

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062823\
 Data File : VN078438.D
 Acq On : 28 Jun 2023 13:51
 Operator : JC\MD
 Sample : 03428-04
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 PNNL-APM-0621-2

Quant Time: Jun 29 05:20:16 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060623W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jun 07 05:05:00 2023
 Response via : Initial Calibration

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

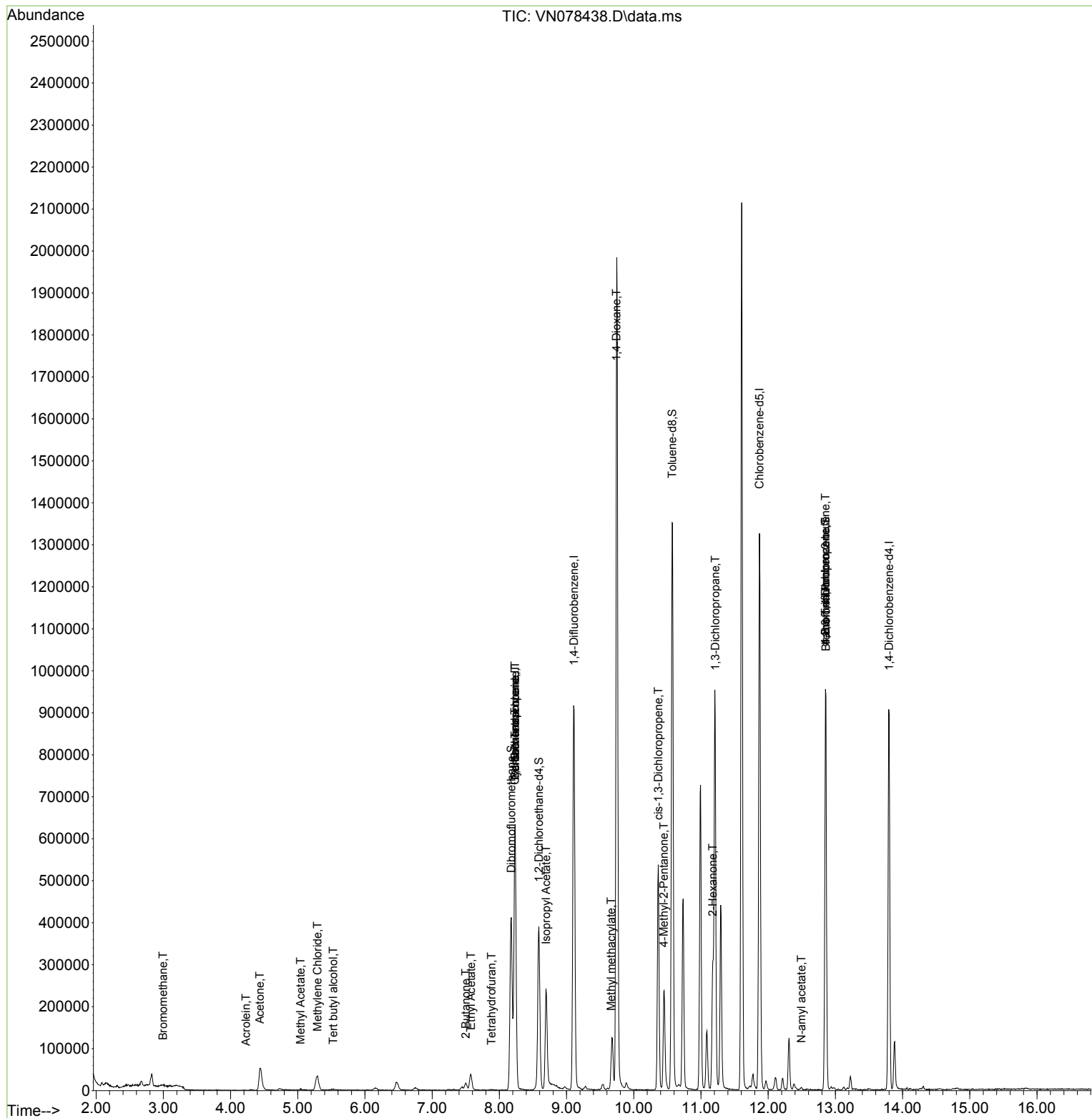
Internal Standards						
1) Pentafluorobenzene	8.235	168	455673	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.112	114	843090	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.871	117	802699	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.800	152	247139	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.588	65	307468	50.608	ug/l	0.00
Spiked Amount	50.000	Range	74 - 125	Recovery	= 101.220%	
35) Dibromofluoromethane	8.177	113	301179	56.498	ug/l	0.00
Spiked Amount	50.000	Range	75 - 124	Recovery	= 113.000%	
50) Toluene-d8	10.571	98	1001507	48.734	ug/l	0.00
Spiked Amount	50.000	Range	86 - 113	Recovery	= 97.460%	
62) 4-Bromofluorobenzene	12.853	95	331438	51.879	ug/l	0.00
Spiked Amount	50.000	Range	83 - 123	Recovery	= 103.760%	
Target Compounds						Qvalue
3) Chloromethane	2.371	50	1431	Below Cal	89	
5) Bromomethane	2.995	94	1780	0.349	ug/l	84
11) Tert butyl alcohol	5.530	59	1956	2.332	ug/l #	72
13) Acrolein	4.230	56	208	0.225	ug/l #	70
16) Acetone	4.436	43	101768	58.194	ug/l	93
18) Methyl Acetate	5.042	43	4270	0.530	ug/l #	65
20) Methylene Chloride	5.295	84	29328	5.075	ug/l	95
25) 2-Butanone	7.500	43	24971	9.286	ug/l	96
29) Tetrahydrofuran	7.883	42	770	0.428	ug/l #	47
31) Cyclohexane	8.230	56	10250	1.315	ug/l #	22
36) 1,1-Dichloropropene	8.235	75	39522	5.169	ug/l #	42
37) Ethyl Acetate	7.577	43	56384	9.439	ug/l #	95
38) Carbon Tetrachloride	8.235	117	50315	6.232	ug/l #	16
43) Isopropyl Acetate	8.694	43	268092	23.468	ug/l #	83
48) Methyl methacrylate	9.665	41	7347	1.533	ug/l #	3
49) 1,4-Dioxane	9.741	88	178	1.767	ug/l #	1
51) 4-Methyl-2-Pentanone	10.447	43	169545	28.184	ug/l	88
54) cis-1,3-Dichloropropene	10.365	75	98388	10.998	ug/l #	71
57) 1,3-Dichloropropane	11.212	76	11163	1.213	ug/l #	42
59) 2-Hexanone	11.176	43	256108	61.144	ug/l #	19
71) Bromoform	12.859	173	2600	0.637	ug/l #	1
74) N-amyl acetate	12.494	43	1628	0.212	ug/l #	49
75) 1,1,2,2-Tetrachloroethane	12.912	83	85	Below Cal	#	26
76) 1,2,3-Trichloropropane	12.853	75	174438	29.857	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.853	75	174438	91.730	ug/l #	15
94) Hexachlorobutadiene	15.506	225	190	Below Cal	#	71

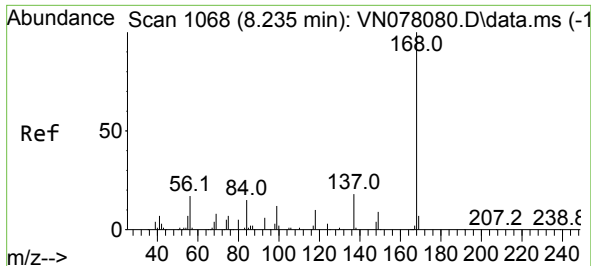
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
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Response via : Initial Calibration

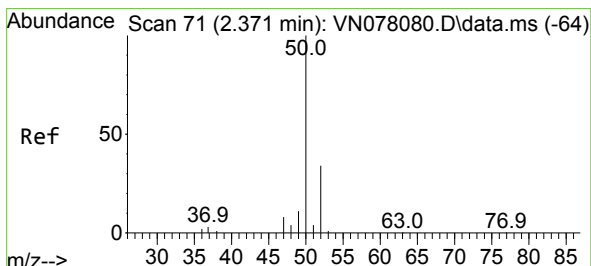
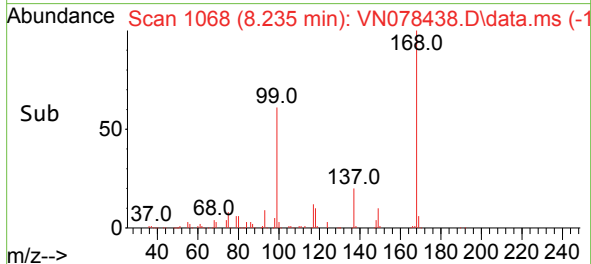
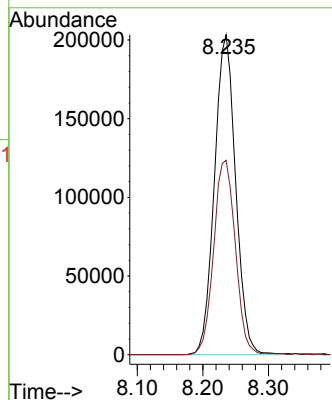
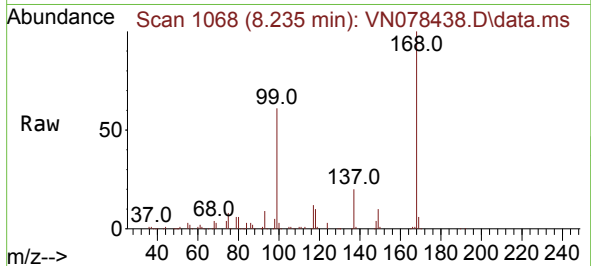




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

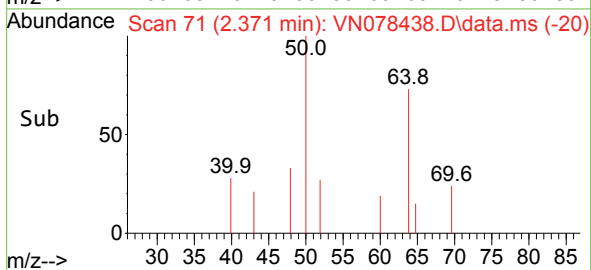
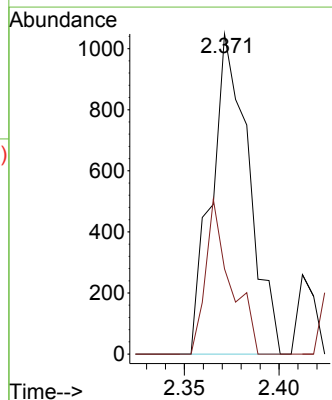
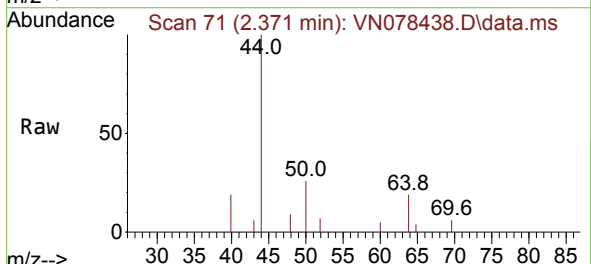
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

