

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN061423\
 Data File : VN078204.D
 Acq On : 14 Jun 2023 14:32
 Operator : JC\MD
 Sample : 03160-04
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 PNNL-B-0609-2

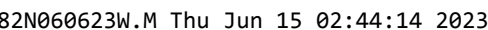
Quant Time: Jun 15 02:44:05 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\82N060623W.M
 Quant Title : SW846 8260
 QLast Update : Wed Jun 07 05:05:00 2023
 Response via : Initial Calibration

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

Internal Standards						
1) Pentafluorobenzene	8.235	168	462159	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	9.106	114	853755	50.000	ug/l	0.00
63) Chlorobenzene-d5	11.870	117	780230	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.800	152	235860	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.588	65	329332	53.446	ug/l	0.00
Spiked Amount 50.000	Range 74 - 125		Recovery = 106.900%			
35) Dibromofluoromethane	8.177	113	291236	53.951	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery = 107.900%			
50) Toluene-d8	10.571	98	1032438	49.611	ug/l	0.00
Spiked Amount 50.000	Range 86 - 113		Recovery = 99.220%			
62) 4-Bromofluorobenzene	12.853	95	319600	49.401	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery = 98.800%			
Target Compounds						
					Qvalue	
3) Chloromethane	2.365	50	905	Below Cal	#	42
11) Tert butyl alcohol	5.541	59	176	0.207	ug/l #	72
16) Acetone	4.447	43	26041	14.682	ug/l #	86
20) Methylene Chloride	5.277	84	11759	2.006	ug/l #	82
25) 2-Butanone	7.494	43	2274	0.834	ug/l #	74
29) Tetrahydrofuran	7.865	42	1279	0.701	ug/l #	25
31) Cyclohexane	8.230	56	10840	1.371	ug/l #	2
36) 1,1-Dichloropropene	8.235	75	39417	5.091	ug/l #	48
37) Ethyl Acetate	7.577	43	54411	8.995	ug/l #	94
38) Carbon Tetrachloride	8.230	117	52099	6.372	ug/l #	16
42) 1,2-Dichloroethane	8.700	62	1721	0.217	ug/l #	73
43) Isopropyl Acetate	8.694	43	229074	19.802	ug/l #	84
45) 1,2-Dichloropropane	9.747	63	2788	0.485	ug/l #	45
48) Methyl methacrylate	9.671	41	5239	1.079	ug/l #	26
49) 1,4-Dioxane	9.747	88	148	1.450	ug/l #	1
51) 4-Methyl-2-Pentanone	10.459	43	14502	2.381	ug/l #	70
53) t-1,3-Dichloropropene	10.741	75	1694	0.207	ug/l #	43
54) cis-1,3-Dichloropropene	10.365	75	88810	9.803	ug/l #	67
56) Ethyl methacrylate	10.988	69	2818	0.351	ug/l #	1
57) 1,3-Dichloropropane	11.212	76	9900	1.062	ug/l #	42
59) 2-Hexanone	11.176	43	195904	46.186	ug/l #	19
71) Bromoform	12.859	173	2679	0.675	ug/l #	1
74) N-amyl acetate	12.488	43	1480	0.202	ug/l #	39
75) 1,1,2,2-Tetrachloroethane	12.841	83	72	Below Cal	#	1
76) 1,2,3-Trichloropropane	12.853	75	170862	30.643	ug/l #	1
81) trans-1,4-Dichloro-2-b...	12.853	75	170862	94.146	ug/l #	15

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

Quant Time: Jun 15 02:44:05 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

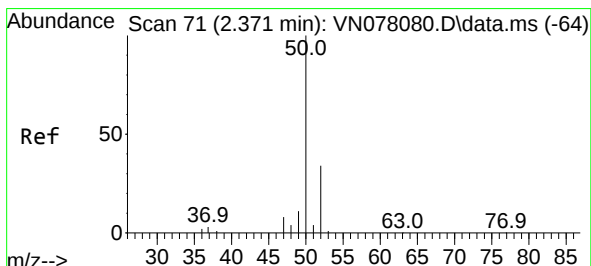
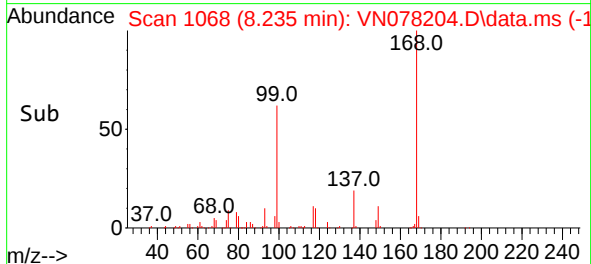
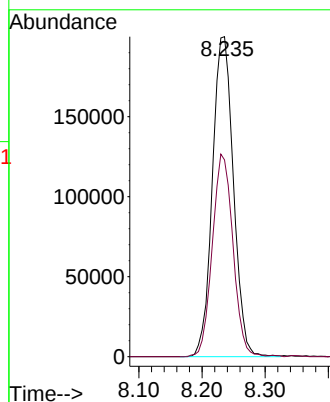
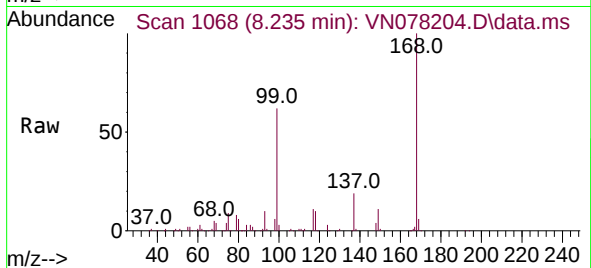




#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 8.235 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

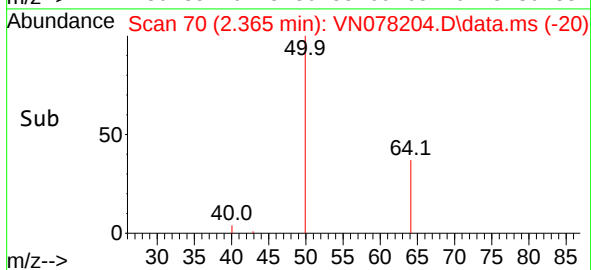
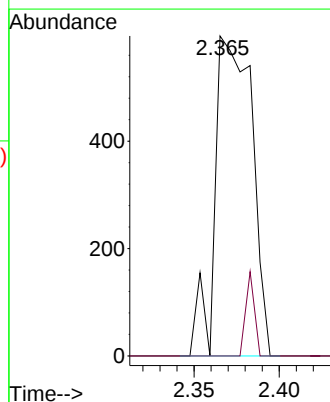
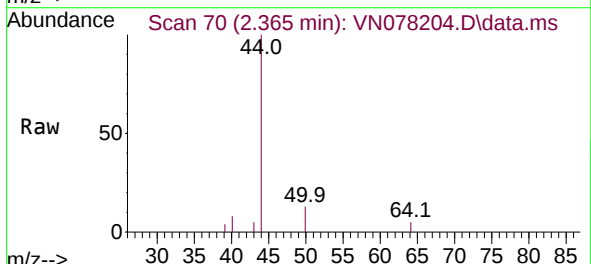
Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

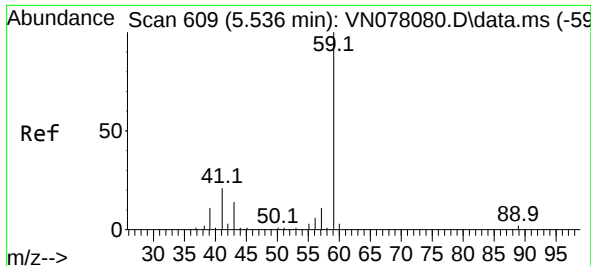
Tgt Ion:168 Resp: 462159
Ion Ratio Lower Upper
168 100
99 61.5 53.0 79.6



#3
Chloromethane
Concen: Below Cal
RT: 2.365 min Scan# 70
Delta R.T. -0.006 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 50 Resp: 905
Ion Ratio Lower Upper
50 100
52 0.0 26.5 39.7#

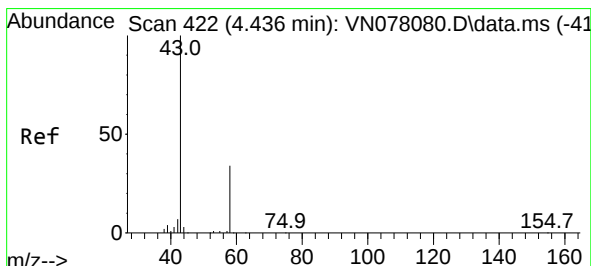
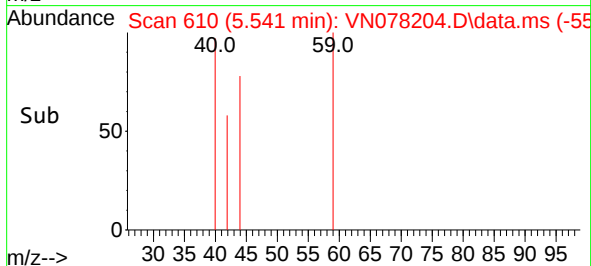
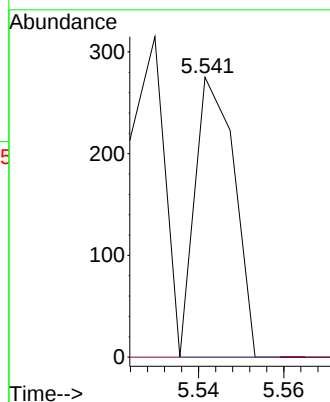
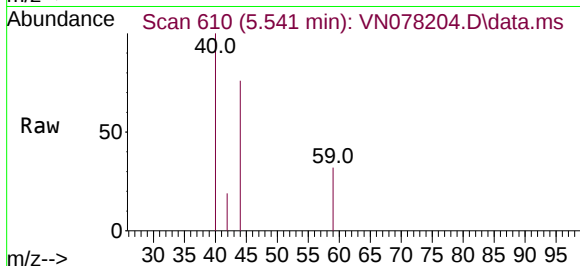




#11
Tert butyl alcohol
Concen: 0.207 ug/l
RT: 5.541 min Scan# 610
Delta R.T. 0.006 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

