

Data Path : Z:\voasrv\HPCHEM1\MSVOA_D\Data\VD121923\
 Data File : VD077979.D
 Acq On : 19 Dec 2023 17:33
 Operator : RP/MD
 Sample : 05789-01
 Misc : 5.08G/5.0ml/MSVOA_D/SOIL/B
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :

Quant Time: Dec 20 02:07:23 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_D\Method\82D120823S.M
 Quant Title : SW846 8260
 QLast Update : Thu Dec 14 14:48:10 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	7.881	168	155284	50.000	ug/l	# 0.00
34) 1,4-Difluorobenzene	8.781	114	290322	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.581	117	278506	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.522	152	138788	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.234	65	78281	42.781	ug/l	0.00
Spiked Amount	50.000	Range	50 - 163	Recovery	=	85.560%
35) Dibromofluoromethane	7.810	113	73666	36.224	ug/l	0.00
Spiked Amount	50.000	Range	54 - 147	Recovery	=	72.440%
50) Toluene-d8	10.269	98	368197	45.206	ug/l	0.00
Spiked Amount	50.000	Range	58 - 134	Recovery	=	90.420%
62) 4-Bromofluorobenzene	12.575	95	111277	45.697	ug/l	0.00
Spiked Amount	50.000	Range	30 - 143	Recovery	=	91.400%
Target Compounds						
						Qvalue
11) Tert butyl alcohol	5.046	59	411	Below Cal	#	73
16) Acetone	4.034	43	5396	Below Cal		92
20) Methylene Chloride	4.805	84	9324	Below Cal		93
25) 2-Butanone	7.063	43	1113	Below Cal	#	37
31) Cyclohexane	7.875	56	3444	1.058	ug/l #	42
36) 1,1-Dichloropropene	7.881	75	13153	4.044	ug/l #	49
38) Carbon Tetrachloride	7.881	117	16007	4.936	ug/l #	17
49) 1,4-Dioxane	9.499	88	65	5.512	ug/l #	4
65) Chlorobenzene	11.604	112	60	Below Cal	#	43
67) Ethyl Benzene	11.681	91	14771	1.274	ug/l	92
68) m/p-Xylenes	11.793	106	21841	4.924	ug/l	90
69) o-Xylene	12.122	106	15727	3.848	ug/l	96
70) Styrene	12.140	104	9360	1.540	ug/l #	75
74) N-amyl acetate	12.216	43	2156	1.043	ug/l #	60
76) 1,2,3-Trichloropropane	12.575	75	59763	49.580	ug/l #	100
78) n-propylbenzene	12.763	91	38473	3.002	ug/l	97
79) 2-Chlorotoluene	12.828	91	23138	3.368	ug/l #	36
80) 1,3,5-Trimethylbenzene	12.904	105	120320	13.715	ug/l	97
81) trans-1,4-Dichloro-2-b...	12.575	75	59763	100.453	ug/l #	18
82) 4-Chlorotoluene	12.904	91	12493	1.740	ug/l #	37
84) 1,2,4-Trimethylbenzene	13.210	105	411424	46.887	ug/l	97
85) sec-Butylbenzene	13.210	105	411424	37.580	ug/l #	54
88) 1,4-Dichlorobenzene	13.528	146	434	Below Cal	#	1
90) Hexachloroethane	14.057	117	6382	3.540	ug/l #	11
95) Naphthalene	15.334	128	1221636	250.149	ug/l	99

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

Quant Time: Dec 20 02:07:23 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_D\Method\82D120823S.M
Quant Title : SW846 8260
QLast Update : Thu Dec 14 14:48:10 2023
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.881 min Scan# 1

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

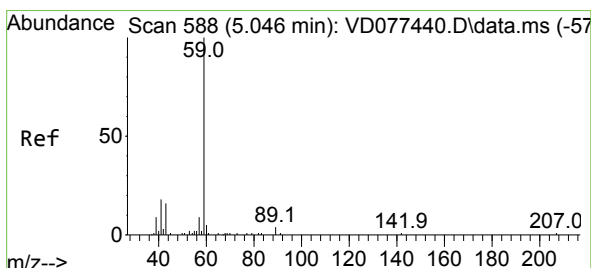
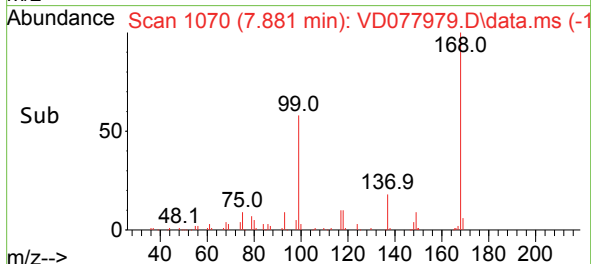
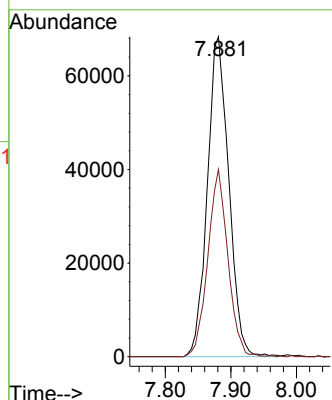
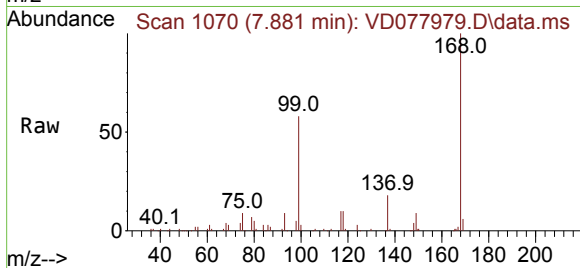
ClientSampleId :

Tgt Ion:168 Resp: 155284

Ion Ratio Lower Upper

168 100

99 58.5 36.7 55.1#



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.046 min Scan# 588

Delta R.T. -0.000 min

Lab File: VD077979.D

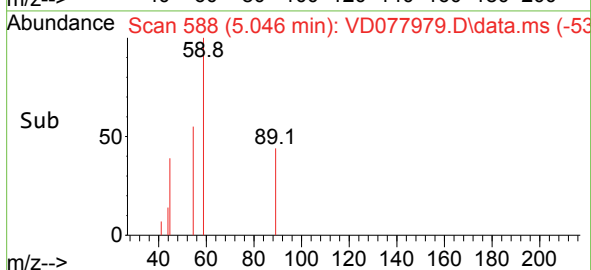
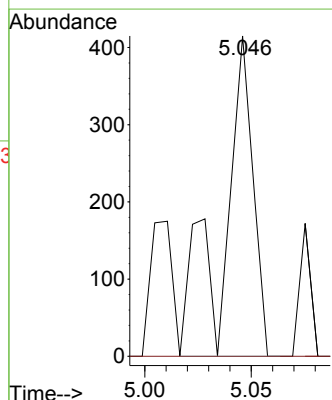
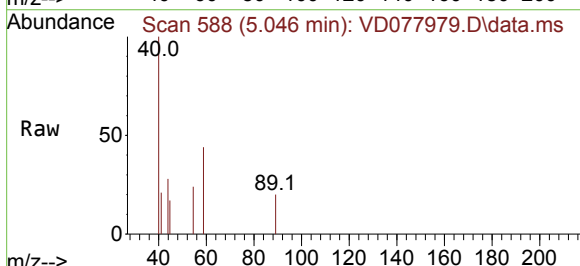
Acq: 19 Dec 2023 17:33

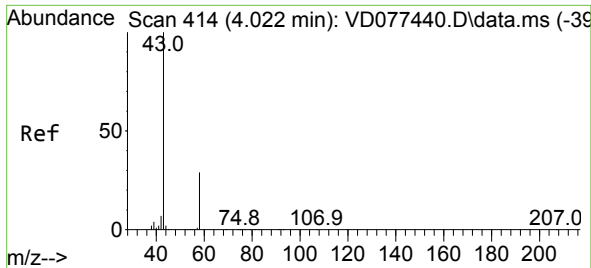
Tgt Ion: 59 Resp: 411

Ion Ratio Lower Upper

59 100

57 0.0 7.8 11.8#

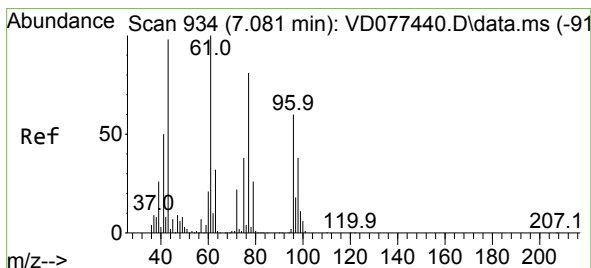
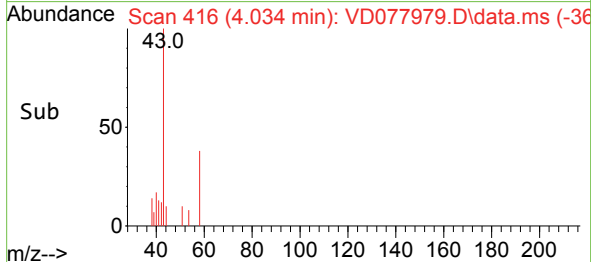
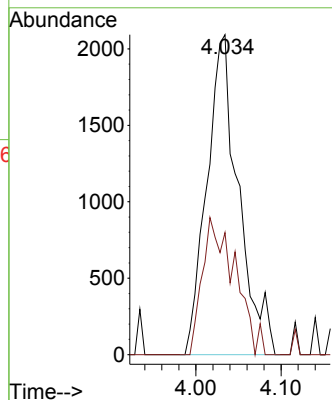
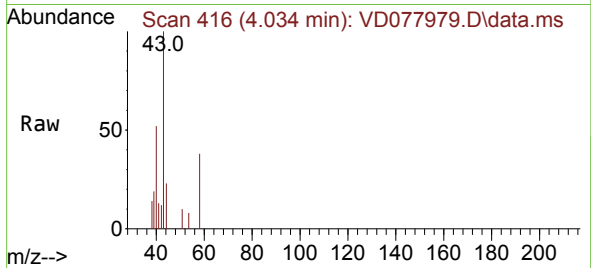




