

Data Path : Z:\voasrv\HPCHEM1\MSVOA_D\Data\VD120823\
 Data File : VD077798.D
 Acq On : 08 Dec 2023 18:31
 Operator : JC/SY
 Sample : 05671-05
 Misc : 5.04G/5.0ml/MSVOA_D/SOIL
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 TP-35

Quant Time: Dec 08 23:13:50 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_D\Method\82D120823S.M
 Quant Title : SW846 8260
 QLast Update : Fri Dec 08 13:33:18 2023
 Response via : Initial Calibration

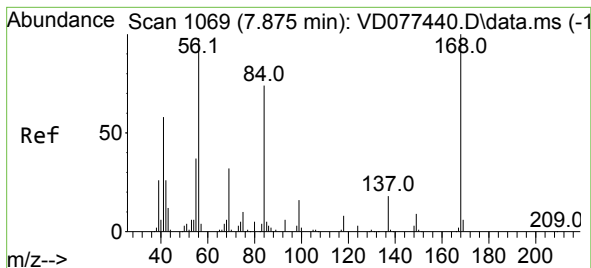
Compound	R.T. QIon		Response	Conc	Units	Dev(Min)

Internal Standards						
1) Pentafluorobenzene	7.881	168	4700	50.000	ug/l	# 0.00
34) 1,4-Difluorobenzene	8.781	114	9952	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.581	117	9474	50.000	ug/l	# 0.00
72) 1,4-Dichlorobenzene-d4	13.522	152	4661	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.234	65	4012	72.441	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	= 144.880%	
35) Dibromofluoromethane	7.793	113	2473	35.475	ug/l	-0.01
Spiked Amount	50.000	Range	54 - 147	Recovery	= 70.960%	
50) Toluene-d8	10.275	98	12253	43.886	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	= 87.780%	
62) 4-Bromofluorobenzene	12.569	95	3905	46.781	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	= 93.560%	
Target Compounds						
					Qvalue	
3) Chloromethane	2.152	50	315	3.936	ug/l	92
5) Bromomethane	2.711	94	151	2.477	ug/l	84
6) Chloroethane	2.846	64	311	4.199	ug/l #	43
10) Methyl Iodide	4.175	142	53	7.655	ug/l #	46
11) Tert butyl alcohol	4.940	59	61	12.148	ug/l #	1
13) Acrolein	3.852	56	55	9.388	ug/l #	15
16) Acetone	4.022	43	143	Below Cal	#	32
18) Methyl Acetate	4.552	43	81	1.857	ug/l #	42
19) Methyl tert-butyl Ether	5.299	73	177	1.477	ug/l #	55
20) Methylene Chloride	4.811	84	55	Below Cal	#	17
25) 2-Butanone	7.099	43	56	Below Cal	#	37
28) Bromochloromethane	7.328	49	56	1.260	ug/l #	1
29) Tetrahydrofuran	7.440	42	57	6.463	ug/l #	23
37) Ethyl Acetate	7.122	43	61	1.403	ug/l #	62
38) Carbon Tetrachloride	7.881	117	244	2.195	ug/l #	11
41) Methacrylonitrile	7.422	41	82	3.711	ug/l #	1
43) Isopropyl Acetate	8.375	43	139	1.798	ug/l #	86
48) Methyl methacrylate	9.399	41	65	1.479	ug/l #	51
49) 1,4-Dioxane	9.122	88	71	175.652	ug/l #	33
51) 4-Methyl-2-Pentanone	10.181	43	71	1.800	ug/l #	28
56) Ethyl methacrylate	10.663	69	67	1.365	ug/l #	1
59) 2-Hexanone	10.916	43	93	2.842	ug/l	79
65) Chlorobenzene	11.610	112	763	1.619	ug/l #	87
76) 1,2,3-Trichloropropane	12.751	75	62	1.532	ug/l #	100
77) Bromobenzene	12.698	156	391	4.706	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.575	75	2046	102.402	ug/l #	17
87) 1,3-Dichlorobenzene	13.540	146	352	2.072	ug/l	85
93) 1,2,4-Trichlorobenzene	15.104	180	468	4.741	ug/l #	38
95) Naphthalene	15.328	128	2086	12.719	ug/l #	81
96) 1,2,3-Trichlorobenzene	15.522	180	224	2.753	ug/l #	13

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

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Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.881 min Scan# 10

Delta R.T. 0.006 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

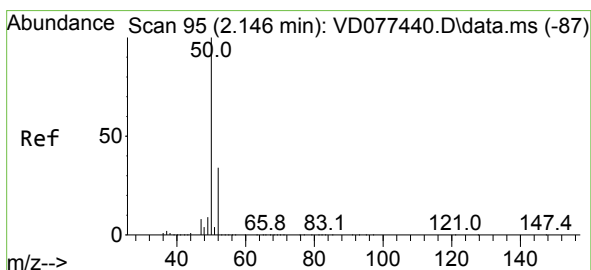
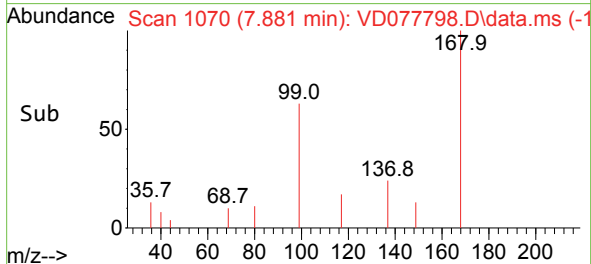
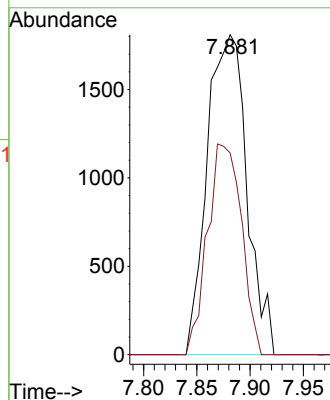
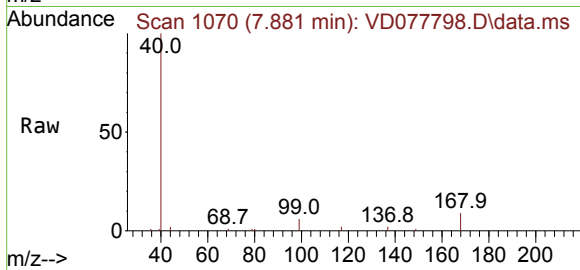
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Tgt Ion:168 Resp: 4700

Ion Ratio Lower Upper

168 100

99 63.0 36.7 55.1#



#3

Chloromethane

Concen: 3.936 ug/l

RT: 2.152 min Scan# 96

Delta R.T. 0.006 min

Lab File: VD077798.D

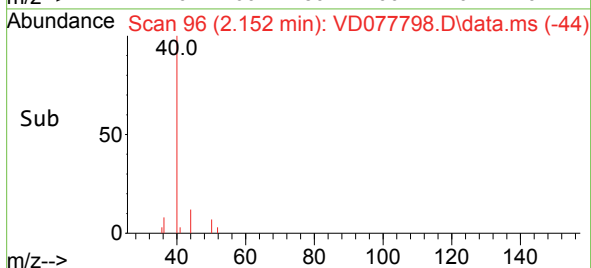
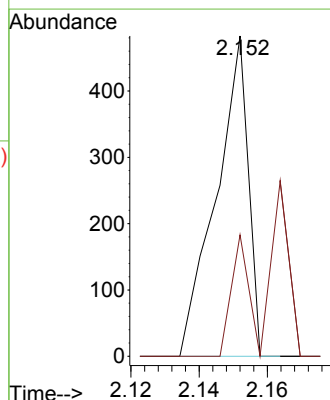
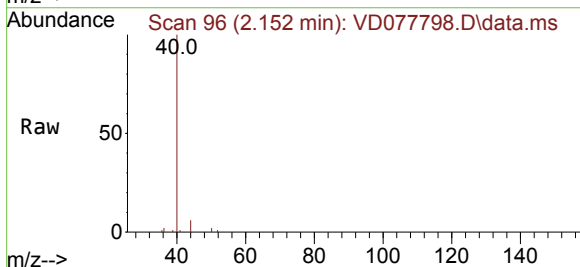
Acq: 08 Dec 2023 18:31

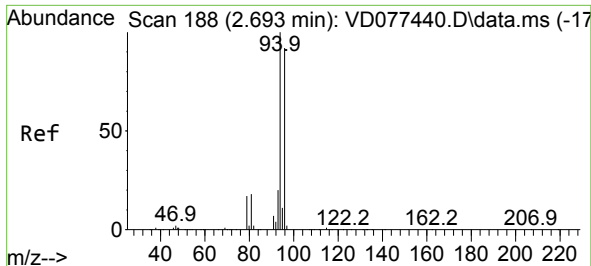
Tgt Ion: 50 Resp: 315

Ion Ratio Lower Upper

50 100

52 37.9 26.6 40.0

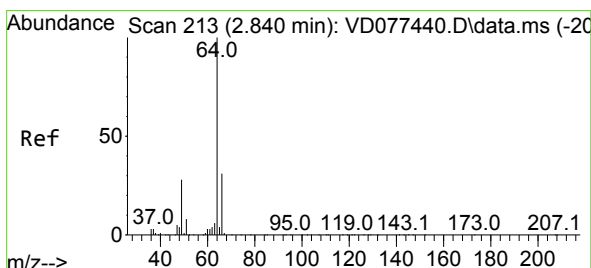
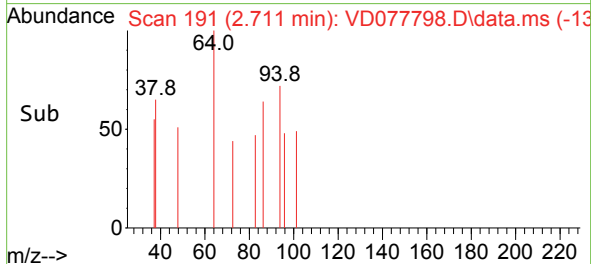
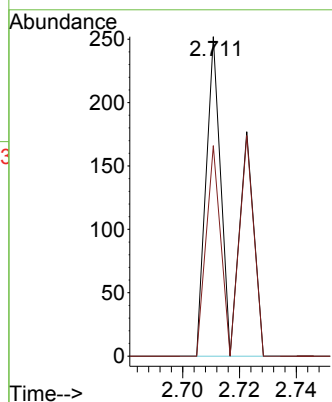
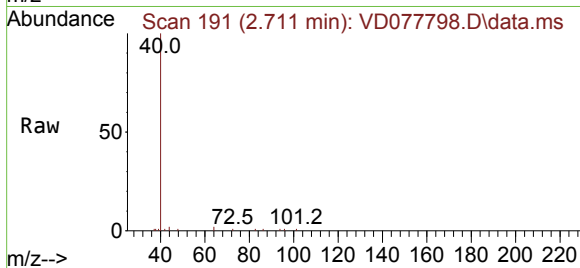




#5
Bromomethane
Concen: 2.477 ug/l
RT: 2.711 min Scan# 191
Delta R.T. 0.018 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

