

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX081423\
 Data File : VX036968.D
 Acq On : 14 Aug 2023 16:36
 Operator : JC/MD
 Sample : 03985-02
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 16 Sample Multiplier: 1

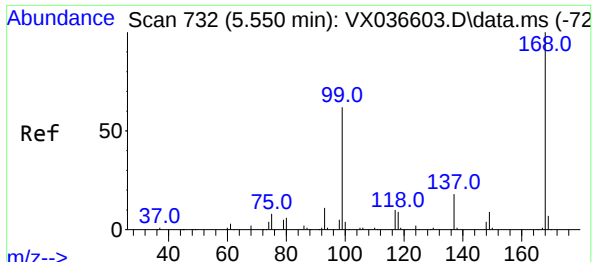
Instrument :
 MSVOA_X
 ClientSampleId :
 PNNL-APM2-0811-1

Quant Time: Aug 15 01:29:59 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X072123W.M
 Quant Title : SW846 8260
 QLast Update : Fri Jul 21 12:14:12 2023
 Response via : Initial Calibration

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

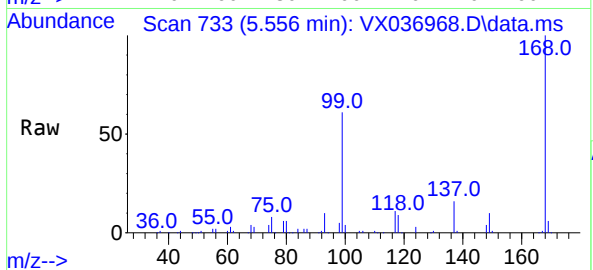
Internal Standards						
1) Pentafluorobenzene	5.556	168	124928	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	231329	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	220104	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	100304	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	90024	48.701	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	97.400%		
35) Dibromofluoromethane	5.385	113	74631	46.937	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	93.880%		
50) Toluene-d8	8.647	98	275589	48.876	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	97.760%		
62) 4-Bromofluorobenzene	11.079	95	108974	51.225	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	102.460%		
Target Compounds						Qvalue
8) Diethyl Ether	2.130	74	894	0.979	ug/l	80
11) Tert butyl alcohol	2.959	59	1335	3.051	ug/l #	83
13) Acrolein	2.239	56	83	0.332	ug/l #	1
16) Acetone	2.380	43	27667	36.069	ug/l	94
18) Methyl Acetate	2.709	43	1612	0.500	ug/l	94
20) Methylene Chloride	2.788	84	12546	7.354	ug/l	88
25) 2-Butanone	4.574	43	7850	6.308	ug/l #	90
29) Tetrahydrofuran	5.025	42	616	0.768	ug/l #	66
31) Cyclohexane	5.556	56	2688	1.050	ug/l #	25
36) 1,1-Dichloropropene	5.550	75	9831	4.148	ug/l #	51
37) Ethyl Acetate	4.727	43	2825	1.053	ug/l	99
38) Carbon Tetrachloride	5.556	117	13529	5.370	ug/l #	14
43) Isopropyl Acetate	6.342	43	132104	28.610	ug/l #	94
48) Methyl methacrylate	7.799	41	105052	48.922	ug/l #	48
49) 1,4-Dioxane	7.677	88	19	0.438	ug/l #	1
51) 4-Methyl-2-Pentanone	8.549	43	124851	48.861	ug/l #	37
52) Toluene	8.720	92	4360	1.009	ug/l	92
53) t-1,3-Dichloropropene	8.958	75	941	0.315	ug/l #	43
54) cis-1,3-Dichloropropene	8.549	75	51950	16.470	ug/l #	53
57) 1,3-Dichloropropane	9.482	76	6361	2.103	ug/l #	42
59) 2-Hexanone	9.378	43	116364	61.360	ug/l #	26
60) Dibromochloromethane	9.275	129	2267	1.136	ug/l #	11
64) Tetrachloroethene	9.275	164	2120	1.291	ug/l	94
74) N-amyl acetate	10.890	43	942	0.243	ug/l #	44
76) 1,2,3-Trichloropropane	11.079	75	56759	24.058	ug/l #	39
81) trans-1,4-Dichloro-2-b...	11.079	75	56759	54.529	ug/l #	5
86) p-Isopropyltoluene	12.012	119	1581	0.226	ug/l #	69
90) Hexachloroethane	12.664	117	552	0.389	ug/l #	17

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

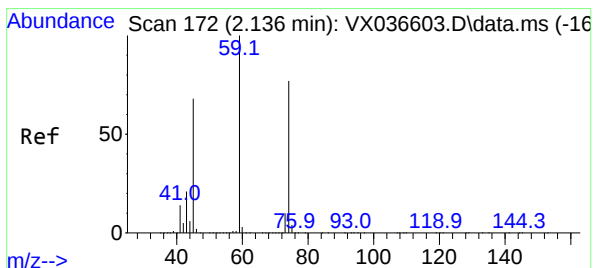
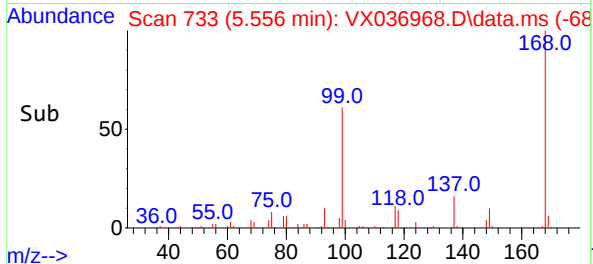
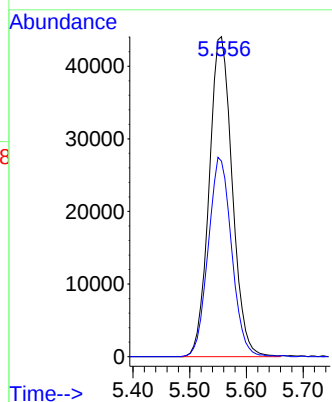


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 71
Delta R.T. 0.006 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

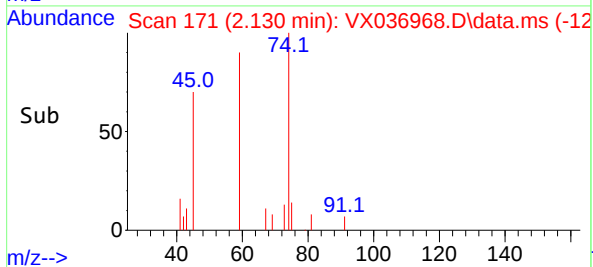
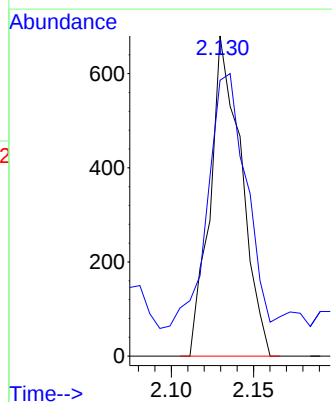
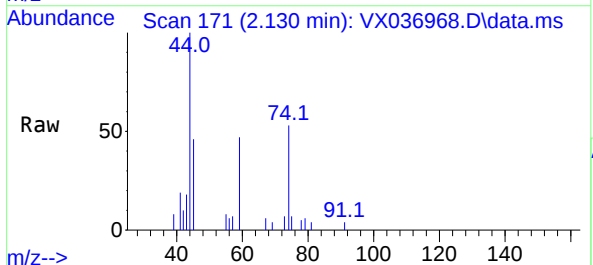


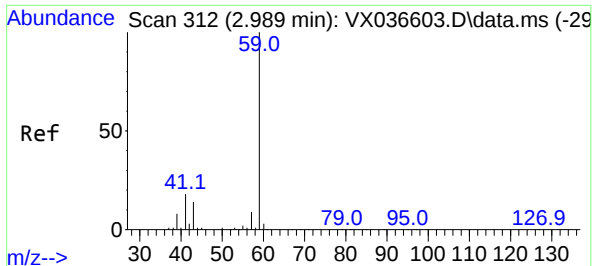
Tgt Ion:168 Resp: 124928
Ion Ratio Lower Upper
168 100
99 61.1 56.6 85.0



#8
Diethyl Ether
Concen: 0.979 ug/l
RT: 2.130 min Scan# 171
Delta R.T. -0.006 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 74 Resp: 894
Ion Ratio Lower Upper
74 100
45 127.2 53.3 159.8





#11

Tert butyl alcohol

Concen: 3.051 ug/l

RT: 2.959 min Scan# 30

Delta R.T. -0.031 min

Lab File: VX036968.D

Acq: 14 Aug 2023 16:36

Instrument :

MSVOA_X

ClientSampleId :

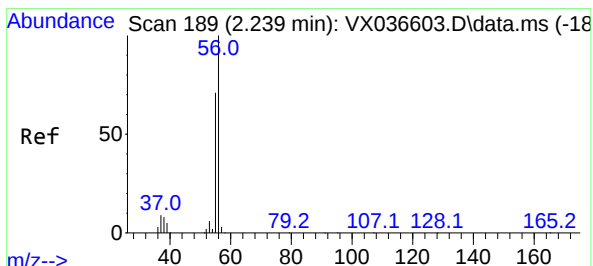
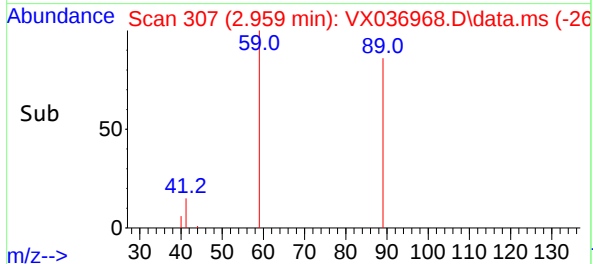
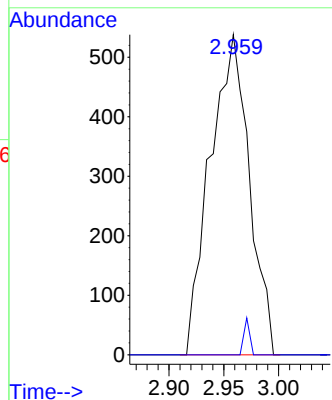
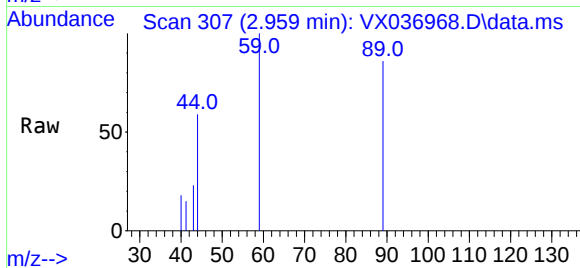
PNNL-APM2-0811-1

