

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071423\
 Data File : VX036540.D
 Acq On : 13 Jul 2023 21:03
 Operator : JC/MD
 Sample : 03609-01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Jul 14 04:38:52 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X071423W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jul 14 04:32:22 2023
 Response via : Initial Calibration

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

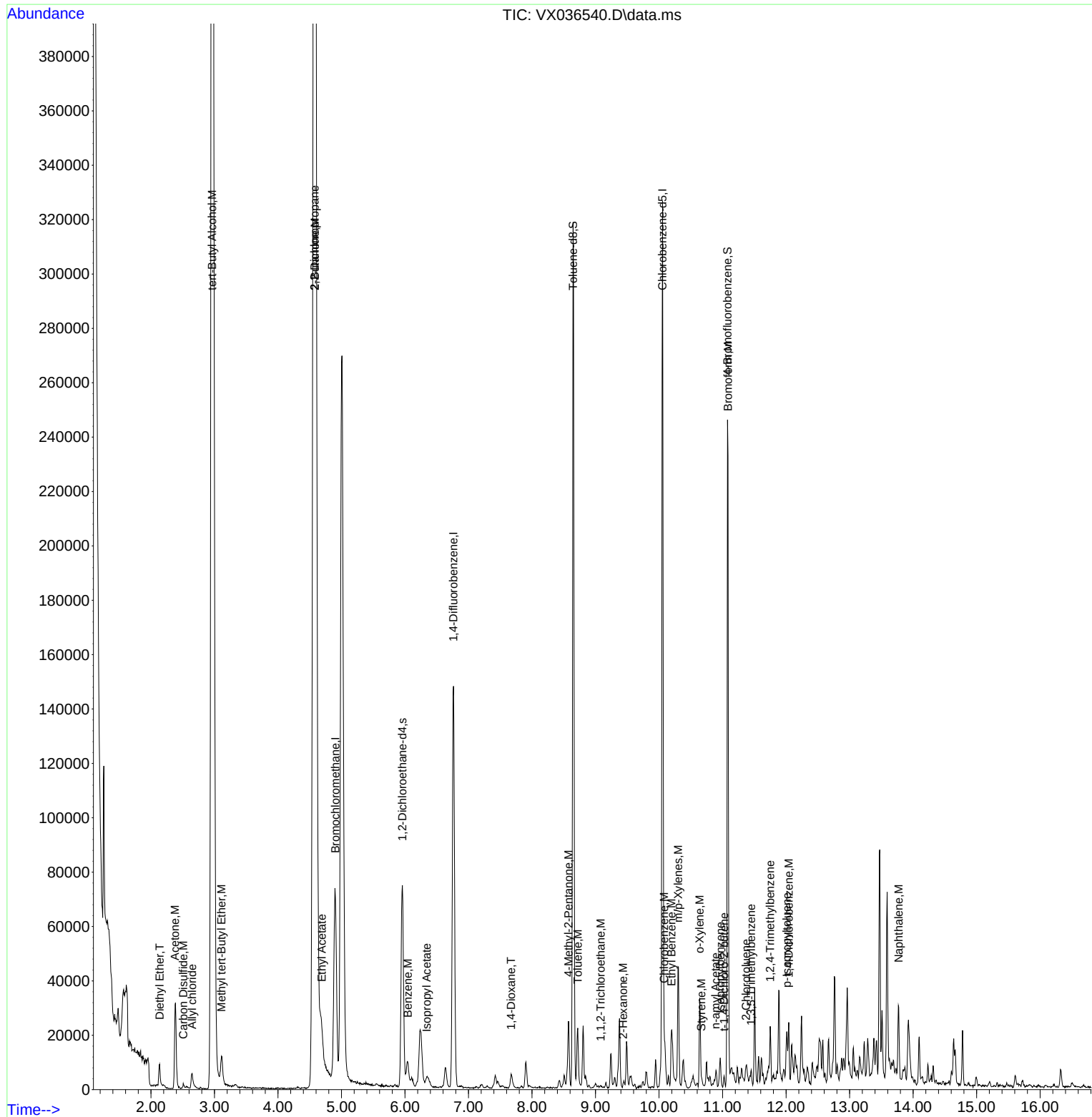
Internal Standards						
1) Bromochloromethane	4.903	128	29532	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.763	114	150904	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	137091	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.958	65	71103	29.009	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	96.700%		
60) 4-Bromofluorobenzene	11.079	95	65726	29.556	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	98.533%		
63) Toluene-d8	8.647	98	188480	29.878	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.600%		
Target Compounds						
					Qvalue	
8) Diethyl Ether	2.136	74	2735	1.743	ug/l	94
15) Acetone	2.380	58	7794	24.177	ug/l	91
16) Carbon Disulfide	2.508	76	1924	0.459	ug/l #	94
17) Allyl chloride	2.648	41	6871	2.241	ug/l #	41
23) tert-Butyl Alcohol	2.965	59	1263014	2388.644	ug/l #	1
24) Methyl tert-Butyl Ether	3.111	73	9259	1.473	ug/l #	87
30) 2-Butanone	4.580	43	47707	33.296	ug/l #	78
31) 2,2-Dichloropropane	4.574	77	66182	26.521	ug/l #	52
34) Benzene	6.043	78	11020	1.571	ug/l	94
43) Ethyl Acetate	4.690	43	4678	1.677	ug/l #	63
44) Isopropyl Acetate	6.342	43	1179	0.265	ug/l #	67
45) 1,4-Dioxane	7.671	88	4065	80.516	ug/l #	1
47) n-amyl Acetate	10.890	43	2044	0.542	ug/l	97
50) 1,1,2-Trichloroethane	9.080	97	432	0.231	ug/l #	14
56) Bromoform	11.085	173	546	0.416	ug/l #	1
58) 4-Methyl-2-Pentanone	8.574	43	15410	5.436	ug/l	96
59) 2-Hexanone	9.433	43	589	0.273	ug/l #	85
62) Toluene	8.720	91	11179	1.453	ug/l	99
64) Chlorobenzene	10.079	112	3319	0.693	ug/l	97
66) Ethyl Benzene	10.195	91	11621	1.390	ug/l	90
67) m/p-Xylenes	10.299	106	9577	2.939	ug/l	99
68) o-Xylene	10.640	106	7026	2.172	ug/l	100
69) Styrene	10.665	104	1191	0.227	ug/l #	39
70) Isopropylbenzene	10.963	105	4602	0.571	ug/l	98
75) 2-Chlorotoluene	11.372	91	1451	0.252	ug/l	96
76) 1,3,5-Trimethylbenzene	11.451	105	2229	0.322	ug/l	93
77) t-1,4-Dichloro-2-butene	11.024	75	454	0.507	ug/l #	7
80) 1,2,4-Trimethylbenzene	11.750	105	9113	1.329	ug/l	95
82) p-Isopropyltoluene	12.012	119	2207	0.321	ug/l	82
84) 1,4-Dichlorobenzene	12.042	146	6992	1.894	ug/l	96
91) Naphthalene	13.774	128	4009	0.488	ug/l	98

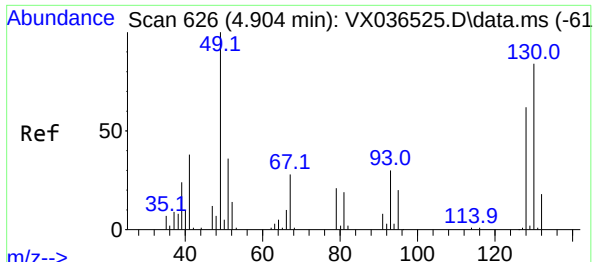
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX071423\
Data File : VX036540.D
Acq On : 13 Jul 2023 21:03
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Sample : 03609-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 18 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :

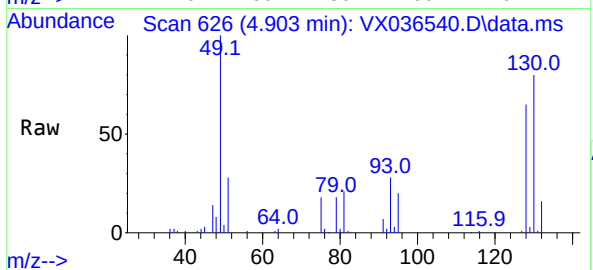
Quant Time: Jul 14 04:38:52 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X071423W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jul 14 04:32:22 2023
Response via : Initial Calibration



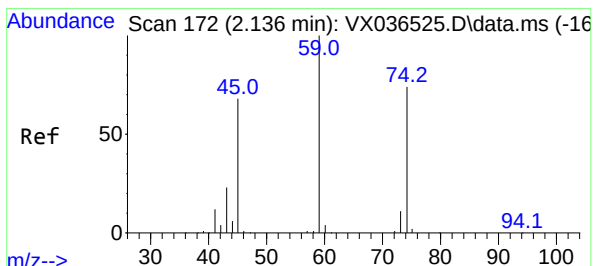
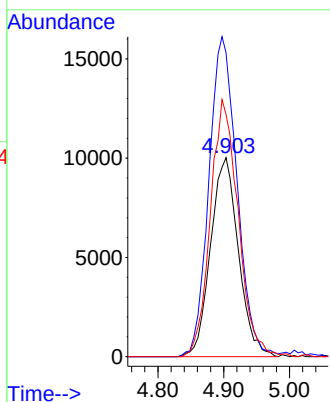
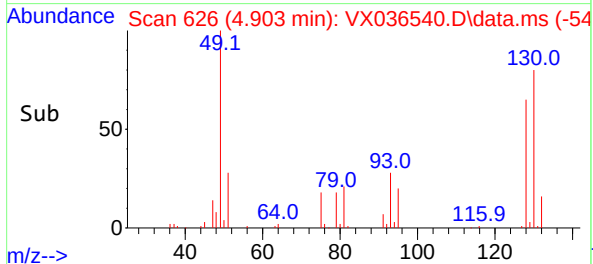


#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.903 min Scan# 61
Delta R.T. -0.001 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Instrument :
MSVOA_X
ClientSampleId :

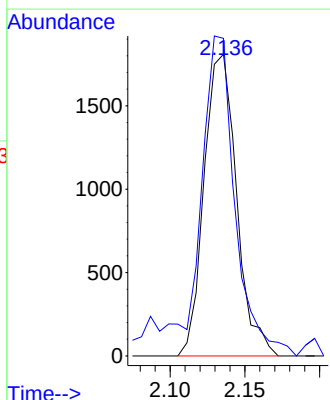
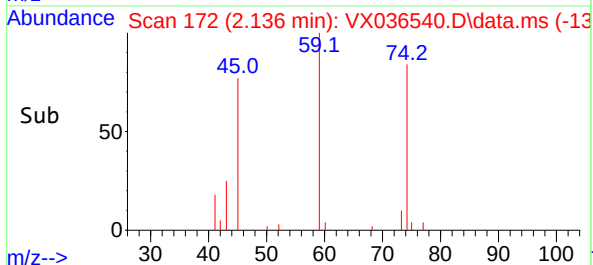
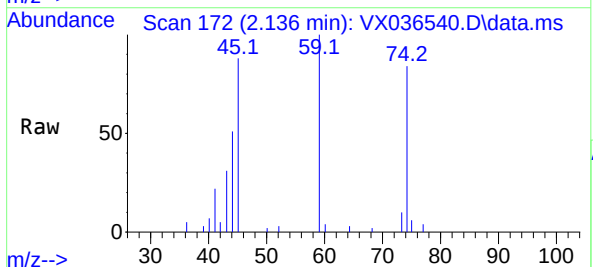