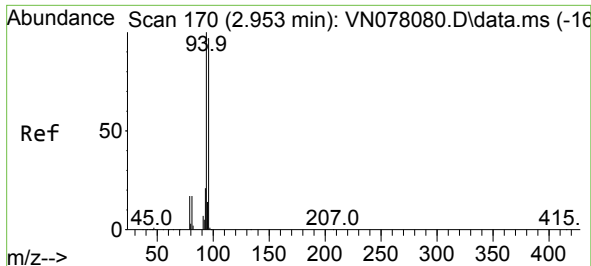
Tgt Ion:168 Resp: 455673
Ion Ratio Lower Upper
168 100
99 60.7 53.0 79.6



#3
Chloromethane
Concen: Below Cal
RT: 2.371 min Scan# 71
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 50 Resp: 1431
Ion Ratio Lower Upper
50 100
52 26.6 26.5 39.7

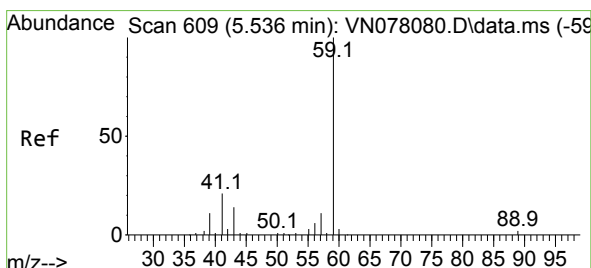
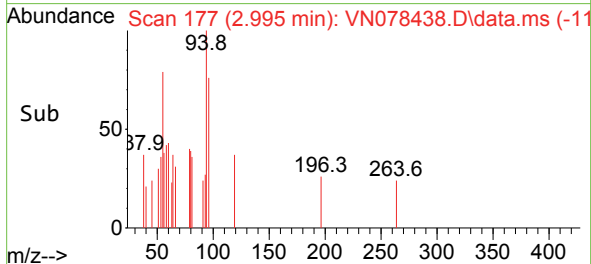
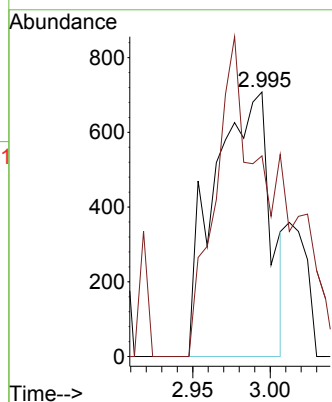
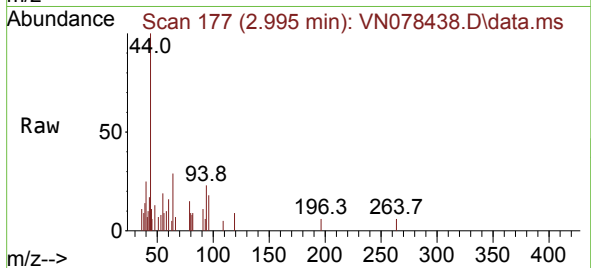




#5
Bromomethane
Concen: 0.349 ug/l
RT: 2.995 min Scan# 11
Delta R.T. 0.041 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

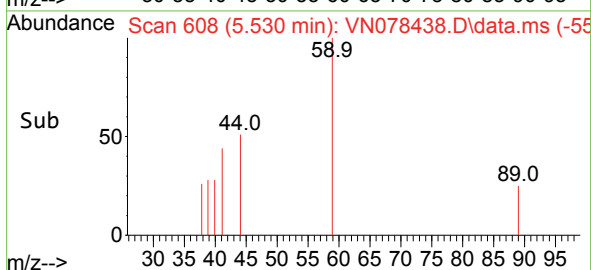
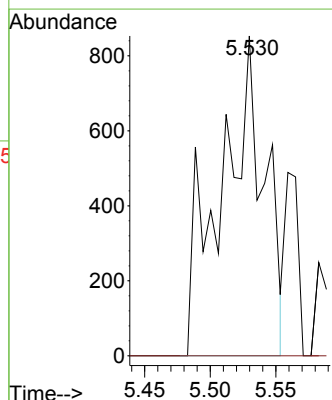
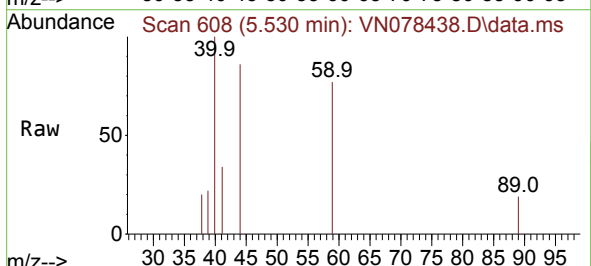
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

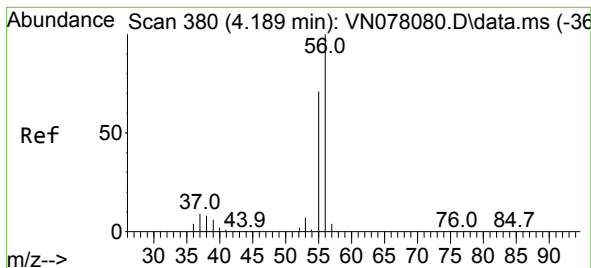
Tgt Ion: 94 Resp: 1780
Ion Ratio Lower Upper
94 100
96 75.8 73.1 109.7



#11
Tert butyl alcohol
Concen: 2.332 ug/l
RT: 5.530 min Scan# 608
Delta R.T. -0.006 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 59 Resp: 1956
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#





#13

Acrolein

Concen: 0.225 ug/l

RT: 4.230 min Scan# 387

Delta R.T. 0.041 min

Lab File: VN078438.D

Acq: 28 Jun 2023 13:51

Instrument :

MSVOA_N

ClientSampleId :

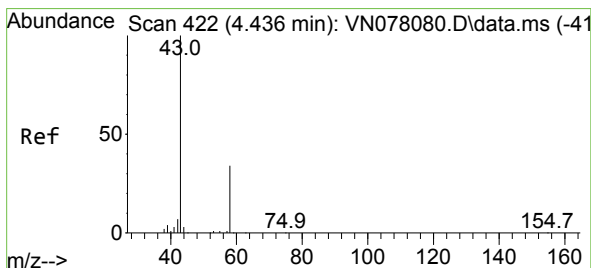
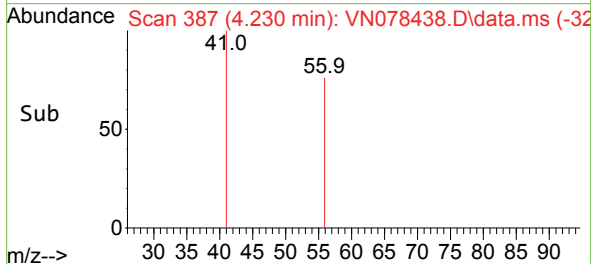
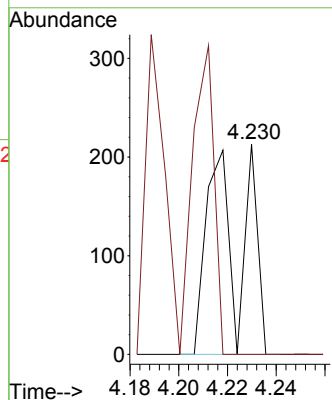
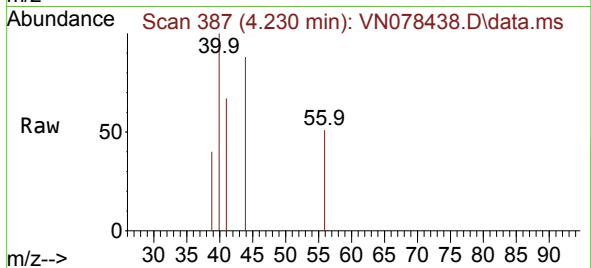
PNNL-APM-0621-2

Tgt Ion: 56 Resp: 208

Ion Ratio Lower Upper

56 100

55 92.3 54.5 81.7#



#16

Acetone

Concen: 58.194 ug/l

RT: 4.436 min Scan# 422

Delta R.T. 0.000 min

Lab File: VN078438.D

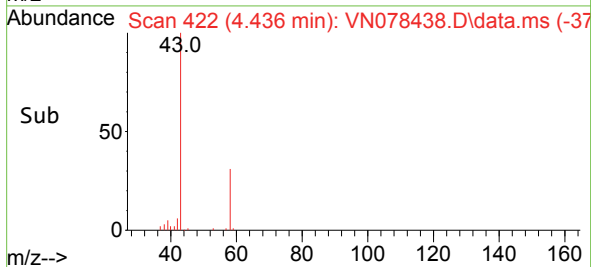
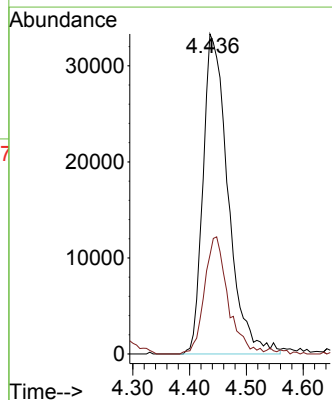
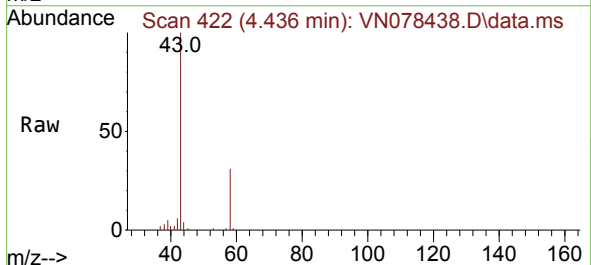
Acq: 28 Jun 2023 13:51

