/L	RPT	98
6] Chloroform	6.652	83	16233	1266.75	ug/L		100
7] 1,1,1-Trichloroethane	6.919	97	1503	109.18	ug/L		97
9] Benzene	7.515	78	2487	68.50	ug/L		45
11] Trichloroethene	8.575	130	159248	13892.44	ug/L	RPT	97
15] Tetrachloroethene	11.432	166	6589	406.59	ug/L		98
25) 2-Fluorotoluene SCAN	10.979	109	123376	5037.64	ug/L		98
26) 1,1-Dichloroethene SCAN	3.074	61	178	31.13	ug/L		77
27) trans-1,2-Dichloroethe...	4.355	61	932	127.98	ug/L	#	66
28) 1,1-Dichloroethane SCAN	5.085	63	1015	118.08	ug/L	#	70
29) cis-1,2-Dichloroethene...	6.086	61	30146	3567.50	ug/L	#	75
30) Chloroform SCAN	6.650	83	11783	1495.00	ug/L		91
31) 1,1,1-Trichloroethane ...	6.906	97	1006	123.69	ug/L	#	33
33) Benzene SCAN	7.611	78	10553	428.89	ug/L	#	91
35) Trichloroethene SCAN	8.568	130	82803	15433.29	ug/L		85
36) Toluene-d8 SCAN	10.486	98	100476	4374.27	ug/L		98
39) Tetrachloroethene SCAN	11.441	166	3163	497.15	ug/L		81

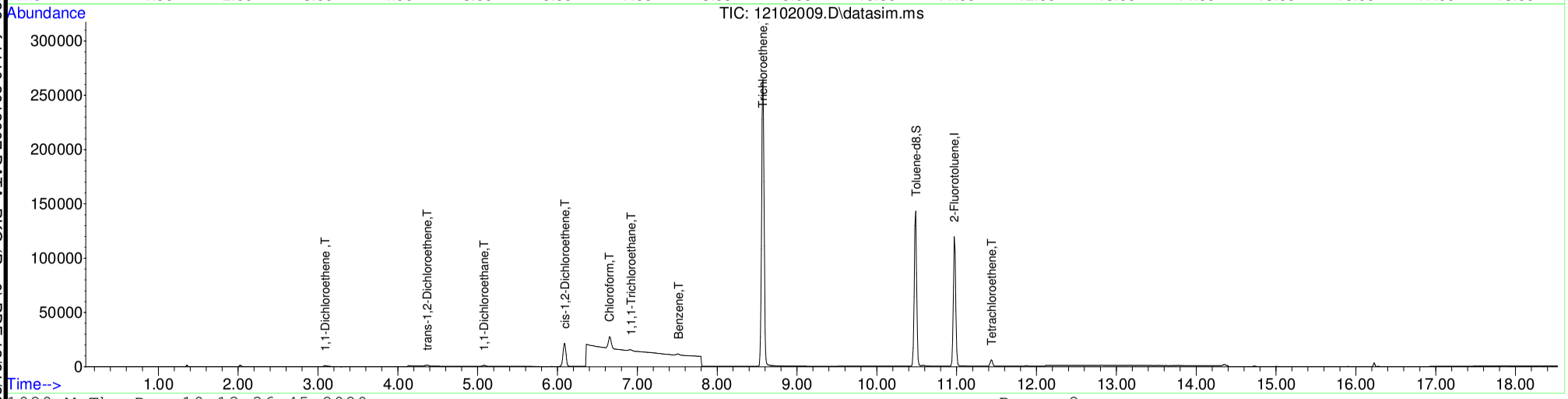
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102009.D
Acq On : 10 Dec 2020 13:16
InstName : AG5975C
Operator : TD
Sample : 2012007-17RE1
Misc : 10X DL (180-20)
ALS Vial : 9 Sample Multiplier: 10

Quant Time: Dec 10 13:36:44 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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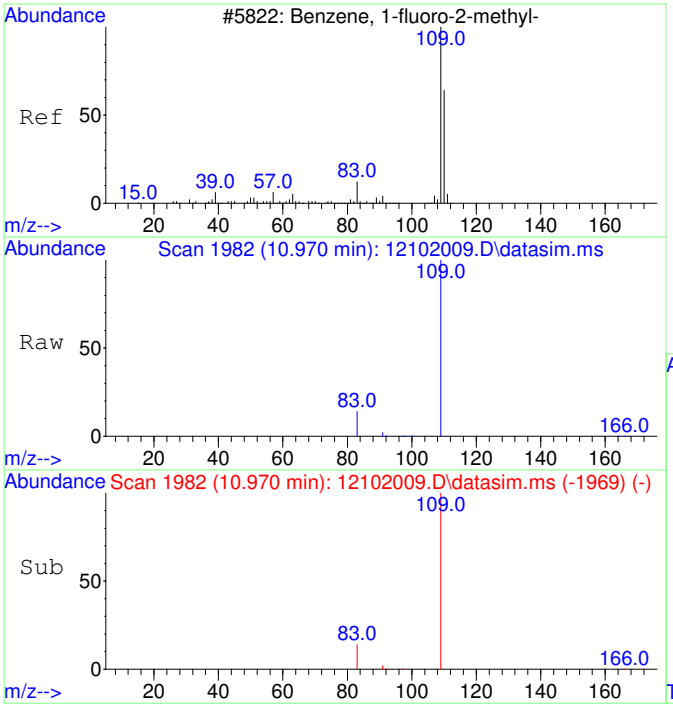
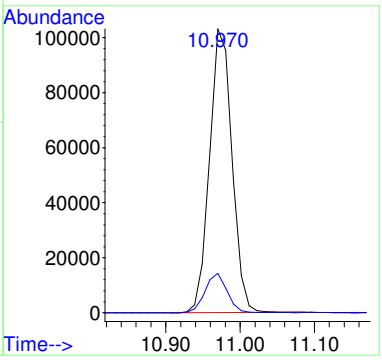
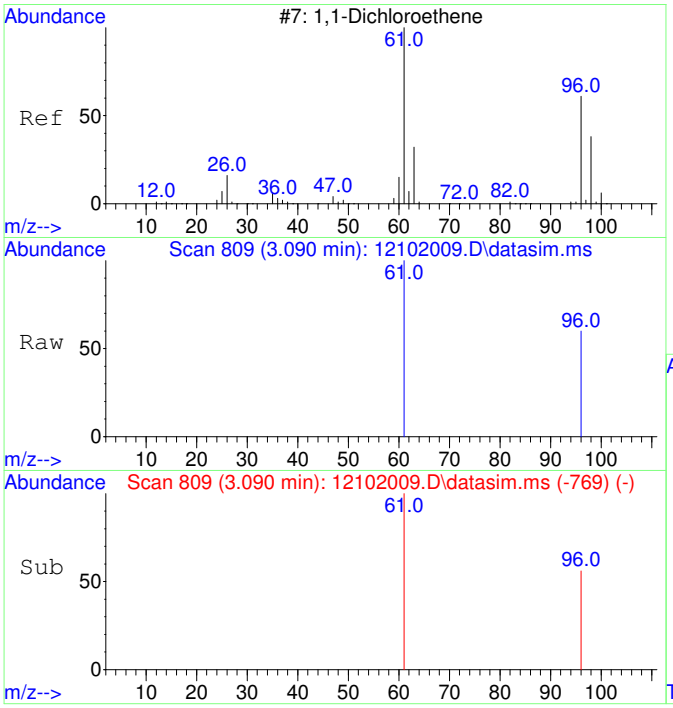


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:109 Resp: 215759

Ion	Ratio	Lower	Upper
109	100		
83	13.5	0.0	42.3

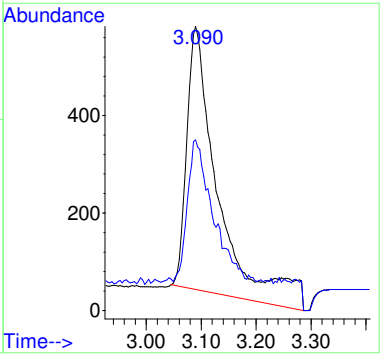


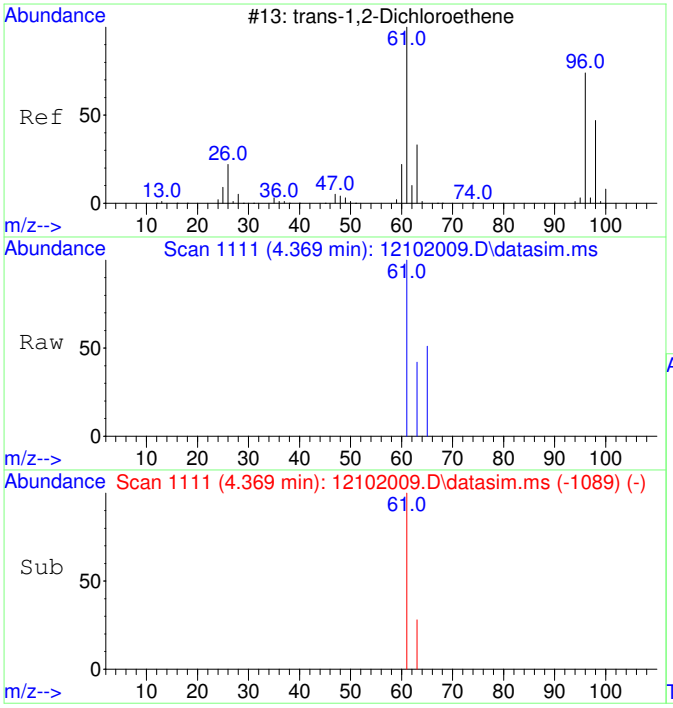


#2
1,1-Dichloroethene
Concen: 247.10 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 2114

Ion	Ratio	Lower	Upper
61	100		
96	44.0	37.2	97.2

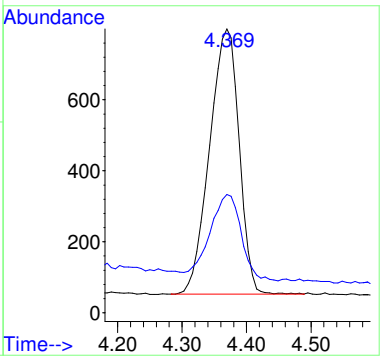


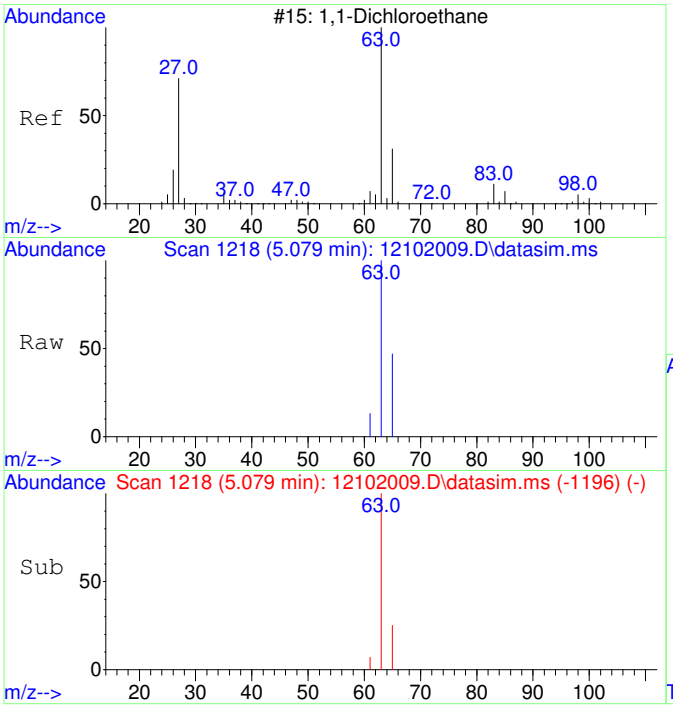


#3
trans-1,2-Dichloroethene
Concen: 219.65 ug/L
RT: 4.369 min Scan# 1111
Delta R.T. -0.006 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 2369

Ion	Ratio	Lower	Upper
61	100		
63	35.3	2.4	62.4

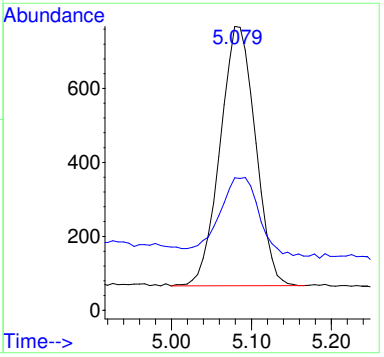


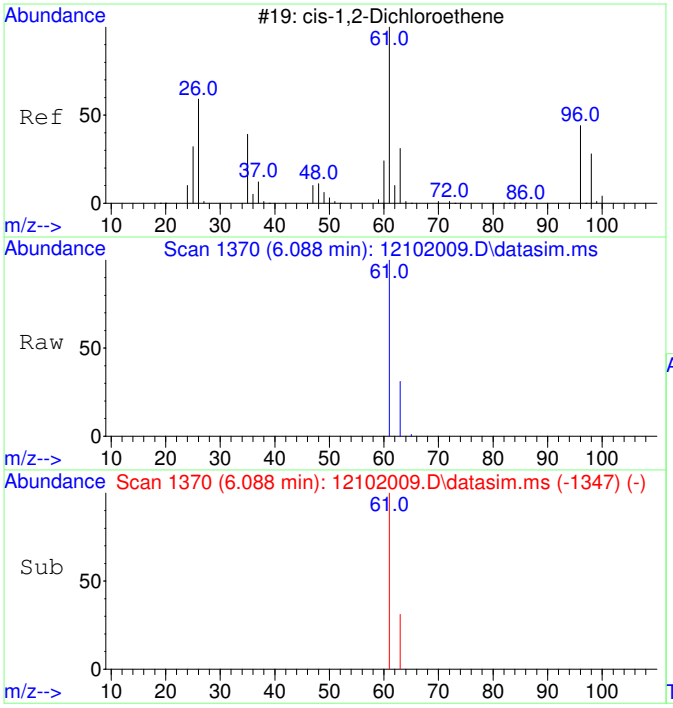


#4
1,1-Dichloroethane
Concen: 167.06 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 63 Resp: 2152

Ion	Ratio	Lower	Upper
63	100		
65	34.2	1.8	61.8

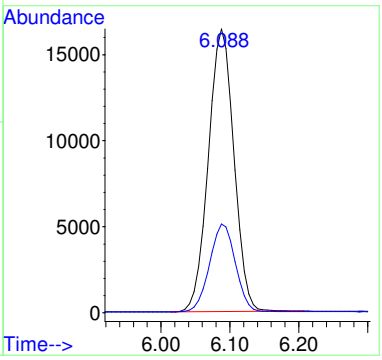


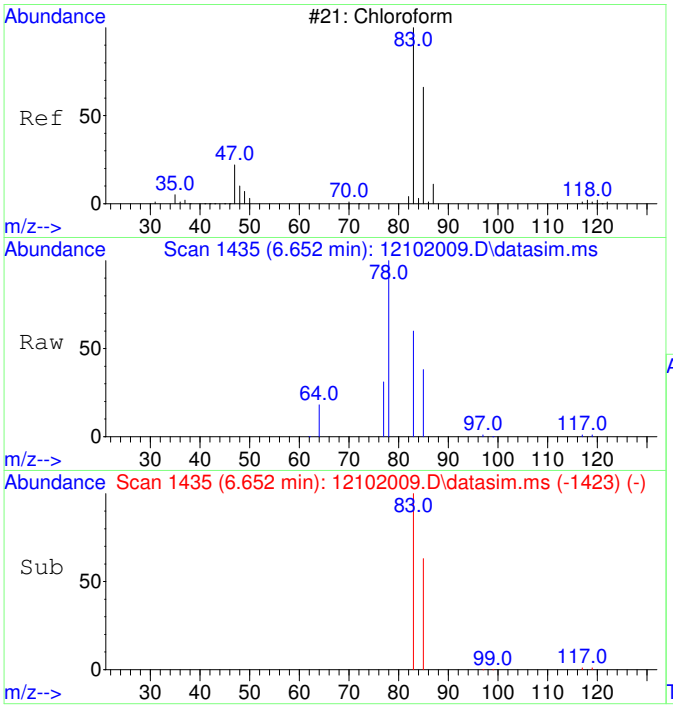


#5
cis-1,2-Dichloroethene
Concen: 3171.58 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 42314

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

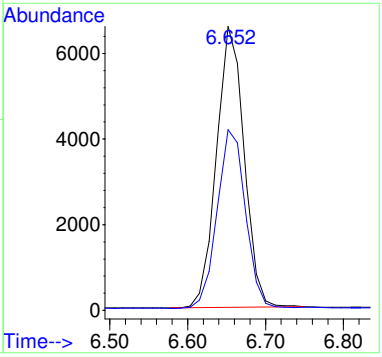


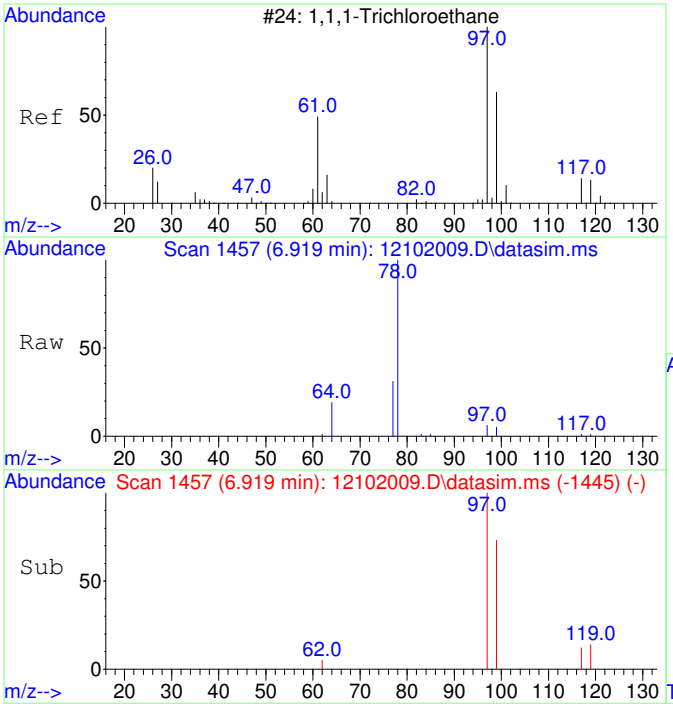


#6
Chloroform
Concen: 1266.75 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 83 Resp: 16233

Ion	Ratio	Lower	Upper
83	100		
85	64.7	35.1	95.1

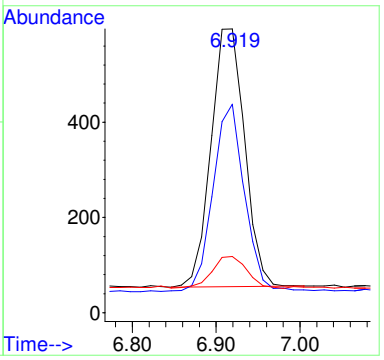


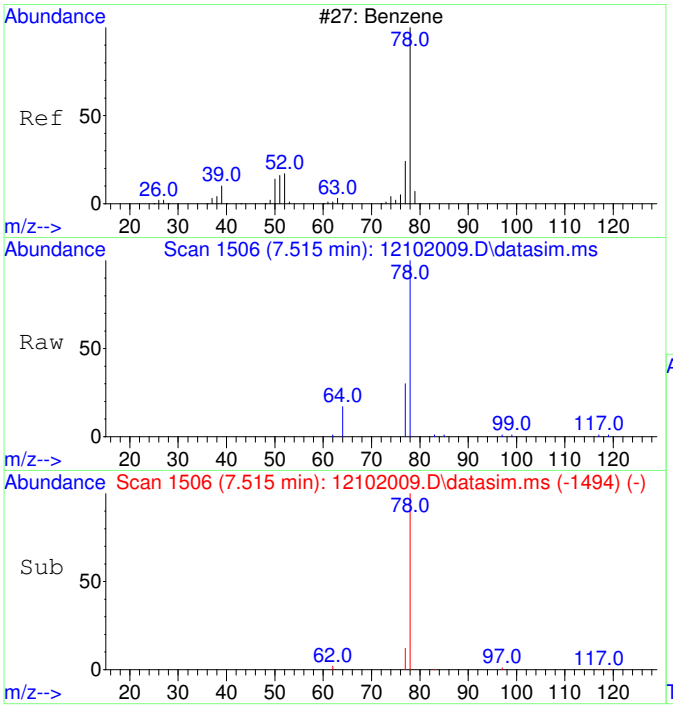


#7
1,1,1-Trichloroethane
Concen: 109.18 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 97 Resp: 1503

Ion	Ratio	Lower	Upper
97	100		
99	67.6	34.6	94.6
117	13.0	0.0	43.2

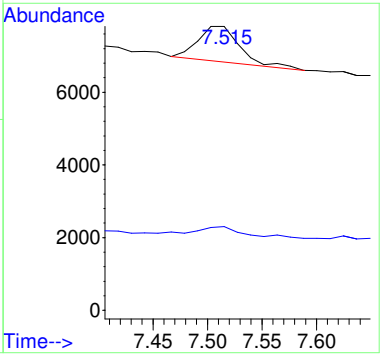


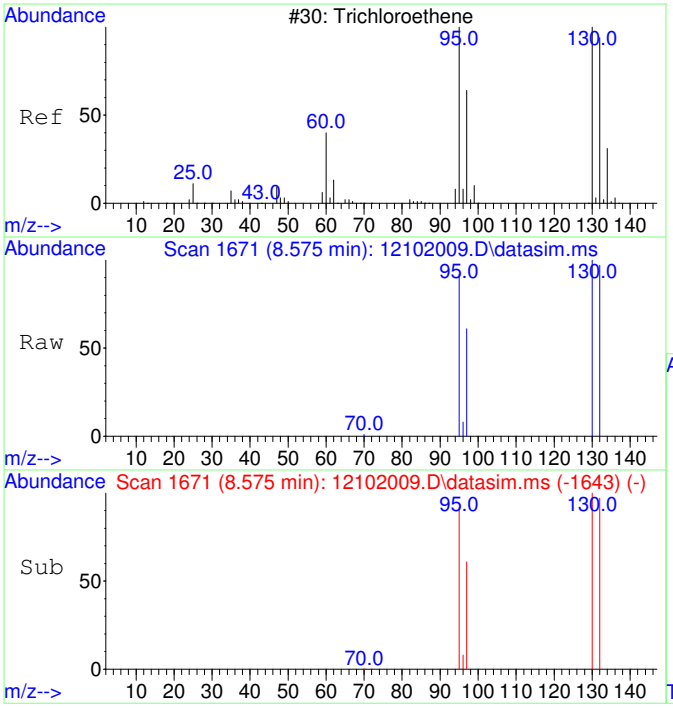


#9
Benzene
Concen: 68.50 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 78 Resp: 2487

Ion	Ratio	Lower	Upper
78	100		
77	49.7	0.0	53.2

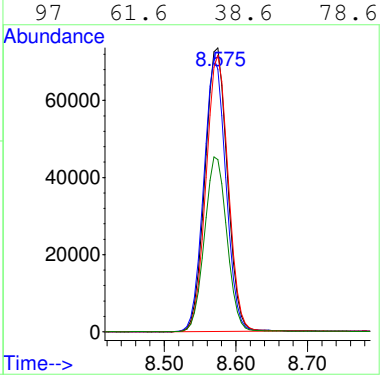


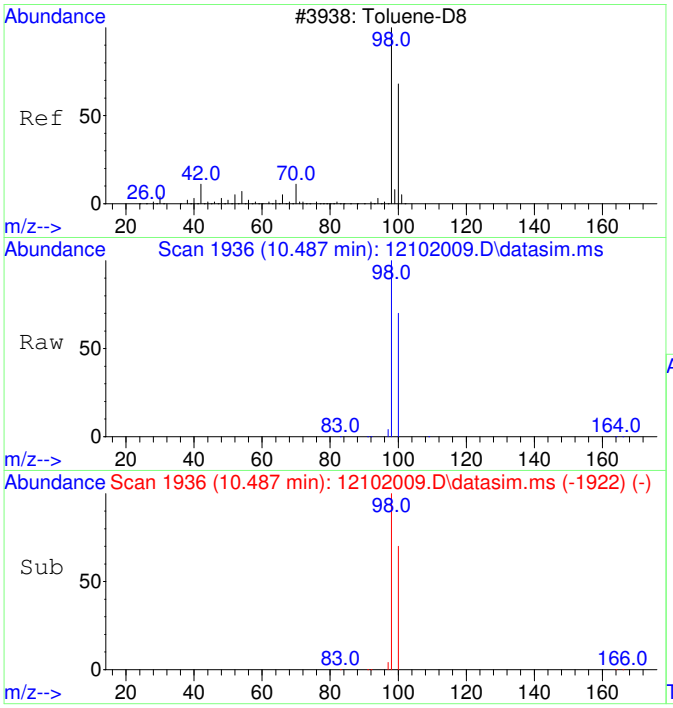


#11
Trichloroethene
Concen: 13892.44 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:130 Resp: 159248

Ion	Ratio	Lower	Upper
130	100		
95	95.3	60.7	120.7
132	96.3	76.0	116.0
97	61.6	38.6	78.6

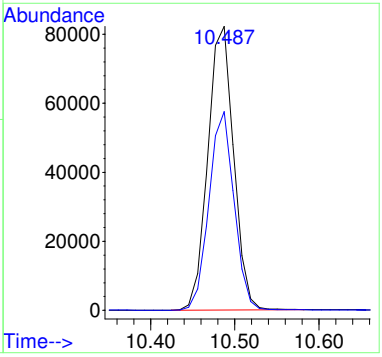


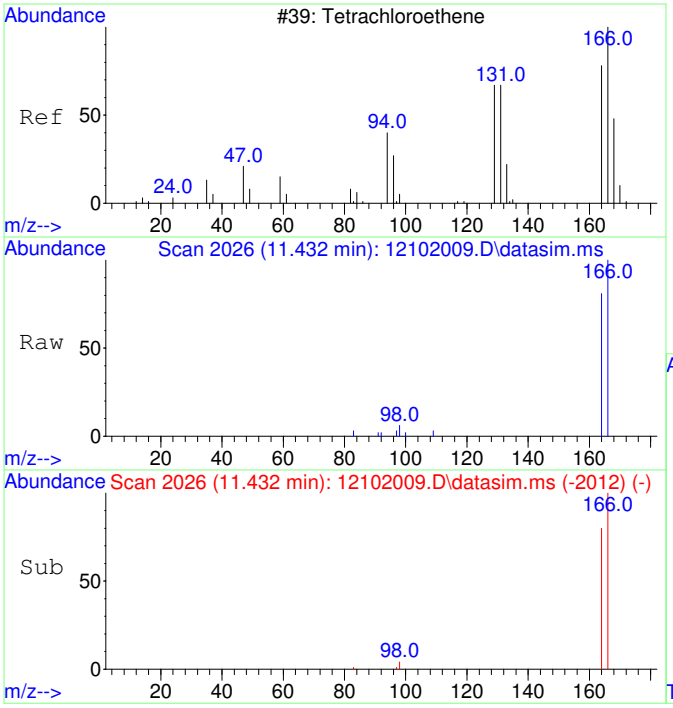


#12
Toluene-d8
Concen: 4190.47 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 98 Resp: 175108

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

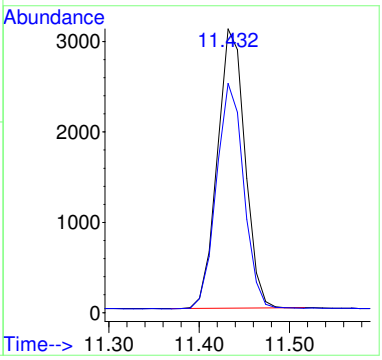


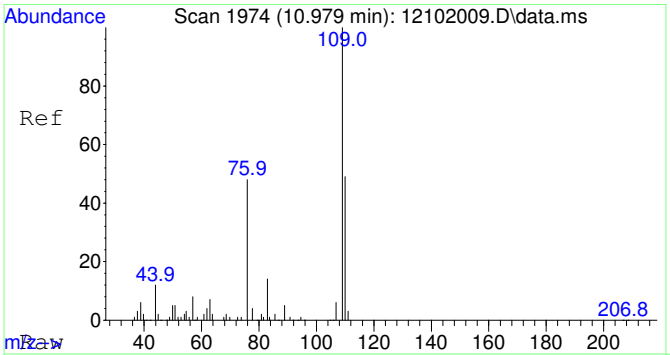


#15
Tetrachloroethene
Concen: 406.59 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:166 Resp: 6589

Ion	Ratio	Lower	Upper
166	100		
164	79.8	47.8	107.8

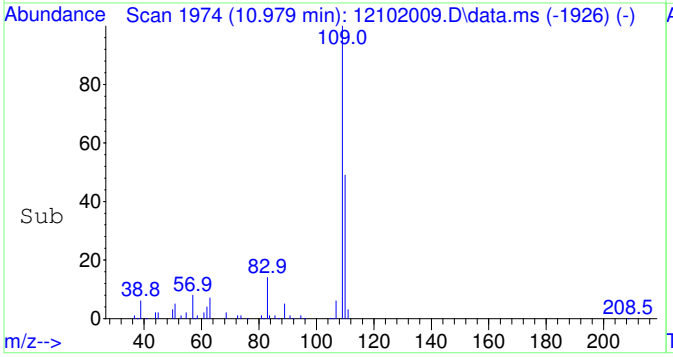


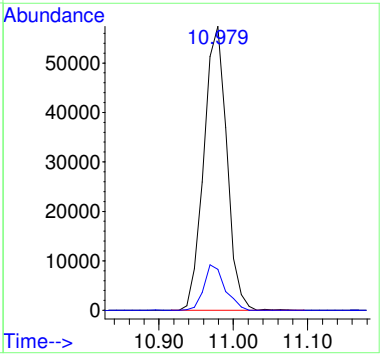


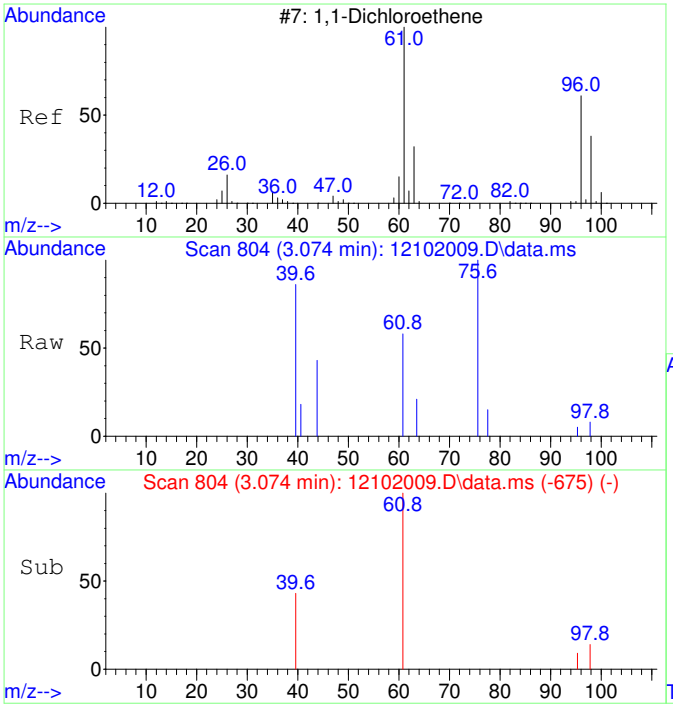
#25
2-Fluorotoluene SCAN
Concen: 5037.64 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:109 Resp: 123376

Ion	Ratio	Lower	Upper
109	100		
83	14.7	0.0	43.8



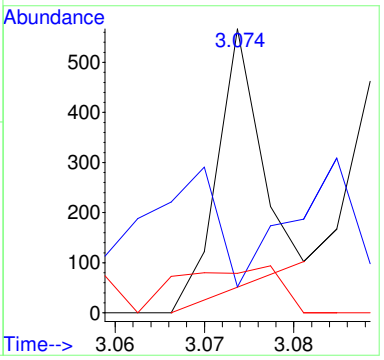


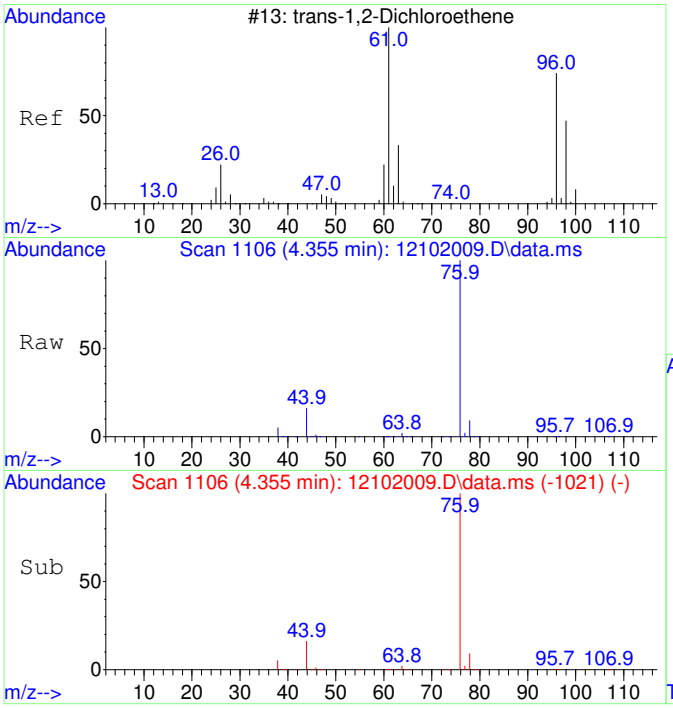


#26
1,1-Dichloroethene SCAN
Concen: 31.13 ug/L
RT: 3.074 min Scan# 804
Delta R.T. -0.022 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 178

Ion	Ratio	Lower	Upper
61	100		
96	92.1	33.1	93.1
98	41.0	11.2	71.2

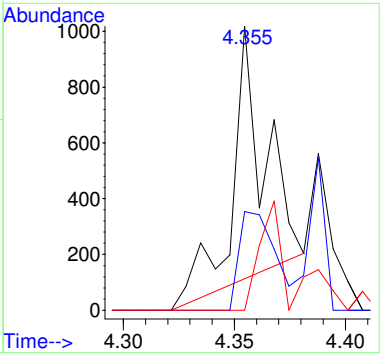


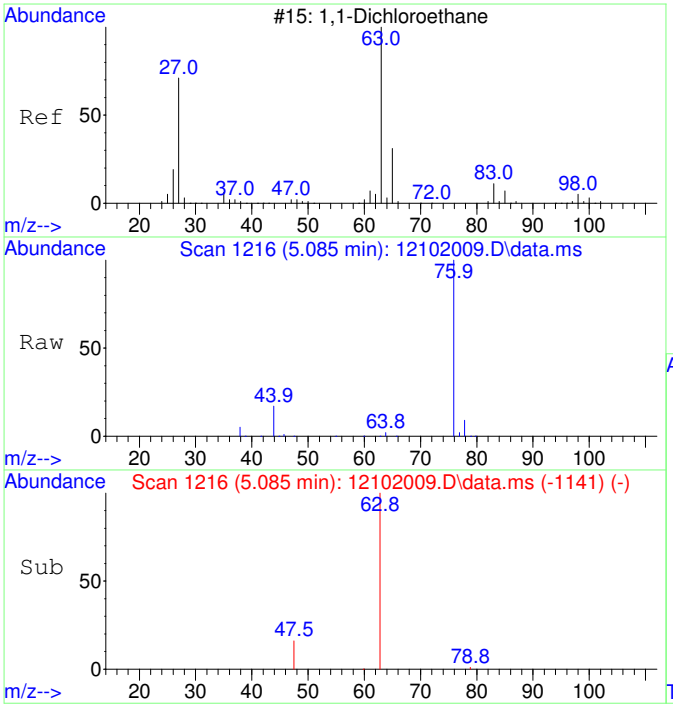


#27
trans-1,2-Dichloroethene SCAN
Concen: 127.98 ug/L
RT: 4.355 min Scan# 1106
Delta R.T. -0.026 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 932

Ion	Ratio	Lower	Upper
61	100		
96	35.4	49.0	109.0#
98	43.9	20.5	80.5

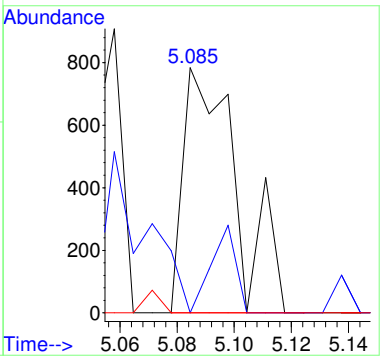


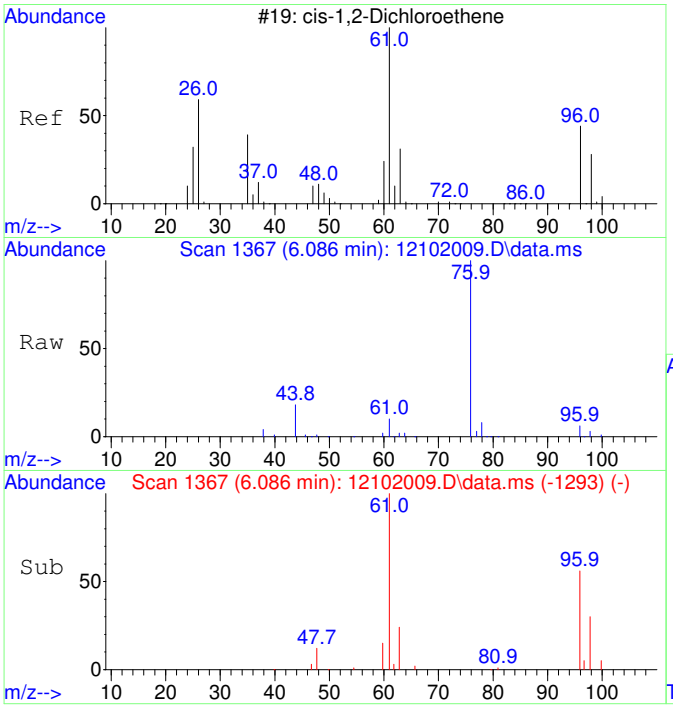


#28
1,1-Dichloroethane SCAN
Concen: 118.08 ug/L
RT: 5.085 min Scan# 1216
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 63 Resp: 1015

Ion	Ratio	Lower	Upper
63	100		
65	16.5	1.3	61.3
83	0.0	0.0	45.9

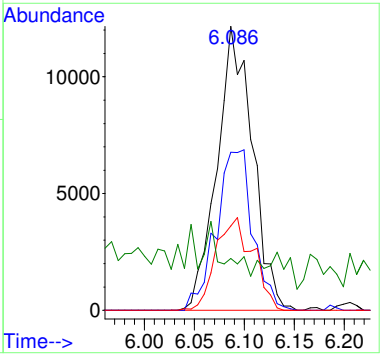


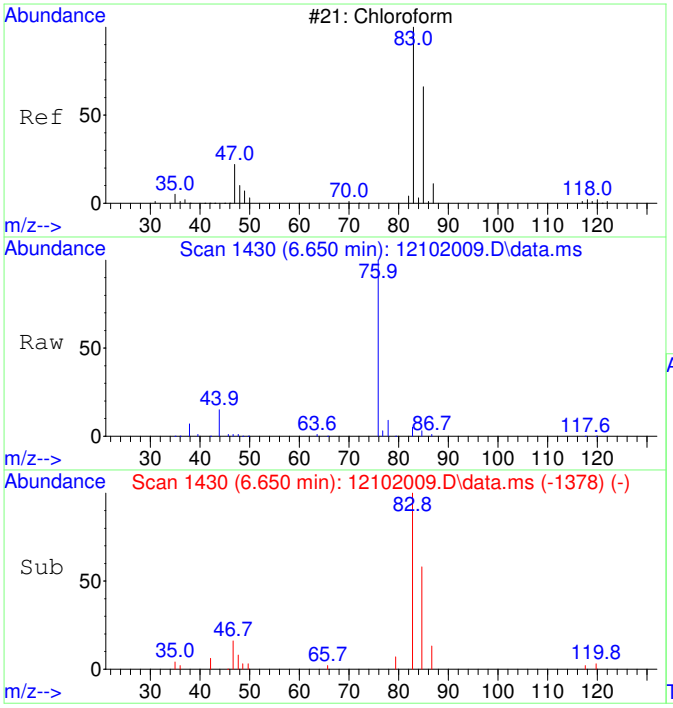


#29
cis-1,2-Dichloroethene SCAN
Concen: 3567.50 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.007 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 61 Resp: 30146

Ion	Ratio	Lower	Upper
61	100		
96	58.3	39.9	99.9
98	34.3	13.5	73.5
64	0.0	4.5	64.5#

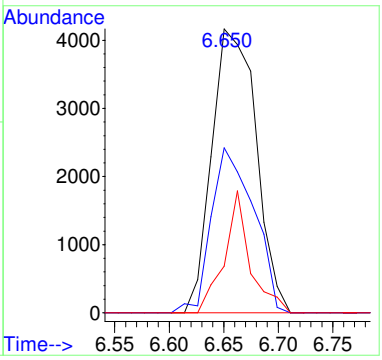


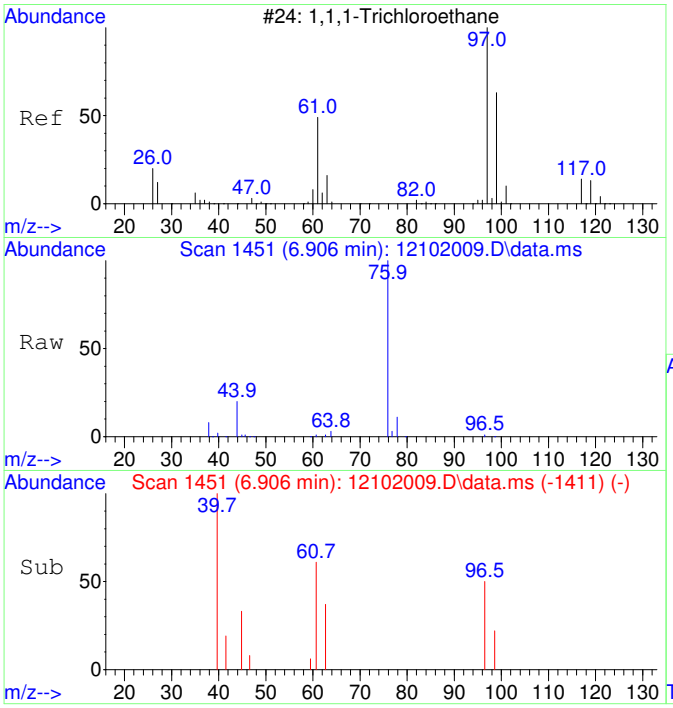


#30
Chloroform SCAN
Concen: 1495.00 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 83 Resp: 11783

Ion	Ratio	Lower	Upper
83	100		
85	55.8	34.6	94.6
47	24.8	0.0	53.4

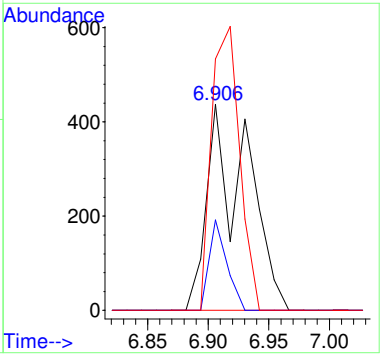


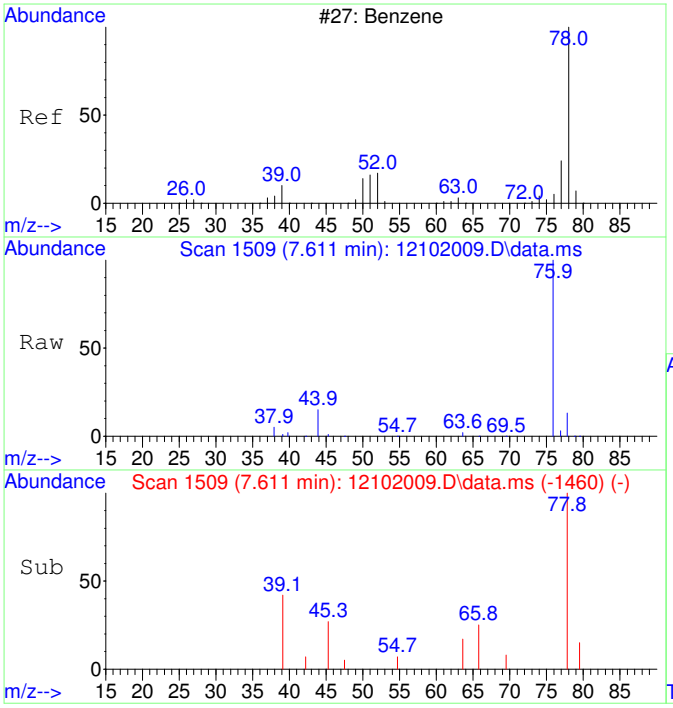


#31
1,1,1-Trichloroethane SCAN
Concen: 123.69 ug/L
RT: 6.906 min Scan# 1451
Delta R.T. -0.012 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 97 Resp: 1006

Ion	Ratio	Lower	Upper
97	100		
99	19.3	43.6	103.6#
61	96.5	18.0	78.0#

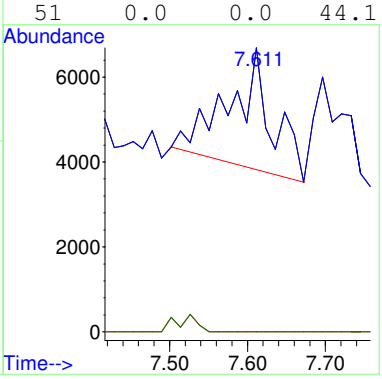


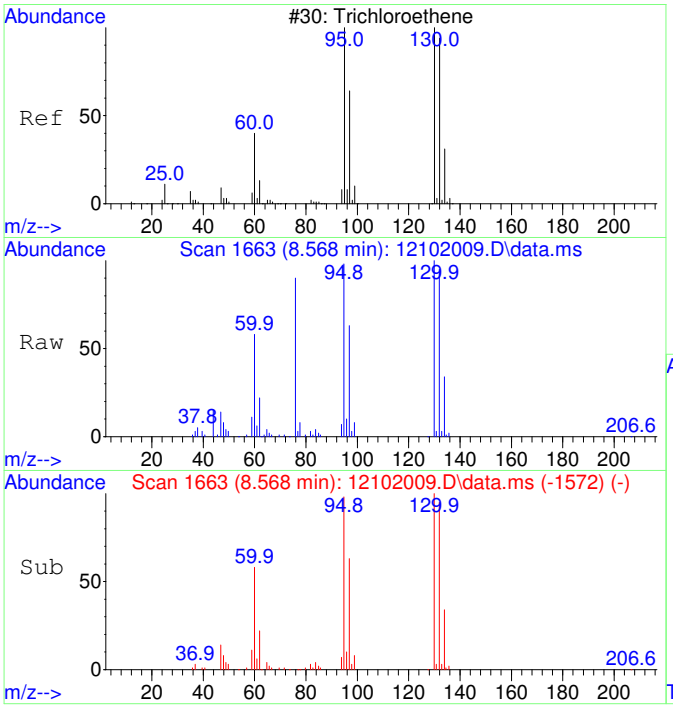


#33
Benzene SCAN
Concen: 428.89 ug/L
RT: 7.611 min Scan# 1509
Delta R.T. 0.097 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 78 Resp: 10553

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

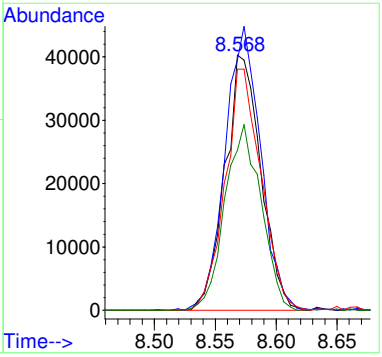


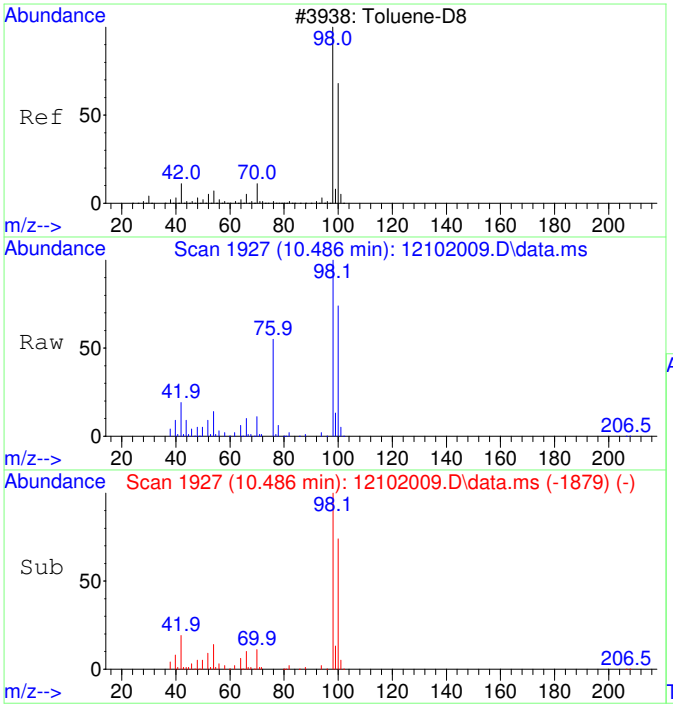


#35
Trichloroethene SCAN
Concen: 15433.29 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:130 Resp: 82803

Ion	Ratio	Lower	Upper
130	100		
95	109.6	60.5	120.5
132	94.7	59.6	119.6
97	73.1	28.2	88.2

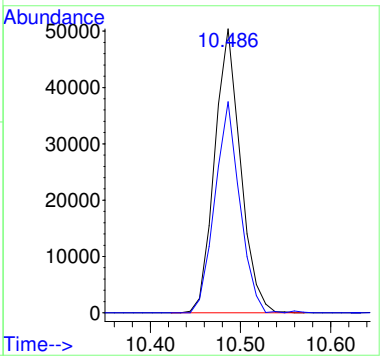


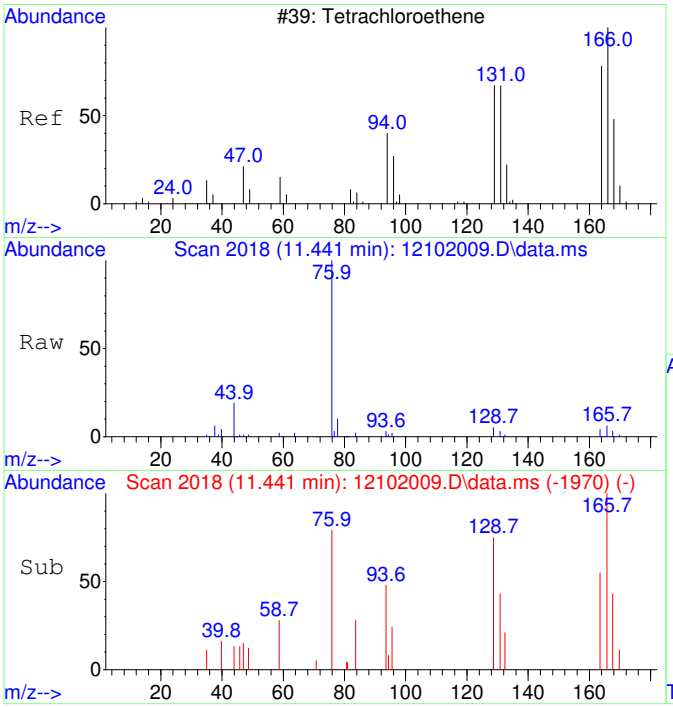


#36
Toluene-d8 SCAN
Concen: 4374.27 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion: 98 Resp: 100476

Ion	Ratio	Lower	Upper
98	100		
100	71.4	40.0	100.0

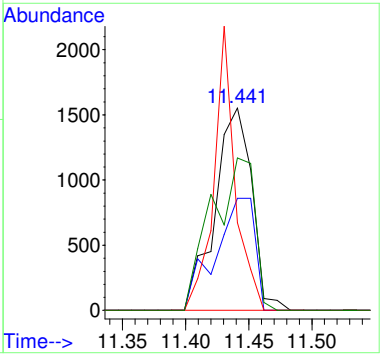




#39
Tetrachloroethene SCAN
Concen: 497.15 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12102009.D
Acq: 10 Dec 2020 13:16

Tgt Ion:166 Resp: 3163

Ion	Ratio	Lower	Upper
166	100		
164	59.2	50.9	110.9
131	80.1	38.7	98.7
129	87.2	41.8	101.8



2012007-18RE1

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102010.D
Acq On : 10 Dec 2020 13:40
InstName : AG5975C
Operator : TD
Sample : 2012007-18RE1
Misc : 5X DL (160-40)
ALS Vial : 10 Sample Multiplier: 5

Quant Time: Dec 10 13:59:01 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

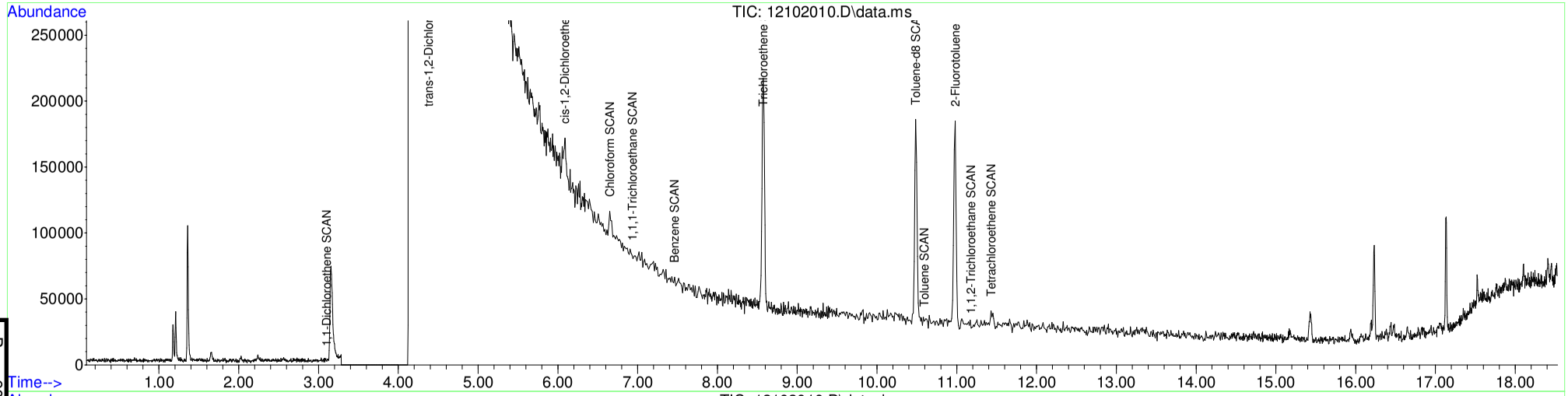
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.981	109	216373	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	177173	4227.86 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 84.56%#		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	1741	202.93 ug/L	72
3] trans-1,2-Dichloroethene	4.363	61	1743	161.15 ug/L	97
4] 1,1-Dichloroethane	5.079	63	1579	122.23 ug/L	96
5] cis-1,2-Dichloroethene	6.088	61	31417	2348.13 ug/L	98
6] Chloroform	6.652	83	27467	2137.31 ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	1121	81.20 ug/L	99
9] Benzene	7.503	78	2301	63.20 ug/L	50
11] Trichloroethene	8.575	130	122172	10627.77 ug/L RPT	97
13] Toluene	10.582	91	1783	34.17 ug/L	99
15] Tetrachloroethene	11.432	166	6347	390.54 ug/L	99
25) 2-Fluorotoluene SCAN	10.979	109	124186	5056.32 ug/L	98
26) 1,1-Dichloroethene SCAN	3.103	61	221	38.54 ug/L #	52
27) trans-1,2-Dichloroethe...	4.375	61	1093	149.66 ug/L #	50
29) cis-1,2-Dichloroethene...	6.086	61	22200	2619.71 ug/L #	78
30) Chloroform SCAN	6.650	83	17763	2247.33 ug/L	95
31) 1,1,1-Trichloroethane ...	6.930	97	508	62.28 ug/L #	33
33) Benzene SCAN	7.465	78	12556	508.85 ug/L #	91
35) Trichloroethene SCAN	8.574	130	61979	11519.21 ug/L	82
36) Toluene-d8 SCAN	10.486	98	113044	4907.46 ug/L	92
37) Toluene SCAN	10.591	91	685	24.15 ug/L	84
38) 1,1,2-Trichloroethane ...	11.179	97	171	24.05 ug/L #	31
39) Tetrachloroethene SCAN	11.431	166	2050	321.30 ug/L #	32

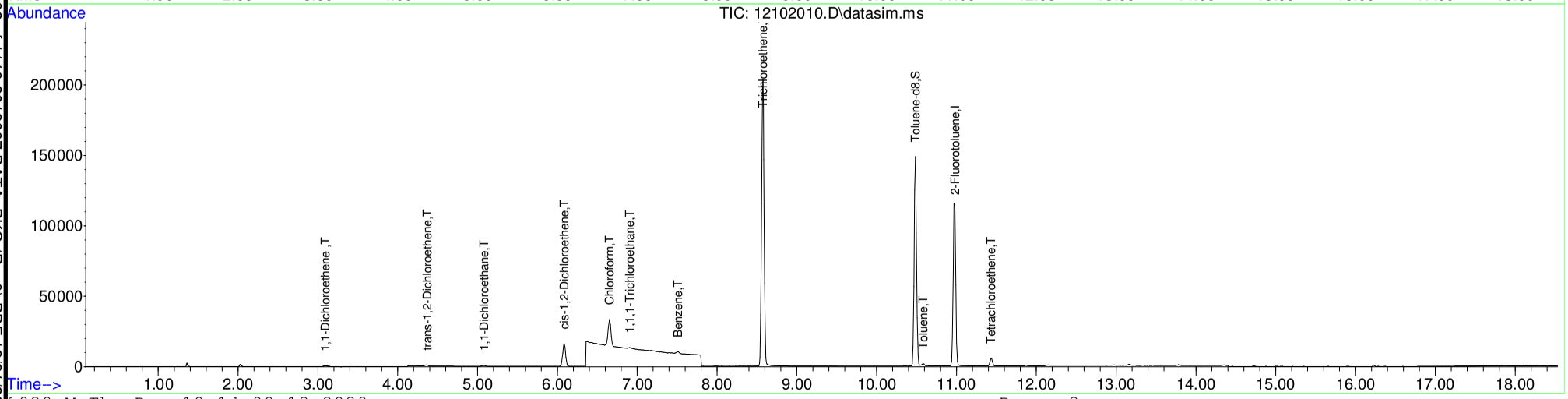
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102010.D
Acq On : 10 Dec 2020 13:40
InstName : AG5975C
Operator : TD
Sample : 2012007-18RE1
Misc : 5X DL (160-40)
ALS Vial : 10 Sample Multiplier: 5

Quant Time: Dec 10 13:59:01 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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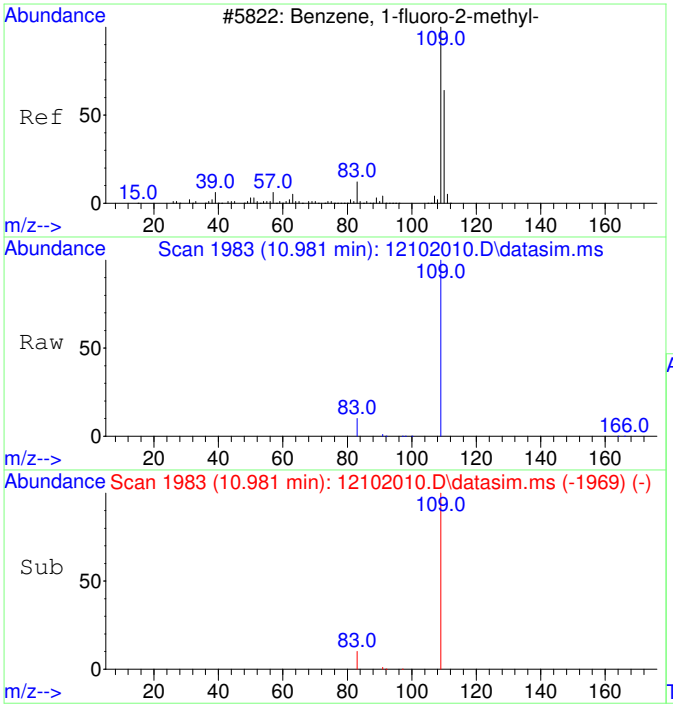
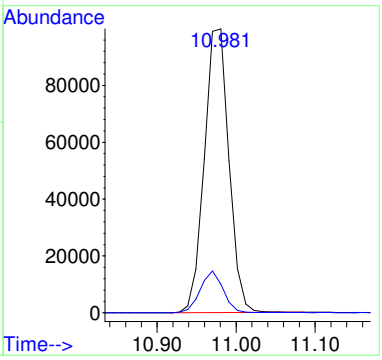
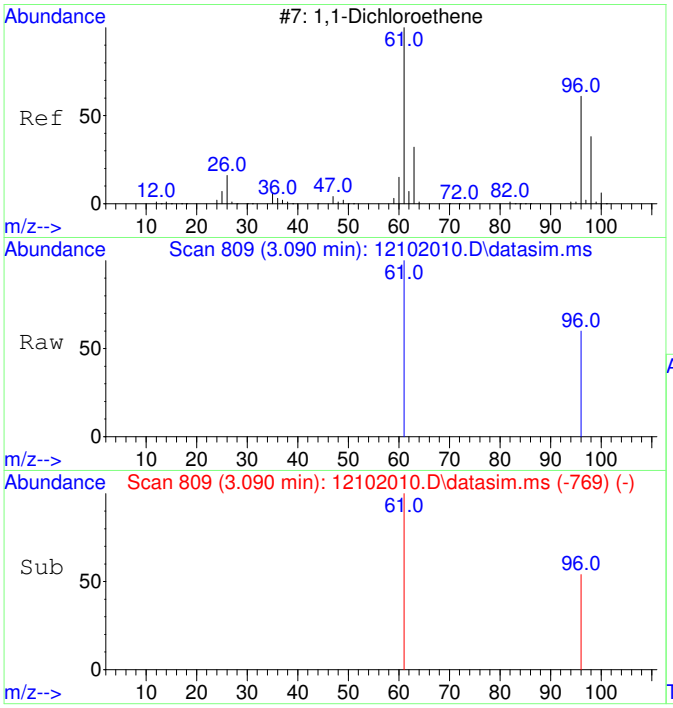


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.981 min Scan# 1983
Delta R.T. 0.001 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:109 Resp: 216373

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

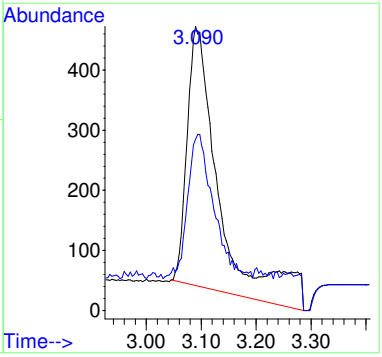


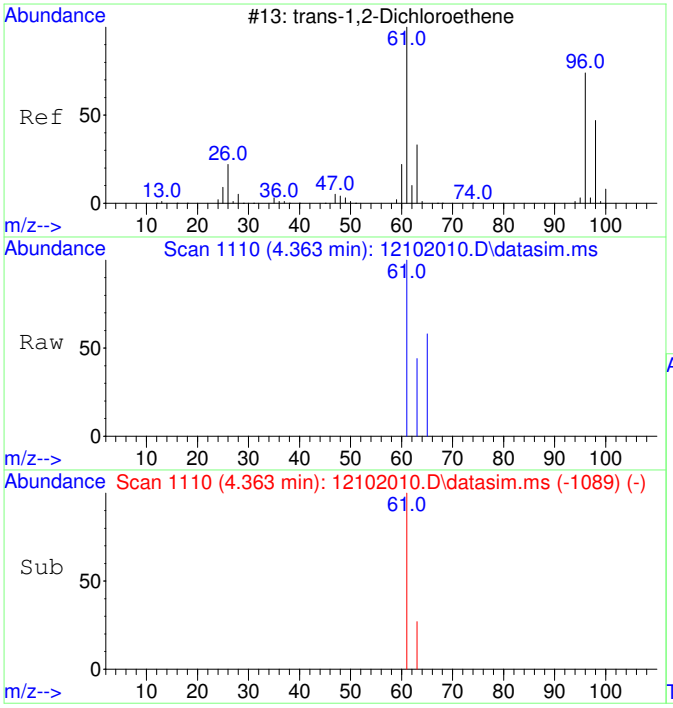


#2
1,1-Dichloroethene
Concen: 202.93 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 61 Resp: 1741

Ion	Ratio	Lower	Upper
61	100		
96	44.9	37.2	97.2

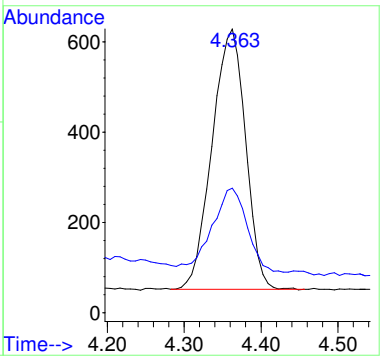


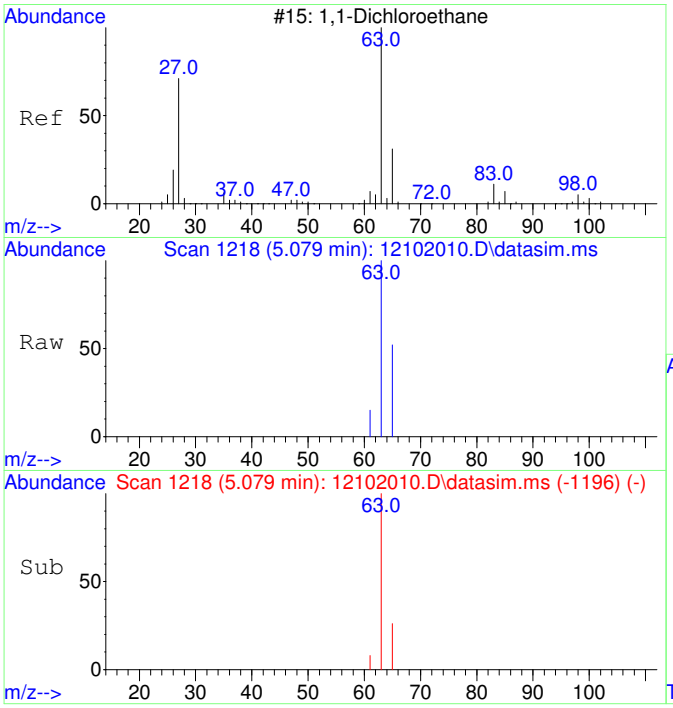


#3
trans-1,2-Dichloroethene
Concen: 161.15 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 61 Resp: 1743

Ion	Ratio	Lower	Upper
61	100		
63	34.1	2.4	62.4

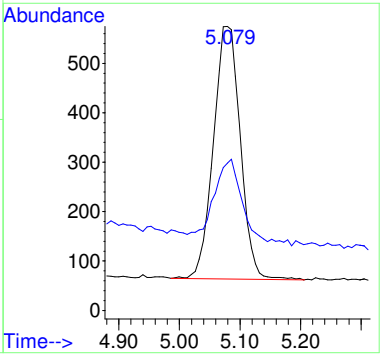


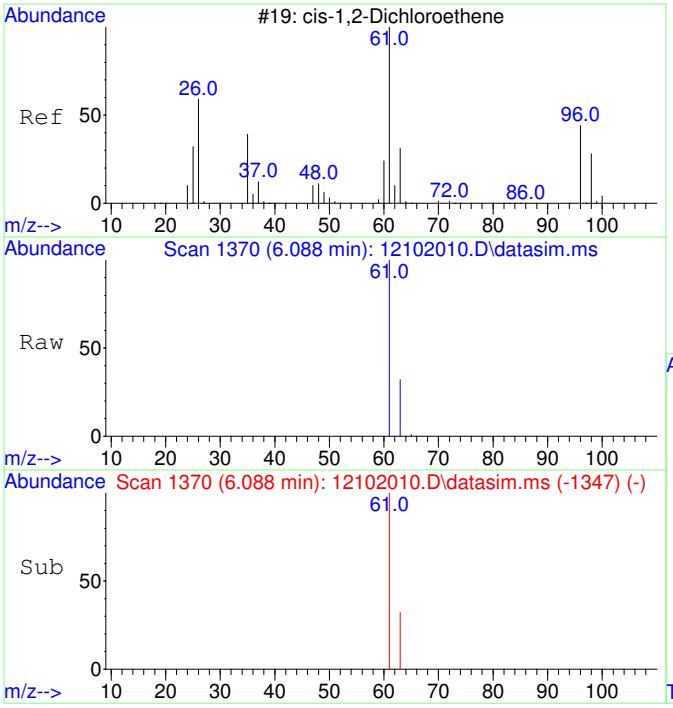


#4
1,1-Dichloroethane
Concen: 122.23 ug/L
RT: 5.079 min Scan# 1218
Delta R.T. -0.006 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 63 Resp: 1579

Ion	Ratio	Lower	Upper
63	100		
65	33.8	1.8	61.8

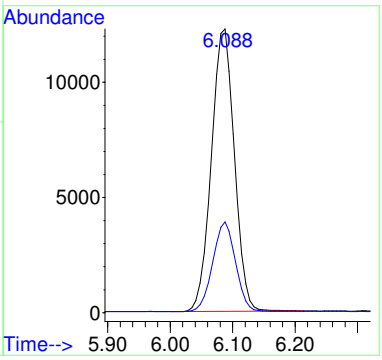


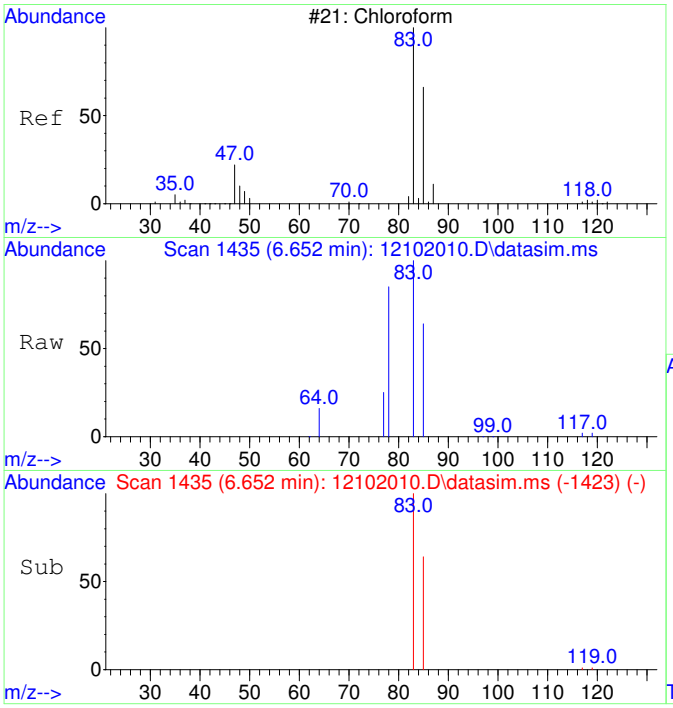


#5
cis-1,2-Dichloroethene
Concen: 2348.13 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 61 Resp: 31417

Ion	Ratio	Lower	Upper
61	100		
63	31.2	2.5	62.5

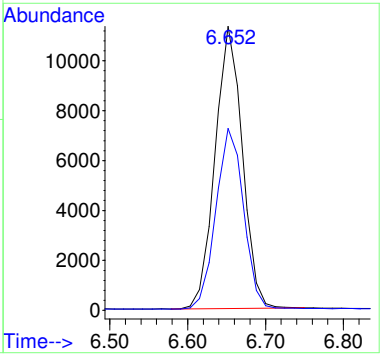


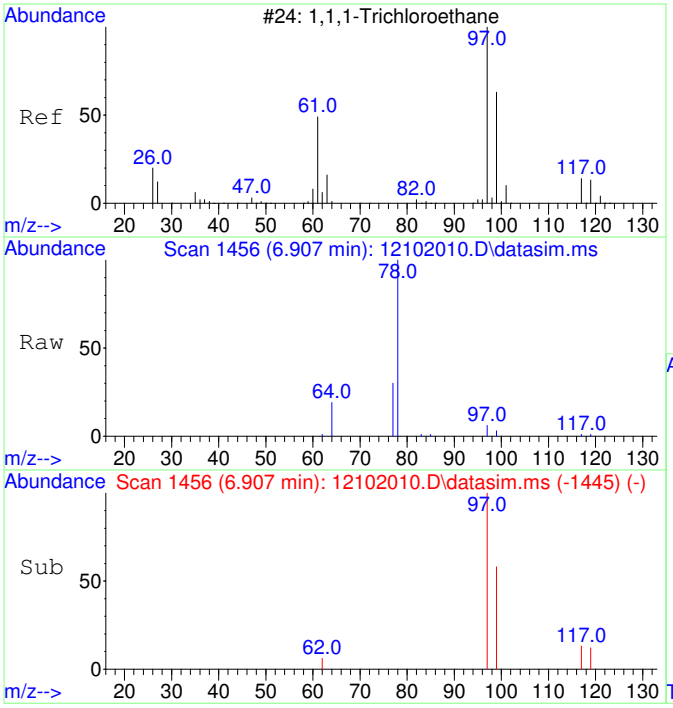


#6
Chloroform
Concen: 2137.31 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 83 Resp: 27467

Ion	Ratio	Lower	Upper
83	100		
85	64.7	35.1	95.1

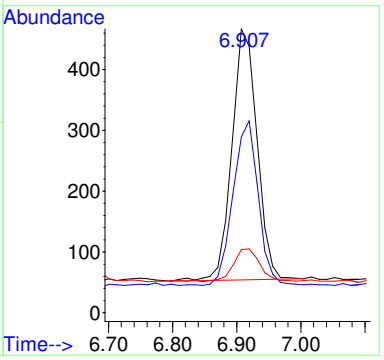


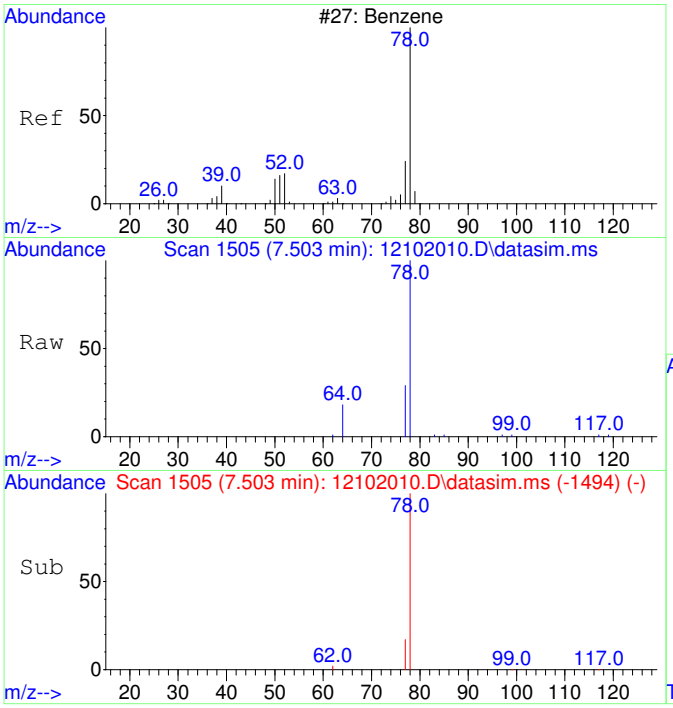


#7
1,1,1-Trichloroethane
Concen: 81.20 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 97 Resp: 1121

Ion	Ratio	Lower	Upper
97	100		
99	65.3	34.6	94.6
117	14.1	0.0	43.2

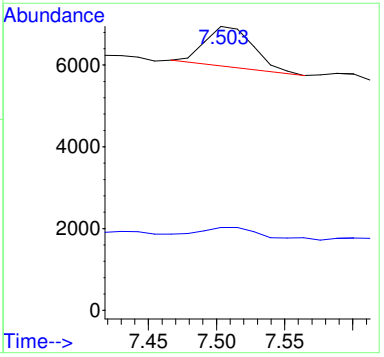


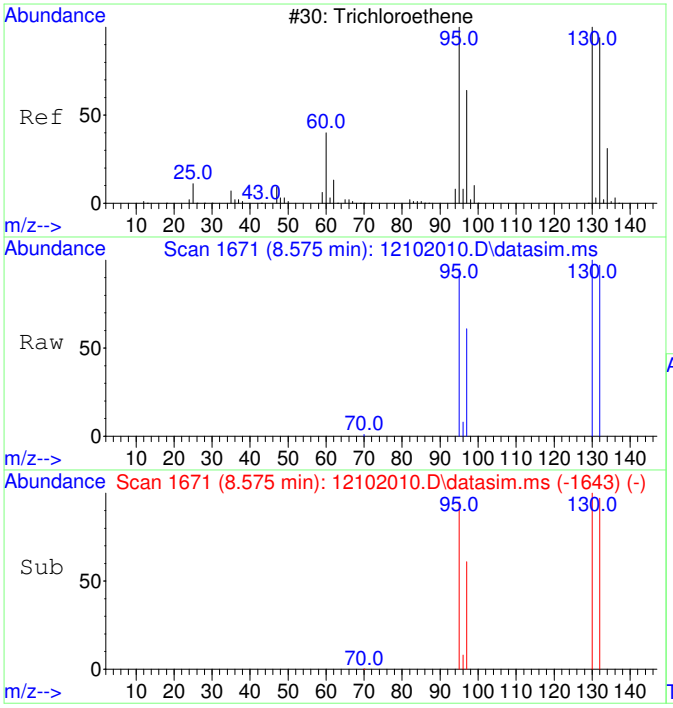


#9
Benzene
Concen: 63.20 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 78 Resp: 2301

Ion	Ratio	Lower	Upper
78	100		
77	47.7	0.0	53.2

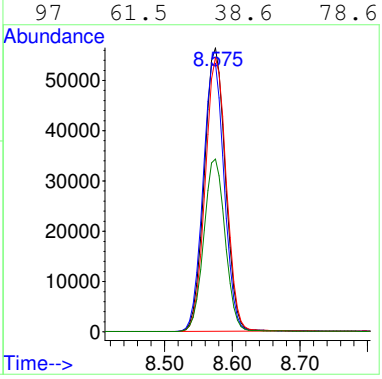


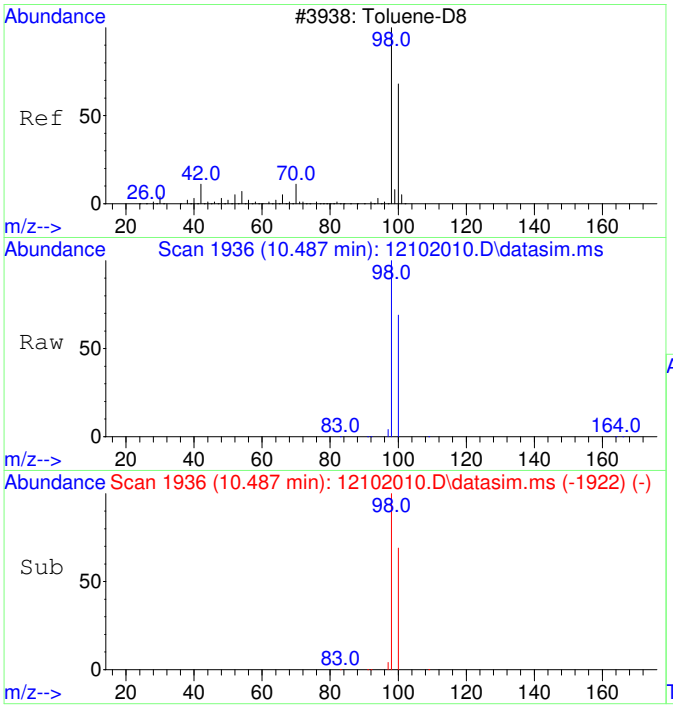


#11
Trichloroethene
Concen: 10627.77 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:130 Resp: 122172

Ion	Ratio	Lower	Upper
130	100		
95	95.4	60.7	120.7
132	96.4	76.0	116.0
97	61.5	38.6	78.6

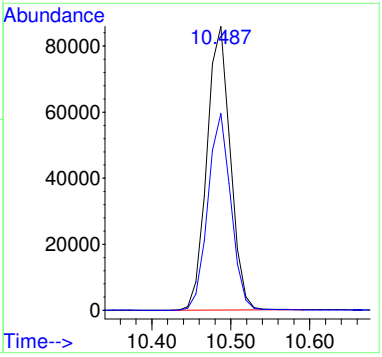


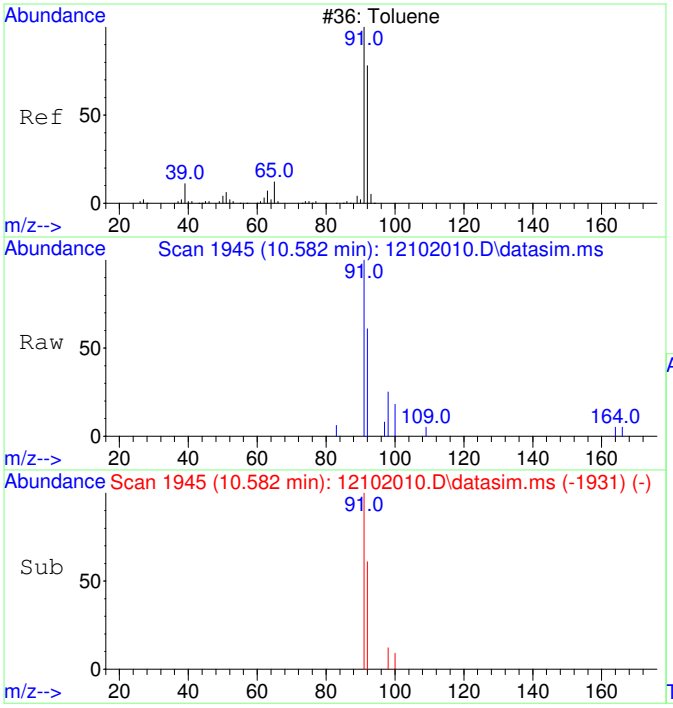


#12
Toluene-d8
Concen: 4227.86 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 98 Resp: 177173

Ion	Ratio	Lower	Upper
98	100		
100	67.9	37.1	97.1

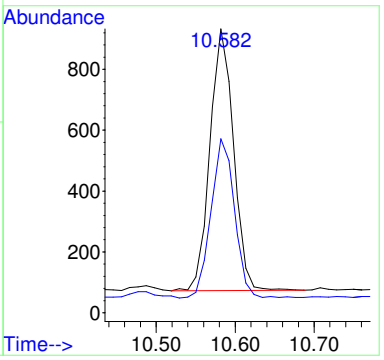


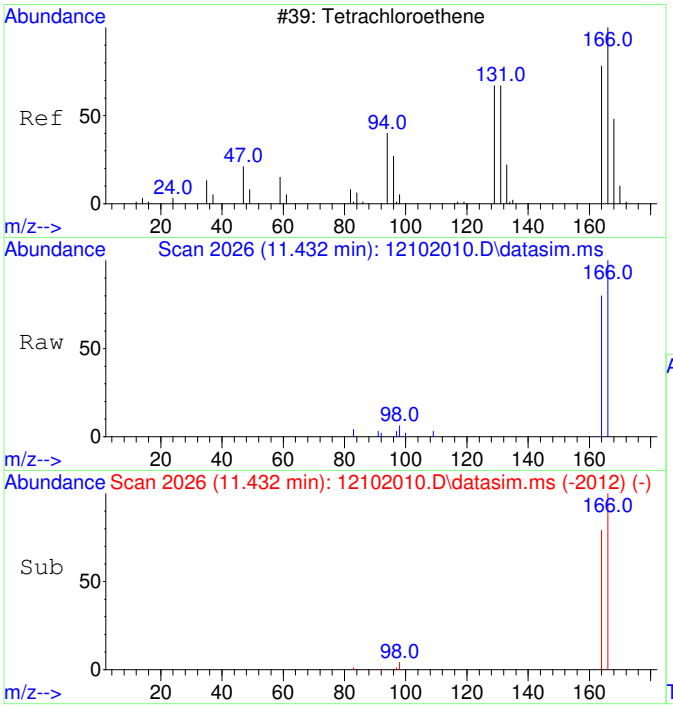


#13
Toluene
Concen: 34.17 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 91 Resp: 1783

Ion	Ratio	Lower	Upper
91	100		
92	60.3	29.9	89.9

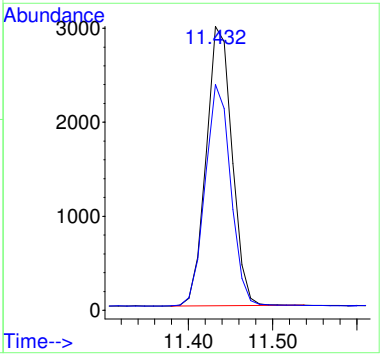


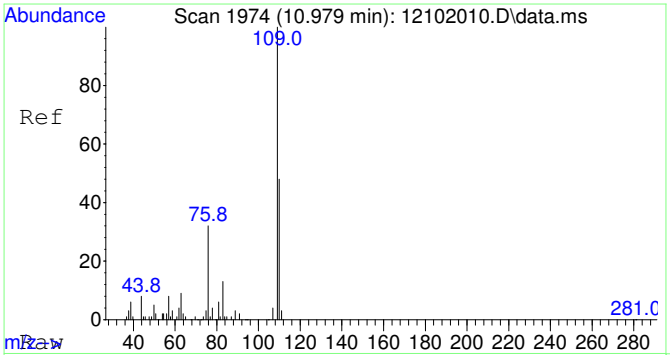


#15
Tetrachloroethene
Concen: 390.54 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:166 Resp: 6347

Ion	Ratio	Lower	Upper
166	100		
164	78.4	47.8	107.8

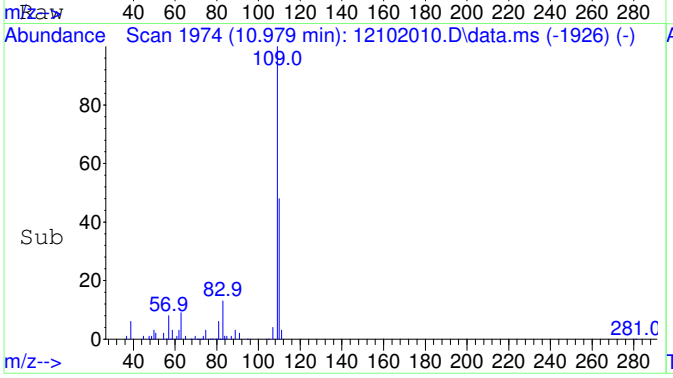


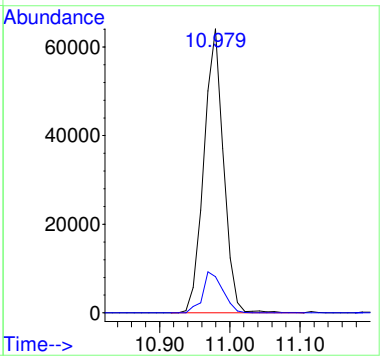


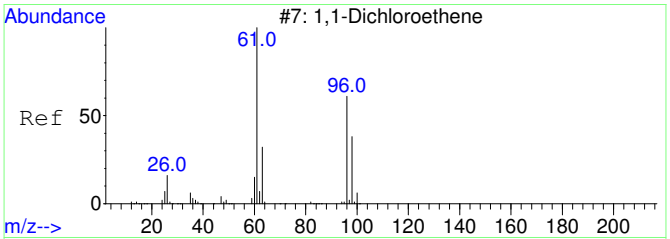
#25
2-Fluorotoluene SCAN
Concen: 5056.32 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:109 Resp: 124186

Ion	Ratio	Lower	Upper
109	100		
83	14.7	0.0	43.8



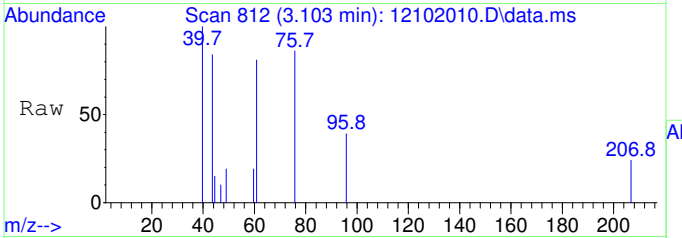


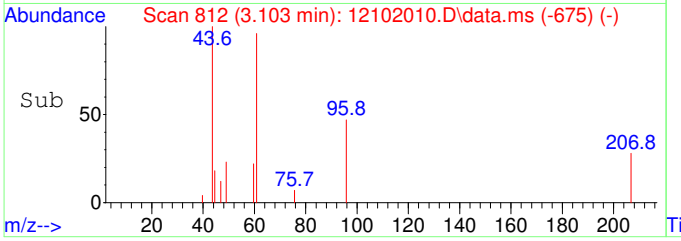


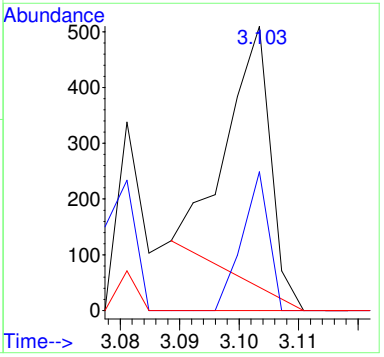
#26
1,1-Dichloroethene SCAN
Concen: 38.54 ug/L
RT: 3.103 min Scan# 812
Delta R.T. 0.008 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

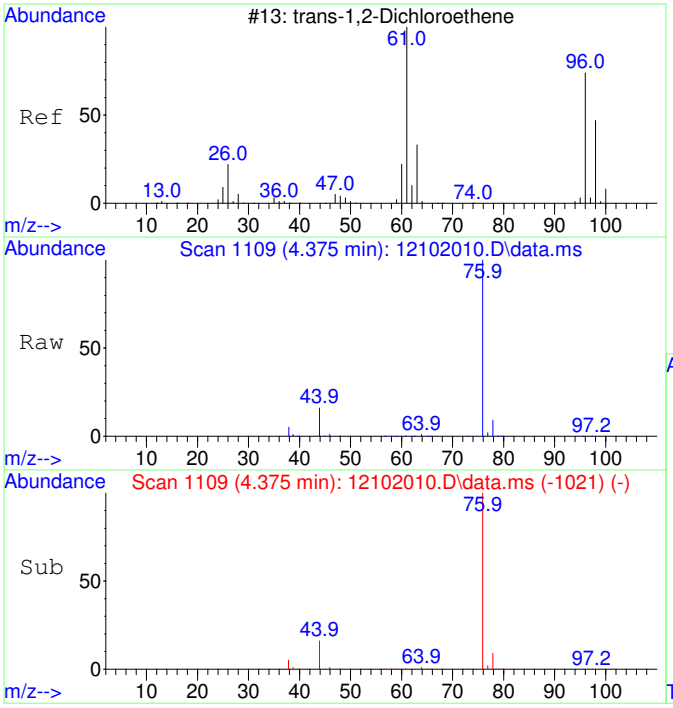
Tgt Ion: 61 Resp: 221

Ion	Ratio	Lower	Upper
61	100		
96	35.3	33.1	93.1
98	0.0	11.2	71.2#





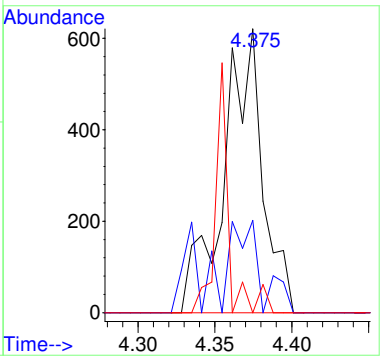


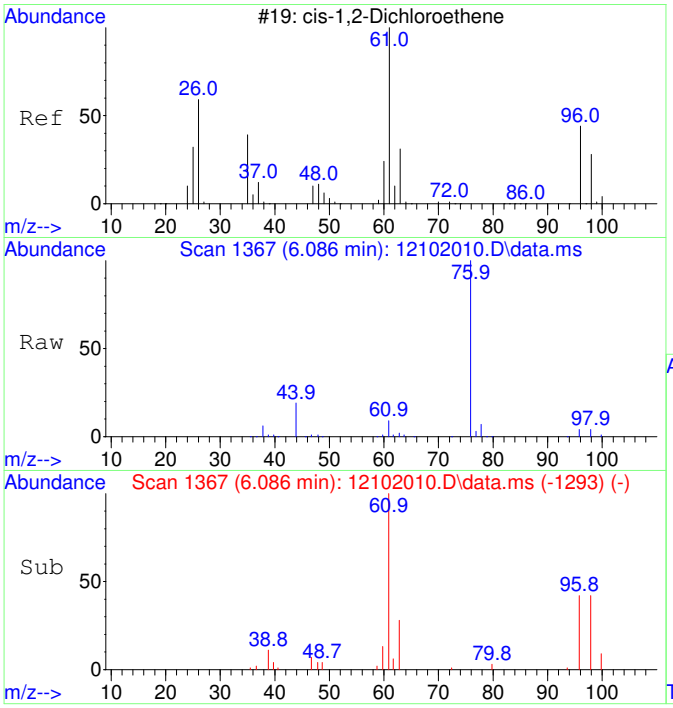


#27
trans-1,2-Dichloroethene SCAN
Concen: 149.66 ug/L
RT: 4.375 min Scan# 1109
Delta R.T. -0.006 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 61 Resp: 1093

Ion	Ratio	Lower	Upper
61	100		
96	25.2	49.0	109.0#
98	29.0	20.5	80.5

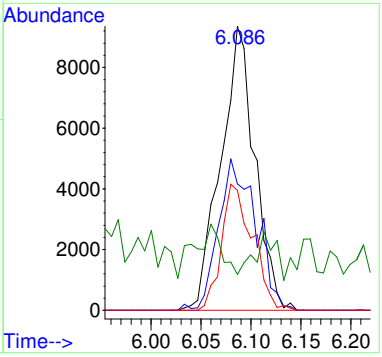


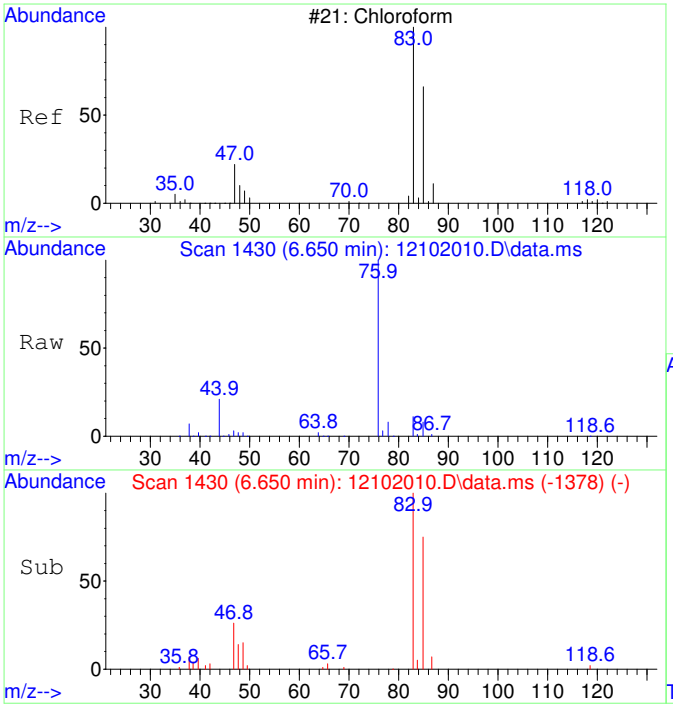


#29
cis-1,2-Dichloroethene SCAN
Concen: 2619.71 ug/L
RT: 6.086 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 61 Resp: 22200

Ion	Ratio	Lower	Upper
61	100		
96	58.5	39.9	99.9
98	40.7	13.5	73.5
64	0.0	4.5	64.5#

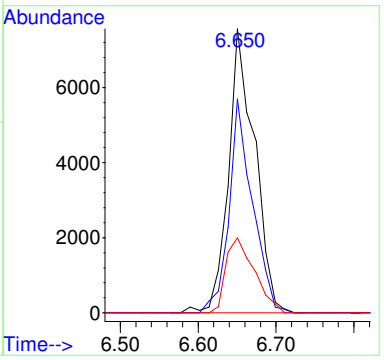


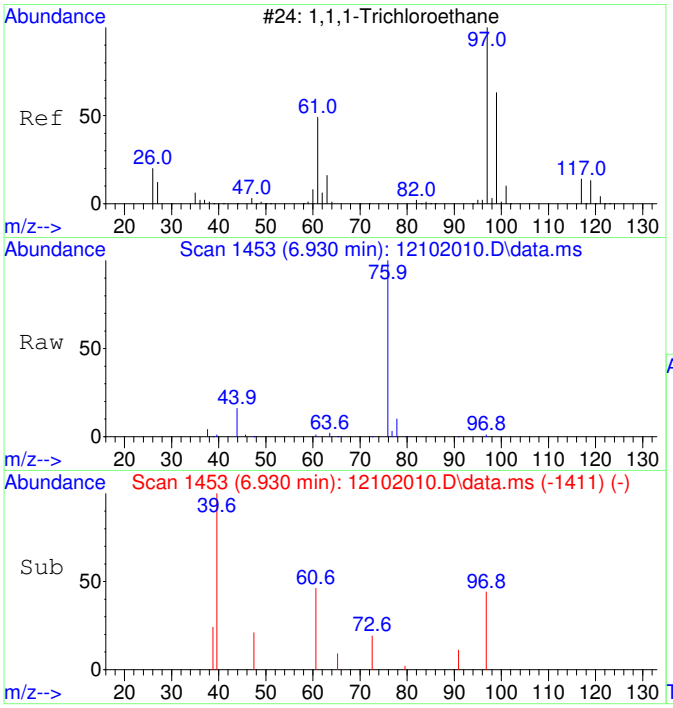


#30
Chloroform SCAN
Concen: 2247.33 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 83 Resp: 17763

