

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VW012623\
 Data File : VW029960.D
 Acq On : 26 Jan 2023 12:47
 Operator : SY/MD
 Sample : 01295-07
 Misc : 25.0mL/MSVOA_V/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 COLD0

Quant Time: Jan 27 01:29:45 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVTR011223WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Fri Jan 27 01:28:41 2023
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.619	114	379	5.000	ug/L	# 0.01
28) Chlorobenzene-d5	8.709	117	6241	5.000	ug/L	#-0.13
58) 1,4-Dichlorobenzene-d4	11.365	152	38820	5.000	ug/L	0.13
System Monitoring Compounds						
4) Vinyl Chloride-d3	0.000	65	0	0.000	ug/L	
Spiked Amount	5.000	Range	40 - 130	Recovery	=	0.000%#
7) Chloroethane-d5	0.000	69	0	0.000	ug/L	
Spiked Amount	5.000	Range	65 - 130	Recovery	=	0.000%#
11) 1,1-Dichloroethene-d2	0.000	63	0	0.000	ug/L	
Spiked Amount	5.000	Range	60 - 125	Recovery	=	0.000%#
20) 2-Butanone-d5	3.899	46	333	65.356	ug/L	0.02
Spiked Amount	50.000	Range	40 - 130	Recovery	=	130.720%#
24) Chloroform-d	4.326	84	949	17.996	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	360.000%#
26) 1,2-Dichloroethane-d4	4.761	65	3236	144.901	ug/L	-0.26
Spiked Amount	5.000	Range	70 - 130	Recovery	=	2898.000%#
32) Benzene-d6	5.018	84	218	0.118	ug/L	-0.02
Spiked Amount	5.000	Range	70 - 125	Recovery	=	2.400%#
36) 1,2-Dichloropropane-d6	6.056	67	629	1.161	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	23.200%#
41) Toluene-d8	7.330	98	954	0.557	ug/L	0.03
Spiked Amount	5.000	Range	70 - 130	Recovery	=	11.200%#
43) trans-1,3-Dichloroprop...	7.600	79	385	1.946	ug/L	-0.01
Spiked Amount	5.000	Range	55 - 130	Recovery	=	39.000%#
46) 2-Hexanone-d5	8.101	63	153	1.899	ug/L	0.02
Spiked Amount	50.000	Range	45 - 130	Recovery	=	3.800%#
56) 1,1,2,2-Tetrachloroeth...	10.416	84	20088	50.594	ug/L	0.21
Spiked Amount	5.000	Range	65 - 120	Recovery	=	1011.800%#
66) 1,2-Dichlorobenzene-d4	11.715	152	32025	4.538	ug/L	0.10
Spiked Amount	5.000	Range	80 - 120	Recovery	=	90.800%
Target Compounds						
					Qvalue	
17) Methyl tert-butyl Ether	2.892	73	500	8.935	ug/L #	1
18) trans-1,2-Dichloroethene	2.892	96	416	13.829	ug/L #	78
19) 1,1-Dichloroethane	3.204	63	2959	58.797	ug/L #	89
21) 2-Butanone	4.066	43	606	116.320	ug/L	85
22) cis-1,2-Dichloroethene	3.896	96	303	9.452	ug/L #	28
23) Bromochloromethane	4.249	128	1458	110.139	ug/L #	46
25) Chloroform	4.371	83	2286	41.788	ug/L	83
27) 1,2-Dichloroethane	5.098	62	1443	54.292	ug/L #	23
29) 1,1,1-Trichloroethane	4.597	97	301	0.371	ug/L #	58
30) Cyclohexane	4.854	56	6188	8.066	ug/L	94
31) Carbon tetrachloride	4.571	117	966	1.370	ug/L	86
33) Benzene	5.092	78	1799	0.872	ug/L	100
34) Trichloroethene	5.934	95	858	1.641	ug/L	80
35) Methylcyclohexane	6.127	83	1279	1.449	ug/L #	19
37) 1,2-Dichloropropane	6.162	63	334	0.691	ug/L #	1
38) Bromodichloromethane	6.474	83	728	1.165	ug/L #	64
39) cis-1,3-Dichloropropene	7.011	75	674	1.040	ug/L #	51
40) 4-Methyl-2-pentanone	7.220	43	1141	5.533	ug/L #	46
44) trans-1,3-Dichloropropene	7.632	75	343	0.657	ug/L #	1

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

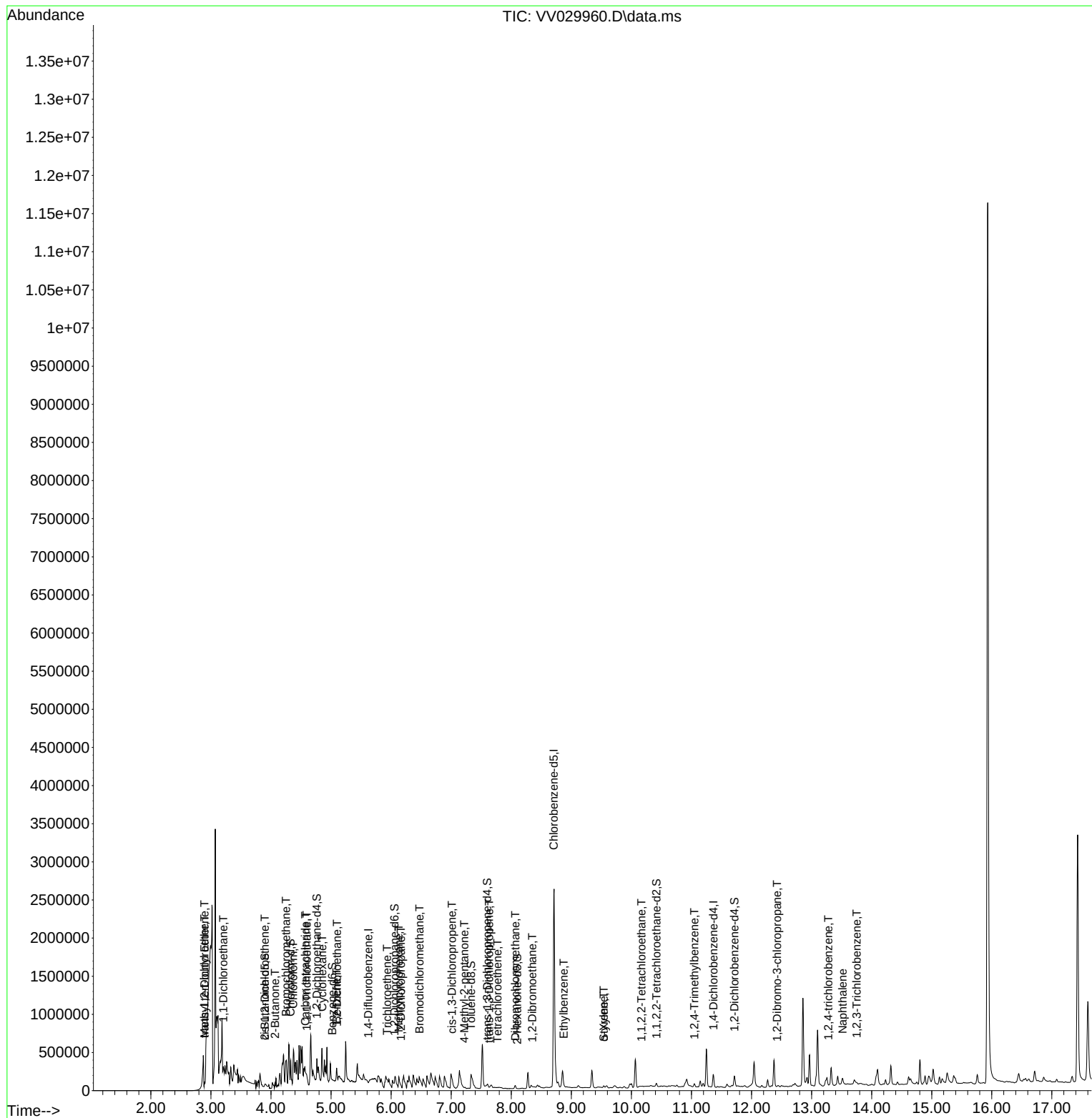
47) Tetrachloroethene	7.770	164	133	0.302	ug/L	85
49) Dibromochloromethane	8.066	129	39	0.095	ug/L #	1
50) 1,2-Dibromoethane	8.349	107	111	0.367	ug/L #	6
52) Ethylbenzene	8.873	91	281	0.121	ug/L	89
54) o-Xylene	9.538	106	6417	7.334	ug/L	92
55) Styrene	9.538	104	522	0.347	ug/L #	1
57) 1,1,2,2-Tetrachloroethane	10.169	83	151	0.390	ug/L #	83
63) 1,2,4-Trimethylbenzene	11.050	105	12888	0.608	ug/L	96
68) 1,2-Dibromo-3-chloropr...	12.426	75	182	0.268	ug/L #	1
70) 1,2,4-trichlorobenzene	13.278	180	891	0.112	ug/L	96
71) Naphthalene	13.516	128	52117	5.076	ug/L	98
72) 1,2,3-Trichlorobenzene	13.751	180	3765	0.572	ug/L	90

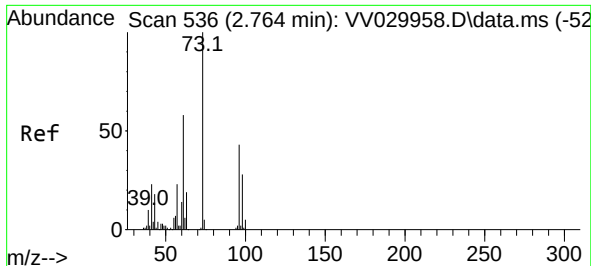
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#17