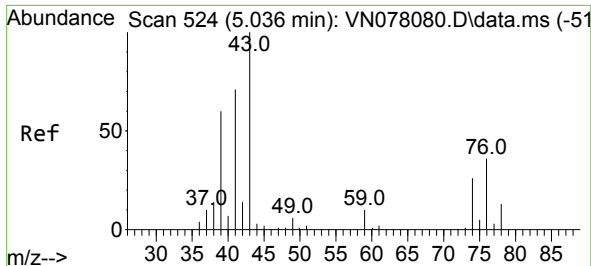
Tgt Ion: 43 Resp: 101768

Ion Ratio Lower Upper

43 100

58 30.9 28.0 42.0

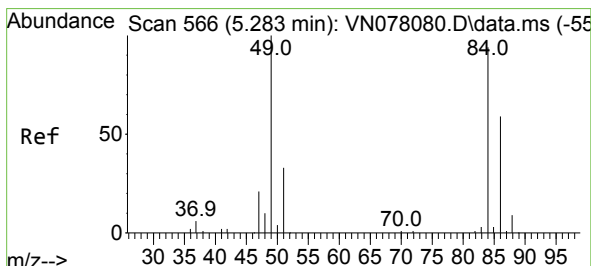
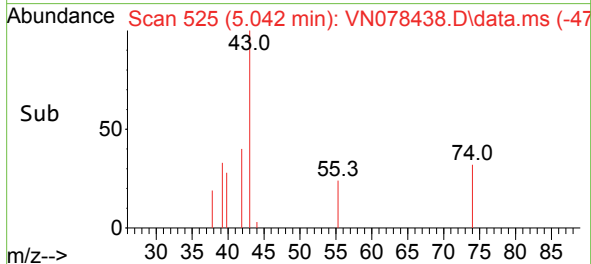
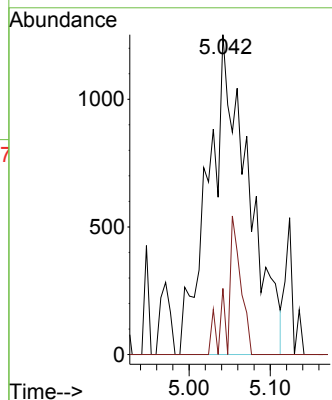
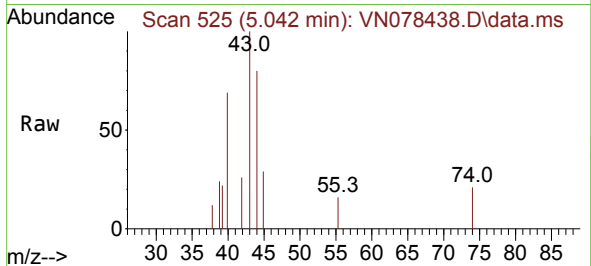




#18
Methyl Acetate
Concen: 0.530 ug/l
RT: 5.042 min Scan# 51
Delta R.T. 0.006 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

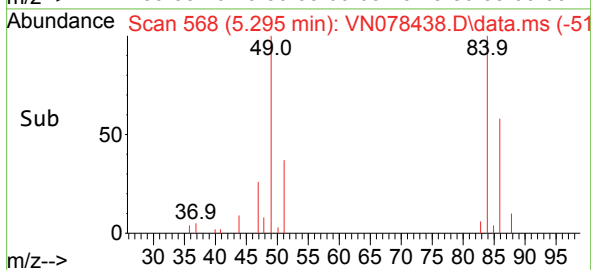
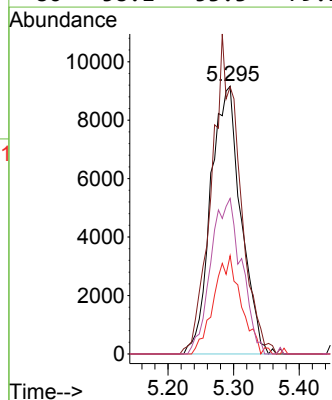
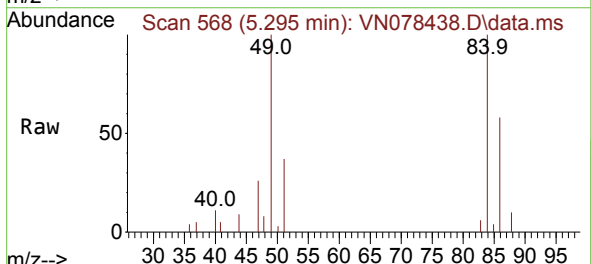
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

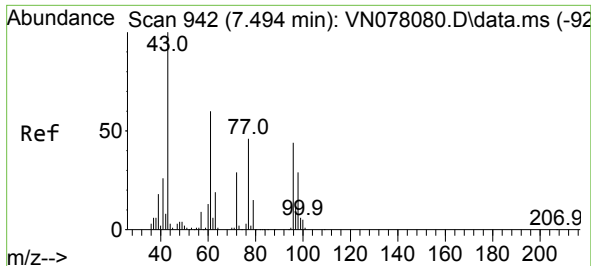
Tgt Ion: 43 Resp: 4270
Ion Ratio Lower Upper
43 100
74 13.3 26.2 39.4#



#20
Methylene Chloride
Concen: 5.075 ug/l
RT: 5.295 min Scan# 568
Delta R.T. 0.012 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 84 Resp: 29328
Ion Ratio Lower Upper
84 100
49 99.8 79.7 119.5
51 36.7 25.2 37.8
86 58.1 53.3 79.9

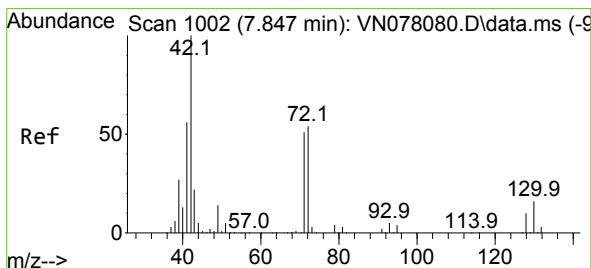
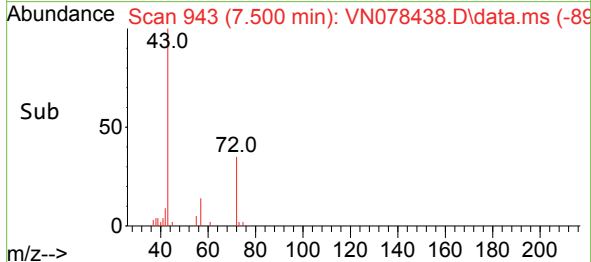
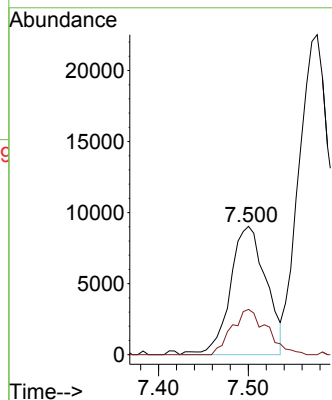
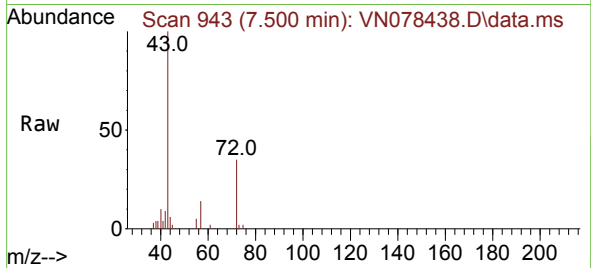




#25
2-Butanone
Concen: 9.286 ug/l
RT: 7.500 min Scan# 94
Delta R.T. 0.006 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

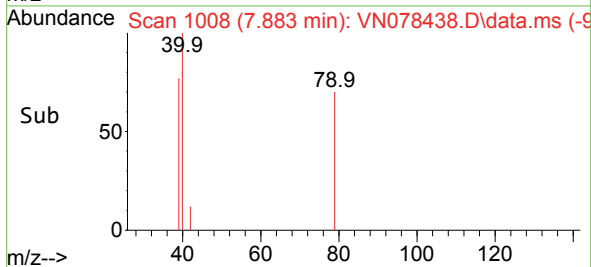
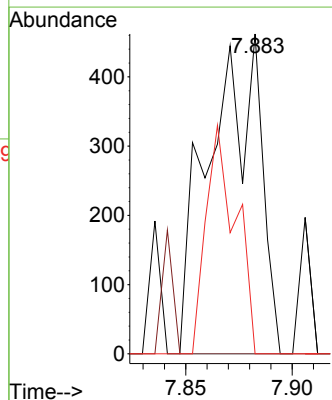
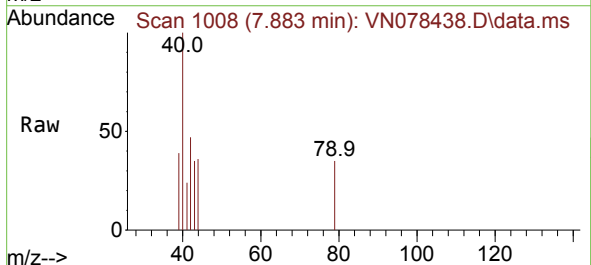
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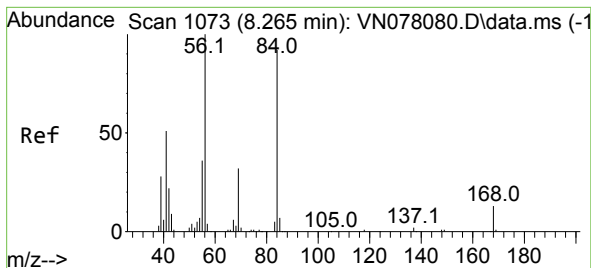
Tgt Ion: 43 Resp: 24971
Ion Ratio Lower Upper
43 100
72 35.3 30.2 45.2



#29
Tetrahydrofuran
Concen: 0.428 ug/l
RT: 7.883 min Scan# 1008
Delta R.T. 0.035 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 42 Resp: 770
Ion Ratio Lower Upper
42 100
72 0.0 49.8 74.6#
71 41.8 47.4 71.2#





#31

Cyclohexane

Concen: 1.315 ug/l

RT: 8.230 min Scan# 1067

Delta R.T. -0.035 min

Lab File: VN078438.D

Acq: 28 Jun 2023 13:51

Instrument :

MSVOA_N

ClientSampleId :

PNNL-APM-0621-2

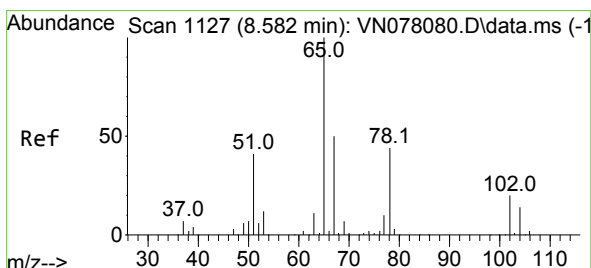
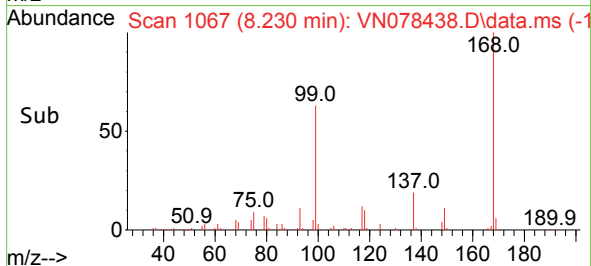
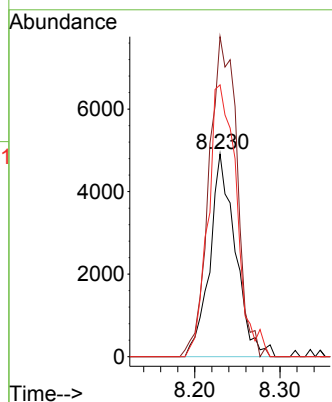
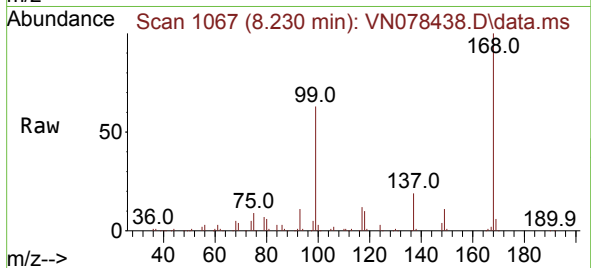
Tgt Ion: 56 Resp: 10250

