

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\DATA\VW091525\
 Data File : VW039088.D
 Acq On : 15 Sep 2025 18:34
 Operator : SY/MD
 Sample : Q3084-07
 Misc : 25.0mL/MSVOA_V/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 PMW-3(20250910)

Quant Time: Sep 16 02:26:59 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVTR091525WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Tue Sep 16 02:04:20 2025
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.535	114	389086	5.000	ug/L	0.00
28) Chlorobenzene-d5	8.776	117	389482	5.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.175	152	169827	5.000	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.291	65	145541	4.743	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	94.800%
7) Chloroethane-d5	1.545	69	134557	5.060	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	101.200%
11) 1,1-Dichloroethene-d2	2.073	65	63998	4.378	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	87.600%
20) 2-Butanone-d5	3.793	46	221181	48.528	ug/L	-0.01
Spiked Amount	50.000	Range	40 - 130	Recovery	=	97.060%
24) Chloroform-d	4.253	84	301259	5.055	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	101.000%
26) 1,2-Dichloroethane-d4	4.947	65	129805	5.172	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	103.400%
32) Benzene-d6	4.963	84	535740	5.027	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	100.600%
36) 1,2-Dichloropropane-d6	5.989	67	169710	5.328	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	106.600%
41) Toluene-d8	7.240	98	419250	4.394	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	87.800%
43) trans-1,3-Dichloroprop...	7.555	79	53885	4.625	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	92.400%
46) 2-Hexanone-d5	8.014	63	184850	49.004	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	98.000%
56) 1,1,2,2-Tetrachloroeth...	10.143	84	115784	5.091	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	101.800%
66) 1,2-Dichlorobenzene-d4	11.548	152	160217	5.861	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	117.200%

Target Compounds

						Qvalue
5) Vinyl chloride	1.294	62	79993	1.878	ug/L #	1
12) 1,1-Dichloroethene	2.085	96	10772	0.337	ug/L #	1
16) Methylene chloride	2.458	84	9993	0.278	ug/L	96
18) trans-1,2-Dichloroethene	2.712	96	31309	0.963	ug/L	95
19) 1,1-Dichloroethane	3.118	63	1198138	20.088	ug/L	98
22) cis-1,2-Dichloroethene	3.822	96	382172	12.041	ug/L	99
27) 1,2-Dichloroethane	5.047	62	155332	4.899	ug/L	96
30) Cyclohexane	4.581	56	7933	0.167	ug/L #	68
33) Benzene	5.015	78	261896	2.136	ug/L	100
34) Trichloroethene	5.838	95	67958	2.056	ug/L	98
35) Methylcyclohexane	6.050	83	12239	0.237	ug/L	93
42) Toluene	7.330	91	14229	0.111	ug/L	83
47) Tetrachloroethene	7.902	164	28679	1.110	ug/L	97
51) Chlorobenzene	8.805	112	609523	7.391	ug/L	100
52) Ethylbenzene	8.950	91	16402	0.125	ug/L	99
60) Isopropylbenzene	9.863	105	24716	0.218	ug/L #	82
63) 1,2,4-Trimethylbenzene	10.847	105	16873	0.197	ug/L	100
64) 1,3-Dichlorobenzene	11.111	146	84929	1.532	ug/L	97
65) 1,4-Dichlorobenzene	11.198	146	142379	2.483	ug/L	95

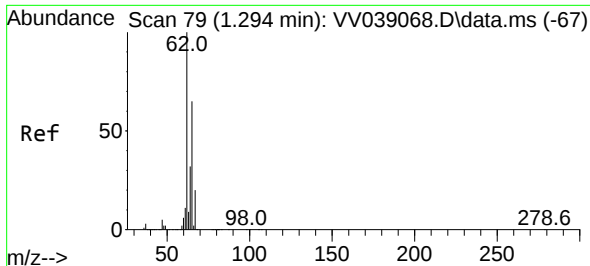
Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\DATA\VV091525\
Data File : VV039088.D
Acq On : 15 Sep 2025 18:34
Operator : SY/MD
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PMW-3(20250910)

Quant Time: Sep 16 02:26:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVTR091525WMA.M
Quant Title : TRACE VOA SFAM1.0
QLast Update : Tue Sep 16 02:04:20 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67) 1,2-Dichlorobenzene	11.567	146	7305	0.149	ug/L	90
70) 1,2,4-trichlorobenzene	13.191	180	14747	0.539	ug/L #	75

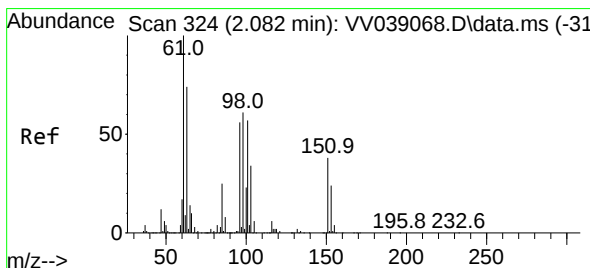
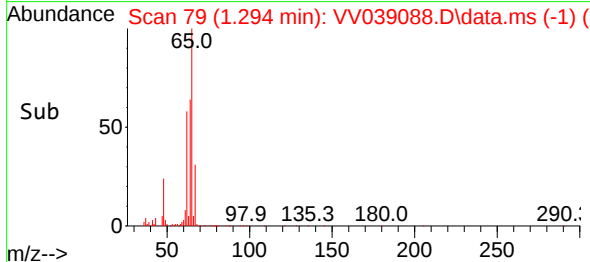
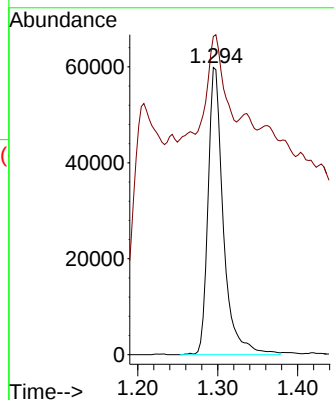
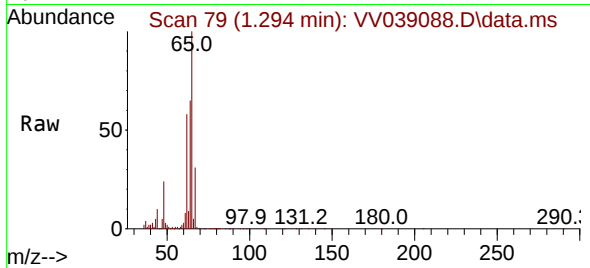
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#5
 Vinyl chloride
 Concen: 1.878 ug/L
 RT: 1.294 min Scan# 79
 Delta R.T. 0.000 min
 Lab File: VV039088.D
 Acq: 15 Sep 2025 18:34