Tgt Ion: 59 Resp: 1335

Ion Ratio Lower Upper

59 100

57 1.7 6.0 9.0#



#13

Acrolein

Concen: 0.332 ug/l

RT: 2.239 min Scan# 189

Delta R.T. -0.000 min

Lab File: VX036968.D

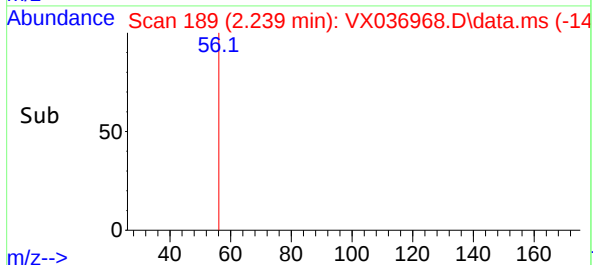
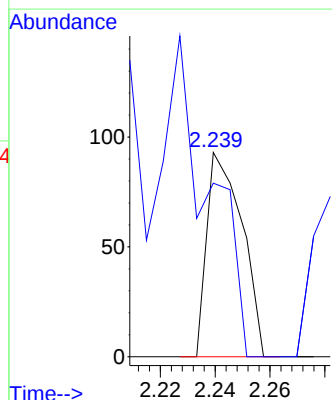
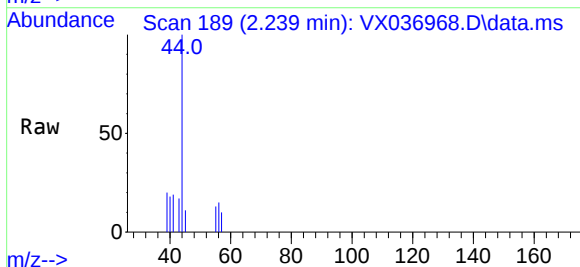
Acq: 14 Aug 2023 16:36

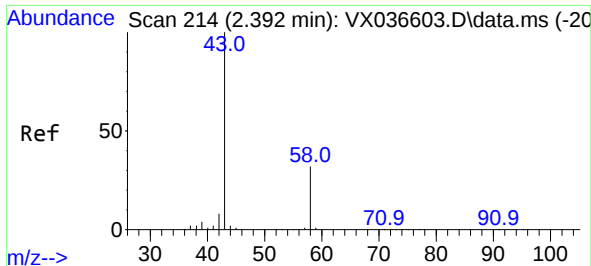
Tgt Ion: 56 Resp: 83

Ion Ratio Lower Upper

56 100

55 200.0 57.1 85.7#

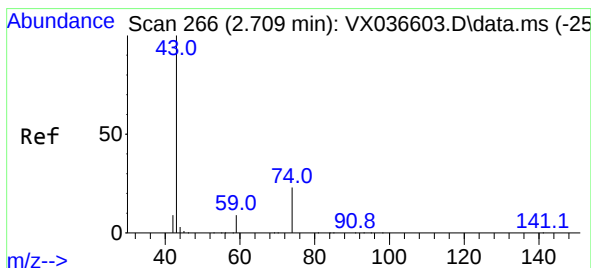
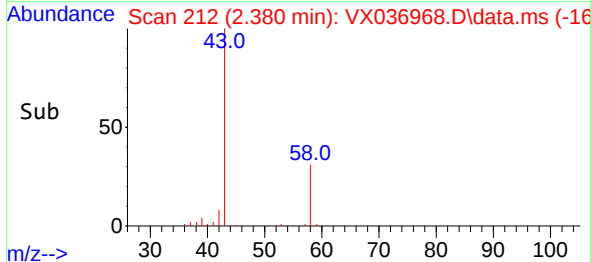
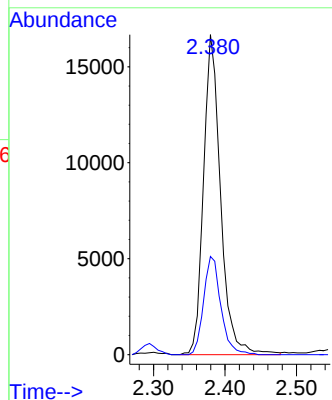
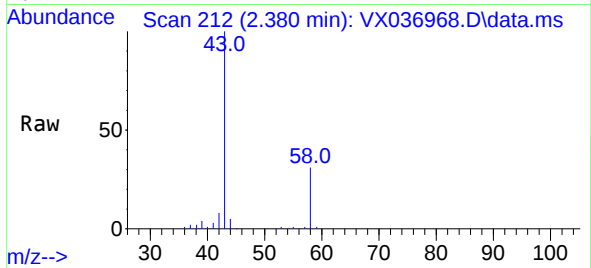




#16
Acetone
Concen: 36.069 ug/l
RT: 2.380 min Scan# 214
Delta R.T. -0.012 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

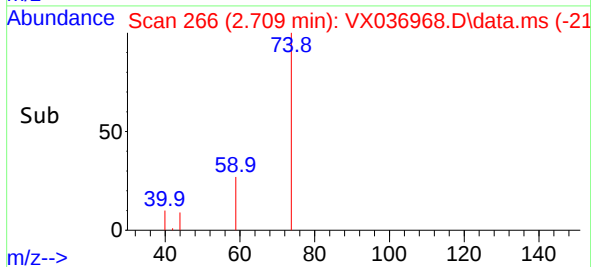
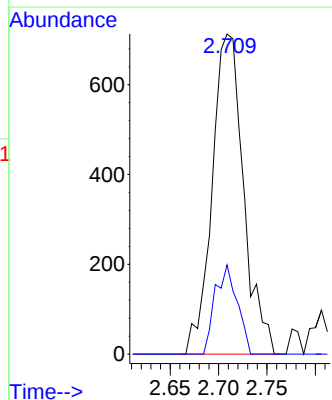
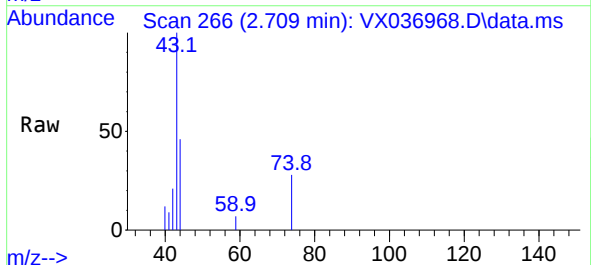
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

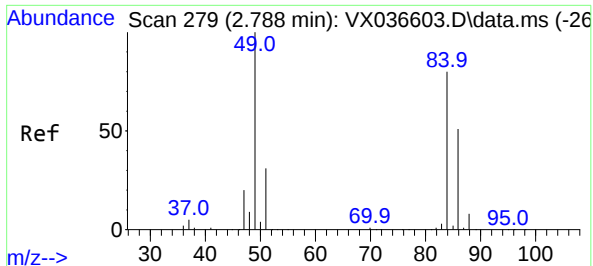
Tgt Ion: 43 Resp: 27667
Ion Ratio Lower Upper
43 100
58 30.7 21.9 32.9



#18
Methyl Acetate
Concen: 0.500 ug/l
RT: 2.709 min Scan# 266
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

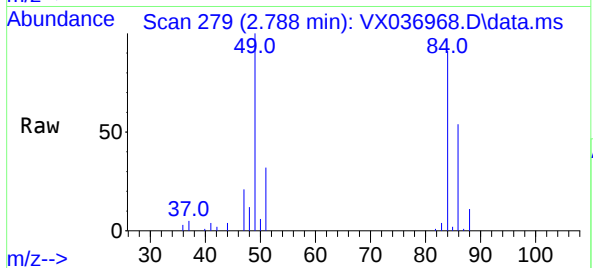
Tgt Ion: 43 Resp: 1612
Ion Ratio Lower Upper
43 100
74 19.5 17.8 26.8





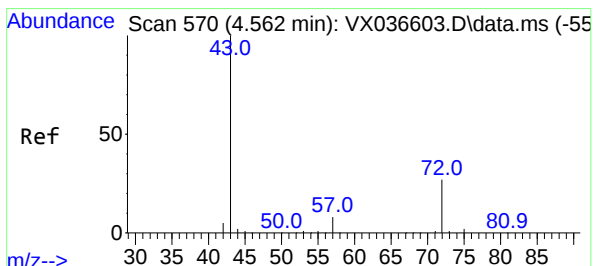
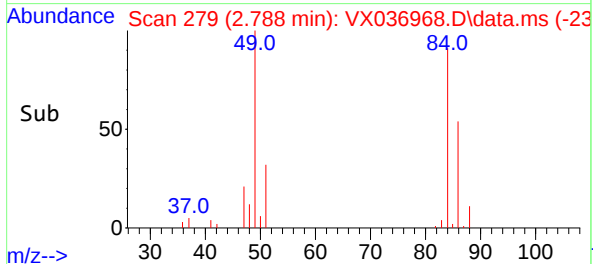
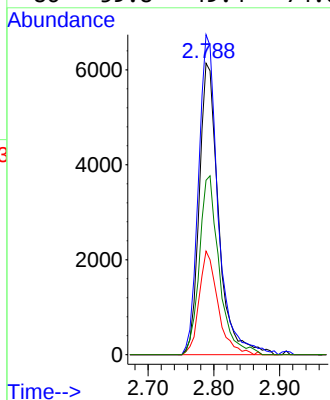
#20
Methylene Chloride
Concen: 7.354 ug/l
RT: 2.788 min Scan# 21
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1



Tgt Ion: 84 Resp: 12546

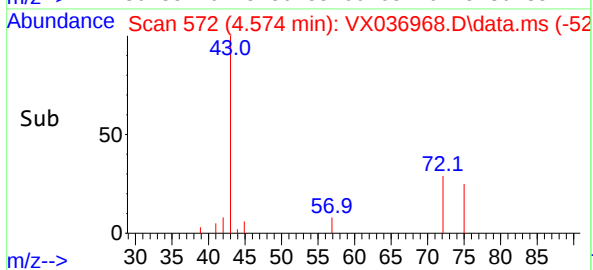
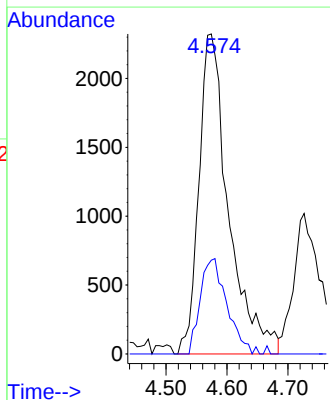
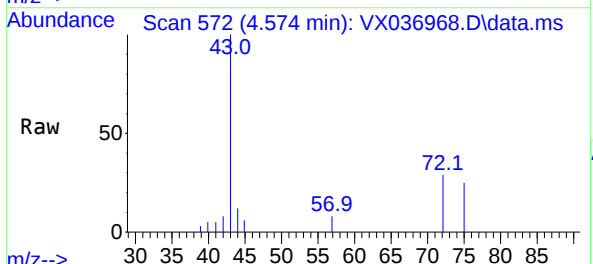
Ion	Ratio	Lower	Upper
84	100		
49	109.8	103.6	155.4
51	35.5	33.8	50.6
86	59.8	49.4	74.0