Ion	Ratio	Lower	Upper
83	100		
85	67.3	34.6	94.6
47	28.8	0.0	53.4

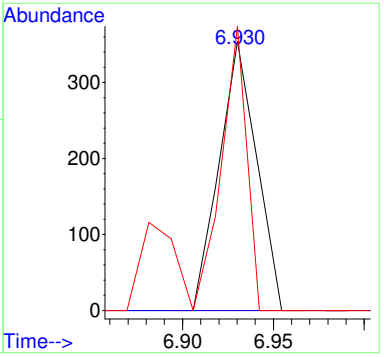


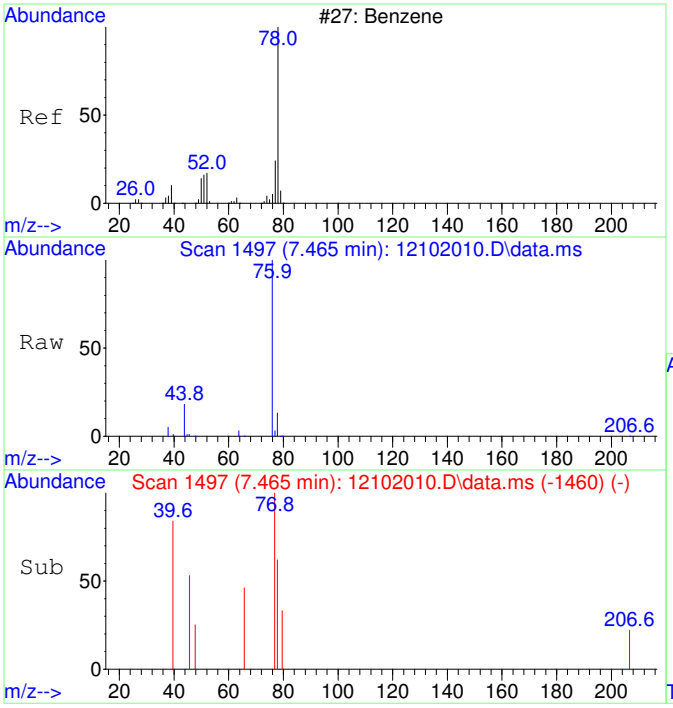


#31
1,1,1-Trichloroethane SCAN
Concen: 62.28 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 97 Resp: 508

Ion	Ratio	Lower	Upper
97	100		
99	0.0	43.6	103.6#
61	71.5	18.0	78.0

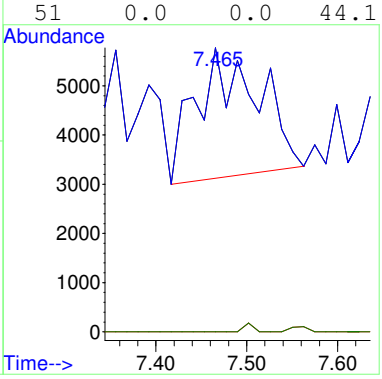


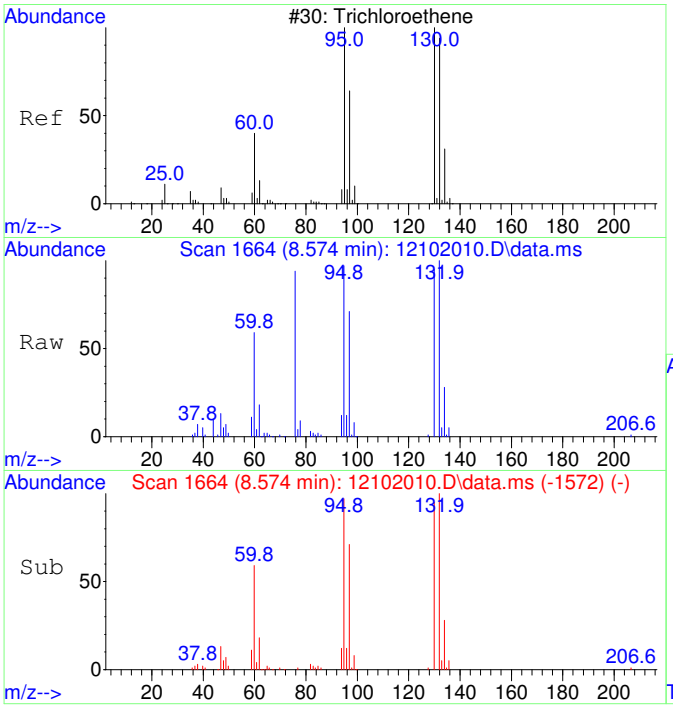


#33
Benzene SCAN
Concen: 508.85 ug/L
RT: 7.465 min Scan# 1497
Delta R.T. -0.048 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 78 Resp: 12556

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

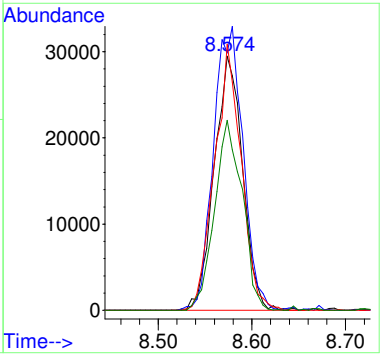


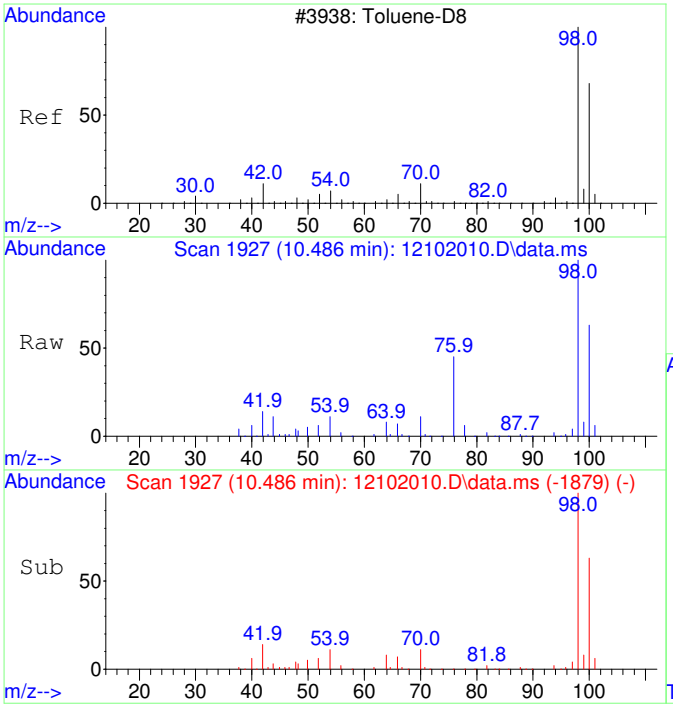


#35
Trichloroethene SCAN
Concen: 11519.21 ug/L
RT: 8.574 min Scan# 1664
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:130 Resp: 61979

Ion	Ratio	Lower	Upper
130	100		
95	115.6	60.5	120.5
132	98.6	59.6	119.6
97	72.9	28.2	88.2

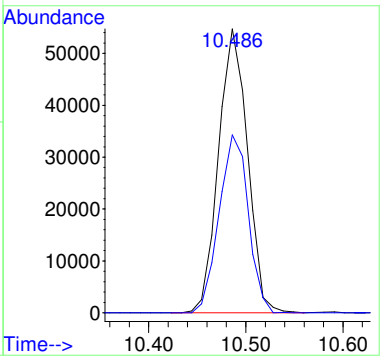


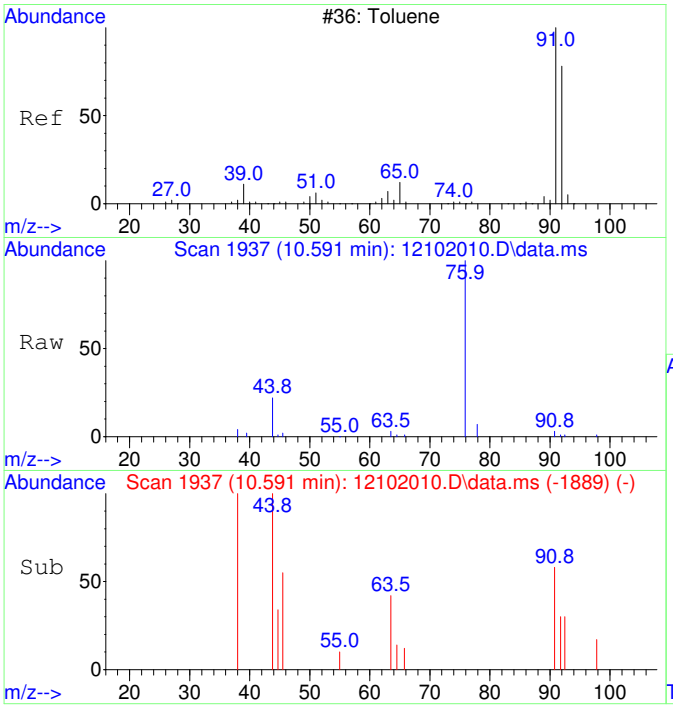


#36
Toluene-d8 SCAN
Concen: 4907.46 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 98 Resp: 113044

Ion	Ratio	Lower	Upper
98	100		
100	63.2	40.0	100.0

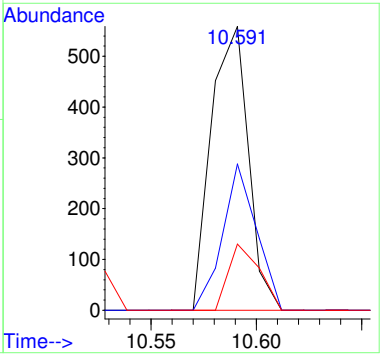


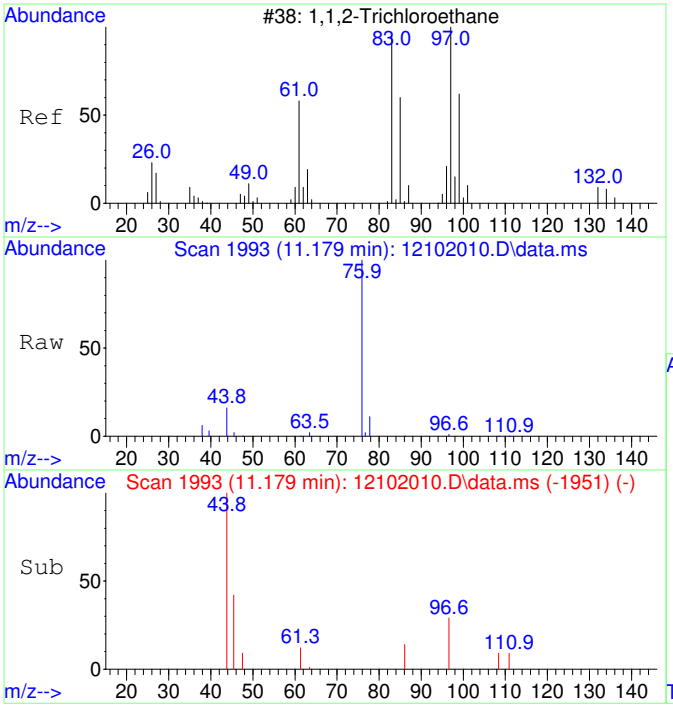


#37
Toluene SCAN
Concen: 24.15 ug/L
RT: 10.591 min Scan# 1937
Delta R.T. 0.000 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 91 Resp: 685

Ion	Ratio	Lower	Upper
91	100		
92	47.0	28.3	88.3
65	19.6	0.0	41.0

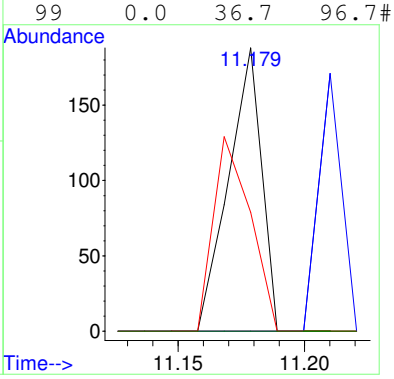


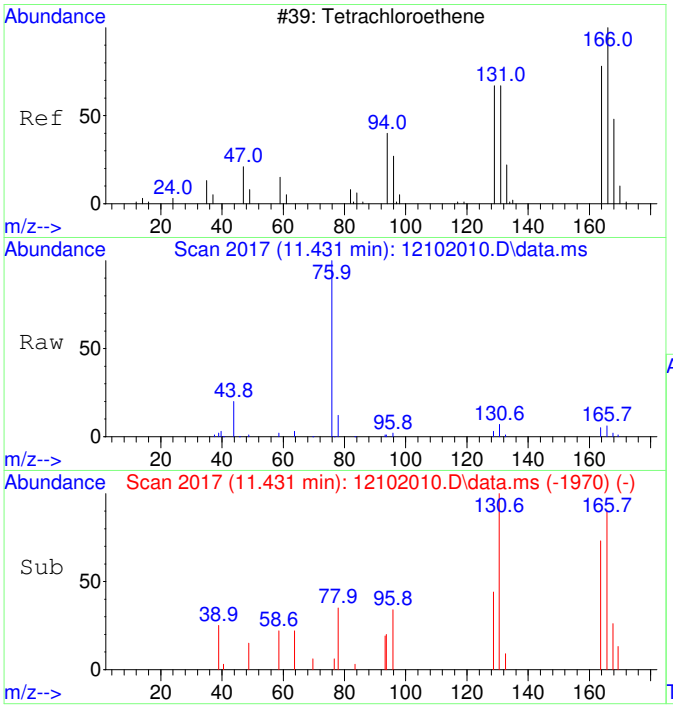


#38
1,1,2-Trichloroethane SCAN
Concen: 24.05 ug/L
RT: 11.179 min Scan# 1993
Delta R.T. -0.063 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion: 97 Resp: 171

Ion	Ratio	Lower	Upper
97	100		
83	0.0	57.7	117.7#
61	76.6	32.1	92.1
99	0.0	36.7	96.7#

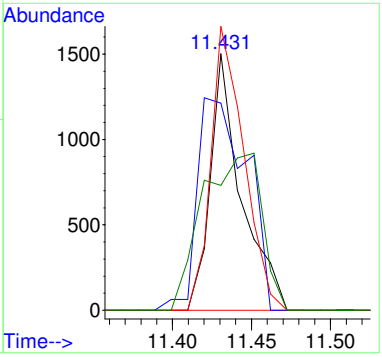




#39
Tetrachloroethene SCAN
Concen: 321.30 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12102010.D
Acq: 10 Dec 2020 13:40

Tgt Ion:166 Resp: 2050

Ion	Ratio	Lower	Upper
166	100		
164	132.7	50.9	110.9#
131	118.1	38.7	98.7#
129	0.0	41.8	101.8#



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory

SDG: 20343A

Client: California Site Cleanup Section 3

Project: MEW OU1 FY2021 Vapor Intrusion Investigation

Instrument ID: AG5975CV

Calibration: 2012007

Sequence: S20L024

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
B20L016-MRL1	1,1-Dichloroethene	0.131	0.097	74	ug/m³ Air	50 - 150
	trans-1,2-Dichloroethene	0.160	0.121	75	ug/m³ Air	50 - 150
	1,1-Dichloroethane	0.157	0.117	74	ug/m³ Air	50 - 150
	cis-1,2-Dichloroethene	0.160	0.122	76	ug/m³ Air	50 - 150
	Chloroform	0.132	0.111	84	ug/m³ Air	50 - 150
	Trichloroethene	0.144	0.130	90	ug/m³ Air	50 - 150
	Tetrachloroethene	0.168	0.158	94	ug/m³ Air	50 - 150
	Toluene-d8	992	878	88	ug/m³ Air	86 - 118

Quantitation Report (Not Reviewed)

Table of Contents

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

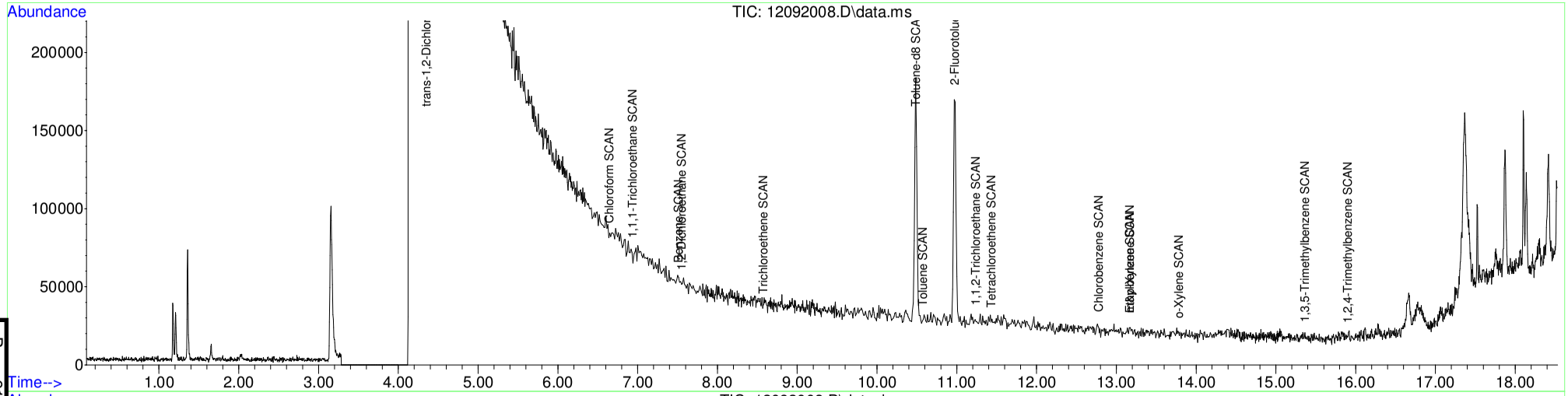
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	204619	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.487	98	175348	4424.67 ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.49%		
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.094	61	611	75.31 ug/L #	49
3] trans-1,2-Dichloroethene	4.356	61	386	37.74 ug/L	92
4] 1,1-Dichloroethane	5.073	63	454	37.16 ug/L	91
5] cis-1,2-Dichloroethene	6.081	61	484	38.25 ug/L	92
6] Chloroform	6.652	83	512	42.13 ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	571	43.74 ug/L	98
8] Carbon tetrachloride	7.175	117	540	43.26 ug/L	87
9] Benzene	7.503	78	2996	87.01 ug/L #	28
10] 1,2-Dichloroethane	7.540	62	508	43.25 ug/L	65
11] Trichloroethene	8.575	130	491	45.17 ug/L	94
13] Toluene	10.582	91	2507	50.81 ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	512	44.80 ug/L	91
15] Tetrachloroethene	11.432	166	722	46.98 ug/L	96
16] Chlorobenzene	12.765	112	1747	45.70 ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	642	47.99 ug/L	100
18] Ethylbenzene	12.972	91	3324	52.74 ug/L	95
19] m&p-Xylene	13.171	91	5757	118.62 ug/L	96
20] o-Xylene	13.782	91	2631	50.47 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	1133	46.65 ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	2973	51.86 ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	3394	57.89 ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	115624	4978.14 ug/L	98
27) trans-1,2-Dichloroethe...	4.348	61	299	43.29 ug/L #	17
30) Chloroform SCAN	6.638	83	592	79.20 ug/L #	27
31) 1,1,1-Trichloroethane ...	6.930	97	242	31.37 ug/L #	19
33) Benzene SCAN	7.514	78	3485	149.35 ug/L	97
34) 1,2-Dichloroethane SCAN	7.551	62	185	25.35 ug/L #	60
35) Trichloroethene SCAN	8.568	130	123	24.17 ug/L #	55
36) Toluene-d8 SCAN	10.486	98	109238	5014.65 ug/L	92
37) Toluene SCAN	10.570	91	2259	84.23 ug/L #	32
38) 1,1,2-Trichloroethane ...	11.231	97	263	39.12 ug/L #	42
39) Tetrachloroethene SCAN	11.431	166	167	27.68 ug/L #	29
40) Chlorobenzene SCAN	12.772	112	1014	52.64 ug/L #	37
42) Ethylbenzene SCAN	13.169	91	4335	84.81 ug/L	70
43) m&p-Xylene SCAN	13.169	91	4335	84.81 ug/L	77
44) o-Xylene SCAN	13.781	91	1805	64.67 ug/L	72
46) 1,3,5-Trimethylbenzene...	15.358	105	1997	67.82 ug/L	75
47) 1,2,4-Trimethylbenzene...	15.899	105	1826	60.70 ug/L	86

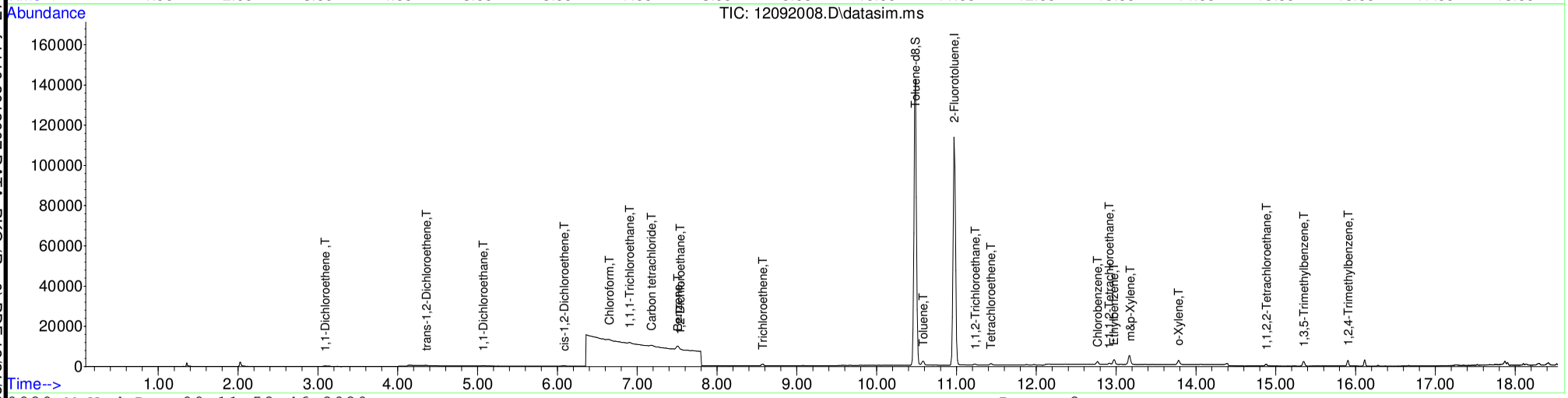
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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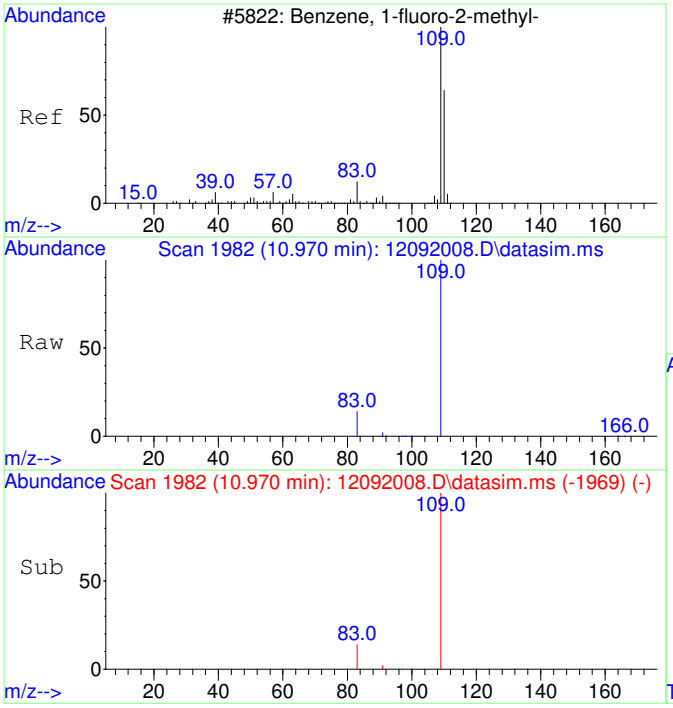
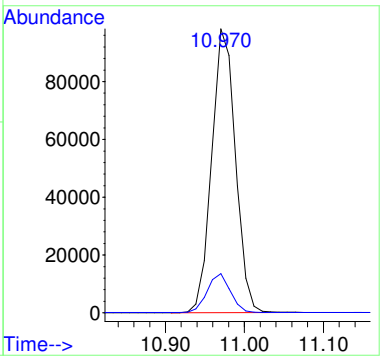
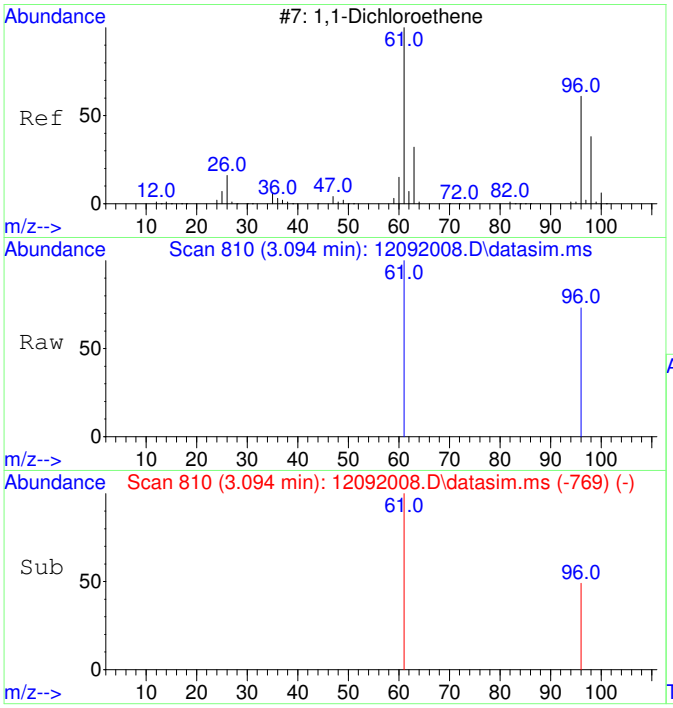


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 204619

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

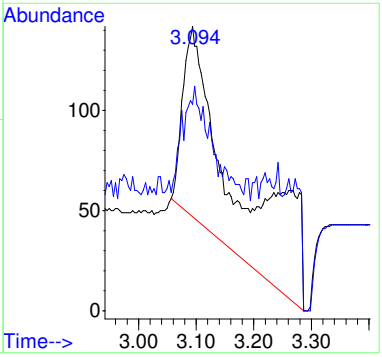




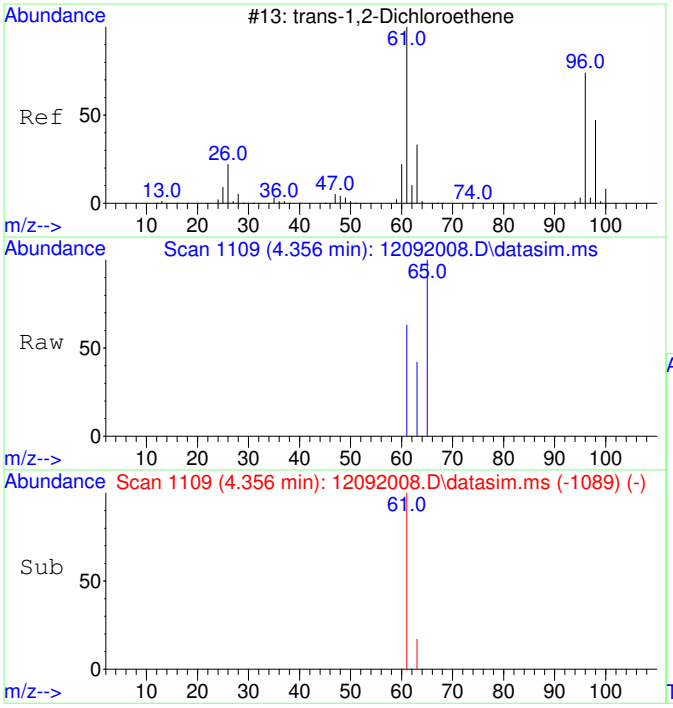
#2
1,1-Dichloroethene
Concen: 75.31 ug/L
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 611

Ion	Ratio	Lower	Upper
61	100		
96	26.2	37.2	97.2#



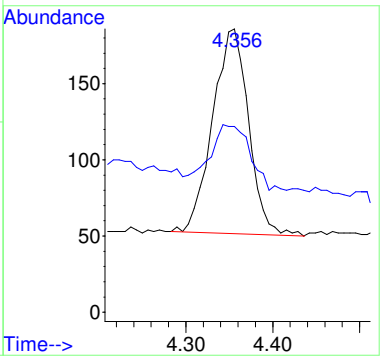
Before MI:
IMPROPER
BASELINE

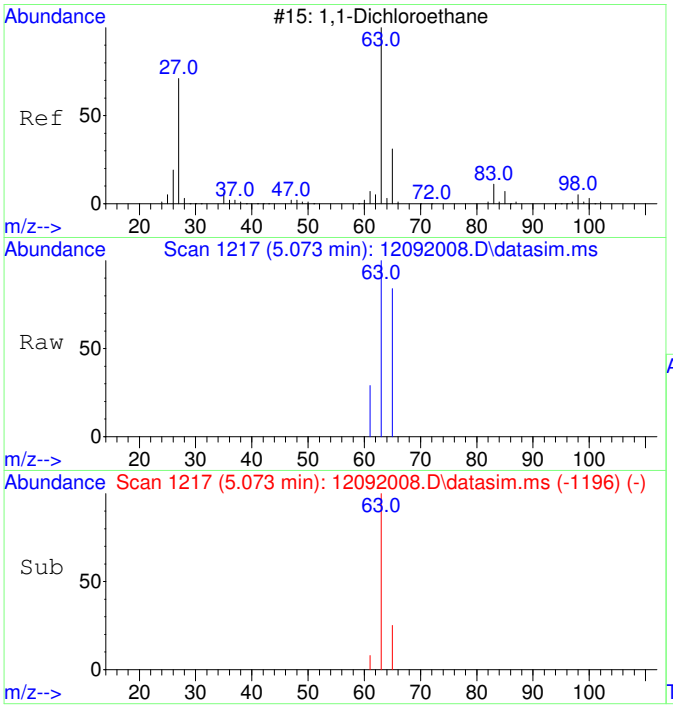


#3
trans-1,2-Dichloroethene
Concen: 37.74 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 386

Ion	Ratio	Lower	Upper
61	100		
63	37.0	2.4	62.4

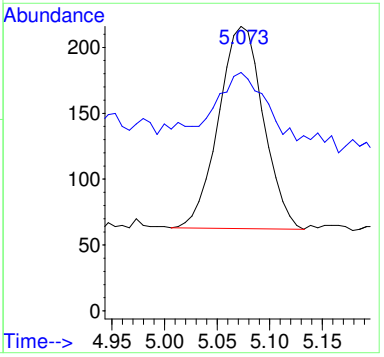


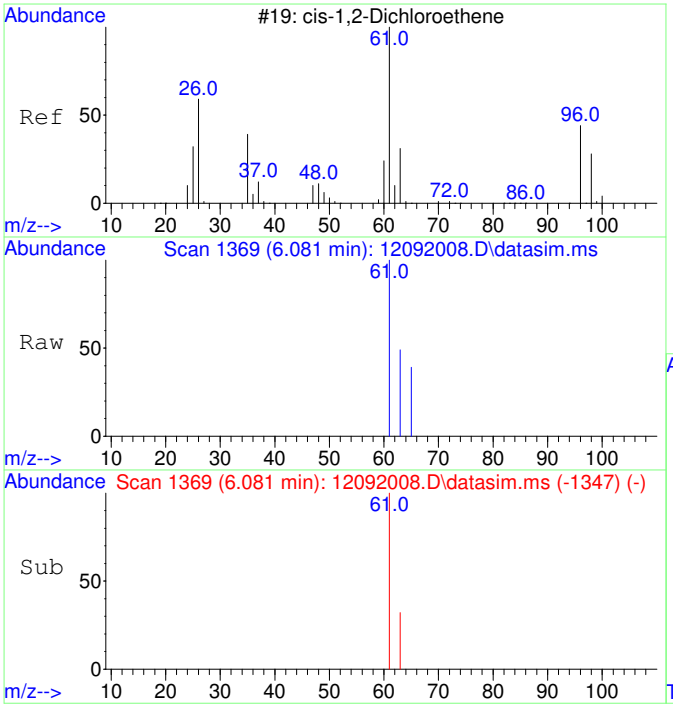


#4
1,1-Dichloroethane
Concen: 37.16 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 63 Resp: 454

Ion	Ratio	Lower	Upper
63	100		
65	36.8	1.8	61.8

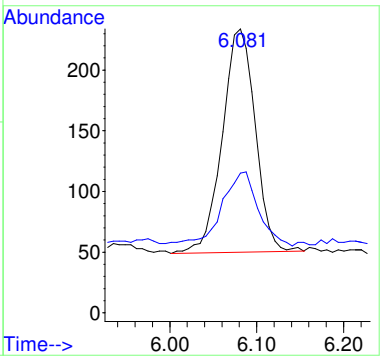


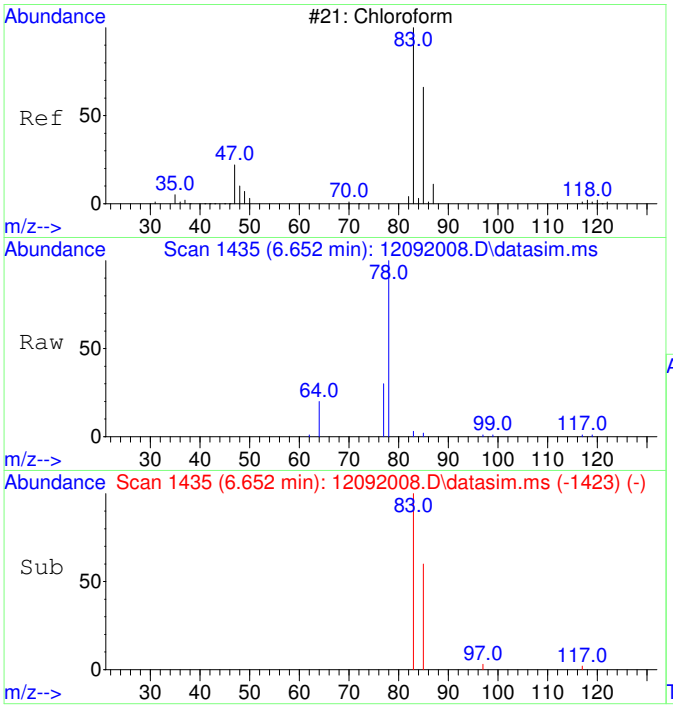


#5
cis-1,2-Dichloroethene
Concen: 38.25 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
63	37.2	2.5	62.5

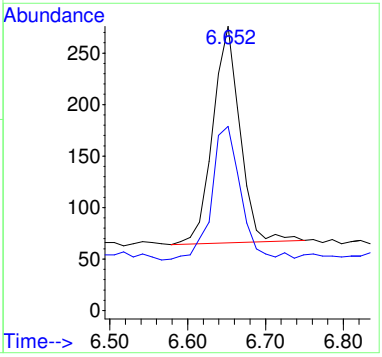


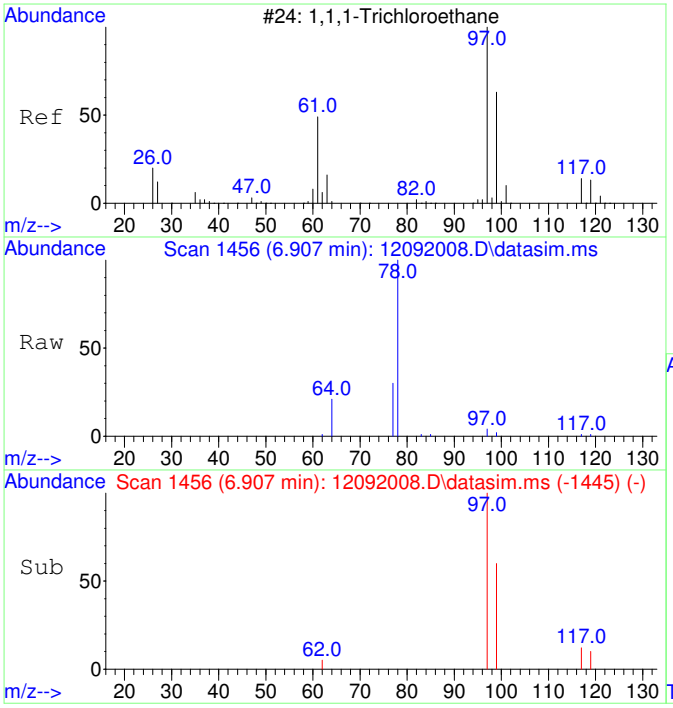


#6
Chloroform
Concen: 42.13 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 512

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

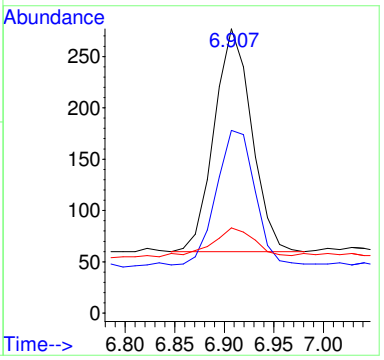


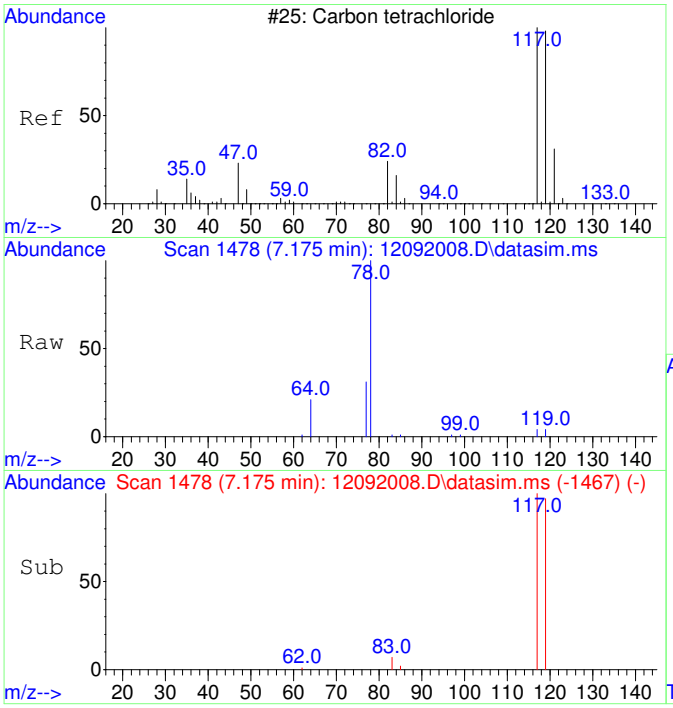


#7
1,1,1-Trichloroethane
Concen: 43.74 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 571

Ion	Ratio	Lower	Upper
97	100		
99	66.2	34.6	94.6
117	14.9	0.0	43.2

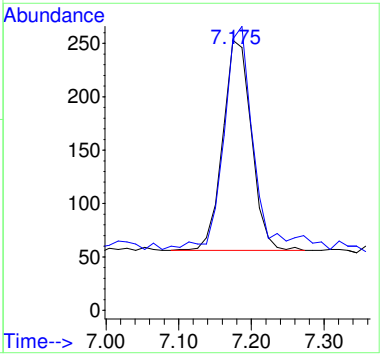


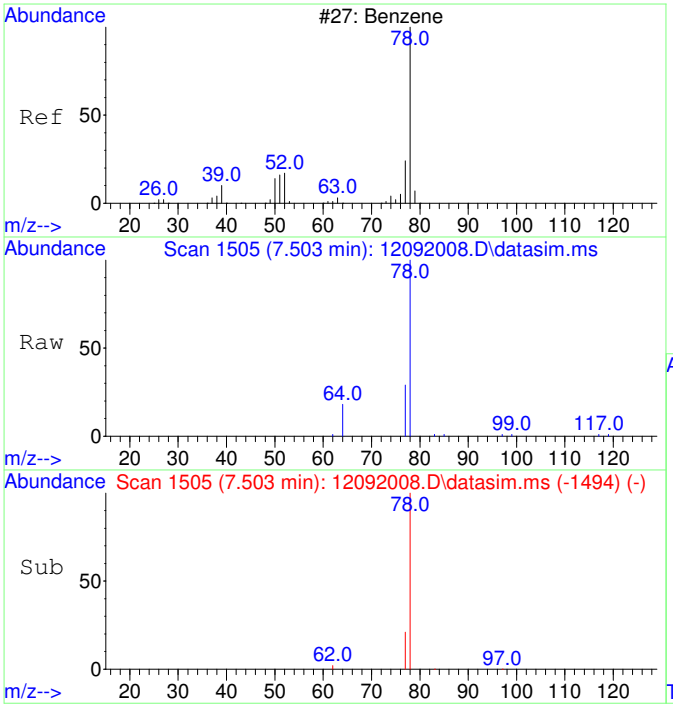


#8
Carbon tetrachloride
Concen: 43.26 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:117 Resp: 540

Ion	Ratio	Lower	Upper
117	100		
119	108.9	66.4	126.4

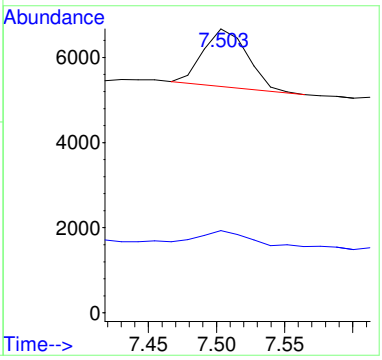


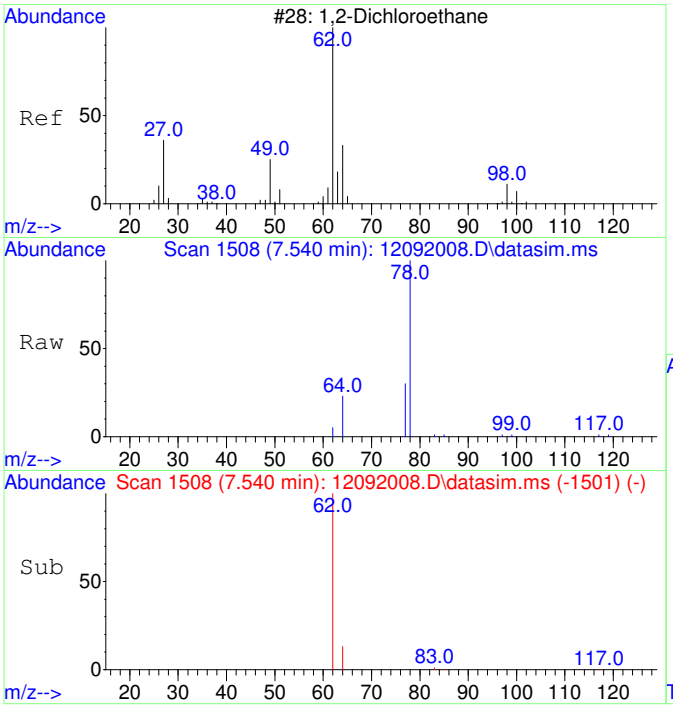


#9
Benzene
Concen: 87.01 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 2996

Ion	Ratio	Lower	Upper
78	100		
77	58.3	0.0	53.2#

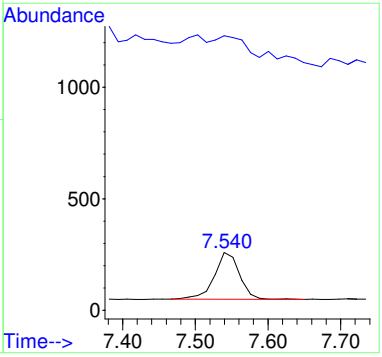


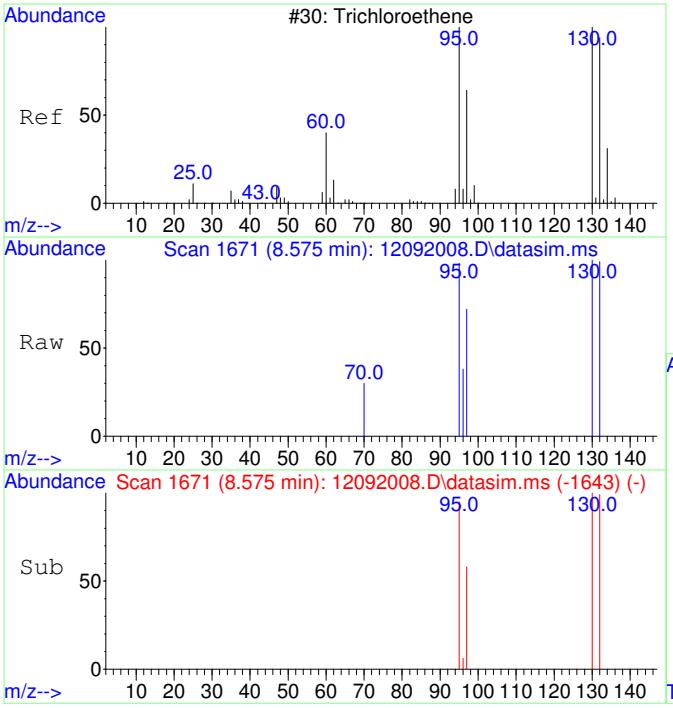


#10
1,2-Dichloroethane
Concen: 43.25 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 508

Ion	Ratio	Lower	Upper
62	100		
64	52.0	2.3	62.3

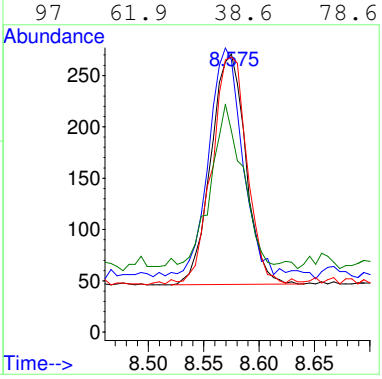


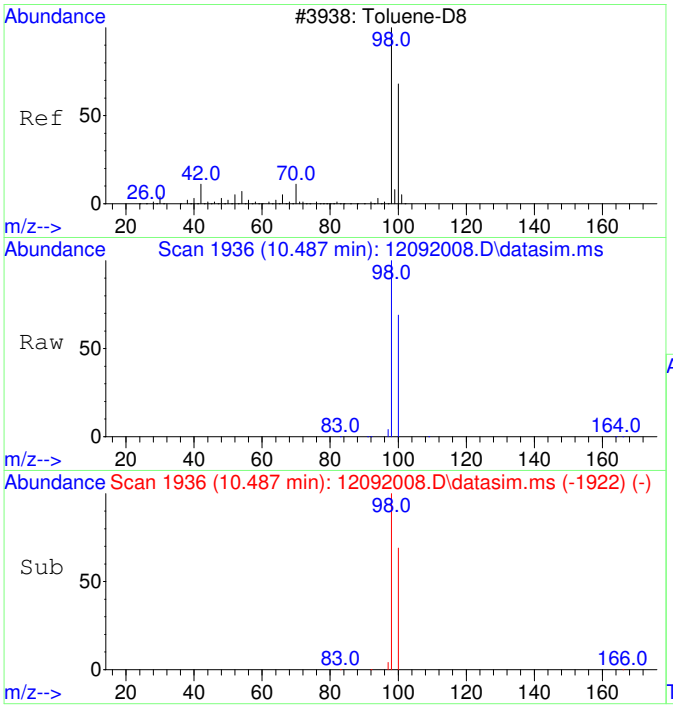


#11
Trichloroethene
Concen: 45.17 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 491

Ion	Ratio	Lower	Upper
130	100		
95	100.2	60.7	120.7
132	99.2	76.0	116.0
97	61.9	38.6	78.6

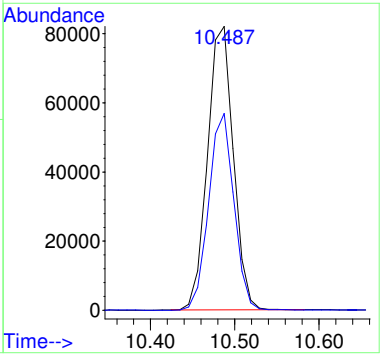


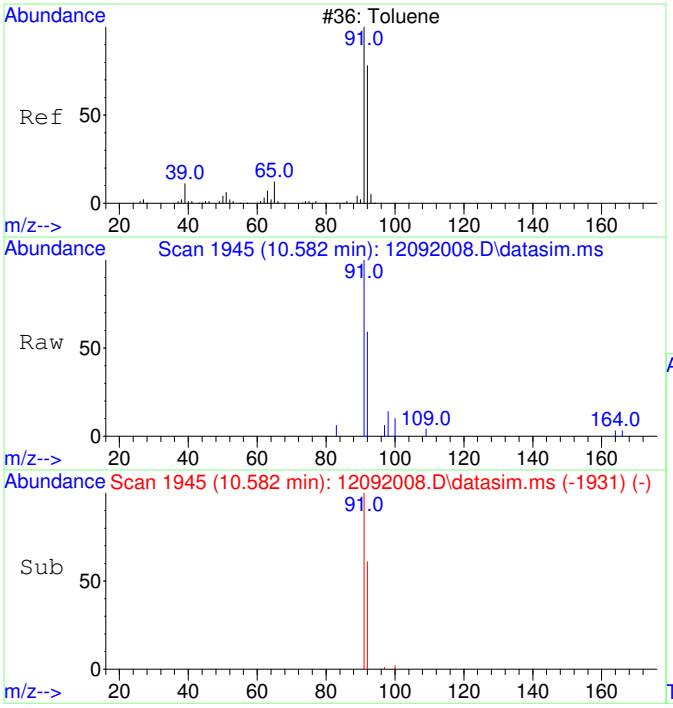


#12
Toluene-d8
Concen: 4424.67 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 175348

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

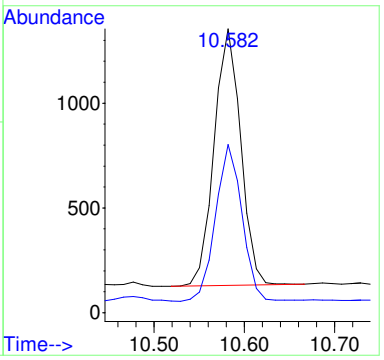


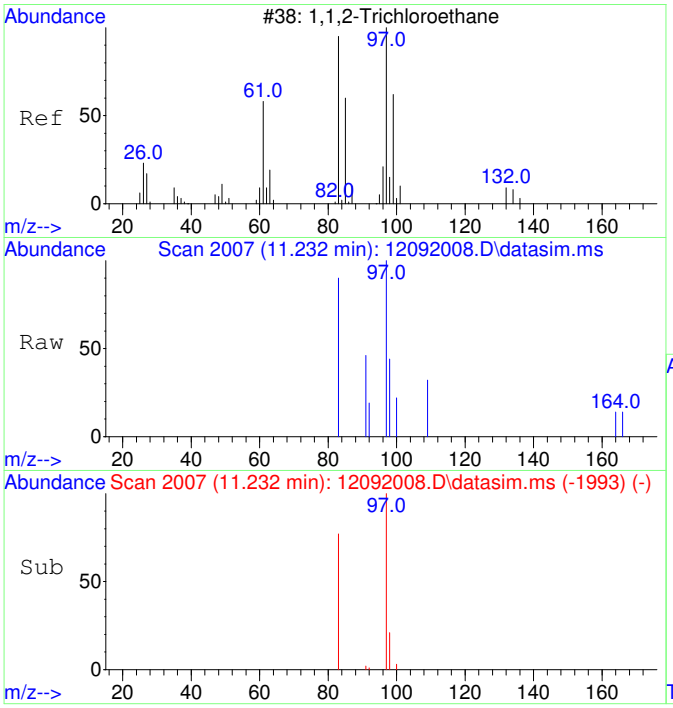


#13
Toluene
Concen: 50.81 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2507

Ion	Ratio	Lower	Upper
91	100		
92	60.4	29.9	89.9

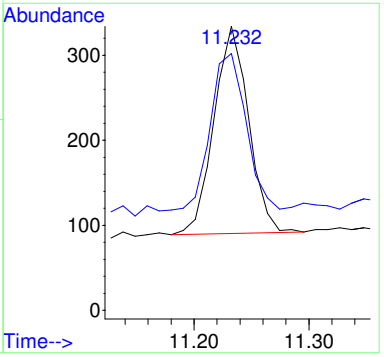


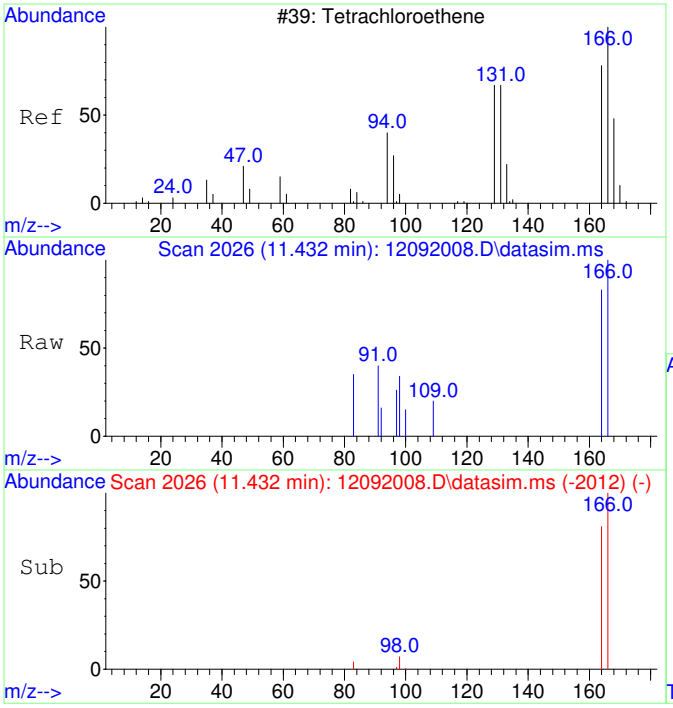


#14
1,1,2-Trichloroethane
Concen: 44.80 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	89.3	51.2	111.2

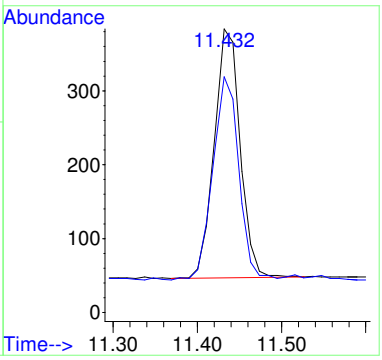


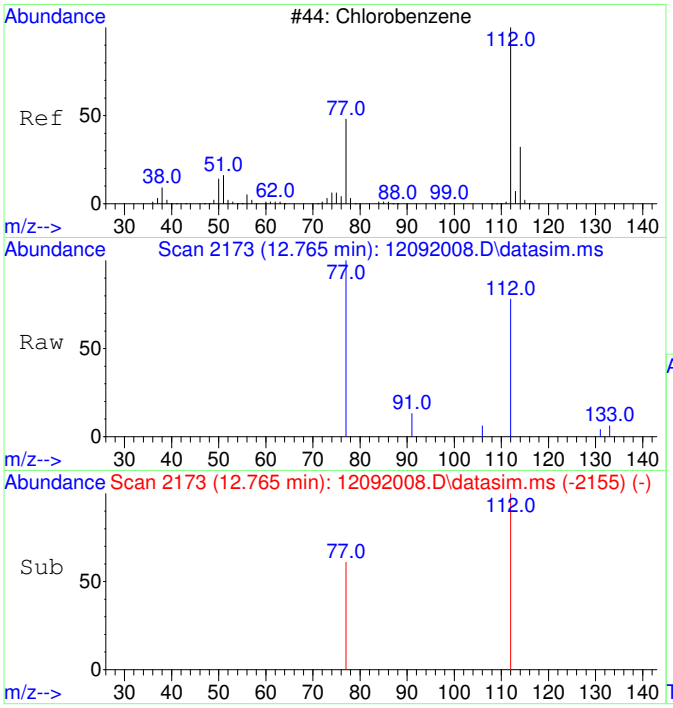


#15
Tetrachloroethene
Concen: 46.98 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 722

Ion	Ratio	Lower	Upper
166	100		
164	80.9	47.8	107.8

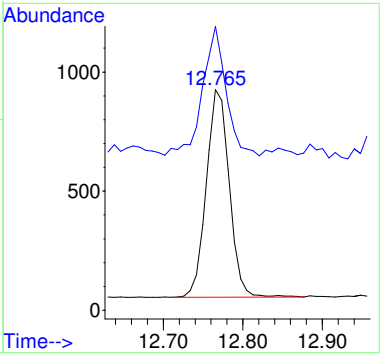


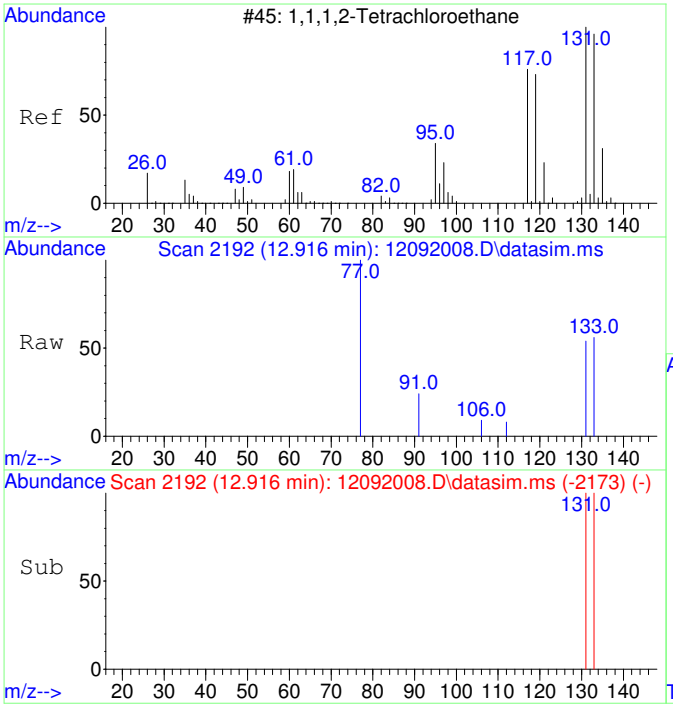


#16
Chlorobenzene
Concen: 45.70 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1747

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

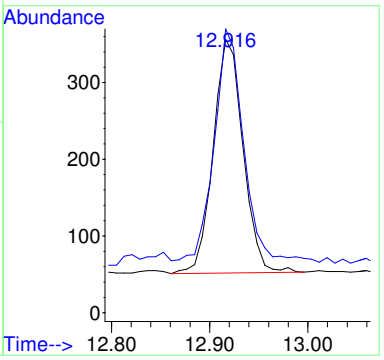


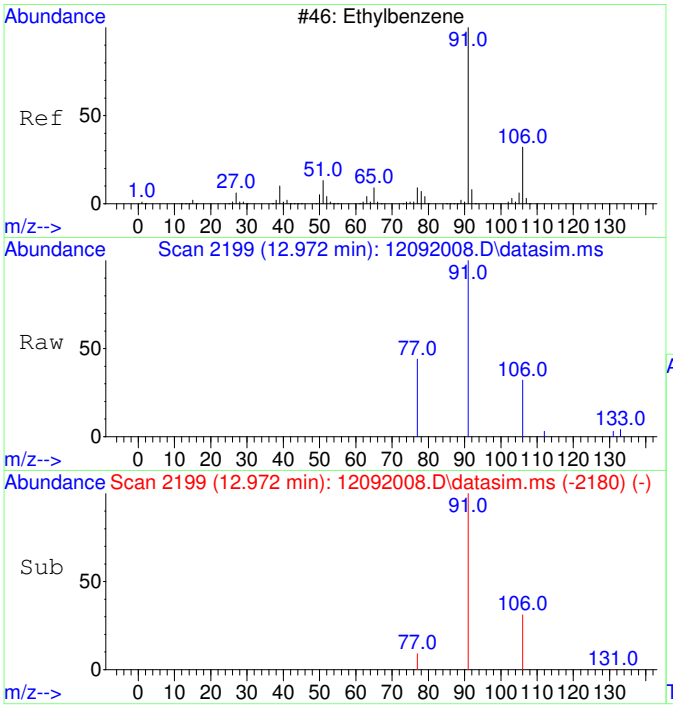


#17
1,1,1,2-Tetrachloroethane
Concen: 47.99 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:131 Resp: 642

Ion	Ratio	Lower	Upper
131	100		
133	96.7	66.3	126.3

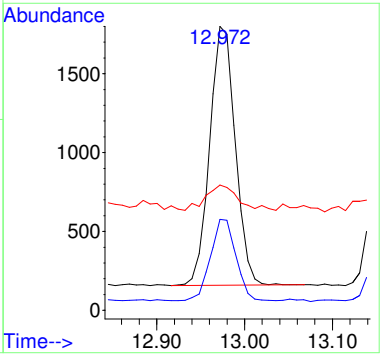


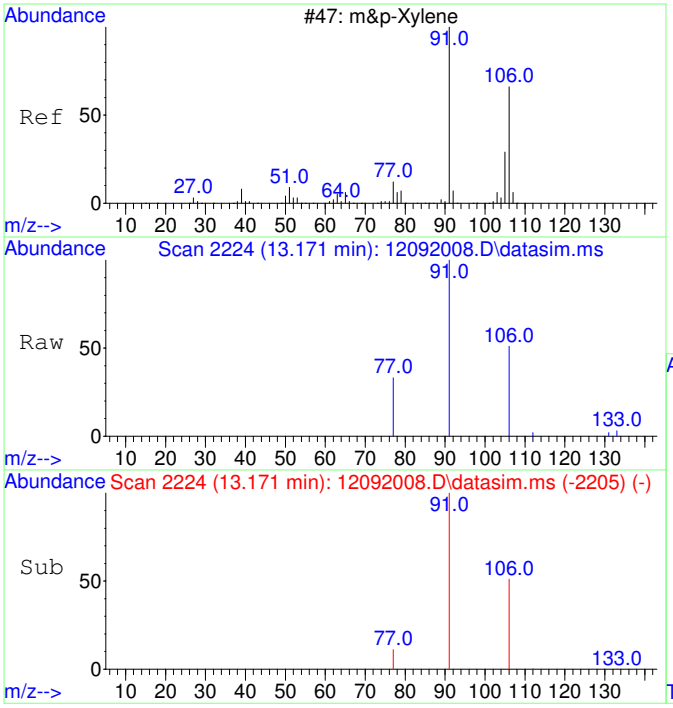


#18
Ethylbenzene
Concen: 52.74 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 3324

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	11.9	0.0	38.2

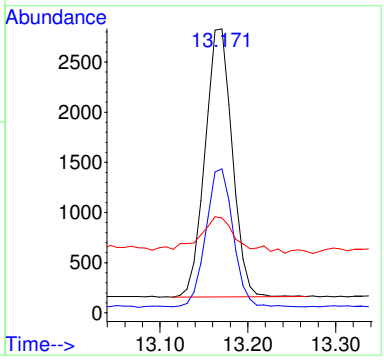


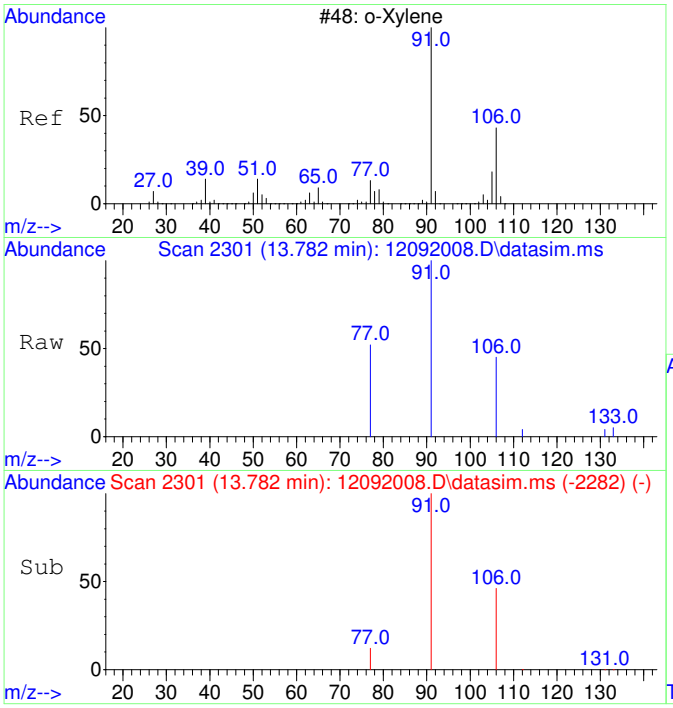


#19
m&p-Xylene
Concen: 118.62 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 5757

Ion	Ratio	Lower	Upper
91	100		
106	51.3	22.2	82.2
77	19.3	0.0	42.4

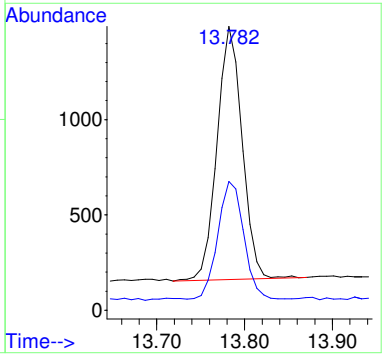


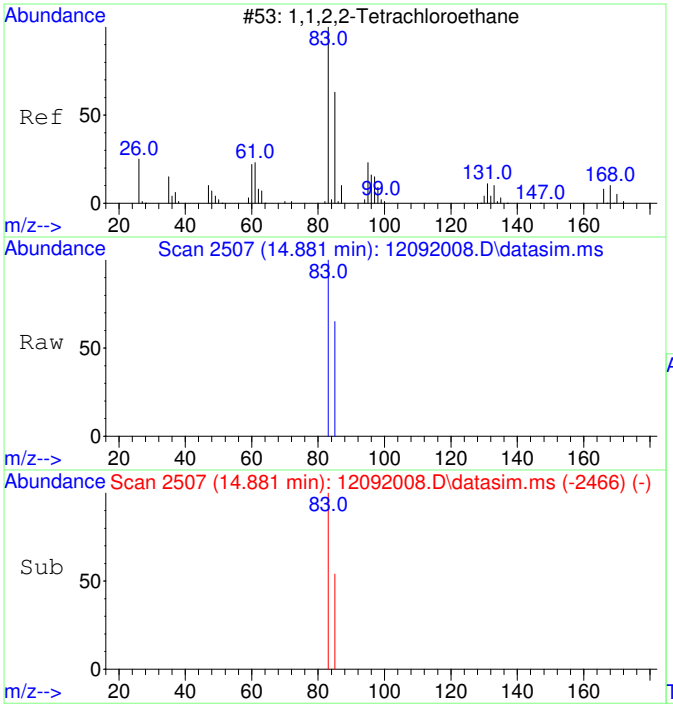


#20
o-Xylene
Concen: 50.47 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2631

Ion	Ratio	Lower	Upper
91	100		
106	47.8	19.2	79.2

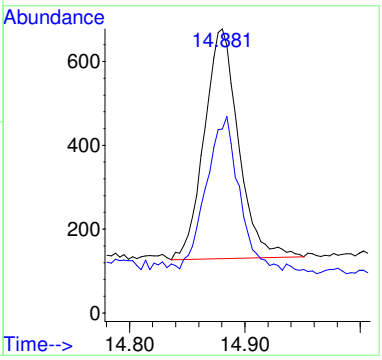


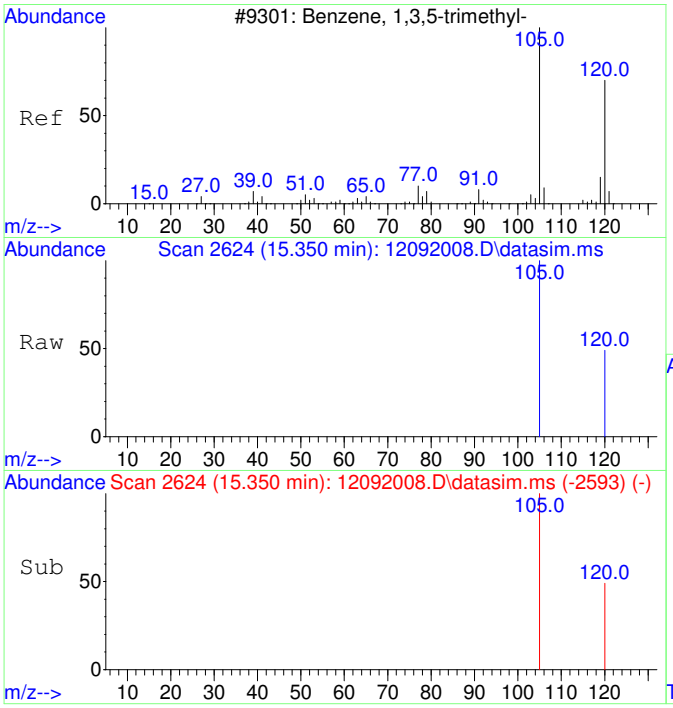


#21
1,1,2,2-Tetrachloroethane
Concen: 46.65 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 1133

Ion	Ratio	Lower	Upper
83	100		
85	64.6	34.8	94.8

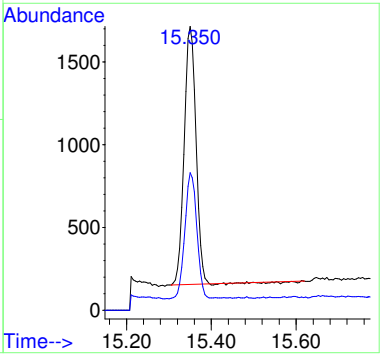


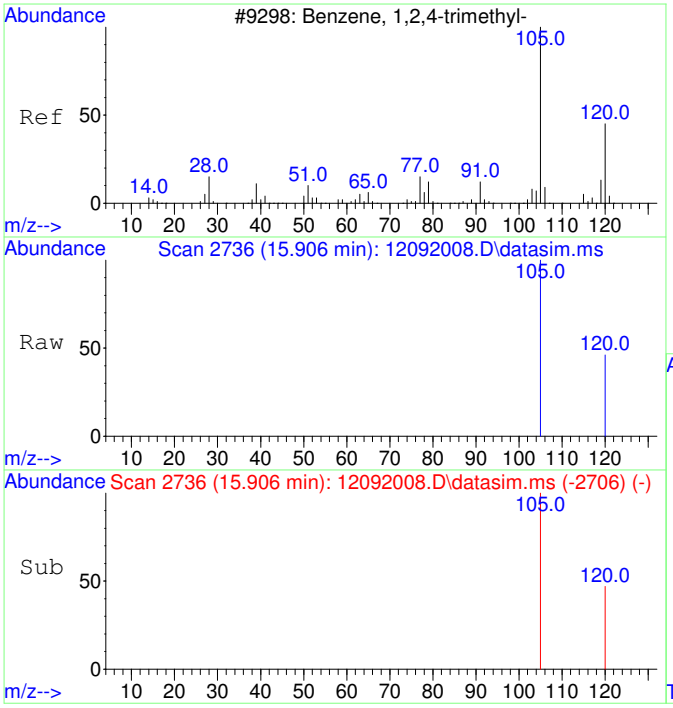


#22
1,3,5-Trimethylbenzene
Concen: 51.86 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 2973

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

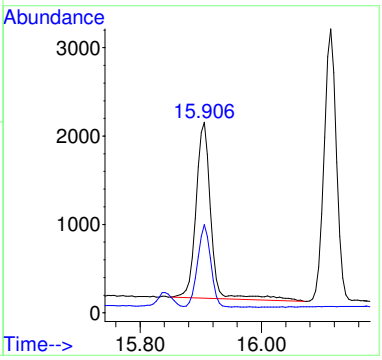


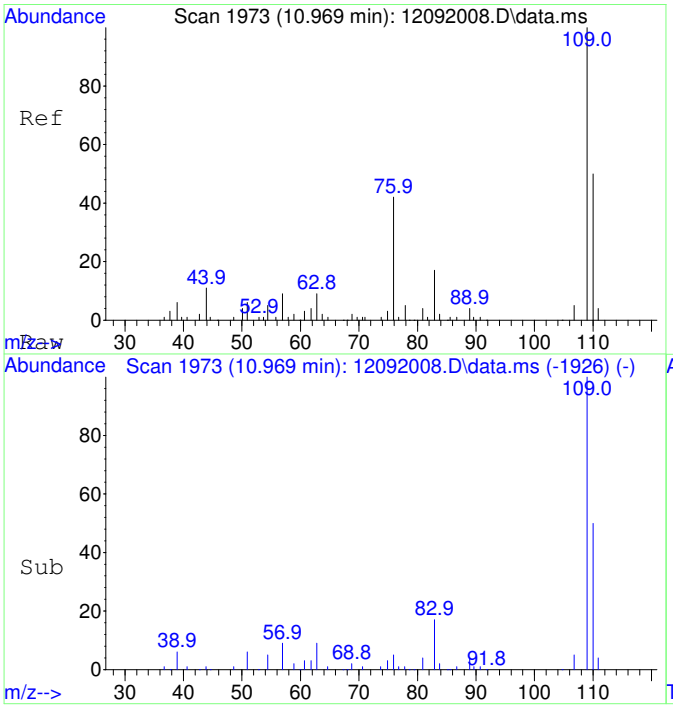


#23
1,2,4-Trimethylbenzene
Concen: 57.89 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 3394

Ion	Ratio	Lower	Upper
105	100		
120	40.5	17.2	77.2

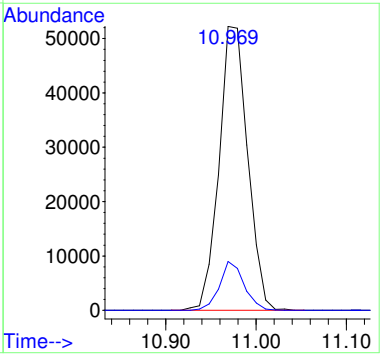


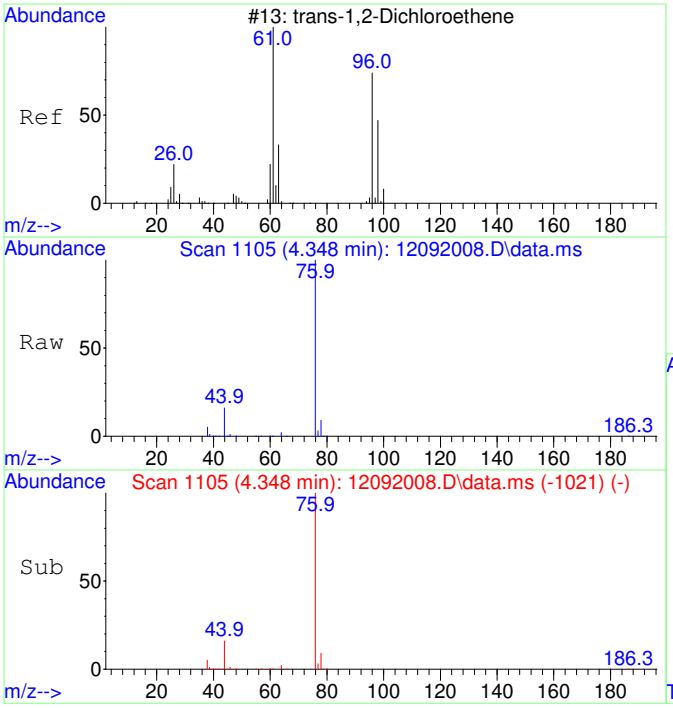


#25
2-Fluorotoluene SCAN
Concen: 4978.14 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 115624

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

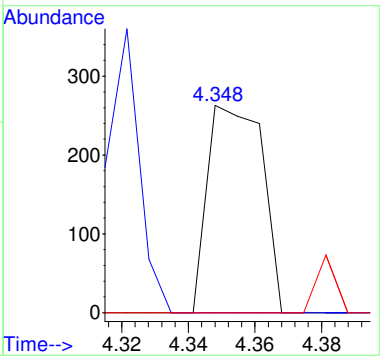


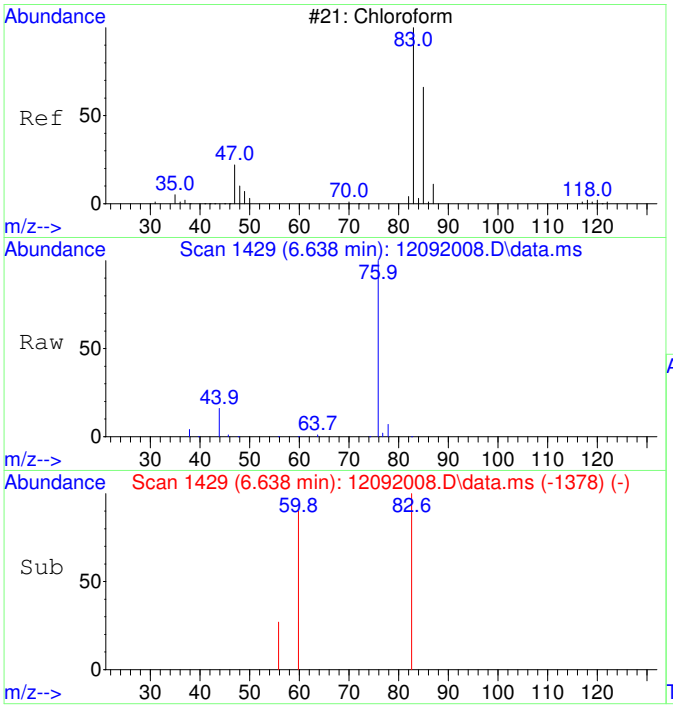


#27
trans-1,2-Dichloroethene SCAN
Concen: 43.29 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 299

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

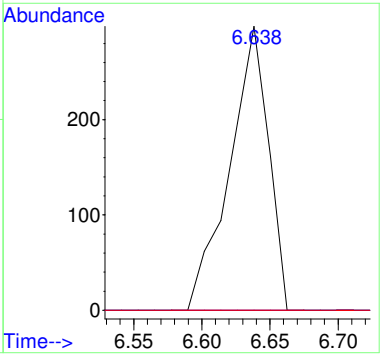


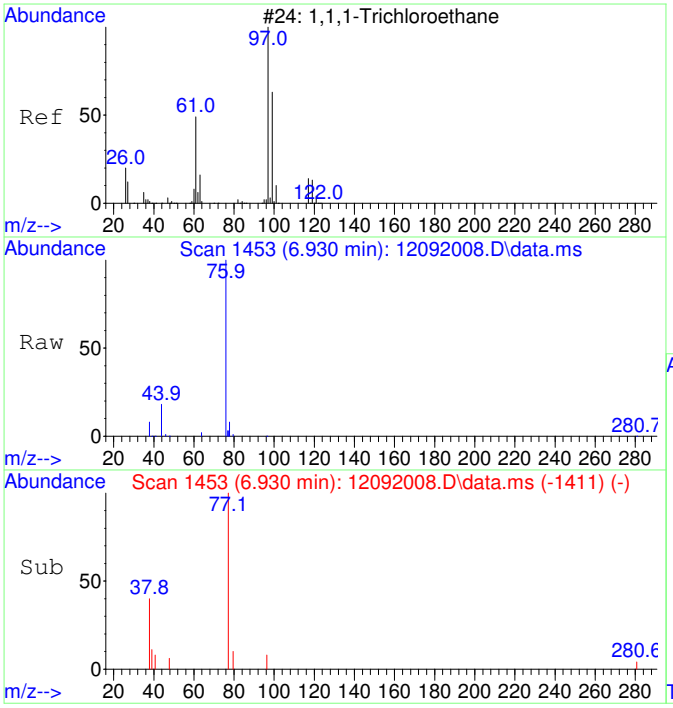


#30
Chloroform SCAN
Concen: 79.20 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 592

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

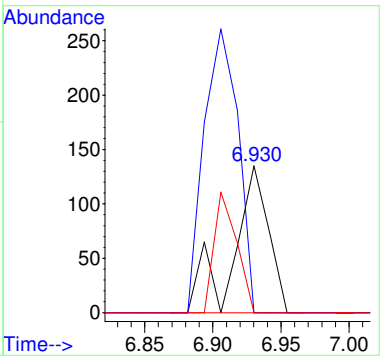


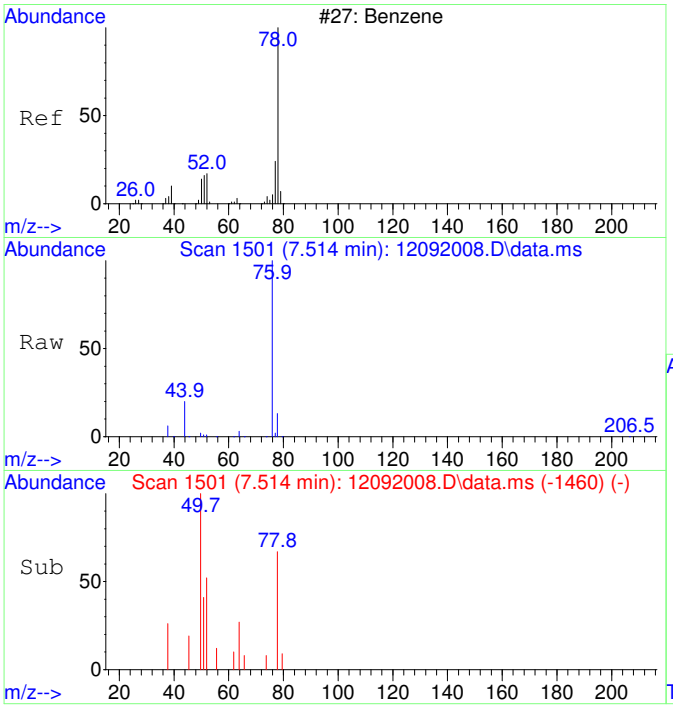


#31
1,1,1-Trichloroethane SCAN
Concen: 31.37 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 242

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

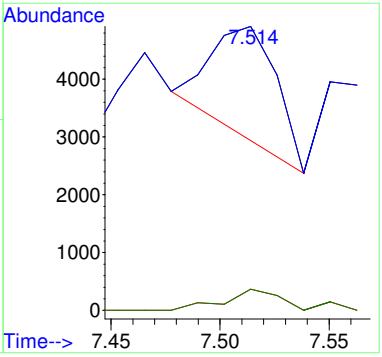


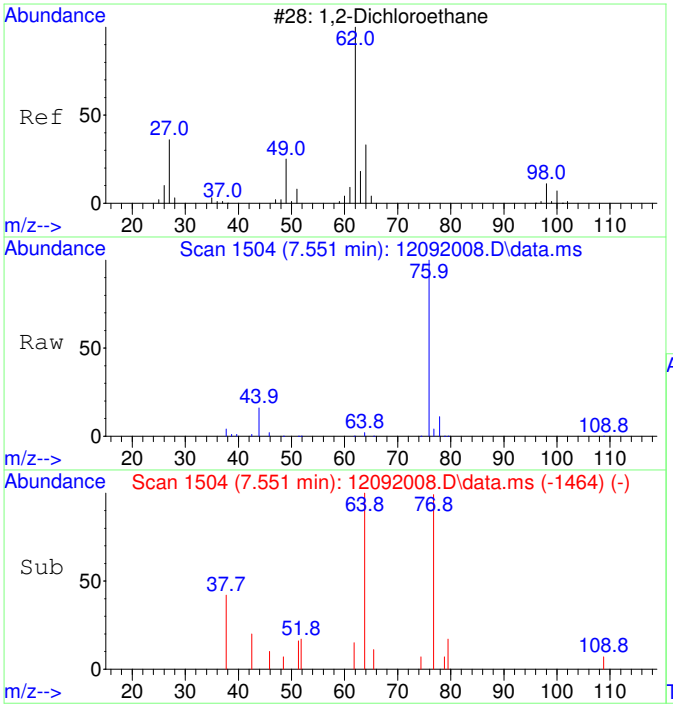


#33
Benzene SCAN
Concen: 149.35 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 3485

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.1	0.0	47.9
51	21.1	0.0	44.1

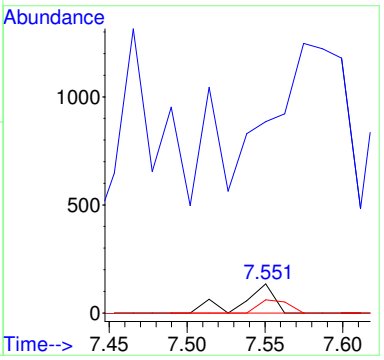


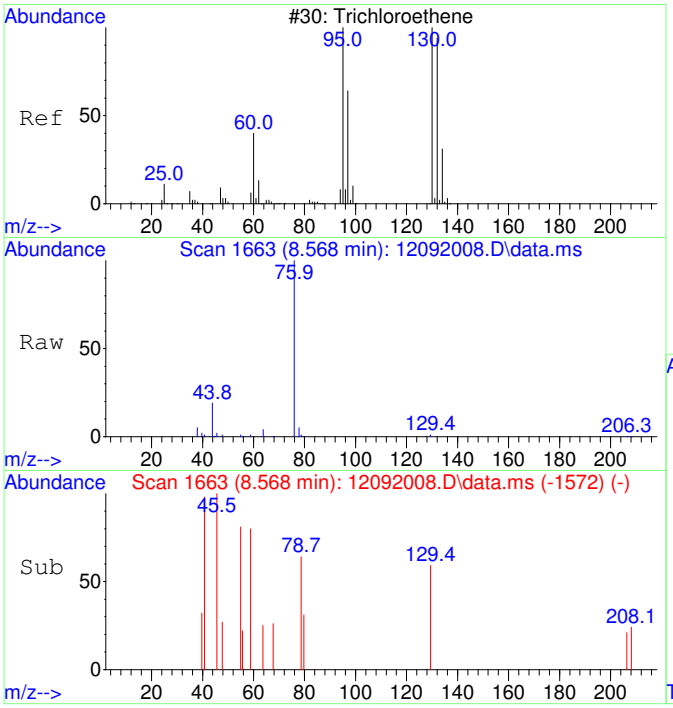


#34
1,2-Dichloroethane SCAN
Concen: 25.35 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 185

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	44.3	3.9	63.9

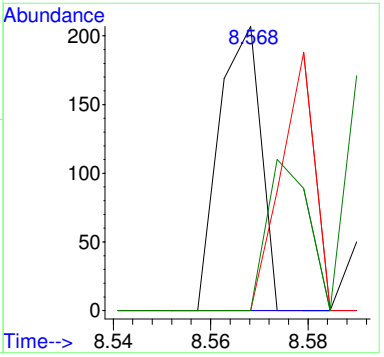


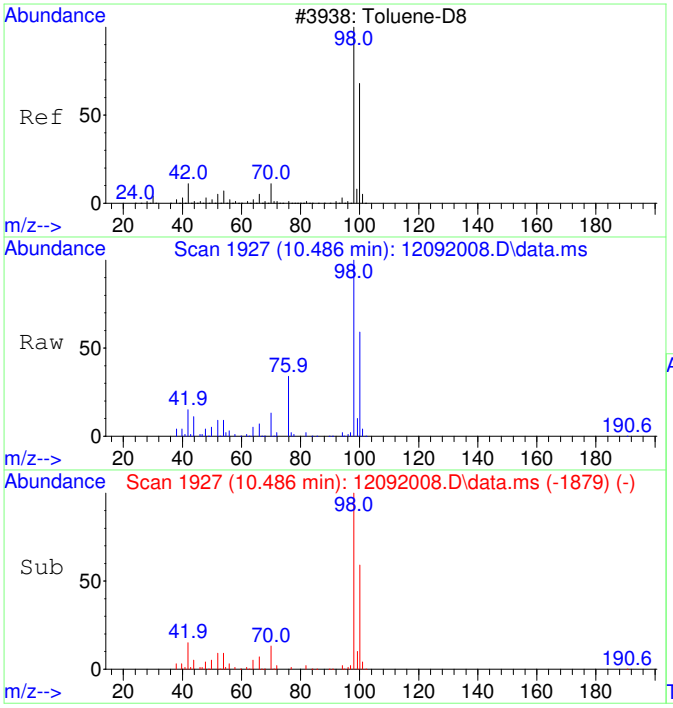


#35
Trichloroethene SCAN
Concen: 24.17 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 123

Ion	Ratio	Lower	Upper
130	100		
95	0.0	60.5	120.5#
132	73.2	59.6	119.6
97	52.8	28.2	88.2

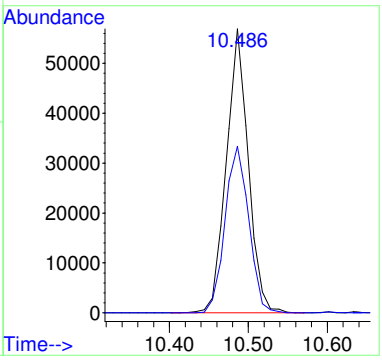


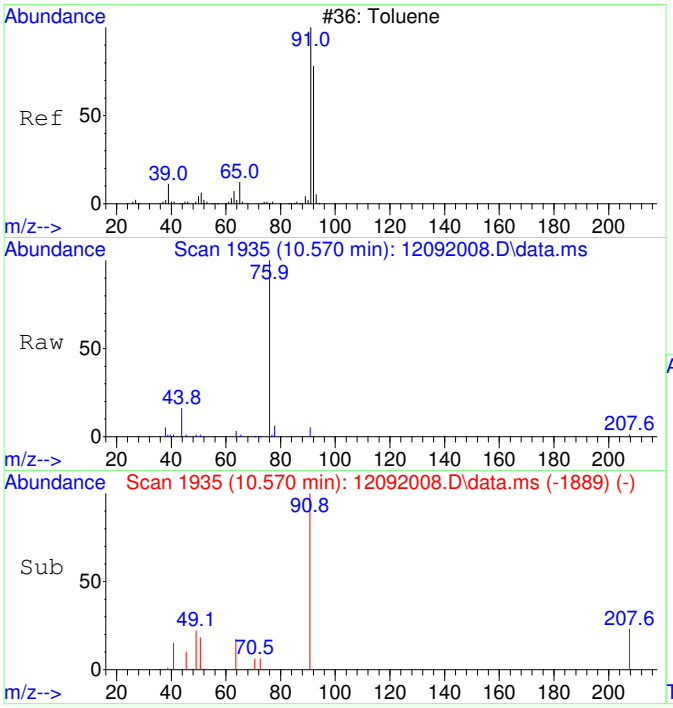


#36
Toluene-d8 SCAN
Concen: 5014.65 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 109238

Ion	Ratio	Lower	Upper
98	100		
100	63.3	40.0	100.0

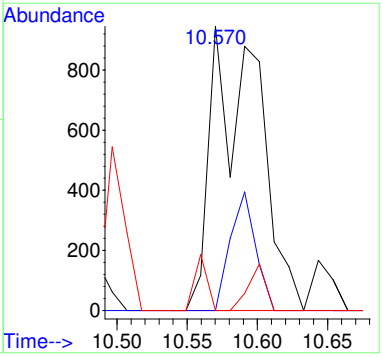


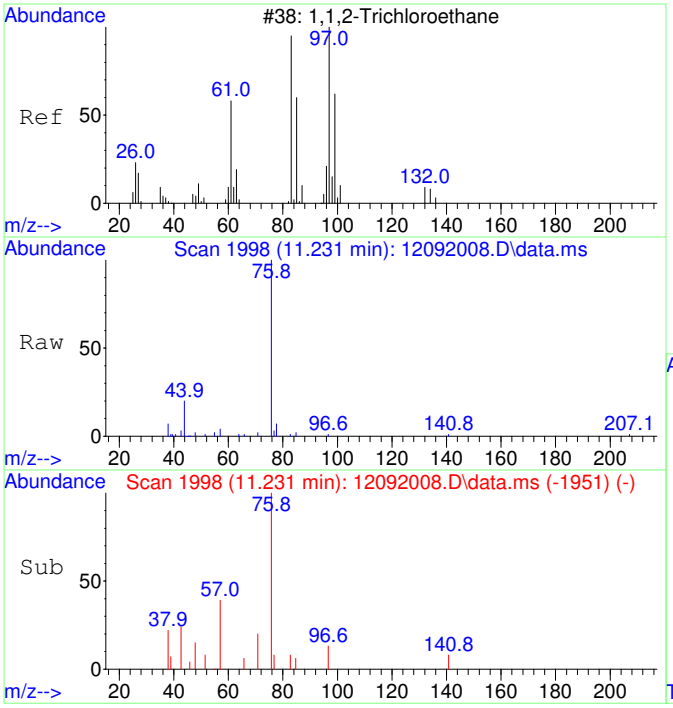


#37
Toluene SCAN
Concen: 84.23 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2259

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	5.2	0.0	41.0

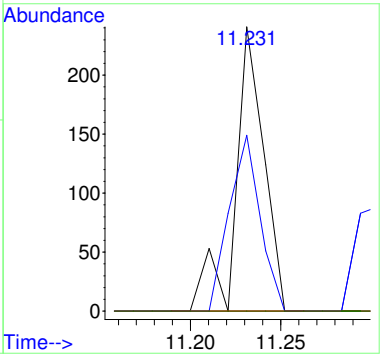


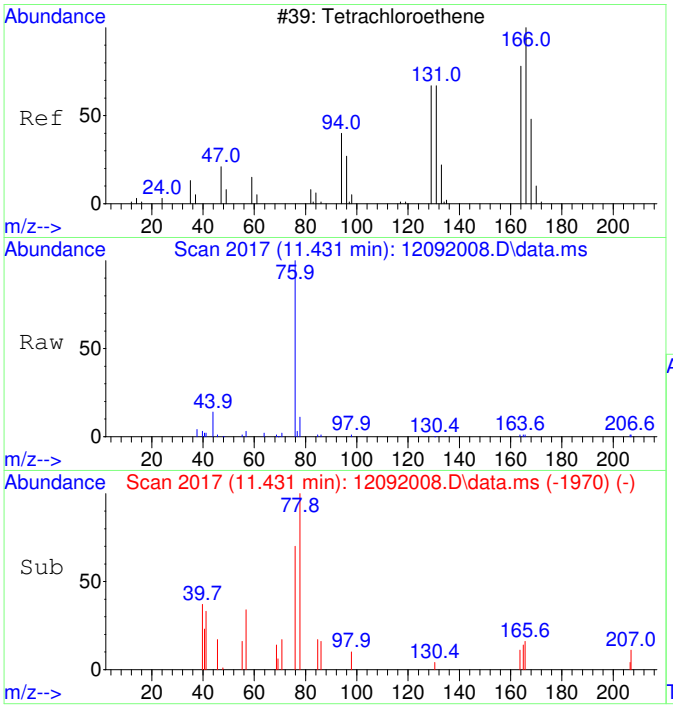


#38
1,1,2-Trichloroethane SCAN
Concen: 39.12 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 263

Ion	Ratio	Lower	Upper
97	100		
83	67.7	57.7	117.7
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

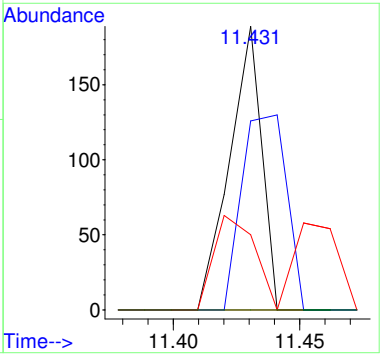


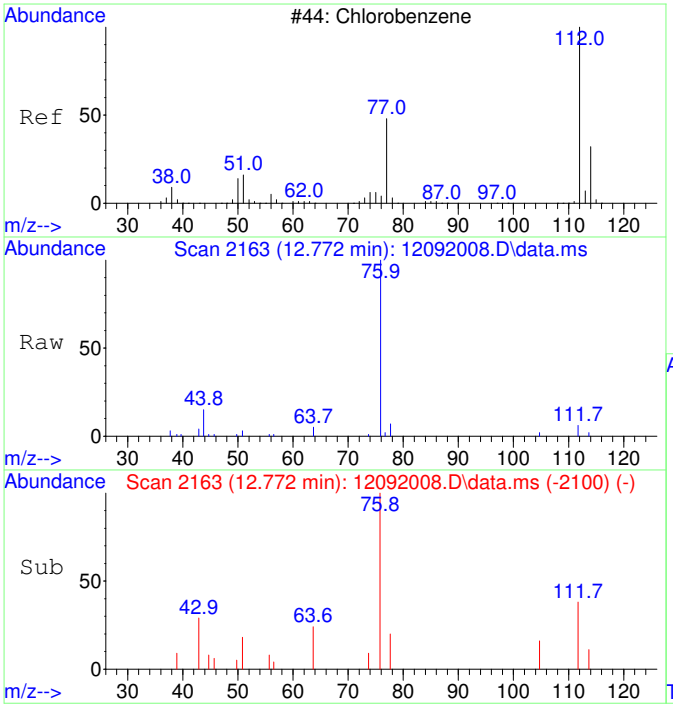


#39
Tetrachloroethene SCAN
Concen: 27.68 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 167

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	42.5	38.7	98.7
129	0.0	41.8	101.8#

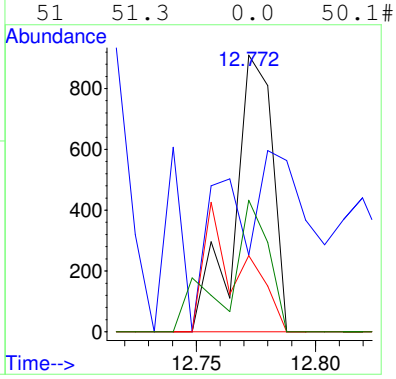


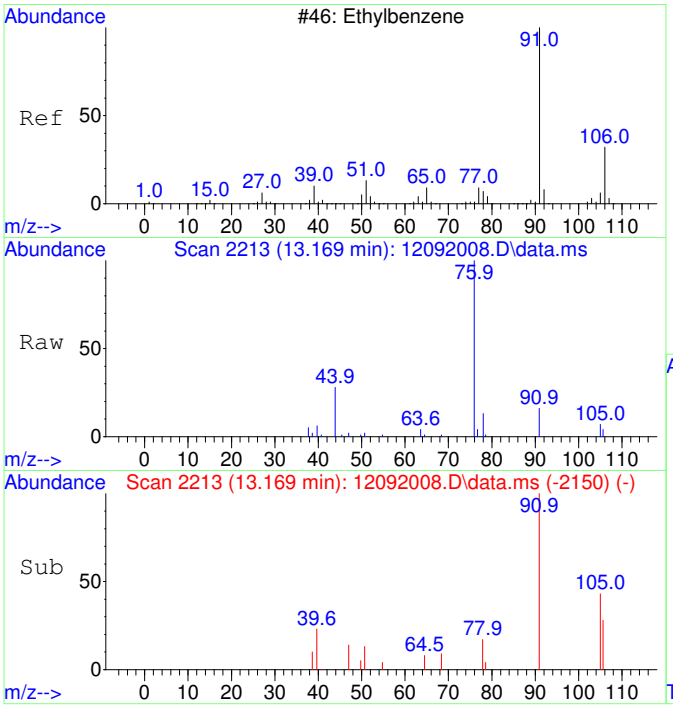


#40
Chlorobenzene SCAN
Concen: 52.64 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1014