Ion Ratio Lower Upper

56 100

69 157.9 26.8 40.2#

84 134.1 81.8 122.6#



#33

1,2-Dichloroethane-d4

Concen: 50.608 ug/l

RT: 8.588 min Scan# 1128

Delta R.T. 0.006 min

Lab File: VN078438.D

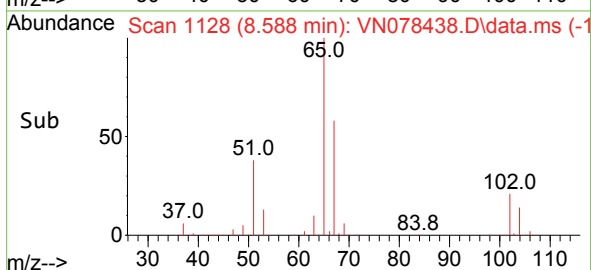
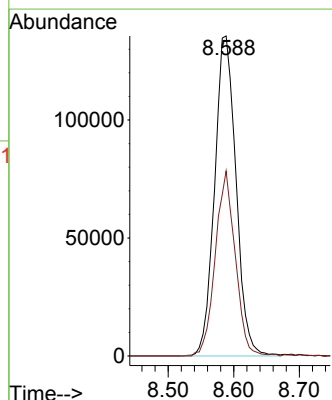
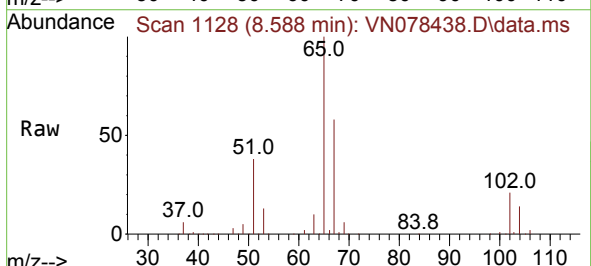
Acq: 28 Jun 2023 13:51

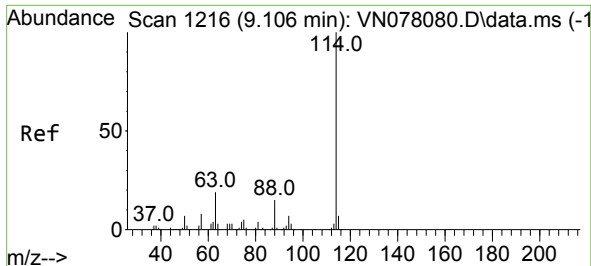
Tgt Ion: 65 Resp: 307468

Ion Ratio Lower Upper

65 100

67 53.9 0.0 106.6

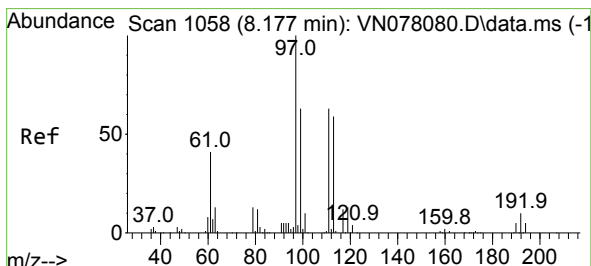
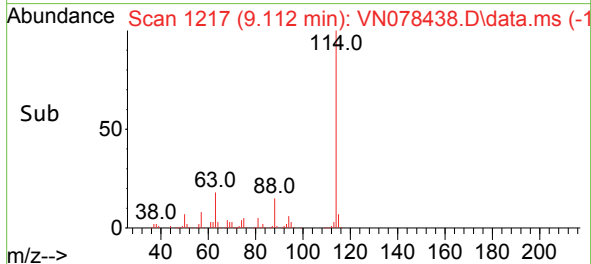
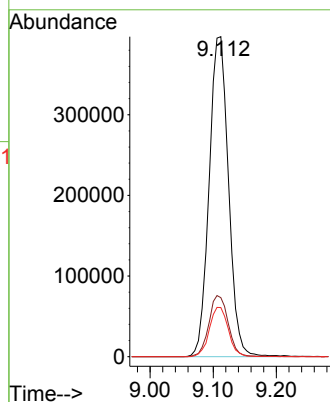
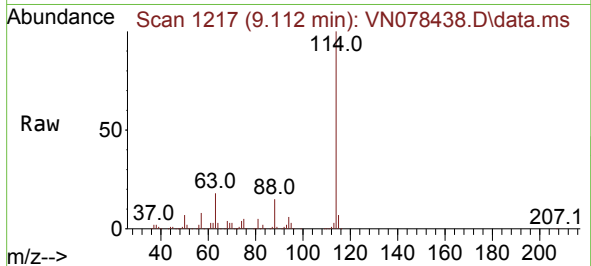




#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 9.112 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

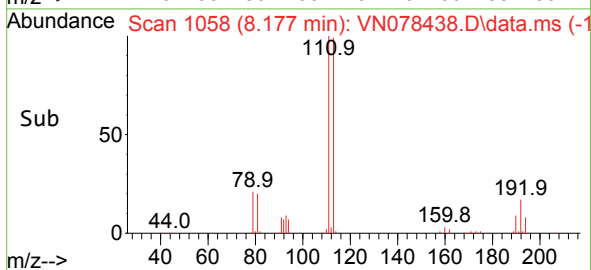
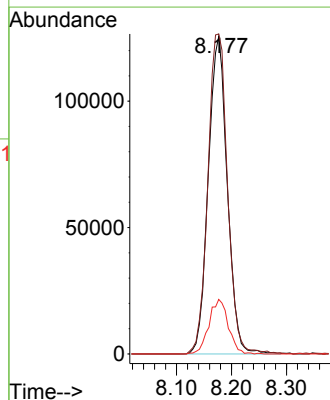
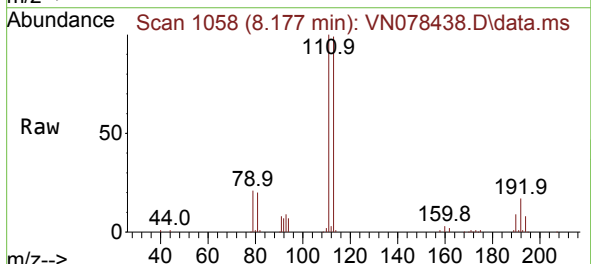
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

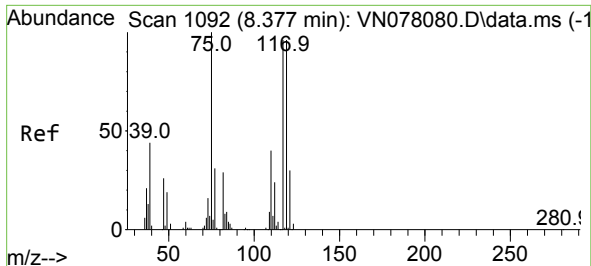
Tgt Ion:114 Resp: 843090
Ion Ratio Lower Upper
114 100
63 18.5 0.0 36.4
88 15.4 0.0 30.6



#35
Dibromofluoromethane
Concen: 56.498 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion:113 Resp: 301179
Ion Ratio Lower Upper
113 100
111 104.6 82.6 123.8
192 17.5 12.7 19.1

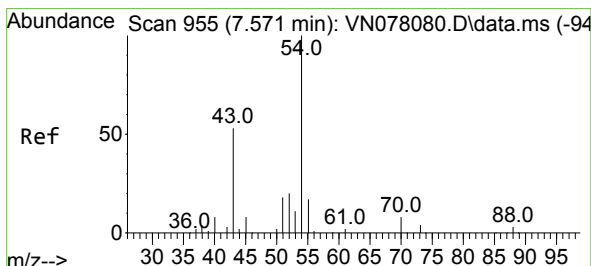
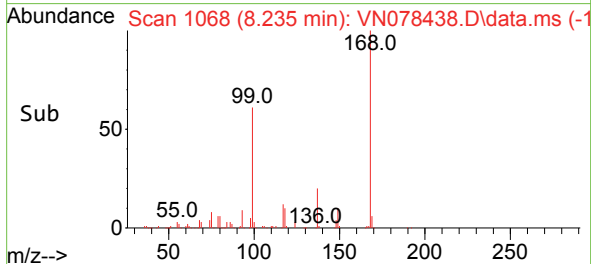
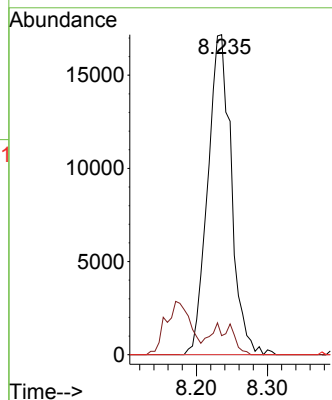
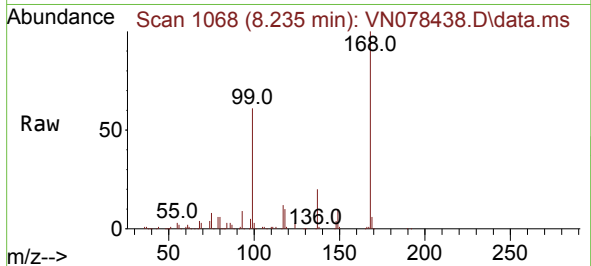




#36
1,1-Dichloropropene
Concen: 5.169 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.141 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

