

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VW061324\
 Data File : VW036068.D
 Acq On : 13 Jun 2024 17:12
 Operator : SY/MD
 Sample : P2775-17
 Misc : 5.01g/10.0mL/MSVOA_V/SOIL/B
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :

Quant Time: Jun 14 01:20:44 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVLM053024SMA.M
 Quant Title : VOC Analysis
 QLast Update : Fri Jun 14 01:10:24 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.532	114	361460	25.000	ug/L	0.00
28) Chlorobenzene-d5	8.783	117	341636	25.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.185	152	124902	25.000	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.272	65	107219	16.134	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	64.520%
7) Chloroethane-d5	1.526	69	108169	20.414	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	81.640%
11) 1,1-Dichloroethene-d2	2.050	65	53652	18.136	ug/L	0.00
Spiked Amount	25.000	Range	45 - 110	Recovery	=	72.560%
21) 2-Butanone-d5	3.873	46	5418	3.553	ug/L	0.03
Spiked Amount	50.000	Range	20 - 135	Recovery	=	7.100%#
24) Chloroform-d	4.246	84	251506	21.886	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	87.560%
26) 1,2-Dichloroethane-d4	4.940	65	129337	21.466	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	85.880%
32) Benzene-d6	4.957	84	415582	20.464	ug/L	0.00
Spiked Amount	25.000	Range	20 - 135	Recovery	=	81.840%
36) 1,2-Dichloropropane-d6	5.985	67	155003	24.238	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	96.960%
41) Toluene-d8	7.243	98	301548	16.829	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	67.320%
43) trans-1,3-Dichloroprop...	7.558	79	35726	13.625	ug/L	0.00
Spiked Amount	25.000	Range	30 - 135	Recovery	=	54.480%
47) 2-Hexanone-d5	8.043	63	12478	14.401	ug/L	0.01
Spiked Amount	50.000	Range	20 - 135	Recovery	=	28.800%
56) 1,1,2,2-Tetrachloroeth...	10.152	84	113446	23.739	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	94.960%
66) 1,2-Dichlorobenzene-d4	11.558	152	102315	22.338	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	89.360%

Target Compounds

						Qvalue
8) Chloroethane	1.542	64	2589	0.529	ug/L #	77
9) Trichlorofluoromethane	1.706	101	4355	0.445	ug/L	96
10) 1,1,2-Trichloro-1,2,2-...	2.060	101	3929	0.633	ug/L #	77
12) 1,1-Dichloroethene	2.060	96	3725	0.644	ug/L #	1
15) Methyl Acetate	2.400	43	1214	0.411	ug/L	94
16) Methylene chloride	2.442	84	54217	6.629	ug/L	100
17) trans-1,2-Dichloroethene	2.690	96	2575	0.419	ug/L	100
18) Methyl tert-butyl Ether	2.703	73	6360	0.461	ug/L #	90
19) 1,1-Dichloroethane	3.111	63	5944	0.508	ug/L	98
20) cis-1,2-Dichloroethene	3.841	96	2635	0.426	ug/L	100
23) Bromochloromethane	4.162	128	1392	0.449	ug/L	93
25) Chloroform	4.272	83	5848	0.486	ug/L	84
30) 1,1,1-Trichloroethane	4.506	97	4665	0.499	ug/L	97
31) Carbon tetrachloride	4.735	117	3866	0.472	ug/L	96
38) Bromodichloromethane	6.442	83	4328	0.557	ug/L #	89
42) Toluene	7.329	91	8926	0.391	ug/L	97
45) 1,1,2-Trichloroethane	7.783	97	2254	0.464	ug/L	93
46) Tetrachloroethene	7.908	164	2162	0.432	ug/L	96
49) Dibromochloromethane	8.181	129	2676	0.504	ug/L	94

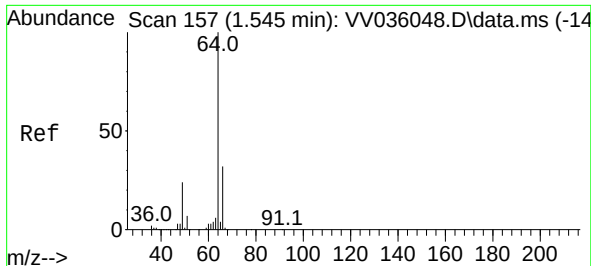
Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV061324\
Data File : VV036068.D
Acq On : 13 Jun 2024 17:12
Operator : SY/MD
Sample : P2775-17
Misc : 5.01g/10.0mL/MSVOA_V/SOIL/B
ALS Vial : 23 Sample Multiplier: 1

Instrument :
MSVOA_V
ClientSampleId :

Quant Time: Jun 14 01:20:44 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVLM053024SMA.M
Quant Title : VOC Analysis
QLast Update : Fri Jun 14 01:10:24 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 1,2-Dibromoethane	8.297	107	1852	0.398	ug/L #	89
51) Chlorobenzene	8.815	112	6935	0.446	ug/L	94
54) o-Xylene	9.484	106	2725	0.315	ug/L	94
57) 1,1,2,2-Tetrachloroethane	10.178	83	2926	0.673	ug/L #	96
59) Bromoform	9.677	173	1327	0.563	ug/L #	92
60) Isopropylbenzene	9.870	105	6082	0.380	ug/L #	92
61) 1,2,3-Trichloropropane	10.214	75	1906	0.645	ug/L #	89
62) 1,3,5-Trimethylbenzene	10.480	105	4438	0.382	ug/L	98
64) 1,3-Dichlorobenzene	11.127	146	3491	0.415	ug/L	99
65) 1,4-Dichlorobenzene	11.207	146	4685	0.539	ug/L	91
67) 1,2-Dichlorobenzene	11.577	146	4250	0.537	ug/L #	83
71) Naphthalene	13.455	128	2464	0.305	ug/L #	81

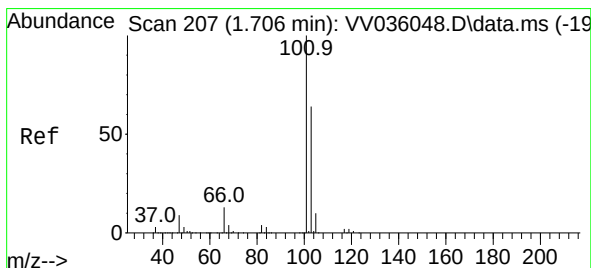
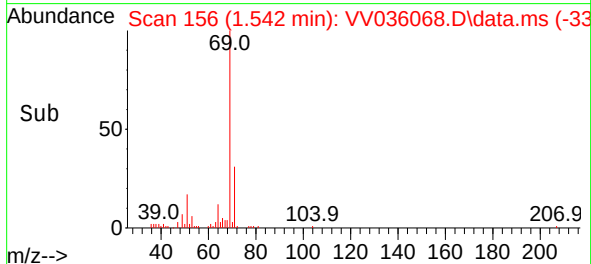
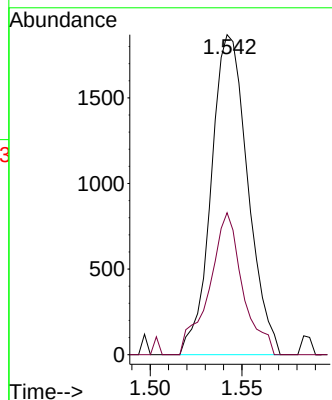
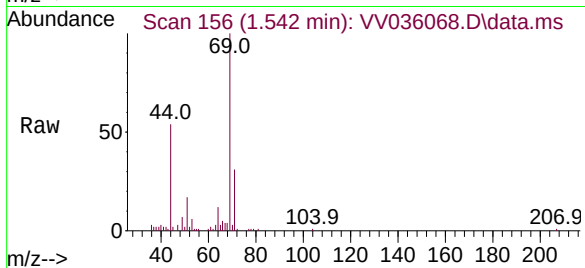
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#8
Chloroethane
Concen: 0.529 ug/L
RT: 1.542 min Scan# 157
Delta R.T. -0.003 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

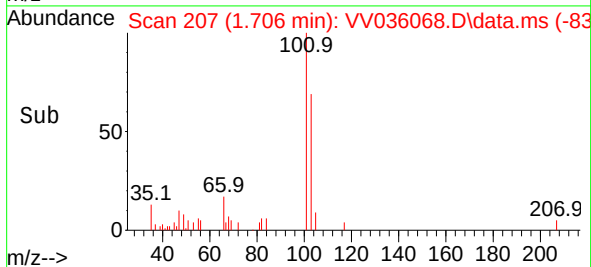
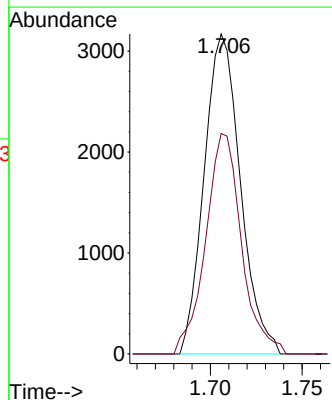
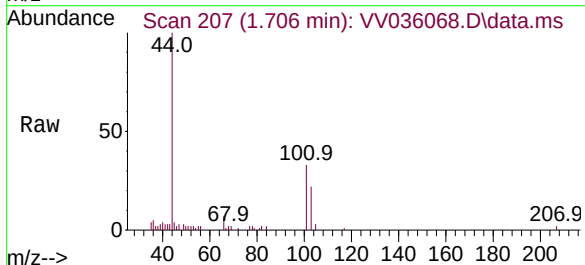
Instrument :
MSVOA_V
ClientSampleId :