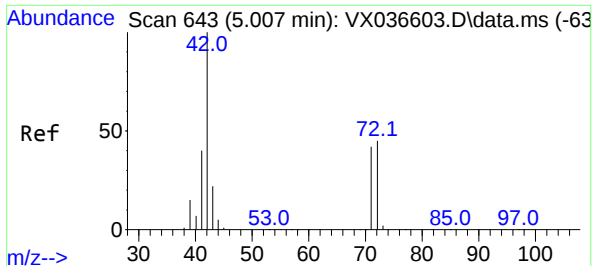


#25
2-Butanone
Concen: 6.308 ug/l
RT: 4.574 min Scan# 572
Delta R.T. 0.012 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 43 Resp: 7850

Ion	Ratio	Lower	Upper
43	100		
72	29.3	19.4	29.2#





#29

Tetrahydrofuran

Concen: 0.768 ug/l

RT: 5.025 min Scan# 64

Delta R.T. 0.018 min

Lab File: VX036968.D

Acq: 14 Aug 2023 16:36

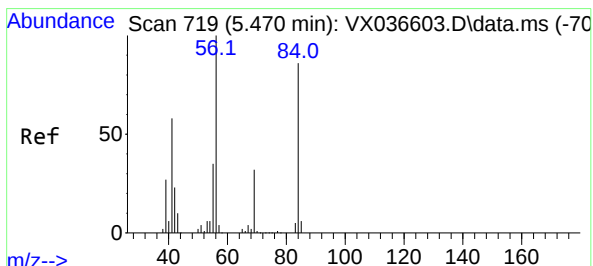
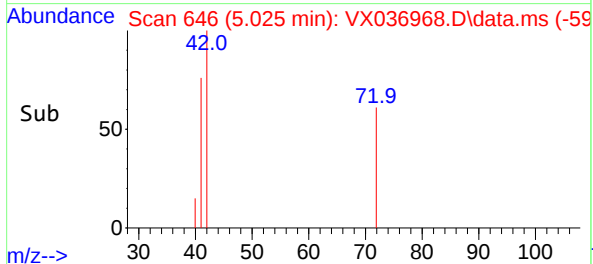
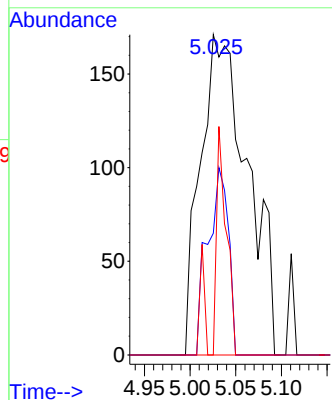
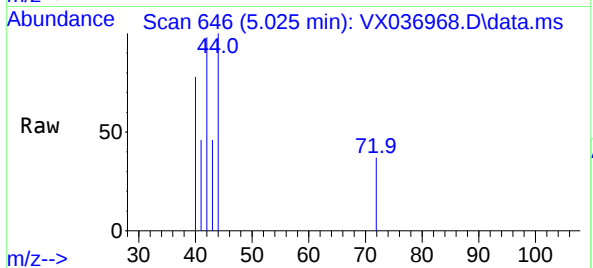
Instrument :

MSVOA_X

ClientSampleId :

PNNL-APM2-0811-1

Tgt Ion: 42	Resp:	616
Ion	Ratio	Lower Upper
42	100	
72	25.6	34.2 51.4#
71	14.8	32.2 48.2#



#31

Cyclohexane

Concen: 1.050 ug/l

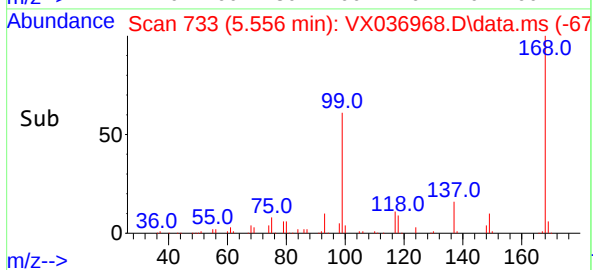
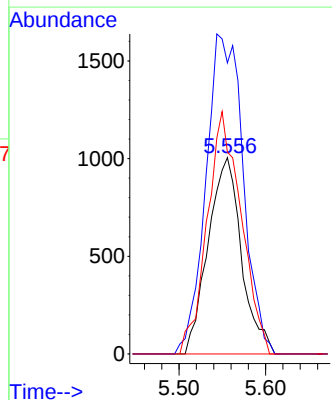
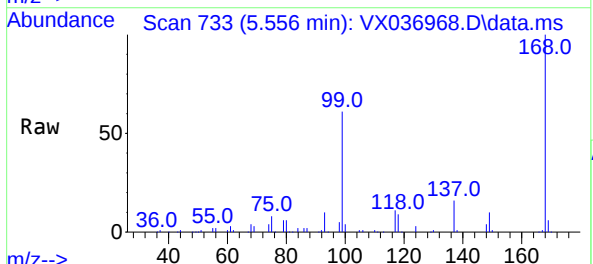
RT: 5.556 min Scan# 733

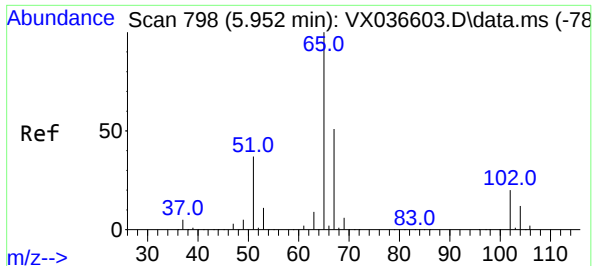
Delta R.T. 0.085 min

Lab File: VX036968.D

Acq: 14 Aug 2023 16:36

Tgt Ion: 56	Resp:	2688
Ion	Ratio	Lower Upper
56	100	
69	148.3	23.4 35.2#
84	102.9	65.9 98.9#

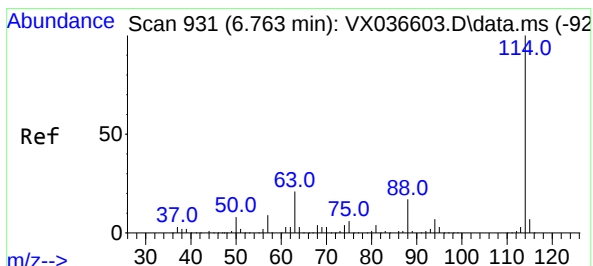
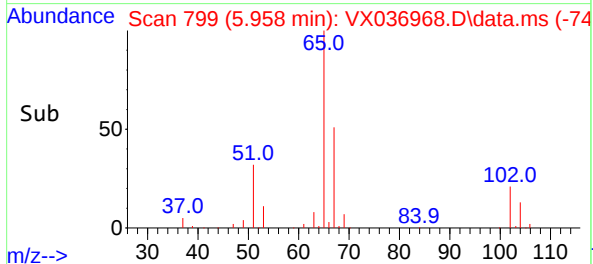
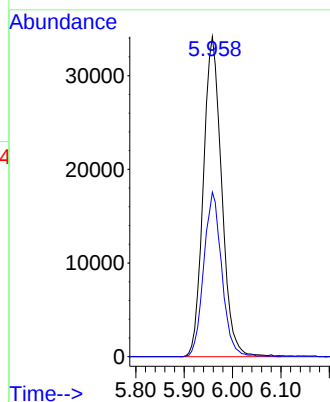
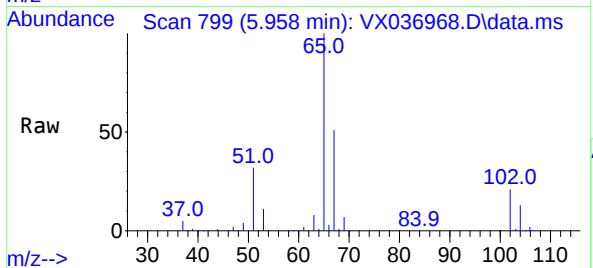




#33
 1,2-Dichloroethane-d4
 Concen: 48.701 ug/l
 RT: 5.958 min Scan# 798
 Delta R.T. 0.006 min
 Lab File: VX036968.D
 Acq: 14 Aug 2023 16:36

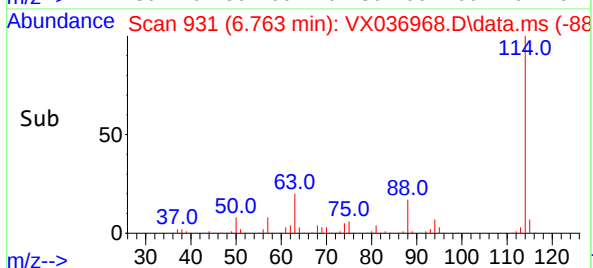
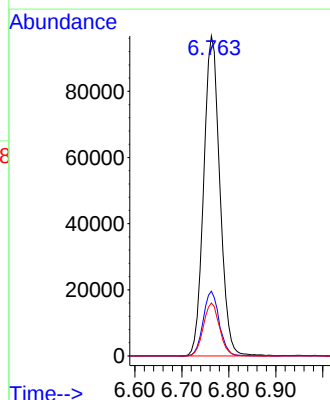
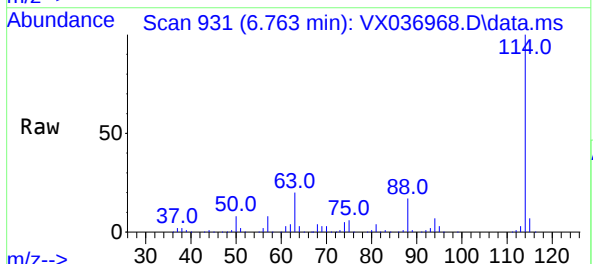
Instrument :
 MSVOA_X
 ClientSampleId :
 PNNL-APM2-0811-1

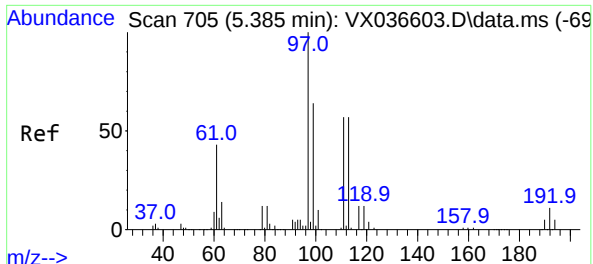
Tgt Ion: 65 Resp: 90024
 Ion Ratio Lower Upper
 65 100
 67 50.5 0.0 100.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.763 min Scan# 931
 Delta R.T. -0.000 min
 Lab File: VX036968.D
 Acq: 14 Aug 2023 16:36

Tgt Ion: 114 Resp: 231329
 Ion Ratio Lower Upper
 114 100
 63 20.3 0.0 45.0
 88 16.5 0.0 36.6