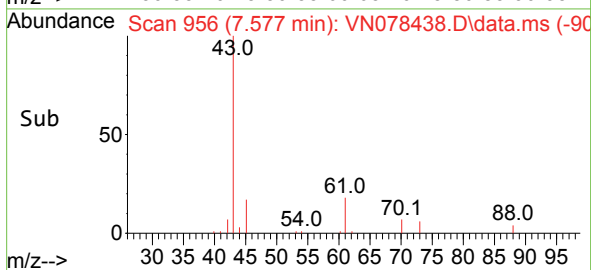
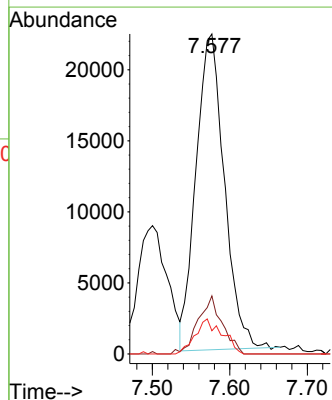
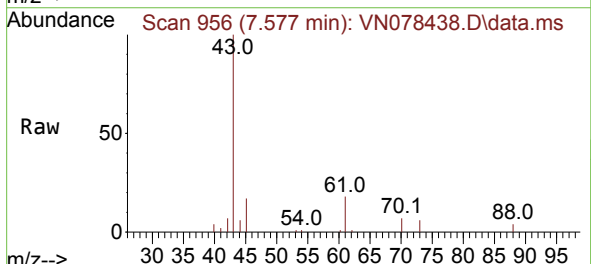
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

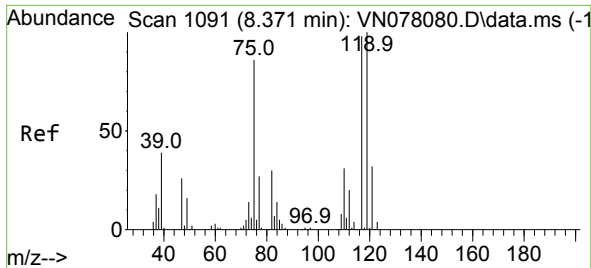
Tgt Ion: 75 Resp: 39522
Ion Ratio Lower Upper
75 100
110 2.9 19.1 57.3#
77 0.0 25.0 37.4#



#37
Ethyl Acetate
Concen: 9.439 ug/l
RT: 7.577 min Scan# 956
Delta R.T. 0.006 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

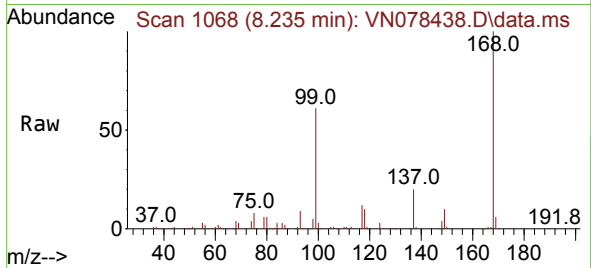
Tgt Ion: 43 Resp: 56384
Ion Ratio Lower Upper
43 100
61 15.7 13.2 19.8
70 10.6 11.3 16.9#



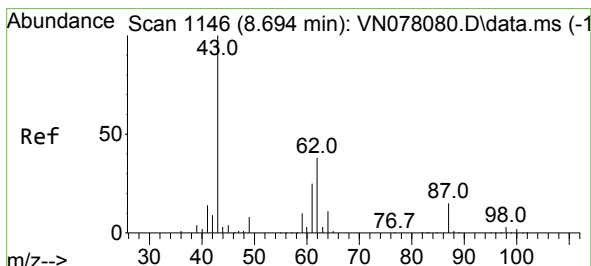
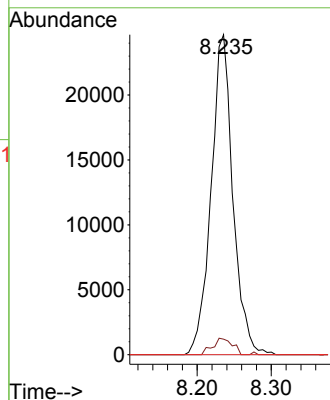
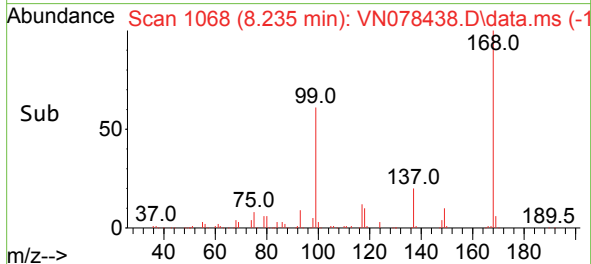


#38
Carbon Tetrachloride
Concen: 6.232 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.135 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

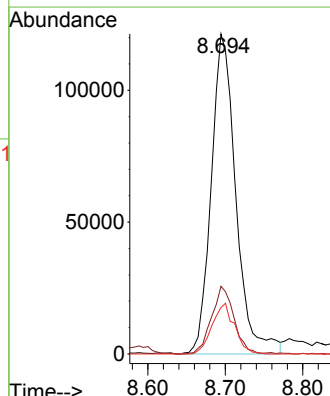
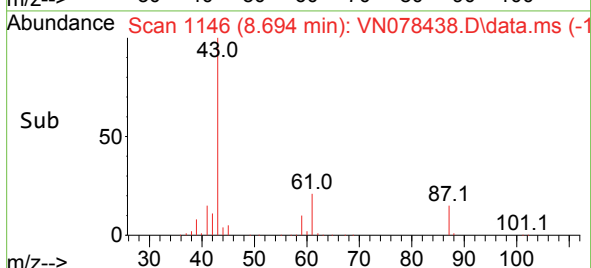
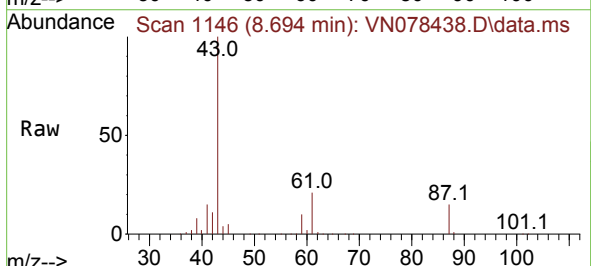


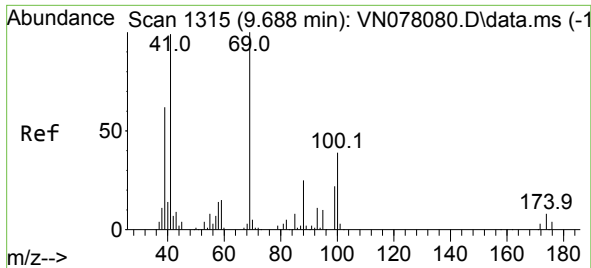
Tgt Ion:117 Resp: 50315
Ion Ratio Lower Upper
117 100
119 4.9 77.3 115.9#
121 0.0 23.3 34.9#



#43
Isopropyl Acetate
Concen: 23.468 ug/l
RT: 8.694 min Scan# 1146
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 43 Resp: 268092
Ion Ratio Lower Upper
43 100
61 19.2 24.7 37.1#
87 14.4 14.6 21.8#

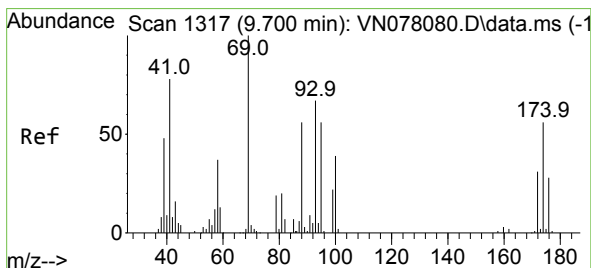
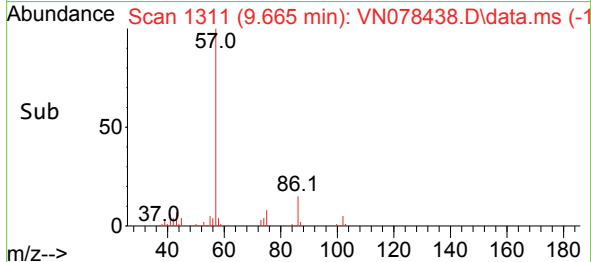
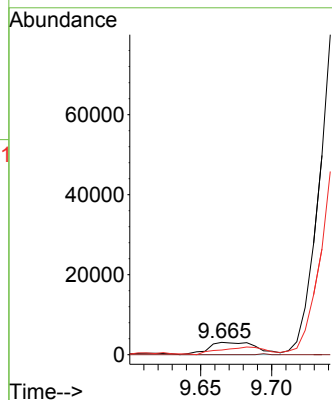
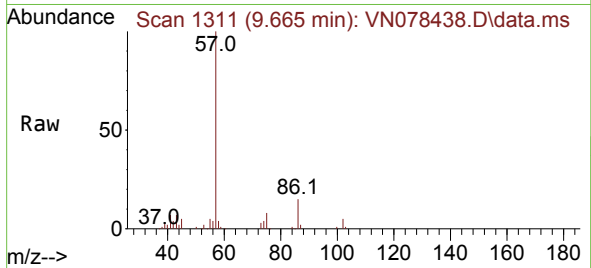




#48
Methyl methacrylate
Concen: 1.533 ug/l
RT: 9.665 min Scan# 11
Delta R.T. -0.023 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

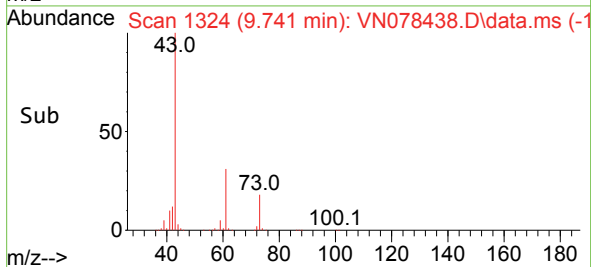
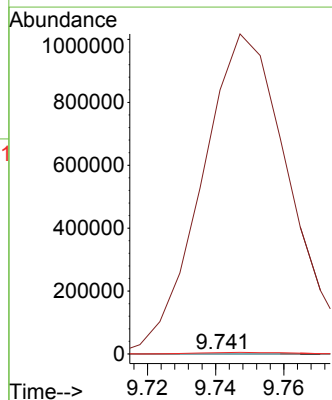
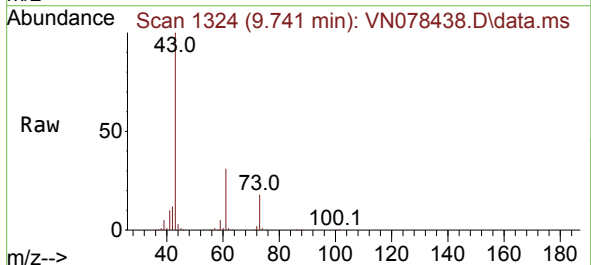
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