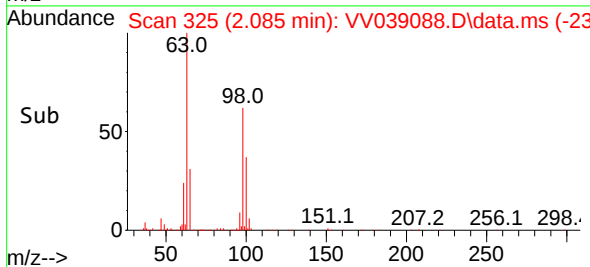
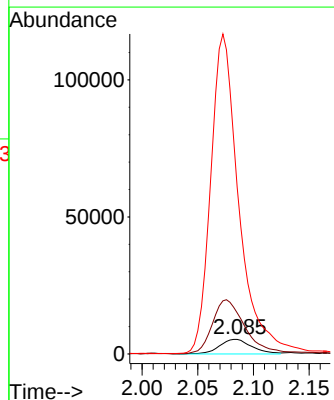
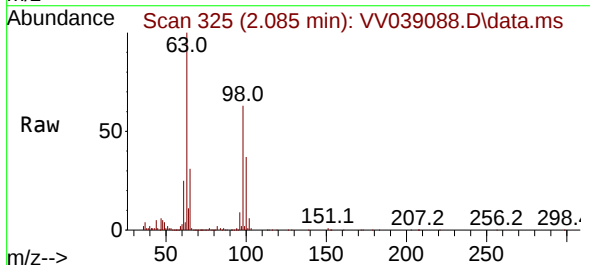
Instrument :
 MSVOA_V
 ClientSampleId :
 PMW-3(20250910)

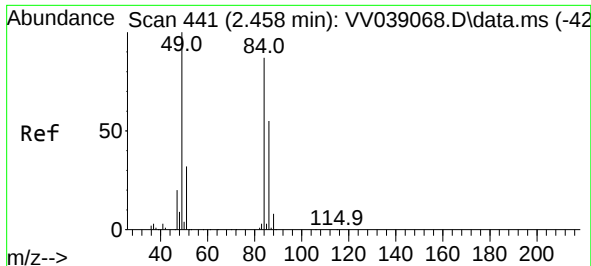
Tgt Ion: 62 Resp: 79993
 Ion Ratio Lower Upper
 62 100
 64 110.8 22.4 41.6#



#12
 1,1-Dichloroethene
 Concen: 0.337 ug/L
 RT: 2.085 min Scan# 325
 Delta R.T. 0.003 min
 Lab File: VV039088.D
 Acq: 15 Sep 2025 18:34

Tgt Ion: 96 Resp: 10772
 Ion Ratio Lower Upper
 96 100
 61 282.1 124.7 231.7#
 63 1144.3 93.5 173.7#

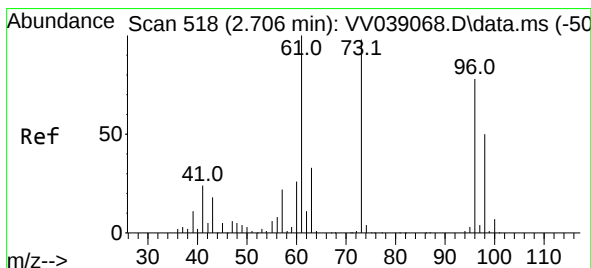
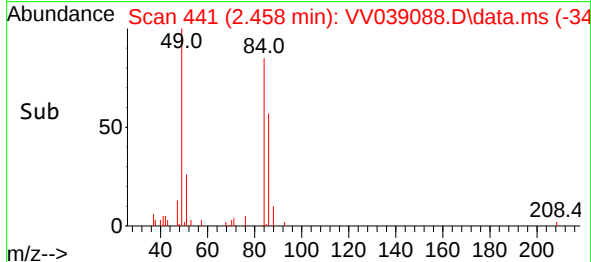
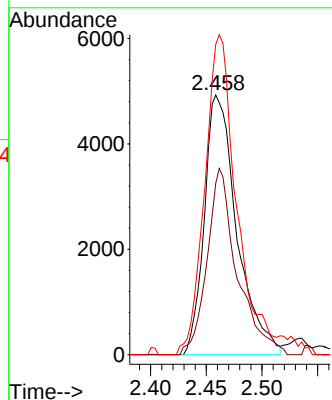
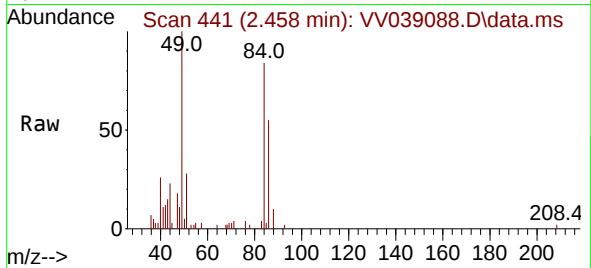




#16
Methylene chloride
Concen: 0.278 ug/L
RT: 2.458 min Scan# 441
Delta R.T. 0.000 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

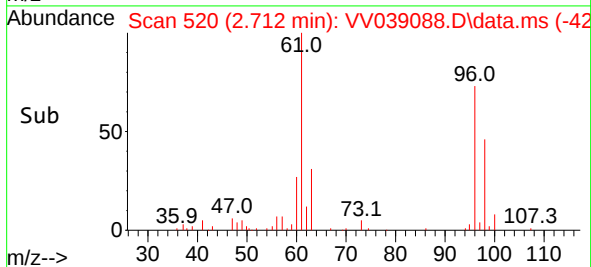
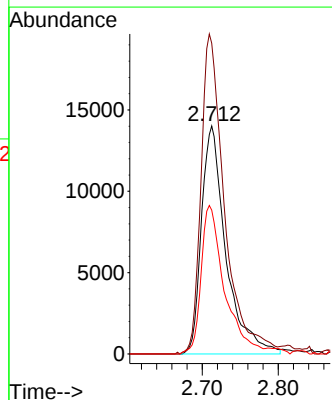
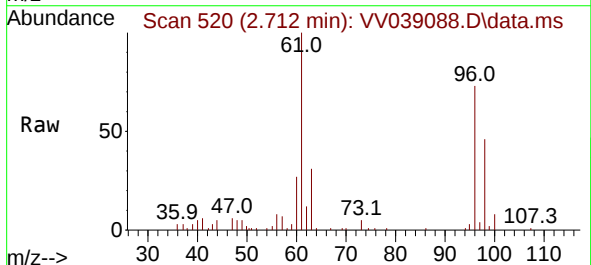
Instrument :
MSVOA_V
ClientSampleId :
PMW-3(20250910)

