

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX080421\
 Data File : VX023542.D
 Acq On : 04 Aug 2021 14:45
 Operator : JC/MD
 Sample : M3281-07
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TWP03

Quant Time: Aug 05 05:18:56 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X080321W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Tue Aug 03 12:05:42 2021
 Response via : Initial Calibration

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

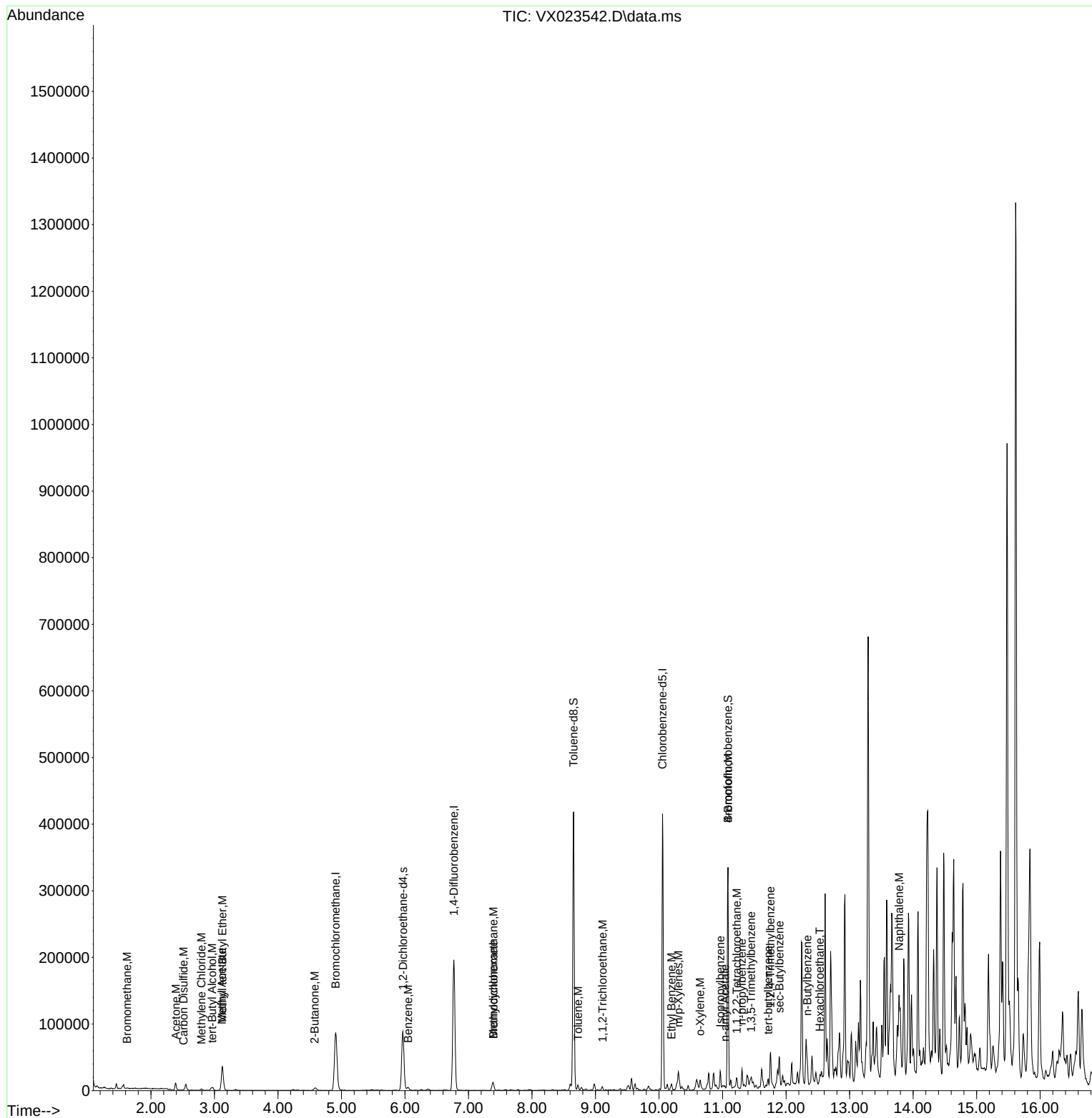
Internal Standards						
1) Bromochloromethane	4.910	128	36567	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.769	114	199032	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	180833	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.970	65	83794	29.631	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	98.767%
60) 4-Bromofluorobenzene	11.085	95	84966	28.686	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	95.633%
63) Toluene-d8	8.653	98	241774	29.707	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	99.033%
Target Compounds						
					Qvalue	
5) Bromomethane	1.624	94	465	0.325	ug/l #	79
12) Methyl Acetate	3.117	43	8596	2.721	ug/l	96
15) Acetone	2.392	58	3480	8.215	ug/l	86
16) Carbon Disulfide	2.514	76	1141	0.218	ug/l #	83
18) Methylene Chloride	2.794	84	929	0.373	ug/l #	77
23) tert-Butyl Alcohol	2.965	59	3140	4.951	ug/l #	100
24) Methyl tert-Butyl Ether	3.123	73	36724	4.942	ug/l	98
30) 2-Butanone	4.574	43	1874	0.902	ug/l #	75
34) Benzene	6.050	78	4718	0.505	ug/l #	95
38) Methylcyclohexane	7.391	83	5291	1.342	ug/l	97
41) Bromodichloromethane	7.391	83	5291	1.680	ug/l #	25
47) n-amyl Acetate	11.037	43	1532	0.293	ug/l	94
50) 1,1,2-Trichloroethane	9.110	97	1878	0.750	ug/l #	19
56) Bromoform	11.085	173	698	0.386	ug/l #	1
62) Toluene	8.726	91	4694	0.460	ug/l	100
66) Ethyl Benzene	10.195	91	4373	0.387	ug/l	98
67) m/p-Xylenes	10.305	106	4807	1.101	ug/l	92
68) o-Xylene	10.646	106	2692	0.625	ug/l	96
70) Isopropylbenzene	10.963	105	12854	1.136	ug/l	98
71) 1,1,2,2-Tetrachloroethane	11.226	83	951	0.263	ug/l #	32
74) n-propylbenzene	11.305	91	17363	1.325	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	6124	0.652	ug/l	98
79) tert-butylbenzene	11.719	119	3352	0.368	ug/l	85
80) 1,2,4-Trimethylbenzene	11.756	105	20419	2.195	ug/l	95
81) sec-Butylbenzene	11.896	105	18665	1.598	ug/l	100
85) n-Butylbenzene	12.335	91	12837	1.512	ug/l	73
86) Hexachloroethane	12.530	117	596	0.382	ug/l #	12
91) Naphthalene	13.780	128	75017	7.332	ug/l	97

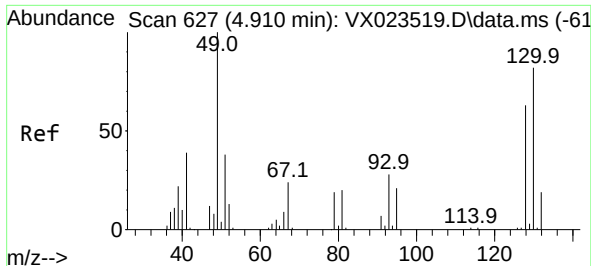
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX080421\
Data File : VX023542.D
Acq On : 04 Aug 2021 14:45
Operator : JC/MD
Sample : M3281-07
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
TWP03

Quant Time: Aug 05 05:18:56 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X080321W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Tue Aug 03 12:05:42 2021
Response via : Initial Calibration

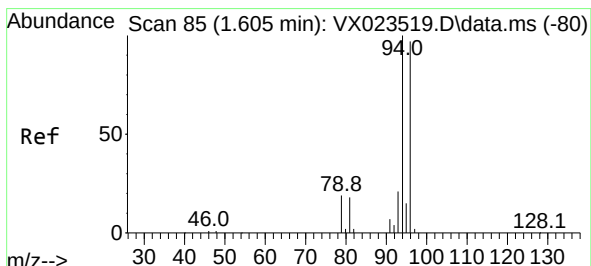
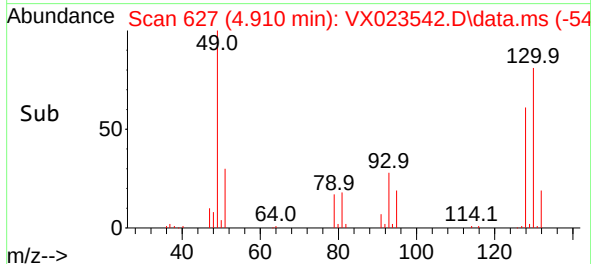
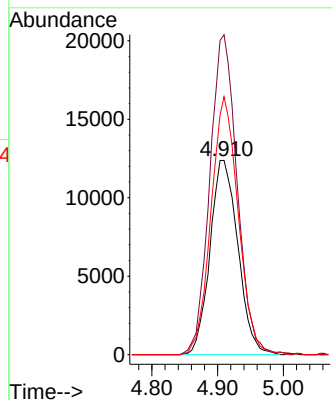
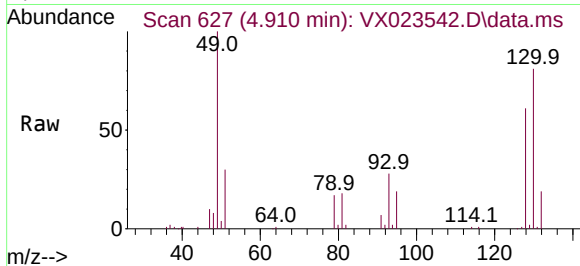




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.910 min Scan# 627
Delta R.T. -0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

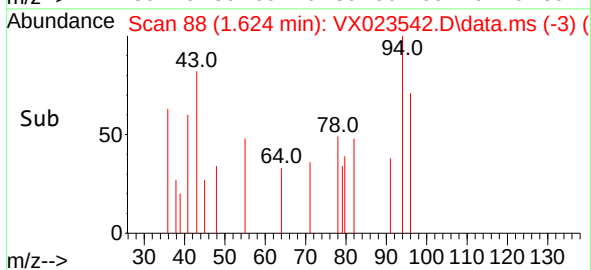
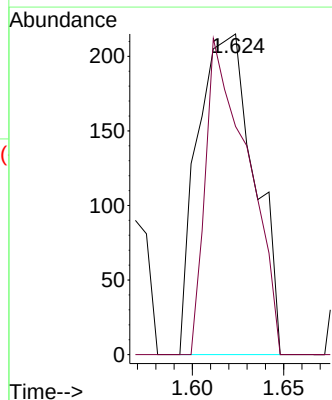
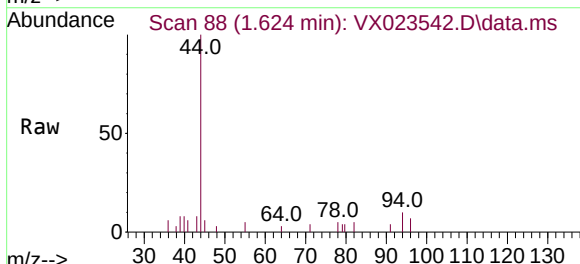
Instrument :
MSVOA_X
ClientSampleId :
TWP03