Methyl tert-butyl Ether

Concen: 8.935 ug/L

RT: 2.892 min Scan# 51

Delta R.T. 0.129 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

COLD0

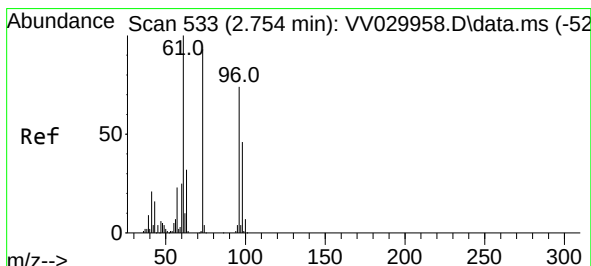
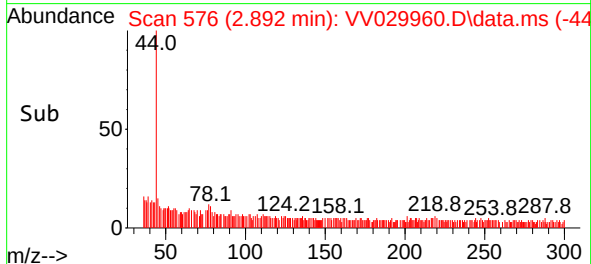
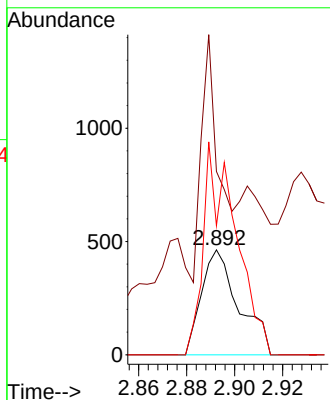
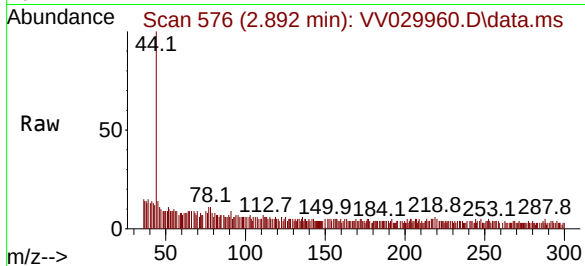
Tgt Ion: 73 Resp: 500

Ion Ratio Lower Upper

73 100

43 113.6 13.0 19.4#

57 176.0 17.1 25.7#



#18

trans-1,2-Dichloroethene

Concen: 13.829 ug/L

RT: 2.892 min Scan# 576

Delta R.T. 0.138 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

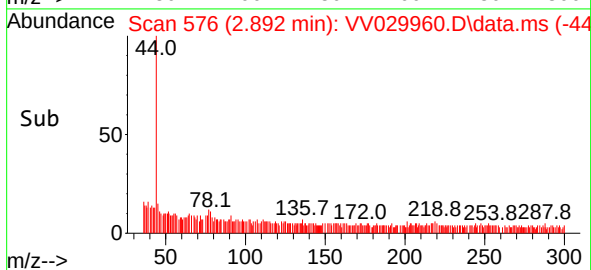
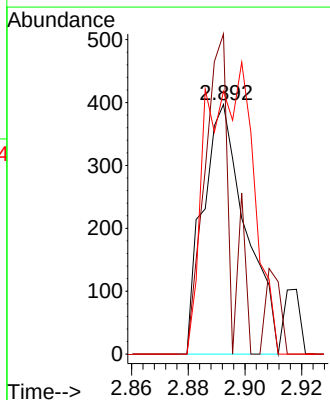
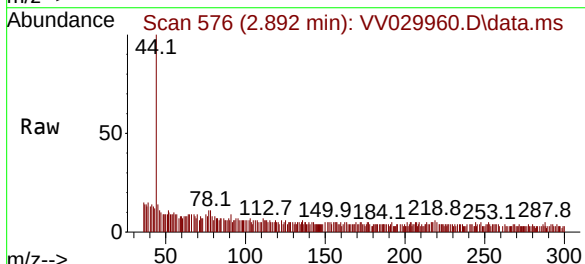
Tgt Ion: 96 Resp: 416

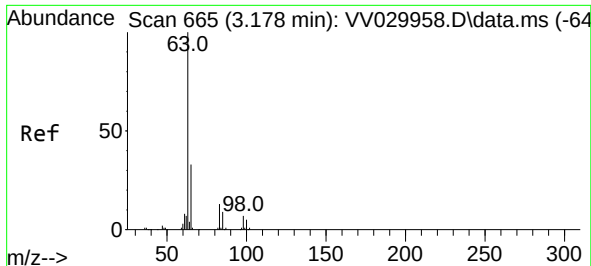
Ion Ratio Lower Upper

96 100

61 128.2 86.1 159.9

98 105.3 43.9 81.5#





#19

1,1-Dichloroethane

Concen: 58.797 ug/L

RT: 3.204 min Scan# 6

Delta R.T. 0.026 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

COLD0

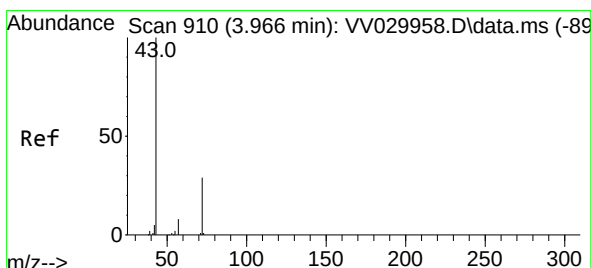
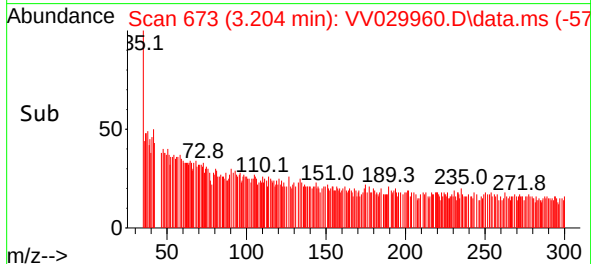
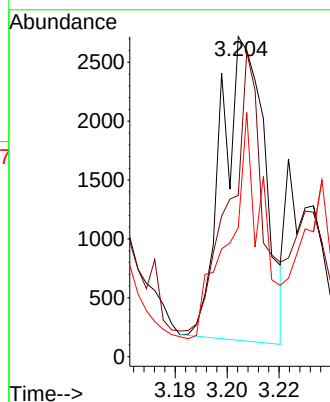
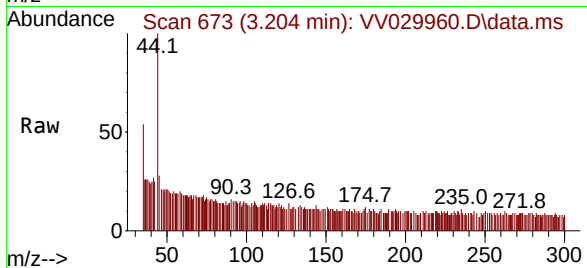
Tgt Ion: 63 Resp: 2959

Ion Ratio Lower Upper

63 100

65 33.7 22.4 41.6

83 27.0 10.2 19.0#



#21

2-Butanone

Concen: 116.320 ug/L

RT: 4.066 min Scan# 941

Delta R.T. 0.100 min

Lab File: VV029960.D

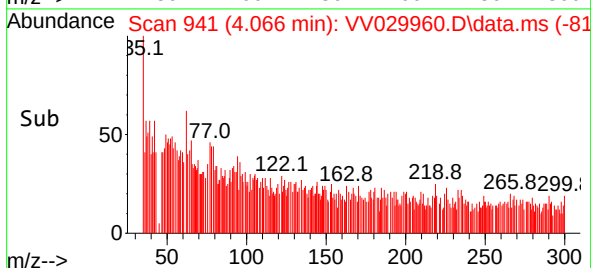
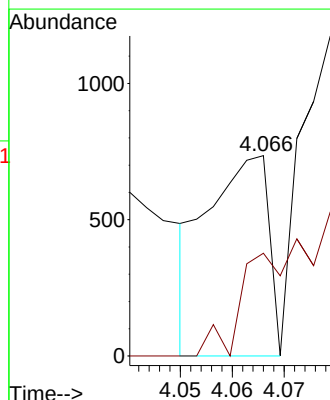
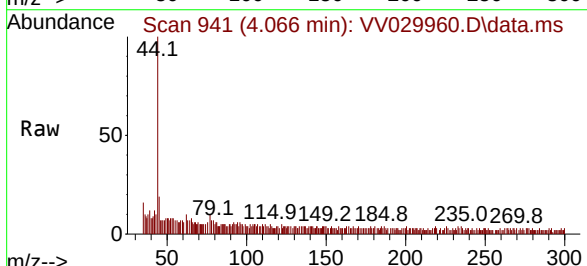
Acq: 26 Jan 2023 12:47

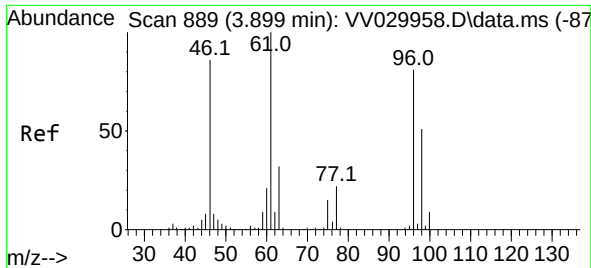
Tgt Ion: 43 Resp: 606

Ion Ratio Lower Upper

43 100

72 35.8 13.9 41.6

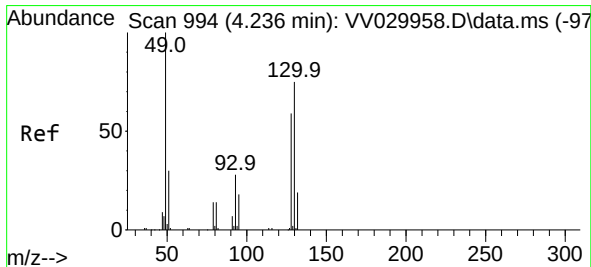
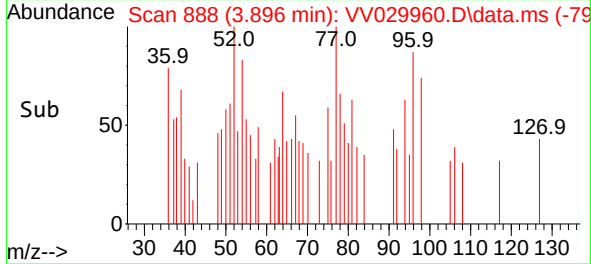
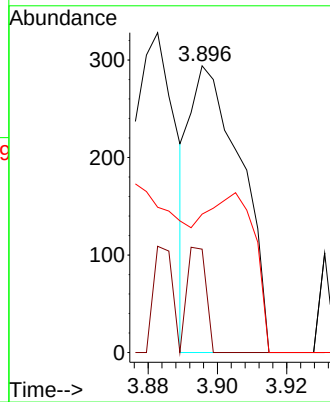
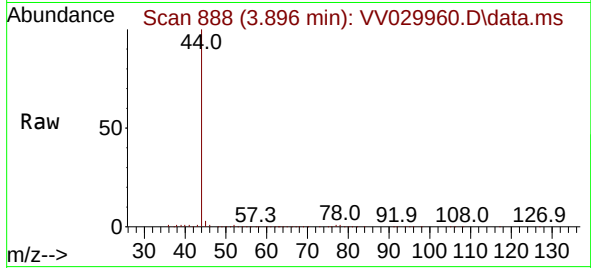