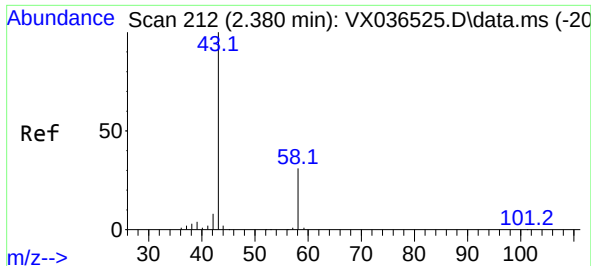
Tgt Ion:128 Resp: 29532
Ion Ratio Lower Upper
128 100
49 161.2 0.0 406.3
130 128.7 0.0 328.0



#8
Diethyl Ether
Concen: 1.743 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 74 Resp: 2735
Ion Ratio Lower Upper
74 100
45 105.0 19.9 178.9

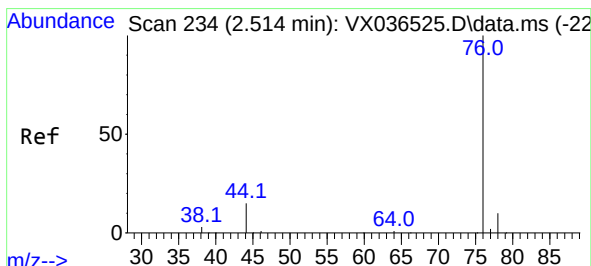
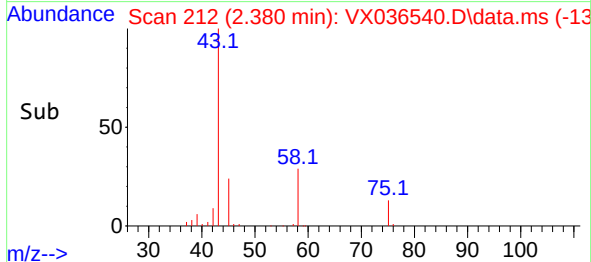
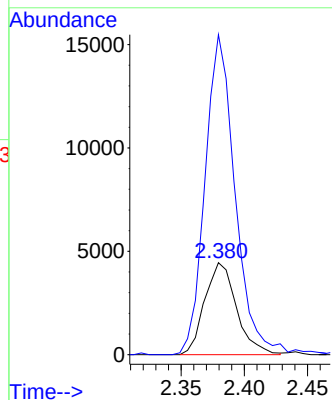
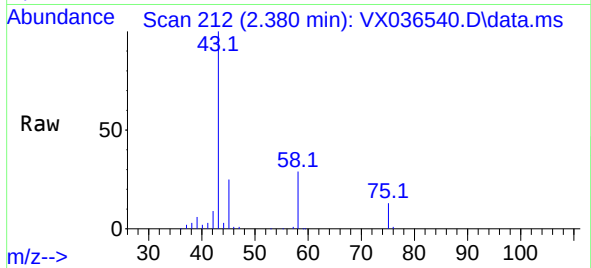




#15
Acetone
Concen: 24.177 ug/l
RT: 2.380 min Scan# 212
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

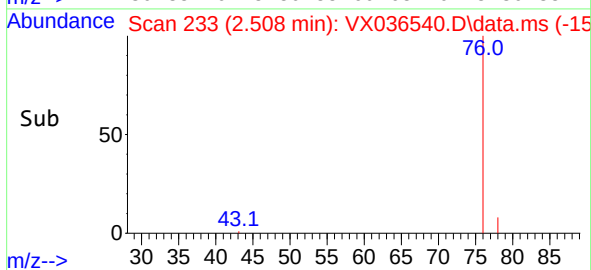
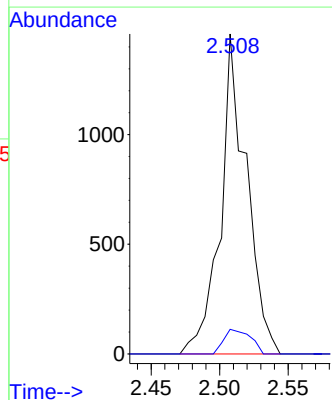
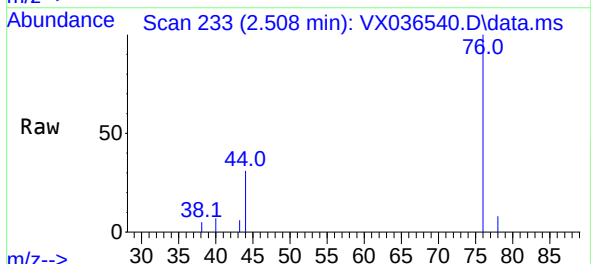
Instrument :
MSVOA_X
ClientSampleId :

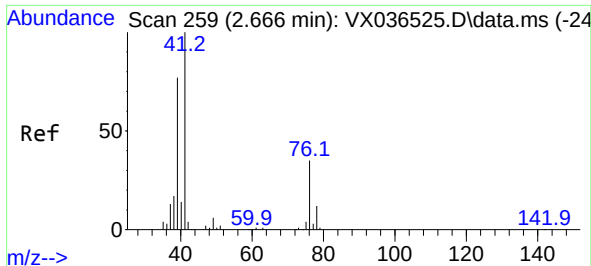
Tgt Ion: 58 Resp: 7794
Ion Ratio Lower Upper
58 100
43 345.8 261.0 391.4



#16
Carbon Disulfide
Concen: 0.459 ug/l
RT: 2.508 min Scan# 233
Delta R.T. -0.006 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

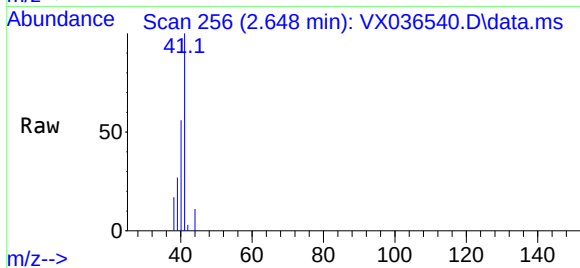
Tgt Ion: 76 Resp: 1924
Ion Ratio Lower Upper
76 100
78 7.7 8.0 12.0#



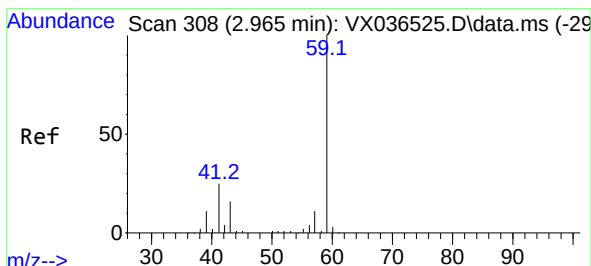
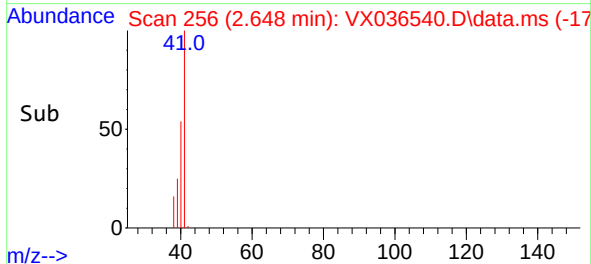
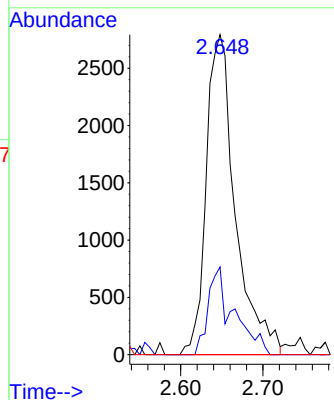


#17
 Allyl chloride
 Concen: 2.241 ug/l
 RT: 2.648 min Scan# 21
 Delta R.T. -0.018 min
 Lab File: VX036540.D
 Acq: 13 Jul 2023 21:03

Instrument :
 MSVOA_X
 ClientSampleId :

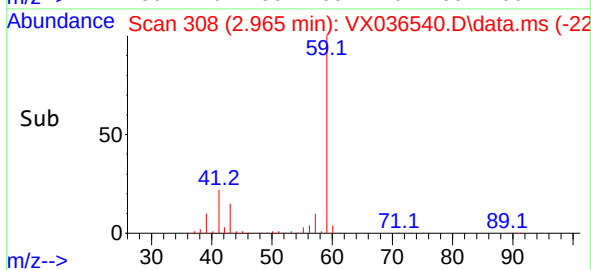
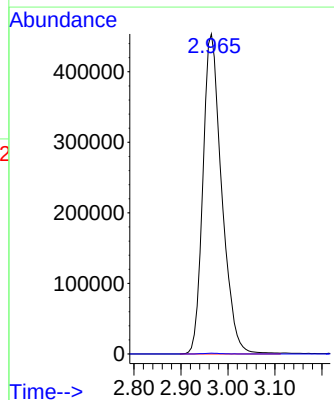
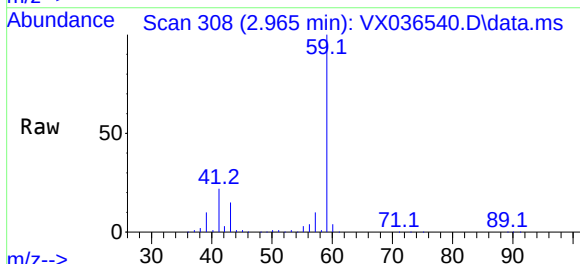


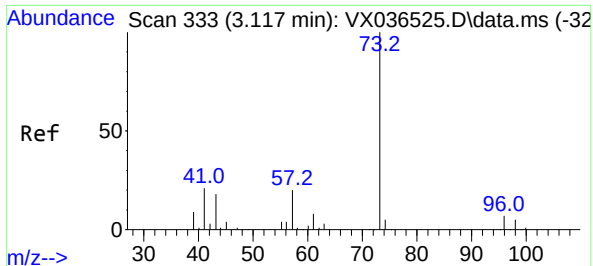
Tgt Ion: 41 Resp: 6871
 Ion Ratio Lower Upper
 41 100
 39 27.4 38.5 115.3#
 76 0.0 18.6 55.8#



#23
 tert-Butyl Alcohol
 Concen: 2388.644 ug/l
 RT: 2.965 min Scan# 308
 Delta R.T. -0.000 min
 Lab File: VX036540.D
 Acq: 13 Jul 2023 21:03

Tgt Ion: 59 Resp: 1263014
 Ion Ratio Lower Upper
 59 100
 52 0.2 142.6 213.8#

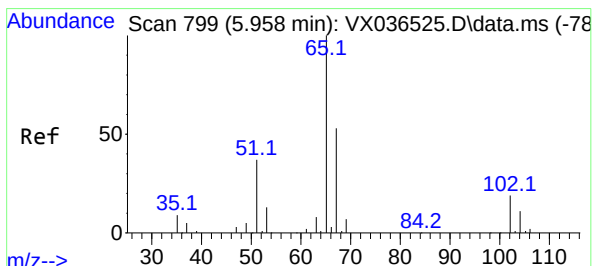
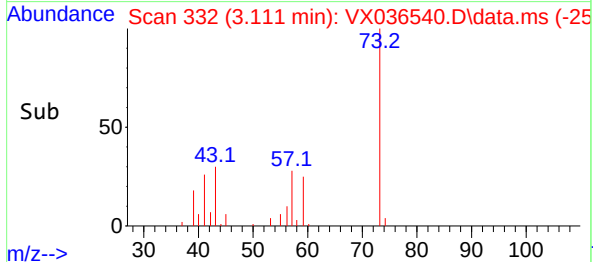
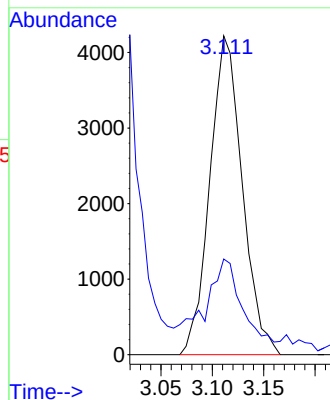
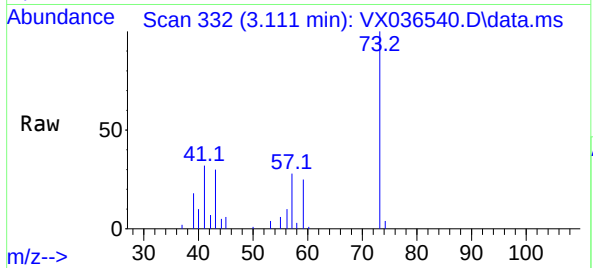