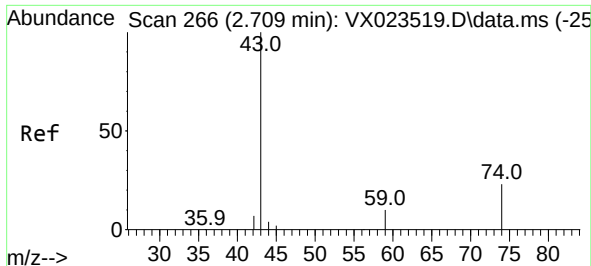
Tgt Ion:	128	Resp:	36567
Ion	Ratio	Lower	Upper
128	100		
49	161.1	0.0	402.5
130	129.7	0.0	326.5



#5
Bromomethane
Concen: 0.325 ug/l
RT: 1.624 min Scan# 88
Delta R.T. 0.018 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion:	94	Resp:	465
Ion	Ratio	Lower	Upper
94	100		
96	71.2	72.8	109.2#

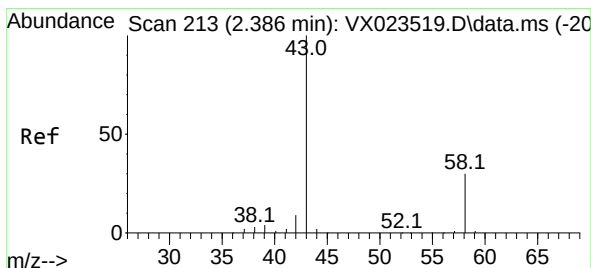
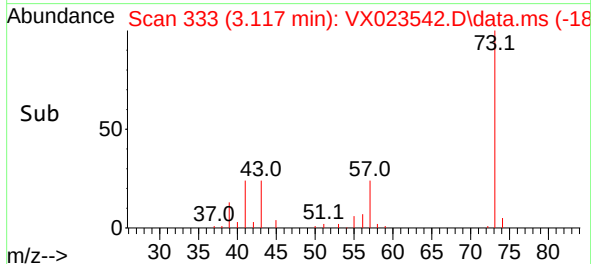
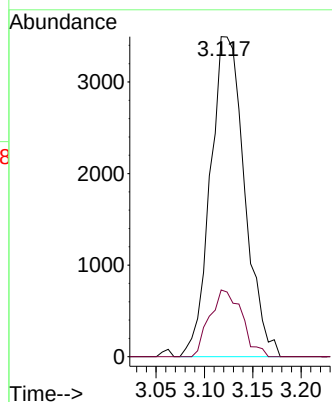
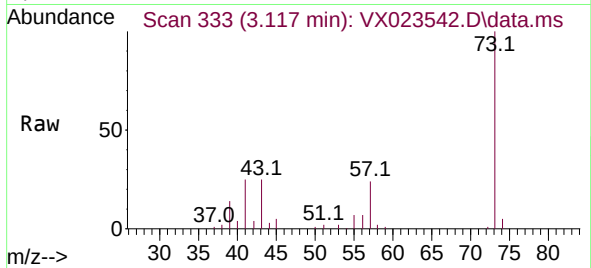




#12
Methyl Acetate
Concen: 2.721 ug/l
RT: 3.117 min Scan# 333
Delta R.T. 0.409 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

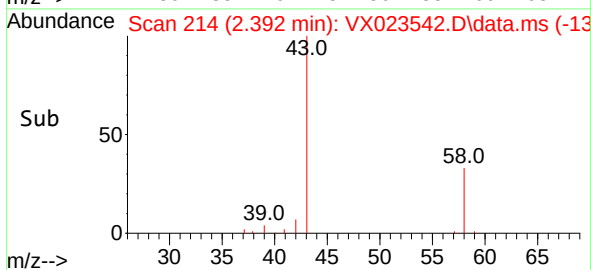
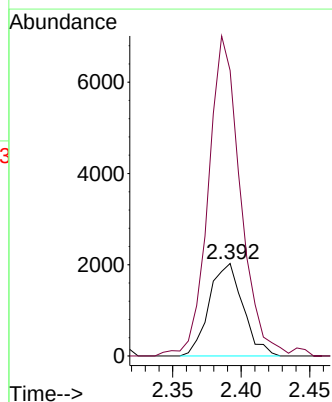
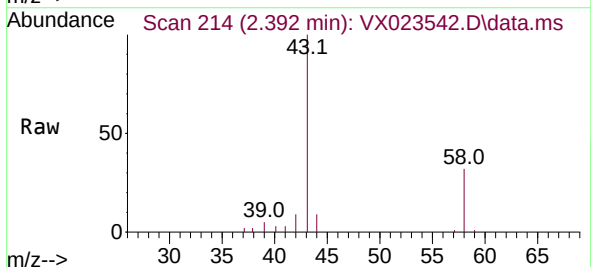
Instrument :
MSVOA_X
ClientSampleId :
TWP03

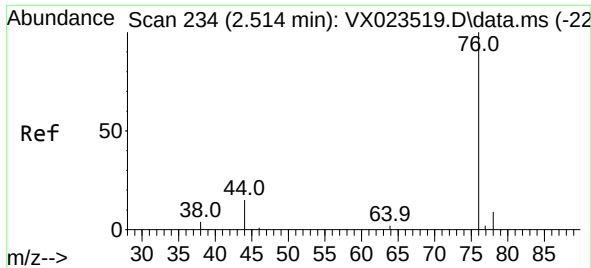
Tgt Ion: 43 Resp: 8596
Ion Ratio Lower Upper
43 100
74 20.8 18.2 27.2



#15
Acetone
Concen: 8.215 ug/l
RT: 2.392 min Scan# 214
Delta R.T. 0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

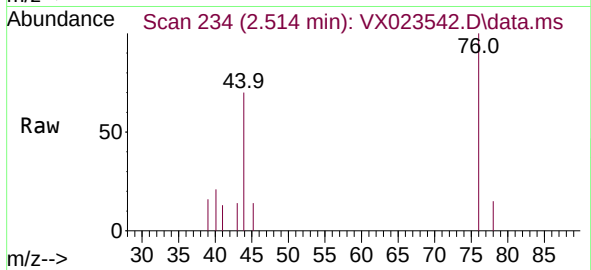
Tgt Ion: 58 Resp: 3480
Ion Ratio Lower Upper
58 100
43 303.4 266.6 400.0



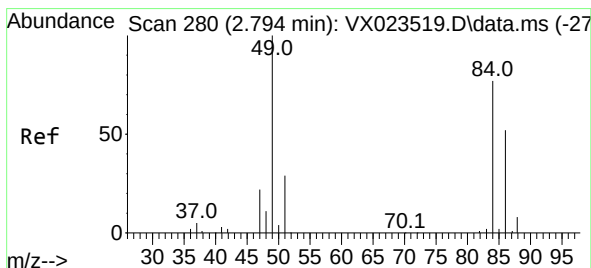
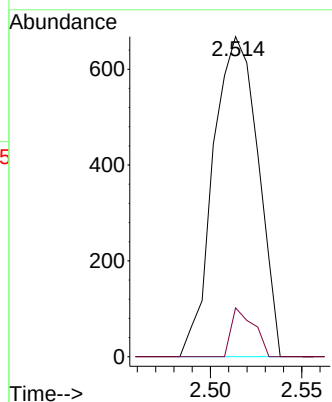
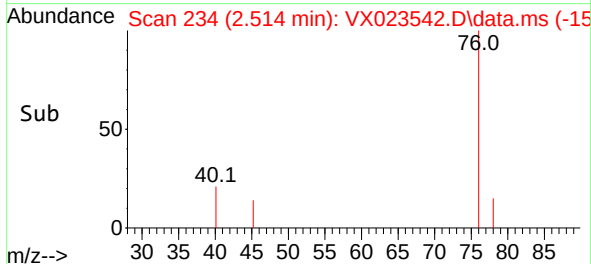


#16
Carbon Disulfide
Concen: 0.218 ug/l
RT: 2.514 min Scan# 234
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

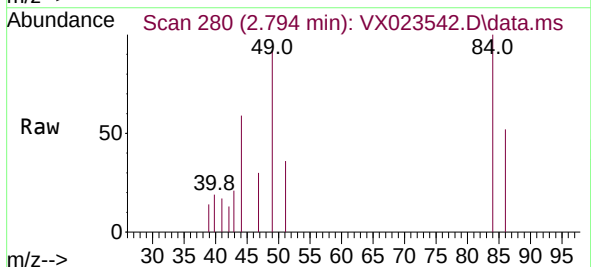
Instrument :
MSVOA_X
ClientSampleId :
TWP03



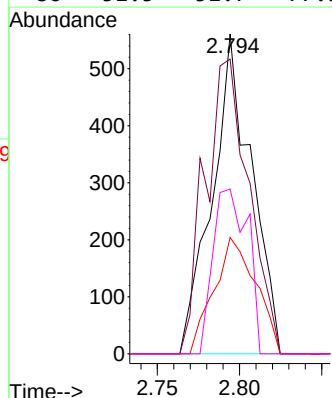
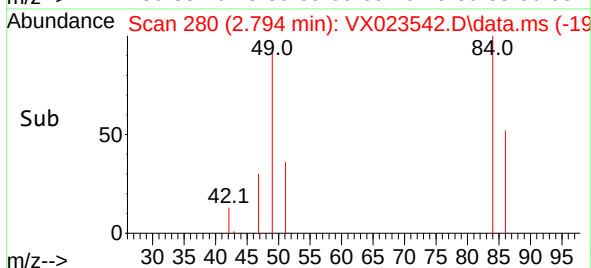
Tgt Ion: 76 Resp: 1141
Ion Ratio Lower Upper
76 100
78 15.3 7.3 10.9#

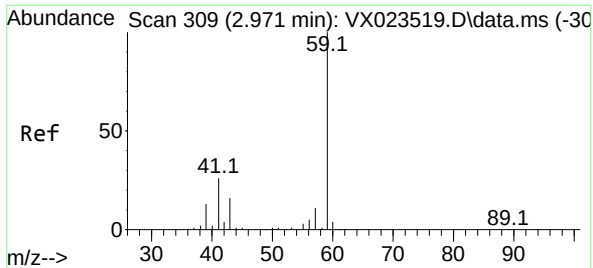


#18
Methylene Chloride
Concen: 0.373 ug/l
RT: 2.794 min Scan# 280
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45