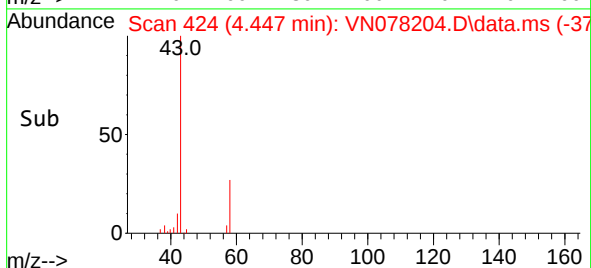
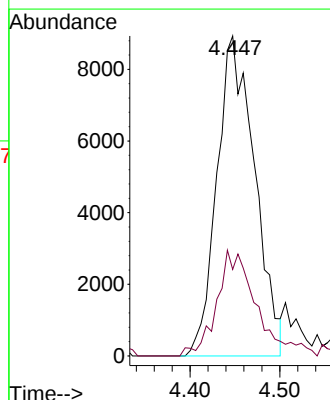
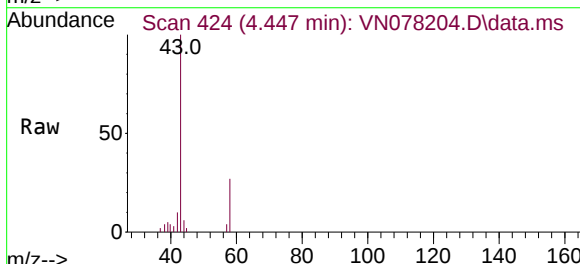
Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

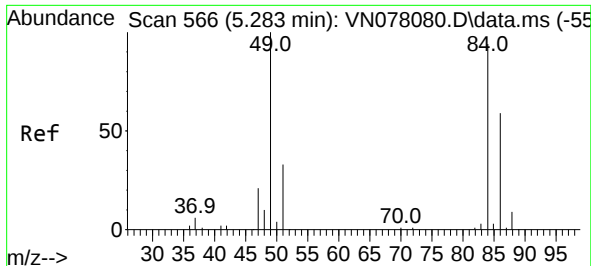
Tgt Ion: 59 Resp: 176
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#



#16
Acetone
Concen: 14.682 ug/l
RT: 4.447 min Scan# 424
Delta R.T. 0.012 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 43 Resp: 26041
Ion Ratio Lower Upper
43 100
58 27.1 28.0 42.0#

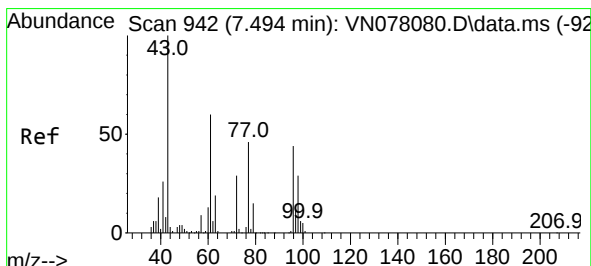
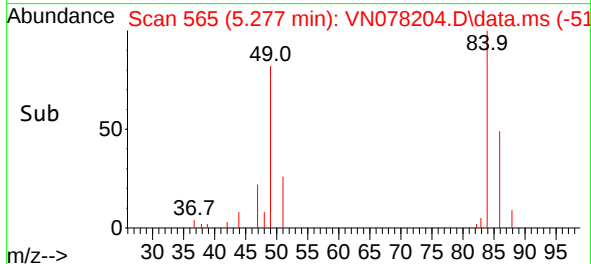
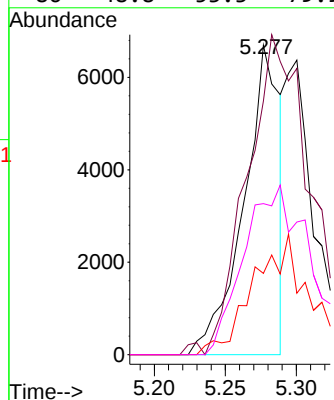
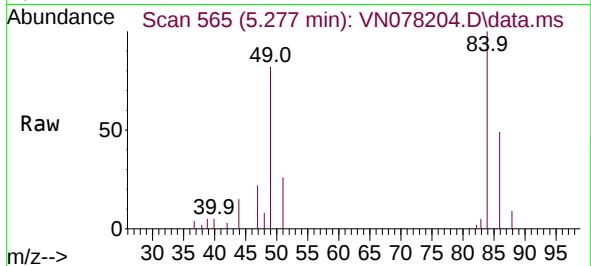




#20
Methylene Chloride
Concen: 2.006 ug/l
RT: 5.277 min Scan# 51
Delta R.T. -0.006 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

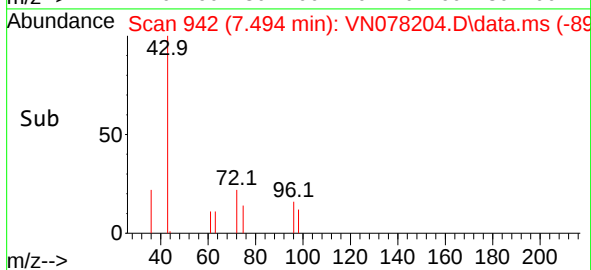
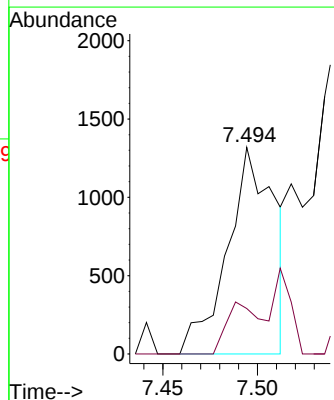
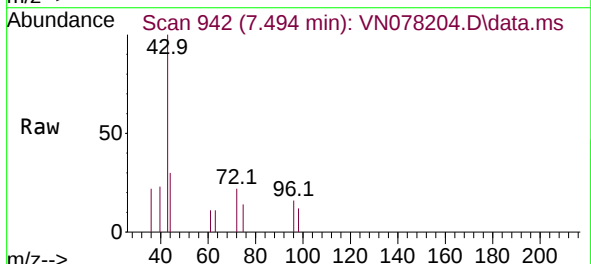
Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

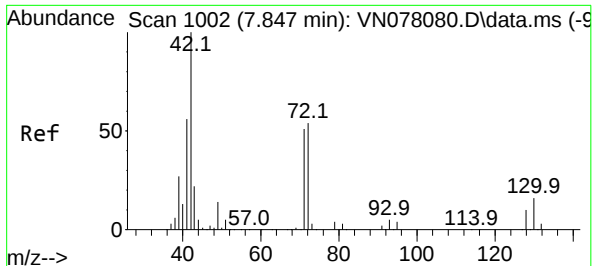
Tgt Ion:	84	Resp:	11759
Ion	Ratio	Lower	Upper
84	100		
49	82.0	79.7	119.5
51	26.3	25.2	37.8
86	48.8	53.3	79.9



#25
2-Butanone
Concen: 0.834 ug/l
RT: 7.494 min Scan# 942
Delta R.T. 0.000 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion:	43	Resp:	2274
Ion	Ratio	Lower	Upper
43	100		
72	22.0	30.2	45.2





#29

Tetrahydrofuran

Concen: 0.701 ug/l

RT: 7.865 min Scan# 1005

Delta R.T. 0.018 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

PNNL-B-0609-2

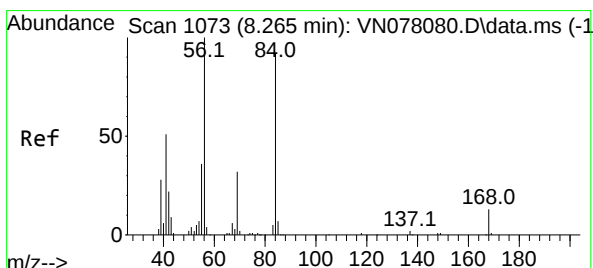
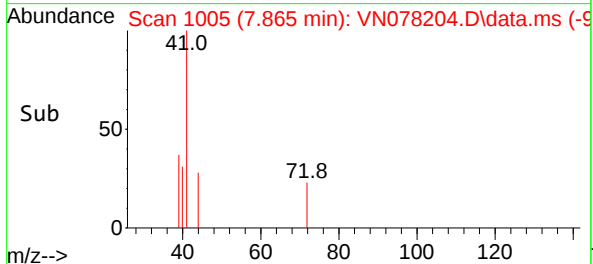
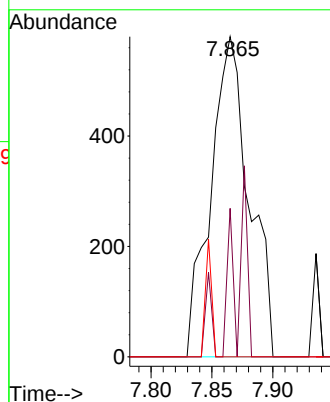
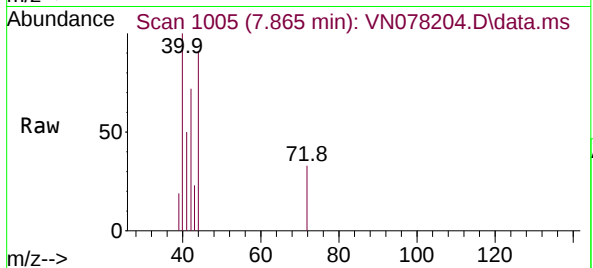
Tgt Ion: 42 Resp: 1279