#24
Methyl tert-Butyl Ether
Concen: 1.473 ug/l
RT: 3.111 min Scan# 311
Delta R.T. -0.006 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

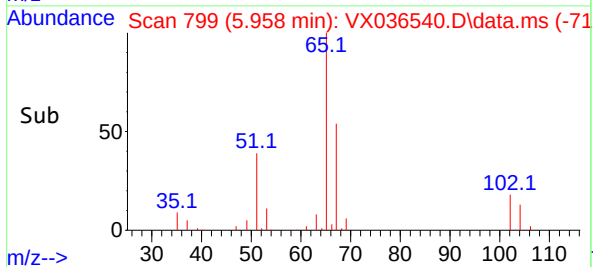
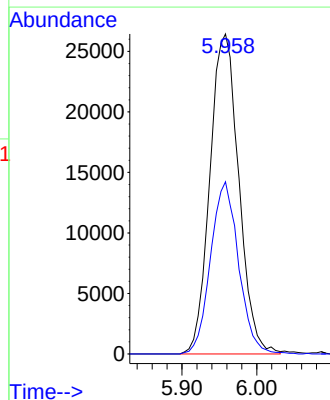
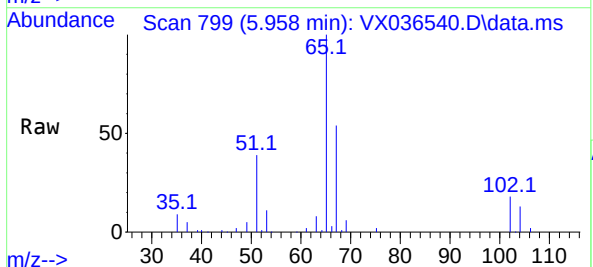
Instrument :
MSVOA_X
ClientSampleId :

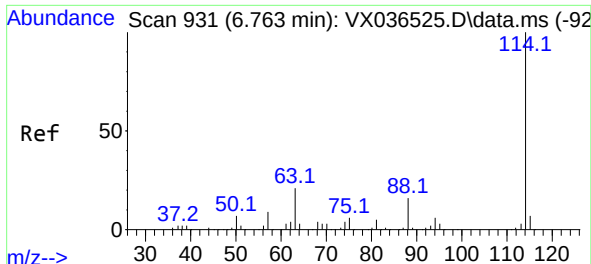
Tgt Ion: 73 Resp: 9259
Ion Ratio Lower Upper
73 100
43 27.1 16.8 25.2#



#27
1,2-Dichloroethane-d4
Concen: 29.009 ug/l
RT: 5.958 min Scan# 799
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

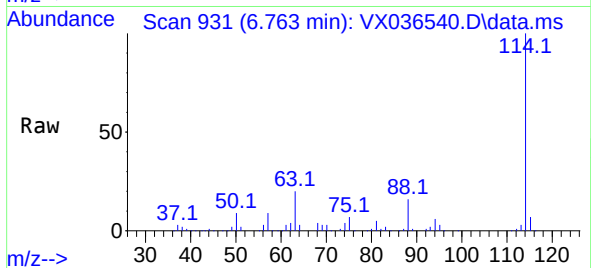
Tgt Ion: 65 Resp: 71103
Ion Ratio Lower Upper
65 100
67 52.1 42.1 63.1



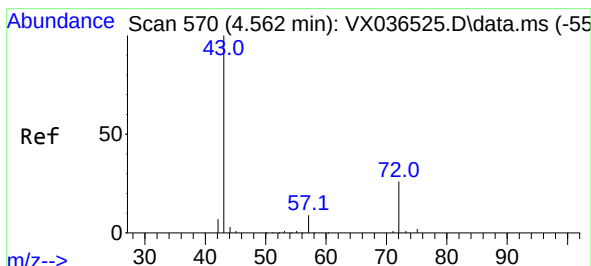
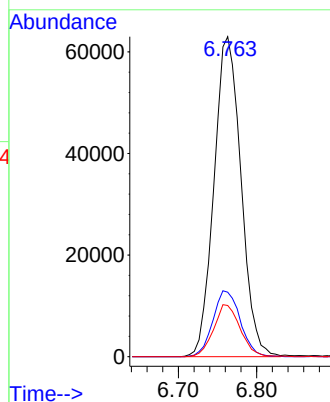
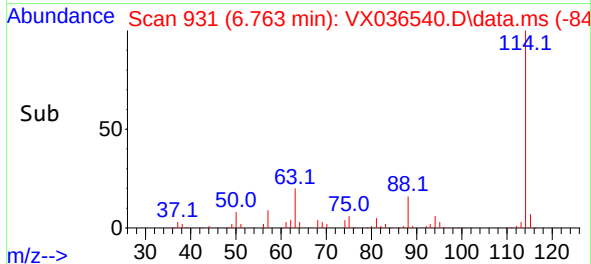


#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.763 min Scan# 91
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Instrument :
MSVOA_X
ClientSampleId :

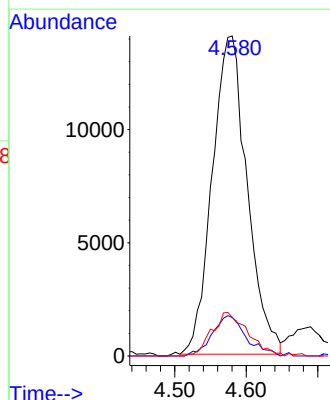
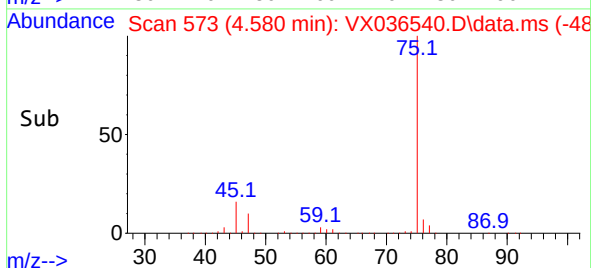
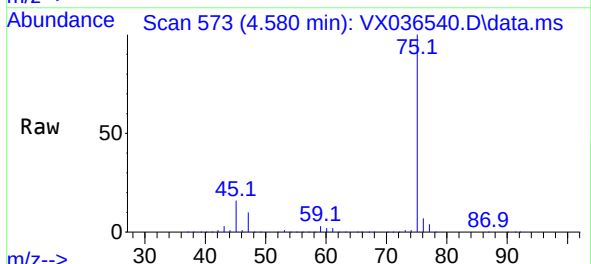


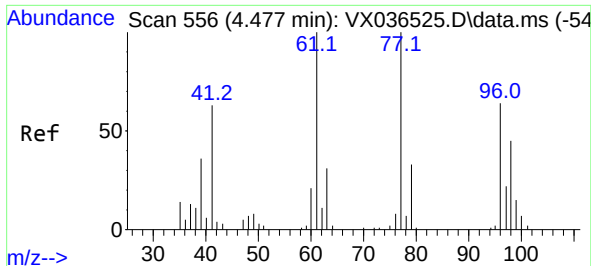
Tgt Ion:114 Resp: 150904
Ion Ratio Lower Upper
114 100
63 20.9 16.6 24.8
88 16.0 12.9 19.3



#30
2-Butanone
Concen: 33.296 ug/l
RT: 4.580 min Scan# 573
Delta R.T. 0.018 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 43 Resp: 47707
Ion Ratio Lower Upper
43 100
57 11.1 6.4 9.6#
72 13.4 21.6 32.4#





#31

2,2-Dichloropropane

Concen: 26.521 ug/l

RT: 4.574 min Scan# 51

Delta R.T. 0.097 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

Instrument :

MSVOA_X

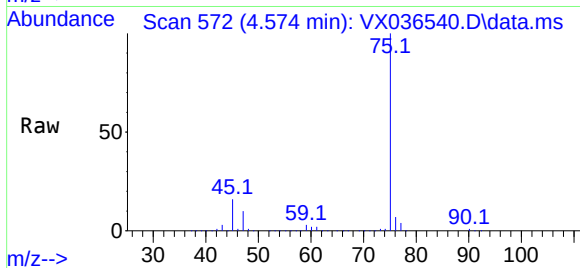
ClientSampleId :

Tgt Ion: 77 Resp: 66182

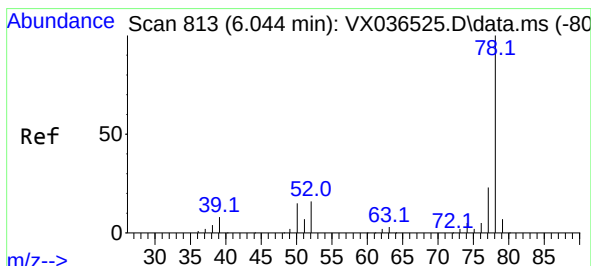
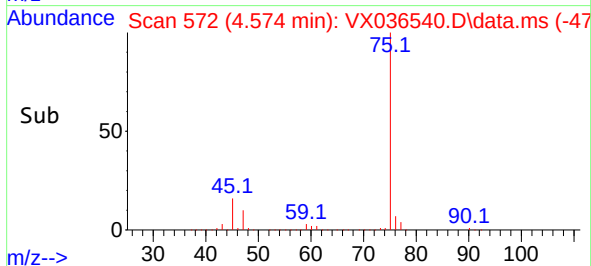
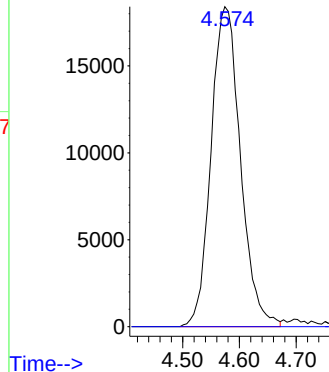
Ion Ratio Lower Upper

77 100

97 0.0 18.6 27.8#



Abundance



#34

Benzene

Concen: 1.571 ug/l

RT: 6.043 min Scan# 813

Delta R.T. -0.000 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

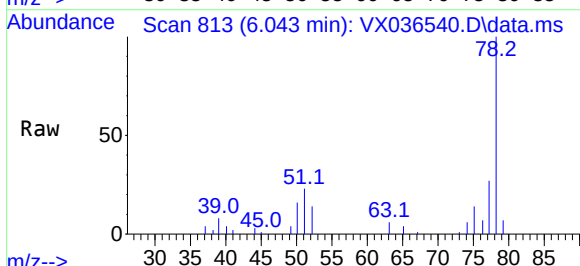
Tgt Ion: 78 Resp: 11020

Ion Ratio Lower Upper

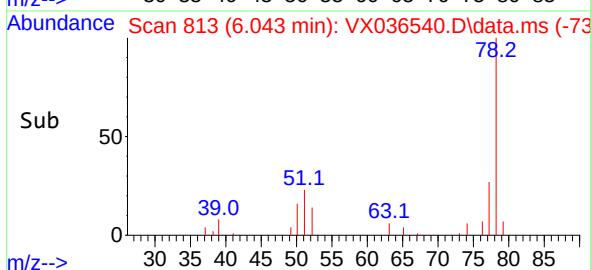
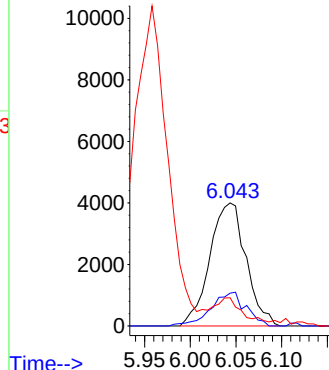
78 100

