

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121121\
 Data File : VX025741.D
 Acq On : 11 Dec 2021 14:25
 Operator : JC/MD
 Sample : M4997-06
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 EW5R1

Quant Time: Dec 12 06:35:07 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\SFAMXML112221WMA.M
 Quant Title : VOC Analysis
 QLast Update : Sat Dec 11 00:48:07 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Difluorobenzene	6.769	114	86452	50.000	ug/L	0.00
28) Chlorobenzene-d5	10.055	117	82611	50.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	12.024	152	45560	50.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.368	65	34208	57.980	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	115.960%
7) Chloroethane-d5	1.666	69	22216	45.623	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	91.240%
11) 1,1-Dichloroethene-d2	2.312	63	58221	61.890	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	123.780%
21) 2-Butanone-d5	4.495	46	57237	130.324	ug/L	0.04
Spiked Amount	100.000	Range	40 - 130	Recovery	=	130.320%#
24) Chloroform-d	5.068	84	55065	53.402	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	106.800%
26) 1,2-Dichloroethane-d4	5.964	65	36355	56.564	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	113.120%
32) Benzene-d6	5.983	84	108538	49.573	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	99.140%
36) 1,2-Dichloropropane-d6	7.312	67	33793	49.851	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.700%
41) Toluene-d8	8.653	98	100620	48.689	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.380%
43) trans-1,3-Dichloroprop...	8.952	79	17183	50.418	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	100.840%
47) 2-Hexanone-d5	9.384	63	32430	91.905	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	91.910%
56) 1,1,2,2-Tetrachloroeth...	11.195	84	50977	53.210	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	106.420%
66) 1,2-Dichlorobenzene-d4	12.323	152	44370	49.654	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	99.300%
Target Compounds						
					Qvalue	
5) Vinyl chloride	1.374	62	1055070	1725.944	ug/L	99
8) Chloroethane	1.685	64	62711	153.994	ug/L	98
10) 1,1,2-Trichloro-1,2,2-...	2.312	101	421	0.840	ug/L #	17
12) 1,1-Dichloroethene	2.325	96	40855	88.005	ug/L	90
13) Acetone	2.380	43	2796	7.742	ug/L	97
14) Carbon disulfide	2.520	76	1781	1.560	ug/L #	92
16) Methylene chloride	2.788	84	4977	9.269	ug/L	95
17) trans-1,2-Dichloroethene	3.099	96	100644	201.369	ug/L	93
19) 1,1-Dichloroethane	3.623	63	5071228	5665.769	ug/L	97
20) cis-1,2-Dichloroethene	4.507	96	5634230	9566.241	ug/L	87
25) Chloroform	5.099	83	4511	4.631	ug/L	97
27) 1,2-Dichloroethane	6.092	62	22906	32.332	ug/L	99
29) Cyclohexane	5.483	56	1373	1.622	ug/L	95
30) 1,1,1-Trichloroethane	5.391	97	293162	321.467	ug/L	98
33) Benzene	6.043	78	26338	11.934	ug/L	100
34) Trichloroethene	7.129	95	244253	420.784	ug/L	93
35) Methylcyclohexane	7.379	83	1338	1.465	ug/L #	82
39) cis-1,3-Dichloropropene	8.330	75	1287	1.427	ug/L #	82
42) Toluene	8.720	91	95728	39.331	ug/L	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121121\
 Data File : VX025741.D
 Acq On : 11 Dec 2021 14:25
 Operator : JC/MD
 Sample : M4997-06
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

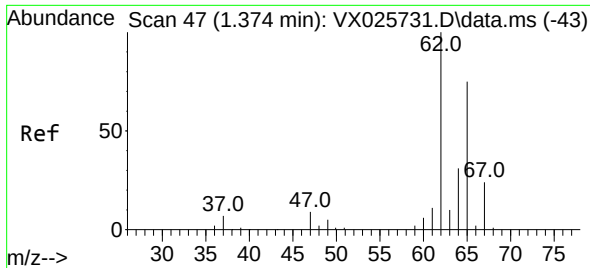
Instrument :
 MSVOA_X
 ClientSampleId :
 EW5R1

Quant Time: Dec 12 06:35:07 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\SFAMXML112221WMA.M
 Quant Title : VOC Analysis
 QLast Update : Sat Dec 11 00:48:07 2021
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

44) trans-1,3-Dichloropropene	8.952	75	833	0.961	ug/L	87
45) 1,1,2-Trichloroethane	9.153	97	11934	20.315	ug/L	95
46) Tetrachloroethene	9.275	164	26501	53.833	ug/L	94
49) Dibromochloromethane	9.275	129	26093	38.539	ug/L #	12
52) Ethylbenzene	10.195	91	278129	106.329	ug/L	97
53) m,p-Xylene	10.305	106	215617	203.499	ug/L	100
54) o-Xylene	10.646	106	264679	249.552	ug/L	95
55) Styrene	10.646	104	12952	7.349	ug/L #	1
57) 1,1,2,2-Tetrachloroethane	11.213	83	789	0.870	ug/L #	76
60) Isopropylbenzene	10.963	105	95604	32.651	ug/L	98
62) 1,3,5-Trimethylbenzene	11.457	105	314054	128.240	ug/L	97
63) 1,2,4-Trimethylbenzene	11.756	105	1479384	597.876	ug/L #	80
67) 1,2-Dichlorobenzene	12.335	146	44324	32.603	ug/L	99
71) Naphthalene	13.780	128	142981	51.308	ug/L	100

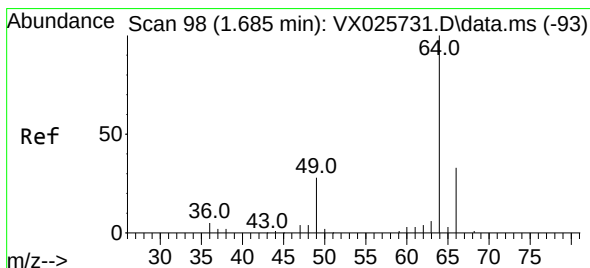
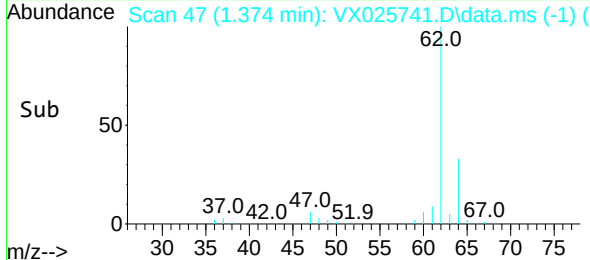
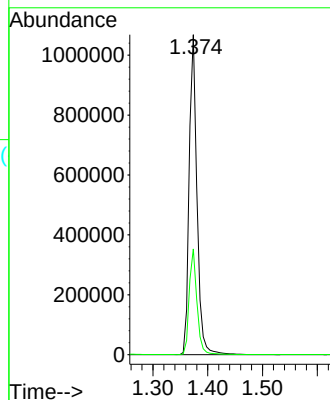
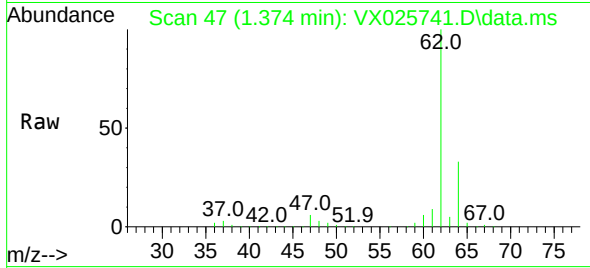
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#5
 Vinyl chloride
 Concen: 1725.944 ug/L
 RT: 1.374 min Scan# 41
 Delta R.T. -0.000 min
 Lab File: VX025741.D
 Acq: 11 Dec 2021 14:25

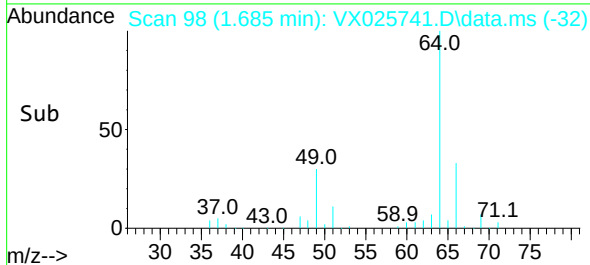
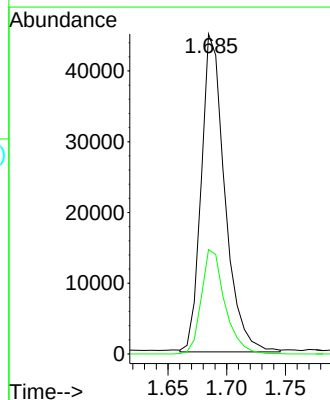
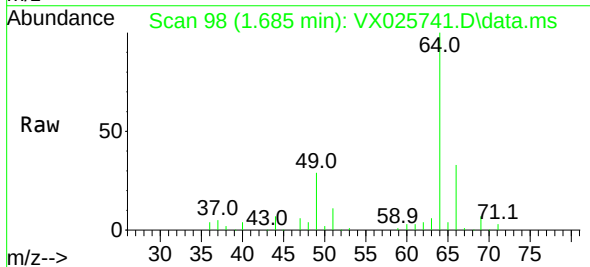
Instrument :
 MSVOA_X
 ClientSampleId :
 EW5R1

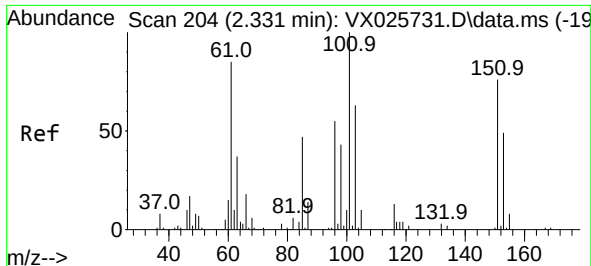
Tgt Ion: 62 Resp: 1055070
 Ion Ratio Lower Upper
 62 100
 64 33.0 22.9 42.5



#8
 Chloroethane
 Concen: 153.994 ug/L
 RT: 1.685 min Scan# 98
 Delta R.T. -0.000 min
 Lab File: VX025741.D
 Acq: 11 Dec 2021 14:25