#22
 cis-1,2-Dichloroethene
 Concen: 9.452 ug/L
 RT: 3.896 min Scan# 889
 Delta R.T. -0.003 min
 Lab File: VV029960.D
 Acq: 26 Jan 2023 12:47

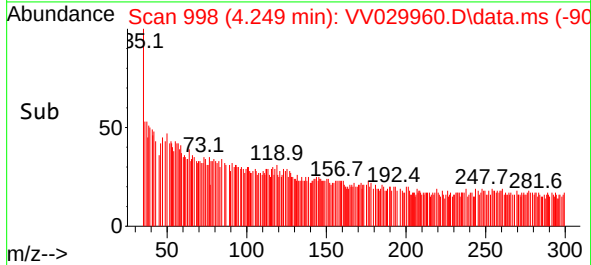
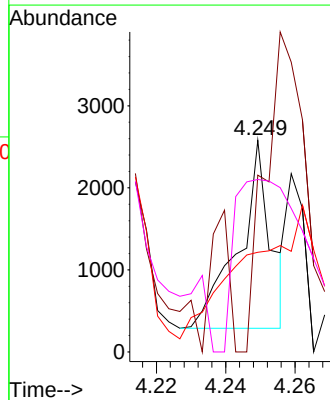
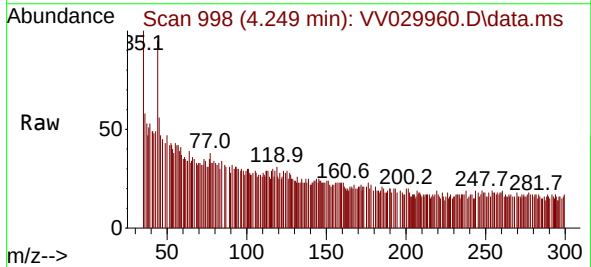
Instrument :
 MSVOA_V
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 COLD0

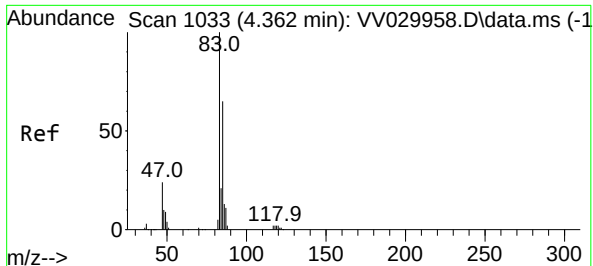
Tgt Ion: 96 Resp: 303
 Ion Ratio Lower Upper
 96 100
 61 36.1 80.0 148.6#
 68 48.3 0.0 0.0#



#23
 Bromochloromethane
 Concen: 110.139 ug/L
 RT: 4.249 min Scan# 998
 Delta R.T. 0.013 min
 Lab File: VV029960.D
 Acq: 26 Jan 2023 12:47

Tgt Ion: 128 Resp: 1458
 Ion Ratio Lower Upper
 128 100
 49 83.6 91.2 169.4#
 130 47.1 87.0 161.6#
 51 81.5 35.8 53.6#





#25

Chloroform

Concen: 41.788 ug/L

RT: 4.371 min Scan# 1033

Delta R.T. 0.010 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

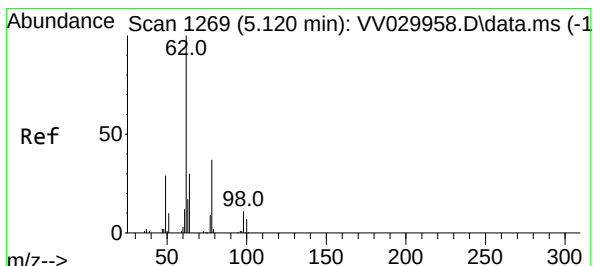
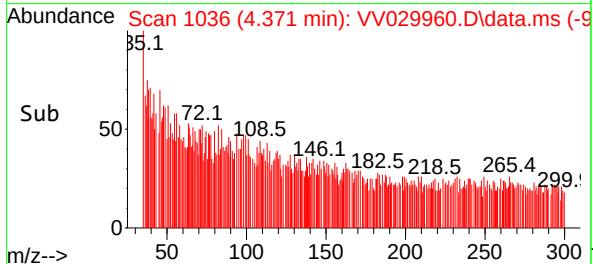
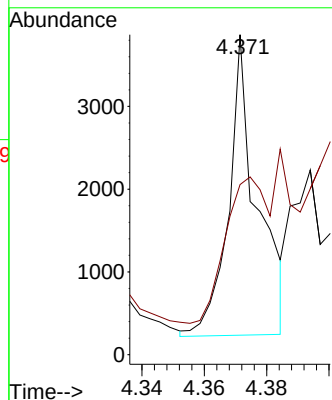
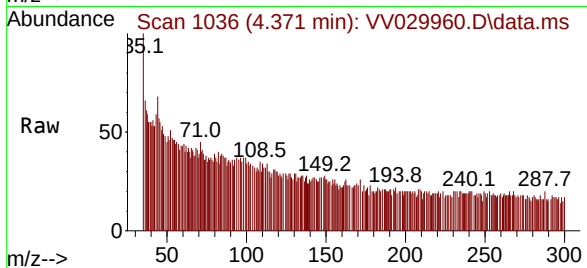
COLD0

Tgt Ion: 83 Resp: 2286

Ion Ratio Lower Upper

83 100

85 53.1 46.5 86.5



#27

1,2-Dichloroethane

Concen: 54.292 ug/L

RT: 5.098 min Scan# 1262

Delta R.T. -0.022 min

Lab File: VV029960.D

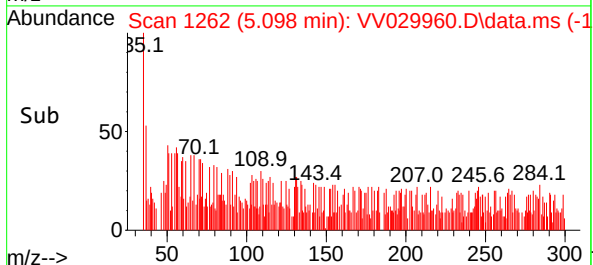
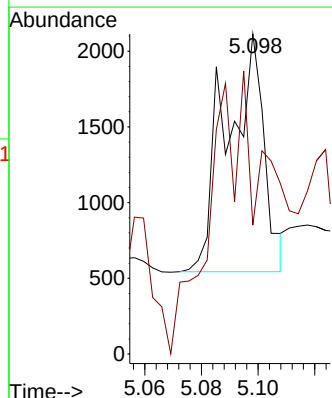
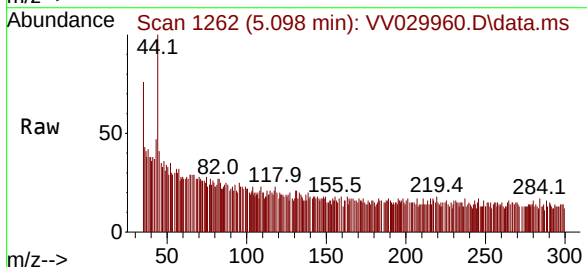
Acq: 26 Jan 2023 12:47

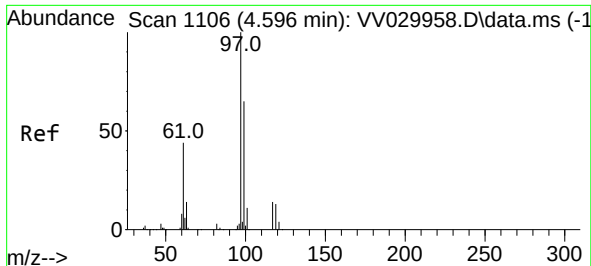
Tgt Ion: 62 Resp: 1443

Ion Ratio Lower Upper

62 100

98 40.3 8.9 13.3#





#29

1,1,1-Trichloroethane

Concen: 0.371 ug/L

RT: 4.597 min Scan# 1106

Delta R.T. 0.000 min

Lab File: VV029960.D

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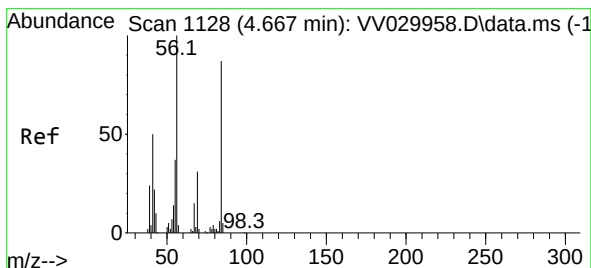
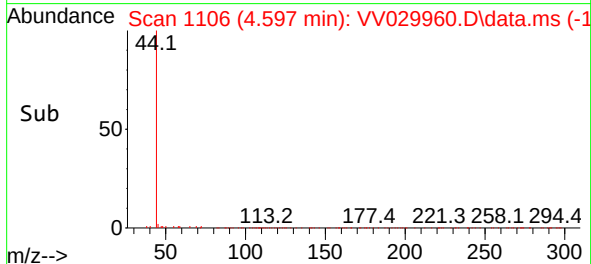
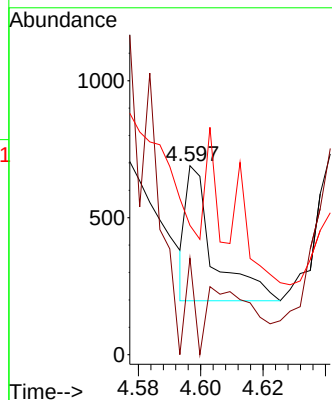
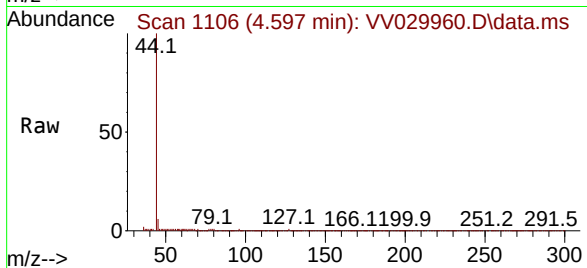
Tgt Ion: 97 Resp: 301