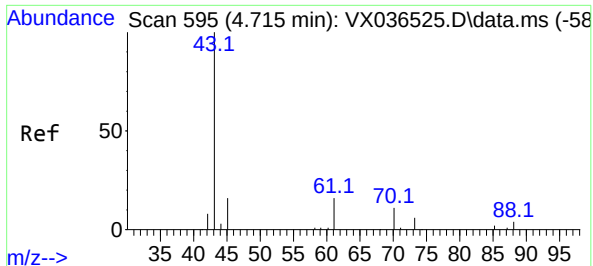
77 26.6 18.7 28.1

51 20.1 14.2 21.4



Abundance





#43

Ethyl Acetate

Concen: 1.677 ug/l

RT: 4.690 min Scan# 591

Delta R.T. -0.025 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

Instrument :

MSVOA_X

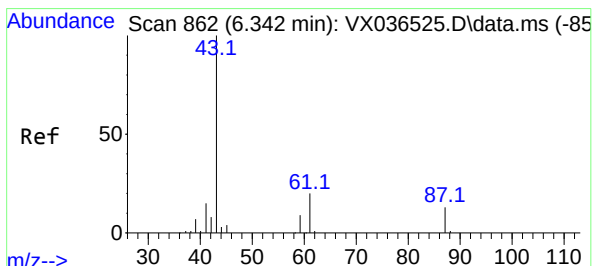
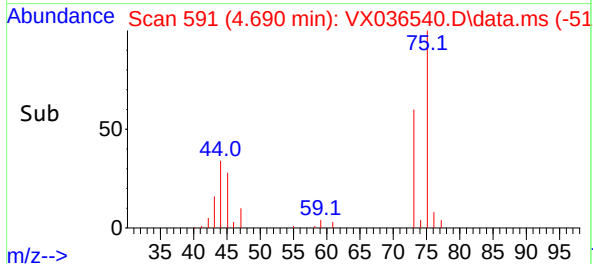
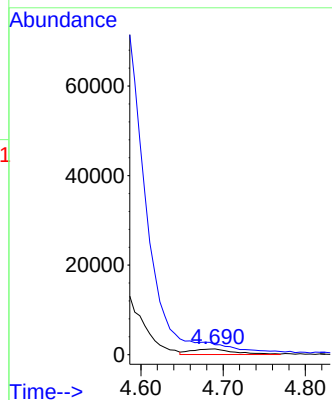
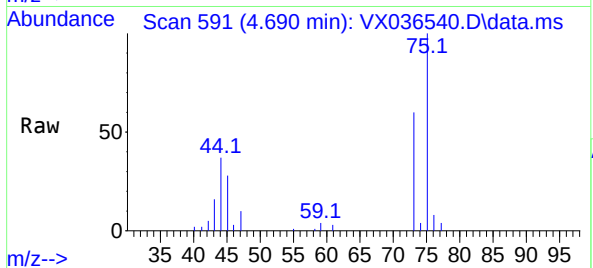
ClientSampleId :

Tgt Ion: 43 Resp: 4678

Ion Ratio Lower Upper

43 100

45 0.0 12.6 18.8#



#44

Isopropyl Acetate

Concen: 0.265 ug/l

RT: 6.342 min Scan# 862

Delta R.T. -0.000 min

Lab File: VX036540.D

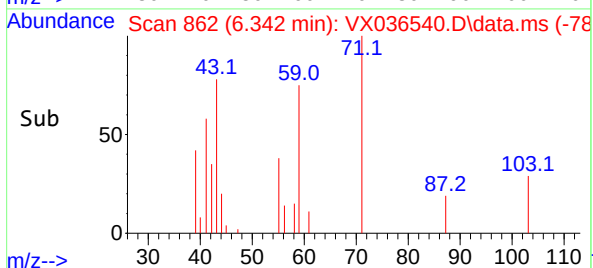
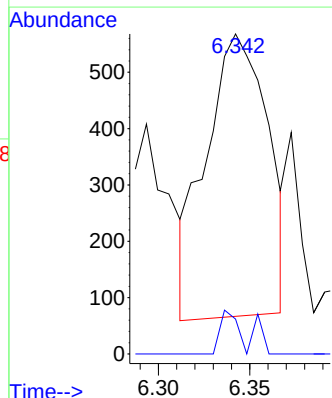
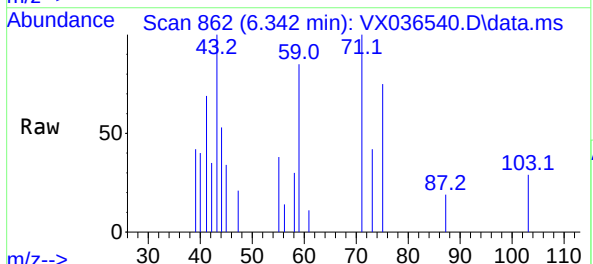
Acq: 13 Jul 2023 21:03

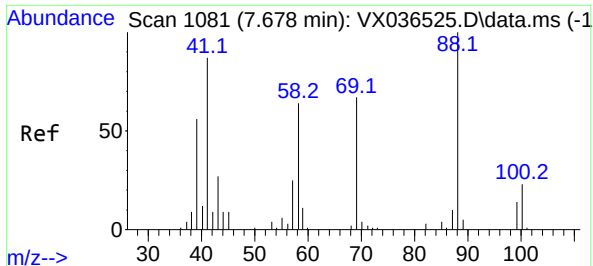
Tgt Ion: 43 Resp: 1179

Ion Ratio Lower Upper

43 100

61 4.3 15.4 23.0#

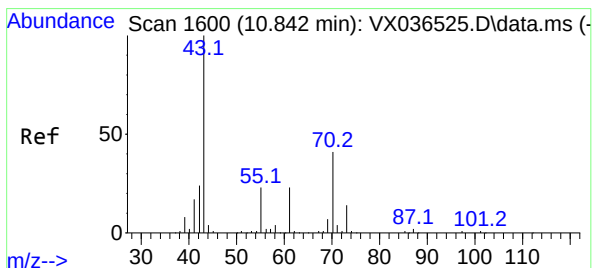
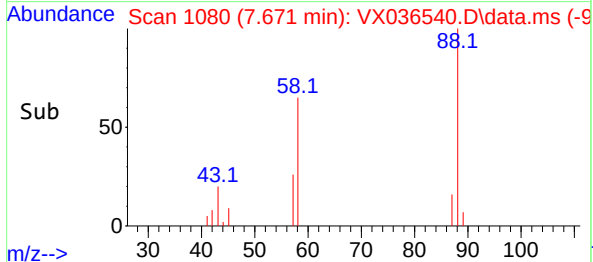
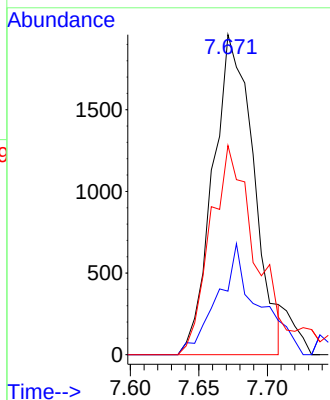
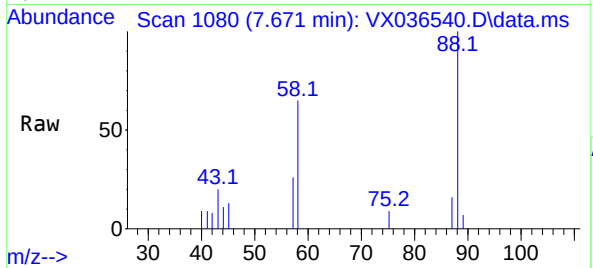




#45
1,4-Dioxane
Concen: 80.516 ug/l
RT: 7.671 min Scan# 1081
Delta R.T. -0.006 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

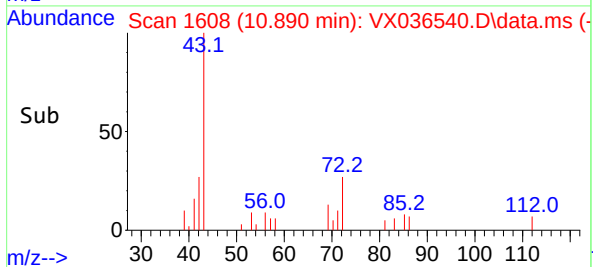
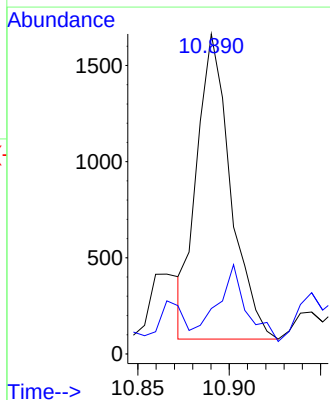
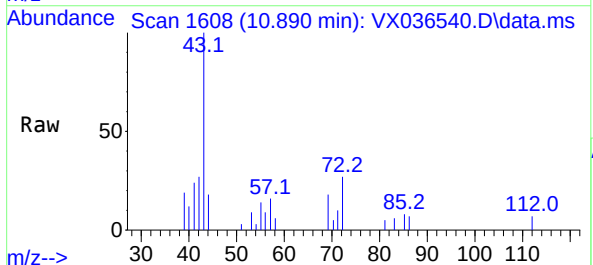
Instrument :
MSVOA_X
ClientSampleId :

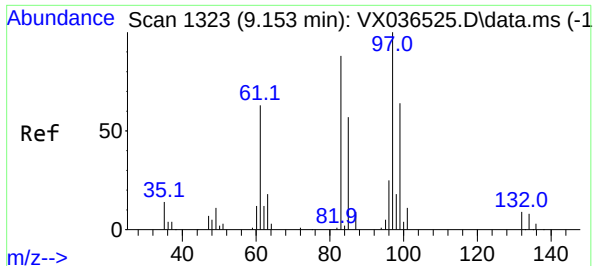
Tgt Ion: 88 Resp: 4065
Ion Ratio Lower Upper
88 100
43 27.5 297.5 446.3#
58 62.8 1.0 1.4#



#47
n-amy1 Acetate
Concen: 0.542 ug/l
RT: 10.890 min Scan# 1608
Delta R.T. 0.049 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 43 Resp: 2044
Ion Ratio Lower Upper
43 100
55 21.7 18.6 28.0



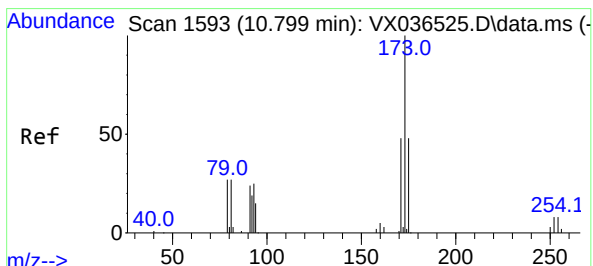
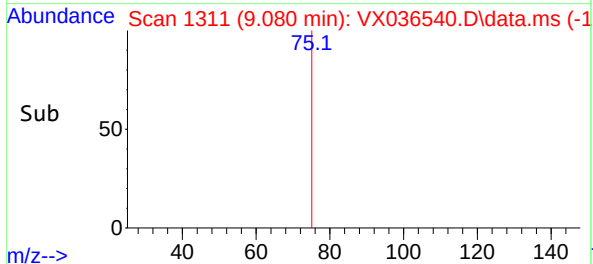
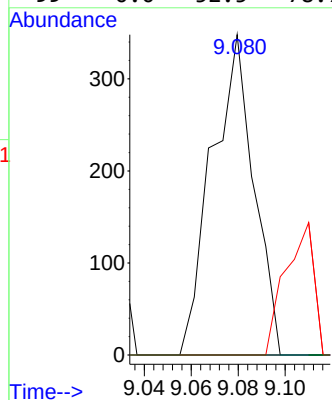
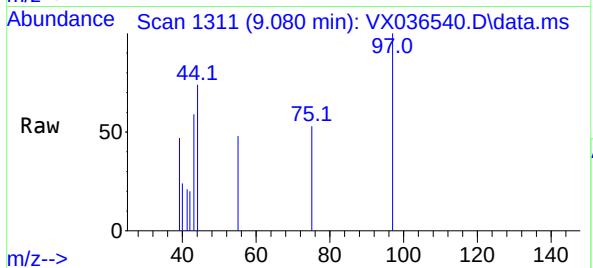