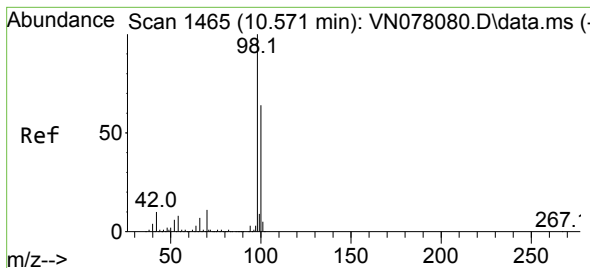
Tgt Ion: 41 Resp: 7347
Ion Ratio Lower Upper
41 100
69 0.0 90.4 135.6#
39 0.0 54.6 81.8#



#49
1,4-Dioxane
Concen: 1.767 ug/l
RT: 9.741 min Scan# 1324
Delta R.T. 0.041 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 88 Resp: 178
Ion Ratio Lower Upper
88 100
43 1032757.9 17.0 25.6#
58 5465.7 47.0 70.4#





#50

Toluene-d8

Concen: 48.734 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. 0.000 min

Lab File: VN078438.D

Acq: 28 Jun 2023 13:51

Instrument :

MSVOA_N

ClientSampleId :

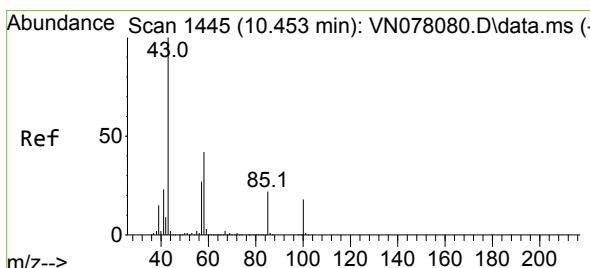
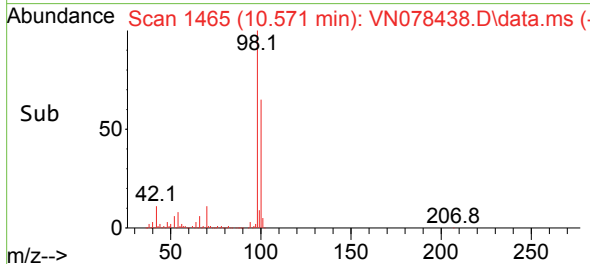
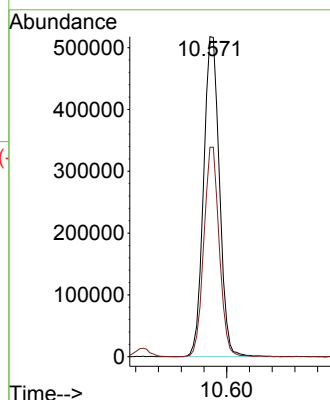
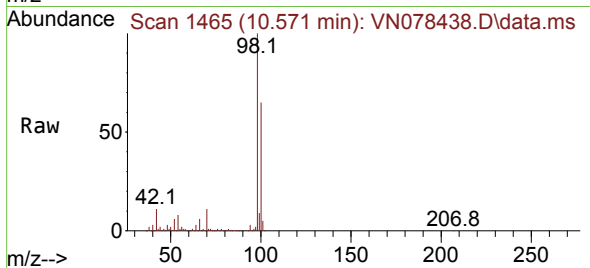
PNNL-APM-0621-2

Tgt Ion: 98 Resp: 1001507

Ion Ratio Lower Upper

98 100

100 63.7 52.0 78.0



#51

4-Methyl-2-Pentanone

Concen: 28.184 ug/l

RT: 10.447 min Scan# 1444

Delta R.T. -0.006 min

Lab File: VN078438.D

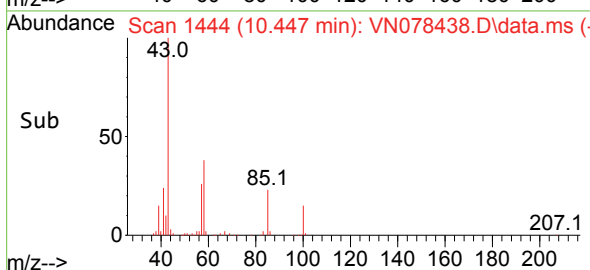
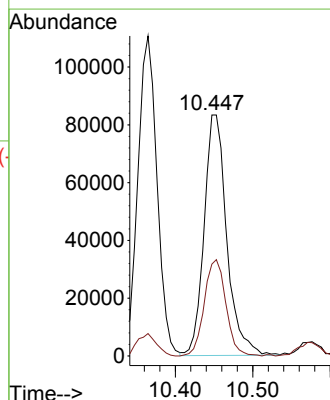
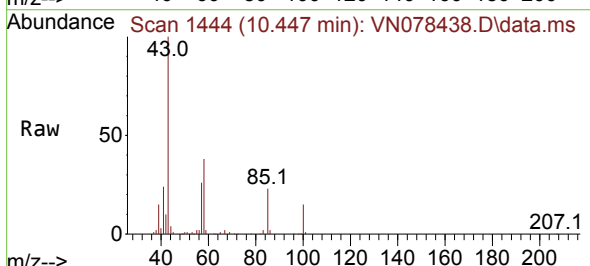
Acq: 28 Jun 2023 13:51

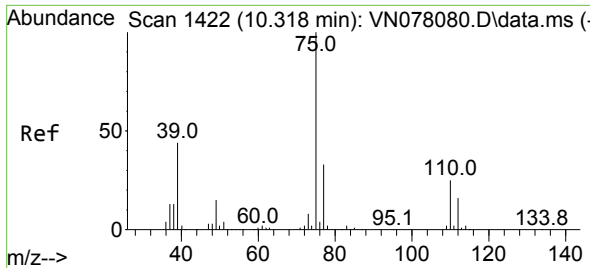
Tgt Ion: 43 Resp: 169545

Ion Ratio Lower Upper

43 100

58 38.1 36.6 54.8

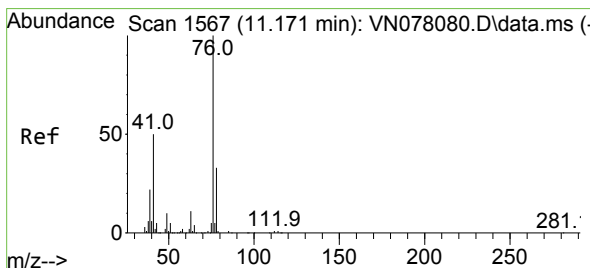
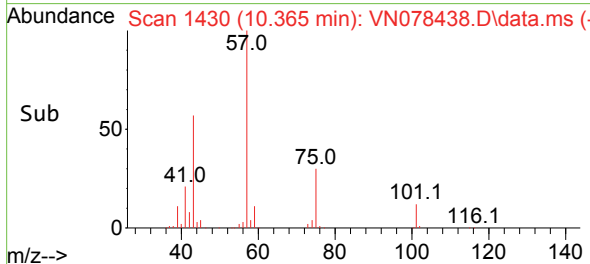
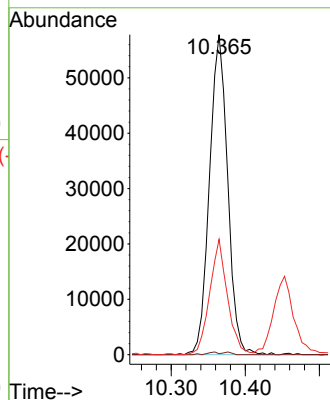
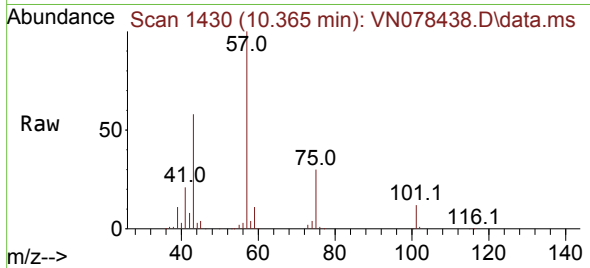




#54
 cis-1,3-Dichloropropene
 Concen: 10.998 ug/l
 RT: 10.365 min Scan# 1422
 Delta R.T. 0.047 min
 Lab File: VN078438.D
 Acq: 28 Jun 2023 13:51

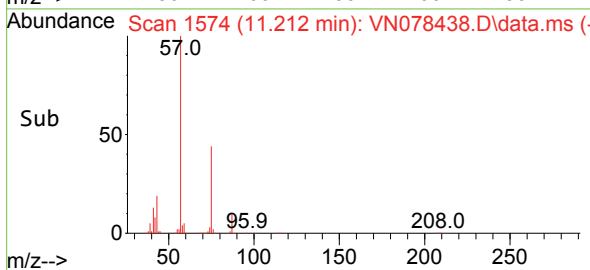
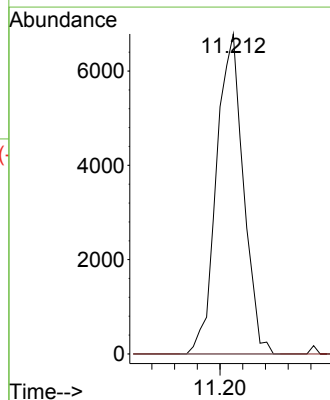
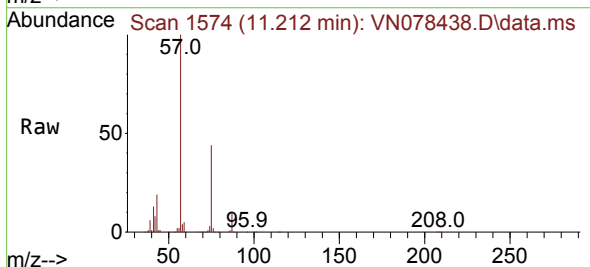
Instrument :
 MSVOA_N
 ClientSampleId :
 PNNL-APM-0621-2

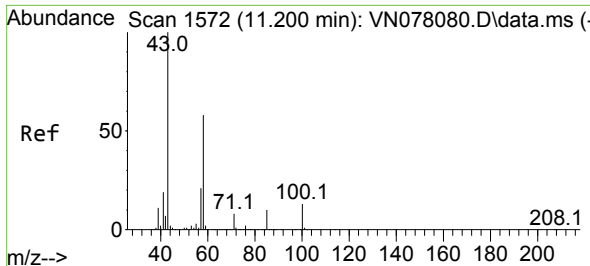
Tgt Ion: 75 Resp: 98388
 Ion Ratio Lower Upper
 75 100
 77 0.3 26.1 39.1#
 39 36.1 31.6 47.4



#57
 1,3-Dichloropropane
 Concen: 1.213 ug/l
 RT: 11.212 min Scan# 1574
 Delta R.T. 0.041 min
 Lab File: VN078438.D
 Acq: 28 Jun 2023 13:51