Tgt Ion: 84 Resp: 929
Ion Ratio Lower Upper
84 100
49 92.2 104.3 156.5#
51 36.4 30.3 45.5
86 51.5 51.7 77.5#

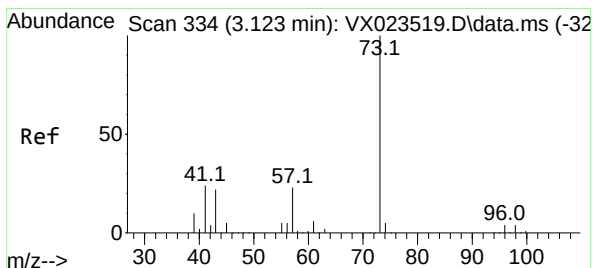
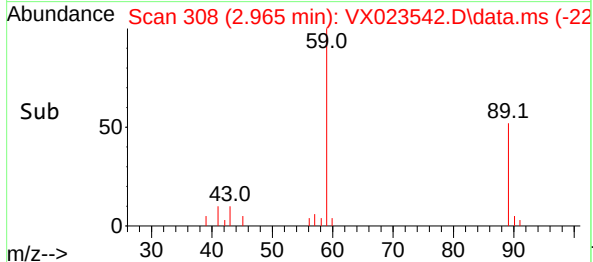
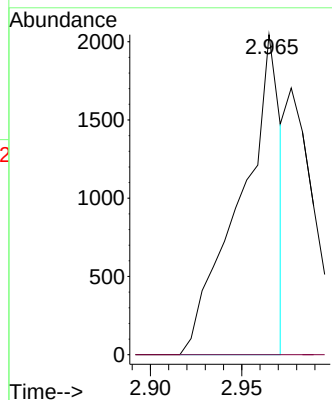
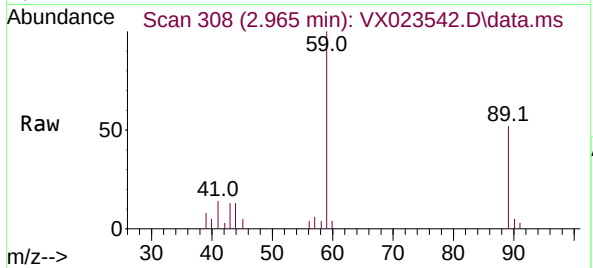




#23
tert-Butyl Alcohol
Concen: 4.951 ug/l
RT: 2.965 min Scan# 308
Delta R.T. -0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

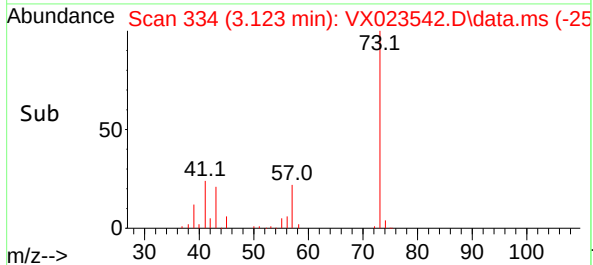
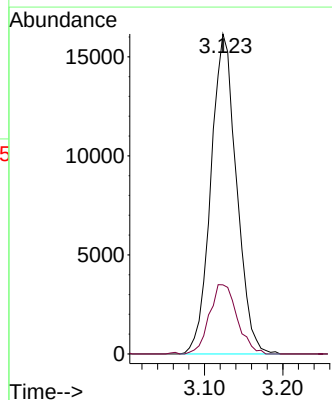
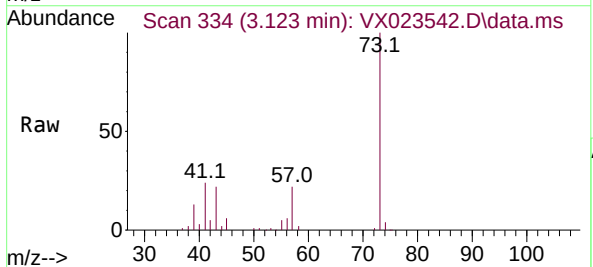
Instrument :
MSVOA_X
ClientSampled :
TWP03

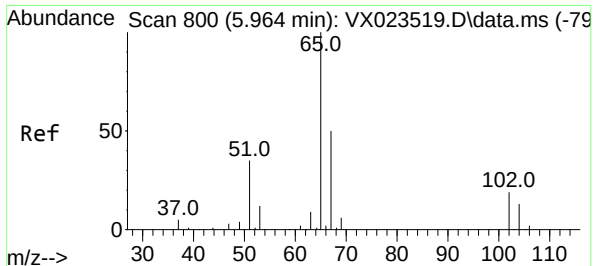
Tgt Ion: 59 Resp: 3140
Ion Ratio Lower Upper
59 100
52 0.0 0.1 0.1#



#24
Methyl tert-Butyl Ether
Concen: 4.942 ug/l
RT: 3.123 min Scan# 334
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 73 Resp: 36724
Ion Ratio Lower Upper
73 100
43 23.4 17.9 26.9



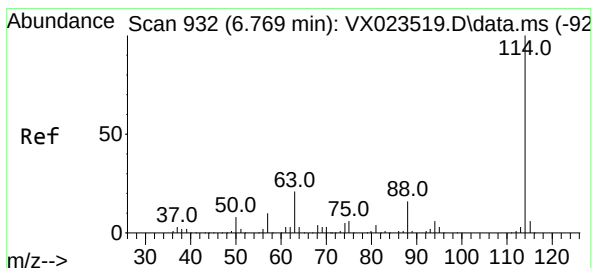
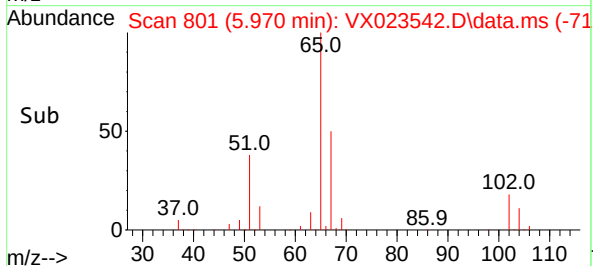
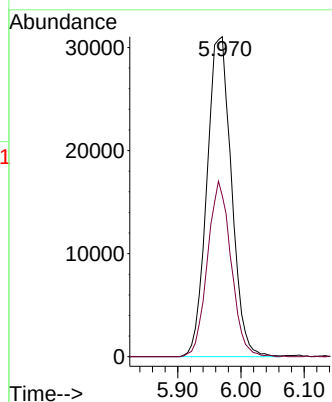
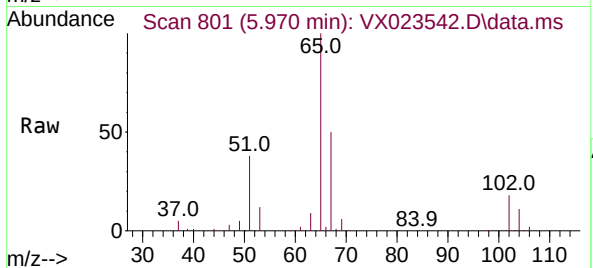


#27

1,2-Dichloroethane-d4
Concen: 29.631 ug/l
RT: 5.970 min Scan# 801
Delta R.T. 0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Instrument :
MSVOA_X
ClientSampleId :
TWP03

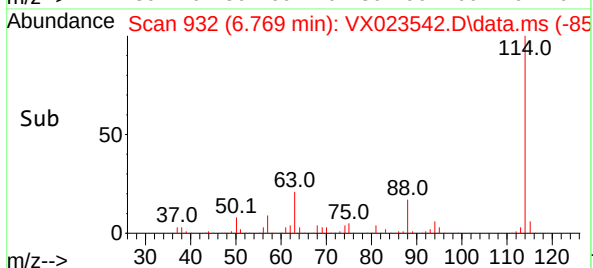
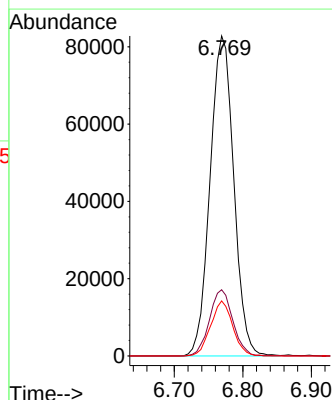
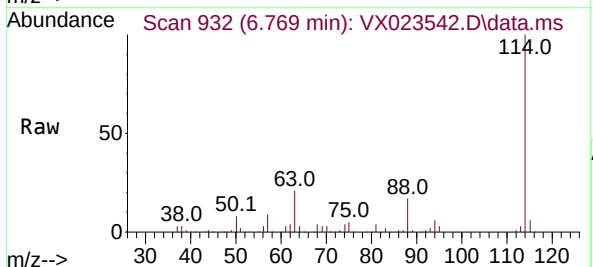
Tgt Ion: 65 Resp: 83794
Ion Ratio Lower Upper
65 100
67 52.6 42.4 63.6

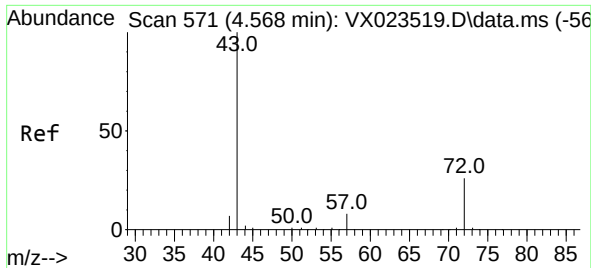


#28

1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.769 min Scan# 932
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 114 Resp: 199032
Ion Ratio Lower Upper
114 100
63 20.3 16.4 24.6
88 16.0 12.7 19.1

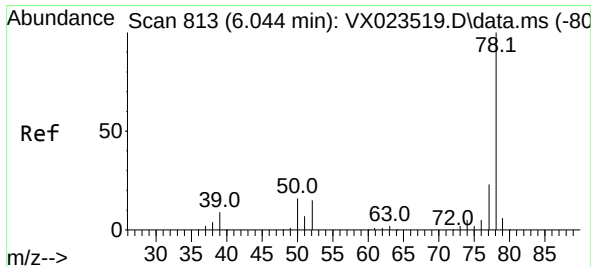
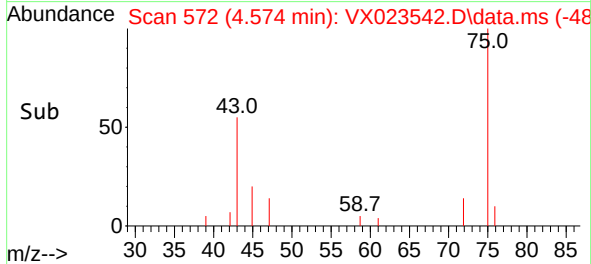
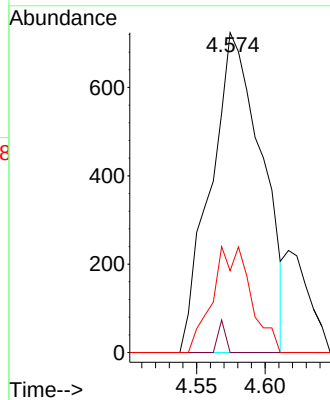
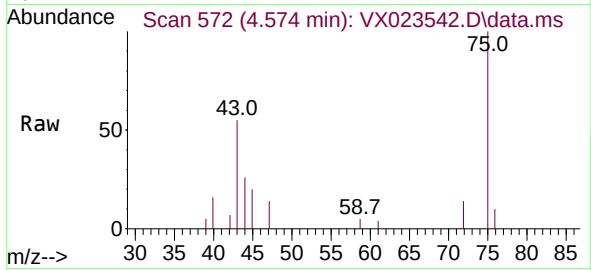