Tgt Ion: 64 Resp: 62711
 Ion Ratio Lower Upper
 64 100
 66 32.6 22.0 40.8

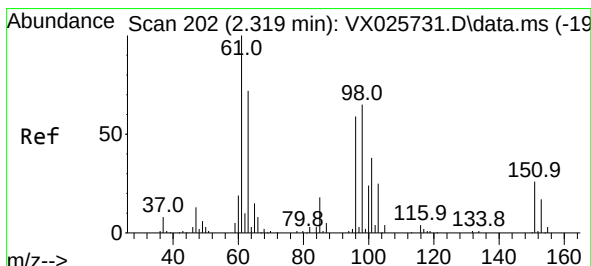
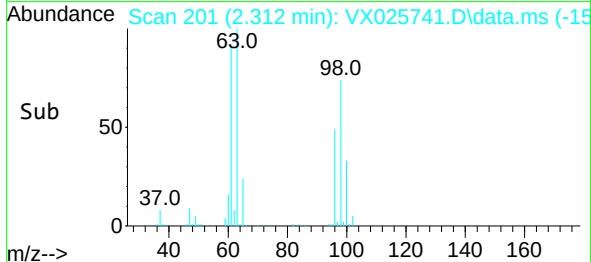
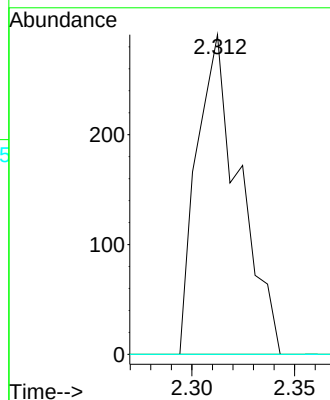
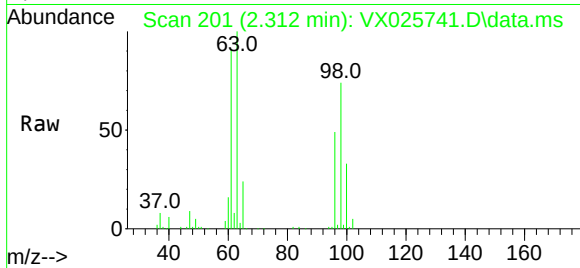




#10
 1,1,2-Trichloro-1,2,2-trifluoroethane
 Concen: 0.840 ug/L
 RT: 2.312 min Scan# 201
 Delta R.T. -0.018 min
 Lab File: VX025741.D
 Acq: 11 Dec 2021 14:25

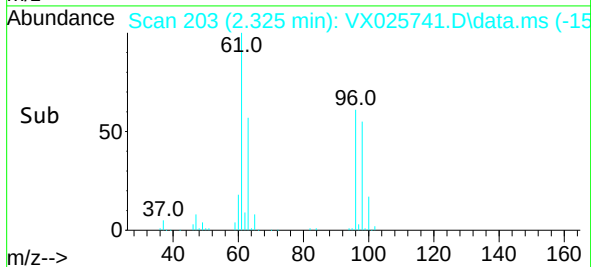
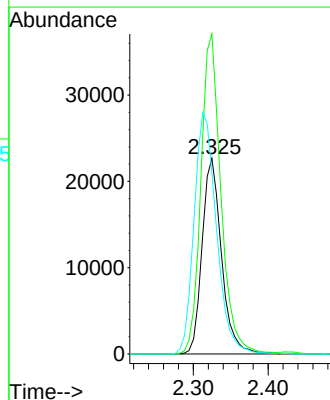
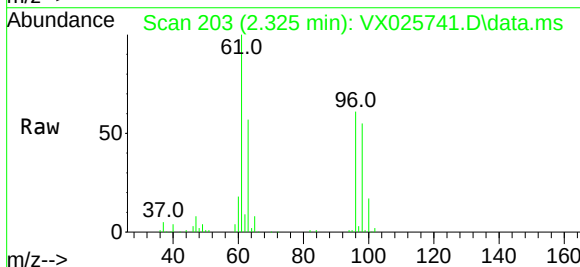
Instrument :
 MSVOA_X
 ClientSampleId :
 EW5R1

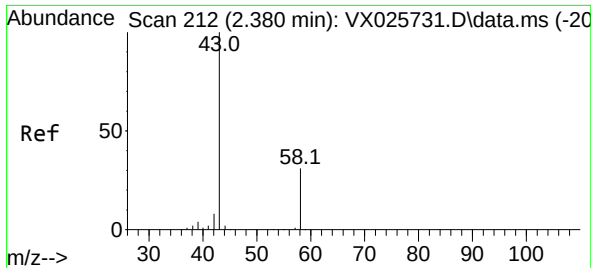
Tgt Ion:101 Resp: 421
 Ion Ratio Lower Upper
 101 100
 85 0.0 34.3 51.5#
 151 0.0 65.2 97.8#



#12
 1,1-Dichloroethene
 Concen: 88.005 ug/L
 RT: 2.325 min Scan# 203
 Delta R.T. 0.006 min
 Lab File: VX025741.D
 Acq: 11 Dec 2021 14:25

Tgt Ion: 96 Resp: 40855
 Ion Ratio Lower Upper
 96 100
 61 163.7 108.7 201.9
 63 92.9 76.3 141.7





#13

Acetone

Concen: 7.742 ug/L

RT: 2.380 min Scan# 212

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

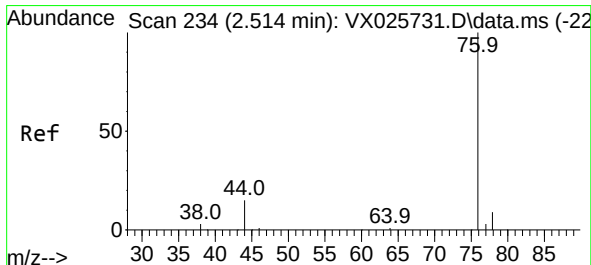
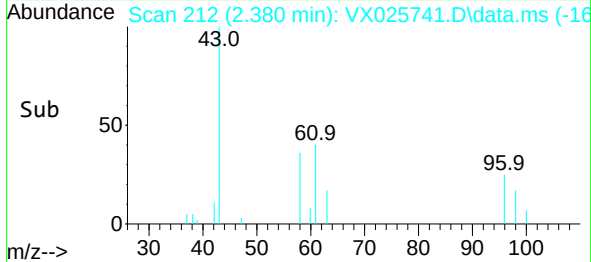
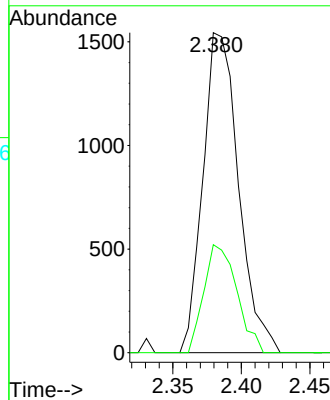
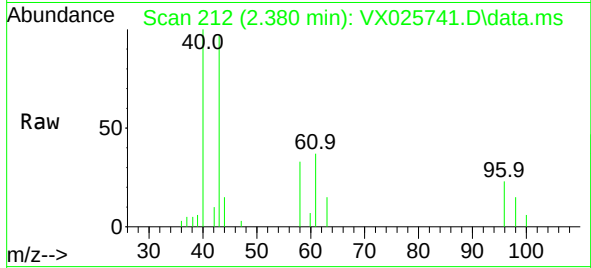
EW5R1

Tgt Ion: 43 Resp: 2796

Ion Ratio Lower Upper

43 100

58 31.2 0.0 65.6



#14

Carbon disulfide

Concen: 1.560 ug/L

RT: 2.520 min Scan# 235

Delta R.T. 0.006 min

Lab File: VX025741.D

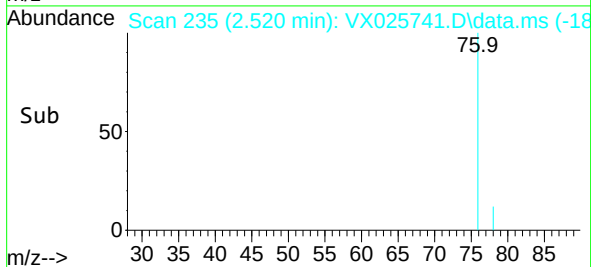
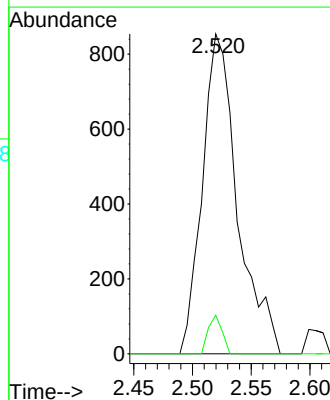
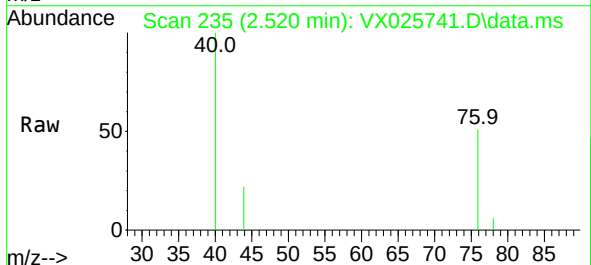
Acq: 11 Dec 2021 14:25