Ion Ratio Lower Upper

42 100

72 7.4 49.8 74.6#

71 0.0 47.4 71.2#



#31

Cyclohexane

Concen: 1.371 ug/l

RT: 8.230 min Scan# 1067

Delta R.T. -0.035 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

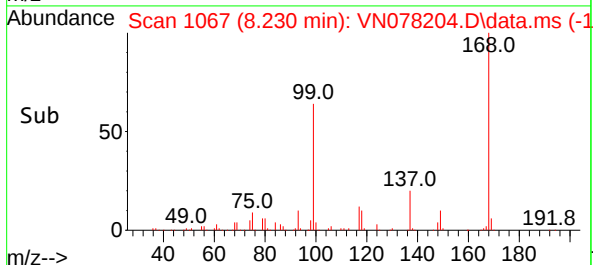
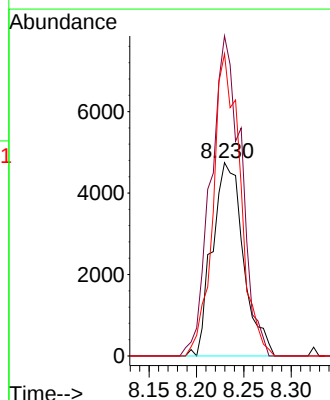
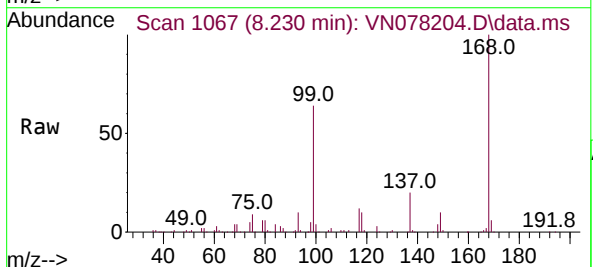
Tgt Ion: 56 Resp: 10840

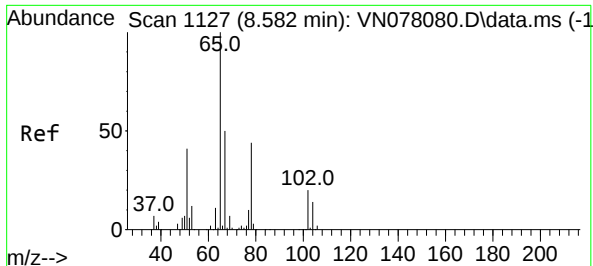
Ion Ratio Lower Upper

56 100

69 165.5 26.8 40.2#

84 156.3 81.8 122.6#





#33

1,2-Dichloroethane-d4

Concen: 53.446 ug/l

RT: 8.588 min Scan# 1127

Delta R.T. 0.006 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

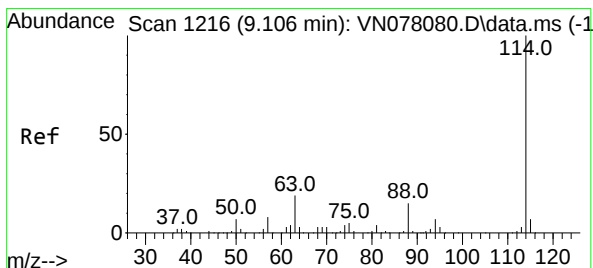
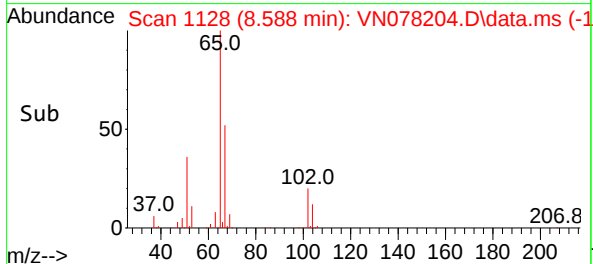
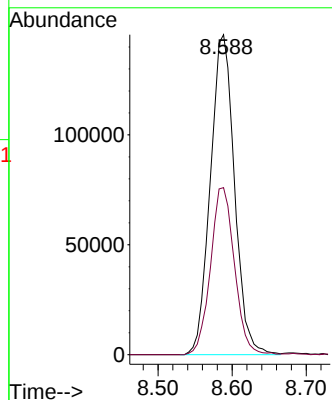
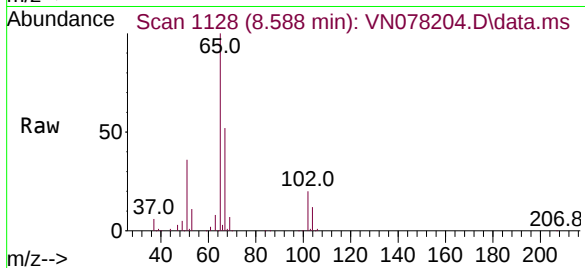
PNNL-B-0609-2

Tgt Ion: 65 Resp: 329332

Ion Ratio Lower Upper

65 100

67 51.8 0.0 106.6



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.106 min Scan# 1216

Delta R.T. 0.000 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

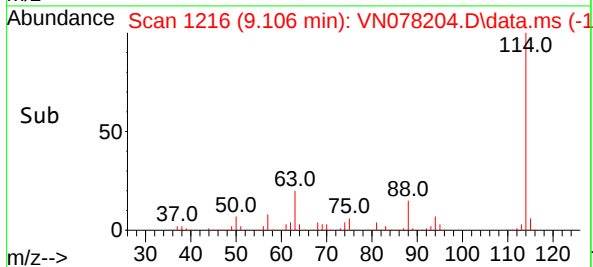
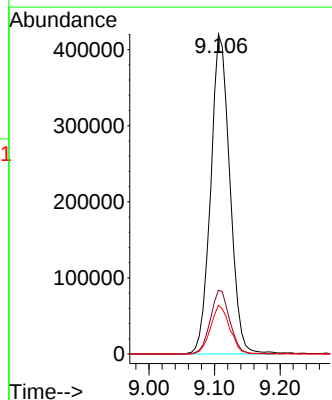
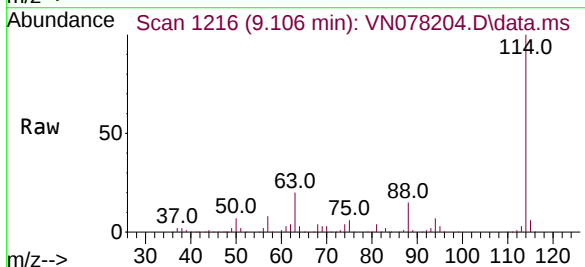
Tgt Ion: 114 Resp: 853755

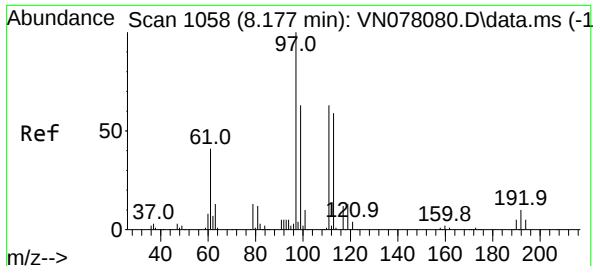
Ion Ratio Lower Upper

114 100

63 19.9 0.0 36.4

88 15.2 0.0 30.6

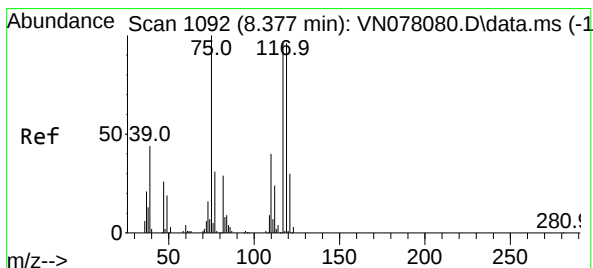
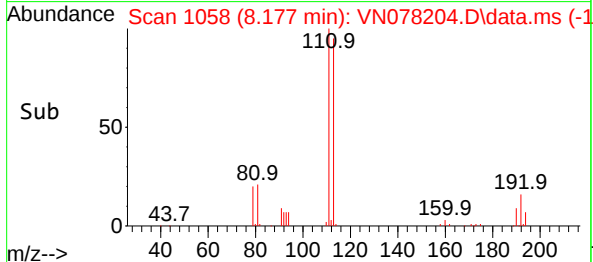
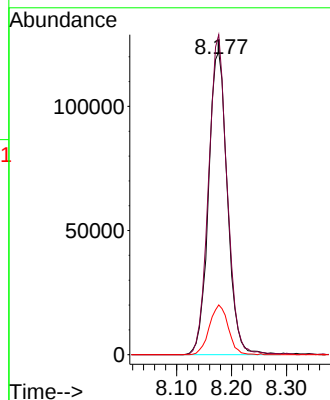
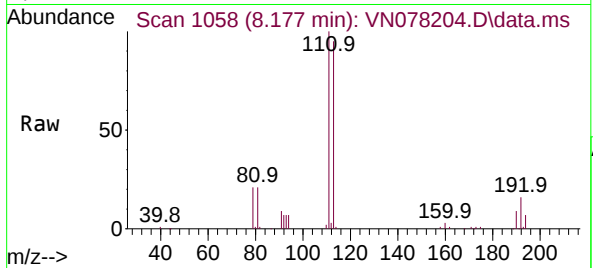




#35
Dibromofluoromethane
Concen: 53.951 ug/l
RT: 8.177 min Scan# 1058
Delta R.T. 0.000 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

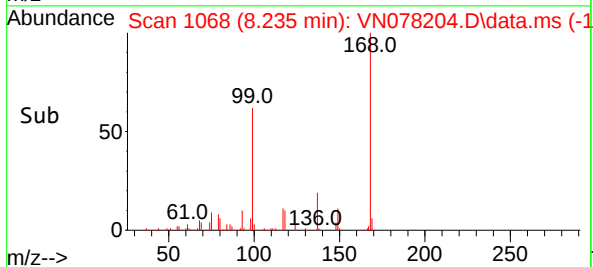
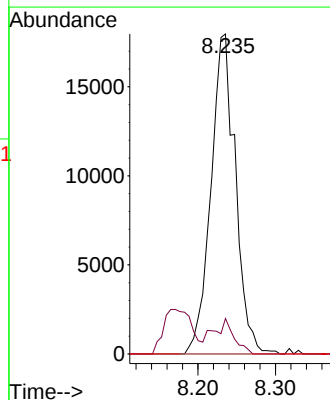
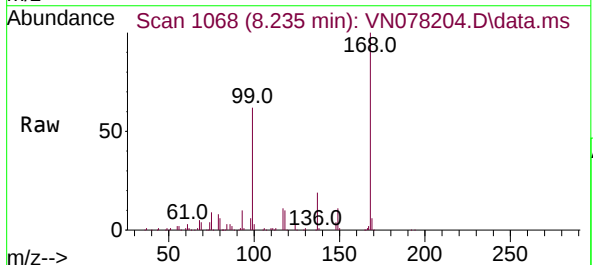
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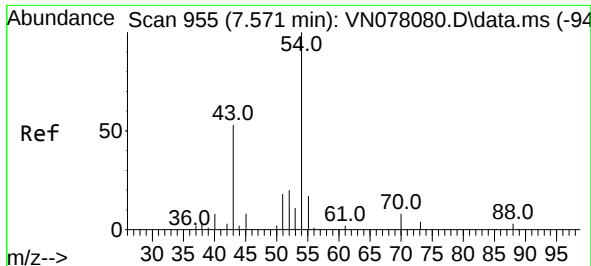
Tgt Ion:113 Resp: 291236
Ion Ratio Lower Upper
113 100
111 103.8 82.6 123.8
192 16.4 12.7 19.1