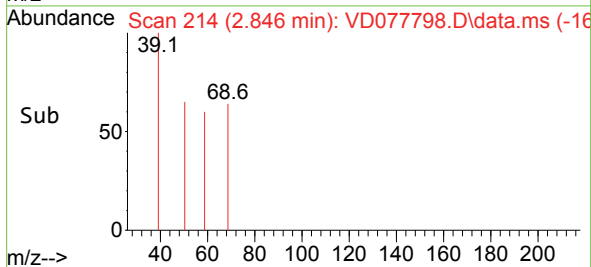
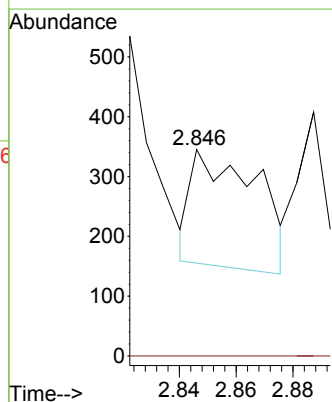
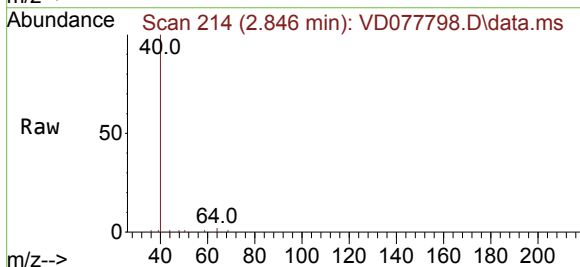
Instrument :
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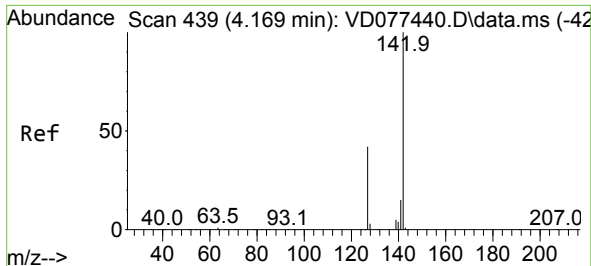
Tgt Ion: 94 Resp: 151
Ion Ratio Lower Upper
94 100
96 79.5 75.8 113.8



#6
Chloroethane
Concen: 4.199 ug/l
RT: 2.846 min Scan# 214
Delta R.T. 0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 64 Resp: 311
Ion Ratio Lower Upper
64 100
66 0.0 25.5 38.3#

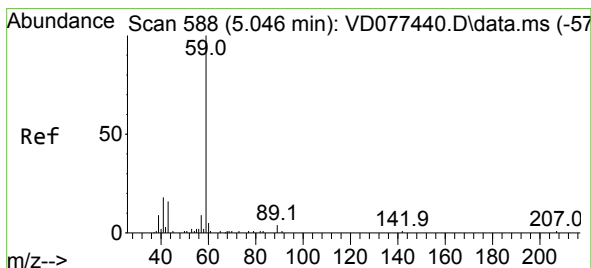
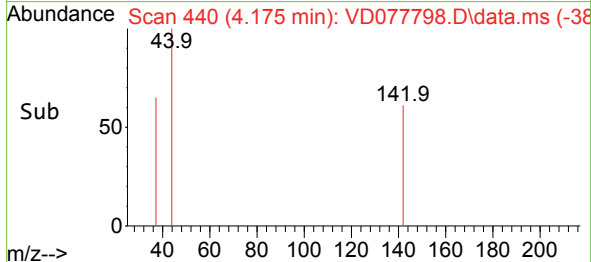
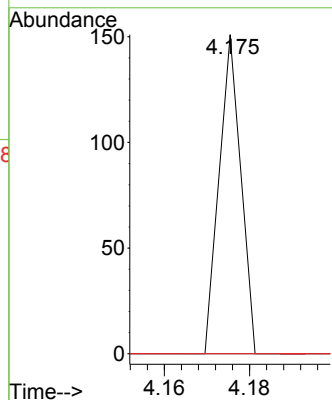
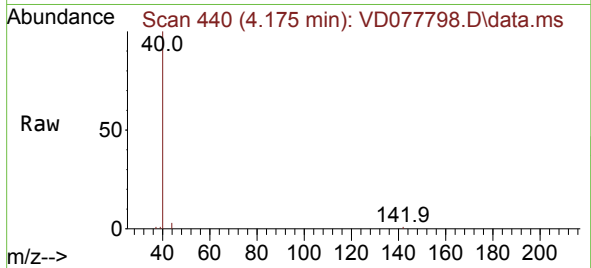




#10
Methyl Iodide
Concen: 7.655 ug/l
RT: 4.175 min Scan# 440
Delta R.T. 0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

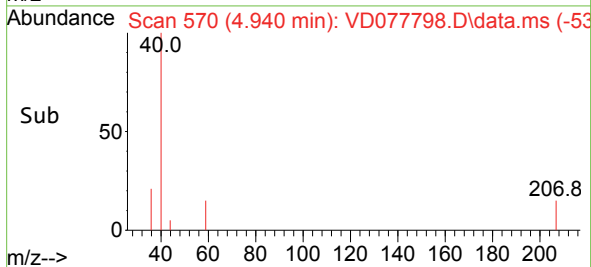
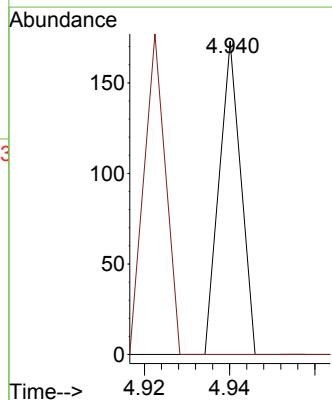
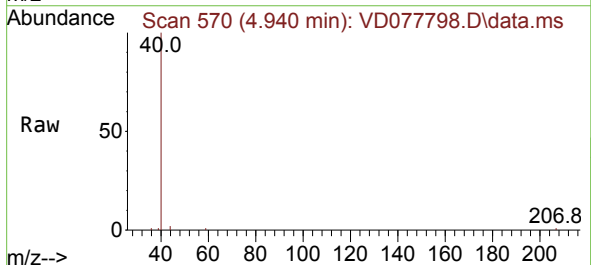
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MSVOA_D
ClientSampleId :
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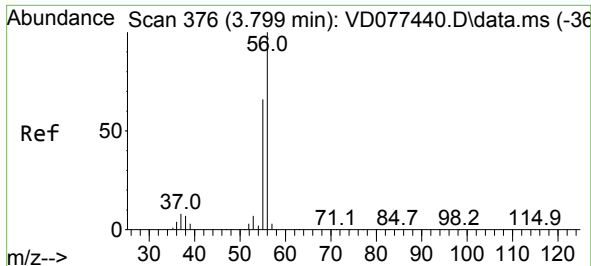
Tgt Ion:142 Resp: 53
Ion Ratio Lower Upper
142 100
127 0.0 29.4 44.0#
141 0.0 11.1 16.7#



#11
Tert butyl alcohol
Concen: 12.148 ug/l
RT: 4.940 min Scan# 570
Delta R.T. -0.106 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 59 Resp: 61
Ion Ratio Lower Upper
59 100
57 101.6 7.8 11.8#

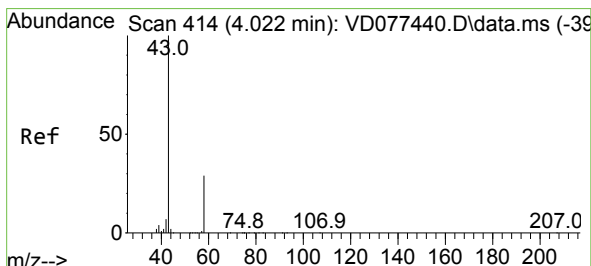
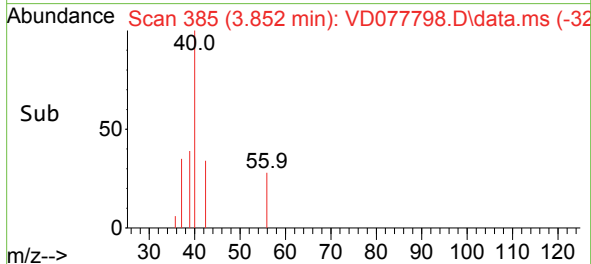
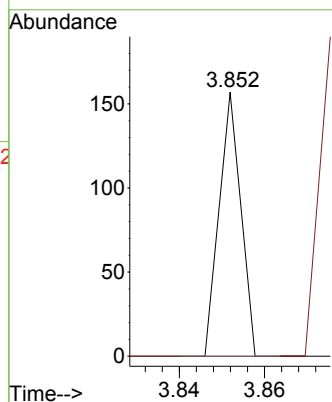
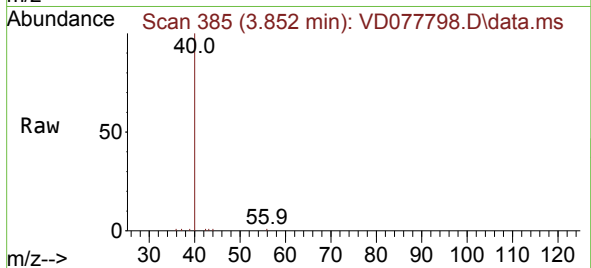




#13
Acrolein
Concen: 9.388 ug/l
RT: 3.852 min Scan# 385
Delta R.T. 0.053 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

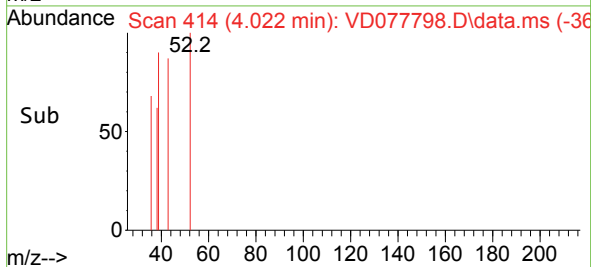
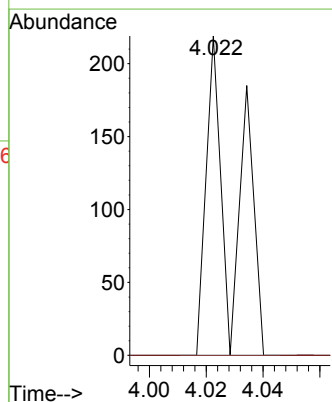
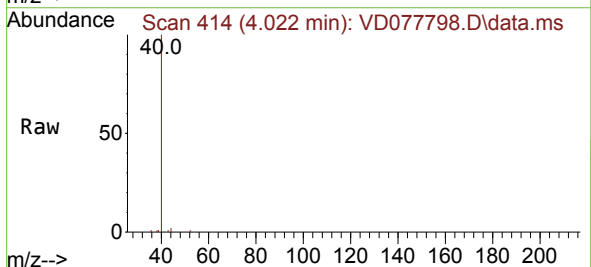
Instrument :
MSVOA_D
ClientSampleId :
TP-35

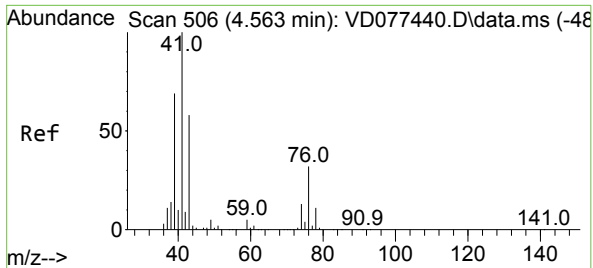
Tgt Ion: 56 Resp: 55
Ion Ratio Lower Upper
56 100
55 0.0 55.1 82.7#



#16
Acetone
Concen: Below Cal
RT: 4.022 min Scan# 414
Delta R.T. 0.000 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 43 Resp: 143
Ion Ratio Lower Upper
43 100
58 0.0 34.7 52.1#

