

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX081423\
 Data File : VX036969.D
 Acq On : 14 Aug 2023 17:00
 Operator : JC/MD
 Sample : 03985-04
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 PNNL-APM2-0811-2

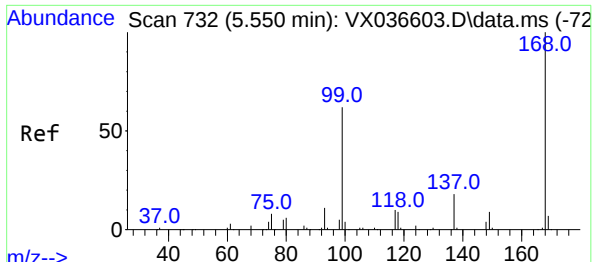
Quant Time: Aug 15 01:30:11 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X072123W.M
 Quant Title : SW846 8260
 QLast Update : Fri Jul 21 12:14:12 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	5.556	168	116535	50.000	ug/l	0.00
34) 1,4-Difluorobenzene	6.763	114	216315	50.000	ug/l	0.00
63) Chlorobenzene-d5	10.055	117	208411	50.000	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.024	152	95145	50.000	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.958	65	84354	48.921	ug/l	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery =	97.840%		
35) Dibromofluoromethane	5.385	113	70137	47.172	ug/l	0.00
Spiked Amount 50.000	Range 75 - 124		Recovery =	94.340%		
50) Toluene-d8	8.647	98	259903	49.293	ug/l	0.00
Spiked Amount 50.000	Range 92 - 112		Recovery =	98.580%		
62) 4-Bromofluorobenzene	11.079	95	103447	52.002	ug/l	0.00
Spiked Amount 50.000	Range 83 - 123		Recovery =	104.000%		
Target Compounds						
					Qvalue	
8) Diethyl Ether	2.136	74	997	1.171	ug/l	64
11) Tert butyl alcohol	2.946	59	2422	5.933	ug/l #	81
13) Acrolein	2.233	56	159	0.682	ug/l	84
16) Acetone	2.380	43	22833	31.911	ug/l #	88
18) Methyl Acetate	2.709	43	1822	0.605	ug/l	94
20) Methylene Chloride	2.788	84	12005	7.544	ug/l	90
25) 2-Butanone	4.568	43	7173	6.179	ug/l	96
29) Tetrahydrofuran	5.044	42	519	0.693	ug/l #	65
31) Cyclohexane	5.550	56	2623	1.099	ug/l #	1
36) 1,1-Dichloropropene	5.556	75	9572	4.319	ug/l #	51
37) Ethyl Acetate	4.727	43	3028	1.207	ug/l	95
38) Carbon Tetrachloride	5.550	117	12611	5.353	ug/l #	16
43) Isopropyl Acetate	6.342	43	124086	28.739	ug/l #	94
48) Methyl methacrylate	7.799	41	99300	49.453	ug/l #	48
49) 1,4-Dioxane	7.641	88	20	0.493	ug/l #	1
51) 4-Methyl-2-Pentanone	8.549	43	118969	49.791	ug/l #	37
52) Toluene	8.720	92	1131	0.280	ug/l	81
53) t-1,3-Dichloropropene	8.951	75	805	0.288	ug/l #	43
54) cis-1,3-Dichloropropene	8.549	75	49646	16.832	ug/l #	54
57) 1,3-Dichloropropane	9.482	76	6262	2.214	ug/l #	42
59) 2-Hexanone	9.378	43	111512	62.883	ug/l #	26
60) Dibromochloromethane	9.275	129	803	0.430	ug/l #	11
64) Tetrachloroethene	9.275	164	766	0.493	ug/l	88
74) N-amyl acetate	10.890	43	883	0.240	ug/l #	44
76) 1,2,3-Trichloropropane	11.079	75	54347	24.285	ug/l #	38
81) trans-1,4-Dichloro-2-b...	11.079	75	54347	55.043	ug/l #	5

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

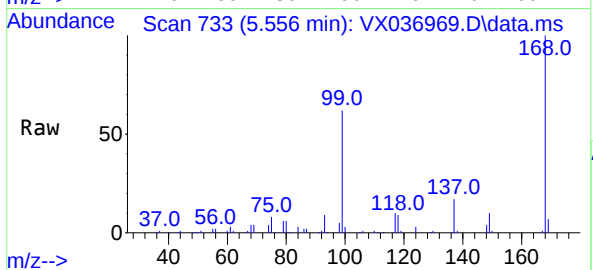
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X072123W.M
Quant Title : SW846 8260
QLast Update : Fri Jul 21 12:14:12 2023
Response via : Initial Calibration



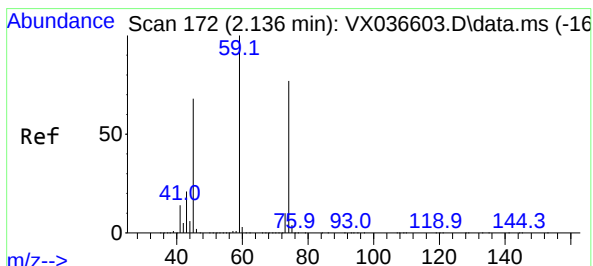
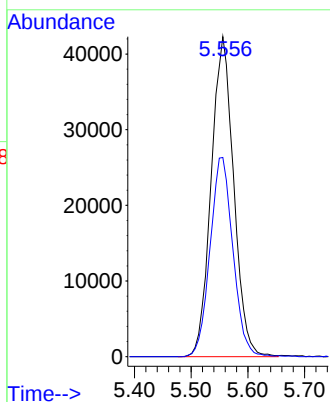
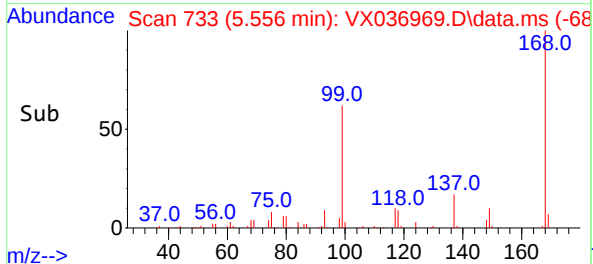


#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.556 min Scan# 71
Delta R.T. 0.006 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

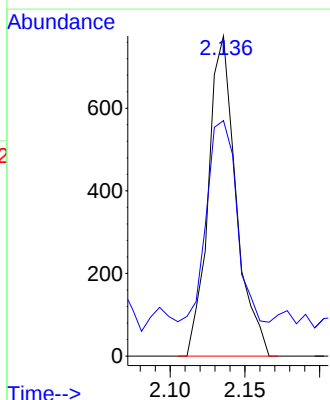
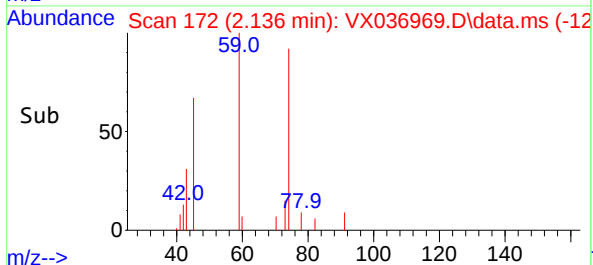
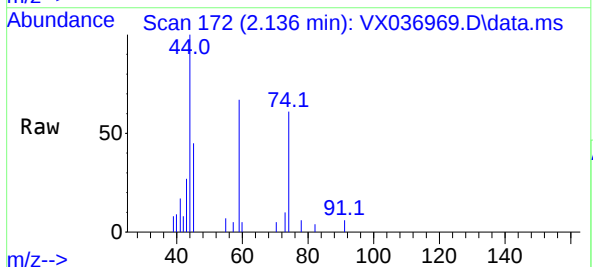


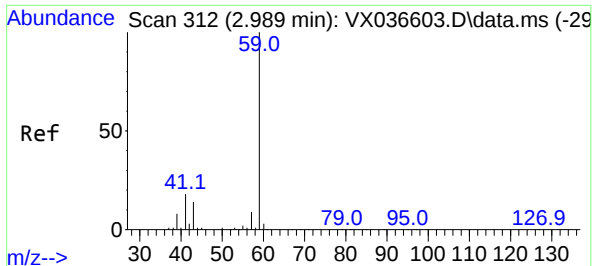
Tgt Ion:168 Resp: 116535
Ion Ratio Lower Upper
168 100
99 62.3 56.6 85.0



#8
Diethyl Ether
Concen: 1.171 ug/l
RT: 2.136 min Scan# 172
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 74 Resp: 997
Ion Ratio Lower Upper
74 100
45 68.9 53.3 159.8





#11

Tert butyl alcohol

Concen: 5.933 ug/l

RT: 2.946 min Scan# 30

Delta R.T. -0.043 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

Instrument :

MSVOA_X

ClientSampleId :

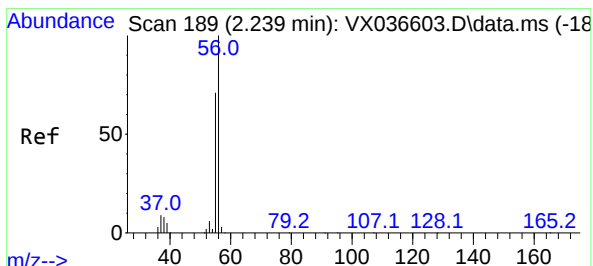
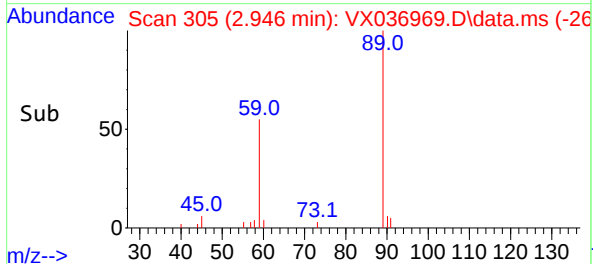
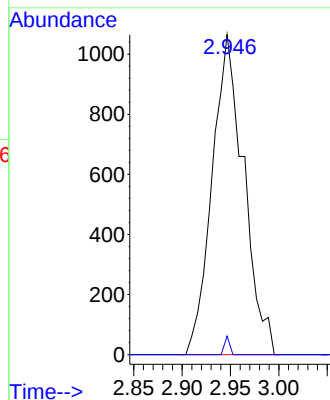
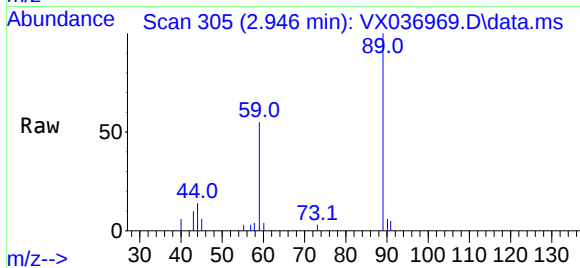
PNNL-APM2-0811-2