#30
2-Butanone
Concen: 0.902 ug/l
RT: 4.574 min Scan# 572
Delta R.T. 0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

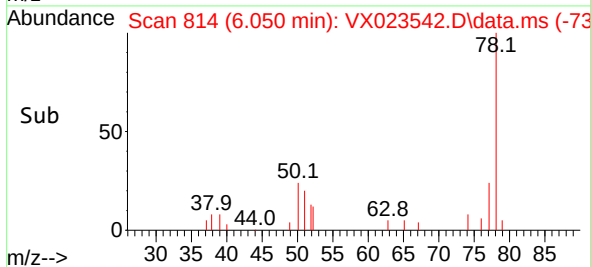
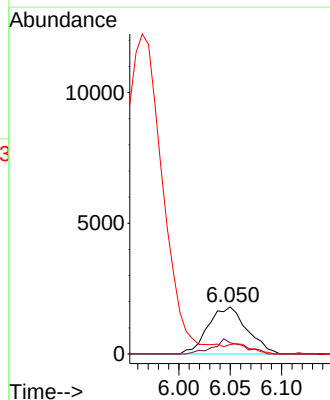
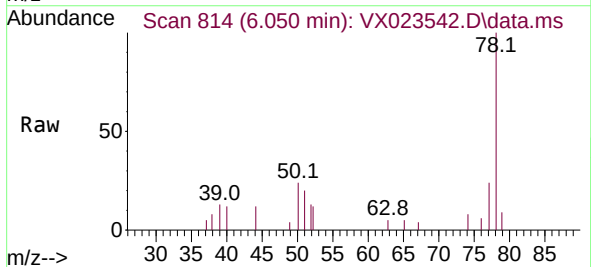
Instrument :
MSVOA_X
ClientSampleId :
TWP03

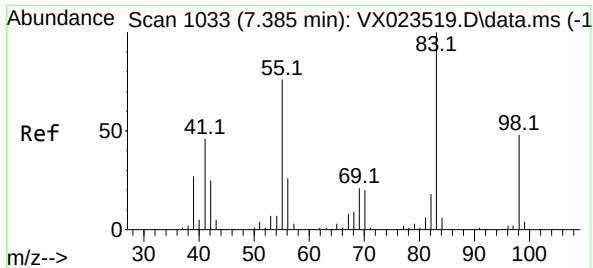
Tgt Ion: 43	Resp:	1874
Ion Ratio	Lower	Upper
43	100	
57	0.0	6.6 9.8#
72	13.2	21.0 31.4#



#34
Benzene
Concen: 0.505 ug/l
RT: 6.050 min Scan# 814
Delta R.T. 0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 78	Resp:	4718
Ion Ratio	Lower	Upper
78	100	
77	23.8	19.3 28.9
51	20.1	12.2 18.4#





#38

Methylcyclohexane

Concen: 1.342 ug/l

RT: 7.391 min Scan# 1034

Delta R.T. 0.006 min

Lab File: VX023542.D

Acq: 04 Aug 2021 14:45

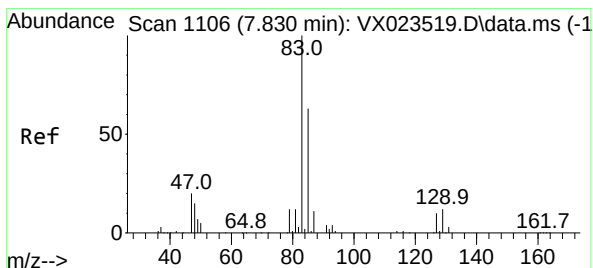
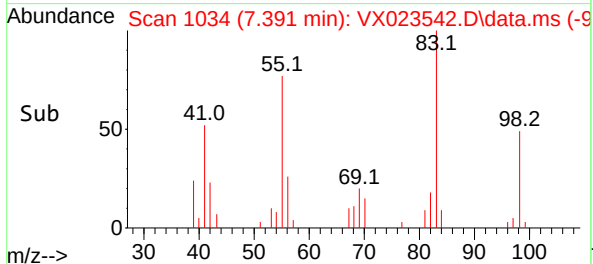
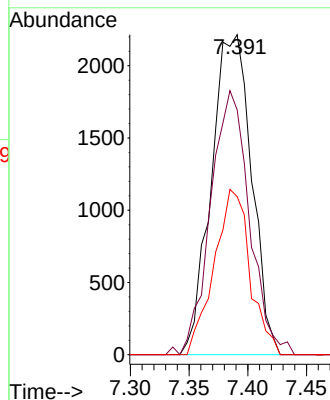
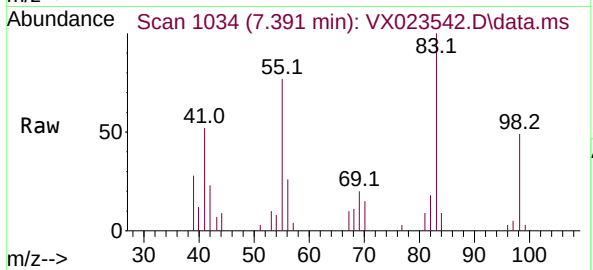
Tgt Ion: 83 Resp: 5291

Ion Ratio Lower Upper

83 100

55 79.4 37.8 113.4

98 46.0 23.4 70.3



#41

Bromodichloromethane

Concen: 1.680 ug/l

RT: 7.391 min Scan# 1034

Delta R.T. -0.439 min

Lab File: VX023542.D

Acq: 04 Aug 2021 14:45

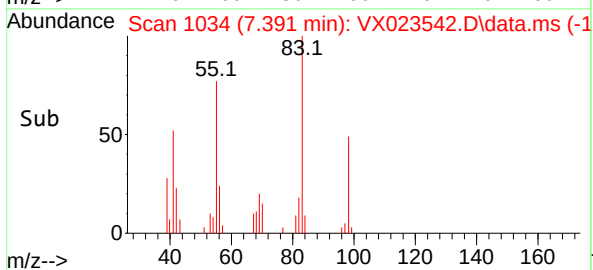
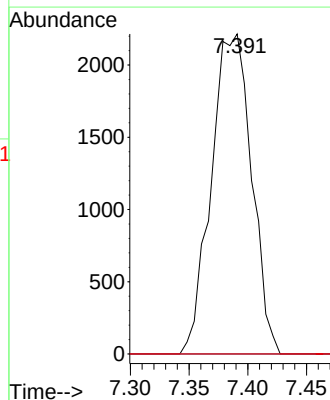
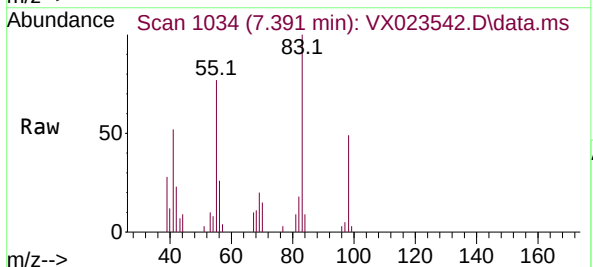
Tgt Ion: 83 Resp: 5291

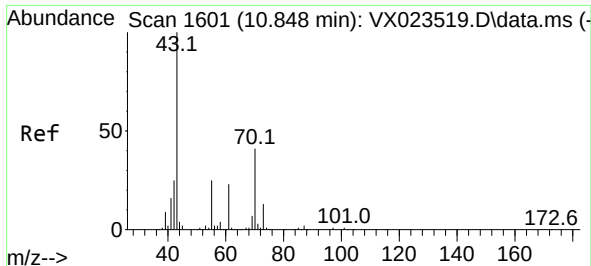
Ion Ratio Lower Upper

83 100

85 0.0 51.7 77.5#

127 0.0 7.4 11.0#

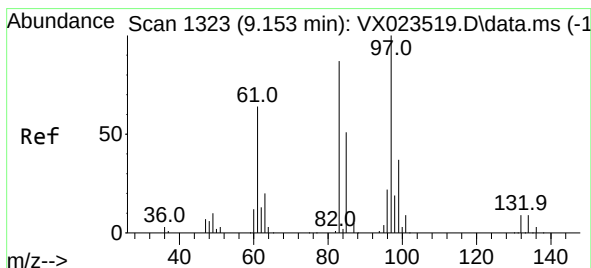
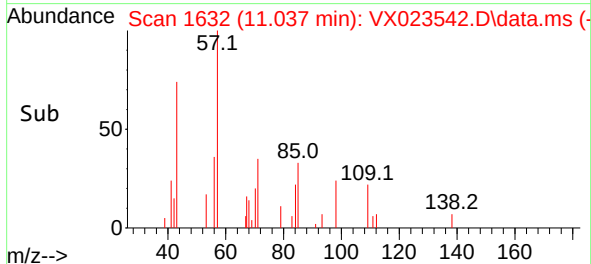
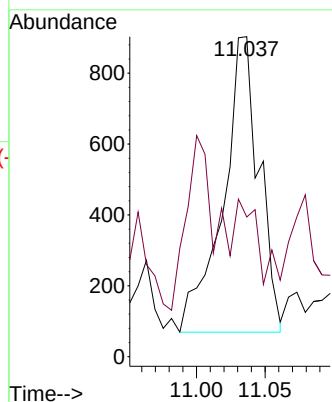
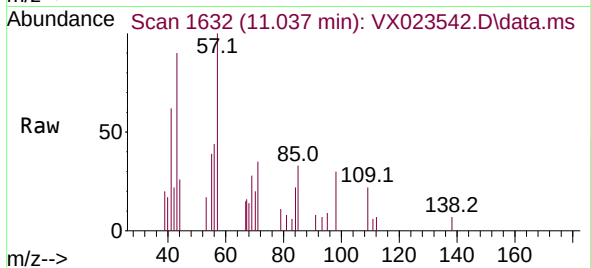




#47
n-amy1 Acetate
Concen: 0.293 ug/l
RT: 11.037 min Scan# 1632
Delta R.T. 0.189 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