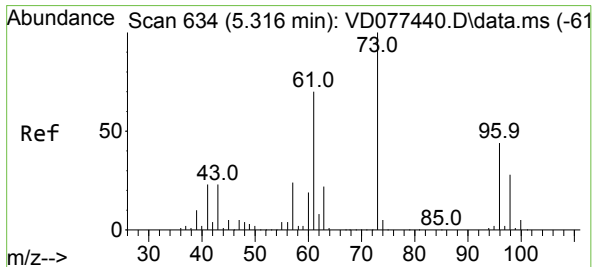
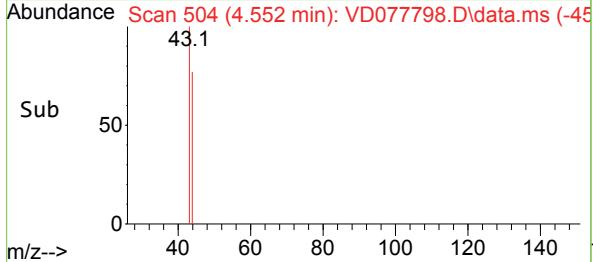
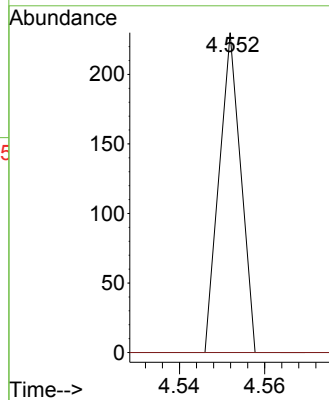
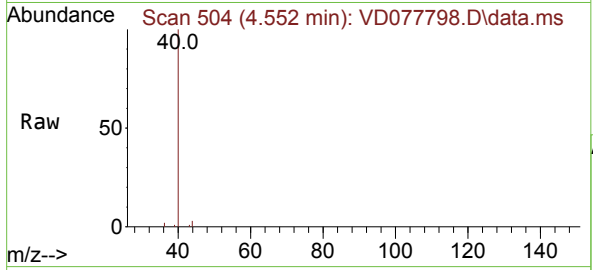




#18
Methyl Acetate
Concen: 1.857 ug/l
RT: 4.552 min Scan# 506
Delta R.T. -0.011 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

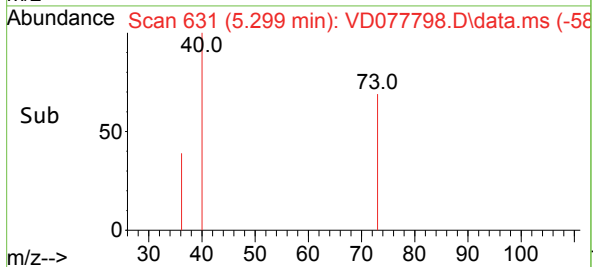
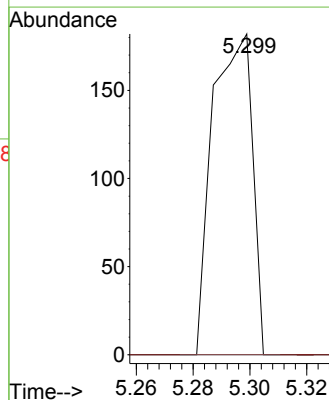
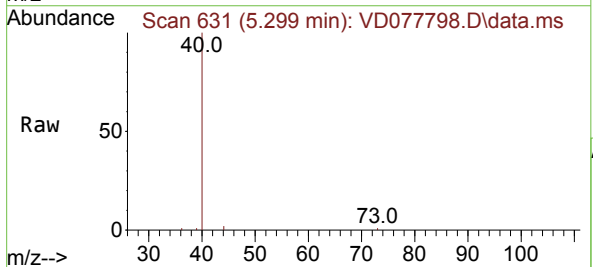
Instrument :
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ClientSampleId :
TP-35

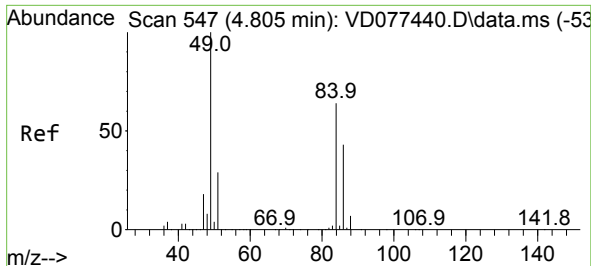
Tgt Ion: 43 Resp: 81
Ion Ratio Lower Upper
43 100
74 0.0 26.4 39.6#



#19
Methyl tert-butyl Ether
Concen: 1.477 ug/l
RT: 5.299 min Scan# 631
Delta R.T. -0.017 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

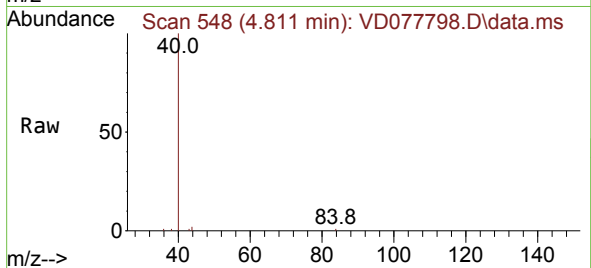
Tgt Ion: 73 Resp: 177
Ion Ratio Lower Upper
73 100
57 0.0 16.6 25.0#



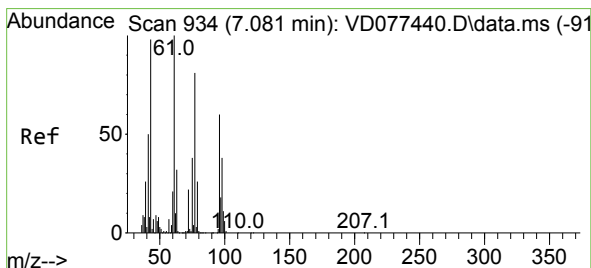
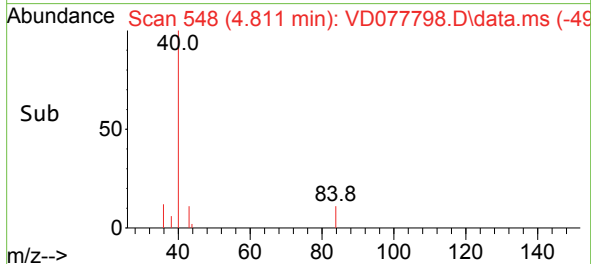
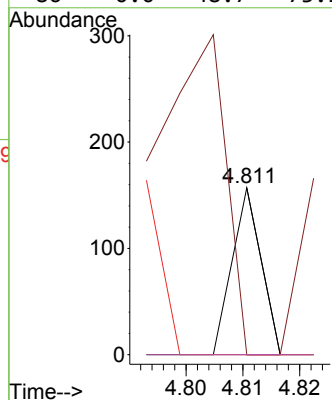


#20
Methylene Chloride
Concen: Below Cal
RT: 4.811 min Scan# 54
Delta R.T. 0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Instrument :
MSVOA_D
ClientSampleId :
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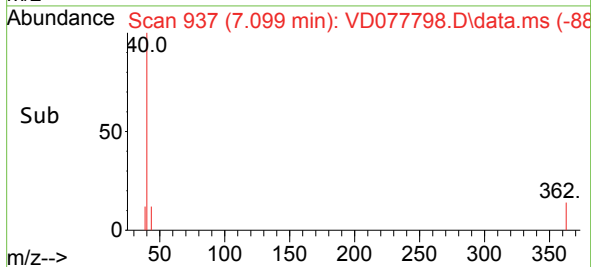
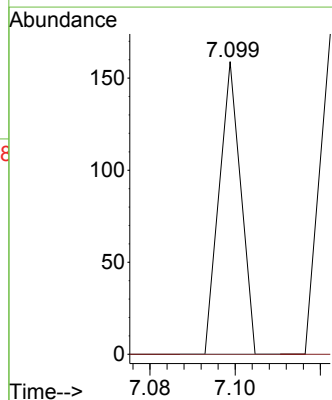
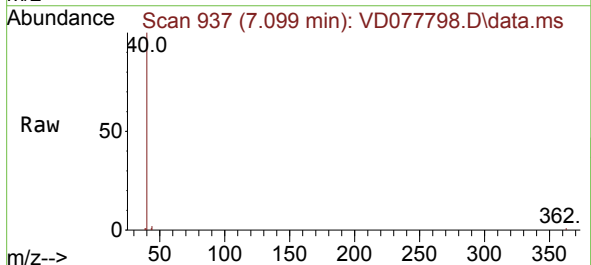


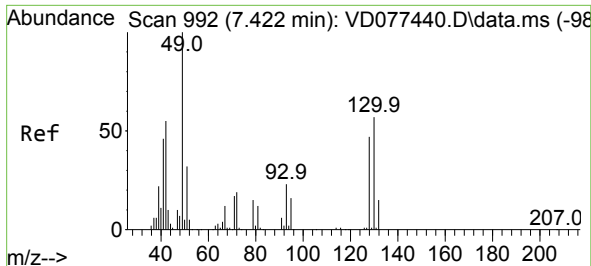
Tgt Ion: 84 Resp: 55
Ion Ratio Lower Upper
84 100
49 0.0 71.4 107.2#
51 0.0 24.5 36.7#
86 0.0 48.7 73.1#



#25
2-Butanone
Concen: Below Cal
RT: 7.099 min Scan# 937
Delta R.T. 0.018 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 43 Resp: 56
Ion Ratio Lower Upper
43 100
72 0.0 30.7 46.1#

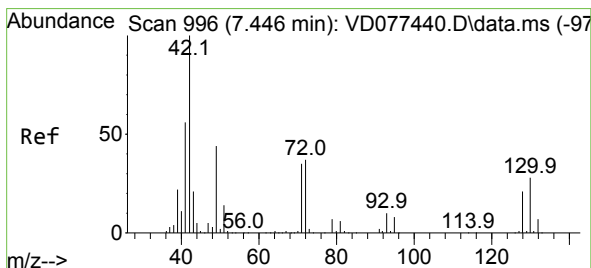
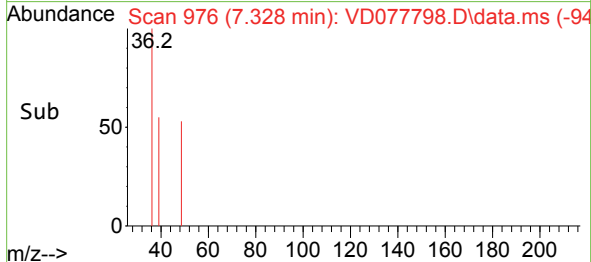
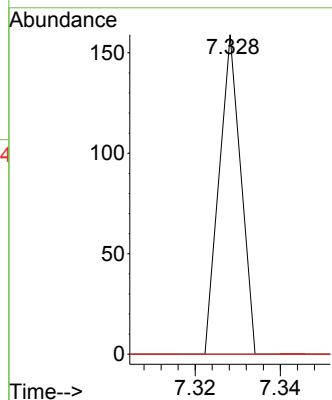
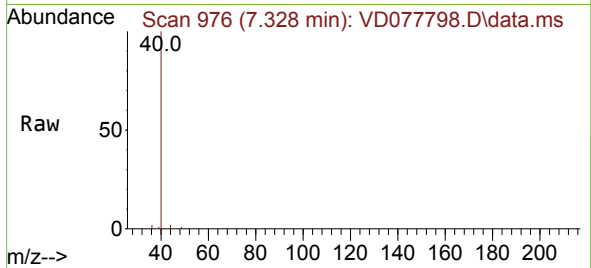




#28
Bromochloromethane
Concen: 1.260 ug/l
RT: 7.328 min Scan# 91
Delta R.T. -0.094 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