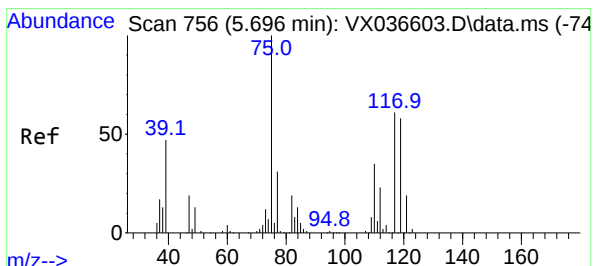
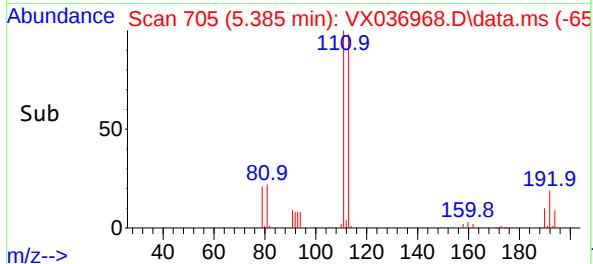
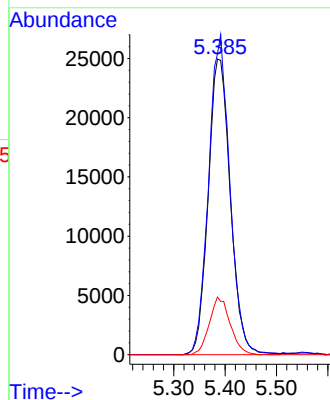
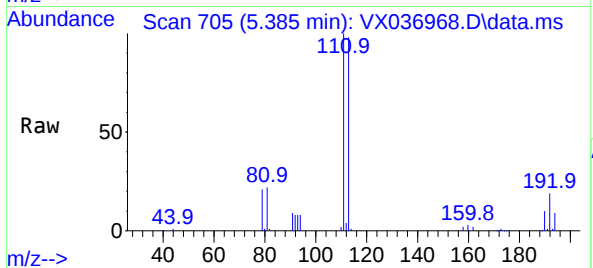




#35
Dibromofluoromethane
Concen: 46.937 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

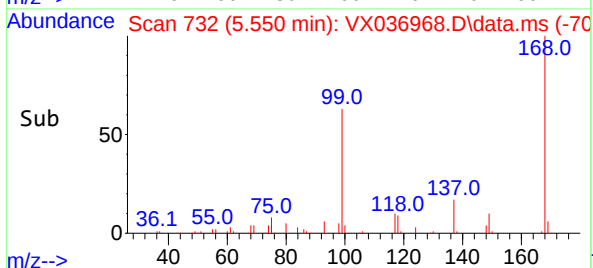
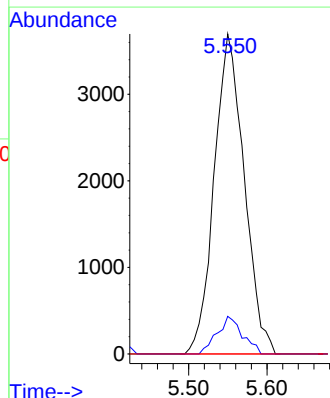
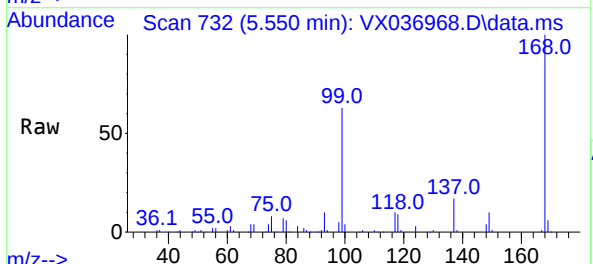
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

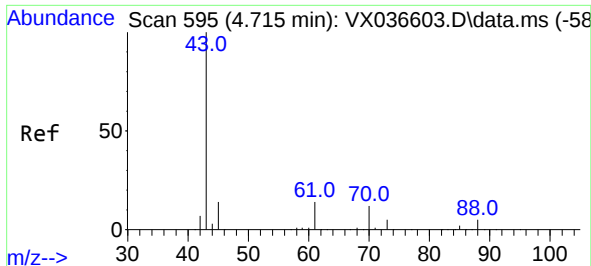
Tgt Ion:	113	Resp:	74631
Ion	Ratio	Lower	Upper
113	100		
111	104.2	82.9	124.3
192	18.4	13.3	19.9



#36
1,1-Dichloropropene
Concen: 4.148 ug/l
RT: 5.550 min Scan# 732
Delta R.T. -0.146 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion:	75	Resp:	9831
Ion	Ratio	Lower	Upper
75	100		
110	9.9	17.0	50.9#
77	0.0	24.7	37.1#





#37

Ethyl Acetate

Concen: 1.053 ug/l

RT: 4.727 min Scan# 595

Delta R.T. 0.012 min

Lab File: VX036968.D

Acq: 14 Aug 2023 16:36

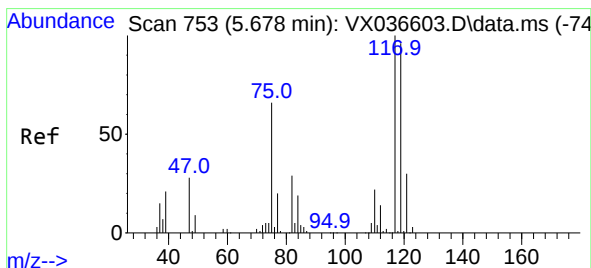
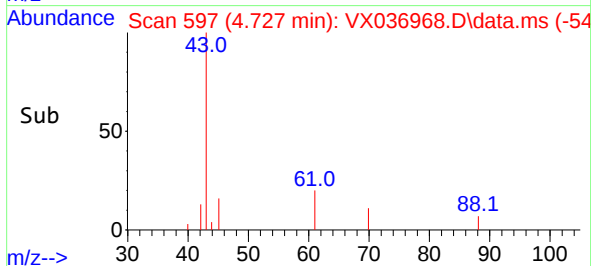
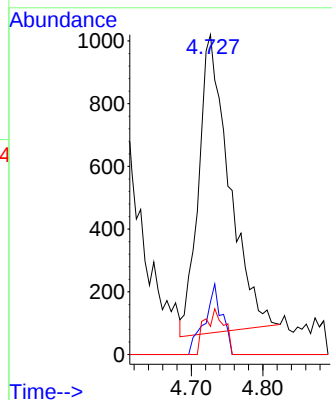
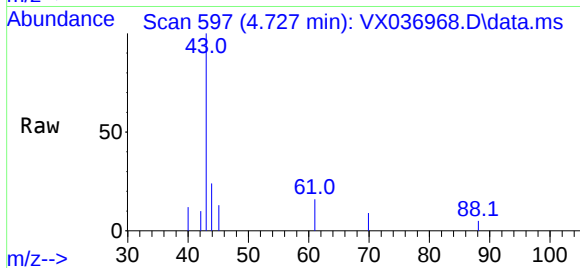
Instrument :

MSVOA_X

ClientSampleId :

PNNL-APM2-0811-1

Tgt Ion:	43	Resp:	2825
Ion	Ratio	Lower	Upper
43	100		
61	13.5	10.6	16.0
70	9.8	8.3	12.5



#38

Carbon Tetrachloride

Concen: 5.370 ug/l

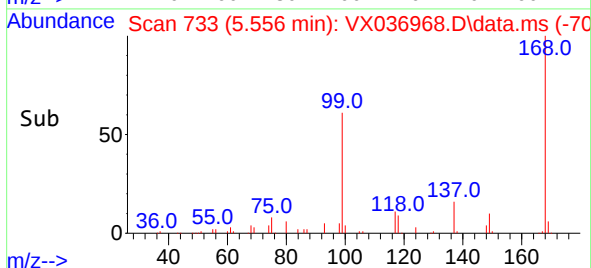
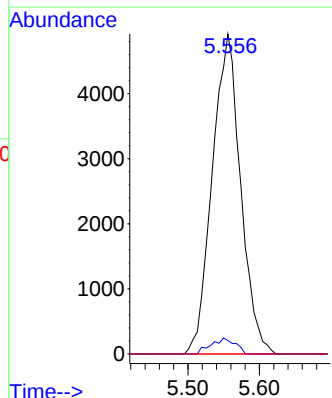
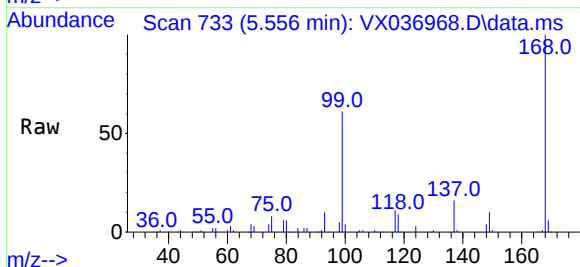
RT: 5.556 min Scan# 733

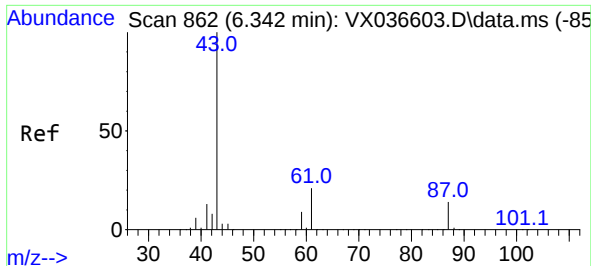
Delta R.T. -0.122 min

Lab File: VX036968.D

Acq: 14 Aug 2023 16:36

Tgt Ion:	117	Resp:	13529
Ion	Ratio	Lower	Upper
117	100		
119	4.2	78.2	117.2#
121	0.0	24.4	36.6#

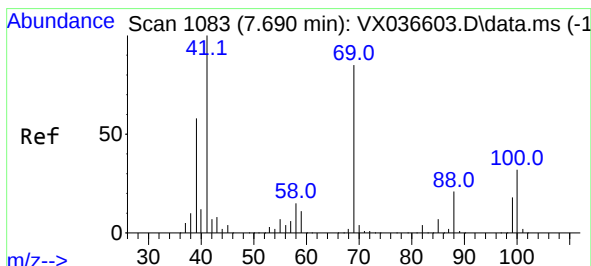
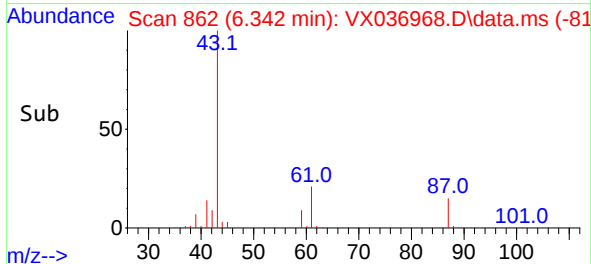
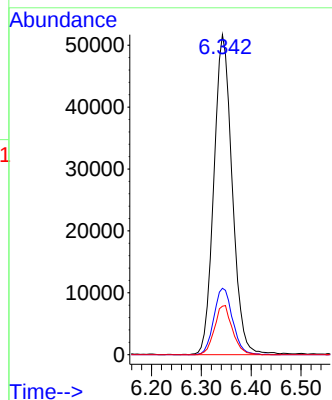
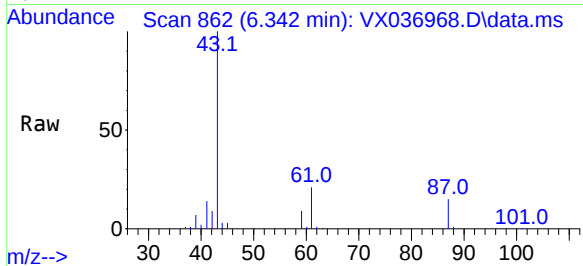