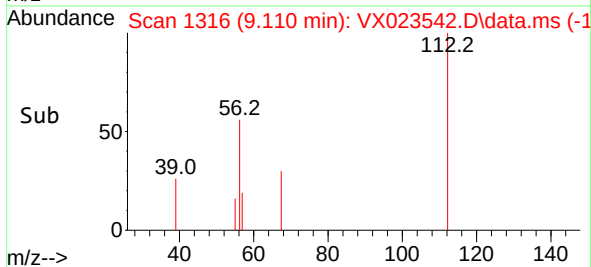
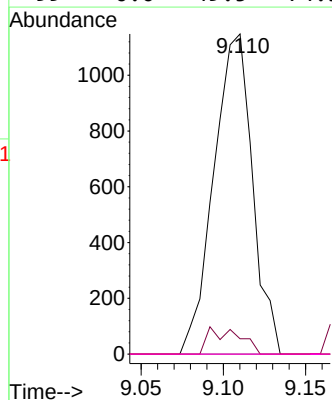
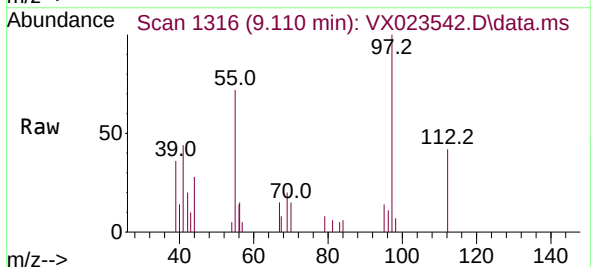
Instrument :
MSVOA_X
ClientSampleId :
TWP03

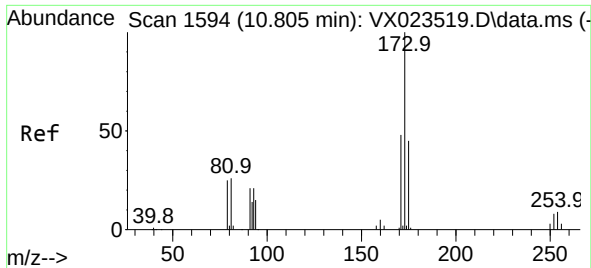
Tgt Ion: 43 Resp: 1532
Ion Ratio Lower Upper
43 100
55 20.8 18.9 28.3



#50
1,1,2-Trichloroethane
Concen: 0.750 ug/l
RT: 9.110 min Scan# 1316
Delta R.T. -0.043 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 97 Resp: 1878
Ion Ratio Lower Upper
97 100
83 4.8 64.2 96.4#
85 0.0 42.4 63.6#
99 0.0 49.5 74.3#

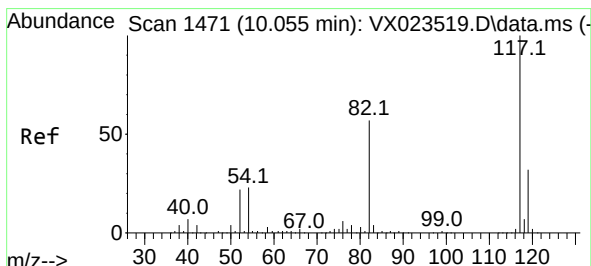
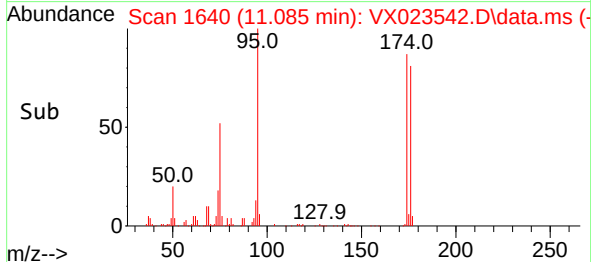
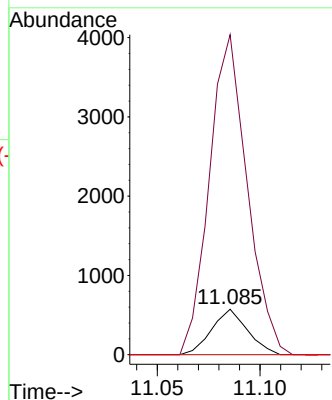
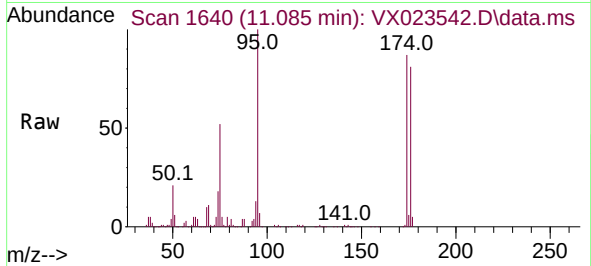




#56
Bromoform
Concen: 0.386 ug/l
RT: 11.085 min Scan# 1640
Delta R.T. 0.281 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

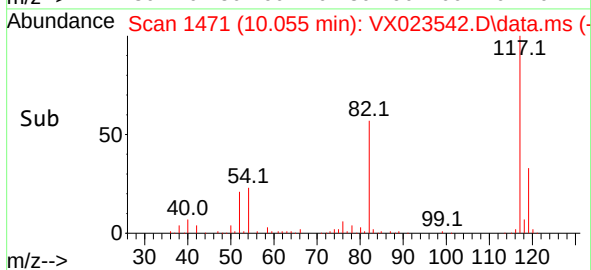
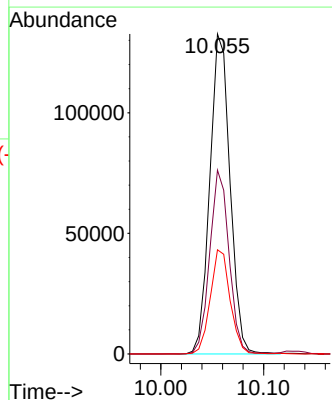
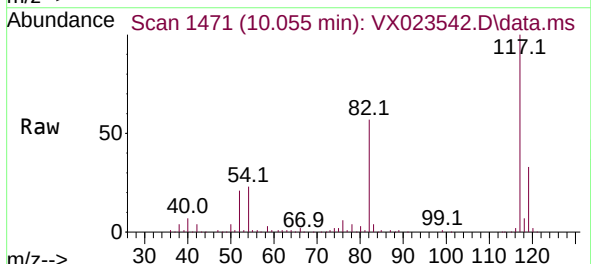
Instrument :
MSVOA_X
ClientSampleId :
TWP03

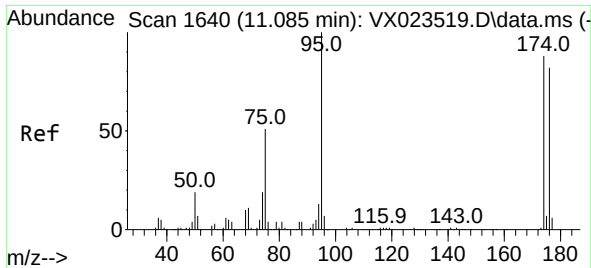
Tgt Ion:173 Resp: 698
Ion Ratio Lower Upper
173 100
175 741.8 38.4 57.6#
254 0.0 7.3 10.9#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion:117 Resp: 180833
Ion Ratio Lower Upper
117 100
82 54.7 45.0 67.4
119 32.0 26.2 39.2

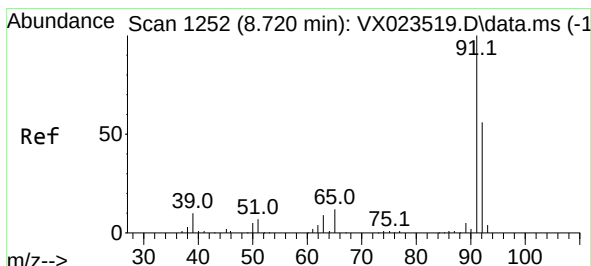
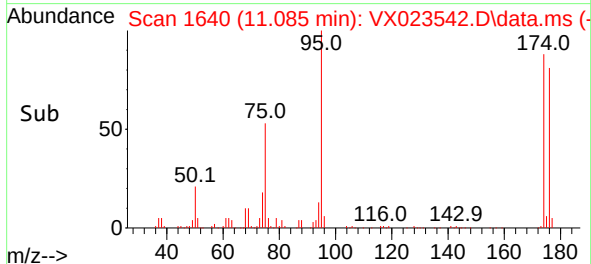
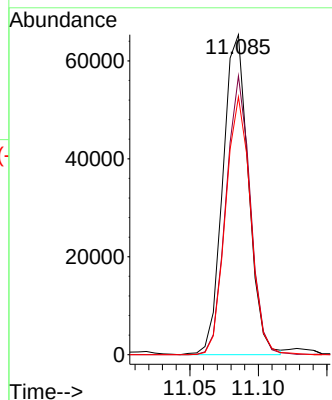
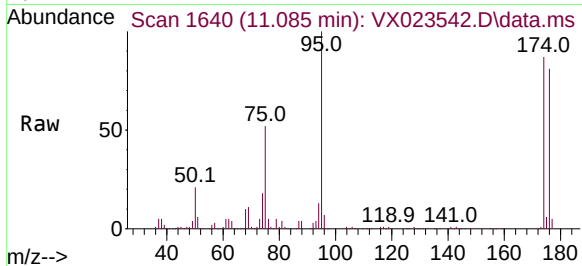




#60
4-Bromofluorobenzene
Concen: 28.686 ug/l
RT: 11.085 min Scan# 1640
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

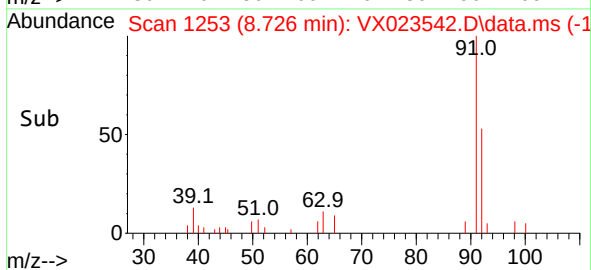
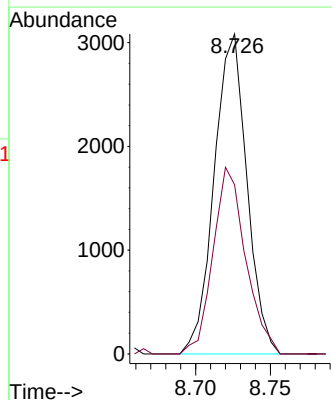
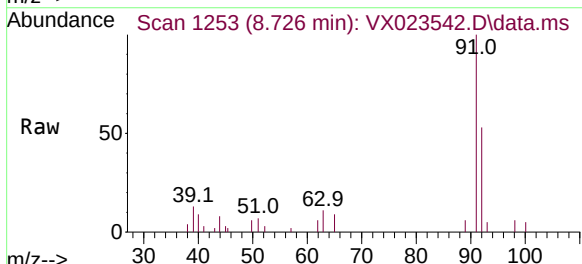
Instrument :
MSVOA_X
ClientSampleId :
TWP03