#16
Acetone
Concen: Below Cal
RT: 4.034 min Scan# 416
Delta R.T. 0.012 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

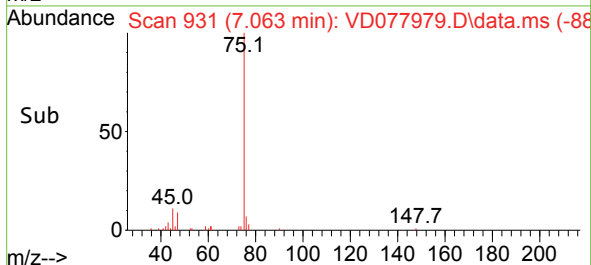
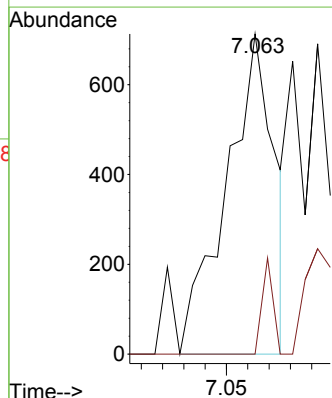
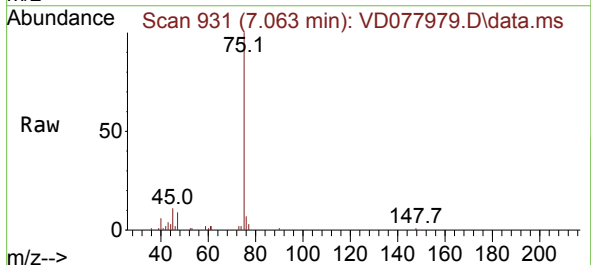
Instrument :
MSVOA_D
ClientSampleId :

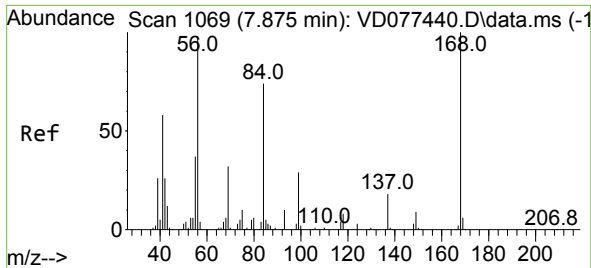
Tgt Ion: 43 Resp: 5396
Ion Ratio Lower Upper
43 100
58 38.1 34.7 52.1



#25
2-Butanone
Concen: Below Cal
RT: 7.063 min Scan# 931
Delta R.T. -0.018 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

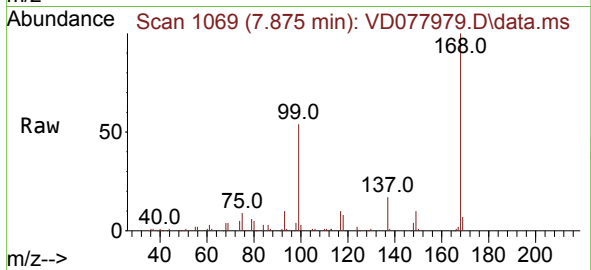
Tgt Ion: 43 Resp: 1113
Ion Ratio Lower Upper
43 100
72 0.0 30.7 46.1#



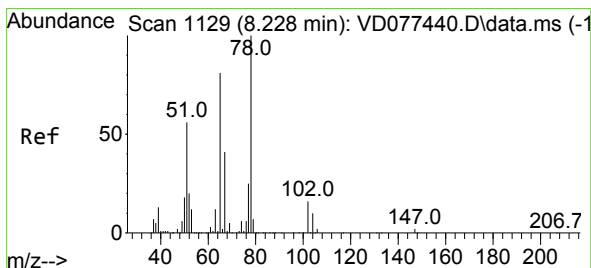
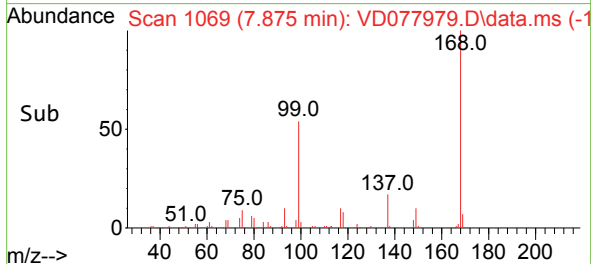
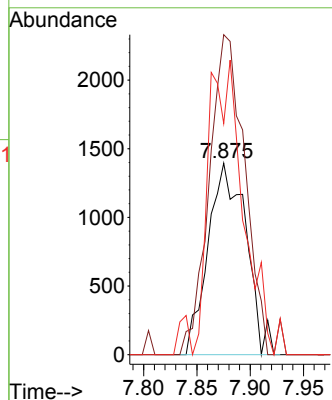


#31
Cyclohexane
Concen: 1.058 ug/l
RT: 7.875 min Scan# 110
Delta R.T. 0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

Instrument :
MSVOA_D
ClientSampleId :

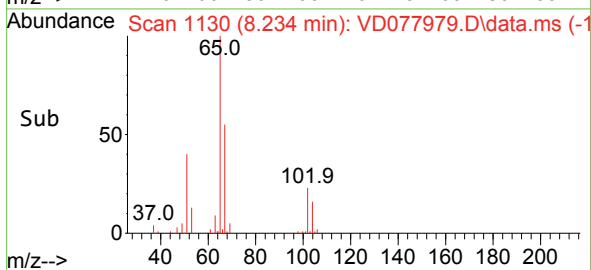
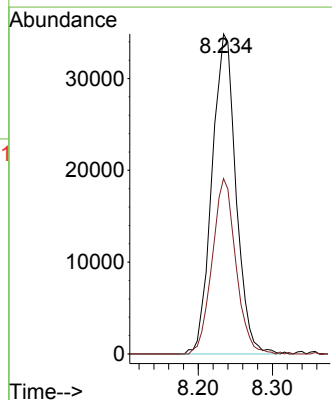
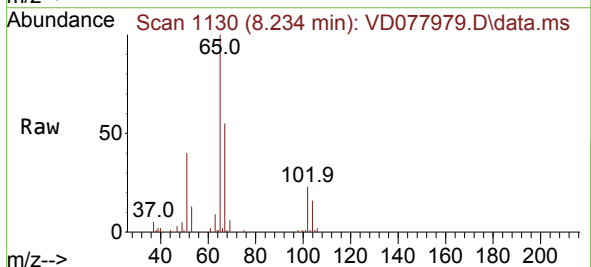


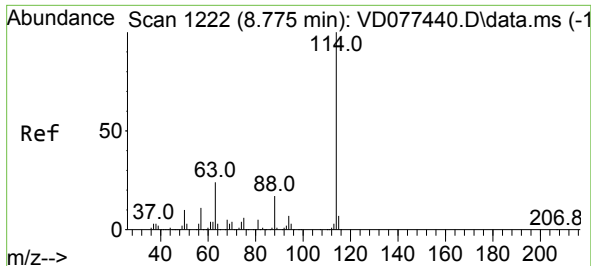
Tgt Ion: 56 Resp: 3444
Ion Ratio Lower Upper
56 100
69 167.1 28.6 43.0#
84 103.6 84.8 127.2



#33
1,2-Dichloroethane-d4
Concen: 42.781 ug/l
RT: 8.234 min Scan# 1130
Delta R.T. 0.006 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

Tgt Ion: 65 Resp: 78281
Ion Ratio Lower Upper
65 100
67 54.1 0.0 115.0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.781 min Scan# 11

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

ClientSampleId :

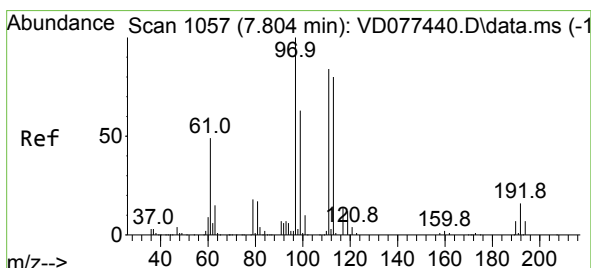
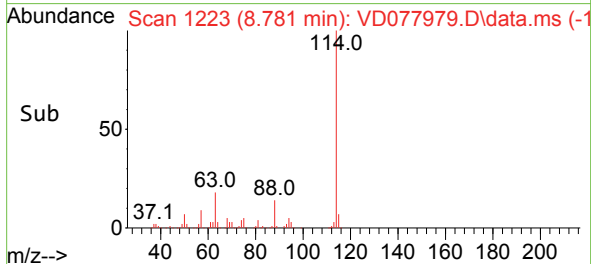
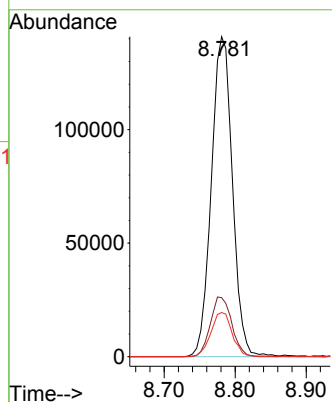
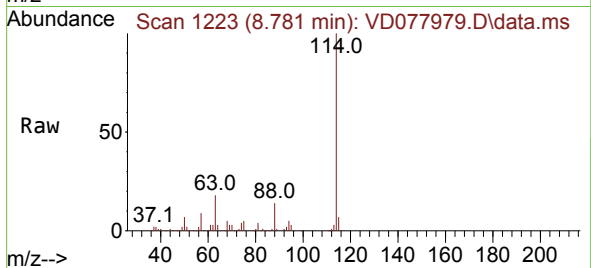
Tgt Ion:114 Resp: 290322