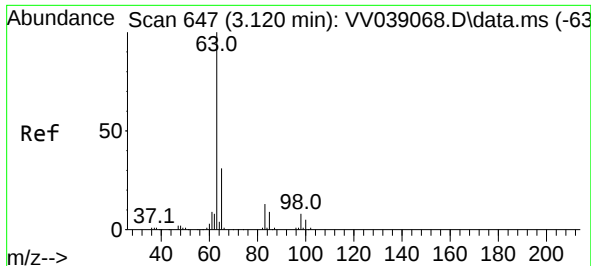
Tgt Ion:	84	Resp:	9993
Ion	Ratio	Lower	Upper
84	100		
86	65.9	44.2	82.2
49	119.5	80.6	149.6



#18
trans-1,2-Dichloroethene
Concen: 0.963 ug/L
RT: 2.712 min Scan# 520
Delta R.T. 0.007 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

Tgt Ion:	96	Resp:	31309
Ion	Ratio	Lower	Upper
96	100		
61	136.3	89.7	166.5
98	63.1	44.9	83.3





#19

1,1-Dichloroethane

Concen: 20.088 ug/L

RT: 3.118 min Scan# 64

Delta R.T. -0.003 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

PMW-3(20250910)

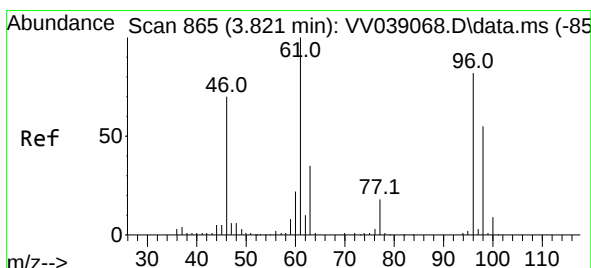
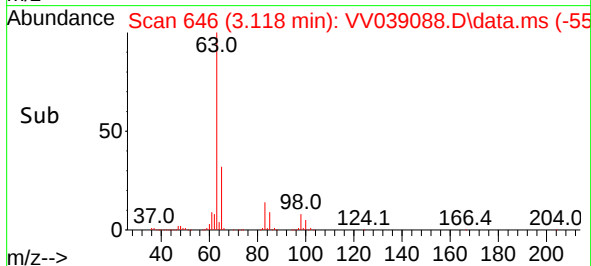
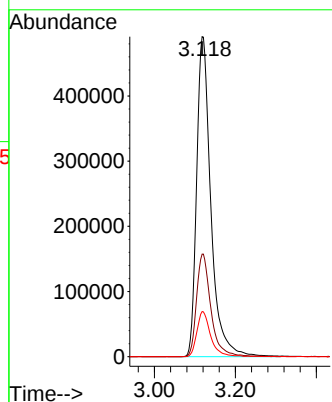
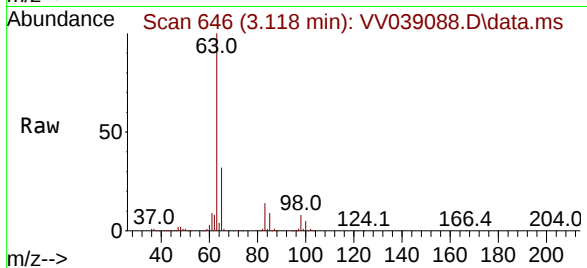
Tgt Ion: 63 Resp: 1198138

Ion Ratio Lower Upper

63 100

65 32.1 21.5 39.9

83 14.1 9.2 17.2



#22

cis-1,2-Dichloroethene

Concen: 12.041 ug/L

RT: 3.822 min Scan# 865

Delta R.T. 0.000 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

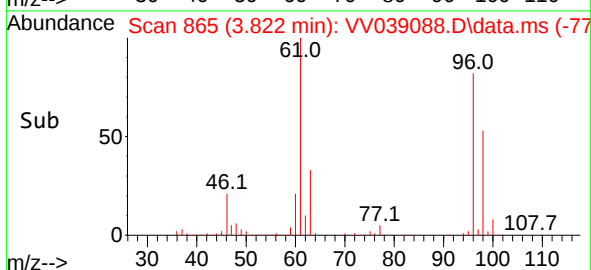
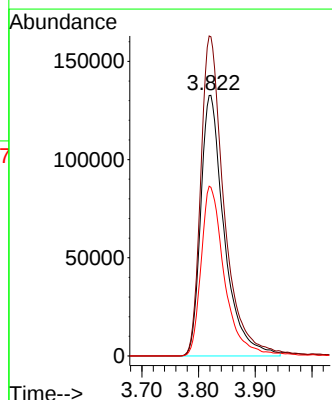
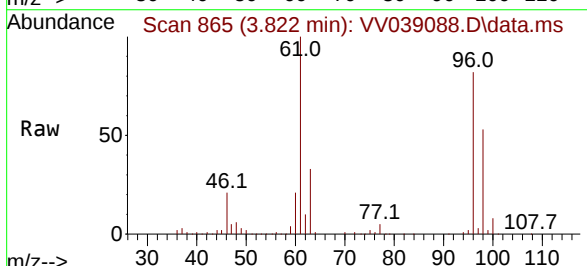
Tgt Ion: 96 Resp: 382172