#43
Isopropyl Acetate
Concen: 28.610 ug/l
RT: 6.342 min Scan# 862
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

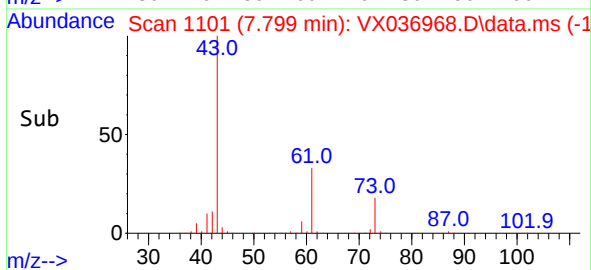
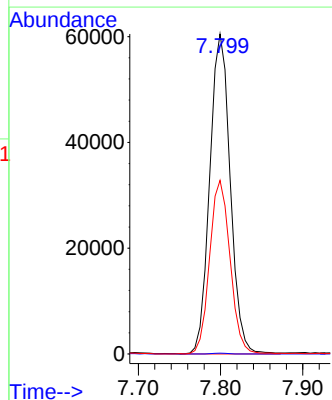
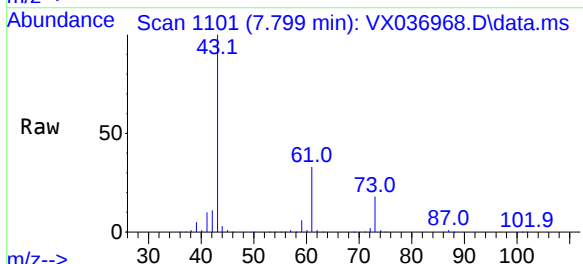
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

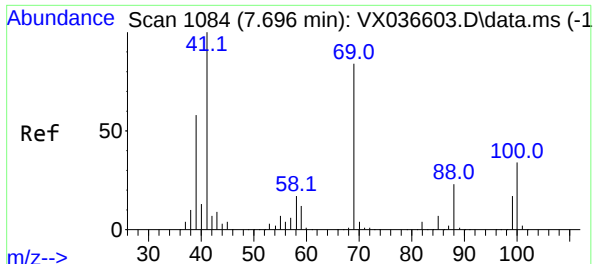
Tgt Ion: 43 Resp: 132104
Ion Ratio Lower Upper
43 100
61 21.2 15.2 22.8
87 15.0 9.8 14.6#



#48
Methyl methacrylate
Concen: 48.922 ug/l
RT: 7.799 min Scan# 1101
Delta R.T. 0.110 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 41 Resp: 105052
Ion Ratio Lower Upper
41 100
69 0.2 59.2 88.8#
39 54.2 47.7 71.5

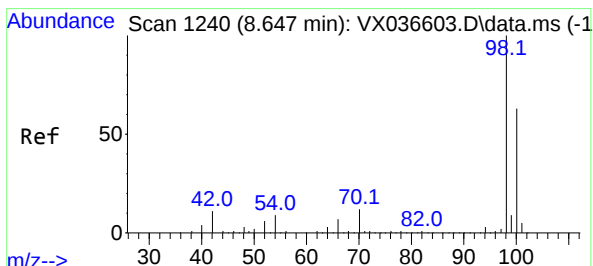
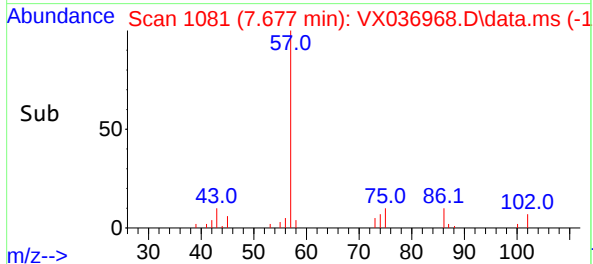
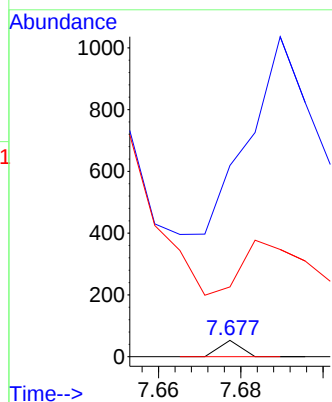
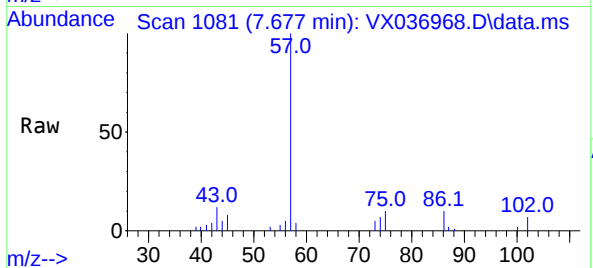




#49
1,4-Dioxane
Concen: 0.438 ug/l
RT: 7.677 min Scan# 1081
Delta R.T. -0.018 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

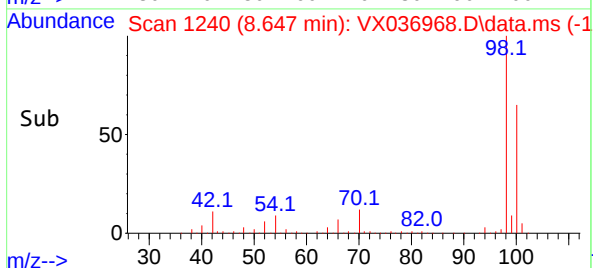
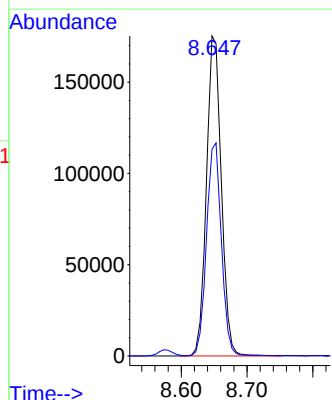
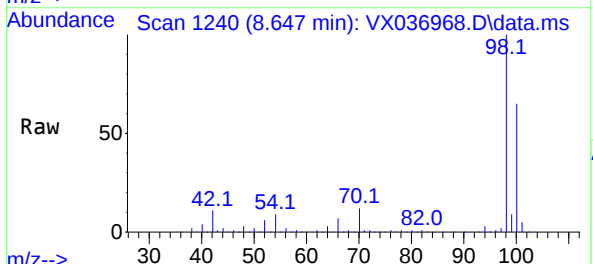
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

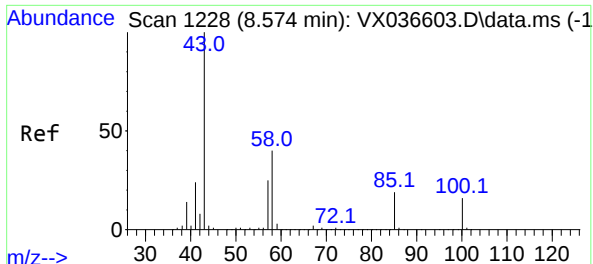
Tgt Ion: 88 Resp: 19
Ion Ratio Lower Upper
88 100
43 0.0 0.0 0.0
58 3342.1 60.1 90.1#



#50
Toluene-d8
Concen: 48.876 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 98 Resp: 275589
Ion Ratio Lower Upper
98 100
100 66.8 53.1 79.7

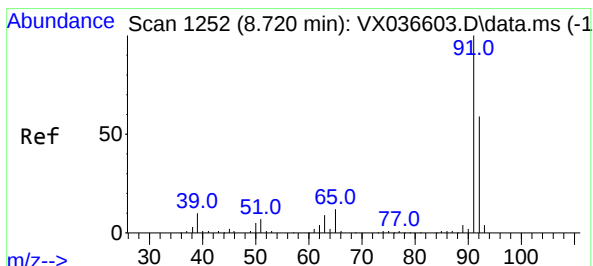
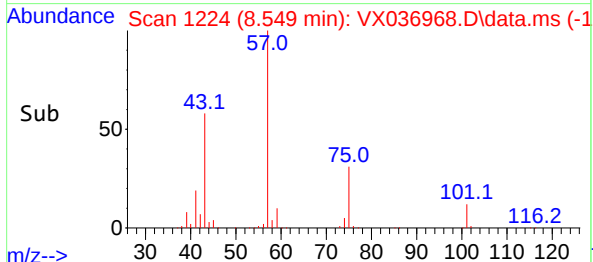
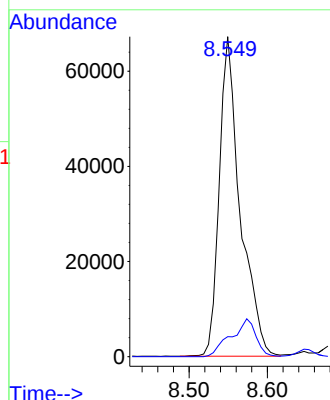
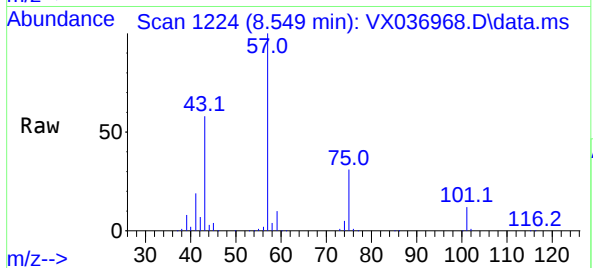




#51
4-Methyl-2-Pentanone
Concen: 48.861 ug/l
RT: 8.549 min Scan# 11
Delta R.T. -0.024 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