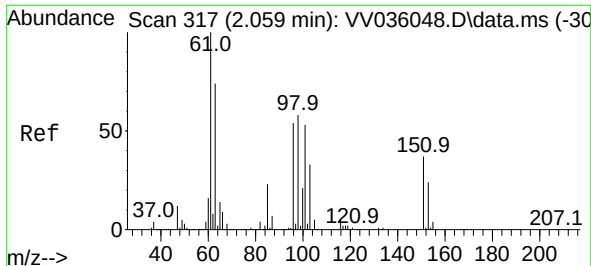
Tgt Ion: 64 Resp: 2589
Ion Ratio Lower Upper
64 100
66 44.4 22.0 41.0#



#9
Trichlorofluoromethane
Concen: 0.445 ug/L
RT: 1.706 min Scan# 207
Delta R.T. 0.000 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

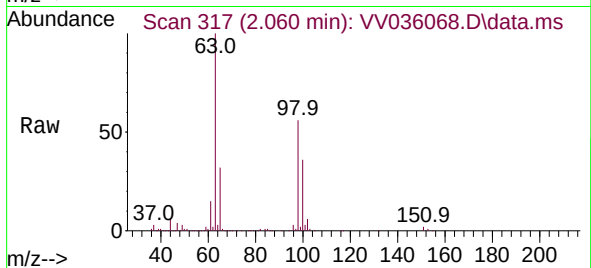
Tgt Ion:101 Resp: 4355
Ion Ratio Lower Upper
101 100
103 68.0 51.8 77.8



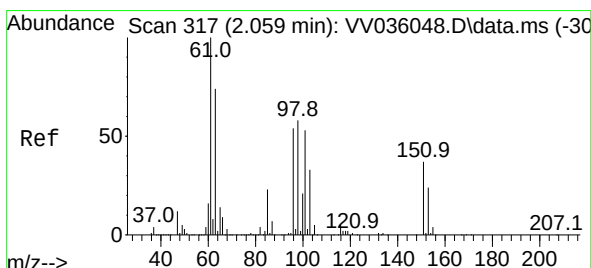
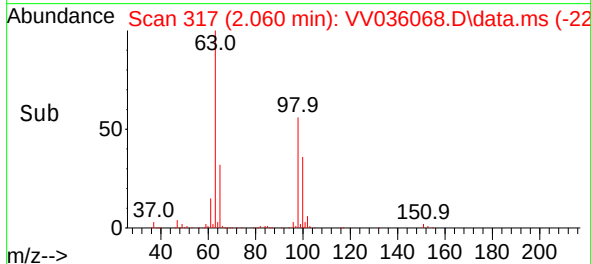
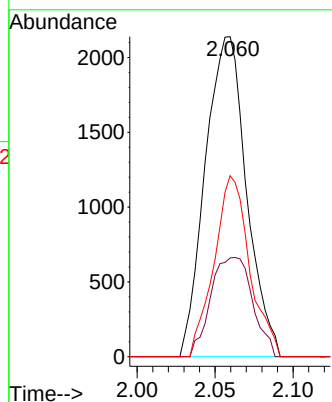


#10
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.633 ug/L
RT: 2.060 min Scan# 317
Delta R.T. 0.000 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Instrument :
MSVOA_V
ClientSampleId :

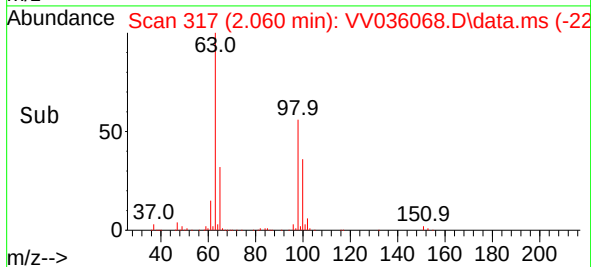
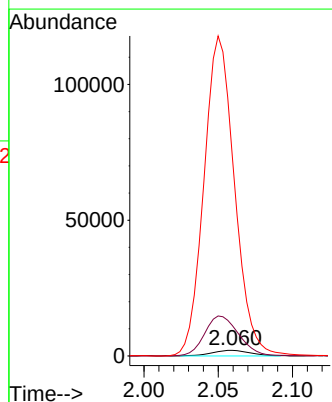
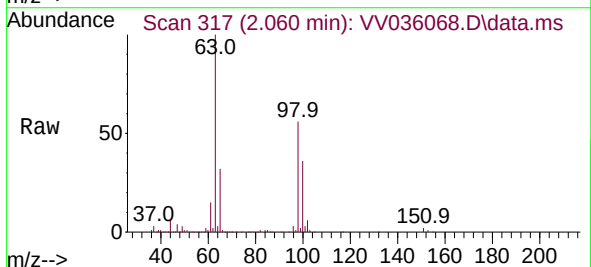


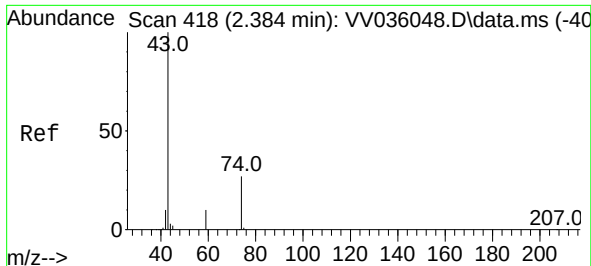
Tgt Ion:101 Resp: 3929
Ion Ratio Lower Upper
101 100
85 31.5 34.5 51.7#
151 48.7 56.3 84.5#



#12
1,1-Dichloroethene
Concen: 0.644 ug/L
RT: 2.060 min Scan# 317
Delta R.T. 0.000 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Tgt Ion: 96 Resp: 3725
Ion Ratio Lower Upper
96 100
61 540.3 127.3 236.3#
63 3530.9 93.7 173.9#





#15

Methyl Acetate

Concen: 0.411 ug/L

RT: 2.400 min Scan# 418

Delta R.T. 0.016 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

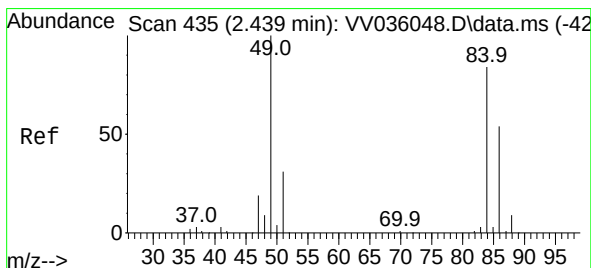
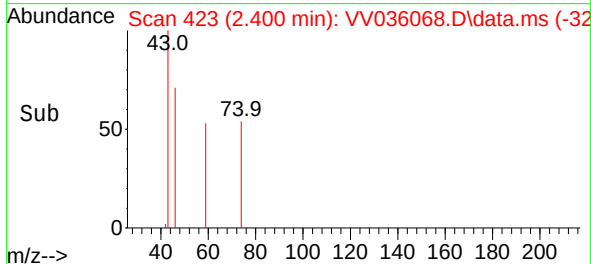
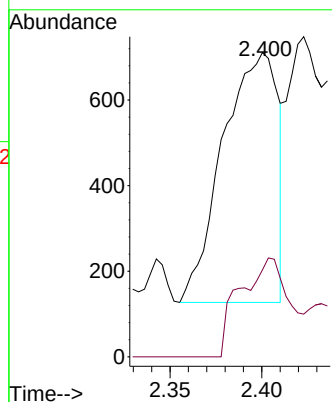
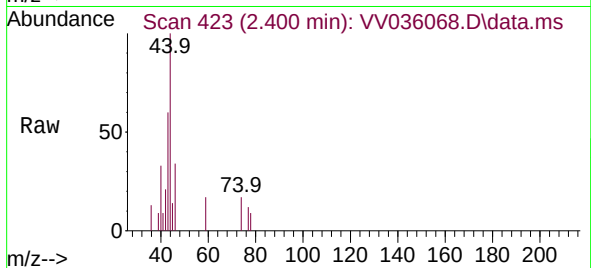
ClientSampleId :

Tgt Ion: 43 Resp: 1214

Ion Ratio Lower Upper

43 100

74 23.6 21.4 32.2



#16

Methylene chloride

Concen: 6.629 ug/L

RT: 2.442 min Scan# 436

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

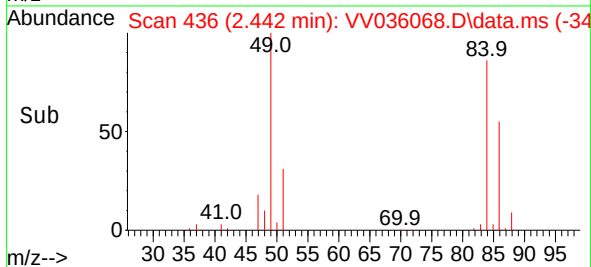
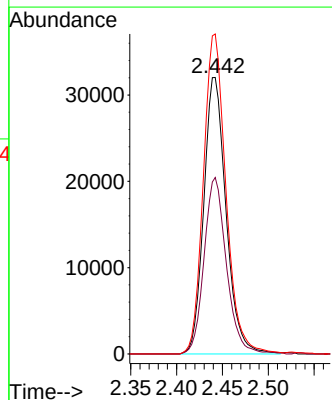
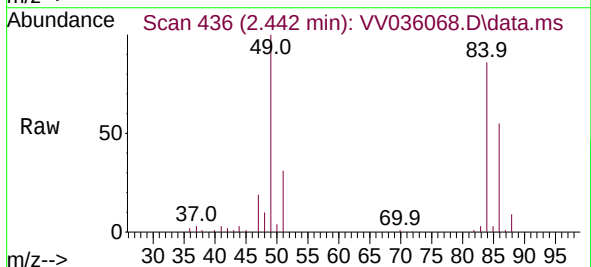
Tgt Ion: 84 Resp: 54217