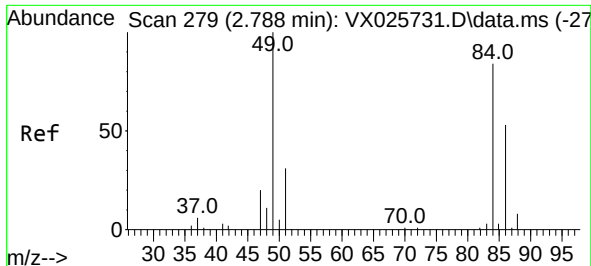
Tgt Ion: 76 Resp: 1781

Ion Ratio Lower Upper

76 100

78 12.1 7.4 11.2#

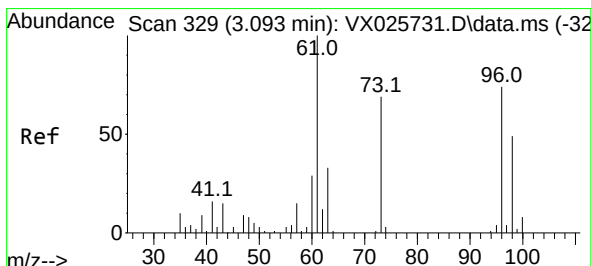
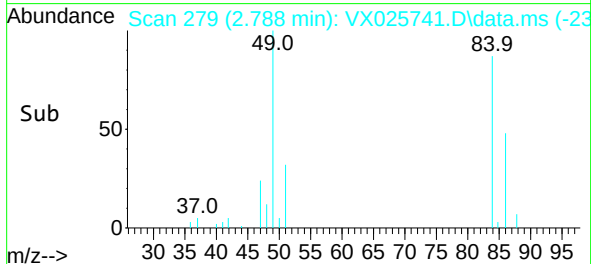
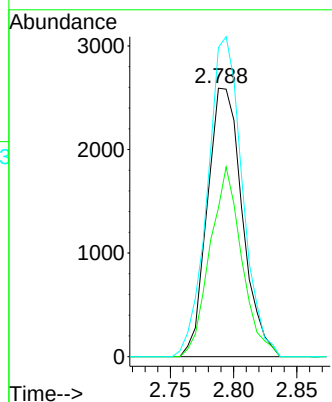
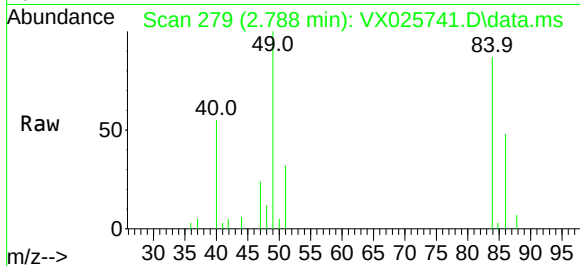




#16
Methylene chloride
Concen: 9.269 ug/L
RT: 2.788 min Scan# 21
Delta R.T. -0.000 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

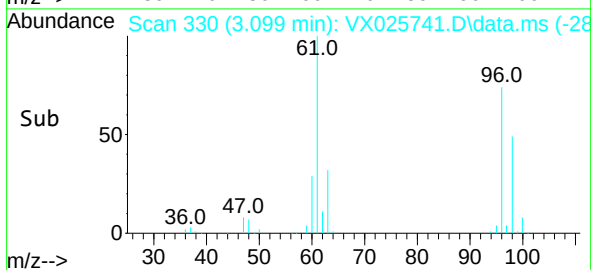
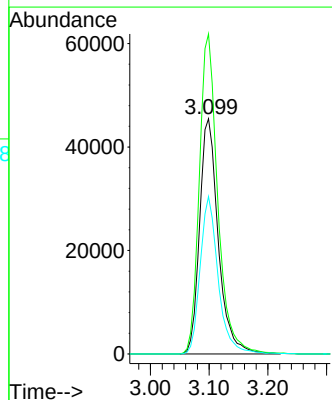
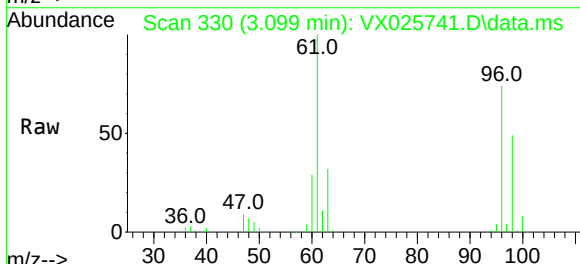
Instrument :
MSVOA_X
ClientSampleId :
EW5R1

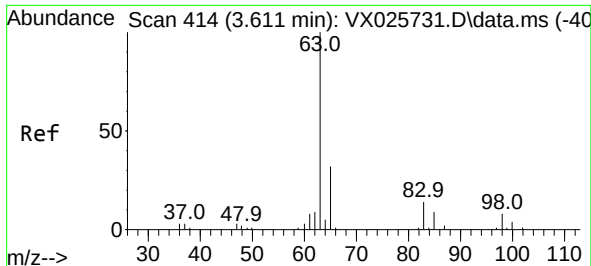
Tgt Ion: 84 Resp: 4977
Ion Ratio Lower Upper
84 100
86 55.4 45.1 83.9
49 115.2 82.3 152.8



#17
trans-1,2-Dichloroethene
Concen: 201.369 ug/L
RT: 3.099 min Scan# 330
Delta R.T. 0.006 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

Tgt Ion: 96 Resp: 100644
Ion Ratio Lower Upper
96 100
61 136.0 88.5 164.4
98 66.9 44.3 82.3





#19

1,1-Dichloroethane

Concen: 5665.769 ug/L

RT: 3.623 min Scan# 41

Delta R.T. 0.012 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

EW5R1

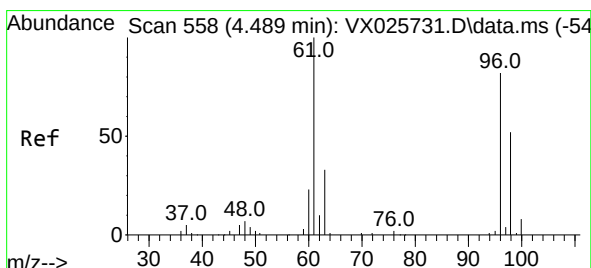
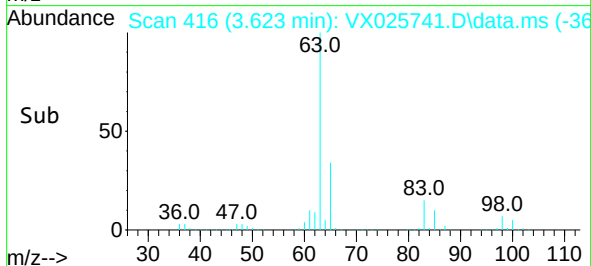
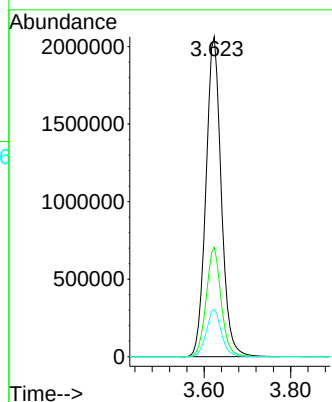
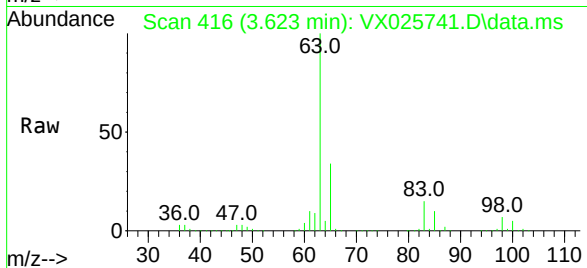
Tgt Ion: 63 Resp: 5071228

Ion Ratio Lower Upper

63 100

65 34.2 22.2 41.2

83 14.8 10.2 19.0



#20

cis-1,2-Dichloroethene

Concen: 9566.241 ug/L

RT: 4.507 min Scan# 561

Delta R.T. 0.012 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

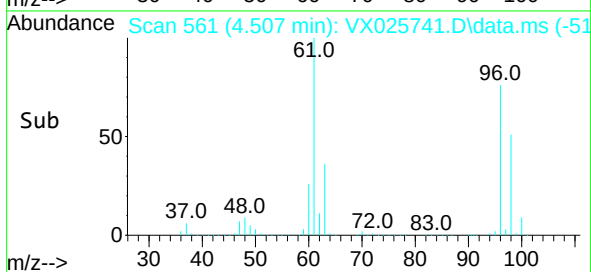
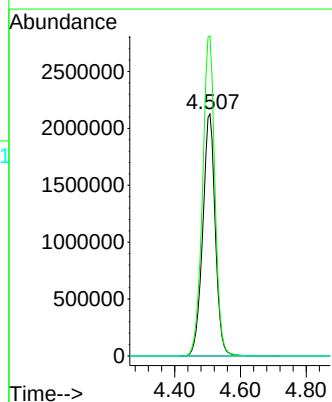
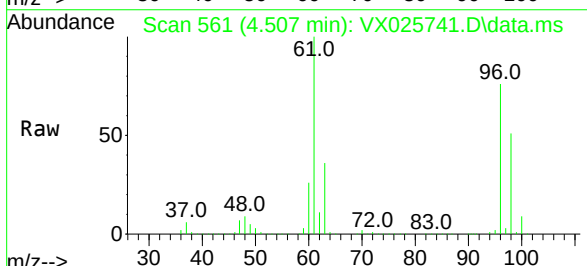
Tgt Ion: 96 Resp: 5634230

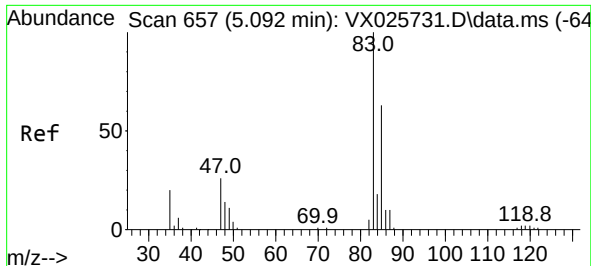
Ion Ratio Lower Upper

96 100

61 132.3 82.3 152.8

68 0.0 0.0 0.0





#25

Chloroform

Concen: 4.631 ug/L

RT: 5.099 min Scan# 61

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

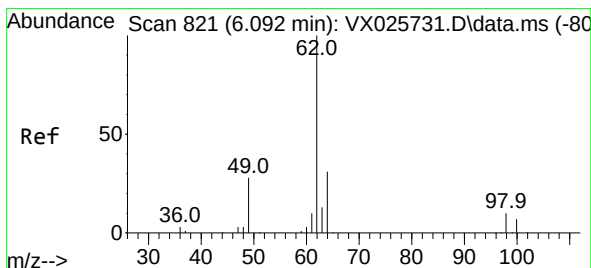
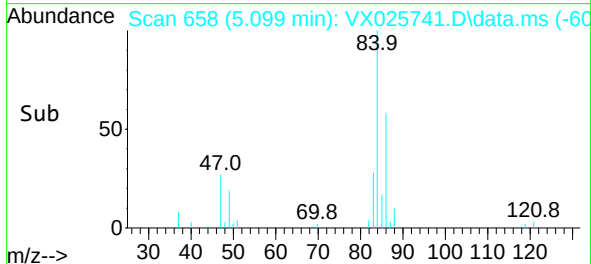
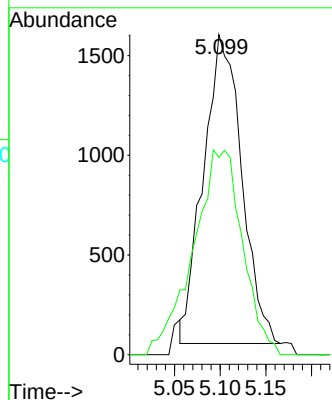
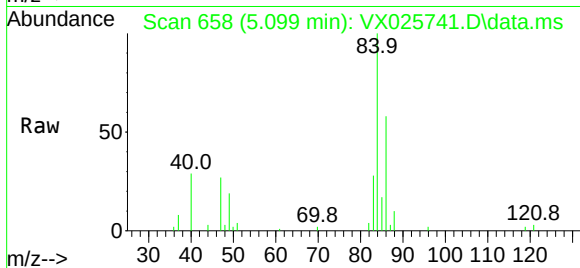
EW5R1