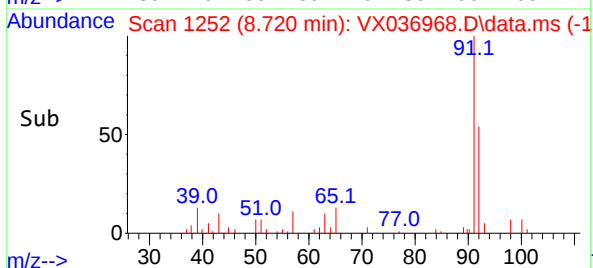
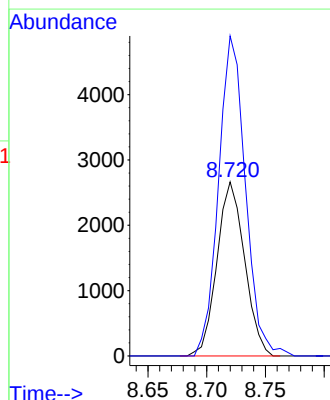
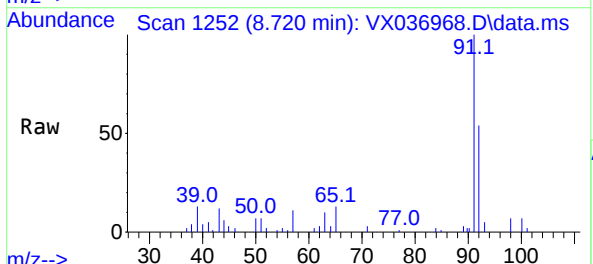
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

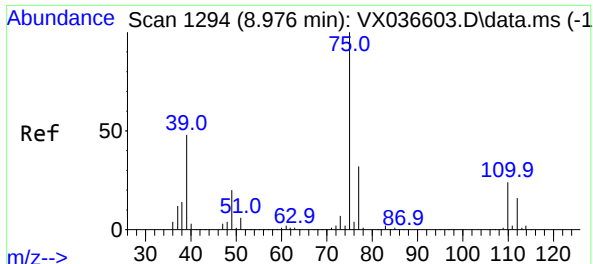
Tgt Ion: 43 Resp: 124851
Ion Ratio Lower Upper
43 100
58 0.0 30.4 45.6#



#52
Toluene
Concen: 1.009 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 92 Resp: 4360
Ion Ratio Lower Upper
92 100
91 179.2 134.2 201.2

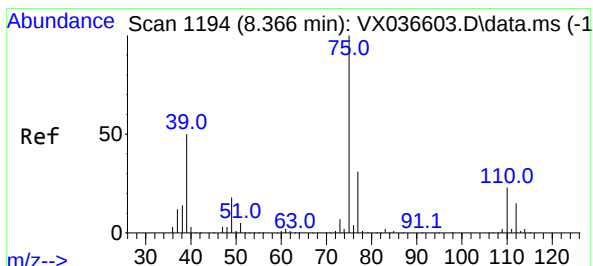
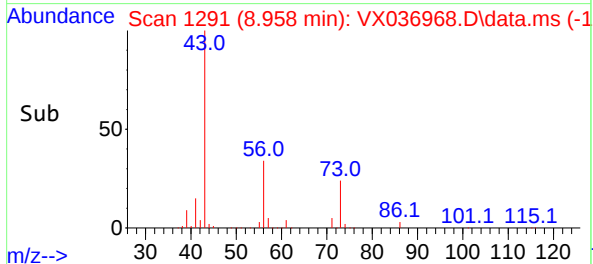
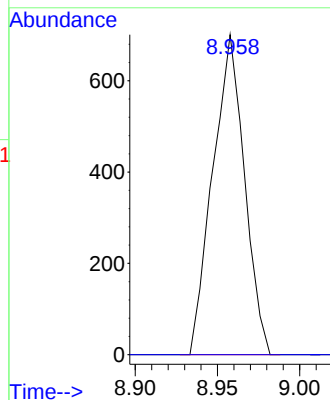
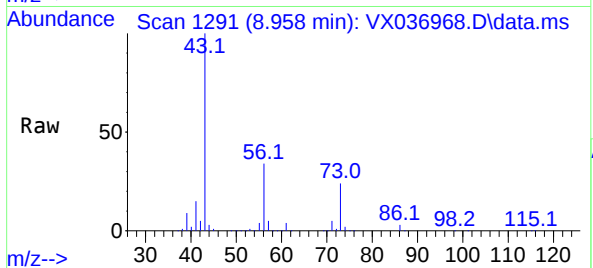




#53
t-1,3-Dichloropropene
Concen: 0.315 ug/l
RT: 8.958 min Scan# 11
Delta R.T. -0.018 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

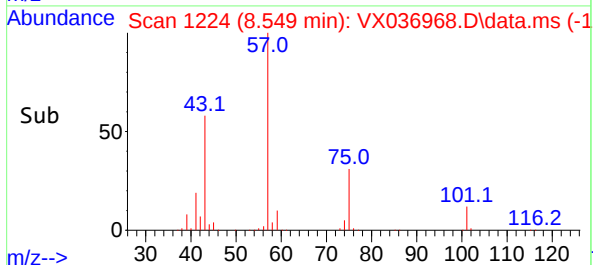
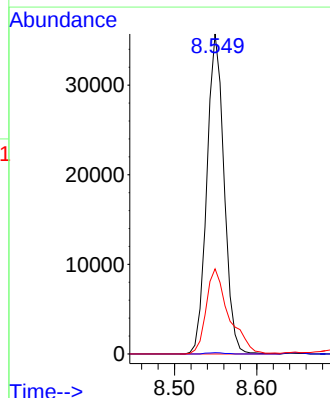
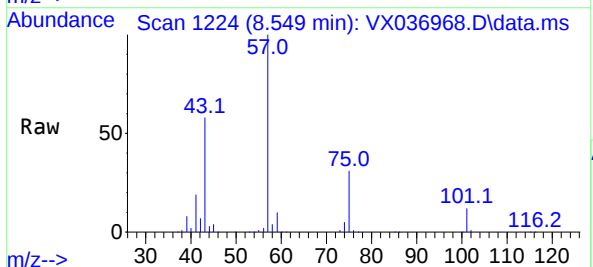
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

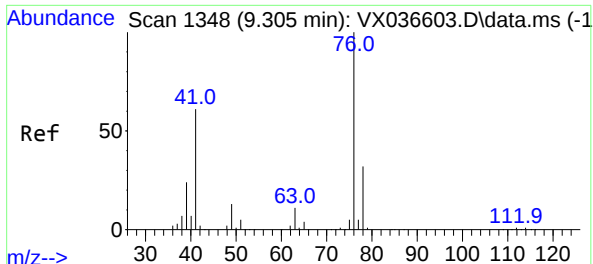
Tgt Ion: 75 Resp: 941
Ion Ratio Lower Upper
75 100
77 0.0 25.7 38.5#



#54
cis-1,3-Dichloropropene
Concen: 16.470 ug/l
RT: 8.549 min Scan# 1224
Delta R.T. 0.183 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 75 Resp: 51950
Ion Ratio Lower Upper
75 100
77 0.4 25.3 37.9#
39 26.6 46.7 70.1#

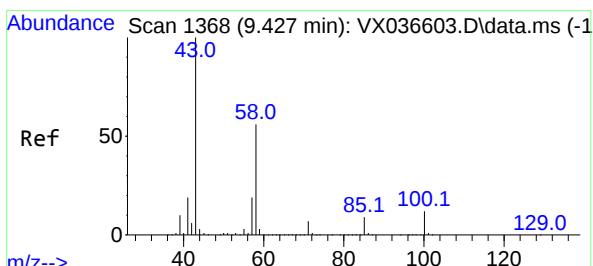
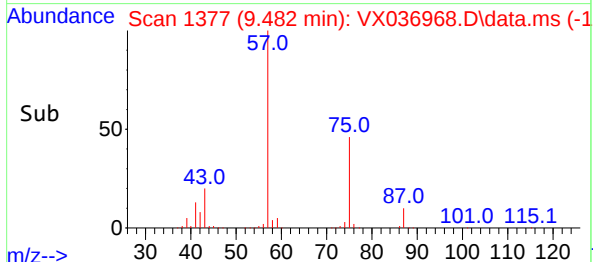
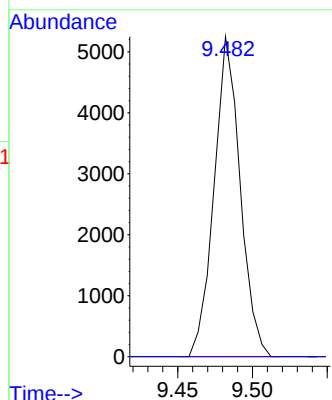
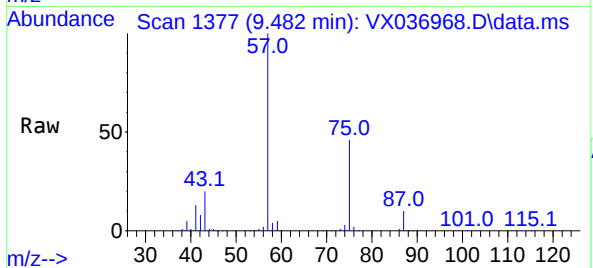




#57
1,3-Dichloropropane
Concen: 2.103 ug/l
RT: 9.482 min Scan# 11
Delta R.T. 0.177 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

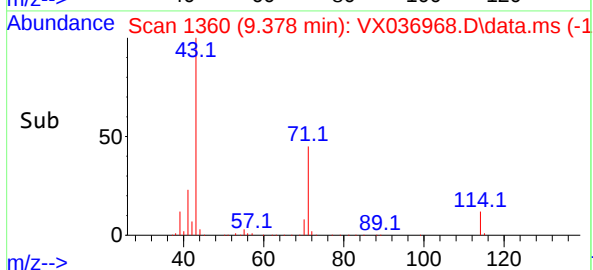
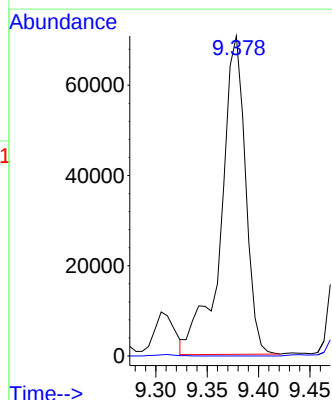
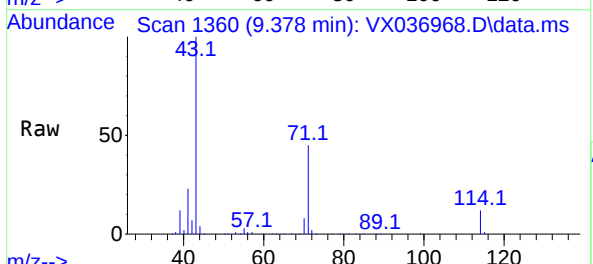
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