Tgt Ion: 59 Resp: 2422

Ion Ratio Lower Upper

59 100

57 0.9 6.0 9.0#



#13

Acrolein

Concen: 0.682 ug/l

RT: 2.233 min Scan# 188

Delta R.T. -0.006 min

Lab File: VX036969.D

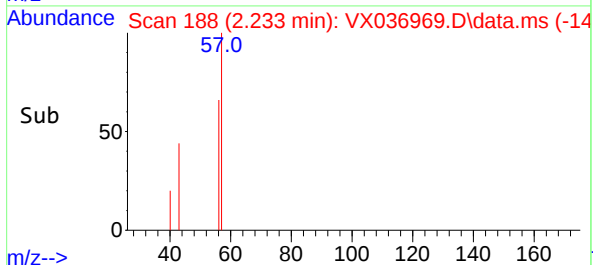
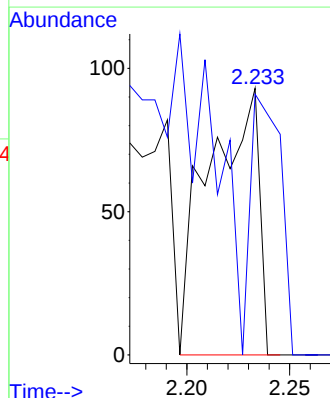
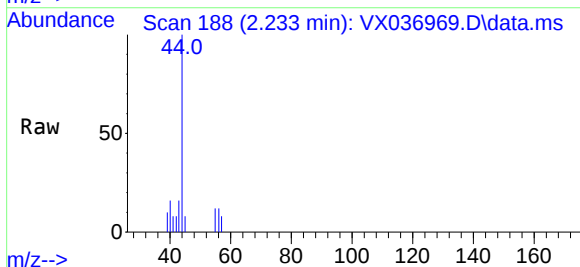
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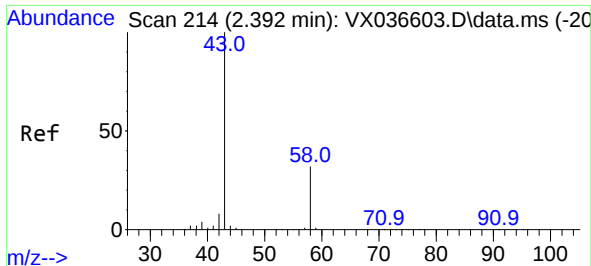
Tgt Ion: 56 Resp: 159

Ion Ratio Lower Upper

56 100

55 57.9 57.1 85.7

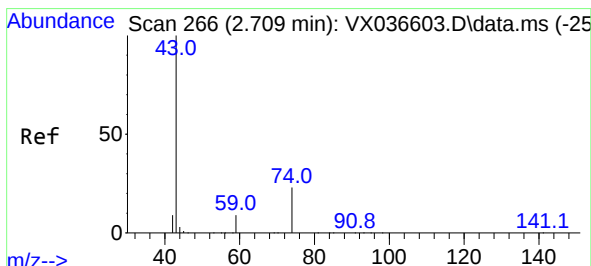
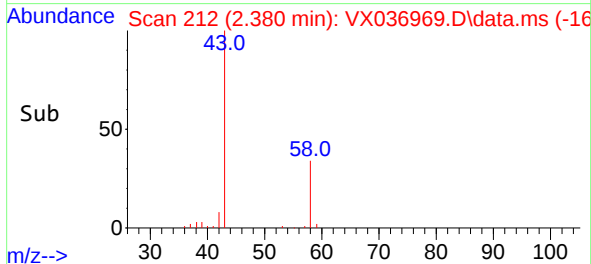
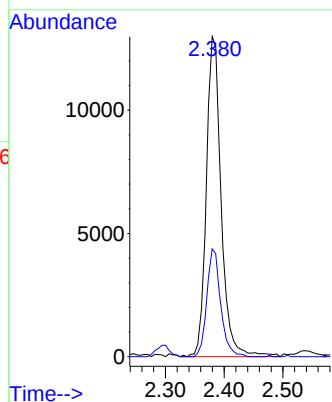
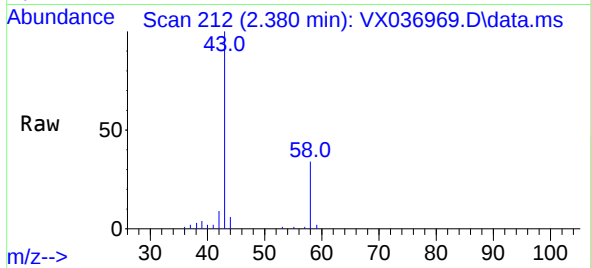




#16
Acetone
Concen: 31.911 ug/l
RT: 2.380 min Scan# 214
Delta R.T. -0.012 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

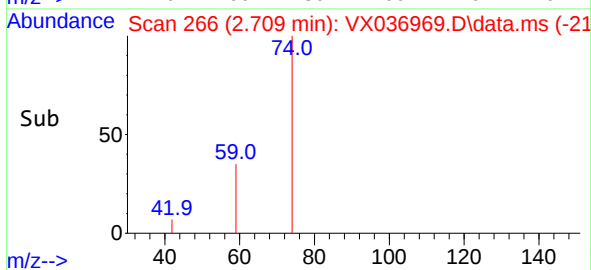
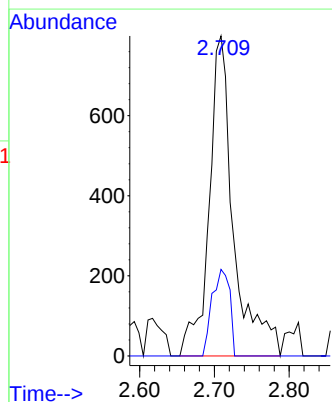
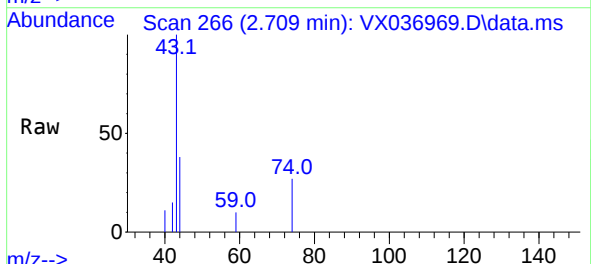
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

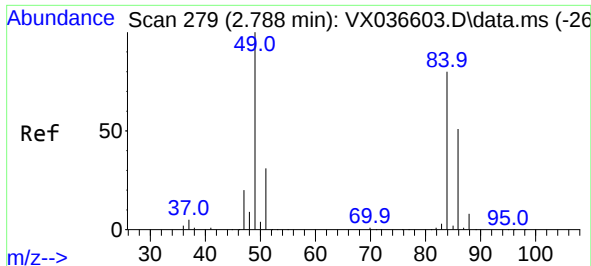
Tgt Ion: 43 Resp: 22833
Ion Ratio Lower Upper
43 100
58 33.7 21.9 32.9#



#18
Methyl Acetate
Concen: 0.605 ug/l
RT: 2.709 min Scan# 266
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 43 Resp: 1822
Ion Ratio Lower Upper
43 100
74 19.3 17.8 26.8



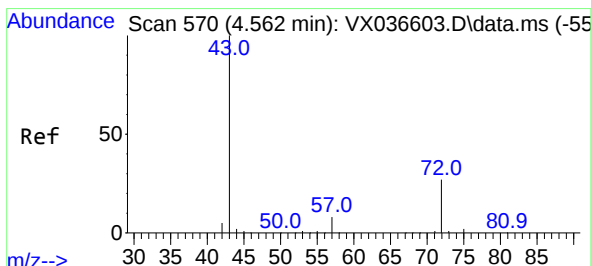
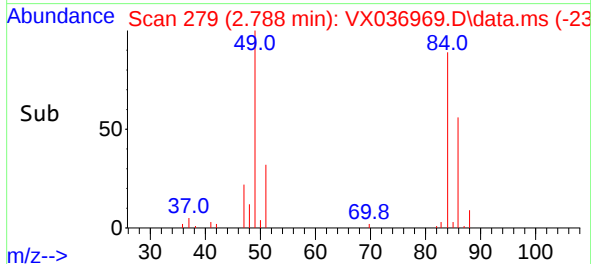
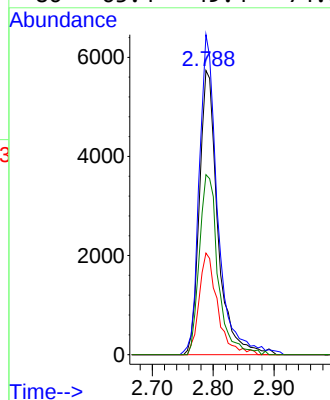
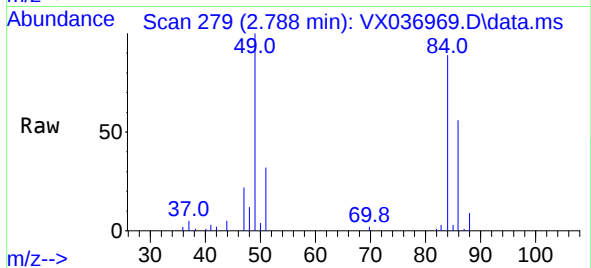


#20
Methylene Chloride
Concen: 7.544 ug/l
RT: 2.788 min Scan# 21
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