Tgt Ion: 83 Resp: 4511

Ion Ratio Lower Upper

83 100

85 61.6 44.9 83.5



#27

1,2-Dichloroethane

Concen: 32.332 ug/L

RT: 6.092 min Scan# 821

Delta R.T. -0.000 min

Lab File: VX025741.D

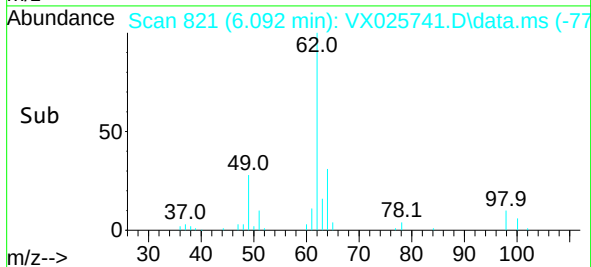
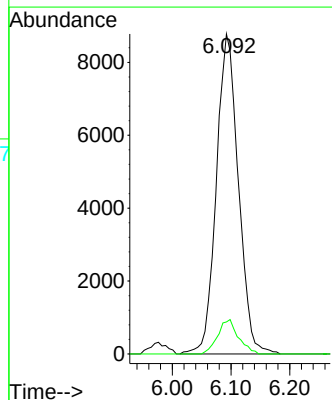
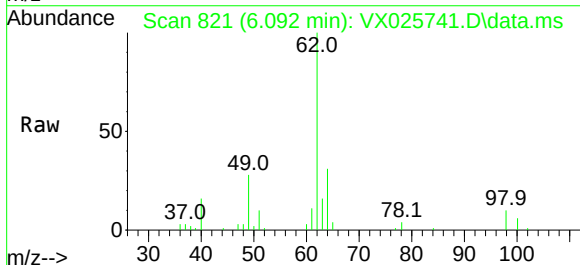
Acq: 11 Dec 2021 14:25

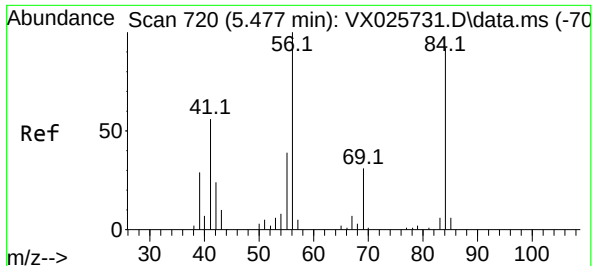
Tgt Ion: 62 Resp: 22906

Ion Ratio Lower Upper

62 100

98 10.0 8.2 12.2





#29

Cyclohexane

Concen: 1.622 ug/L

RT: 5.483 min Scan# 71

Delta R.T. 0.012 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

EW5R1

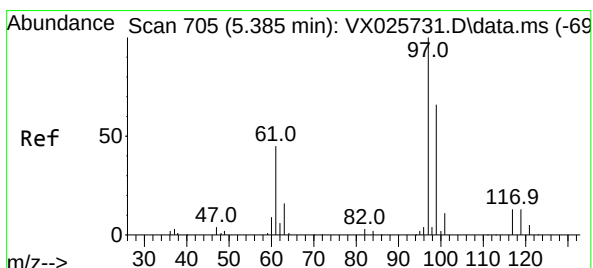
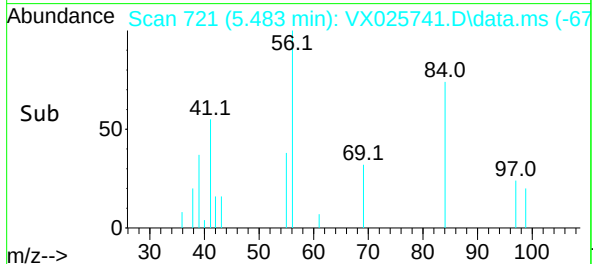
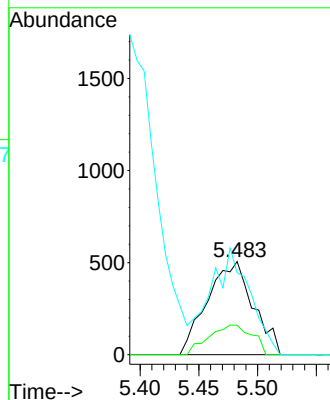
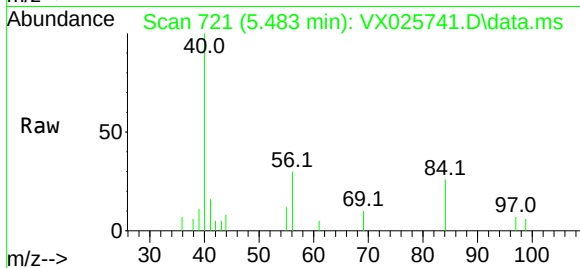
Tgt Ion: 56 Resp: 1373

Ion Ratio Lower Upper

56 100

69 27.4 25.4 38.2

84 99.9 76.6 114.8



#30

1,1,1-Trichloroethane

Concen: 321.467 ug/L

RT: 5.391 min Scan# 706

Delta R.T. 0.006 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

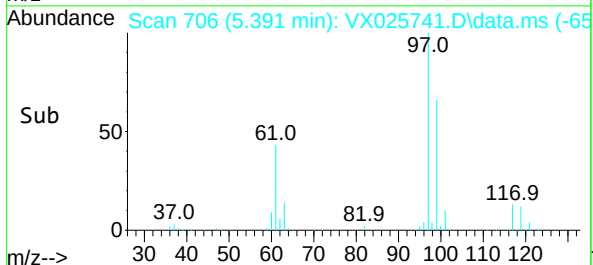
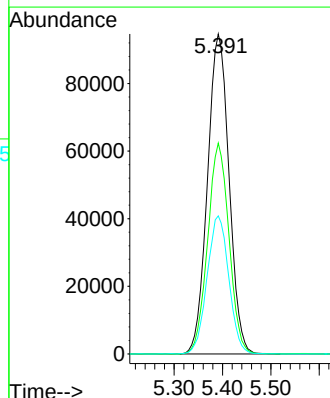
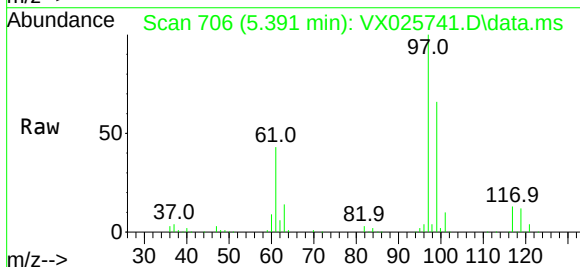
Tgt Ion: 97 Resp: 293162

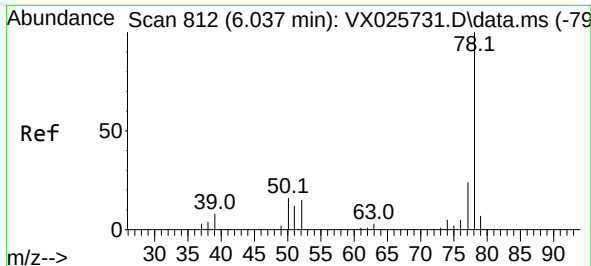
Ion Ratio Lower Upper

97 100

99 65.0 51.5 77.3

61 43.5 33.1 49.7

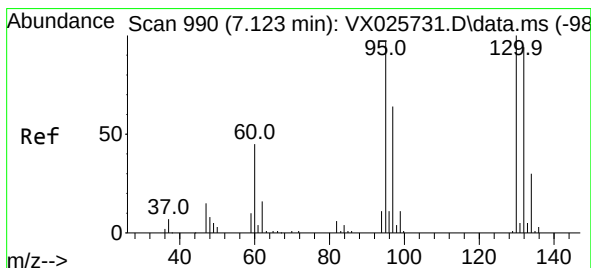
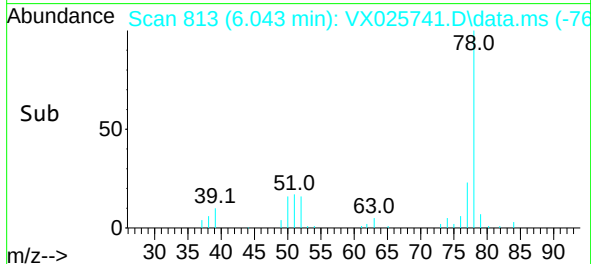
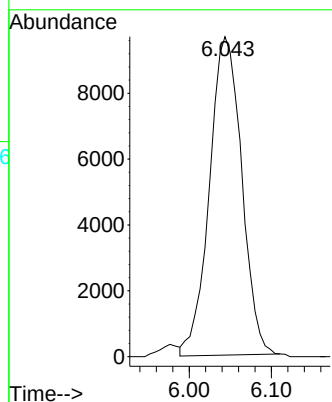
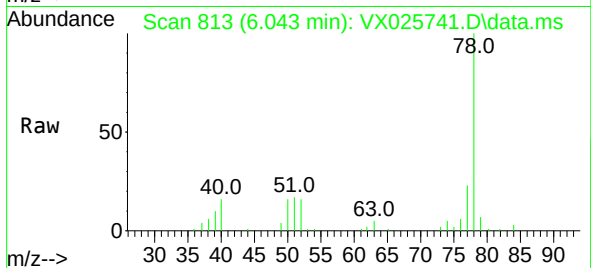




#33
Benzene
Concen: 11.934 ug/L
RT: 6.043 min Scan# 812
Delta R.T. 0.006 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