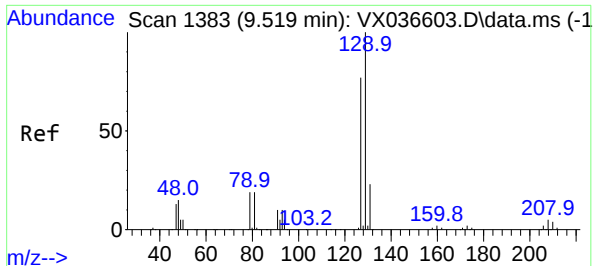
Tgt Ion: 76 Resp: 6361
Ion Ratio Lower Upper
76 100
78 0.0 26.1 39.1#



#59
2-Hexanone
Concen: 61.360 ug/l
RT: 9.378 min Scan# 1360
Delta R.T. -0.049 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 43 Resp: 116364
Ion Ratio Lower Upper
43 100
58 0.0 26.2 78.5#

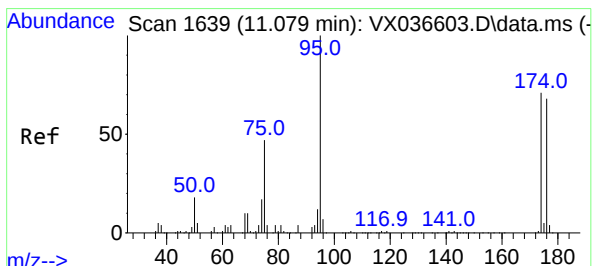
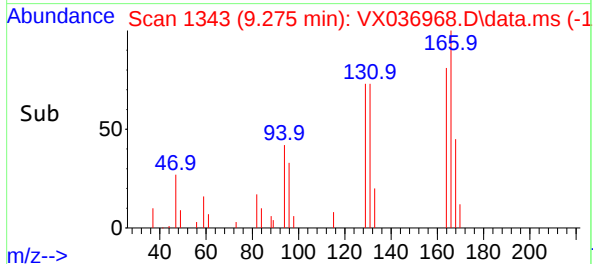
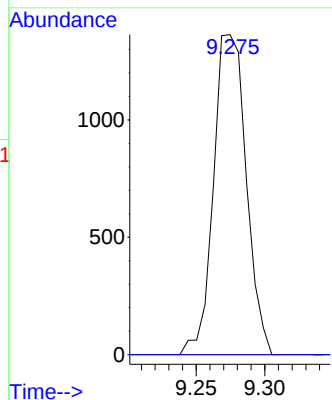
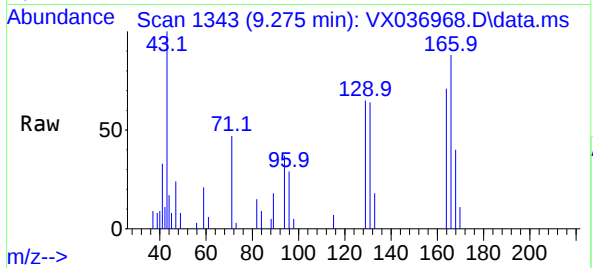




#60
Dibromochloromethane
Concen: 1.136 ug/l
RT: 9.275 min Scan# 11
Delta R.T. -0.244 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

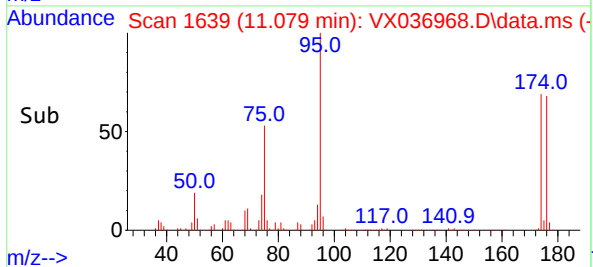
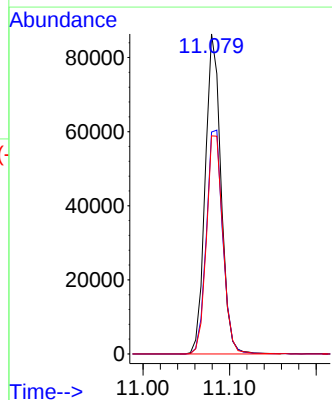
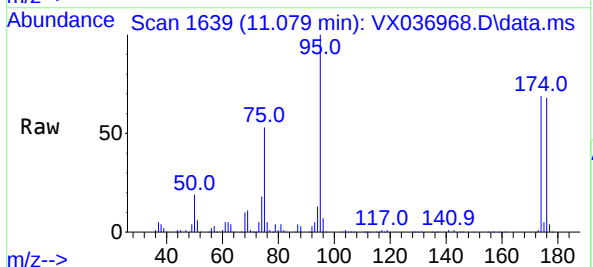
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

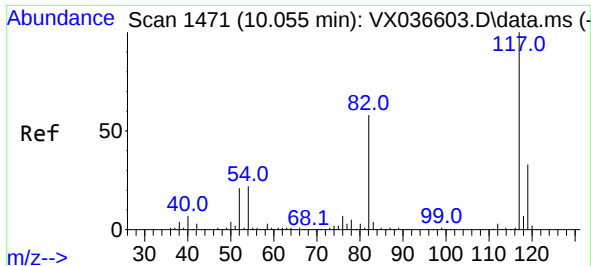
Tgt Ion:129 Resp: 2267
Ion Ratio Lower Upper
129 100
127 0.0 38.8 116.4#



#62
4-Bromofluorobenzene
Concen: 51.225 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 95 Resp: 108974
Ion Ratio Lower Upper
95 100
174 72.8 0.0 135.6
176 71.4 0.0 131.0

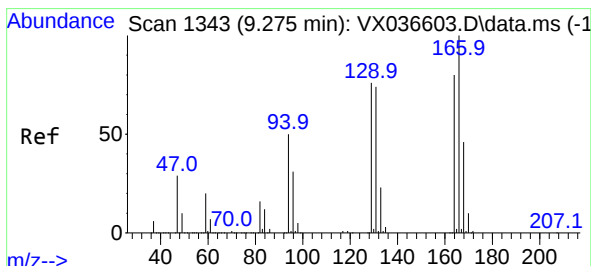
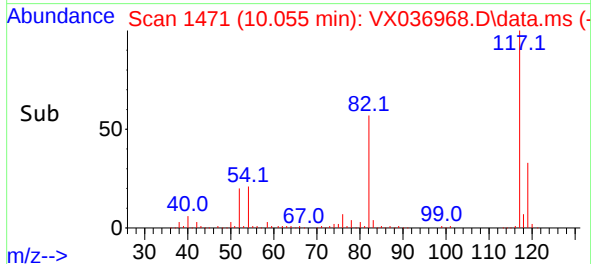
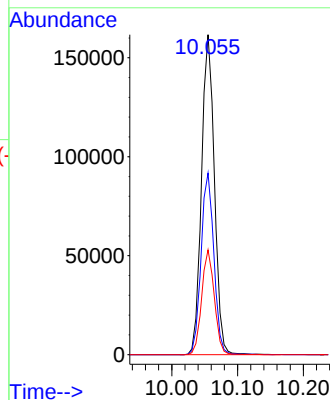
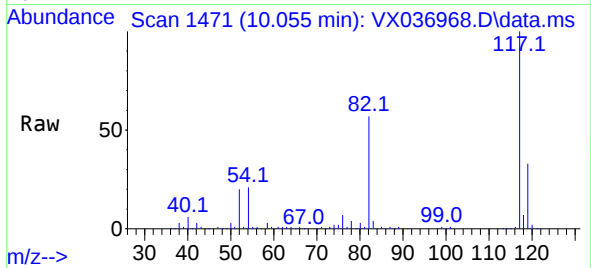




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

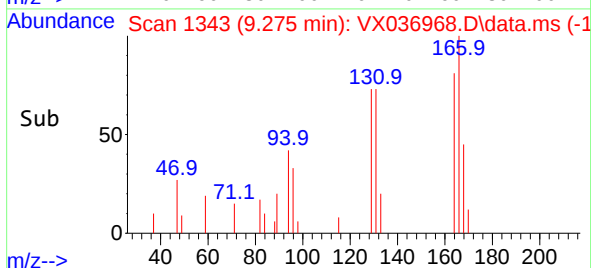
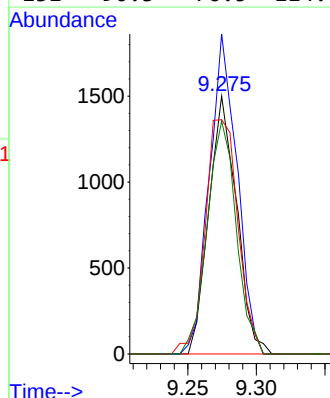
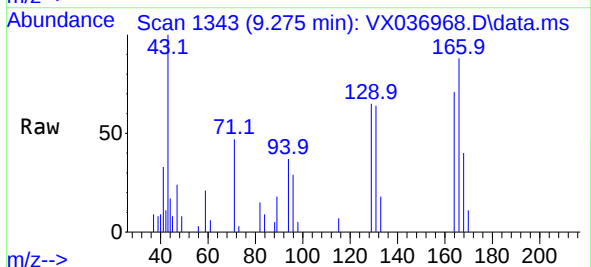
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

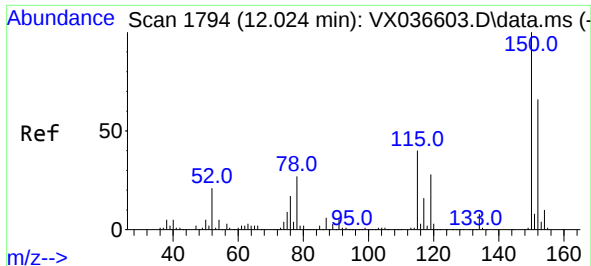
Tgt Ion:117 Resp: 220104
Ion Ratio Lower Upper
117 100
82 56.8 46.2 69.4
119 32.8 25.5 38.3



#64
Tetrachloroethene
Concen: 1.291 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion:164 Resp: 2120
Ion Ratio Lower Upper
164 100
166 124.1 102.7 154.1
129 90.8 80.4 120.6
131 90.3 76.5 114.7