Tgt Ion: 76 Resp: 11163
 Ion Ratio Lower Upper
 76 100
 78 0.0 26.1 39.1#

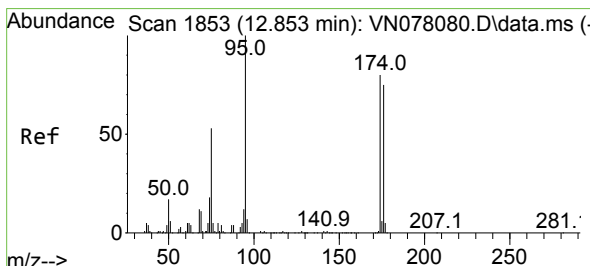
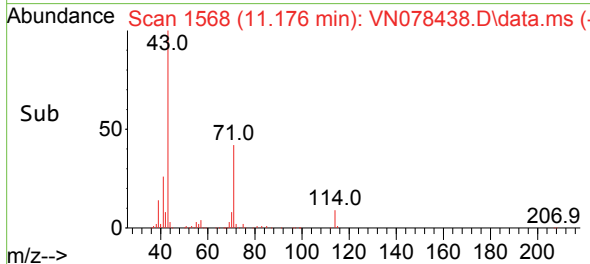
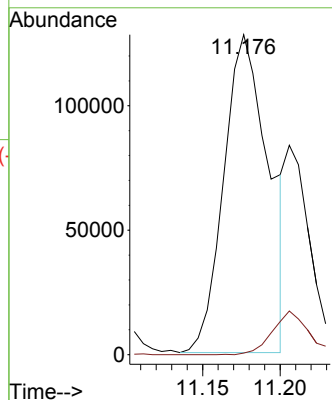
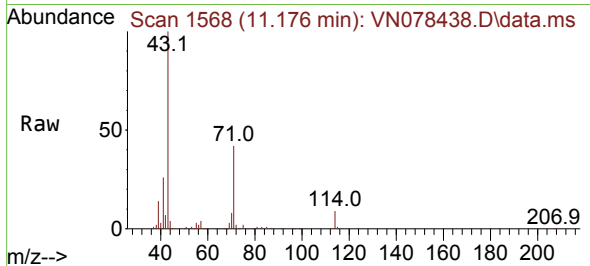




#59
2-Hexanone
Concen: 61.144 ug/l
RT: 11.176 min Scan# 1117
Delta R.T. -0.023 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

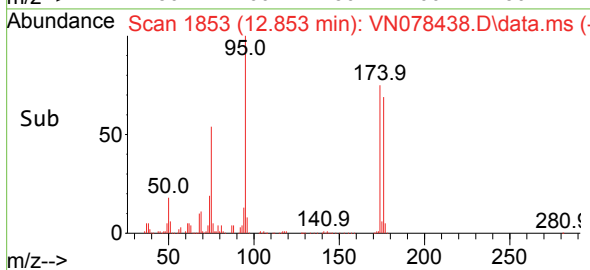
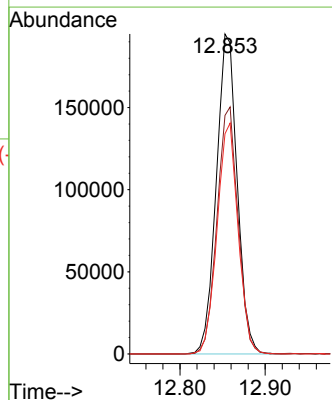
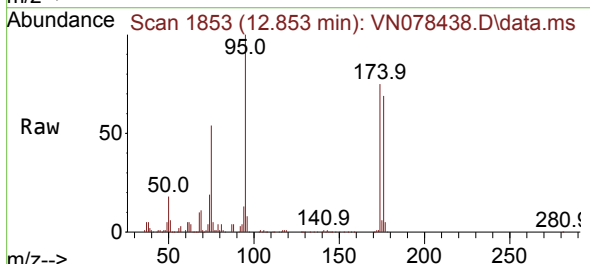
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

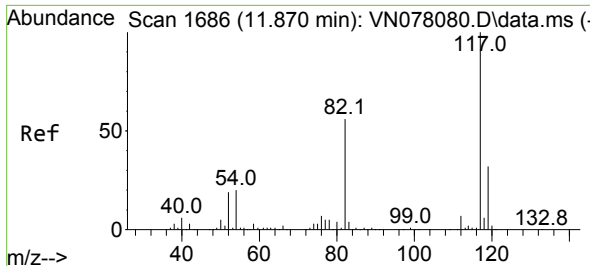
Tgt Ion: 43 Resp: 256108
Ion Ratio Lower Upper
43 100
58 0.0 31.7 95.1#



#62
4-Bromofluorobenzene
Concen: 51.879 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 95 Resp: 331438
Ion Ratio Lower Upper
95 100
174 77.8 0.0 143.8
176 72.7 0.0 135.8

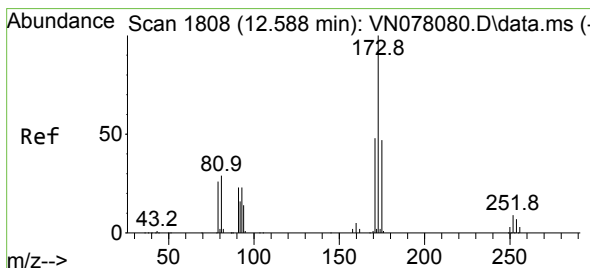
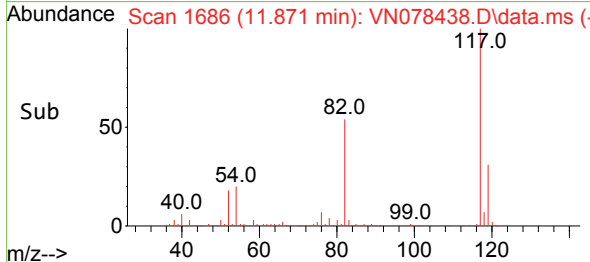
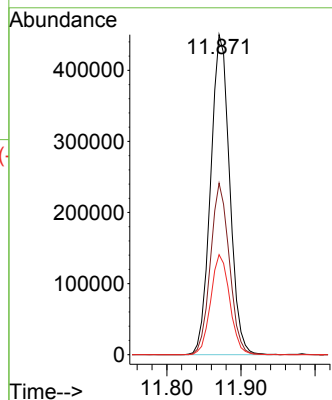
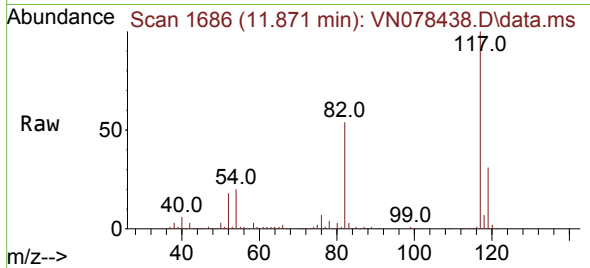




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.871 min Scan# 1185
Delta R.T. 0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

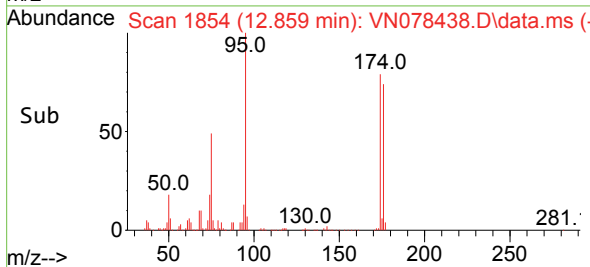
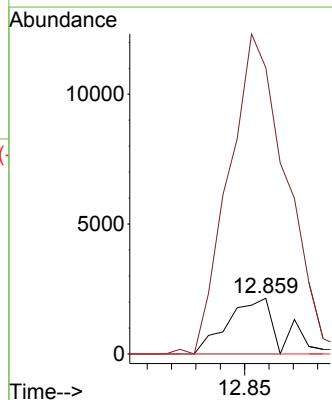
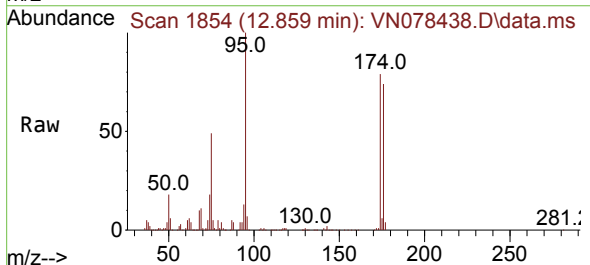
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

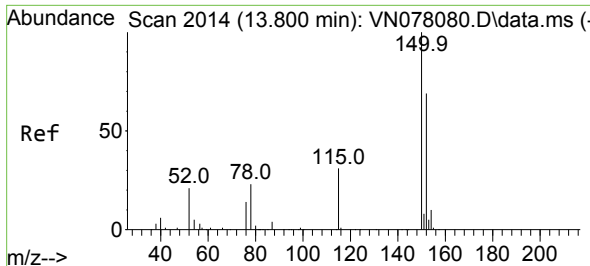
Tgt Ion:117 Resp: 802699
Ion Ratio Lower Upper
117 100
82 53.6 44.0 66.0
119 31.3 25.6 38.4



#71
Bromoform
Concen: 0.637 ug/l
RT: 12.859 min Scan# 1854
Delta R.T. 0.271 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion:173 Resp: 2600
Ion Ratio Lower Upper
173 100
175 646.2 24.3 73.0#
254 0.0 0.0 0.0

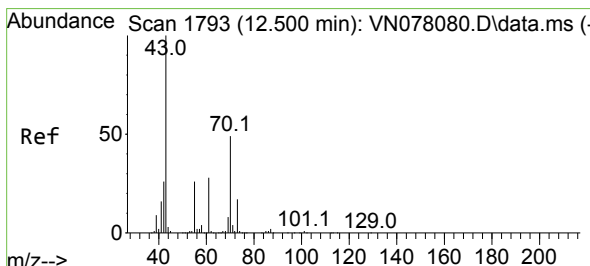
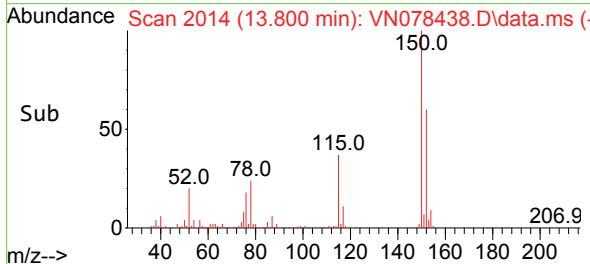
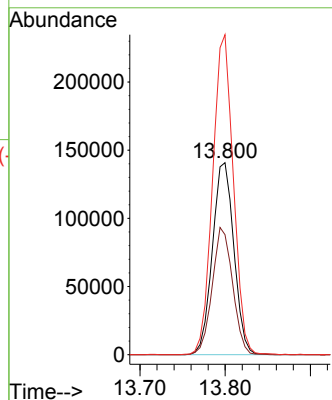
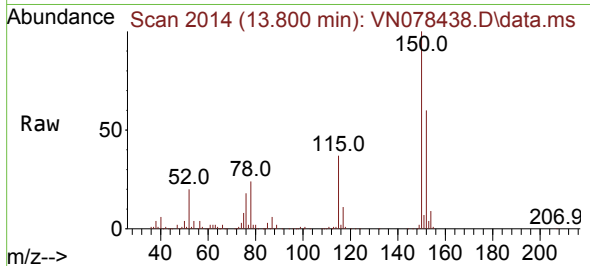