Ion	Ratio	Lower	Upper
112	100		
77	106.3	28.2	88.2#
114	0.0	2.3	62.3#
51	51.3	0.0	50.1#

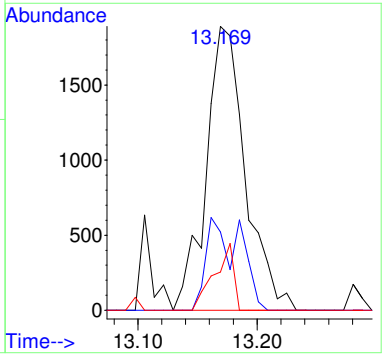


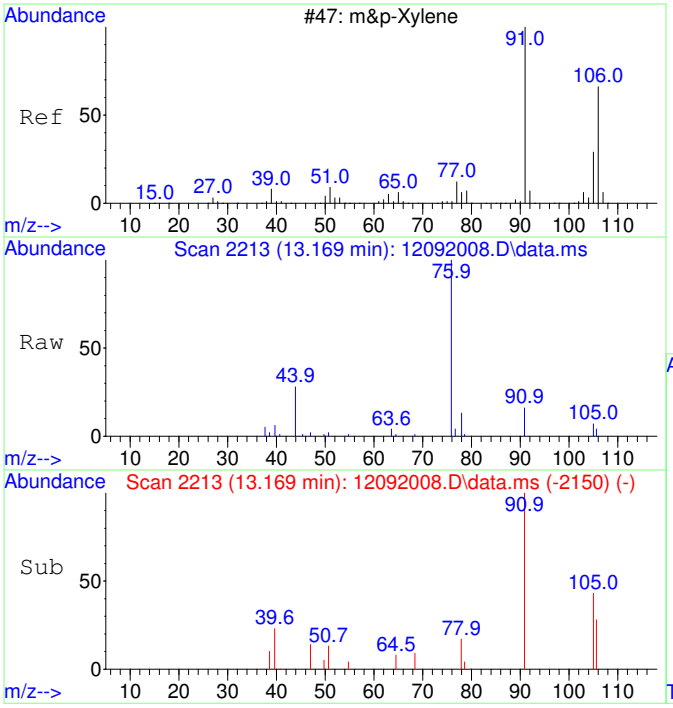


#42
Ethylbenzene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
51	11.5	0.0	40.1

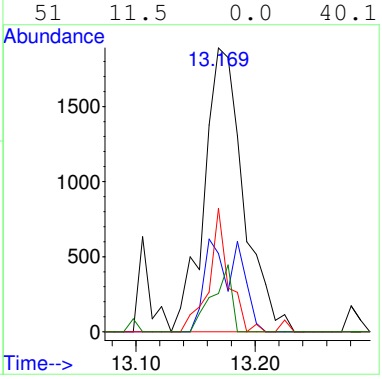


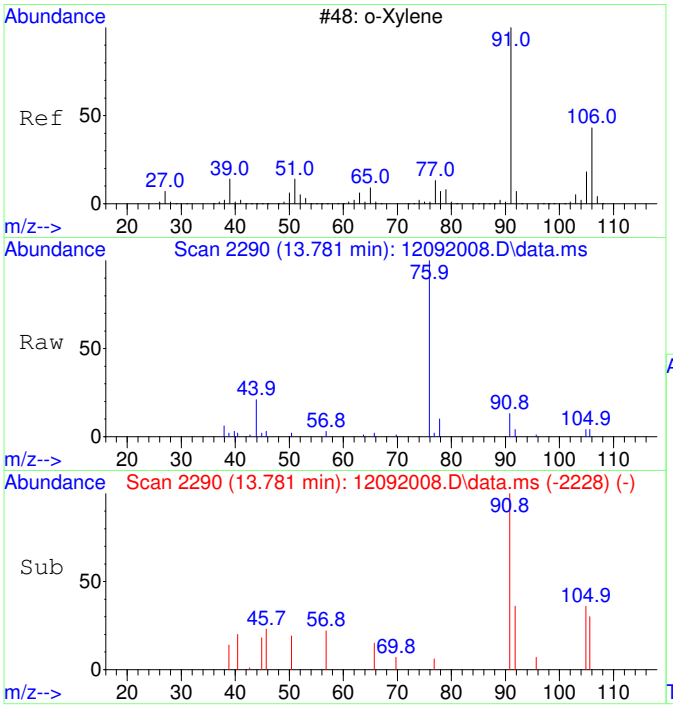


#43
m&p-Xylene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
105	21.7	0.0	54.7
51	11.5	0.0	40.1

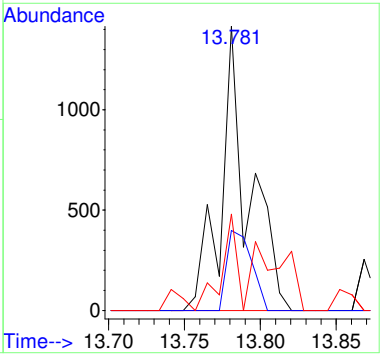


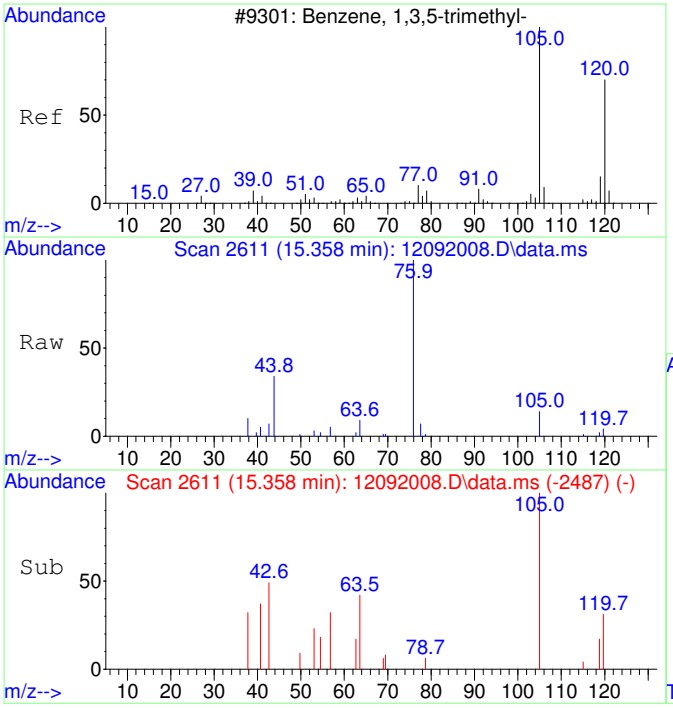


#44
o-Xylene SCAN
Concen: 64.67 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 1805

Ion	Ratio	Lower	Upper
91	100		
106	25.2	18.0	78.0
105	18.3	0.0	56.6

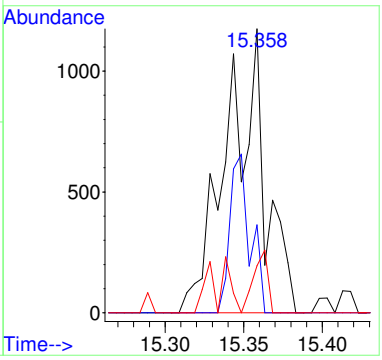


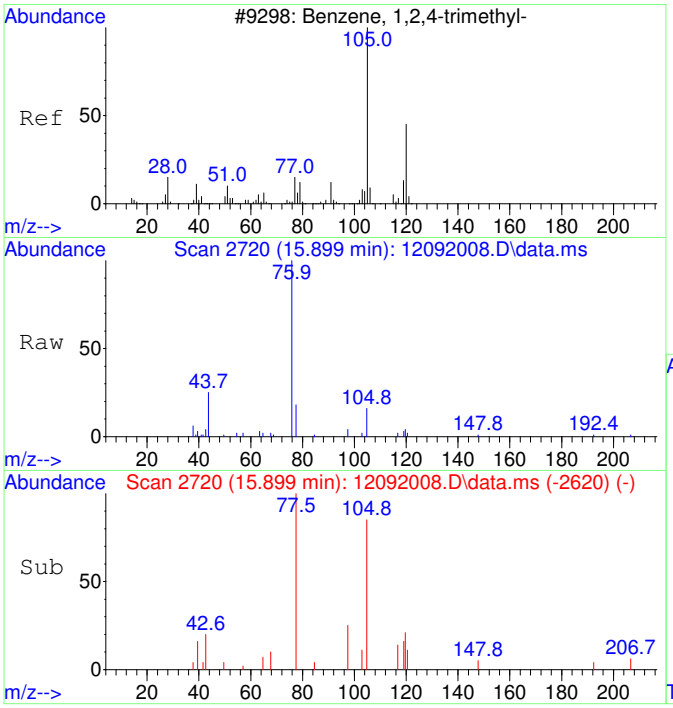


#46
1,3,5-Trimethylbenzene SCAN
Concen: 67.82 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1997

Ion	Ratio	Lower	Upper
105	100		
120	29.1	18.3	78.3
119	8.2	0.0	43.1

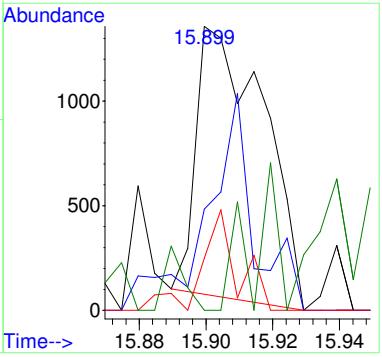




#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.70 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1826

Ion	Ratio	Lower	Upper
105	100		
120	55.9	16.9	76.9
119	19.7	0.0	41.9
77	8.4	0.0	42.3



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 12:01 pm, Dec 09, 2020

M.I. Approved By:
ZAR at 2:59 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

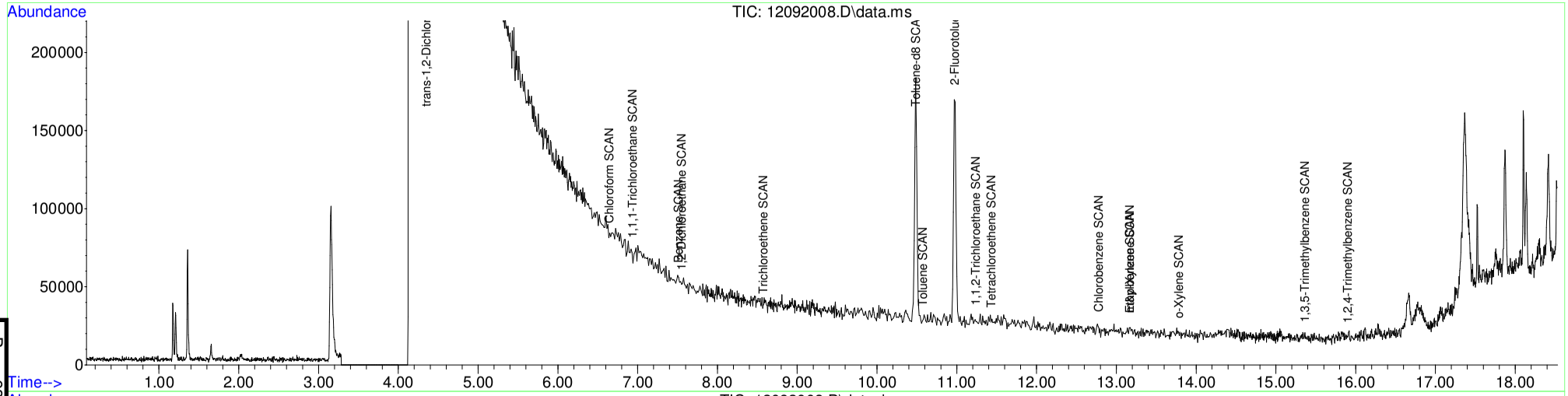
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204619	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	175348	4424.67	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 88.49%			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.094	61	300m	36.98	ug/L	
3] trans-1,2-Dichloroethene	4.356	61	386	37.74	ug/L	92
4] 1,1-Dichloroethane	5.073	63	454	37.16	ug/L	91
5] cis-1,2-Dichloroethene	6.081	61	484	38.25	ug/L	92
6] Chloroform	6.652	83	512	42.13	ug/L	99
7] 1,1,1-Trichloroethane	6.907	97	571	43.74	ug/L	98
8] Carbon tetrachloride	7.175	117	540	43.26	ug/L	87
9] Benzene	7.503	78	2996	87.01	ug/L #	28
10] 1,2-Dichloroethane	7.540	62	508	43.25	ug/L	65
11] Trichloroethene	8.575	130	491	45.17	ug/L	94
13] Toluene	10.582	91	2507	50.81	ug/L	99
14] 1,1,2-Trichloroethane	11.232	97	512	44.80	ug/L	91
15] Tetrachloroethene	11.432	166	722	46.98	ug/L	96
16] Chlorobenzene	12.765	112	1747	45.70	ug/L	87
17] 1,1,1,2-Tetrachloroethane	12.916	131	642	47.99	ug/L	100
18] Ethylbenzene	12.972	91	3324	52.74	ug/L	95
19] m&p-Xylene	13.171	91	5757	118.62	ug/L	96
20] o-Xylene	13.782	91	2631	50.47	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.881	83	1133	46.65	ug/L	100
22] 1,3,5-Trimethylbenzene	15.350	105	2973	51.86	ug/L	97
23] 1,2,4-Trimethylbenzene	15.906	105	3394	57.89	ug/L	90
25) 2-Fluorotoluene SCAN	10.969	109	115624	4978.14	ug/L	98
27) trans-1,2-Dichloroethe...	4.348	61	299	43.29	ug/L #	17
30) Chloroform SCAN	6.638	83	592	79.20	ug/L #	27
31) 1,1,1-Trichloroethane ...	6.930	97	242	31.37	ug/L #	19
33) Benzene SCAN	7.514	78	3485	149.35	ug/L	97
34) 1,2-Dichloroethane SCAN	7.551	62	185	25.35	ug/L #	60
35) Trichloroethene SCAN	8.568	130	123	24.17	ug/L #	55
36) Toluene-d8 SCAN	10.486	98	109238	5014.65	ug/L	92
37) Toluene SCAN	10.570	91	2259	84.23	ug/L #	32
38) 1,1,2-Trichloroethane ...	11.231	97	263	39.12	ug/L #	42
39) Tetrachloroethene SCAN	11.431	166	167	27.68	ug/L #	29
40) Chlorobenzene SCAN	12.772	112	1014	52.64	ug/L #	37
42) Ethylbenzene SCAN	13.169	91	4335	84.81	ug/L	70
43) m&p-Xylene SCAN	13.169	91	4335	84.81	ug/L	77
44) o-Xylene SCAN	13.781	91	1805	64.67	ug/L	72
46) 1,3,5-Trimethylbenzene...	15.358	105	1997	67.82	ug/L	75
47) 1,2,4-Trimethylbenzene...	15.899	105	1826	60.70	ug/L	86

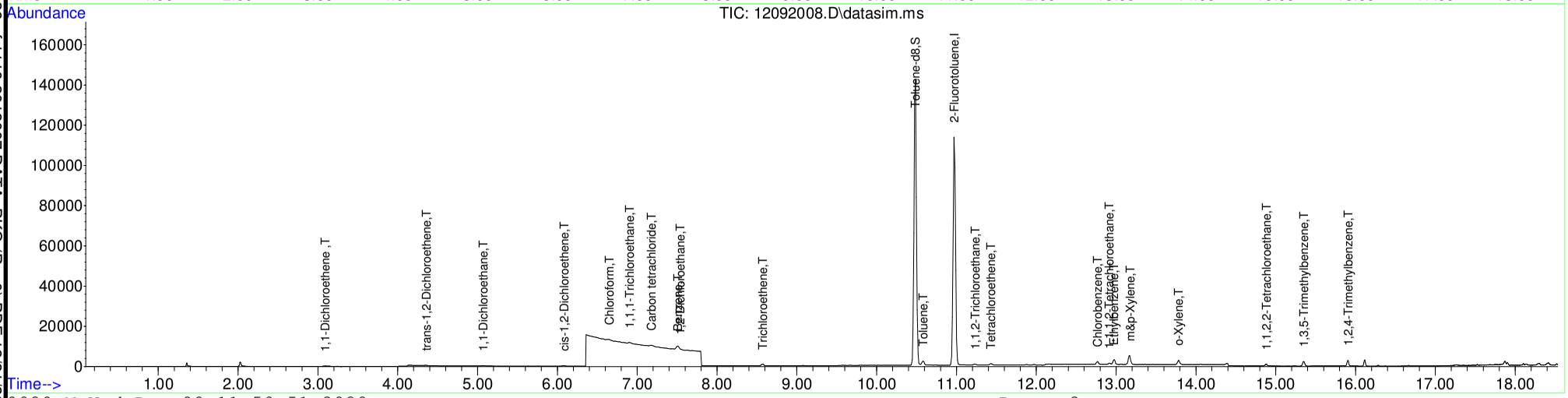
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092008.D
Acq On : 9 Dec 2020 11:39
InstName : AG5975C
Operator : TD
Sample : B20L016-MRL1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 09 11:58:00 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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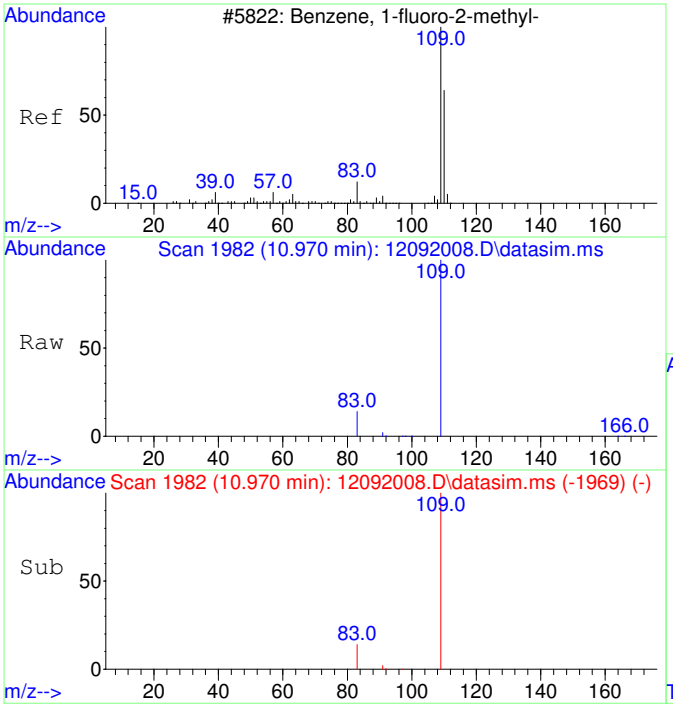
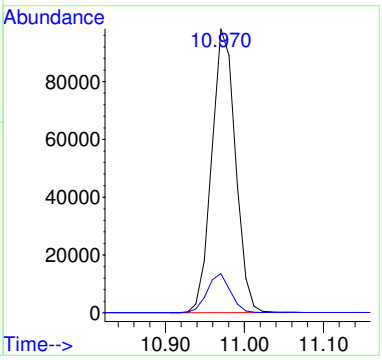
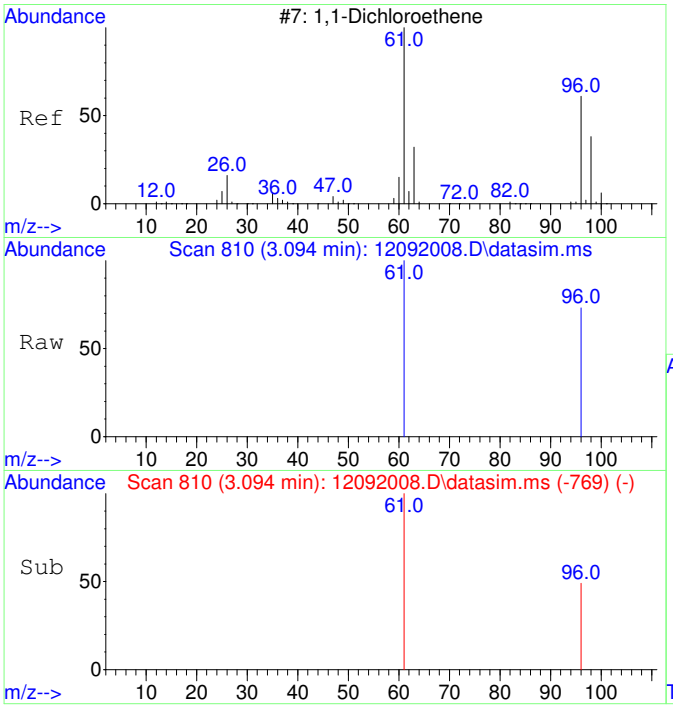


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 204619

Ion	Ratio	Lower	Upper
109	100		
83	13.4	0.0	42.3

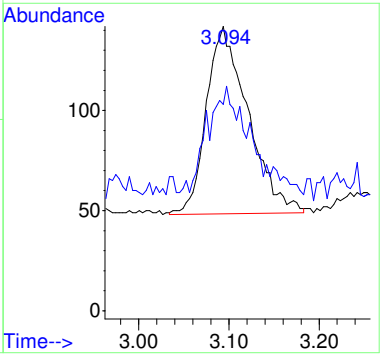


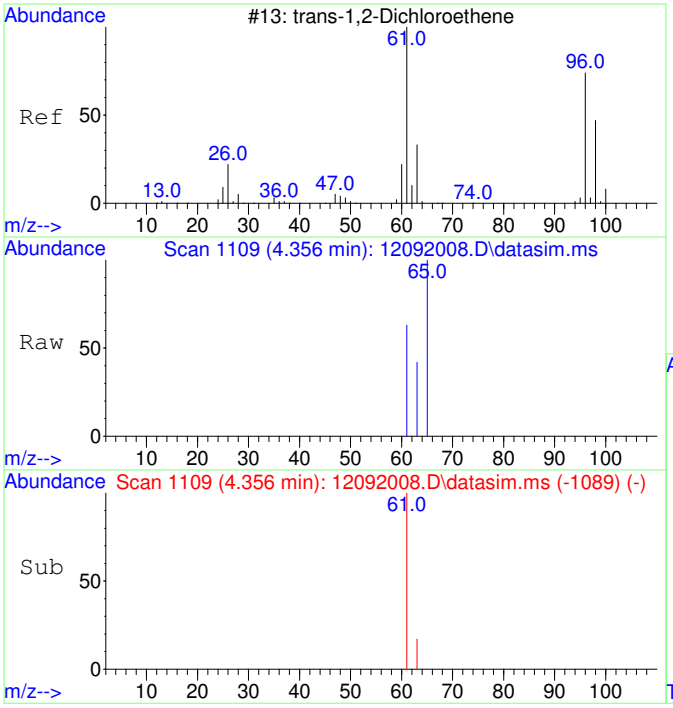


#2
1,1-Dichloroethene
Concen: 36.98 ug/L m
RT: 3.094 min Scan# 810
Delta R.T. 0.004 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 300

Ion	Ratio	Lower	Upper
61	100		
96	53.3	37.2	97.2

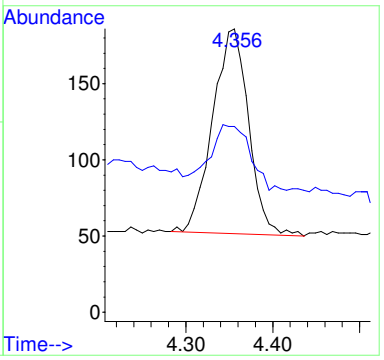


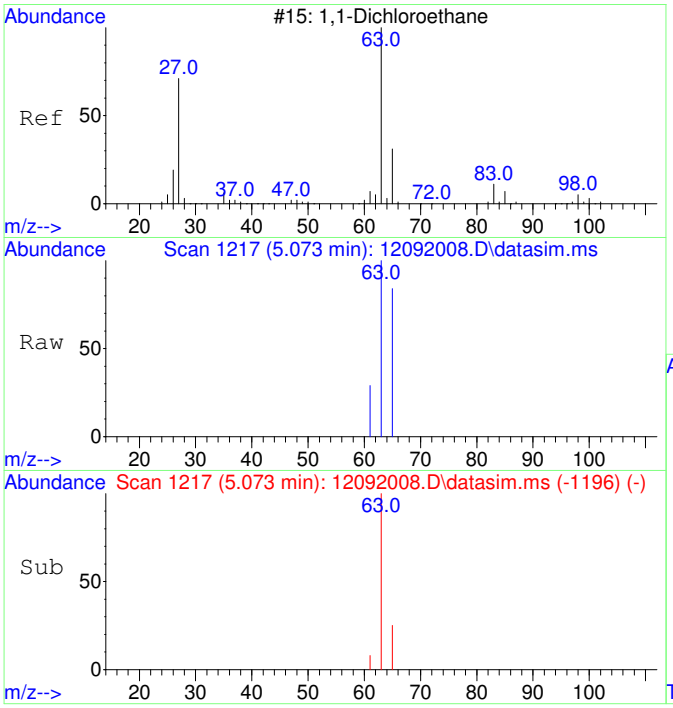


#3
trans-1,2-Dichloroethene
Concen: 37.74 ug/L
RT: 4.356 min Scan# 1109
Delta R.T. -0.020 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 386

Ion	Ratio	Lower	Upper
61	100		
63	37.0	2.4	62.4

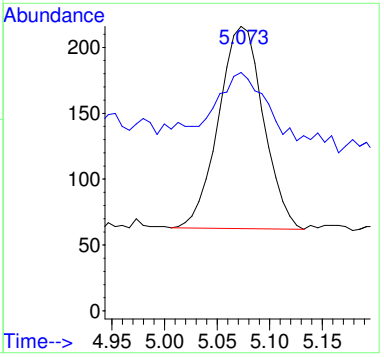


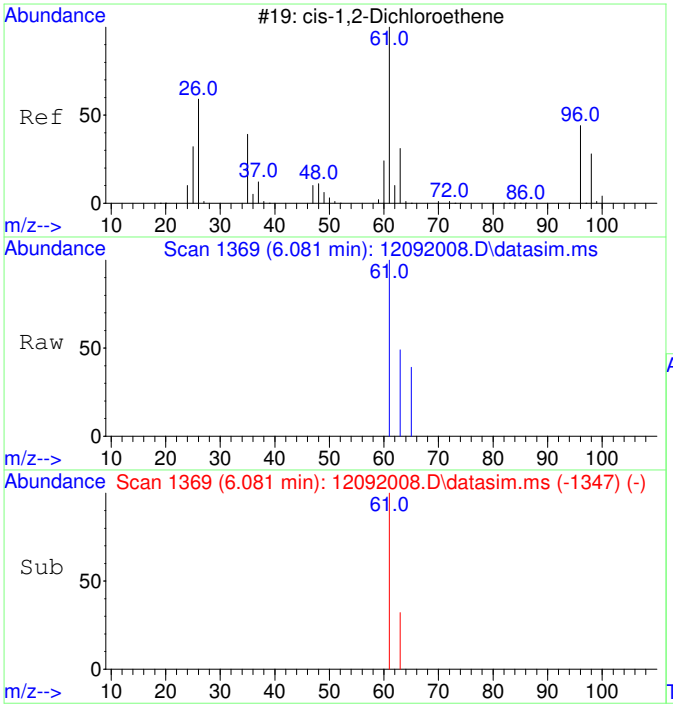


#4
1,1-Dichloroethane
Concen: 37.16 ug/L
RT: 5.073 min Scan# 1217
Delta R.T. -0.013 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 63 Resp: 454

Ion	Ratio	Lower	Upper
63	100		
65	36.8	1.8	61.8

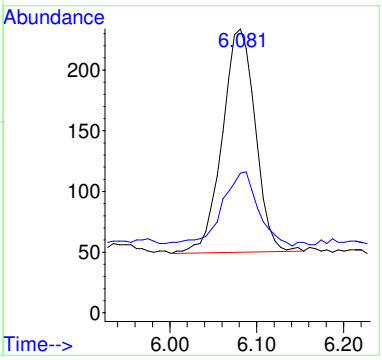


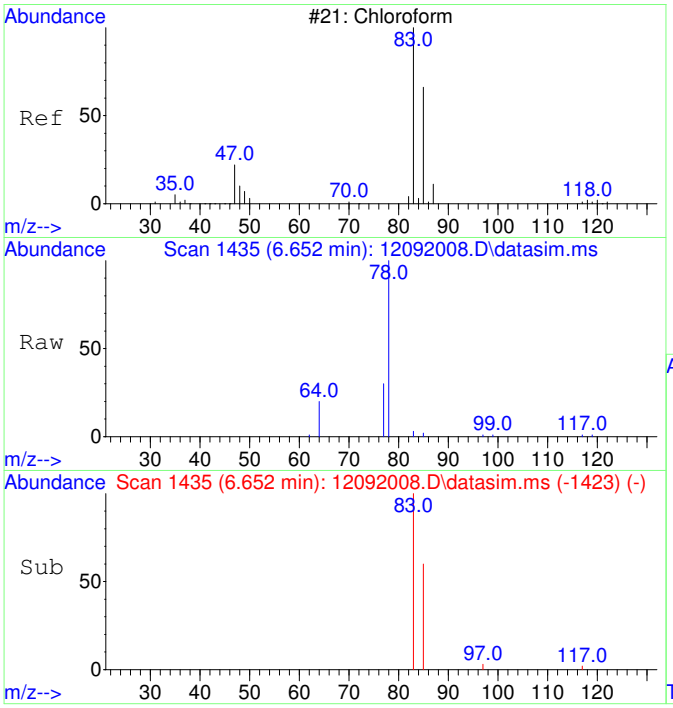


#5
cis-1,2-Dichloroethene
Concen: 38.25 ug/L
RT: 6.081 min Scan# 1369
Delta R.T. -0.006 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 484

Ion	Ratio	Lower	Upper
61	100		
63	37.2	2.5	62.5

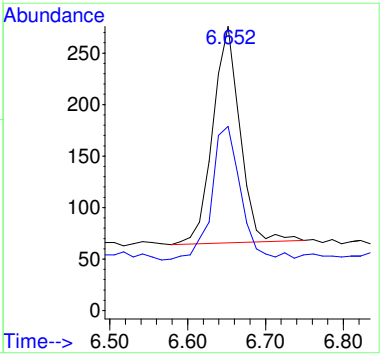


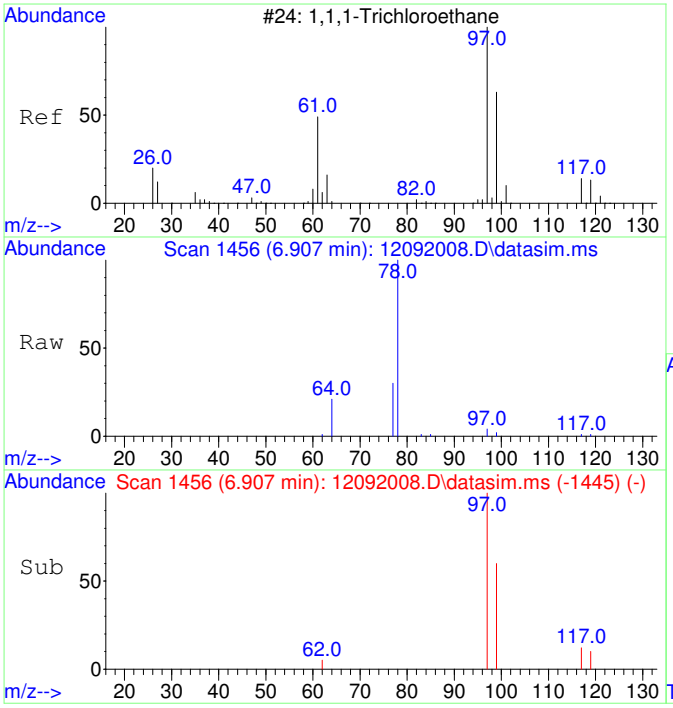


#6
Chloroform
Concen: 42.13 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 512

Ion	Ratio	Lower	Upper
83	100		
85	65.6	35.1	95.1

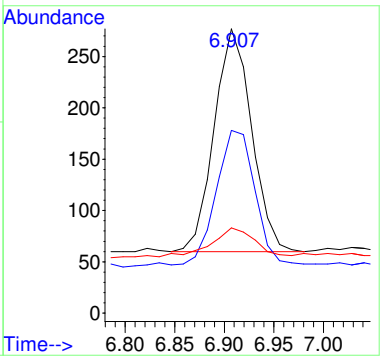


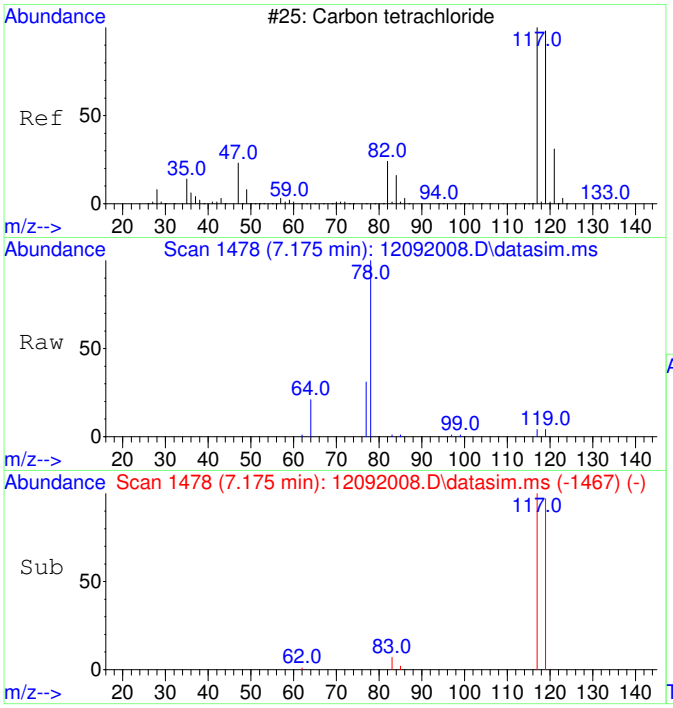


#7
1,1,1-Trichloroethane
Concen: 43.74 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 571

Ion	Ratio	Lower	Upper
97	100		
99	66.2	34.6	94.6
117	14.9	0.0	43.2

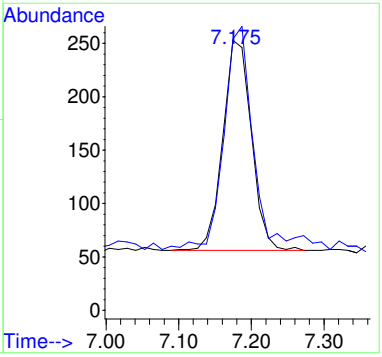


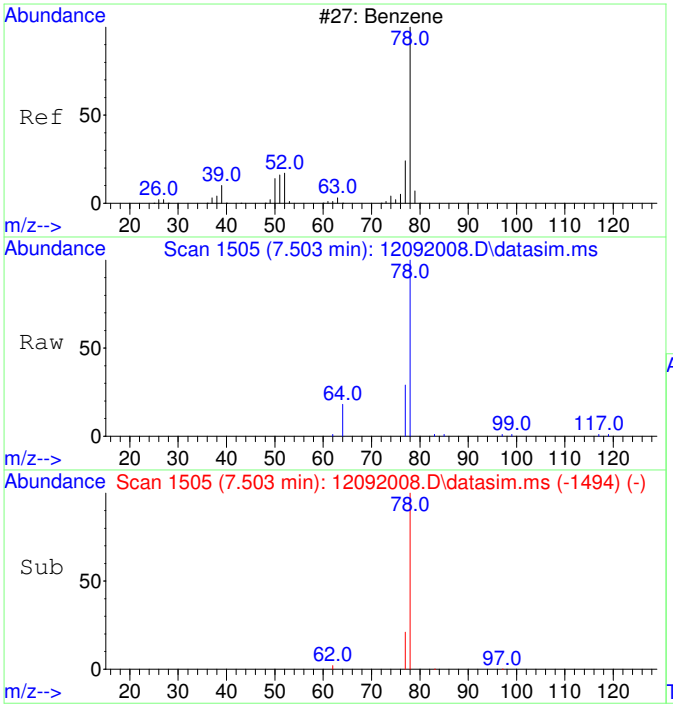


#8
Carbon tetrachloride
Concen: 43.26 ug/L
RT: 7.175 min Scan# 1478
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:117 Resp: 540

Ion	Ratio	Lower	Upper
117	100		
119	108.9	66.4	126.4

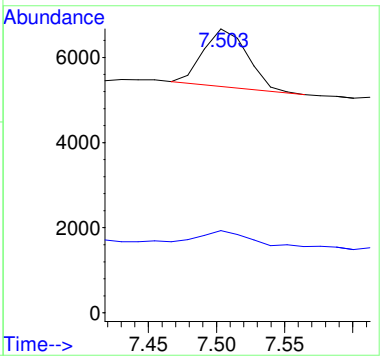


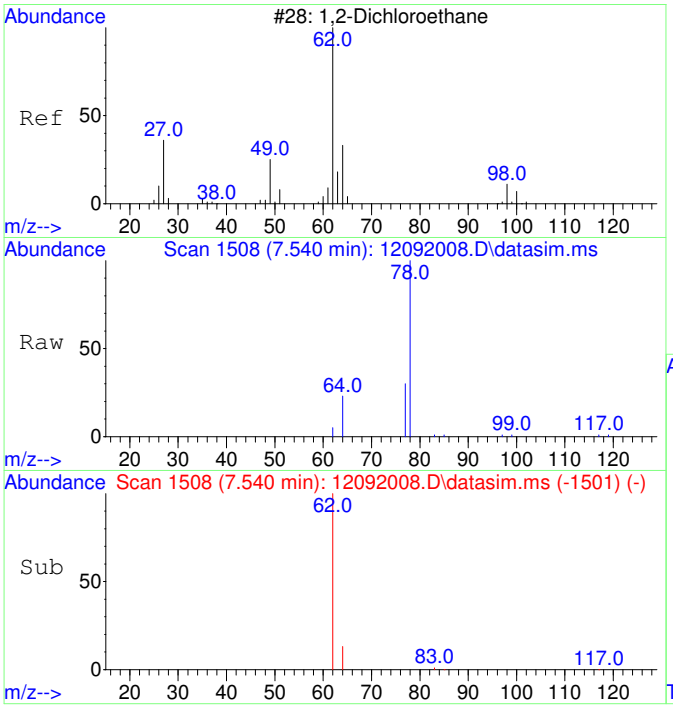


#9
Benzene
Concen: 87.01 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 2996

Ion	Ratio	Lower	Upper
78	100		
77	58.3	0.0	53.2#

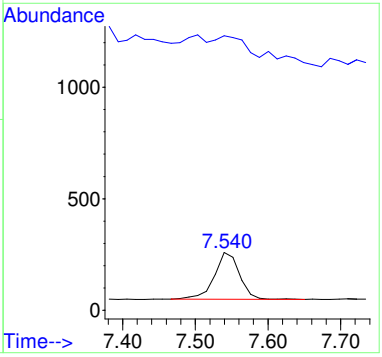


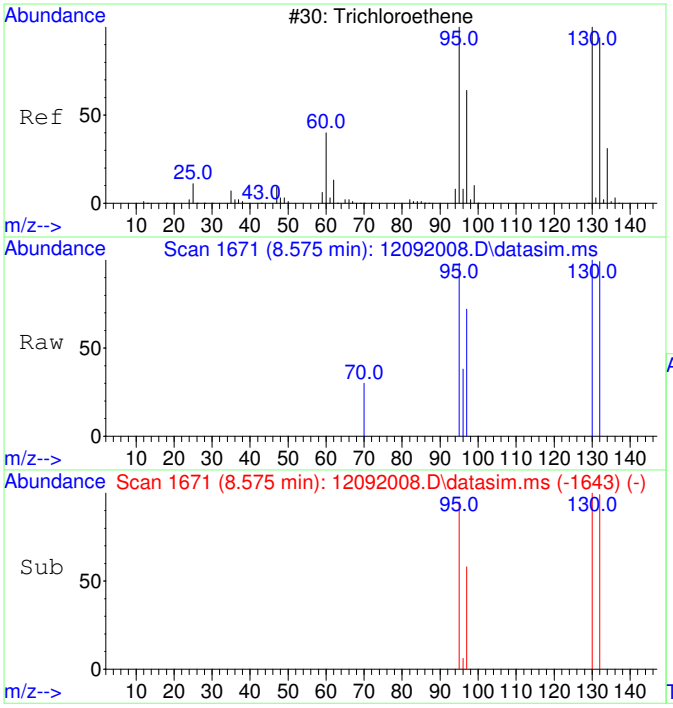


#10
1,2-Dichloroethane
Concen: 43.25 ug/L
RT: 7.540 min Scan# 1508
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 508

Ion	Ratio	Lower	Upper
62	100		
64	52.0	2.3	62.3

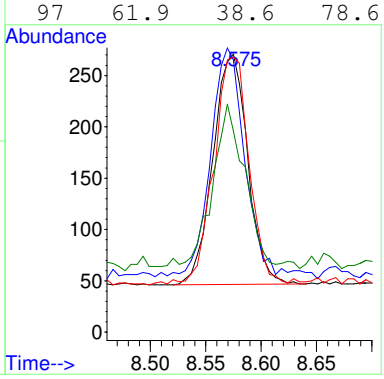


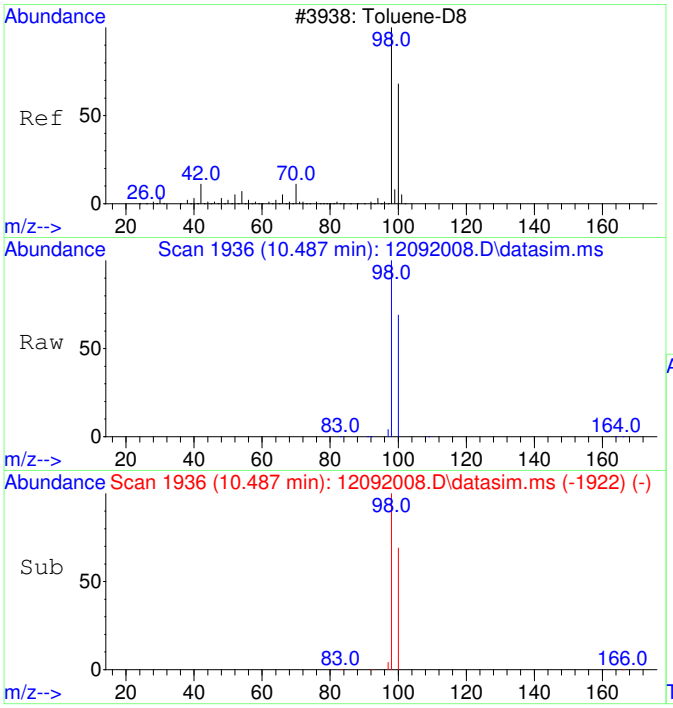


#11
Trichloroethene
Concen: 45.17 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 491

Ion	Ratio	Lower	Upper
130	100		
95	100.2	60.7	120.7
132	99.2	76.0	116.0
97	61.9	38.6	78.6

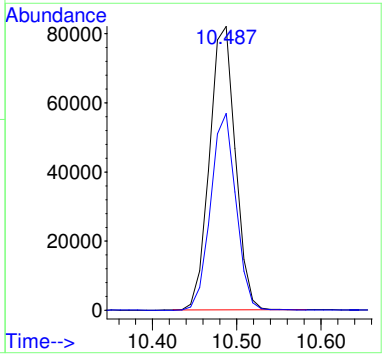


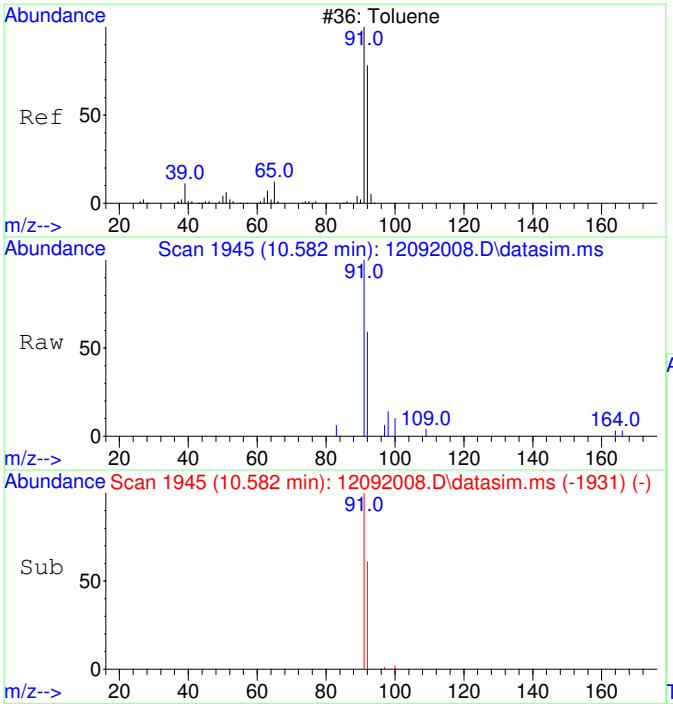


#12
Toluene-d8
Concen: 4424.67 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 175348

Ion	Ratio	Lower	Upper
98	100		
100	67.6	37.1	97.1

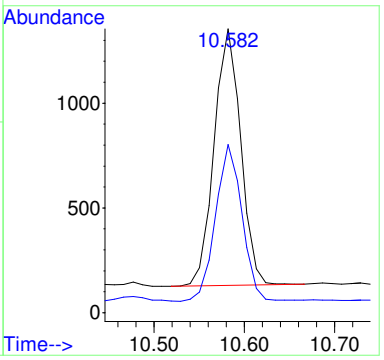


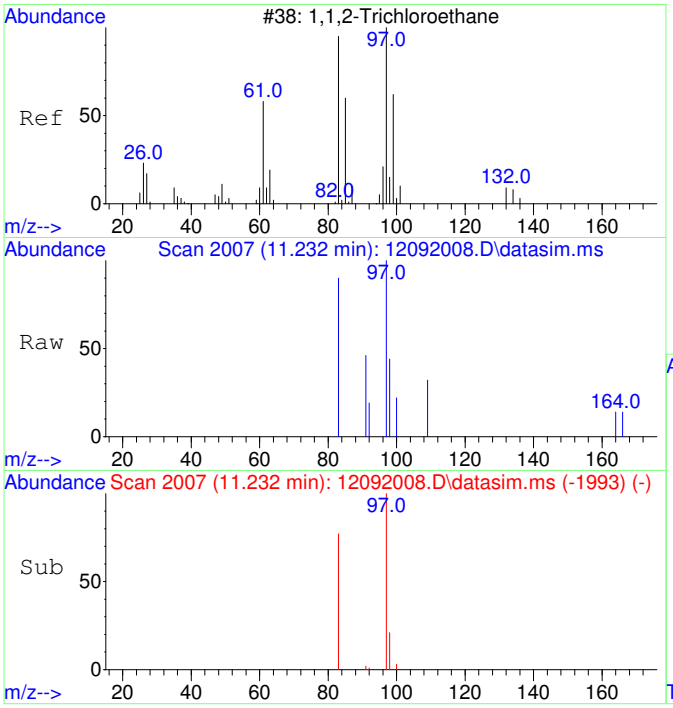


#13
Toluene
Concen: 50.81 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2507

Ion	Ratio	Lower	Upper
91	100		
92	60.4	29.9	89.9

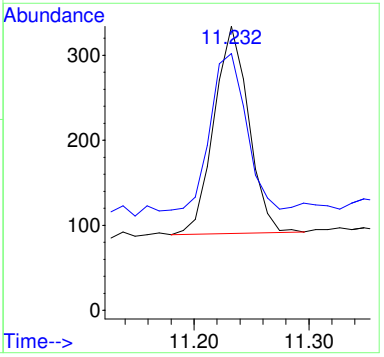


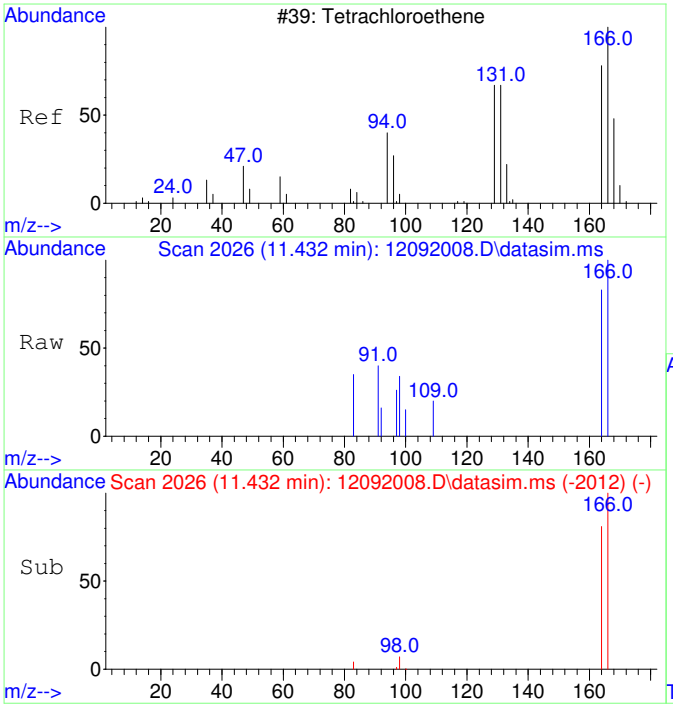


#14
1,1,2-Trichloroethane
Concen: 44.80 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 512

Ion	Ratio	Lower	Upper
97	100		
83	89.3	51.2	111.2

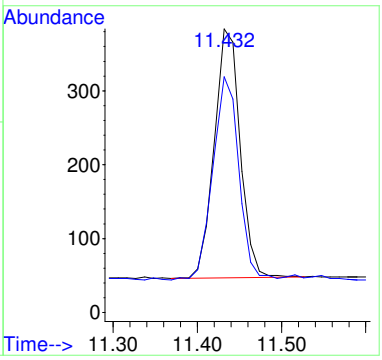


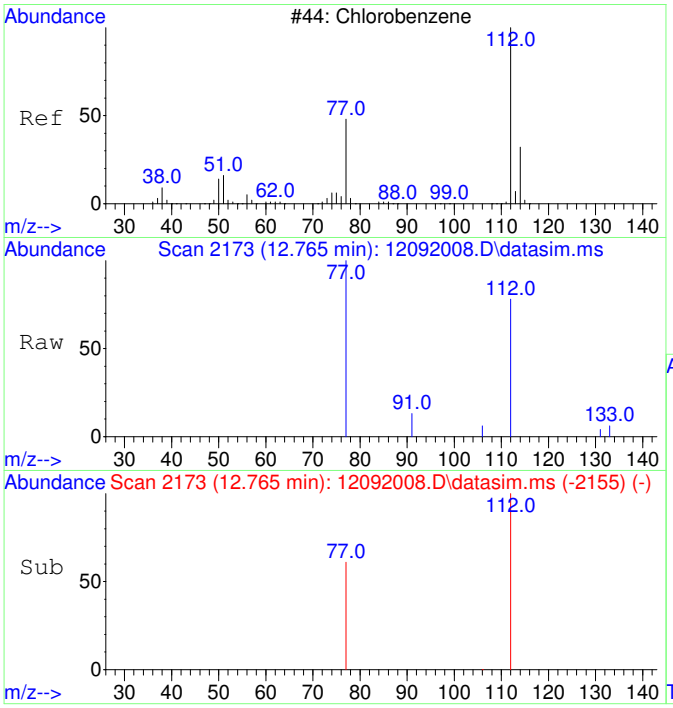


#15
Tetrachloroethene
Concen: 46.98 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 722

Ion	Ratio	Lower	Upper
166	100		
164	80.9	47.8	107.8

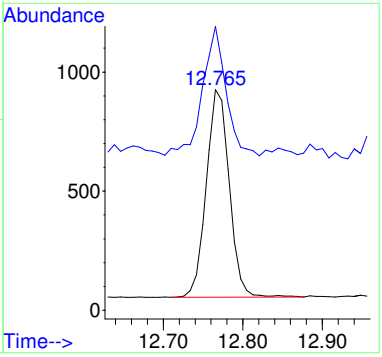


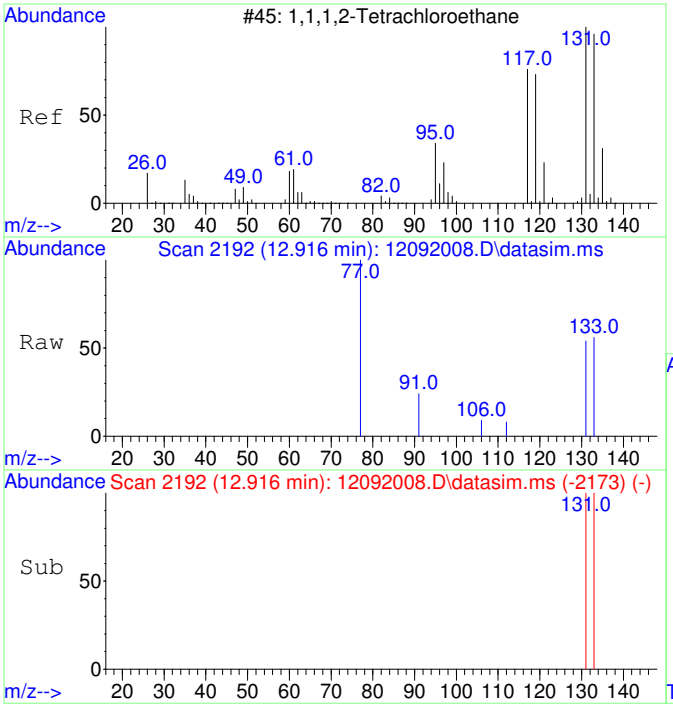


#16
Chlorobenzene
Concen: 45.70 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1747

Ion	Ratio	Lower	Upper
112	100		
77	63.2	23.6	83.6

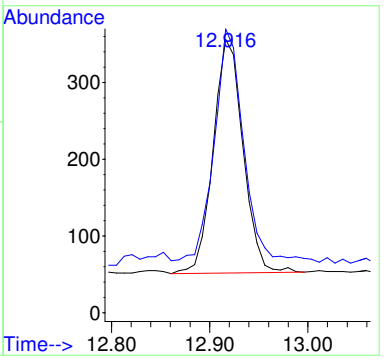


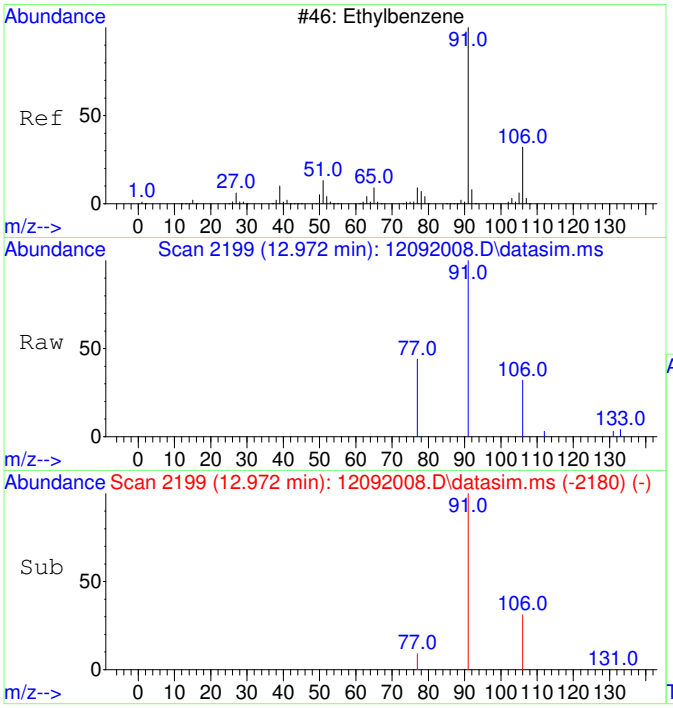


#17
1,1,1,2-Tetrachloroethane
Concen: 47.99 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:131 Resp: 642

Ion	Ratio	Lower	Upper
131	100		
133	96.7	66.3	126.3

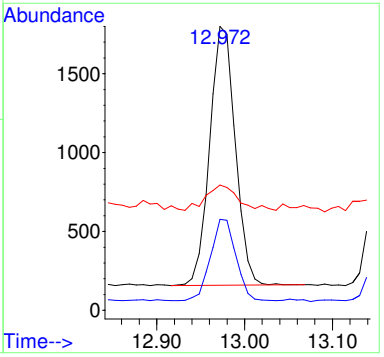


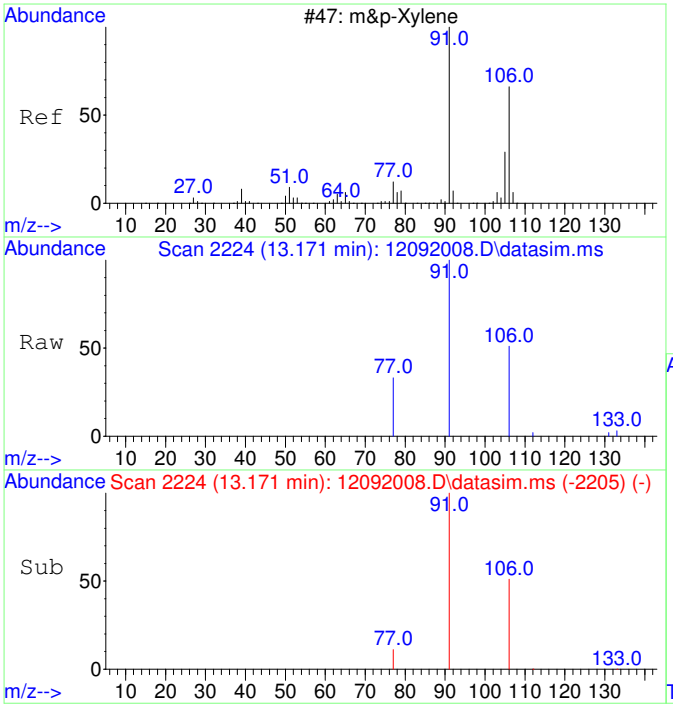


#18
Ethylbenzene
Concen: 52.74 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 3324

Ion	Ratio	Lower	Upper
91	100		
106	31.2	3.0	63.0
77	11.9	0.0	38.2

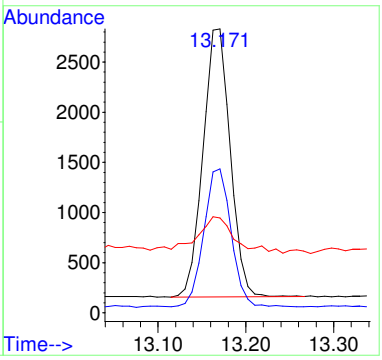


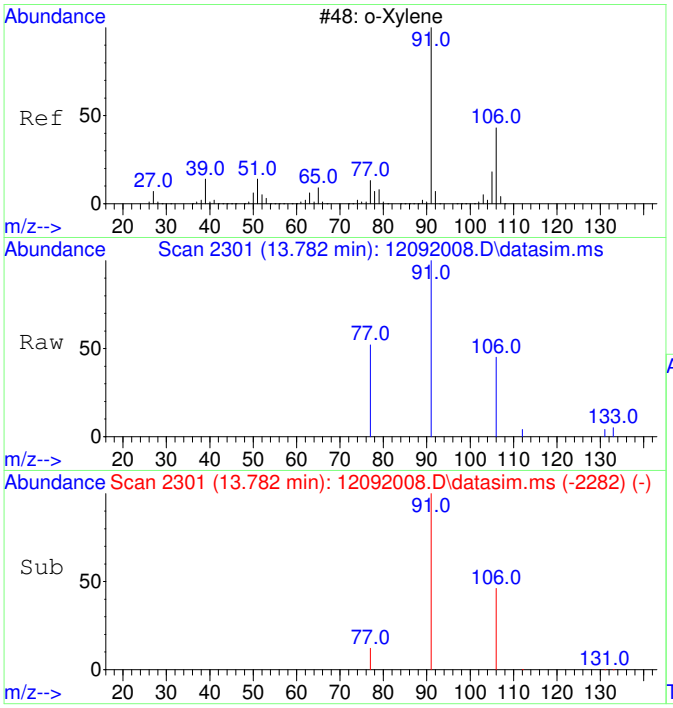


#19
m&p-Xylene
Concen: 118.62 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 5757

Ion	Ratio	Lower	Upper
91	100		
106	51.3	22.2	82.2
77	19.3	0.0	42.4

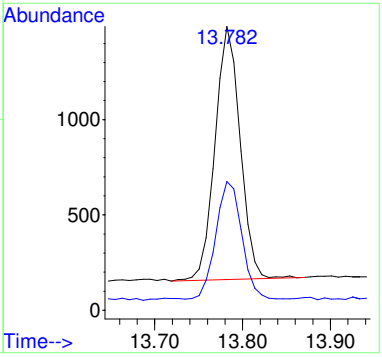


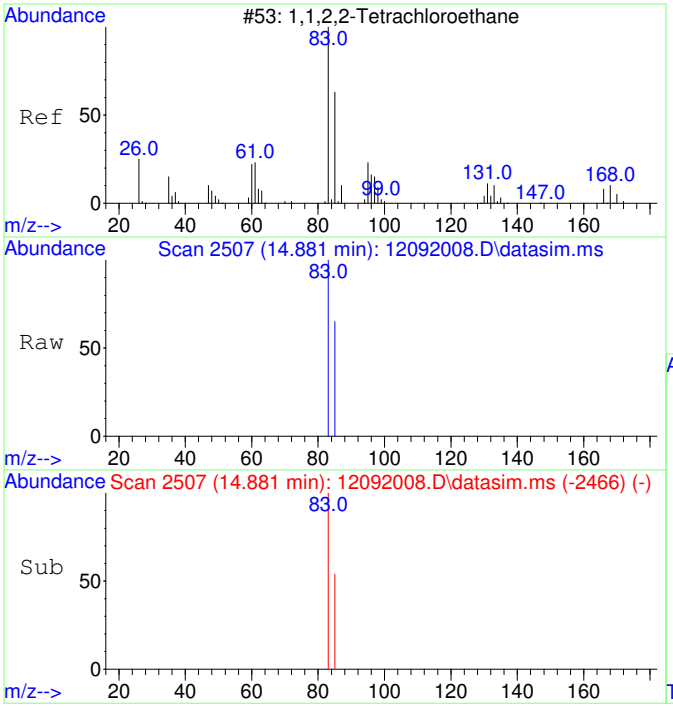


#20
o-Xylene
Concen: 50.47 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2631

Ion	Ratio	Lower	Upper
91	100		
106	47.8	19.2	79.2

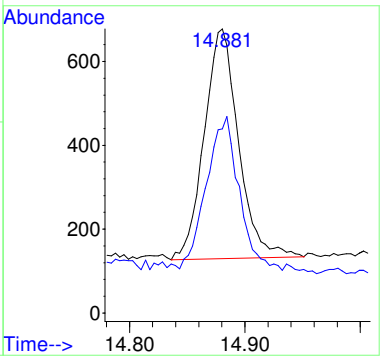


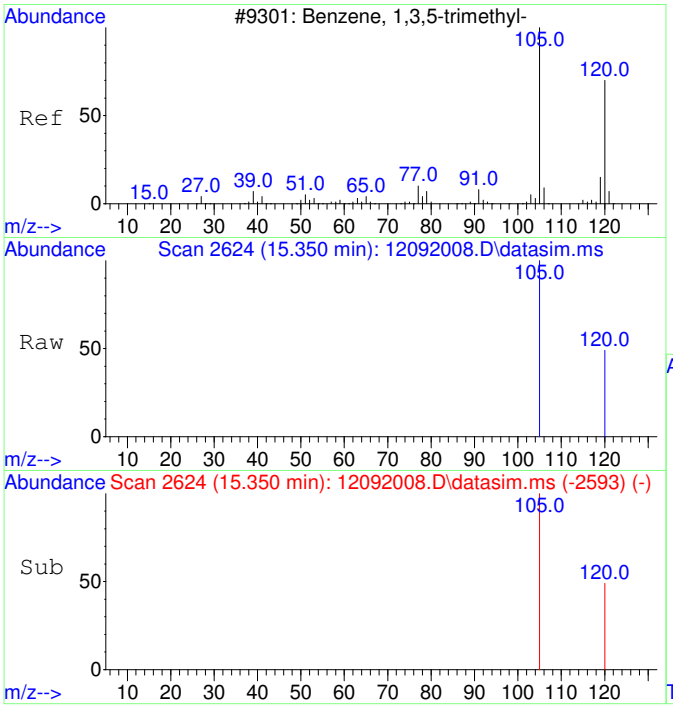


#21
1,1,2,2-Tetrachloroethane
Concen: 46.65 ug/L
RT: 14.881 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 1133

Ion	Ratio	Lower	Upper
83	100		
85	64.6	34.8	94.8

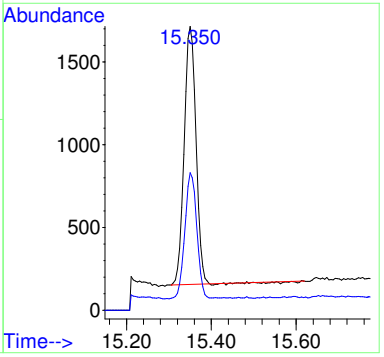


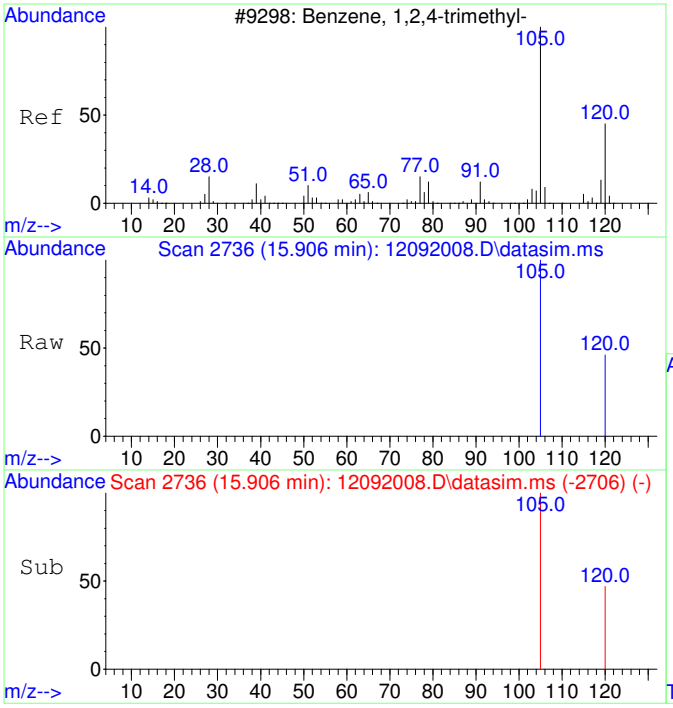


#22
1,3,5-Trimethylbenzene
Concen: 51.86 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 2973

Ion	Ratio	Lower	Upper
105	100		
120	48.9	21.1	81.1

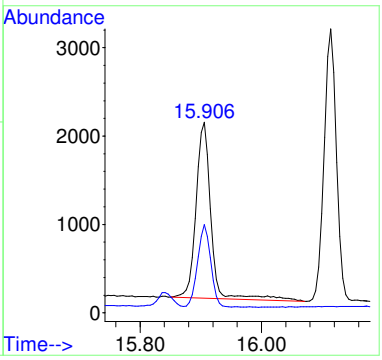


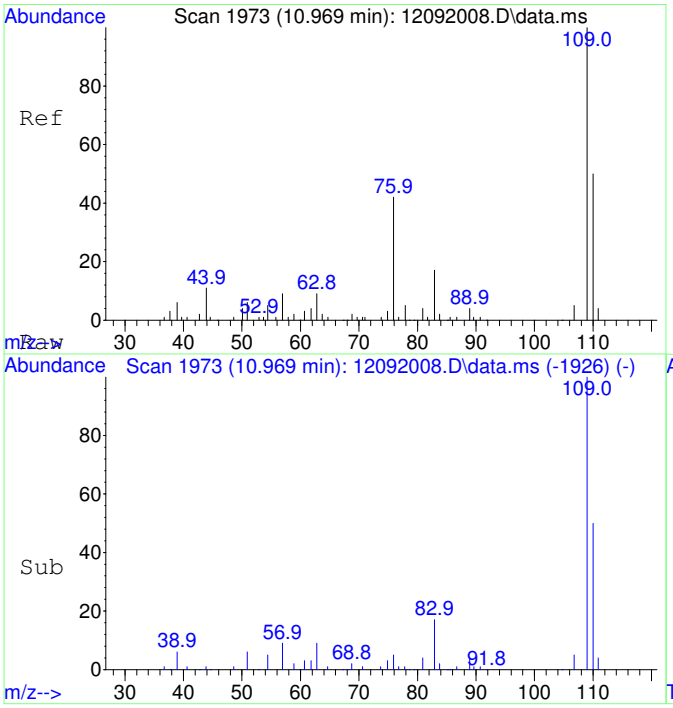


#23
1,2,4-Trimethylbenzene
Concen: 57.89 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 3394

Ion	Ratio	Lower	Upper
105	100		
120	40.5	17.2	77.2

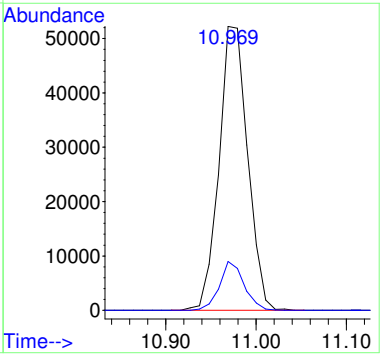


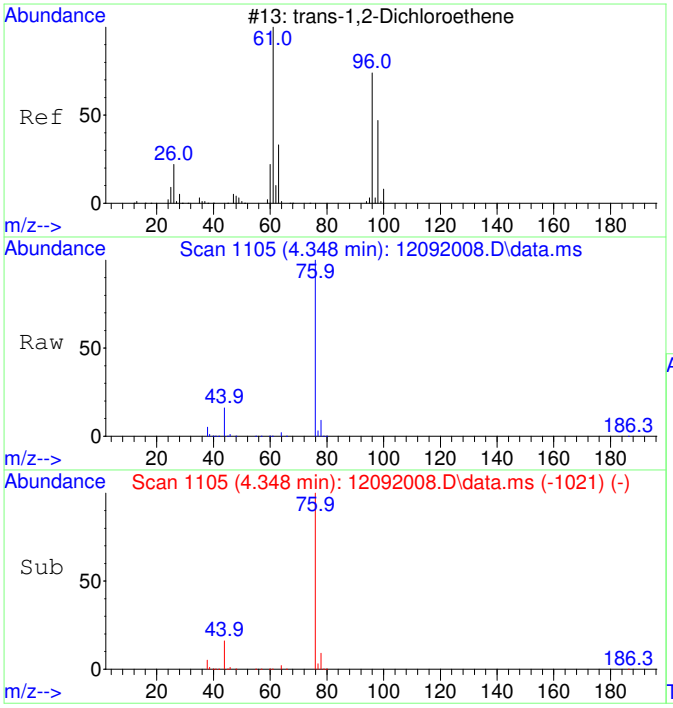


#25
2-Fluorotoluene SCAN
Concen: 4978.14 ug/L
RT: 10.969 min Scan# 1973
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:109 Resp: 115624

Ion	Ratio	Lower	Upper
109	100		
83	14.8	0.0	43.8

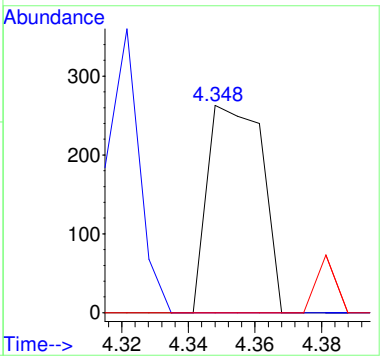


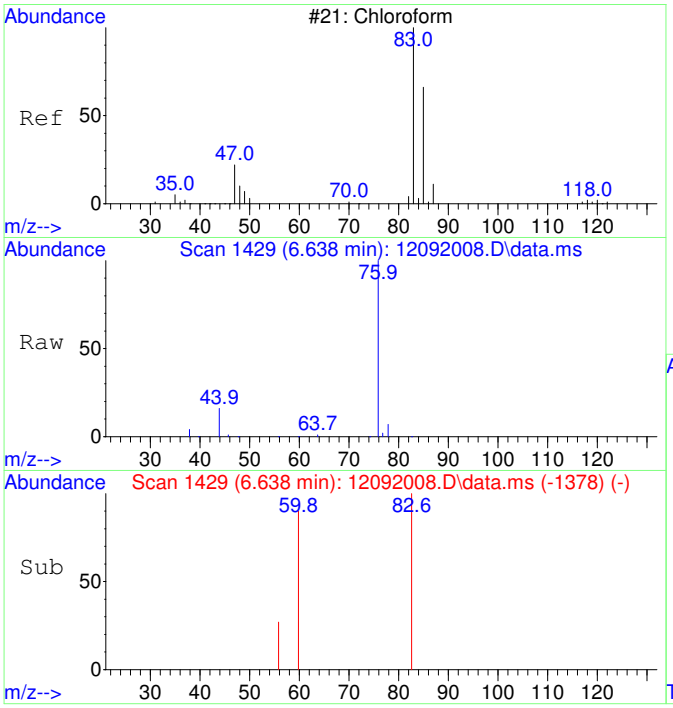


#27
trans-1,2-Dichloroethene SCAN
Concen: 43.29 ug/L
RT: 4.348 min Scan# 1105
Delta R.T. -0.033 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 61 Resp: 299

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

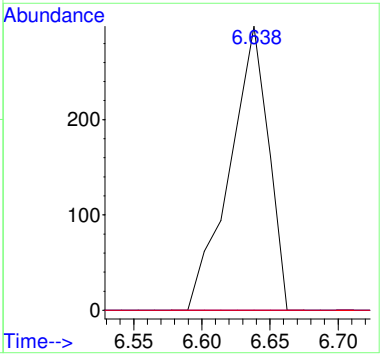


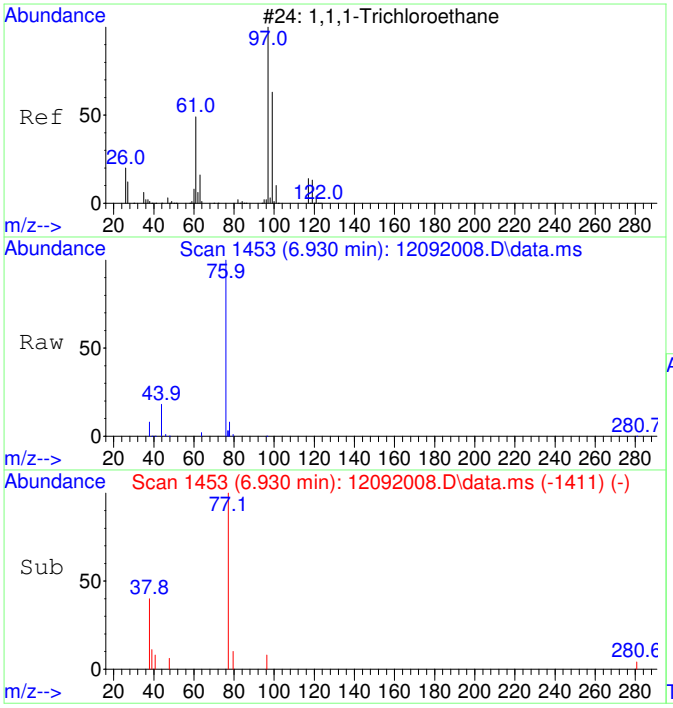


#30
Chloroform SCAN
Concen: 79.20 ug/L
RT: 6.638 min Scan# 1429
Delta R.T. -0.024 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 83 Resp: 592

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

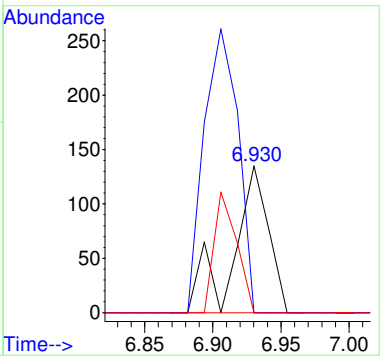


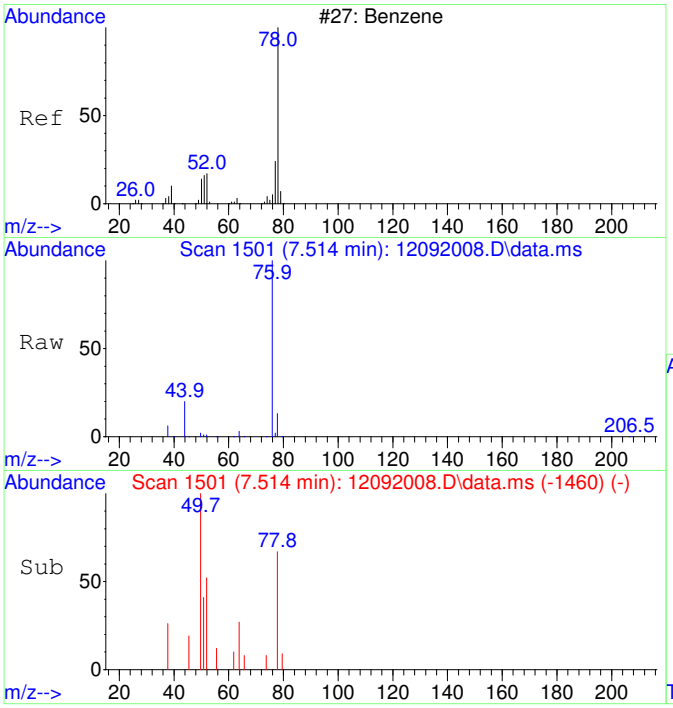


#31
1,1,1-Trichloroethane SCAN
Concen: 31.37 ug/L
RT: 6.930 min Scan# 1453
Delta R.T. 0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 242

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

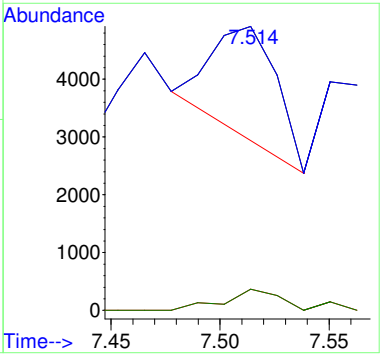


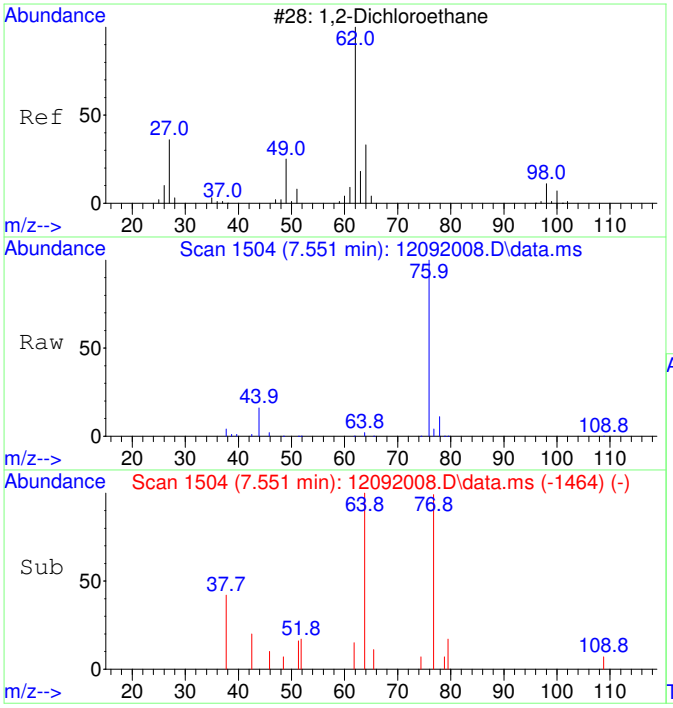


#33
Benzene SCAN
Concen: 149.35 ug/L
RT: 7.514 min Scan# 1501
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 78 Resp: 3485

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	21.1	0.0	47.9
51	21.1	0.0	44.1

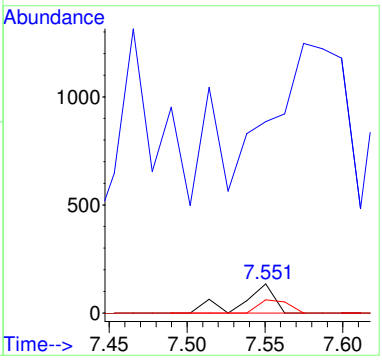


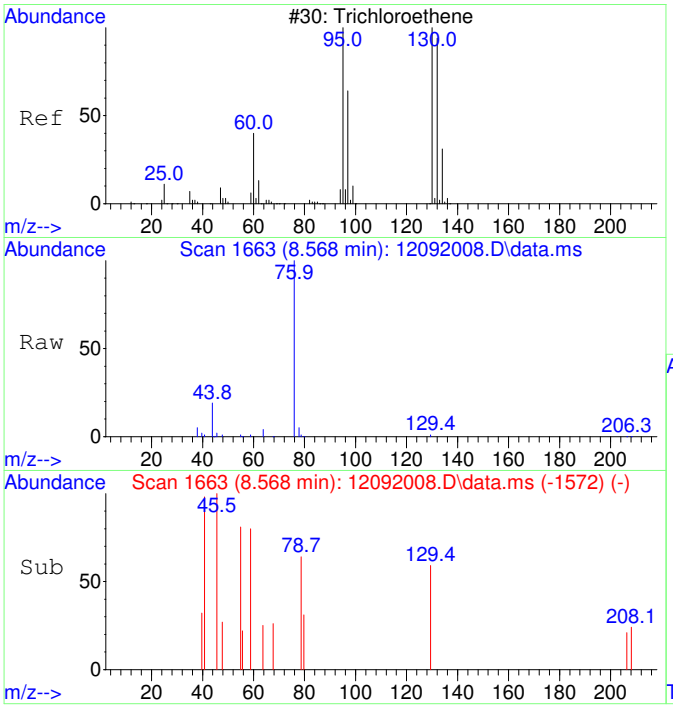


#34
1,2-Dichloroethane SCAN
Concen: 25.35 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 62 Resp: 185

Ion	Ratio	Lower	Upper
62	100		
64	0.0	5.2	65.2#
49	44.3	3.9	63.9

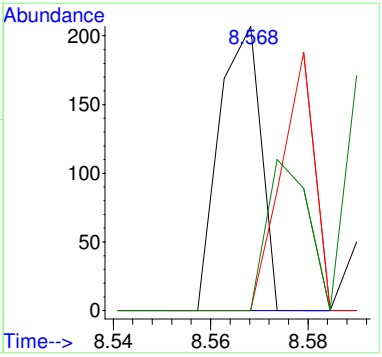


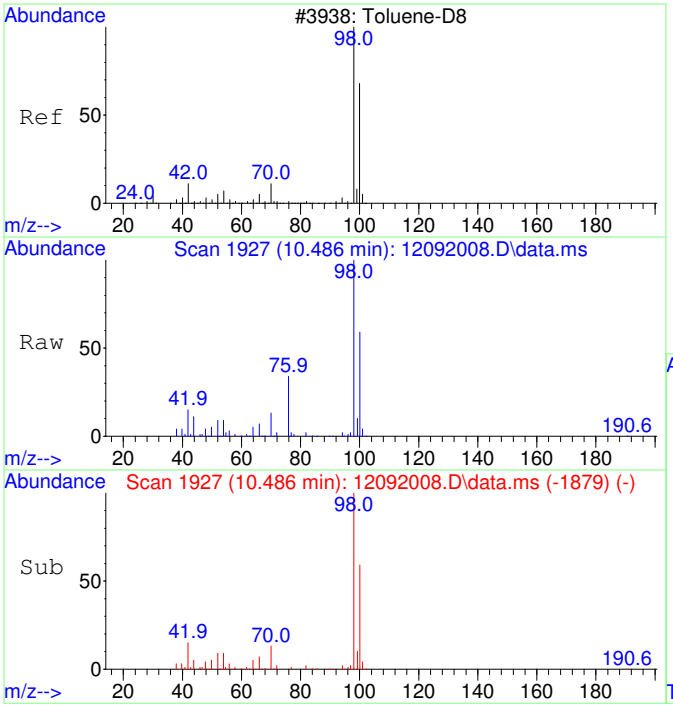


#35
Trichloroethene SCAN
Concen: 24.17 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:130 Resp: 123

Ion	Ratio	Lower	Upper
130	100		
95	0.0	60.5	120.5#
132	73.2	59.6	119.6
97	52.8	28.2	88.2

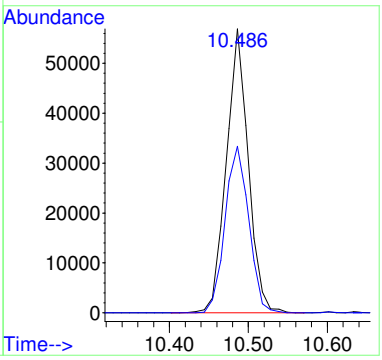


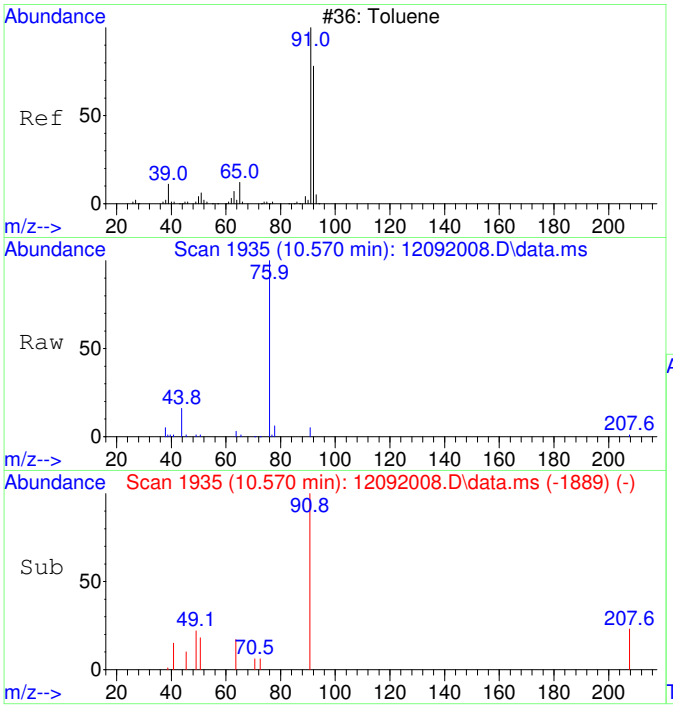


#36
Toluene-d8 SCAN
Concen: 5014.65 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 98 Resp: 109238

Ion	Ratio	Lower	Upper
98	100		
100	63.3	40.0	100.0

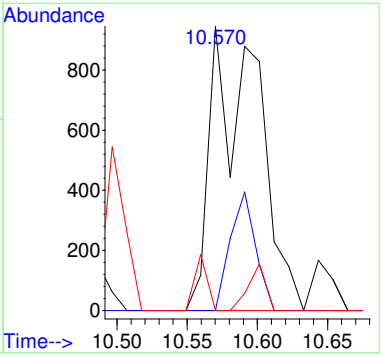


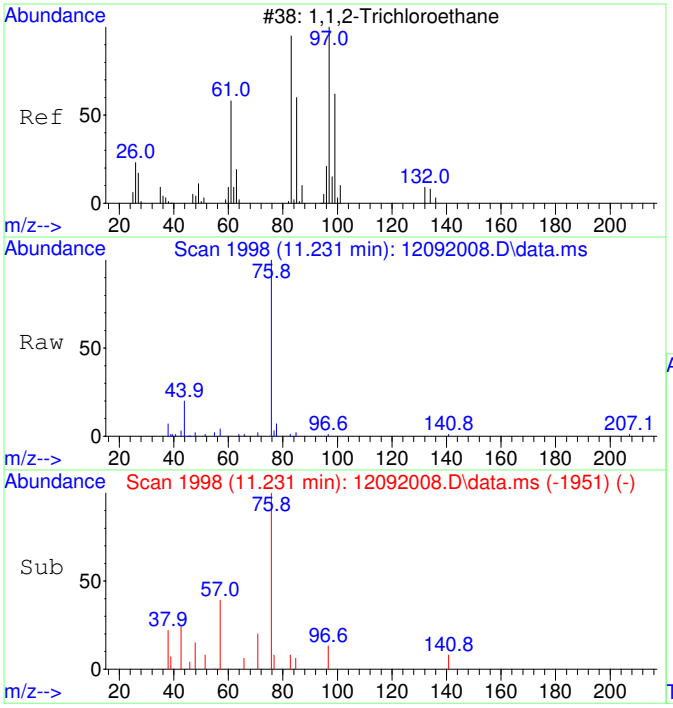


#37
Toluene SCAN
Concen: 84.23 ug/L
RT: 10.570 min Scan# 1935
Delta R.T. -0.021 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 2259

Ion	Ratio	Lower	Upper
91	100		
92	0.0	28.3	88.3#
65	5.2	0.0	41.0

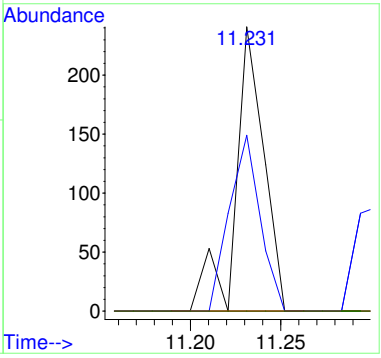


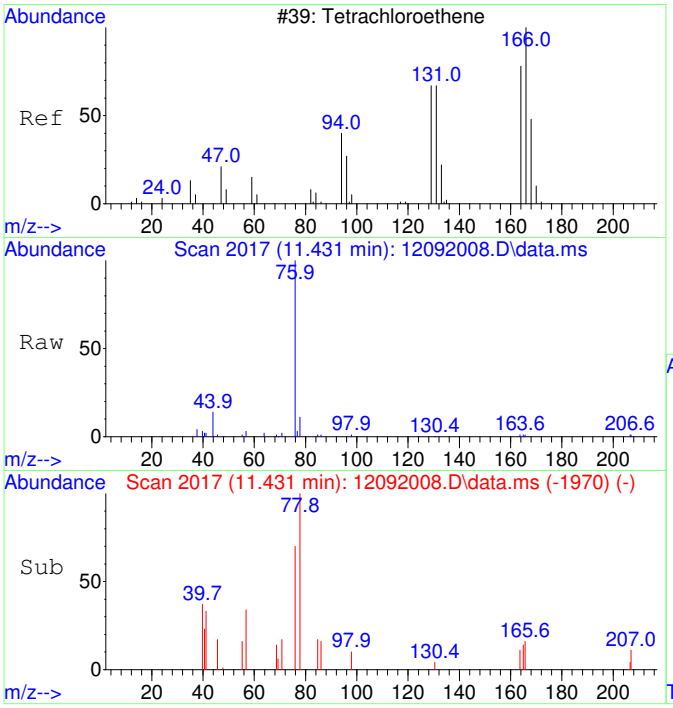


#38
1,1,2-Trichloroethane SCAN
Concen: 39.12 ug/L
RT: 11.231 min Scan# 1998
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 97 Resp: 263

Ion	Ratio	Lower	Upper
97	100		
83	67.7	57.7	117.7
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

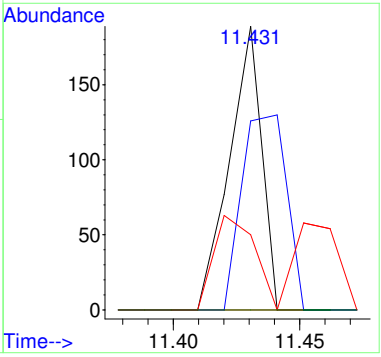


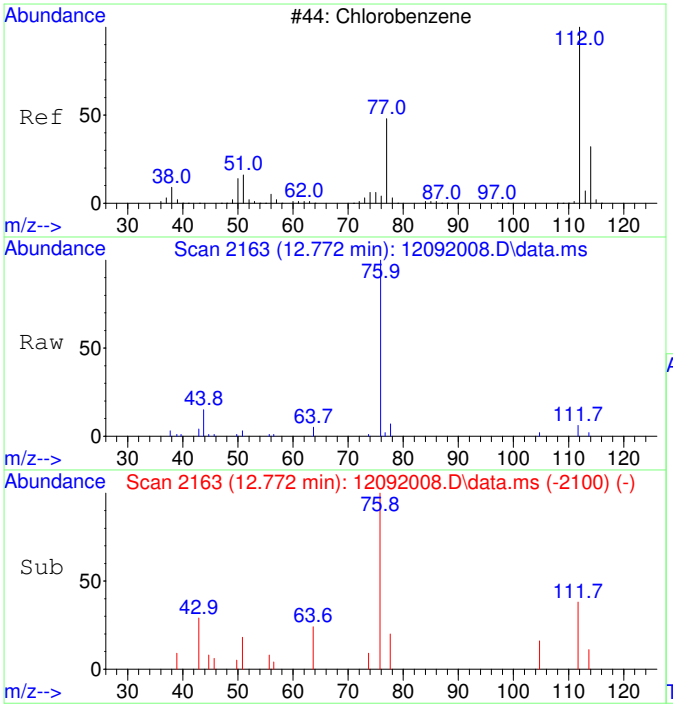


#39
Tetrachloroethene SCAN
Concen: 27.68 ug/L
RT: 11.431 min Scan# 2017
Delta R.T. -0.010 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:166 Resp: 167

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	42.5	38.7	98.7
129	0.0	41.8	101.8#

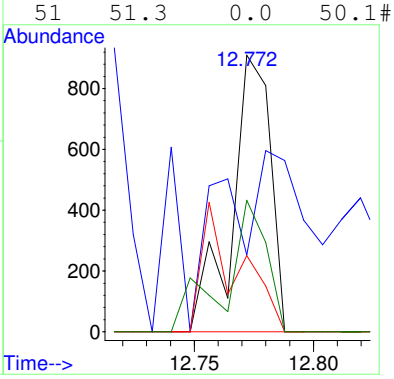


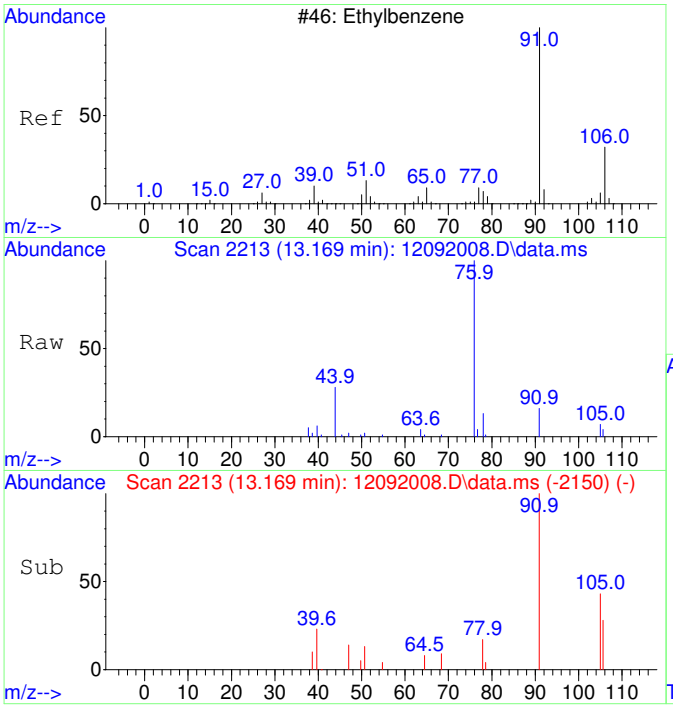


#40
Chlorobenzene SCAN
Concen: 52.64 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:112 Resp: 1014

Ion	Ratio	Lower	Upper
112	100		
77	106.3	28.2	88.2#
114	0.0	2.3	62.3#
51	51.3	0.0	50.1#

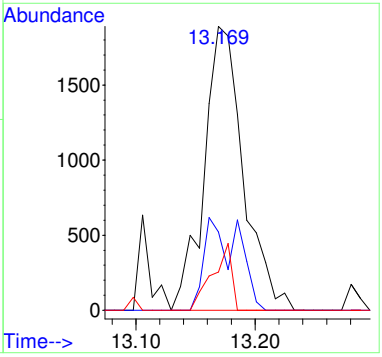


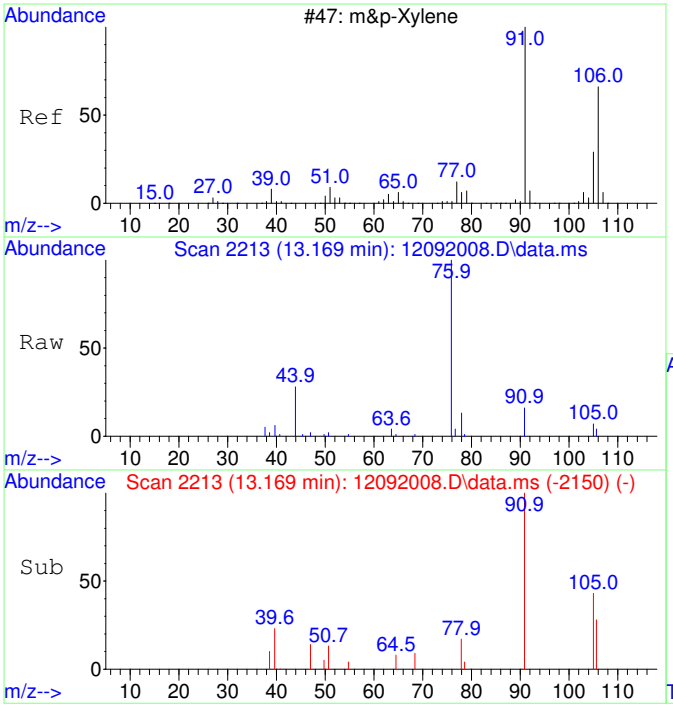


#42
Ethylbenzene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
51	11.5	0.0	40.1