Tgt Ion: 84 Resp: 12005

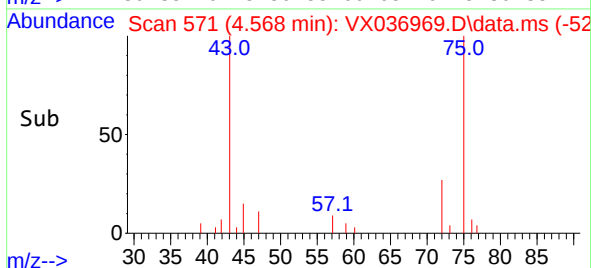
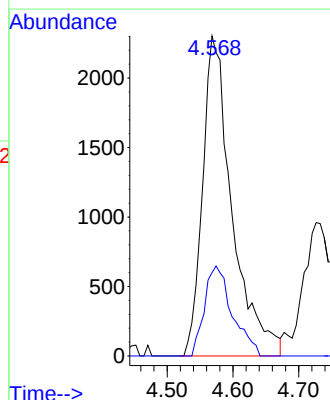
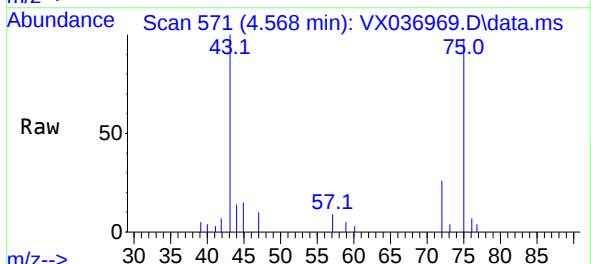
Ion	Ratio	Lower	Upper
84	100		
49	112.6	103.6	155.4
51	35.7	33.8	50.6
86	63.4	49.4	74.0

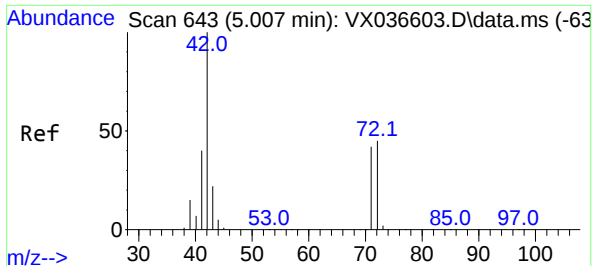


#25
2-Butanone
Concen: 6.179 ug/l
RT: 4.568 min Scan# 571
Delta R.T. 0.006 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 43 Resp: 7173

Ion	Ratio	Lower	Upper
43	100		
72	26.1	19.4	29.2





#29

Tetrahydrofuran

Concen: 0.693 ug/l

RT: 5.044 min Scan# 64

Delta R.T. 0.037 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

Instrument :

MSVOA_X

ClientSampleId :

PNNL-APM2-0811-2

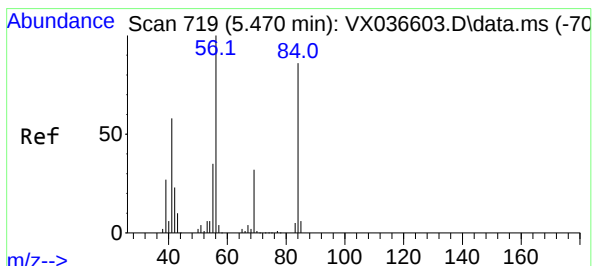
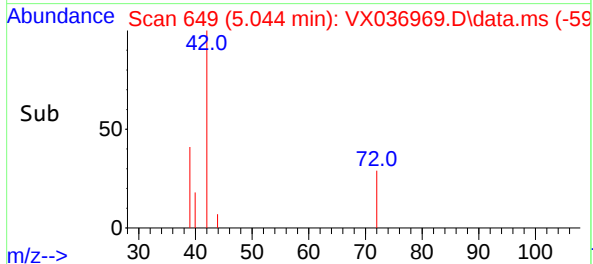
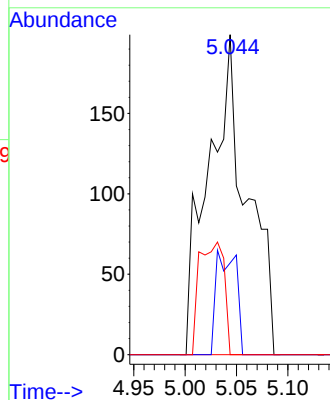
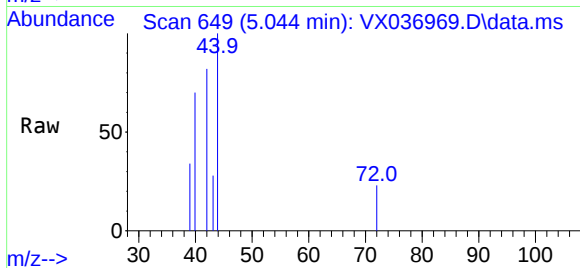
Tgt Ion: 42 Resp: 519

Ion Ratio Lower Upper

42 100

72 16.6 34.2 51.4#

71 22.5 32.2 48.2#



#31

Cyclohexane

Concen: 1.099 ug/l

RT: 5.550 min Scan# 732

Delta R.T. 0.079 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

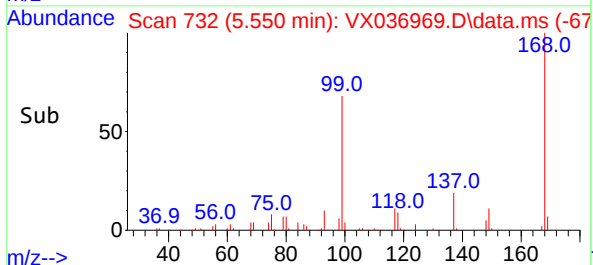
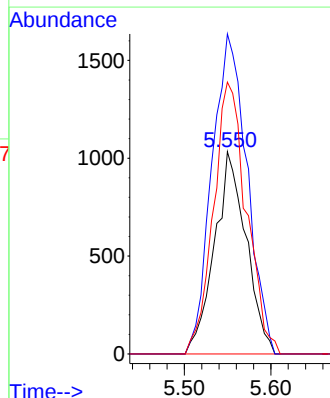
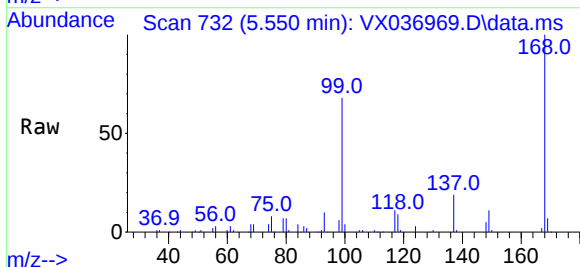
Tgt Ion: 56 Resp: 2623

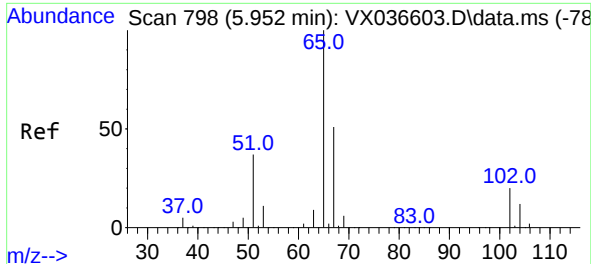
Ion Ratio Lower Upper

56 100

69 158.3 23.4 35.2#

84 134.5 65.9 98.9#

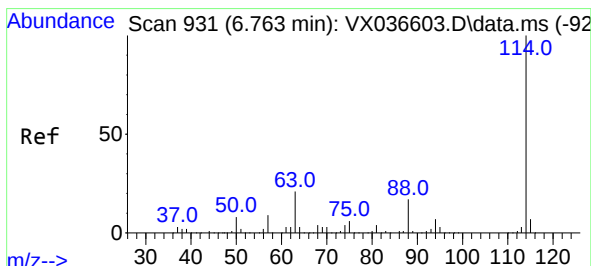
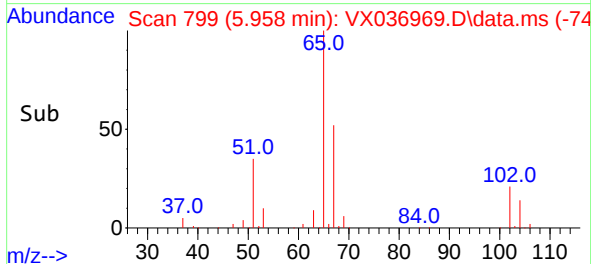
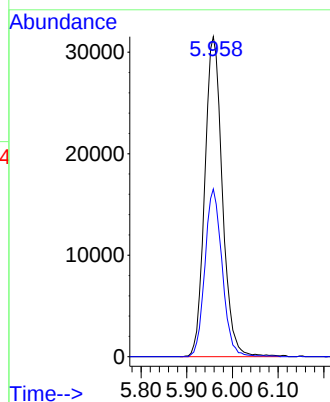
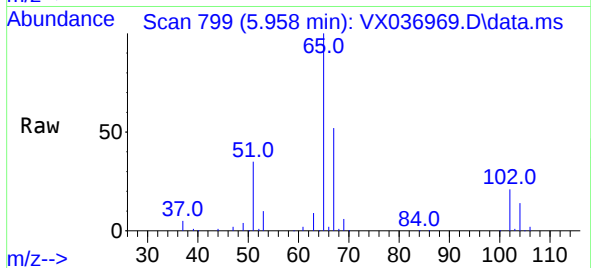




#33
 1,2-Dichloroethane-d4
 Concen: 48.921 ug/l
 RT: 5.958 min Scan# 798
 Delta R.T. 0.006 min
 Lab File: VX036969.D
 Acq: 14 Aug 2023 17:00