#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 13.800 min Scan# 20
 Delta R.T. 0.000 min
 Lab File: VN078438.D
 Acq: 28 Jun 2023 13:51

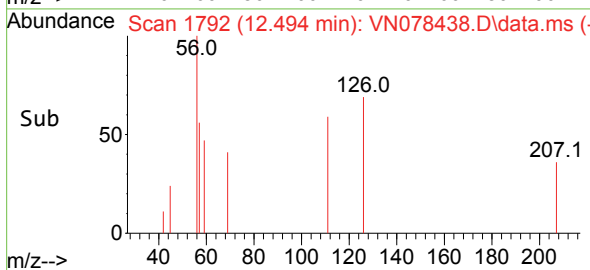
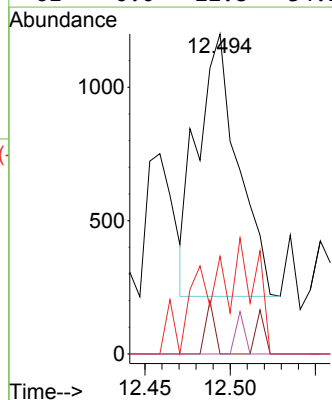
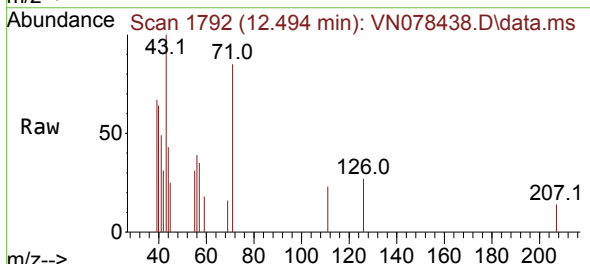
Instrument :
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 ClientSampleId :
 PNNL-APM-0621-2

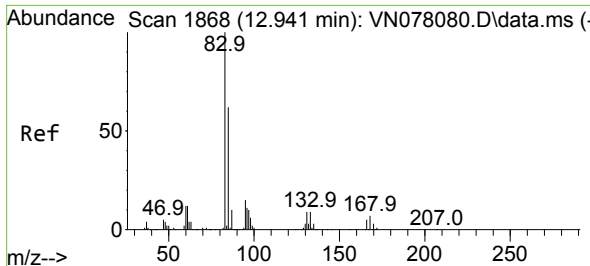
Tgt Ion:152 Resp: 247139
 Ion Ratio Lower Upper
 152 100
 115 62.9 32.3 96.8
 150 160.7 0.0 355.8



#74
 N-ethyl acetate
 Concen: 0.212 ug/l
 RT: 12.494 min Scan# 1792
 Delta R.T. -0.006 min
 Lab File: VN078438.D
 Acq: 28 Jun 2023 13:51

Tgt Ion: 43 Resp: 1628
 Ion Ratio Lower Upper
 43 100
 70 4.4 43.4 65.2#
 55 20.7 21.4 32.0#
 61 0.0 22.8 34.2#

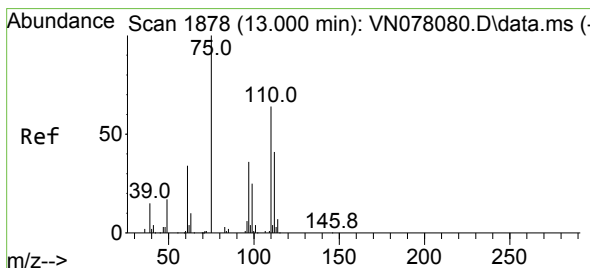
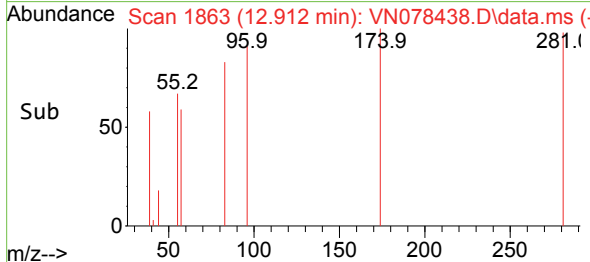
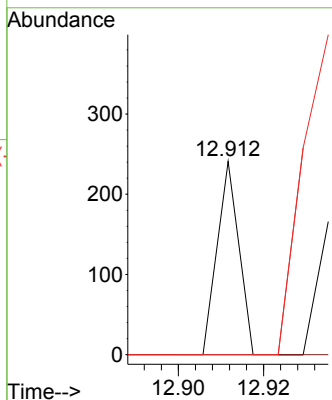
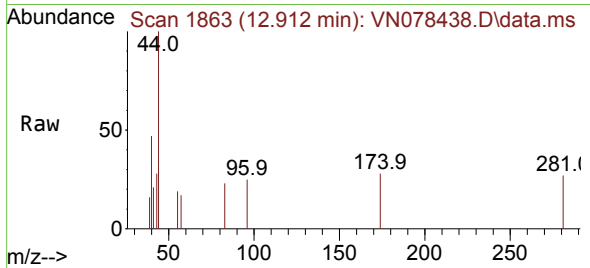




#75
1,1,2,2-Tetrachloroethane
Concen: Below Cal
RT: 12.912 min Scan# 1863
Delta R.T. -0.029 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

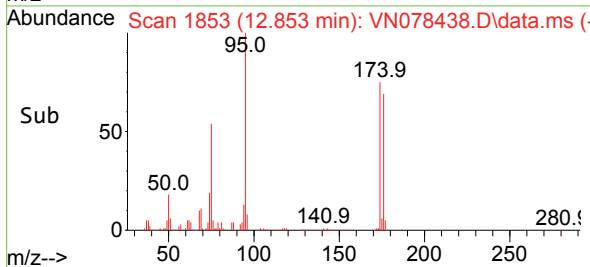
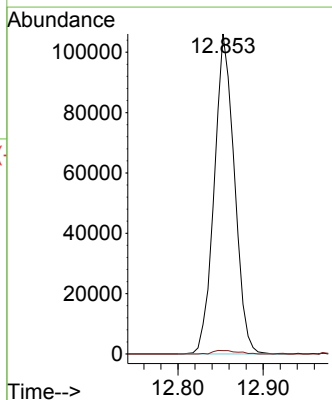
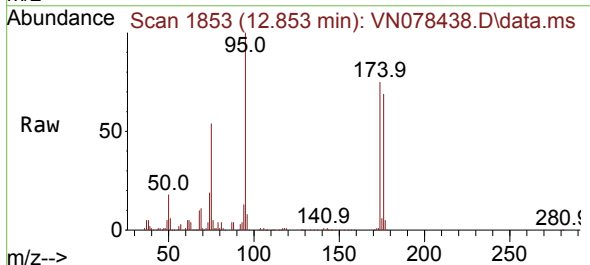
Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

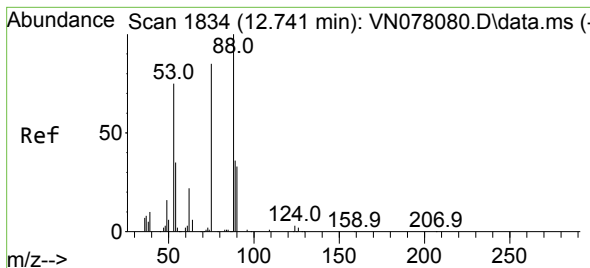
Tgt Ion: 83 Resp: 85
Ion Ratio Lower Upper
83 100
131 0.0 5.0 15.0#
85 0.0 31.9 95.7#



#76
1,2,3-Trichloropropane
Concen: 29.857 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.147 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 75 Resp: 174438
Ion Ratio Lower Upper
75 100
77 1.3 84.5 253.5#

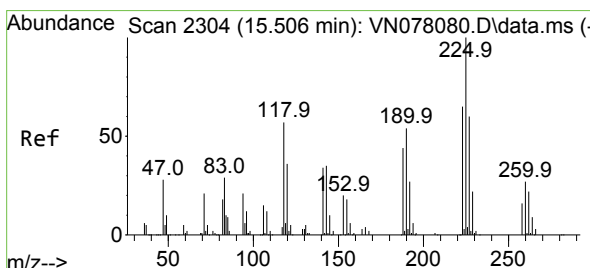
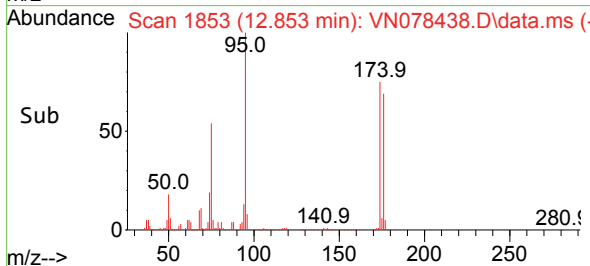
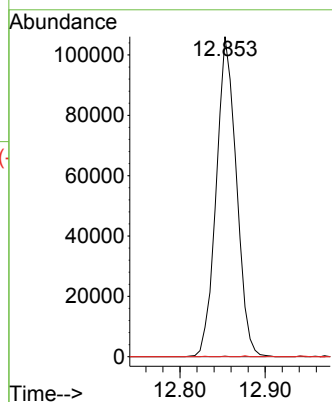
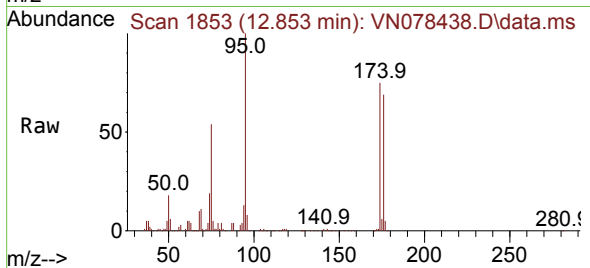




#81
trans-1,4-Dichloro-2-butene
Concen: 91.730 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.112 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Instrument :
MSVOA_N
ClientSampleId :
PNNL-APM-0621-2

Tgt Ion: 75 Resp: 174438
Ion Ratio Lower Upper
75 100
53 0.0 67.4 101.2#
89 0.0 38.8 58.2#



#94
Hexachlorobutadiene
Concen: Below Cal
RT: 15.506 min Scan# 2304
Delta R.T. -0.000 min
Lab File: VN078438.D
Acq: 28 Jun 2023 13:51

Tgt Ion: 225 Resp: 190
Ion Ratio Lower Upper
225 100
223 62.6 31.3 93.8
227 107.9 31.9 95.9#