#36
1,1-Dichloropropene
Concen: 5.091 ug/l
RT: 8.235 min Scan# 1068
Delta R.T. -0.141 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 75 Resp: 39417
Ion Ratio Lower Upper
75 100
110 9.4 19.1 57.3#
77 0.0 25.0 37.4#

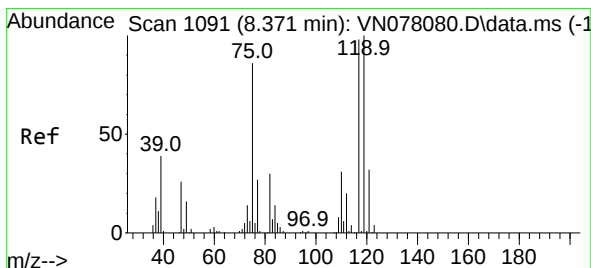
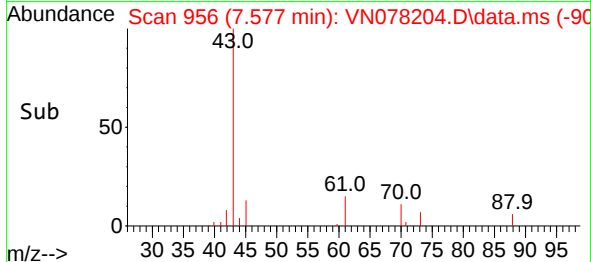
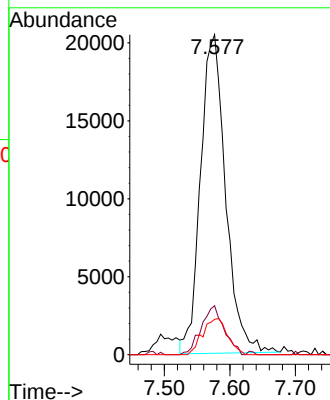
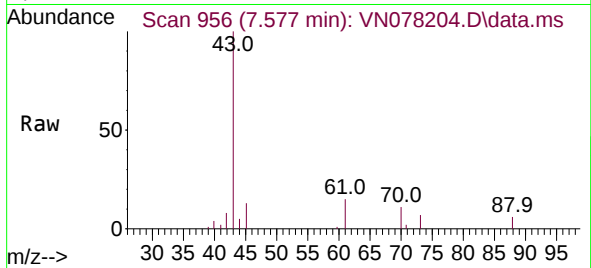




#37
Ethyl Acetate
Concen: 8.995 ug/l
RT: 7.577 min Scan# 91
Delta R.T. 0.006 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

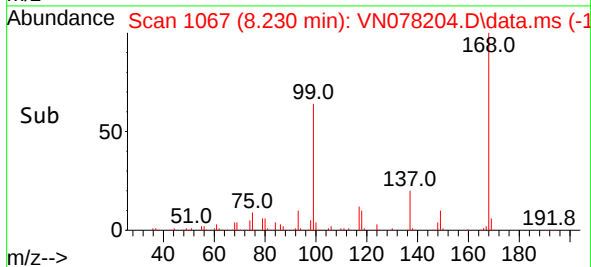
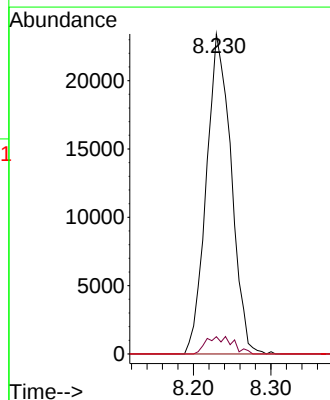
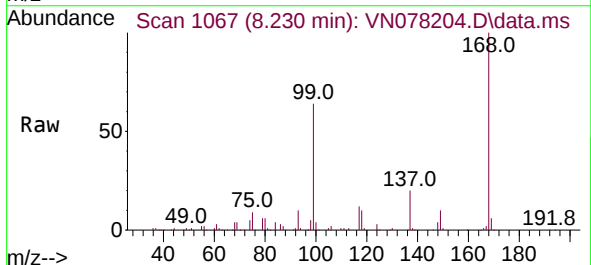
Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

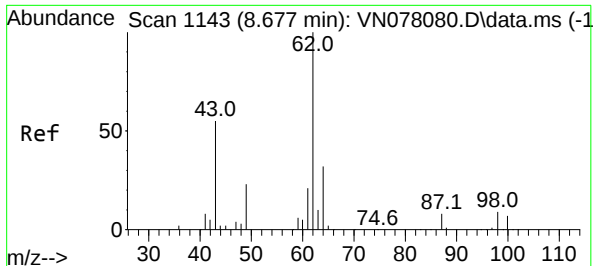
Tgt Ion: 43 Resp: 54411
Ion Ratio Lower Upper
43 100
61 14.0 13.2 19.8
70 11.2 11.3 16.9#



#38
Carbon Tetrachloride
Concen: 6.372 ug/l
RT: 8.230 min Scan# 1067
Delta R.T. -0.141 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 117 Resp: 52099
Ion Ratio Lower Upper
117 100
119 5.4 77.3 115.9#
121 0.0 23.3 34.9#





#42

1,2-Dichloroethane

Concen: 0.217 ug/l

RT: 8.700 min Scan# 1143

Delta R.T. 0.024 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

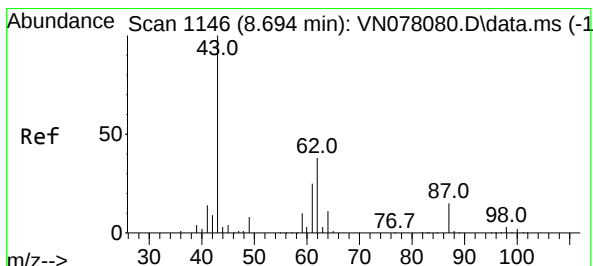
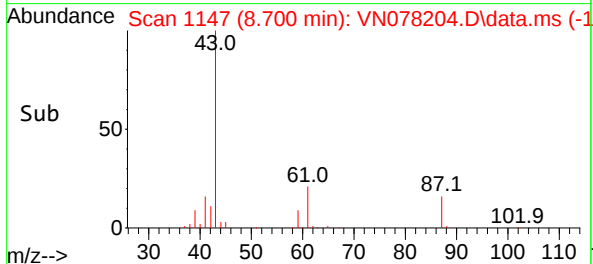
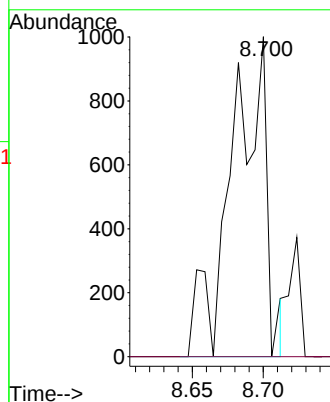
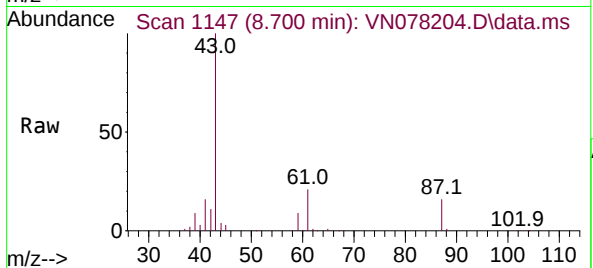
PNNL-B-0609-2

Tgt Ion: 62 Resp: 1721

Ion Ratio Lower Upper

62 100

98 0.0 0.0 19.8



#43

Isopropyl Acetate

Concen: 19.802 ug/l

RT: 8.694 min Scan# 1146

Delta R.T. 0.000 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

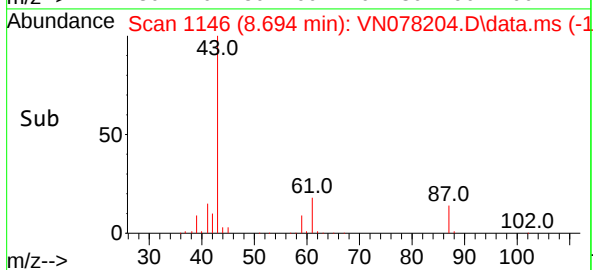
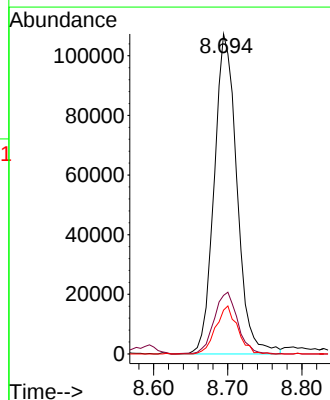
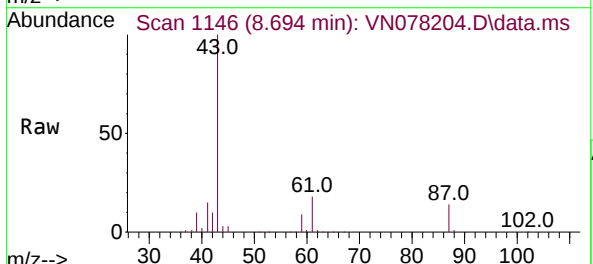
Tgt Ion: 43 Resp: 229074