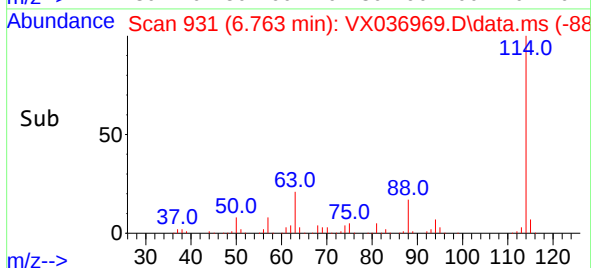
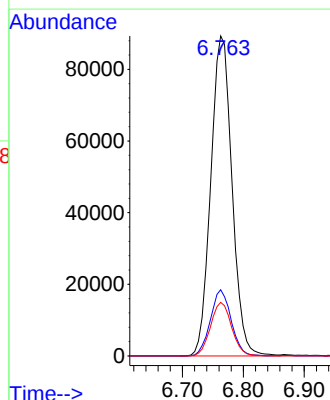
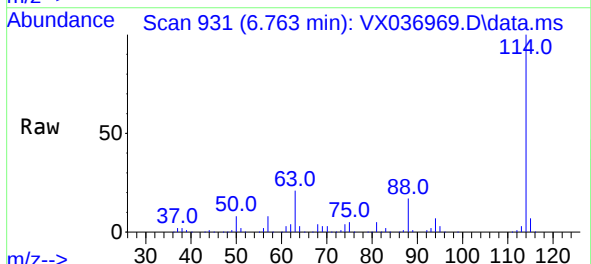
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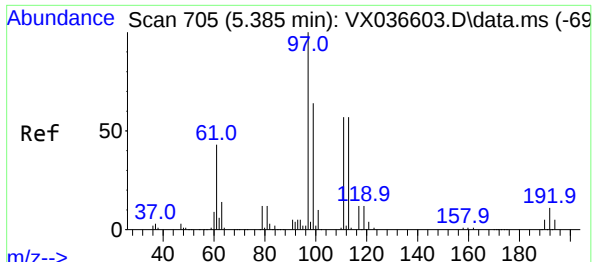
Tgt Ion: 65 Resp: 84354
 Ion Ratio Lower Upper
 65 100
 67 51.4 0.0 100.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.763 min Scan# 931
 Delta R.T. -0.000 min
 Lab File: VX036969.D
 Acq: 14 Aug 2023 17:00

Tgt Ion: 114 Resp: 216315
 Ion Ratio Lower Upper
 114 100
 63 20.7 0.0 45.0
 88 16.7 0.0 36.6



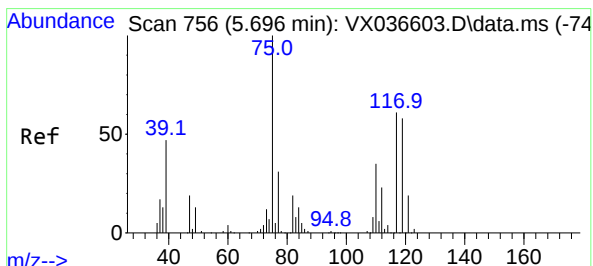
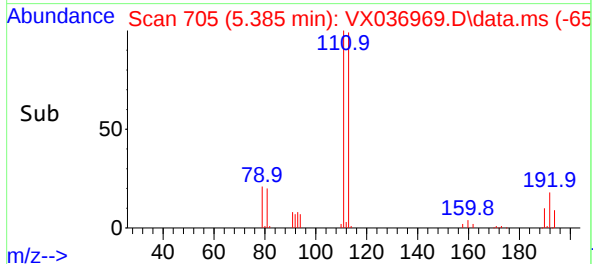
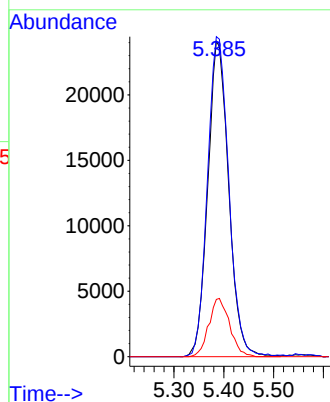
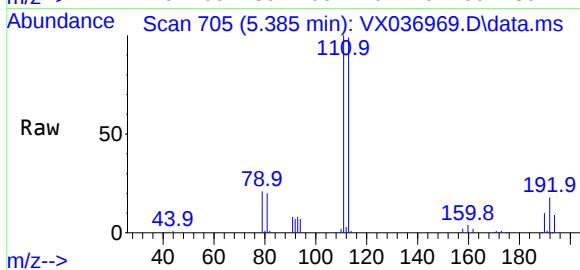


#35
Dibromofluoromethane
Concen: 47.172 ug/l
RT: 5.385 min Scan# 705
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

Tgt Ion:113 Resp: 70137

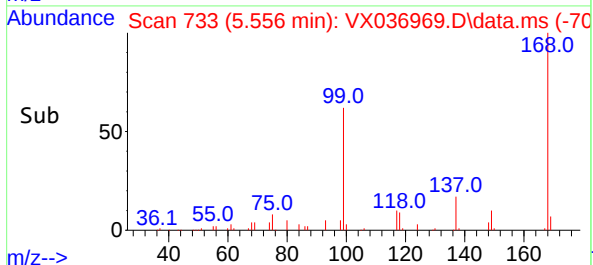
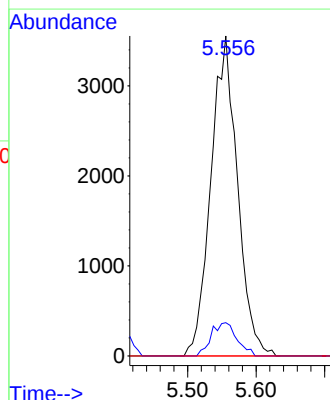
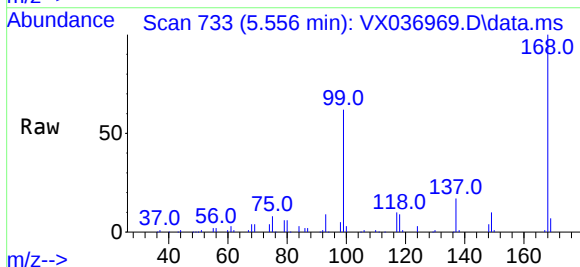
Ion	Ratio	Lower	Upper
113	100		
111	103.4	82.9	124.3
192	18.4	13.3	19.9

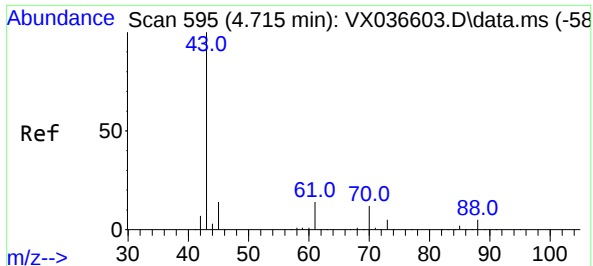


#36
1,1-Dichloropropene
Concen: 4.319 ug/l
RT: 5.556 min Scan# 733
Delta R.T. -0.140 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 75 Resp: 9572

Ion	Ratio	Lower	Upper
75	100		
110	10.0	17.0	50.9#
77	0.0	24.7	37.1#





#37

Ethyl Acetate

Concen: 1.207 ug/l

RT: 4.727 min Scan# 595

Delta R.T. 0.012 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

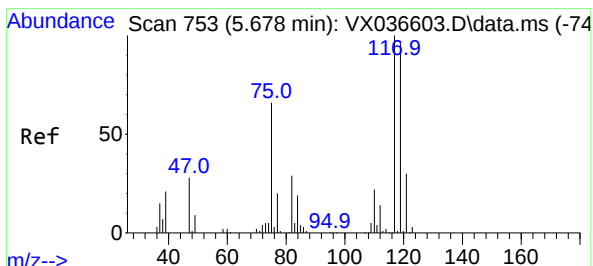
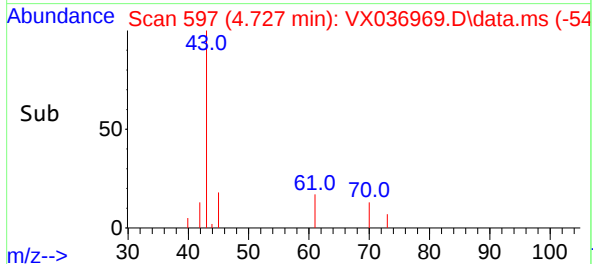
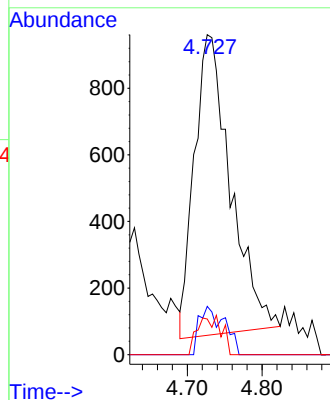
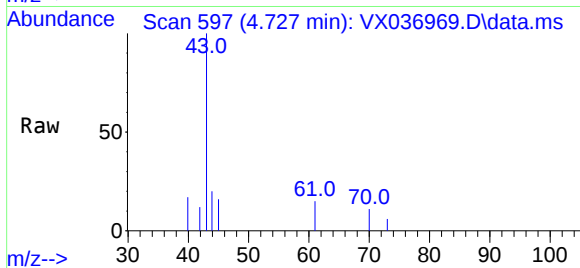
Instrument :

MSVOA_X

ClientSampleId :

PNNL-APM2-0811-2

Tgt Ion: 43	Resp:	3028	
Ion	Ratio	Lower	Upper
43	100		
61	11.1	10.6	16.0
70	8.5	8.3	12.5



#38

Carbon Tetrachloride

Concen: 5.353 ug/l

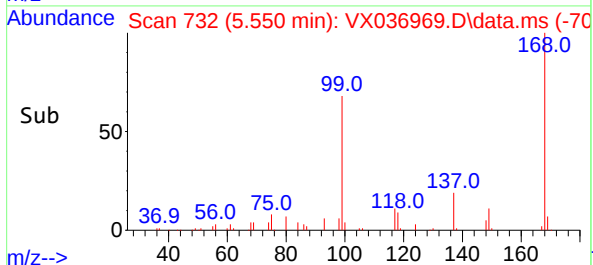
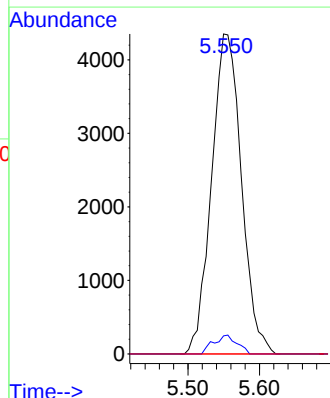
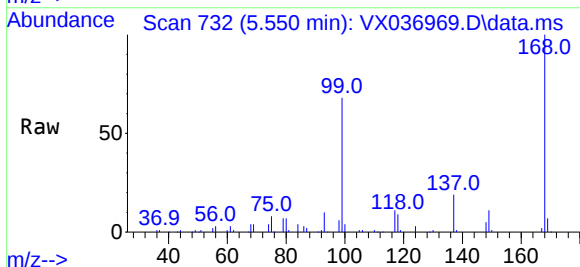
RT: 5.550 min Scan# 732