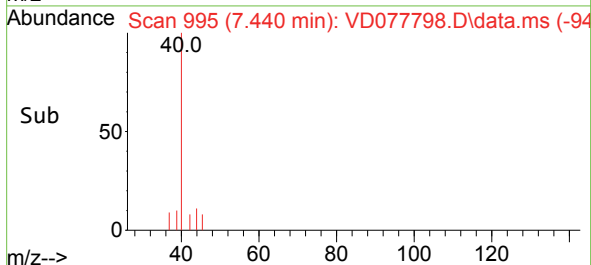
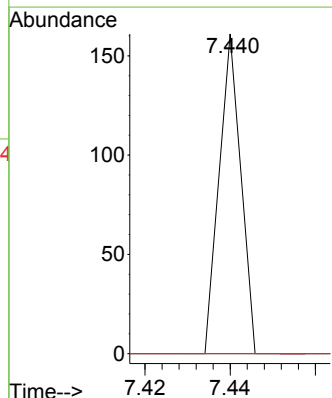
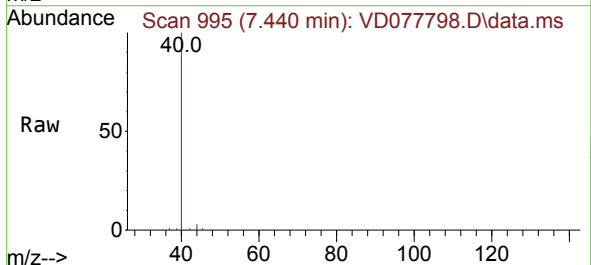
Instrument :
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ClientSampleId :
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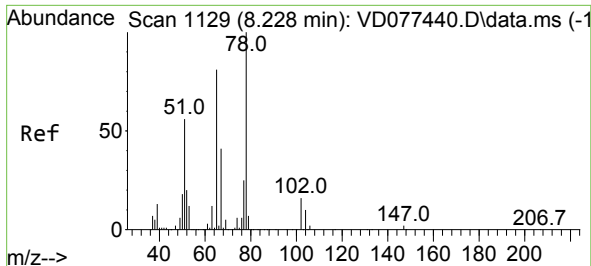
Tgt Ion: 49 Resp: 56
Ion Ratio Lower Upper
49 100
129 0.0 0.0 6.0
130 0.0 83.2 124.8#



#29
Tetrahydrofuran
Concen: 6.463 ug/l
RT: 7.440 min Scan# 995
Delta R.T. -0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 42 Resp: 57
Ion Ratio Lower Upper
42 100
72 0.0 46.5 69.7#
71 0.0 44.5 66.7#





#33

1,2-Dichloroethane-d4

Concen: 72.441 ug/l

RT: 8.234 min Scan# 1129

Delta R.T. 0.006 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

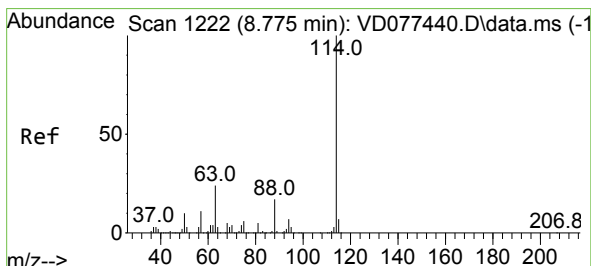
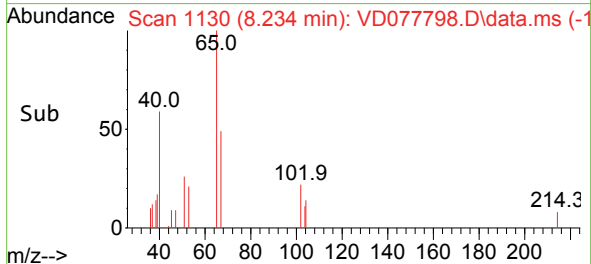
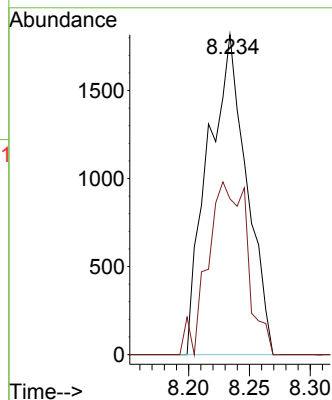
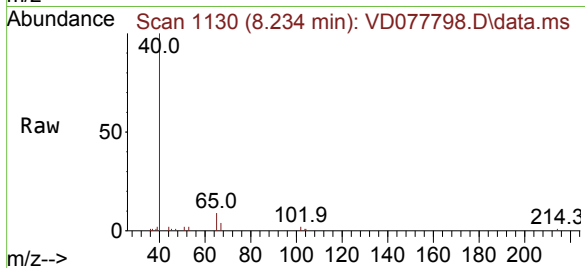
TP-35

Tgt Ion: 65 Resp: 4012

Ion Ratio Lower Upper

65 100

67 55.3 0.0 115.0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.781 min Scan# 1223

Delta R.T. 0.006 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

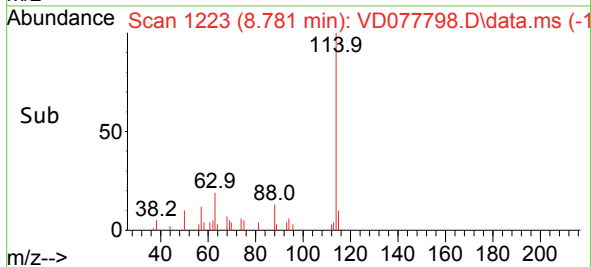
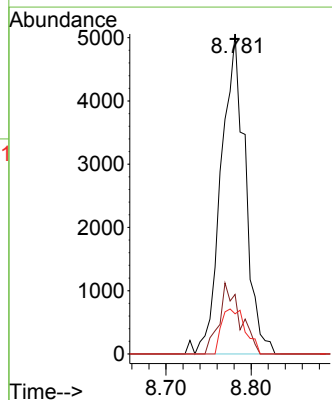
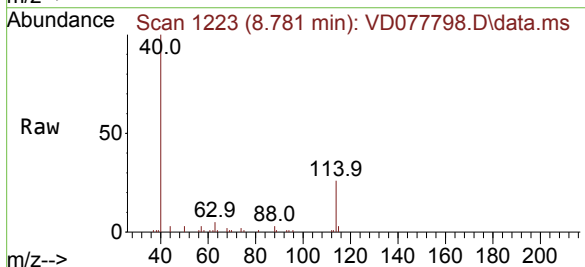
Tgt Ion: 114 Resp: 9952

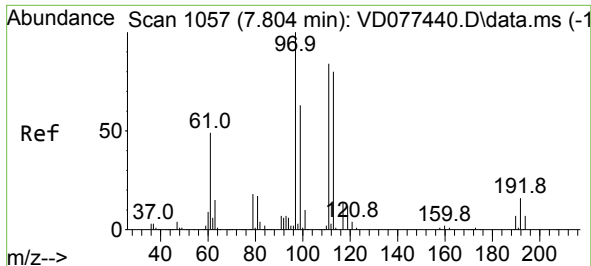
Ion Ratio Lower Upper

114 100

63 18.6 0.0 33.4

88 12.5 0.0 26.2





#35

Dibromofluoromethane

Concen: 35.475 ug/l

RT: 7.793 min Scan# 1055

Delta R.T. -0.011 min

Lab File: VD077798.D

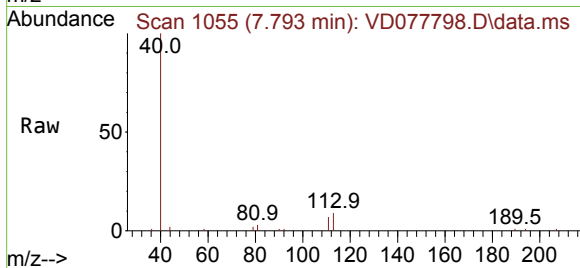
Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

TP-35



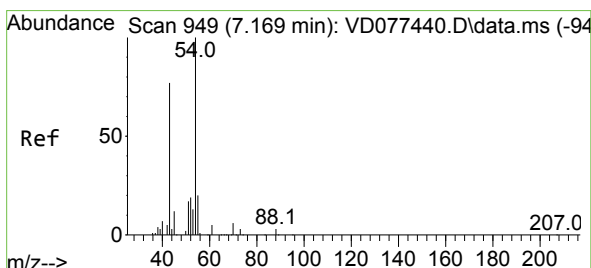
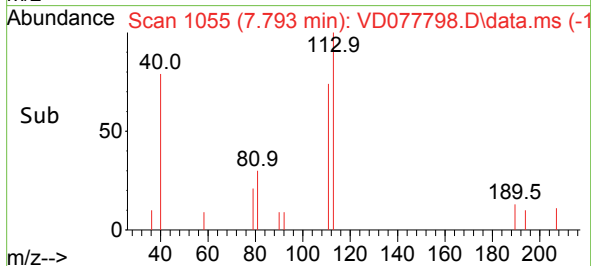
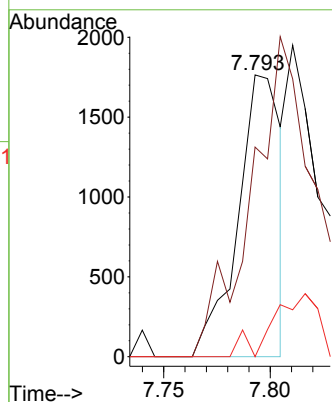
Tgt Ion:113 Resp: 2473

Ion Ratio Lower Upper

113 100

111 0.0 84.7 127.1#

192 0.0 16.8 25.2#



#37

Ethyl Acetate

Concen: 1.403 ug/l

RT: 7.122 min Scan# 941

Delta R.T. -0.047 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

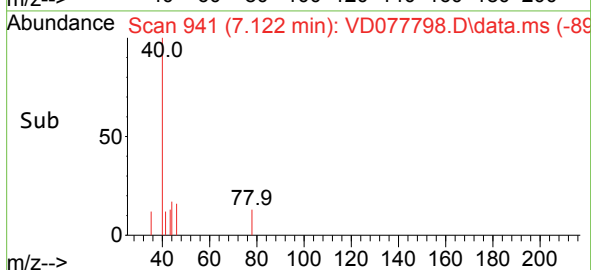
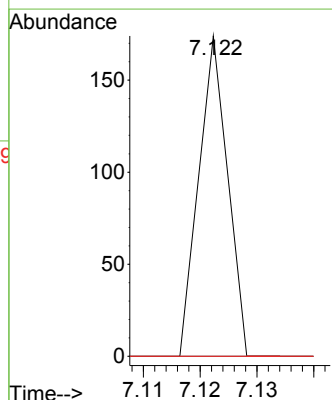
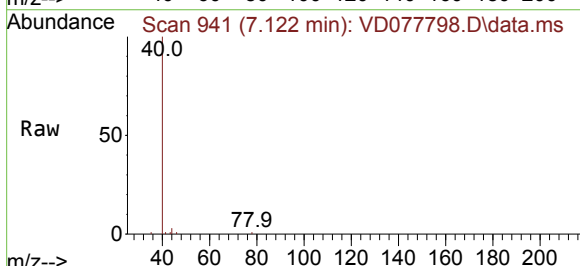
Tgt Ion: 43 Resp: 61