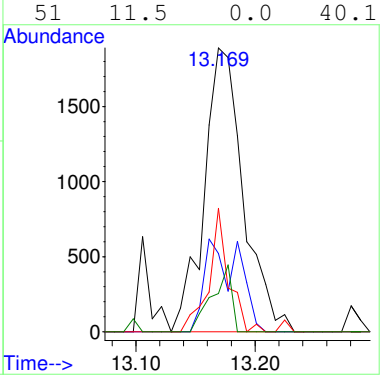


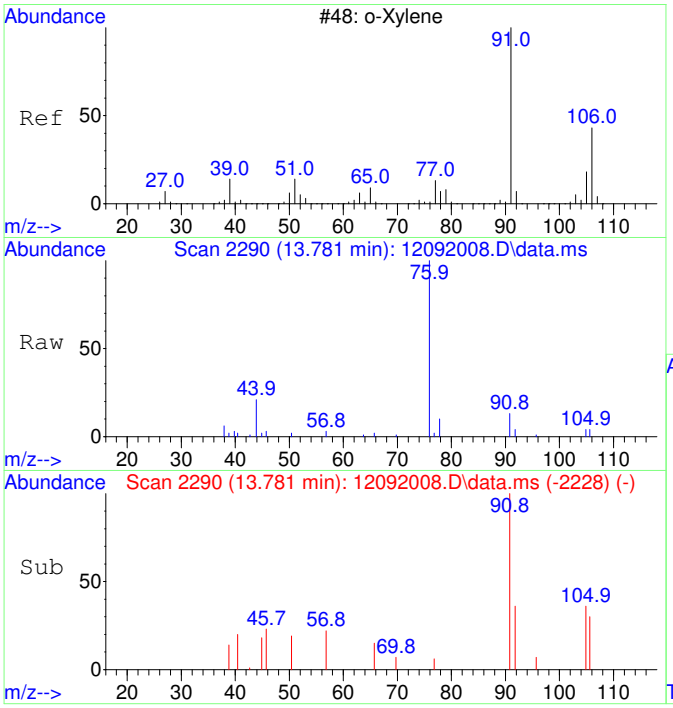


#43
m&p-Xylene SCAN
Concen: 84.81 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 4335

Ion	Ratio	Lower	Upper
91	100		
106	28.0	23.1	83.1
105	21.7	0.0	54.7
51	11.5	0.0	40.1

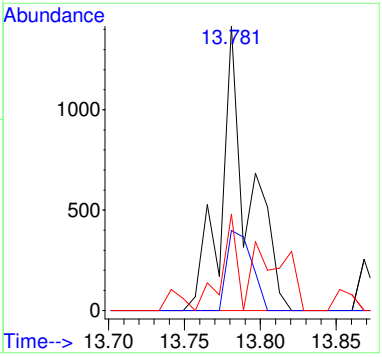


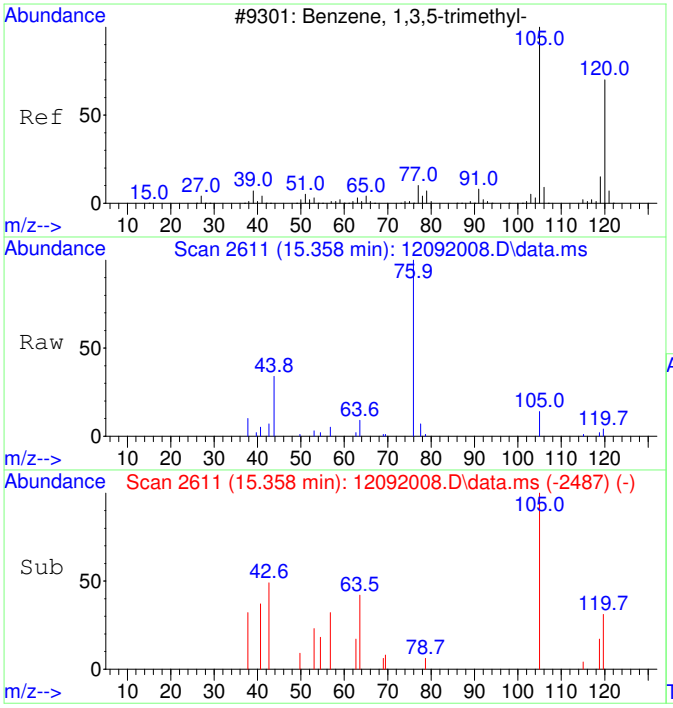


#44
o-Xylene SCAN
Concen: 64.67 ug/L
RT: 13.781 min Scan# 2290
Delta R.T. -0.008 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion: 91 Resp: 1805

Ion	Ratio	Lower	Upper
91	100		
106	25.2	18.0	78.0
105	18.3	0.0	56.6

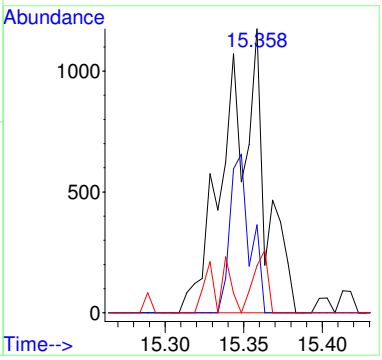


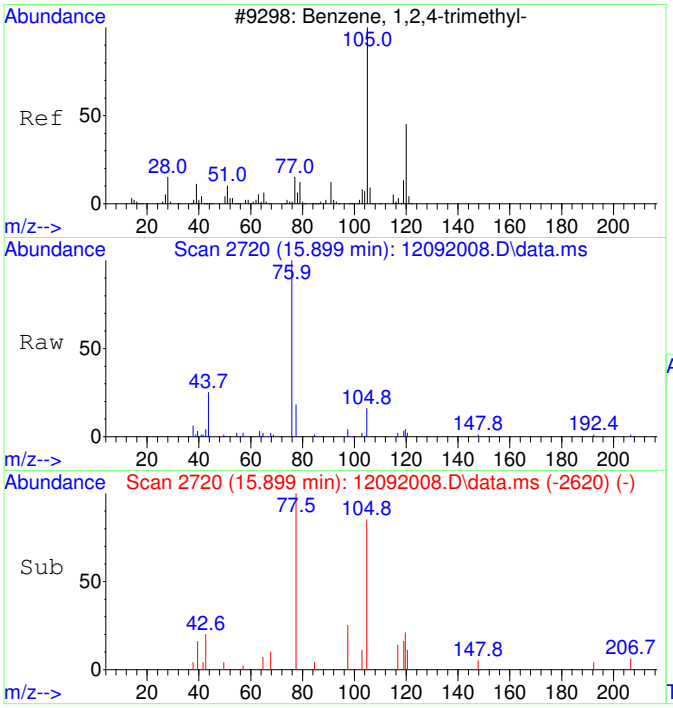


#46
1,3,5-Trimethylbenzene SCAN
Concen: 67.82 ug/L
RT: 15.358 min Scan# 2611
Delta R.T. 0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1997

Ion	Ratio	Lower	Upper
105	100		
120	29.1	18.3	78.3
119	8.2	0.0	43.1

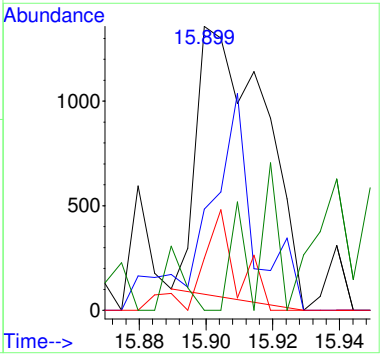




#47
1,2,4-Trimethylbenzene SCAN
Concen: 60.70 ug/L
RT: 15.899 min Scan# 2720
Delta R.T. -0.005 min
Lab File: 12092008.D
Acq: 9 Dec 2020 11:39

Tgt Ion:105 Resp: 1826

Ion	Ratio	Lower	Upper
105	100		
120	55.9	16.9	76.9
119	19.7	0.0	41.9
77	8.4	0.0	42.3



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20343A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2012007
Sequence: S20L024

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20L024-CRL1	1,1-Dichloroethene	50.0	44.8	90	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	45.9	92	ug/L	60 - 140
	1,1-Dichloroethane	50.0	46.0	92	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	47.0	94	ug/L	60 - 140
	Chloroform	50.0	49.4	99	ug/L	60 - 140
	Trichloroethene	50.0	49.1	98	ug/L	60 - 140
	Tetrachloroethene	50.0	53.1	106	ug/L	60 - 140
	Toluene-d8	50.0	50.4	101	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20L024-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 12/9/20 10:04
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	44.81	90%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	45.88	92%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	46.01	92%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	46.98	94%	60	140	pass
6)	Chloroform	6.652	50.0	49.36	99%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	50.82	102%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	49.70	99%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	50.42	101%	60	140	pass
11)	Trichloroethene	8.575	50.0	49.12	98%	60	140	pass
12)	Toluene-d8	10.487	50.0	50.45	101%	60	140	pass
13)	Toluene	10.582	50.0	53.11	106%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	48.90	98%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	53.07	106%	60	140	pass
16)	Chlorobenzene	12.773	50.0	51.42	103%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	50.24	100%	60	140	pass
18)	Ethylbenzene	12.972	50.0	53.26	107%	60	140	pass
19)	m&p-Xylene	13.170	100.0	108.81	109%	60	140	pass
20)	o-Xylene	13.782	50.0	53.15	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	51.97	104%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	57.08	114%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	55.38	111%	60	140	pass
24)	Naphthalene	17.904	50.0	58.30	117%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

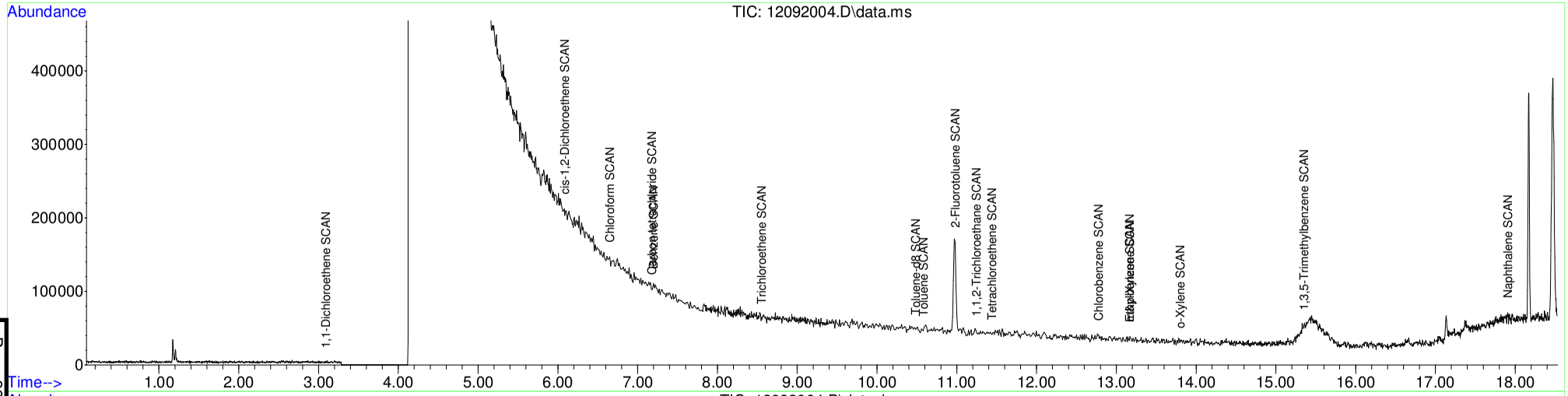
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 2-Fluorotoluene	10.970	109	189663	5000.00 ug/L	0.00
System Monitoring Compounds					
12) Toluene-d8	10.477	98	1853	50.45 ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery =	1.01%#	
Target Compounds					Qvalue
2] 1,1-Dichloroethene	3.090	61	672	89.36 ug/L	73
3] trans-1,2-Dichloroethene	4.363	61	435	45.88 ug/L	84
4] 1,1-Dichloroethane	5.086	63	521	46.01 ug/L	58
5] cis-1,2-Dichloroethene	6.088	61	551	46.98 ug/L	96
6] Chloroform	6.652	83	556	49.36 ug/L	98
7] 1,1,1-Trichloroethane	6.907	97	615	50.82 ug/L	94
8] Carbon tetrachloride	7.187	117	575	49.70 ug/L	87
9] Benzene	7.503	78	1676	52.51 ug/L	48
10] 1,2-Dichloroethane	7.552	62	549	50.42 ug/L #	1
11] Trichloroethene	8.569	130	495	49.12 ug/L	94
13] Toluene	10.582	91	2429	53.11 ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	518	48.90 ug/L	92
15] Tetrachloroethene	11.432	166	756	53.07 ug/L	99
16] Chlorobenzene	12.765	112	1822	51.42 ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	623	50.24 ug/L	95
18] Ethylbenzene	12.972	91	3111	53.26 ug/L	97
19] m&p-Xylene	13.170	91	4895	108.81 ug/L	96
20] o-Xylene	13.782	91	2568	53.15 ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	1170	51.97 ug/L	97
22] 1,3,5-Trimethylbenzene	15.350	105	3033	57.08 ug/L	94
23] 1,2,4-Trimethylbenzene	15.906	105	3010	55.38 ug/L	97
24] Naphthalene	17.906	128	4337	49.26 ug/L	98
25) 2-Fluorotoluene SCAN	10.979	109	101604	4719.47 ug/L	94
26) 1,1-Dichloroethene SCAN	3.085	61	137	27.26 ug/L #	25
29) cis-1,2-Dichloroethene...	6.080	61	195	26.25 ug/L #	31
30) Chloroform SCAN	6.650	83	787	113.59 ug/L #	27
32) Carbon tetrachloride SCAN	7.173	117	403	65.96 ug/L #	61
33) Benzene SCAN	7.198	78	3227	149.19 ug/L	97
35) Trichloroethene SCAN	8.557	130	172	36.47 ug/L #	60
36) Toluene-d8 SCAN	10.486	98	1672	82.81 ug/L	71
37) Toluene SCAN	10.580	91	1723	69.31 ug/L #	63
38) 1,1,2-Trichloroethane ...	11.242	97	326	52.32 ug/L #	33
39) Tetrachloroethene SCAN	11.441	166	676	120.87 ug/L #	27
40) Chlorobenzene SCAN	12.772	112	873	48.89 ug/L #	1
42) Ethylbenzene SCAN	13.169	91	3117	65.79 ug/L	84
43) m&p-Xylene SCAN	13.169	91	3117	65.79 ug/L	83
44) o-Xylene SCAN	13.797	91	1780	68.81 ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	1915	70.17 ug/L	76
48) Naphthalene SCAN	17.905	128	3684	88.02 ug/L	94

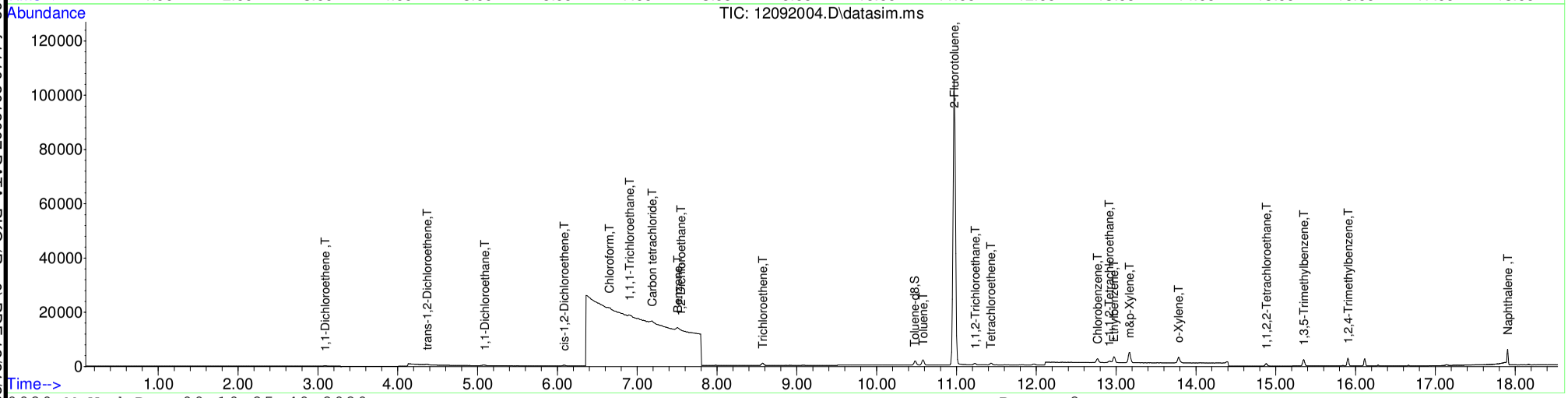
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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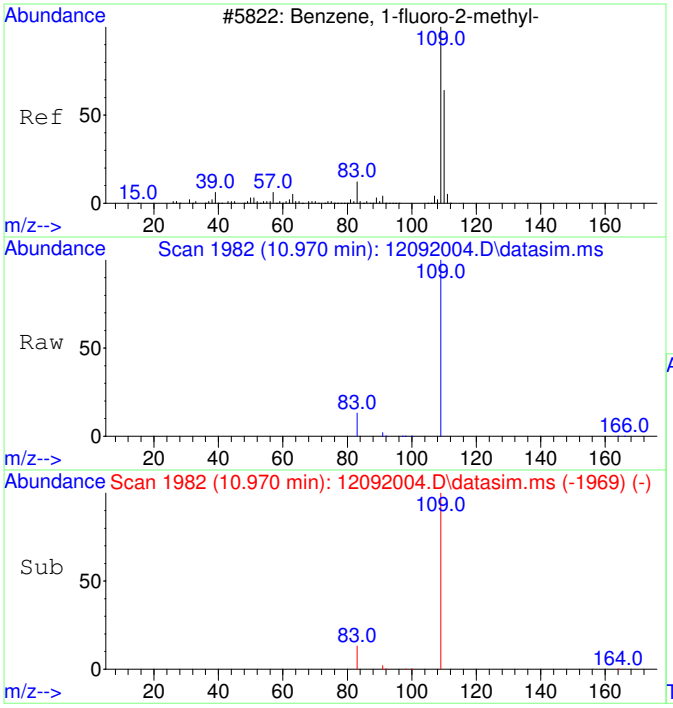
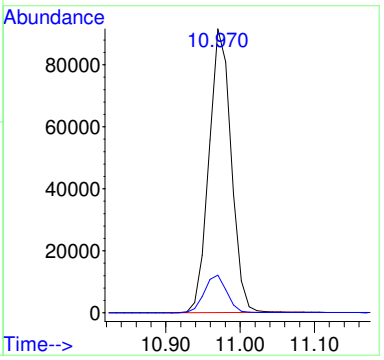
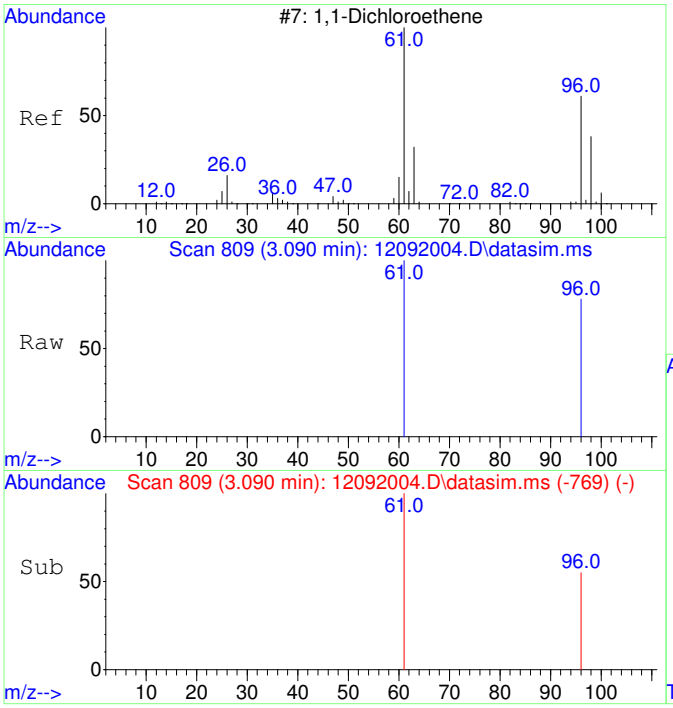


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:109 Resp: 189663

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

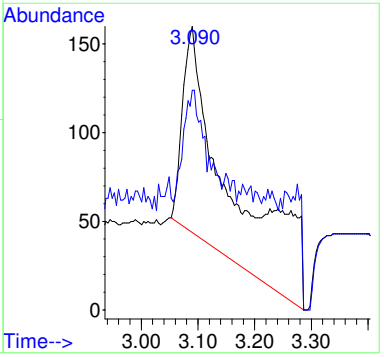




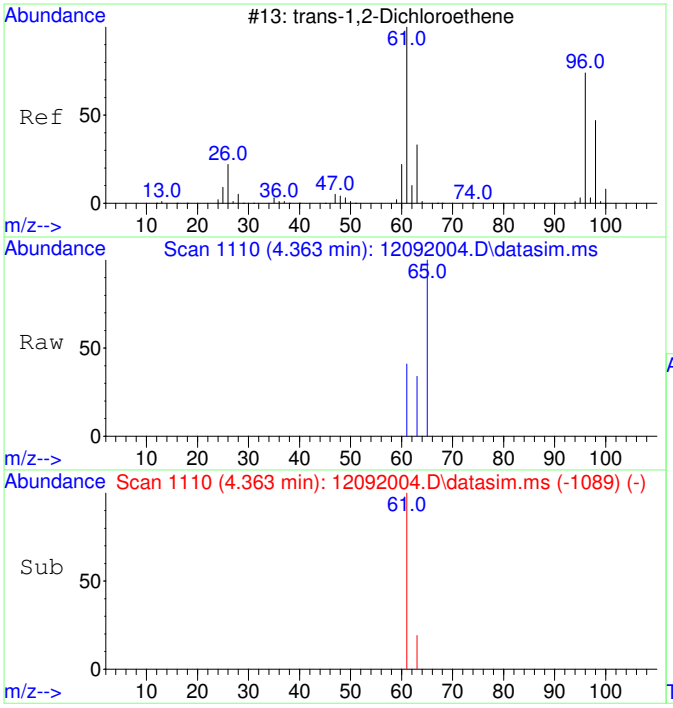
#2
1,1-Dichloroethene
Concen: 89.36 ug/L
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 672

Ion	Ratio	Lower	Upper
61	100		
96	45.5	37.2	97.2



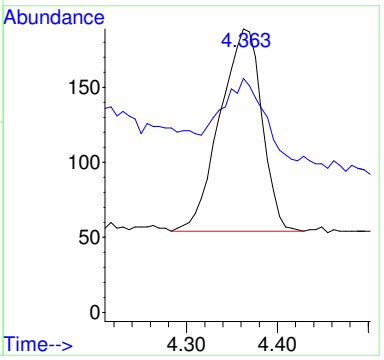
Before MI:
IMPROPER
BASELINE

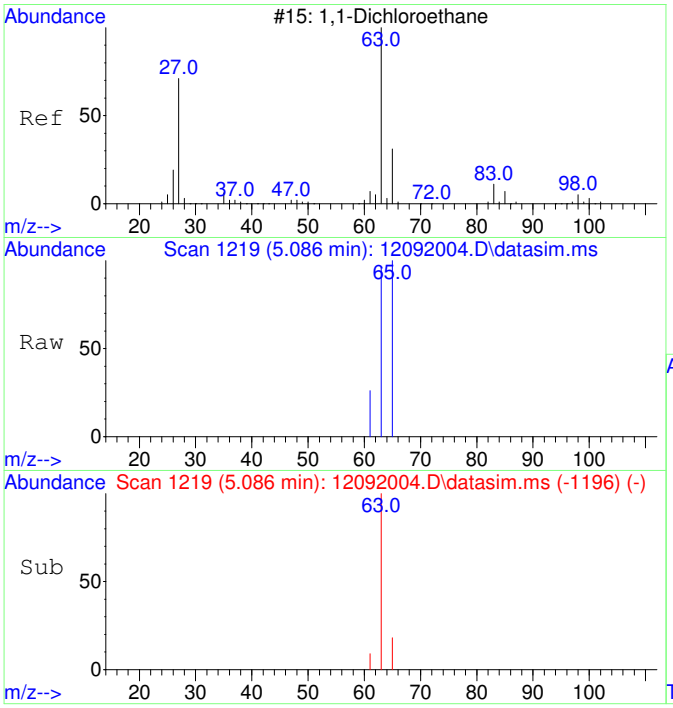


#3
trans-1,2-Dichloroethene
Concen: 45.88 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
63	41.4	2.4	62.4

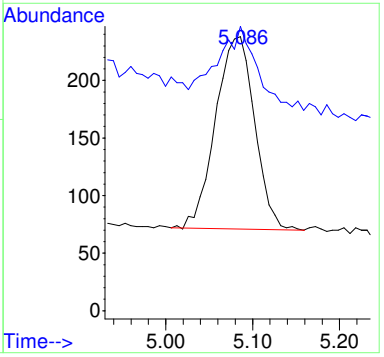


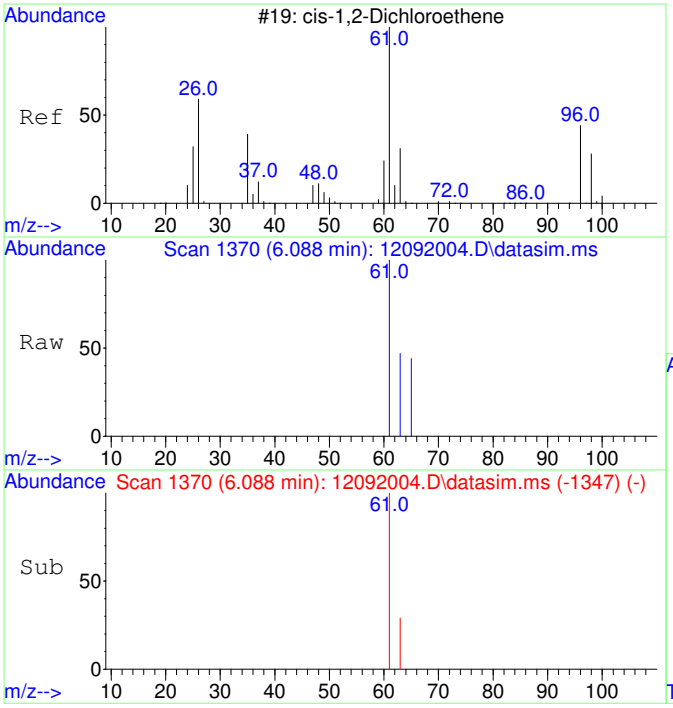


#4
1,1-Dichloroethane
Concen: 46.01 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 63 Resp: 521

Ion	Ratio	Lower	Upper
63	100		
65	54.9	1.8	61.8

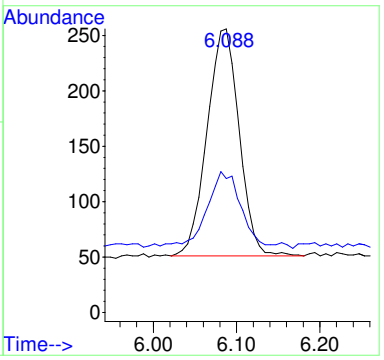


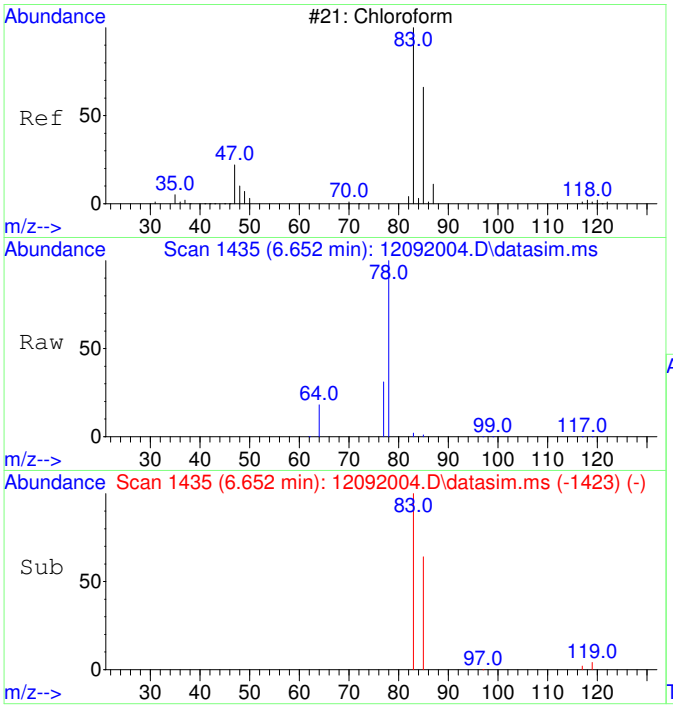


#5
cis-1,2-Dichloroethene
Concen: 46.98 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 551

Ion	Ratio	Lower	Upper
61	100		
63	34.8	2.5	62.5

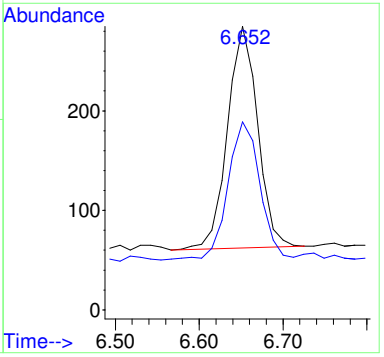


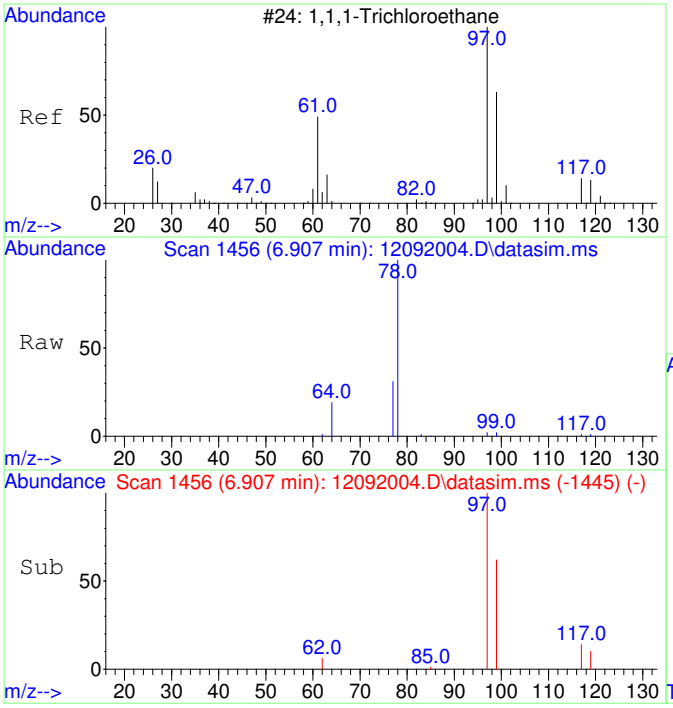


#6
Chloroform
Concen: 49.36 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 556

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

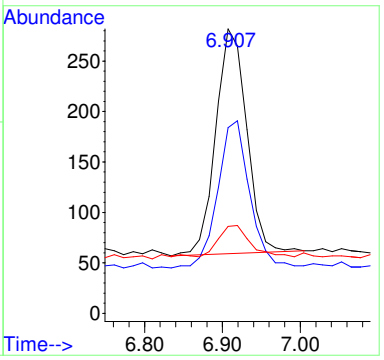


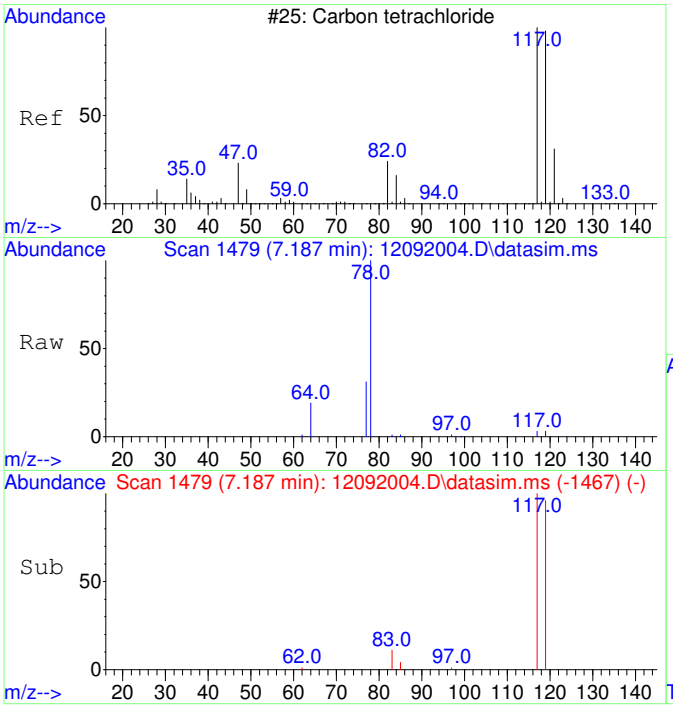


#7
1,1,1-Trichloroethane
Concen: 50.82 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 615

Ion	Ratio	Lower	Upper
97	100		
99	67.8	34.6	94.6
117	18.2	0.0	43.2

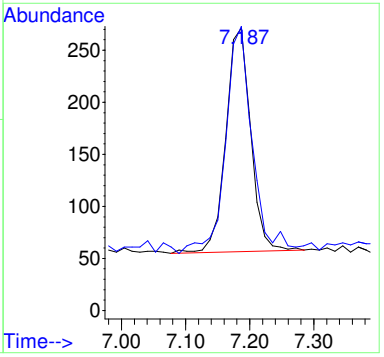


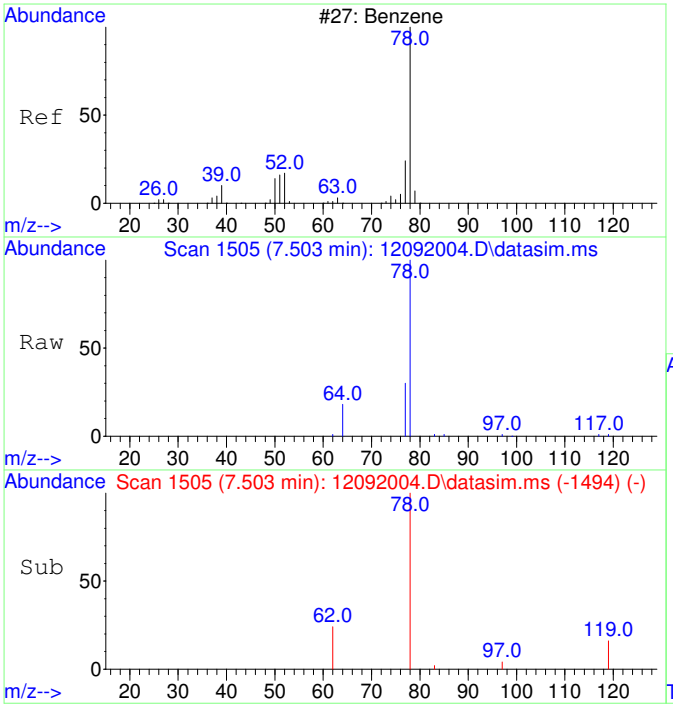


#8
Carbon tetrachloride
Concen: 49.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 575

Ion	Ratio	Lower	Upper
117	100		
119	109.4	66.4	126.4

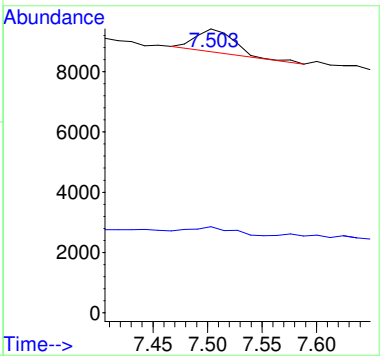


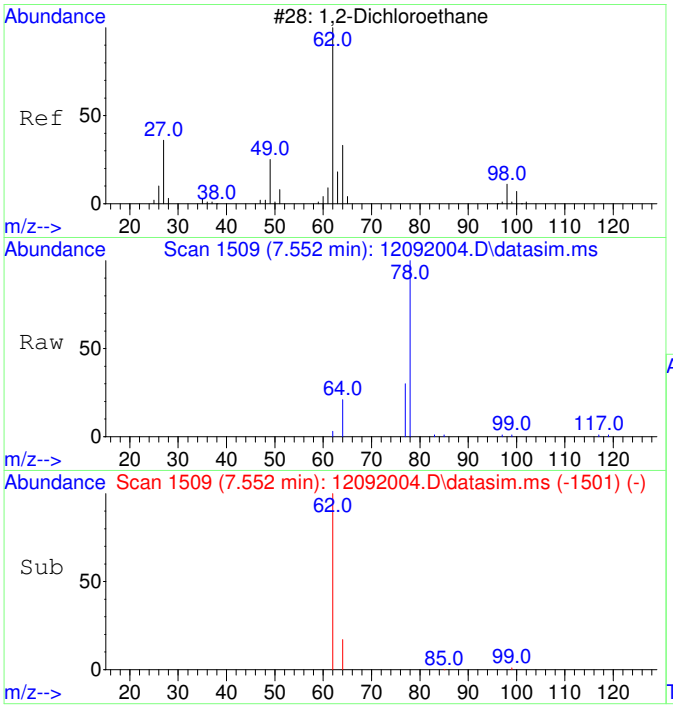


#9
Benzene
Concen: 52.51 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 1676

Ion	Ratio	Lower	Upper
78	100		
77	48.4	0.0	53.2

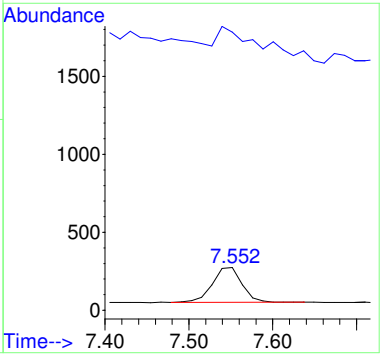


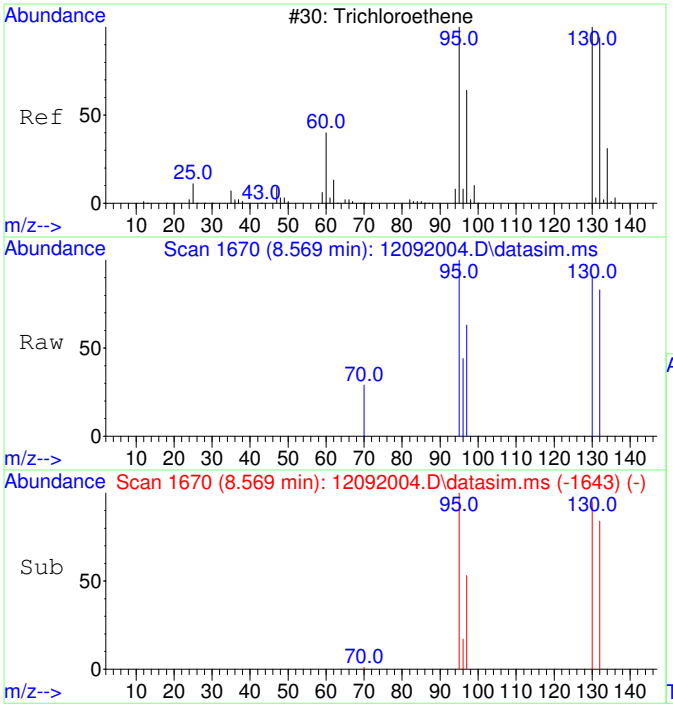


#10
1,2-Dichloroethane
Concen: 50.42 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 62 Resp: 549

Ion	Ratio	Lower	Upper
62	100		
64	148.8	2.3	62.3#

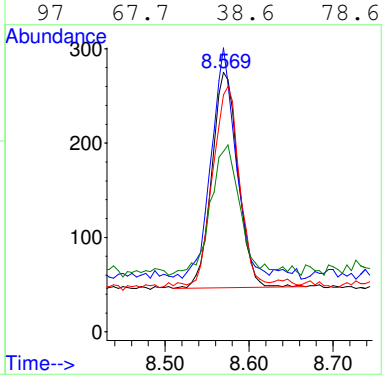


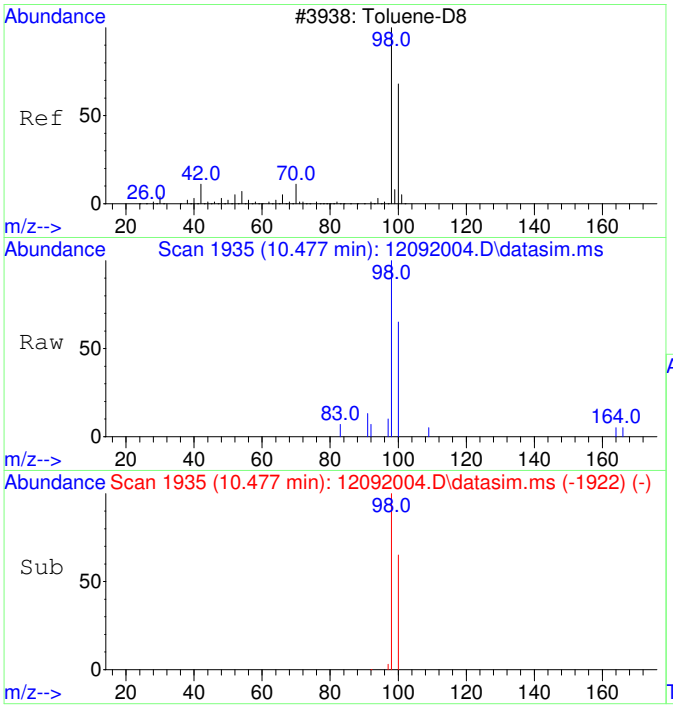


#11
Trichloroethene
Concen: 49.12 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 495

Ion	Ratio	Lower	Upper
130	100		
95	97.8	60.7	120.7
132	98.0	76.0	116.0
97	67.7	38.6	78.6

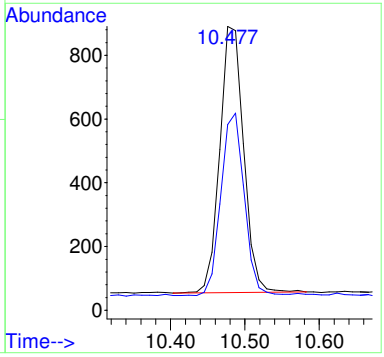


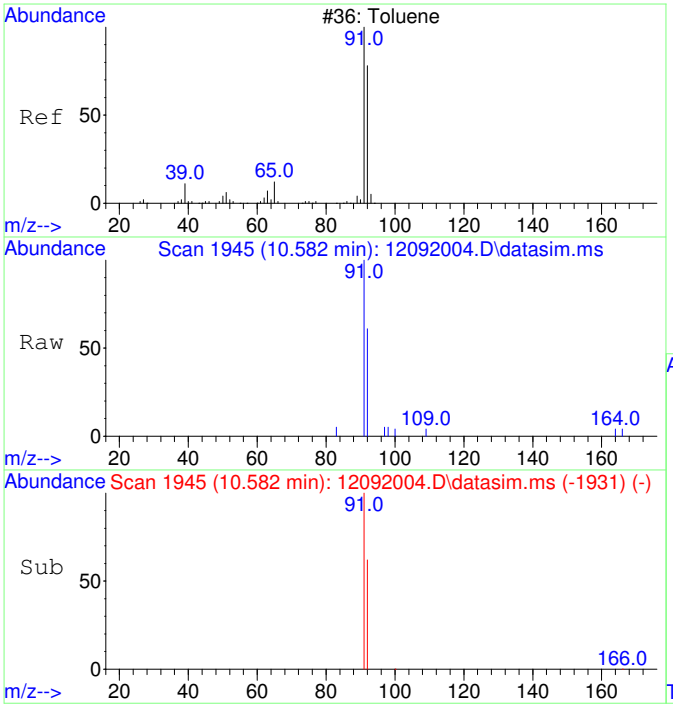


#12
Toluene-d8
Concen: 50.45 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1853

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

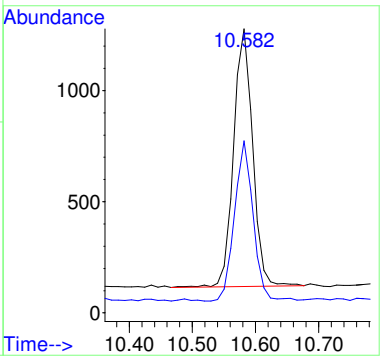


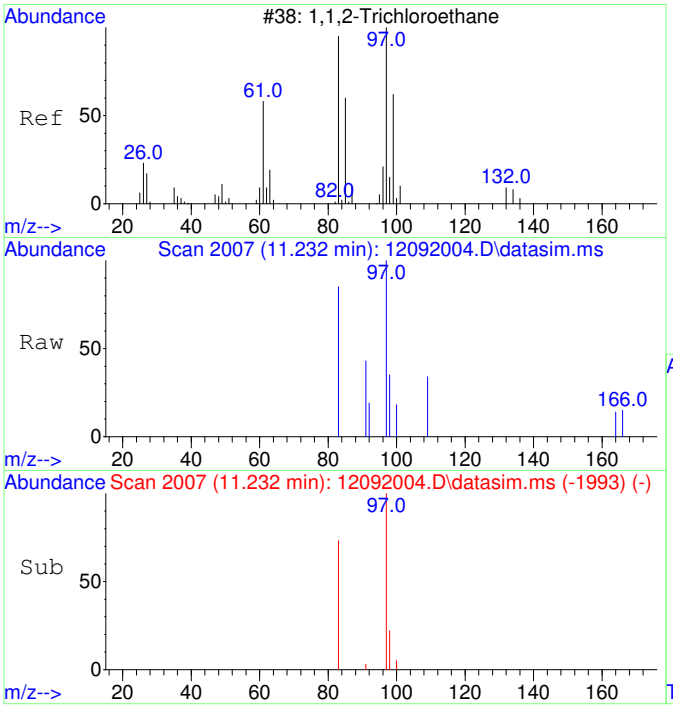


#13
Toluene
Concen: 53.11 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2429

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

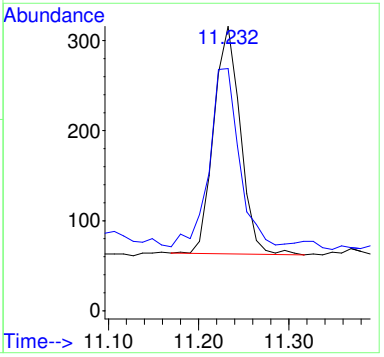


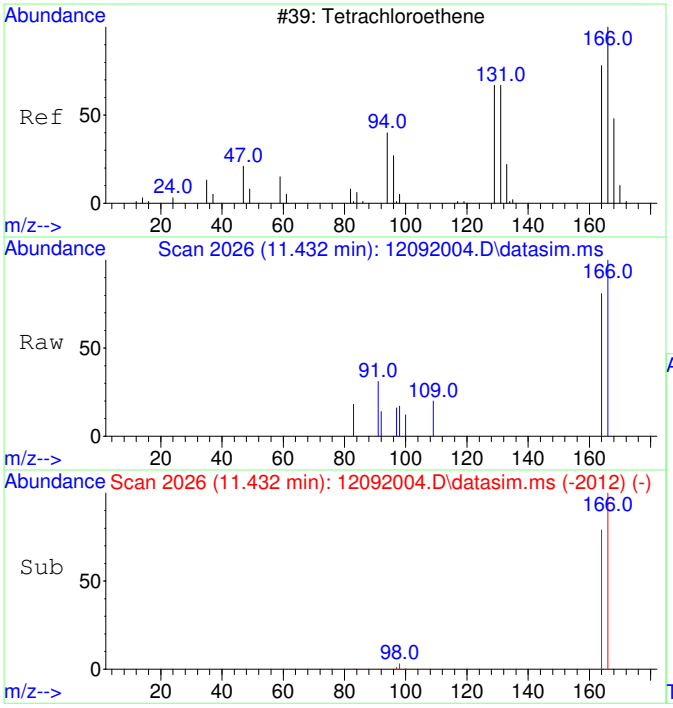


#14
1,1,2-Trichloroethane
Concen: 48.90 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 518

Ion	Ratio	Lower	Upper
97	100		
83	88.2	51.2	111.2

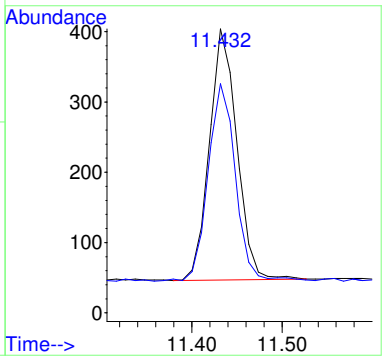


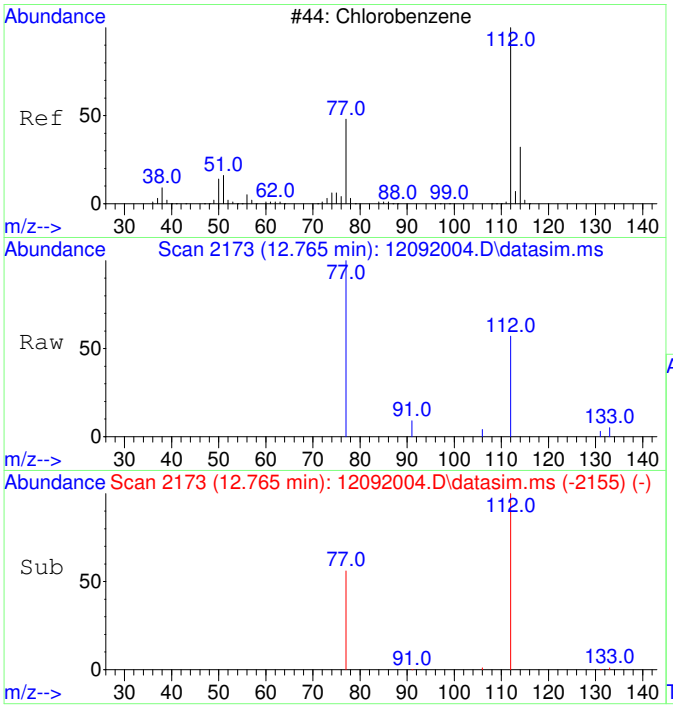


#15
Tetrachloroethene
Concen: 53.07 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 756

Ion	Ratio	Lower	Upper
166	100		
164	77.2	47.8	107.8

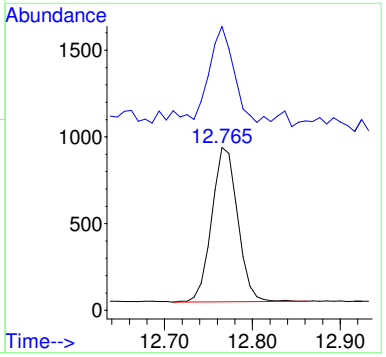


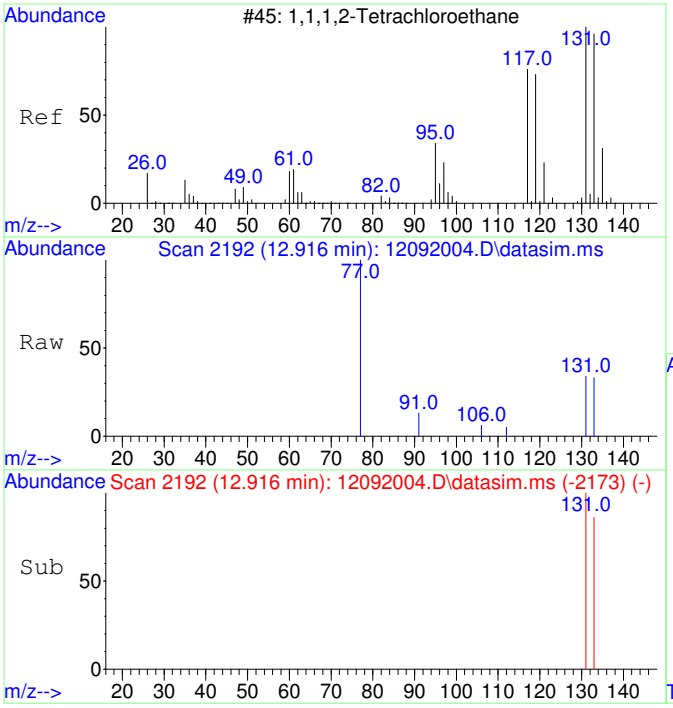


#16
Chlorobenzene
Concen: 51.42 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 1822

Ion	Ratio	Lower	Upper
112	100		
77	59.3	23.6	83.6

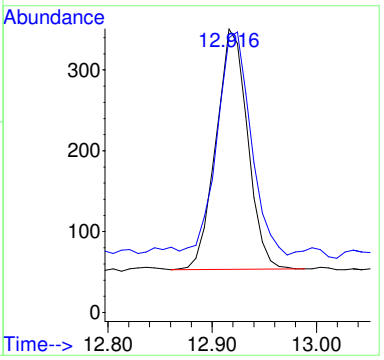


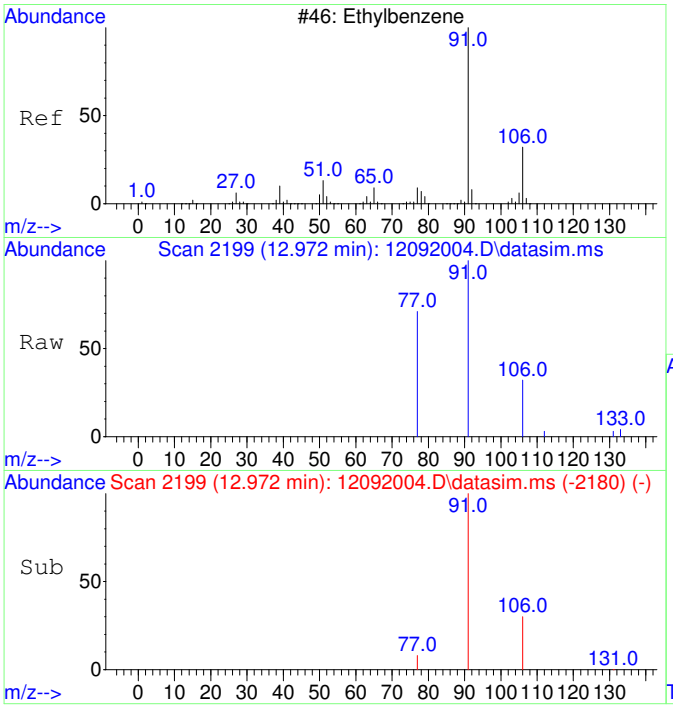


#17
1,1,1,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:131 Resp: 623

Ion	Ratio	Lower	Upper
131	100		
133	100.8	66.3	126.3

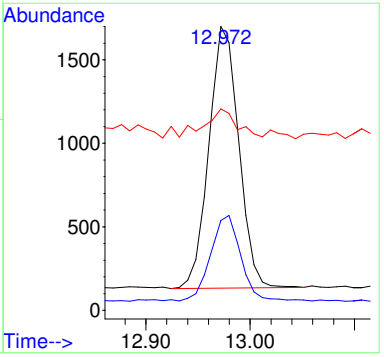


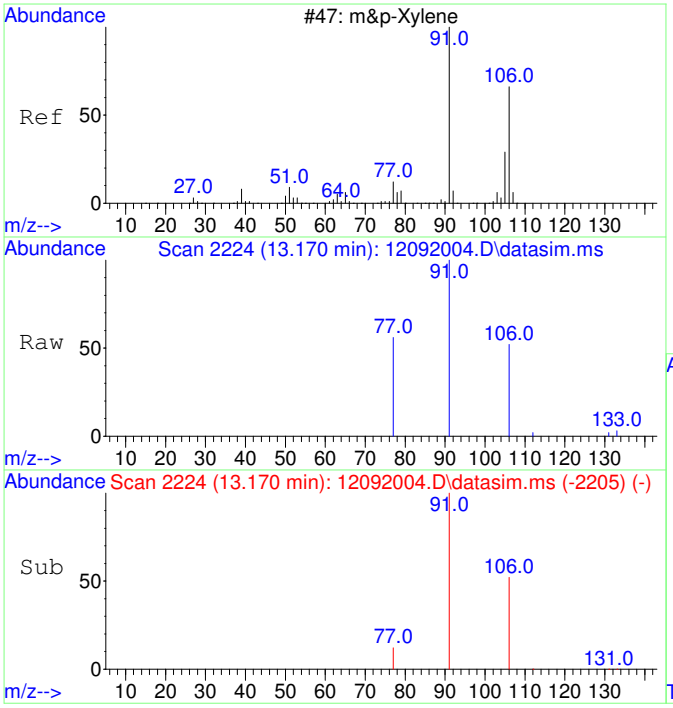


#18
Ethylbenzene
Concen: 53.26 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3111

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	12.9	0.0	38.2

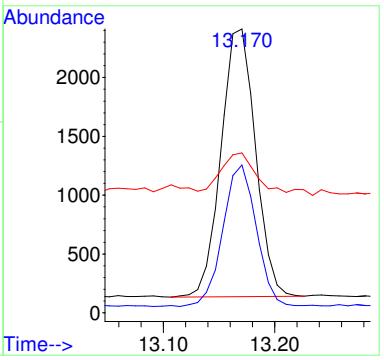


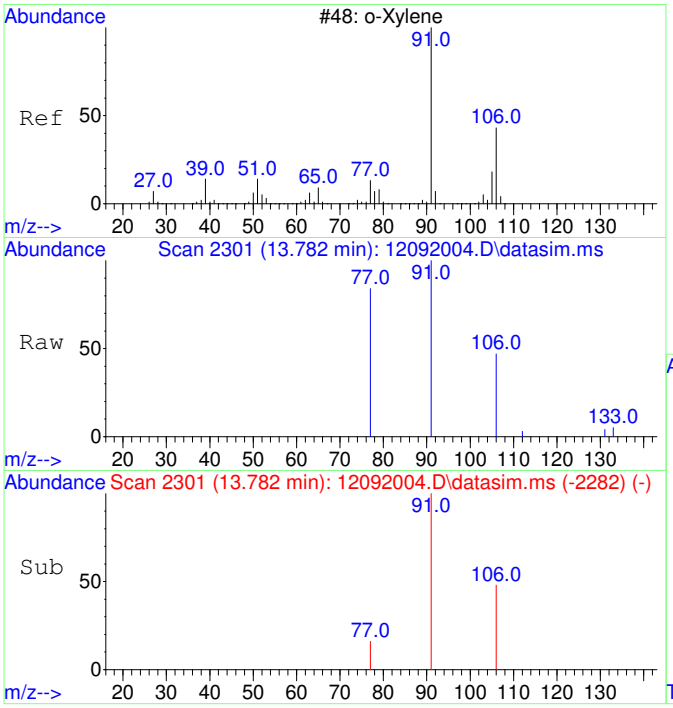


#19
m&p-Xylene
Concen: 108.81 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 4895

Ion	Ratio	Lower	Upper
91	100		
106	51.1	22.2	82.2
77	17.4	0.0	42.4

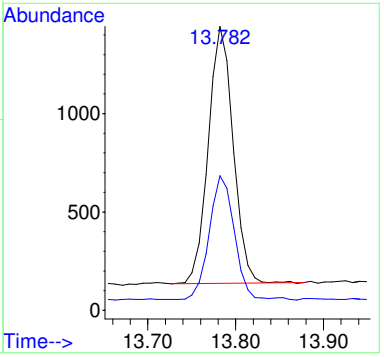


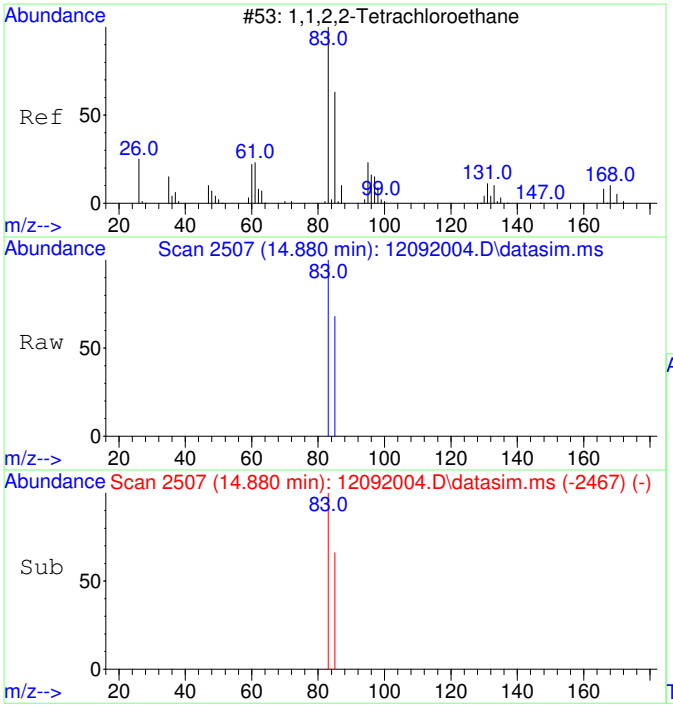


#20
o-Xylene
Concen: 53.15 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

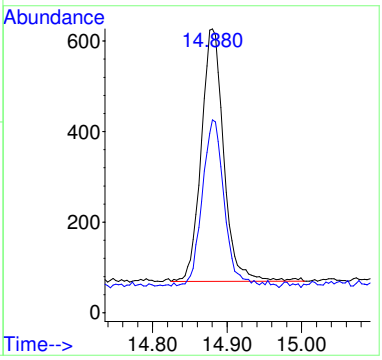


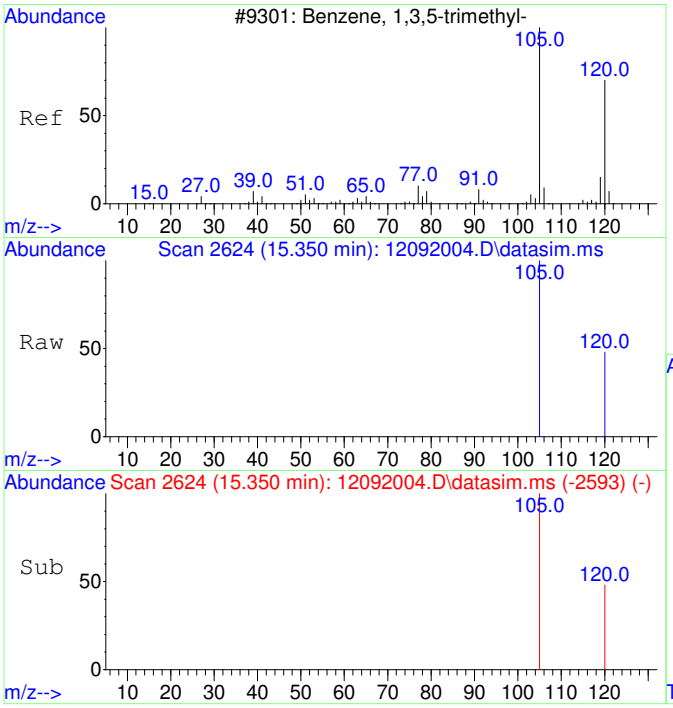


#21
1,1,2,2-Tetrachloroethane
Concen: 51.97 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 1170

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.8	94.8

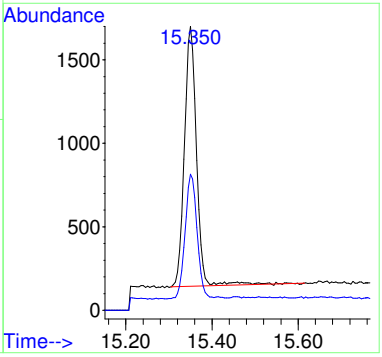


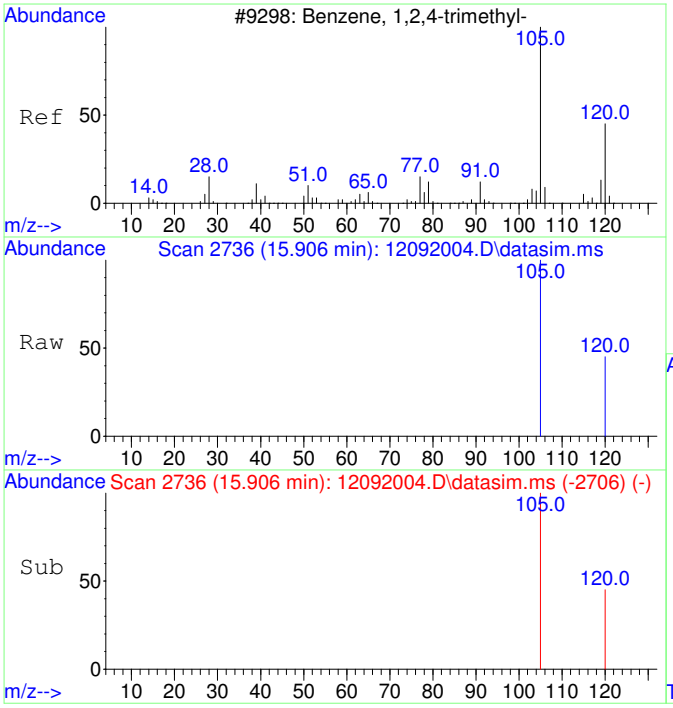


#22
1,3,5-Trimethylbenzene
Concen: 57.08 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3033

Ion	Ratio	Lower	Upper
105	100		
120	46.9	21.1	81.1

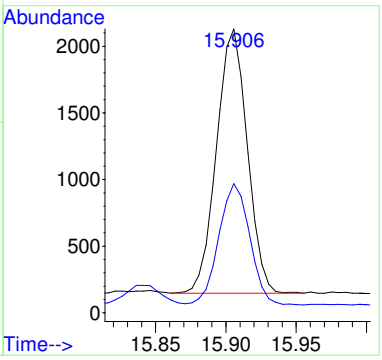


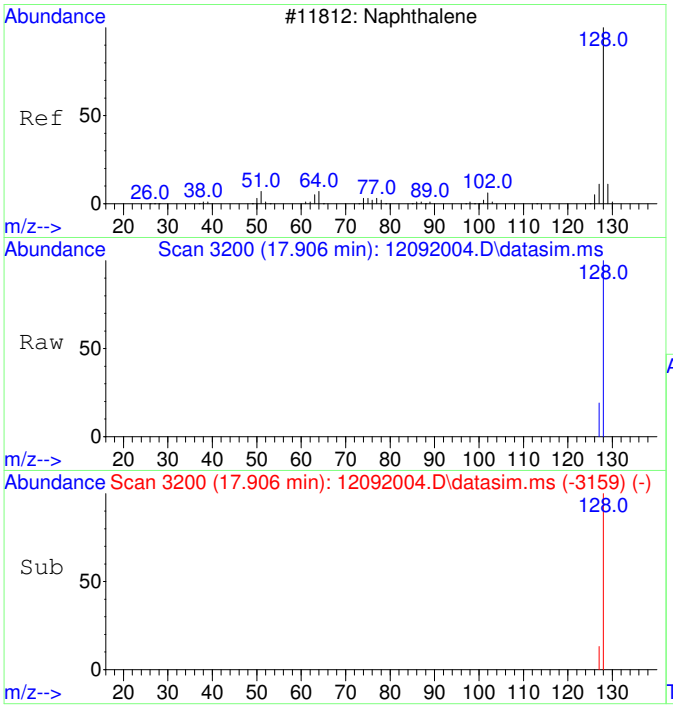


#23
1,2,4-Trimethylbenzene
Concen: 55.38 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3010

Ion	Ratio	Lower	Upper
105	100		
120	45.4	17.2	77.2

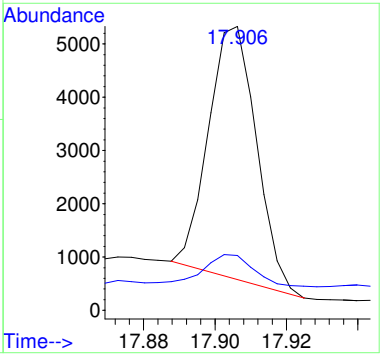




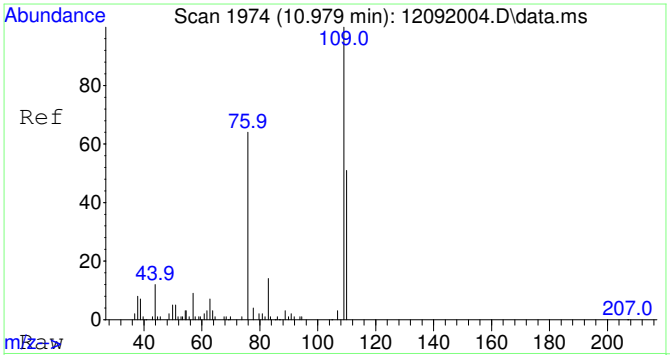
#24
Naphthalene
Concen: 49.26 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 4337

Ion	Ratio	Lower	Upper
128	100		
127	11.6	0.0	42.5



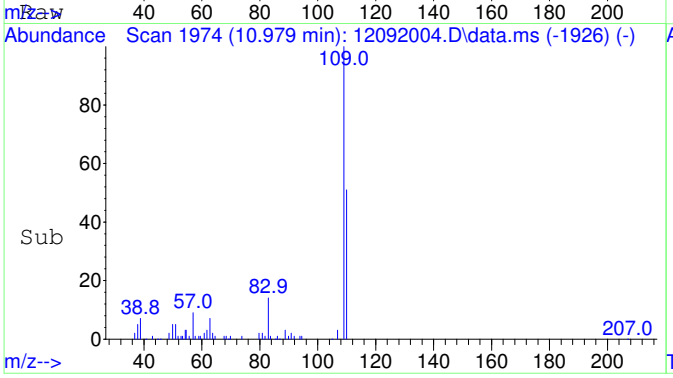
Before MI:
IMPROPER
BASELINE

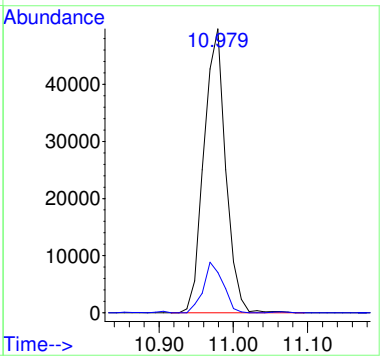


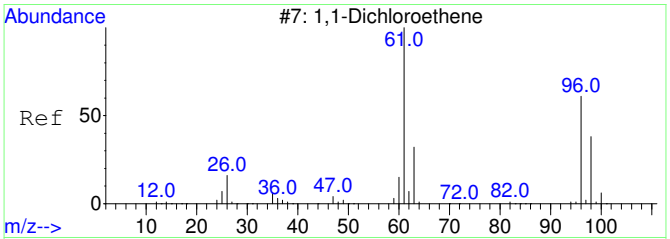
#25
2-Fluorotoluene SCAN
Concen: 4719.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

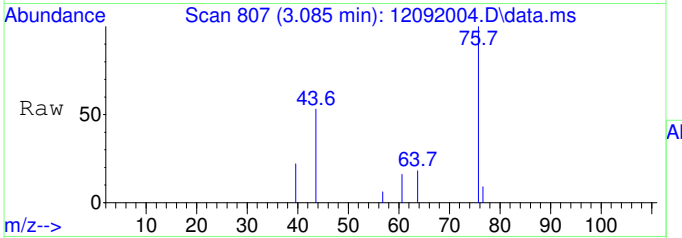
Tgt Ion:109 Resp: 101604

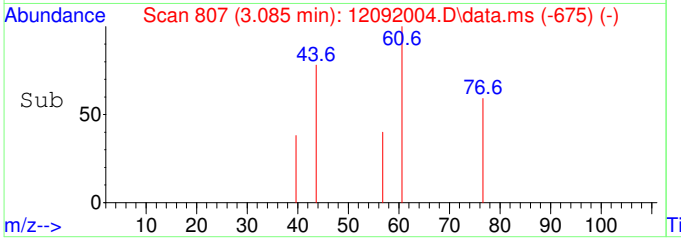
Ion	Ratio	Lower	Upper
109	100		
83	16.1	0.0	43.8







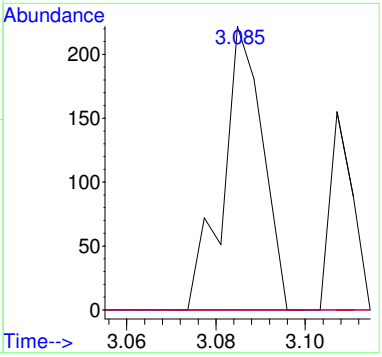


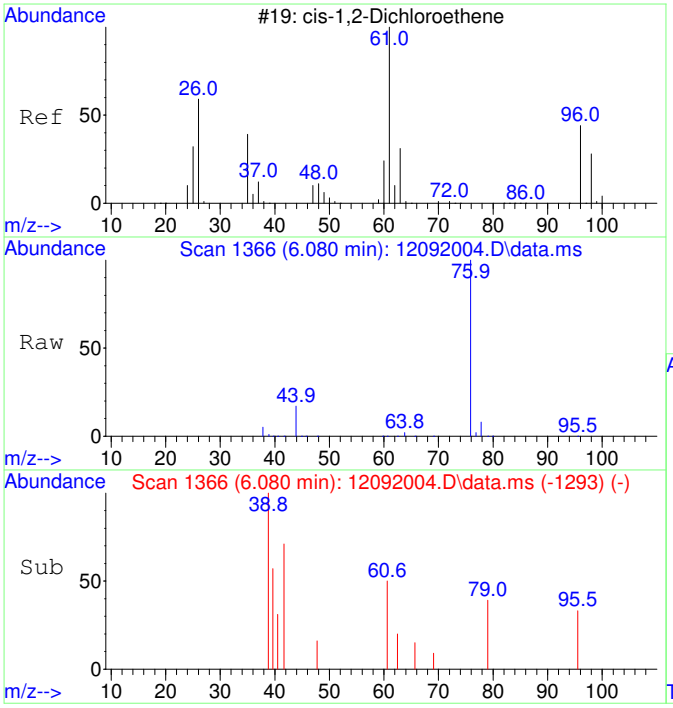


#26
1,1-Dichloroethene SCAN
Concen: 27.26 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 137

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

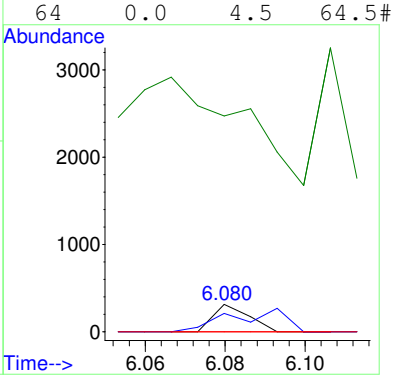


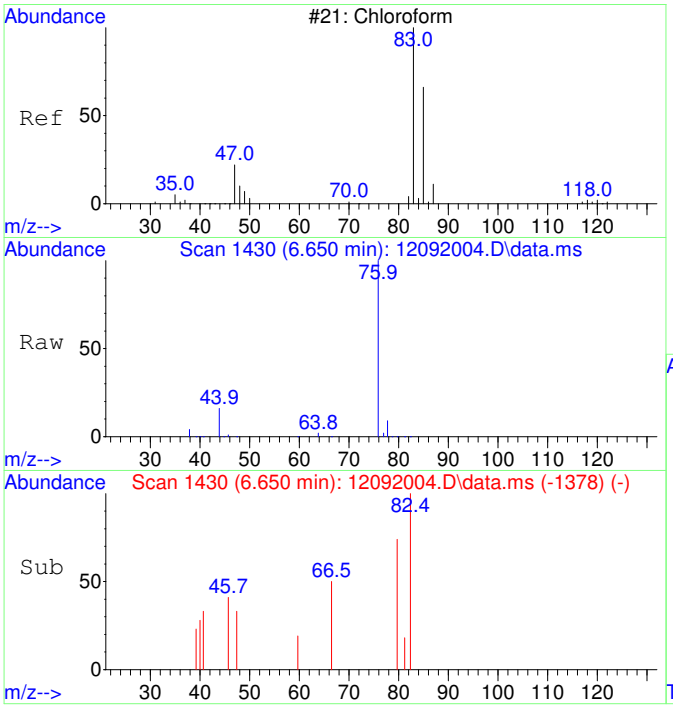


#29
cis-1,2-Dichloroethene SCAN
Concen: 26.25 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 195

Ion	Ratio	Lower	Upper
61	100		
96	130.8	39.9	99.9#
98	0.0	13.5	73.5#
64	0.0	4.5	64.5#

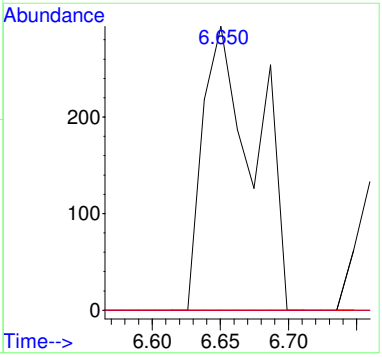


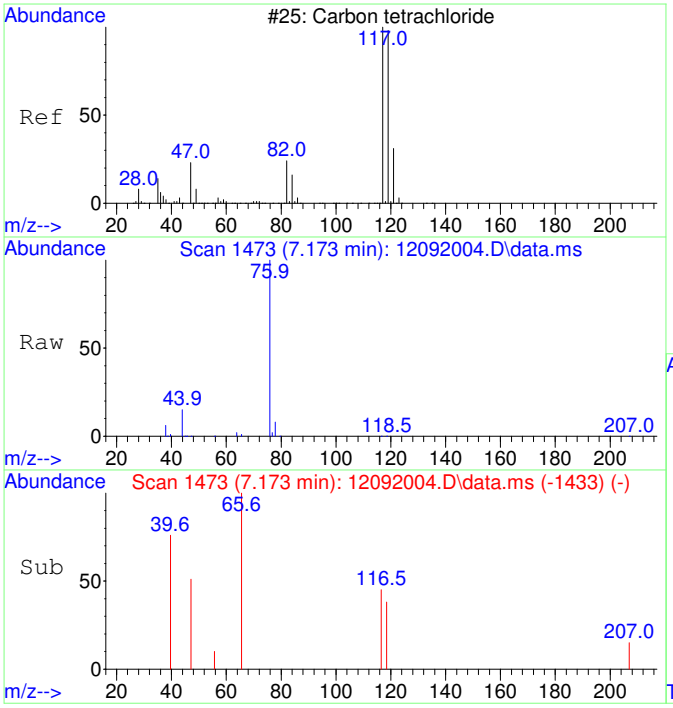


#30
Chloroform SCAN
Concen: 113.59 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 787

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

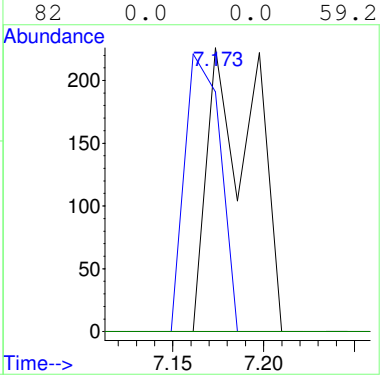


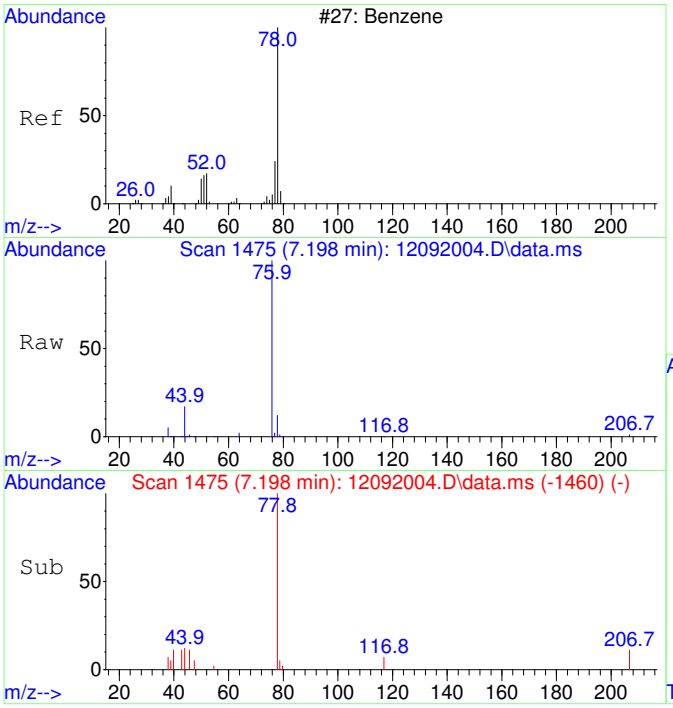


#32
Carbon tetrachloride SCAN
Concen: 65.96 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 403

Ion	Ratio	Lower	Upper
117	100		
119	74.7	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

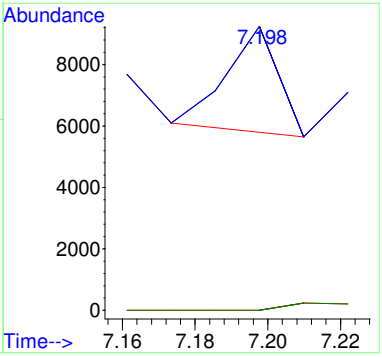


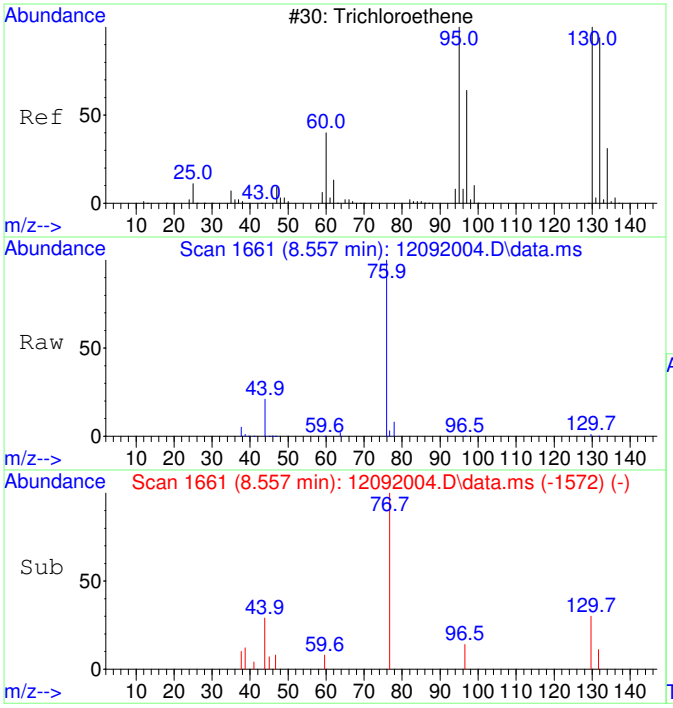


#33
Benzene SCAN
Concen: 149.19 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. -0.316 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 3227

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.0	0.0	47.9
51	10.0	0.0	44.1

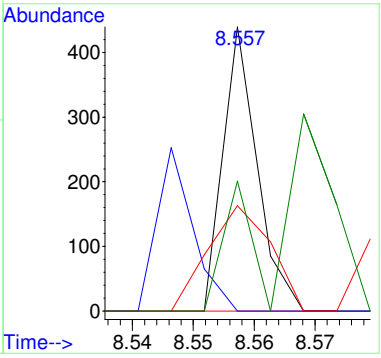


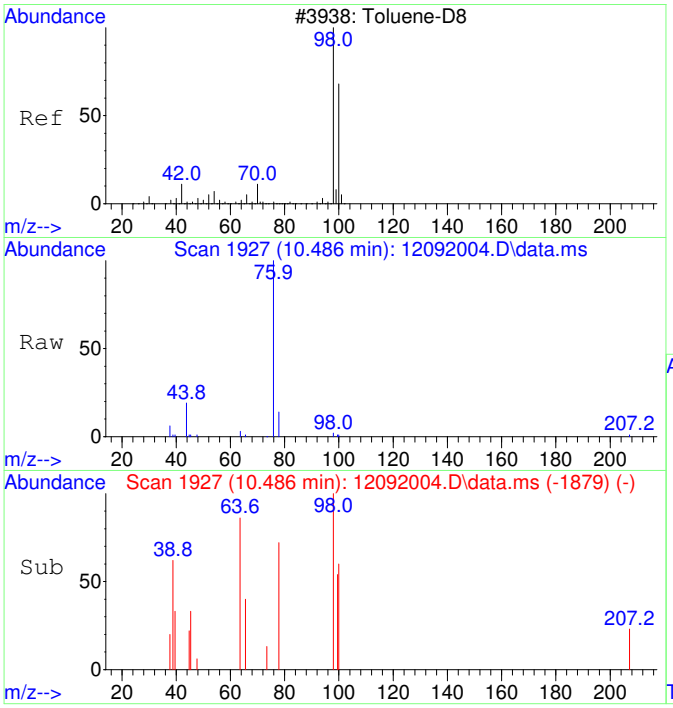


#35
Trichloroethene SCAN
Concen: 36.47 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.016 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 172

Ion	Ratio	Lower	Upper
130	100		
95	60.5	60.5	120.5#
132	68.0	59.6	119.6
97	0.0	28.2	88.2#

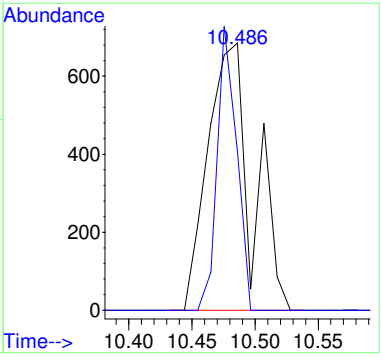


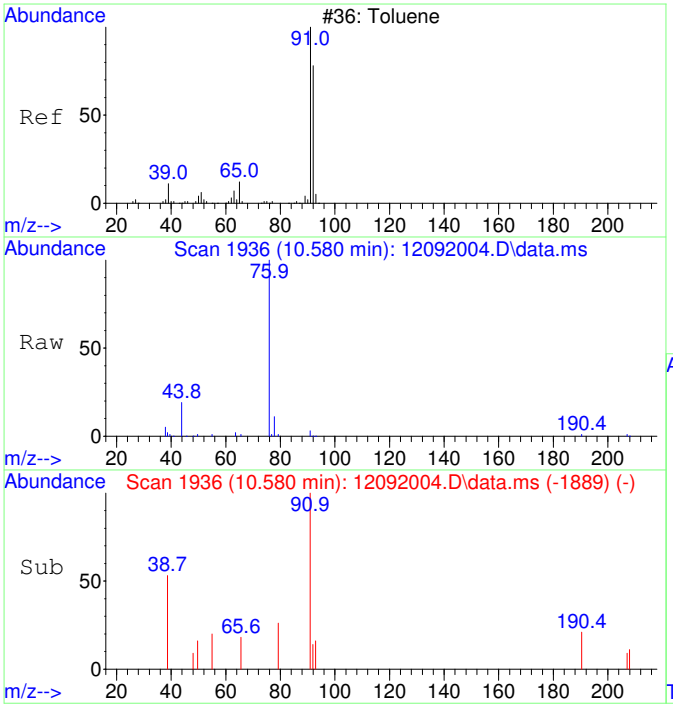


#36
Toluene-d8 SCAN
Concen: 82.81 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1672

Ion	Ratio	Lower	Upper
98	100		
100	46.5	40.0	100.0

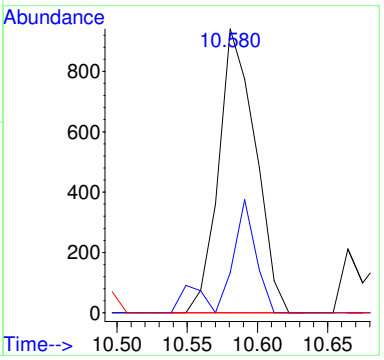


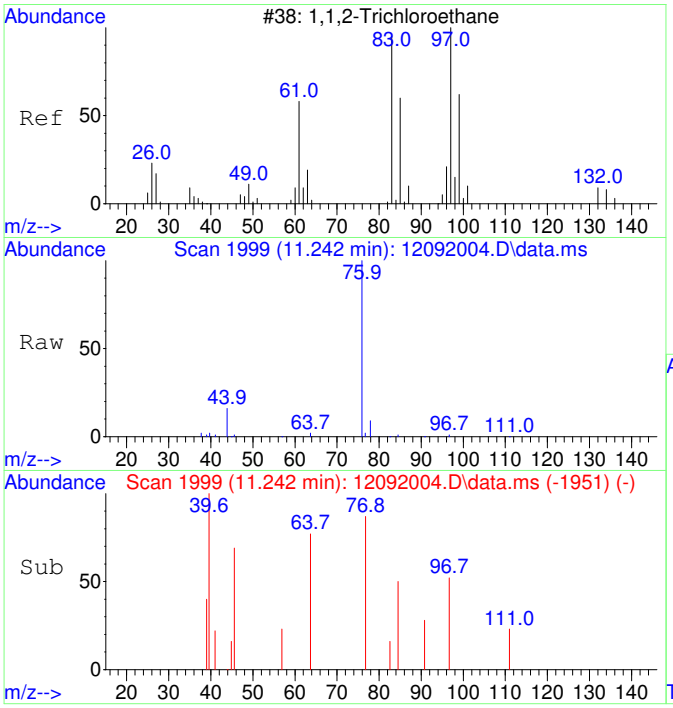


#37
Toluene SCAN
Concen: 69.31 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1723

Ion	Ratio	Lower	Upper
91	100		
92	29.7	28.3	88.3
65	0.0	0.0	41.0

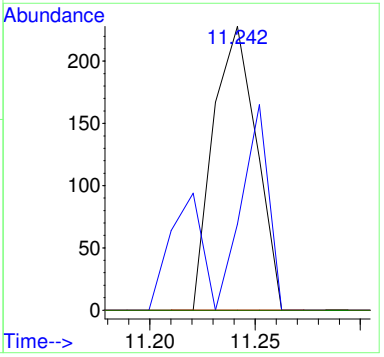


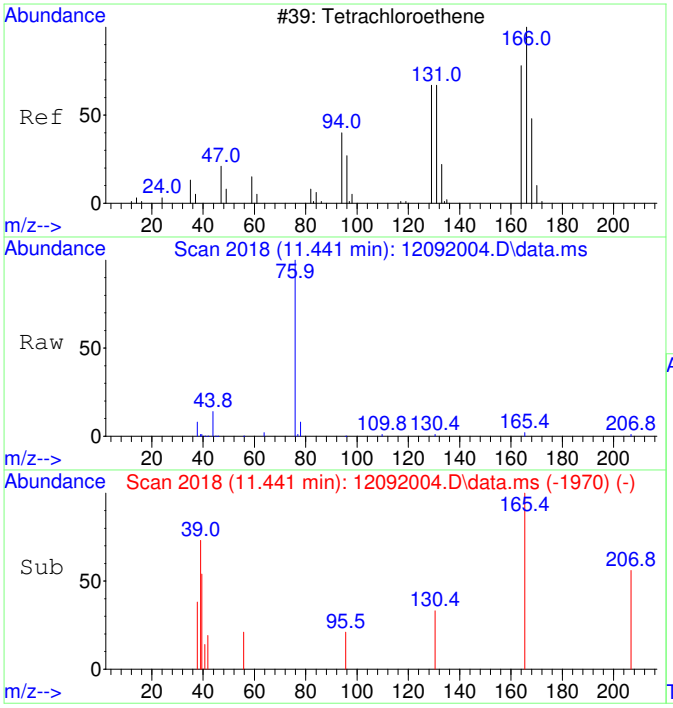


#38
1,1,2-Trichloroethane SCAN
Concen: 52.32 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 326

Ion	Ratio	Lower	Upper
97	100		
83	45.1	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

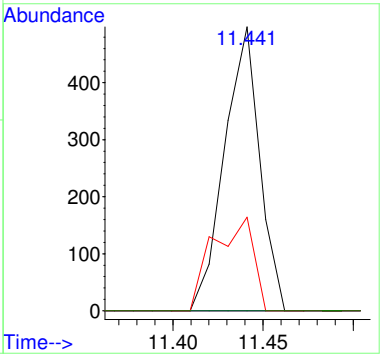


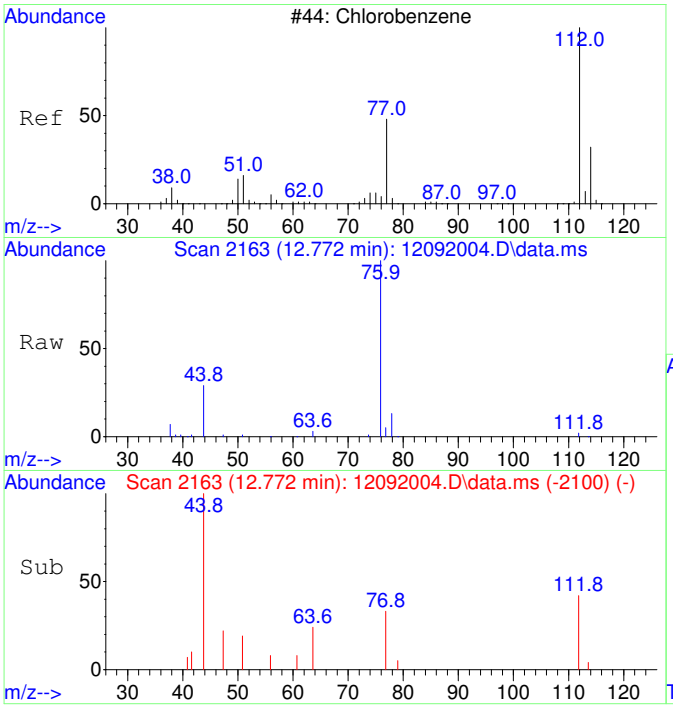


#39
Tetrachloroethene SCAN
Concen: 120.87 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 676

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	37.9	38.7	98.7#
129	0.0	41.8	101.8#

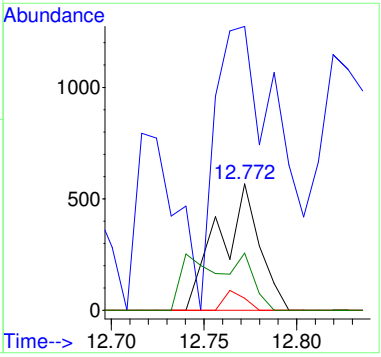


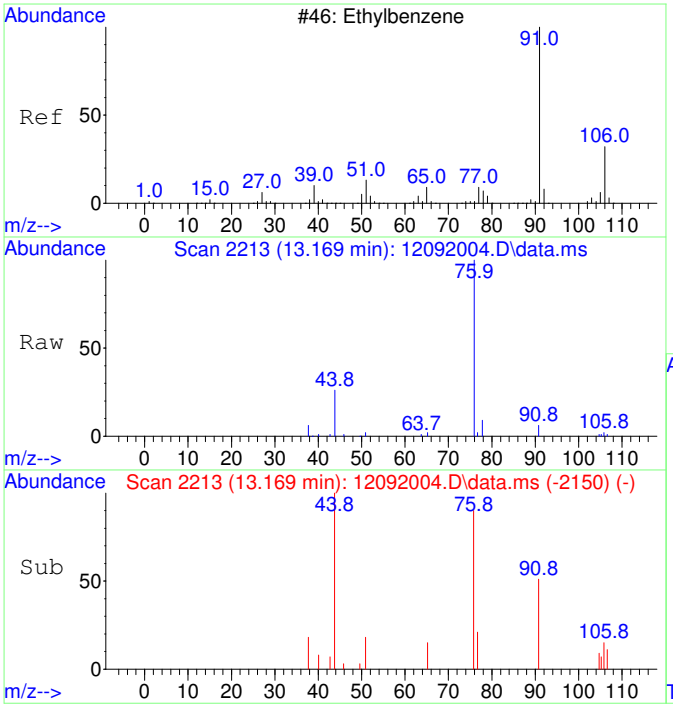


#40
Chlorobenzene SCAN
Concen: 48.89 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 873

Ion	Ratio	Lower	Upper
112	100		
77	267.7	28.2	88.2#
114	7.9	2.3	62.3
51	60.8	0.0	50.1#

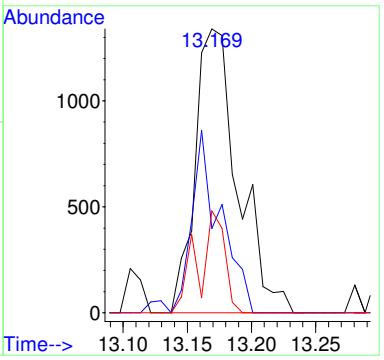


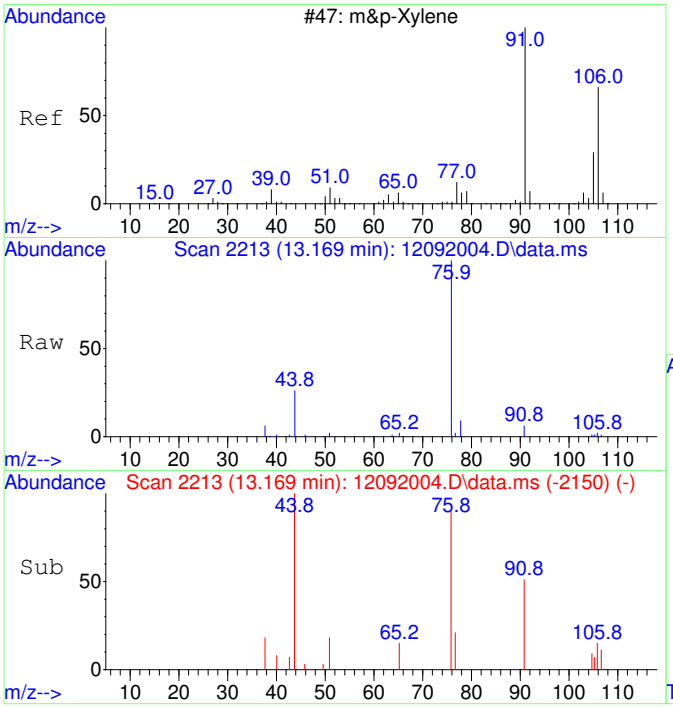


#42
Ethylbenzene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
51	22.1	0.0	40.1