#50
1,1,2-Trichloroethane
Concen: 0.231 ug/l
RT: 9.080 min Scan# 11
Delta R.T. -0.073 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Instrument :
MSVOA_X
ClientSampleId :

Tgt Ion: 97 Resp: 432

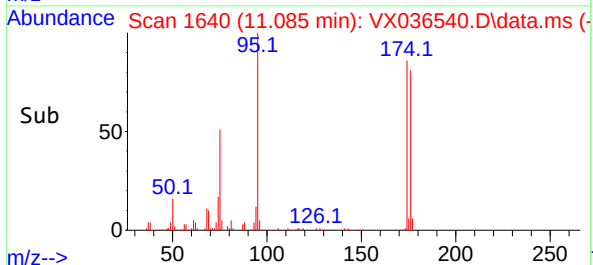
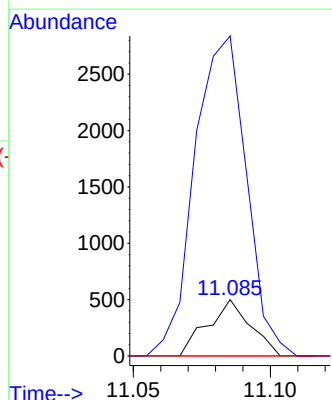
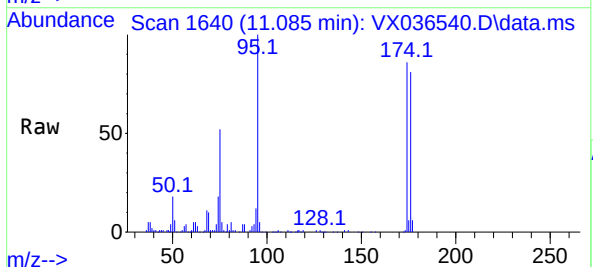
Ion	Ratio	Lower	Upper
97	100		
83	0.0	70.0	105.0#
85	0.0	46.1	69.1#
99	0.0	52.5	78.7#

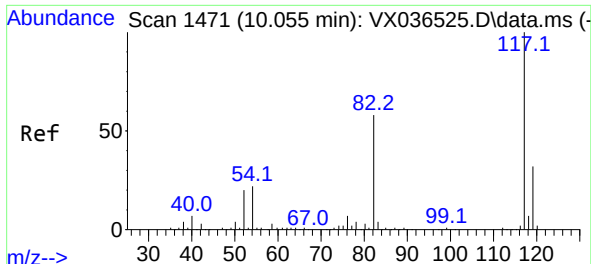


#56
Bromoform
Concen: 0.416 ug/l
RT: 11.085 min Scan# 1640
Delta R.T. 0.286 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 173 Resp: 546

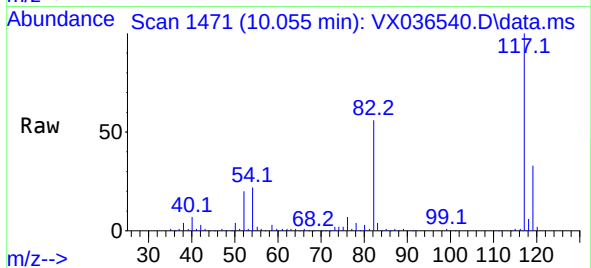
Ion	Ratio	Lower	Upper
173	100		
175	683.3	38.1	57.1#
254	0.0	6.7	10.1#



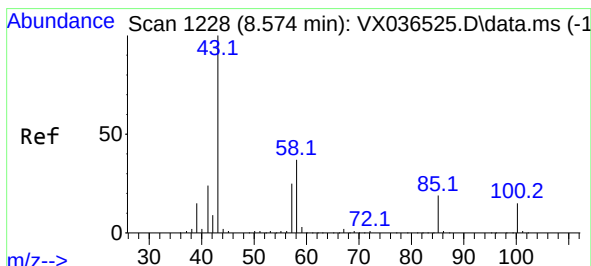
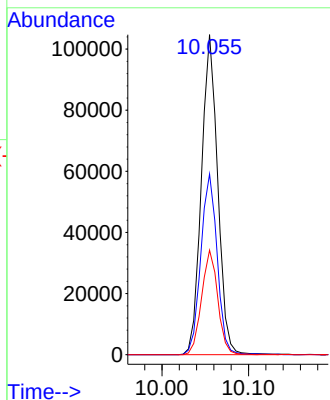
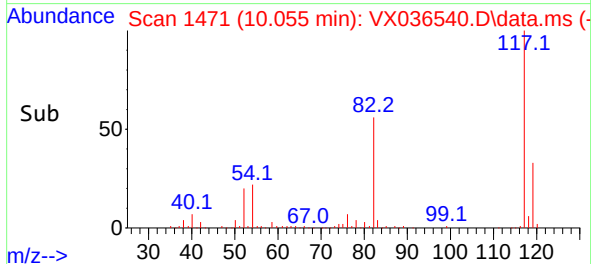


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Instrument :
MSVOA_X
ClientSampleId :

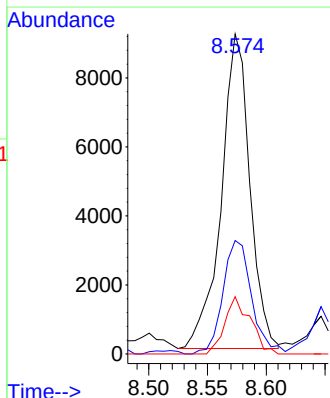
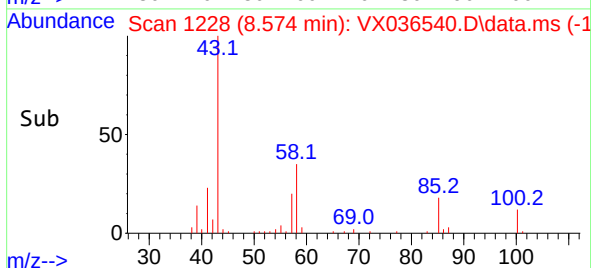
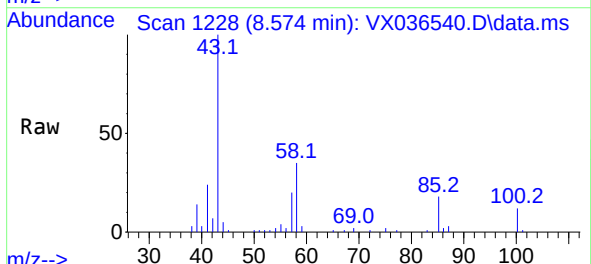


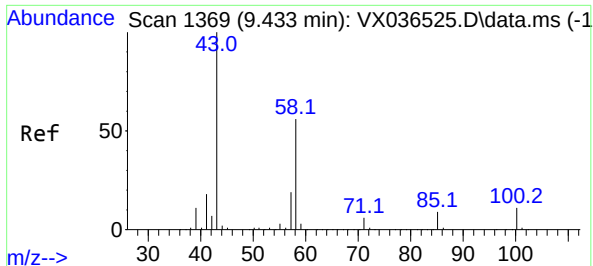
Tgt Ion:117 Resp: 137091
Ion Ratio Lower Upper
117 100
82 56.4 44.7 67.1
119 32.3 25.6 38.4



#58
4-Methyl-2-Pentanone
Concen: 5.436 ug/l
RT: 8.574 min Scan# 1228
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 43 Resp: 15410
Ion Ratio Lower Upper
43 100
58 36.2 30.9 46.3
85 16.3 14.4 21.6





#59

2-Hexanone

Concen: 0.273 ug/l

RT: 9.433 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

Instrument :

MSVOA_X

ClientSampleId :

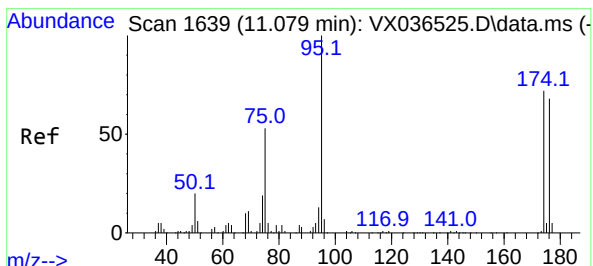
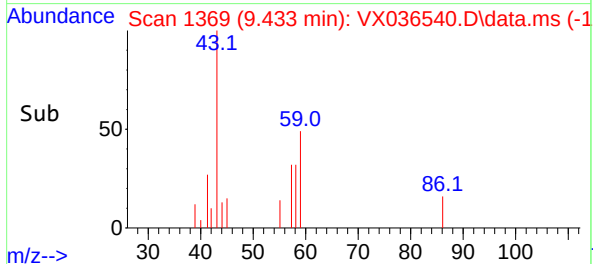
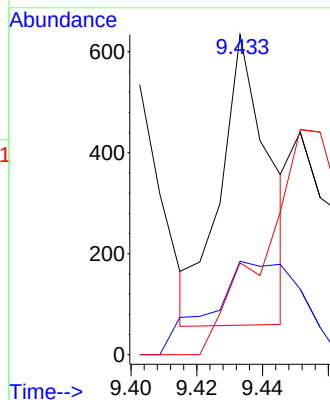
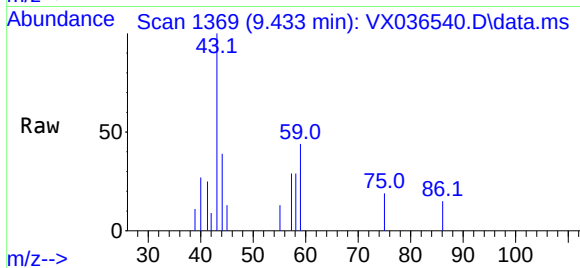
Tgt Ion: 43 Resp: 589

Ion Ratio Lower Upper

43 100

58 50.4 43.4 65.2

57 0.0 15.1 22.7#



#60

4-Bromofluorobenzene

Concen: 29.556 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. -0.000 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

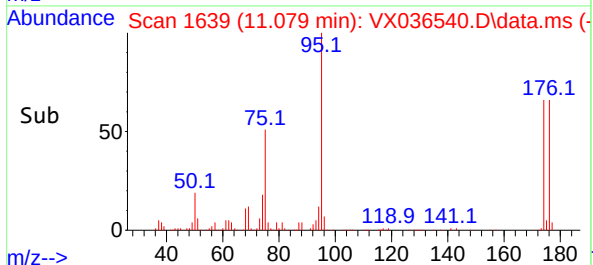
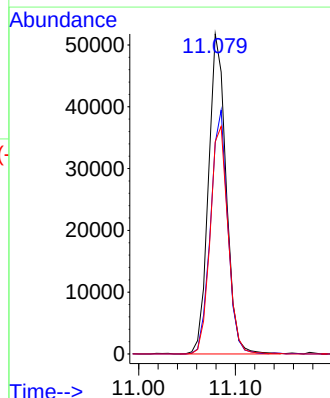
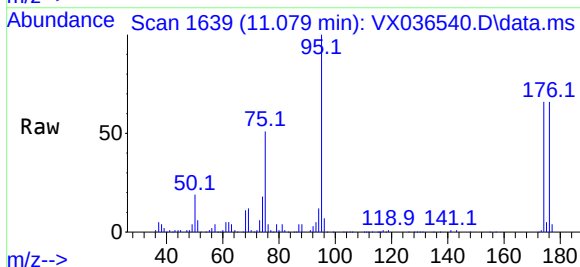
Tgt Ion: 95 Resp: 65726