Instrument :
MSVOA_X
ClientSampleId :
EW5R1

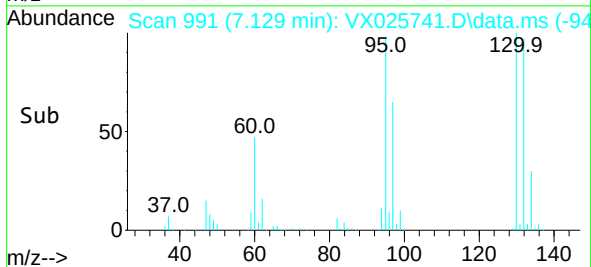
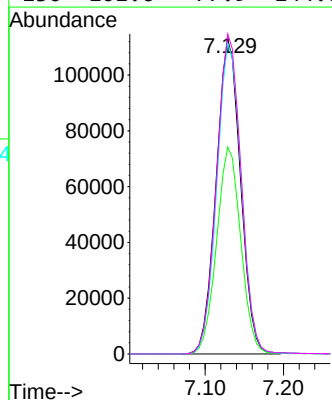
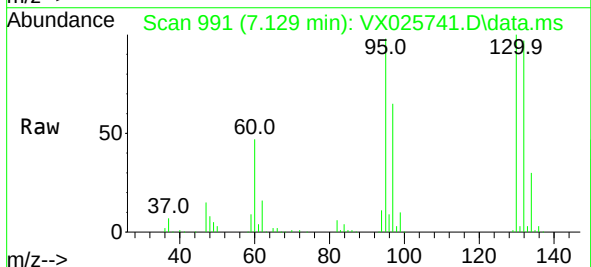
Tgt Ion: 78 Resp: 26338

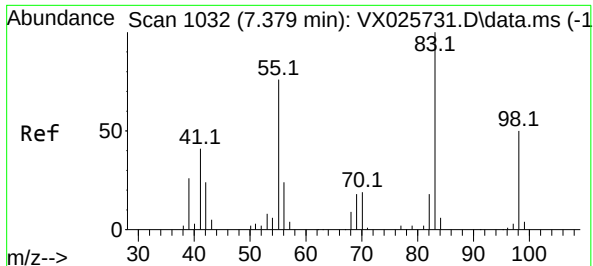


#34
Trichloroethene
Concen: 420.784 ug/L
RT: 7.129 min Scan# 991
Delta R.T. -0.000 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

Tgt Ion: 95 Resp: 244253

Ion	Ratio	Lower	Upper
95	100		
97	65.7	46.0	85.4
132	98.7	75.0	139.2
130	101.6	77.9	144.7





#35

Methylcyclohexane

Concen: 1.465 ug/L

RT: 7.379 min Scan# 1188

Delta R.T. -0.006 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

EW5R1

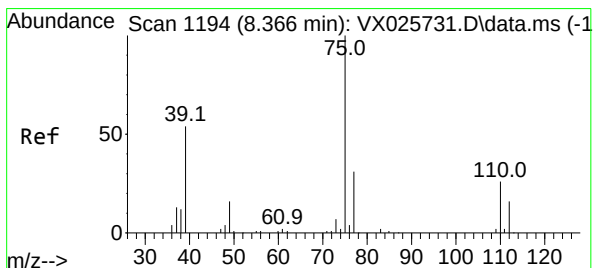
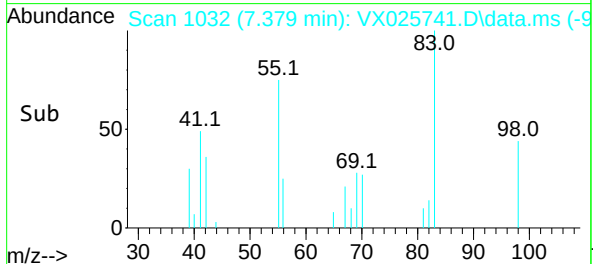
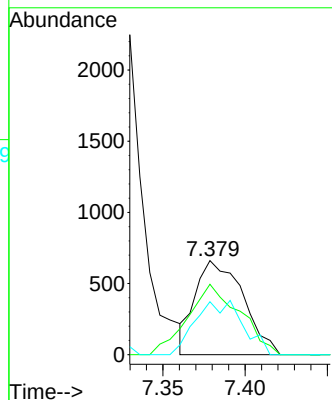
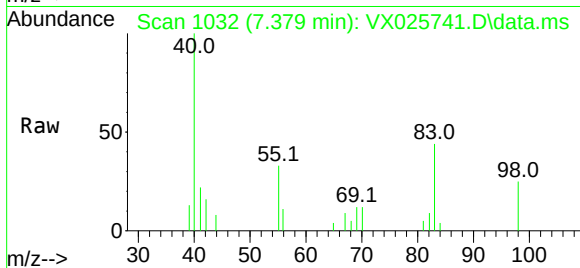
Tgt Ion: 83 Resp: 1338

Ion Ratio Lower Upper

83 100

55 81.8 57.3 85.9

98 33.0 41.1 61.7#



#39

cis-1,3-Dichloropropene

Concen: 1.427 ug/L

RT: 8.330 min Scan# 1188

Delta R.T. -0.037 min

Lab File: VX025741.D

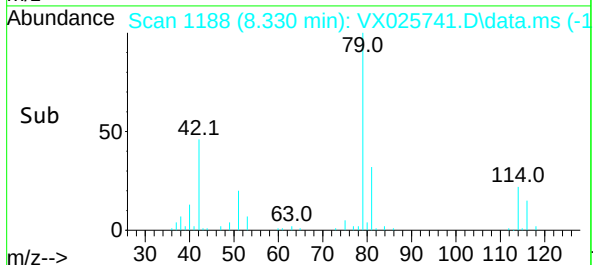
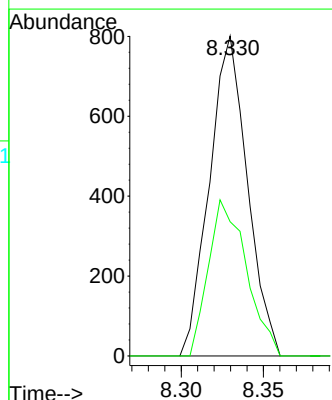
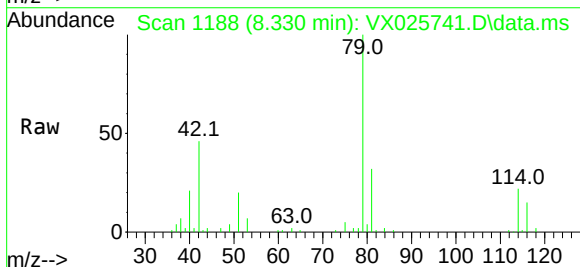
Acq: 11 Dec 2021 14:25

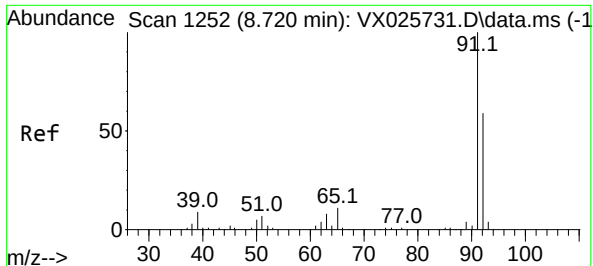
Tgt Ion: 75 Resp: 1287

Ion Ratio Lower Upper

75 100

77 41.9 22.3 41.3#





#42

Toluene

Concen: 39.331 ug/L

RT: 8.720 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

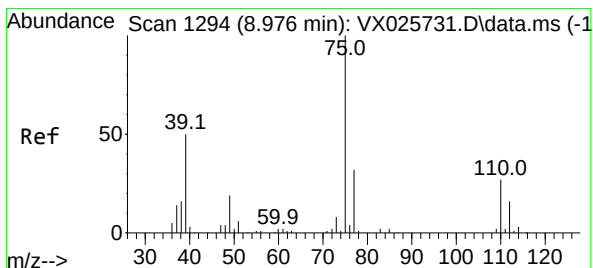
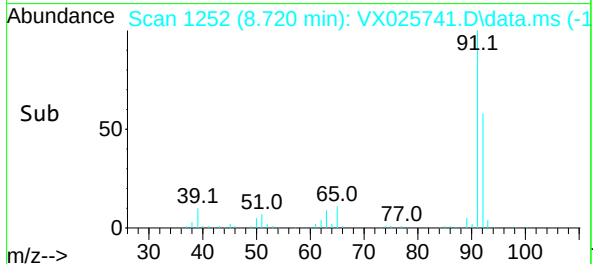
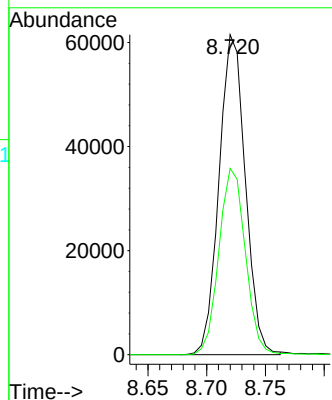
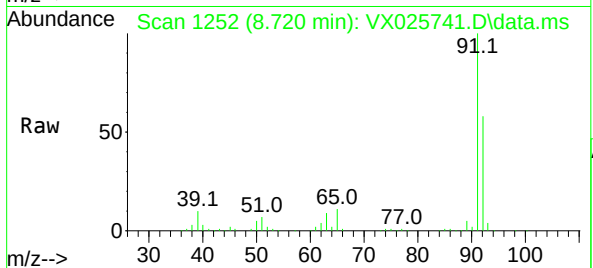
EW5R1

Tgt Ion: 91 Resp: 95728

Ion Ratio Lower Upper

91 100

92 58.2 41.2 76.6



#44

trans-1,3-Dichloropropene

Concen: 0.961 ug/L

RT: 8.952 min Scan# 1290

Delta R.T. -0.031 min

Lab File: VX025741.D

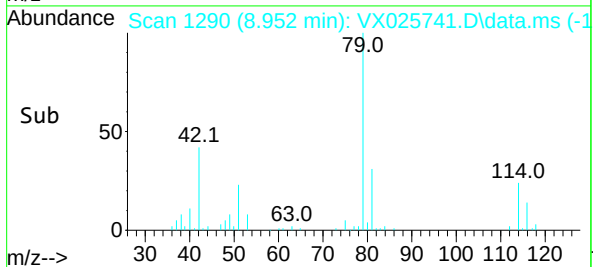
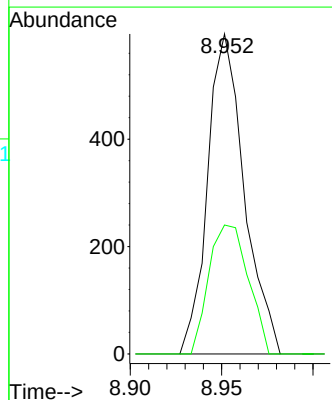
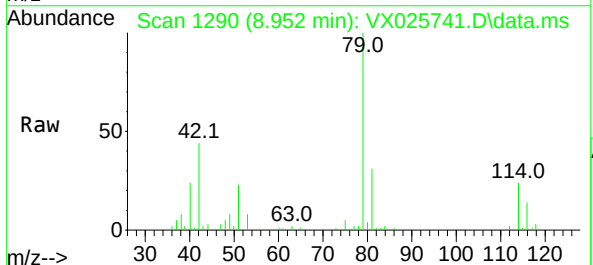
Acq: 11 Dec 2021 14:25