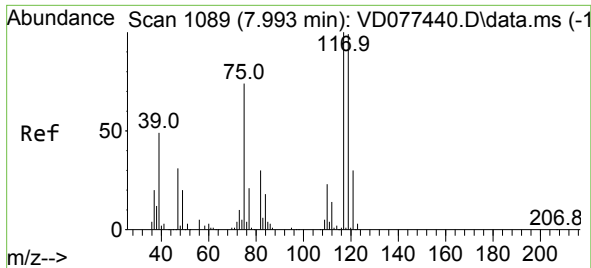
Ion Ratio Lower Upper

43 100

61 0.0 14.9 22.3#

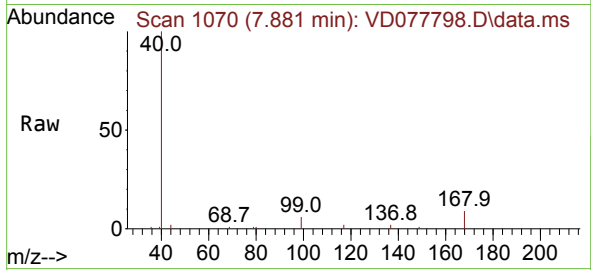
70 0.0 10.0 15.0#



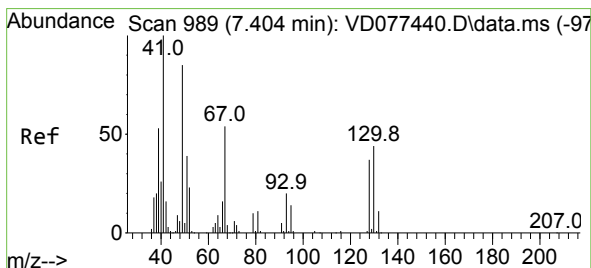
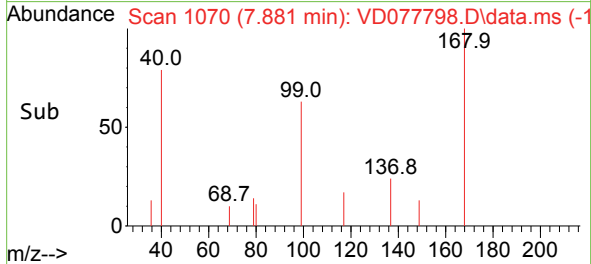
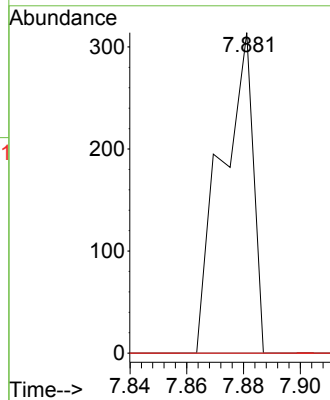


#38
Carbon Tetrachloride
Concen: 2.195 ug/l
RT: 7.881 min Scan# 1089
Delta R.T. -0.112 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Instrument :
MSVOA_D
ClientSampleId :
TP-35

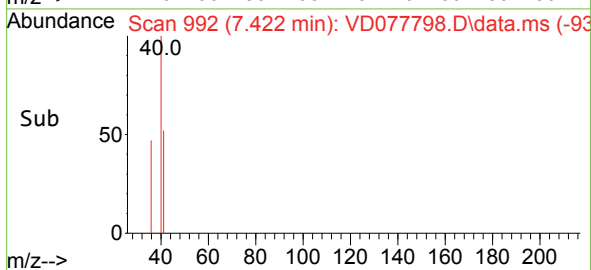
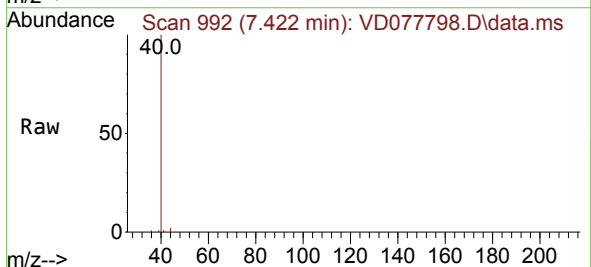
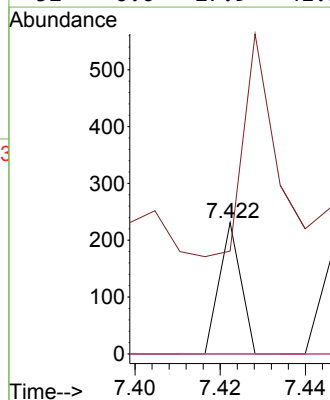


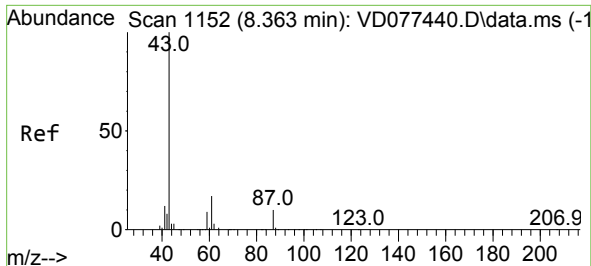
Tgt Ion:117 Resp: 244
Ion Ratio Lower Upper
117 100
119 0.0 78.0 117.0#
121 0.0 24.2 36.2#



#41
Methacrylonitrile
Concen: 3.711 ug/l
RT: 7.422 min Scan# 992
Delta R.T. 0.018 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 41 Resp: 82
Ion Ratio Lower Upper
41 100
39 248.8 34.0 51.0#
67 0.0 77.0 115.4#
52 0.0 27.9 41.9#

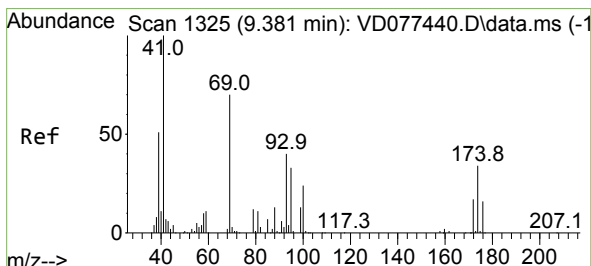
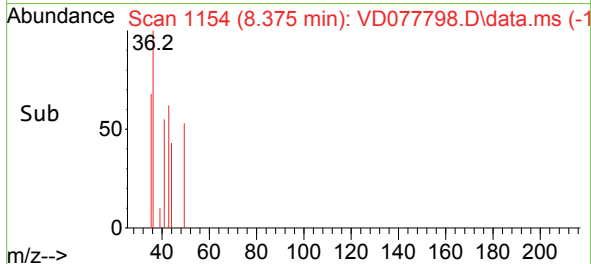
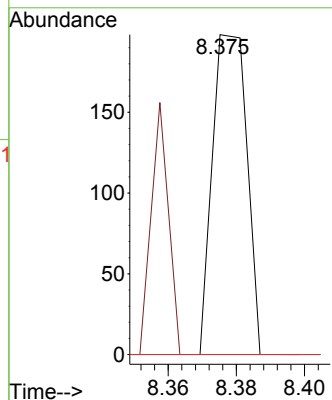
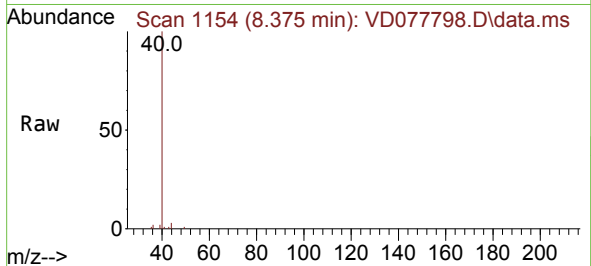




#43
Isopropyl Acetate
Concen: 1.798 ug/l
RT: 8.375 min Scan# 1154
Delta R.T. 0.012 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

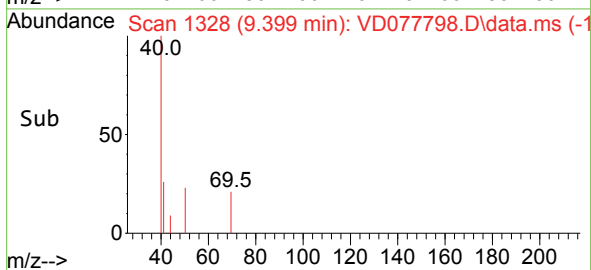
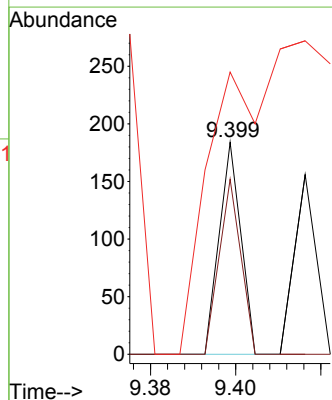
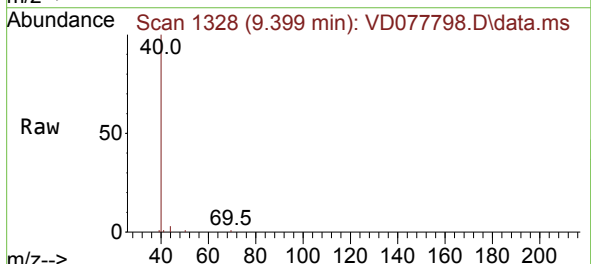
Instrument :
MSVOA_D
ClientSampleId :
TP-35

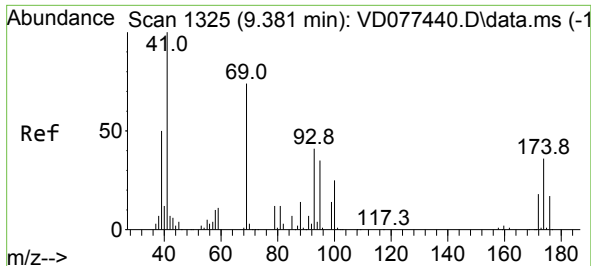
Tgt Ion: 43	Resp: 139
Ion Ratio	Lower Upper
43 100	
61 39.6	31.4 47.0
87 0.0	14.9 22.3#



#48
Methyl methacrylate
Concen: 1.479 ug/l
RT: 9.399 min Scan# 1328
Delta R.T. 0.018 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 41	Resp: 65		
Ion Ratio	Lower	Upper	
41 100			
69 83.1	102.2	153.2#	
39 0.0	41.4	62.2#	





#49

1,4-Dioxane

Concen: 175.652 ug/l

RT: 9.122 min Scan# 1

Delta R.T. -0.259 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

TP-35

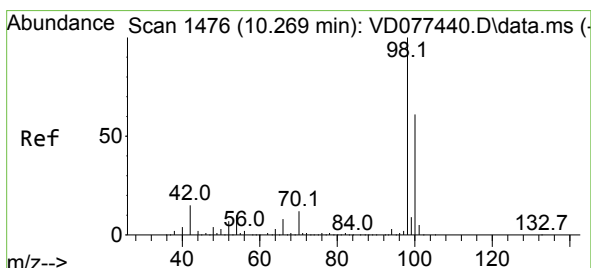
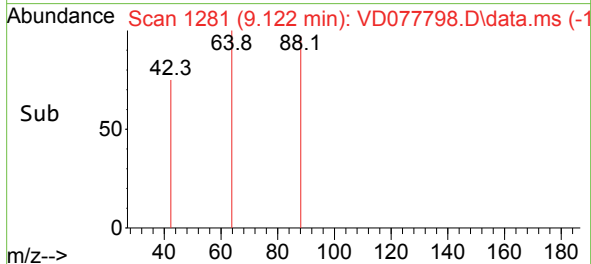
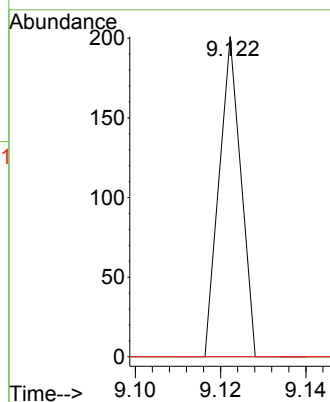
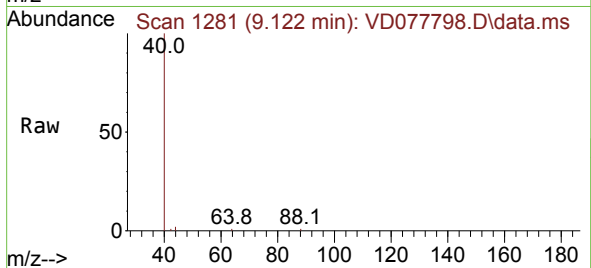
Tgt Ion: 88 Resp: 71