Ion Ratio Lower Upper

97 100

99 85.7 51.3 76.9#

61 0.0 31.6 47.4#



#30

Cyclohexane

Concen: 8.066 ug/L

RT: 4.854 min Scan# 1186

Delta R.T. 0.187 min

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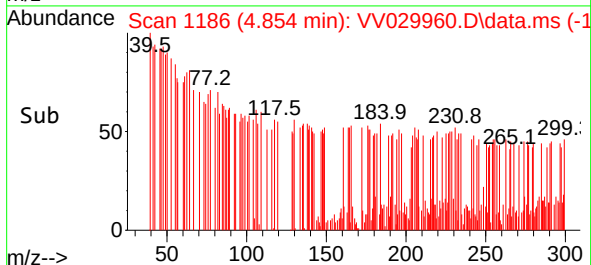
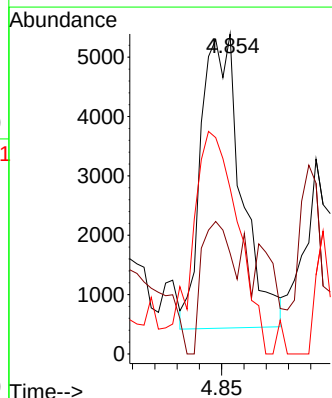
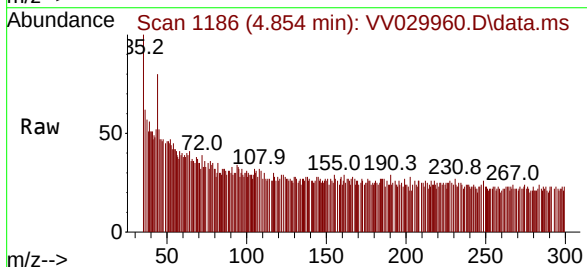
Tgt Ion: 56 Resp: 6188

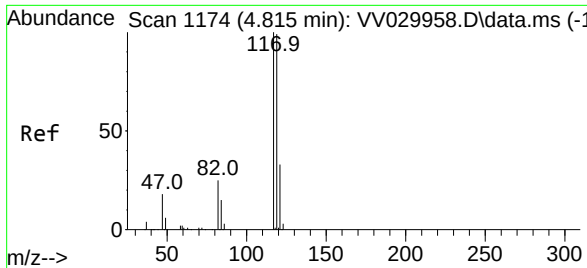
Ion Ratio Lower Upper

56 100

69 34.8 26.7 40.1

84 84.8 73.8 110.8

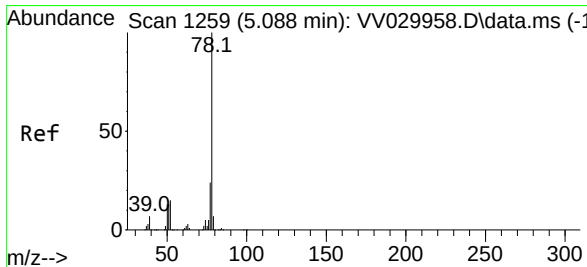
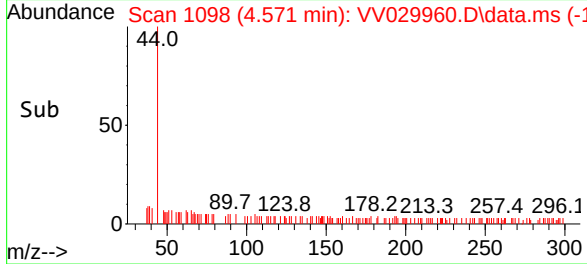
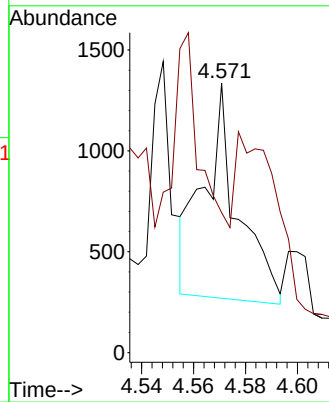
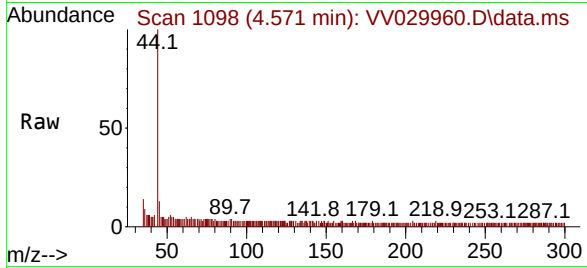




#31
Carbon tetrachloride
Concen: 1.370 ug/L
RT: 4.571 min Scan# 1174
Delta R.T. -0.244 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

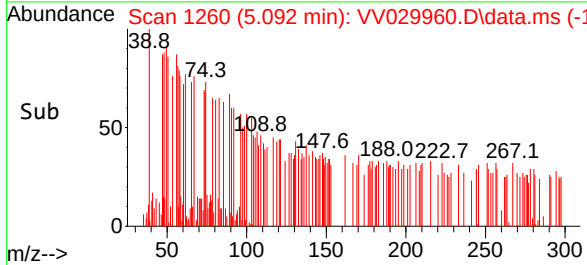
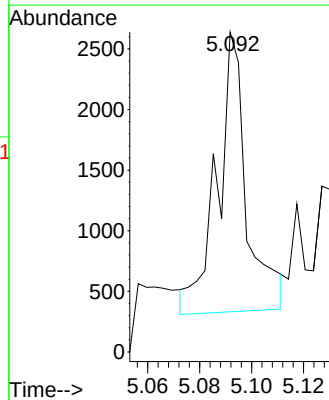
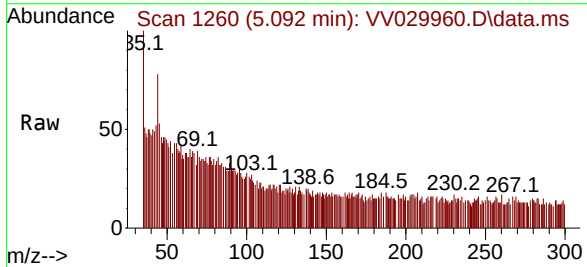
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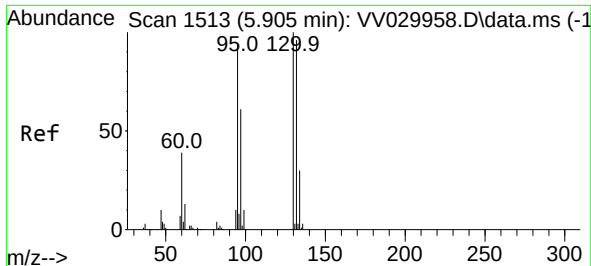
Tgt Ion:117 Resp: 966
Ion Ratio Lower Upper
117 100
119 109.5 76.6 114.8



#33
Benzene
Concen: 0.872 ug/L
RT: 5.092 min Scan# 1260
Delta R.T. 0.003 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

Tgt Ion: 78 Resp: 1799





#34

Trichloroethene

Concen: 1.641 ug/L

RT: 5.934 min Scan# 1

Delta R.T. 0.029 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

COLD0

Tgt Ion: 95 Resp: 858

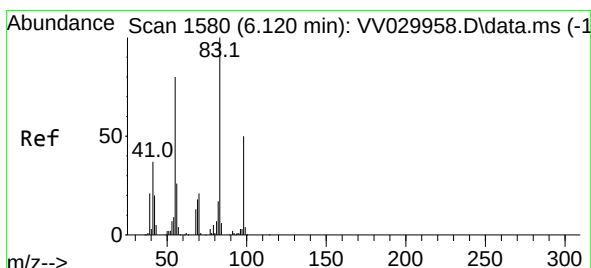
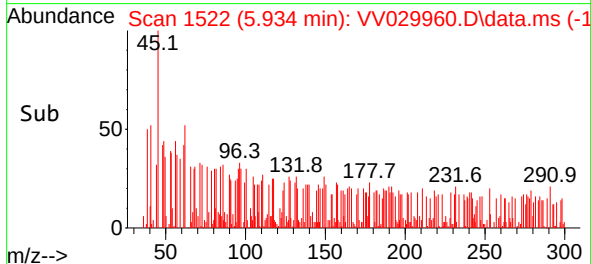
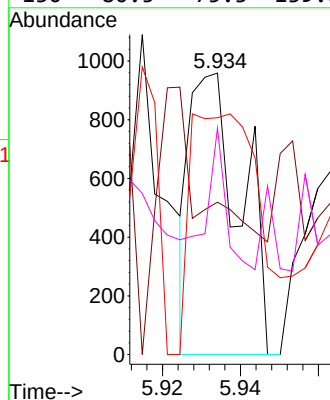
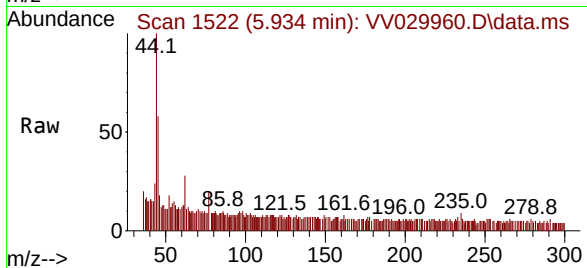
Ion Ratio Lower Upper