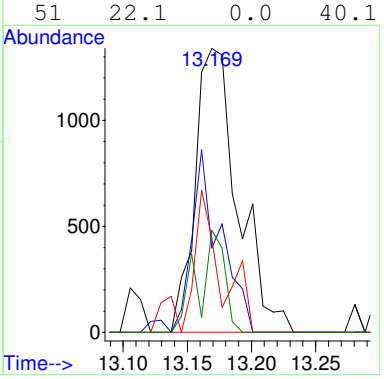


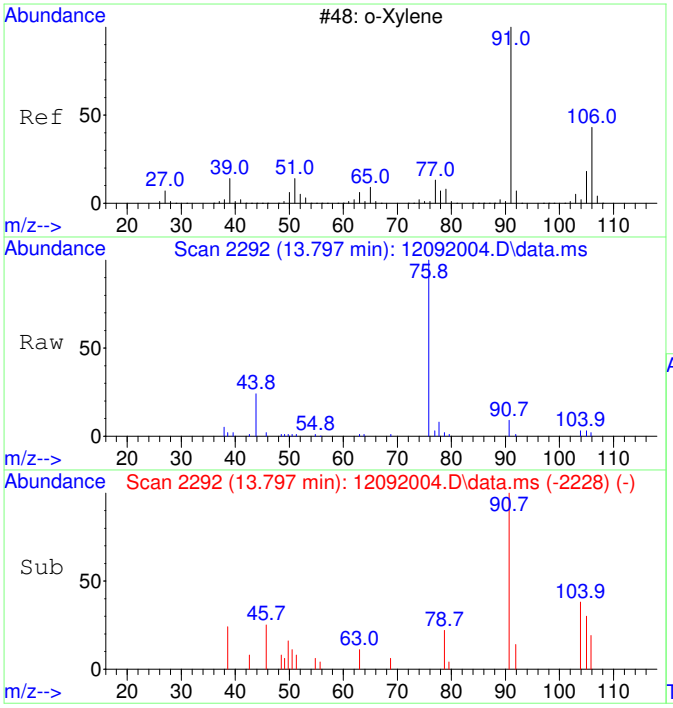


#43
m&p-Xylene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
105	35.1	0.0	54.7
51	22.1	0.0	40.1

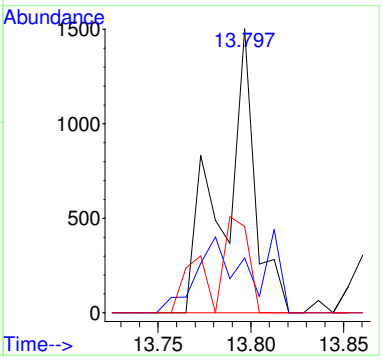


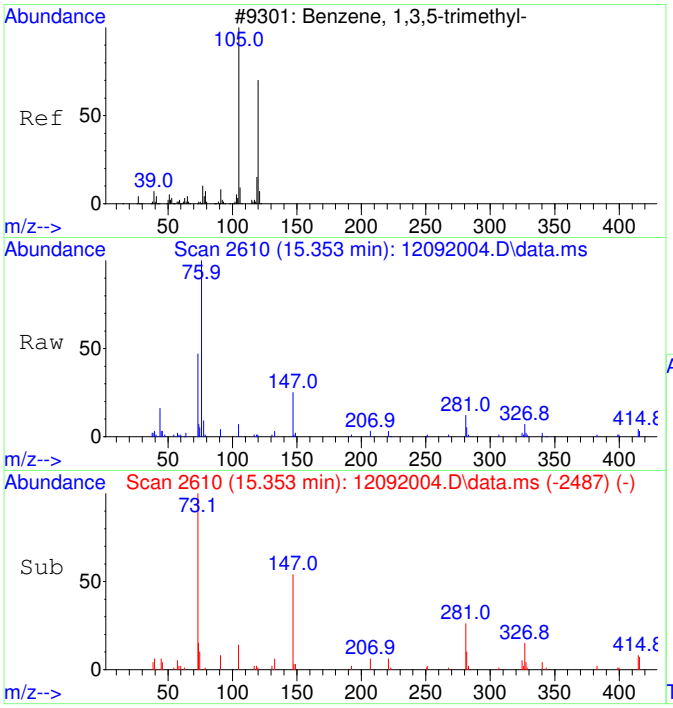


#44
o-Xylene SCAN
Concen: 68.81 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1780

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	40.3	0.0	56.6

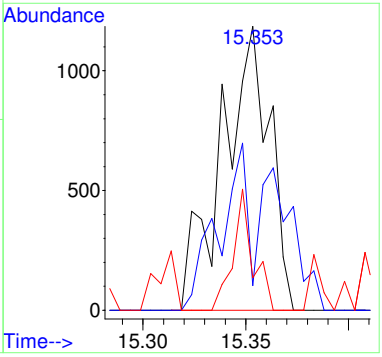


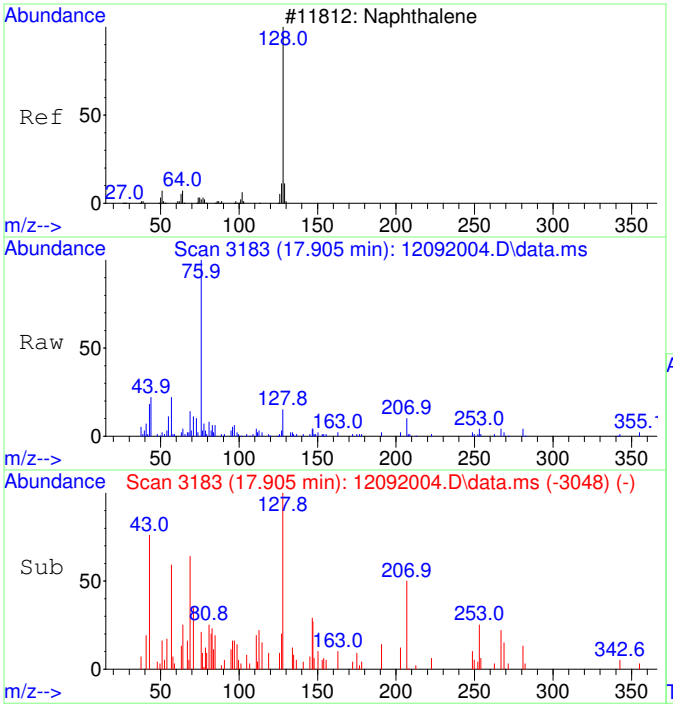


#46
1,3,5-Trimethylbenzene SCAN
Concen: 70.17 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 1915

Ion	Ratio	Lower	Upper
105	100		
120	29.8	18.3	78.3
119	17.5	0.0	43.1

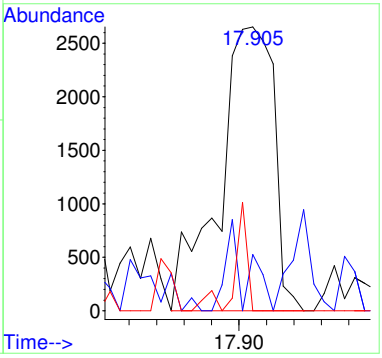




#48
Naphthalene SCAN
Concen: 88.02 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 3684

Ion	Ratio	Lower	Upper
128	100		
127	11.8	0.0	44.0
129	8.6	0.0	40.8



Quantitation Report (QT Reviewed)

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M.I. Performed By:
TD at 10:28 am, Dec 09, 2020

M.I. Approved By:
ZAR at 2:58 pm, Dec 14, 2020

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
Operator : TD
Sample : S20L024-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 09 10:25:48 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\120920.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	189663	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.477	98	1853	50.45	ug/L	-0.01
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.01%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.090	61	337m	44.81	ug/L	
3] trans-1,2-Dichloroethene	4.363	61	435	45.88	ug/L	84
4] 1,1-Dichloroethane	5.086	63	521	46.01	ug/L	58
5] cis-1,2-Dichloroethene	6.088	61	551	46.98	ug/L	96
6] Chloroform	6.652	83	556	49.36	ug/L	98
7] 1,1,1-Trichloroethane	6.907	97	615	50.82	ug/L	94
8] Carbon tetrachloride	7.187	117	575	49.70	ug/L	87
9] Benzene	7.503	78	1676	52.51	ug/L	48
10] 1,2-Dichloroethane	7.552	62	549	50.42	ug/L #	1
11] Trichloroethene	8.569	130	495	49.12	ug/L	94
13] Toluene	10.582	91	2429	53.11	ug/L	100
14] 1,1,2-Trichloroethane	11.232	97	518	48.90	ug/L	92
15] Tetrachloroethene	11.432	166	756	53.07	ug/L	99
16] Chlorobenzene	12.765	112	1822	51.42	ug/L	92
17] 1,1,1,2-Tetrachloroethane	12.916	131	623	50.24	ug/L	95
18] Ethylbenzene	12.972	91	3111	53.26	ug/L	97
19] m&p-Xylene	13.170	91	4895	108.81	ug/L	96
20] o-Xylene	13.782	91	2568	53.15	ug/L	98
21] 1,1,2,2-Tetrachloroethane	14.880	83	1170	51.97	ug/L	97
22] 1,3,5-Trimethylbenzene	15.350	105	3033	57.08	ug/L	94
23] 1,2,4-Trimethylbenzene	15.906	105	3010	55.38	ug/L	97
24] Naphthalene	17.906	128	5133m	58.30	ug/L	
25) 2-Fluorotoluene SCAN	10.979	109	101604	4719.47	ug/L	94
26) 1,1-Dichloroethene SCAN	3.085	61	137	27.26	ug/L #	25
29) cis-1,2-Dichloroethene...	6.080	61	195	26.25	ug/L #	31
30) Chloroform SCAN	6.650	83	787	113.59	ug/L #	27
32) Carbon tetrachloride SCAN	7.173	117	403	65.96	ug/L #	61
33) Benzene SCAN	7.198	78	3227	149.19	ug/L	97
35) Trichloroethene SCAN	8.557	130	172	36.47	ug/L #	60
36) Toluene-d8 SCAN	10.486	98	1672	82.81	ug/L	71
37) Toluene SCAN	10.580	91	1723	69.31	ug/L #	63
38) 1,1,2-Trichloroethane ...	11.242	97	326	52.32	ug/L #	33
39) Tetrachloroethene SCAN	11.441	166	676	120.87	ug/L #	27
40) Chlorobenzene SCAN	12.772	112	873	48.89	ug/L #	1
42) Ethylbenzene SCAN	13.169	91	3117	65.79	ug/L	84
43) m&p-Xylene SCAN	13.169	91	3117	65.79	ug/L	83
44) o-Xylene SCAN	13.797	91	1780	68.81	ug/L #	45
46) 1,3,5-Trimethylbenzene...	15.353	105	1915	70.17	ug/L	76
48) Naphthalene SCAN	17.905	128	3684	88.02	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\120920\
Data File : 12092004.D
Acq On : 9 Dec 2020 10:04
InstName : AG5975C
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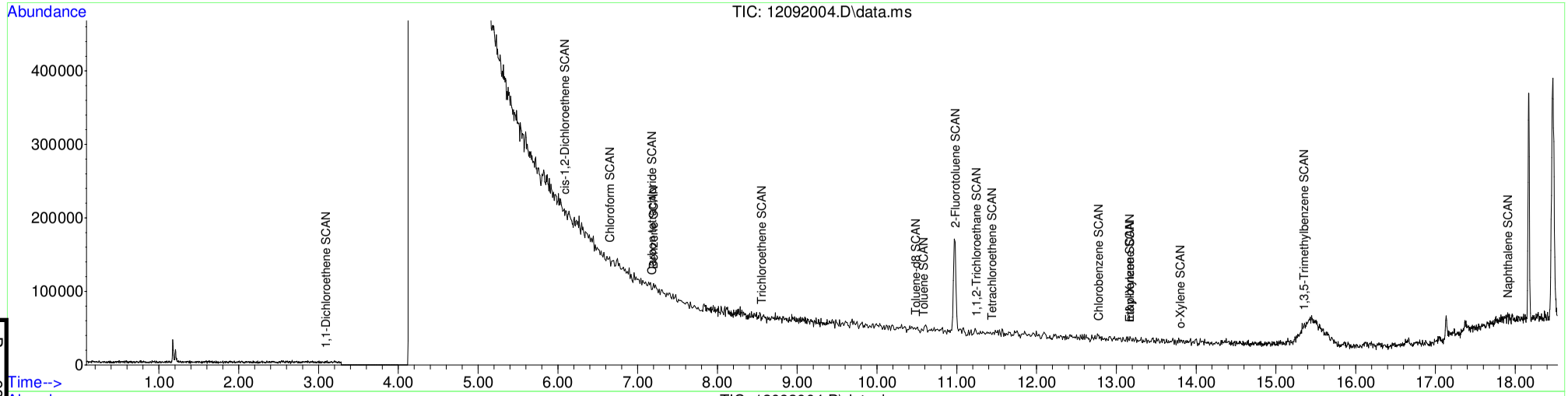
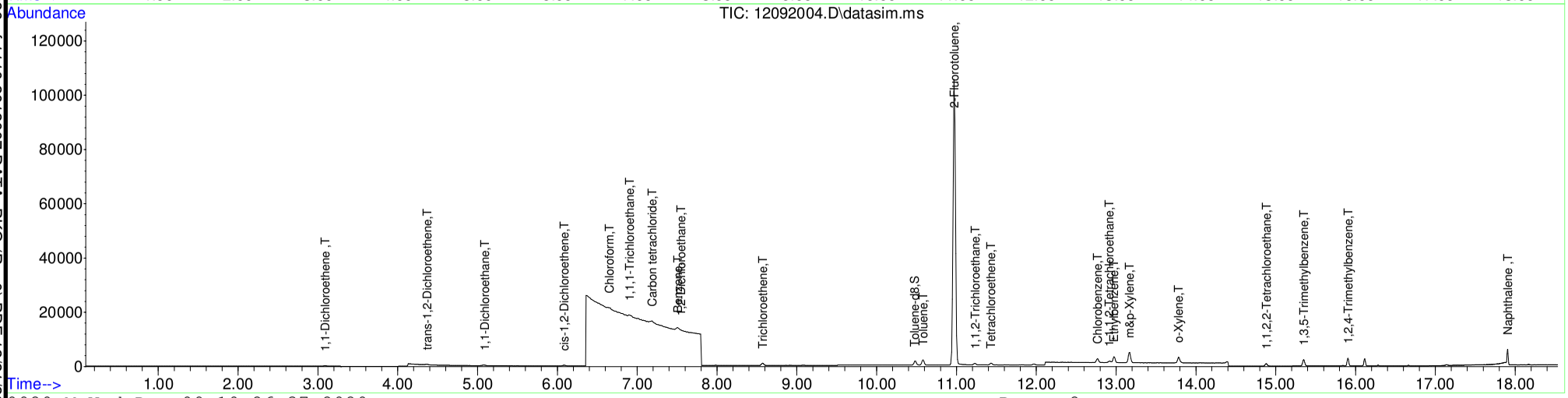
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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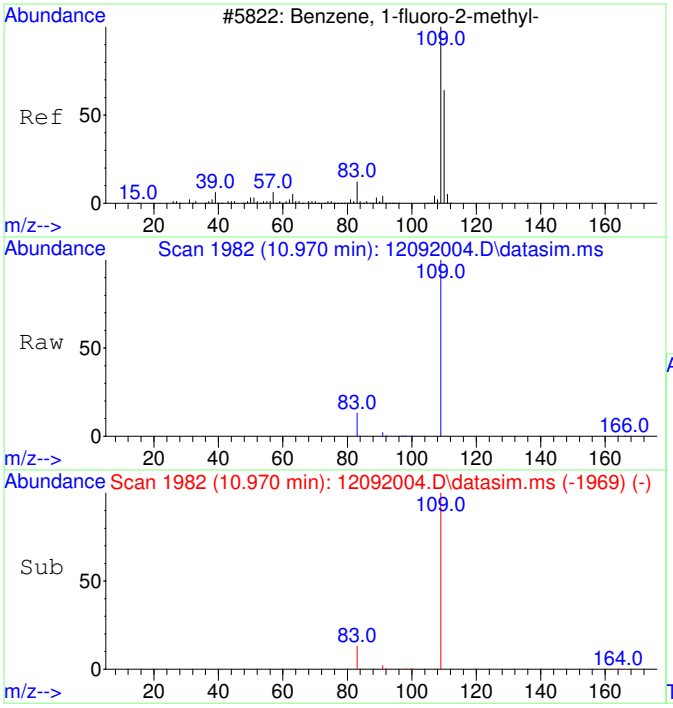
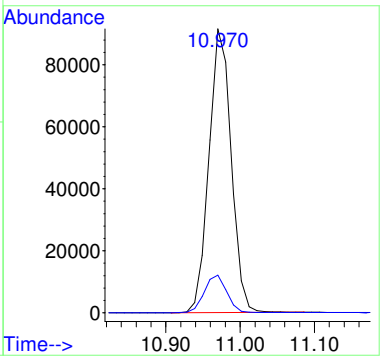
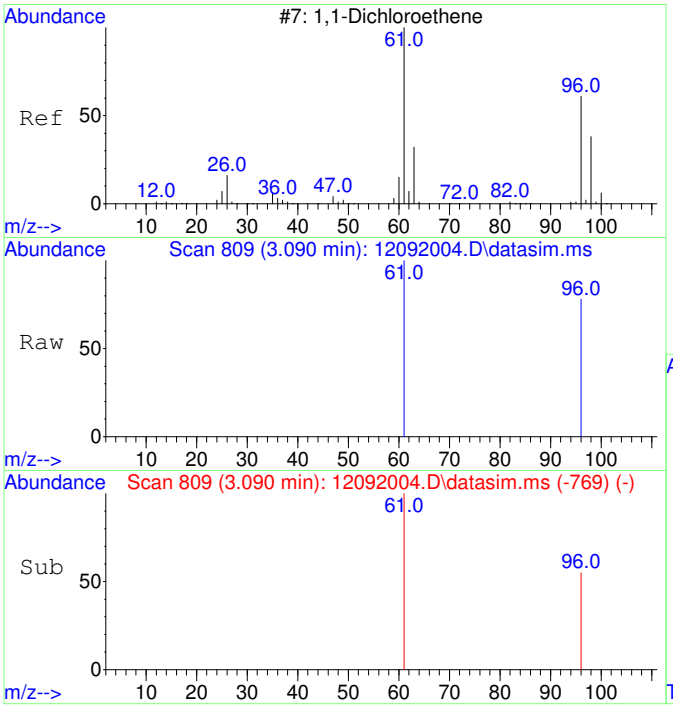


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:109 Resp: 189663

Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	42.3

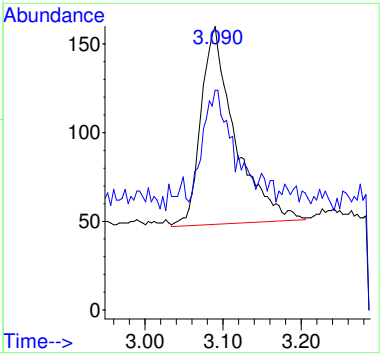


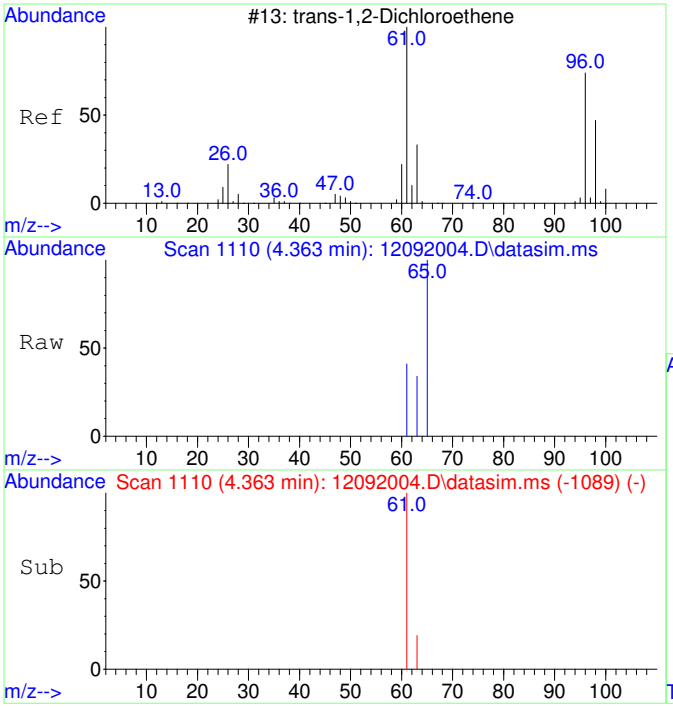


#2
1,1-Dichloroethene
Concen: 44.81 ug/L m
RT: 3.090 min Scan# 809
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 337

Ion	Ratio	Lower	Upper
61	100		
96	90.8	37.2	97.2

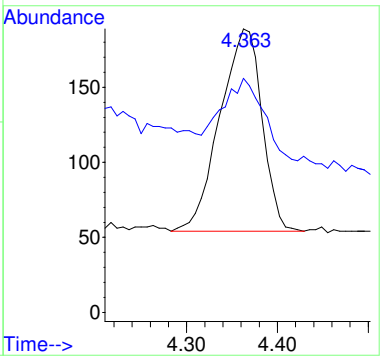


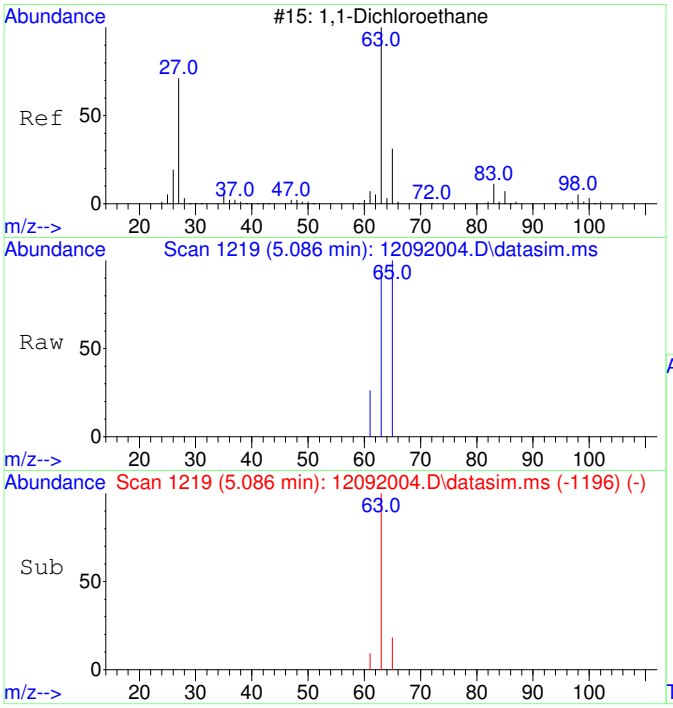


#3
trans-1,2-Dichloroethene
Concen: 45.88 ug/L
RT: 4.363 min Scan# 1110
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 435

Ion	Ratio	Lower	Upper
61	100		
63	41.4	2.4	62.4

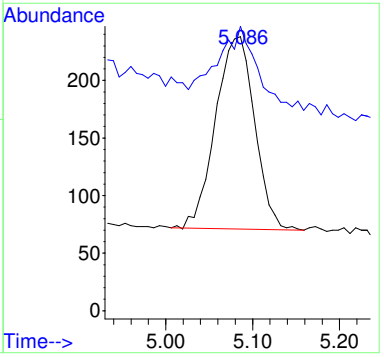


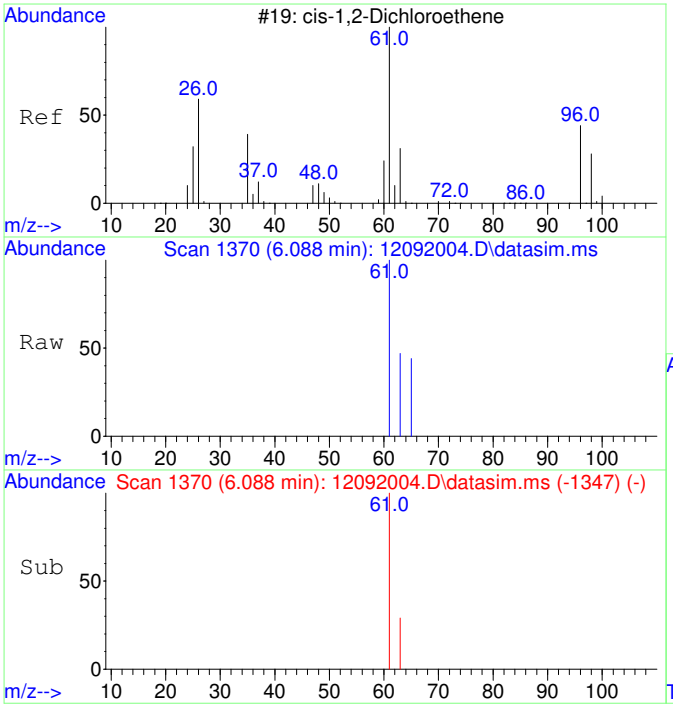


#4
1,1-Dichloroethane
Concen: 46.01 ug/L
RT: 5.086 min Scan# 1219
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 63 Resp: 521

Ion	Ratio	Lower	Upper
63	100		
65	54.9	1.8	61.8

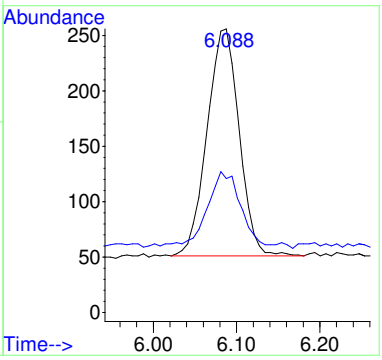


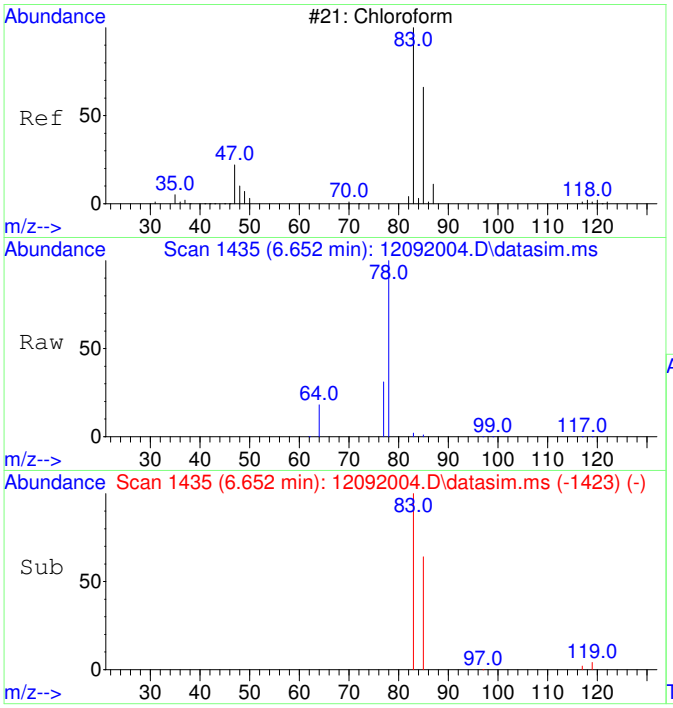


#5
cis-1,2-Dichloroethene
Concen: 46.98 ug/L
RT: 6.088 min Scan# 1370
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 551

Ion	Ratio	Lower	Upper
61	100		
63	34.8	2.5	62.5

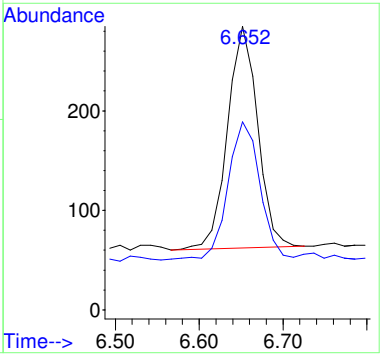


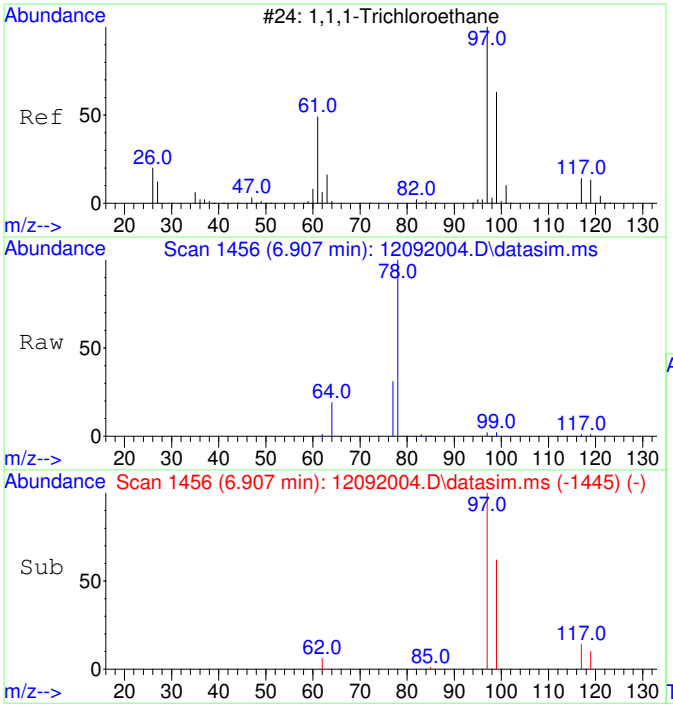


#6
Chloroform
Concen: 49.36 ug/L
RT: 6.652 min Scan# 1435
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 556

Ion	Ratio	Lower	Upper
83	100		
85	66.7	35.1	95.1

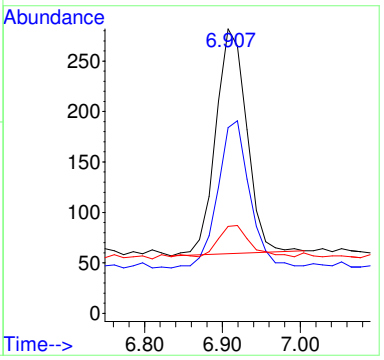


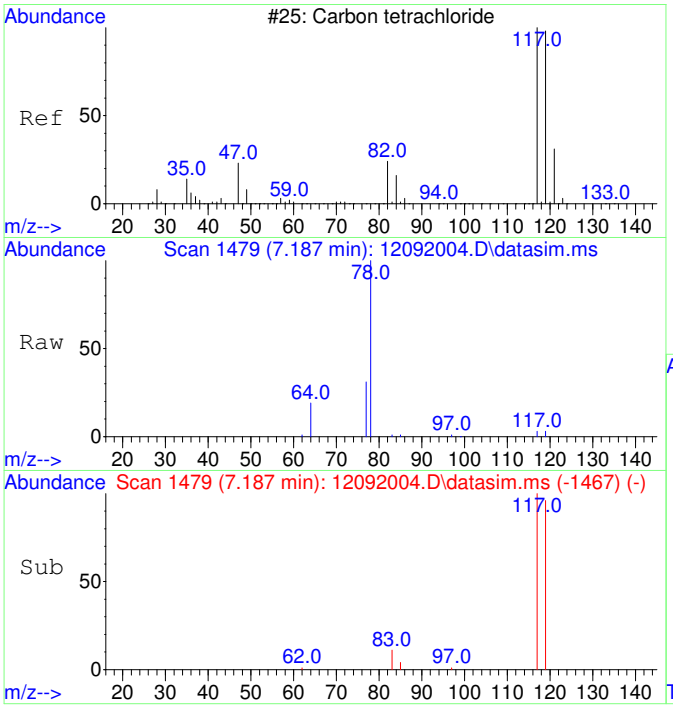


#7
1,1,1-Trichloroethane
Concen: 50.82 ug/L
RT: 6.907 min Scan# 1456
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 615

Ion	Ratio	Lower	Upper
97	100		
99	67.8	34.6	94.6
117	18.2	0.0	43.2

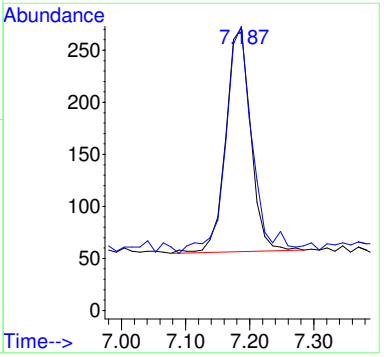


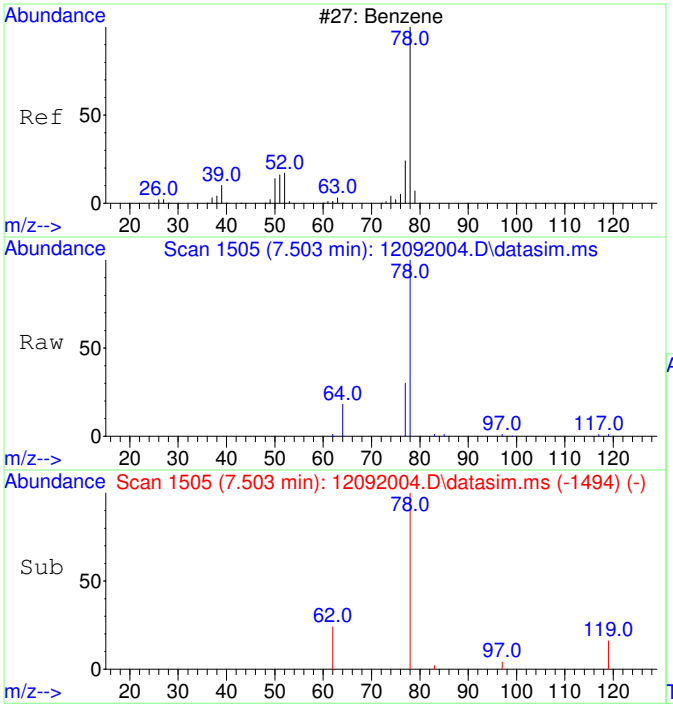


#8
Carbon tetrachloride
Concen: 49.70 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 575

Ion	Ratio	Lower	Upper
117	100		
119	109.4	66.4	126.4

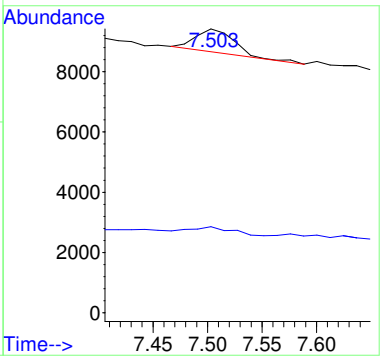


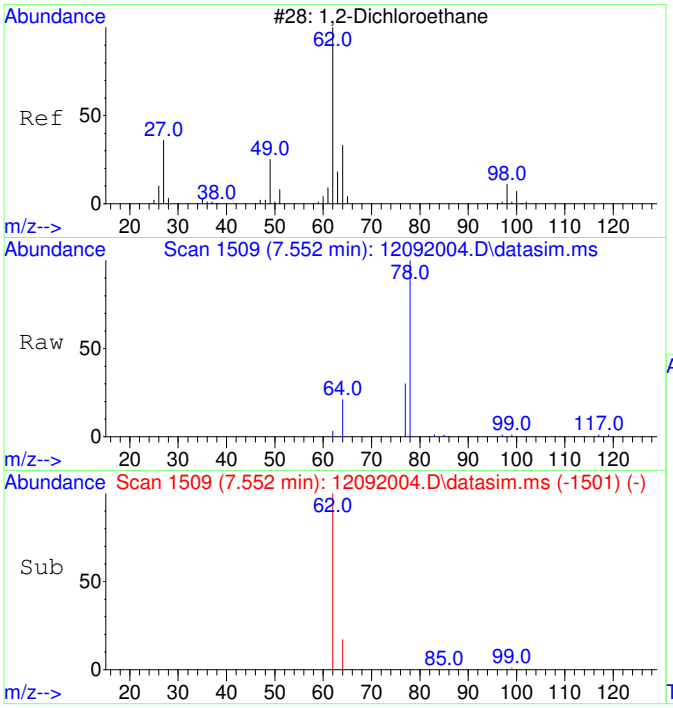


#9
Benzene
Concen: 52.51 ug/L
RT: 7.503 min Scan# 1505
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 1676

Ion	Ratio	Lower	Upper
78	100		
77	48.4	0.0	53.2

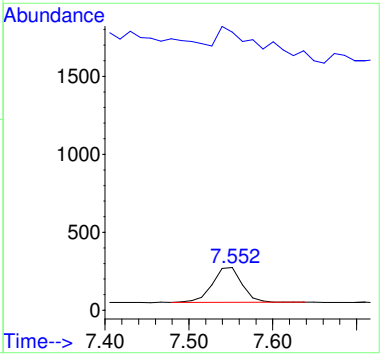


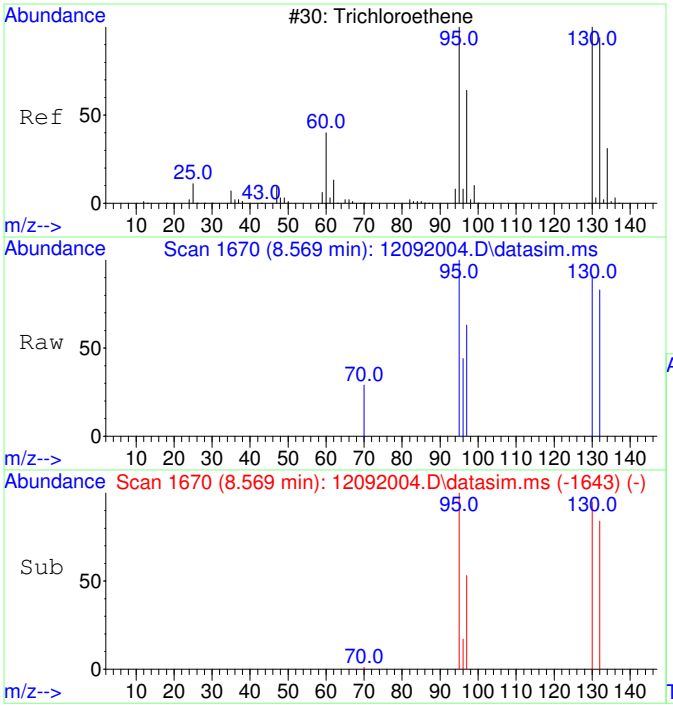


#10
1,2-Dichloroethane
Concen: 50.42 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 62 Resp: 549

Ion	Ratio	Lower	Upper
62	100		
64	148.8	2.3	62.3#

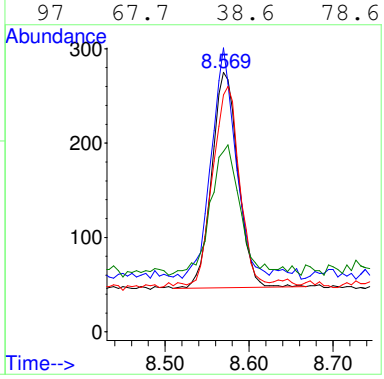


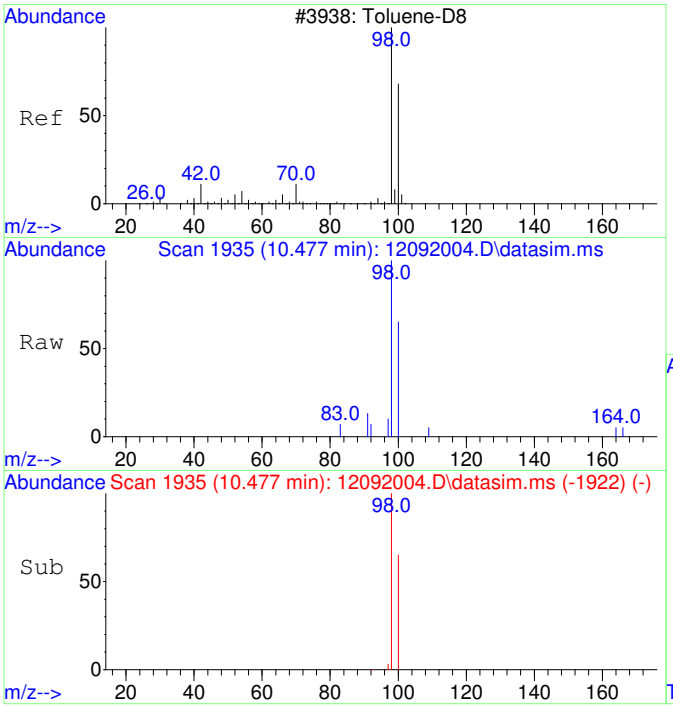


#11
Trichloroethene
Concen: 49.12 ug/L
RT: 8.569 min Scan# 1670
Delta R.T. -0.005 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 495

Ion	Ratio	Lower	Upper
130	100		
95	97.8	60.7	120.7
132	98.0	76.0	116.0
97	67.7	38.6	78.6

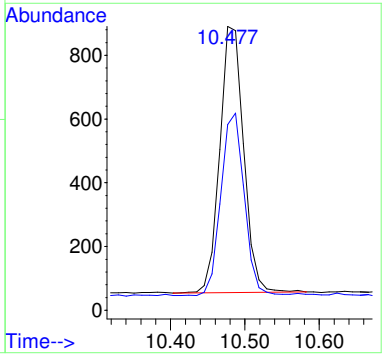


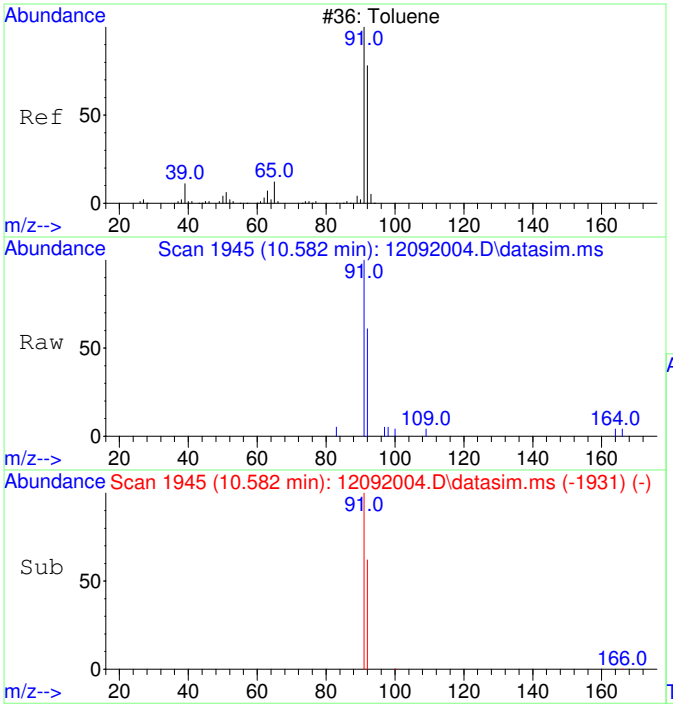


#12
Toluene-d8
Concen: 50.45 ug/L
RT: 10.477 min Scan# 1935
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1853

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

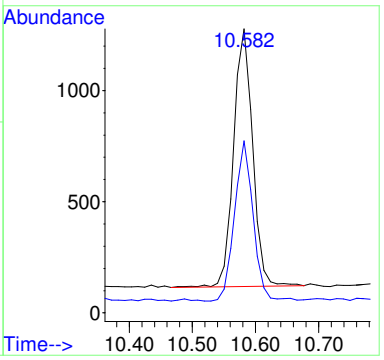


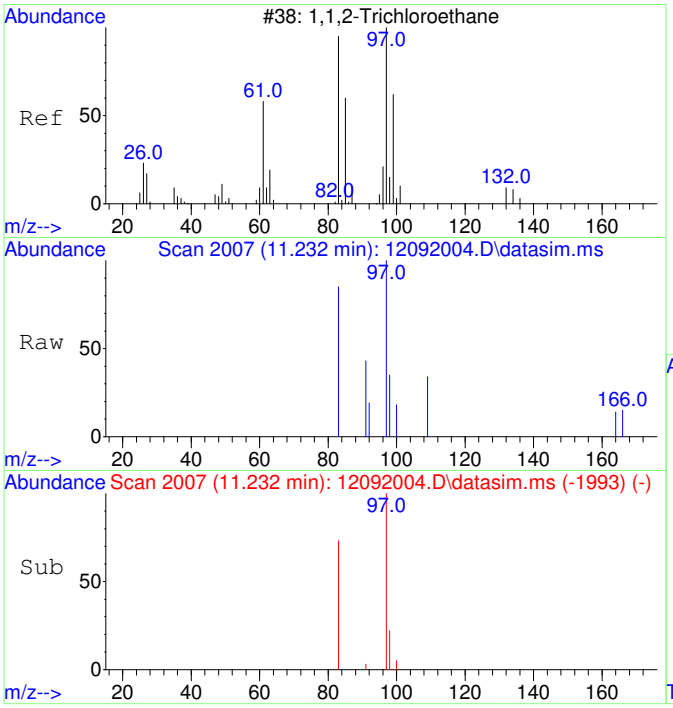


#13
Toluene
Concen: 53.11 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2429

Ion	Ratio	Lower	Upper
91	100		
92	60.2	29.9	89.9

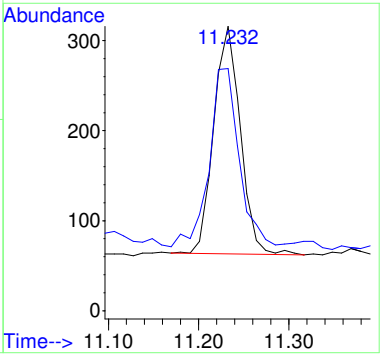


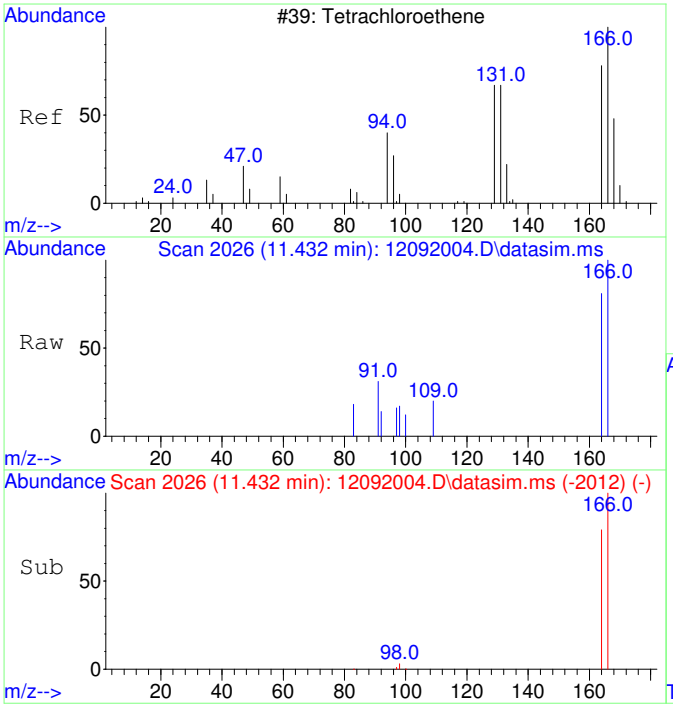


#14
1,1,2-Trichloroethane
Concen: 48.90 ug/L
RT: 11.232 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 518

Ion	Ratio	Lower	Upper
97	100		
83	88.2	51.2	111.2

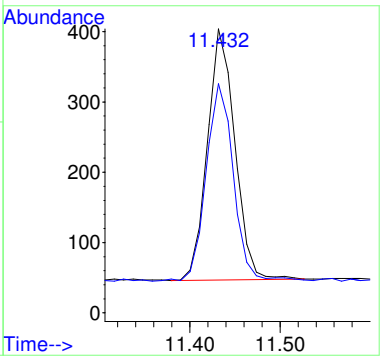


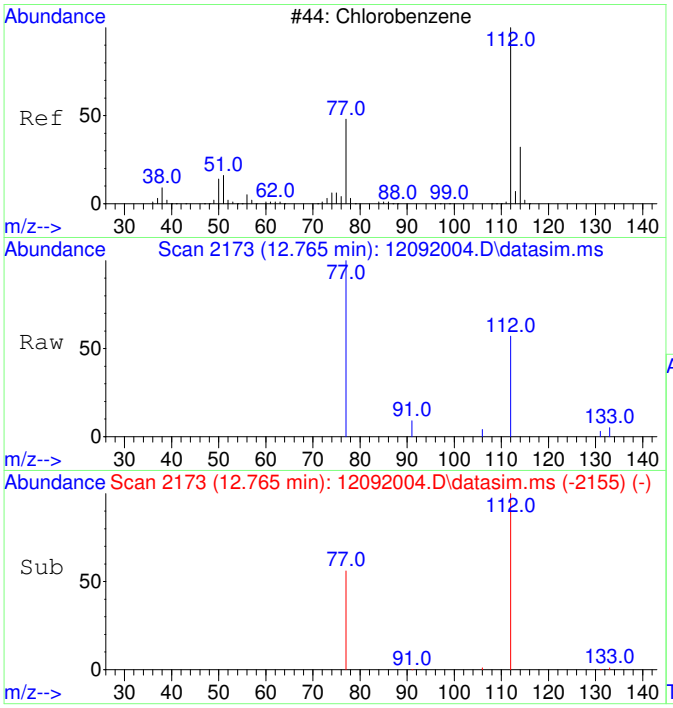


#15
Tetrachloroethene
Concen: 53.07 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 756

Ion	Ratio	Lower	Upper
166	100		
164	77.2	47.8	107.8

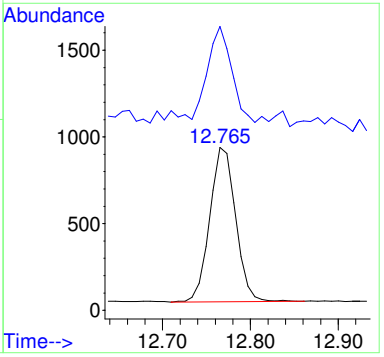


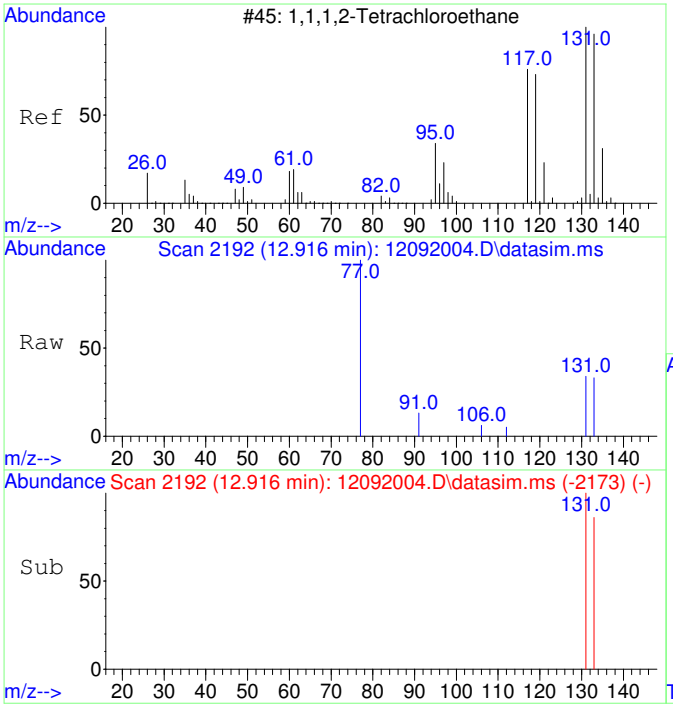


#16
Chlorobenzene
Concen: 51.42 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 1822

Ion	Ratio	Lower	Upper
112	100		
77	59.3	23.6	83.6

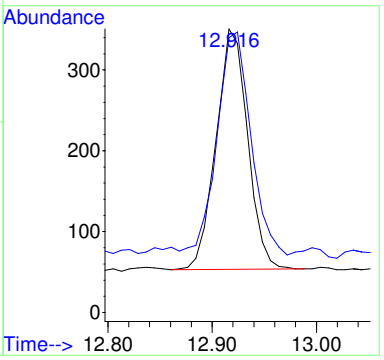


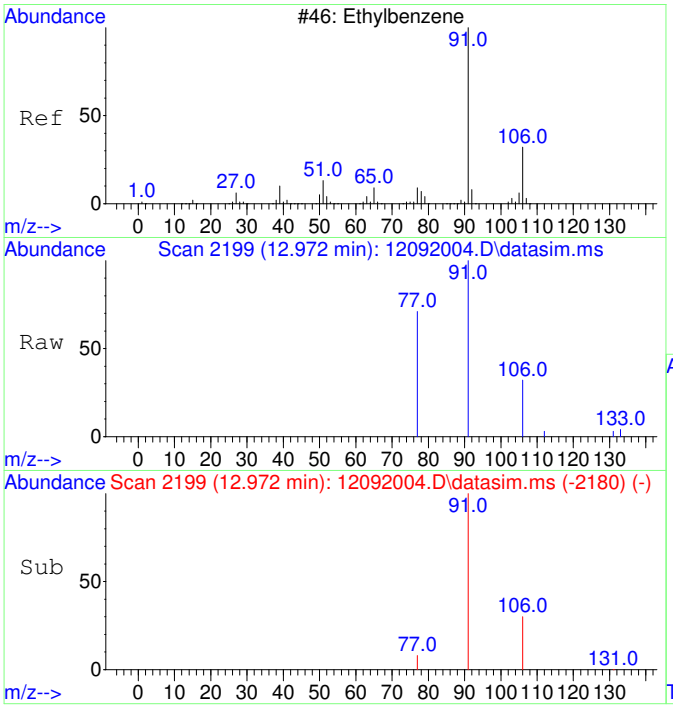


#17
1,1,1,2-Tetrachloroethane
Concen: 50.24 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:131 Resp: 623

Ion	Ratio	Lower	Upper
131	100		
133	100.8	66.3	126.3

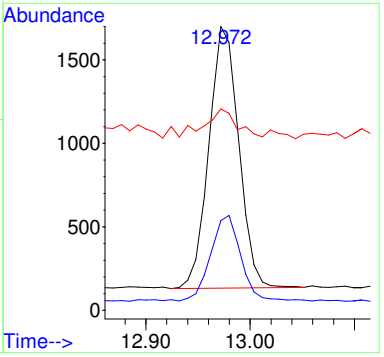


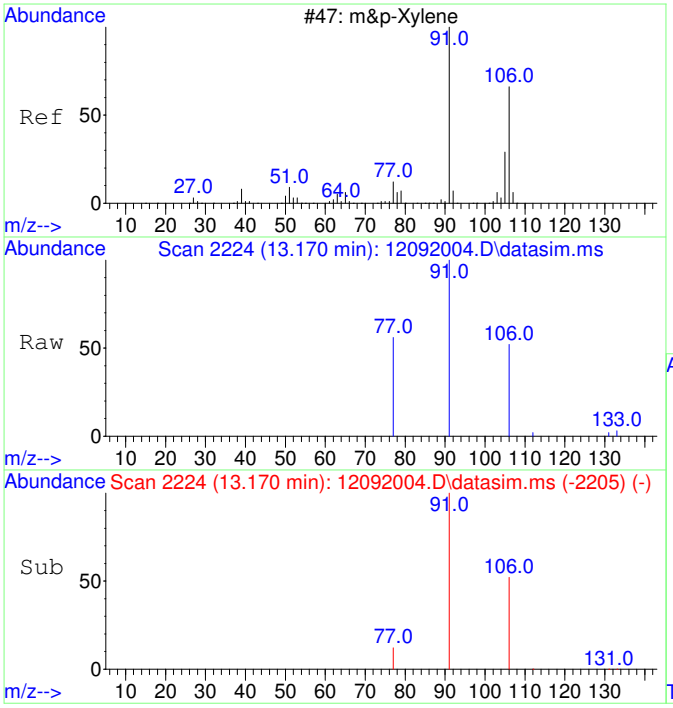


#18
Ethylbenzene
Concen: 53.26 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3111

Ion	Ratio	Lower	Upper
91	100		
106	32.7	3.0	63.0
77	12.9	0.0	38.2

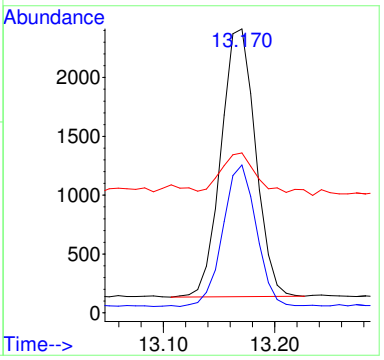


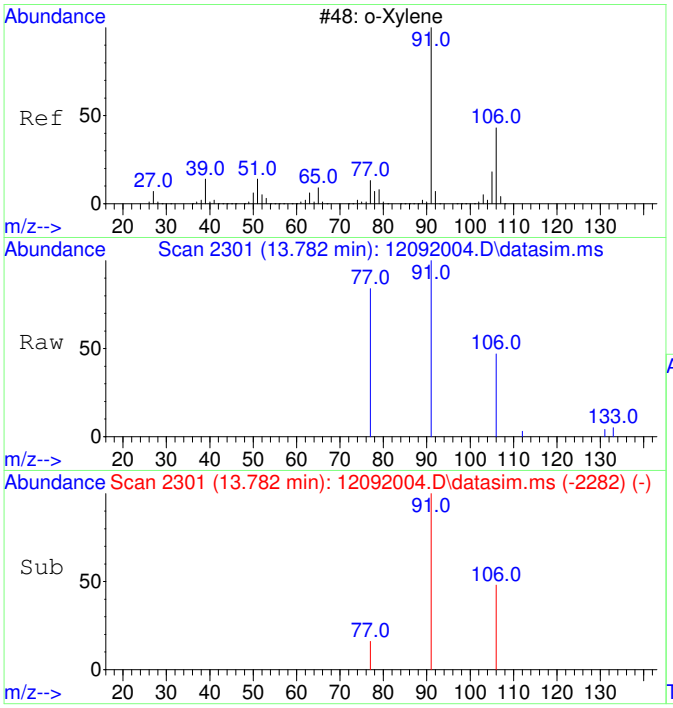


#19
m&p-Xylene
Concen: 108.81 ug/L
RT: 13.170 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 4895

Ion	Ratio	Lower	Upper
91	100		
106	51.1	22.2	82.2
77	17.4	0.0	42.4

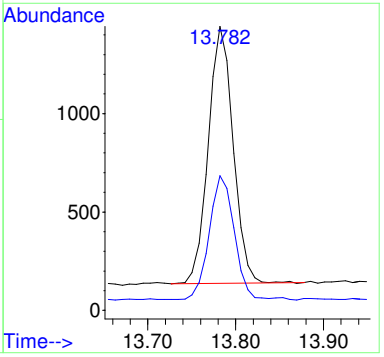


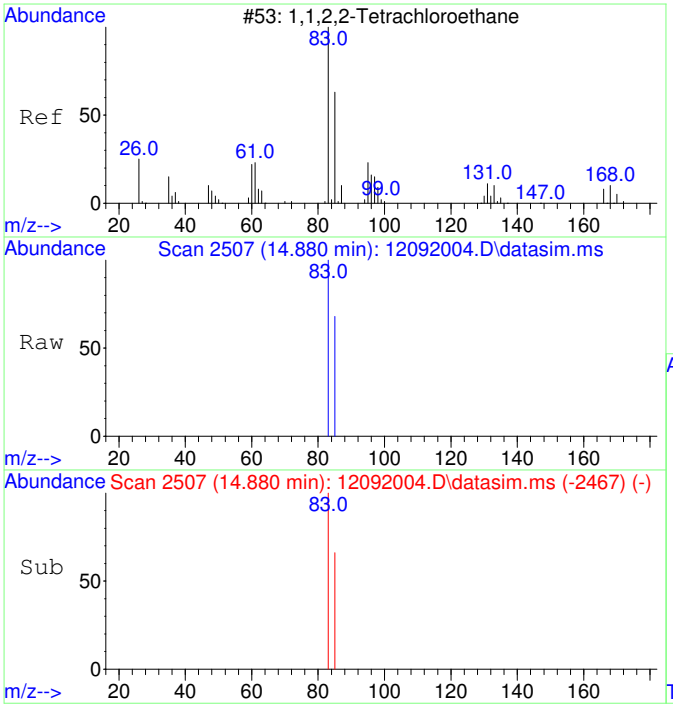


#20
o-Xylene
Concen: 53.15 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 2568

Ion	Ratio	Lower	Upper
91	100		
106	47.6	19.2	79.2

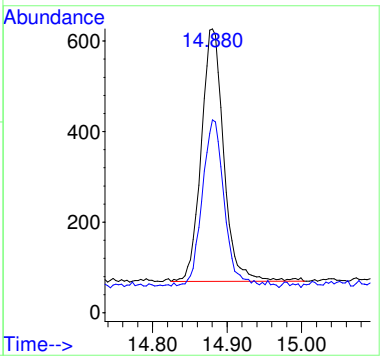


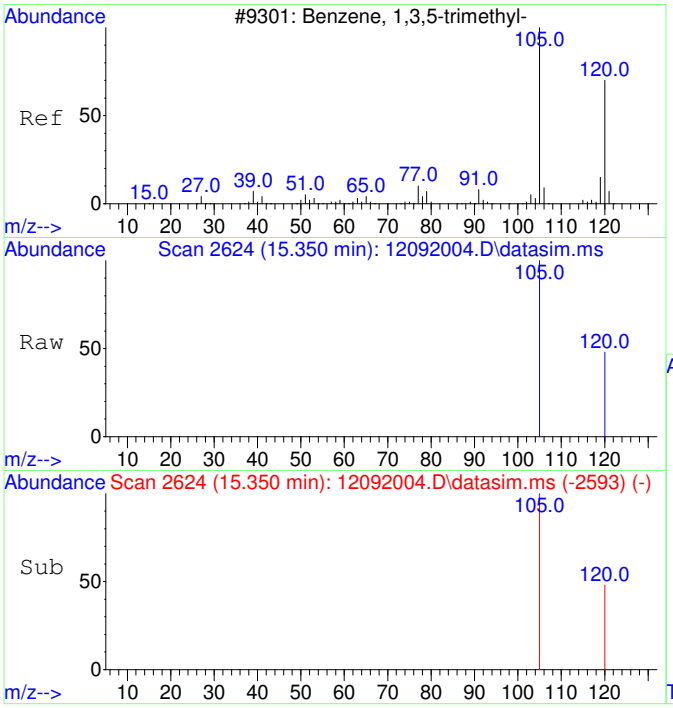


#21
1,1,2,2-Tetrachloroethane
Concen: 51.97 ug/L
RT: 14.880 min Scan# 2507
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 1170

Ion	Ratio	Lower	Upper
83	100		
85	62.6	34.8	94.8

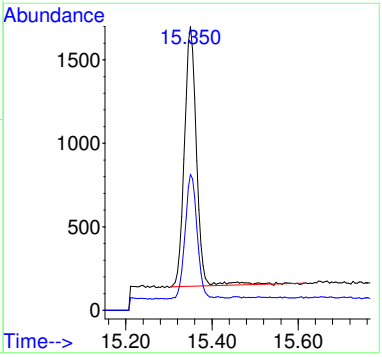


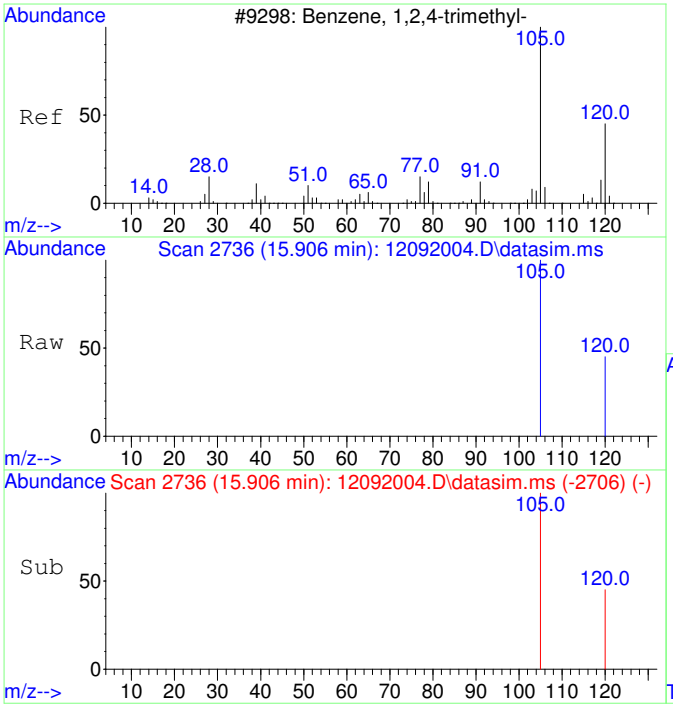


#22
1,3,5-Trimethylbenzene
Concen: 57.08 ug/L
RT: 15.350 min Scan# 2624
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3033

Ion	Ratio	Lower	Upper
105	100		
120	46.9	21.1	81.1

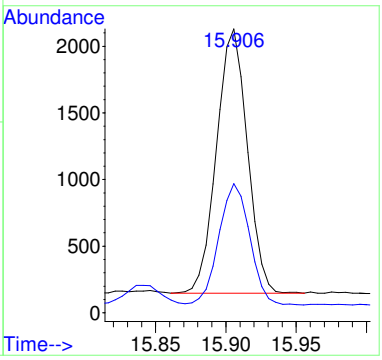


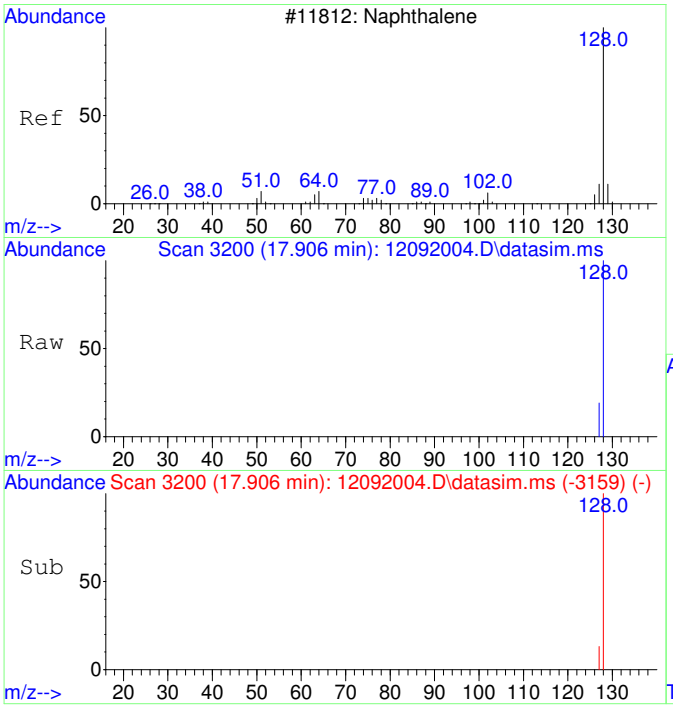


#23
1,2,4-Trimethylbenzene
Concen: 55.38 ug/L
RT: 15.906 min Scan# 2736
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 3010

Ion	Ratio	Lower	Upper
105	100		
120	45.4	17.2	77.2

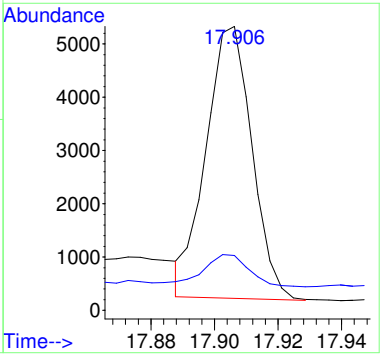


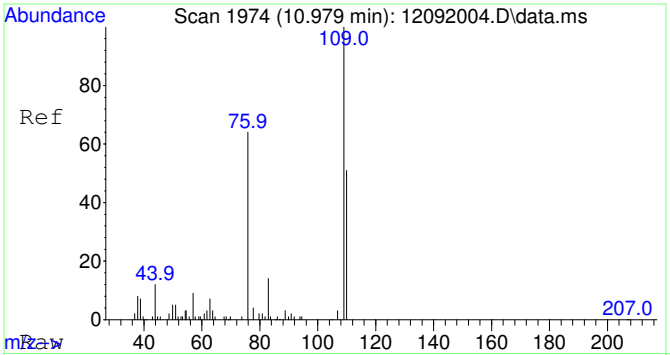


#24
Naphthalene
Concen: 58.30 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 5133

Ion	Ratio	Lower	Upper
128	100		
127	9.8	0.0	42.5

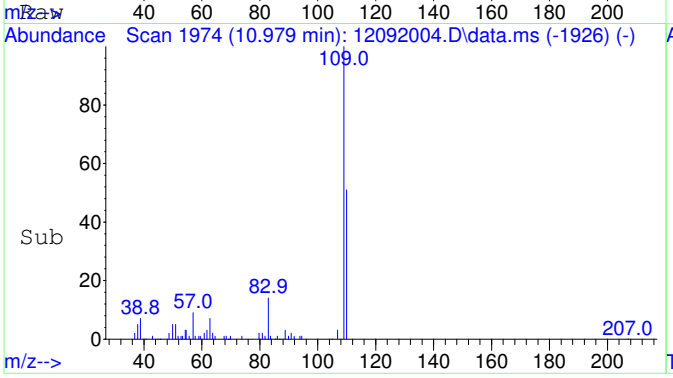


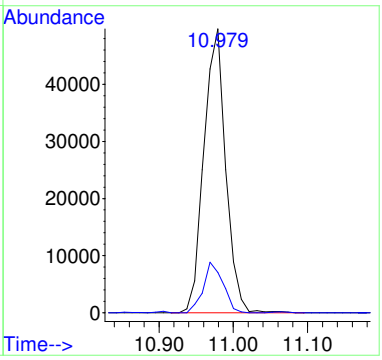


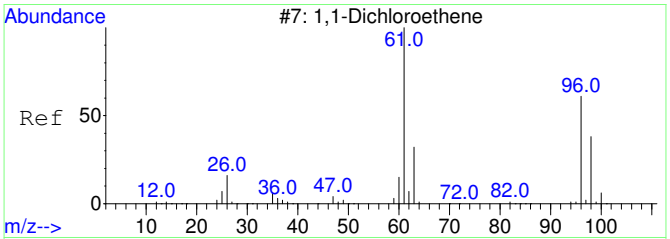
#25
2-Fluorotoluene SCAN
Concen: 4719.47 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

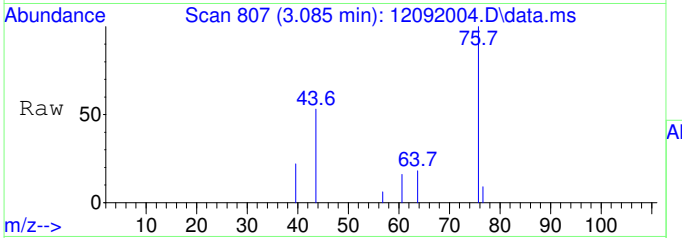
Tgt Ion:109 Resp: 101604

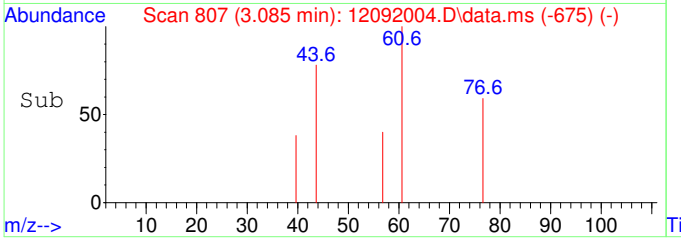
Ion	Ratio	Lower	Upper
109	100		
83	16.1	0.0	43.8







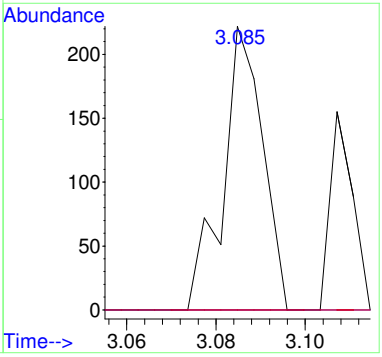


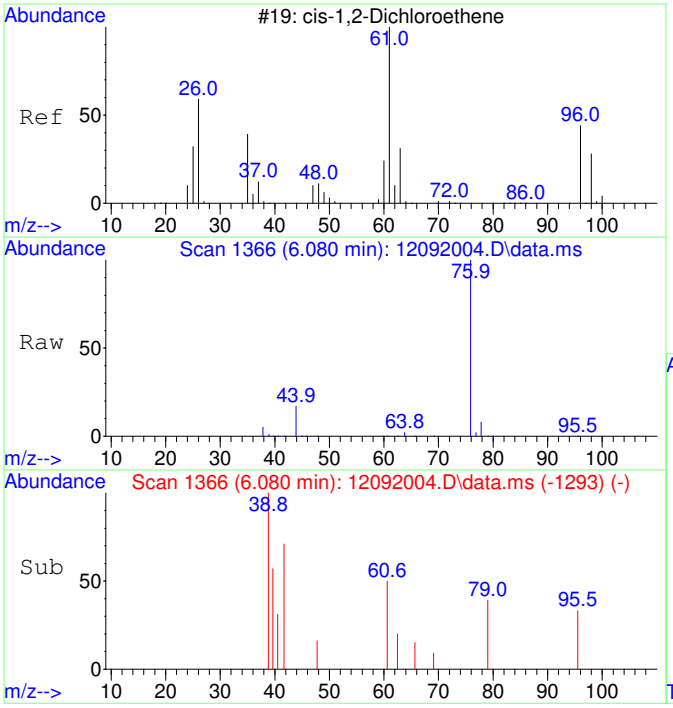


#26
1,1-Dichloroethene SCAN
Concen: 27.26 ug/L
RT: 3.085 min Scan# 807
Delta R.T. -0.011 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 137

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

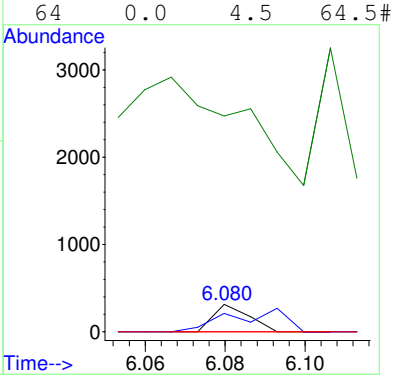


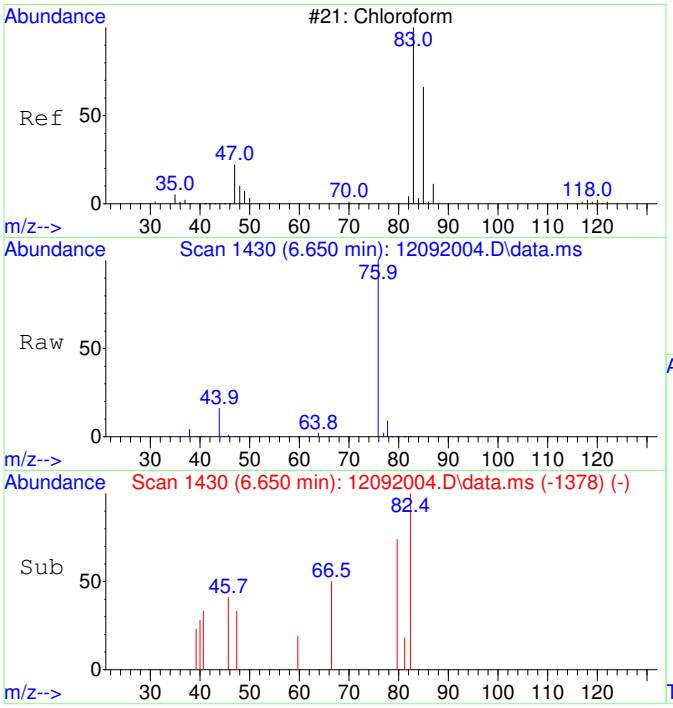


#29
cis-1,2-Dichloroethene SCAN
Concen: 26.25 ug/L
RT: 6.080 min Scan# 1366
Delta R.T. -0.013 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 61 Resp: 195

Ion	Ratio	Lower	Upper
61	100		
96	130.8	39.9	99.9#
98	0.0	13.5	73.5#
64	0.0	4.5	64.5#

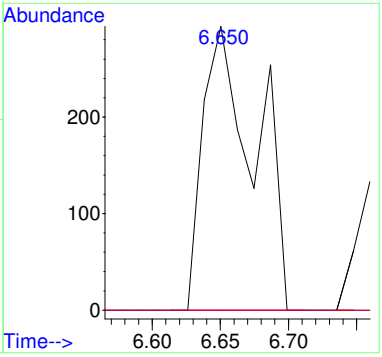


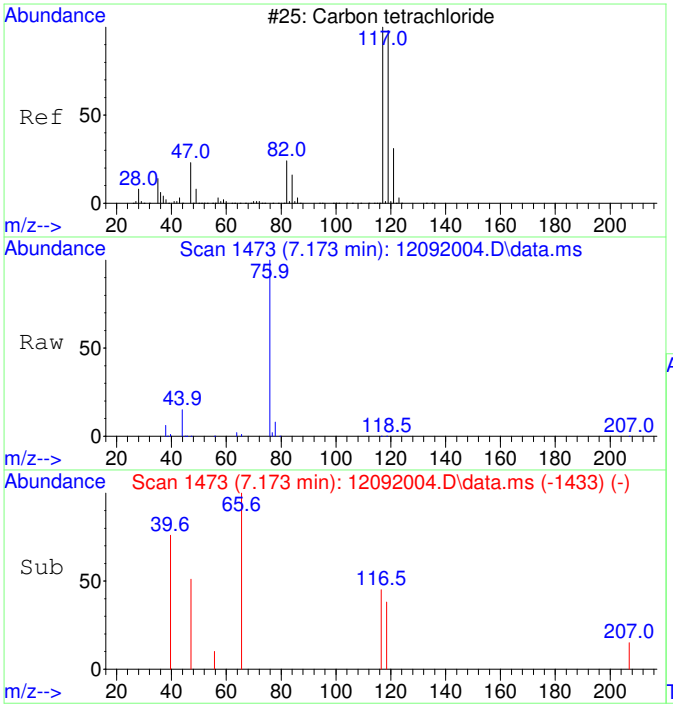


#30
Chloroform SCAN
Concen: 113.59 ug/L
RT: 6.650 min Scan# 1430
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 83 Resp: 787

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

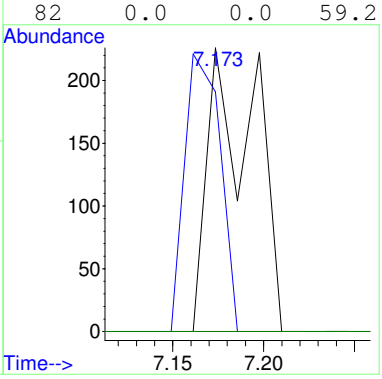


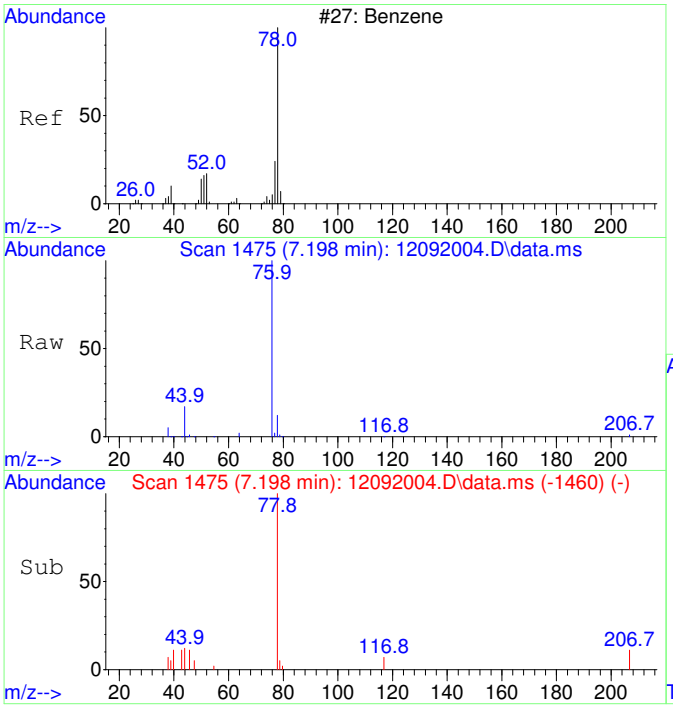


#32
Carbon tetrachloride SCAN
Concen: 65.96 ug/L
RT: 7.173 min Scan# 1473
Delta R.T. -0.012 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:117 Resp: 403

Ion	Ratio	Lower	Upper
117	100		
119	74.7	75.5	135.5#
121	0.0	0.0	58.8
82	0.0	0.0	59.2

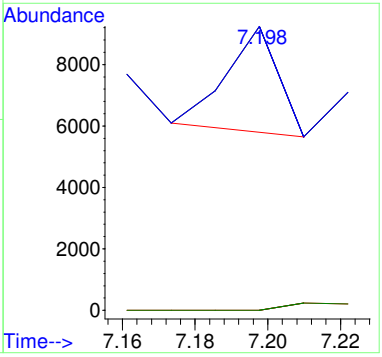


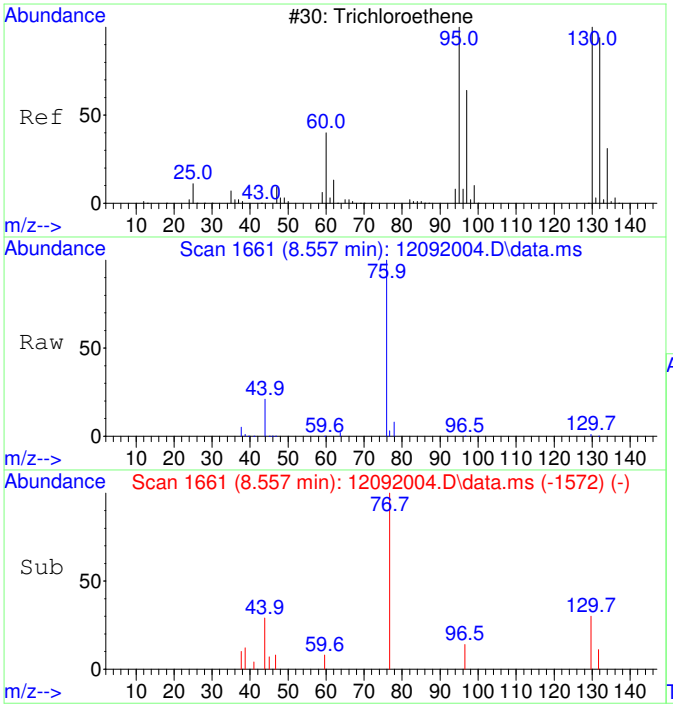


#33
Benzene SCAN
Concen: 149.19 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. -0.316 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 78 Resp: 3227

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	10.0	0.0	47.9
51	10.0	0.0	44.1

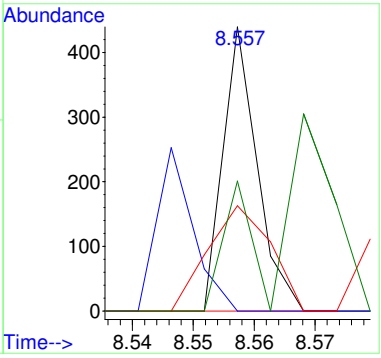


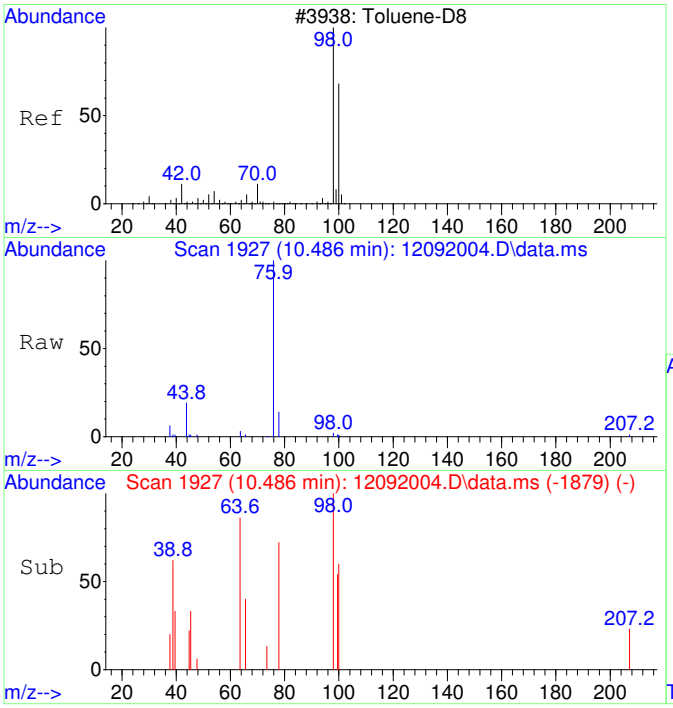


#35
Trichloroethene SCAN
Concen: 36.47 ug/L
RT: 8.557 min Scan# 1661
Delta R.T. -0.016 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:130 Resp: 172

Ion	Ratio	Lower	Upper
130	100		
95	60.5	60.5	120.5#
132	68.0	59.6	119.6
97	0.0	28.2	88.2#

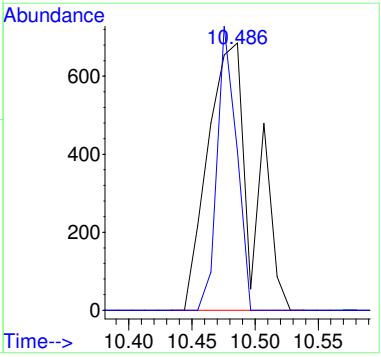


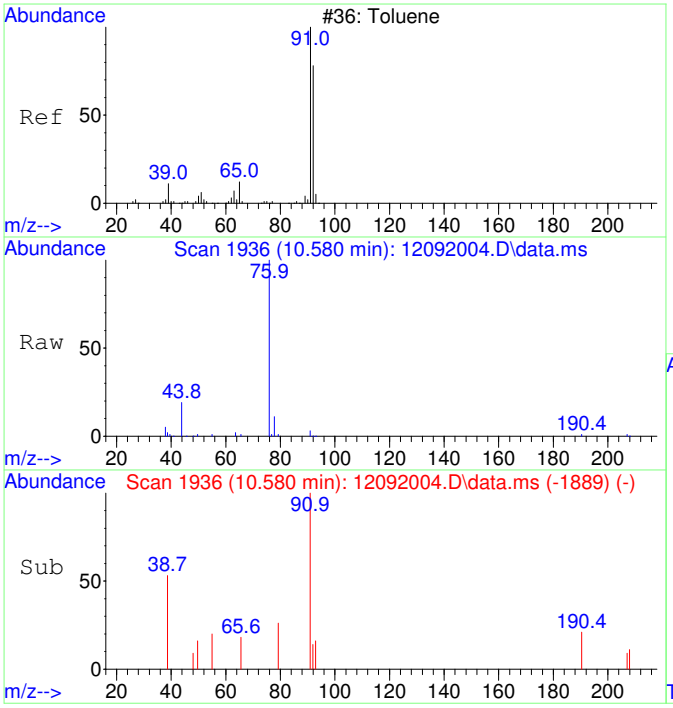


#36
Toluene-d8 SCAN
Concen: 82.81 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 98 Resp: 1672

Ion	Ratio	Lower	Upper
98	100		
100	46.5	40.0	100.0

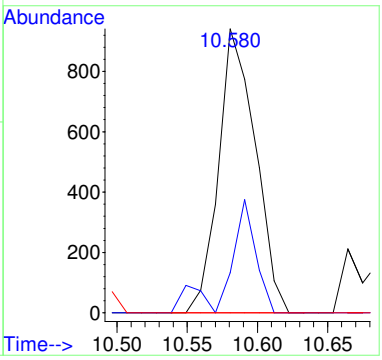


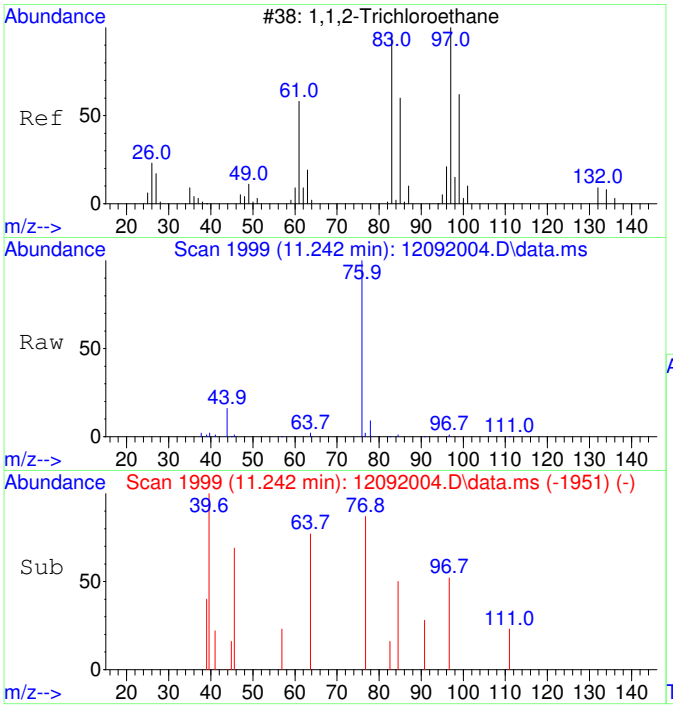


#37
Toluene SCAN
Concen: 69.31 ug/L
RT: 10.580 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1723

Ion	Ratio	Lower	Upper
91	100		
92	29.7	28.3	88.3
65	0.0	0.0	41.0

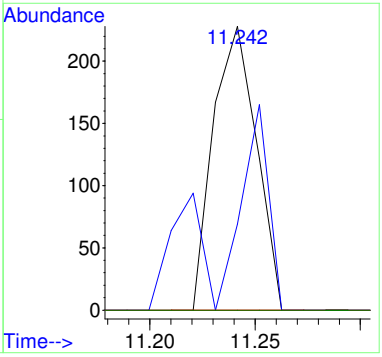


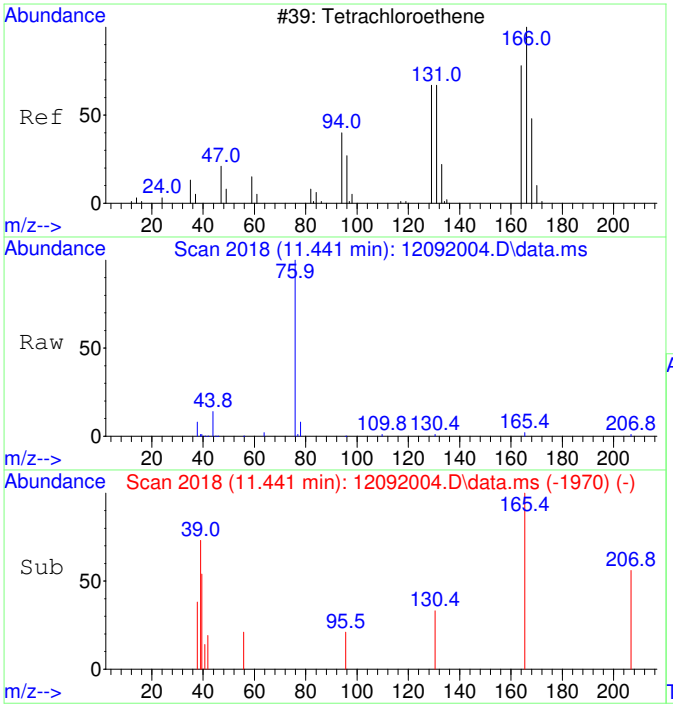


#38
1,1,2-Trichloroethane SCAN
Concen: 52.32 ug/L
RT: 11.242 min Scan# 1999
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 97 Resp: 326

Ion	Ratio	Lower	Upper
97	100		
83	45.1	57.7	117.7#
61	0.0	32.1	92.1#
99	0.0	36.7	96.7#

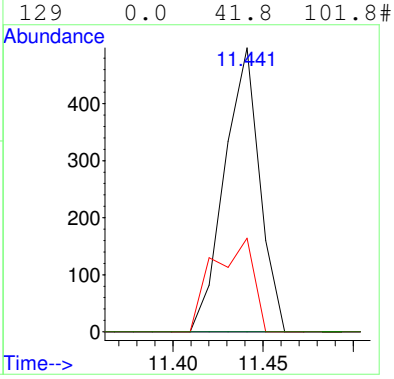


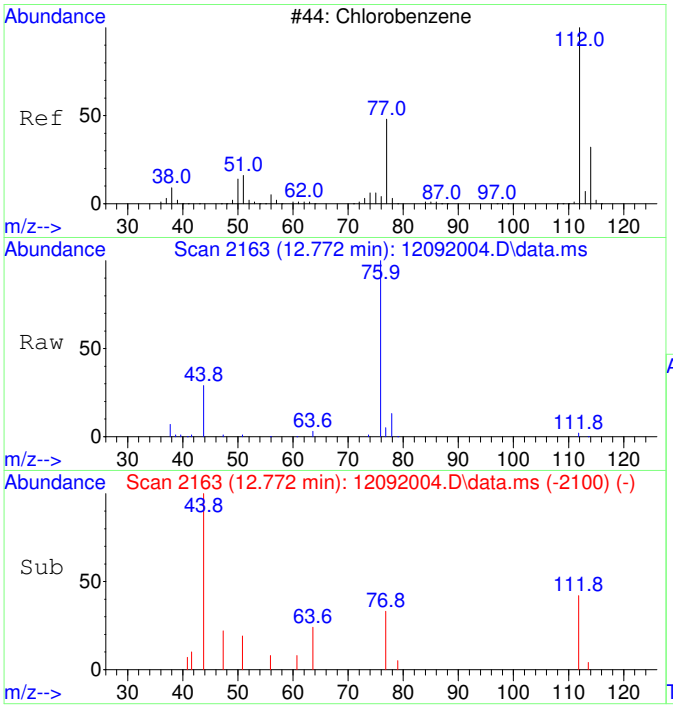


#39
Tetrachloroethene SCAN
Concen: 120.87 ug/L
RT: 11.441 min Scan# 2018
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:166 Resp: 676

Ion	Ratio	Lower	Upper
166	100		
164	0.0	50.9	110.9#
131	37.9	38.7	98.7#
129	0.0	41.8	101.8#

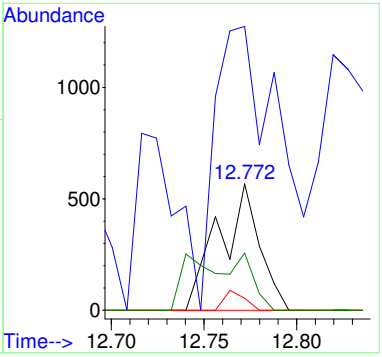


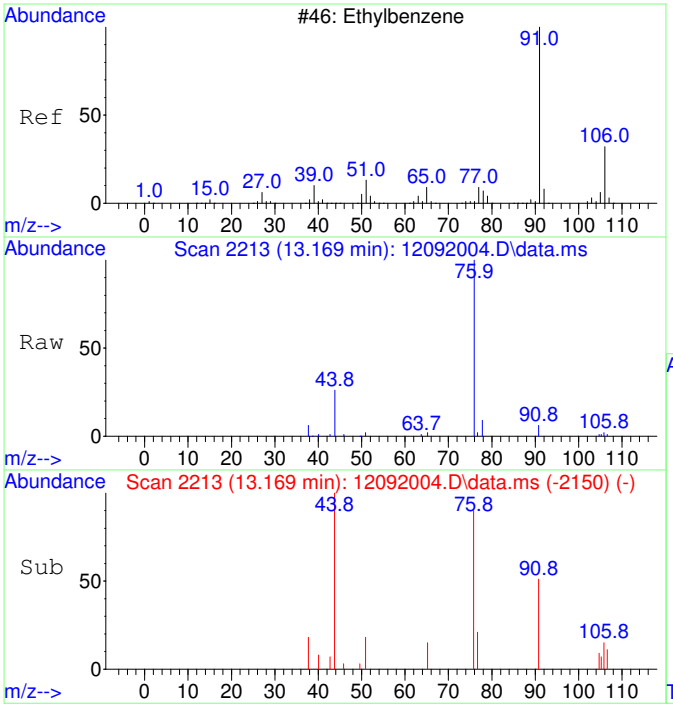


#40
Chlorobenzene SCAN
Concen: 48.89 ug/L
RT: 12.772 min Scan# 2163
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:112 Resp: 873

Ion	Ratio	Lower	Upper
112	100		
77	267.7	28.2	88.2#
114	7.9	2.3	62.3
51	60.8	0.0	50.1#

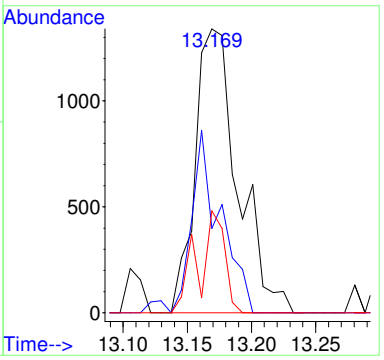


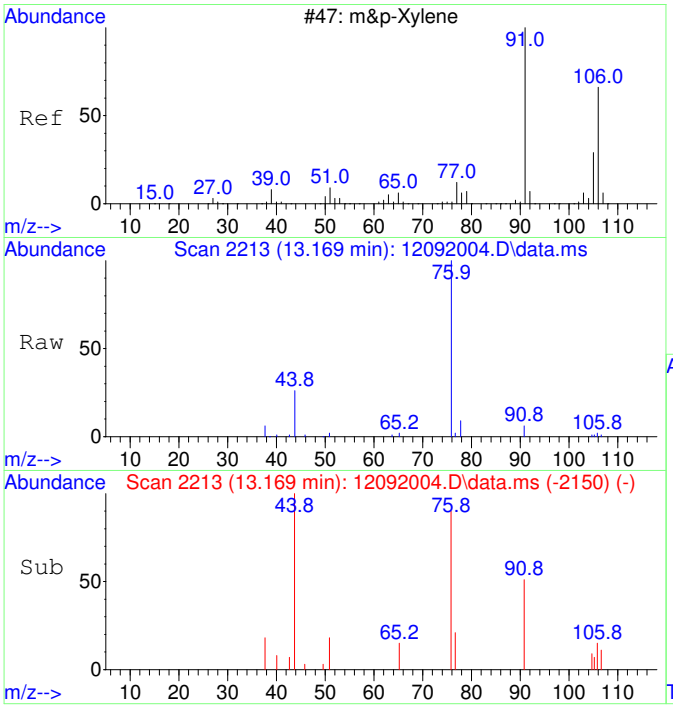


#42
Ethylbenzene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
51	22.1	0.0	40.1