Ion Ratio Lower Upper

114 100

63 18.5 0.0 33.4

88 13.8 0.0 26.2



#35

Dibromofluoromethane

Concen: 36.224 ug/l

RT: 7.810 min Scan# 1058

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

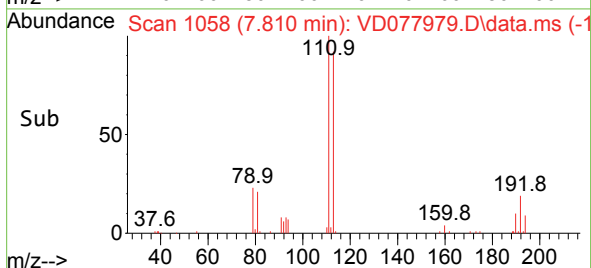
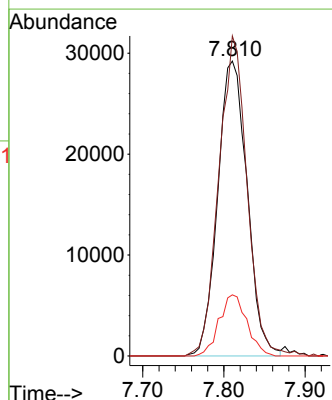
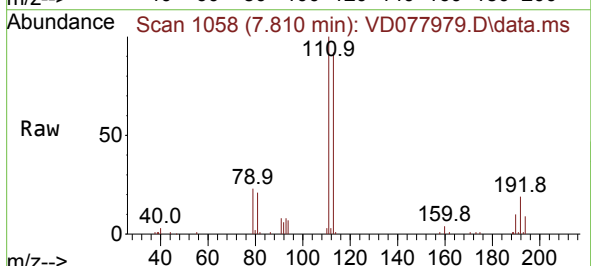
Tgt Ion:113 Resp: 73666

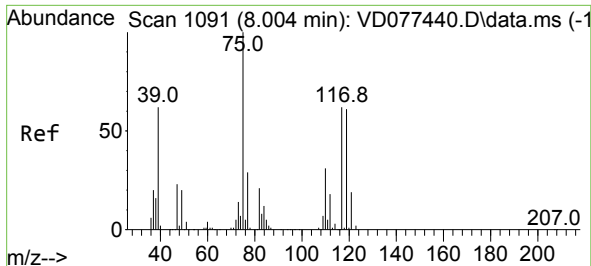
Ion Ratio Lower Upper

113 100

111 104.3 84.7 127.1

192 19.5 16.8 25.2





#36

1,1-Dichloropropene

Concen: 4.044 ug/l

RT: 7.881 min Scan# 1070

Delta R.T. -0.123 min

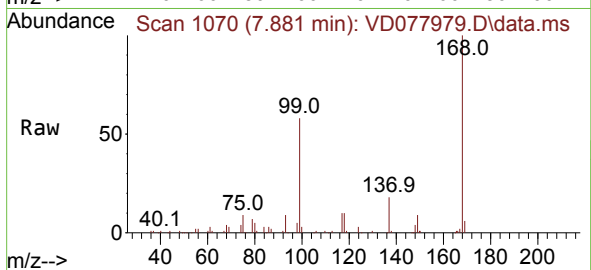
Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

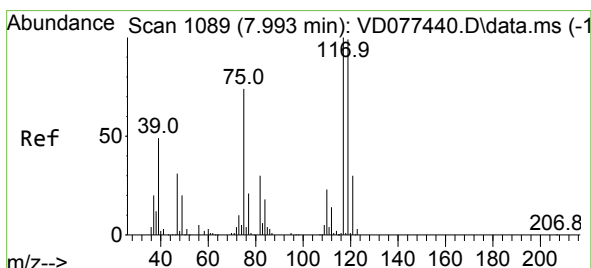
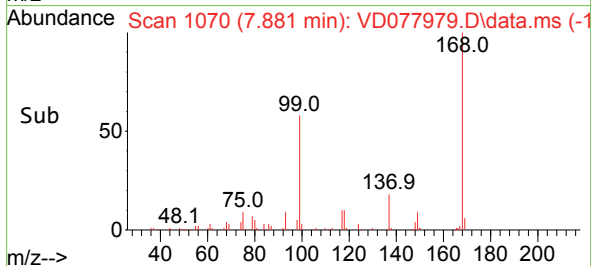
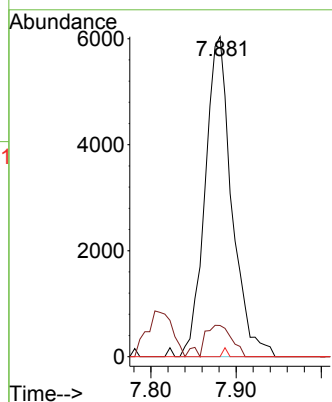
Instrument :

MSVOA_D

ClientSampleId :



Tgt Ion: 75	Resp: 13153
Ion Ratio	Lower Upper
75	100
110	10.2 19.9 59.6#
77	0.5 24.7 37.1#



#38

Carbon Tetrachloride

Concen: 4.936 ug/l

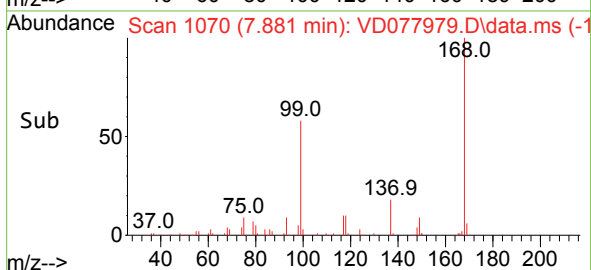
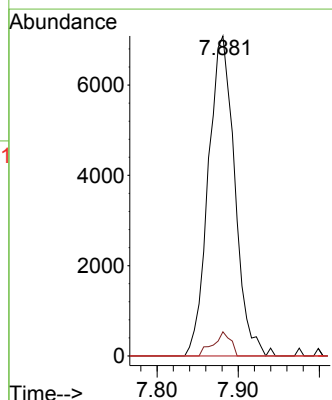
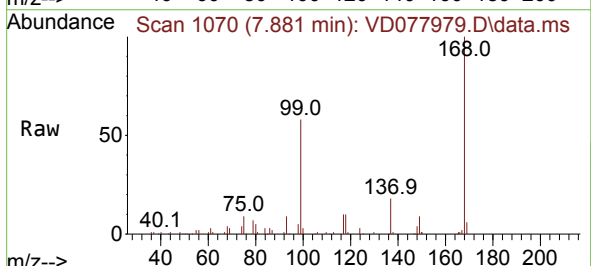
RT: 7.881 min Scan# 1070

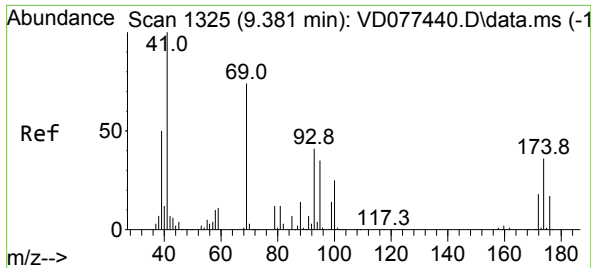
Delta R.T. -0.112 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Tgt Ion: 117	Resp: 16007
Ion Ratio	Lower Upper
117	100
119	7.6 78.0 117.0#
121	0.0 24.2 36.2#





#49

1,4-Dioxane

Concen: 5.512 ug/l

RT: 9.499 min Scan# 1

Delta R.T. 0.118 min

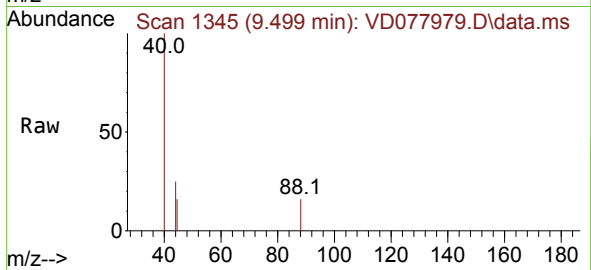
Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

ClientSampleId :



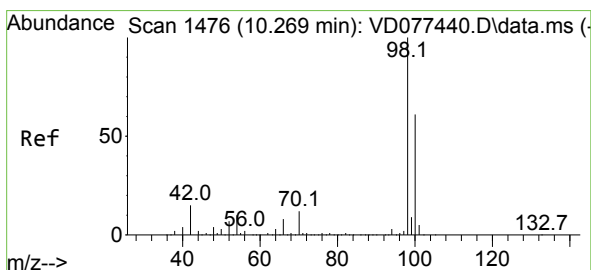
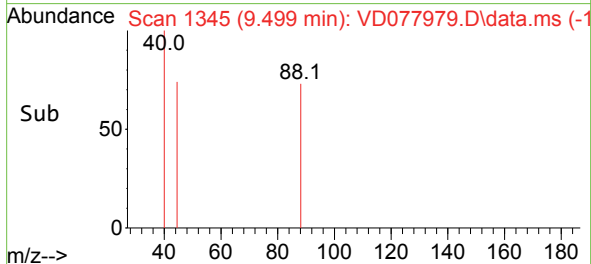
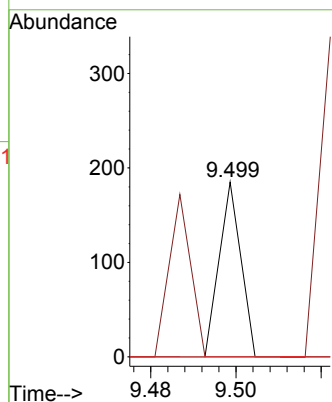
Tgt Ion: 88 Resp: 65