95 100

97 54.1 44.9 83.3

132 84.2 71.8 133.4

130 80.5 75.3 139.8



#35

Methylcyclohexane

Concen: 1.449 ug/L

RT: 6.127 min Scan# 1582

Delta R.T. 0.007 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

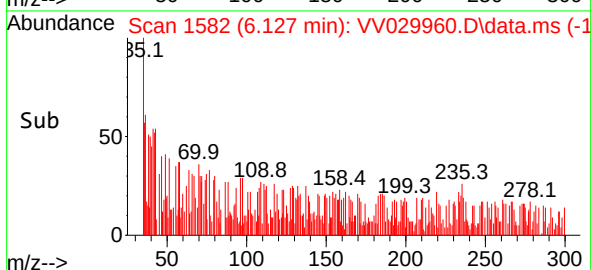
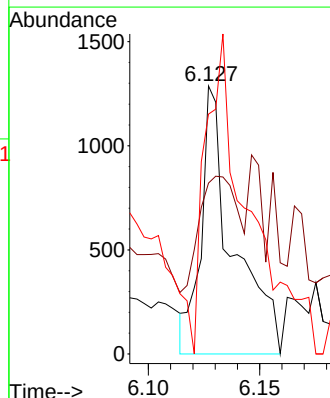
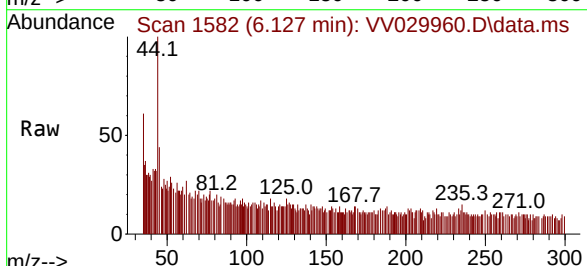
Tgt Ion: 83 Resp: 1279

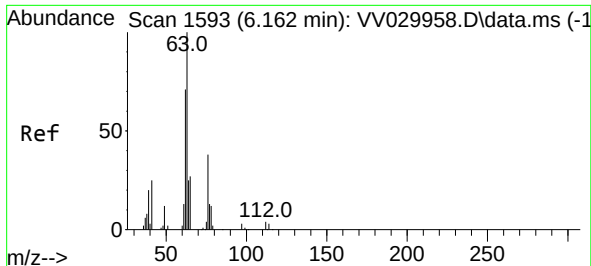
Ion Ratio Lower Upper

83 100

55 52.6 57.3 85.9#

98 162.0 39.0 58.6#





#37

1,2-Dichloropropane

Concen: 0.691 ug/L

RT: 6.162 min Scan# 1593

Delta R.T. 0.000 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

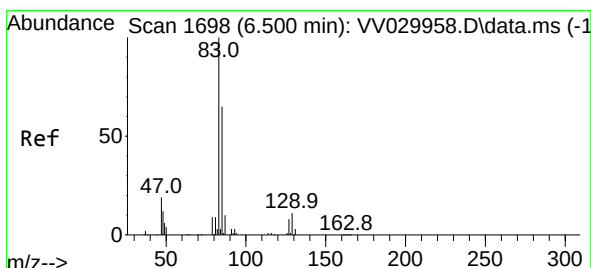
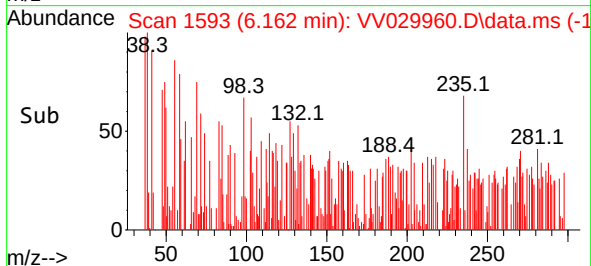
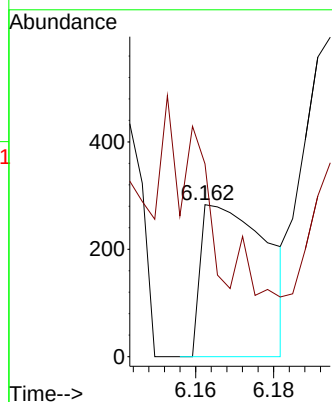
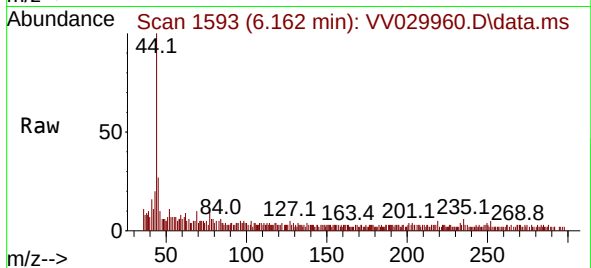
COLD0

Tgt Ion: 63 Resp: 334

Ion Ratio Lower Upper

63 100

112 60.8 3.9 5.9#



#38

Bromodichloromethane

Concen: 1.165 ug/L

RT: 6.474 min Scan# 1690

Delta R.T. -0.026 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

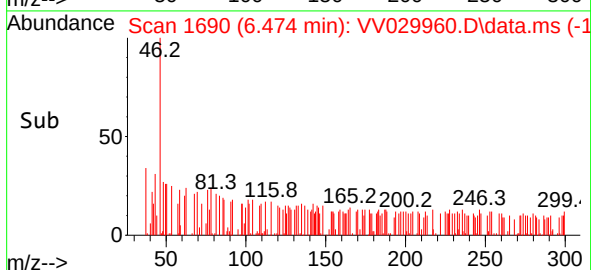
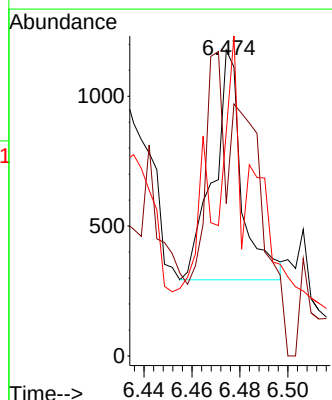
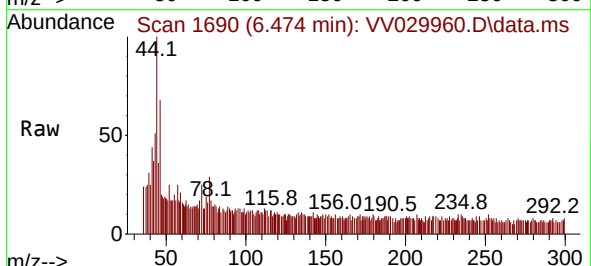
Tgt Ion: 83 Resp: 728

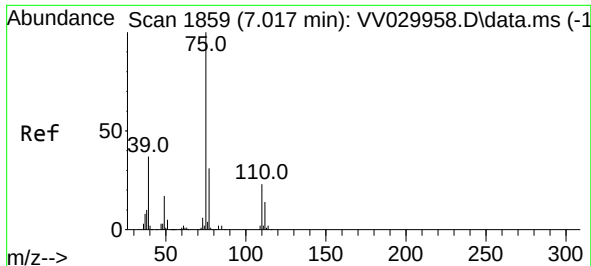
Ion Ratio Lower Upper

83 100

85 49.8 43.2 80.2

127 73.3 7.0 10.6#





#39

cis-1,3-Dichloropropene

Concen: 1.040 ug/L

RT: 7.011 min Scan# 1859

Delta R.T. -0.006 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

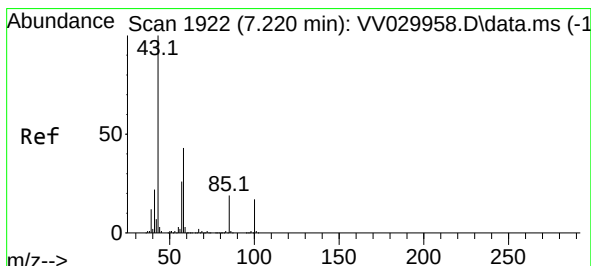
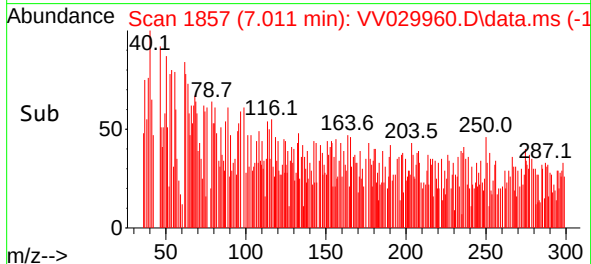
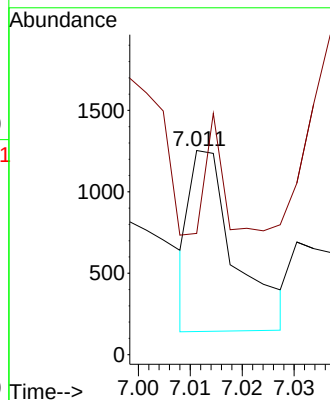
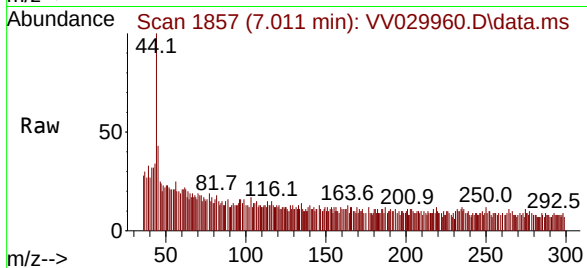
COLD0

Tgt Ion: 75 Resp: 674

Ion Ratio Lower Upper

75 100

77 59.4 22.4 41.6#



#40

4-Methyl-2-pentanone

Concen: 5.533 ug/L

RT: 7.220 min Scan# 1922

Delta R.T. 0.000 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

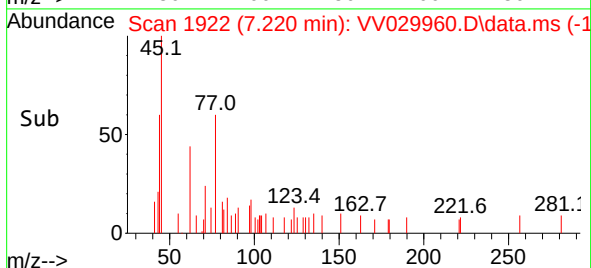
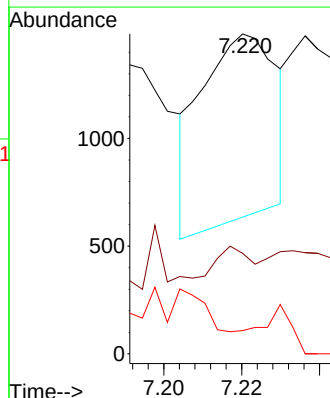
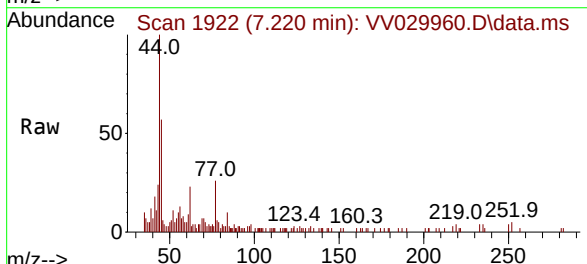
Tgt Ion: 43 Resp: 1141