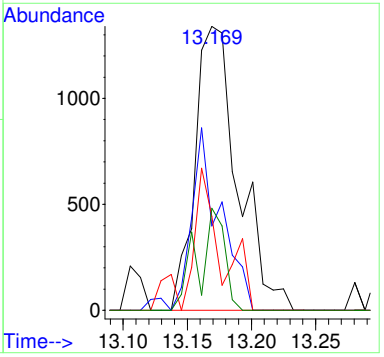


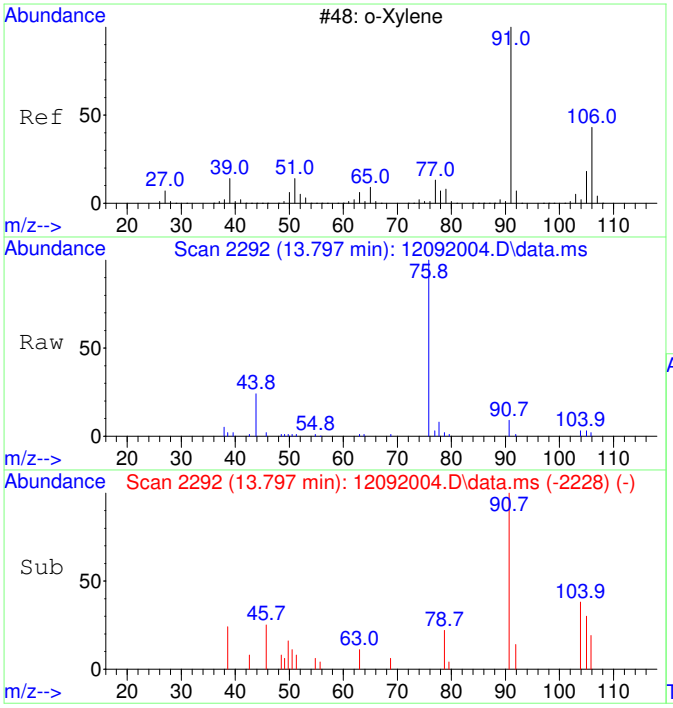


#43
m&p-Xylene SCAN
Concen: 65.79 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 3117

Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.1	83.1
105	35.1	0.0	54.7
51	22.1	0.0	40.1

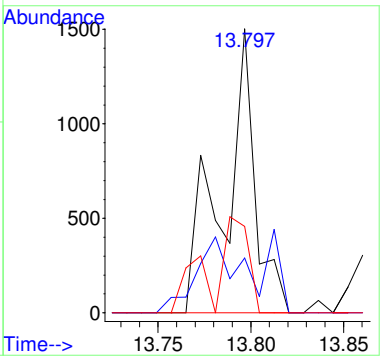


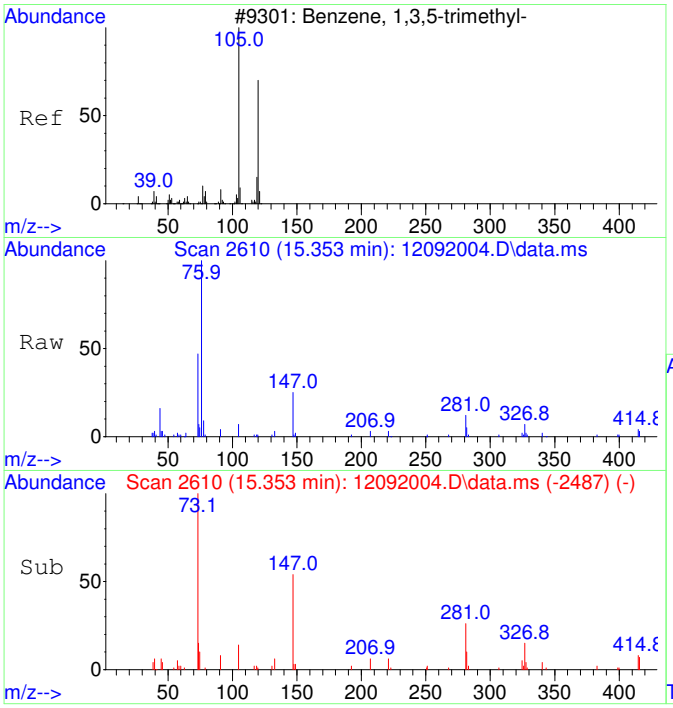


#44
o-Xylene SCAN
Concen: 68.81 ug/L
RT: 13.797 min Scan# 2292
Delta R.T. 0.008 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion: 91 Resp: 1780

Ion	Ratio	Lower	Upper
91	100		
106	0.0	18.0	78.0#
105	40.3	0.0	56.6

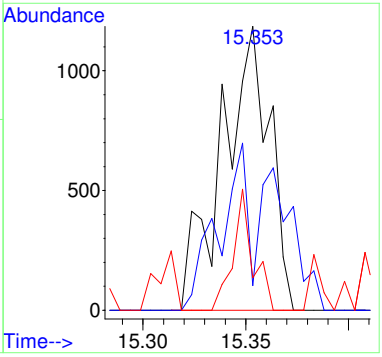


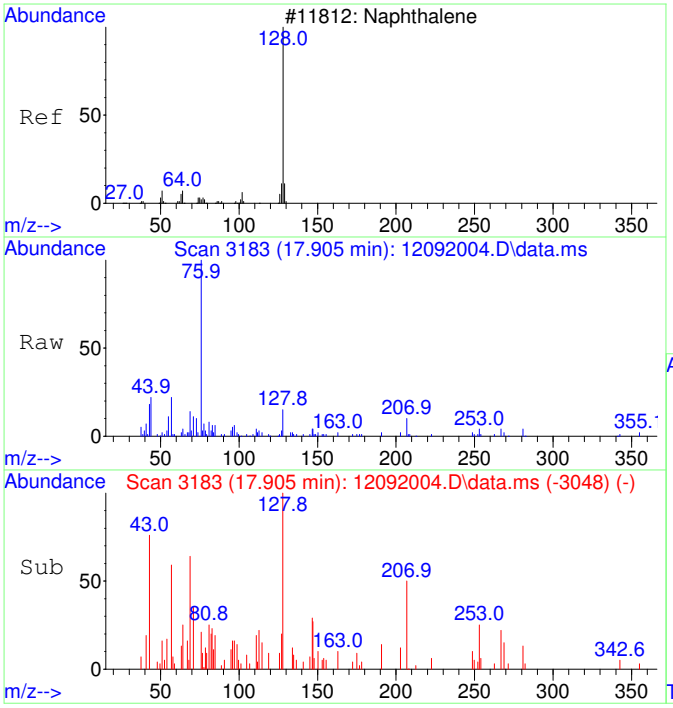


#46
1,3,5-Trimethylbenzene SCAN
Concen: 70.17 ug/L
RT: 15.353 min Scan# 2610
Delta R.T. 0.000 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:105 Resp: 1915

Ion	Ratio	Lower	Upper
105	100		
120	29.8	18.3	78.3
119	17.5	0.0	43.1

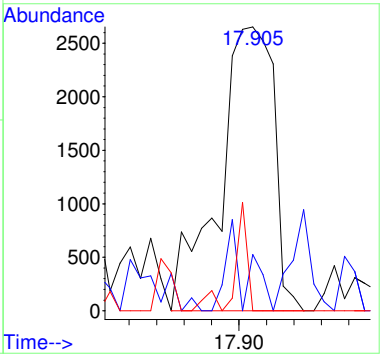




#48
Naphthalene SCAN
Concen: 88.02 ug/L
RT: 17.905 min Scan# 3183
Delta R.T. 0.003 min
Lab File: 12092004.D
Acq: 9 Dec 2020 10:04

Tgt Ion:128 Resp: 3684

Ion	Ratio	Lower	Upper
128	100		
127	11.8	0.0	44.0
129	8.6	0.0	40.8



CRDL STANDARD

Radiello D1

Laboratory: EPA Region 9 Laboratory
SDG: 20343A
Client: California Site Cleanup Section 3
Project: MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID: AG5975CV
Calibration: 2012007
Sequence: S20L031

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S20L031-CRL1	1,1-Dichloroethene	50.0	55.9	112	ug/L	60 - 140
	trans-1,2-Dichloroethene	50.0	49.9	100	ug/L	60 - 140
	1,1-Dichloroethane	50.0	52.0	104	ug/L	60 - 140
	cis-1,2-Dichloroethene	50.0	49.8	100	ug/L	60 - 140
	Chloroform	50.0	51.6	103	ug/L	60 - 140
	Trichloroethene	50.0	49.2	98	ug/L	60 - 140
	Tetrachloroethene	50.0	52.6	105	ug/L	60 - 140
	Toluene-d8	50.0	51.1	102	ug/L	60 - 140

QLS REPORT

Instrument Name: AG5975C
Sample Name: S20L031-CRL1
Misc Info: 2030073 0.05 mg/L
Date Acquired: 12/10/20 9:43
QLast Update: Tue Dec 08 06:26:34 2020
Operator: TD

#	Name	Ret Time	Amount	Concentration	%R	QC	LIMIT	STATUS
1)	2-Fluorotoluene	10.980	5000.0	5000.00	100%	60	140	pass
2)	1,1-Dichloroethene	3.090	50.0	55.88	112%	60	140	pass
3)	trans-1,2-Dichloroethene	4.376	50.0	49.90	100%	60	140	pass
4)	1,1-Dichloroethane	5.086	50.0	52.02	104%	60	140	pass
5)	cis-1,2-Dichloroethene	6.088	50.0	49.75	99%	60	140	pass
6)	Chloroform	6.652	50.0	51.55	103%	60	140	pass
7)	1,1,1-Trichloroethane	6.919	50.0	51.90	104%	60	140	pass
8)	Carbon tetrachloride	7.187	50.0	49.95	100%	60	140	pass
10)	1,2-Dichloroethane	7.552	50.0	52.23	104%	60	140	pass
11)	Trichloroethene	8.575	50.0	49.25	99%	60	140	pass
12)	Toluene-d8	10.487	50.0	51.14	102%	60	140	pass
13)	Toluene	10.582	50.0	52.92	106%	60	140	pass
14)	1,1,2-Trichloroethane	11.232	50.0	49.82	100%	60	140	pass
15)	Tetrachloroethene	11.432	50.0	52.61	105%	60	140	pass
16)	Chlorobenzene	12.773	50.0	51.71	103%	60	140	pass
17)	1,1,1,2-Tetrachloroethane	12.916	50.0	50.19	100%	60	140	pass
18)	Ethylbenzene	12.972	50.0	53.97	108%	60	140	pass
19)	m&p-Xylene	13.170	100.0	110.86	111%	60	140	pass
20)	o-Xylene	13.782	50.0	53.18	106%	60	140	pass
21)	1,1,2,2-Tetrachloroethane	14.880	50.0	52.04	104%	60	140	pass
22)	1,3,5-Trimethylbenzene	15.350	50.0	57.12	114%	60	140	pass
23)	1,2,4-Trimethylbenzene	15.906	50.0	58.13	116%	60	140	pass
24)	Naphthalene	17.904	50.0	55.01	110%	60	140	pass

Quantitation Report (Not Reviewed)

Before Manual Integration

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

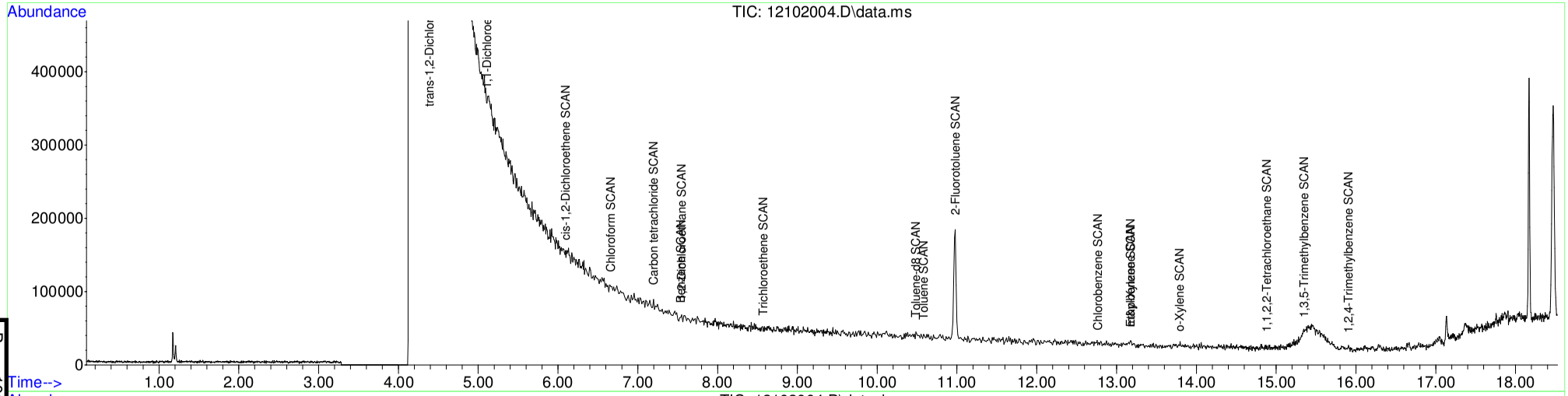
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204465	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	2025	51.14	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.02%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	752	92.76	ug/L #	34
3] trans-1,2-Dichloroethene	4.389	61	510	49.90	ug/L	72
4] 1,1-Dichloroethane	5.093	63	635	52.02	ug/L	83
5] cis-1,2-Dichloroethene	6.094	61	629	49.75	ug/L	98
6] Chloroform	6.664	83	626	51.55	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	677	51.90	ug/L	97
8] Carbon tetrachloride	7.187	117	623	49.95	ug/L	91
9] Benzene	7.515	78	1917	55.72	ug/L	57
10] 1,2-Dichloroethane	7.552	62	613	52.23	ug/L	67
11] Trichloroethene	8.575	130	535	49.25	ug/L	94
13] Toluene	10.582	91	2609	52.92	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	569	49.82	ug/L	85
15] Tetrachloroethene	11.432	166	808	52.61	ug/L	100
16] Chlorobenzene	12.765	112	1975	51.71	ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.916	131	671	50.19	ug/L	97
18] Ethylbenzene	12.972	91	3399	53.97	ug/L	95
19] m&p-Xylene	13.171	91	5376	110.86	ug/L	95
20] o-Xylene	13.782	91	2770	53.18	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	1263	52.04	ug/L	99
22] 1,3,5-Trimethylbenzene	15.348	105	3272	57.12	ug/L	96
23] 1,2,4-Trimethylbenzene	15.904	105	3406	58.13	ug/L	94
24] Naphthalene	17.906	128	4712	49.64	ug/L	97
25) 2-Fluorotoluene SCAN	10.979	109	119951	5168.33	ug/L	99
27) trans-1,2-Dichloroethe...	4.388	61	175	25.36	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.111	63	190	23.32	ug/L #	15
29) cis-1,2-Dichloroethene...	6.087	61	269	33.59	ug/L #	58
30) Chloroform SCAN	6.663	83	430	57.57	ug/L #	23
32) Carbon tetrachloride SCAN	7.198	117	247	37.50	ug/L #	9
33) Benzene SCAN	7.538	78	4359	186.94	ug/L	94
34) 1,2-Dichloroethane SCAN	7.551	62	271	37.16	ug/L #	40
35) Trichloroethene SCAN	8.568	130	144	28.32	ug/L #	25
36) Toluene-d8 SCAN	10.486	98	2152	98.86	ug/L #	15
37) Toluene SCAN	10.581	91	674	25.15	ug/L #	1
40) Chlorobenzene SCAN	12.764	112	1038	53.92	ug/L #	65
42) Ethylbenzene SCAN	13.169	91	3758	73.58	ug/L	84
43) m&p-Xylene SCAN	13.169	91	3758	73.58	ug/L	84
44) o-Xylene SCAN	13.789	91	2125	76.20	ug/L #	56
45) 1,1,2,2-Tetrachloroeth...	14.879	83	833	57.45	ug/L #	49
46) 1,3,5-Trimethylbenzene...	15.352	105	2420	82.25	ug/L	83
47) 1,2,4-Trimethylbenzene...	15.903	105	1880	62.54	ug/L #	60

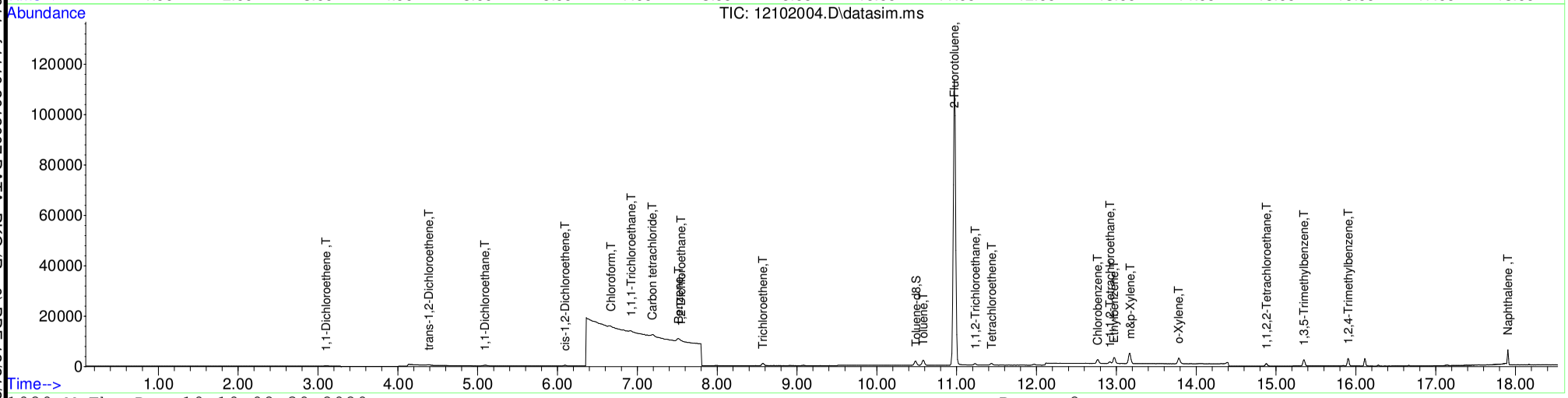
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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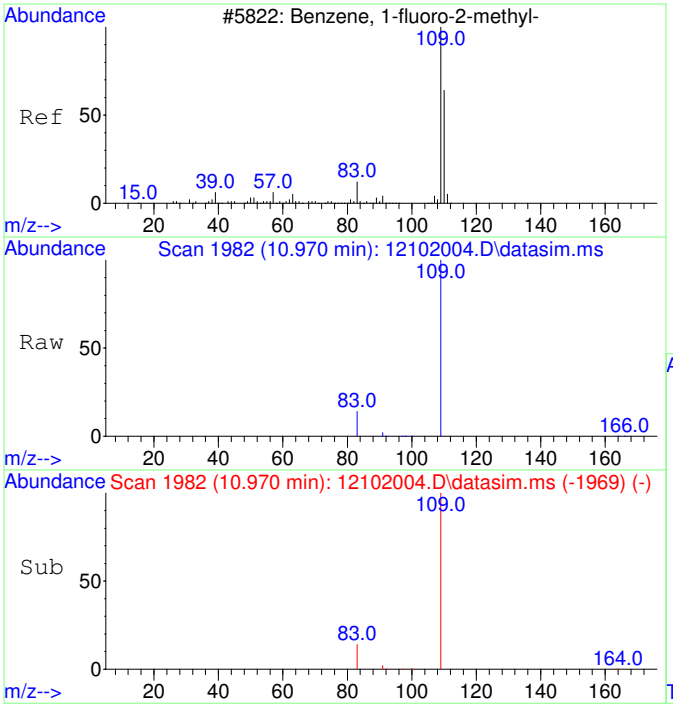
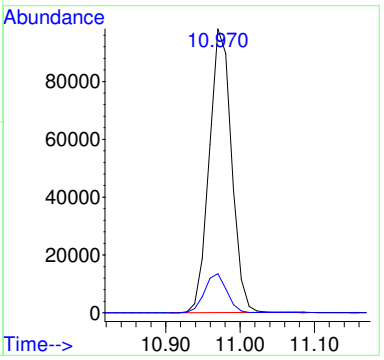
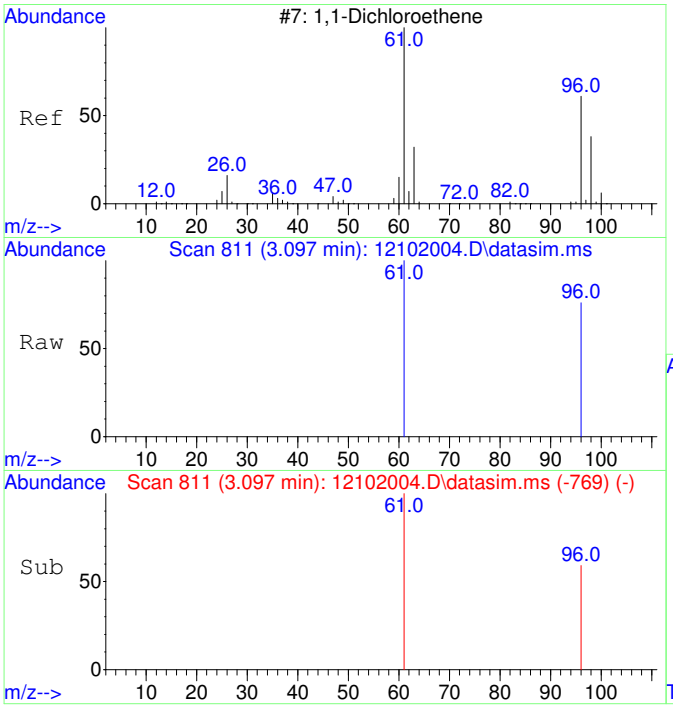


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:109 Resp: 204465

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

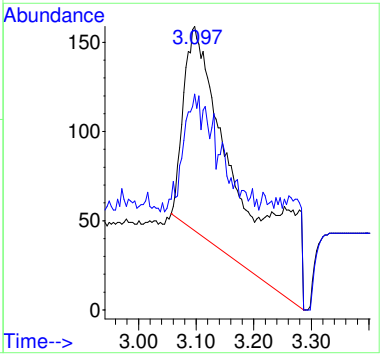




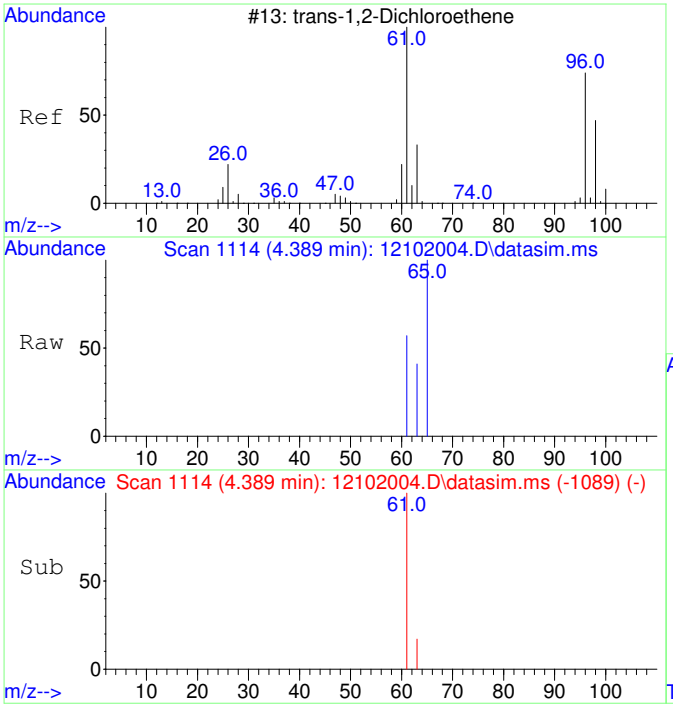
#2
1,1-Dichloroethene
Concen: 92.76 ug/L
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 752

Ion	Ratio	Lower	Upper
61	100		
96	13.8	37.2	97.2#



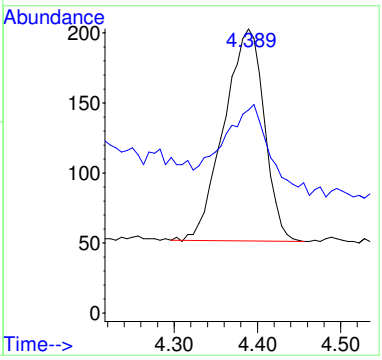
Before MI:
IMPROPER
BASELINE

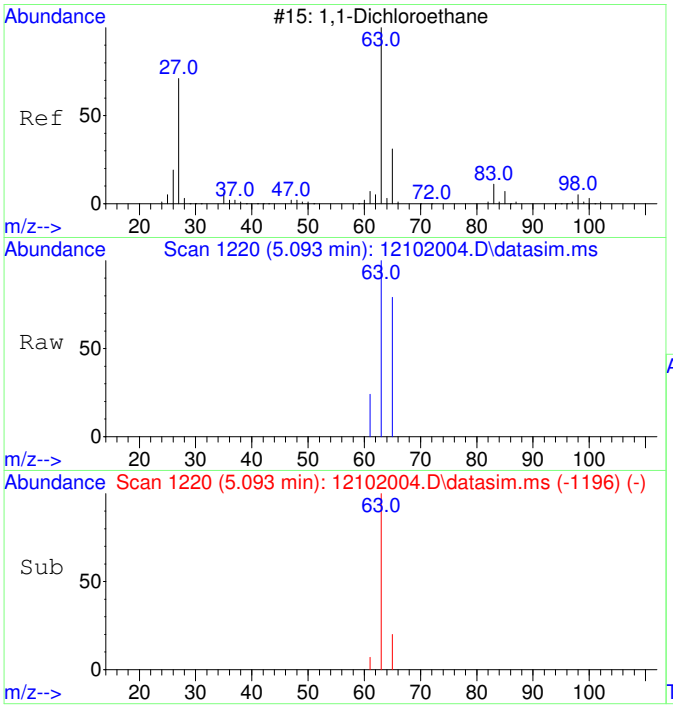


#3
trans-1,2-Dichloroethene
Concen: 49.90 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 510

Ion	Ratio	Lower	Upper
61	100		
63	48.2	2.4	62.4

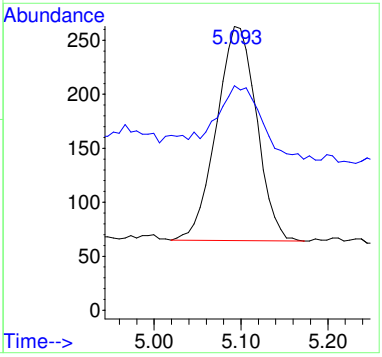


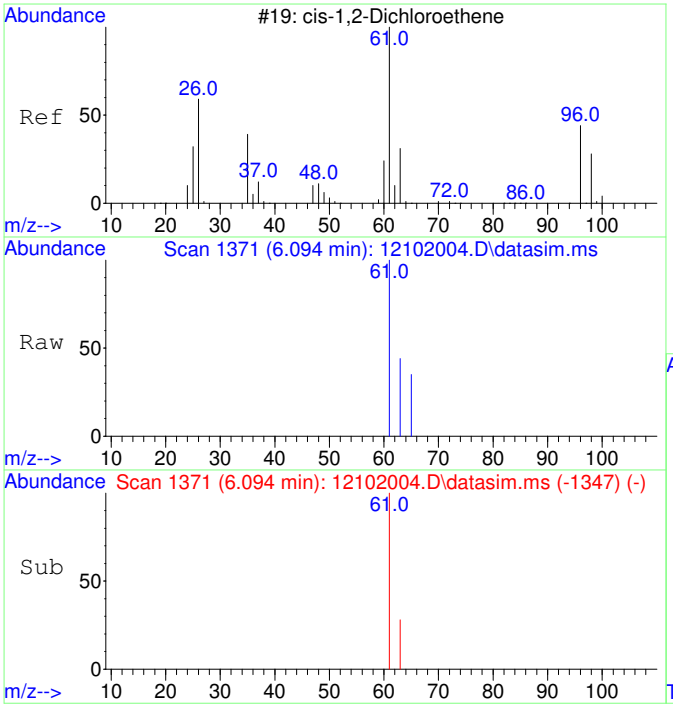


#4
1,1-Dichloroethane
Concen: 52.02 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 635

Ion	Ratio	Lower	Upper
63	100		
65	41.3	1.8	61.8

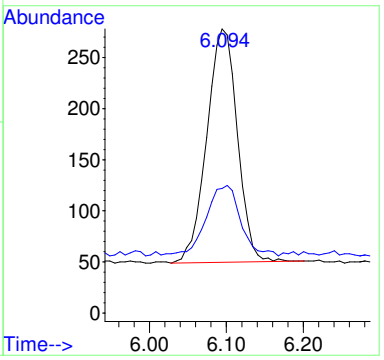


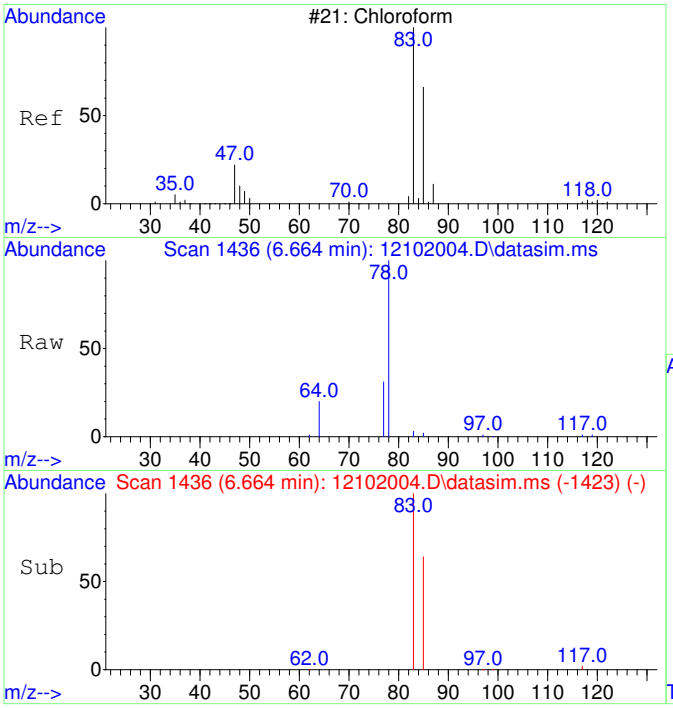


#5
cis-1,2-Dichloroethene
Concen: 49.75 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 629

Ion	Ratio	Lower	Upper
61	100		
63	33.7	2.5	62.5

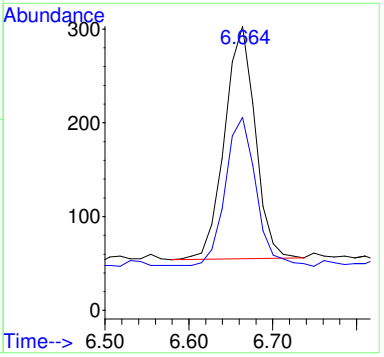


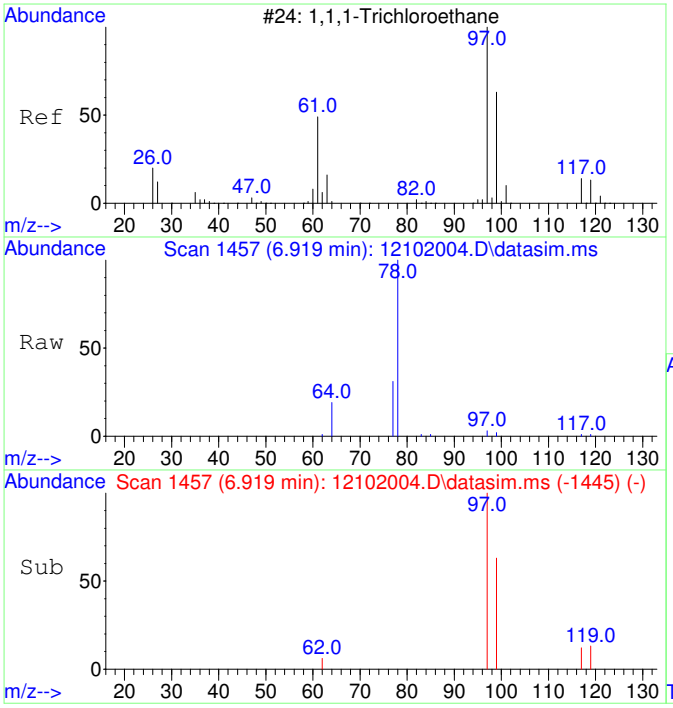


#6
Chloroform
Concen: 51.55 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 626

Ion	Ratio	Lower	Upper
83	100		
85	63.9	35.1	95.1

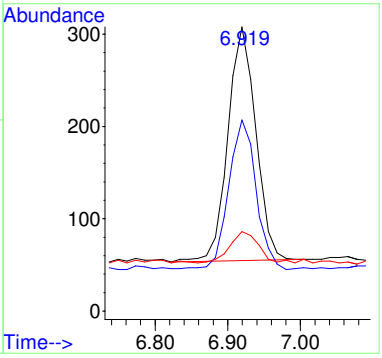


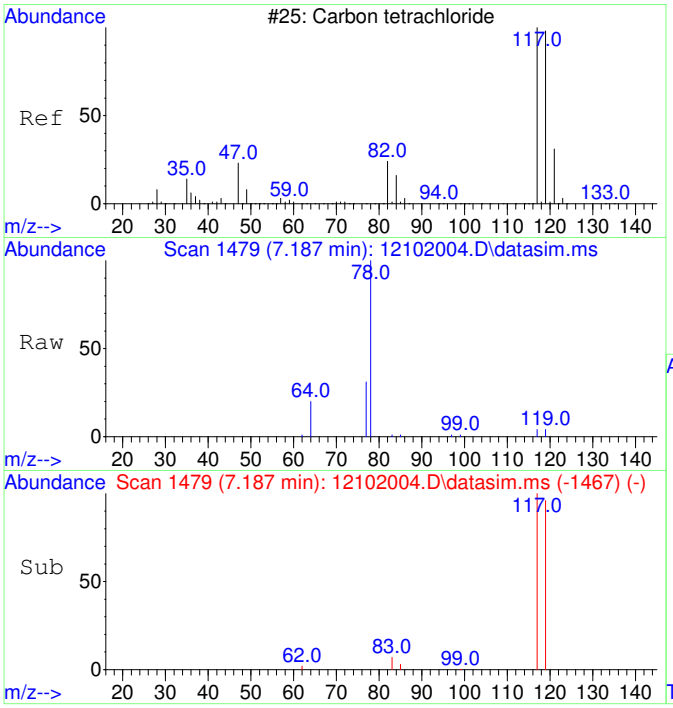


#7
1,1,1-Trichloroethane
Concen: 51.90 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 677

Ion	Ratio	Lower	Upper
97	100		
99	61.6	34.6	94.6
117	13.9	0.0	43.2

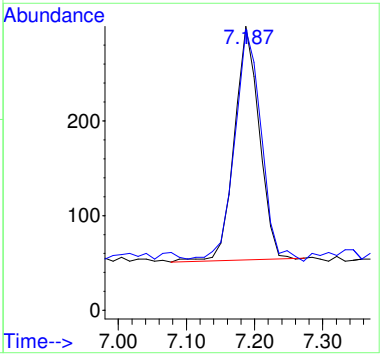


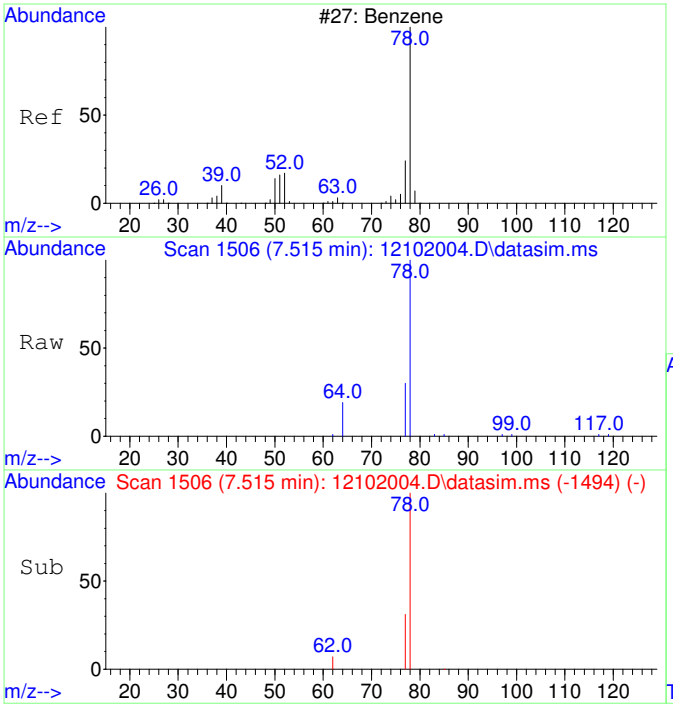


#8
Carbon tetrachloride
Concen: 49.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 623

Ion	Ratio	Lower	Upper
117	100		
119	105.0	66.4	126.4

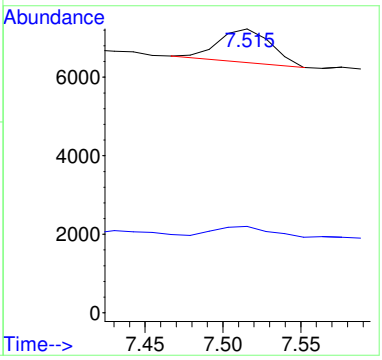


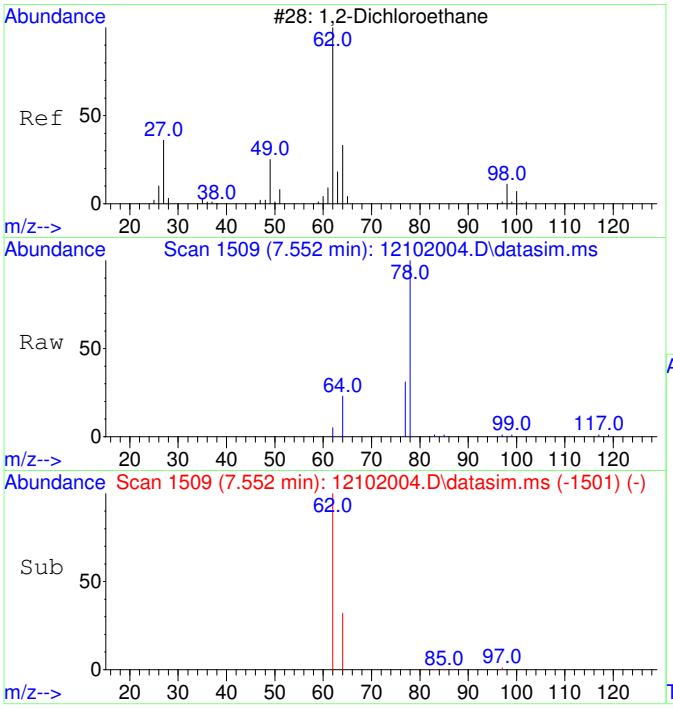


#9
Benzene
Concen: 55.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 1917

Ion	Ratio	Lower	Upper
78	100		
77	44.3	0.0	53.2

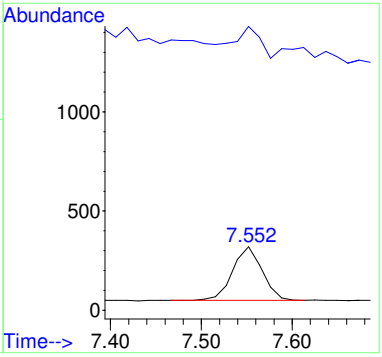


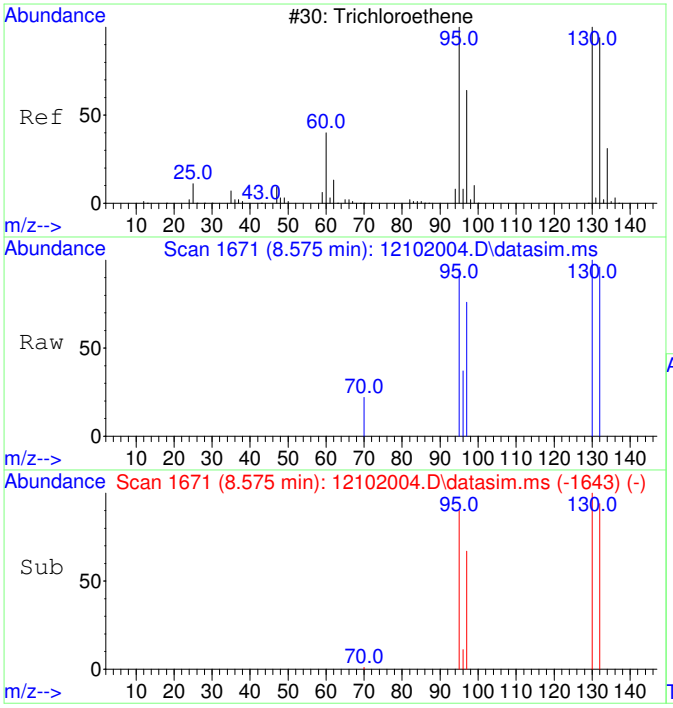


#10
1,2-Dichloroethane
Concen: 52.23 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 613

Ion	Ratio	Lower	Upper
62	100		
64	50.9	2.3	62.3

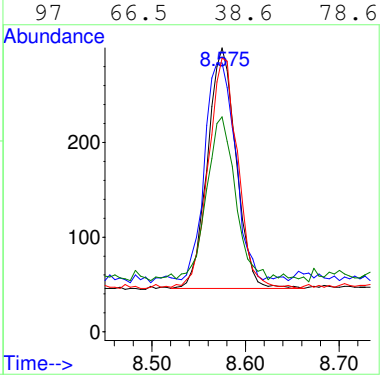


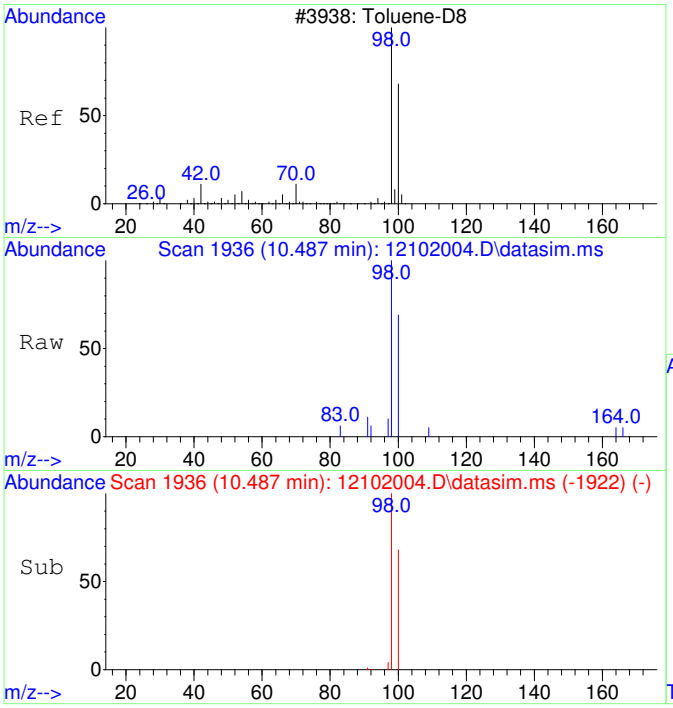


#11
Trichloroethene
Concen: 49.25 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 535

Ion	Ratio	Lower	Upper
130	100		
95	96.6	60.7	120.7
132	98.5	76.0	116.0
97	66.5	38.6	78.6

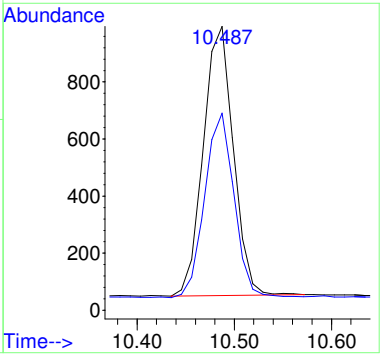


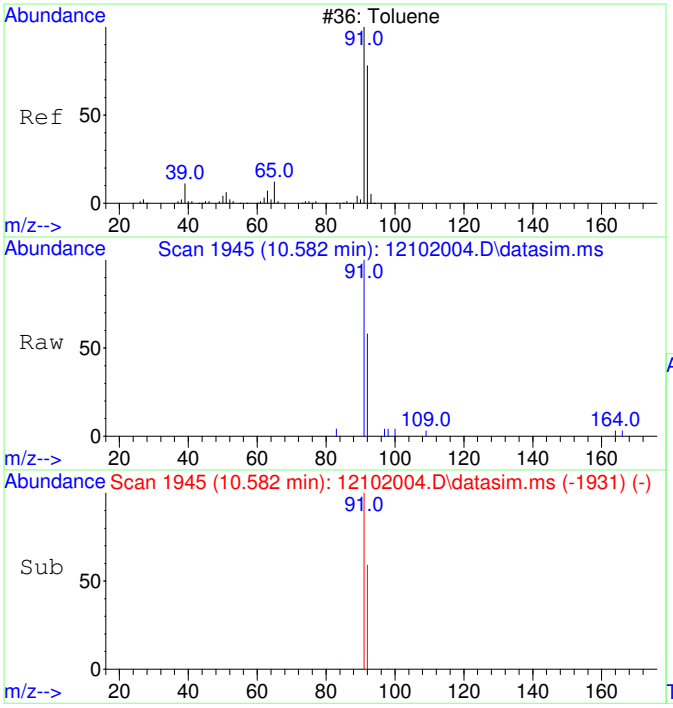


#12
Toluene-d8
Concen: 51.14 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2025

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

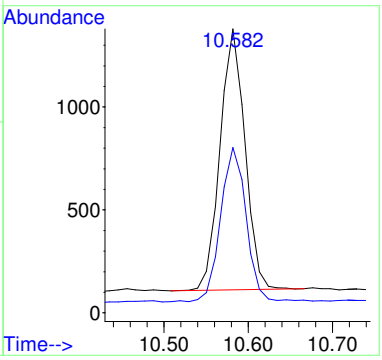


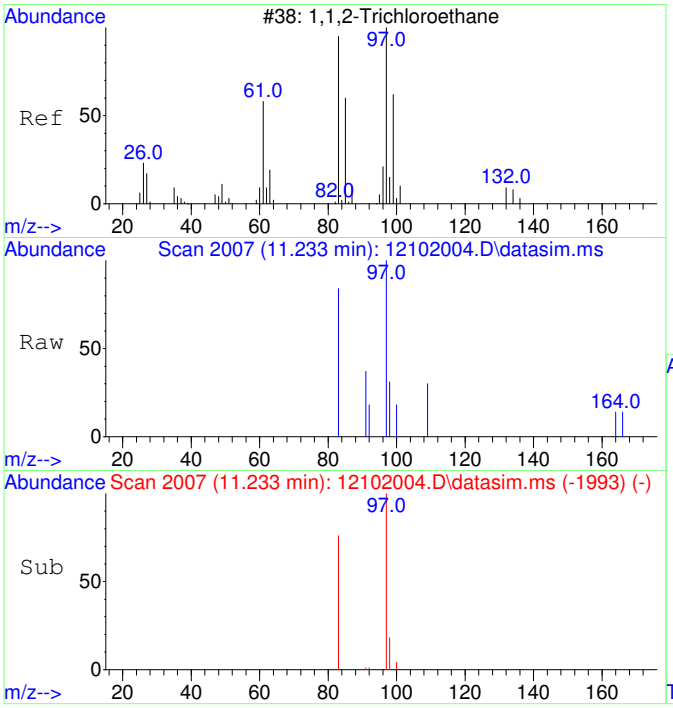


#13
Toluene
Concen: 52.92 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2609

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

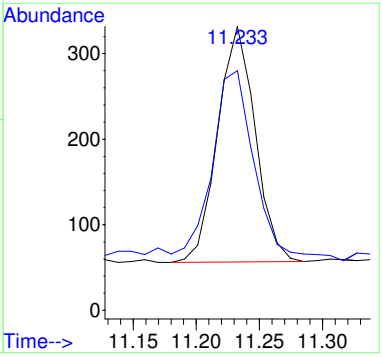


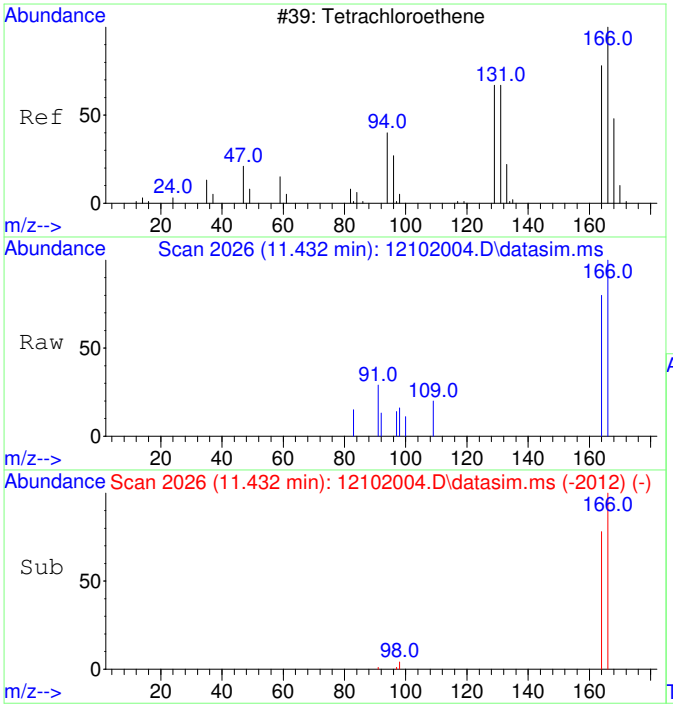


#14
1,1,2-Trichloroethane
Concen: 49.82 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 569

Ion	Ratio	Lower	Upper
97	100		
83	94.4	51.2	111.2

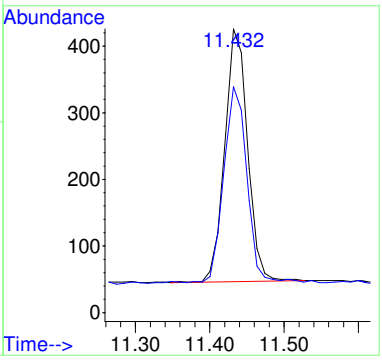


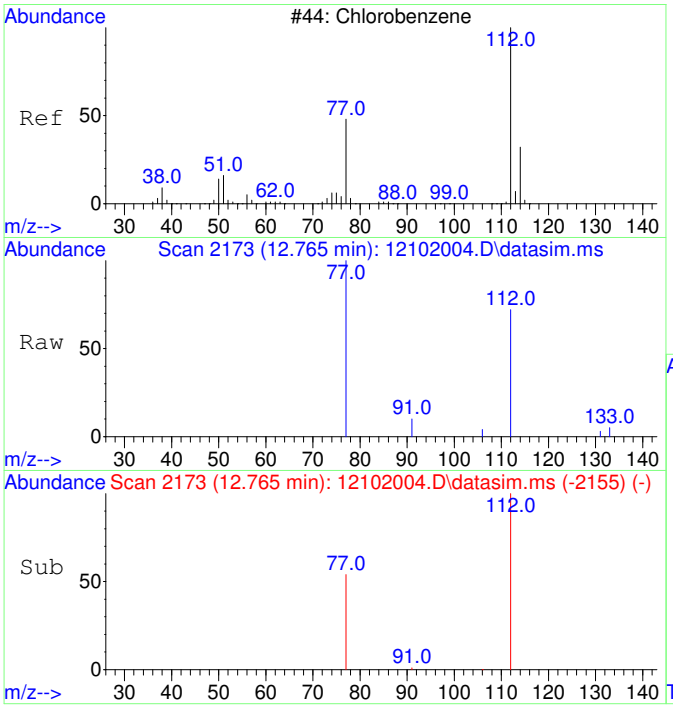


#15
Tetrachloroethene
Concen: 52.61 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:166 Resp: 808

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

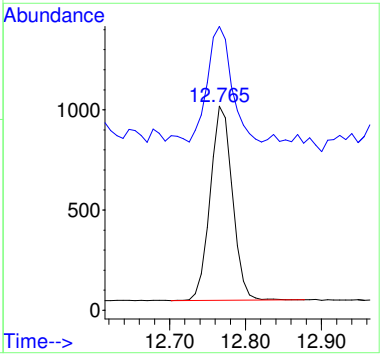


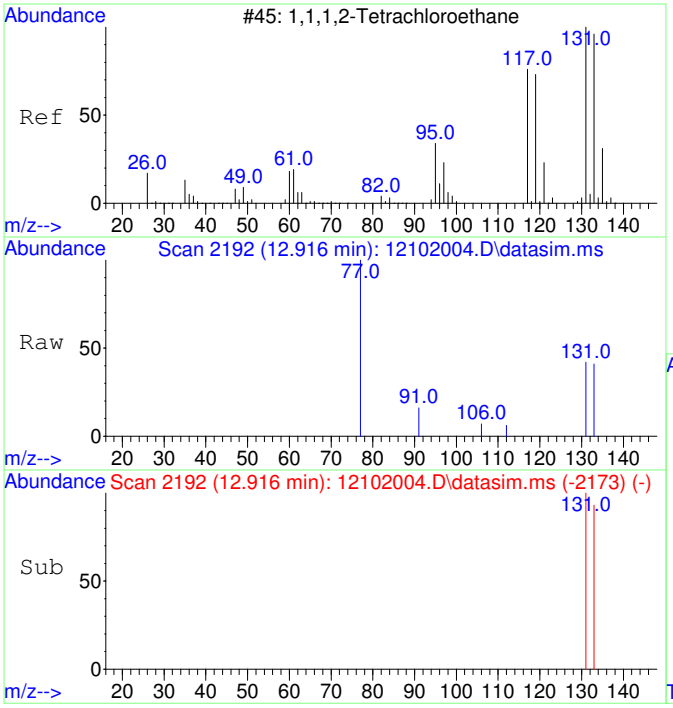


#16
Chlorobenzene
Concen: 51.71 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1975

Ion	Ratio	Lower	Upper
112	100		
77	64.6	23.6	83.6

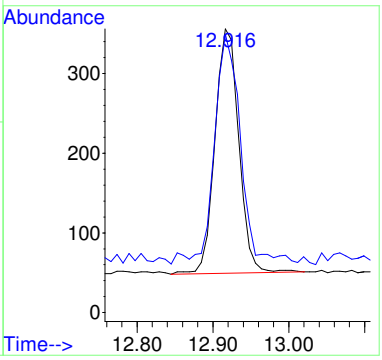


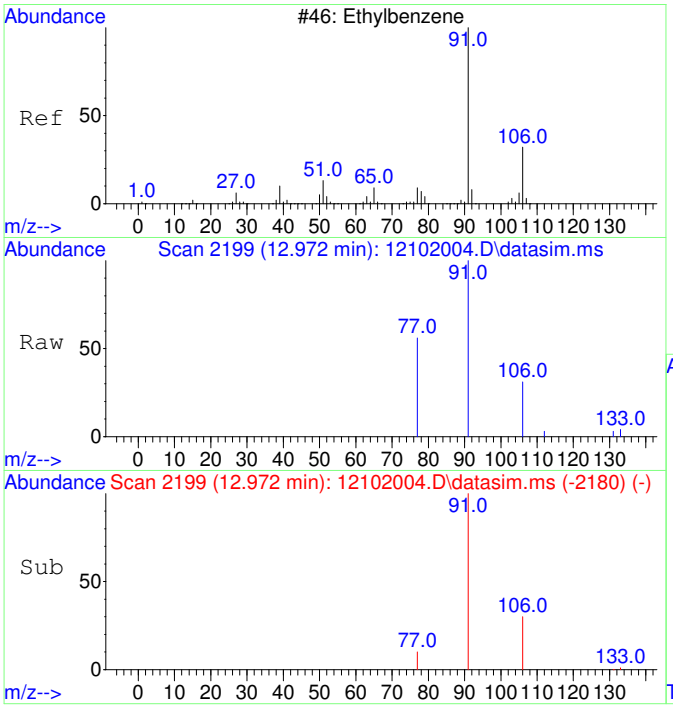


#17
1,1,1,2-Tetrachloroethane
Concen: 50.19 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:131 Resp: 671

Ion	Ratio	Lower	Upper
131	100		
133	99.1	66.3	126.3

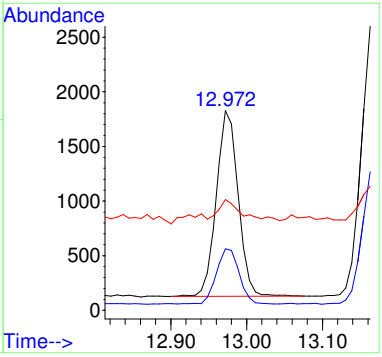


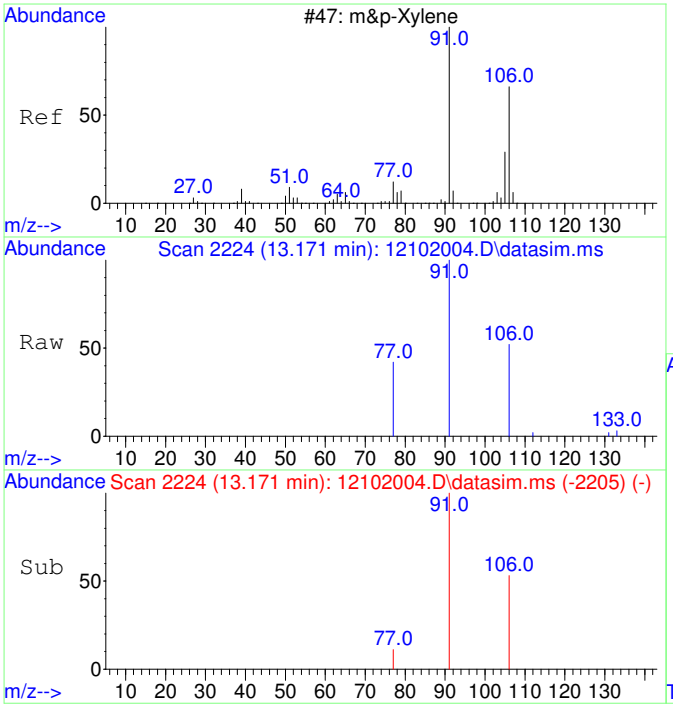


#18
Ethylbenzene
Concen: 53.97 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3399

Ion	Ratio	Lower	Upper
91	100		
106	30.8	3.0	63.0
77	10.9	0.0	38.2

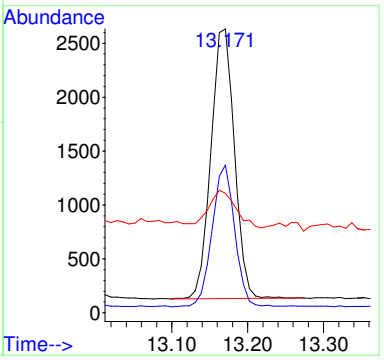


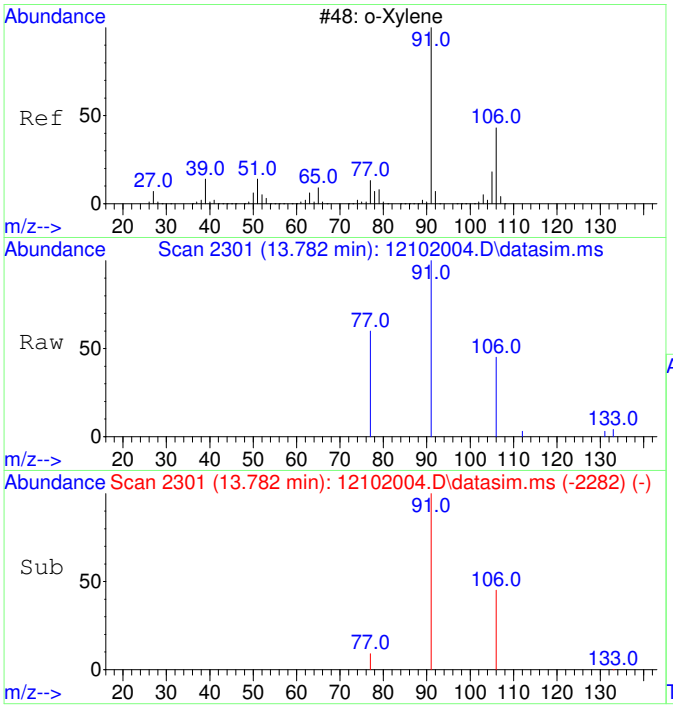


#19
m&p-Xylene
Concen: 110.86 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 5376

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	16.7	0.0	42.4

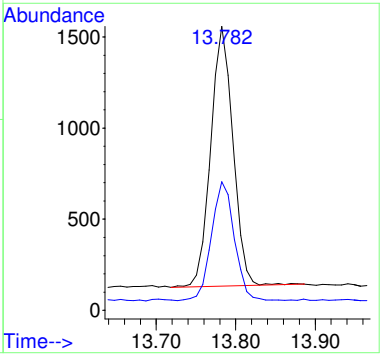


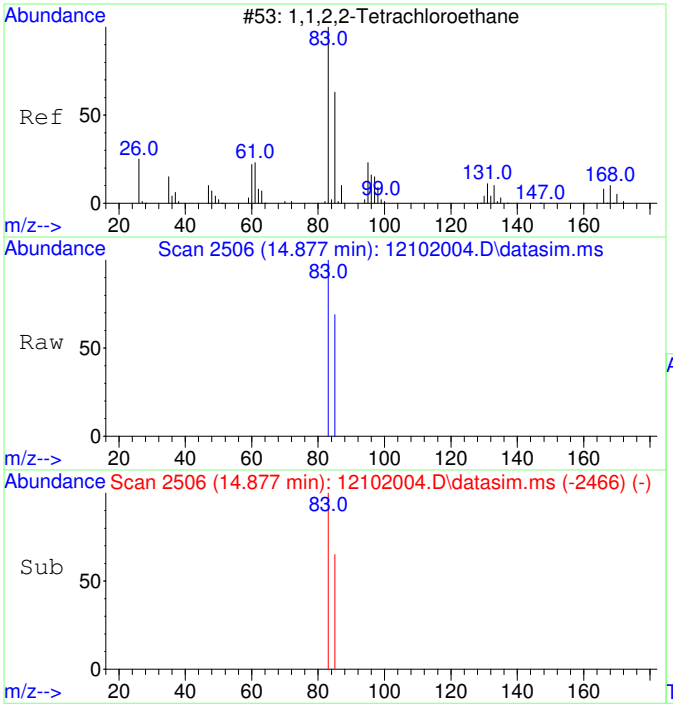


#20
o-Xylene
Concen: 53.18 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2770

Ion	Ratio	Lower	Upper
91	100		
106	46.9	19.2	79.2

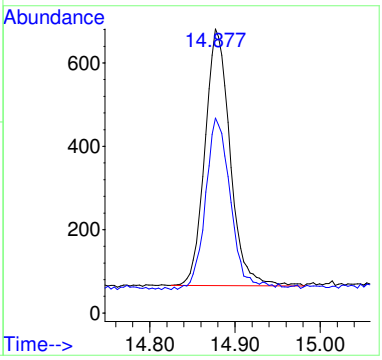


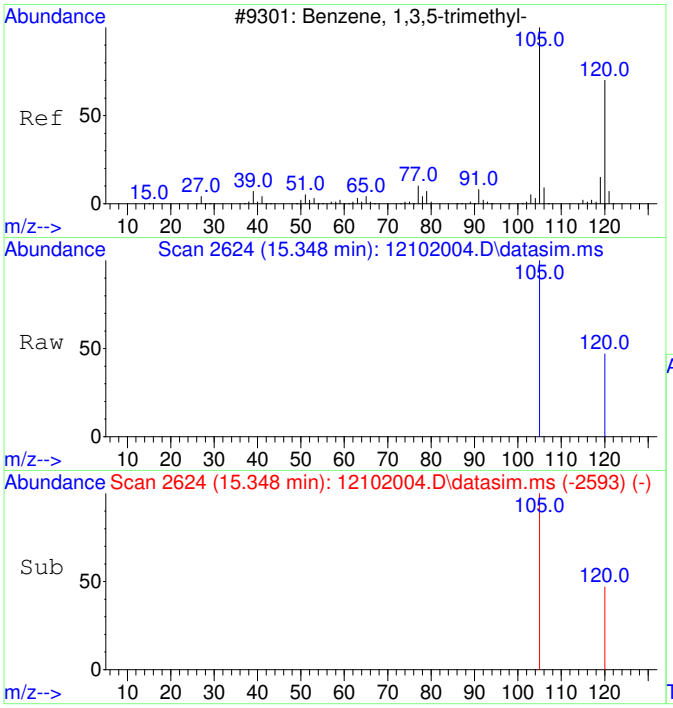


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 1263

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

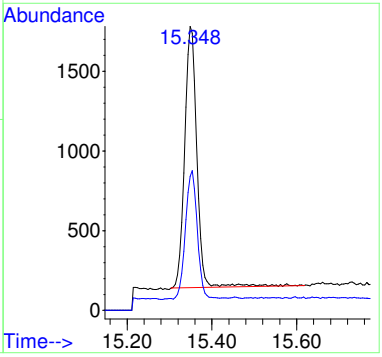


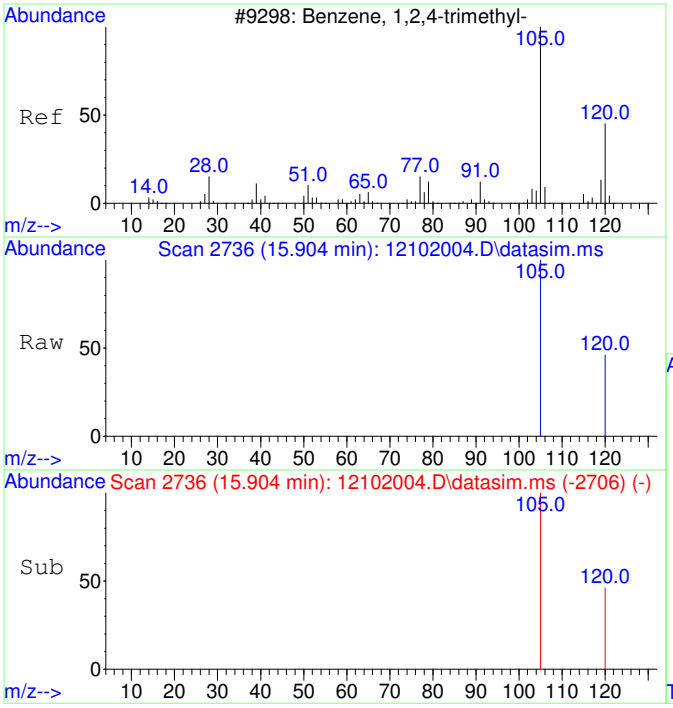


#22
1,3,5-Trimethylbenzene
Concen: 57.12 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3272

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

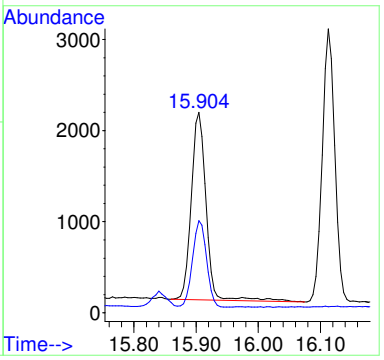


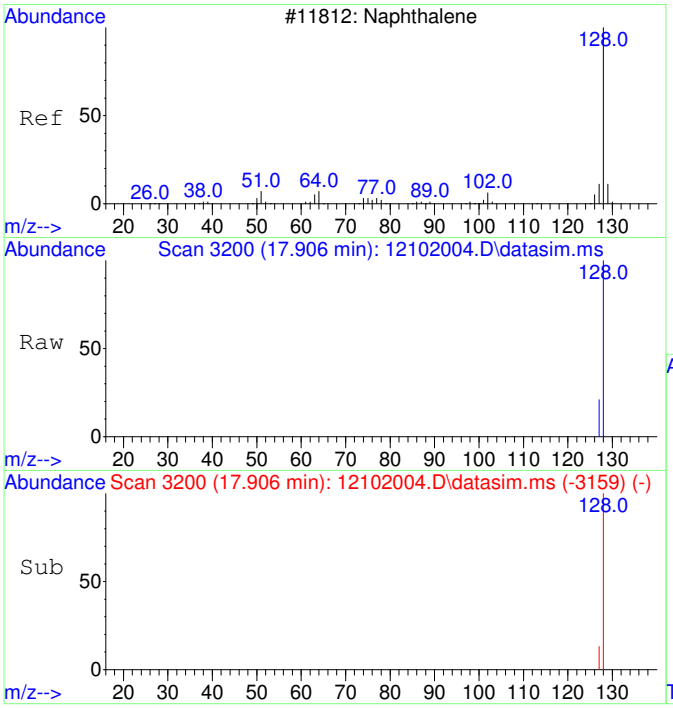


#23
1,2,4-Trimethylbenzene
Concen: 58.13 ug/L
RT: 15.904 min Scan# 2736
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3406

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

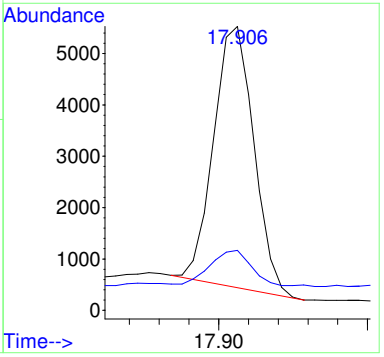




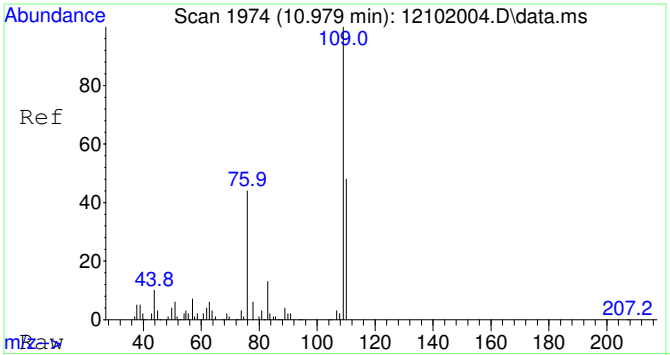
#24
Naphthalene
Concen: 49.64 ug/L
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:128 Resp: 4712

Ion	Ratio	Lower	Upper
128	100		
127	13.6	0.0	42.5



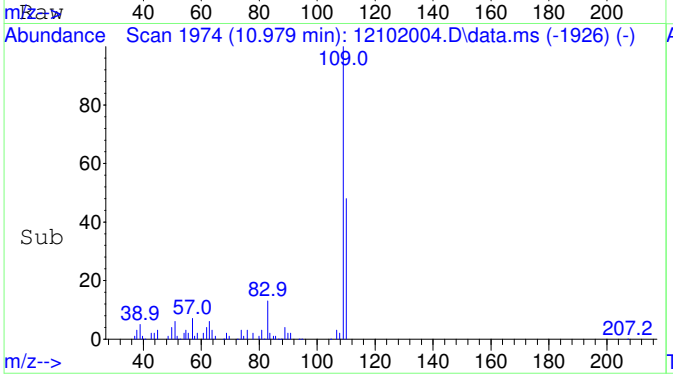
Before MI:
IMPROPER
BASELINE

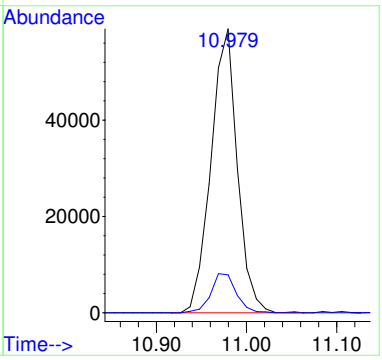


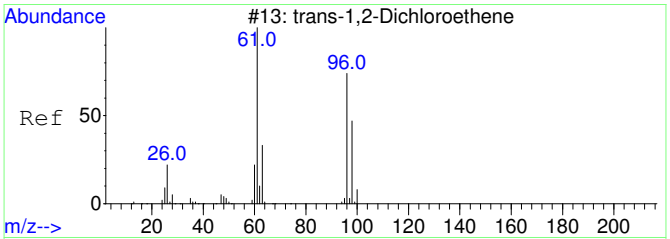
#25
2-Fluorotoluene SCAN
Concen: 5168.33 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

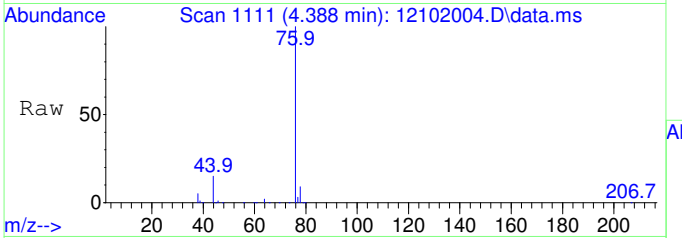
Tgt Ion:109 Resp: 119951

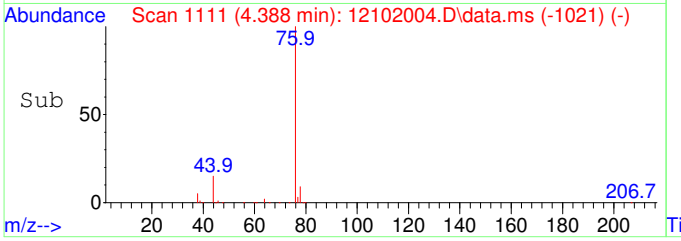
Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	43.8







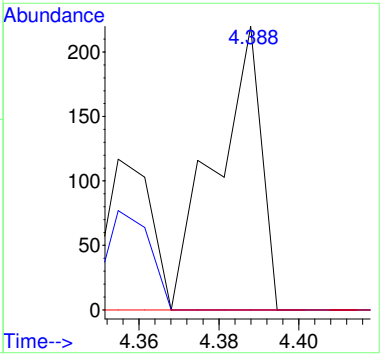


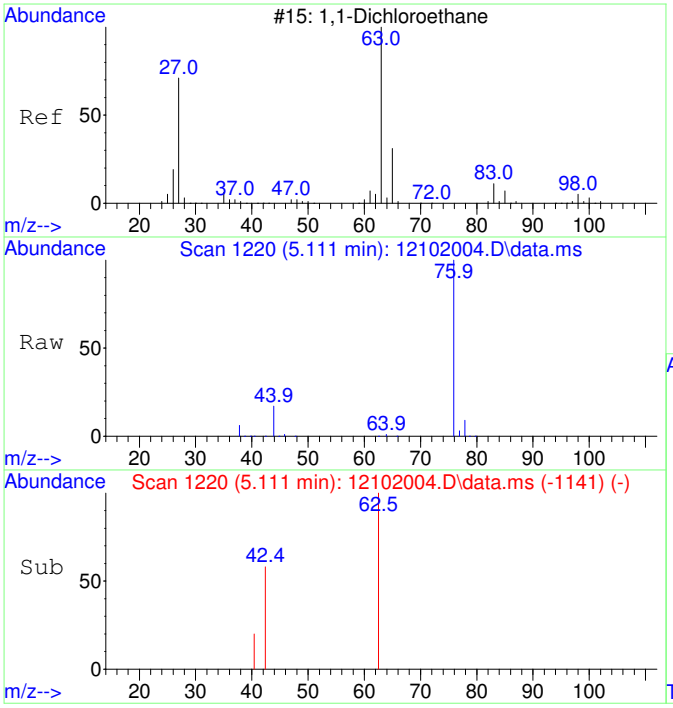


#27
trans-1,2-Dichloroethene SCAN
Concen: 25.36 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 175

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

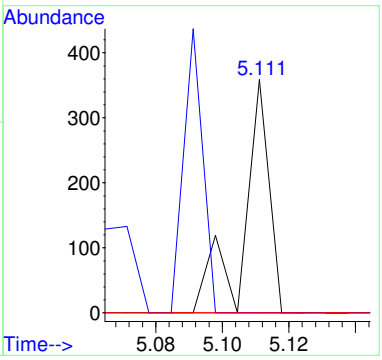


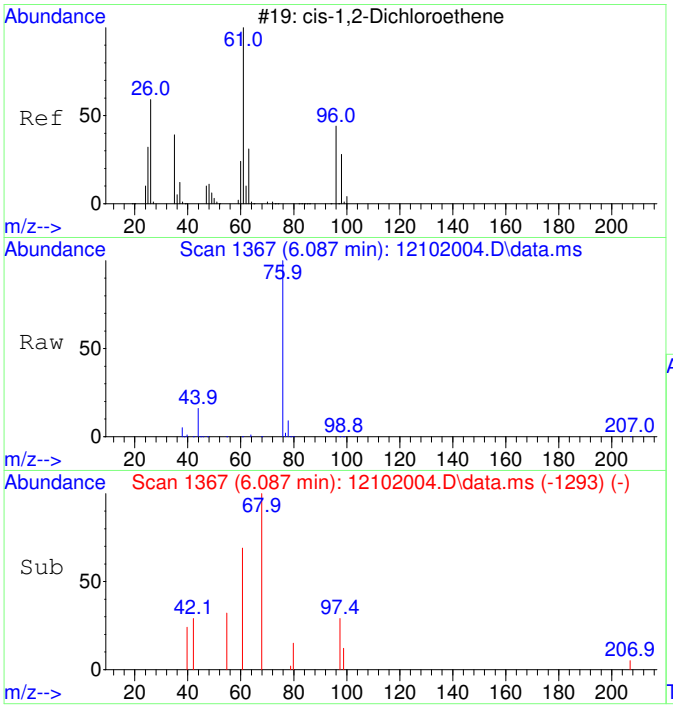


#28
1,1-Dichloroethane SCAN
Concen: 23.32 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.027 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 190

Ion	Ratio	Lower	Upper
63	100		
65	91.6	1.3	61.3#
83	0.0	0.0	45.9

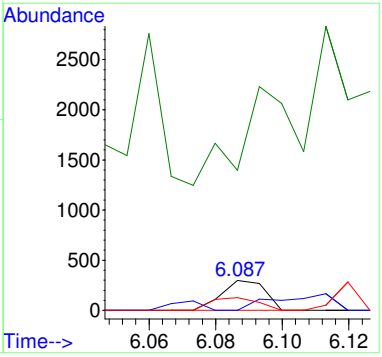


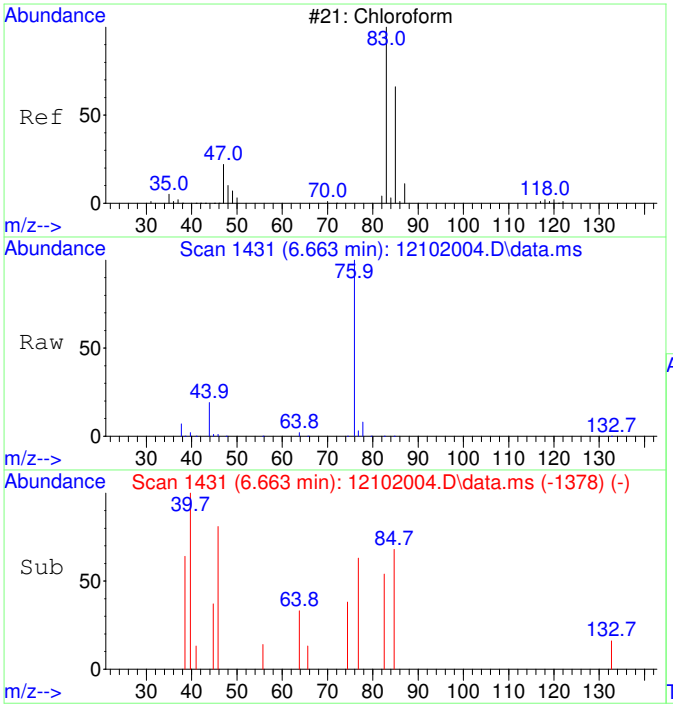


#29
cis-1,2-Dichloroethene SCAN
Concen: 33.59 ug/L
RT: 6.087 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 269

Ion	Ratio	Lower	Upper
61	100		
96	23.8	39.9	99.9#
98	46.5	13.5	73.5
64	0.0	4.5	64.5#

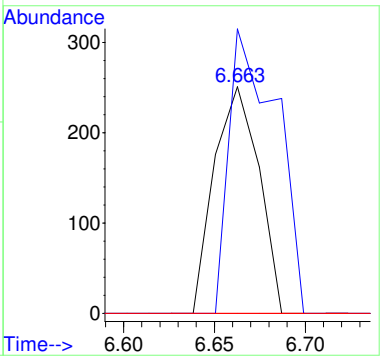


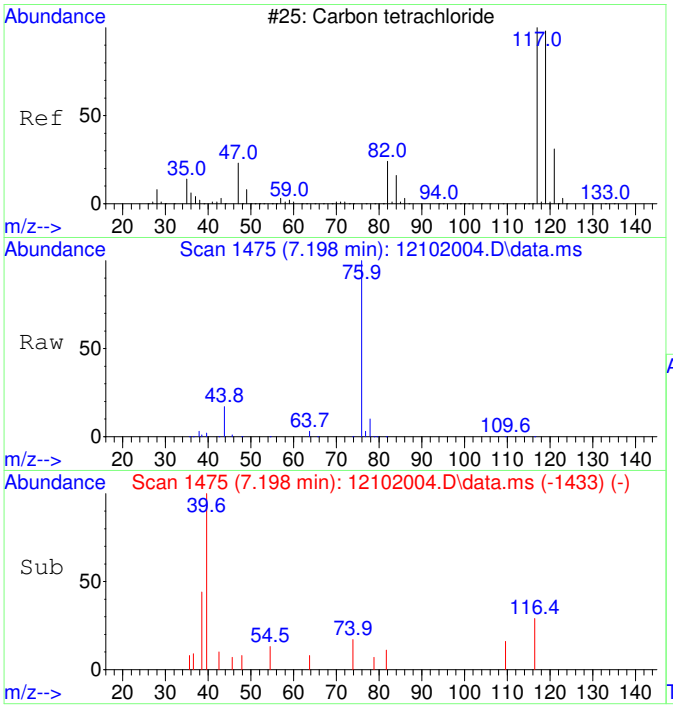


#30
Chloroform SCAN
Concen: 57.57 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 430

Ion	Ratio	Lower	Upper
83	100		
85	133.5	34.6	94.6#
47	0.0	0.0	53.4

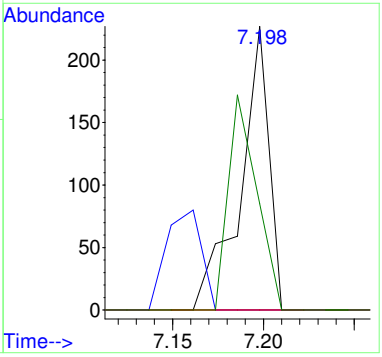


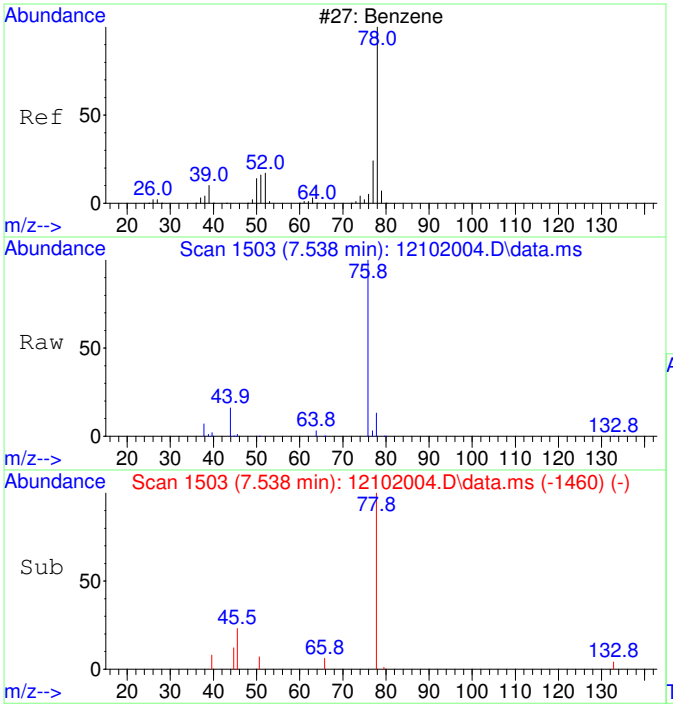


#32
Carbon tetrachloride SCAN
Concen: 37.50 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 247

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	76.1	0.0	59.2#

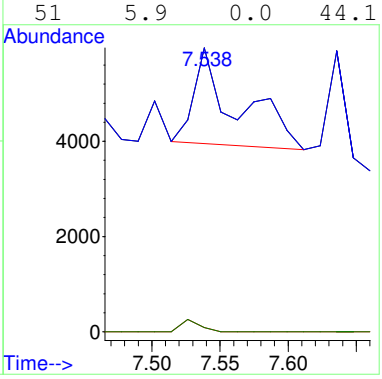


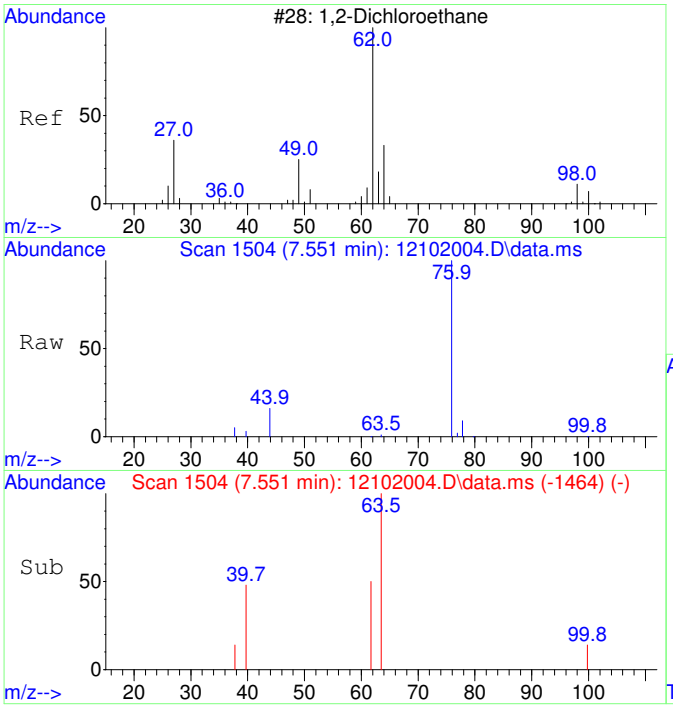


#33
Benzene SCAN
Concen: 186.94 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.025 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 4359

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

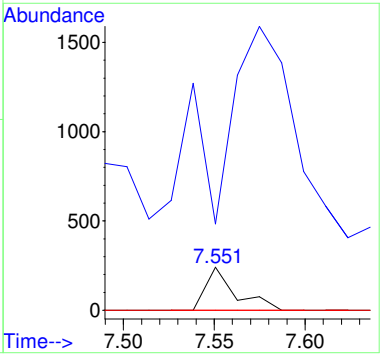


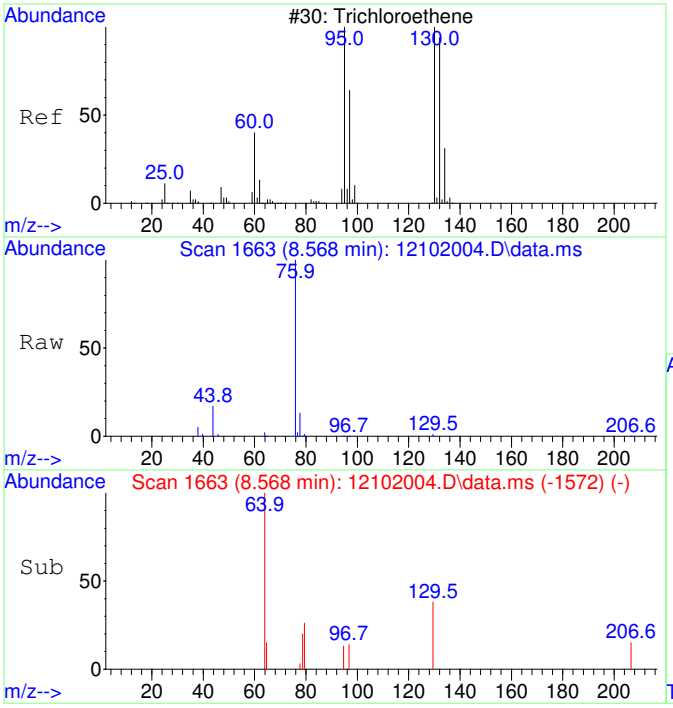


#34
1,2-Dichloroethane SCAN
Concen: 37.16 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 271

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

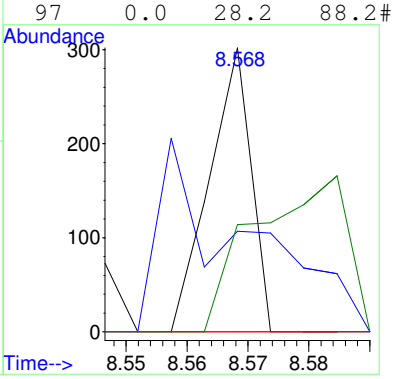


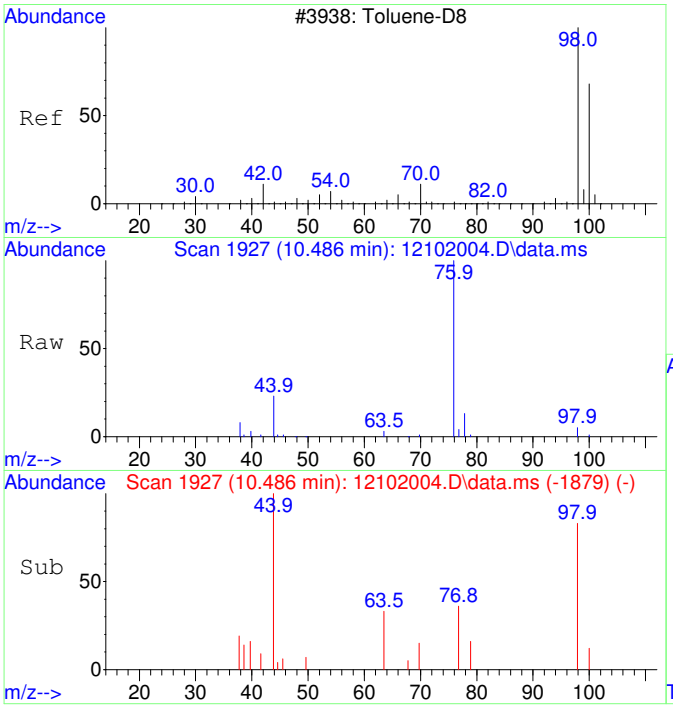


#35
Trichloroethene SCAN
Concen: 28.32 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 144

Ion	Ratio	Lower	Upper
130	100		
95	140.3	60.5	120.5#
132	0.0	59.6	119.6#
97	0.0	28.2	88.2#

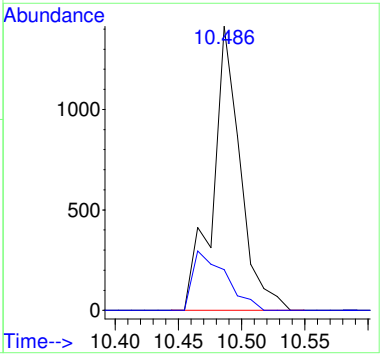


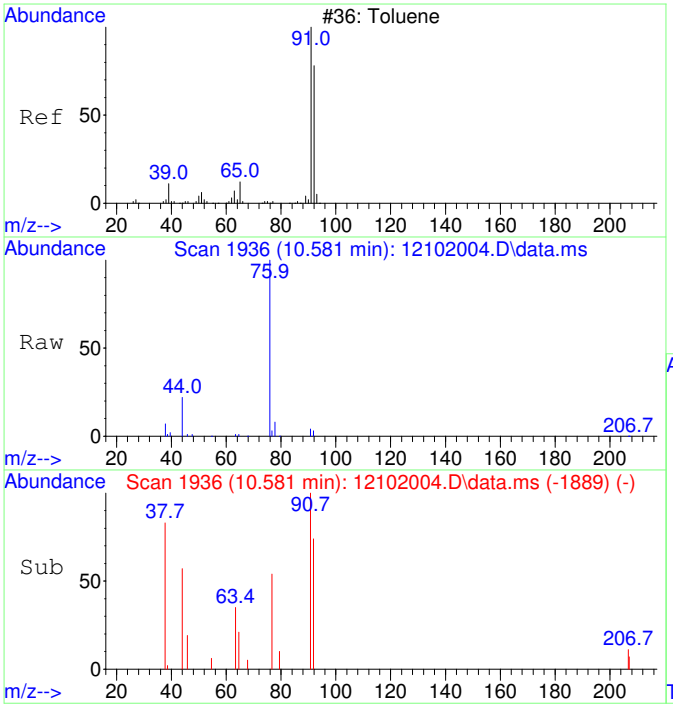


#36
Toluene-d8 SCAN
Concen: 98.86 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2152

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

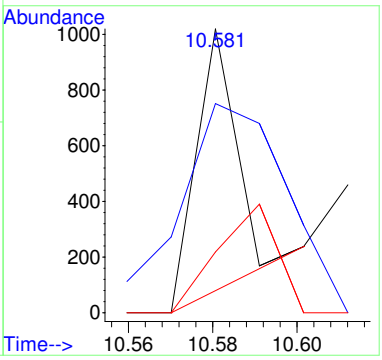


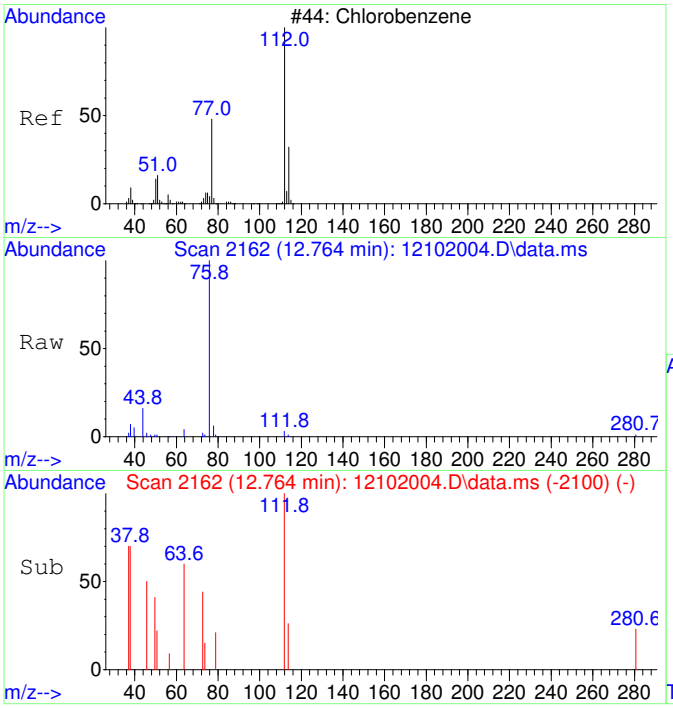


#37
Toluene SCAN
Concen: 25.15 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 674

Ion	Ratio	Lower	Upper
91	100		
92	199.0	28.3	88.3#
65	56.8	0.0	41.0#

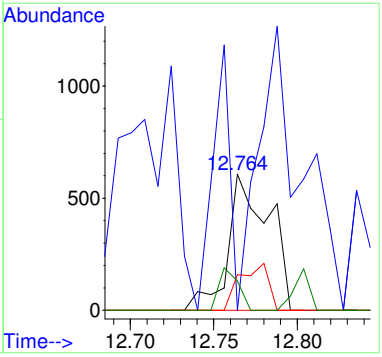


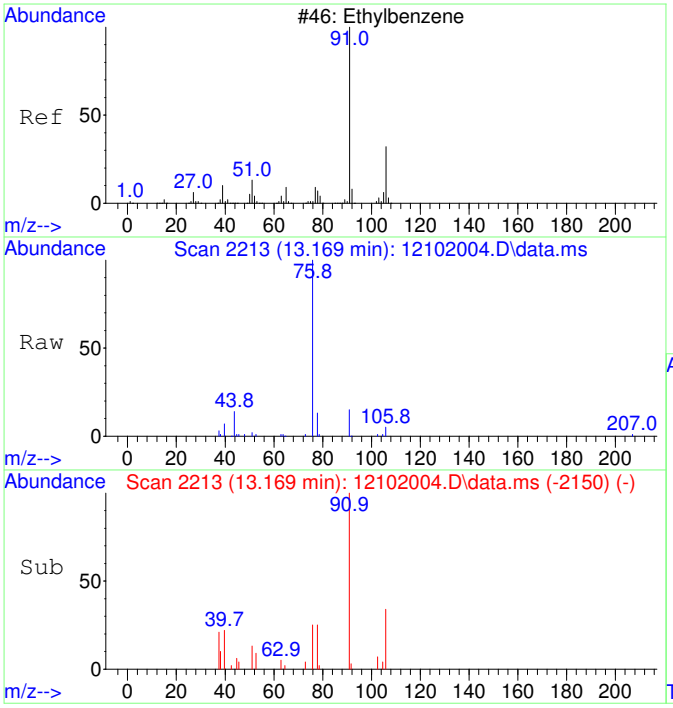


#40
Chlorobenzene SCAN
Concen: 53.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1038

Ion	Ratio	Lower	Upper
112	100		
77	80.5	28.2	88.2
114	0.0	2.3	62.3#
51	14.7	0.0	50.1