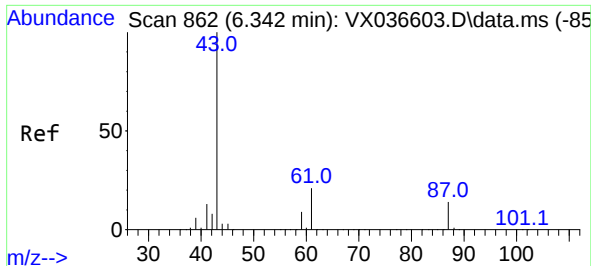
Delta R.T. -0.128 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

Tgt Ion:117	Resp:	12611	
Ion	Ratio	Lower	Upper
117	100		
119	5.7	78.2	117.2#
121	0.0	24.4	36.6#

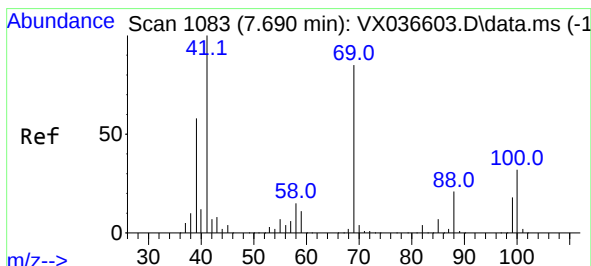
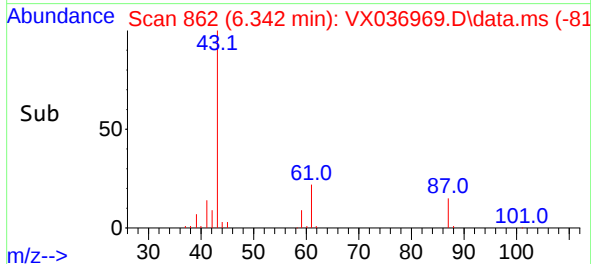
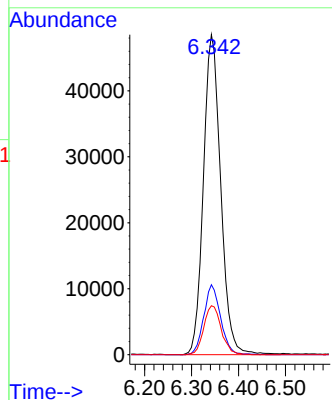
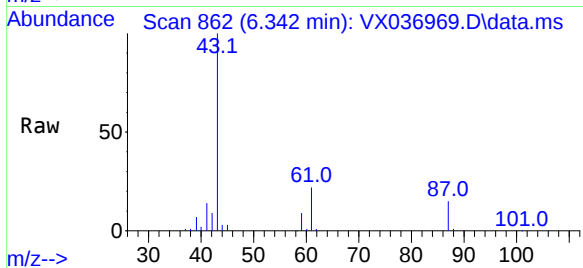




#43
Isopropyl Acetate
Concen: 28.739 ug/l
RT: 6.342 min Scan# 81
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

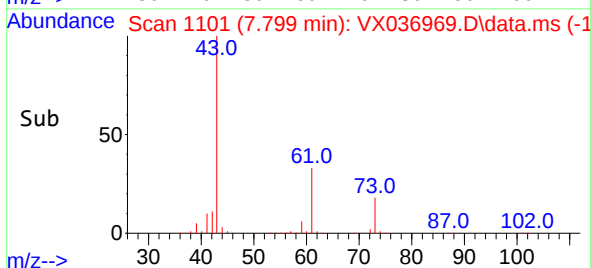
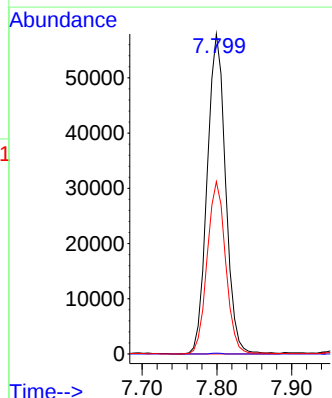
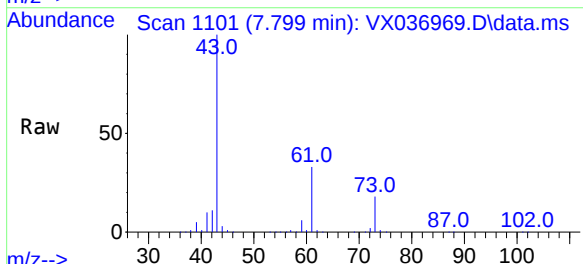
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

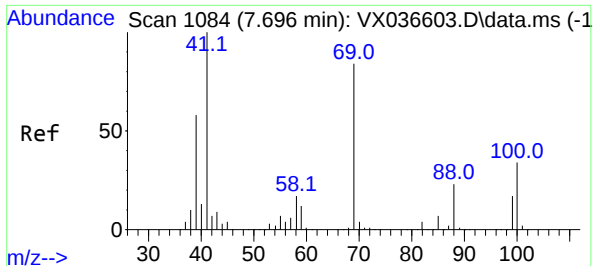
Tgt Ion: 43 Resp: 124086
Ion Ratio Lower Upper
43 100
61 21.3 15.2 22.8
87 15.4 9.8 14.6#



#48
Methyl methacrylate
Concen: 49.453 ug/l
RT: 7.799 min Scan# 1101
Delta R.T. 0.110 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 41 Resp: 99300
Ion Ratio Lower Upper
41 100
69 0.1 59.2 88.8#
39 54.2 47.7 71.5

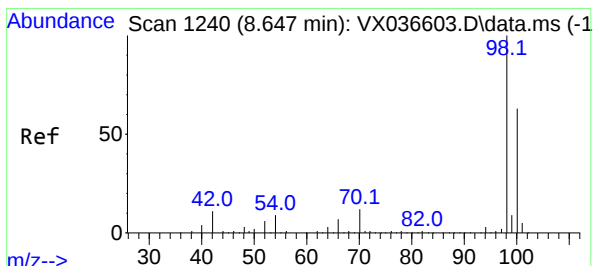
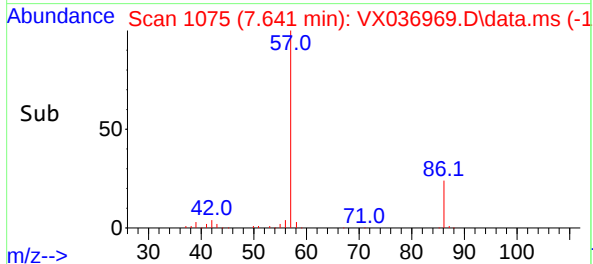
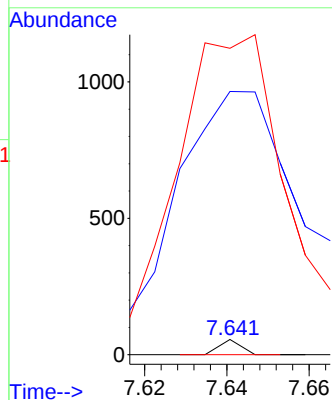
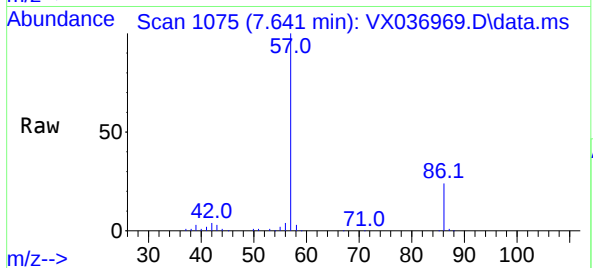




#49
1,4-Dioxane
Concen: 0.493 ug/l
RT: 7.641 min Scan# 1084
Delta R.T. -0.055 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

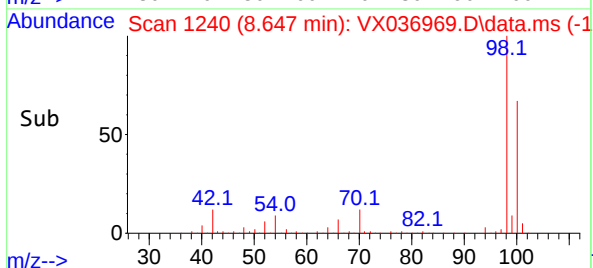
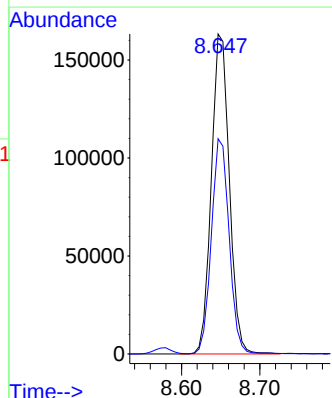
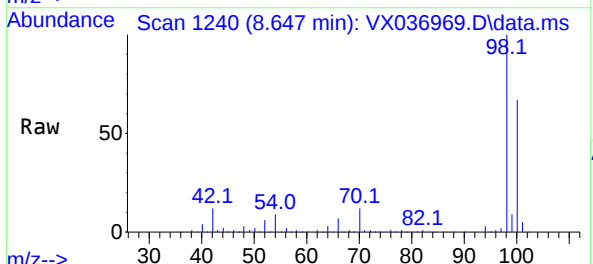
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

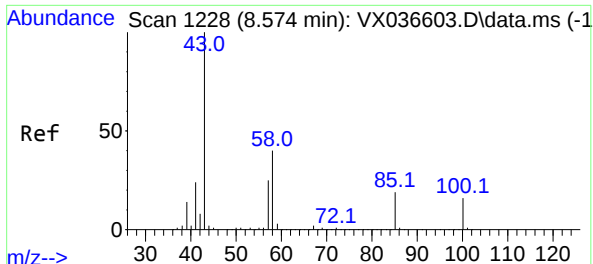
Tgt Ion: 88 Resp: 20
Ion Ratio Lower Upper
88 100
43 0.0 0.0 0.0
58 11685.0 60.1 90.1#



#50
Toluene-d8
Concen: 49.293 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 98 Resp: 259903
Ion Ratio Lower Upper
98 100
100 66.5 53.1 79.7