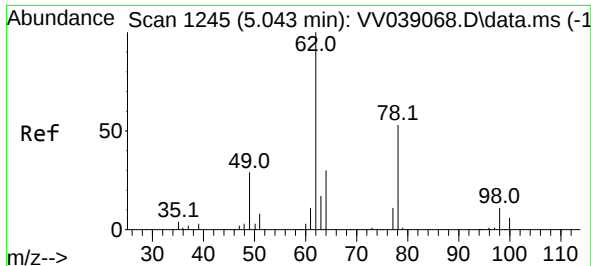
Ion Ratio Lower Upper

96 100

61 122.5 85.4 158.6

98 64.7 46.6 86.6





#27

1,2-Dichloroethane

Concen: 4.899 ug/L

RT: 5.047 min Scan# 1101

Delta R.T. 0.003 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

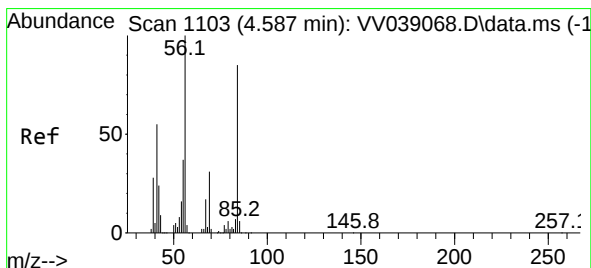
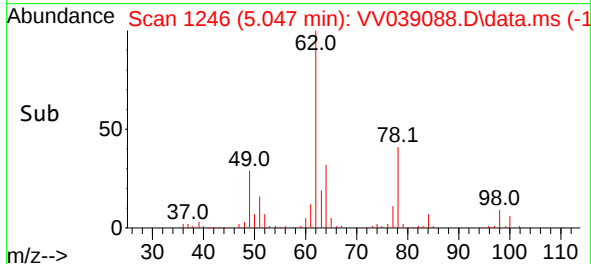
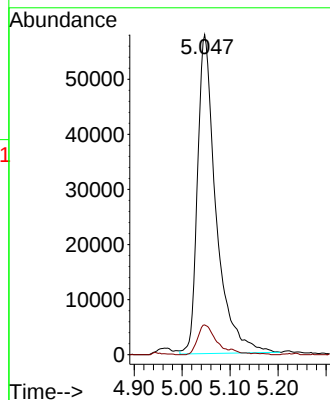
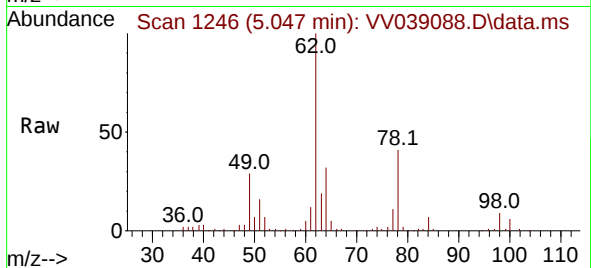
PMW-3(20250910)

Tgt Ion: 62 Resp: 155332

Ion Ratio Lower Upper

62 100

98 9.3 8.6 12.8



#30

Cyclohexane

Concen: 0.167 ug/L

RT: 4.581 min Scan# 1101

Delta R.T. -0.006 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

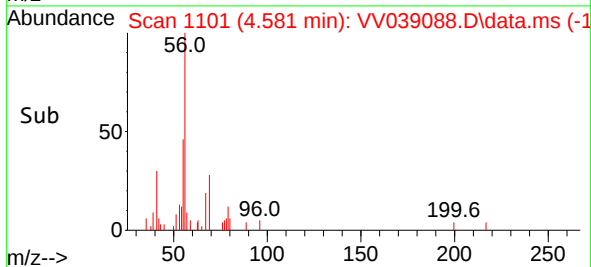
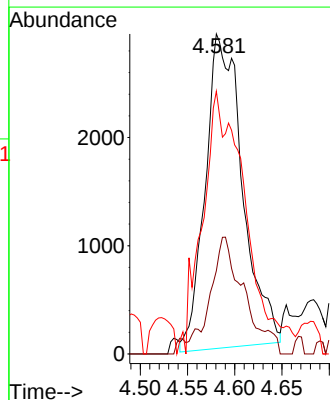
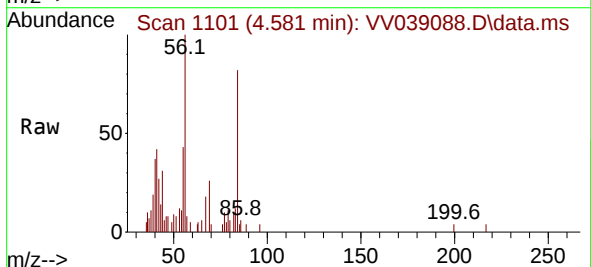
Tgt Ion: 56 Resp: 7933

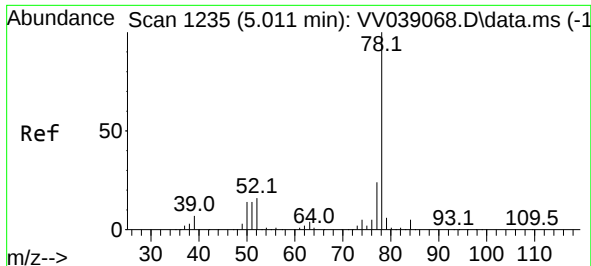
Ion Ratio Lower Upper

56 100

69 34.1 25.0 37.6

84 49.8 71.3 106.9#

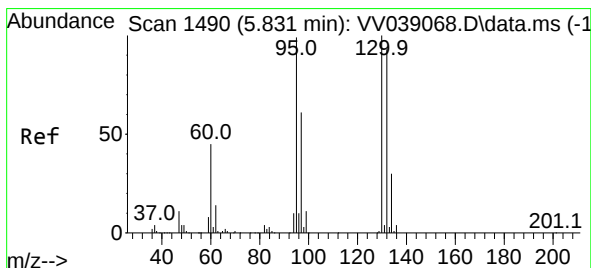
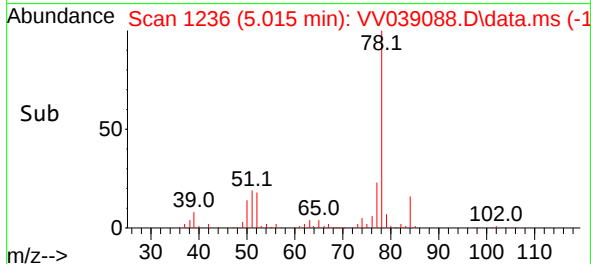
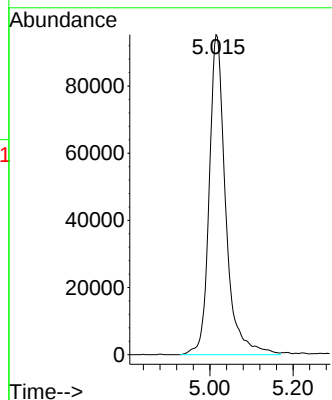
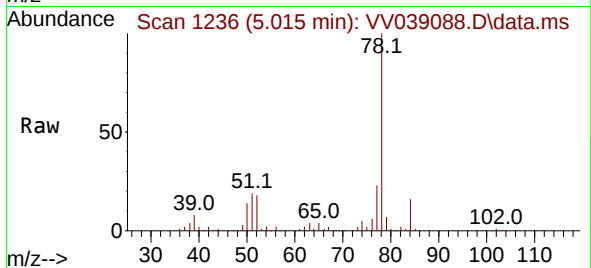




#33
Benzene
Concen: 2.136 ug/L
RT: 5.015 min Scan# 11
Delta R.T. 0.003 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