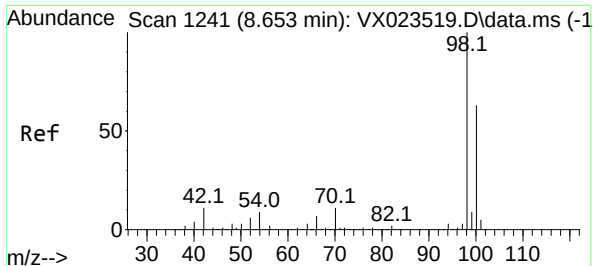
Tgt Ion: 95 Resp: 84966
Ion Ratio Lower Upper
95 100
174 82.6 63.5 95.3
176 78.7 63.0 94.4



#62
Toluene
Concen: 0.460 ug/l
RT: 8.726 min Scan# 1253
Delta R.T. 0.006 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 91 Resp: 4694
Ion Ratio Lower Upper
91 100
92 58.2 46.5 69.7

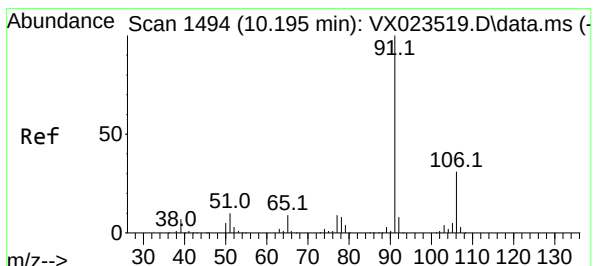
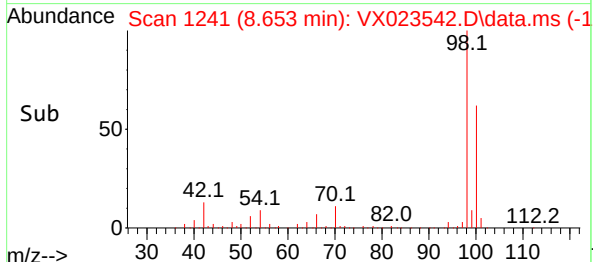
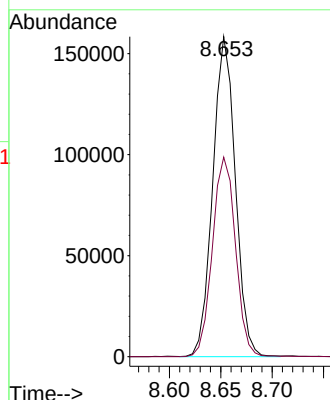
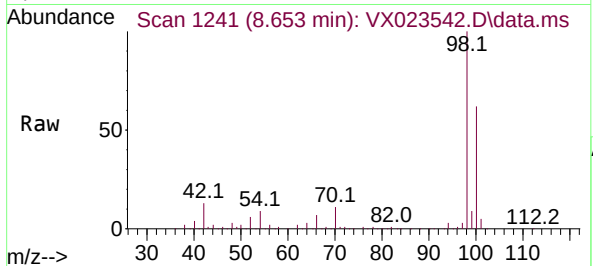




#63
Toluene-d8
Concen: 29.707 ug/l
RT: 8.653 min Scan# 1241
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

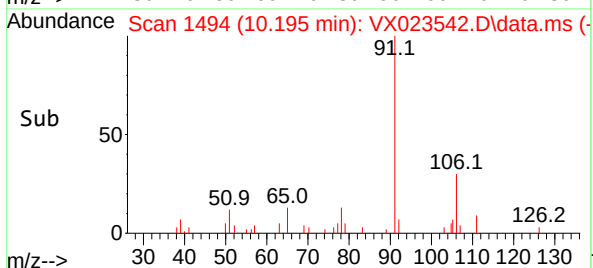
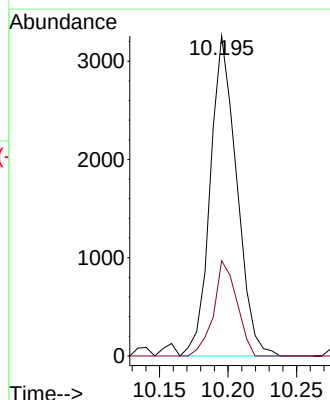
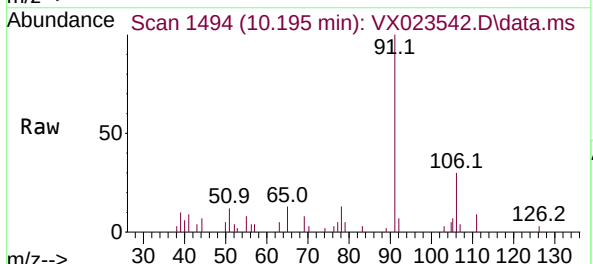
Instrument :
MSVOA_X
ClientSampled :
TWP03

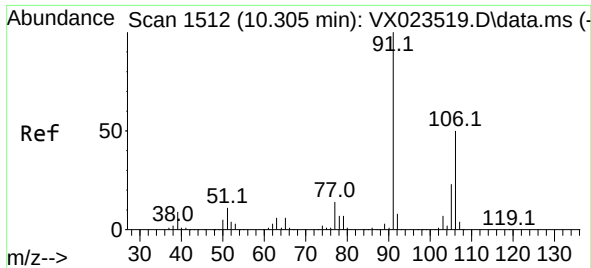
Tgt Ion: 98 Resp: 241774
Ion Ratio Lower Upper
98 100
100 63.6 51.4 77.0



#66
Ethyl Benzene
Concen: 0.387 ug/l
RT: 10.195 min Scan# 1494
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 91 Resp: 4373
Ion Ratio Lower Upper
91 100
106 29.7 24.7 37.1

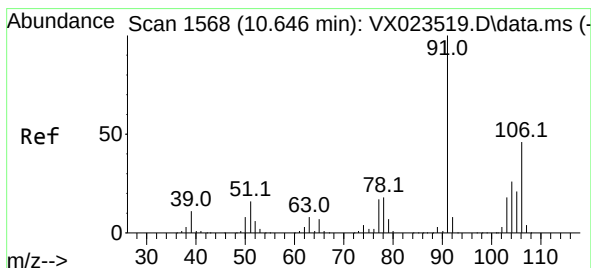
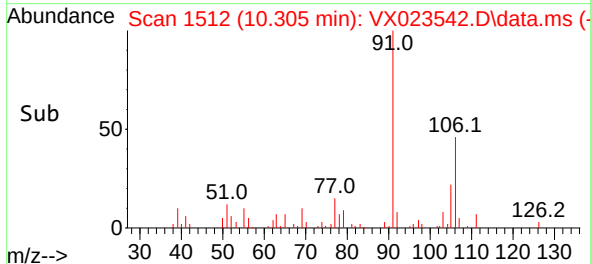
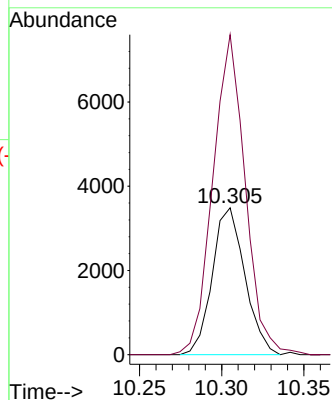
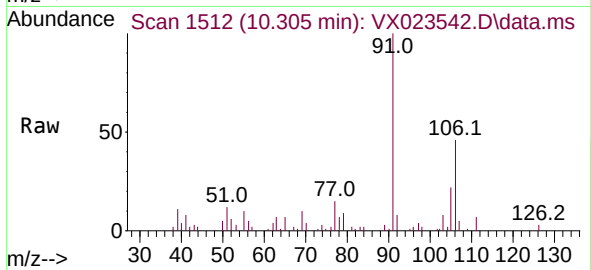




#67
m/p-Xylenes
Concen: 1.101 ug/l
RT: 10.305 min Scan# 1512
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

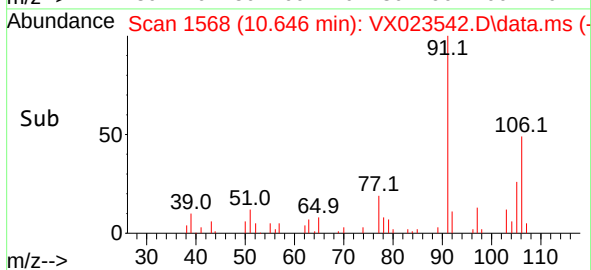
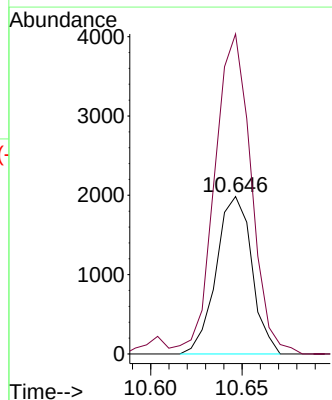
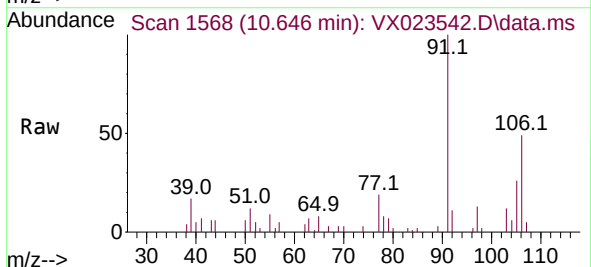
Instrument :
MSVOA_X
ClientSampleId :
TWP03

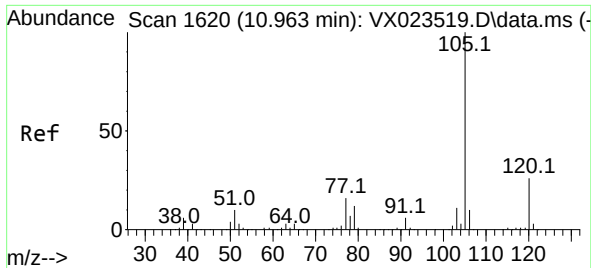
Tgt Ion:106 Resp: 4807
Ion Ratio Lower Upper
106 100
91 215.8 162.4 243.6



#68
o-Xylene
Concen: 0.625 ug/l
RT: 10.646 min Scan# 1568
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion:106 Resp: 2692
Ion Ratio Lower Upper
106 100
91 208.1 107.3 321.8