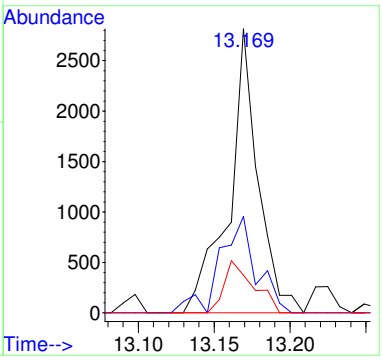


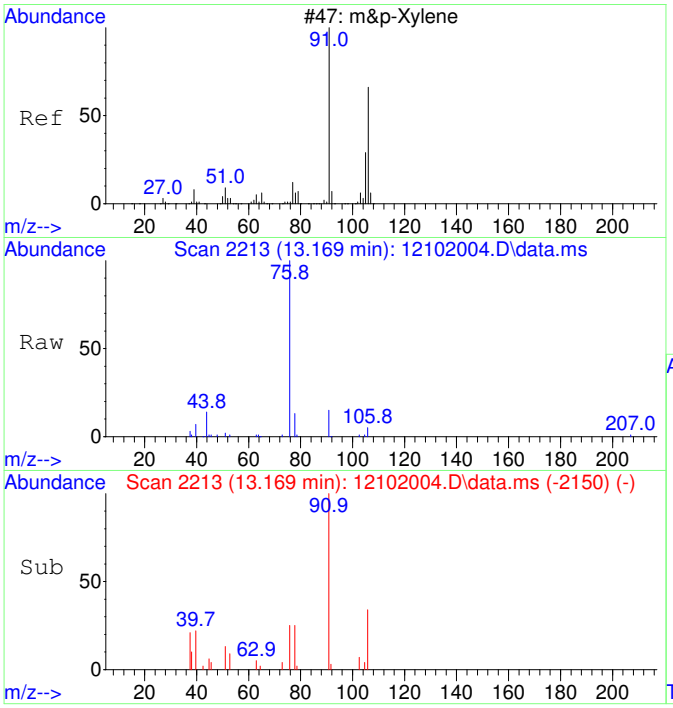


#42
Ethylbenzene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
51	18.7	0.0	40.1

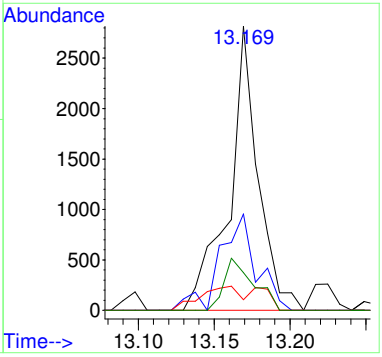


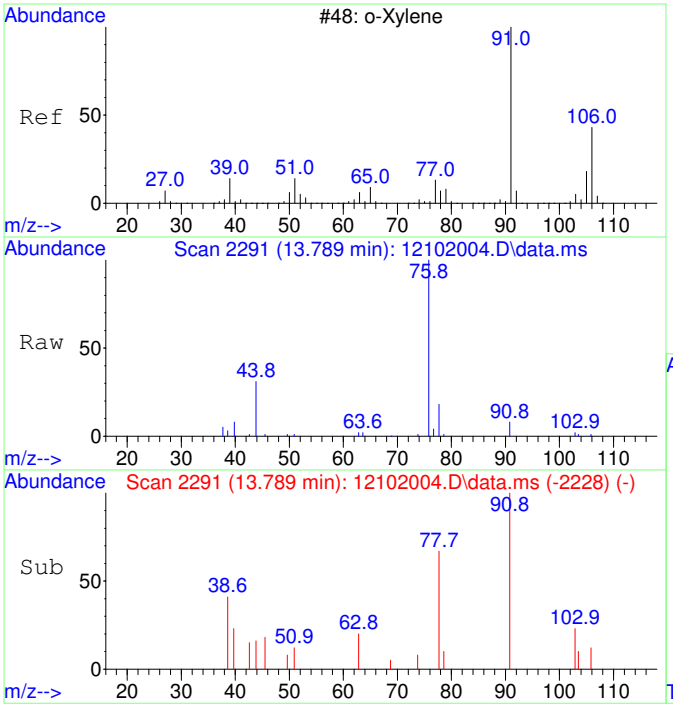


#43
m&p-Xylene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
105	17.4	0.0	54.7
51	18.7	0.0	40.1

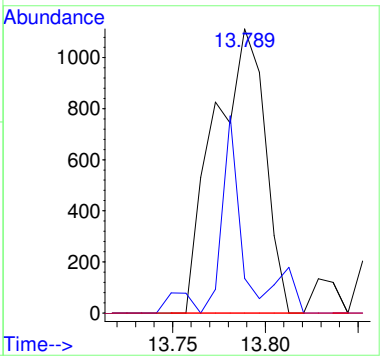


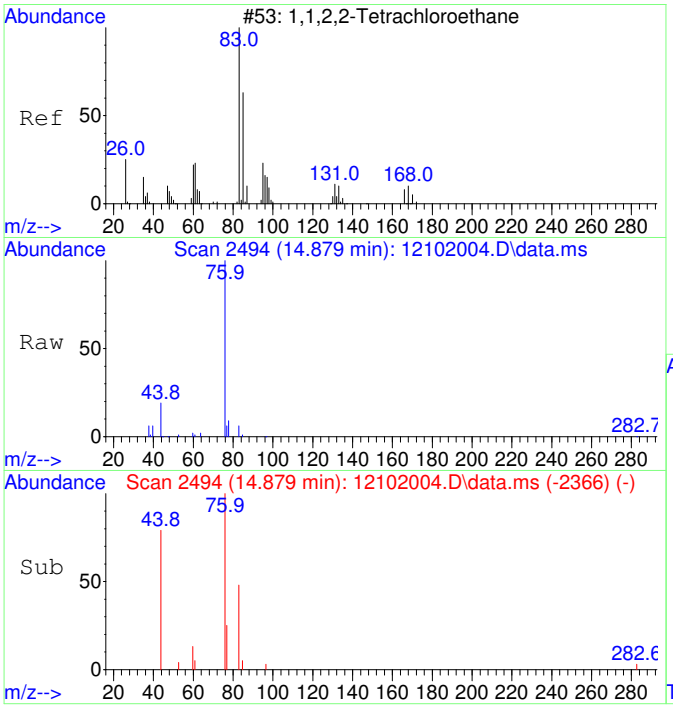


#44
o-Xylene SCAN
Concen: 76.20 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2125

Ion	Ratio	Lower	Upper
91	100		
106	21.2	18.0	78.0
105	0.0	0.0	56.6

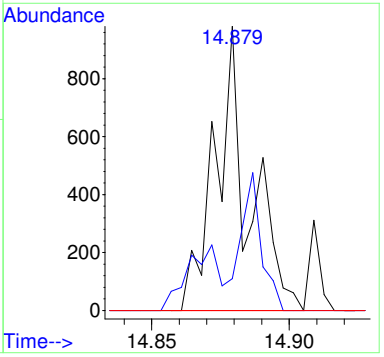


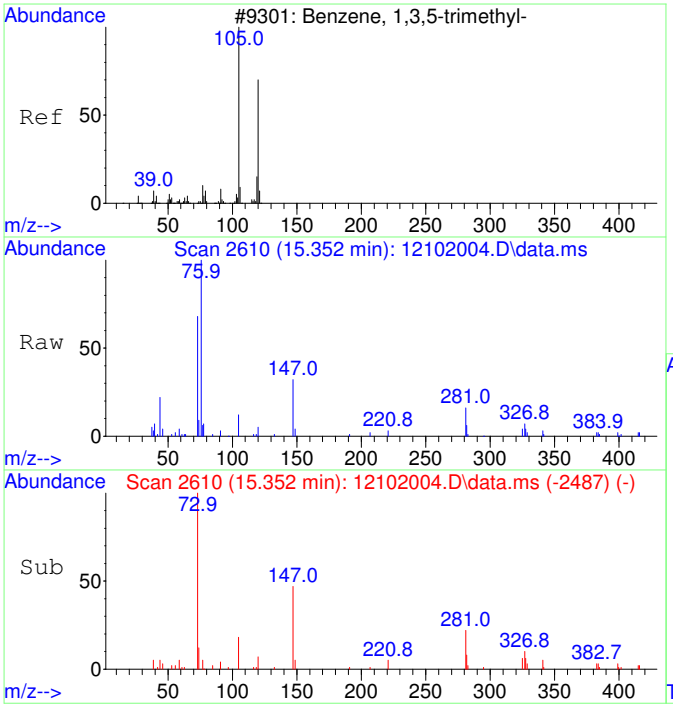


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 57.45 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 833

Ion	Ratio	Lower	Upper
83	100		
85	23.3	35.9	95.9#
95	0.0	0.0	47.4

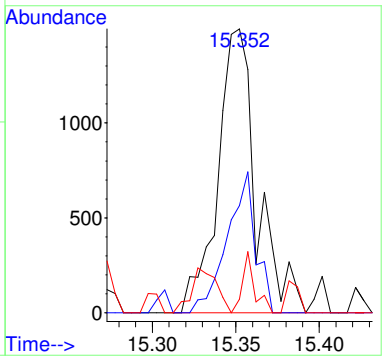


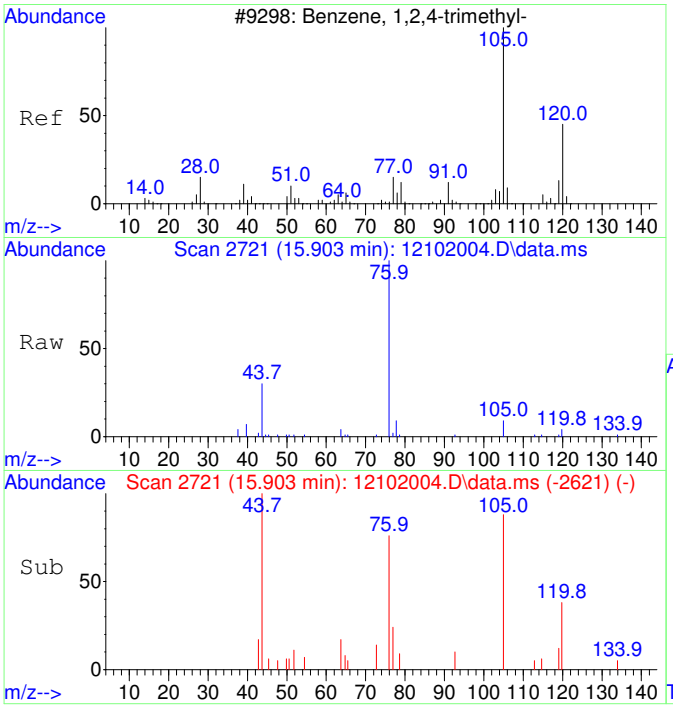


#46
1,3,5-Trimethylbenzene SCAN
Concen: 82.25 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 2420

Ion	Ratio	Lower	Upper
105	100		
120	36.2	18.3	78.3
119	6.7	0.0	43.1

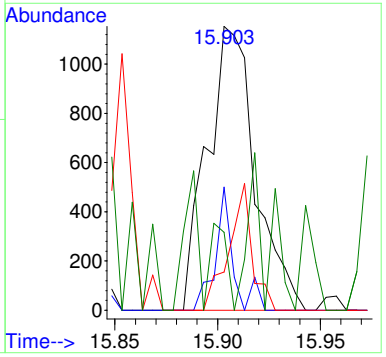




#47
1,2,4-Trimethylbenzene SCAN
Concen: 62.54 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 1880

Ion	Ratio	Lower	Upper
105	100		
120	15.9	16.9	76.9#
119	21.4	0.0	41.9
77	23.0	0.0	42.3



Quantitation Report (QT Reviewed)

Table of Contents

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

M.I. Performed By:
TD at 10:20 am, Dec 10, 2020

M.I. Approved By:
ZR at 12:25 pm, Dec 16, 2020

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration

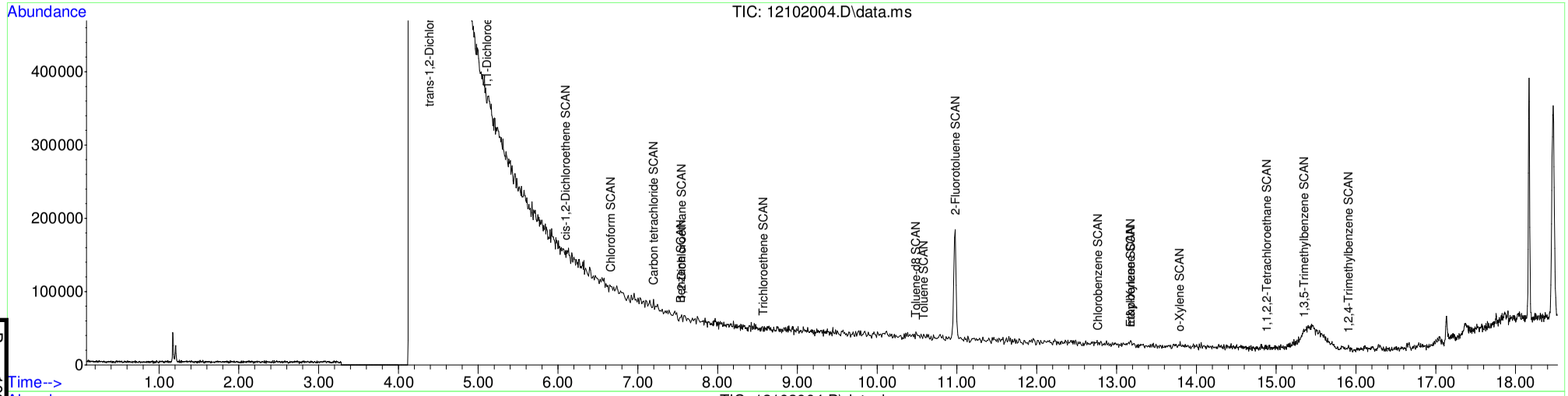
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	204465	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	2025	51.14	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 1.02%#			
Target Compounds						Qvalue
2] 1,1-Dichloroethene	3.097	61	453m	55.88	ug/L	
3] trans-1,2-Dichloroethene	4.389	61	510	49.90	ug/L	72
4] 1,1-Dichloroethane	5.093	63	635	52.02	ug/L	83
5] cis-1,2-Dichloroethene	6.094	61	629	49.75	ug/L	98
6] Chloroform	6.664	83	626	51.55	ug/L	98
7] 1,1,1-Trichloroethane	6.919	97	677	51.90	ug/L	97
8] Carbon tetrachloride	7.187	117	623	49.95	ug/L	91
9] Benzene	7.515	78	1917	55.72	ug/L	57
10] 1,2-Dichloroethane	7.552	62	613	52.23	ug/L	67
11] Trichloroethene	8.575	130	535	49.25	ug/L	94
13] Toluene	10.582	91	2609	52.92	ug/L	99
14] 1,1,2-Trichloroethane	11.233	97	569	49.82	ug/L	85
15] Tetrachloroethene	11.432	166	808	52.61	ug/L	100
16] Chlorobenzene	12.765	112	1975	51.71	ug/L	85
17] 1,1,1,2-Tetrachloroethane	12.916	131	671	50.19	ug/L	97
18] Ethylbenzene	12.972	91	3399	53.97	ug/L	95
19] m&p-Xylene	13.171	91	5376	110.86	ug/L	95
20] o-Xylene	13.782	91	2770	53.18	ug/L	97
21] 1,1,2,2-Tetrachloroethane	14.877	83	1263	52.04	ug/L	99
22] 1,3,5-Trimethylbenzene	15.348	105	3272	57.12	ug/L	96
23] 1,2,4-Trimethylbenzene	15.904	105	3406	58.13	ug/L	94
24] Naphthalene	17.906	128	5222m	55.01	ug/L	
25) 2-Fluorotoluene SCAN	10.979	109	119951	5168.33	ug/L	99
27) trans-1,2-Dichloroethe...	4.388	61	175	25.36	ug/L #	17
28) 1,1-Dichloroethane SCAN	5.111	63	190	23.32	ug/L #	15
29) cis-1,2-Dichloroethene...	6.087	61	269	33.59	ug/L #	58
30) Chloroform SCAN	6.663	83	430	57.57	ug/L #	23
32) Carbon tetrachloride SCAN	7.198	117	247	37.50	ug/L #	9
33) Benzene SCAN	7.538	78	4359	186.94	ug/L	94
34) 1,2-Dichloroethane SCAN	7.551	62	271	37.16	ug/L #	40
35) Trichloroethene SCAN	8.568	130	144	28.32	ug/L #	25
36) Toluene-d8 SCAN	10.486	98	2152	98.86	ug/L #	15
37) Toluene SCAN	10.581	91	674	25.15	ug/L #	1
40) Chlorobenzene SCAN	12.764	112	1038	53.92	ug/L #	65
42) Ethylbenzene SCAN	13.169	91	3758	73.58	ug/L	84
43) m&p-Xylene SCAN	13.169	91	3758	73.58	ug/L	84
44) o-Xylene SCAN	13.789	91	2125	76.20	ug/L #	56
45) 1,1,2,2-Tetrachloroeth...	14.879	83	833	57.45	ug/L #	49
46) 1,3,5-Trimethylbenzene...	15.352	105	2420	82.25	ug/L	83
47) 1,2,4-Trimethylbenzene...	15.903	105	1880	62.54	ug/L #	60

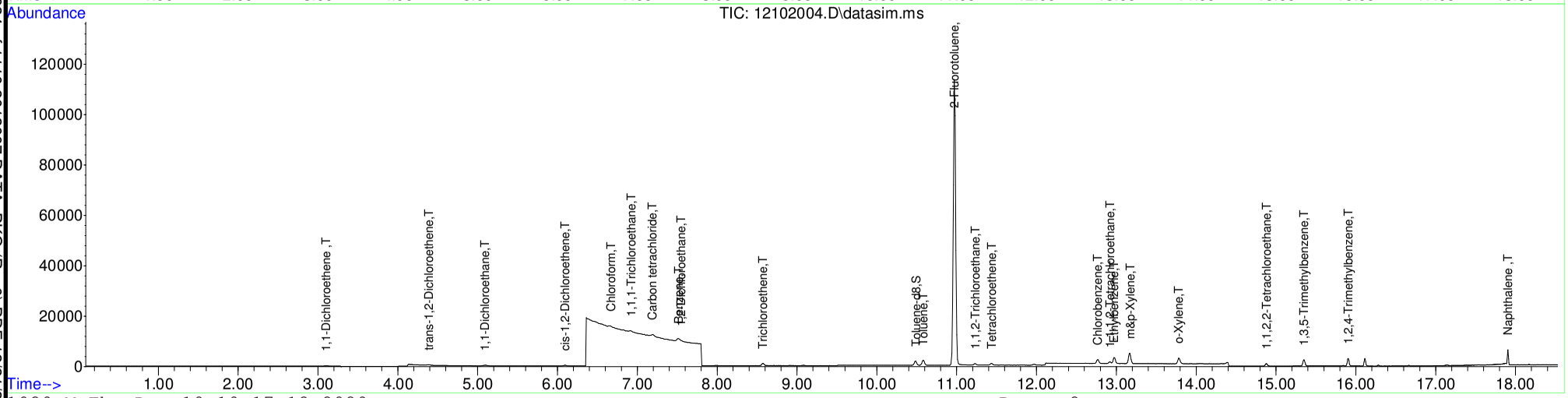
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\Ravioli Data\2020\121020\
Data File : 12102004.D
Acq On : 10 Dec 2020 9:43
InstName : AG5975C
Operator : TD
Sample : S20L031-CRL1
Misc : 2030073 0.05 mg/L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 10 10:02:05 2020
Quant Method : C:\MSDCHEM\1\RAVIOLI METHODS\2020\121020.M
Quant Title : Volatile Organic Analysis - Passive samplers
QLast Update : Tue Dec 08 06:26:34 2020
Response via : Initial Calibration





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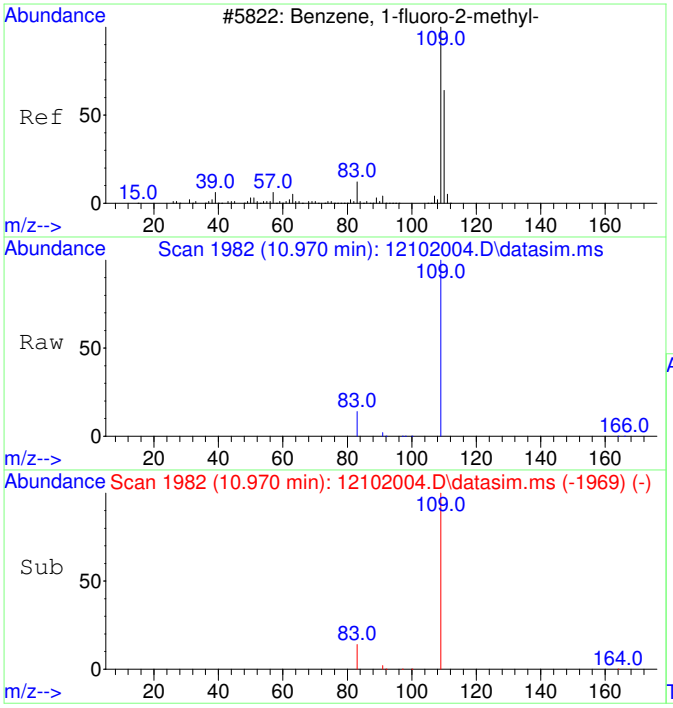
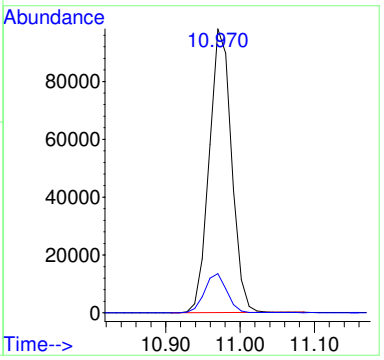
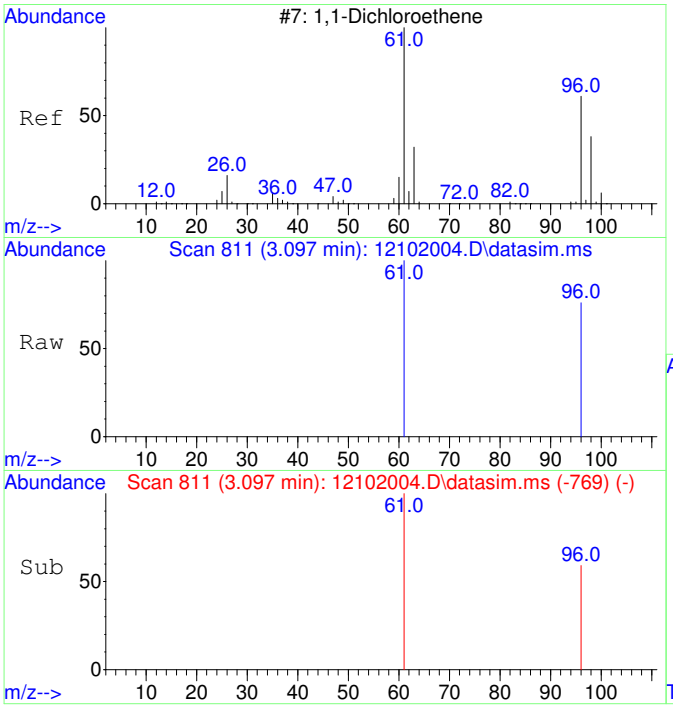


#1
2-Fluorotoluene
Concen: 5000.00 ug/L
RT: 10.970 min Scan# 1982
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:109 Resp: 204465

Ion	Ratio	Lower	Upper
109	100		
83	13.6	0.0	42.3

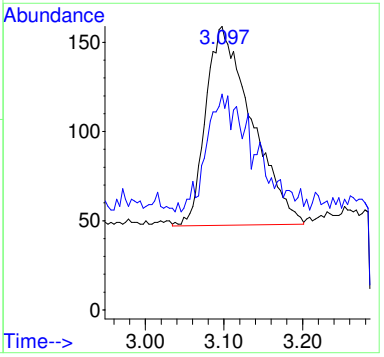


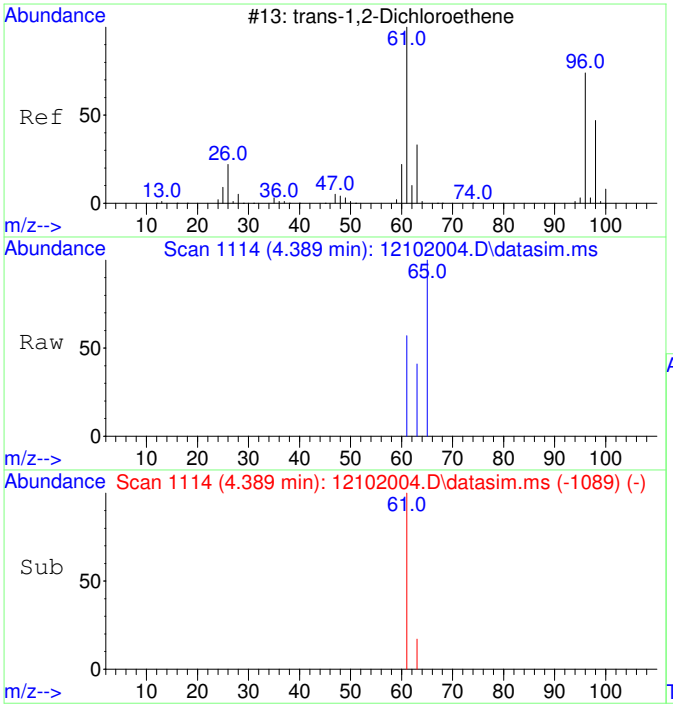


#2
1,1-Dichloroethene
Concen: 55.88 ug/L m
RT: 3.097 min Scan# 811
Delta R.T. 0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 453

Ion	Ratio	Lower	Upper
61	100		
96	23.0	37.2	97.2#

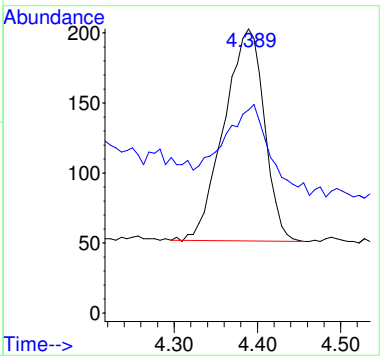


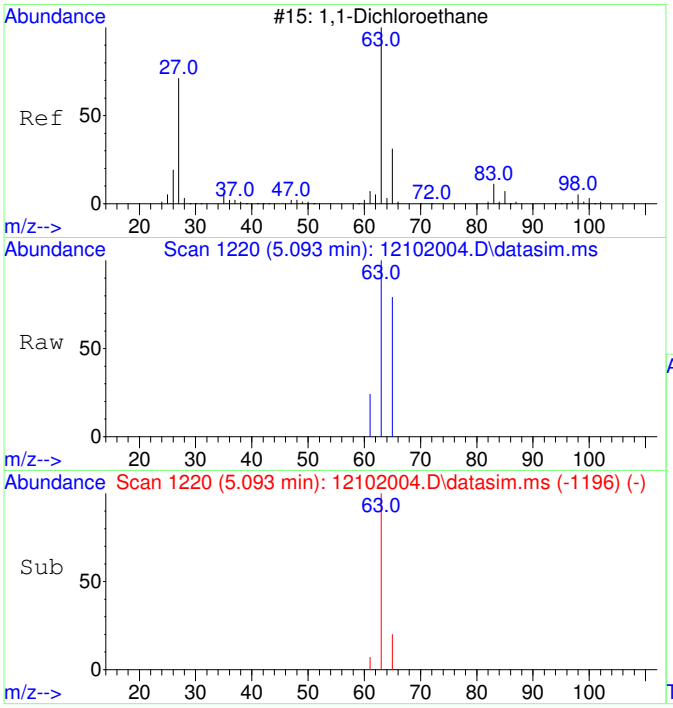


#3
trans-1,2-Dichloroethene
Concen: 49.90 ug/L
RT: 4.389 min Scan# 1114
Delta R.T. 0.014 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 510

Ion	Ratio	Lower	Upper
61	100		
63	48.2	2.4	62.4

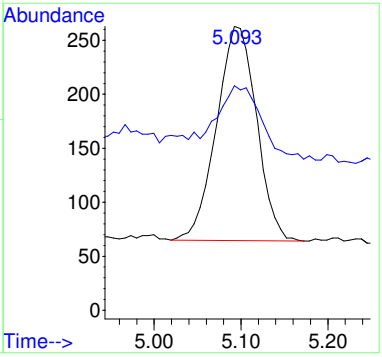


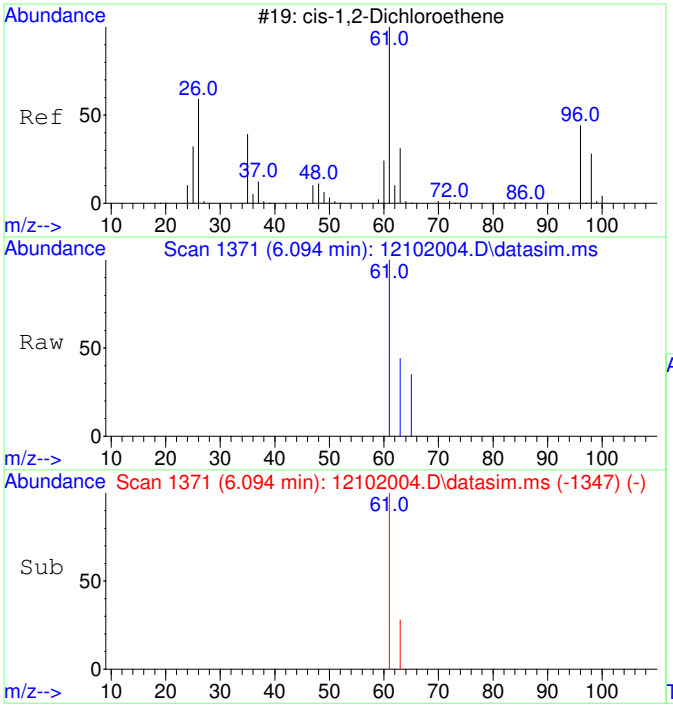


#4
1,1-Dichloroethane
Concen: 52.02 ug/L
RT: 5.093 min Scan# 1220
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 635

Ion	Ratio	Lower	Upper
63	100		
65	41.3	1.8	61.8

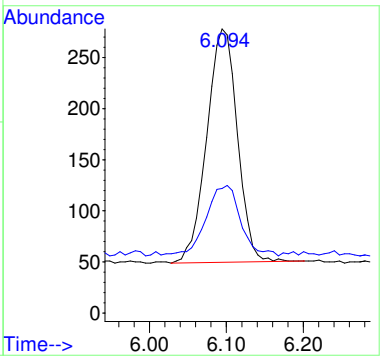


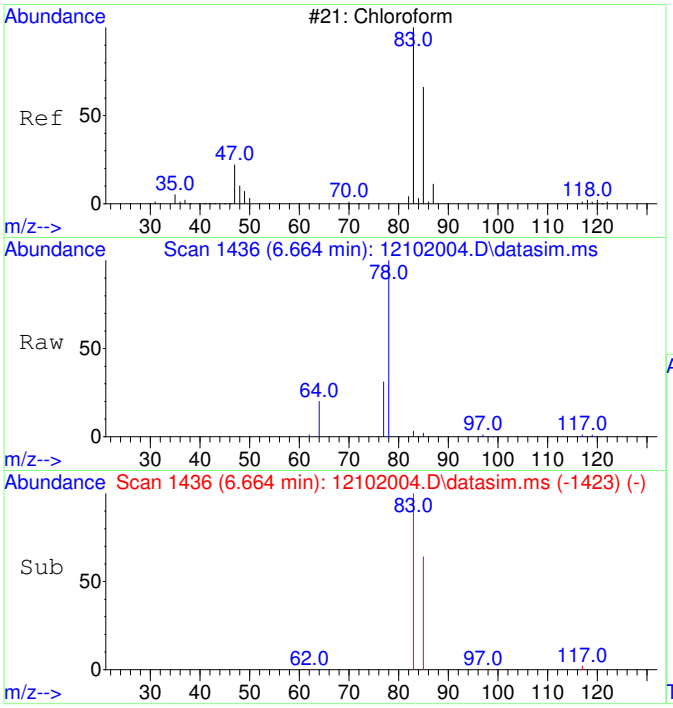


#5
cis-1,2-Dichloroethene
Concen: 49.75 ug/L
RT: 6.094 min Scan# 1371
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 629

Ion	Ratio	Lower	Upper
61	100		
63	33.7	2.5	62.5

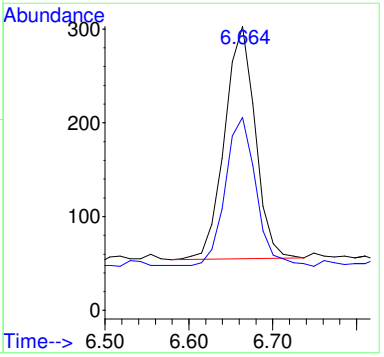


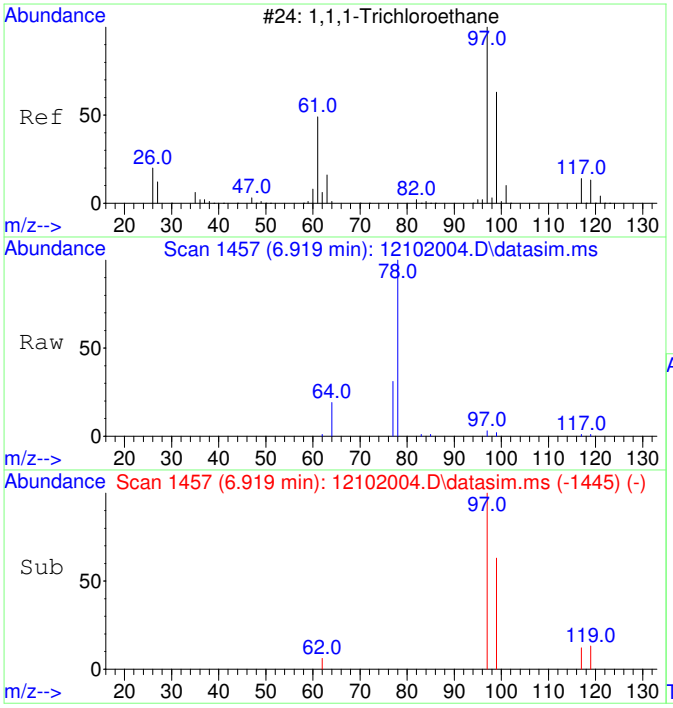


#6
Chloroform
Concen: 51.55 ug/L
RT: 6.664 min Scan# 1436
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 626

Ion	Ratio	Lower	Upper
83	100		
85	63.9	35.1	95.1

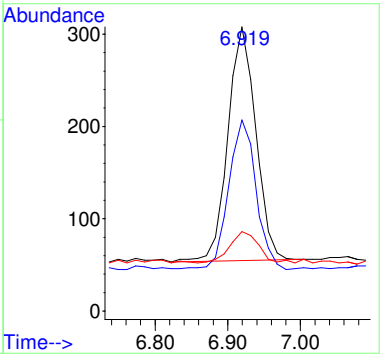


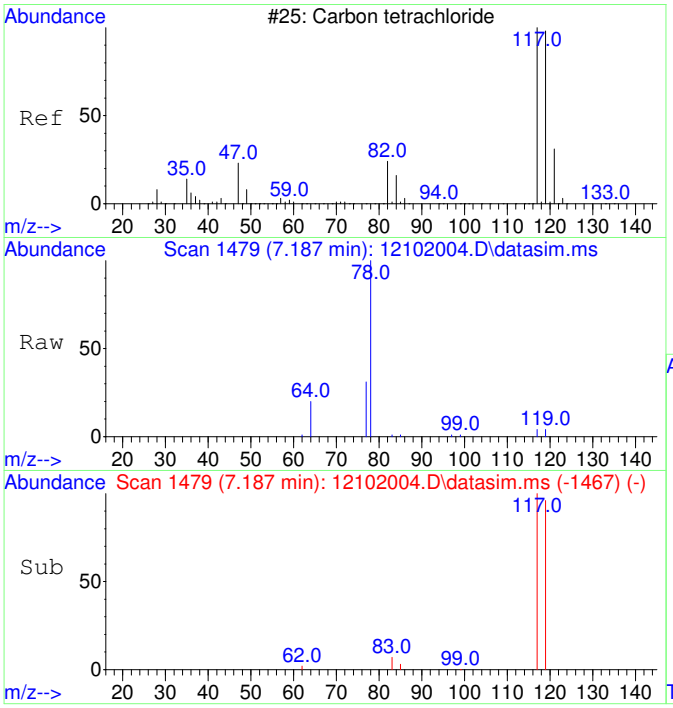


#7
1,1,1-Trichloroethane
Concen: 51.90 ug/L
RT: 6.919 min Scan# 1457
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 677

Ion	Ratio	Lower	Upper
97	100		
99	61.6	34.6	94.6
117	13.9	0.0	43.2

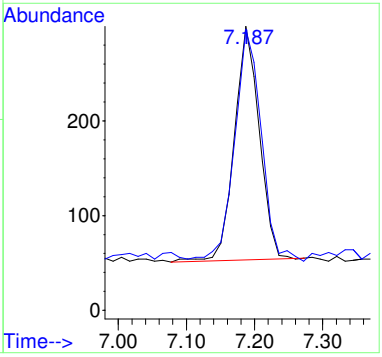


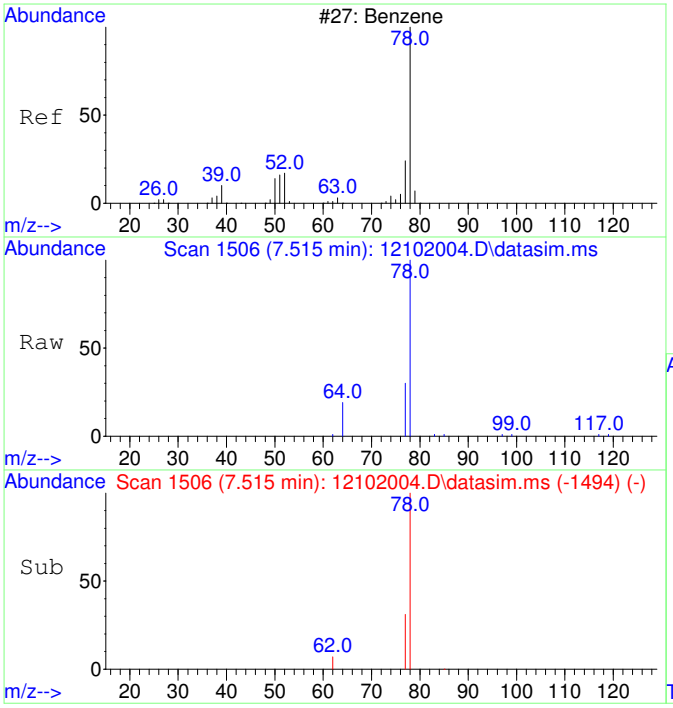


#8
Carbon tetrachloride
Concen: 49.95 ug/L
RT: 7.187 min Scan# 1479
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 623

Ion	Ratio	Lower	Upper
117	100		
119	105.0	66.4	126.4

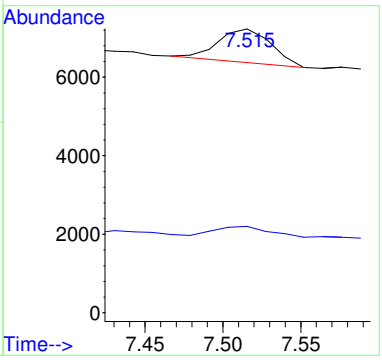


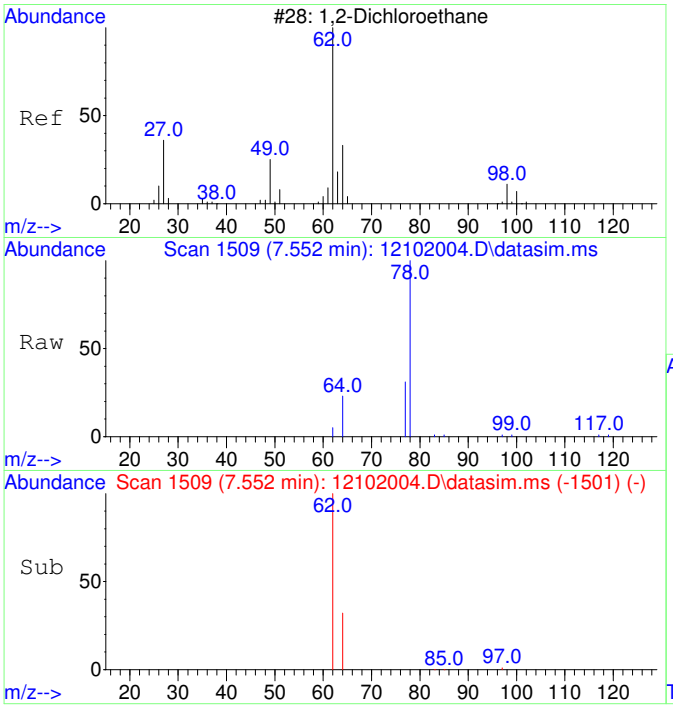


#9
Benzene
Concen: 55.72 ug/L
RT: 7.515 min Scan# 1506
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 1917

Ion	Ratio	Lower	Upper
78	100		
77	44.3	0.0	53.2

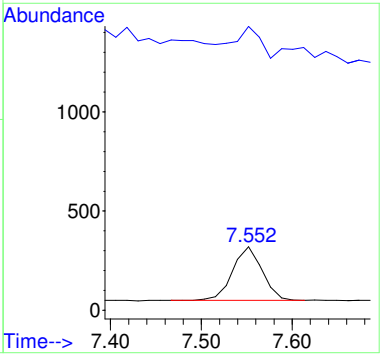


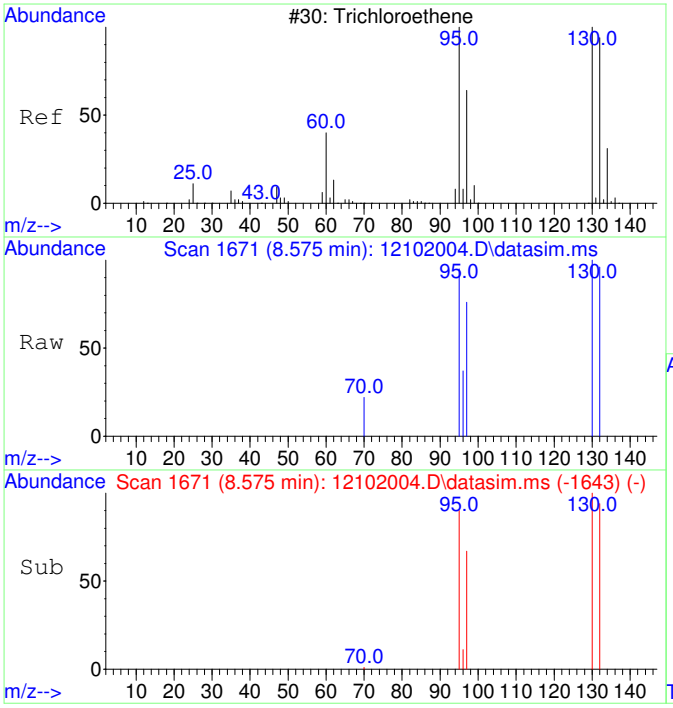


#10
1,2-Dichloroethane
Concen: 52.23 ug/L
RT: 7.552 min Scan# 1509
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 613

Ion	Ratio	Lower	Upper
62	100		
64	50.9	2.3	62.3

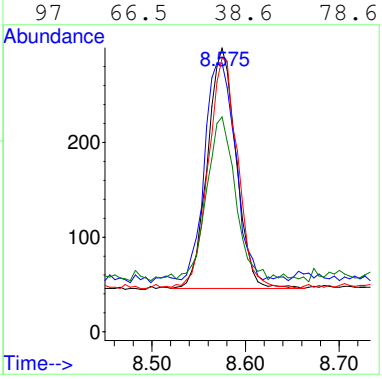


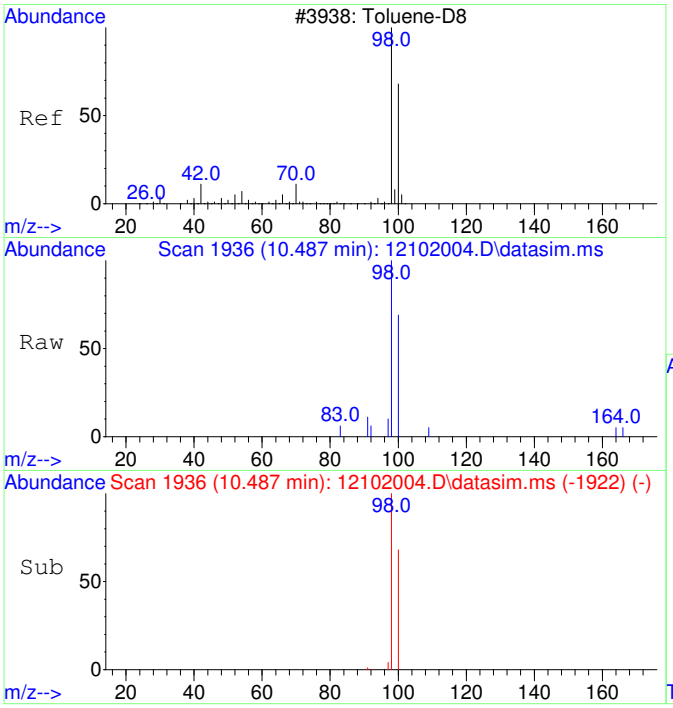


#11
Trichloroethene
Concen: 49.25 ug/L
RT: 8.575 min Scan# 1671
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 535

Ion	Ratio	Lower	Upper
130	100		
95	96.6	60.7	120.7
132	98.5	76.0	116.0
97	66.5	38.6	78.6

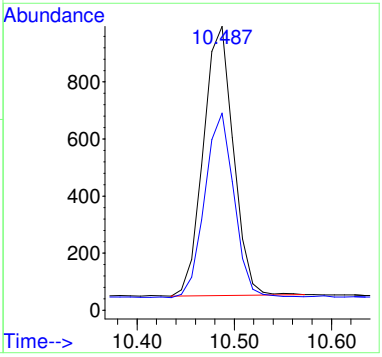


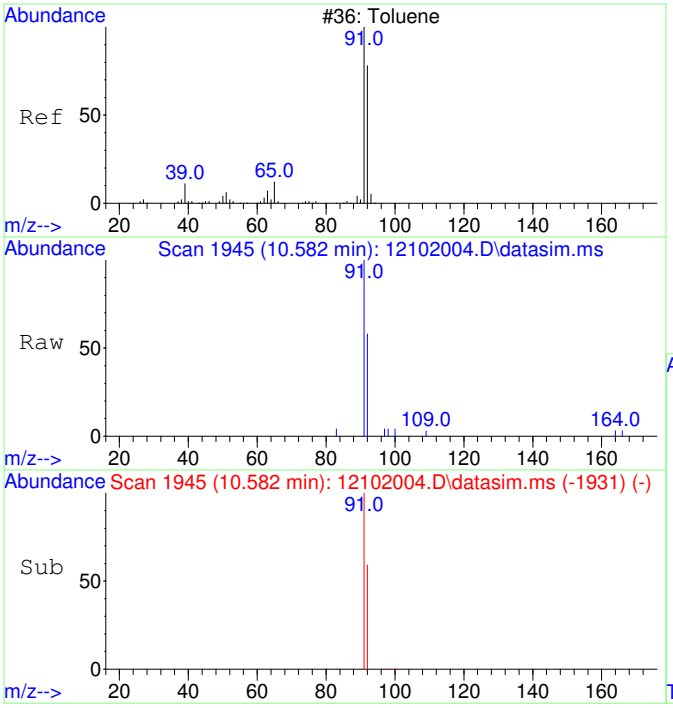


#12
Toluene-d8
Concen: 51.14 ug/L
RT: 10.487 min Scan# 1936
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2025

Ion	Ratio	Lower	Upper
98	100		
100	66.5	37.1	97.1

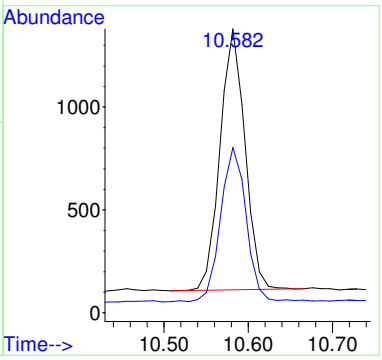


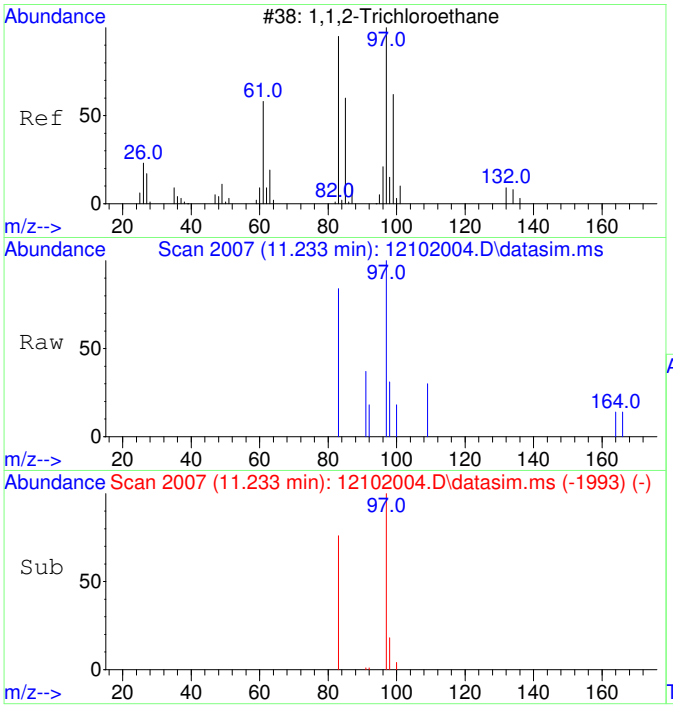


#13
Toluene
Concen: 52.92 ug/L
RT: 10.582 min Scan# 1945
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2609

Ion	Ratio	Lower	Upper
91	100		
92	60.5	29.9	89.9

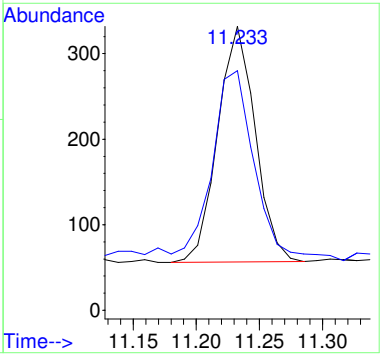


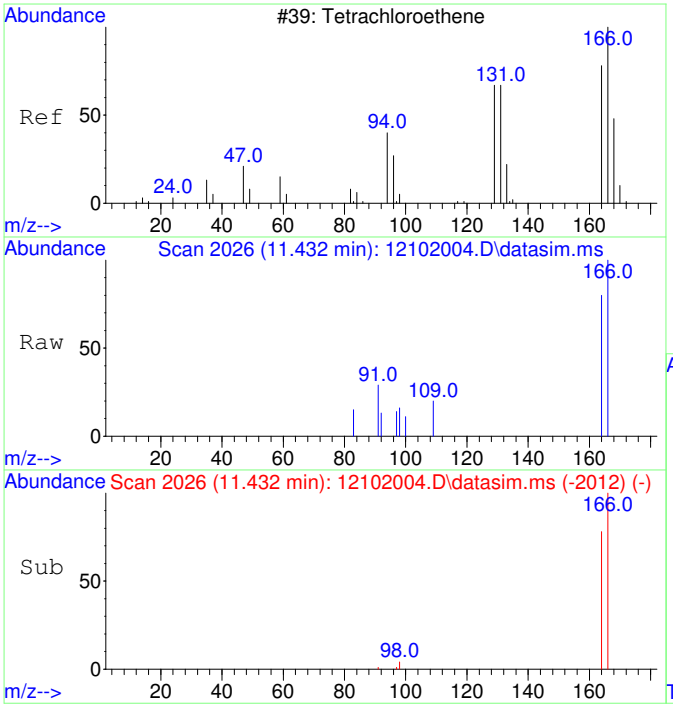


#14
1,1,2-Trichloroethane
Concen: 49.82 ug/L
RT: 11.233 min Scan# 2007
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 97 Resp: 569

Ion	Ratio	Lower	Upper
97	100		
83	94.4	51.2	111.2

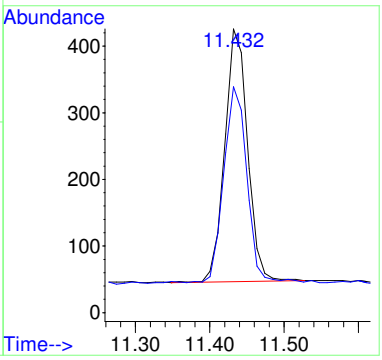


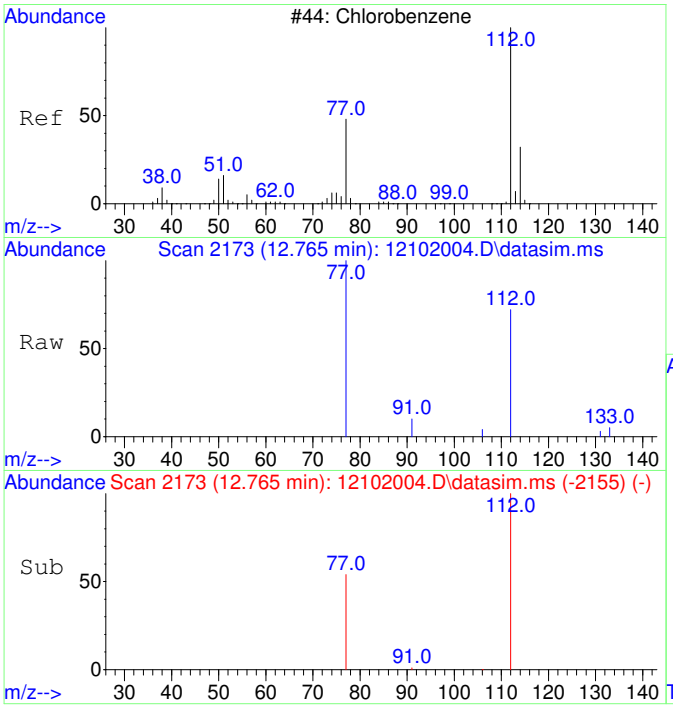


#15
Tetrachloroethene
Concen: 52.61 ug/L
RT: 11.432 min Scan# 2026
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:166 Resp: 808

Ion	Ratio	Lower	Upper
166	100		
164	78.0	47.8	107.8

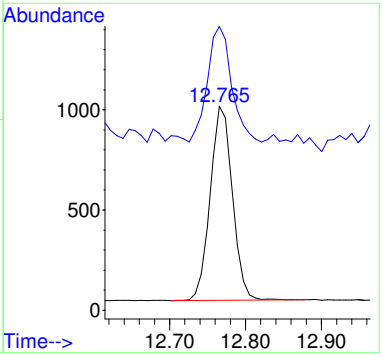


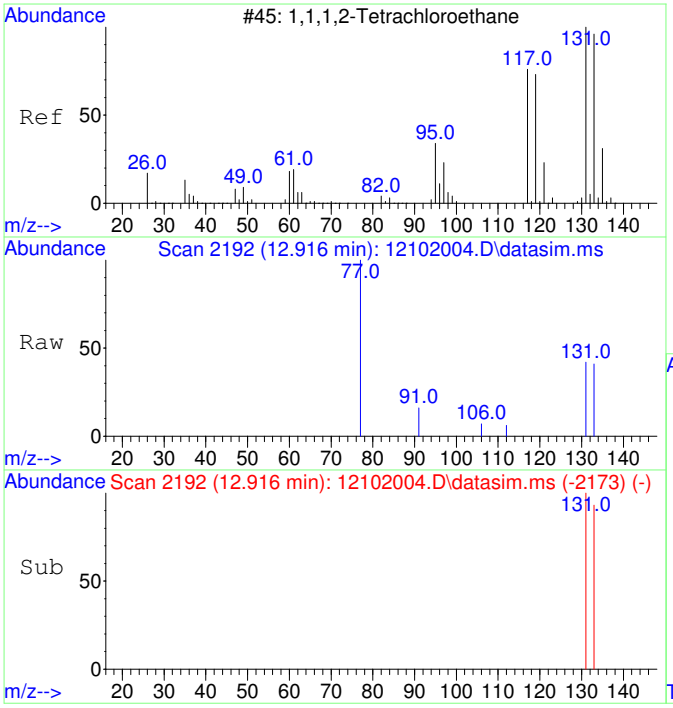


#16
Chlorobenzene
Concen: 51.71 ug/L
RT: 12.765 min Scan# 2173
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1975

Ion	Ratio	Lower	Upper
112	100		
77	64.6	23.6	83.6

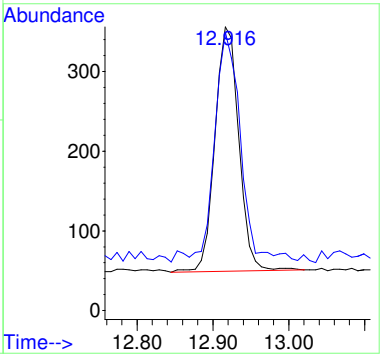


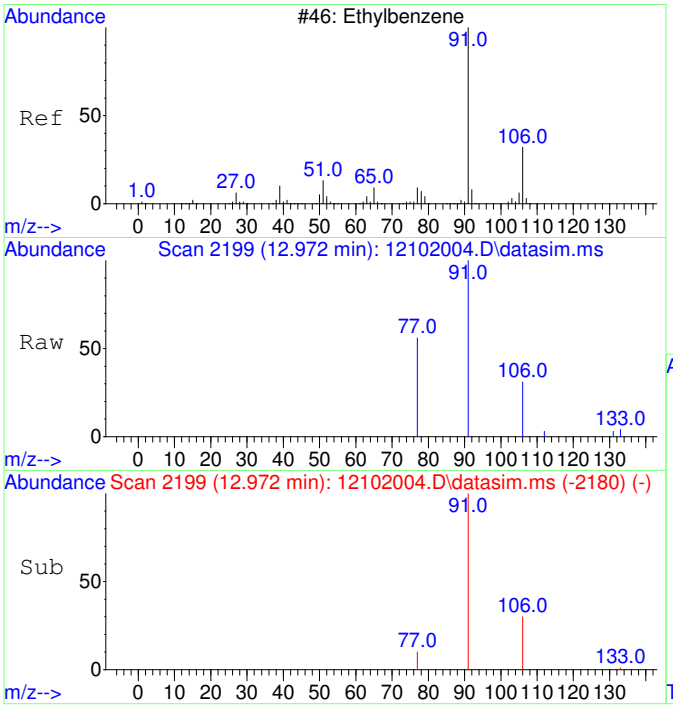


#17
1,1,1,2-Tetrachloroethane
Concen: 50.19 ug/L
RT: 12.916 min Scan# 2192
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:131 Resp: 671

Ion	Ratio	Lower	Upper
131	100		
133	99.1	66.3	126.3

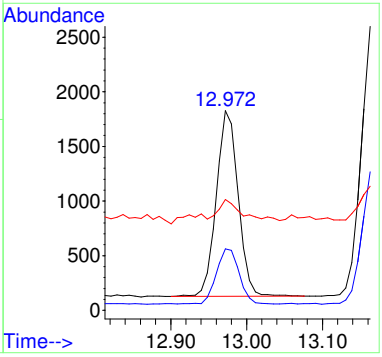


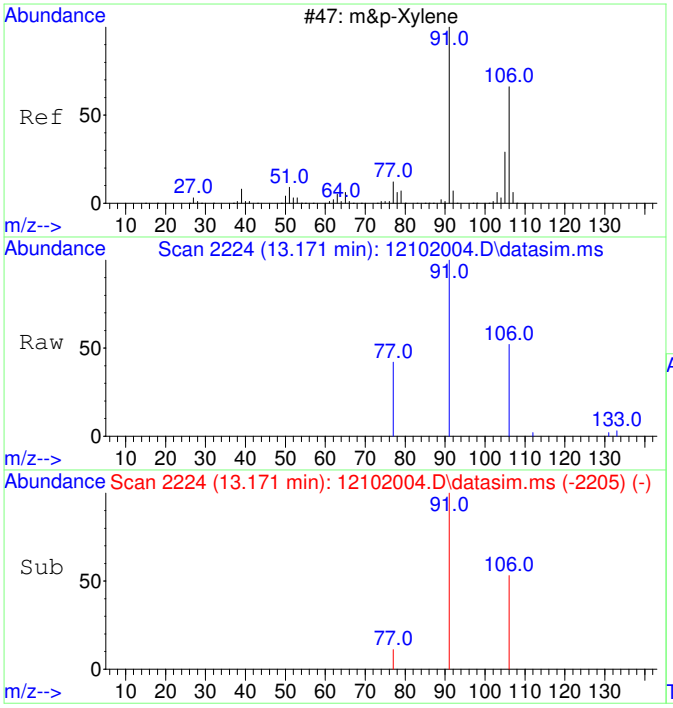


#18
Ethylbenzene
Concen: 53.97 ug/L
RT: 12.972 min Scan# 2199
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3399

Ion	Ratio	Lower	Upper
91	100		
106	30.8	3.0	63.0
77	10.9	0.0	38.2

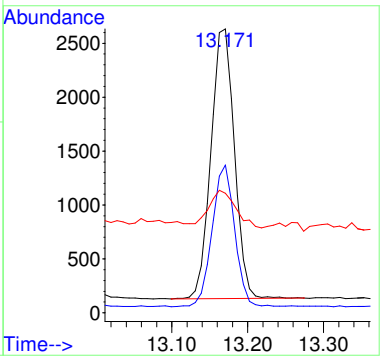


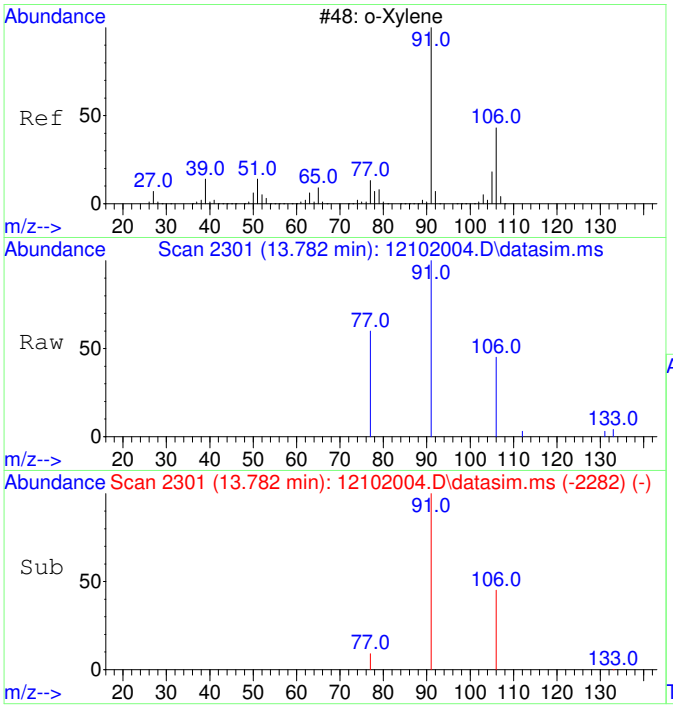


#19
m&p-Xylene
Concen: 110.86 ug/L
RT: 13.171 min Scan# 2224
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 5376

Ion	Ratio	Lower	Upper
91	100		
106	50.1	22.2	82.2
77	16.7	0.0	42.4

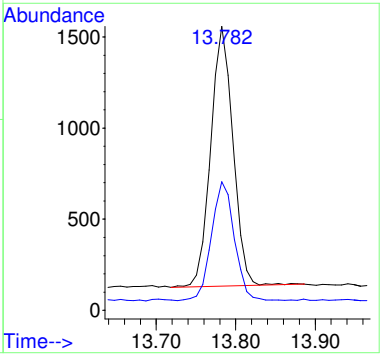


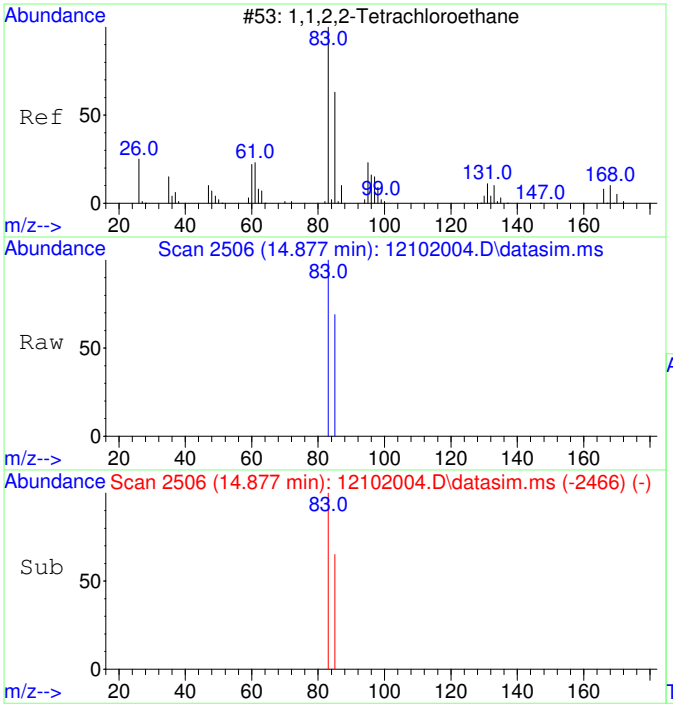


#20
o-Xylene
Concen: 53.18 ug/L
RT: 13.782 min Scan# 2301
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2770

Ion	Ratio	Lower	Upper
91	100		
106	46.9	19.2	79.2

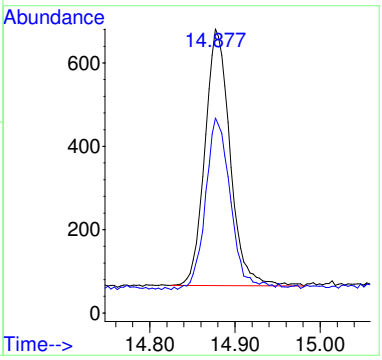


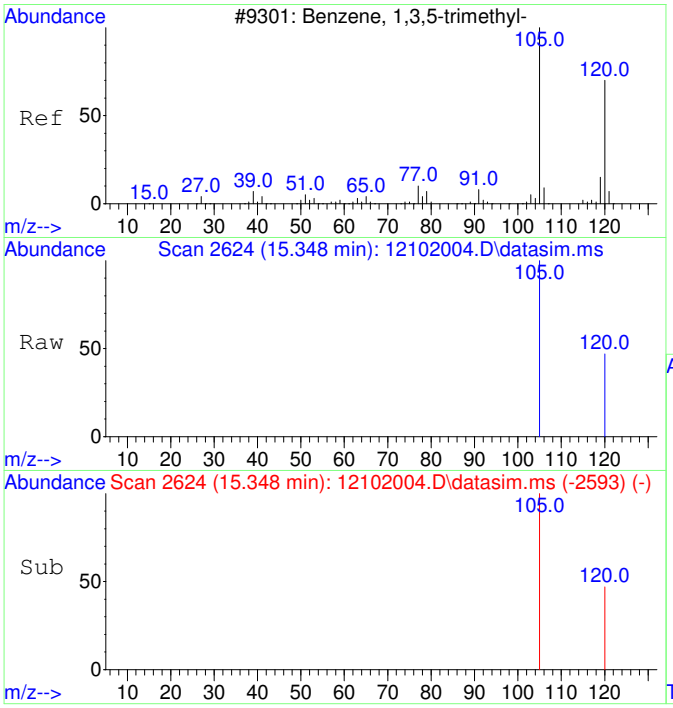


#21
1,1,2,2-Tetrachloroethane
Concen: 52.04 ug/L
RT: 14.877 min Scan# 2506
Delta R.T. -0.004 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 1263

Ion	Ratio	Lower	Upper
83	100		
85	65.7	34.8	94.8

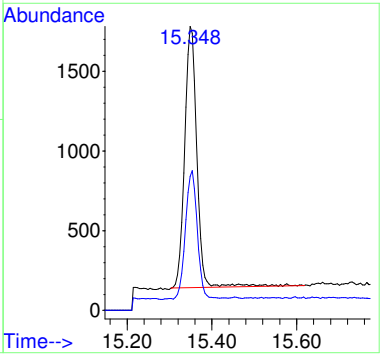


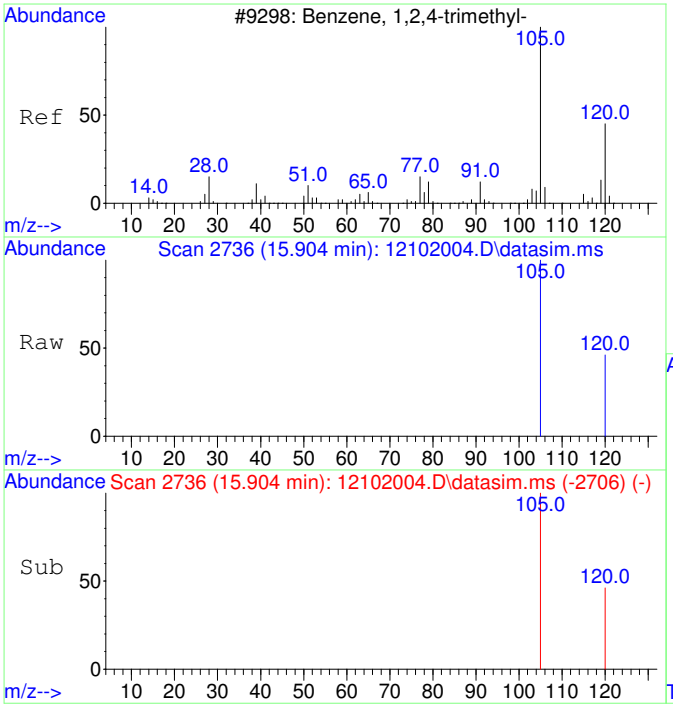


#22
1,3,5-Trimethylbenzene
Concen: 57.12 ug/L
RT: 15.348 min Scan# 2624
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3272

Ion	Ratio	Lower	Upper
105	100		
120	48.6	21.1	81.1

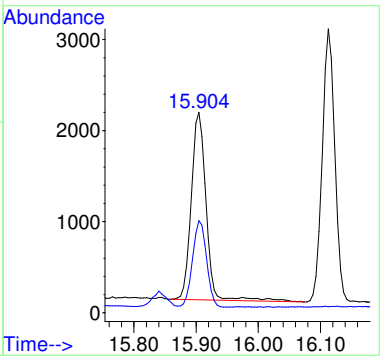


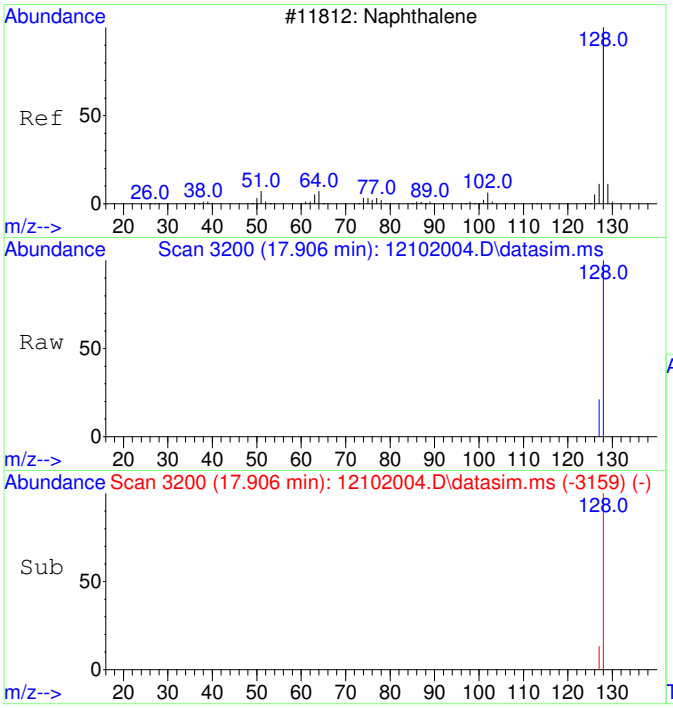


#23
1,2,4-Trimethylbenzene
Concen: 58.13 ug/L
RT: 15.904 min Scan# 2736
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 3406

Ion	Ratio	Lower	Upper
105	100		
120	42.9	17.2	77.2

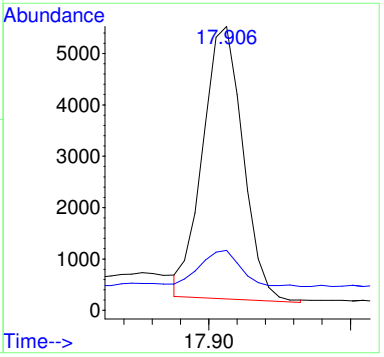


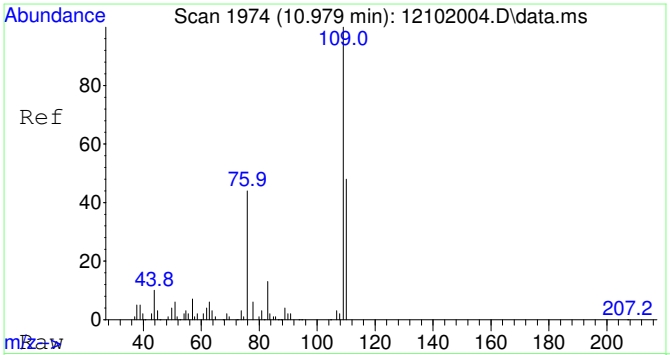


#24
Naphthalene
Concen: 55.01 ug/L m
RT: 17.906 min Scan# 3200
Delta R.T. 0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:128 Resp: 5222

Ion	Ratio	Lower	Upper
128	100		
127	12.3	0.0	42.5

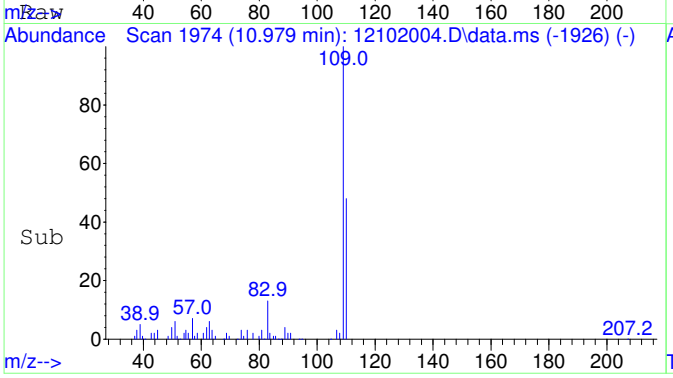


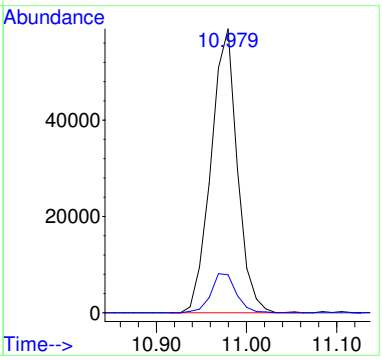


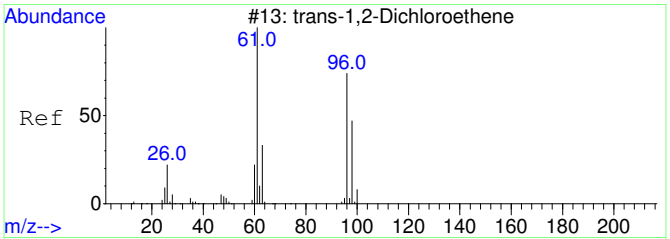
#25
2-Fluorotoluene SCAN
Concen: 5168.33 ug/L
RT: 10.979 min Scan# 1974
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

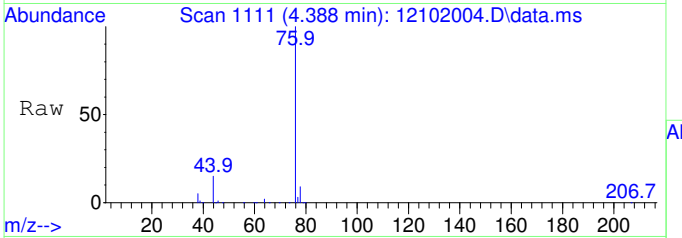
Tgt Ion:109 Resp: 119951

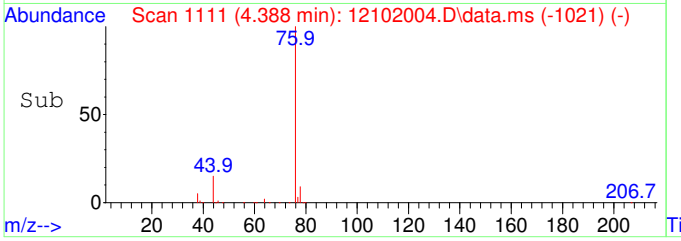
Ion	Ratio	Lower	Upper
109	100		
83	13.3	0.0	43.8







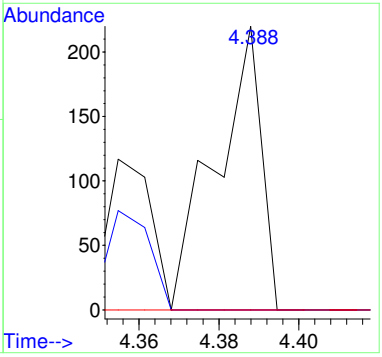


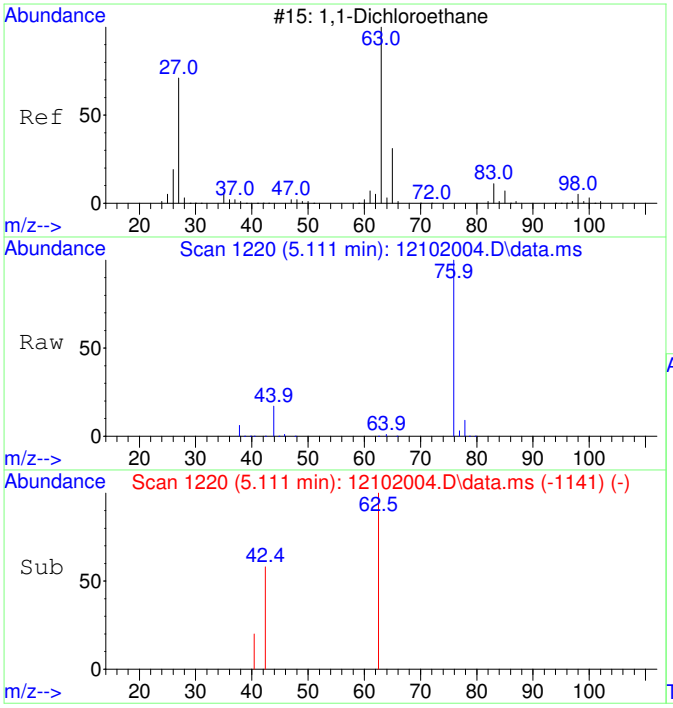


#27
trans-1,2-Dichloroethene SCAN
Concen: 25.36 ug/L
RT: 4.388 min Scan# 1111
Delta R.T. 0.007 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 175

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

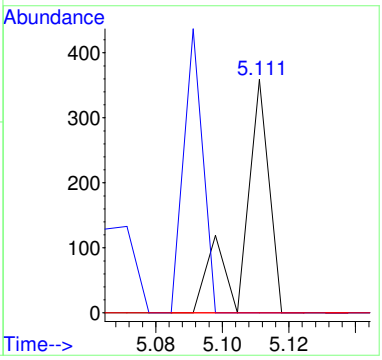


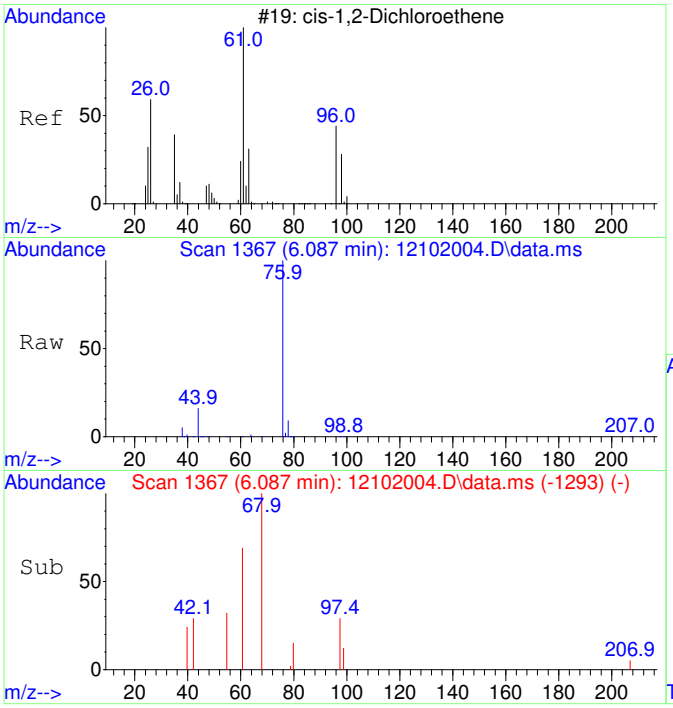


#28
1,1-Dichloroethane SCAN
Concen: 23.32 ug/L
RT: 5.111 min Scan# 1220
Delta R.T. 0.027 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 63 Resp: 190

Ion	Ratio	Lower	Upper
63	100		
65	91.6	1.3	61.3#
83	0.0	0.0	45.9

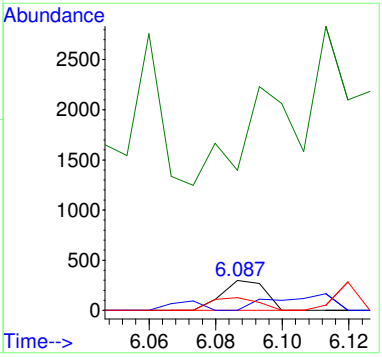


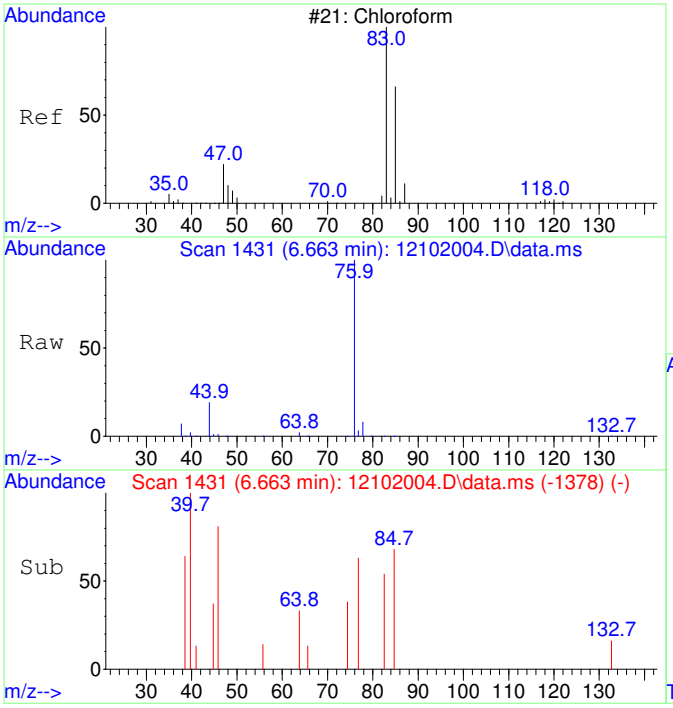


#29
cis-1,2-Dichloroethene SCAN
Concen: 33.59 ug/L
RT: 6.087 min Scan# 1367
Delta R.T. -0.006 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 61 Resp: 269

Ion	Ratio	Lower	Upper
61	100		
96	23.8	39.9	99.9#
98	46.5	13.5	73.5
64	0.0	4.5	64.5#

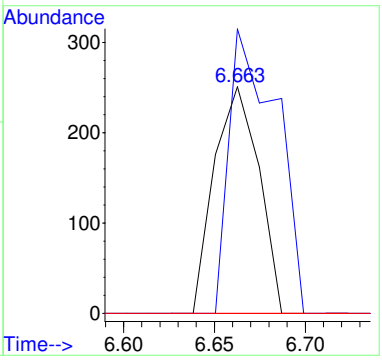


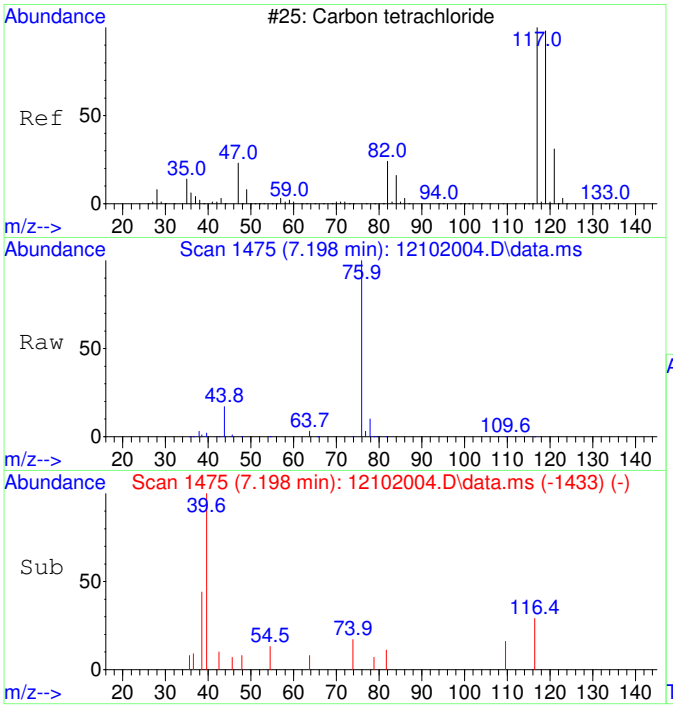


#30
Chloroform SCAN
Concen: 57.57 ug/L
RT: 6.663 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 430

Ion	Ratio	Lower	Upper
83	100		
85	133.5	34.6	94.6#
47	0.0	0.0	53.4

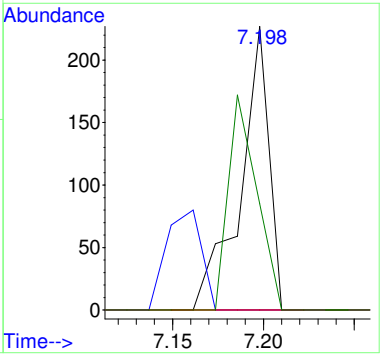


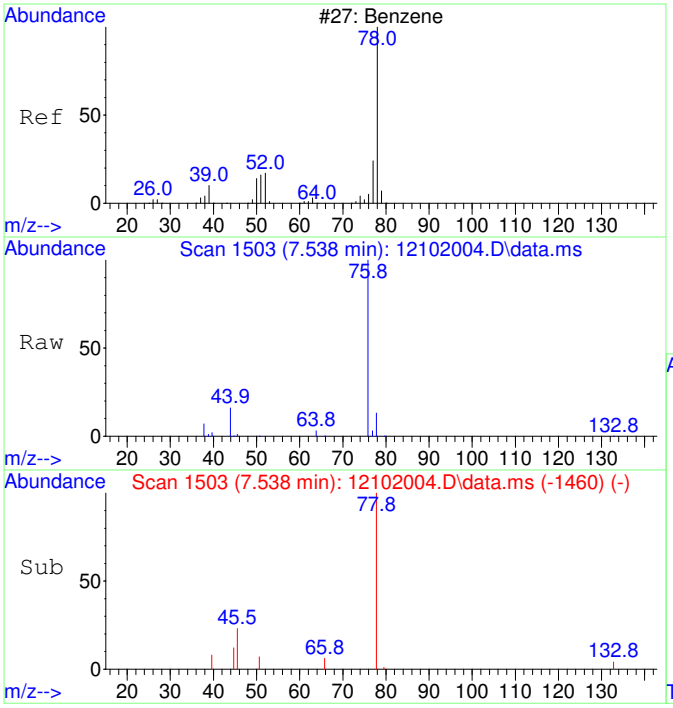


#32
Carbon tetrachloride SCAN
Concen: 37.50 ug/L
RT: 7.198 min Scan# 1475
Delta R.T. 0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:117 Resp: 247

Ion	Ratio	Lower	Upper
117	100		
119	0.0	75.5	135.5#
121	0.0	0.0	58.8
82	76.1	0.0	59.2#

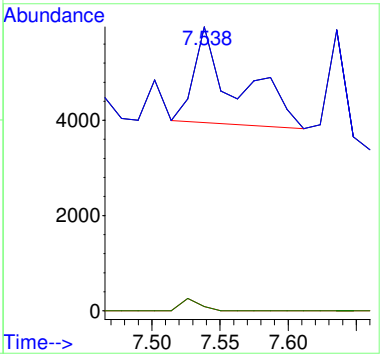


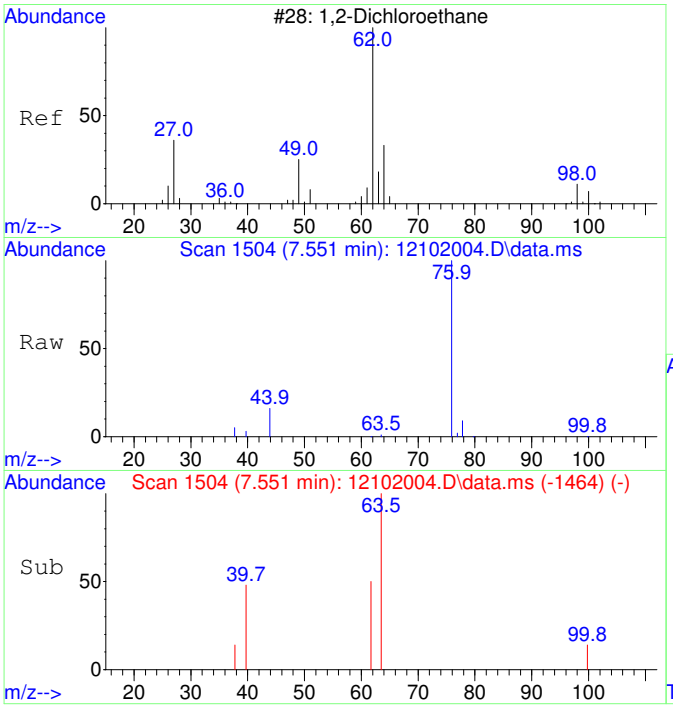


#33
Benzene SCAN
Concen: 186.94 ug/L
RT: 7.538 min Scan# 1503
Delta R.T. 0.025 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 78 Resp: 4359

Ion	Ratio	Lower	Upper
78	100		
78	100.0	70.0	130.0
51	5.9	0.0	47.9
51	5.9	0.0	44.1

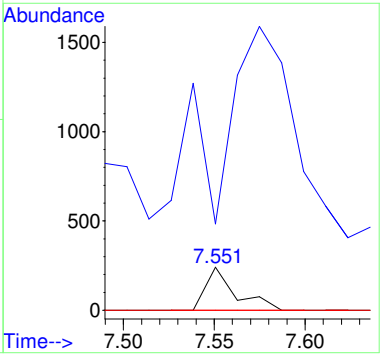


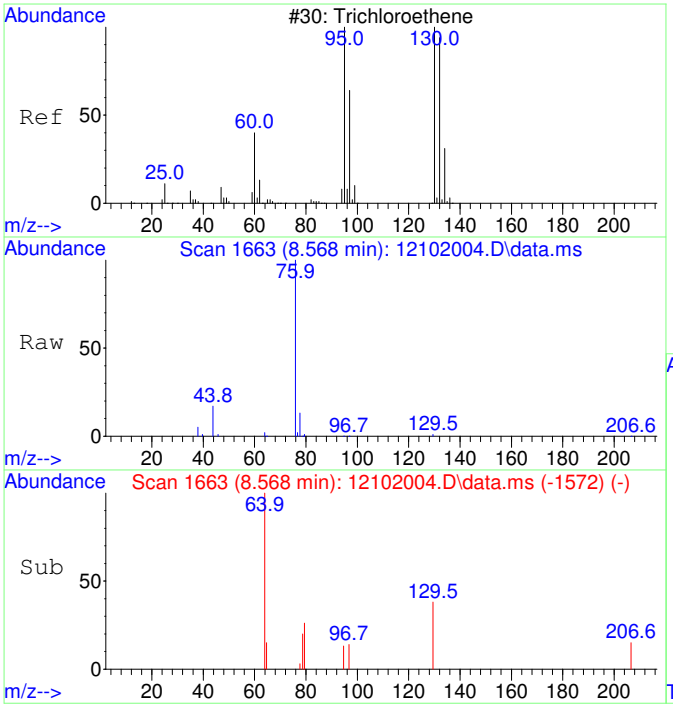


#34
1,2-Dichloroethane SCAN
Concen: 37.16 ug/L
RT: 7.551 min Scan# 1504
Delta R.T. -0.012 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 62 Resp: 271

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

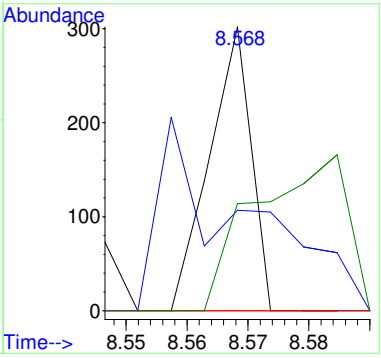


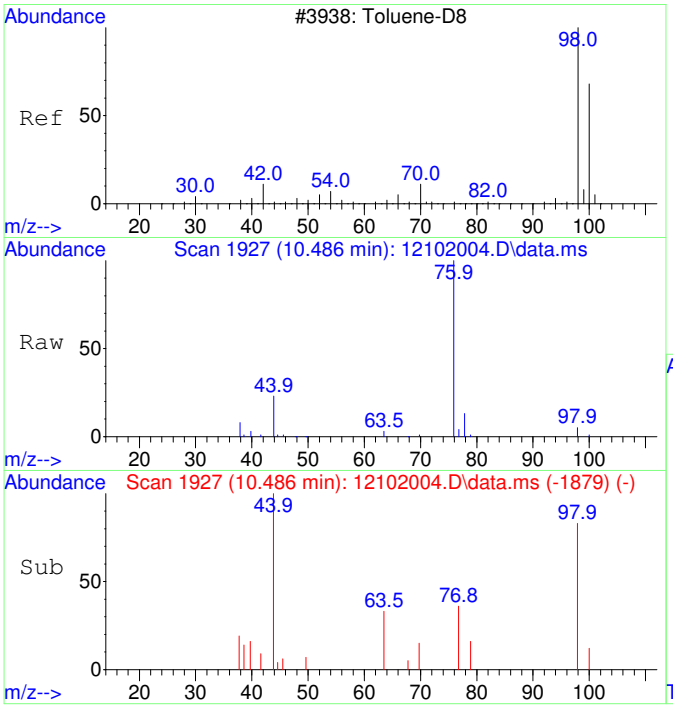


#35
Trichloroethene SCAN
Concen: 28.32 ug/L
RT: 8.568 min Scan# 1663
Delta R.T. -0.005 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:130 Resp: 144

Ion	Ratio	Lower	Upper
130	100		
95	140.3	60.5	120.5#
132	0.0	59.6	119.6#
97	0.0	28.2	88.2#

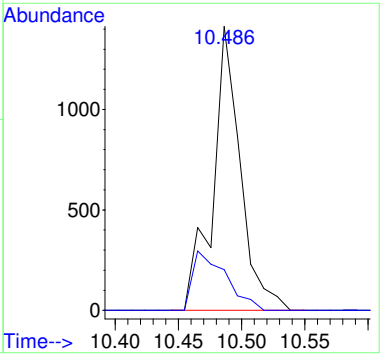


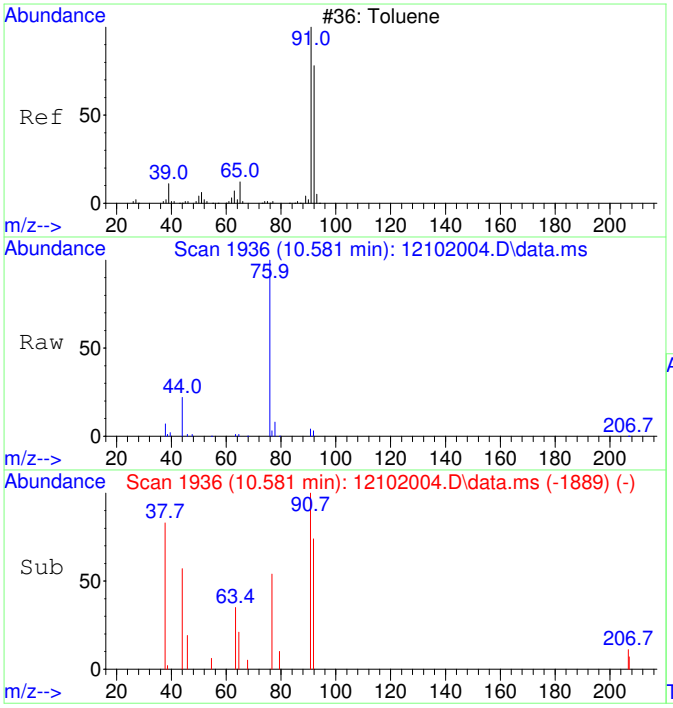


#36
Toluene-d8 SCAN
Concen: 98.86 ug/L
RT: 10.486 min Scan# 1927
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 98 Resp: 2152