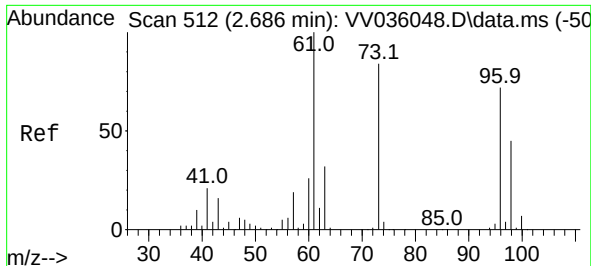
Ion Ratio Lower Upper

84 100

86 63.8 44.6 82.8

49 115.7 81.1 150.5





#17

trans-1,2-Dichloroethene

Concen: 0.419 ug/L

RT: 2.690 min Scan# 512

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

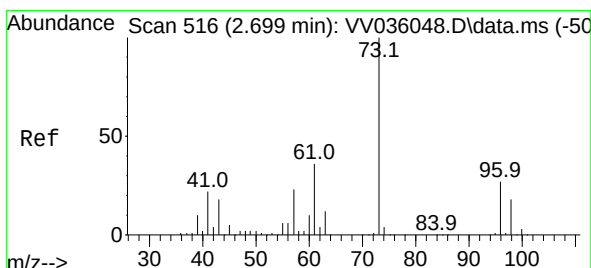
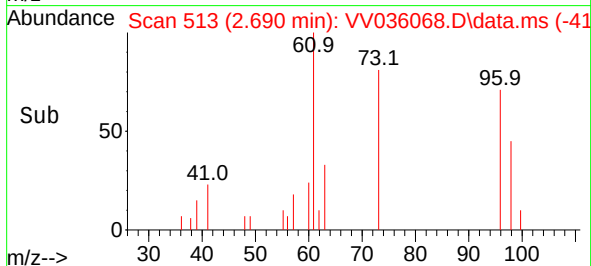
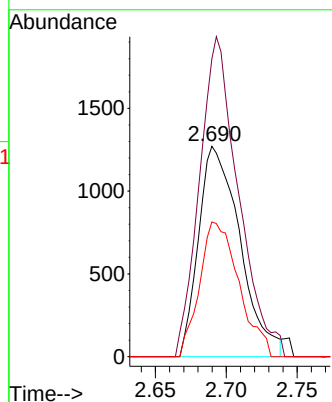
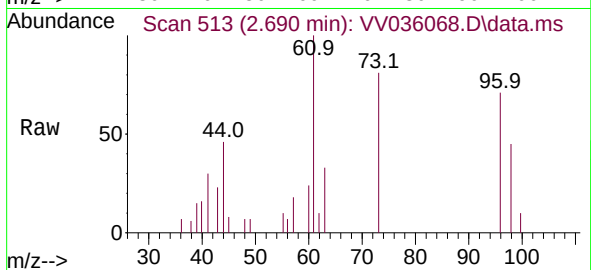
Tgt Ion: 96 Resp: 2575

Ion Ratio Lower Upper

96 100

61 141.6 99.4 184.6

98 64.0 44.9 83.3



#18

Methyl tert-butyl Ether

Concen: 0.461 ug/L

RT: 2.703 min Scan# 517

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

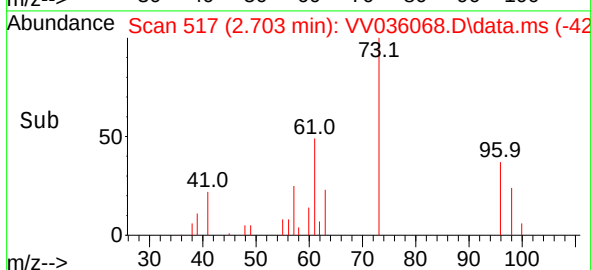
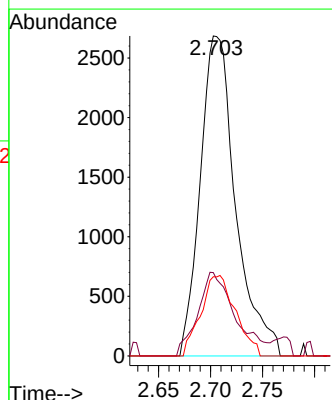
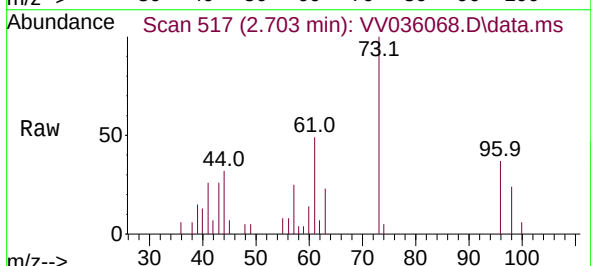
Tgt Ion: 73 Resp: 6360

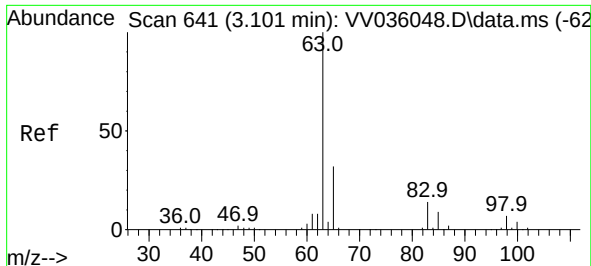
Ion Ratio Lower Upper

73 100

43 24.7 14.3 21.5#

57 24.6 17.8 26.6





#19

1,1-Dichloroethane

Concen: 0.508 ug/L

RT: 3.111 min Scan# 641

Delta R.T. 0.010 min

Lab File: VV036068.D

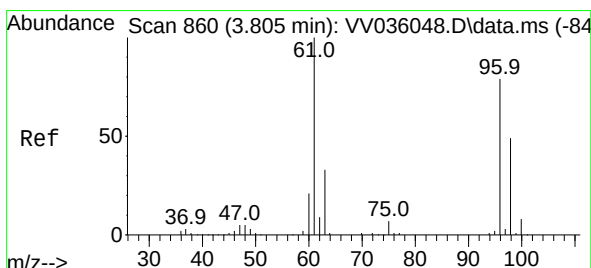
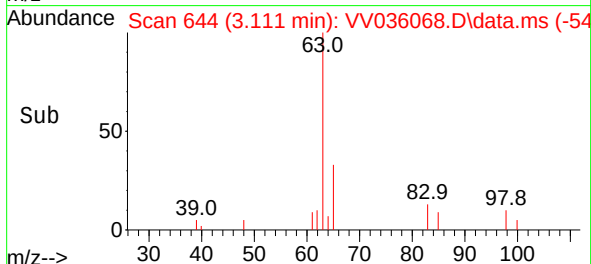
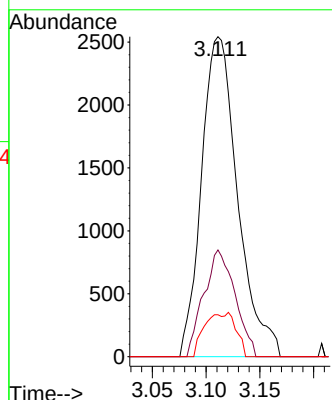
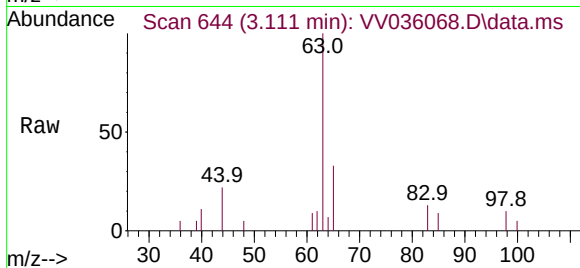
Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion: 63	Resp: 5944
Ion Ratio	Lower Upper
63	100
65	33.3 22.4 41.6
83	13.1 9.2 17.0



#20

cis-1,2-Dichloroethene

Concen: 0.426 ug/L

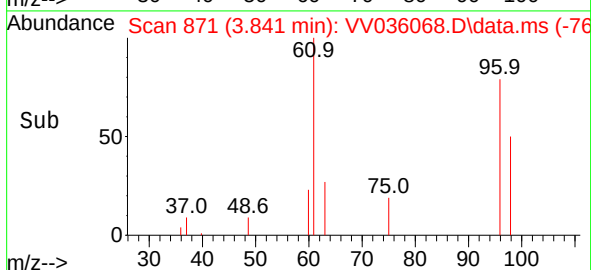
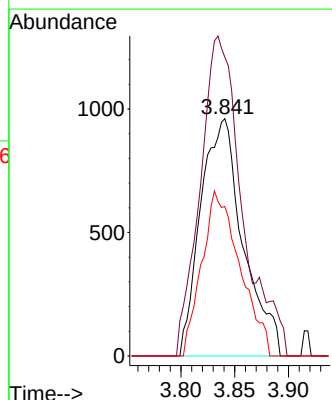
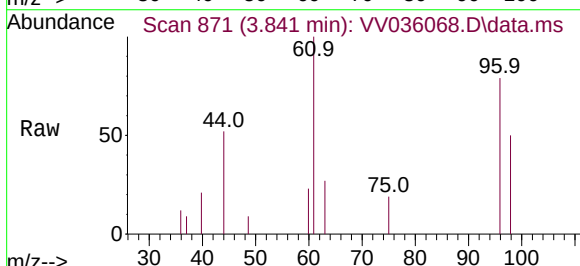
RT: 3.841 min Scan# 871

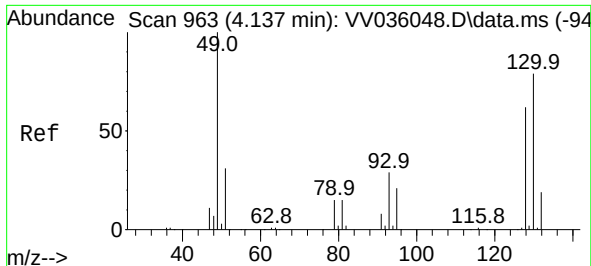
Delta R.T. 0.035 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