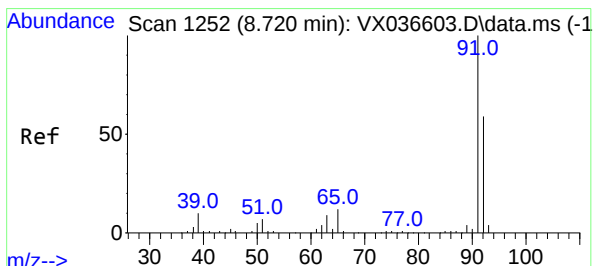
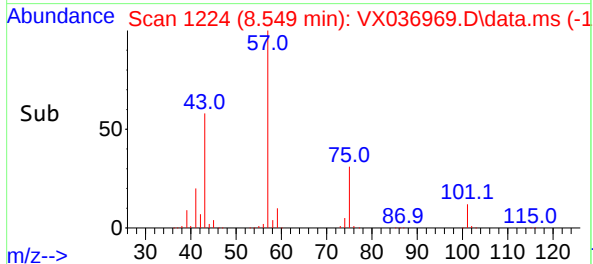
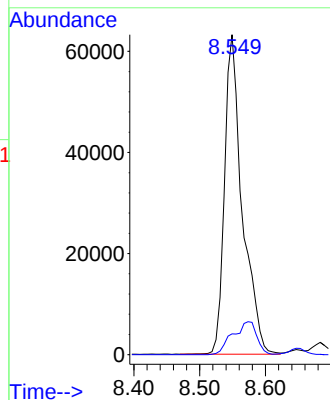
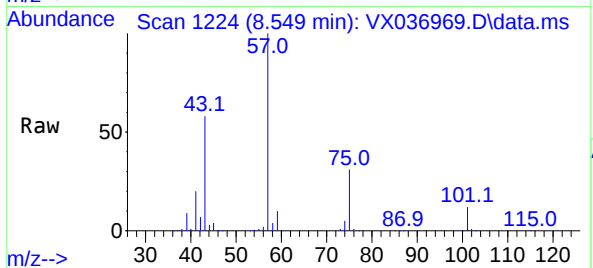




#51
4-Methyl-2-Pentanone
Concen: 49.791 ug/l
RT: 8.549 min Scan# 118969
Delta R.T. -0.024 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

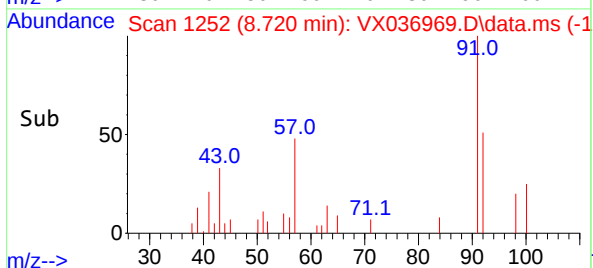
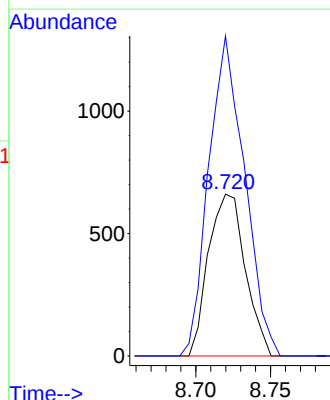
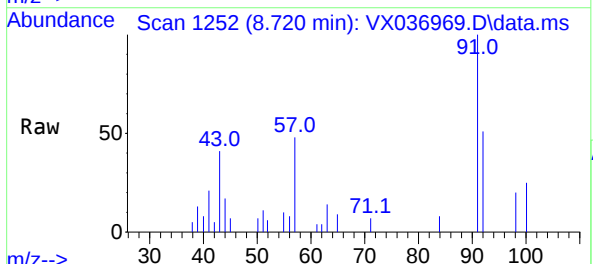
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

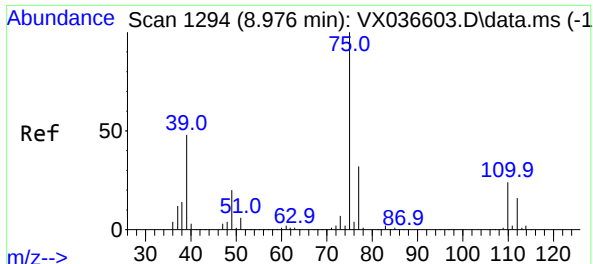
Tgt Ion: 43 Resp: 118969
Ion Ratio Lower Upper
43 100
58 0.0 30.4 45.6#



#52
Toluene
Concen: 0.280 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 92 Resp: 1131
Ion Ratio Lower Upper
92 100
91 193.2 134.2 201.2





#53

t-1,3-Dichloropropene

Concen: 0.288 ug/l

RT: 8.951 min Scan# 11

Delta R.T. -0.024 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

Instrument :

MSVOA_X

ClientSampleId :

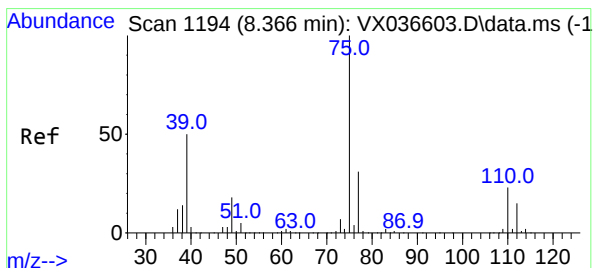
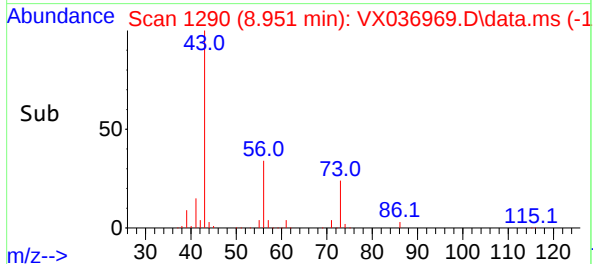
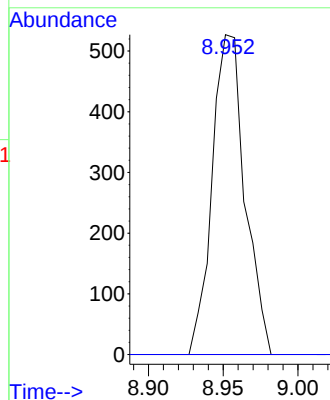
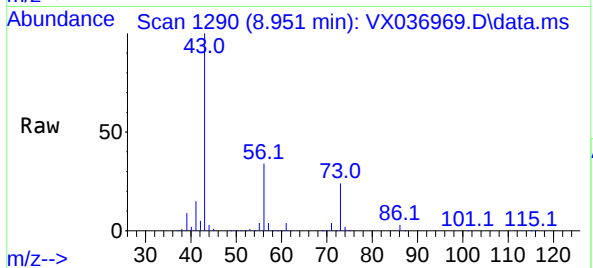
PNNL-APM2-0811-2

Tgt Ion: 75 Resp: 805

Ion Ratio Lower Upper

75 100

77 0.0 25.7 38.5#



#54

cis-1,3-Dichloropropene

Concen: 16.832 ug/l

RT: 8.549 min Scan# 1224

Delta R.T. 0.183 min

Lab File: VX036969.D

Acq: 14 Aug 2023 17:00

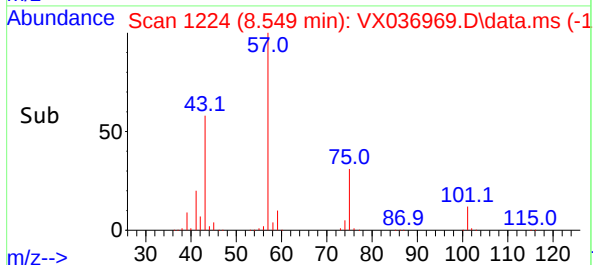
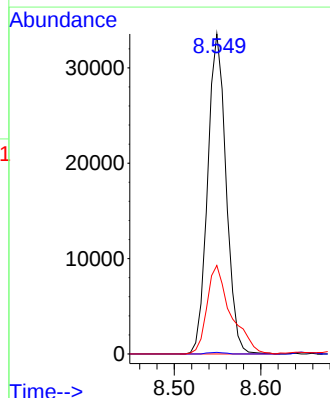
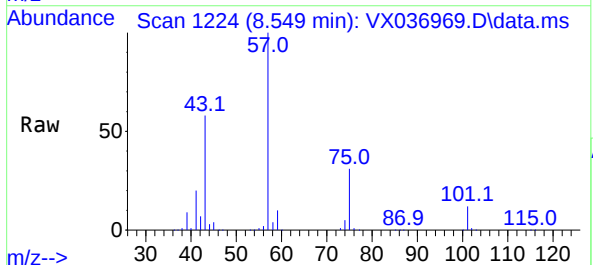
Tgt Ion: 75 Resp: 49646