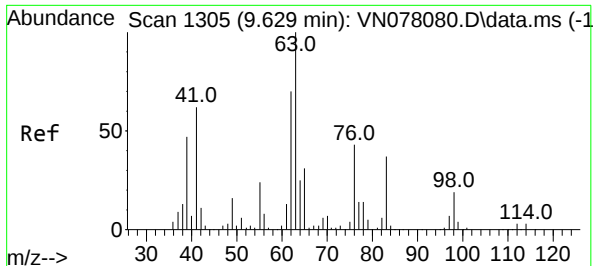
Ion Ratio Lower Upper

43 100

61 20.0 24.7 37.1#

87 14.4 14.6 21.8#





#45

1,2-Dichloropropane

Concen: 0.485 ug/l

RT: 9.747 min Scan# 1325

Delta R.T. 0.118 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

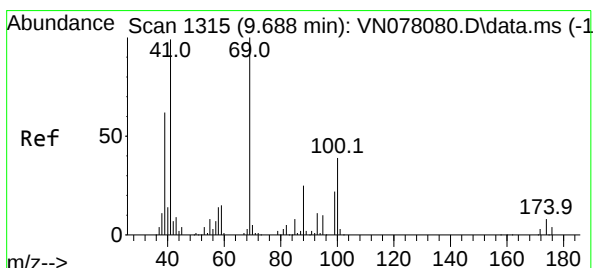
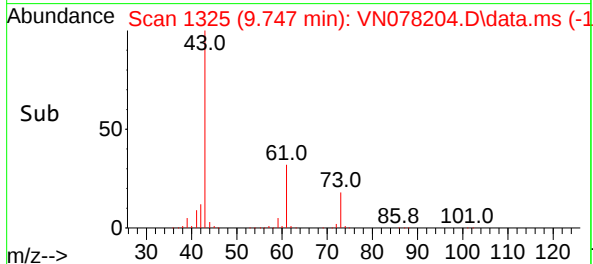
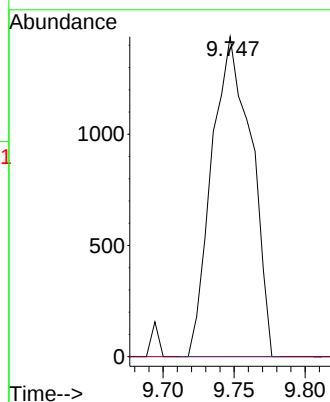
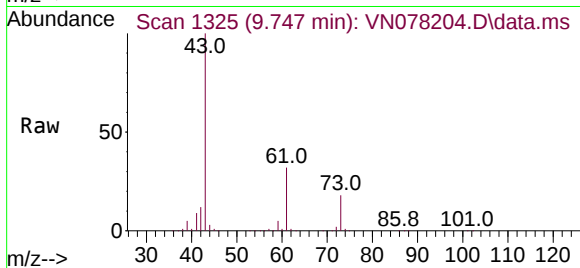
PNNL-B-0609-2

Tgt Ion: 63 Resp: 2788

Ion Ratio Lower Upper

63 100

65 0.0 23.9 35.9#



#48

Methyl methacrylate

Concen: 1.079 ug/l

RT: 9.671 min Scan# 1312

Delta R.T. -0.018 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

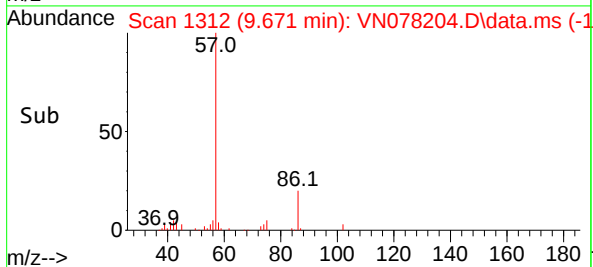
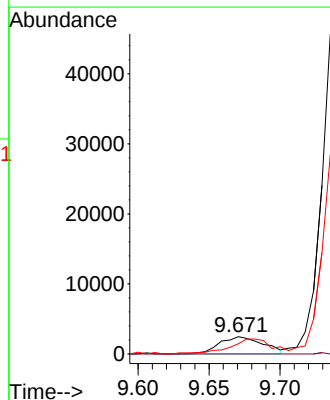
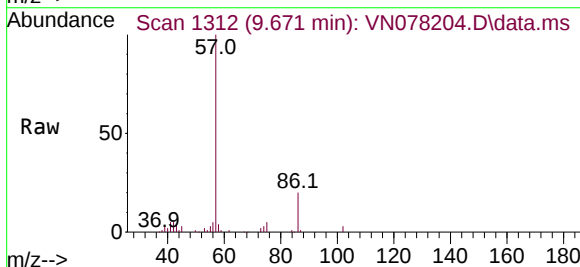
Tgt Ion: 41 Resp: 5239

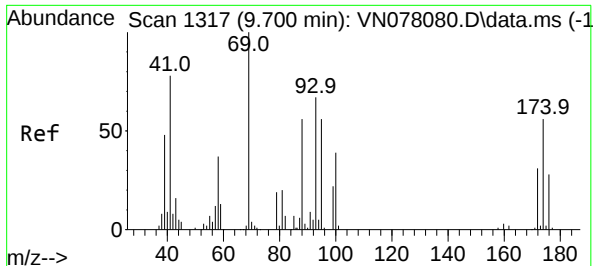
Ion Ratio Lower Upper

41 100

69 0.0 90.4 135.6#

39 85.7 54.6 81.8#





#49

1,4-Dioxane

Concen: 1.450 ug/l

RT: 9.747 min Scan# 11

Delta R.T. 0.047 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

PNNL-B-0609-2

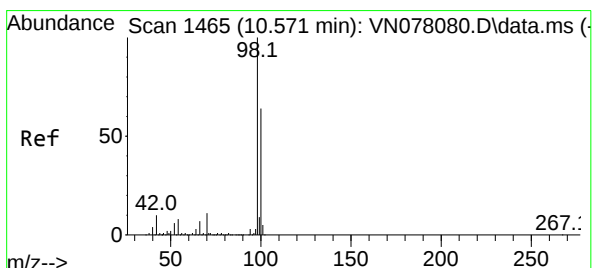
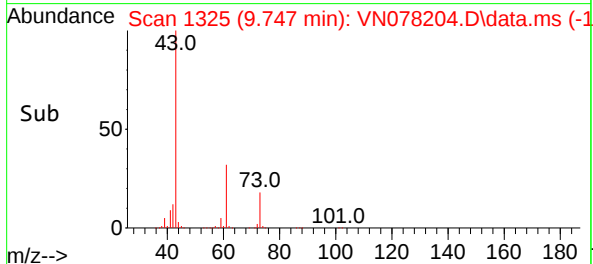
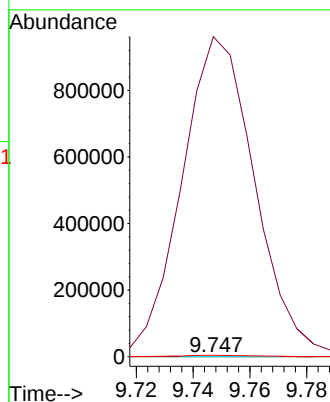
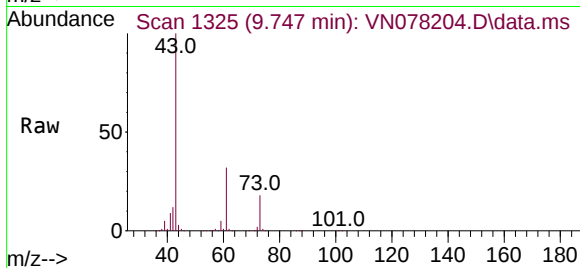
Tgt Ion: 88 Resp: 148

Ion Ratio Lower Upper

88 100

43 1182513.5 17.0 25.6#

58 5793.9 47.0 70.4#



#50

Toluene-d8

Concen: 49.611 ug/l

RT: 10.571 min Scan# 1465

Delta R.T. 0.000 min

Lab File: VN078204.D

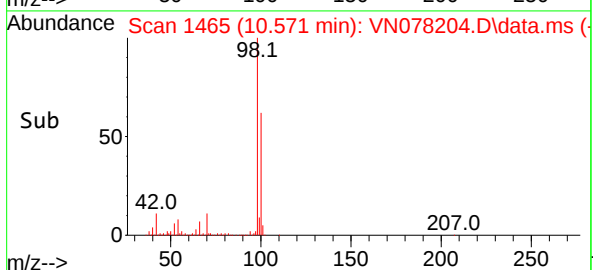
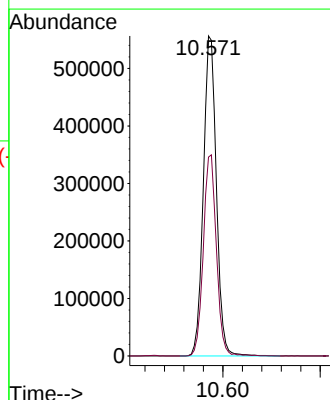
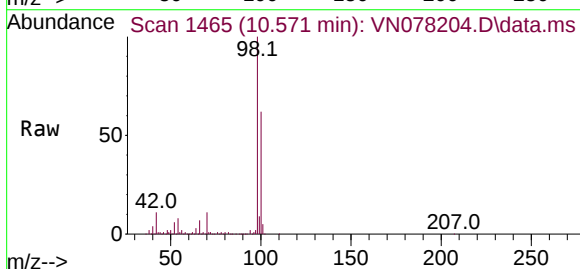
Acq: 14 Jun 2023 14:32