Ion Ratio Lower Upper

88 100

43 93.8 19.0 28.6#

58 0.0 43.5 65.3#



#50

Toluene-d8

Concen: 45.206 ug/l

RT: 10.269 min Scan# 1476

Delta R.T. 0.000 min

Lab File: VD077979.D

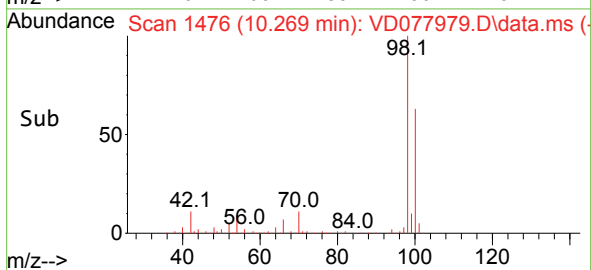
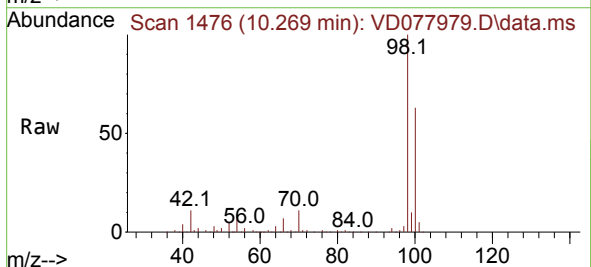
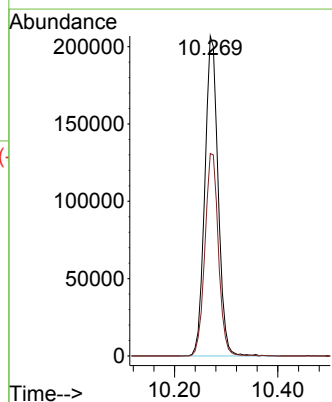
Acq: 19 Dec 2023 17:33

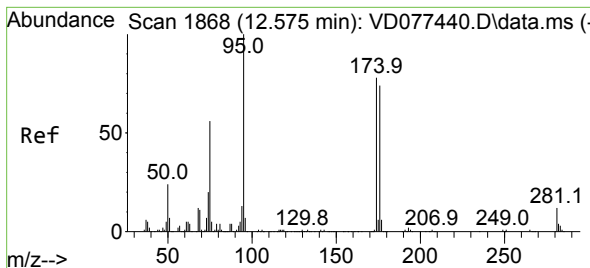
Tgt Ion: 98 Resp: 368197

Ion Ratio Lower Upper

98 100

100 64.3 50.3 75.5

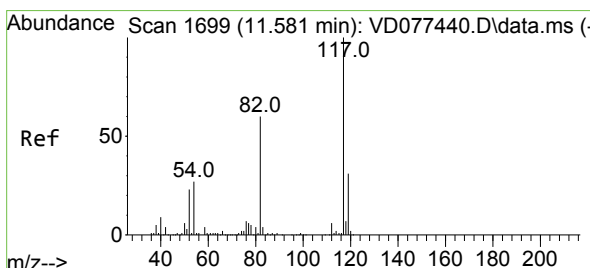
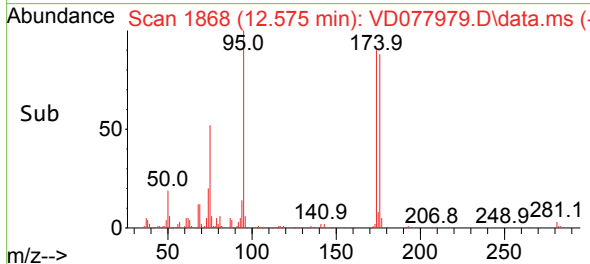
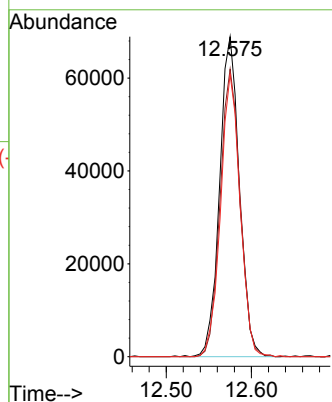
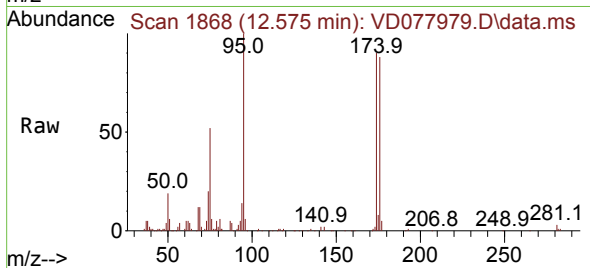




#62
4-Bromofluorobenzene
Concen: 45.697 ug/l
RT: 12.575 min Scan# 1868
Delta R.T. -0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

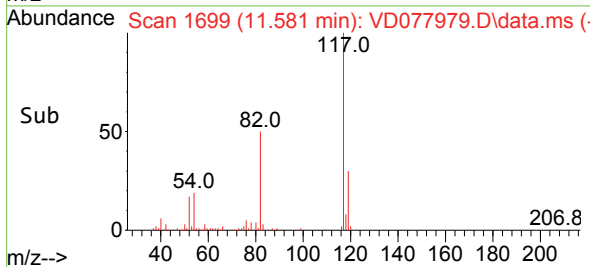
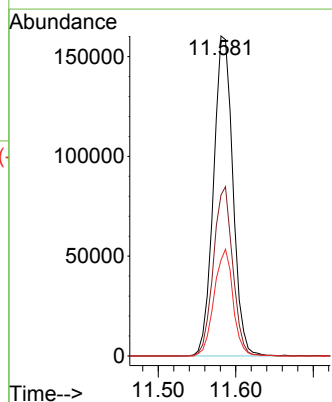
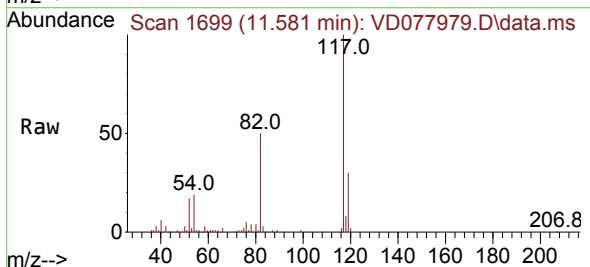
Instrument :
MSVOA_D
ClientSampleId :

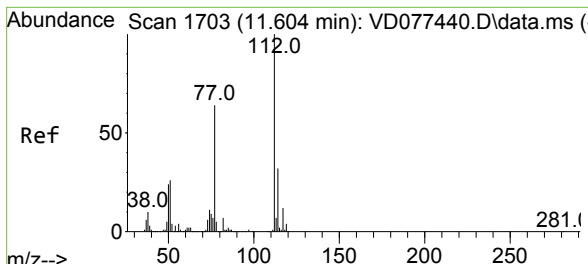
Tgt Ion: 95 Resp: 111277
Ion Ratio Lower Upper
95 100
174 90.6 0.0 201.8
176 86.8 0.0 191.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.581 min Scan# 1699
Delta R.T. -0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

Tgt Ion: 117 Resp: 278506
Ion Ratio Lower Upper
117 100
82 50.3 38.3 57.5
119 30.0 25.0 37.4

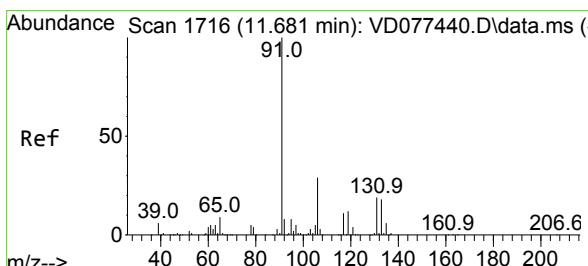
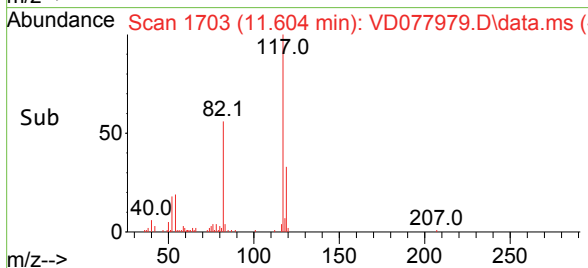
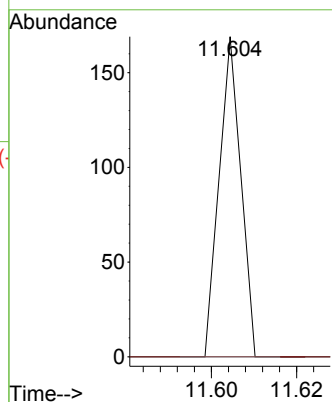
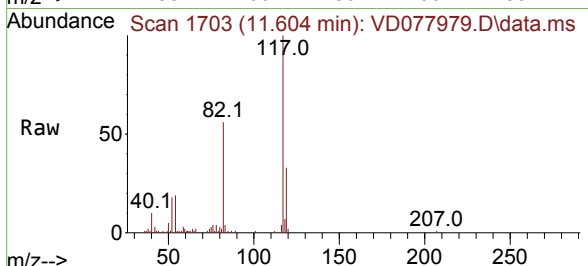




#65
Chlorobenzene
Concen: Below Cal
RT: 11.604 min Scan# 11
Delta R.T. 0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