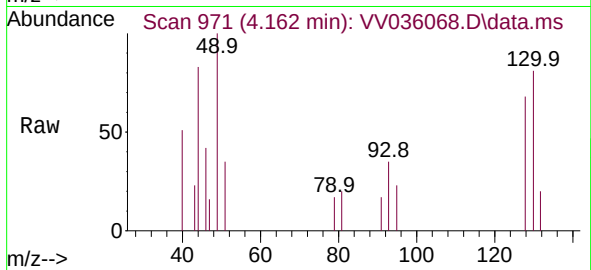
Tgt Ion: 96	Resp: 2635
Ion Ratio	Lower Upper
96	100
61	125.9 87.9 163.3
98	63.0 44.4 82.5



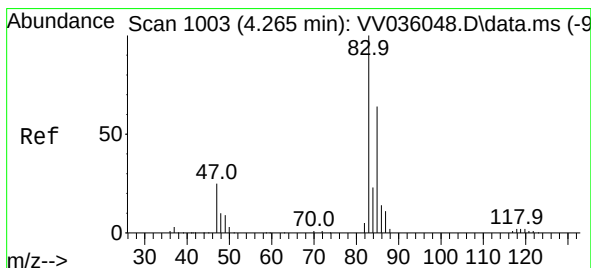
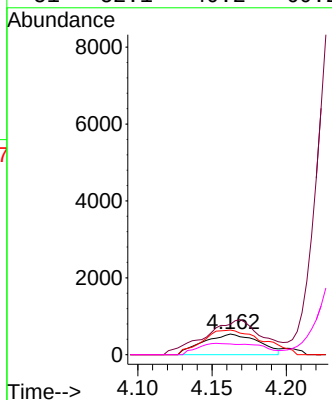
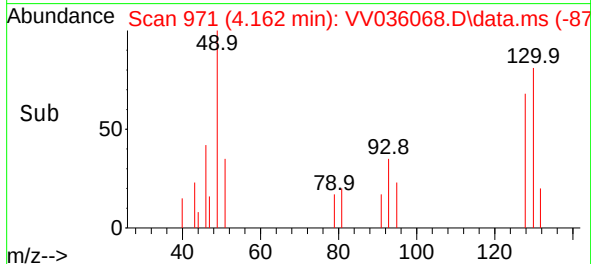


#23
Bromochloromethane
Concen: 0.449 ug/L
RT: 4.162 min Scan# 91
Delta R.T. 0.026 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Instrument :
MSVOA_V
ClientSampleId :

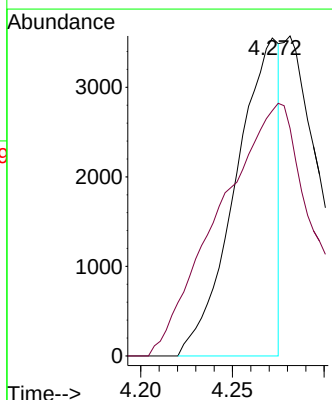
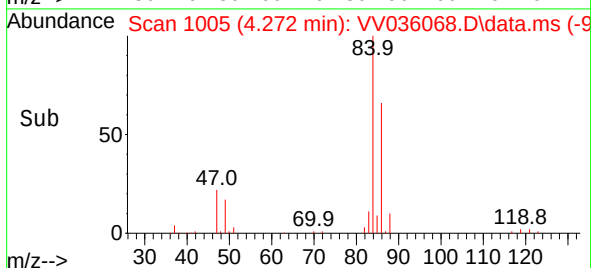
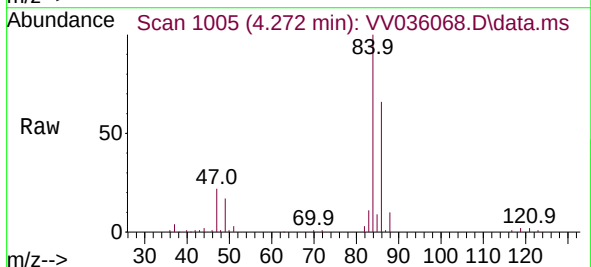


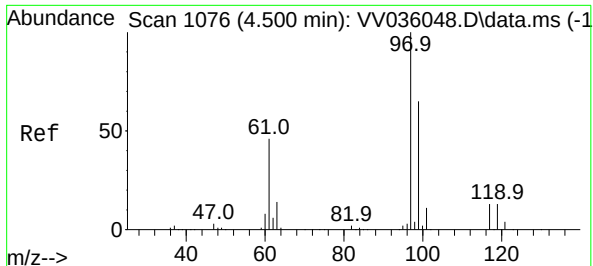
Tgt Ion:128 Resp: 1392
Ion Ratio Lower Upper
128 100
49 147.7 110.2 204.6
130 120.2 90.2 167.4
51 52.1 40.2 60.2



#25
Chloroform
Concen: 0.486 ug/L
RT: 4.272 min Scan# 1005
Delta R.T. 0.006 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Tgt Ion: 83 Resp: 5848
Ion Ratio Lower Upper
83 100
85 77.1 45.2 84.0





#30

1,1,1-Trichloroethane

Concen: 0.499 ug/L

RT: 4.506 min Scan# 1149

Delta R.T. 0.006 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

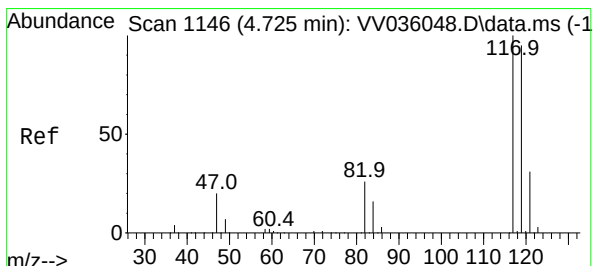
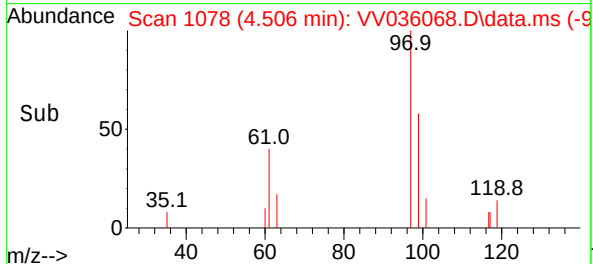
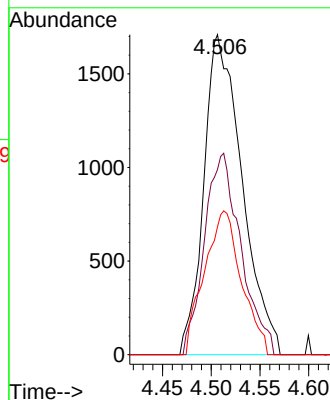
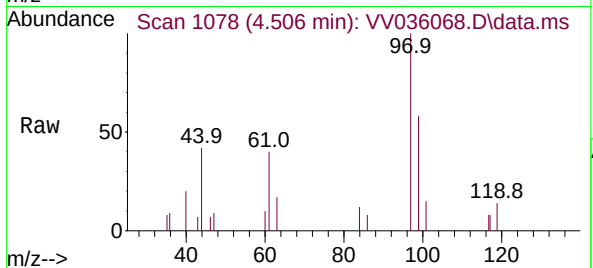
Tgt Ion: 97 Resp: 4665

Ion Ratio Lower Upper

97 100

99 60.1 50.9 76.3

61 43.6 35.0 52.6



#31

Carbon tetrachloride

Concen: 0.472 ug/L

RT: 4.735 min Scan# 1149

Delta R.T. 0.010 min

Lab File: VV036068.D

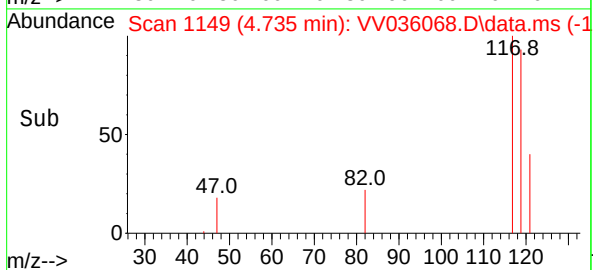
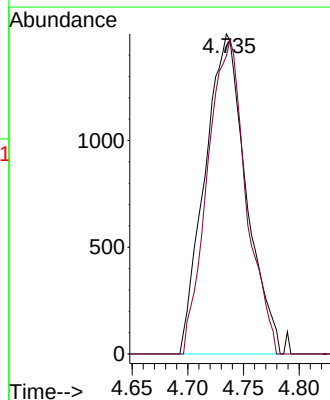
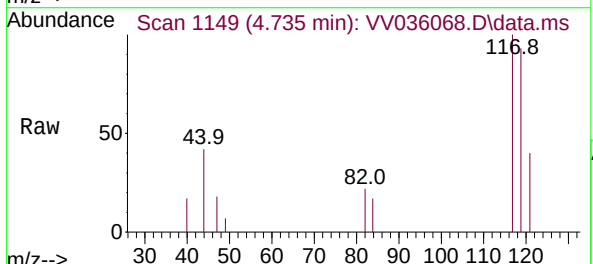
Acq: 13 Jun 2024 17:12

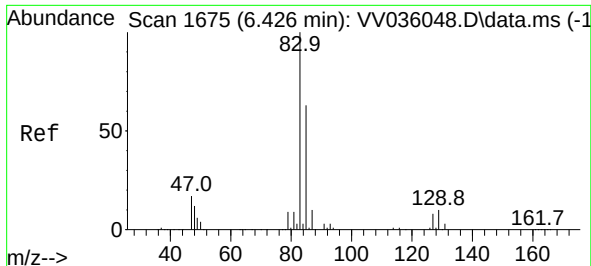
Tgt Ion: 117 Resp: 3866

Ion Ratio Lower Upper

117 100

119 91.7 76.8 115.2





#38

Bromodichloromethane

Concen: 0.557 ug/L

RT: 6.442 min Scan# 1

Delta R.T. 0.016 min

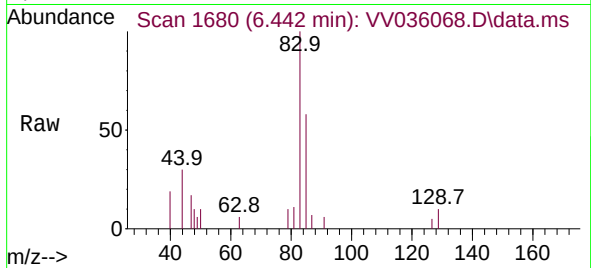
Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :