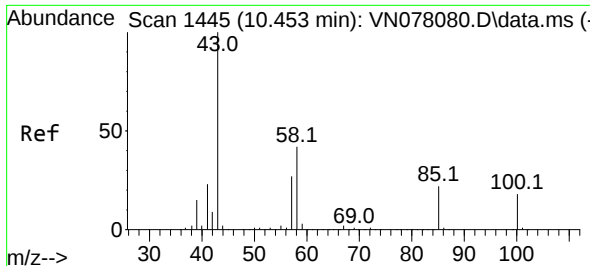
Tgt Ion: 98 Resp: 1032438

Ion Ratio Lower Upper

98 100

100 63.2 52.0 78.0





#51

4-Methyl-2-Pentanone

Concen: 2.381 ug/l

RT: 10.459 min Scan# 1445

Delta R.T. 0.006 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

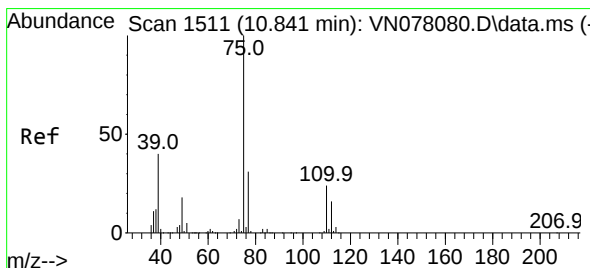
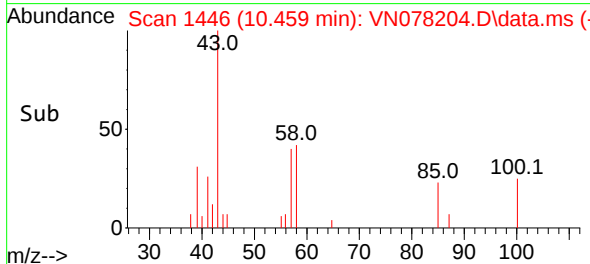
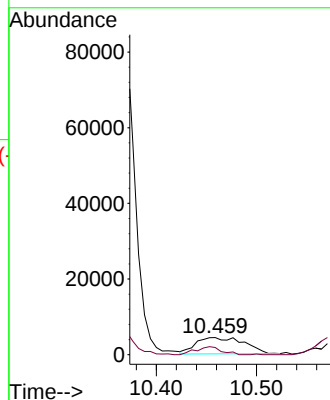
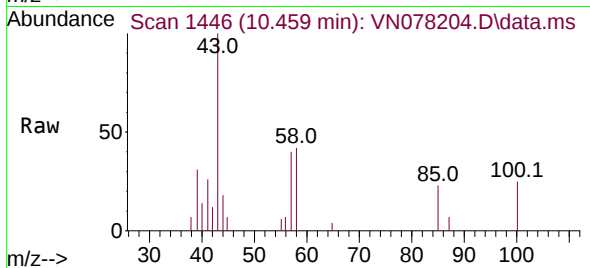
PNNL-B-0609-2

Tgt Ion: 43 Resp: 14502

Ion Ratio Lower Upper

43 100

58 25.9 36.6 54.8#



#53

t-1,3-Dichloropropene

Concen: 0.207 ug/l

RT: 10.741 min Scan# 1494

Delta R.T. -0.100 min

Lab File: VN078204.D

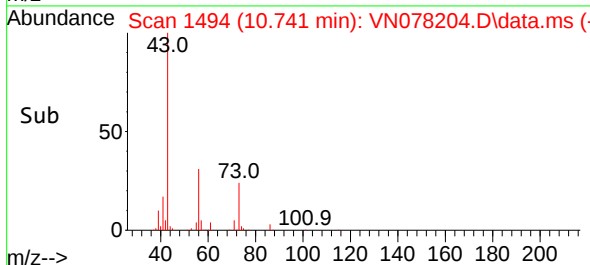
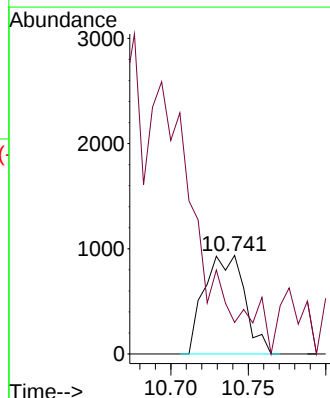
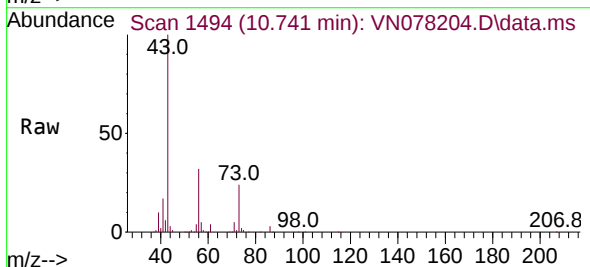
Acq: 14 Jun 2023 14:32

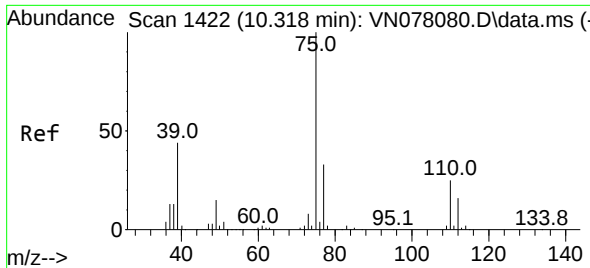
Tgt Ion: 75 Resp: 1694

Ion Ratio Lower Upper

75 100

77 0.0 25.4 38.0#

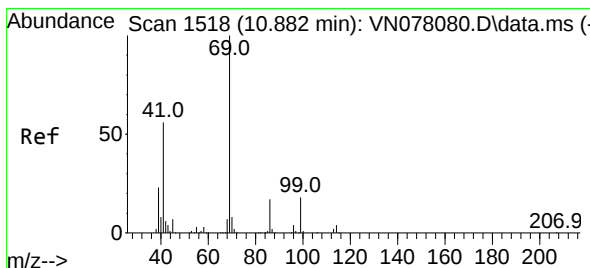
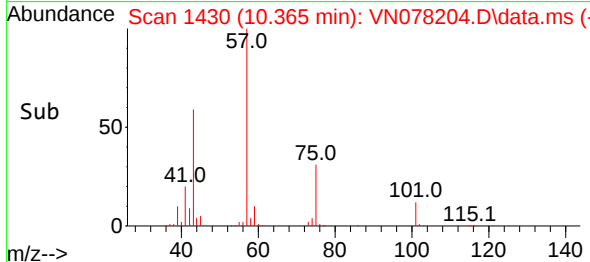
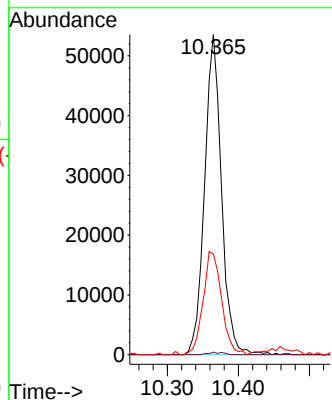
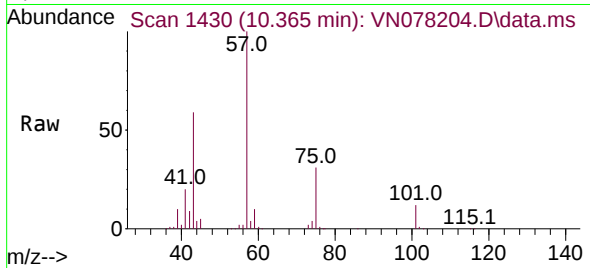




#54
 cis-1,3-Dichloropropene
 Concen: 9.803 ug/l
 RT: 10.365 min Scan# 14
 Delta R.T. 0.047 min
 Lab File: VN078204.D
 Acq: 14 Jun 2023 14:32

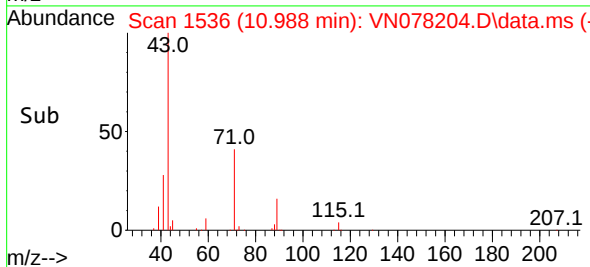
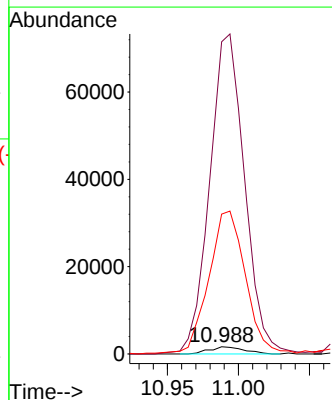
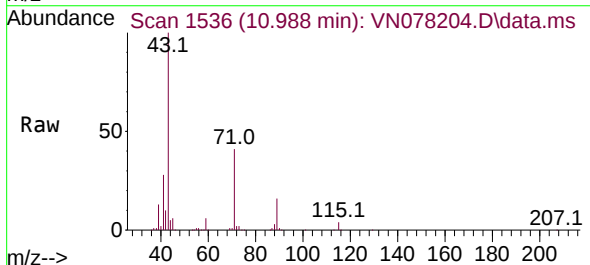
Instrument :
 MSVOA_N
 ClientSampleId :
 PNNL-B-0609-2

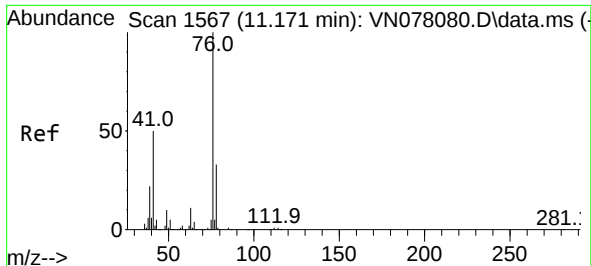
Tgt Ion: 75 Resp: 88810
 Ion Ratio Lower Upper
 75 100
 77 0.8 26.1 39.1#
 39 31.5 31.6 47.4#



#56
 Ethyl methacrylate
 Concen: 0.351 ug/l
 RT: 10.988 min Scan# 1536
 Delta R.T. 0.106 min
 Lab File: VN078204.D
 Acq: 14 Jun 2023 14:32

Tgt Ion: 69 Resp: 2818
 Ion Ratio Lower Upper
 69 100
 41 4458.3 39.6 59.4#
 39 2091.7 28.6 43.0#