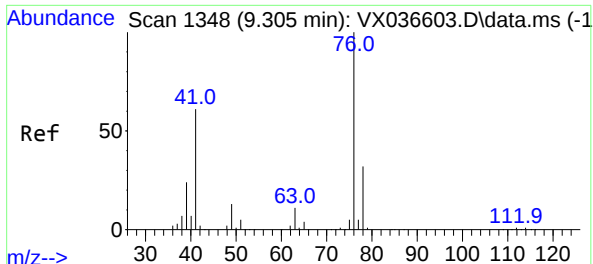
Ion Ratio Lower Upper

75 100

77 0.5 25.3 37.9#

39 27.7 46.7 70.1#

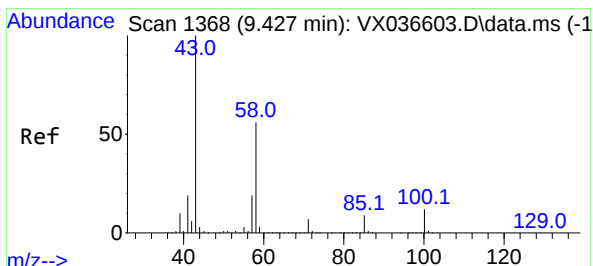
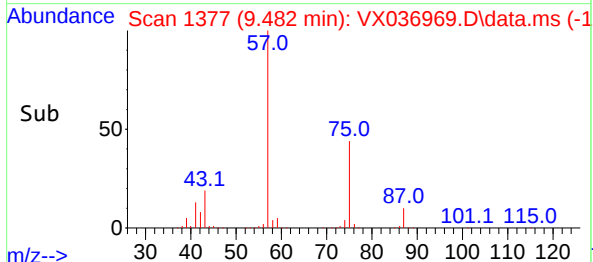
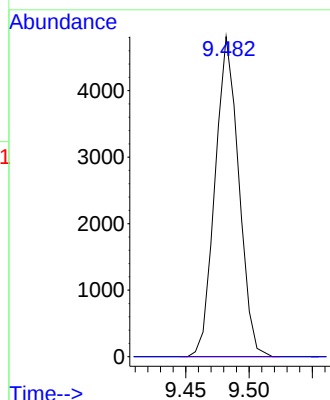
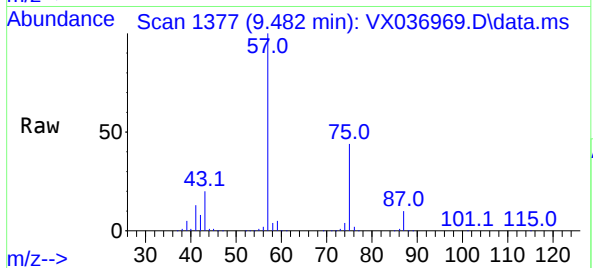




#57
1,3-Dichloropropane
Concen: 2.214 ug/l
RT: 9.482 min Scan# 11
Delta R.T. 0.177 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

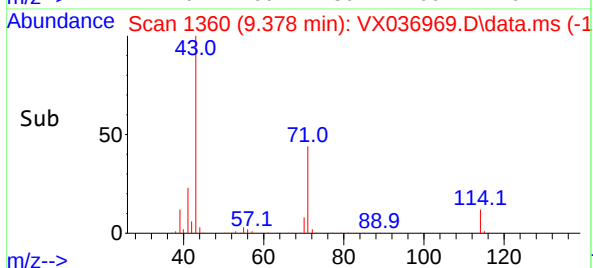
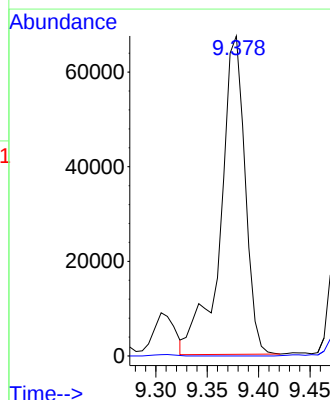
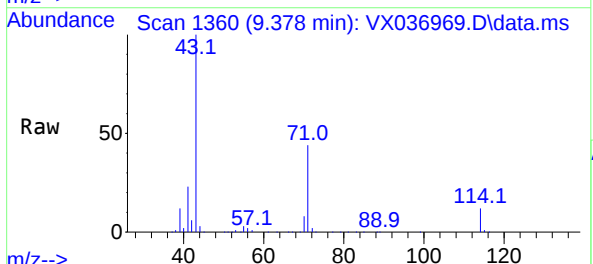
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

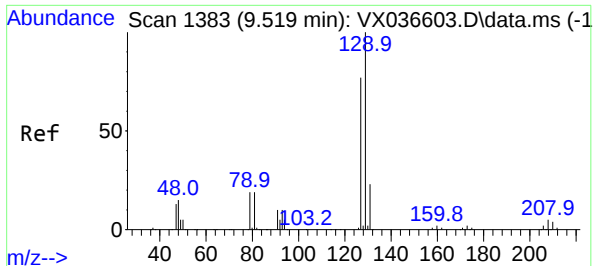
Tgt Ion: 76 Resp: 6262
Ion Ratio Lower Upper
76 100
78 0.0 26.1 39.1#



#59
2-Hexanone
Concen: 62.883 ug/l
RT: 9.378 min Scan# 1360
Delta R.T. -0.049 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 43 Resp: 111512
Ion Ratio Lower Upper
43 100
58 0.0 26.2 78.5#

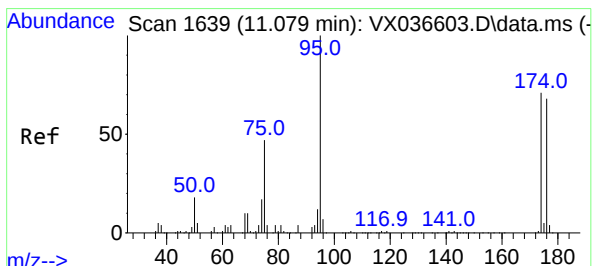
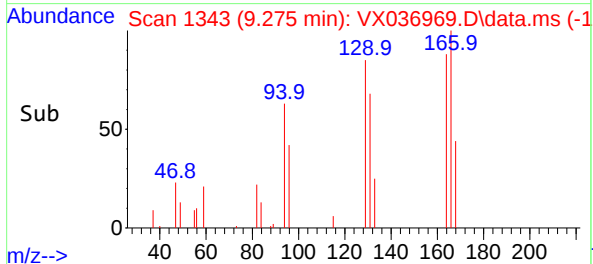
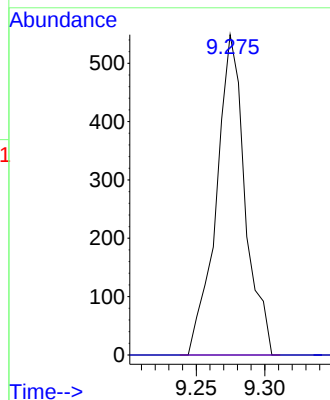
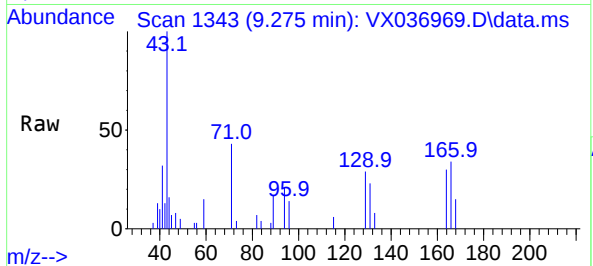




#60
Dibromochloromethane
Concen: 0.430 ug/l
RT: 9.275 min Scan# 11
Delta R.T. -0.244 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

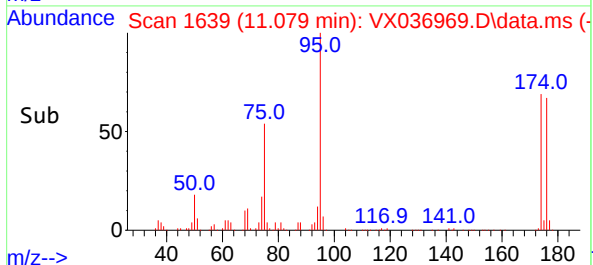
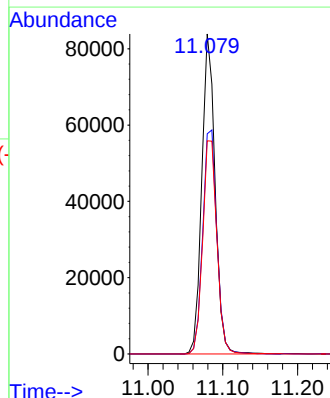
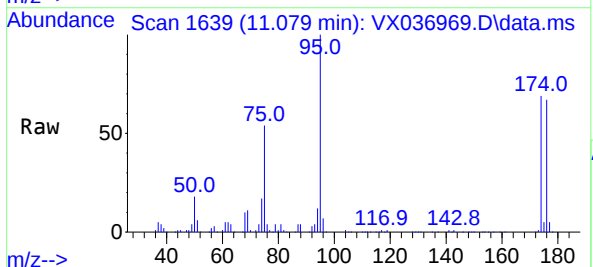
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

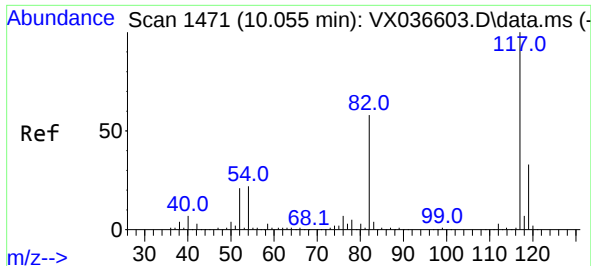
Tgt Ion:129 Resp: 803
Ion Ratio Lower Upper
129 100
127 0.0 38.8 116.4#



#62
4-Bromofluorobenzene
Concen: 52.002 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 95 Resp: 103447
Ion Ratio Lower Upper
95 100
174 74.4 0.0 135.6
176 71.6 0.0 131.0

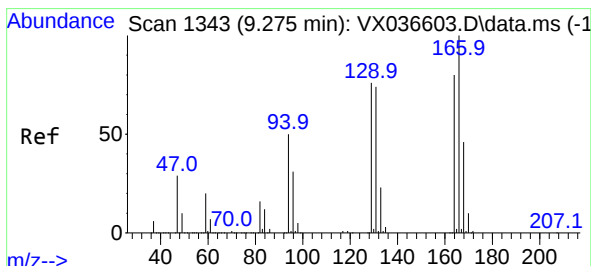
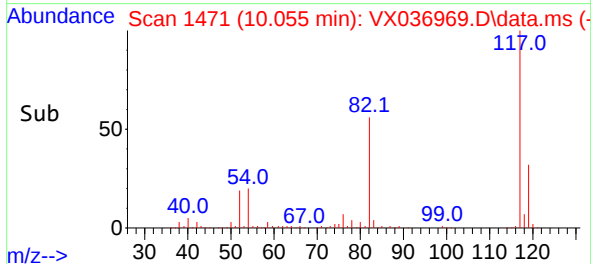
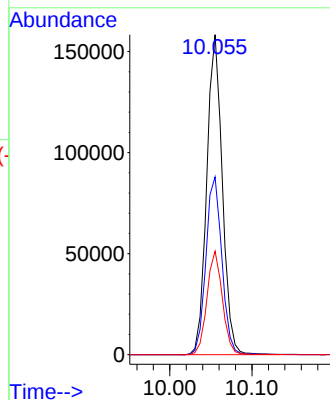
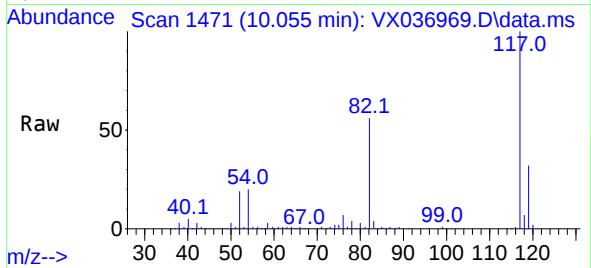