Ion Ratio Lower Upper

88 100

43 0.0 19.0 28.6#

58 0.0 43.5 65.3#



#50

Toluene-d8

Concen: 43.886 ug/l

RT: 10.275 min Scan# 1477

Delta R.T. 0.006 min

Lab File: VD077798.D

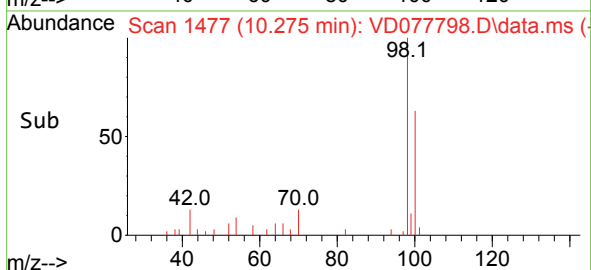
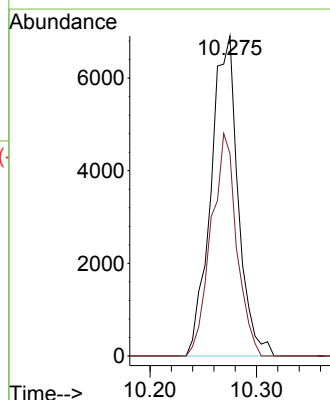
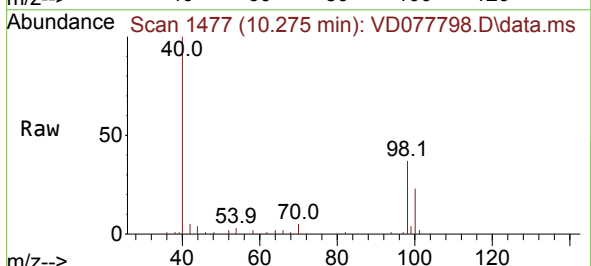
Acq: 08 Dec 2023 18:31

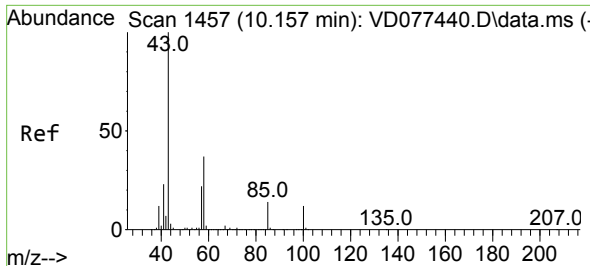
Tgt Ion: 98 Resp: 12253

Ion Ratio Lower Upper

98 100

100 65.2 50.3 75.5

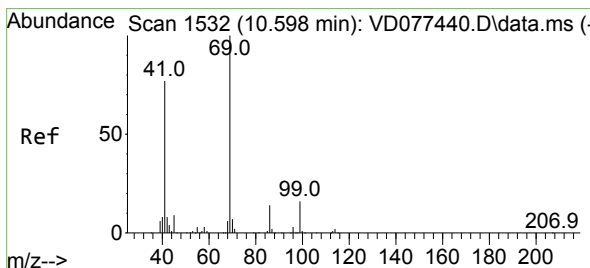
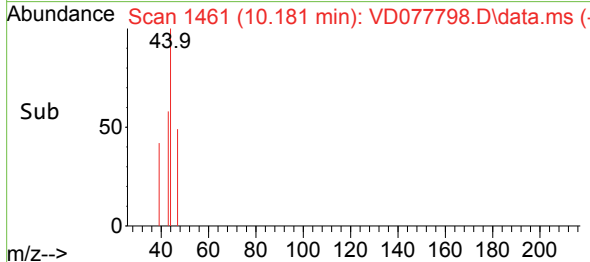
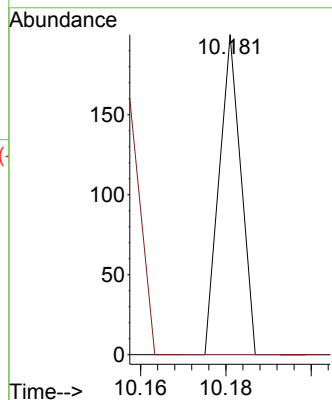
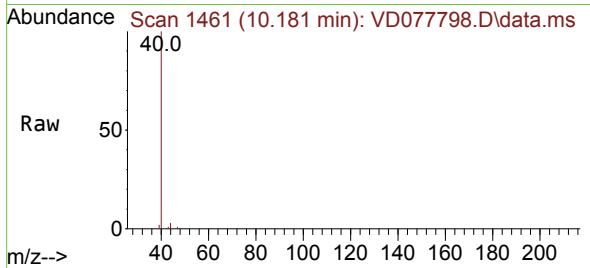




#51
4-Methyl-2-Pentanone
Concen: 1.800 ug/l
RT: 10.181 min Scan# 1457
Delta R.T. 0.024 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

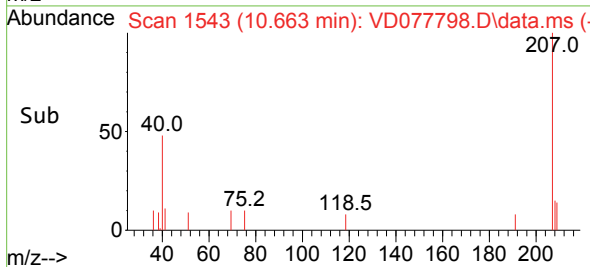
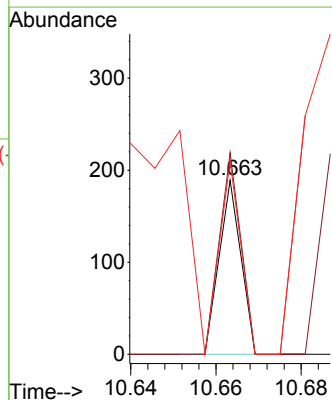
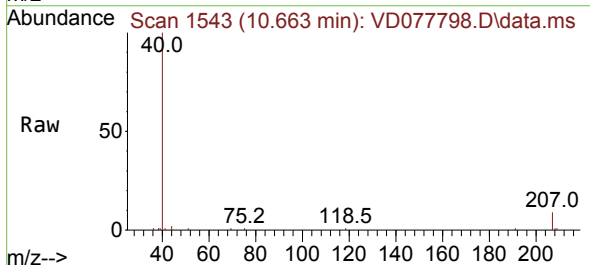
Instrument :
MSVOA_D
ClientSampleId :
TP-35

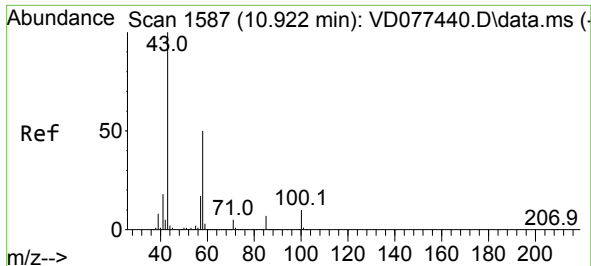
Tgt Ion: 43 Resp: 71
Ion Ratio Lower Upper
43 100
58 0.0 38.9 58.3#



#56
Ethyl methacrylate
Concen: 1.365 ug/l
RT: 10.663 min Scan# 1543
Delta R.T. 0.065 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 69 Resp: 67
Ion Ratio Lower Upper
69 100
41 114.9 39.1 58.7#
39 465.7 20.0 30.0#

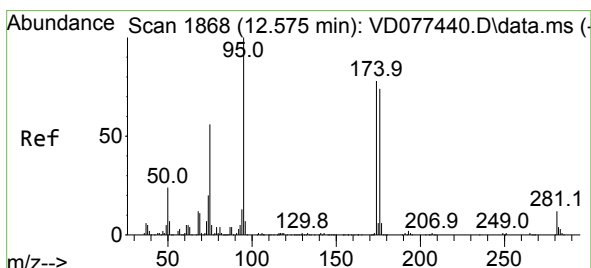
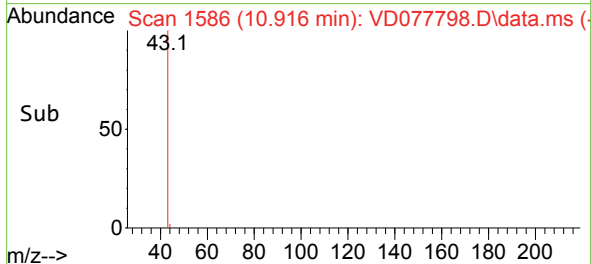
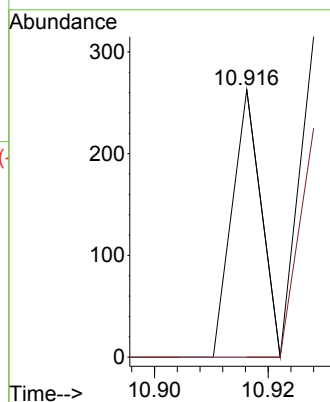
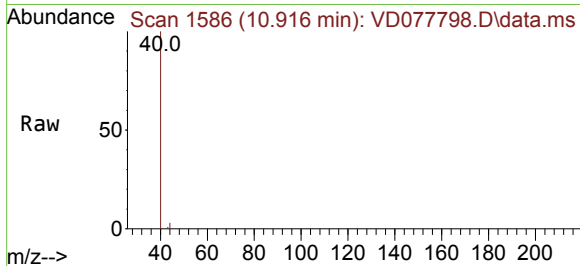




#59
2-Hexanone
Concen: 2.842 ug/l
RT: 10.916 min Scan# 11
Delta R.T. -0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

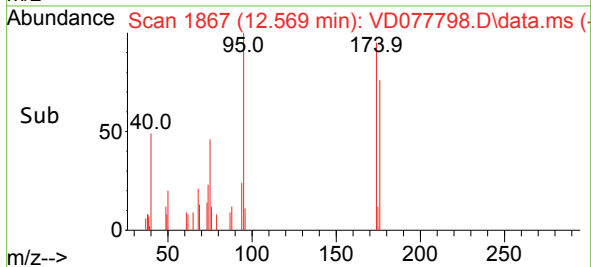
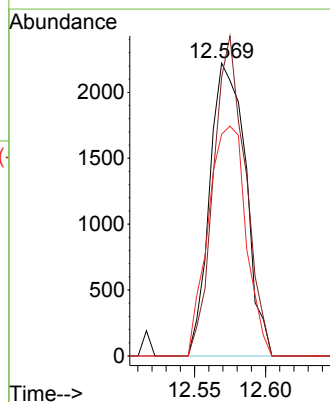
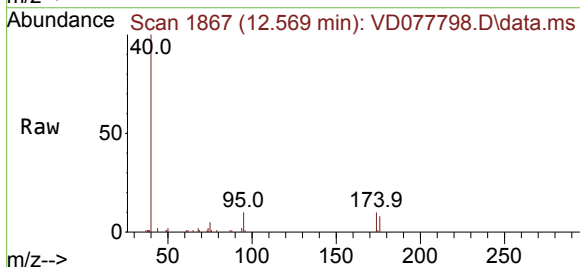
Instrument :
MSVOA_D
ClientSampleId :
TP-35