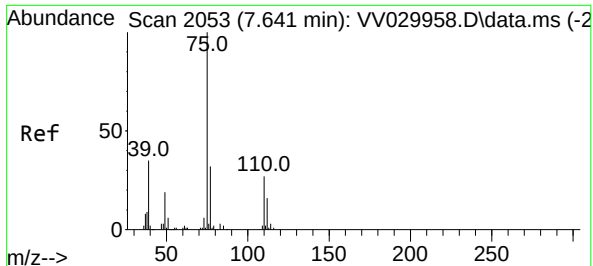
Ion Ratio Lower Upper

43 100

58 7.3 36.7 55.1#

100 0.0 15.6 23.4#

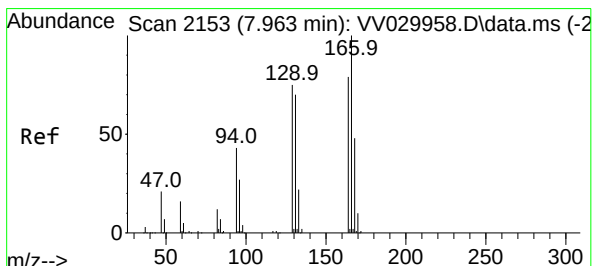
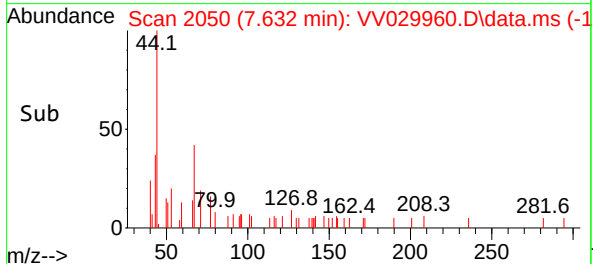
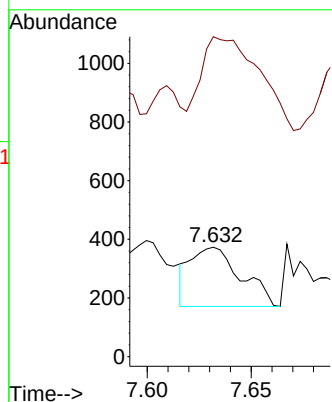
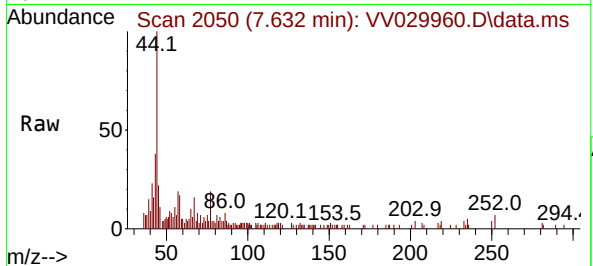




#44
trans-1,3-Dichloropropene
Concen: 0.657 ug/L
RT: 7.632 min Scan# 2050
Delta R.T. -0.009 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

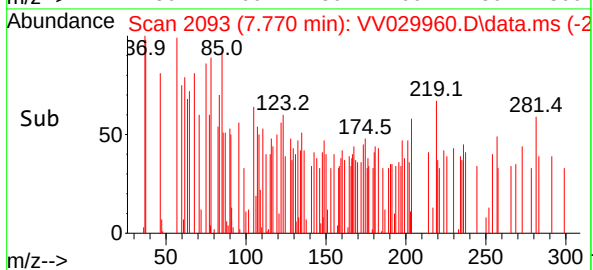
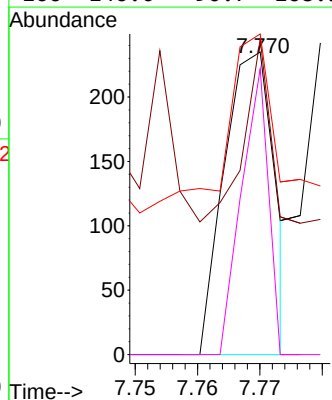
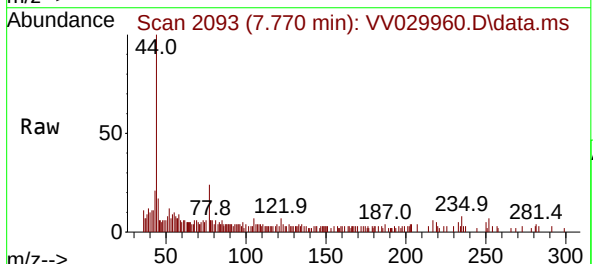
Instrument :
MSVOA_V
ClientSampleId :
COLD0

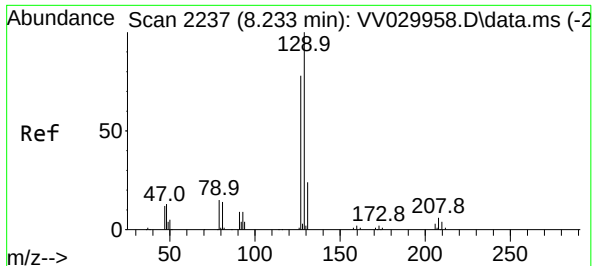
Tgt Ion: 75 Resp: 343
Ion Ratio Lower Upper
75 100
77 292.5 21.9 40.7#



#47
Tetrachloroethene
Concen: 0.302 ug/L
RT: 7.770 min Scan# 2093
Delta R.T. -0.193 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

Tgt Ion: 164 Resp: 133
Ion Ratio Lower Upper
164 100
129 104.3 64.5 119.7
131 106.0 62.9 116.7
166 146.0 90.7 168.5





#49

Dibromochloromethane

Concen: 0.095 ug/L

RT: 8.066 min Scan# 2185

Delta R.T. -0.167 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

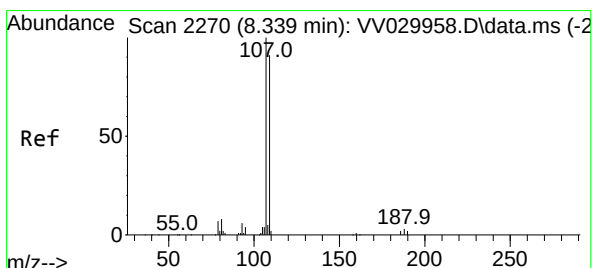
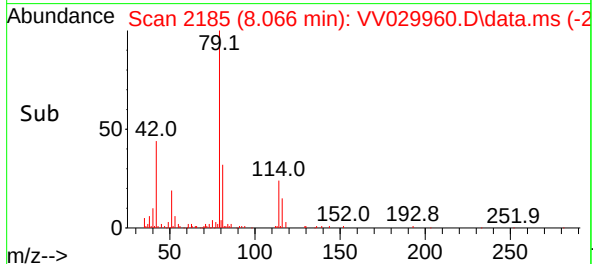
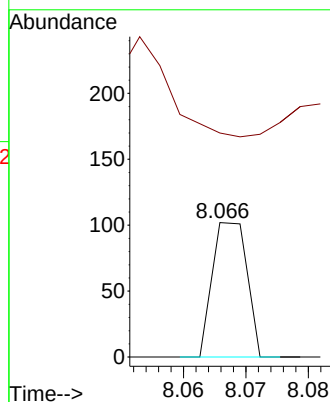
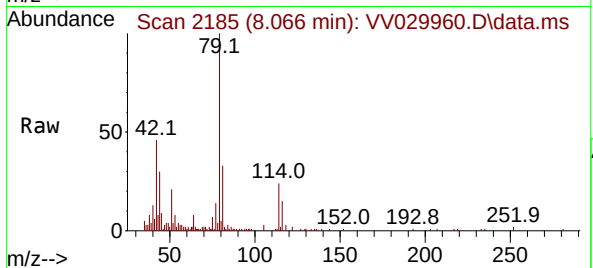
COLD0

Tgt Ion:129 Resp: 39

Ion Ratio Lower Upper

129 100

127 166.7 54.1 100.5#



#50

1,2-Dibromoethane

Concen: 0.367 ug/L

RT: 8.349 min Scan# 2273

Delta R.T. 0.010 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

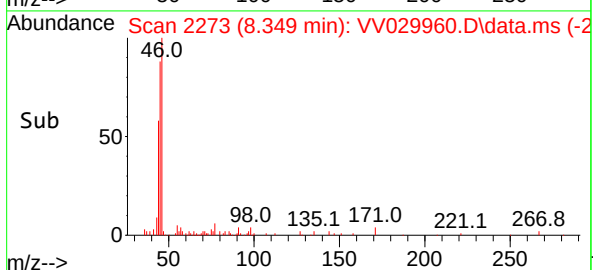
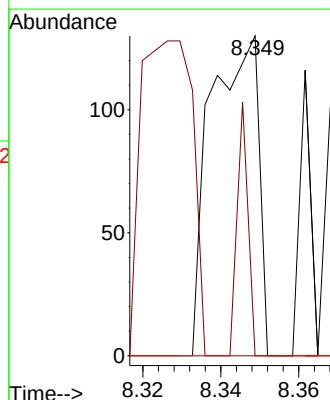
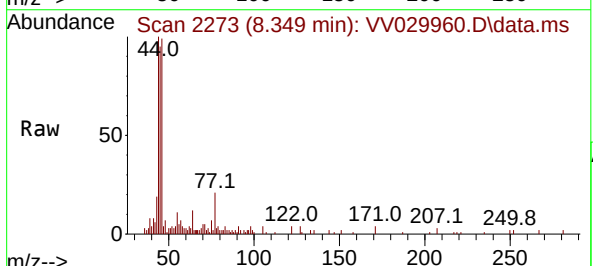
Tgt Ion:107 Resp: 111