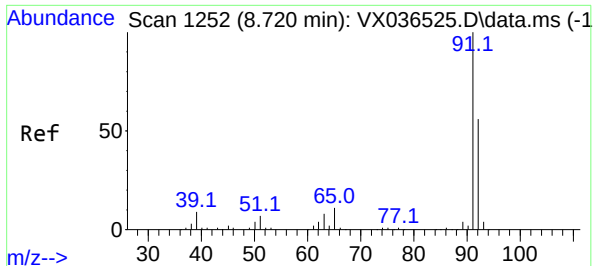
Ion Ratio Lower Upper

95 100

174 73.9 60.5 90.7

176 71.9 58.2 87.4





#62

Toluene

Concen: 1.453 ug/l

RT: 8.720 min Scan# 11

Delta R.T. -0.000 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

Instrument :

MSVOA_X

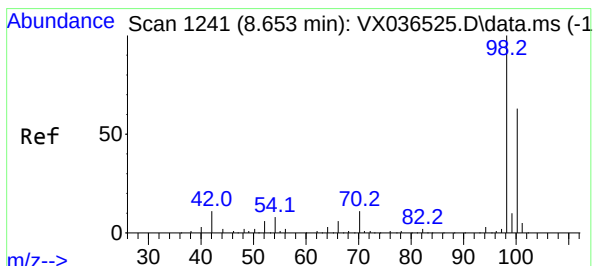
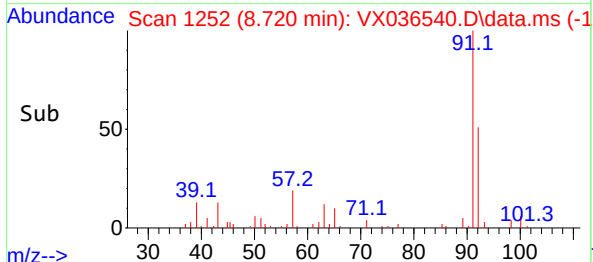
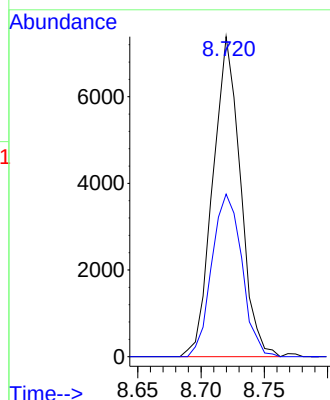
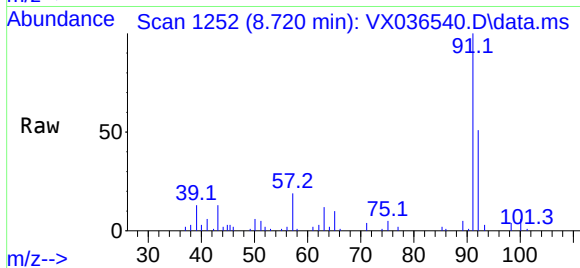
ClientSampleId :

Tgt Ion: 91 Resp: 11179

Ion Ratio Lower Upper

91 100

92 55.3 44.9 67.3



#63

Toluene-d8

Concen: 29.878 ug/l

RT: 8.647 min Scan# 1240

Delta R.T. -0.006 min

Lab File: VX036540.D

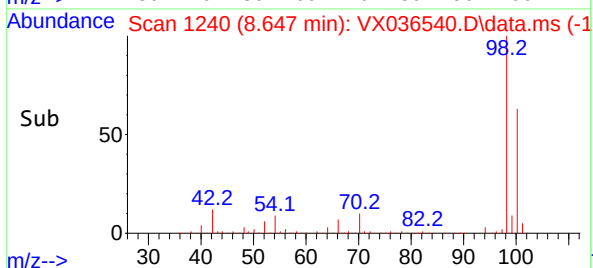
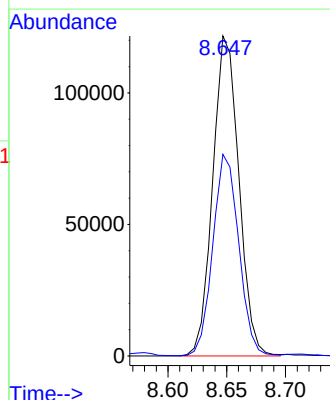
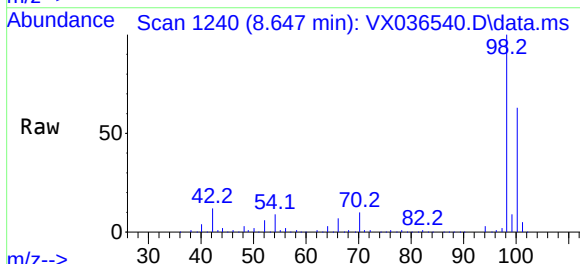
Acq: 13 Jul 2023 21:03

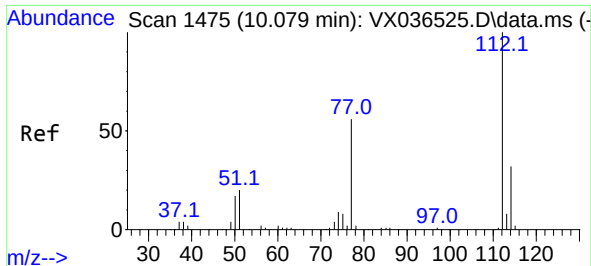
Tgt Ion: 98 Resp: 188480

Ion Ratio Lower Upper

98 100

100 62.5 51.6 77.4

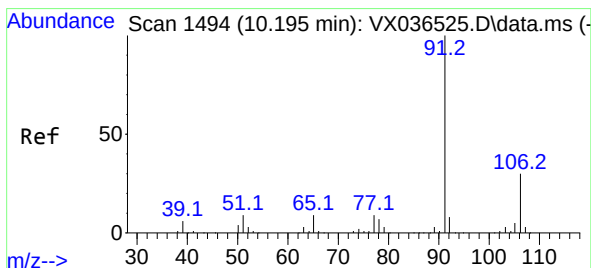
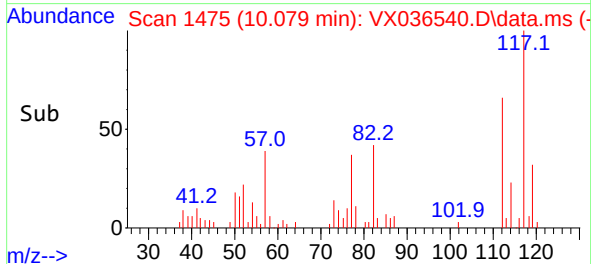
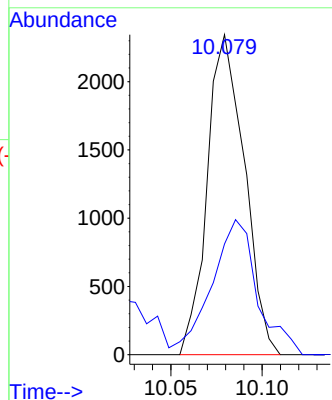
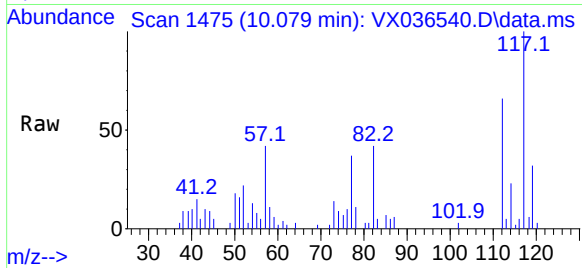




#64
Chlorobenzene
Concen: 0.693 ug/l
RT: 10.079 min Scan# 1475
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

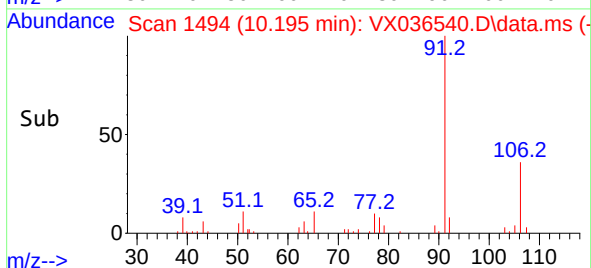
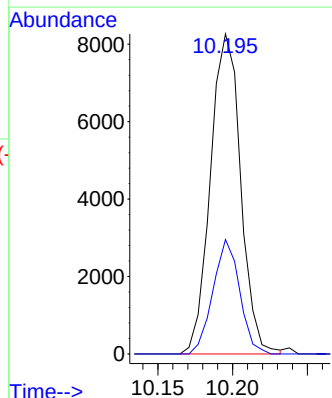
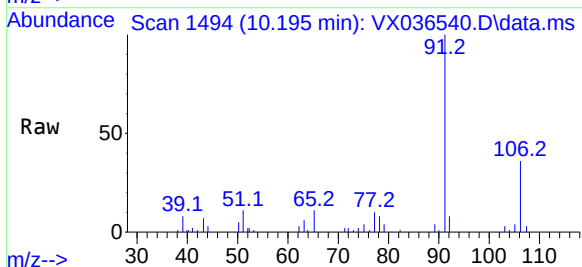
Instrument :
MSVOA_X
ClientSampleId :

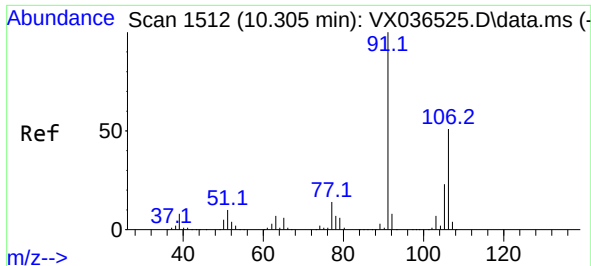
Tgt Ion:112 Resp: 3319
Ion Ratio Lower Upper
112 100
114 30.5 25.8 38.6



#66
Ethyl Benzene
Concen: 1.390 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 91 Resp: 11621
Ion Ratio Lower Upper
91 100
106 35.8 24.2 36.4





#67

m/p-Xylenes

Concen: 2.939 ug/l

RT: 10.299 min Scan# 1511

Delta R.T. -0.006 min

Lab File: VX036540.D

Acq: 13 Jul 2023 21:03

Instrument :