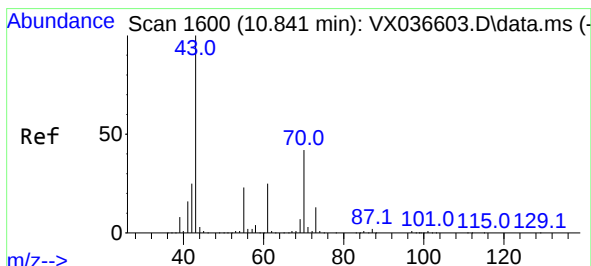
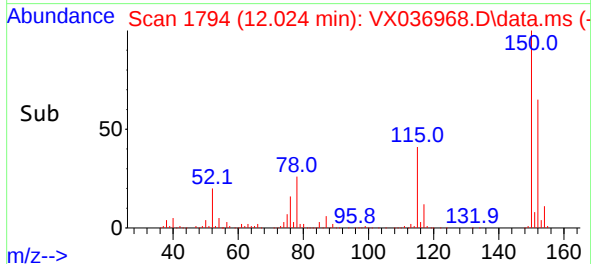
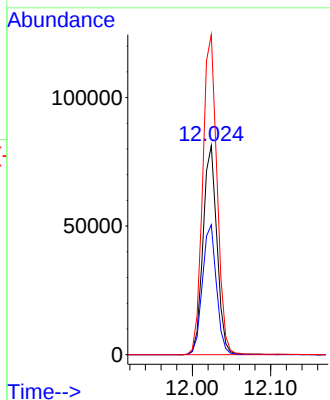
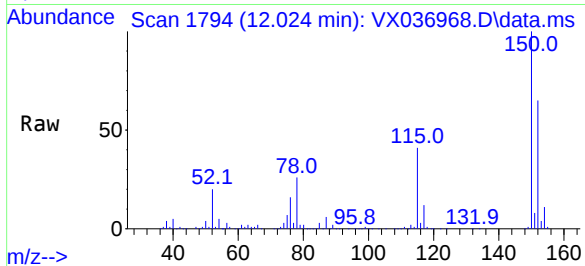




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

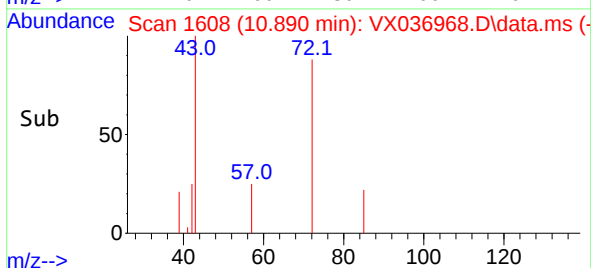
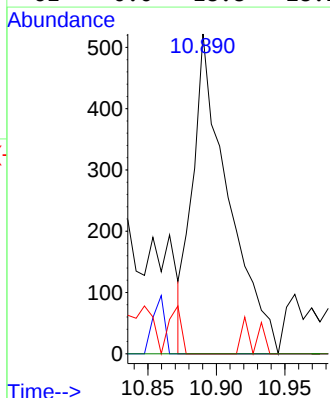
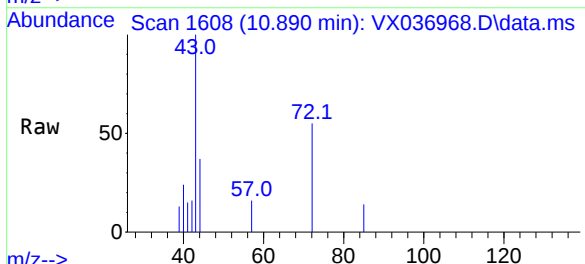
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

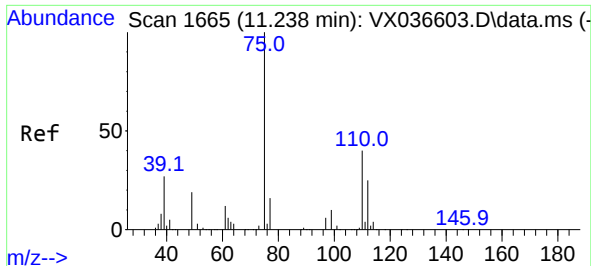
Tgt Ion:152 Resp: 100304
Ion Ratio Lower Upper
152 100
115 62.7 43.3 129.9
150 157.3 0.0 345.0



#74
N-ethyl acetate
Concen: 0.243 ug/l
RT: 10.890 min Scan# 1608
Delta R.T. 0.049 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 43 Resp: 942
Ion Ratio Lower Upper
43 100
70 0.0 32.9 49.3#
55 0.0 19.3 28.9#
61 0.0 18.8 28.2#

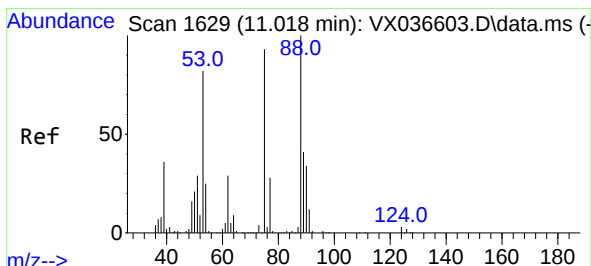
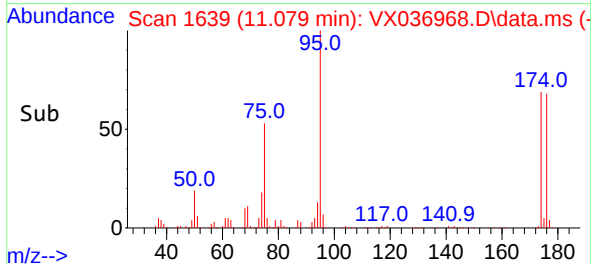
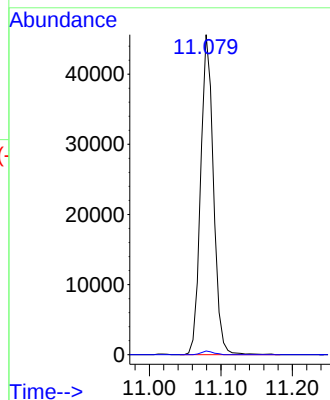
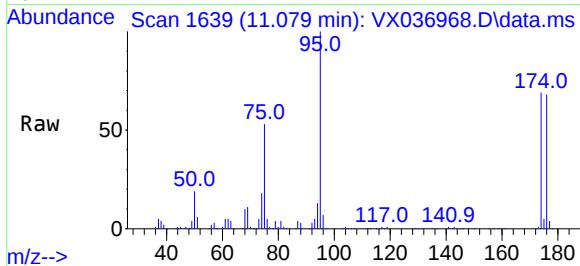




#76
1,2,3-Trichloropropane
Concen: 24.058 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.159 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

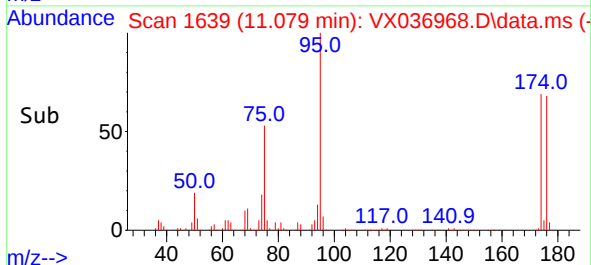
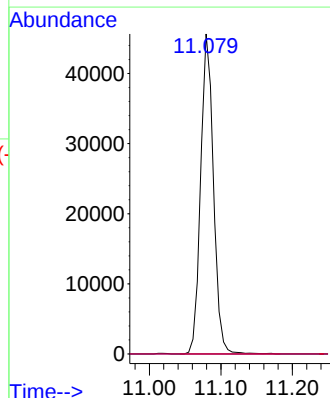
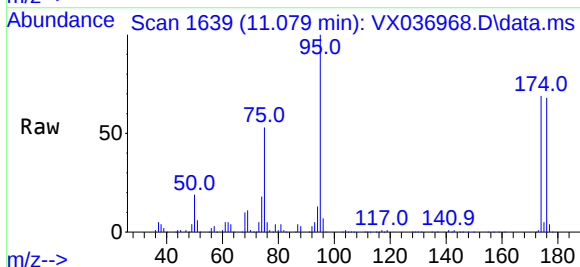
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

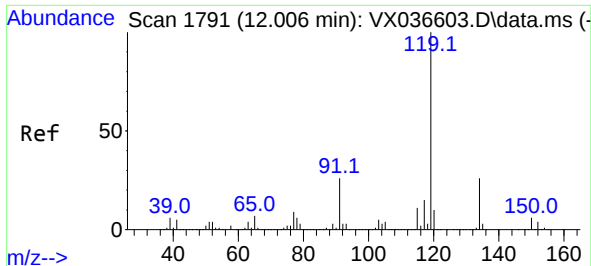
Tgt Ion: 75 Resp: 56759
Ion Ratio Lower Upper
75 100
77 1.1 19.1 57.5#



#81
trans-1,4-Dichloro-2-butene
Concen: 54.529 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.061 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion: 75 Resp: 56759
Ion Ratio Lower Upper
75 100
53 0.0 90.5 135.7#
89 0.0 36.9 55.3#

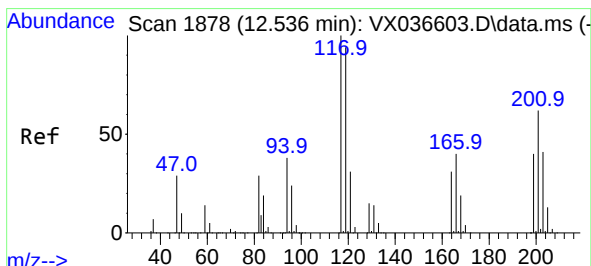
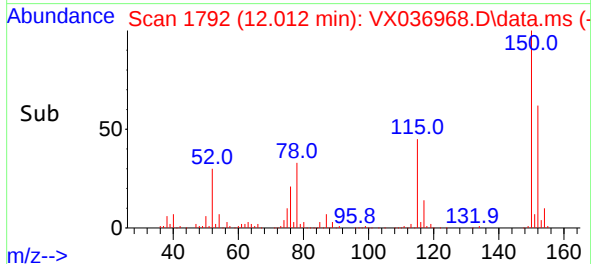
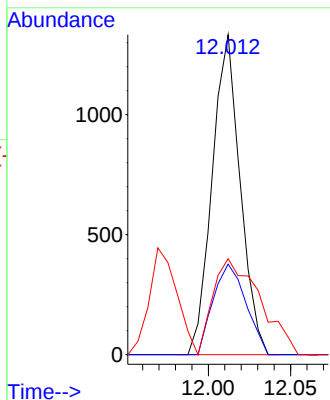
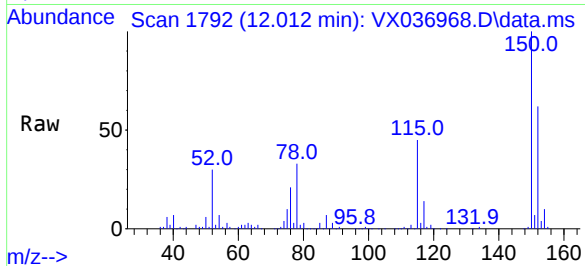




#86
p-Isopropyltoluene
Concen: 0.226 ug/l
RT: 12.012 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-1

Tgt Ion:119 Resp: 1581
Ion Ratio Lower Upper
119 100
134 33.0 12.8 38.3
91 50.2 13.1 39.3#



#90
Hexachloroethane
Concen: 0.389 ug/l
RT: 12.664 min Scan# 1899
Delta R.T. 0.128 min
Lab File: VX036968.D
Acq: 14 Aug 2023 16:36

Tgt Ion:117 Resp: 552
Ion Ratio Lower Upper
117 100
201 0.0 32.9 98.6#