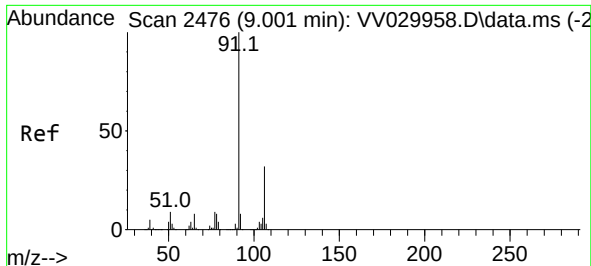
Ion Ratio Lower Upper

107 100

109 0.0 66.1 122.7#

188 0.0 2.9 4.3#

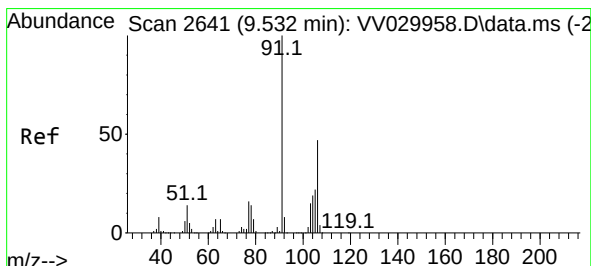
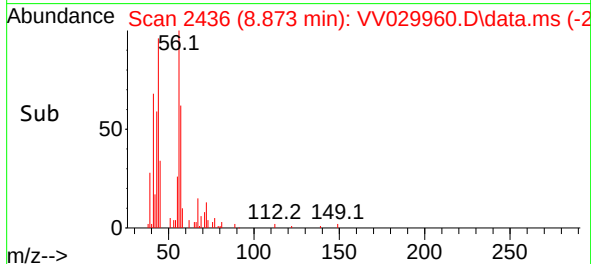
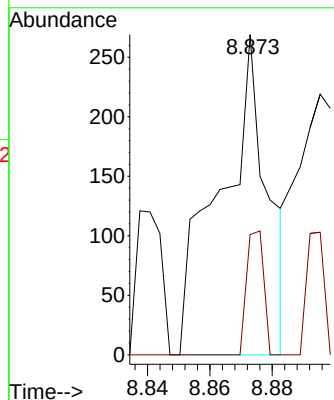
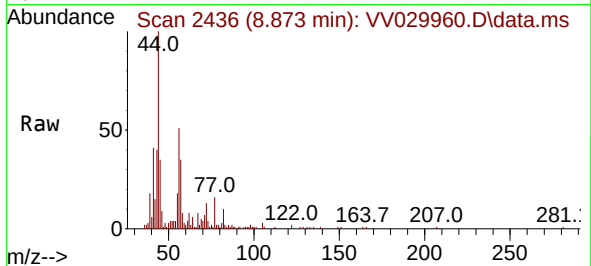




#52
Ethylbenzene
Concen: 0.121 ug/L
RT: 8.873 min Scan# 2476
Delta R.T. -0.128 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

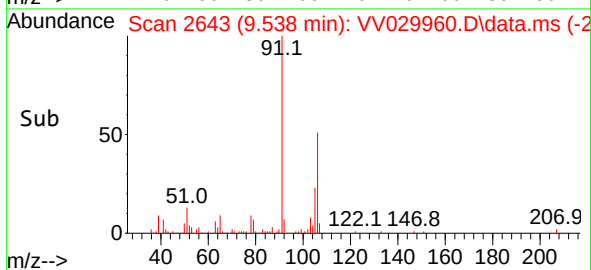
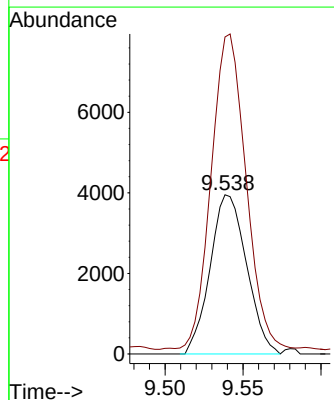
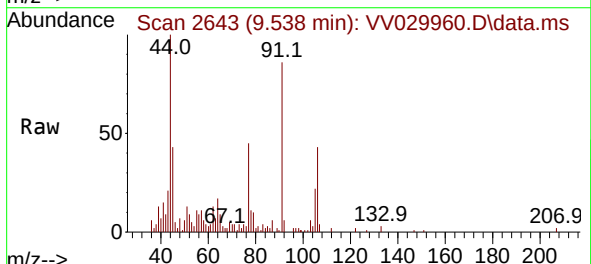
Instrument :
MSVOA_V
ClientSampleId :
COLD0

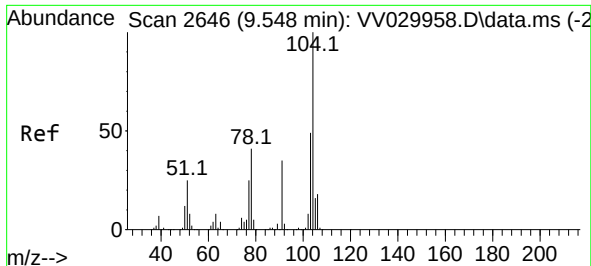
Tgt Ion: 91 Resp: 281
Ion Ratio Lower Upper
91 100
106 37.5 21.9 40.7



#54
o-Xylene
Concen: 7.334 ug/L
RT: 9.538 min Scan# 2643
Delta R.T. 0.007 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

Tgt Ion: 106 Resp: 6417
Ion Ratio Lower Upper
106 100
91 199.1 147.7 274.3

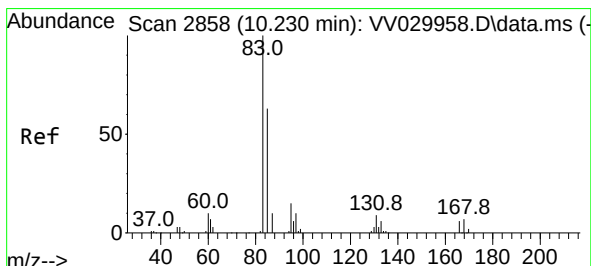
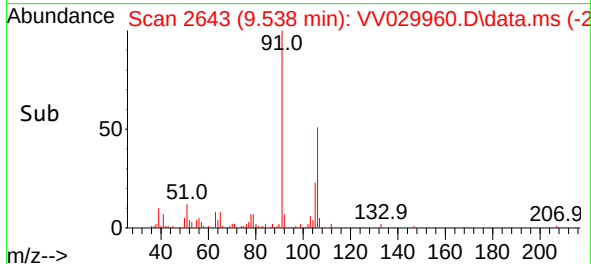
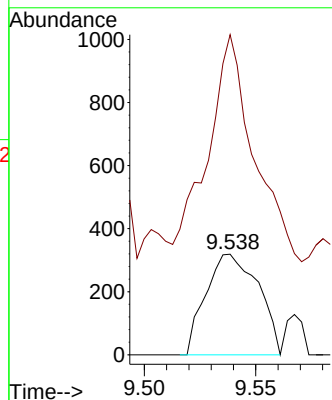
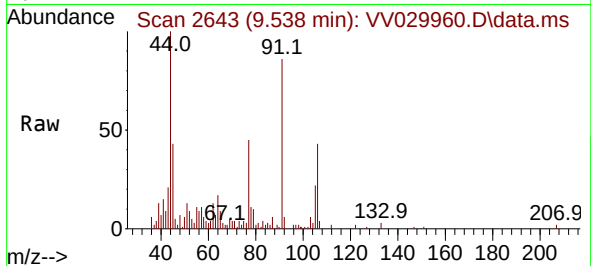




#55
Styrene
Concen: 0.347 ug/L
RT: 9.538 min Scan# 2643
Delta R.T. -0.009 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

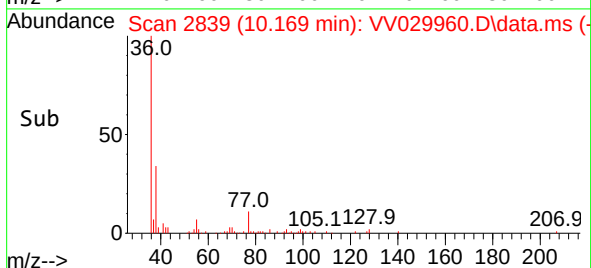
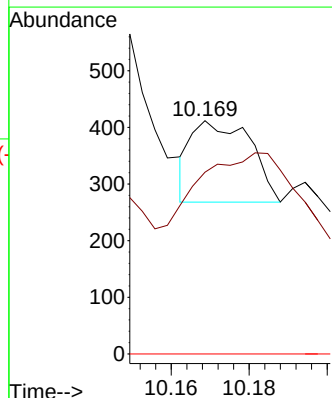
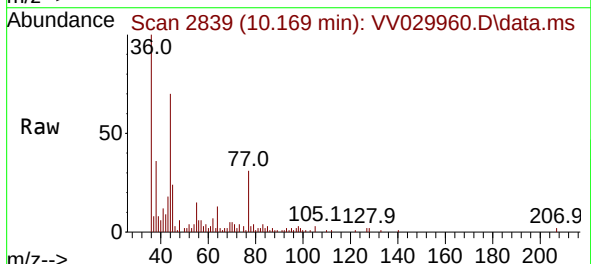
Instrument :
MSVOA_V
ClientSampleId :
COLD0

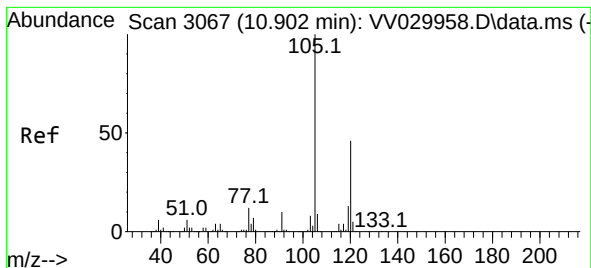
Tgt Ion:104 Resp: 522
Ion Ratio Lower Upper
104 100
78 318.2 28.6 53.2#



#57
1,1,2,2-Tetrachloroethane
Concen: 0.390 ug/L
RT: 10.169 min Scan# 2839
Delta R.T. -0.061 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

Tgt Ion: 83 Resp: 151
Ion Ratio Lower Upper
83 100
85 77.9 46.0 85.4
131 0.0 8.4 12.6#