#57

1,3-Dichloropropane

Concen: 1.062 ug/l

RT: 11.212 min Scan# 11

Delta R.T. 0.041 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

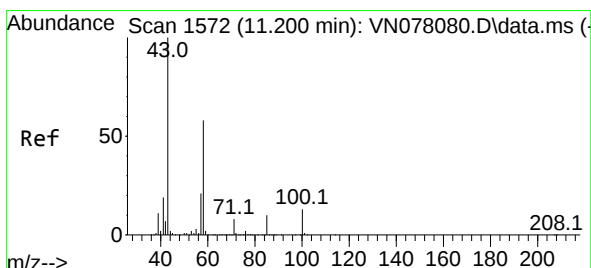
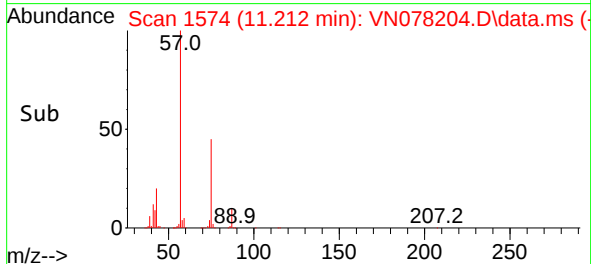
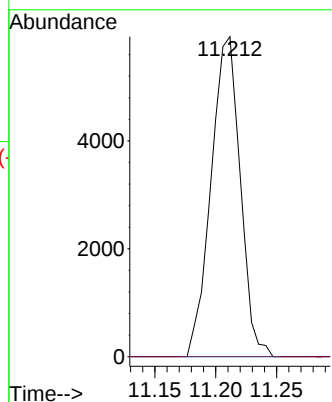
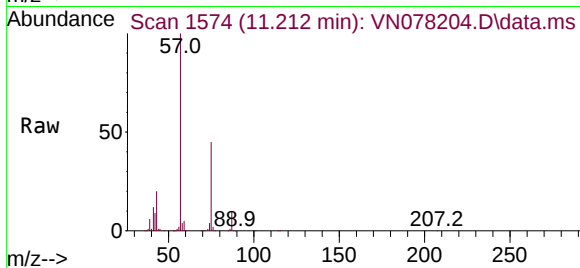
PNNL-B-0609-2

Tgt Ion: 76 Resp: 9900

Ion Ratio Lower Upper

76 100

78 0.0 26.1 39.1#



#59

2-Hexanone

Concen: 46.186 ug/l

RT: 11.176 min Scan# 1568

Delta R.T. -0.024 min

Lab File: VN078204.D

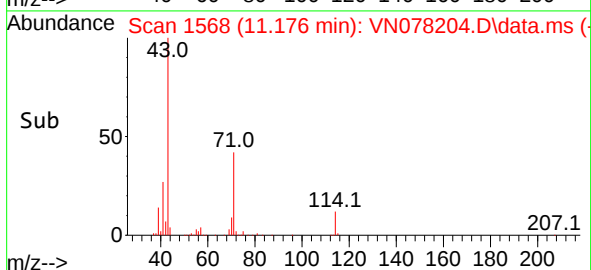
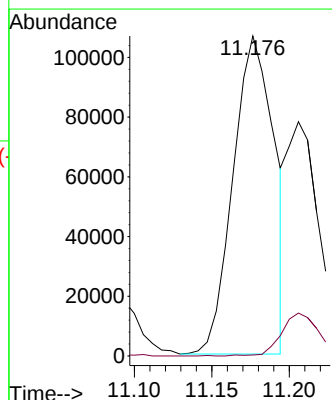
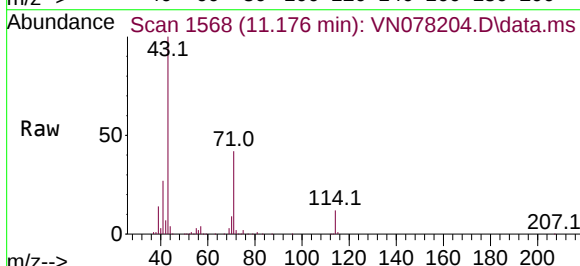
Acq: 14 Jun 2023 14:32

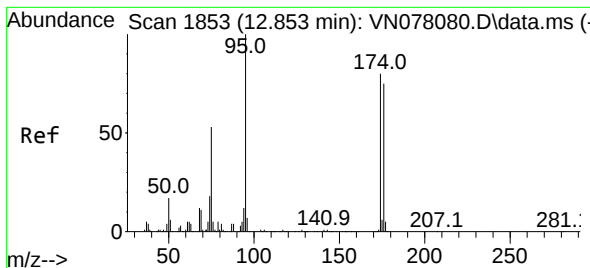
Tgt Ion: 43 Resp: 195904

Ion Ratio Lower Upper

43 100

58 0.0 31.7 95.1#

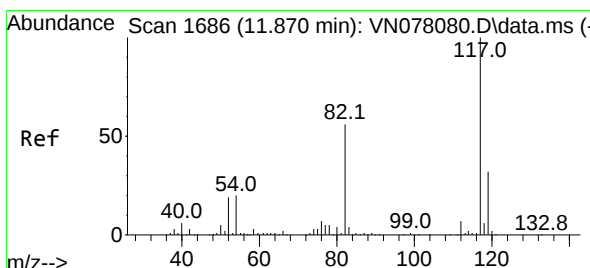
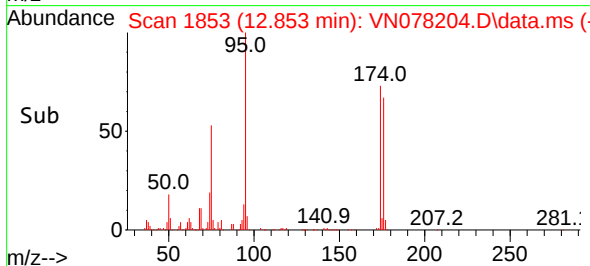
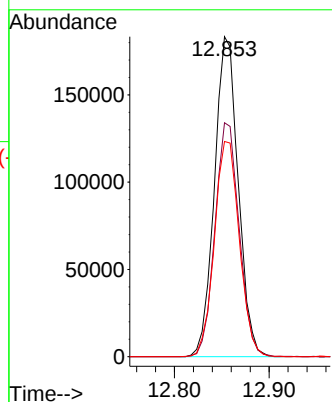
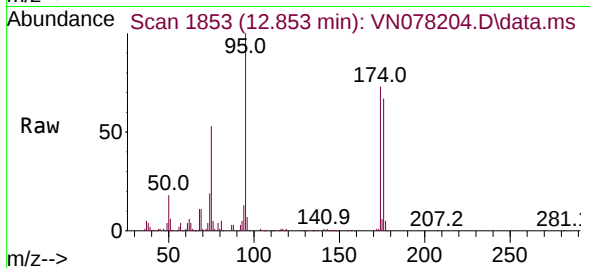




#62
4-Bromofluorobenzene
Concen: 49.401 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.000 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

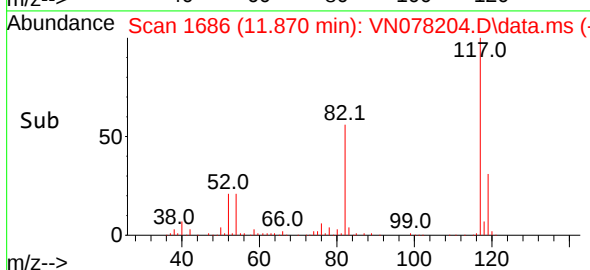
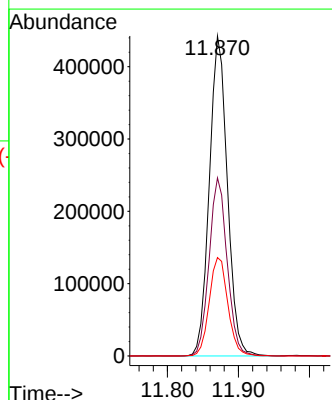
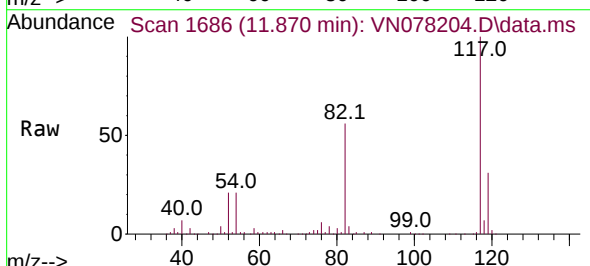
Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

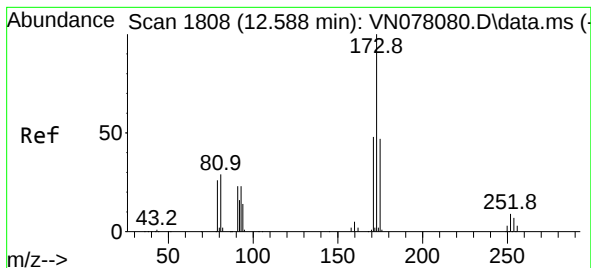
Tgt Ion: 95 Resp: 319600
Ion Ratio Lower Upper
95 100
174 74.4 0.0 143.8
176 70.6 0.0 135.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.870 min Scan# 1686
Delta R.T. 0.000 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 117 Resp: 780230
Ion Ratio Lower Upper
117 100
82 55.6 44.0 66.0
119 30.7 25.6 38.4





#71

Bromoform

Concen: 0.675 ug/l

RT: 12.859 min Scan# 1808

Delta R.T. 0.271 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

PNNL-B-0609-2

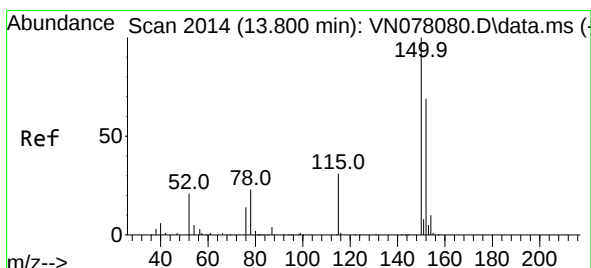
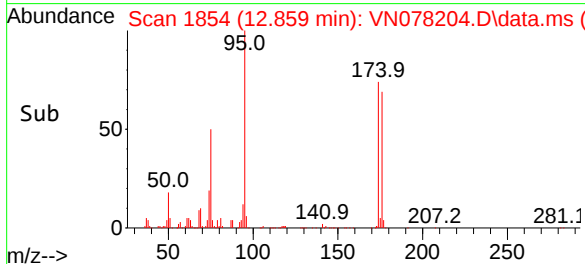
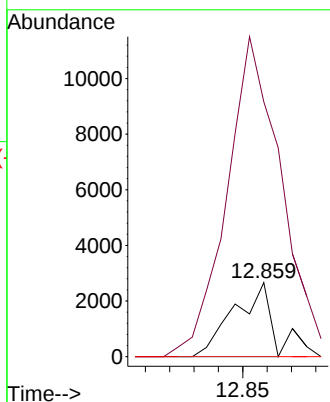
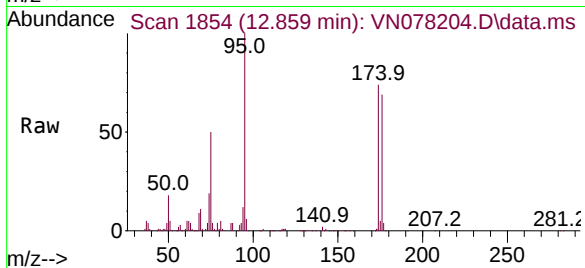
Tgt Ion:173 Resp: 2679