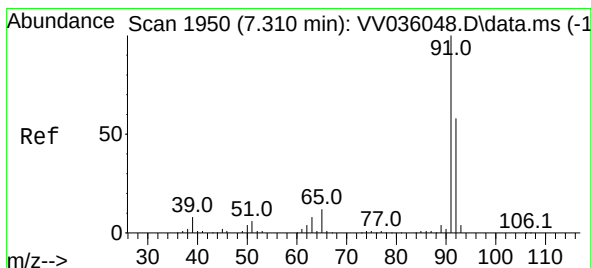
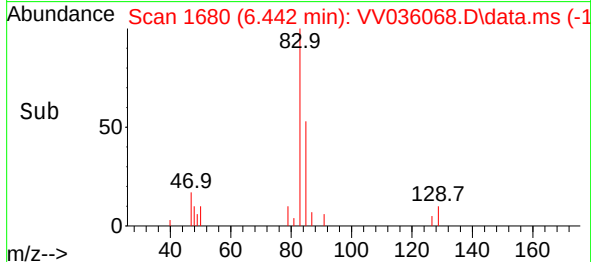
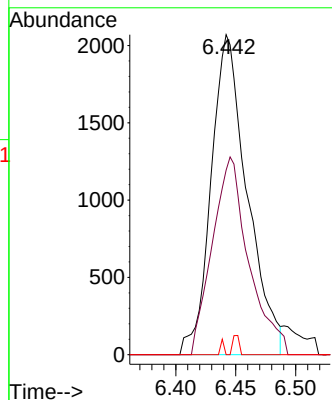
Tgt Ion: 83 Resp: 4328

Ion Ratio Lower Upper

83 100

85 57.6 45.3 84.1

127 0.0 6.7 10.1#



#42

Toluene

Concen: 0.391 ug/L

RT: 7.329 min Scan# 1956

Delta R.T. 0.019 min

Lab File: VV036068.D

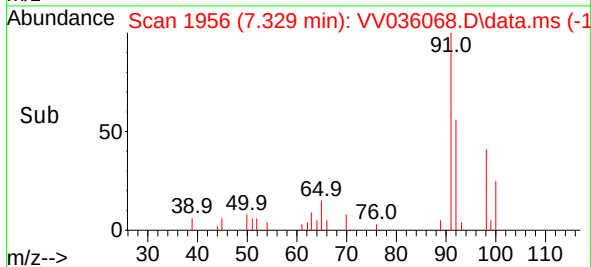
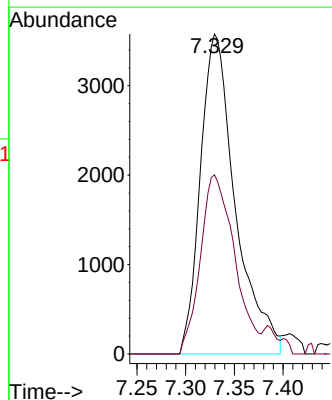
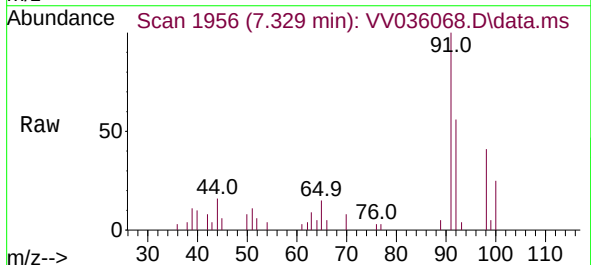
Acq: 13 Jun 2024 17:12

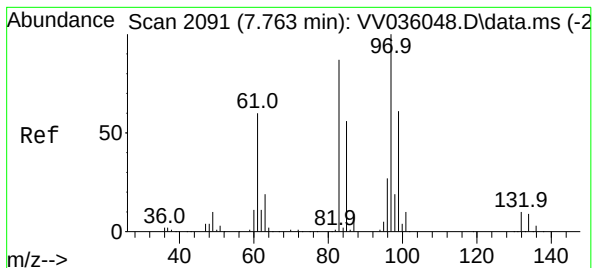
Tgt Ion: 91 Resp: 8926

Ion Ratio Lower Upper

91 100

92 56.0 40.6 75.4





#45

1,1,2-Trichloroethane

Concen: 0.464 ug/L

RT: 7.783 min Scan# 2091

Delta R.T. 0.019 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion: 97 Resp: 2254

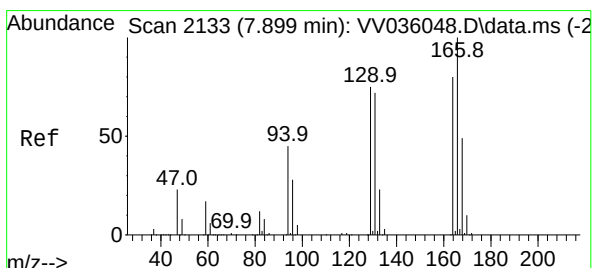
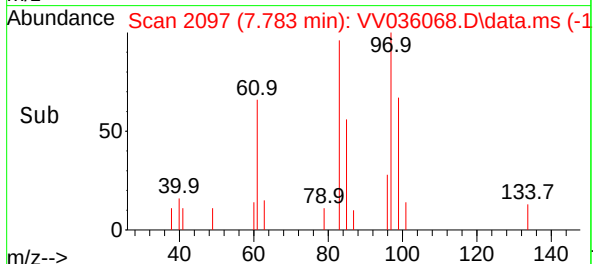
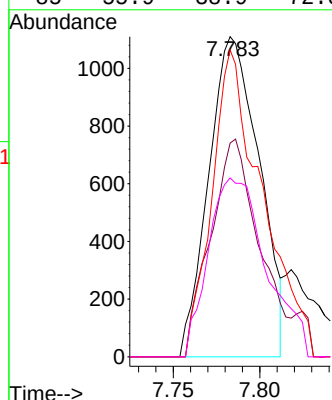
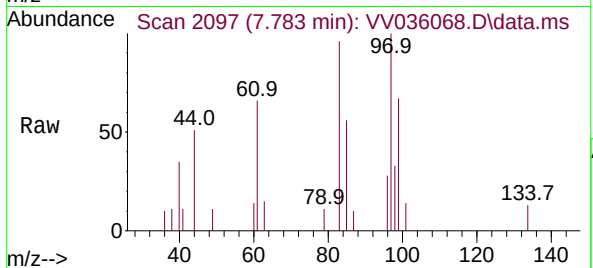
Ion Ratio Lower Upper

97 100

99 66.8 43.3 80.5

83 95.9 60.1 111.7

85 55.9 38.9 72.3



#46

Tetrachloroethene

Concen: 0.432 ug/L

RT: 7.908 min Scan# 2136

Delta R.T. 0.010 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Tgt Ion:164 Resp: 2162

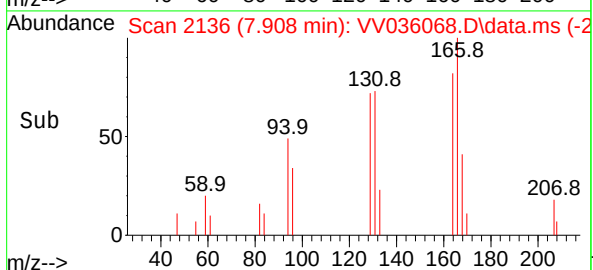
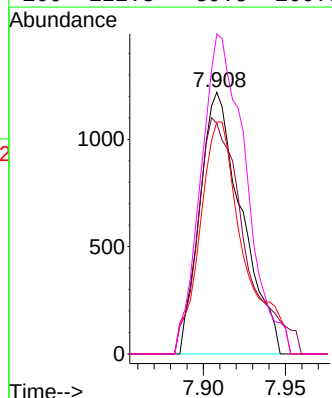
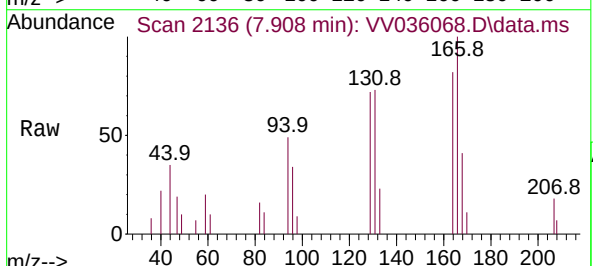
Ion Ratio Lower Upper