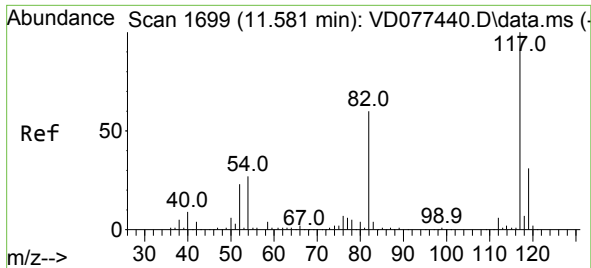
Tgt Ion: 43 Resp: 93
Ion Ratio Lower Upper
43 100
58 84.9 34.1 102.2



#62
4-Bromofluorobenzene
Concen: 46.781 ug/l
RT: 12.569 min Scan# 1867
Delta R.T. -0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion: 95 Resp: 3905
Ion Ratio Lower Upper
95 100
174 96.6 0.0 201.8
176 82.6 0.0 191.8

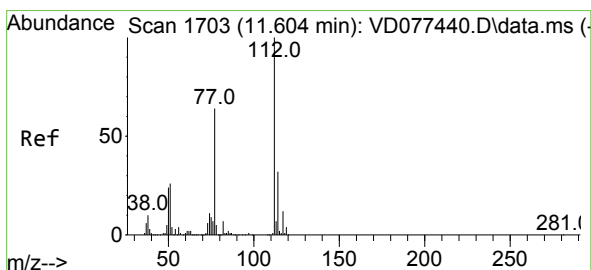
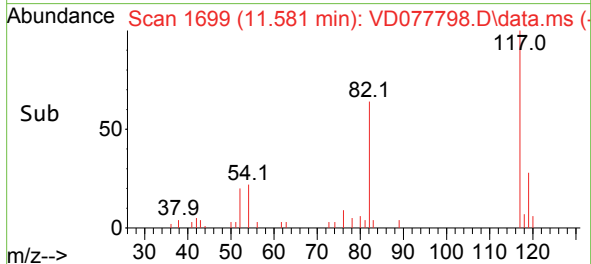
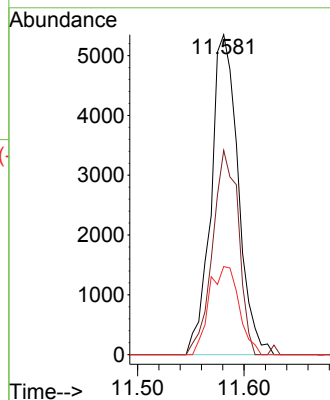
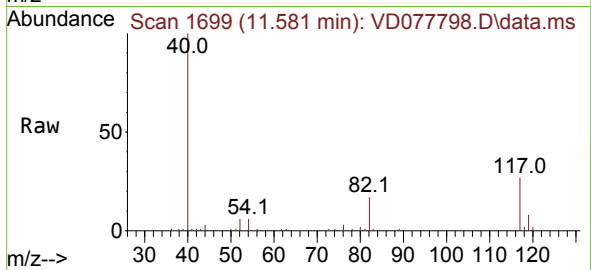




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.581 min Scan# 11
Delta R.T. -0.000 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

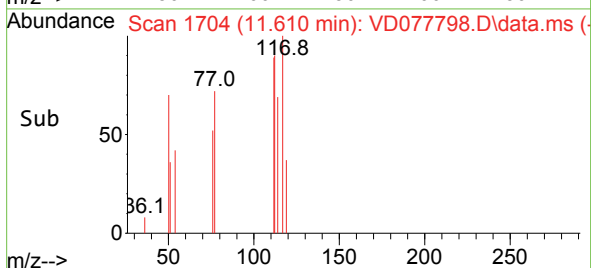
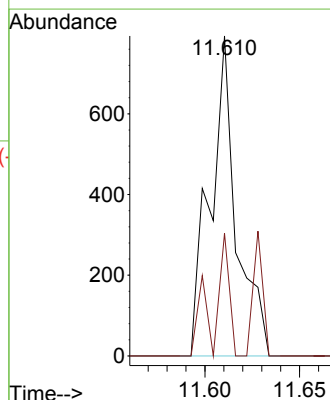
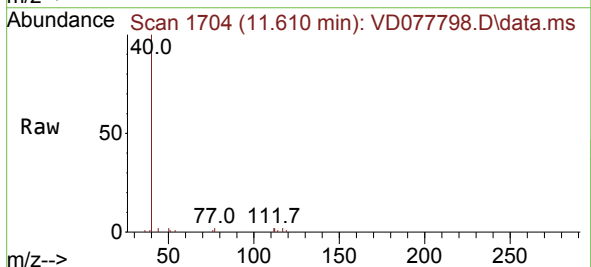
Instrument :
MSVOA_D
ClientSampleId :
TP-35

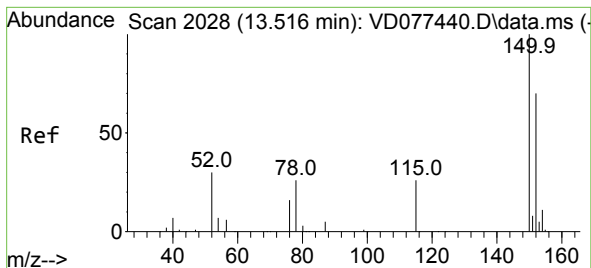
Tgt Ion:117 Resp: 9474
Ion Ratio Lower Upper
117 100
82 63.8 38.3 57.5#
119 27.5 25.0 37.4



#65
Chlorobenzene
Concen: 1.619 ug/l
RT: 11.610 min Scan# 1704
Delta R.T. 0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion:112 Resp: 763
Ion Ratio Lower Upper
112 100
114 38.3 25.1 37.7#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.522 min Scan# 20

Delta R.T. 0.006 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

TP-35

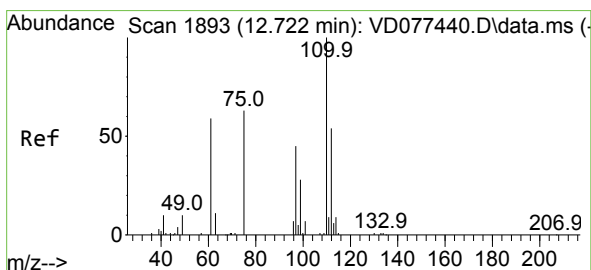
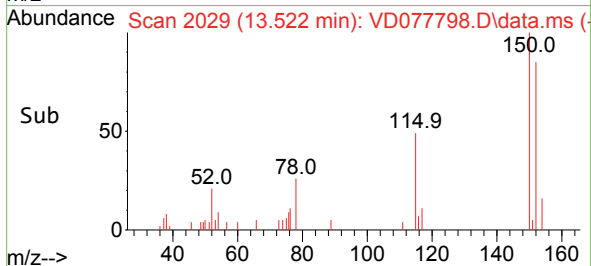
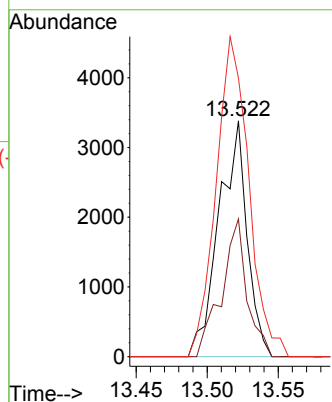
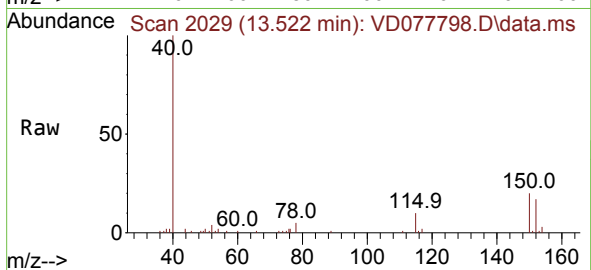
Tgt Ion:152 Resp: 4661

Ion Ratio Lower Upper

152 100

115 52.9 27.1 81.3

150 157.8 0.0 353.6



#76

1,2,3-Trichloropropane

Concen: 1.532 ug/l

RT: 12.751 min Scan# 1898

Delta R.T. 0.029 min

Lab File: VD077798.D

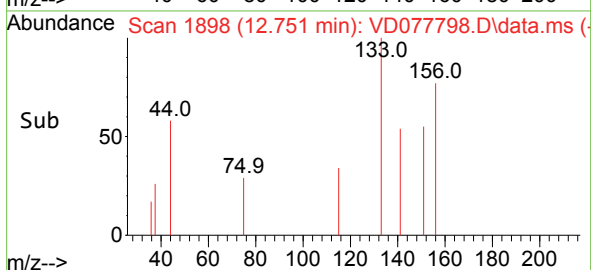
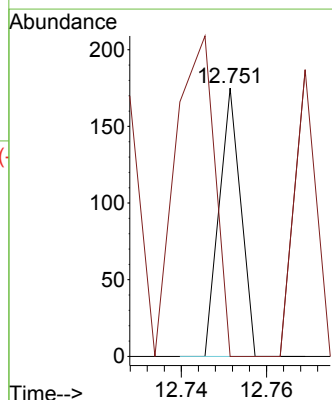
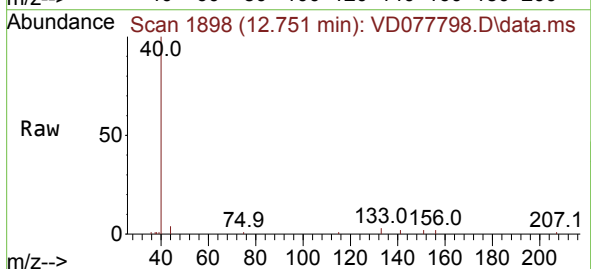
Acq: 08 Dec 2023 18:31

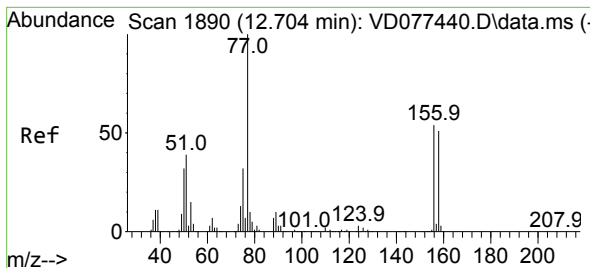
Tgt Ion: 75 Resp: 62

Ion Ratio Lower Upper

75 100

77 212.9 0.0 0.0#





#77

Bromobenzene

Concen: 4.706 ug/l

RT: 12.698 min Scan# 1889

Delta R.T. -0.006 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

Instrument :

MSVOA_D

ClientSampleId :