#63

1,2,4-Trimethylbenzene

Concen: 0.608 ug/L

RT: 11.050 min Scan# 3113

Delta R.T. 0.148 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

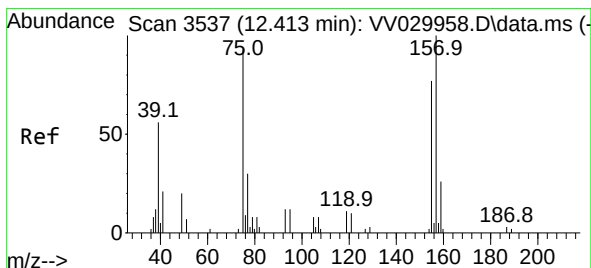
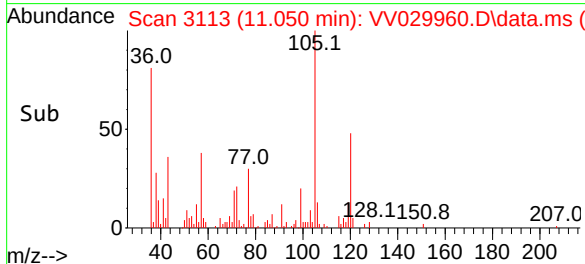
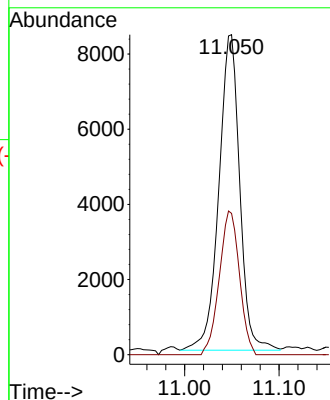
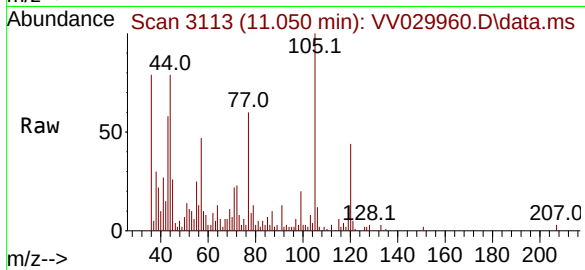
COLD0

Tgt Ion:105 Resp: 12888

Ion Ratio Lower Upper

105 100

120 43.8 37.4 56.0



#68

1,2-Dibromo-3-chloropropane

Concen: 0.268 ug/L

RT: 12.426 min Scan# 3541

Delta R.T. 0.013 min

Lab File: VV029960.D

Acq: 26 Jan 2023 12:47

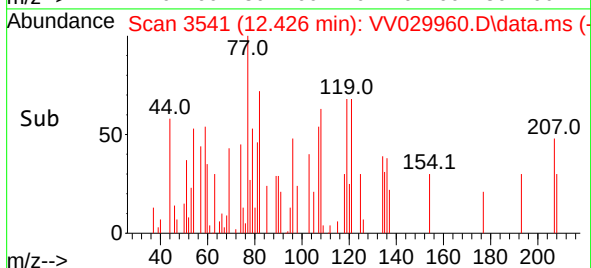
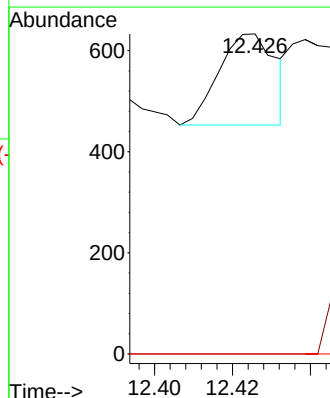
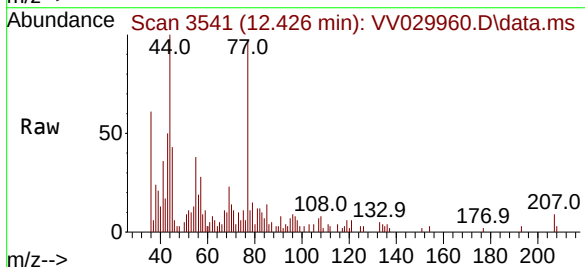
Tgt Ion: 75 Resp: 182

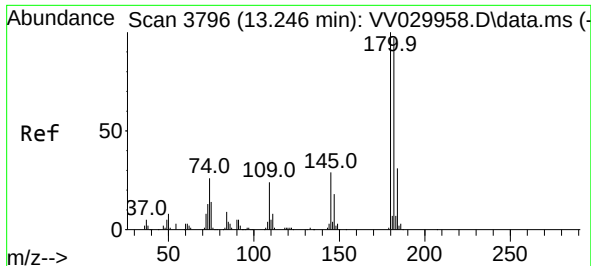
Ion Ratio Lower Upper

75 100

155 0.0 75.5 113.3#

157 0.0 99.2 148.8#

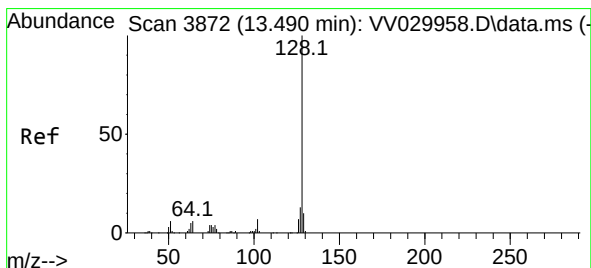
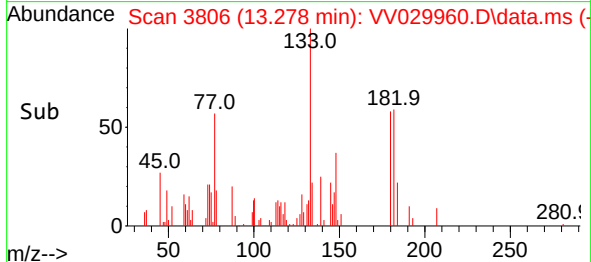
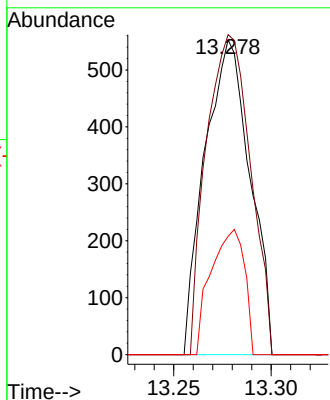
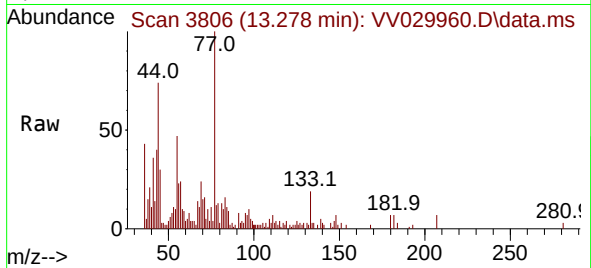




#70
1,2,4-trichlorobenzene
Concen: 0.112 ug/L
RT: 13.278 min Scan# 3806
Delta R.T. 0.032 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

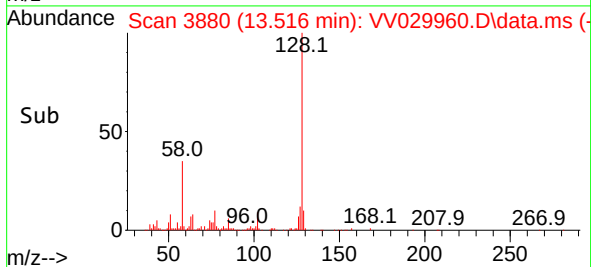
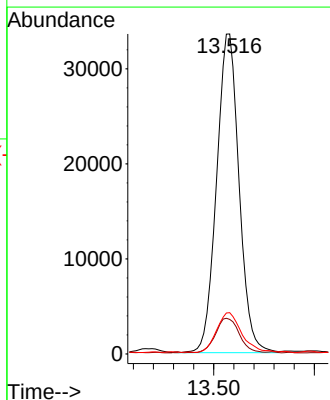
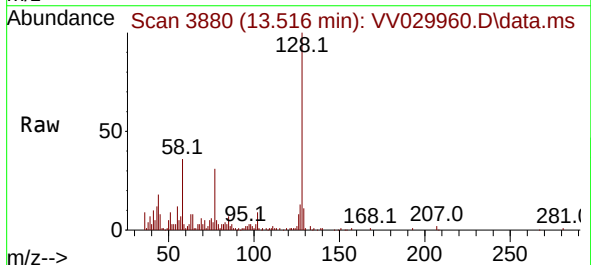
Instrument :
MSVOA_V
ClientSampleId :
COLD0

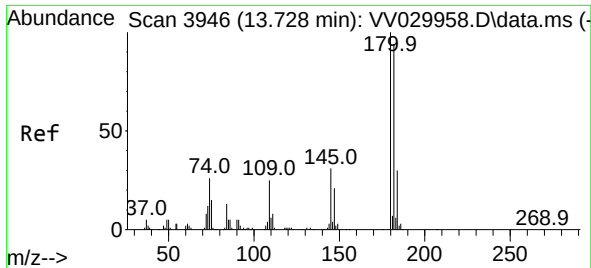
Tgt Ion:180 Resp: 891
Ion Ratio Lower Upper
180 100
182 99.2 75.8 113.8
145 29.5 23.7 35.5



#71
Naphthalene
Concen: 5.076 ug/L
RT: 13.516 min Scan# 3880
Delta R.T. 0.026 min
Lab File: VV029960.D
Acq: 26 Jan 2023 12:47

Tgt Ion:128 Resp: 52117
Ion Ratio Lower Upper
128 100
129 11.3 8.6 12.8
127 13.7 10.0 15.0





#72

1,2,3-Trichlorobenzene

Concen: 0.572 ug/L

RT: 13.751 min Scan# 3946

Delta R.T. 0.023 min

Lab File: VV029960.D

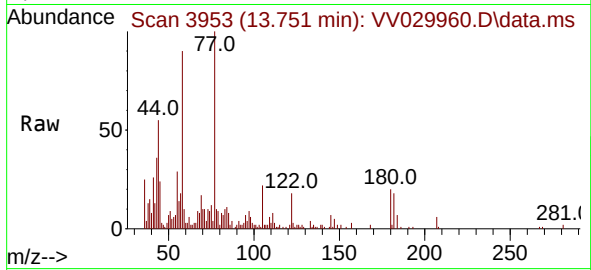
Acq: 26 Jan 2023 12:47

Instrument :

MSVOA_V

ClientSampleId :

COLD0



Tgt Ion:180 Resp: 3765

Ion Ratio Lower Upper

180 100

182 83.1 75.5 113.3

145 27.9 25.0 37.6