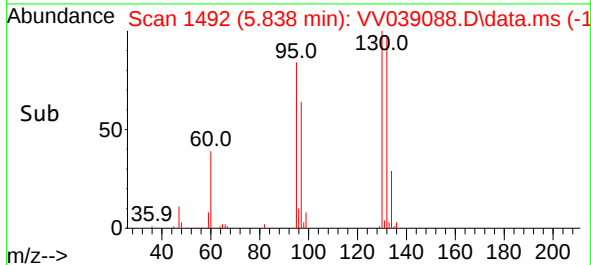
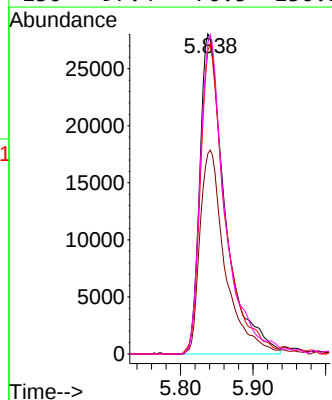
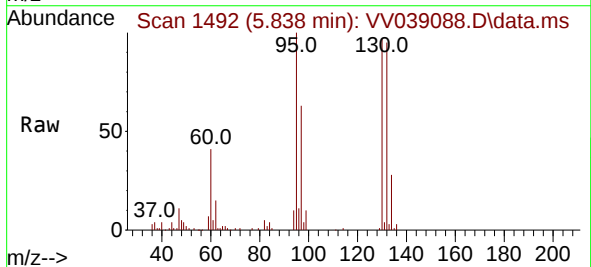
Instrument :
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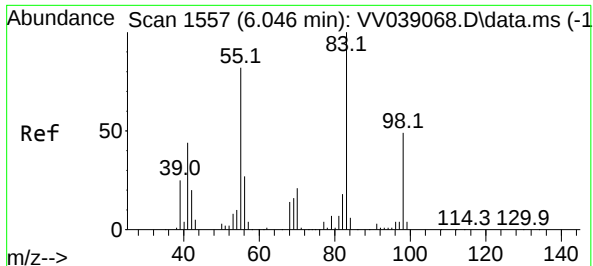
Tgt Ion: 78 Resp: 261896



#34
Trichloroethene
Concen: 2.056 ug/L
RT: 5.838 min Scan# 1492
Delta R.T. 0.007 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

Tgt Ion: 95 Resp: 67958
Ion Ratio Lower Upper
95 100
97 62.7 43.3 80.5
132 94.9 65.5 121.7
130 97.4 70.5 130.9





#35

Methylcyclohexane

Concen: 0.237 ug/L

RT: 6.050 min Scan# 1

Delta R.T. 0.003 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

PMW-3(20250910)

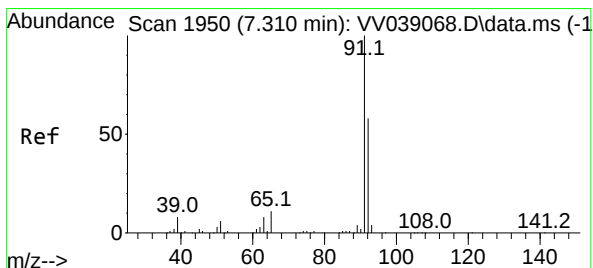
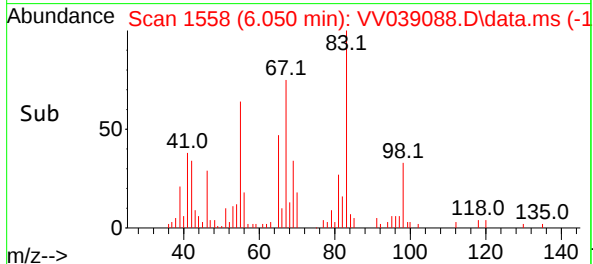
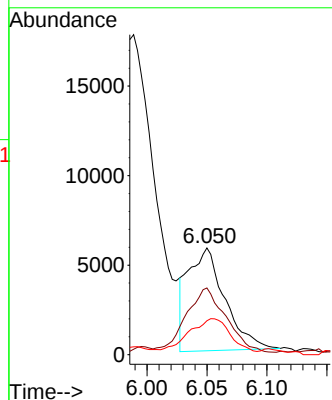
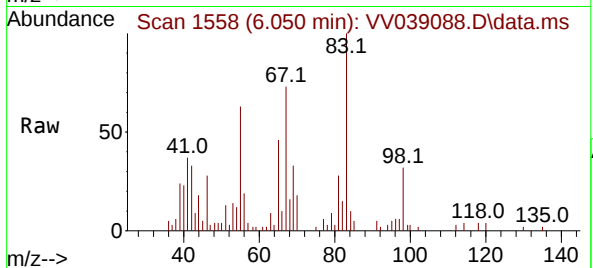
Tgt Ion: 83 Resp: 12239

Ion Ratio Lower Upper

83 100

55 74.7 61.4 92.2

98 38.6 38.2 57.4



#42

Toluene

Concen: 0.111 ug/L

RT: 7.330 min Scan# 1956

Delta R.T. 0.020 min

Lab File: VV039088.D

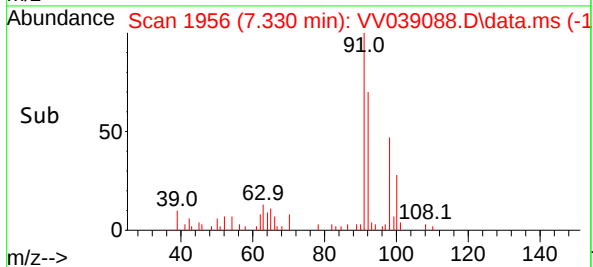
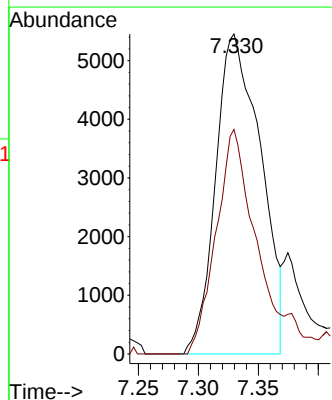
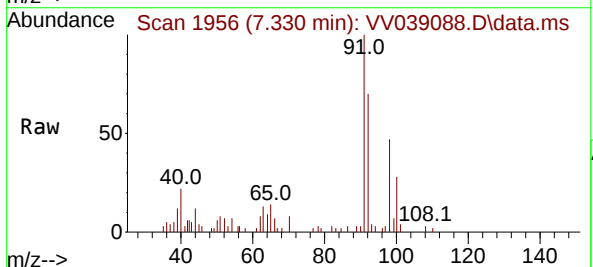
Acq: 15 Sep 2025 18:34

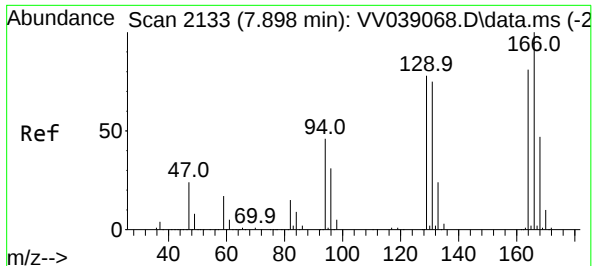
Tgt Ion: 91 Resp: 14229

Ion Ratio Lower Upper

91 100

92 70.2 40.5 75.1





#47

Tetrachloroethene

Concen: 1.110 ug/L

RT: 7.902 min Scan# 2134

Delta R.T. 0.003 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

PMW-3(20250910)