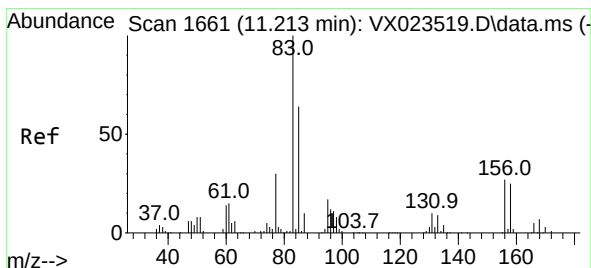
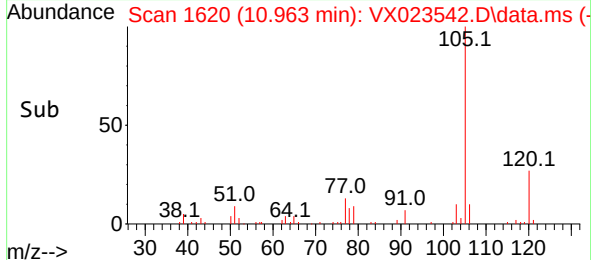
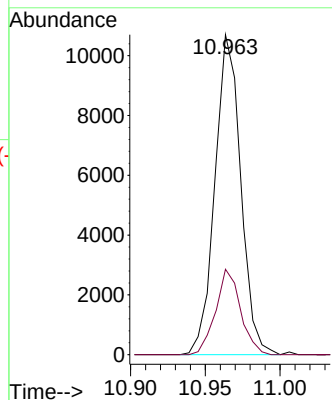
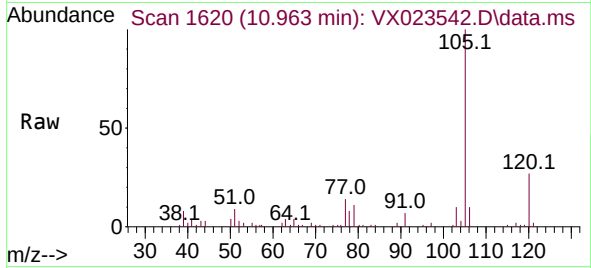




#70
Isopropylbenzene
Concen: 1.136 ug/l
RT: 10.963 min Scan# 1620
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

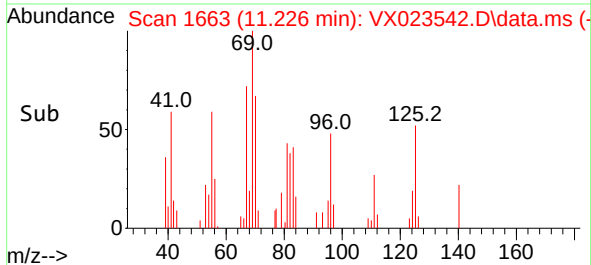
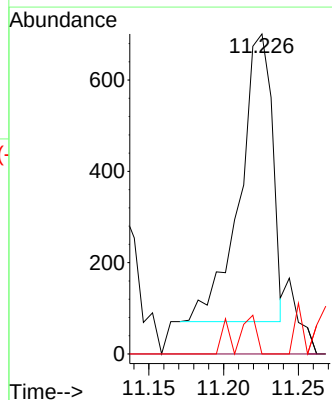
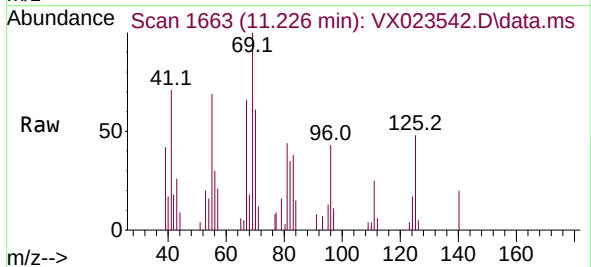
Instrument :
MSVOA_X
ClientSampled :
TWP03

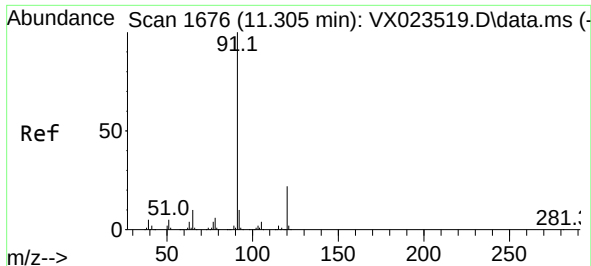
Tgt Ion:105 Resp: 12854
Ion Ratio Lower Upper
105 100
120 25.8 18.7 34.7



#71
1,1,2,2-Tetrachloroethane
Concen: 0.263 ug/l
RT: 11.226 min Scan# 1663
Delta R.T. 0.012 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 83 Resp: 951
Ion Ratio Lower Upper
83 100
131 0.0 5.1 15.4#
85 5.8 32.4 97.2#

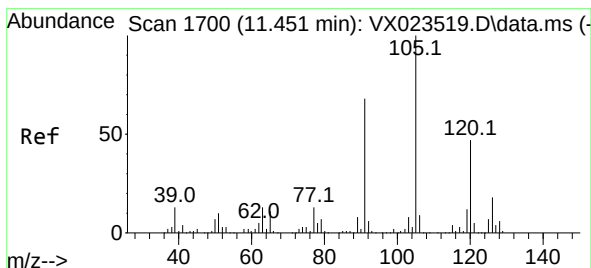
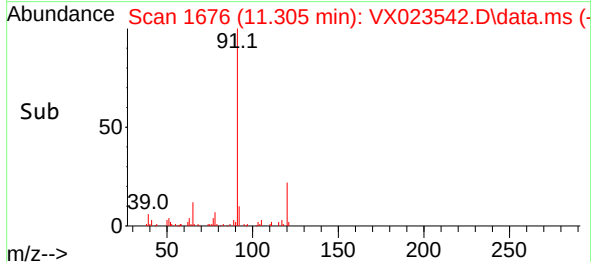
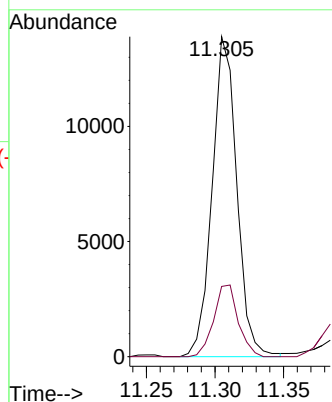
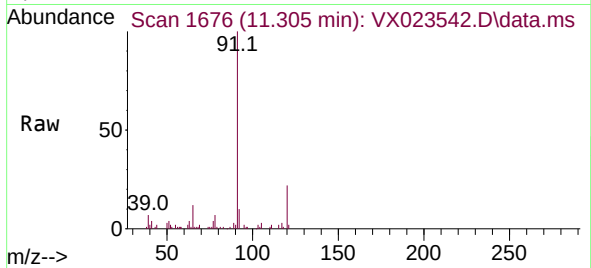




#74
n-propylbenzene
Concen: 1.325 ug/l
RT: 11.305 min Scan# 1676
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

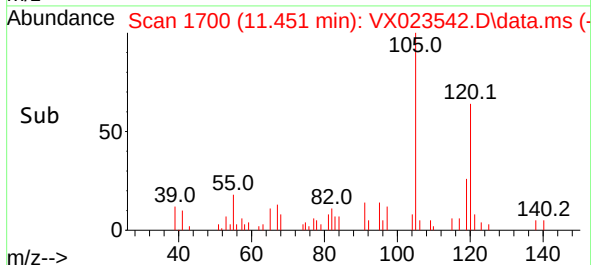
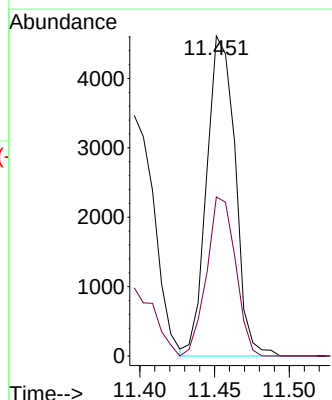
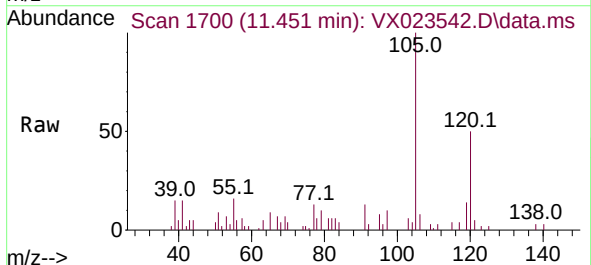
Instrument :
MSVOA_X
ClientSampleId :
TWP03

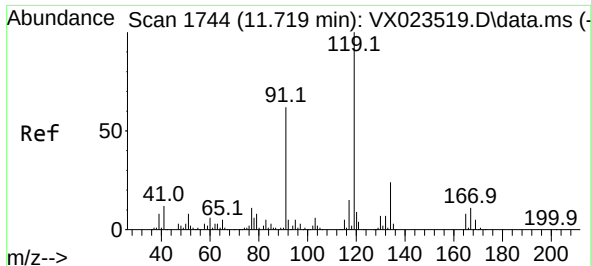
Tgt Ion: 91 Resp: 17363
Ion Ratio Lower Upper
91 100
120 22.2 0.0 46.0



#76
1,3,5-Trimethylbenzene
Concen: 0.652 ug/l
RT: 11.451 min Scan# 1700
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 105 Resp: 6124
Ion Ratio Lower Upper
105 100
120 50.1 0.0 98.0

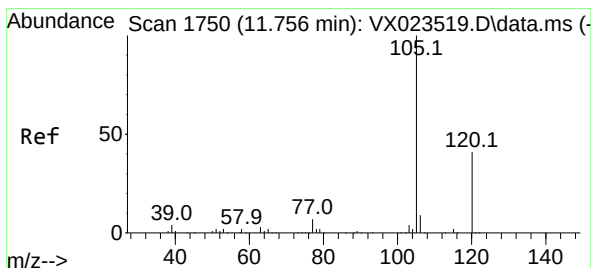
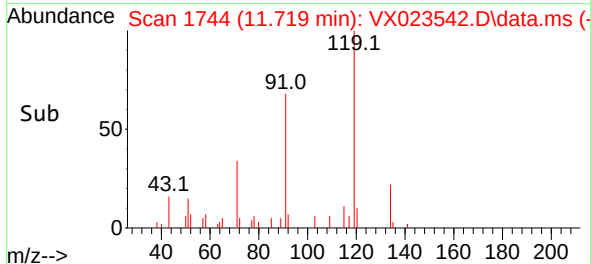
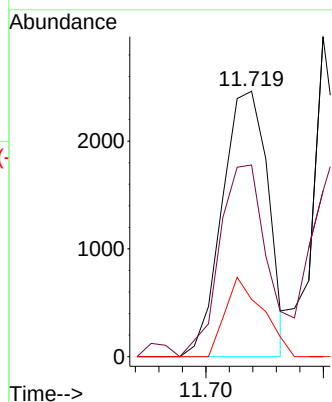
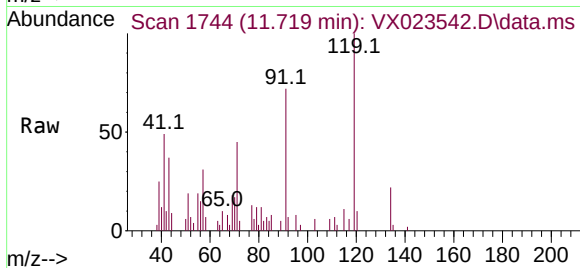