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

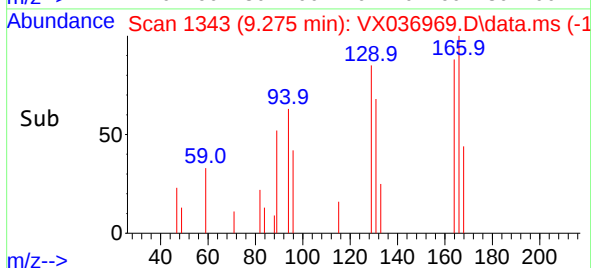
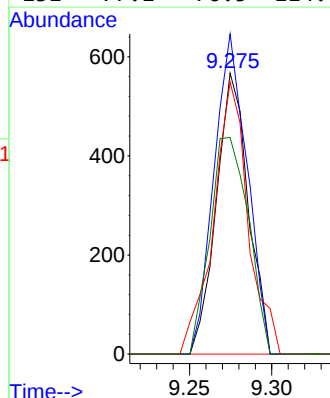
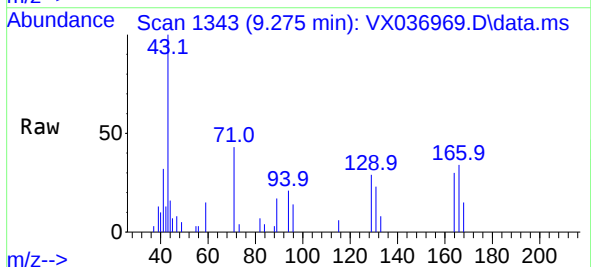
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

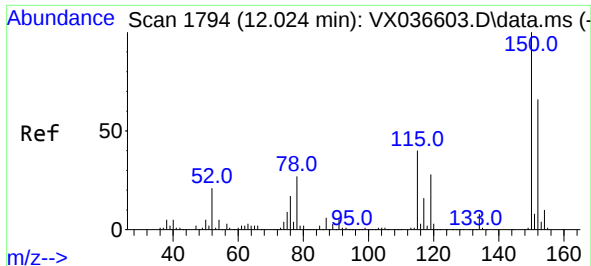
Tgt Ion:117 Resp: 208411
Ion Ratio Lower Upper
117 100
82 55.5 46.2 69.4
119 32.3 25.5 38.3



#64
Tetrachloroethene
Concen: 0.493 ug/l
RT: 9.275 min Scan# 1343
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion:164 Resp: 766
Ion Ratio Lower Upper
164 100
166 113.9 102.7 154.1
129 96.8 80.4 120.6
131 77.1 76.5 114.7

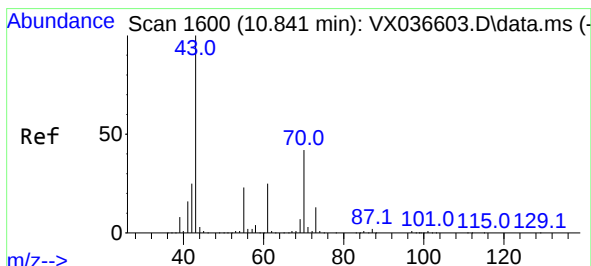
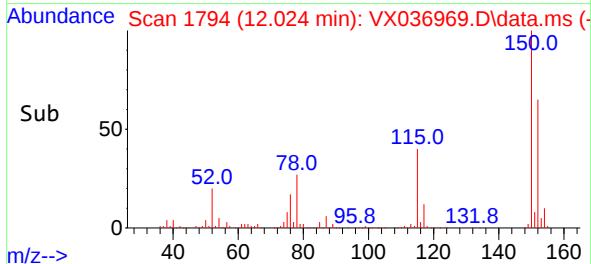
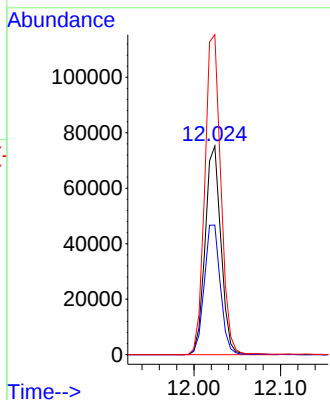
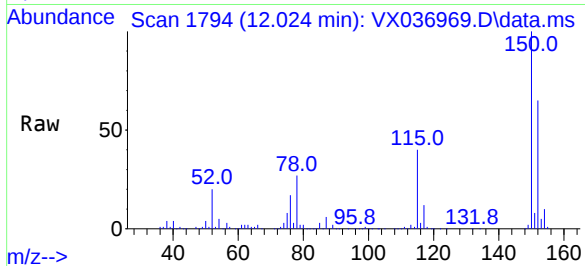




#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.024 min Scan# 11
Delta R.T. -0.000 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

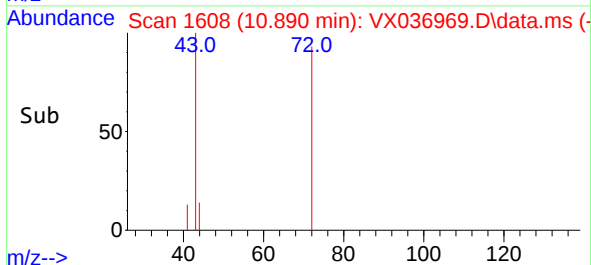
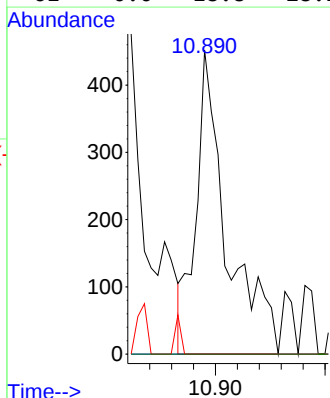
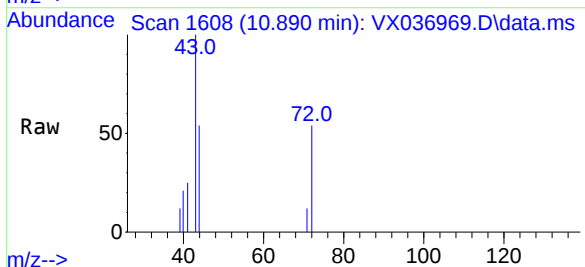
Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

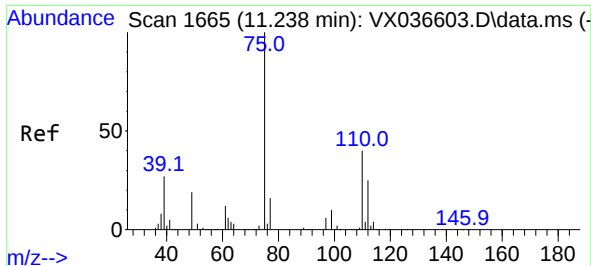
Tgt Ion:152 Resp: 95145
Ion Ratio Lower Upper
152 100
115 63.7 43.3 129.9
150 156.0 0.0 345.0



#74
N-ethyl acetate
Concen: 0.240 ug/l
RT: 10.890 min Scan# 1608
Delta R.T. 0.049 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 43 Resp: 883
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#

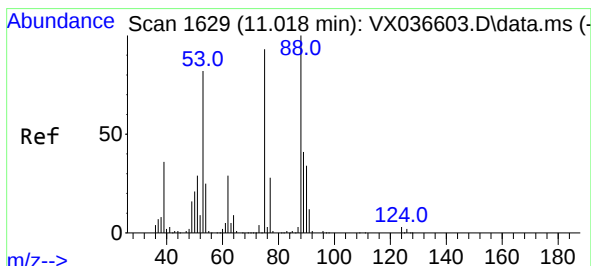
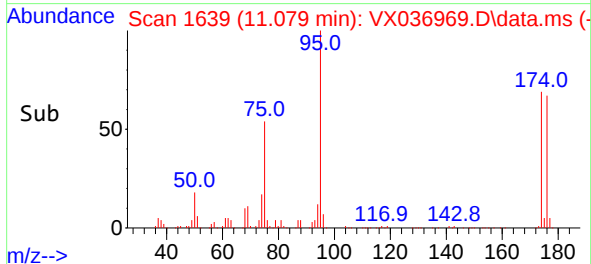
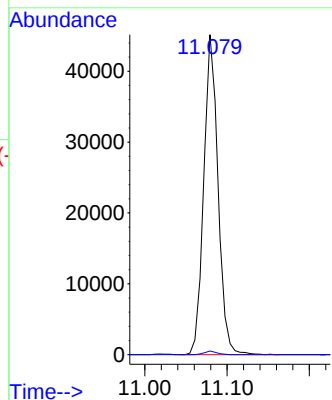
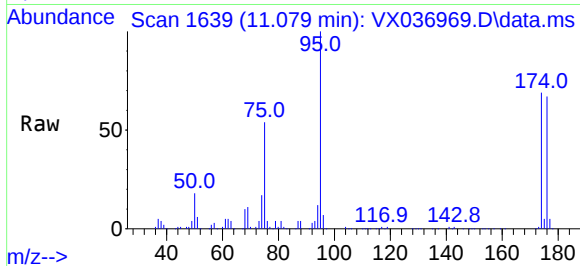




#76
1,2,3-Trichloropropane
Concen: 24.285 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.159 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Instrument :
MSVOA_X
ClientSampleId :
PNNL-APM2-0811-2

Tgt Ion: 75 Resp: 54347
Ion Ratio Lower Upper
75 100
77 1.0 19.1 57.5#



#81
trans-1,4-Dichloro-2-butene
Concen: 55.043 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.061 min
Lab File: VX036969.D
Acq: 14 Aug 2023 17:00

Tgt Ion: 75 Resp: 54347
Ion Ratio Lower Upper
75 100
53 0.0 90.5 135.7#
89 0.0 36.9 55.3#