MSVOA_X

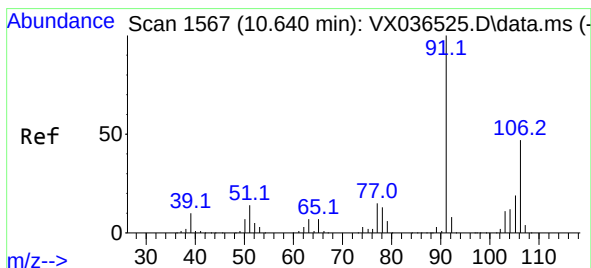
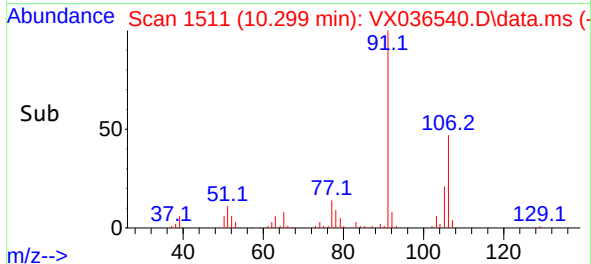
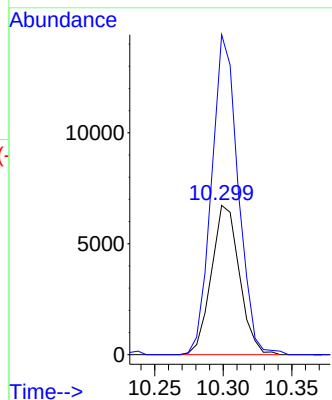
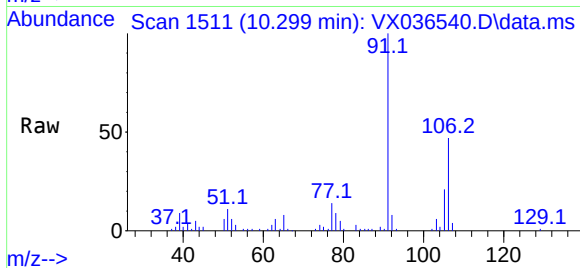
ClientSampleId :

Tgt Ion:106 Resp: 9577

Ion Ratio Lower Upper

106 100

91 202.5 160.5 240.7



#68

o-Xylene

Concen: 2.172 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. -0.000 min

Lab File: VX036540.D

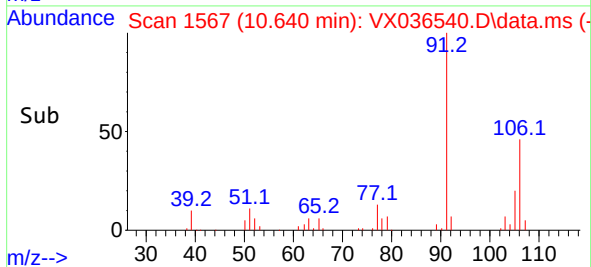
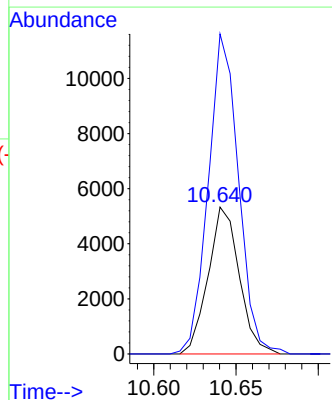
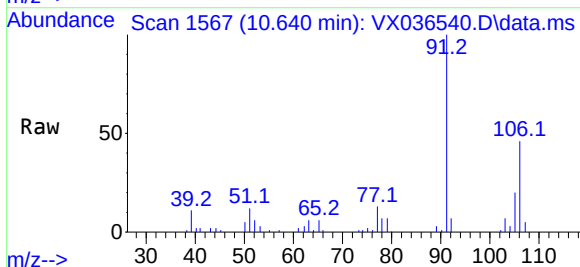
Acq: 13 Jul 2023 21:03

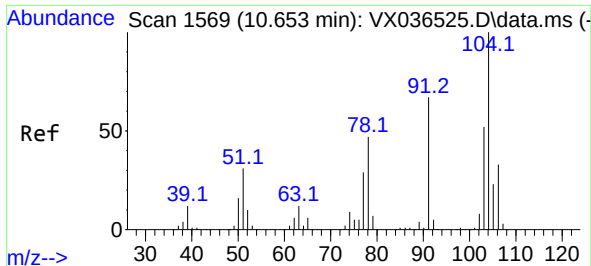
Tgt Ion:106 Resp: 7026

Ion Ratio Lower Upper

106 100

91 211.2 105.4 316.1

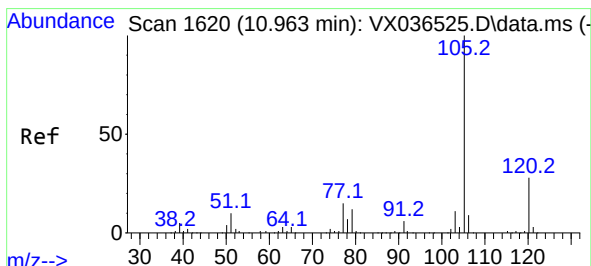
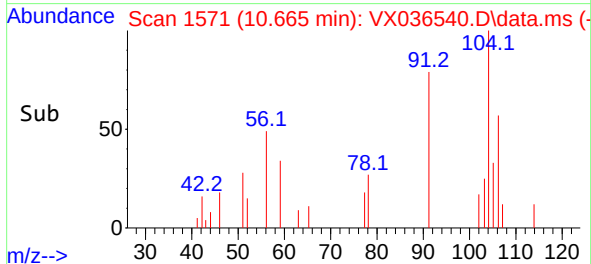
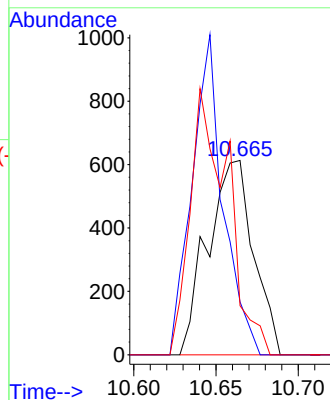
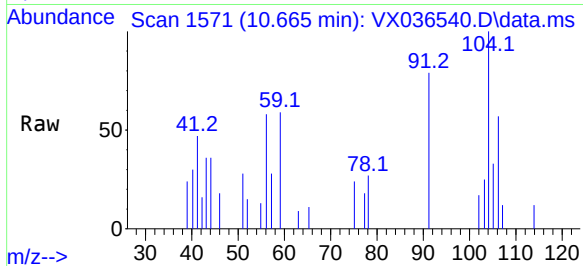




#69
Styrene
Concen: 0.227 ug/l
RT: 10.665 min Scan# 1191
Delta R.T. 0.012 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

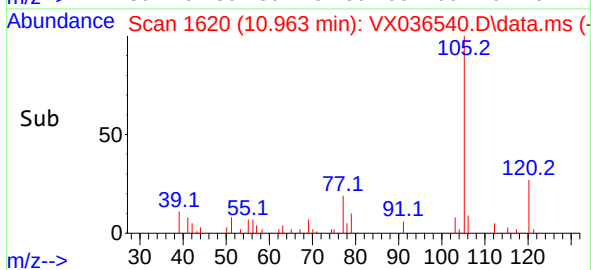
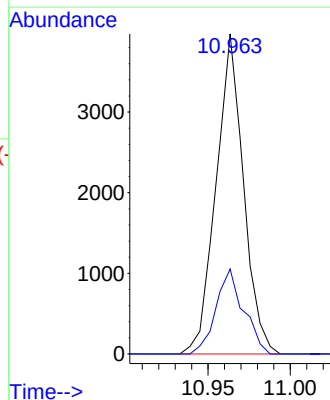
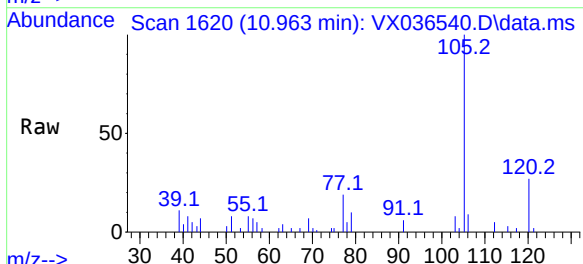
Instrument :
MSVOA_X
ClientSampleId :

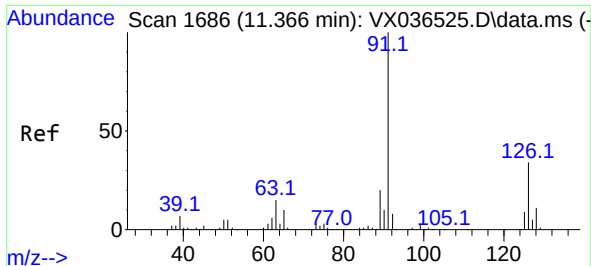
Tgt Ion:104 Resp: 1191
Ion Ratio Lower Upper
104 100
78 0.0 41.0 61.4#
103 20.7 45.5 68.3#



#70
Isopropylbenzene
Concen: 0.571 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion:105 Resp: 4602
Ion Ratio Lower Upper
105 100
120 26.7 19.5 36.3

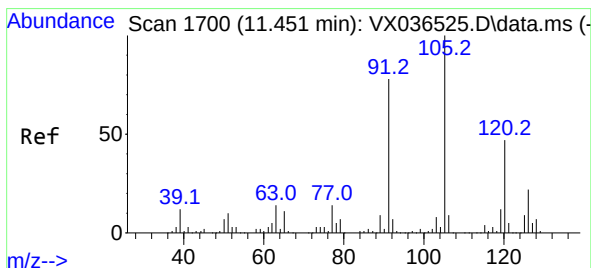
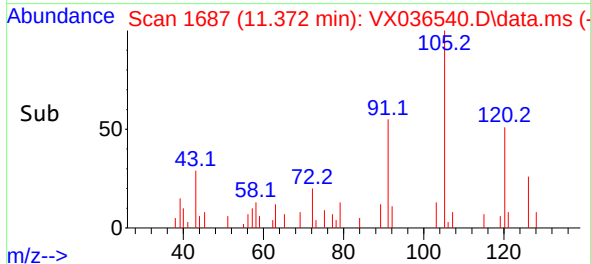
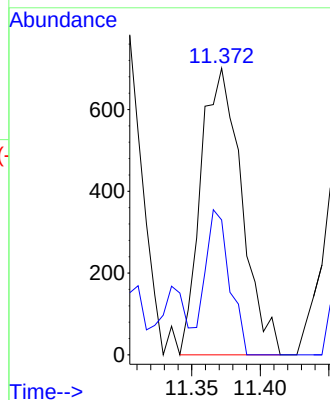
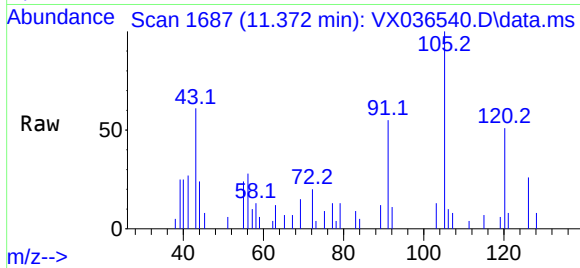




#75
2-Chlorotoluene
Concen: 0.252 ug/l
RT: 11.372 min Scan# 1
Delta R.T. 0.006 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

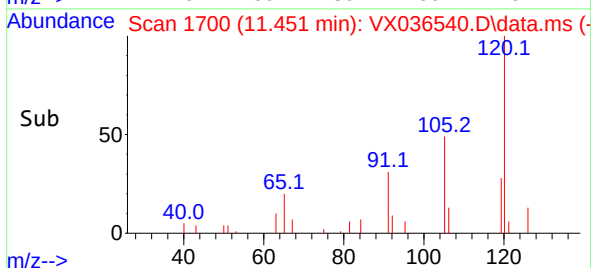
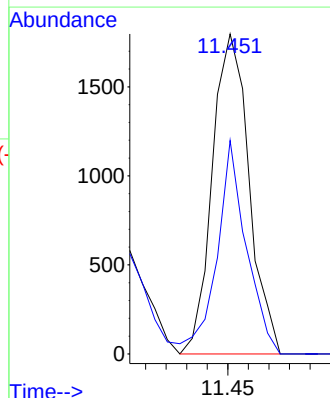
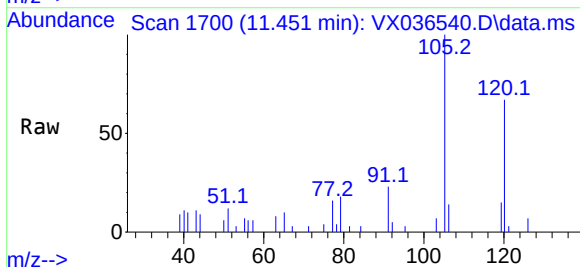
Instrument :
MSVOA_X
ClientSampleId :