#79
tert-butylbenzene
Concen: 0.368 ug/l
RT: 11.719 min Scan# 1744
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

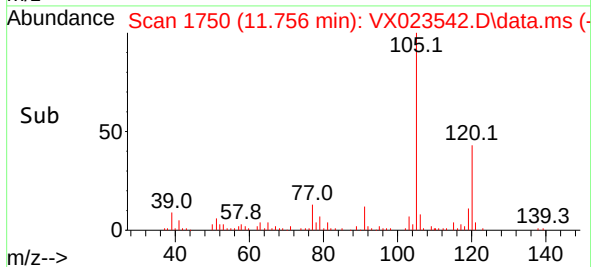
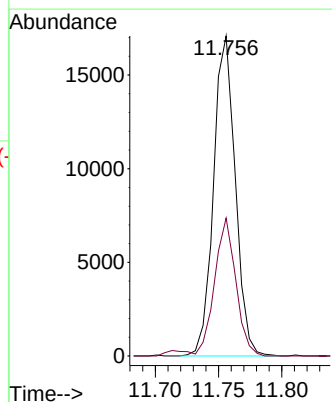
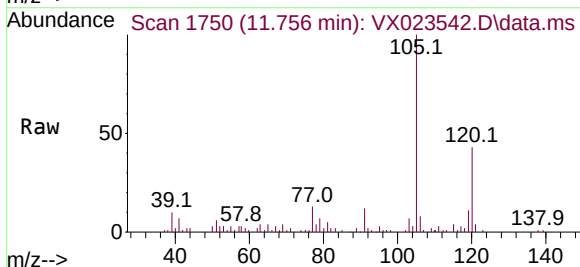
Instrument :
MSVOA_X
ClientSampled :
TWP03

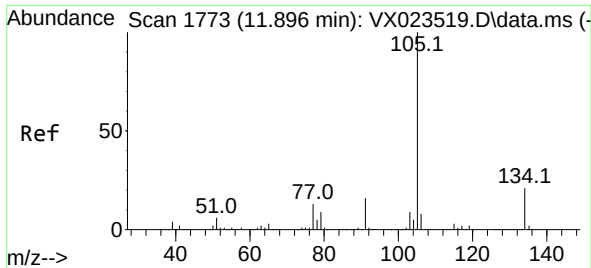
Tgt Ion:119 Resp: 3352
Ion Ratio Lower Upper
119 100
91 76.4 0.0 121.2
134 24.4 0.0 47.4



#80
1,2,4-Trimethylbenzene
Concen: 2.195 ug/l
RT: 11.756 min Scan# 1750
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion:105 Resp: 20419
Ion Ratio Lower Upper
105 100
120 41.9 0.0 90.4

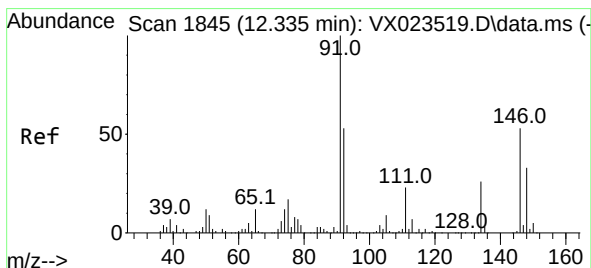
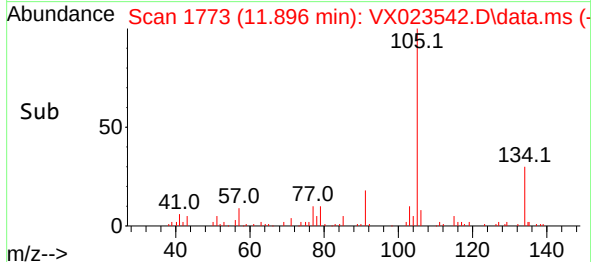
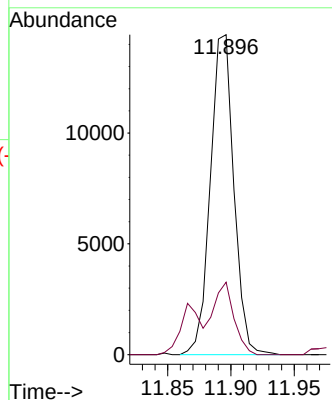
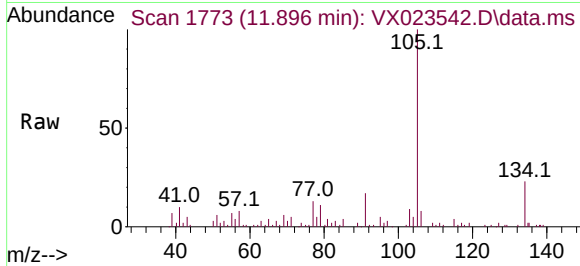




#81
sec-Butylbenzene
Concen: 1.598 ug/l
RT: 11.896 min Scan# 1773
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

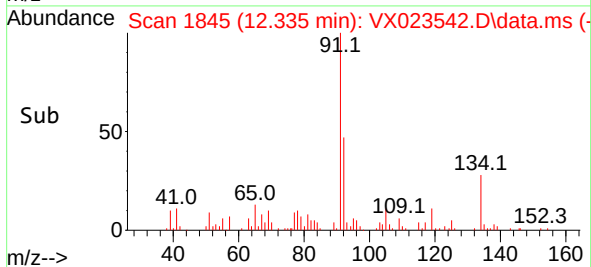
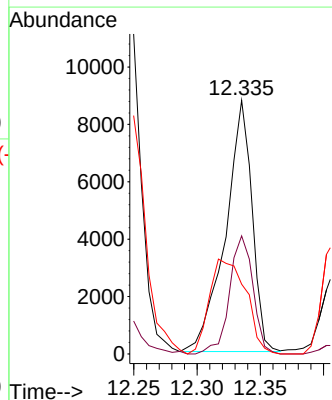
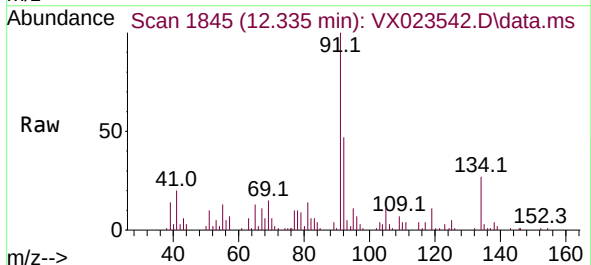
Instrument :
MSVOA_X
ClientSampled :
TWP03

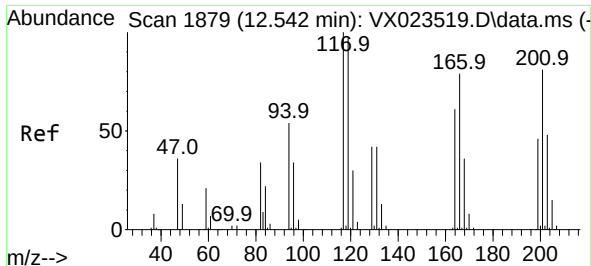
Tgt Ion:105 Resp: 18665
Ion Ratio Lower Upper
105 100
134 20.0 0.0 40.2



#85
n-Butylbenzene
Concen: 1.512 ug/l
RT: 12.335 min Scan# 1845
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion: 91 Resp: 12837
Ion Ratio Lower Upper
91 100
92 41.4 0.0 105.4
134 51.7 0.0 52.4

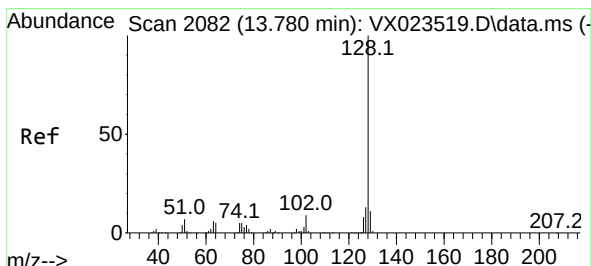
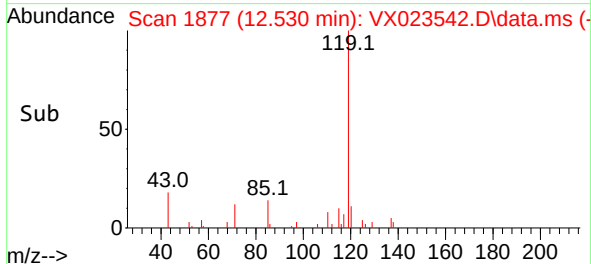
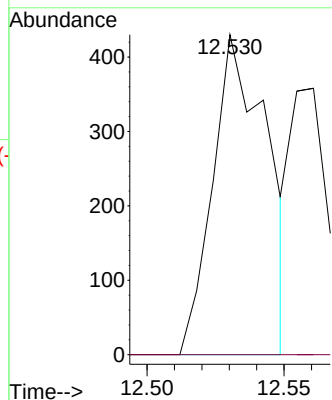
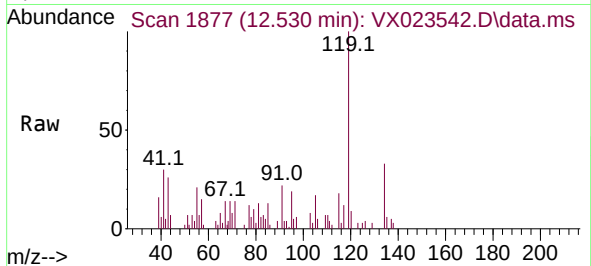




#86
Hexachloroethane
Concen: 0.382 ug/l
RT: 12.530 min Scan# 1877
Delta R.T. -0.012 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Instrument :
MSVOA_X
ClientSampled :
TWP03

Tgt Ion:117 Resp: 596
Ion Ratio Lower Upper
117 100
201 0.0 37.5 112.5#



#91
Naphthalene
Concen: 7.332 ug/l
RT: 13.780 min Scan# 2082
Delta R.T. 0.000 min
Lab File: VX023542.D
Acq: 04 Aug 2021 14:45

Tgt Ion:128 Resp: 75017
Ion Ratio Lower Upper
128 100
127 13.4 10.1 15.1
129 12.4 8.6 12.8