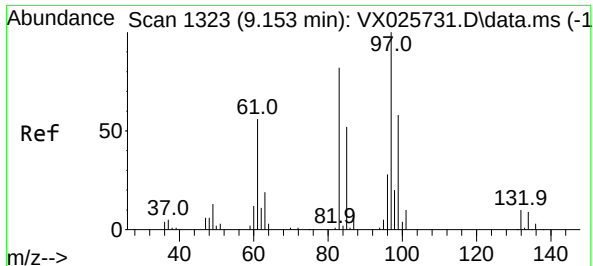
Tgt Ion: 75 Resp: 833

Ion Ratio Lower Upper

75 100

77 40.3 23.0 42.8





#45

1,1,2-Trichloroethane

Concen: 20.315 ug/L

RT: 9.153 min Scan# 1

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

EW5R1

Tgt Ion: 97 Resp: 11934

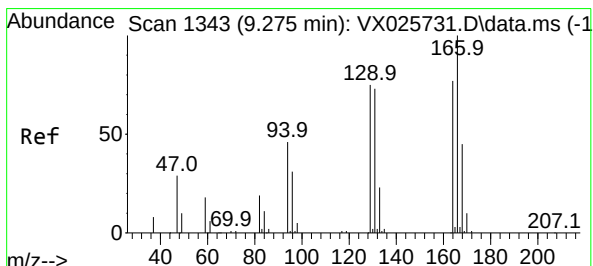
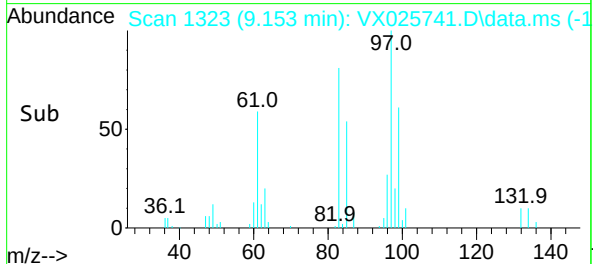
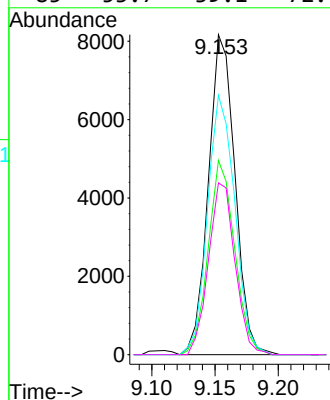
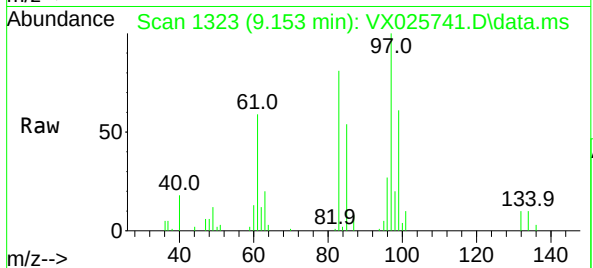
Ion Ratio Lower Upper

97 100

99 60.7 46.0 85.4

83 81.0 59.6 110.8

85 53.7 39.1 72.7



#46

Tetrachloroethene

Concen: 53.833 ug/L

RT: 9.275 min Scan# 1343

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Tgt Ion: 164 Resp: 26501

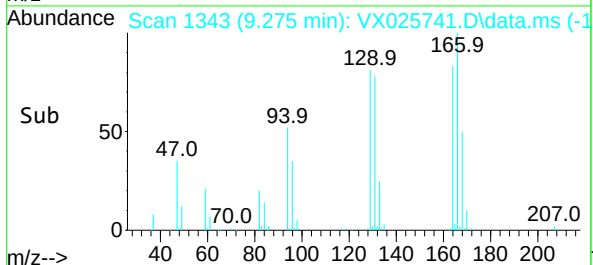
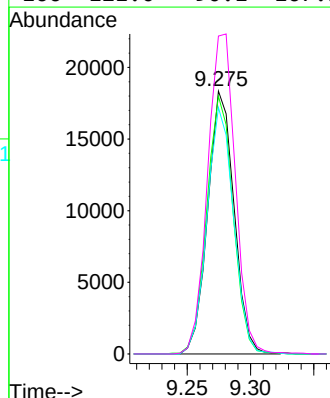
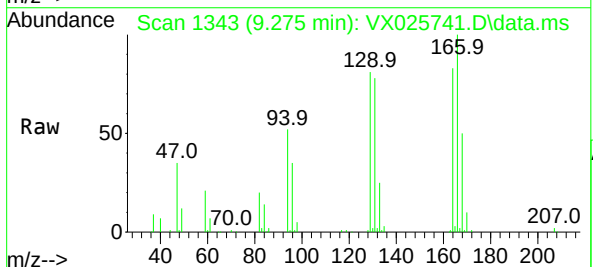
Ion Ratio Lower Upper

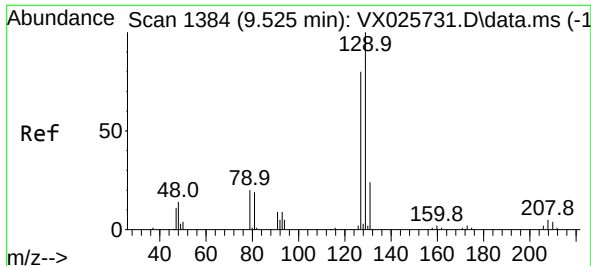
164 100

129 98.1 64.7 120.1

131 93.8 63.2 117.4

166 121.0 90.1 167.3





#49

Dibromochloromethane

Concen: 38.539 ug/L

RT: 9.275 min Scan# 11

Delta R.T. -0.250 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

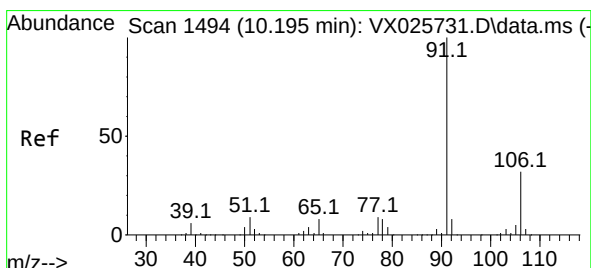
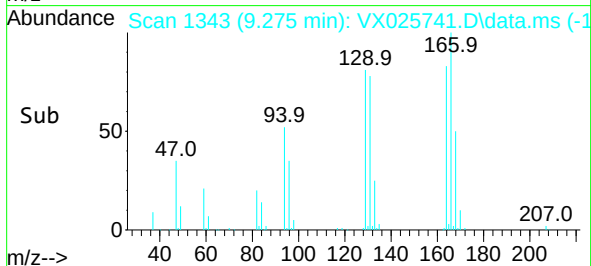
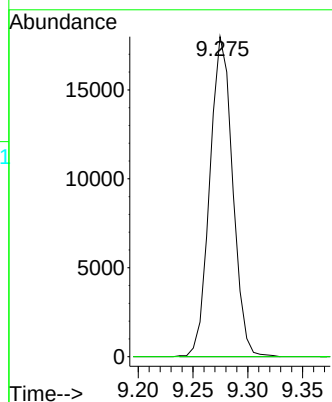
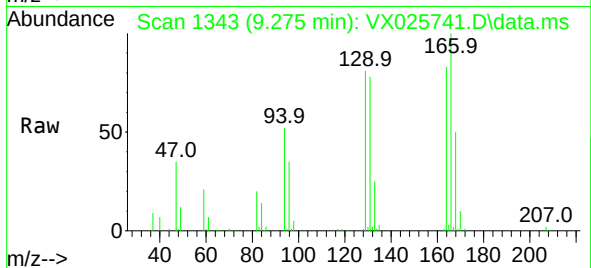
EW5R1

Tgt Ion:129 Resp: 26093

Ion Ratio Lower Upper

129 100

127 0.0 52.4 97.2#



#52

Ethylbenzene

Concen: 106.329 ug/L

RT: 10.195 min Scan# 1494

Delta R.T. -0.000 min

Lab File: VX025741.D

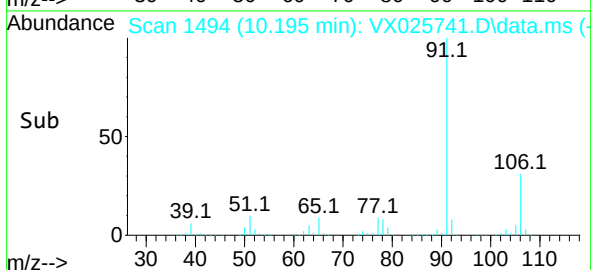
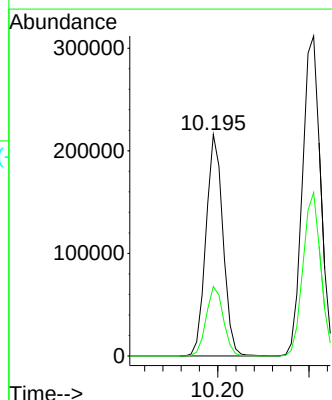
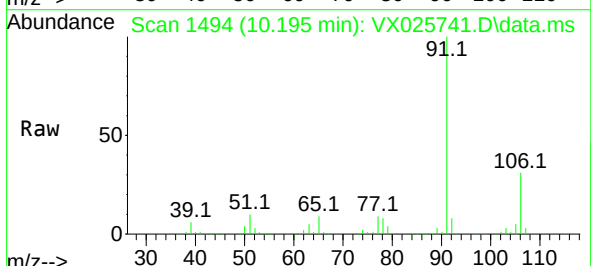
Acq: 11 Dec 2021 14:25