Tgt Ion:164 Resp: 28679

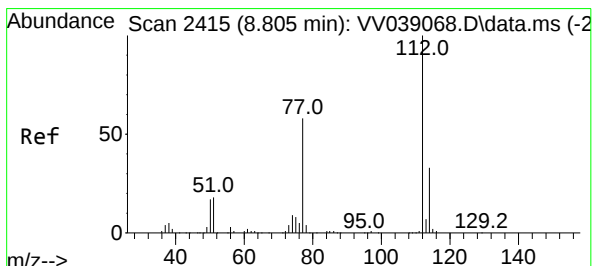
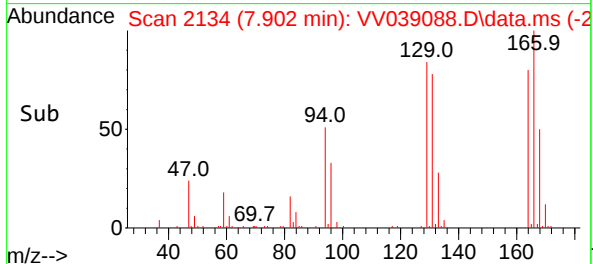
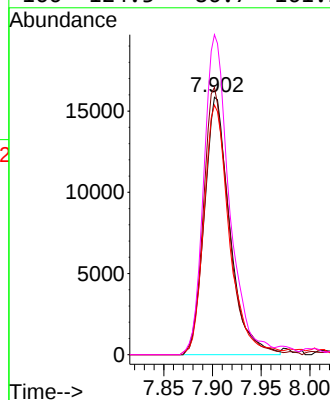
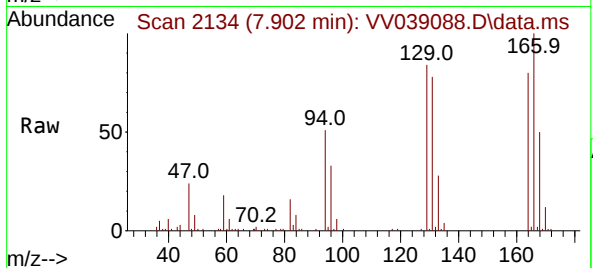
Ion Ratio Lower Upper

164 100

129 103.9 68.0 126.4

131 97.0 65.4 121.4

166 124.3 86.7 161.1



#51

Chlorobenzene

Concen: 7.391 ug/L

RT: 8.805 min Scan# 2415

Delta R.T. 0.000 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

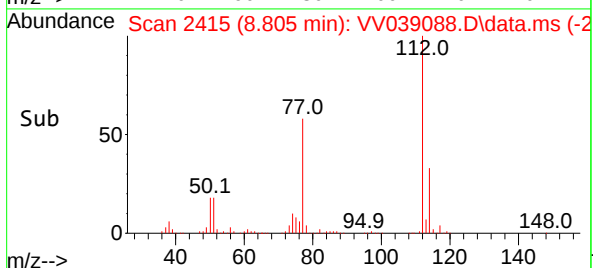
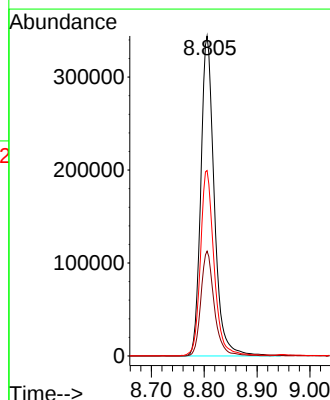
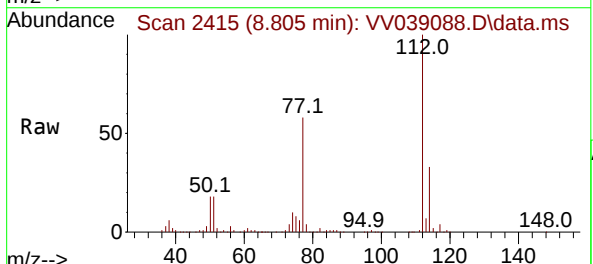
Tgt Ion:112 Resp: 609523

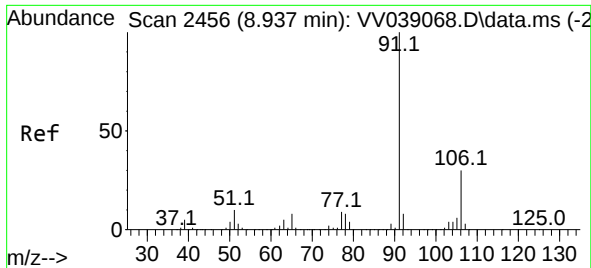
Ion Ratio Lower Upper

112 100

114 32.8 23.0 42.6

77 57.9 46.6 69.8

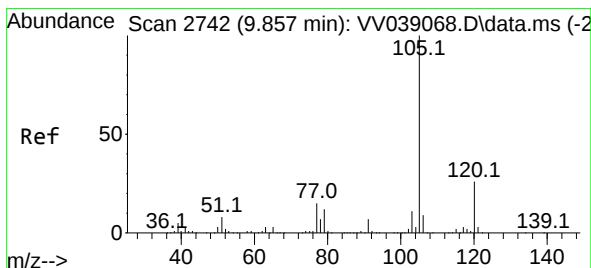
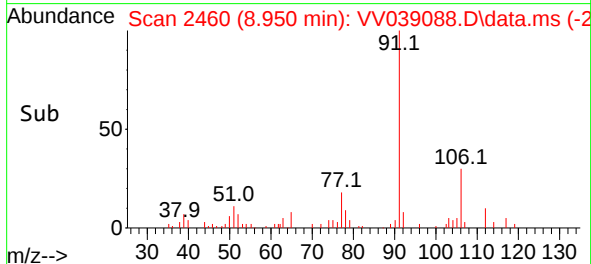
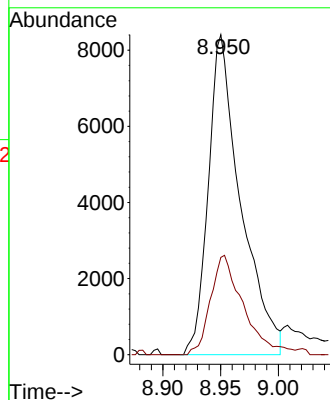
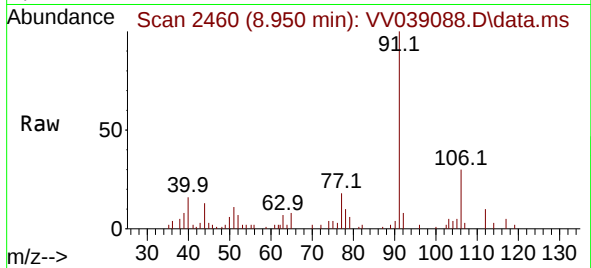




#52
Ethylbenzene
Concen: 0.125 ug/L
RT: 8.950 min Scan# 2456
Delta R.T. 0.013 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