TP-35

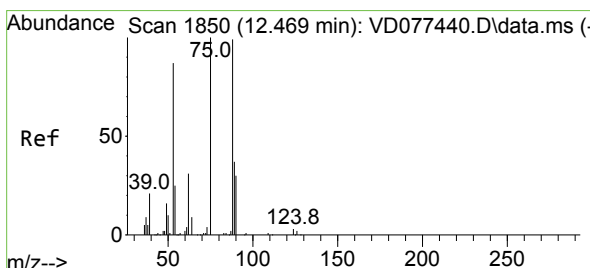
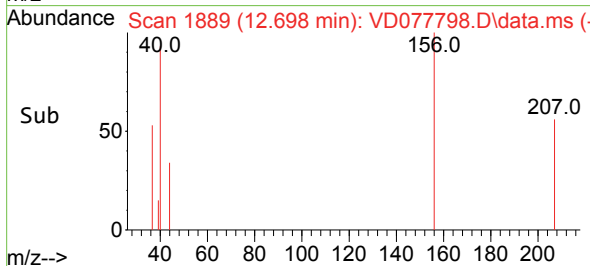
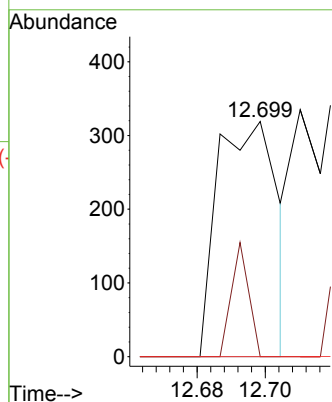
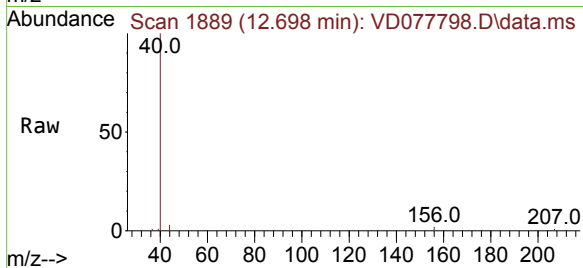
Tgt Ion:156 Resp: 391

Ion Ratio Lower Upper

156 100

77 14.1 76.8 230.4#

158 0.0 48.6 145.9#



#81

trans-1,4-Dichloro-2-butene

Concen: 102.402 ug/l

RT: 12.575 min Scan# 1868

Delta R.T. 0.106 min

Lab File: VD077798.D

Acq: 08 Dec 2023 18:31

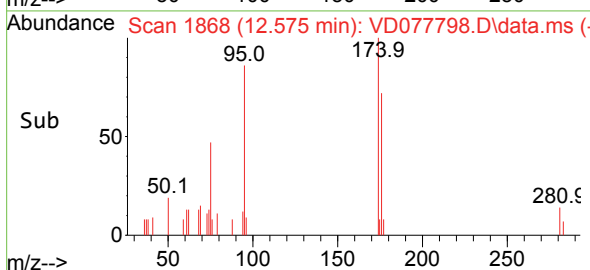
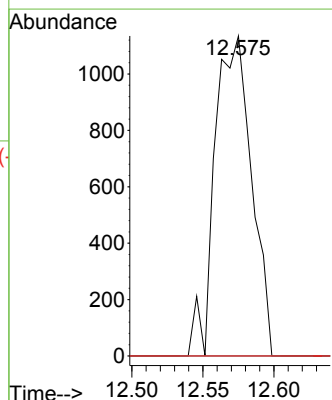
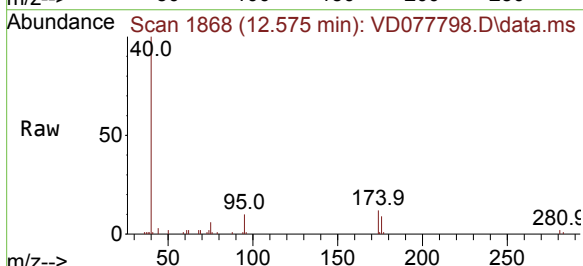
Tgt Ion: 75 Resp: 2046

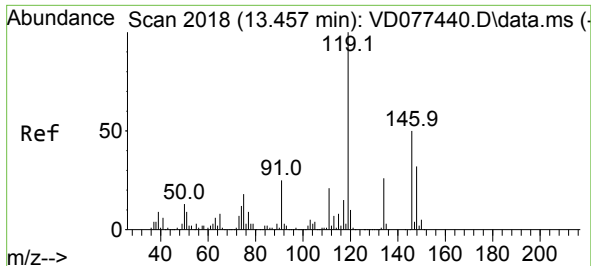
Ion Ratio Lower Upper

75 100

53 0.0 63.0 94.4#

89 0.0 37.9 56.9#

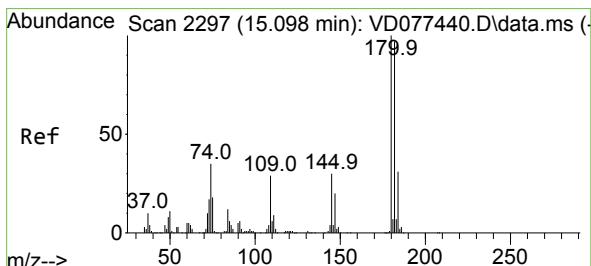
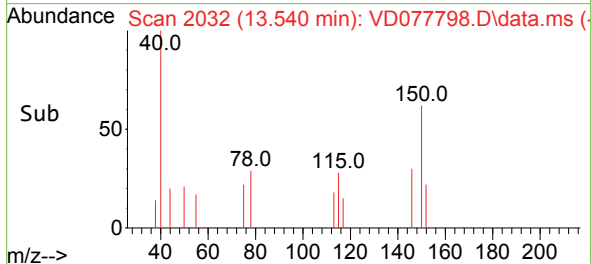
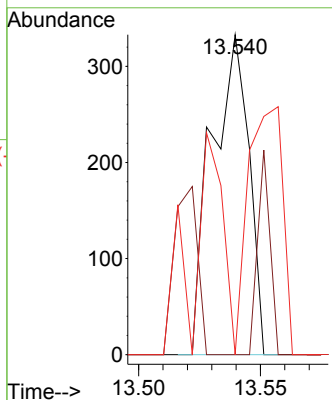
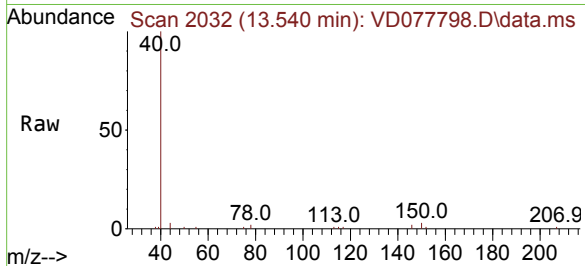




#87
1,3-Dichlorobenzene
Concen: 2.072 ug/l
RT: 13.540 min Scan# 2018
Delta R.T. 0.083 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

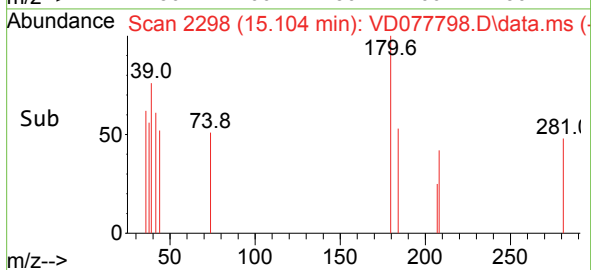
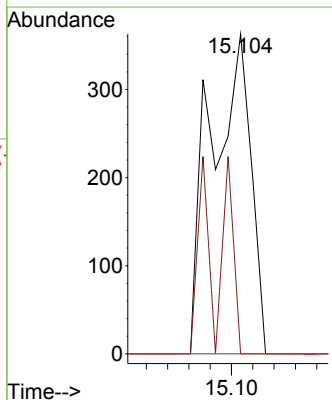
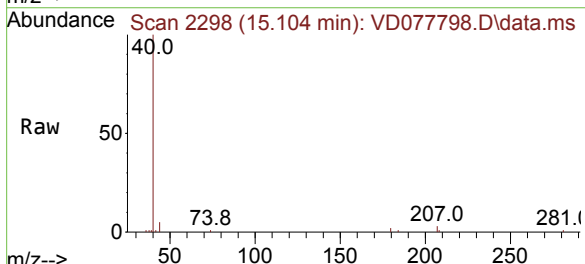
Instrument :
MSVOA_D
ClientSampleId :
TP-35

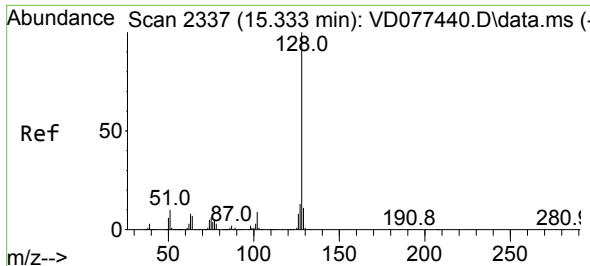
Tgt Ion:146 Resp: 352
Ion Ratio Lower Upper
146 100
111 21.3 17.9 53.8
148 72.2 32.3 96.8



#93
1,2,4-Trichlorobenzene
Concen: 4.741 ug/l
RT: 15.104 min Scan# 2298
Delta R.T. 0.006 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion:180 Resp: 468
Ion Ratio Lower Upper
180 100
182 33.8 48.5 145.6#
145 0.0 14.2 42.6#

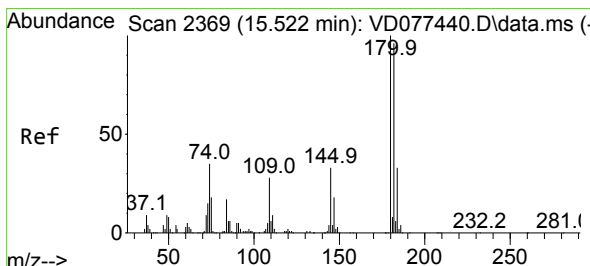
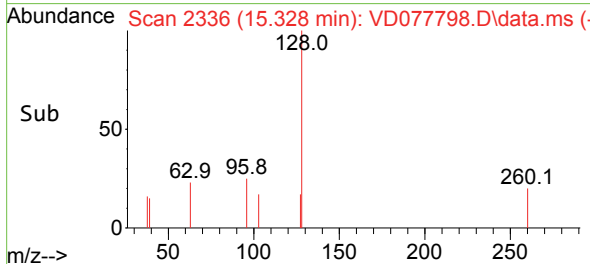
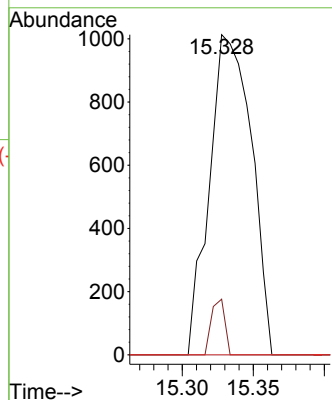
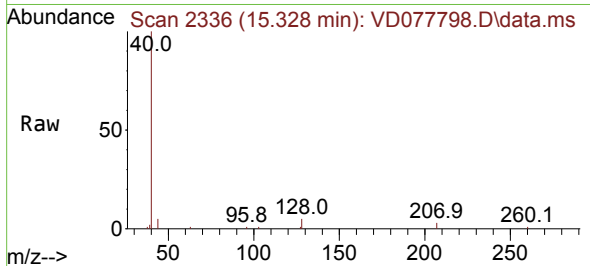




#95
Naphthalene
Concen: 12.719 ug/l
RT: 15.328 min Scan# 21
Delta R.T. -0.005 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Instrument :
MSVOA_D
ClientSampleId :
TP-35

Tgt Ion:128 Resp: 2086
Ion Ratio Lower Upper
128 100
127 17.4 10.5 15.7#
129 0.0 8.7 13.1#



#96
1,2,3-Trichlorobenzene
Concen: 2.753 ug/l
RT: 15.522 min Scan# 2369
Delta R.T. -0.000 min
Lab File: VD077798.D
Acq: 08 Dec 2023 18:31

Tgt Ion:180 Resp: 224
Ion Ratio Lower Upper
180 100
182 188.4 47.3 141.9#
145 0.0 15.1 45.3#