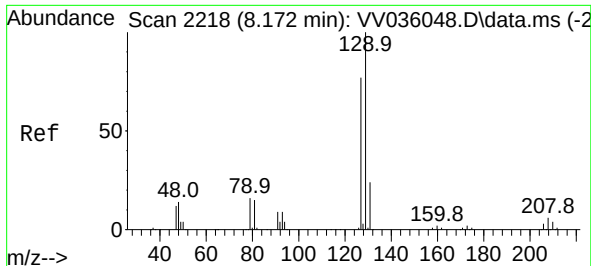
164 100

129 88.1 64.6 120.0

131 88.7 63.2 117.4

166 122.3 89.5 166.3





#49

Dibromochloromethane

Concen: 0.504 ug/L

RT: 8.181 min Scan# 2218

Delta R.T. 0.010 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

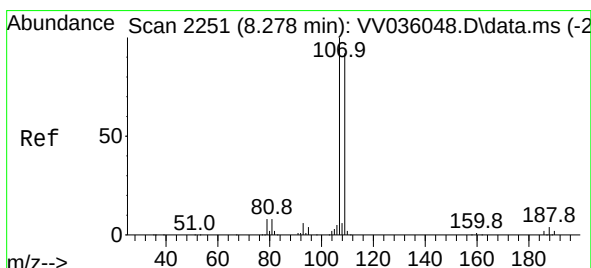
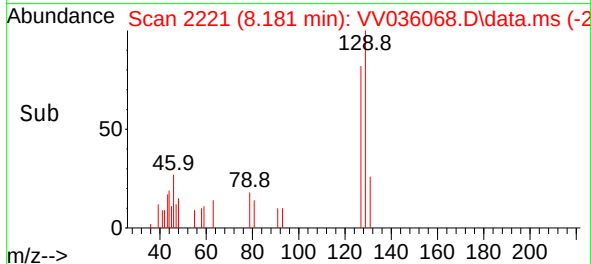
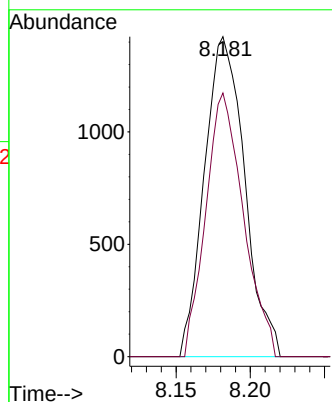
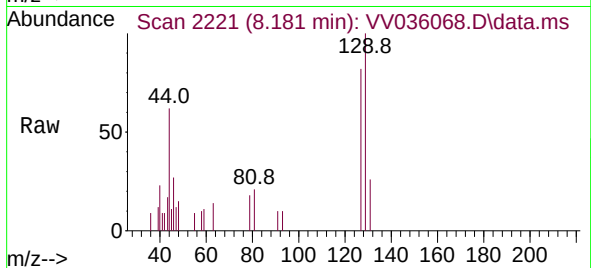
ClientSampleId :

Tgt Ion:129 Resp: 2676

Ion Ratio Lower Upper

129 100

127 82.4 53.9 100.1



#50

1,2-Dibromoethane

Concen: 0.398 ug/L

RT: 8.297 min Scan# 2257

Delta R.T. 0.019 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

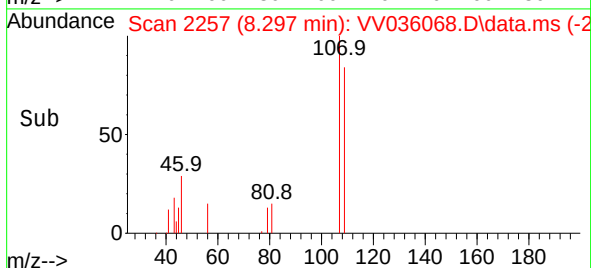
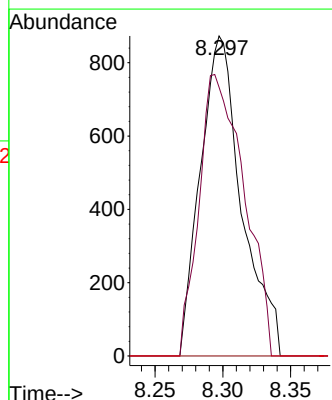
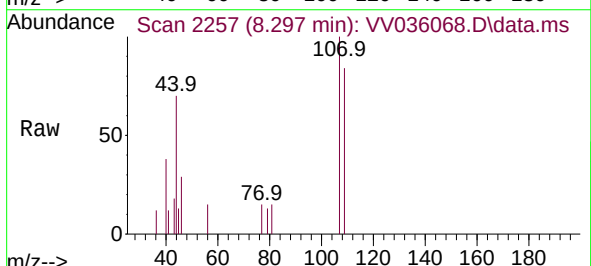
Tgt Ion:107 Resp: 1852

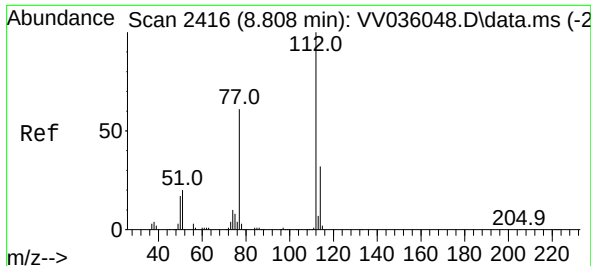
Ion Ratio Lower Upper

107 100

109 84.0 66.1 122.7

188 0.0 3.0 4.6#





#51

Chlorobenzene

Concen: 0.446 ug/L

RT: 8.815 min Scan# 2416

Delta R.T. 0.006 min

Lab File: VV036068.D

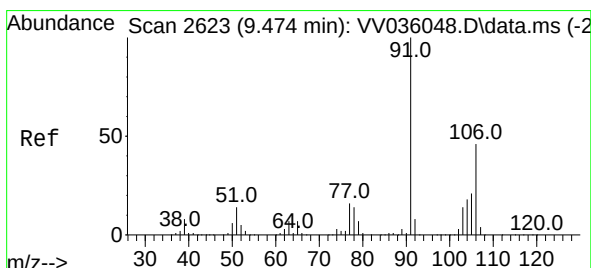
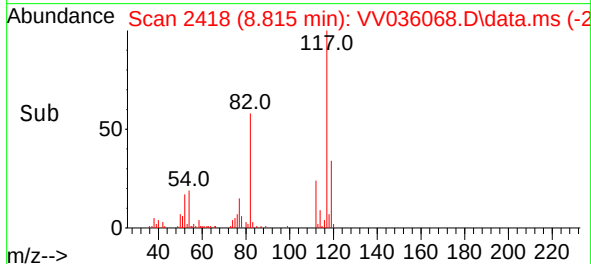
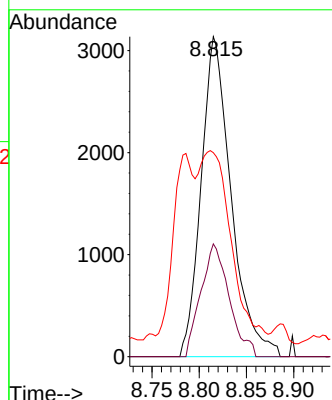
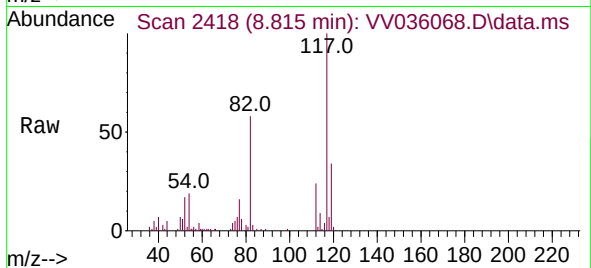
Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion:112	Resp:	6935
Ion Ratio	Lower	Upper
112	100	
114	35.3	22.3 41.5
77	63.7	47.3 70.9



#54

o-Xylene

Concen: 0.315 ug/L

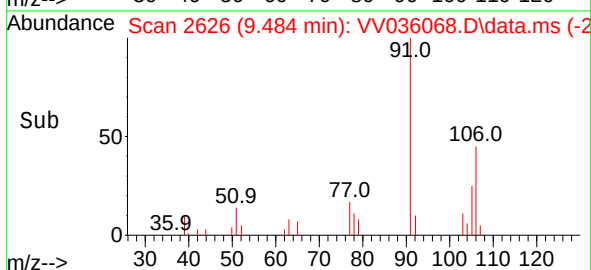
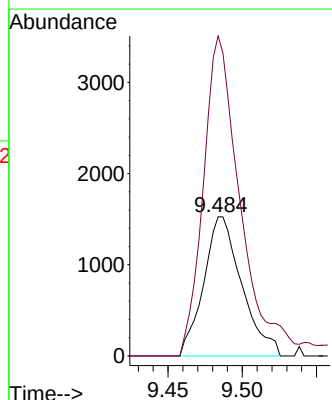
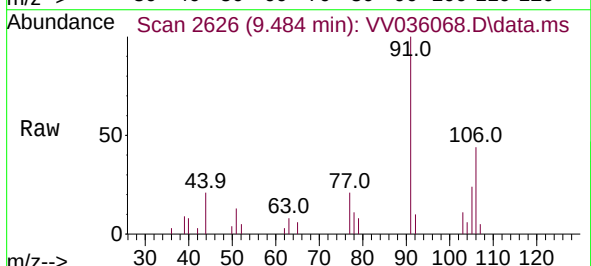
RT: 9.484 min Scan# 2626

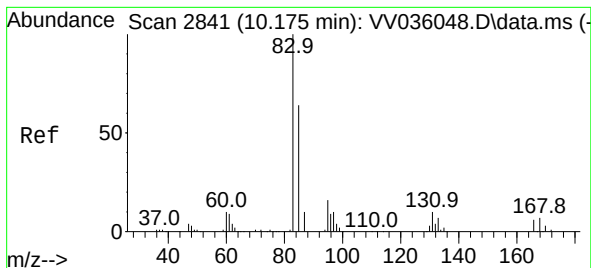
Delta R.T. 0.010 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Tgt Ion:106	Resp:	2725
Ion Ratio	Lower	Upper
106	100	
91	229.8	154.5 286.9