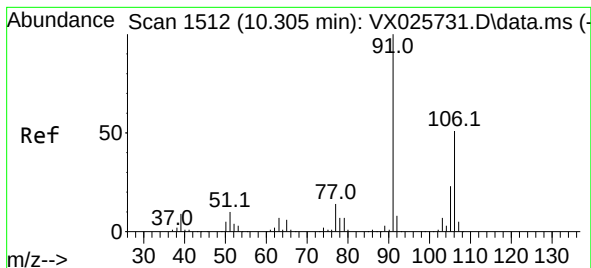
Tgt Ion: 91 Resp: 278129

Ion Ratio Lower Upper

91 100

106 31.4 23.1 42.9





#53

m,p-Xylene

Concen: 203.499 ug/L

RT: 10.305 min Scan# 1512

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

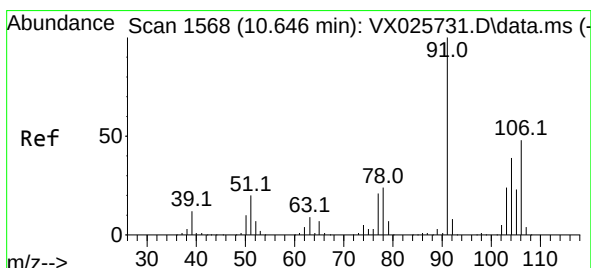
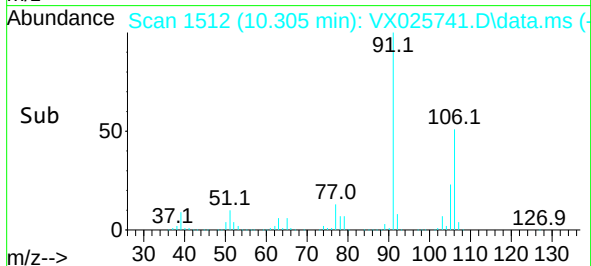
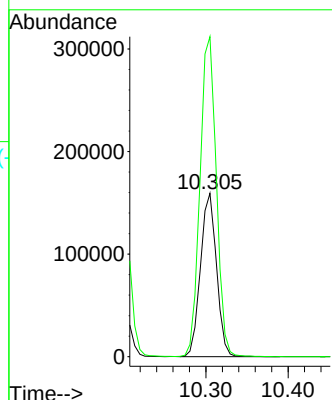
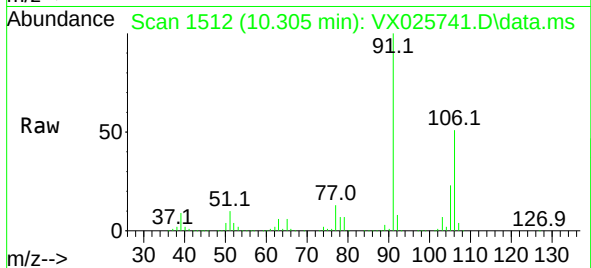
EW5R1

Tgt Ion:106 Resp: 215617

Ion Ratio Lower Upper

106 100

91 195.9 136.8 254.2



#54

o-Xylene

Concen: 249.552 ug/L

RT: 10.646 min Scan# 1568

Delta R.T. -0.000 min

Lab File: VX025741.D

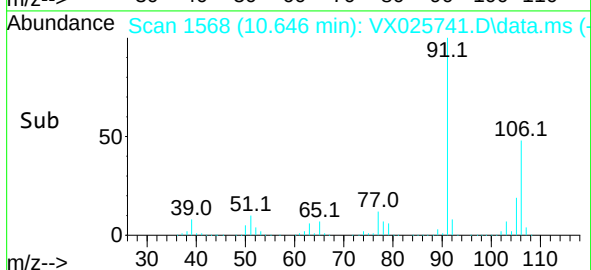
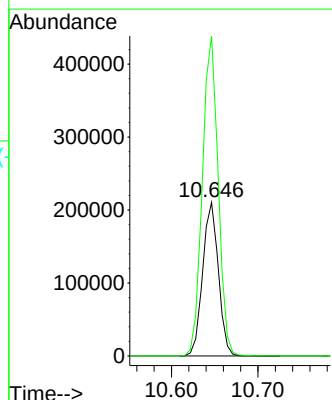
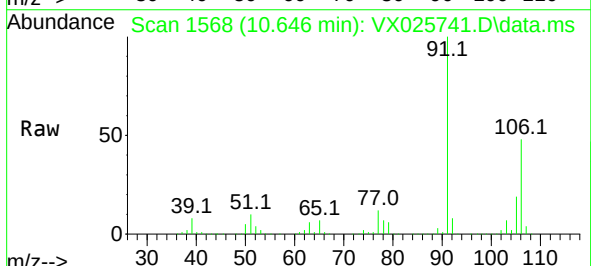
Acq: 11 Dec 2021 14:25

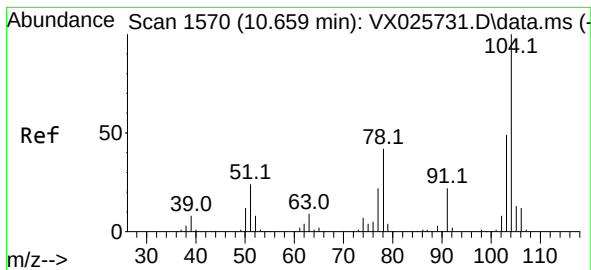
Tgt Ion:106 Resp: 264679

Ion Ratio Lower Upper

106 100

91 208.2 140.5 260.9





#55

Styrene

Concen: 7.349 ug/L

RT: 10.646 min Scan# 11

Delta R.T. -0.012 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

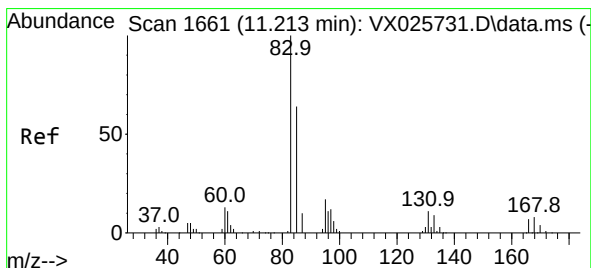
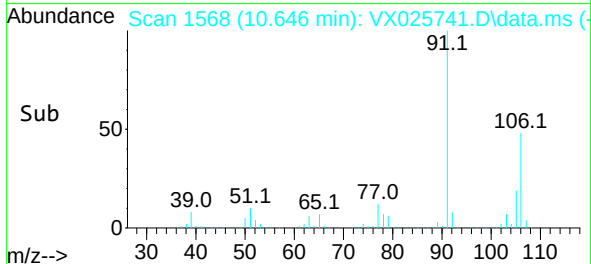
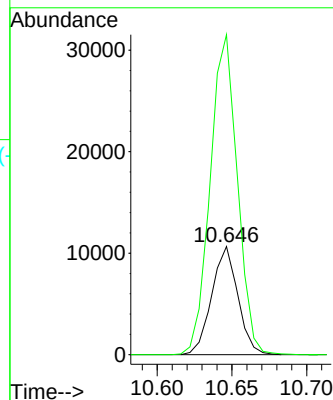
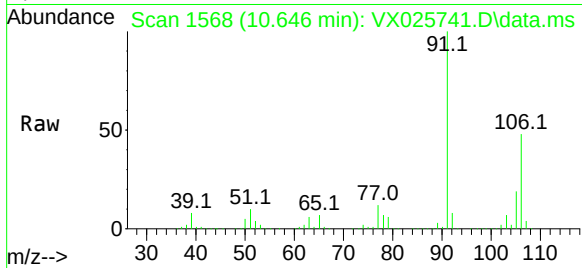
EW5R1

Tgt Ion:104 Resp: 12952

Ion Ratio Lower Upper

104 100

78 295.7 28.6 53.0#



#57

1,1,2,2-Tetrachloroethane

Concen: 0.870 ug/L

RT: 11.213 min Scan# 1661

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

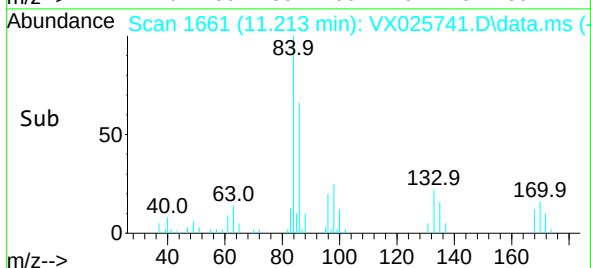
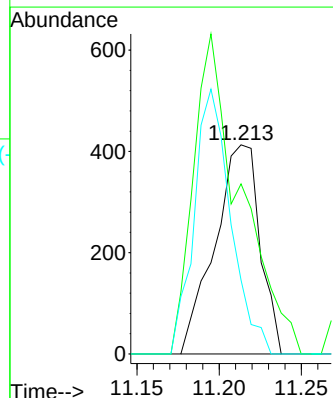
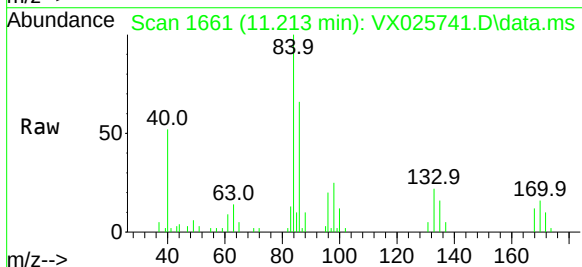
Tgt Ion: 83 Resp: 789