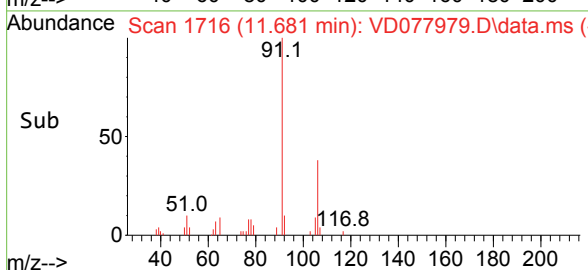
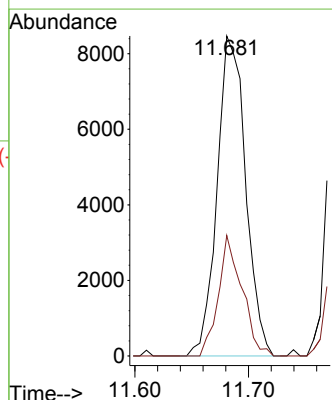
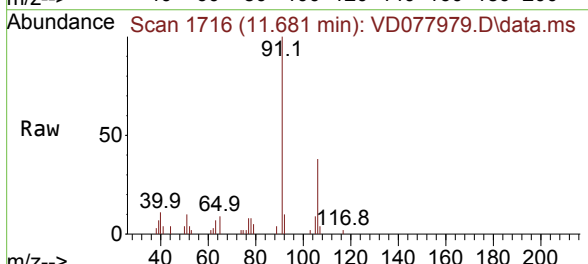
Instrument :
MSVOA_D
ClientSampleId :

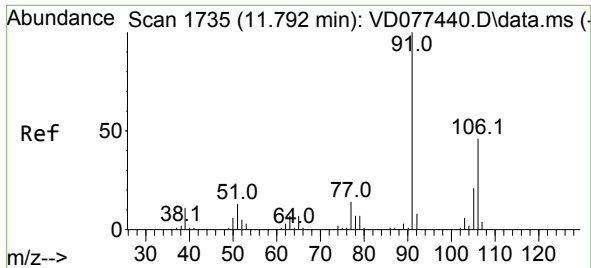
Tgt Ion:112 Resp: 60
Ion Ratio Lower Upper
112 100
114 0.0 25.1 37.7#



#67
Ethyl Benzene
Concen: 1.274 ug/l
RT: 11.681 min Scan# 1716
Delta R.T. -0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

Tgt Ion: 91 Resp: 14771
Ion Ratio Lower Upper
91 100
106 37.7 26.5 39.7

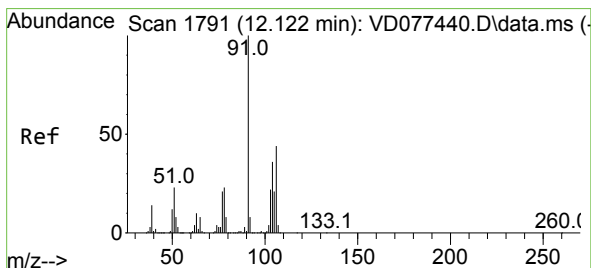
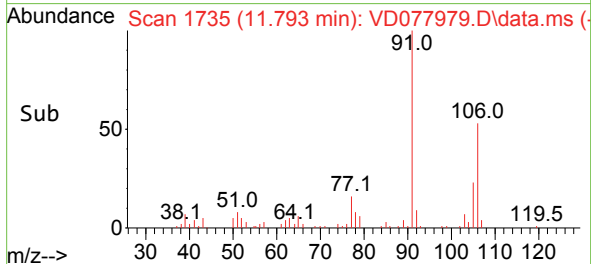
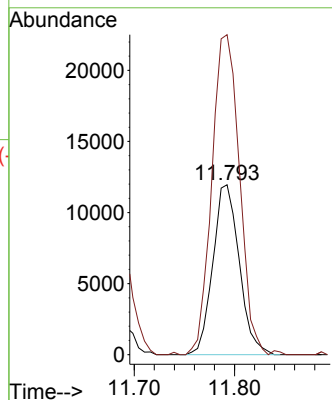
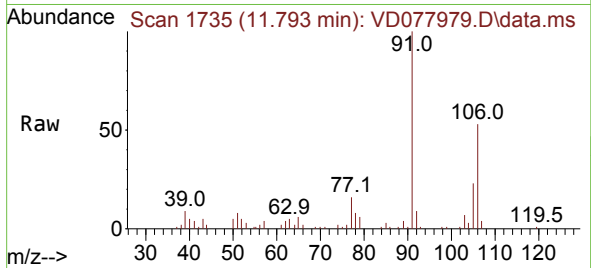




#68
m/p-Xylenes
Concen: 4.924 ug/l
RT: 11.793 min Scan# 1735
Delta R.T. 0.001 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

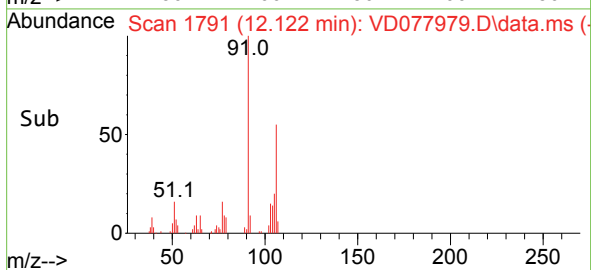
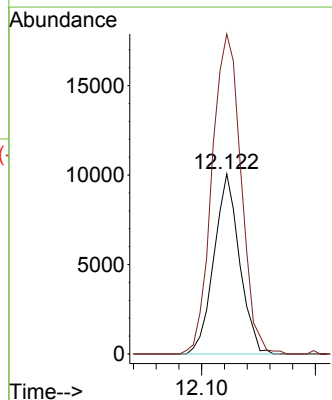
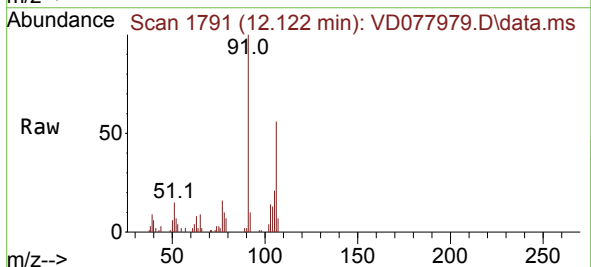
Instrument :
MSVOA_D
ClientSampleId :

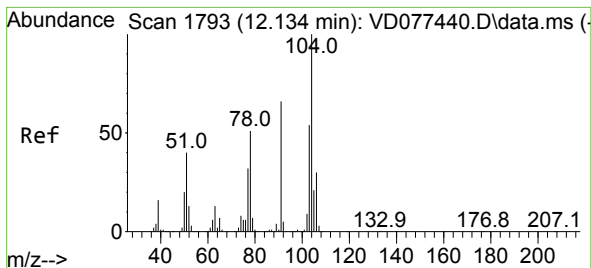
Tgt Ion:106 Resp: 21841
Ion Ratio Lower Upper
106 100
91 197.5 147.0 220.6



#69
o-Xylene
Concen: 3.848 ug/l
RT: 12.122 min Scan# 1791
Delta R.T. -0.000 min
Lab File: VD077979.D
Acq: 19 Dec 2023 17:33

Tgt Ion:106 Resp: 15727
Ion Ratio Lower Upper
106 100
91 201.9 97.9 293.6





#70

Styrene

Concen: 1.540 ug/l

RT: 12.140 min Scan# 1

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

ClientSampleId :

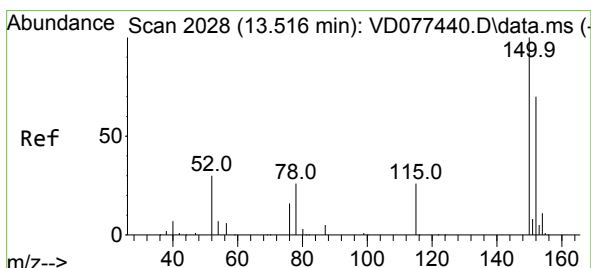
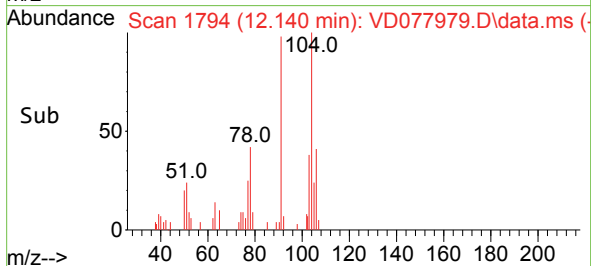
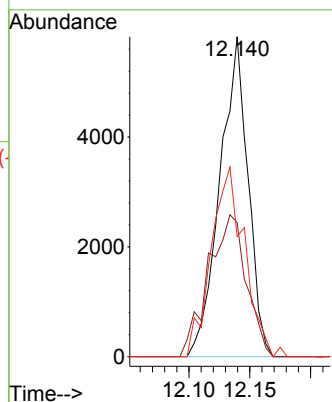
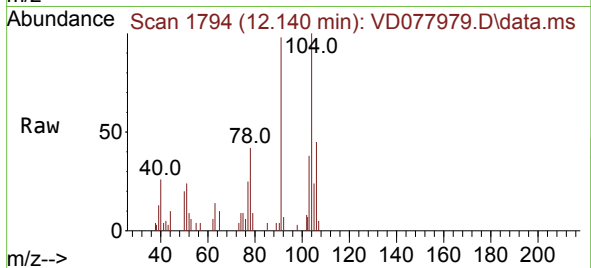
Tgt Ion:104 Resp: 9360