Ion Ratio Lower Upper

173 100

175 577.7 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# 2014

Delta R.T. 0.000 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

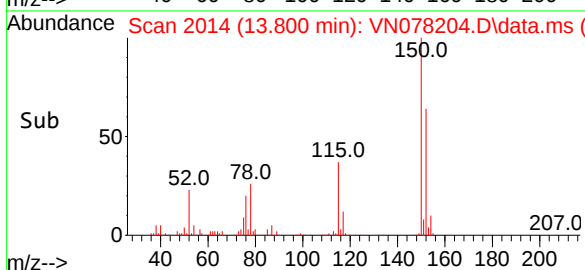
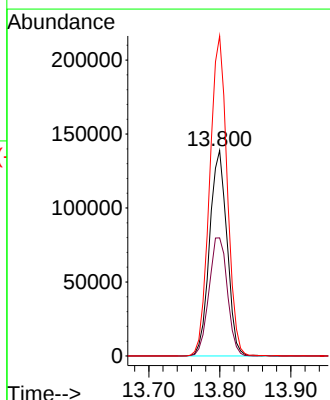
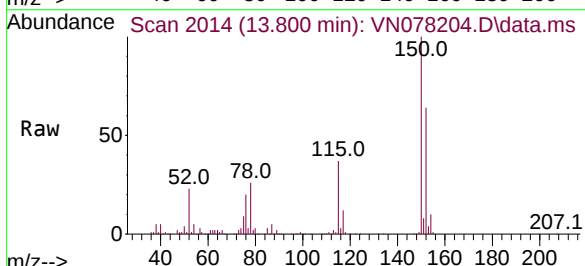
Tgt Ion:152 Resp: 235860

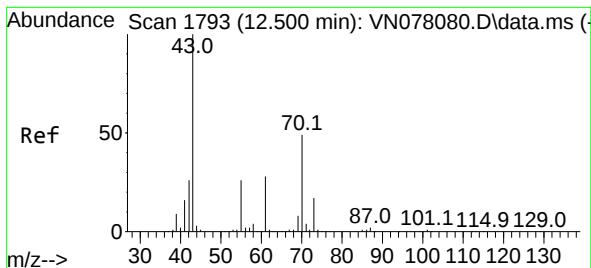
Ion Ratio Lower Upper

152 100

115 60.8 32.3 96.8

150 156.6 0.0 355.8





#74

N-amy1 acetate

Concen: 0.202 ug/l

RT: 12.488 min Scan# 1

Delta R.T. -0.012 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

Instrument :

MSVOA_N

ClientSampleId :

PNNL-B-0609-2

Tgt Ion: 43 Resp: 1480

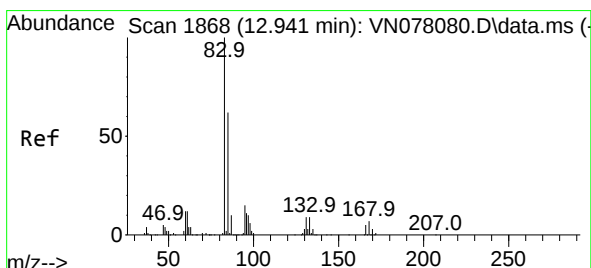
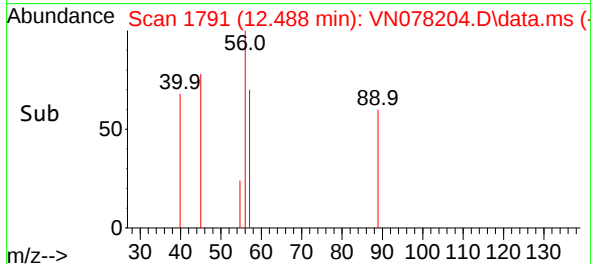
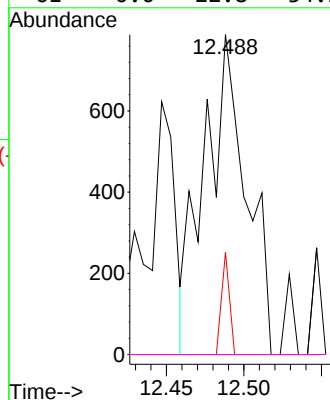
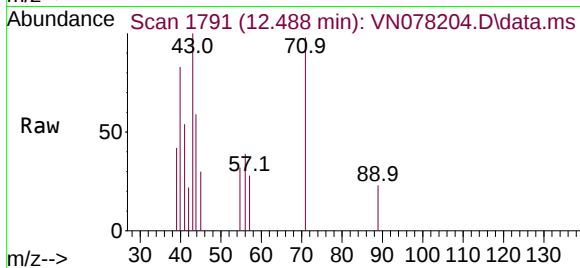
Ion Ratio Lower Upper

43 100

70 0.0 43.4 65.2#

55 6.0 21.4 32.0#

61 0.0 22.8 34.2#



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.841 min Scan# 1851

Delta R.T. -0.100 min

Lab File: VN078204.D

Acq: 14 Jun 2023 14:32

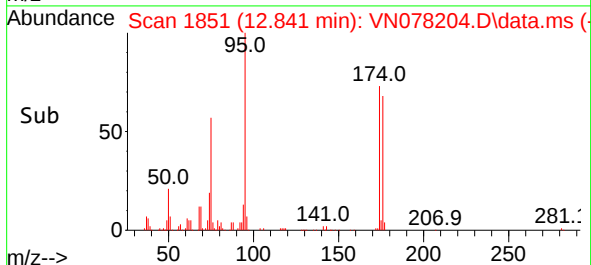
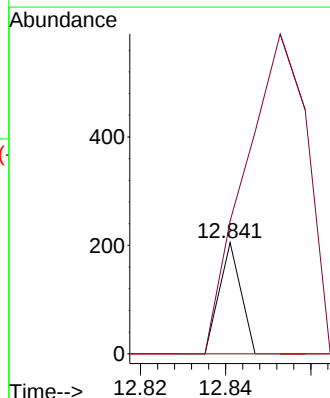
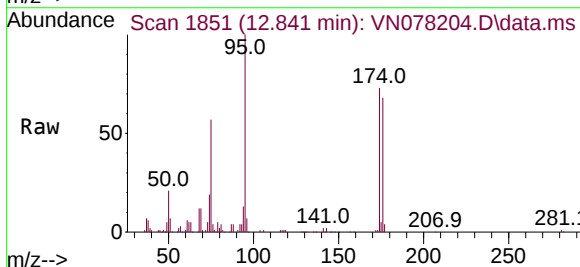
Tgt Ion: 83 Resp: 72

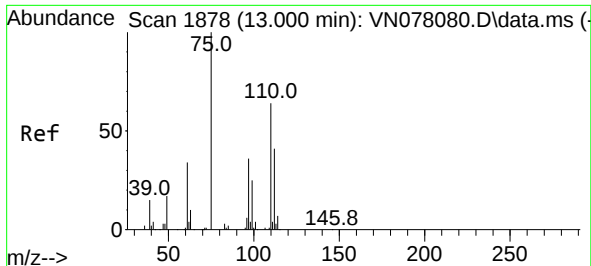
Ion Ratio Lower Upper

83 100

131 940.3 5.0 15.0#

85 0.0 31.9 95.7#

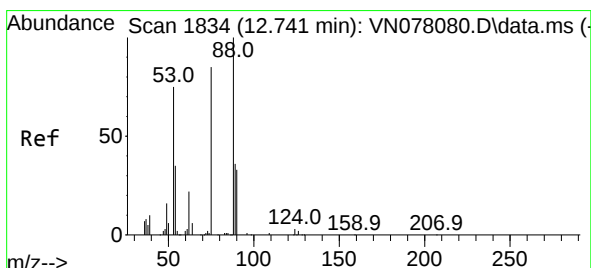
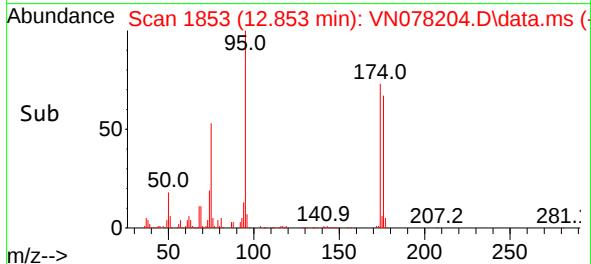
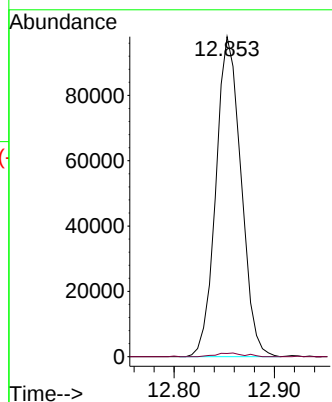
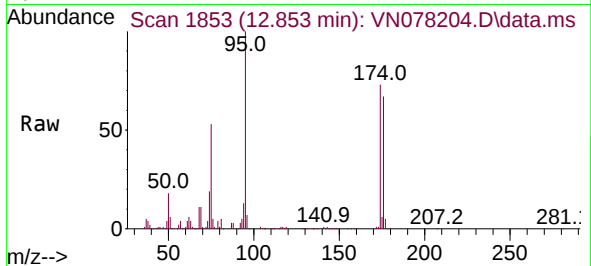




#76
1,2,3-Trichloropropane
Concen: 30.643 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.147 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Instrument :
MSVOA_N
ClientSampleId :
PNNL-B-0609-2

Tgt Ion: 75 Resp: 170862
Ion Ratio Lower Upper
75 100
77 1.3 84.5 253.5#



#81
trans-1,4-Dichloro-2-butene
Concen: 94.146 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. 0.112 min
Lab File: VN078204.D
Acq: 14 Jun 2023 14:32

Tgt Ion: 75 Resp: 170862
Ion Ratio Lower Upper
75 100
53 0.0 67.4 101.2#
89 0.0 38.8 58.2#