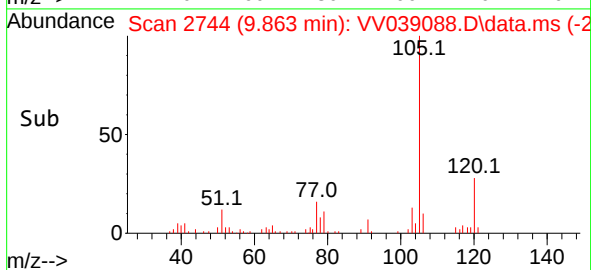
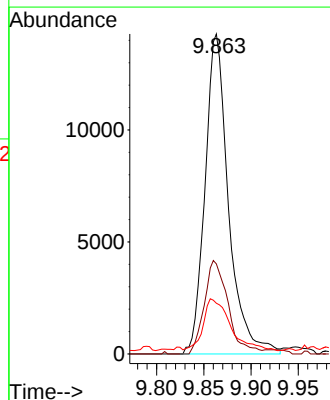
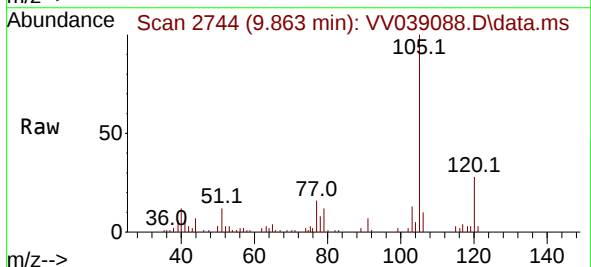
Instrument :
MSVOA_V
ClientSampleId :
PMW-3(20250910)

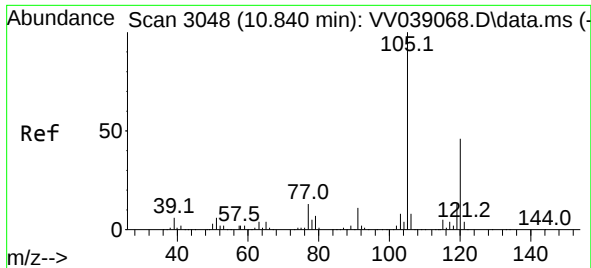
Tgt Ion: 91 Resp: 16402
Ion Ratio Lower Upper
91 100
106 30.4 20.8 38.6



#60
Isopropylbenzene
Concen: 0.218 ug/L
RT: 9.863 min Scan# 2744
Delta R.T. 0.007 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

Tgt Ion: 105 Resp: 24716
Ion Ratio Lower Upper
105 100
120 29.4 20.8 31.2
77 0.0 12.5 18.7#

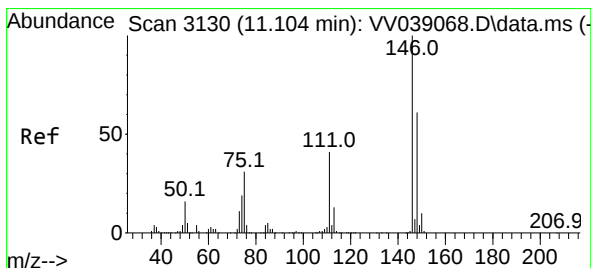
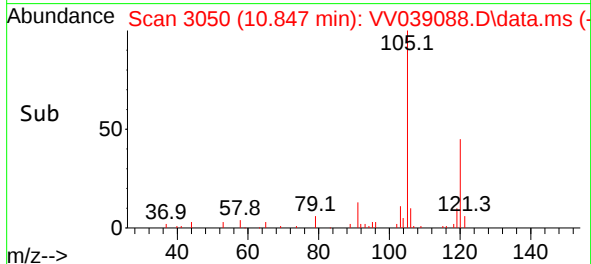
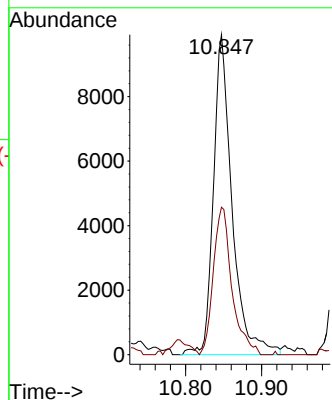
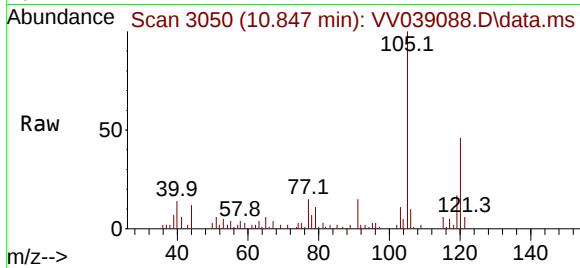




#63
1,2,4-Trimethylbenzene
Concen: 0.197 ug/L
RT: 10.847 min Scan# 3048
Delta R.T. 0.007 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

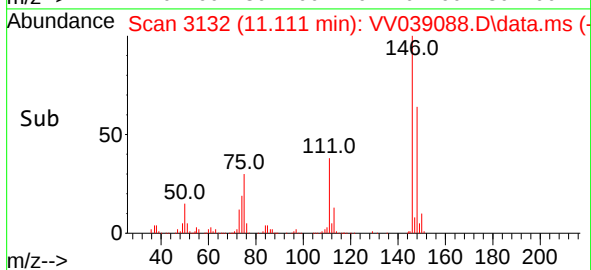
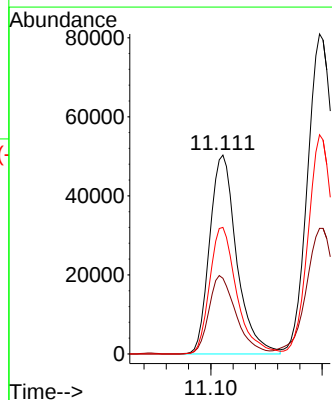
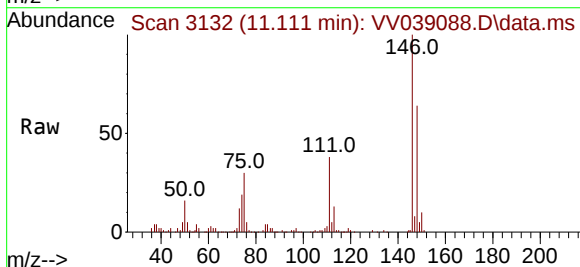
Instrument :
MSVOA_V
ClientSampleId :
PMW-3(20250910)