Ion Ratio Lower Upper

104 100

78 59.9 33.2 49.8#

103 70.2 43.6 65.4#



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.522 min Scan# 2029

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

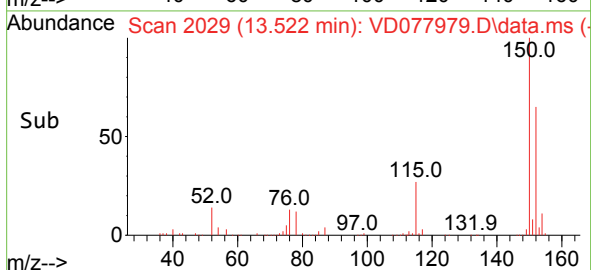
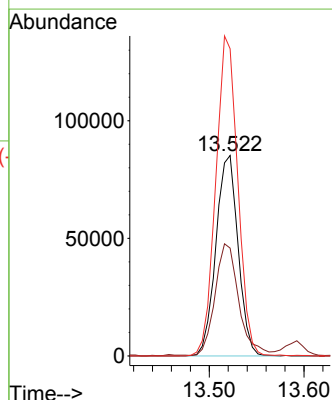
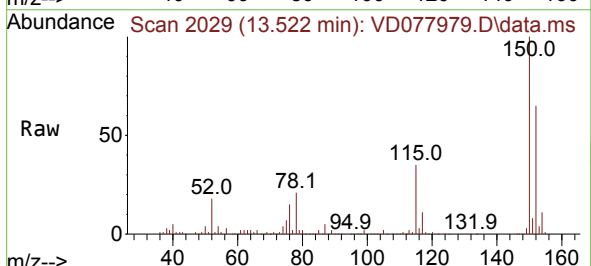
Tgt Ion:152 Resp: 138788

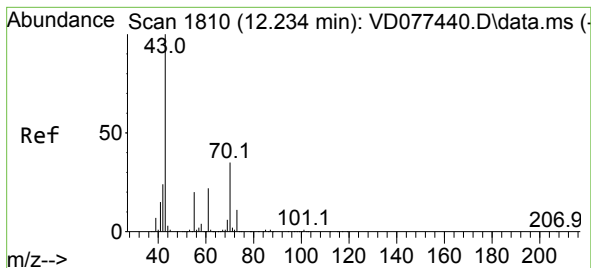
Ion Ratio Lower Upper

152 100

115 59.4 27.1 81.3

150 158.3 0.0 353.6





#74

N-amy1 acetate

Concen: 1.043 ug/l

RT: 12.216 min Scan# 1807

Delta R.T. -0.018 min

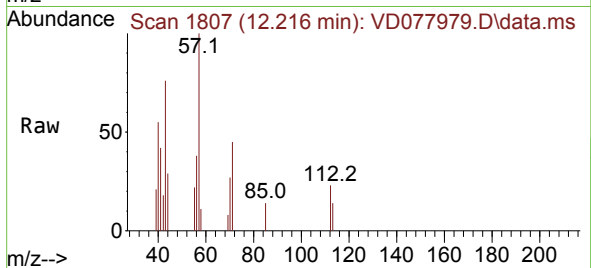
Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

ClientSampleId :



Tgt Ion: 43 Resp: 2156

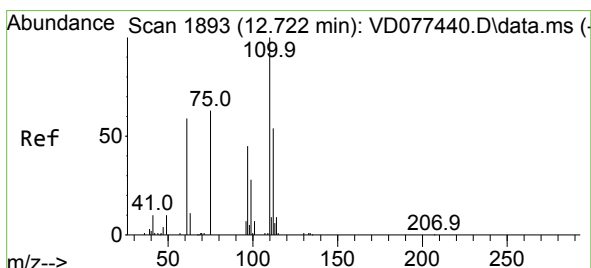
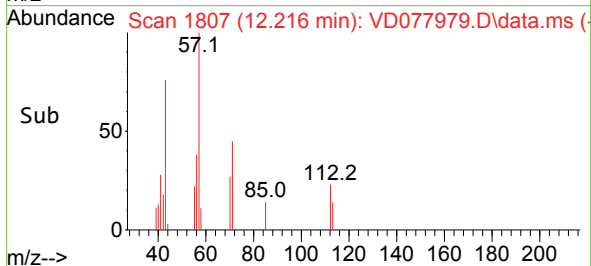
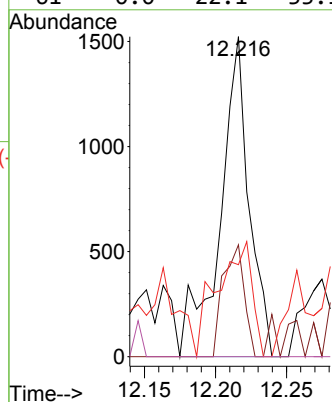
Ion Ratio Lower Upper

43 100

70 25.6 45.0 67.4#

55 43.2 23.8 35.6#

61 0.0 22.1 33.1#



#76

1,2,3-Trichloropropane

Concen: 49.580 ug/l

RT: 12.575 min Scan# 1868

Delta R.T. -0.147 min

Lab File: VD077979.D

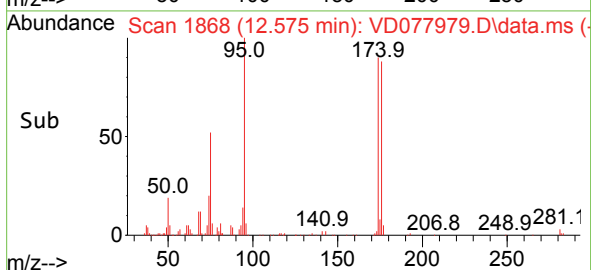
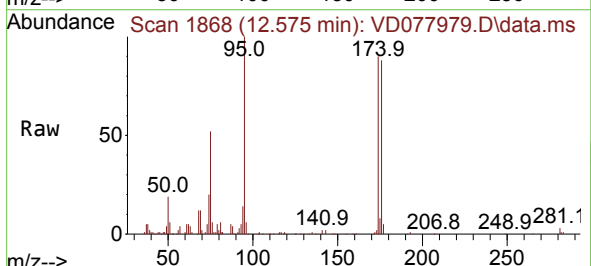
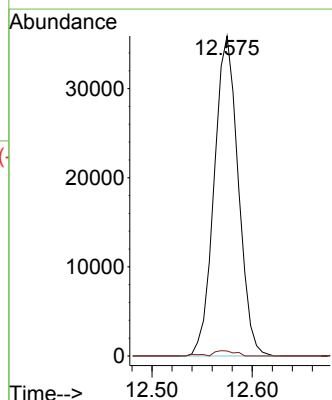
Acq: 19 Dec 2023 17:33

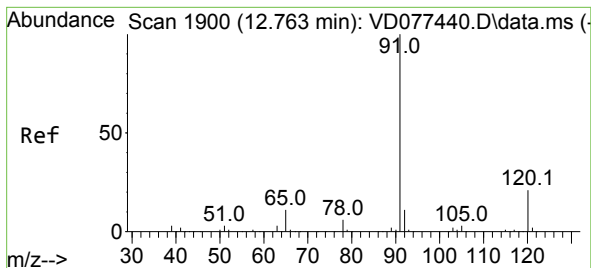
Tgt Ion: 75 Resp: 59763

Ion Ratio Lower Upper

75 100

77 1.7 0.0 0.0#





#78

n-propylbenzene

Concen: 3.002 ug/l

RT: 12.763 min Scan# 1900

Delta R.T. 0.000 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

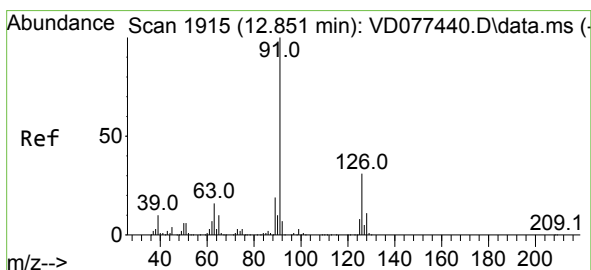
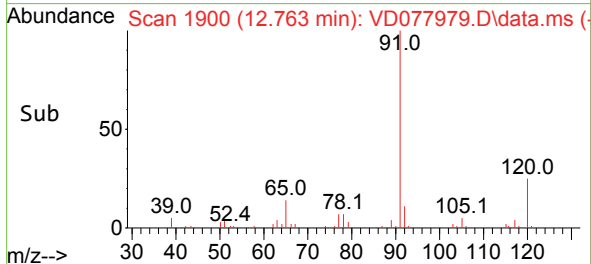
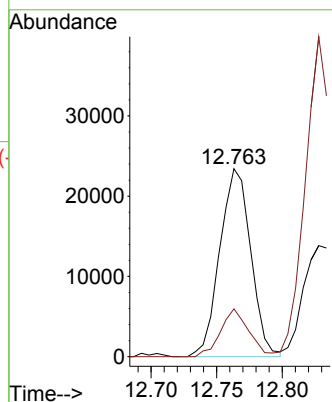
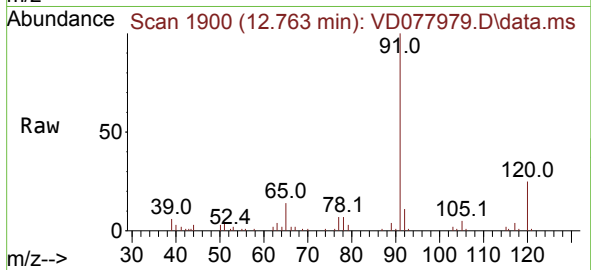
ClientSampleId :