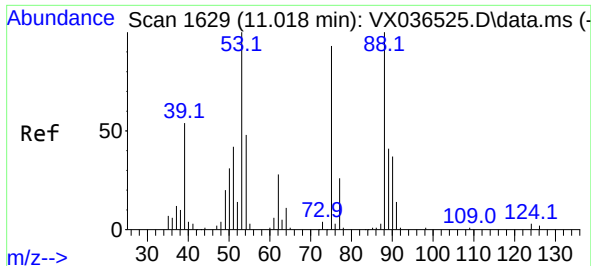
Tgt Ion: 91 Resp: 1451
Ion Ratio Lower Upper
91 100
126 31.1 0.0 66.2



#76
1,3,5-Trimethylbenzene
Concen: 0.322 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Tgt Ion: 105 Resp: 2229
Ion Ratio Lower Upper
105 100
120 53.0 0.0 96.4

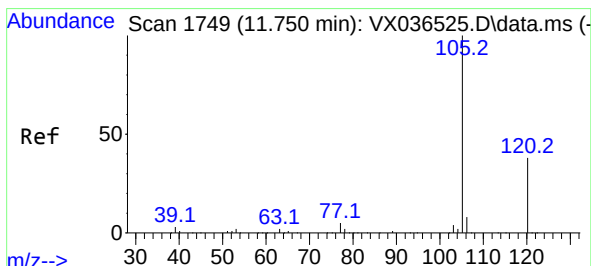
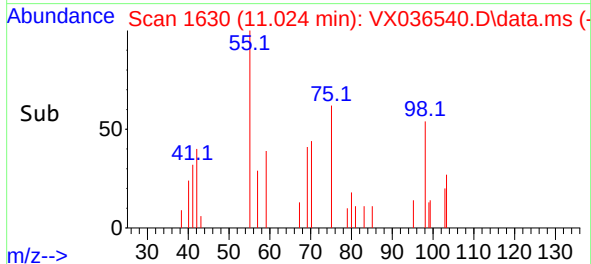
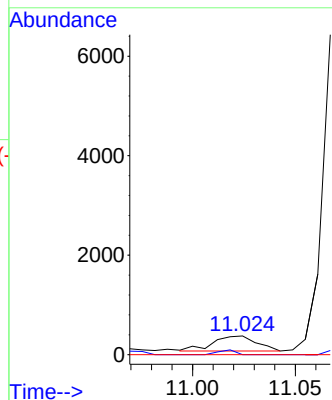
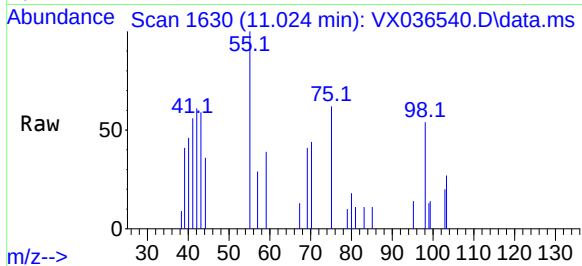




#77
t-1,4-Dichloro-2-butene
Concen: 0.507 ug/l
RT: 11.024 min Scan# 1630
Delta R.T. 0.006 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

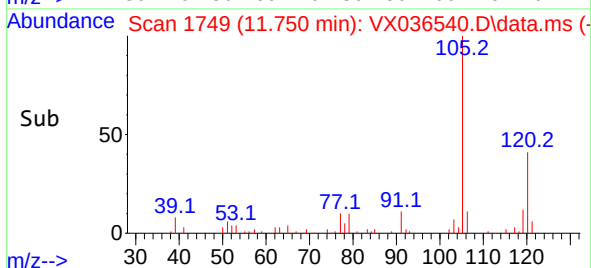
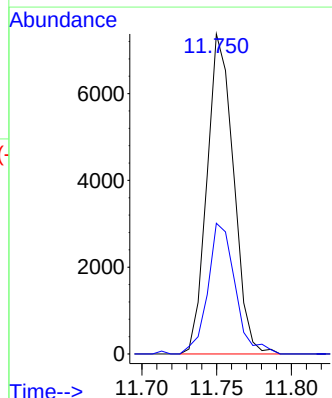
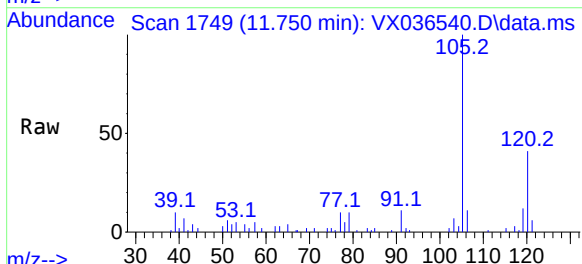
Instrument :
MSVOA_X
ClientSampleId :

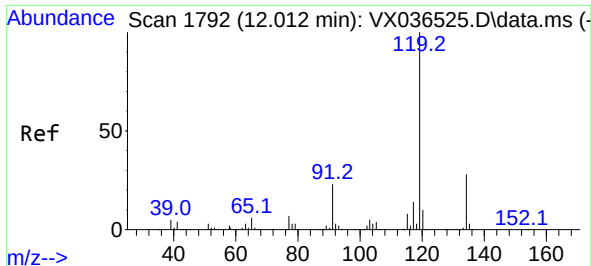
Tgt Ion: 75 Resp: 454
Ion Ratio Lower Upper
75 100
53 0.0 53.9 161.7#
89 0.0 22.1 66.1#



#80
1,2,4-Trimethylbenzene
Concen: 1.329 ug/l
RT: 11.750 min Scan# 1749
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

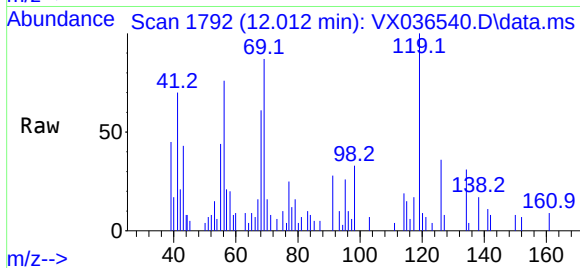
Tgt Ion: 105 Resp: 9113
Ion Ratio Lower Upper
105 100
120 42.0 0.0 90.2



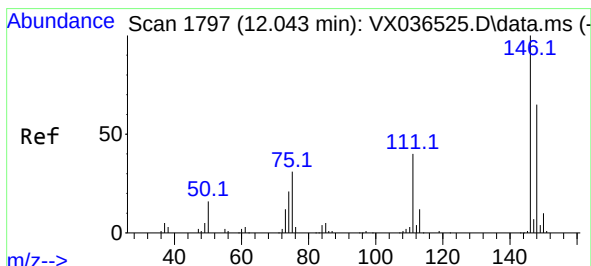
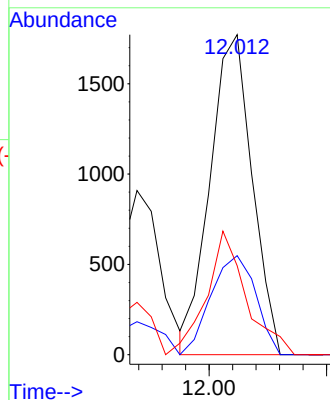
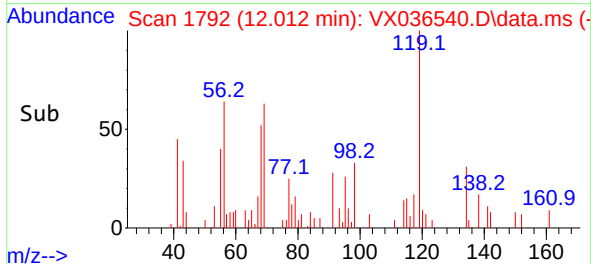


#82
p-Isopropyltoluene
Concen: 0.321 ug/l
RT: 12.012 min Scan# 119
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

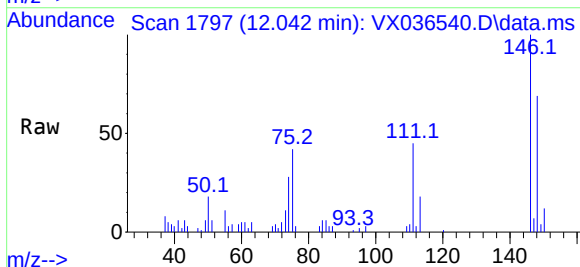
Instrument :
MSVOA_X
ClientSampleId :



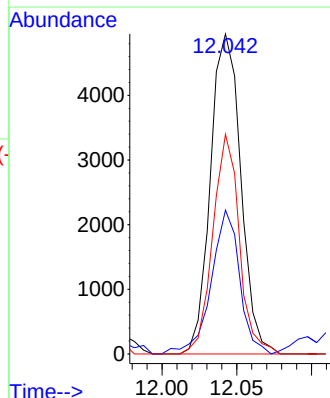
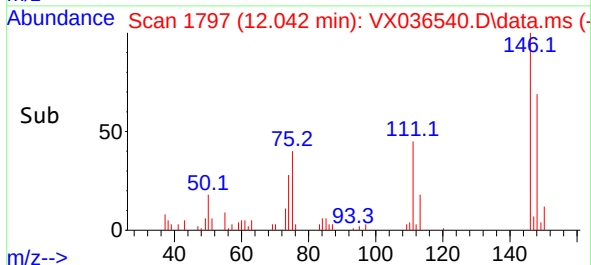
Tgt Ion:119 Resp: 2207
Ion Ratio Lower Upper
119 100
134 32.9 0.0 53.2
91 36.4 0.0 49.4

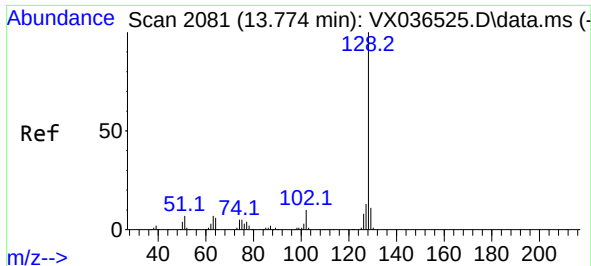


#84
1,4-Dichlorobenzene
Concen: 1.894 ug/l
RT: 12.042 min Scan# 1797
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03



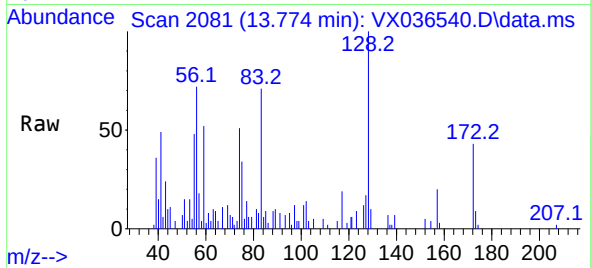
Tgt Ion:146 Resp: 6992
Ion Ratio Lower Upper
146 100
111 42.0 20.2 60.6
148 60.0 32.1 96.3





#91
Naphthalene
Concen: 0.488 ug/l
RT: 13.774 min Scan# 2081
Delta R.T. -0.000 min
Lab File: VX036540.D
Acq: 13 Jul 2023 21:03

Instrument :
MSVOA_X
ClientSampleId :



Tgt Ion:	128	Resp:	4009
Ion	Ratio	Lower	Upper
128	100		
127	14.0	10.3	15.5
129	10.3	8.7	13.1