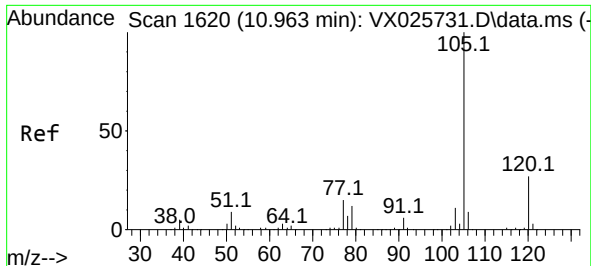
Ion Ratio Lower Upper

83 100

85 81.4 47.0 87.2

131 35.4 8.5 12.7#

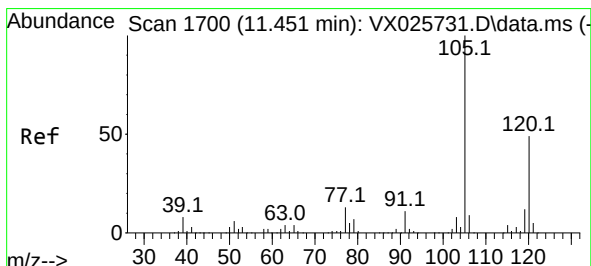
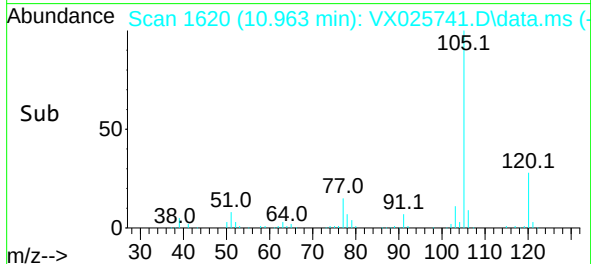
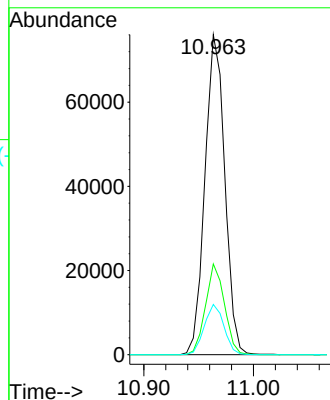
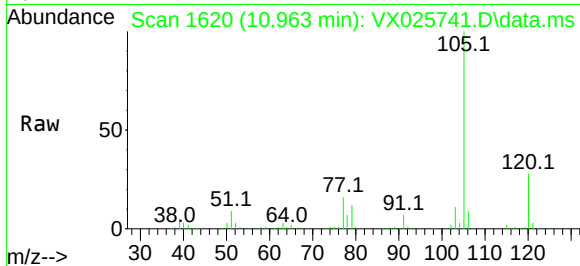




#60
Isopropylbenzene
Concen: 32.651 ug/L
RT: 10.963 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

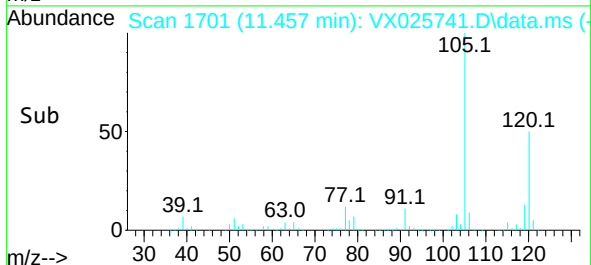
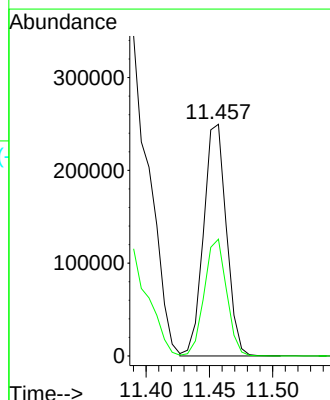
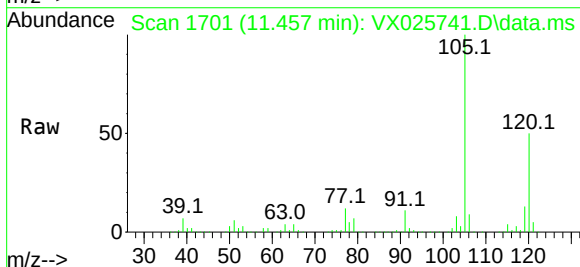
Instrument :
MSVOA_X
ClientSampleId :
EW5R1

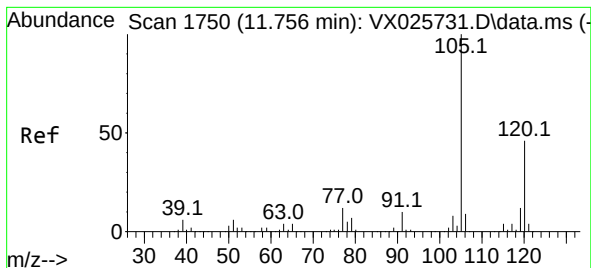
Tgt Ion:105 Resp: 95604
Ion Ratio Lower Upper
105 100
120 27.0 22.3 33.5
77 15.6 11.5 17.3



#62
1,3,5-Trimethylbenzene
Concen: 128.240 ug/L
RT: 11.457 min Scan# 1701
Delta R.T. 0.006 min
Lab File: VX025741.D
Acq: 11 Dec 2021 14:25

Tgt Ion:105 Resp: 314054
Ion Ratio Lower Upper
105 100
120 49.3 41.0 61.4





#63

1,2,4-Trimethylbenzene

Concen: 597.876 ug/L

RT: 11.756 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

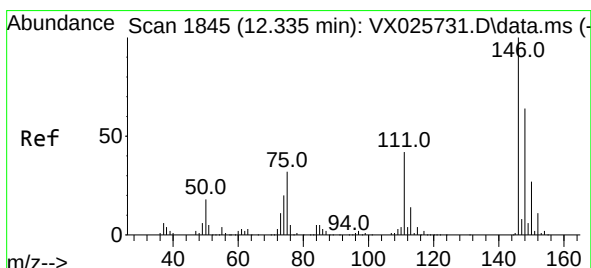
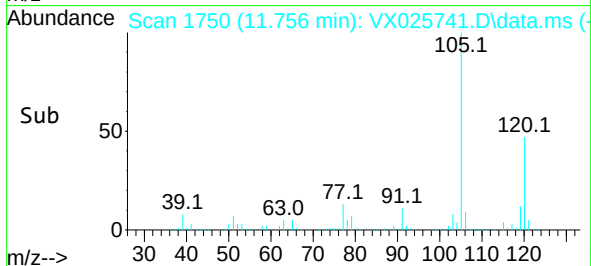
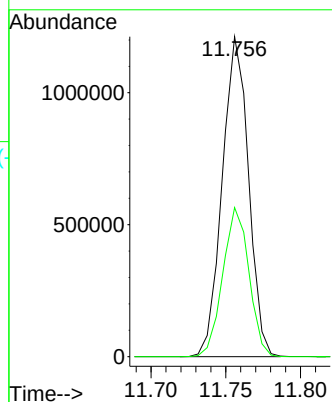
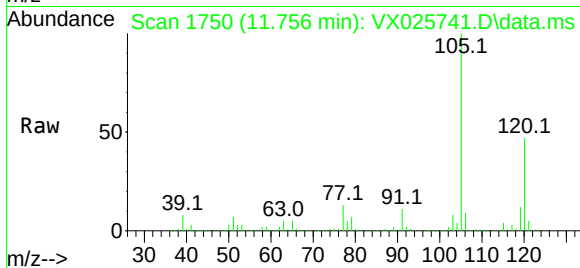
EW5R1

Tgt Ion:105 Resp: 1479384

Ion Ratio Lower Upper

105 100

120 46.3 0.1 0.1#



#67

1,2-Dichlorobenzene

Concen: 32.603 ug/L

RT: 12.335 min Scan# 1845

Delta R.T. -0.000 min

Lab File: VX025741.D

Acq: 11 Dec 2021 14:25

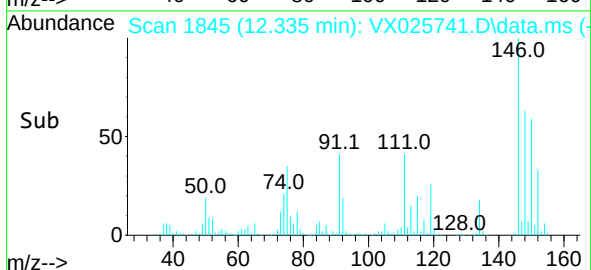
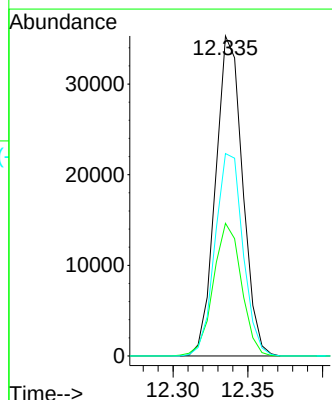
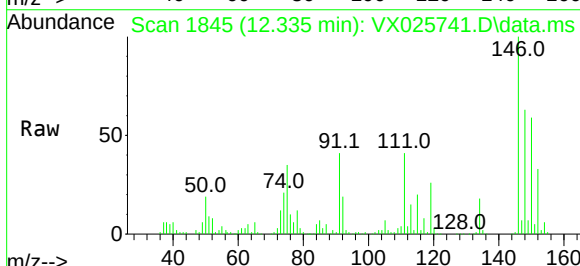
Tgt Ion:146 Resp: 44324

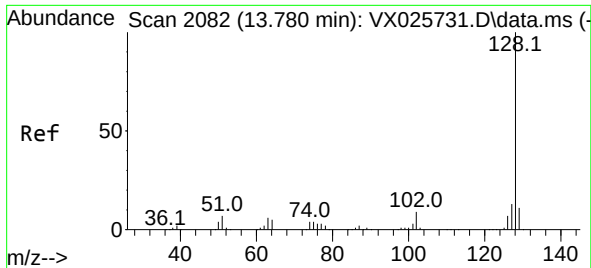
Ion Ratio Lower Upper

146 100

111 41.5 32.3 48.5

148 63.3 50.3 75.5





#71

Naphthalene

Concen: 51.308 ug/L

RT: 13.780 min Scan# 20

Delta R.T. -0.000 min

Lab File: VX025741.D

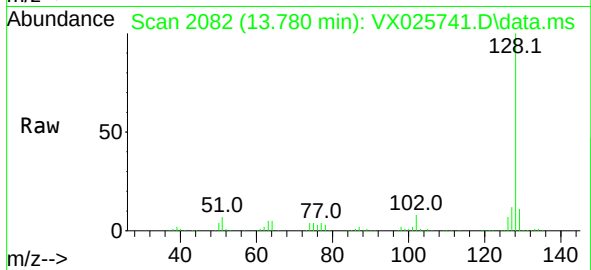
Acq: 11 Dec 2021 14:25

Instrument :

MSVOA_X

ClientSampleId :

EW5R1



Tgt Ion:128 Resp: 142981

Ion Ratio Lower Upper

128 100

127 12.7 10.1 15.1

129 11.0 8.7 13.1