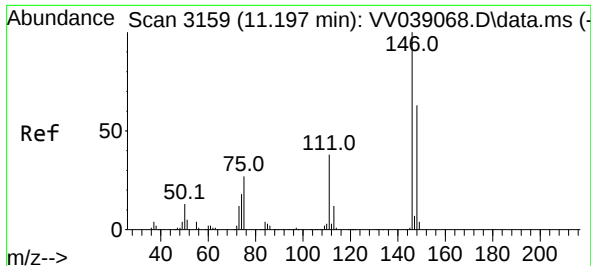
Tgt Ion:105 Resp: 16873
Ion Ratio Lower Upper
105 100
120 45.9 36.6 54.8



#64
1,3-Dichlorobenzene
Concen: 1.532 ug/L
RT: 11.111 min Scan# 3132
Delta R.T. 0.007 min
Lab File: VV039088.D
Acq: 15 Sep 2025 18:34

Tgt Ion:146 Resp: 84929
Ion Ratio Lower Upper
146 100
111 38.1 28.3 52.7
148 63.6 42.9 79.7





#65

1,4-Dichlorobenzene

Concen: 2.483 ug/L

RT: 11.198 min Scan# 3159

Delta R.T. 0.000 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

PMW-3(20250910)

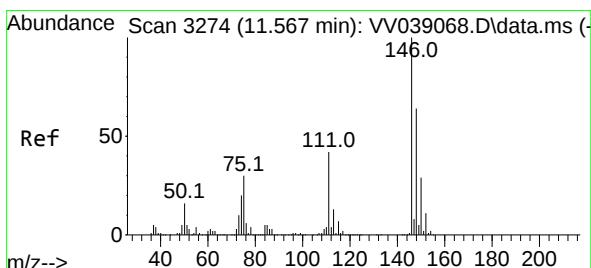
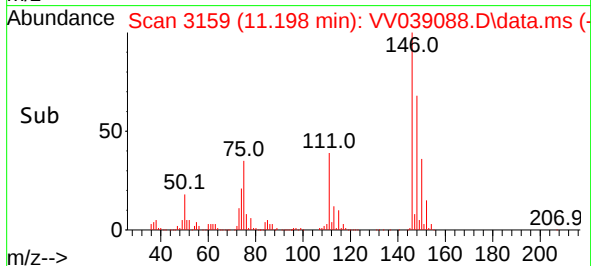
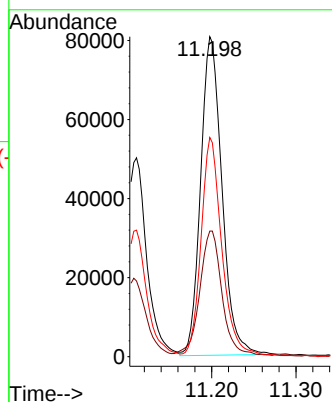
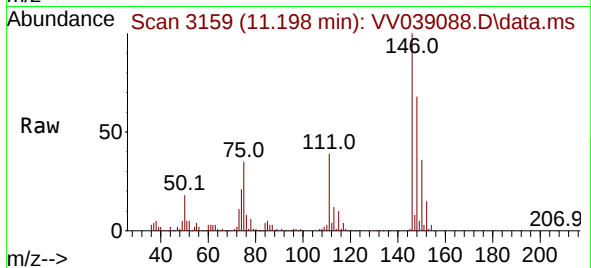
Tgt Ion:146 Resp: 142379

Ion Ratio Lower Upper

146 100

111 39.2 27.2 50.6

148 68.5 43.8 81.4



#67

1,2-Dichlorobenzene

Concen: 0.149 ug/L

RT: 11.567 min Scan# 3274

Delta R.T. 0.000 min

Lab File: VV039088.D

Acq: 15 Sep 2025 18:34

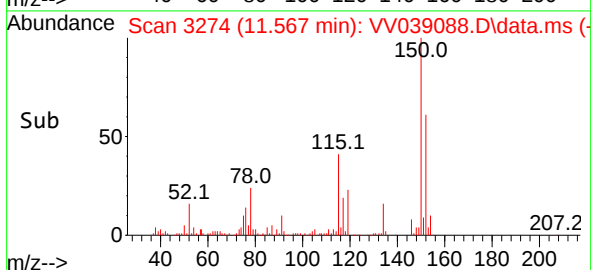
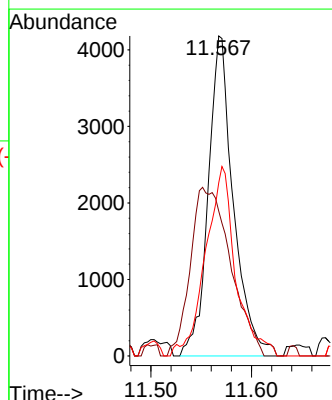
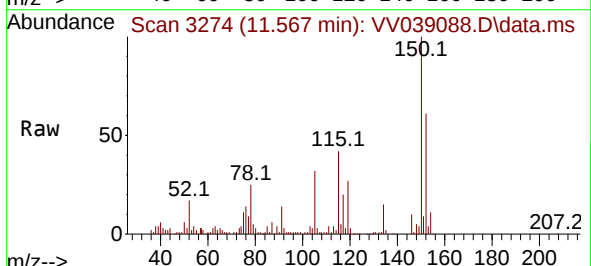
Tgt Ion:146 Resp: 7305

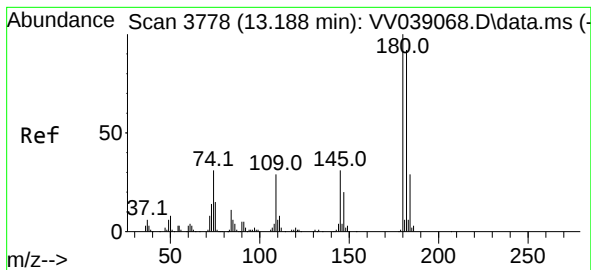
Ion Ratio Lower Upper

146 100

111 45.2 33.4 50.2

148 54.1 51.1 76.7





#70

1,2,4-trichlorobenzene

Concen: 0.539 ug/L

RT: 13.191 min Scan# 31

Delta R.T. 0.003 min

Lab File: VV039088.D

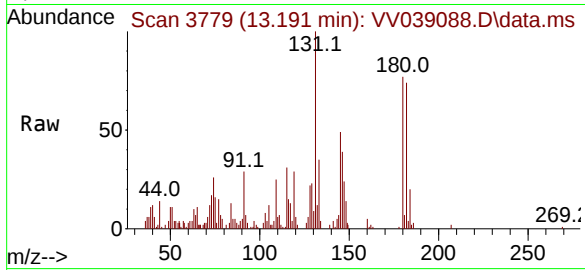
Acq: 15 Sep 2025 18:34

Instrument :

MSVOA_V

ClientSampleId :

PMW-3(20250910)



Tgt Ion:	180	Resp:	14747
Ion Ratio	Lower	Upper	
180	100		
182	102.4	73.2	109.8
145	66.9	25.0	37.4#