Ion	Ratio	Lower	Upper
98	100		
100	0.0	40.0	100.0#

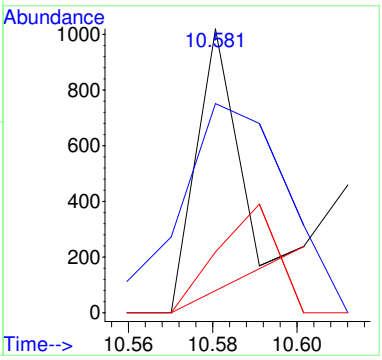


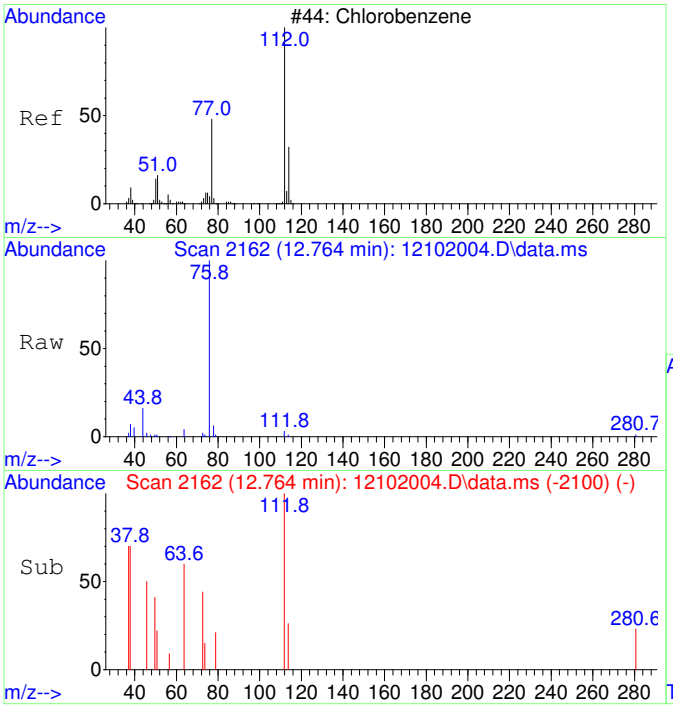


#37
Toluene SCAN
Concen: 25.15 ug/L
RT: 10.581 min Scan# 1936
Delta R.T. -0.010 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 674

Ion	Ratio	Lower	Upper
91	100		
92	199.0	28.3	88.3#
65	56.8	0.0	41.0#

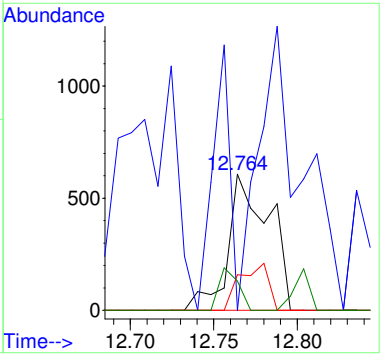


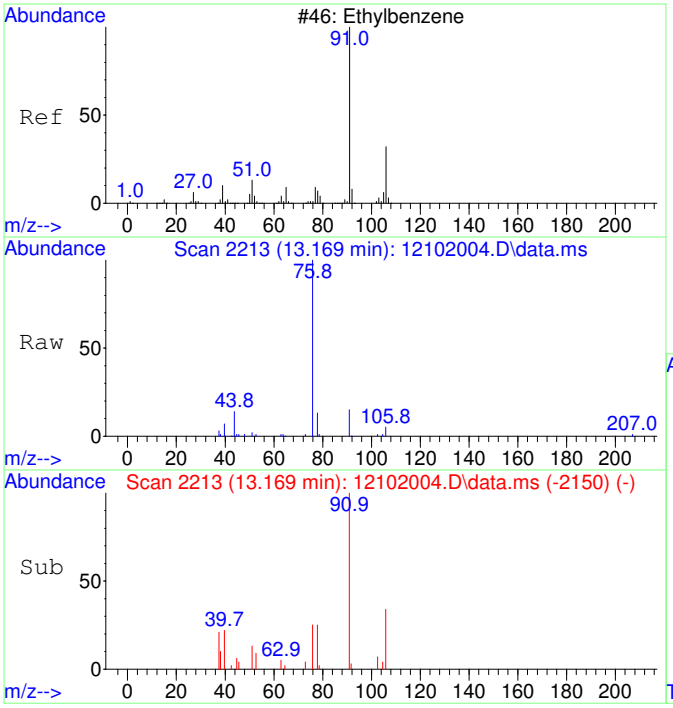


#40
Chlorobenzene SCAN
Concen: 53.92 ug/L
RT: 12.764 min Scan# 2162
Delta R.T. -0.008 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:112 Resp: 1038

Ion	Ratio	Lower	Upper
112	100		
77	80.5	28.2	88.2
114	0.0	2.3	62.3#
51	14.7	0.0	50.1

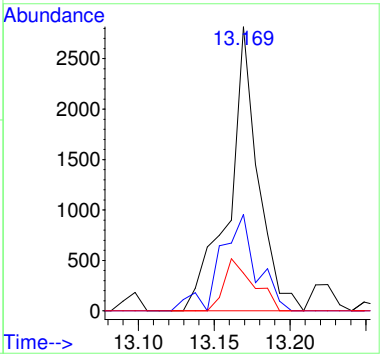


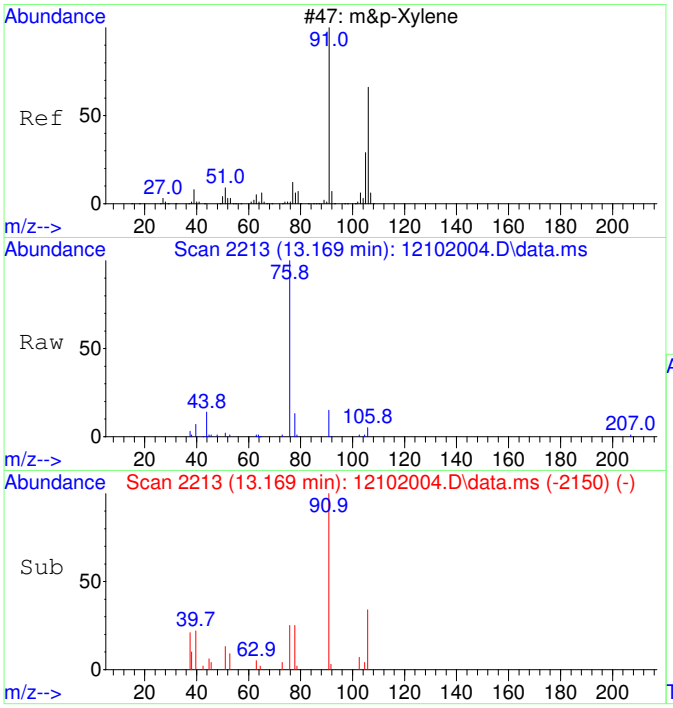


#42
Ethylbenzene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
51	18.7	0.0	40.1

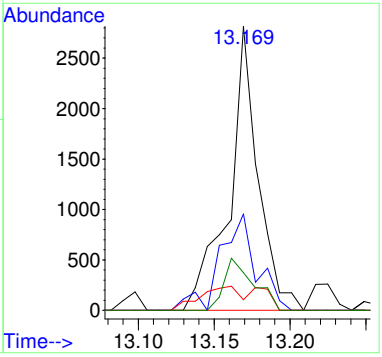


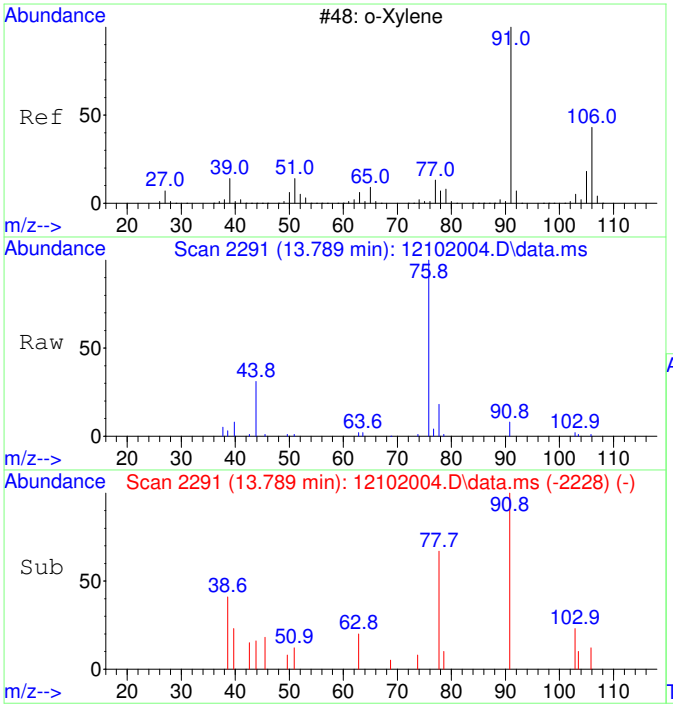


#43
m&p-Xylene SCAN
Concen: 73.58 ug/L
RT: 13.169 min Scan# 2213
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 3758

Ion	Ratio	Lower	Upper
91	100		
106	42.7	23.1	83.1
105	17.4	0.0	54.7
51	18.7	0.0	40.1

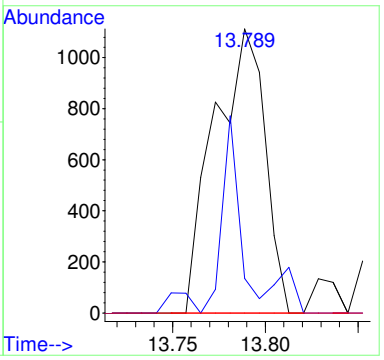


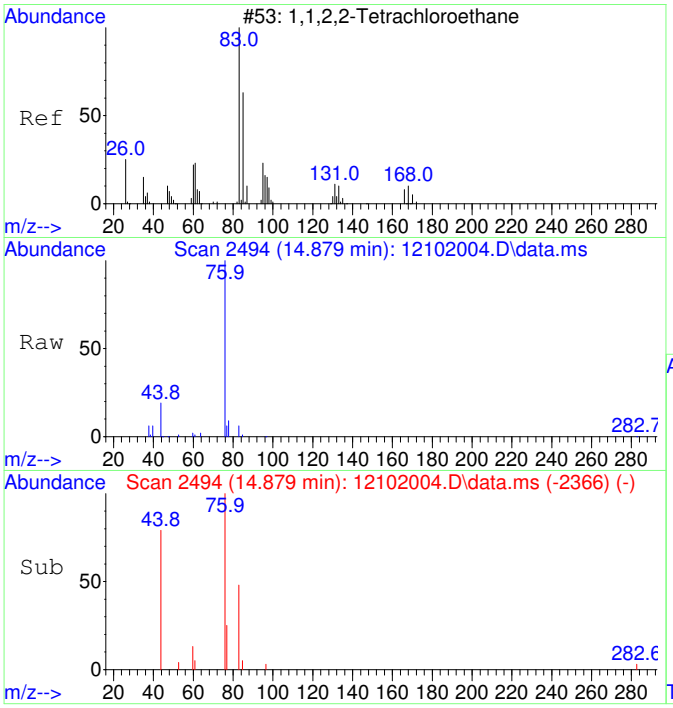


#44
o-Xylene SCAN
Concen: 76.20 ug/L
RT: 13.789 min Scan# 2291
Delta R.T. 0.000 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 91 Resp: 2125

Ion	Ratio	Lower	Upper
91	100		
106	21.2	18.0	78.0
105	0.0	0.0	56.6

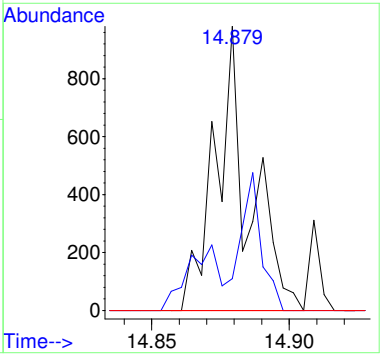


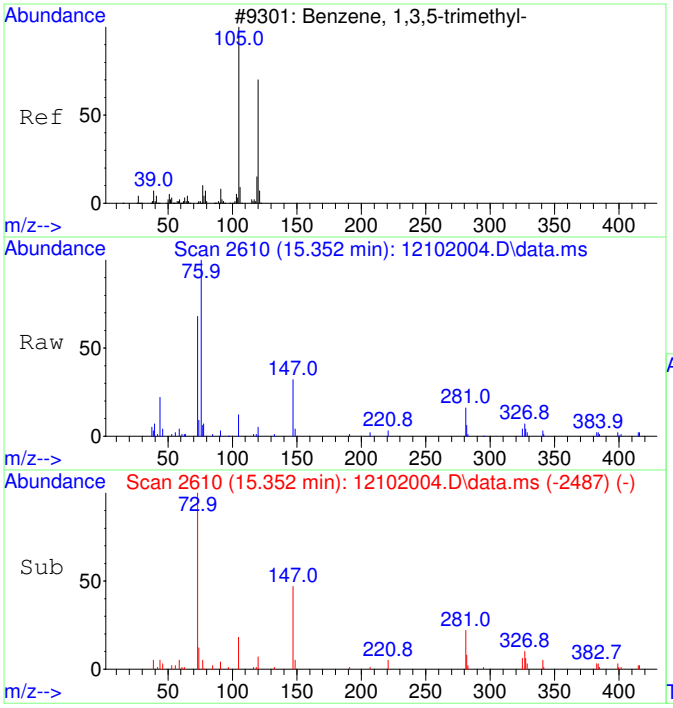


#45
1,1,2,2-Tetrachloroethane SCAN
Concen: 57.45 ug/L
RT: 14.879 min Scan# 2494
Delta R.T. -0.003 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion: 83 Resp: 833

Ion	Ratio	Lower	Upper
83	100		
85	23.3	35.9	95.9#
95	0.0	0.0	47.4

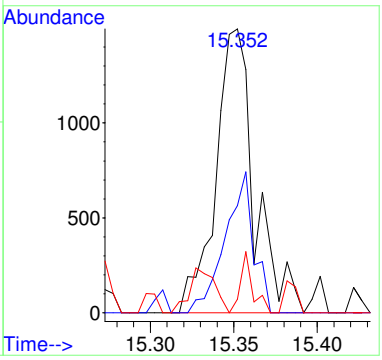


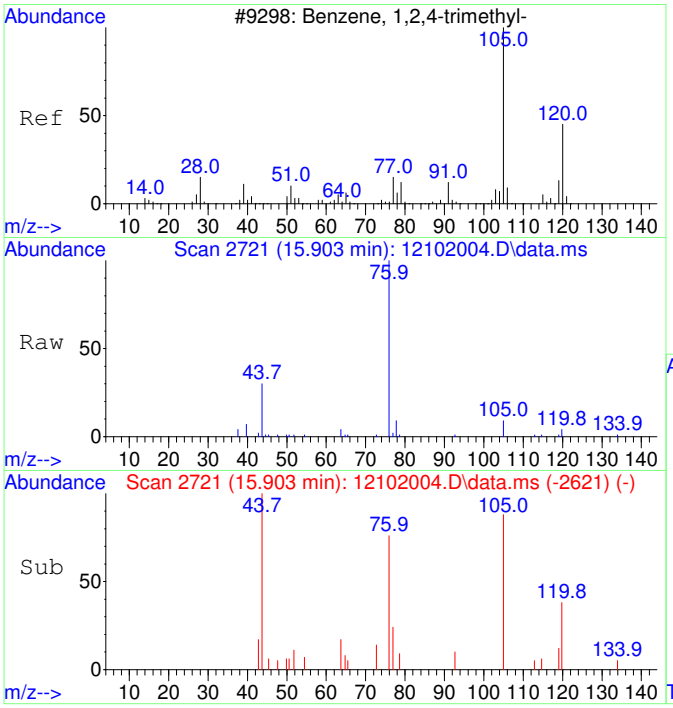


#46
1,3,5-Trimethylbenzene SCAN
Concen: 82.25 ug/L
RT: 15.352 min Scan# 2610
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 2420

Ion	Ratio	Lower	Upper
105	100		
120	36.2	18.3	78.3
119	6.7	0.0	43.1

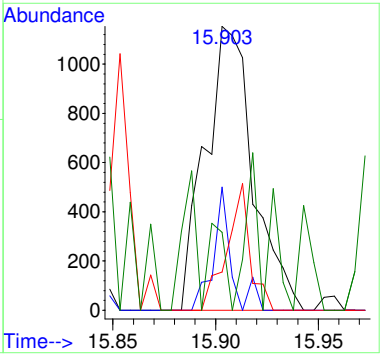




#47
1,2,4-Trimethylbenzene SCAN
Concen: 62.54 ug/L
RT: 15.903 min Scan# 2721
Delta R.T. -0.001 min
Lab File: 12102004.D
Acq: 10 Dec 2020 9:43

Tgt Ion:105 Resp: 1880

Ion	Ratio	Lower	Upper
105	100		
120	15.9	16.9	76.9#
119	21.4	0.0	41.9
77	23.0	0.0	42.3



SECOND SOURCE CALIBRATION CHECK

Radiello D1

Laboratory:	EPA Region 9 Laboratory	SDG:	20343A
Client:	California Site Cleanup Section 3	Project:	MEW OU1 FY2021 Vapor Intrusion Investigation
Instrument ID:	AG5975CV	Calibration:	2012007
Lab File ID:	12072009.D	Calibration Date:	12/07/20 08:54
Sequence:	S20L021	Injection Date:	12/07/20
Lab Sample ID:	S20L021-SCV1	Injection Time:	15:07

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	SCV	ICAL	SCV	MIN (#)	SCV	LIMIT (#)
1,1-Dichloroethene	L	5000	4700	0.1982577	0.1862658		-6.0	30
trans-1,2-Dichloroethene	L	5000	4320	0.2499405	0.2158574		-13.6	30
1,1-Dichloroethane	L	5000	4220	0.2985216	0.2520923		-15.6	30
cis-1,2-Dichloroethene	L	5000	4270	0.3091786	0.2640148		-14.6	30
Chloroform	L	5000	4260	0.2969683	0.2531433		-14.8	30
1,1,1-Trichloroethane	L	5000	4310	0.3190104	0.274891		-13.8	30
Carbon tetrachloride	L	5000	4350	0.3049925	0.265437		-13.0	30
1,2-Dichloroethane	L	5000	4300	0.287022	0.2467458		-14.0	30
Trichloroethene	L	5000	4340	0.2656418	0.2306146		-13.2	30
Toluene	L	5000	4260	1.205713	1.027335		-14.8	30
1,1,2-Trichloroethane	L	5000	4330	0.2792661	0.2418428		-13.4	30
Tetrachloroethene	L	5000	4350	0.3755505	0.3265148		-13.1	30
Chlorobenzene	L	5000	4280	0.934068	0.7998544		-14.4	30
1,1,1,2-Tetrachloroethane	L	5000	4340	0.3269185	0.283593		-13.3	30
Ethylbenzene	L	5000	4710	1.392025	1.176402		-5.8	30
m&p-Xylene	L	10000	8400	1.185909	0.9967		-16.0	30
o-Xylene	L	5000	4220	1.27376	1.075382		-15.6	30
1,1,2,2-Tetrachloroethane	L	5000	4190	0.59351	0.4970254		-16.3	30
1,3,5-Trimethylbenzene	L	5000	4200	1.400752	1.177337		-15.9	30
1,2,4-Trimethylbenzene	L	5000	4080	1.432724	1.170077		-18.3	30
Toluene-d8	L	5000	4350	0.9683759	0.8422362		-13.0	30

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

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

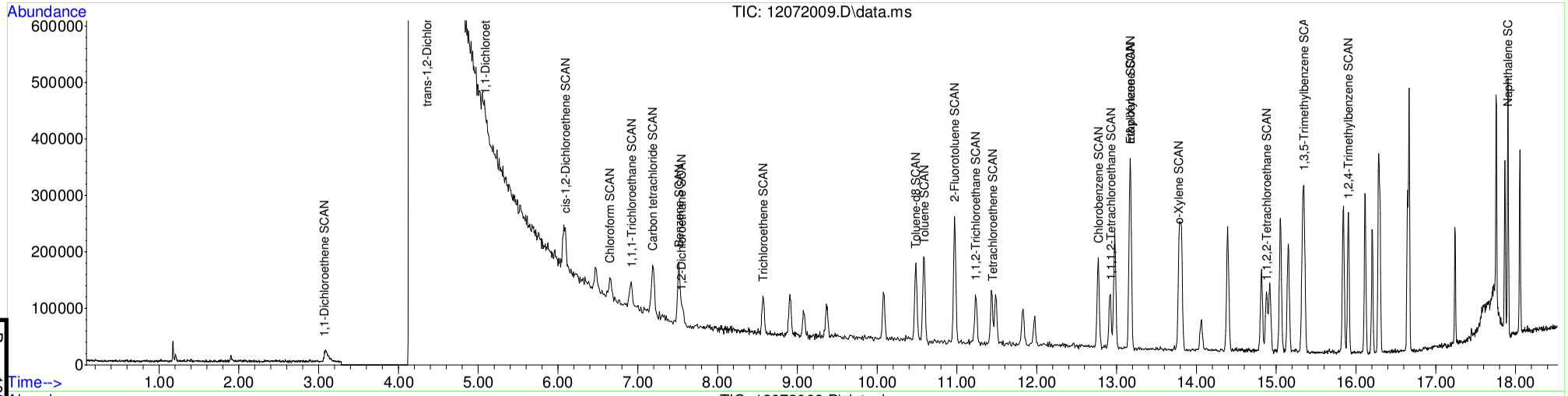
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 2-Fluorotoluene	10.970	109	207424	5000.00	ug/L	0.00
System Monitoring Compounds						
12) Toluene-d8	10.487	98	174700	4348.70	ug/L	0.00
Spiked Amount 5000.000	Range 86 - 118		Recovery = 86.97%			
Target Compounds						Qvalue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

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

Quantitation Report (Not Reviewed)

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

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



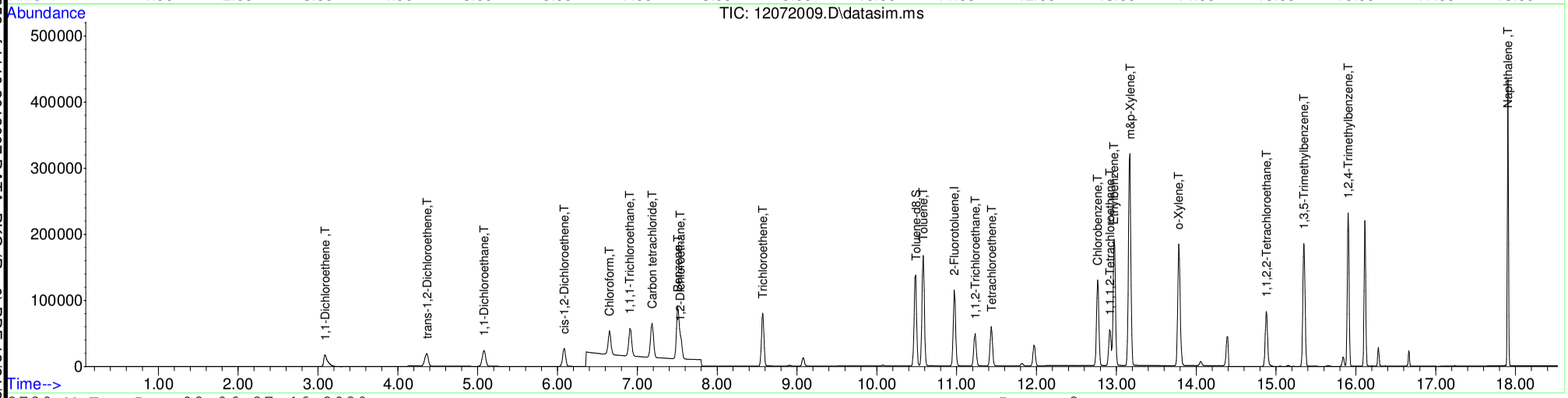


Table of Contents

Analytical Standard Record

EPA Region 9 Laboratory

1639096

Description:	2-Fluorotlouene	**Expires:**	12/31/29
Standard Type:	Other Solution	**Prepared:**	09/22/16
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	100	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/22/16 11:46 by RH
Vendor:		**Lot Numbe**	STBF8552V

Aldrich; Cat # F15323-100G, bar code #AU008468

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	1000000

SIGMA-ALDRICH®

3050 Spruce Street, Saint Louis, MO 63103 USA
Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:	2-FLUOROTOLUENE
	>= 99 %
Product Number:	F15323
Batch Number:	STBF8552V
Brand:	Aldrich
CAS Number:	95-52-3
Formula:	$CH_3C_6H_4F$
Formula Weight:	110.13
Quality Release Date:	14 SEP 2015

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	COLORLESS TO VERY FAINT YELLOW	VERY FAINT YELLOW
APPEARANCE (FORM)	LIQUID	LIQUID
COLOR (IN APHA)	≤ 50 APHA	40 APHA
PURITY (GC AREA %)	≥ 99.0 %	99.9 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS

Dr. Claudia Geitner
Manager Quality Control
Steinheim, Germany

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Analytical Standard Record

EPA Region 9 Laboratory

1920045

Description:	Toluene-d8	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	05/15/19
Solvent:	na	**Prepared By:**	** Vendor **
Final Volume (mls):	0.1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/21/20 11:28 by ZAR
Vendor:	Cambridge Isotope Lab.	**Lot Numbe**	I-21928

Part # DLM-5-10X1; POS #: 18C-262, bar code #AU0010913

Expiration date changed, neat standard, per ZAR

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	1000000

CERTIFICATE OF ANALYSIS

FROM VENDOR

IS NOT AVAILABLE.

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	03/31/21
Standard Type:	Other Solution	**Prepared:**	09/10/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/10/19 13:18 by YNB
Vendor:	Restek	**Lot Numbe**	A0146957

RESTEK, catalog # 30431, Barcode AU011279

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

1937063

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0146957

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,1-dichloroethene	2,008.6 µg/mL	+/- 12.7358	µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBG8609V)		+/- 90.6111	µg/mL	Unstressed
	Purity 99%		+/- 100.5146	µg/mL	Stressed
2	Methylene chloride (dichloromethane)	2,007.1 µg/mL	+/- 12.7263	µg/mL	Gravimetric
	CAS # 75-09-2 (Lot SHBK5095)		+/- 90.5435	µg/mL	Unstressed
	Purity 99%		+/- 100.4395	µg/mL	Stressed
3	trans-1,2-Dichloroethene	2,005.2 µg/mL	+/- 12.7140	µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/- 90.4563	µg/mL	Unstressed
	Purity 99%		+/- 100.3427	µg/mL	Stressed
4	1,1-Dichloroethane	2,003.1 µg/mL	+/- 12.7009	µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 462600)		+/- 90.3630	µg/mL	Unstressed
	Purity 99%		+/- 100.2393	µg/mL	Stressed
5	2,2-Dichloropropane	2,000.3 µg/mL	+/- 12.6830	µg/mL	Gravimetric
	CAS # 594-20-7 (Lot BCBT5124)		+/- 90.2358	µg/mL	Unstressed
	Purity 99%		+/- 100.0982	µg/mL	Stressed
6	cis-1,2-Dichloroethene	2,002.5 µg/mL	+/- 12.6972	µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKBX5945V)		+/- 90.3369	µg/mL	Unstressed
	Purity 99%		+/- 100.2103	µg/mL	Stressed
7	chloroform	2,004.8 µg/mL	+/- 12.7115	µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBJ9076)		+/- 90.4382	µg/mL	Unstressed
	Purity 99%		+/- 100.3227	µg/mL	Stressed

8	Bromochloromethane		2,000.7	µg/mL	+/-	12.6854	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	90.2525	µg/mL	Unstressed
	Purity 98%				+/-	100.1167	µg/mL	Stressed
9	1,1,1-trichloroethane		2,000.9	µg/mL	+/-	12.6872	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	90.2652	µg/mL	Unstressed
	Purity 98%				+/-	100.1308	µg/mL	Stressed
10	1,1-Dichloropropene		2,004.3	µg/mL	+/-	12.7084	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 190122JLM)			+/-	90.4163	µg/mL	Unstressed
	Purity 99%				+/-	100.2984	µg/mL	Stressed
11	carbon tetrachloride		2,004.5	µg/mL	+/-	12.7100	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBJ2110)			+/-	90.4277	µg/mL	Unstressed
	Purity 99%				+/-	100.3110	µg/mL	Stressed
12	1,2-Dichloroethane		2,007.5	µg/mL	+/-	12.7290	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot SHBJ6510)			+/-	90.5630	µg/mL	Unstressed
	Purity 99%				+/-	100.4612	µg/mL	Stressed
13	Benzene		2,004.2	µg/mL	+/-	12.7079	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBJ5344)			+/-	90.4126	µg/mL	Unstressed
	Purity 99%				+/-	100.2944	µg/mL	Stressed
14	Trichloroethene		2,003.4	µg/mL	+/-	12.7030	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBH1955V)			+/-	90.3781	µg/mL	Unstressed
	Purity 99%				+/-	100.2560	µg/mL	Stressed
15	1,2-Dichloropropane		2,007.7	µg/mL	+/-	12.7299	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	90.5690	µg/mL	Unstressed
	Purity 99%				+/-	100.4678	µg/mL	Stressed
16	bromodichloromethane		2,016.1	µg/mL	+/-	12.7833	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCF8470)			+/-	90.9495	µg/mL	Unstressed
	Purity 99%				+/-	100.8899	µg/mL	Stressed
17	Dibromomethane		2,002.3	µg/mL	+/-	12.6960	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)			+/-	90.3278	µg/mL	Unstressed
	Purity 99%				+/-	100.2003	µg/mL	Stressed
18	cis-1,3-Dichloropropene		2,005.6	µg/mL	+/-	12.7170	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 25076)			+/-	90.4773	µg/mL	Unstressed
	Purity 99%				+/-	100.3661	µg/mL	Stressed
19	Toluene		2,000.7	µg/mL	+/-	12.6856	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBJ5659)			+/-	90.2539	µg/mL	Unstressed
	Purity 99%				+/-	100.1182	µg/mL	Stressed
20	trans-1,3-Dichloropropene		2,004.3	µg/mL	+/-	12.7083	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot C797620)			+/-	90.4155	µg/mL	Unstressed
	Purity 98%				+/-	100.2975	µg/mL	Stressed
21	1,1,2-Trichloroethane		2,007.0	µg/mL	+/-	12.7254	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	90.5375	µg/mL	Unstressed
	Purity 99%				+/-	100.4328	µg/mL	Stressed
22	1,3-Dichloropropane		2,001.5	µg/mL	+/-	12.6909	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)			+/-	90.2918	µg/mL	Unstressed
	Purity 99%				+/-	100.1603	µg/mL	Stressed
23	Tetrachloroethene		2,005.1	µg/mL	+/-	12.7136	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBH9691)			+/-	90.4533	µg/mL	Unstressed
	Purity 99%				+/-	100.3394	µg/mL	Stressed

24	dibromochloromethane			2,003.7	µg/mL	+/-	12.7046	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCC0877)				+/-	90.3890	µg/mL	Unstressed
	Purity 98%					+/-	100.2681	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,000.7	µg/mL	+/-	12.6858	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)				+/-	90.2557	µg/mL	Unstressed
	Purity 99%					+/-	100.1202	µg/mL	Stressed
26	Chlorobenzene			2,005.3	µg/mL	+/-	12.7147	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBH4459V)				+/-	90.4608	µg/mL	Unstressed
	Purity 99%					+/-	100.3477	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,001.7	µg/mL	+/-	12.6919	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot MKBS3769V)				+/-	90.2990	µg/mL	Unstressed
	Purity 99%					+/-	100.1683	µg/mL	Stressed
28	Ethylbenzene			2,001.6	µg/mL	+/-	12.6917	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBJ4278)				+/-	90.2972	µg/mL	Unstressed
	Purity 99%					+/-	100.1663	µg/mL	Stressed
29	m-Xylene			2,003.4	µg/mL	+/-	12.7031	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBJ2338)				+/-	90.3784	µg/mL	Unstressed
	Purity 99%					+/-	100.2563	µg/mL	Stressed
30	p-Xylene			2,001.8	µg/mL	+/-	12.6927	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)				+/-	90.3044	µg/mL	Unstressed
	Purity 99%					+/-	100.1743	µg/mL	Stressed
31	o-Xylene			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBH7231)				+/-	90.4289	µg/mL	Unstressed
	Purity 99%					+/-	100.3124	µg/mL	Stressed
32	Styrene			2,001.4	µg/mL	+/-	12.6899	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCC9766)				+/-	90.2845	µg/mL	Unstressed
	Purity 99%					+/-	100.1522	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,001.3	µg/mL	+/-	12.6894	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)				+/-	90.2809	µg/mL	Unstressed
	Purity 99%					+/-	100.1482	µg/mL	Stressed
34	bromoform			2,004.6	µg/mL	+/-	12.7102	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)				+/-	90.4292	µg/mL	Unstressed
	Purity 99%					+/-	100.3127	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,005.5	µg/mL	+/-	12.7161	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)				+/-	90.4713	µg/mL	Unstressed
	Purity 99%					+/-	100.3594	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,002.0	µg/mL	+/-	12.6942	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)				+/-	90.3152	µg/mL	Unstressed
	Purity 99%					+/-	100.1863	µg/mL	Stressed
37	n-Propylbenzene			2,001.2	µg/mL	+/-	12.6891	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot WXBC3346V)				+/-	90.2791	µg/mL	Unstressed
	Purity 99%					+/-	100.1462	µg/mL	Stressed
38	Bromobenzene			2,003.2	µg/mL	+/-	12.7016	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)				+/-	90.3675	µg/mL	Unstressed
	Purity 99%					+/-	100.2443	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,001.4	µg/mL	+/-	12.6904	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBS7648V)				+/-	90.2881	µg/mL	Unstressed
	Purity 99%					+/-	100.1562	µg/mL	Stressed

40	2-Chlorotoluene		2,003.5	µg/mL	+/-	12.7033	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKBW5554V)			+/-	90.3802	µg/mL	Unstressed
	Purity 99%				+/-	100.2583	µg/mL	Stressed
41	4-Chlorotoluene		2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKBL7753V)			+/-	90.3495	µg/mL	Unstressed
	Purity 99%				+/-	100.2243	µg/mL	Stressed
42	tert-Butylbenzene		2,002.2	µg/mL	+/-	12.6950	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	90.3206	µg/mL	Unstressed
	Purity 99%				+/-	100.1923	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		2,001.6	µg/mL	+/-	12.6911	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot MKBJ6229V)			+/-	90.2932	µg/mL	Unstressed
	Purity 98%				+/-	100.1619	µg/mL	Stressed
44	sec-Butylbenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKBR9260V)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		2,000.4	µg/mL	+/-	12.6835	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCB7536)			+/-	90.2394	µg/mL	Unstressed
	Purity 99%				+/-	100.1022	µg/mL	Stressed
46	1,3-Dichlorobenzene		2,008.3	µg/mL	+/-	12.7339	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	90.5976	µg/mL	Unstressed
	Purity 99%				+/-	100.4995	µg/mL	Stressed
47	1,4-Dichlorobenzene		2,000.4	µg/mL	+/-	12.6836	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	90.2397	µg/mL	Unstressed
	Purity 99%				+/-	100.1025	µg/mL	Stressed
48	n-Butylbenzene		2,000.3	µg/mL	+/-	12.6833	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	90.2376	µg/mL	Unstressed
	Purity 99%				+/-	100.1002	µg/mL	Stressed
49	1,2-Dichlorobenzene		2,005.0	µg/mL	+/-	12.7128	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	90.4472	µg/mL	Unstressed
	Purity 99%				+/-	100.3327	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		2,000.1	µg/mL	+/-	12.6820	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	90.2286	µg/mL	Unstressed
	Purity 99%				+/-	100.0902	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		2,002.0	µg/mL	+/-	12.6939	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	90.3134	µg/mL	Unstressed
	Purity 99%				+/-	100.1843	µg/mL	Stressed
52	Hexachlorobutadiene		2,004.0	µg/mL	+/-	12.7064	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	90.4018	µg/mL	Unstressed
	Purity 99%				+/-	100.2824	µg/mL	Stressed
53	Naphthalene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		2,003.9	µg/mL	+/-	12.7061	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	90.4000	µg/mL	Unstressed
	Purity 99%				+/-	100.2804	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

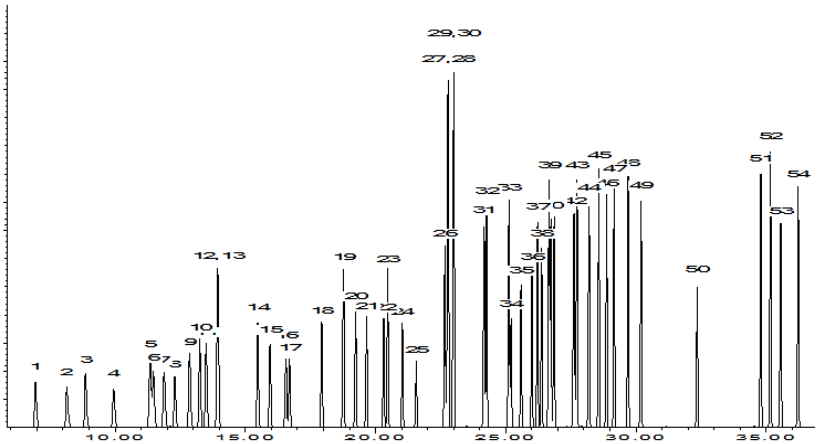
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Date Mixed: 12-Mar-2019 **Balance:** 1126342624

Date Passed: 20-Mar-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Analytical Standard Record

EPA Region 9 Laboratory

2006155

Description:	VOA 502.2 CAL 2000 MEGA MIX, Stock	**Expires:**	07/31/21
Standard Type:	Other Solution	**Prepared:**	07/16/19
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	02/06/20 16:36 by EM
Vendor:	Restek	**Lot Numbe**	A0150913

RESTEK, catalog # 30431, Barcode AU011648

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromobenzene	108-86-1	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Bromoform	75-25-2	2000
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichloroethane	107-06-2	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000
Toluene	108-88-3	2000

Analytical Standard Record

EPA Region 9 Laboratory

2006155

Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromochloromethane	74-97-5	2000
Isopropylbenzene	98-82-8	2000
Bromodichloromethane	75-27-4	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Trichloroethene	79-01-6	2000
m&p-Xylene	179601-23-1	4000

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30431 **Lot No.:** A0150913

Description : 502.2 CAL2000 Mega-Mix

502.2 CAL2000 Mega-Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

A0011645 646 647 648 649 650 651 652

2006152 6153 6154 6155 ~~6156~~ 6157 ~~6157~~ 6158 ~~6158~~ 6159 ~~6159~~ 616

3/10/20

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)[1]		Expanded Uncertainty (95% C.L., K=2)		
1	1,1-dichloroethene		2,001.7 µg/mL	+/- 12.6162	µg/mL	Gravimetric
	CAS # 75-35-4	(Lot SHBG8609V)		+/- 90.2903	µg/mL	Unstressed
	Purity 99%			+/- 100.1609	µg/mL	Stressed
2	Methylene chloride (dichloromethane)		2,002.3 µg/mL	+/- 12.6195	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBK5095)		+/- 90.3140	µg/mL	Unstressed
	Purity 99%			+/- 100.1872	µg/mL	Stressed
3	trans-1,2-Dichloroethene		2,001.7 µg/mL	+/- 12.6157	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)		+/- 90.2870	µg/mL	Unstressed
	Purity 99%			+/- 100.1572	µg/mL	Stressed
4	1,1-Dichloroethane		2,001.3 µg/mL	+/- 12.6135	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 462600)		+/- 90.2712	µg/mL	Unstressed
	Purity 99%			+/- 100.1396	µg/mL	Stressed
5	2,2-Dichloropropane		2,008.0 µg/mL	+/- 12.7321	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBW4162)		+/- 90.5850	µg/mL	Unstressed
	Purity 98%			+/- 100.4855	µg/mL	Stressed
6	cis-1,2-Dichloroethene		2,001.5 µg/mL	+/- 12.6910	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKBX5945V)		+/- 90.2924	µg/mL	Unstressed
	Purity 99%			+/- 100.1609	µg/mL	Stressed
7	chloroform		2,005.2 µg/mL	+/- 12.6381	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBJ9076)		+/- 90.4471	µg/mL	Unstressed
	Purity 99%			+/- 100.3348	µg/mL	Stressed

8	Bromochloromethane			2,015.5	µg/mL	+/-	12.7795	µg/mL	Gravimetric
	CAS #	74-97-5	(Lot 00008541)			+/-	90.9224	µg/mL	Unstressed
	Purity	98%				+/-	100.8599	µg/mL	Stressed
9	1,1,1-trichloroethane			2,002.9	µg/mL	+/-	12.6236	µg/mL	Gravimetric
	CAS #	71-55-6	(Lot 190123CG)			+/-	90.3433	µg/mL	Unstressed
	Purity	98%				+/-	100.2197	µg/mL	Stressed
10	1,1-Dichloropropene			2,013.5	µg/mL	+/-	12.7669	µg/mL	Gravimetric
	CAS #	563-58-6	(Lot 180531JLM)			+/-	90.8322	µg/mL	Unstressed
	Purity	99%				+/-	100.7598	µg/mL	Stressed
11	carbon tetrachloride			2,005.4	µg/mL	+/-	12.6395	µg/mL	Gravimetric
	CAS #	56-23-5	(Lot SHBG8938V)			+/-	90.4572	µg/mL	Unstressed
	Purity	99%				+/-	100.3460	µg/mL	Stressed
12	1,2-Dichloroethane			2,004.9	µg/mL	+/-	12.6359	µg/mL	Gravimetric
	CAS #	107-06-2	(Lot SHBJ6510)			+/-	90.4313	µg/mL	Unstressed
	Purity	99%				+/-	100.3173	µg/mL	Stressed
13	Benzene			2,005.0	µg/mL	+/-	12.7130	µg/mL	Gravimetric
	CAS #	71-43-2	(Lot SHBK7357)			+/-	90.4487	µg/mL	Unstressed
	Purity	99%				+/-	100.3344	µg/mL	Stressed
14	Trichloroethene			2,006.1	µg/mL	+/-	12.6436	µg/mL	Gravimetric
	CAS #	79-01-6	(Lot SHBH1955V)			+/-	90.4866	µg/mL	Unstressed
	Purity	99%				+/-	100.3786	µg/mL	Stressed
15	1,2-Dichloropropane			2,001.0	µg/mL	+/-	12.6113	µg/mL	Gravimetric
	CAS #	78-87-5	(Lot BCBR0882V)			+/-	90.2554	µg/mL	Unstressed
	Purity	99%				+/-	100.1221	µg/mL	Stressed
16	bromodichloromethane			2,006.7	µg/mL	+/-	12.6476	µg/mL	Gravimetric
	CAS #	75-27-4	(Lot MKCJ0238)			+/-	90.5148	µg/mL	Unstressed
	Purity	99%				+/-	100.4098	µg/mL	Stressed
17	Dibromomethane			2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS #	74-95-3	(Lot 10201030)			+/-	90.7600	µg/mL	Unstressed
	Purity	99%				+/-	100.6797	µg/mL	Stressed
18	cis-1,3-Dichloropropene			2,002.7	µg/mL	+/-	12.6223	µg/mL	Gravimetric
	CAS #	10061-01-5	(Lot 25649)			+/-	90.3343	µg/mL	Unstressed
	Purity	99%				+/-	100.2097	µg/mL	Stressed
19	Toluene			2,003.6	µg/mL	+/-	12.7043	µg/mL	Gravimetric
	CAS #	108-88-3	(Lot SHBK3737)			+/-	90.3871	µg/mL	Unstressed
	Purity	99%				+/-	100.2660	µg/mL	Stressed
20	trans-1,3-Dichloropropene			2,002.2	µg/mL	+/-	12.6189	µg/mL	Gravimetric
	CAS #	10061-02-6	(Lot 19160070-D19056)			+/-	90.3095	µg/mL	Unstressed
	Purity	99%				+/-	100.1822	µg/mL	Stressed
21	1,1,2-Trichloroethane			2,000.6	µg/mL	+/-	12.6088	µg/mL	Gravimetric
	CAS #	79-00-5	(Lot FGB01)			+/-	90.2373	µg/mL	Unstressed
	Purity	99%				+/-	100.1021	µg/mL	Stressed
22	1,3-Dichloropropane			2,001.6	µg/mL	+/-	12.6912	µg/mL	Gravimetric
	CAS #	142-28-9	(Lot BCBC6265)			+/-	90.2939	µg/mL	Unstressed
	Purity	99%				+/-	100.1626	µg/mL	Stressed
23	Tetrachloroethene			2,003.4	µg/mL	+/-	12.6268	µg/mL	Gravimetric
	CAS #	127-18-4	(Lot SHBJ7422)			+/-	90.3659	µg/mL	Unstressed
	Purity	99%				+/-	100.2447	µg/mL	Stressed

40	2-Chlorotoluene			2,011.5	µg/mL	+/-	12.7544	µg/mL	Gravimetric
	CAS #	95-49-8	(Lot MKBW5554V)			+/-	90.7435	µg/mL	Unstressed
	Purity	99%				+/-	100.6613	µg/mL	Stressed
41	4-Chlorotoluene			2,006.2	µg/mL	+/-	12.7206	µg/mL	Gravimetric
	CAS #	106-43-4	(Lot MKBL7753V)			+/-	90.5029	µg/mL	Unstressed
	Purity	99%				+/-	100.3944	µg/mL	Stressed
42	tert-Butylbenzene			2,010.9	µg/mL	+/-	12.7502	µg/mL	Gravimetric
	CAS #	98-06-6	(Lot STBD6954V)			+/-	90.7134	µg/mL	Unstressed
	Purity	99%				+/-	100.6280	µg/mL	Stressed
43	1,2,4-Trimethylbenzene			2,007.3	µg/mL	+/-	12.7278	µg/mL	Gravimetric
	CAS #	95-63-6	(Lot WXBC4246V)			+/-	90.5540	µg/mL	Unstressed
	Purity	99%				+/-	100.4512	µg/mL	Stressed
44	sec-Butylbenzene			2,011.4	µg/mL	+/-	12.7533	µg/mL	Gravimetric
	CAS #	135-98-8	(Lot MKCG5431)			+/-	90.7359	µg/mL	Unstressed
	Purity	99%				+/-	100.6530	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)			2,010.8	µg/mL	+/-	12.7500	µg/mL	Gravimetric
	CAS #	99-87-6	(Lot MKCB7536)			+/-	90.7119	µg/mL	Unstressed
	Purity	99%				+/-	100.6263	µg/mL	Stressed
46	1,3-Dichlorobenzene			2,005.6	µg/mL	+/-	12.6406	µg/mL	Gravimetric
	CAS #	541-73-1	(Lot BCBQ7100V)			+/-	90.4651	µg/mL	Unstressed
	Purity	99%				+/-	100.3548	µg/mL	Stressed
47	1,4-Dichlorobenzene			2,008.0	µg/mL	+/-	12.6558	µg/mL	Gravimetric
	CAS #	106-46-7	(Lot MKBS4401V)			+/-	90.5734	µg/mL	Unstressed
	Purity	99%				+/-	100.4749	µg/mL	Stressed
48	n-Butylbenzene			2,006.9	µg/mL	+/-	12.7252	µg/mL	Gravimetric
	CAS #	104-51-8	(Lot 09804AE)			+/-	90.5360	µg/mL	Unstressed
	Purity	99%				+/-	100.4311	µg/mL	Stressed
49	1,2-Dichlorobenzene			2,007.2	µg/mL	+/-	12.6509	µg/mL	Gravimetric
	CAS #	95-50-1	(Lot SHBG3111V)			+/-	90.5384	µg/mL	Unstressed
	Purity	99%				+/-	100.4361	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane			2,001.3	µg/mL	+/-	12.6897	µg/mL	Gravimetric
	CAS #	96-12-8	(Lot FBL01)			+/-	90.2835	µg/mL	Unstressed
	Purity	97%				+/-	100.1511	µg/mL	Stressed
51	1,2,4-Trichlorobenzene			2,011.9	µg/mL	+/-	12.7567	µg/mL	Gravimetric
	CAS #	120-82-1	(Lot SHBJ9215)			+/-	90.7600	µg/mL	Unstressed
	Purity	99%				+/-	100.6797	µg/mL	Stressed
52	Hexachlorobutadiene			2,005.5	µg/mL	+/-	12.7163	µg/mL	Gravimetric
	CAS #	87-68-3	(Lot J31X013)			+/-	90.4728	µg/mL	Unstressed
	Purity	99%				+/-	100.3611	µg/mL	Stressed
53	Naphthalene			2,003.1	µg/mL	+/-	12.7009	µg/mL	Gravimetric
	CAS #	91-20-3	(Lot MKBZ8680V)			+/-	90.3630	µg/mL	Unstressed
	Purity	99%				+/-	100.2393	µg/mL	Stressed
54	1,2,3-Trichlorobenzene			2,004.8	µg/mL	+/-	12.7119	µg/mL	Gravimetric
	CAS #	87-61-6	(Lot MKBX7627V)			+/-	90.4412	µg/mL	Unstressed
	Purity	99%				+/-	100.3261	µg/mL	Stressed

24	dibromochloromethane			2,004.8	µg/mL	+/-	12.6358	µg/mL	Gravimetric
	CAS #	124-48-1	(Lot MKCJ3856)			+/-	90.4306	µg/mL	Unstressed
	Purity	98%				+/-	100.3165	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)			2,002.8	µg/mL	+/-	12.6990	µg/mL	Gravimetric
	CAS #	106-93-4	(Lot BCBP2268V)			+/-	90.3495	µg/mL	Unstressed
	Purity	99%				+/-	100.2243	µg/mL	Stressed
26	Chlorobenzene			2,003.2	µg/mL	+/-	12.6252	µg/mL	Gravimetric
	CAS #	108-90-7	(Lot SHBJ0839)			+/-	90.3546	µg/mL	Unstressed
	Purity	99%				+/-	100.2322	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane			2,007.3	µg/mL	+/-	12.7275	µg/mL	Gravimetric
	CAS #	630-20-6	(Lot MKBS3769V)			+/-	90.5525	µg/mL	Unstressed
	Purity	99%				+/-	100.4495	µg/mL	Stressed
28	Ethylbenzene			2,003.7	µg/mL	+/-	12.7045	µg/mL	Gravimetric
	CAS #	100-41-4	(Lot SHBJ4278)			+/-	90.3886	µg/mL	Unstressed
	Purity	99%				+/-	100.2677	µg/mL	Stressed
29	m-Xylene			2,006.0	µg/mL	+/-	12.7195	µg/mL	Gravimetric
	CAS #	108-38-3	(Lot SHBJ8743)			+/-	90.4954	µg/mL	Unstressed
	Purity	99%				+/-	100.3861	µg/mL	Stressed
30	p-Xylene			2,013.1	µg/mL	+/-	12.7645	µg/mL	Gravimetric
	CAS #	106-42-3	(Lot SHBJ7329)			+/-	90.8156	µg/mL	Unstressed
	Purity	99%				+/-	100.7414	µg/mL	Stressed
31	o-Xylene			2,007.6	µg/mL	+/-	12.7295	µg/mL	Gravimetric
	CAS #	95-47-6	(Lot SHBK7739)			+/-	90.5660	µg/mL	Unstressed
	Purity	99%				+/-	100.4645	µg/mL	Stressed
32	Styrene			2,012.8	µg/mL	+/-	12.7624	µg/mL	Gravimetric
	CAS #	100-42-5	(Lot MKCC9766)			+/-	90.8006	µg/mL	Unstressed
	Purity	99%				+/-	100.7247	µg/mL	Stressed
33	Isopropylbenzene (cumene)			2,007.2	µg/mL	+/-	12.7271	µg/mL	Gravimetric
	CAS #	98-82-8	(Lot P15E008)			+/-	90.5495	µg/mL	Unstressed
	Purity	99%				+/-	100.4462	µg/mL	Stressed
34	bromoform			2,009.4	µg/mL	+/-	12.6644	µg/mL	Gravimetric
	CAS #	75-25-2	(Lot SHBJ4835)			+/-	90.6354	µg/mL	Unstressed
	Purity	99%				+/-	100.5437	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane			2,008.7	µg/mL	+/-	12.6600	µg/mL	Gravimetric
	CAS #	79-34-5	(Lot CFA4D)			+/-	90.6038	µg/mL	Unstressed
	Purity	99%				+/-	100.5087	µg/mL	Stressed
36	1,2,3-Trichloropropane			2,010.2	µg/mL	+/-	12.7461	µg/mL	Gravimetric
	CAS #	96-18-4	(Lot BCBH8722V)			+/-	90.6848	µg/mL	Unstressed
	Purity	99%				+/-	100.5963	µg/mL	Stressed
37	n-Propylbenzene			2,005.1	µg/mL	+/-	12.7134	µg/mL	Gravimetric
	CAS #	103-65-1	(Lot WXBC5978V)			+/-	90.4517	µg/mL	Unstressed
	Purity	99%				+/-	100.3377	µg/mL	Stressed
38	Bromobenzene			2,010.9	µg/mL	+/-	12.7504	µg/mL	Gravimetric
	CAS #	108-86-1	(Lot MKBD4032V)			+/-	90.7149	µg/mL	Unstressed
	Purity	99%				+/-	100.6296	µg/mL	Stressed
39	1,3,5-Trimethylbenzene			2,008.1	µg/mL	+/-	12.7326	µg/mL	Gravimetric
	CAS #	108-67-8	(Lot BCBZ6781)			+/-	90.5886	µg/mL	Unstressed
	Purity	99%				+/-	100.4895	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

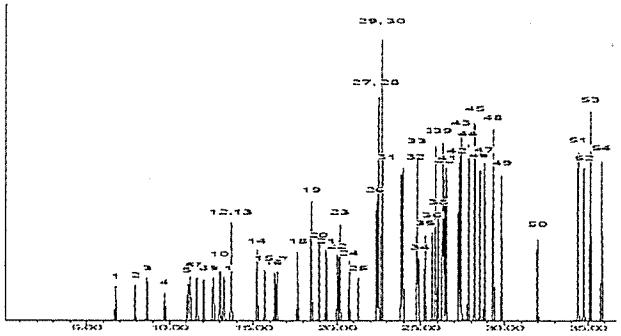
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cydnei L. Crust - Mix Technician

Date Mixed: 16-Jul-2019 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Jul-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

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

2030064

Description:	Passive indoor air Surrogate Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1920045	Toluene-d8	05/15/19	** Vendor **	01/22/21	07/22/20 08:49 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030065

Description:	Passive indoor air Internal Standard Stock	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:52 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
2-Fluorotoluene	95-52-3	10000

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1639096	2-Fluorotoluene	09/22/16	** Vendor **	12/31/29	09/22/17 11:57 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Description:	Passive indoor air stock std 50	**Expires:**	01/22/21
Standard Type:	Analyte Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	20	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:55 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	50
1,1,1,2-Tetrachloroethane	630-20-6	50
Bromobenzene	108-86-1	50
Benzene	71-43-2	50
4-Chlorotoluene	106-43-4	50
2-Chlorotoluene	95-49-8	50
2,2-Dichloropropane	594-20-7	50
1,4-Dichlorobenzene	106-46-7	50
1,3-Dichloropropane	142-28-9	50
1,3-Dichlorobenzene	541-73-1	50
1,3,5-Trimethylbenzene	108-67-8	50
1,2-Dichloropropane	78-87-5	50
Bromodichloromethane	75-27-4	50
1,2-Dichlorobenzene	95-50-1	50
Bromoform	75-25-2	50
1,2-Dibromo-3-chloropropane	96-12-8	50
1,2,4-Trimethylbenzene	95-63-6	50
1,2,4-Trichlorobenzene	120-82-1	50
1,2,3-Trichloropropane	96-18-4	50
1,2,3-Trichlorobenzene	87-61-6	50
1,1-Dichloropropene	563-58-6	50
1,1-Dichloroethene	75-35-4	50
1,1-Dichloroethane	75-34-3	50
1,1,2-Trichloroethane	79-00-5	50
1,1,2,2-Tetrachloroethane	79-34-5	50
1,1,1-Trichloroethane	71-55-6	50
1,2-Dichloroethane	107-06-2	50
Isopropylbenzene	98-82-8	50
trans-1,3-Dichloropropene	10061-02-6	50
trans-1,2-Dichloroethene	156-60-5	50

Analytical Standard Record

EPA Region 9 Laboratory

2030066

Toluene-d8	2037-26-5	50
Toluene	108-88-3	50
Tetrachloroethene	127-18-4	50
tert-Butylbenzene	98-06-6	50
Styrene	100-42-5	50
sec-Butylbenzene	135-98-8	50
Propylbenzene	103-65-1	50
p-Isopropyltoluene	99-87-6	50
o-Xylene	95-47-6	50
Bromochloromethane	74-97-5	50
m&p-Xylene	179601-23-1	100
Trichloroethene	79-01-6	50
Hexachlorobutadiene	87-68-3	50
Ethylbenzene	100-41-4	50
Dichloromethane	75-09-2	50
Dibromomethane	74-95-3	50
cis-1,3-Dichloropropene	10061-01-5	50
cis-1,2-Dichloroethene	156-59-2	50
Chloroform	67-66-3	50
Chlorodibromomethane	124-48-1	50
Chlorobenzene	108-90-7	50
Carbon tetrachloride	56-23-5	50
Butylbenzene	104-51-8	50
Naphthalene	91-20-3	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
1937063	VOA 502.2 CAL 2000 MEGA MIX, St	09/10/19	** Vendor **	01/22/21	07/22/20 08:48 by TD	0.5
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.1

Analytical Standard Record

EPA Region 9 Laboratory

2030067

Description:	Passive air Surrogate/I.S. Working solutio	**Expires:**	01/22/21
Standard Type:	Surrogate Spike	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	25	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:56 by TD
Vendor:	Restek	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
Toluene-d8	2037-26-5	200
2-Fluorotoluene	95-52-3	200

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030064	Passive indoor air Surrogate Stock	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.5

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Description:	Passive indoor air 25	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:58 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	25
Bromobenzene	108-86-1	25
Benzene	71-43-2	25
4-Chlorotoluene	106-43-4	25
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	25
2,2-Dichloropropane	594-20-7	25
1,4-Dichlorobenzene	106-46-7	25
1,3-Dichloropropane	142-28-9	25
1,3-Dichlorobenzene	541-73-1	25
1,3,5-Trimethylbenzene	108-67-8	25
1,2-Dichloropropane	78-87-5	25
1,1,1,2-Tetrachloroethane	630-20-6	25
1,2-Dichlorobenzene	95-50-1	25
Bromoform	75-25-2	25
1,2-Dibromo-3-chloropropane	96-12-8	25
1,2,4-Trimethylbenzene	95-63-6	25
1,2,4-Trichlorobenzene	120-82-1	25
1,2,3-Trichloropropane	96-18-4	25
1,2,3-Trichlorobenzene	87-61-6	25
1,1-Dichloropropene	563-58-6	25
1,1-Dichloroethene	75-35-4	25
1,1-Dichloroethane	75-34-3	25
1,1,2-Trichloroethane	79-00-5	25
1,1,2,2-Tetrachloroethane	79-34-5	25
1,1,1-Trichloroethane	71-55-6	25
1,2-Dichloroethane	107-06-2	25
Isopropylbenzene	98-82-8	25
trans-1,3-Dichloropropene	10061-02-6	25
trans-1,2-Dichloroethene	156-60-5	25

Analytical Standard Record

EPA Region 9 Laboratory

2030068

Toluene-d8	2037-26-5	25
Toluene	108-88-3	25
Tetrachloroethene	127-18-4	25
tert-Butylbenzene	98-06-6	25
Styrene	100-42-5	25
sec-Butylbenzene	135-98-8	25
Propylbenzene	103-65-1	25
p-Isopropyltoluene	99-87-6	25
o-Xylene	95-47-6	25
Bromochloromethane	74-97-5	25
m&p-Xylene	179601-23-1	50
Bromodichloromethane	75-27-4	25
Hexachlorobutadiene	87-68-3	25
Ethylbenzene	100-41-4	25
Dichloromethane	75-09-2	25
Dibromomethane	74-95-3	25
cis-1,3-Dichloropropene	10061-01-5	25
cis-1,2-Dichloroethene	156-59-2	25
Chloroform	67-66-3	25
Chlorodibromomethane	124-48-1	25
Chlorobenzene	108-90-7	25
Carbon tetrachloride	56-23-5	25
Butylbenzene	104-51-8	25
Trichloroethene	79-01-6	25
Naphthalene	91-20-3	25

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	5
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Description:	Passive indoor air 10	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	10
Bromobenzene	108-86-1	10
Benzene	71-43-2	10
4-Chlorotoluene	106-43-4	10
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	10
2,2-Dichloropropane	594-20-7	10
1,4-Dichlorobenzene	106-46-7	10
1,3-Dichloropropane	142-28-9	10
1,3-Dichlorobenzene	541-73-1	10
1,3,5-Trimethylbenzene	108-67-8	10
1,2-Dichloropropane	78-87-5	10
1,1,1,2-Tetrachloroethane	630-20-6	10
1,2-Dichlorobenzene	95-50-1	10
Bromoform	75-25-2	10
1,2-Dibromo-3-chloropropane	96-12-8	10
1,2,4-Trimethylbenzene	95-63-6	10
1,2,4-Trichlorobenzene	120-82-1	10
1,2,3-Trichloropropane	96-18-4	10
1,2,3-Trichlorobenzene	87-61-6	10
1,1-Dichloropropene	563-58-6	10
1,1-Dichloroethene	75-35-4	10
1,1-Dichloroethane	75-34-3	10
1,1,2-Trichloroethane	79-00-5	10
1,1,2,2-Tetrachloroethane	79-34-5	10
1,1,1-Trichloroethane	71-55-6	10
1,2-Dichloroethane	107-06-2	10
Isopropylbenzene	98-82-8	10
trans-1,3-Dichloropropene	10061-02-6	10
trans-1,2-Dichloroethene	156-60-5	10

Analytical Standard Record

EPA Region 9 Laboratory

2030069

Toluene-d8	2037-26-5	10
Toluene	108-88-3	10
Tetrachloroethene	127-18-4	10
tert-Butylbenzene	98-06-6	10
Styrene	100-42-5	10
sec-Butylbenzene	135-98-8	10
Propylbenzene	103-65-1	10
p-Isopropyltoluene	99-87-6	10
o-Xylene	95-47-6	10
Bromochloromethane	74-97-5	10
m&p-Xylene	179601-23-1	20
Bromodichloromethane	75-27-4	10
Hexachlorobutadiene	87-68-3	10
Ethylbenzene	100-41-4	10
Dichloromethane	75-09-2	10
Dibromomethane	74-95-3	10
cis-1,3-Dichloropropene	10061-01-5	10
cis-1,2-Dichloroethene	156-59-2	10
Chloroform	67-66-3	10
Chlorodibromomethane	124-48-1	10
Chlorobenzene	108-90-7	10
Carbon tetrachloride	56-23-5	10
Butylbenzene	104-51-8	10
Trichloroethene	79-01-6	10
Naphthalene	91-20-3	10

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	2
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030070

Description:	Passive indoor air 5	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 08:59 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	5
Bromobenzene	108-86-1	5
Benzene	71-43-2	5
4-Chlorotoluene	106-43-4	5
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	5
2,2-Dichloropropane	594-20-7	5
1,4-Dichlorobenzene	106-46-7	5
1,3-Dichloropropane	142-28-9	5
1,3-Dichlorobenzene	541-73-1	5
1,3,5-Trimethylbenzene	108-67-8	5
1,2-Dichloropropane	78-87-5	5
1,1,1,2-Tetrachloroethane	630-20-6	5
1,2-Dichlorobenzene	95-50-1	5
Bromoform	75-25-2	5
1,2-Dibromo-3-chloropropane	96-12-8	5
1,2,4-Trimethylbenzene	95-63-6	5
1,2,4-Trichlorobenzene	120-82-1	5
1,2,3-Trichloropropane	96-18-4	5
1,2,3-Trichlorobenzene	87-61-6	5
1,1-Dichloropropene	563-58-6	5
1,1-Dichloroethene	75-35-4	5
1,1-Dichloroethane	75-34-3	5
1,1,2-Trichloroethane	79-00-5	5
1,1,2,2-Tetrachloroethane	79-34-5	5
1,1,1-Trichloroethane	71-55-6	5
1,2-Dichloroethane	107-06-2	5
Isopropylbenzene	98-82-8	5
trans-1,3-Dichloropropene	10061-02-6	5
trans-1,2-Dichloroethene	156-60-5	5

Analytical Standard Record

EPA Region 9 Laboratory

2030070

Toluene-d8	2037-26-5	5
Toluene	108-88-3	5
Tetrachloroethene	127-18-4	5
tert-Butylbenzene	98-06-6	5
Styrene	100-42-5	5
sec-Butylbenzene	135-98-8	5
Propylbenzene	103-65-1	5
p-Isopropyltoluene	99-87-6	5
o-Xylene	95-47-6	5
Bromochloromethane	74-97-5	5
m&p-Xylene	179601-23-1	10
Bromodichloromethane	75-27-4	5
Hexachlorobutadiene	87-68-3	5
Ethylbenzene	100-41-4	5
Dichloromethane	75-09-2	5
Dibromomethane	74-95-3	5
cis-1,3-Dichloropropene	10061-01-5	5
cis-1,2-Dichloroethene	156-59-2	5
Chloroform	67-66-3	5
Chlorodibromomethane	124-48-1	5
Chlorobenzene	108-90-7	5
Carbon tetrachloride	56-23-5	5
Butylbenzene	104-51-8	5
Trichloroethene	79-01-6	5
Naphthalene	91-20-3	5

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	1
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030071

Description:	Passive indoor air 1	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:00 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	1
Bromobenzene	108-86-1	1
Benzene	71-43-2	1
4-Chlorotoluene	106-43-4	1
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	1
2,2-Dichloropropane	594-20-7	1
1,4-Dichlorobenzene	106-46-7	1
1,3-Dichloropropane	142-28-9	1
1,3-Dichlorobenzene	541-73-1	1
1,3,5-Trimethylbenzene	108-67-8	1
1,2-Dichloropropane	78-87-5	1
1,1,1,2-Tetrachloroethane	630-20-6	1
1,2-Dichlorobenzene	95-50-1	1
Bromoform	75-25-2	1
1,2-Dibromo-3-chloropropane	96-12-8	1
1,2,4-Trimethylbenzene	95-63-6	1
1,2,4-Trichlorobenzene	120-82-1	1
1,2,3-Trichloropropane	96-18-4	1
1,2,3-Trichlorobenzene	87-61-6	1
1,1-Dichloropropene	563-58-6	1
1,1-Dichloroethene	75-35-4	1
1,1-Dichloroethane	75-34-3	1
1,1,2-Trichloroethane	79-00-5	1
1,1,2,2-Tetrachloroethane	79-34-5	1
1,1,1-Trichloroethane	71-55-6	1
1,2-Dichloroethane	107-06-2	1
Isopropylbenzene	98-82-8	1
trans-1,3-Dichloropropene	10061-02-6	1
trans-1,2-Dichloroethene	156-60-5	1

Analytical Standard Record

EPA Region 9 Laboratory

2030071

Toluene-d8	2037-26-5	1
Toluene	108-88-3	1
Tetrachloroethene	127-18-4	1
tert-Butylbenzene	98-06-6	1
Styrene	100-42-5	1
sec-Butylbenzene	135-98-8	1
Propylbenzene	103-65-1	1
p-Isopropyltoluene	99-87-6	1
o-Xylene	95-47-6	1
Bromochloromethane	74-97-5	1
m&p-Xylene	179601-23-1	2
Bromodichloromethane	75-27-4	1
Hexachlorobutadiene	87-68-3	1
Ethylbenzene	100-41-4	1
Dichloromethane	75-09-2	1
Dibromomethane	74-95-3	1
cis-1,3-Dichloropropene	10061-01-5	1
cis-1,2-Dichloroethene	156-59-2	1
Chloroform	67-66-3	1
Chlorodibromomethane	124-48-1	1
Chlorobenzene	108-90-7	1
Carbon tetrachloride	56-23-5	1
Butylbenzene	104-51-8	1
Trichloroethene	79-01-6	1
Naphthalene	91-20-3	1

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.2
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030072

Description:	Passive indoor air 0.15	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:01 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	0.15
Bromobenzene	108-86-1	0.15
Benzene	71-43-2	0.15
4-Chlorotoluene	106-43-4	0.15
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	0.15
2,2-Dichloropropane	594-20-7	0.15
1,4-Dichlorobenzene	106-46-7	0.15
1,3-Dichloropropane	142-28-9	0.15
1,3-Dichlorobenzene	541-73-1	0.15
1,3,5-Trimethylbenzene	108-67-8	0.15
1,2-Dichloropropane	78-87-5	0.15
1,1,1,2-Tetrachloroethane	630-20-6	0.15
1,2-Dichlorobenzene	95-50-1	0.15
Bromoform	75-25-2	0.15
1,2-Dibromo-3-chloropropane	96-12-8	0.15
1,2,4-Trimethylbenzene	95-63-6	0.15
1,2,4-Trichlorobenzene	120-82-1	0.15
1,2,3-Trichloropropane	96-18-4	0.15
1,2,3-Trichlorobenzene	87-61-6	0.15
1,1-Dichloropropene	563-58-6	0.15
1,1-Dichloroethene	75-35-4	0.15
1,1-Dichloroethane	75-34-3	0.15
1,1,2-Trichloroethane	79-00-5	0.15
1,1,2,2-Tetrachloroethane	79-34-5	0.15
1,1,1-Trichloroethane	71-55-6	0.15
1,2-Dichloroethane	107-06-2	0.15
Isopropylbenzene	98-82-8	0.15
trans-1,3-Dichloropropene	10061-02-6	0.15
trans-1,2-Dichloroethene	156-60-5	0.15

Analytical Standard Record

EPA Region 9 Laboratory

2030072

Toluene-d8	2037-26-5	0.15
Toluene	108-88-3	0.15
Tetrachloroethene	127-18-4	0.15
tert-Butylbenzene	98-06-6	0.15
Styrene	100-42-5	0.15
sec-Butylbenzene	135-98-8	0.15
Propylbenzene	103-65-1	0.15
p-Isopropyltoluene	99-87-6	0.15
o-Xylene	95-47-6	0.15
Bromochloromethane	74-97-5	0.15
m&p-Xylene	179601-23-1	0.3
Bromodichloromethane	75-27-4	0.15
Hexachlorobutadiene	87-68-3	0.15
Ethylbenzene	100-41-4	0.15
Dichloromethane	75-09-2	0.15
Dibromomethane	74-95-3	0.15
cis-1,3-Dichloropropene	10061-01-5	0.15
cis-1,2-Dichloroethene	156-59-2	0.15
Chloroform	67-66-3	0.15
Chlorodibromomethane	124-48-1	0.15
Chlorobenzene	108-90-7	0.15
Carbon tetrachloride	56-23-5	0.15
Butylbenzene	104-51-8	0.15
Trichloroethene	79-01-6	0.15
Naphthalene	91-20-3	0.15

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.03
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2030073

Description:	Passive indoor air 0.05	**Expires:**	01/22/21
Standard Type:	Other Solution	**Prepared:**	07/22/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	10	**Department:**	Volatiles
Vials:	1	**Last Edit:**	07/22/20 09:01 by TD
Vendor:	*Prepared*	**Lot Numbe**	1705143

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	0.05
Bromobenzene	108-86-1	0.05
Benzene	71-43-2	0.05
4-Chlorotoluene	106-43-4	0.05
2-Fluorotoluene	95-52-3	5
2-Chlorotoluene	95-49-8	0.05
2,2-Dichloropropane	594-20-7	0.05
1,4-Dichlorobenzene	106-46-7	0.05
1,3-Dichloropropane	142-28-9	0.05
1,3-Dichlorobenzene	541-73-1	0.05
1,3,5-Trimethylbenzene	108-67-8	0.05
1,2-Dichloropropane	78-87-5	0.05
1,1,1,2-Tetrachloroethane	630-20-6	0.05
1,2-Dichlorobenzene	95-50-1	0.05
Bromoform	75-25-2	0.05
1,2-Dibromo-3-chloropropane	96-12-8	0.05
1,2,4-Trimethylbenzene	95-63-6	0.05
1,2,4-Trichlorobenzene	120-82-1	0.05
1,2,3-Trichloropropane	96-18-4	0.05
1,2,3-Trichlorobenzene	87-61-6	0.05
1,1-Dichloropropene	563-58-6	0.05
1,1-Dichloroethene	75-35-4	0.05
1,1-Dichloroethane	75-34-3	0.05
1,1,2-Trichloroethane	79-00-5	0.05
1,1,2,2-Tetrachloroethane	79-34-5	0.05
1,1,1-Trichloroethane	71-55-6	0.05
1,2-Dichloroethane	107-06-2	0.05
Isopropylbenzene	98-82-8	0.05
trans-1,3-Dichloropropene	10061-02-6	0.05
trans-1,2-Dichloroethene	156-60-5	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2030073

Toluene-d8	2037-26-5	0.05
Toluene	108-88-3	0.05
Tetrachloroethene	127-18-4	0.05
tert-Butylbenzene	98-06-6	0.05
Styrene	100-42-5	0.05
sec-Butylbenzene	135-98-8	0.05
Propylbenzene	103-65-1	0.05
p-Isopropyltoluene	99-87-6	0.05
o-Xylene	95-47-6	0.05
Bromochloromethane	74-97-5	0.05
m&p-Xylene	179601-23-1	0.1
Bromodichloromethane	75-27-4	0.05
Hexachlorobutadiene	87-68-3	0.05
Ethylbenzene	100-41-4	0.05
Dichloromethane	75-09-2	0.05
Dibromomethane	74-95-3	0.05
cis-1,3-Dichloropropene	10061-01-5	0.05
cis-1,2-Dichloroethene	156-59-2	0.05
Chloroform	67-66-3	0.05
Chlorodibromomethane	124-48-1	0.05
Chlorobenzene	108-90-7	0.05
Carbon tetrachloride	56-23-5	0.05
Butylbenzene	104-51-8	0.05
Trichloroethene	79-01-6	0.05
Naphthalene	91-20-3	0.05

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2030066	Passive indoor air stock std 50	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:55 by TD	0.01
2030065	Passive indoor air Internal Standard Sto	07/22/20	Tatyana Dadiomov	01/22/21	07/22/20 08:52 by TD	0.005

Analytical Standard Record

EPA Region 9 Laboratory

2039024

Description:	VOA BFB tuning mix, stock STD.	**Expires:**	10/31/25
Standard Type:	Other Solution	**Prepared:**	09/24/20
Solvent:	Solvent Lot #	**Prepared By:**	** Vendor **
Final Volume (mls):	1	**Department:**	Volatiles
Vials:	1	**Last Edit:**	09/24/20 11:26 by EM
Vendor:	Restek	**Lot Numbe**	A0162498

RESTEK Cat No. 30003, LOT # A0162498 Bar code #AU012127

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	5000

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30003 **Lot No.:** A0162498

Description : VOA Tuning Compound Mix

VOA Tuning Compound Mix 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Bromo-4-fluorobenzene (BFB)	5,012.0 µg/mL	+/- 29.4132 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KO)		+/- 281.0463 µg/mL	Unstressed
	Purity 99%		+/- 287.6211 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

AU012127/2039024
AU012128/2039025
AU012129/2039026
AU012130/2039027
AU012131/2039028

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

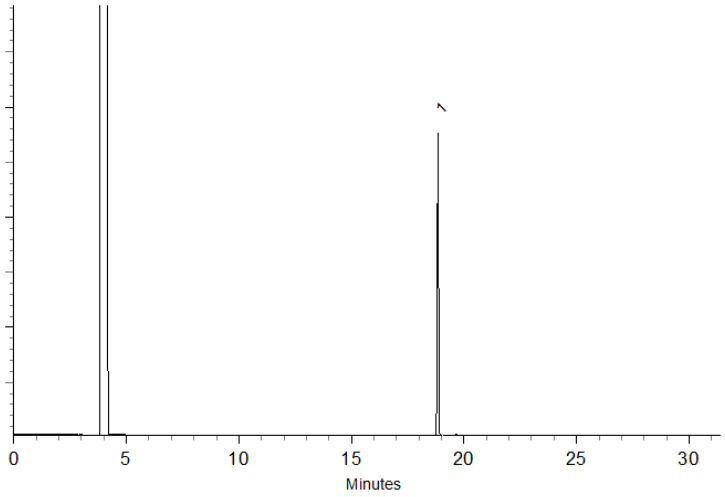
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kylie Struble - Operations Technician I

Date Mixed: 13-Jul-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 14-Jul-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Analytical Standard Record

EPA Region 9 Laboratory

2040028

Description:	passive air WORKING BFB 50 mg/L	**Expires:**	03/30/21
Standard Type:	Other Solution	**Prepared:**	09/30/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	5	**Department:**	Volatiles
Vials:	1	**Last Edit:**	10/05/20 08:43 by TD
Vendor:	*Prepared*	**Lot Numbe**	1748145

Analyte	CAS Number	Concentration (ppm)
4-Bromofluorobenzene	460-00-4	50

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2039024	VOA BFB tuning mix, stock STD.	09/24/20	** Vendor **	10/31/25	09/24/20 11:26 by EM	0.05

Analytical Standard Record

EPA Region 9 Laboratory

2045061

Description:	VOA 502/524 VOC Mix, Stock	**Expires:**	09/01/22
Standard Type:	Other Solution	**Prepared:**	09/01/20
Solvent:	MeOH	**Prepared By:**	** Vendor **
Final Volume (mls):	1.15	**Department:**	Volatiles
Vials:	1	**Last Edit:**	11/04/20 11:15 by EM
Vendor:	Sigma Aldrich	**Lot Numbe**	LRAC7008

Sigma-Aldrich (Supelco), Cat # 502111, Lot# LRAC7008, bar code AU012216

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromo-3-chloropropane	96-12-8	2000
1,1,1,2-Tetrachloroethane	630-20-6	2000
Benzene	71-43-2	2000
4-Chlorotoluene	106-43-4	2000
2-Chlorotoluene	95-49-8	2000
2,2-Dichloropropane	594-20-7	2000
1,4-Dichlorobenzene	106-46-7	2000
1,3-Dichloropropane	142-28-9	2000
1,3-Dichlorobenzene	541-73-1	2000
1,3,5-Trimethylbenzene	108-67-8	2000
1,2-Dichloropropane	78-87-5	2000
1,2-Dichloroethane	107-06-2	2000
Bromochloromethane	74-97-5	2000
1,2-Dibromoethane (EDB)	106-93-4	2000
Bromodichloromethane	75-27-4	2000
1,2,4-Trimethylbenzene	95-63-6	2000
1,2,4-Trichlorobenzene	120-82-1	2000
1,2,3-Trimethylbenzene	526-73-8	2000
1,2,3-Trichloropropane	96-18-4	2000
1,2,3-Trichlorobenzene	87-61-6	2000
1,1-Dichloropropene	563-58-6	2000
1,1-Dichloroethene	75-35-4	2000
1,1-Dichloroethane	75-34-3	2000
1,1,2-Trichloroethane	79-00-5	2000
1,1,2,2-Tetrachloroethane	79-34-5	2000
1,1,1-Trichloroethane	71-55-6	2000
1,2-Dichlorobenzene	95-50-1	2000
Hexachlorobutadiene	87-68-3	2000
trans-1,3-Dichloropropene	10061-02-6	2000
trans-1,2-Dichloroethene	156-60-5	2000

Analytical Standard Record

EPA Region 9 Laboratory

2045061

Toluene	108-88-3	2000
Tetrachloroethene	127-18-4	2000
tert-Butylbenzene	98-06-6	2000
Styrene	100-42-5	2000
sec-Butylbenzene	135-98-8	2000
Propylbenzene	103-65-1	2000
p-Isopropyltoluene	99-87-6	2000
o-Xylene	95-47-6	2000
Naphthalene	91-20-3	2000
Bromobenzene	108-86-1	2000
Isopropylbenzene	98-82-8	2000
Trichloroethene	79-01-6	2000
Ethylbenzene	100-41-4	2000
Dichloromethane	75-09-2	2000
Dibromomethane	74-95-3	2000
cis-1,3-Dichloropropene	10061-01-5	2000
cis-1,2-Dichloroethene	156-59-2	2000
Chloroform	67-66-3	2000
Chlorodibromomethane	124-48-1	2000
Chlorobenzene	108-90-7	2000
Carbon tetrachloride	56-23-5	2000
Butylbenzene	104-51-8	2000
Bromoform	75-25-2	2000
m&p-Xylene	179601-23-1	4000

Certificate of Analysis

EPA 502/524 Volatiles Organic Calibration Mix (without gases)

Certified Reference Material

Description

Product ID 502111
Lot **LRAC7008**
Expiration Date September 2022
Manufacturing Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

2045060 / AU012215
2045061 / AU012216
2045062 / AU012217
2045063 / AU012218
2045064 / AU012219

Certified Values

Analyte	*Units*	*Certified Value* [1,4]	*Raw Material Purity,%*	*Analytical Value* [6]	*Elution order*	*Raw Material Lot*	*CAS*
1,1-DICHLOROETHYLENE	µg/ml	2000 ± 170	99.9998	2120	1	LC08188	75-35-4
DICHLOROMETHANE	µg/ml	2000 ± 140	99.99	2040	2	SHBK1353	75-09-2
TRANS-1,2-DICHLOROETHYLENE	µg/ml	2000 ± 140	99.7	2040	3	MKBH9850V	156-60-5
1,1-DICHLOROETHANE	µg/ml	2001 ± 130	99.9	1980	4	LB68167	75-34-3
2,2-DICHLOROPROPANE	µg/ml	2000 ± 135	98.4	2010	5	BCBR0622V	594-20-7
CIS-1,2-DICHLOROETHYLENE	µg/ml	2001 ± 130	99.9	2010	6	LB73428	156-59-2
CHLOROFORM	µg/ml	2000 ± 120	99.94	2000	7	MKBV7632V	67-66-3
BROMOCHLOROMETHANE	µg/ml	2001 ± 110	98.9	1990	8	LB39040	74-97-5
1,1,1-TRICHLOROETHANE	µg/ml	2000 ± 140	97.2	2020	9	LC06533	71-55-6
1,1-DICHLOROPROPYLENE	µg/ml	2001 ± 125	99.5	1990	10	7738900	563-58-6
CARBON TETRACHLORIDE	µg/ml	2000 ± 140	99.97	1990	11	02041MB	56-23-5
1,2-DICHLOROETHANE	µg/ml	2001 ± 110	99.9	2010	12	LB74294	107-06-02
BENZENE	µg/ml	2000 ± 120	99.99	1970	13	SHBJ5344	71-43-2
TRICHLOROETHYLENE	µg/ml	2001 ± 110	98.6	2010	14	LB86674	79-01-6
1,2-DICHLOROPROPANE	µg/ml	2001 ± 120	99.9	1980	15	LC14320	78-87-5
BROMODICHLOROMETHANE	µg/ml	2001 ± 120	97.9	1980	16	MKCF8470	75-27-4
DIBROMOMETHANE	µg/ml	2001 ± 110	98.8	2030	17	LB81118	74-95-3
TRANS 1,3-DICHLOROPROPENE	µg/ml	2002 ± 120	99	1970	18	ZDMSLEK	10061-02-06
TOLUENE	µg/ml	2000 ± 110	99.98	2010	19	MKCF0747	108-88-3
CIS 1,3-DICHLOROPROPENE	µg/ml	2001 ± 120	99.3	1990	20	MKBZ5000V	10061-01-5
1,1,2-TRICHLOROETHANE	µg/ml	2000 ± 110	99.9	2010	21	LB87978	79-00-5
1,3-DICHLOROPROPANE	µg/ml	2000 ± 110	99.9	1990	22	LC10811	142-28-9
TETRACHLOROETHYLENE	µg/ml	2000 ± 110	99.9	2010	23	LB67182	127-18-4
DIBROMOCHLOROMETHANE	µg/ml	2000 ± 120	96.5	2020	24	LB89245	124-48-1
1,2-DIBROMOETHANE	µg/ml	2003 ± 110	99.1	2020	25	LB42792	106-93-4
CHLOROBENZENE	µg/ml	2000 ± 94	99.9	1990	26	LB93949	108-90-7

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

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800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot **LRAC7008**
Expiration Date September 2022
Manufacturing Date September 2018
Storage Conditions Freeze
Solvent/Matrix METHANOL

1,1,1,2-TETRACHLOROETHANE	µg/ml	2000 ± 110	99.9	1980	27	LC14810	630-20-6
ETHYLBENZENE	µg/ml	2000 ± 110	99.87	1980	28	SHBK2389	100-41-4
M-XYLENE	µg/ml	2002 ± 110	99.8	2000	29	LB87531	108-38-3
P-XYLENE	µg/ml	2000 ± 110	99.9	2000	29	LB73203	106-42-3
O-XYLENE	µg/ml	2000 ± 110	99.5	2000	30	LB92424	95-47-6
STYRENE	µg/ml	2000 ± 98	99.9	1990	31	LC17632	100-42-5
CUMENE	µg/ml	2000 ± 99	99.9	2010	32	LB89580	98-82-8
BROMOFORM	µg/ml	2001 ± 120	96.1	2050	33	67996PJ	75-25-2
1,1,2,2-TETRACHLOROETHANE	µg/ml	2000 ± 100	99.9	1990	34	LB51327	79-34-5
1,2,3-TRICHLOROPROPANE	µg/ml	2001 ± 99	99	2020	35	BCBH8722V	96-18-4
N-PROPYLBENZENE	µg/ml	2000 ± 100	99.9	1990	36	T2HFC	103-65-1
BROMOBENZENE	µg/ml	2001 ± 98	99.5	1980	37	LB99843	108-86-1
1,2,4-TRIMETHYLBENZENE	µg/ml	2000 ± 100	98.9	2020	38	LB97224	95-63-6
2-CHLOROTOLUENE	µg/ml	2001 ± 98	99.9	2010	39	LC01464	95-49-8
4-CHLOROTOLUENE	µg/ml	2001 ± 92	99.9	2000	40	LC02742	106-43-4
TERT-BUTYLBENZENE	µg/ml	2000 ± 93	99.9	2000	41	LB40373	98-06-6
1,3,5-TRIMETHYLBENZENE	µg/ml	2000 ± 94	99.3	1980	42	LB82157	108-67-8
SEC-BUTYLBENZENE	µg/ml	2000 ± 93	99.4	1990	43	LB77150	135-98-8
P-ISOPROPYLTOLUENE	µg/ml	2000 ± 88	98.7	1960	44	LB40003	99-87-6
1,4-DICHLOROBENZENE	µg/ml	2000 ± 88	99.9	2000	45	LB90630	106-46-7
1,3-DICHLOROBENZENE	µg/ml	2001 ± 94	99.9	2010	46	LC17654	541-73-1
N-BUTYLBENZENE	µg/ml	2000 ± 91	99.9	2010	47	LB81630	104-51-8
1,2-DICHLOROBENZENE	µg/ml	2001 ± 82	99.4	2010	48	LB58923	95-50-1
1,2-DIBROMO-3-CHLOROPROPANE	µg/ml	2000 ± 89	96.8	2060	49	LB06608	96-12-8
1,2,3-TRICHLOROBENZENE	µg/ml	2000 ± 73	99.9	2010	50	LC20450	87-61-6
HEXACHLOROBUTADIENE	µg/ml	2000 ± 81	97.4	2060	51	MKCD4346	87-68-3
NAPHTHALENE	µg/ml	2000 ± 81	99.9	1990	52	16412TN	91-20-3
1,2,4-TRICHLOROBENZENE	µg/ml	2001 ± 67	99.4	2020	53	LB48083	120-82-1

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

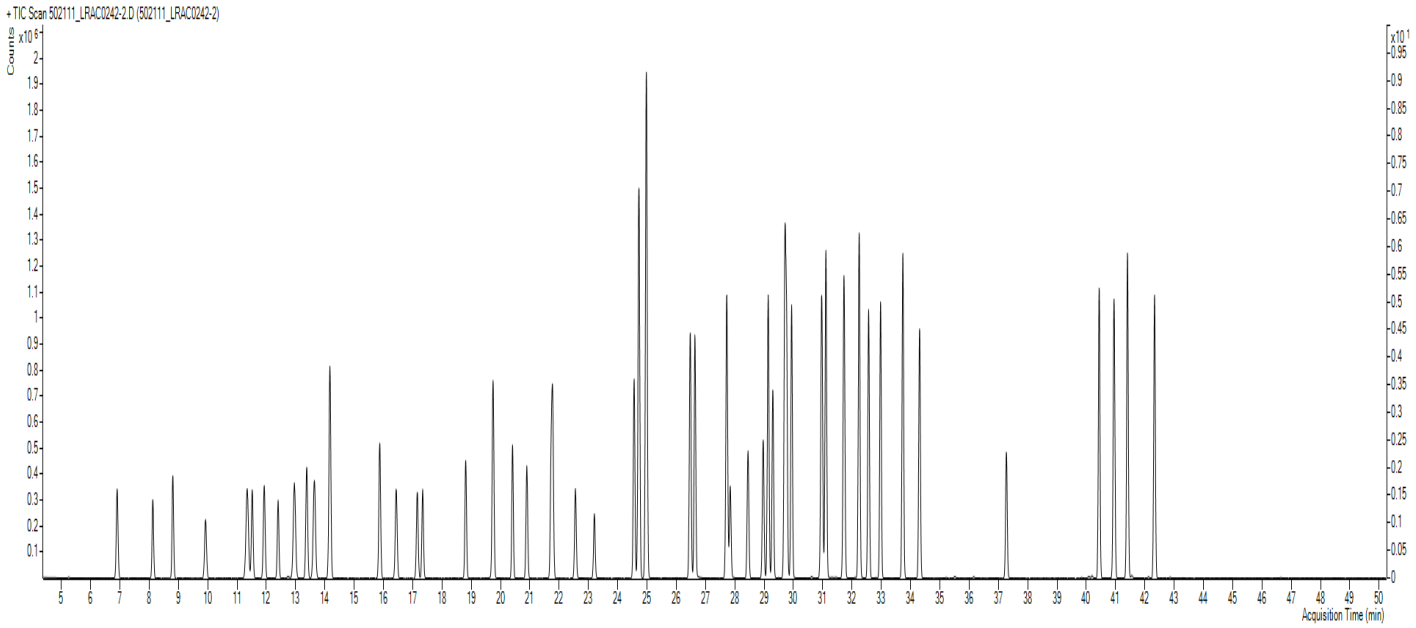
Certificate of Analysis

EPA 502/524 Volatiles Organic Calibration Mix (without gases)

Certified Reference Material

Description

Product ID	502111
Lot	**LRAC7008**
Expiration Date	September 2022
Manufacturing Date	September 2018
Storage Conditions	Freeze
Solvent/Matrix	METHANOL



Additional Information:

Analytical Method Parameters:

Column: VOCOL, 60 m x 0.25 mm x 1.5 µm df
35°C (4 min) to 200°C (5 min) at 4°C/min
Detector: MSD, 200°C
Injection Volume: 1 µL

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Description

Lot	**LRAC7008**
Expiration Date	September 2022
Manufacturing Date	September 2018
Storage Conditions	Freeze
Solvent/Matrix	METHANOL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	September 30, 2020
Version	0-9302020

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Analytical Standard Record

EPA Region 9 Laboratory

2047001

Description:	Passive indoor air MRL Spike	**Expires:**	05/16/21
Standard Type:	Analyte Spike	**Prepared:**	11/16/20
Solvent:	CS2	**Prepared By:**	Tatyana Dadiomov
Final Volume (mls):	2	**Department:**	Volatiles
Vials:	1	**Last Edit:**	11/16/20 06:20 by TD
Vendor:	*Prepared*	**Lot Numbe**	A0150913

Analyte	CAS Number	Concentration (ppm)
1,2-Dibromoethane (EDB)	106-93-4	20
Bromobenzene	108-86-1	20
Benzene	71-43-2	20
4-Chlorotoluene	106-43-4	20
2-Chlorotoluene	95-49-8	20
2,2-Dichloropropane	594-20-7	20
1,4-Dichlorobenzene	106-46-7	20
1,3-Dichloropropane	142-28-9	20
1,3-Dichlorobenzene	541-73-1	20
1,3,5-Trimethylbenzene	108-67-8	20
1,2-Dichloropropane	78-87-5	20
1,1,1,2-Tetrachloroethane	630-20-6	20
1,2-Dichlorobenzene	95-50-1	20
Bromoform	75-25-2	20
1,2-Dibromo-3-chloropropane	96-12-8	20
1,2,4-Trimethylbenzene	95-63-6	20
1,2,4-Trichlorobenzene	120-82-1	20
1,2,3-Trichloropropane	96-18-4	20
1,2,3-Trichlorobenzene	87-61-6	20
1,1-Dichloropropene	563-58-6	20
1,1-Dichloroethene	75-35-4	20
1,1-Dichloroethane	75-34-3	20
1,1,2-Trichloroethane	79-00-5	20
1,1,2,2-Tetrachloroethane	79-34-5	20
1,1,1-Trichloroethane	71-55-6	20
1,2-Dichloroethane	107-06-2	20
Hexachlorobutadiene	87-68-3	20
trans-1,3-Dichloropropene	10061-02-6	20
trans-1,2-Dichloroethene	156-60-5	20
Toluene	108-88-3	20

Analytical Standard Record

EPA Region 9 Laboratory

2047001

Tetrachloroethene	127-18-4	20
tert-Butylbenzene	98-06-6	20
Styrene	100-42-5	20
sec-Butylbenzene	135-98-8	20
Propylbenzene	103-65-1	20
p-Isopropyltoluene	99-87-6	20
o-Xylene	95-47-6	20
Naphthalene	91-20-3	20
Bromochloromethane	74-97-5	20
Isopropylbenzene	98-82-8	20
Bromodichloromethane	75-27-4	20
Ethylbenzene	100-41-4	20
Dichloromethane	75-09-2	20
Dibromomethane	74-95-3	20
cis-1,3-Dichloropropene	10061-01-5	20
cis-1,2-Dichloroethene	156-59-2	20
Chloroform	67-66-3	20
Chlorodibromomethane	124-48-1	20
Chlorobenzene	108-90-7	20
Carbon tetrachloride	56-23-5	20
Butylbenzene	104-51-8	20
Trichloroethene	79-01-6	20
m&p-Xylene	179601-23-1	40

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2006155	VOA 502.2 CAL 2000 MEGA MIX, St	07/16/19	** Vendor **	05/31/21	11/16/20 06:17 by TD	0.02

Analytical Standard Record

EPA Region 9 Laboratory

2050006

Description:	Passive indoor air SCV	Expires:	01/22/21
Standard Type:	Calibration Standa	Prepared:	12/07/20
Solvent:	CS2	Prepared By:	Tatyana Dadiomov
Final Volume (mls):	2	Department:	Volatiles
Vials:	1	Last Edit:	12/07/20 09:36 by TD

Analyte	CAS Number	Concentration	Units
1,2-Dibromoethane (EDB)	106-93-4	5	ug/mL
1,1,1,2-Tetrachloroethane	630-20-6	5	ug/mL
Benzene	71-43-2	5	ug/mL
4-Chlorotoluene	106-43-4	5	ug/mL
2-Fluorotoluene	95-52-3	5	ug/mL
2-Chlorotoluene	95-49-8	5	ug/mL
2,2-Dichloropropane	594-20-7	5	ug/mL
1,4-Dichlorobenzene	106-46-7	5	ug/mL
1,3-Dichloropropane	142-28-9	5	ug/mL
1,3-Dichlorobenzene	541-73-1	5	ug/mL
1,3,5-Trimethylbenzene	108-67-8	5	ug/mL
1,2-Dichloropropane	78-87-5	5	ug/mL
Bromochloromethane	74-97-5	5	ug/mL
1,2-Dichlorobenzene	95-50-1	5	ug/mL
Bromodichloromethane	75-27-4	5	ug/mL
1,2-Dibromo-3-chloropropane	96-12-8	5	ug/mL
1,2,4-Trimethylbenzene	95-63-6	5	ug/mL
1,2,4-Trichlorobenzene	120-82-1	5	ug/mL
1,2,3-Trimethylbenzene	526-73-8	5	ug/mL
1,2,3-Trichloropropane	96-18-4	5	ug/mL
1,2,3-Trichlorobenzene	87-61-6	5	ug/mL
1,1-Dichloropropene	563-58-6	5	ug/mL
1,1-Dichloroethene	75-35-4	5	ug/mL
1,1-Dichloroethane	75-34-3	5	ug/mL
1,1,2-Trichloroethane	79-00-5	5	ug/mL
1,1,2,2-Tetrachloroethane	79-34-5	5	ug/mL
1,1,1-Trichloroethane	71-55-6	5	ug/mL
1,2-Dichloroethane	107-06-2	5	ug/mL
Isopropylbenzene	98-82-8	5	ug/mL
trans-1,3-Dichloropropene	10061-02-6	5	ug/mL

Reviewed By Date

Analytical Standard Record

EPA Region 9 Laboratory

2050006

trans-1,2-Dichloroethene	156-60-5	5	ug/mL
Toluene-d8	2037-26-5	5	ug/mL
Toluene	108-88-3	5	ug/mL
Tetrachloroethene	127-18-4	5	ug/mL
tert-Butylbenzene	98-06-6	5	ug/mL
Styrene	100-42-5	5	ug/mL
sec-Butylbenzene	135-98-8	5	ug/mL
Propylbenzene	103-65-1	5	ug/mL
p-Isopropyltoluene	99-87-6	5	ug/mL
o-Xylene	95-47-6	5	ug/mL
Bromobenzene	108-86-1	5	ug/mL
m&p-Xylene	179601-23-1	10	ug/mL
Trichloroethene	79-01-6	5	ug/mL
Hexachlorobutadiene	87-68-3	5	ug/mL
Ethylbenzene	100-41-4	5	ug/mL
Dichloromethane	75-09-2	5	ug/mL
Dibromomethane	74-95-3	5	ug/mL
cis-1,3-Dichloropropene	10061-01-5	5	ug/mL
cis-1,2-Dichloroethene	156-59-2	5	ug/mL
Chloroform	67-66-3	5	ug/mL
Chlorodibromomethane	124-48-1	5	ug/mL
Chlorobenzene	108-90-7	5	ug/mL
Carbon tetrachloride	56-23-5	5	ug/mL
Butylbenzene	104-51-8	5	ug/mL
Bromoform	75-25-2	5	ug/mL
Naphthalene	91-20-3	5	ug/mL

Parent Standards used in this standard:

Standard	Description	Prepared	Prepared By	Expires	Last Edit	(mls)
2045061	VOA 502/524 VOC Mix, Stock	09/01/20	** Vendor **	06/07/21	12/07/20 09:28 by TD	0.005
2030067	Passive air Surrogate/I.S. Working solu	07/22/20	Tatyana Dadiomov	01/22/21	10/21/20 11:28 by ZAR	0.05

Reviewed By Date