#57

1,1,2,2-Tetrachloroethane

Concen: 0.673 ug/L

RT: 10.178 min Scan# 2841

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

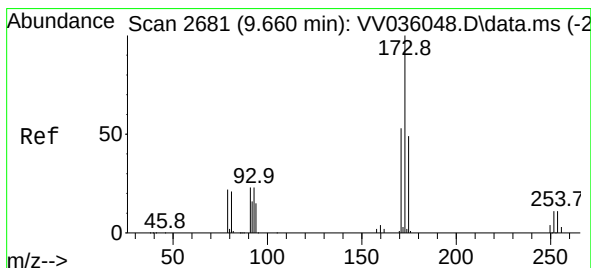
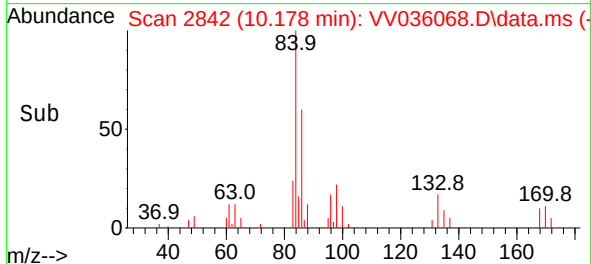
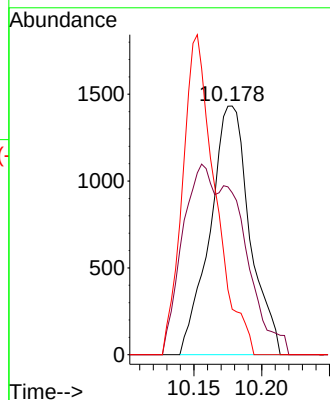
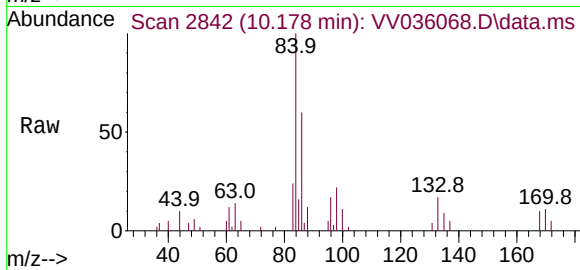
Tgt Ion: 83 Resp: 2926

Ion Ratio Lower Upper

83 100

85 65.2 45.1 83.7

131 18.3 7.6 11.4#



#59

Bromoform

Concen: 0.563 ug/L

RT: 9.677 min Scan# 2686

Delta R.T. 0.016 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

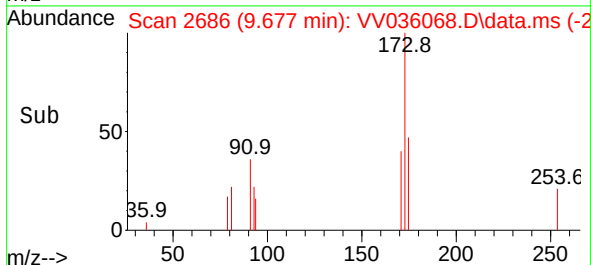
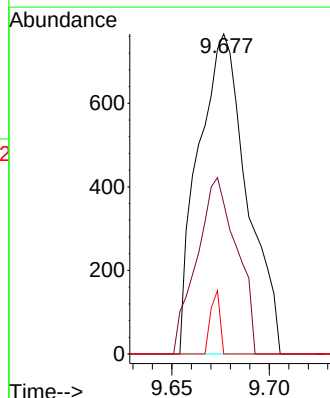
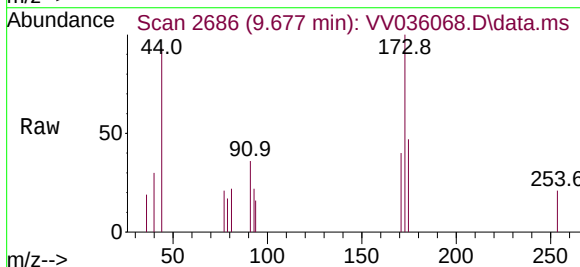
Tgt Ion: 173 Resp: 1327

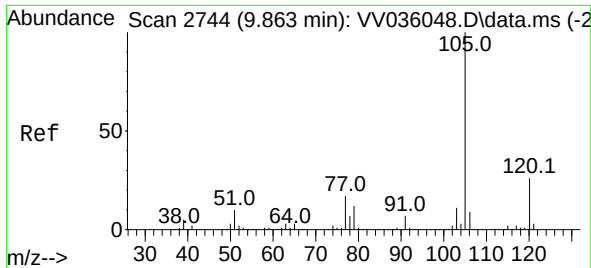
Ion Ratio Lower Upper

173 100

175 45.4 39.0 58.6

254 3.8 8.6 13.0#

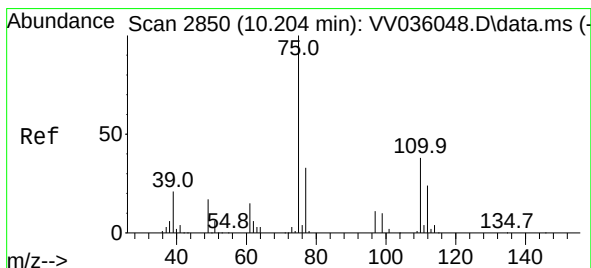
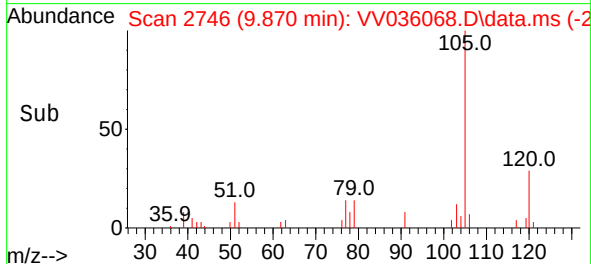
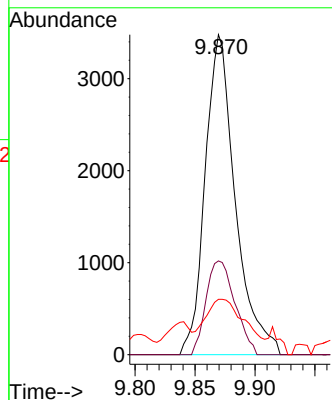
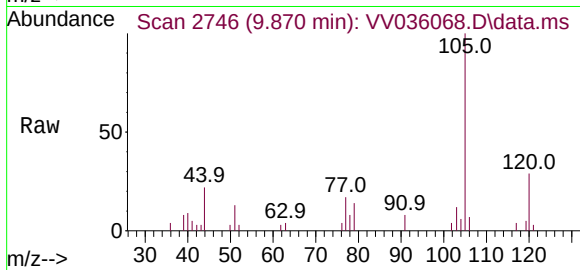




#60
Isopropylbenzene
Concen: 0.380 ug/L
RT: 9.870 min Scan# 21
Delta R.T. 0.006 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

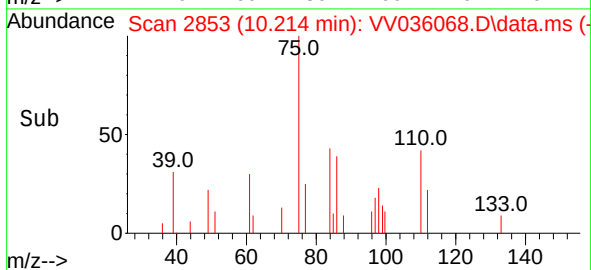
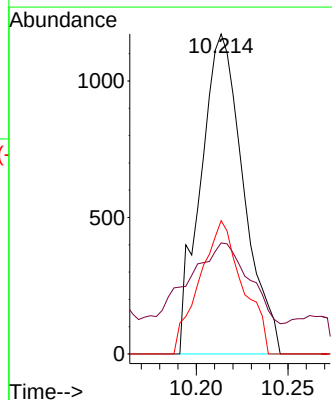
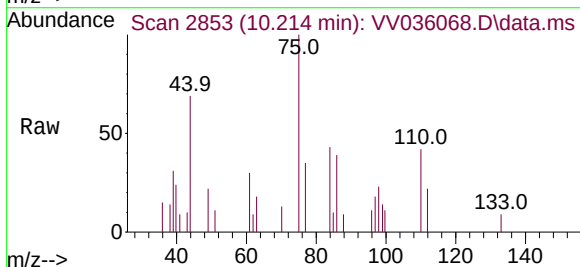
Instrument :
MSVOA_V
ClientSampleId :

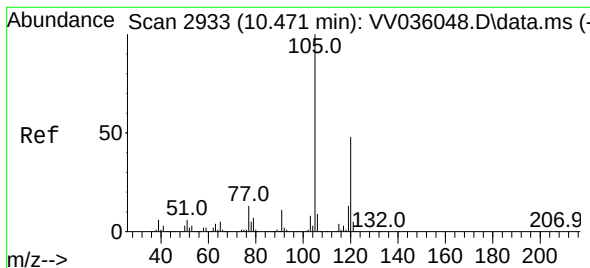
Tgt Ion:105 Resp: 6082
Ion Ratio Lower Upper
105 100
120 28.1 21.0 31.6
77 22.1 12.6 18.8#



#61
1,2,3-Trichloropropane
Concen: 0.645 ug/L
RT: 10.214 min Scan# 2853
Delta R.T. 0.010 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Tgt Ion: 75 Resp: 1906
Ion Ratio Lower Upper
75 100
77 20.1 26.0 39.0#
110 41.8 32.2 48.4