Tgt Ion: 91 Resp: 38473

Ion Ratio Lower Upper

91 100

120 23.2 12.4 37.2



#79

2-Chlorotoluene

Concen: 3.368 ug/l

RT: 12.828 min Scan# 1911

Delta R.T. -0.023 min

Lab File: VD077979.D

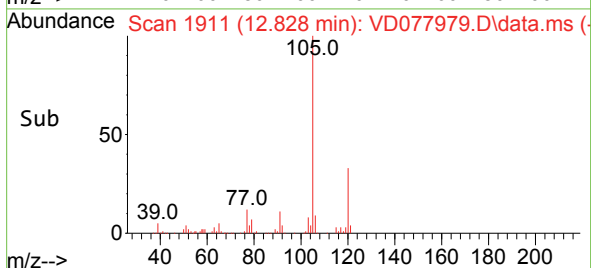
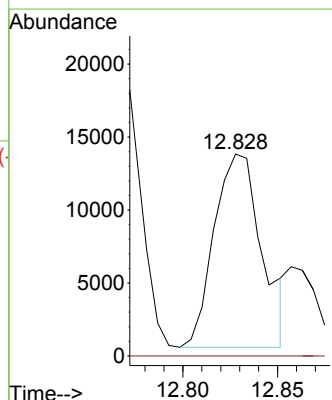
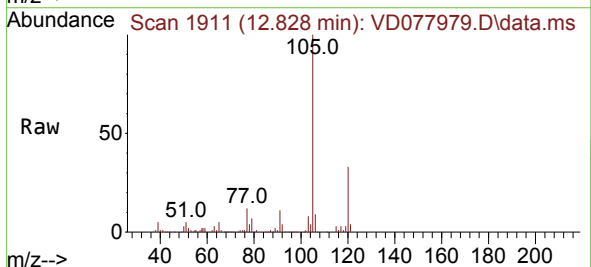
Acq: 19 Dec 2023 17:33

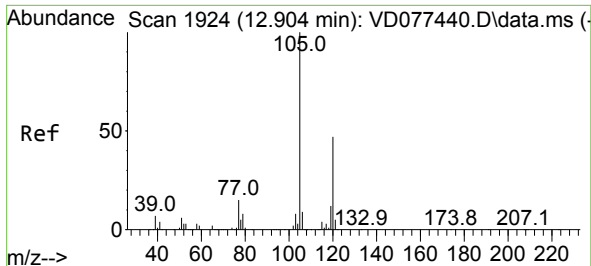
Tgt Ion: 91 Resp: 23138

Ion Ratio Lower Upper

91 100

126 0.0 19.4 58.1#

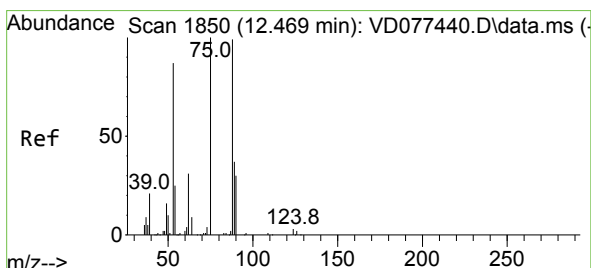
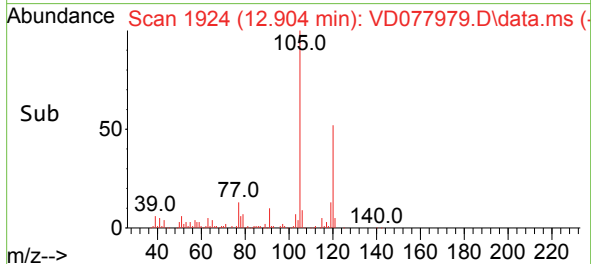
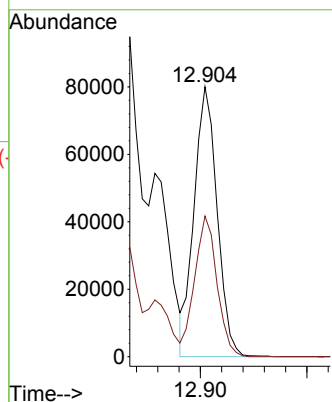
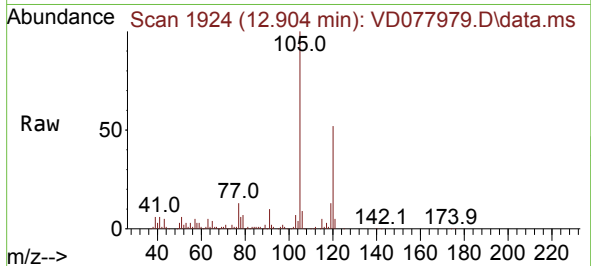




#80
 1,3,5-Trimethylbenzene
 Concen: 13.715 ug/l
 RT: 12.904 min Scan# 1924
 Delta R.T. 0.000 min
 Lab File: VD077979.D
 Acq: 19 Dec 2023 17:33

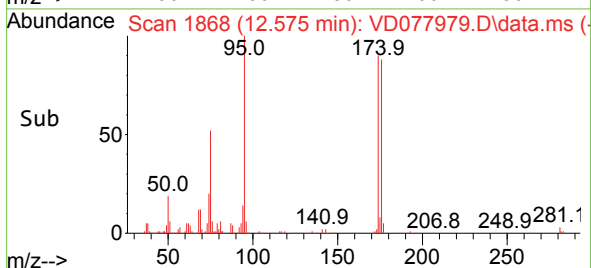
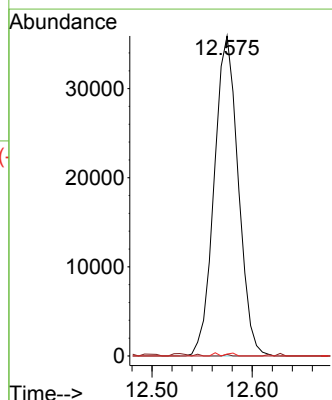
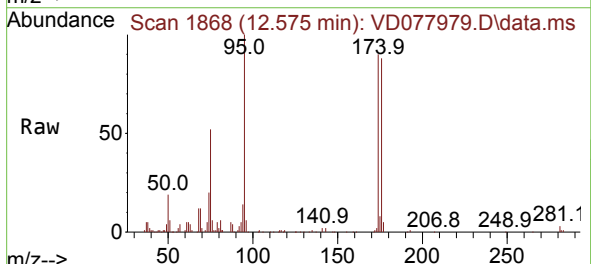
Instrument :
 MSVOA_D
 ClientSampleId :

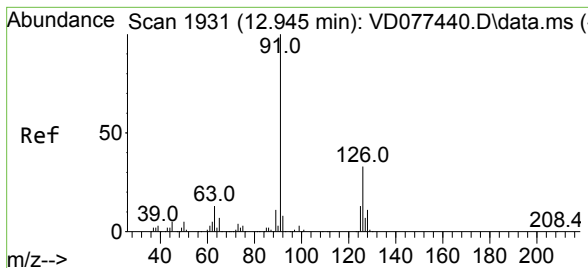
Tgt Ion:105 Resp: 120320
 Ion Ratio Lower Upper
 105 100
 120 50.5 26.4 79.2



#81
 trans-1,4-Dichloro-2-butene
 Concen: 100.453 ug/l
 RT: 12.575 min Scan# 1868
 Delta R.T. 0.106 min
 Lab File: VD077979.D
 Acq: 19 Dec 2023 17:33

Tgt Ion: 75 Resp: 59763
 Ion Ratio Lower Upper
 75 100
 53 0.1 63.0 94.4#
 89 0.3 37.9 56.9#





#82

4-Chlorotoluene

Concen: 1.740 ug/l

RT: 12.904 min Scan# 1931

Delta R.T. -0.041 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

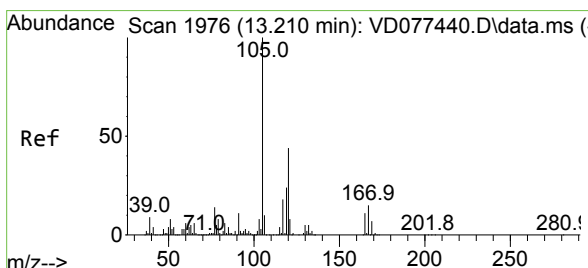
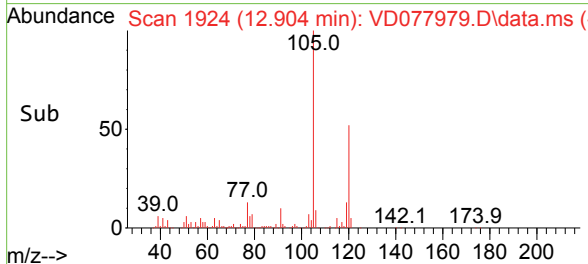
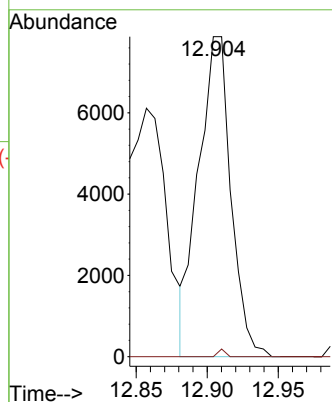
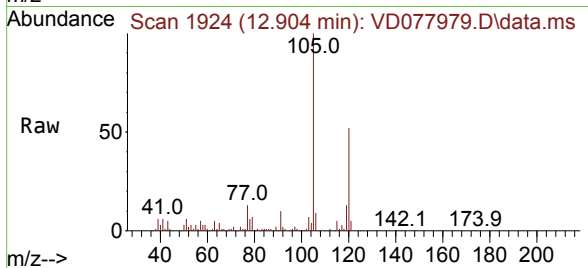
ClientSampleId :