#62

1,3,5-Trimethylbenzene

Concen: 0.382 ug/L

RT: 10.480 min Scan# 2936

Delta R.T. 0.010 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

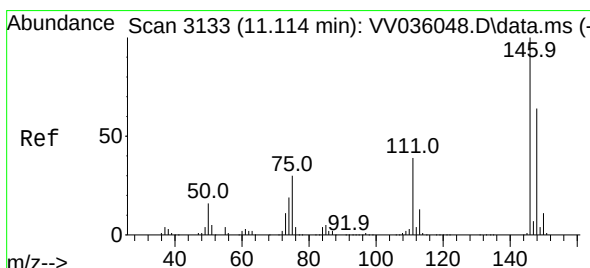
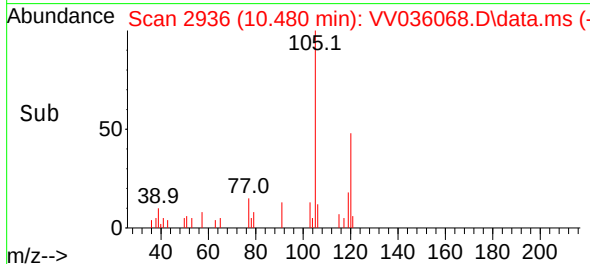
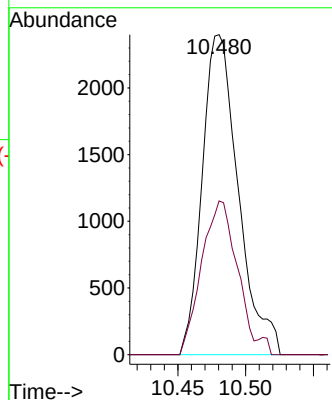
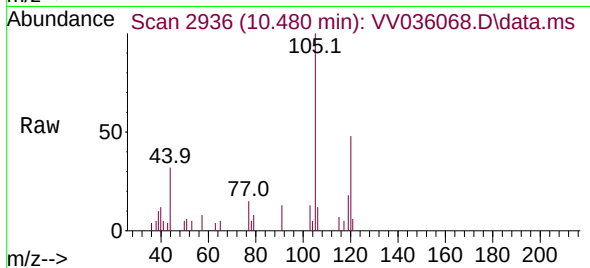
ClientSampleId :

Tgt Ion:105 Resp: 4438

Ion Ratio Lower Upper

105 100

120 46.7 38.6 58.0



#64

1,3-Dichlorobenzene

Concen: 0.415 ug/L

RT: 11.127 min Scan# 3137

Delta R.T. 0.013 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

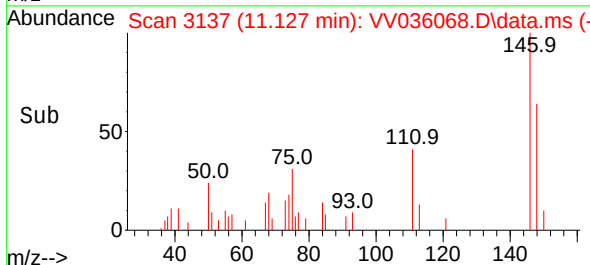
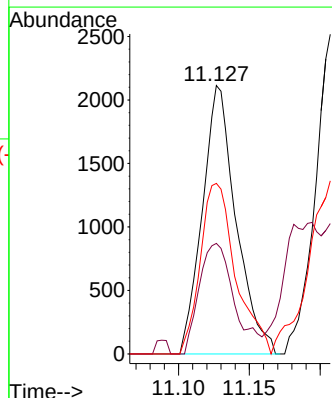
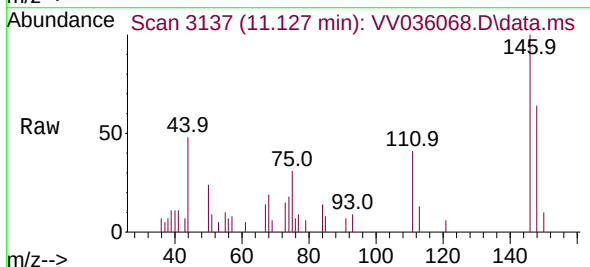
Tgt Ion:146 Resp: 3491

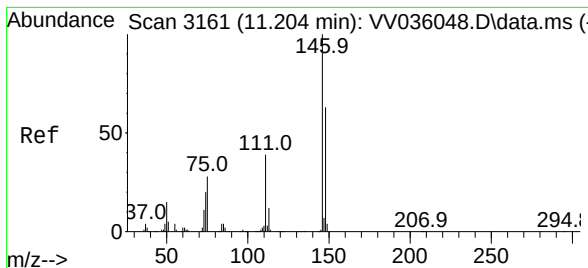
Ion Ratio Lower Upper

146 100

111 41.2 28.1 52.1

148 63.5 44.7 83.1





#65

1,4-Dichlorobenzene

Concen: 0.539 ug/L

RT: 11.207 min Scan# 3161

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

Instrument :

MSVOA_V

ClientSampleId :

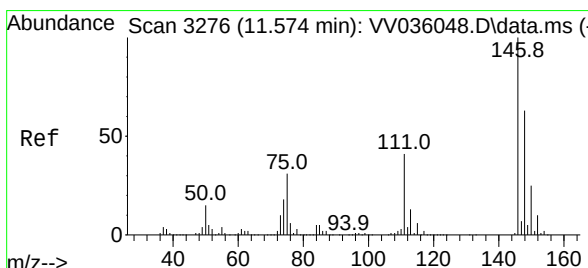
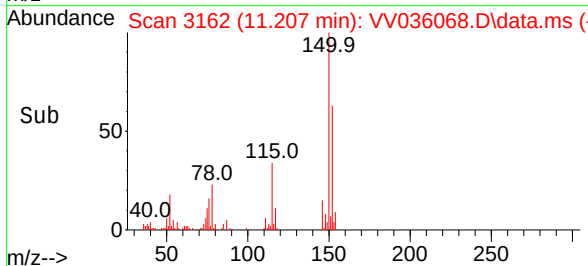
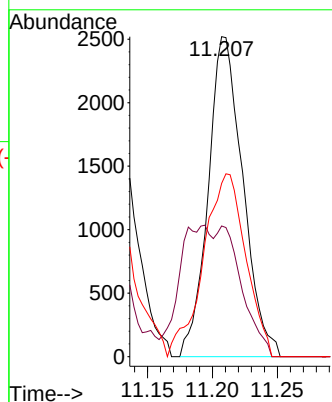
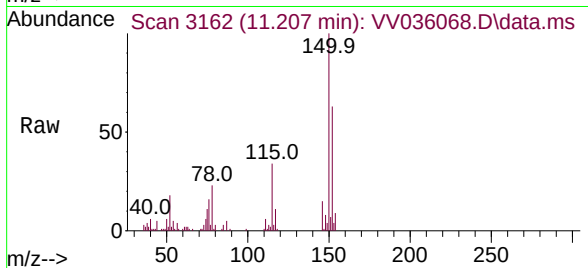
Tgt Ion:146 Resp: 4685

Ion Ratio Lower Upper

146 100

111 40.8 26.9 50.1

148 54.2 44.5 82.7



#67

1,2-Dichlorobenzene

Concen: 0.537 ug/L

RT: 11.577 min Scan# 3277

Delta R.T. 0.003 min

Lab File: VV036068.D

Acq: 13 Jun 2024 17:12

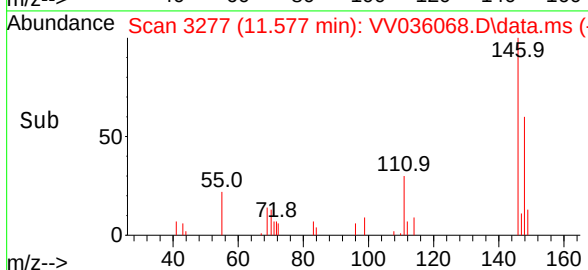
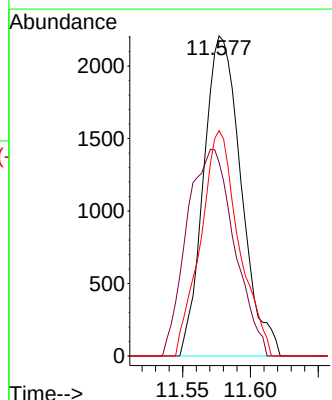
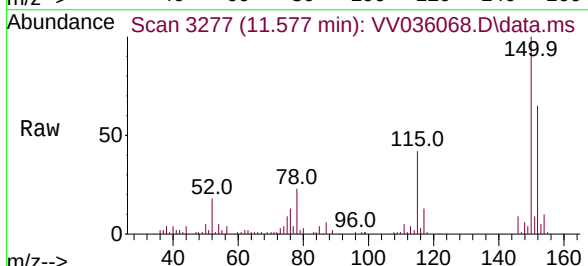
Tgt Ion:146 Resp: 4250

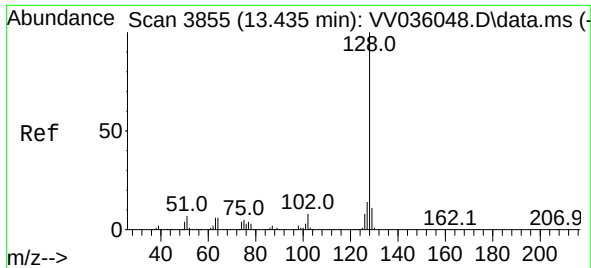
Ion Ratio Lower Upper

146 100

111 60.5 33.5 50.3#

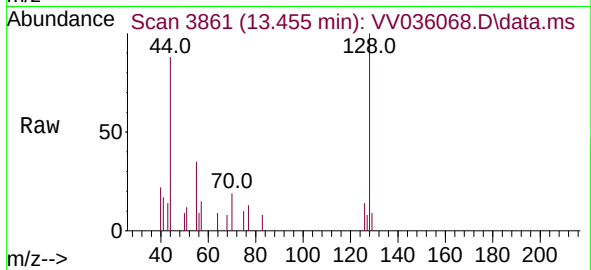
148 70.4 50.9 76.3





#71
Naphthalene
Concen: 0.305 ug/L
RT: 13.455 min Scan# 3861
Delta R.T. 0.019 min
Lab File: VV036068.D
Acq: 13 Jun 2024 17:12

Instrument :
MSVOA_V
ClientSampleId :



Tgt Ion:	128	Resp:	2464
Ion	Ratio	Lower	Upper
128	100		
127	5.1	10.6	16.0#
129	4.5	8.8	13.2#