Tgt Ion: 91 Resp: 12493

Ion Ratio Lower Upper

91 100

126 0.5 19.4 58.4#



#84

1,2,4-Trimethylbenzene

Concen: 46.887 ug/l

RT: 13.210 min Scan# 1976

Delta R.T. 0.000 min

Lab File: VD077979.D

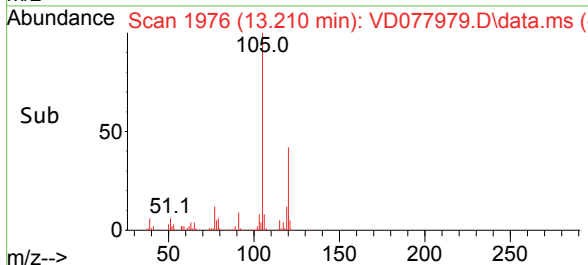
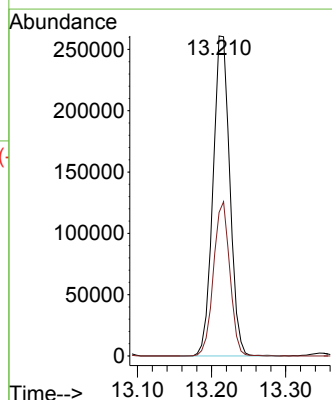
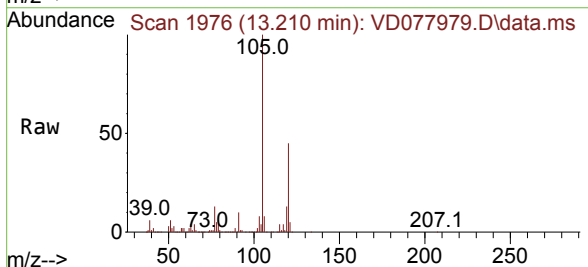
Acq: 19 Dec 2023 17:33

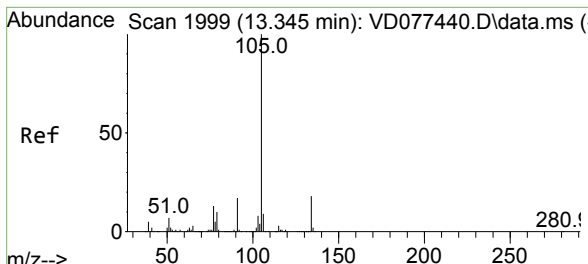
Tgt Ion: 105 Resp: 411424

Ion Ratio Lower Upper

105 100

120 46.7 24.3 72.9

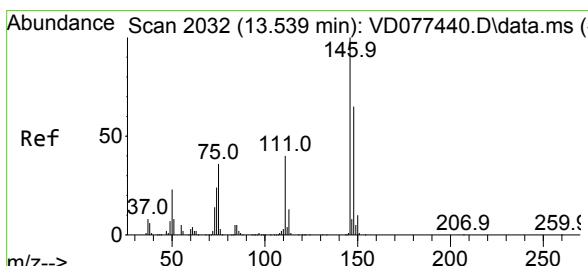
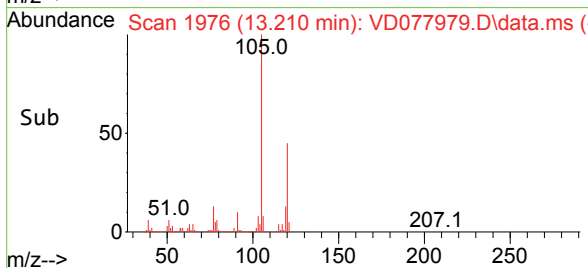
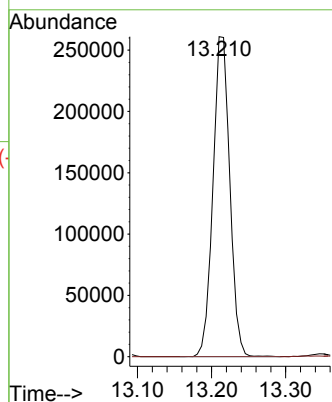
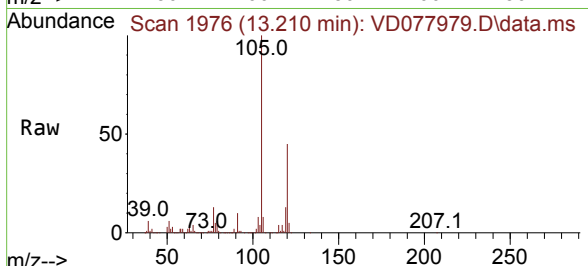




#85
 sec-Butylbenzene
 Concen: 37.580 ug/l
 RT: 13.210 min Scan# 1999
 Delta R.T. -0.135 min
 Lab File: VD077979.D
 Acq: 19 Dec 2023 17:33

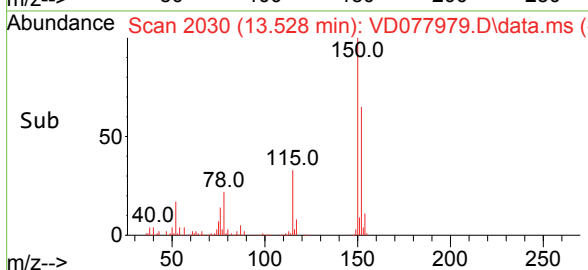
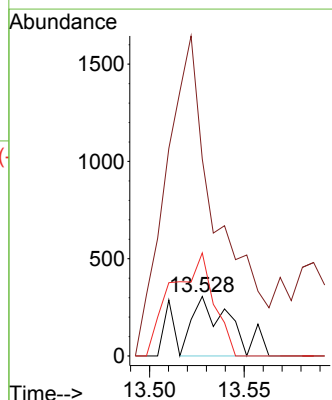
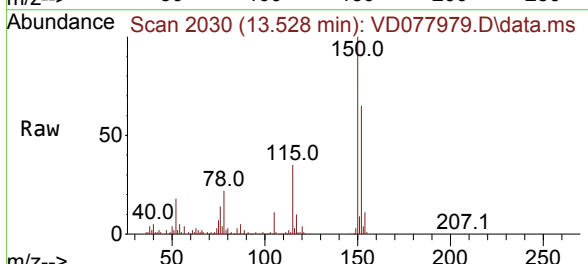
Instrument :
 MSVOA_D
 ClientSampleId :

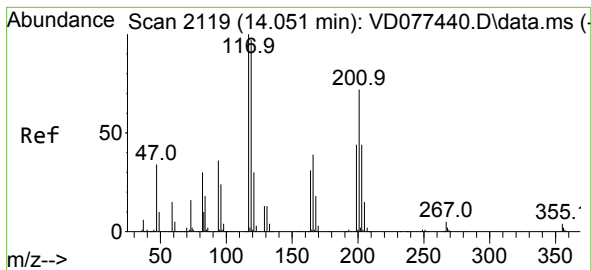
Tgt Ion:105 Resp: 411424
 Ion Ratio Lower Upper
 105 100
 134 0.0 10.9 32.9#



#88
 1,4-Dichlorobenzene
 Concen: Below Cal
 RT: 13.528 min Scan# 2030
 Delta R.T. -0.011 min
 Lab File: VD077979.D
 Acq: 19 Dec 2023 17:33

Tgt Ion:146 Resp: 434
 Ion Ratio Lower Upper
 146 100
 111 741.9 17.4 52.3#
 148 187.3 31.7 95.1#





#90

Hexachloroethane

Concen: 3.540 ug/l

RT: 14.057 min Scan# 2119

Delta R.T. 0.006 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Instrument :

MSVOA_D

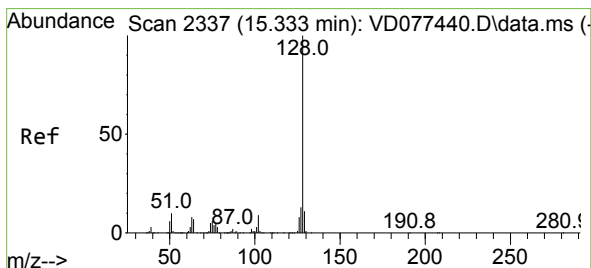
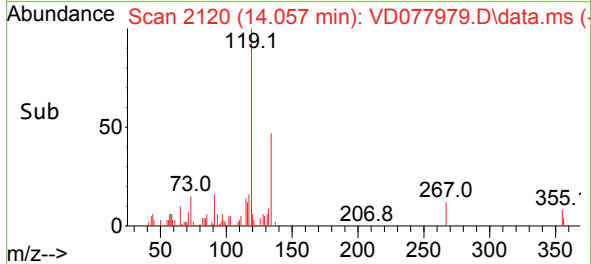
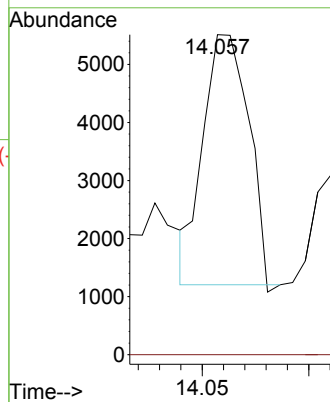
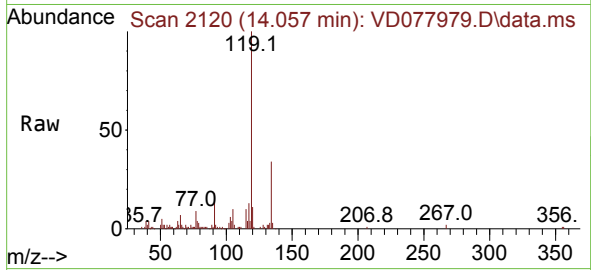
ClientSampleId :

Tgt Ion:117 Resp: 6382

Ion Ratio Lower Upper

117 100

201 0.0 38.5 115.5#



#95

Naphthalene

Concen: 250.149 ug/l

RT: 15.334 min Scan# 2337

Delta R.T. 0.001 min

Lab File: VD077979.D

Acq: 19 Dec 2023 17:33

Tgt Ion:128 Resp: 1221636

Ion Ratio Lower Upper

128 100

127 12.8 10.5 15.7

129 10.7 8.7 13.1

