

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VV071624\
 Data File : VV036564.D
 Acq On : 16 Jul 2024 13:39
 Operator : SY/MD
 Sample : P3828-22 DL 2X
 Misc : 5.00g/10.0mL/MSVOA_V/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :

Quant Time: Jul 17 02:27:30 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVLM071124SMA.M
 Quant Title : VOC Analysis
 QLast Update : Wed Jul 17 02:15:19 2024
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.532	114	305862	25.000	ug/L	0.00
28) Chlorobenzene-d5	8.783	117	322427	25.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.185	152	157404	25.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.272	65	95011	21.682	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	86.720%
7) Chloroethane-d5	1.526	69	87252	22.774	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	91.080%
11) 1,1-Dichloroethene-d2	2.050	65	45591	20.261	ug/L	0.00
Spiked Amount	25.000	Range	45 - 110	Recovery	=	81.040%
21) 2-Butanone-d5	3.815	46	42995	57.326	ug/L	-0.02
Spiked Amount	50.000	Range	20 - 135	Recovery	=	114.660%
24) Chloroform-d	4.243	84	200901	22.566	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	90.280%
26) 1,2-Dichloroethane-d4	4.937	65	105231	23.831	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	95.320%
32) Benzene-d6	4.953	84	368664	22.919	ug/L	0.00
Spiked Amount	25.000	Range	20 - 135	Recovery	=	91.680%
36) 1,2-Dichloropropane-d6	5.985	67	112474	23.462	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	93.840%
41) Toluene-d8	7.239	98	374769	25.251	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	101.000%
43) trans-1,3-Dichloroprop...	7.555	79	47173	23.668	ug/L	0.00
Spiked Amount	25.000	Range	30 - 135	Recovery	=	94.680%
47) 2-Hexanone-d5	8.030	63	27662	51.954	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	103.900%
56) 1,1,2,2-Tetrachloroeth...	10.153	84	96593	23.924	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	95.680%
66) 1,2-Dichlorobenzene-d4	11.558	152	141456	26.481	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	105.920%
Target Compounds						
					Qvalue	
16) Methylene chloride	2.439	84	137399	21.850	ug/L	97
17) trans-1,2-Dichloroethene	2.687	96	50572	12.316	ug/L	99
18) Methyl tert-butyl Ether	2.706	73	52473	5.703	ug/L	100
19) 1,1-Dichloroethane	3.105	63	117137	15.760	ug/L	99
20) cis-1,2-Dichloroethene	3.809	96	88048	20.631	ug/L	98
22) 2-Butanone	3.912	43	11889	13.355	ug/L #	78
25) Chloroform	4.272	83	80864	9.163	ug/L	100
31) Carbon tetrachloride	4.732	117	26582	3.999	ug/L	100
33) Benzene	5.005	78	354917	22.243	ug/L	100
34) Trichloroethene	5.828	95	129744	25.553	ug/L	99
37) 1,2-Dichloropropane	5.822	63	2076	0.516	ug/L	98
38) Bromodichloromethane	6.432	83	104225	16.335	ug/L	98
39) cis-1,3-Dichloropropene	6.953	75	120925	19.474	ug/L	99
40) 4-Methyl-2-pentanone	7.159	43	135034	73.791	ug/L	94
42) Toluene	7.313	91	174904	10.345	ug/L	100
45) 1,1,2-Trichloroethane	7.770	97	51190	12.901	ug/L	97
46) Tetrachloroethene	7.902	164	46070	11.222	ug/L	99
49) Dibromochloromethane	8.175	129	104717	21.824	ug/L	98
50) 1,2-Dibromoethane	8.284	107	36864	9.899	ug/L	98

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QLast Update : Wed Jul 17 02:15:19 2024
Response via : Initial Calibration

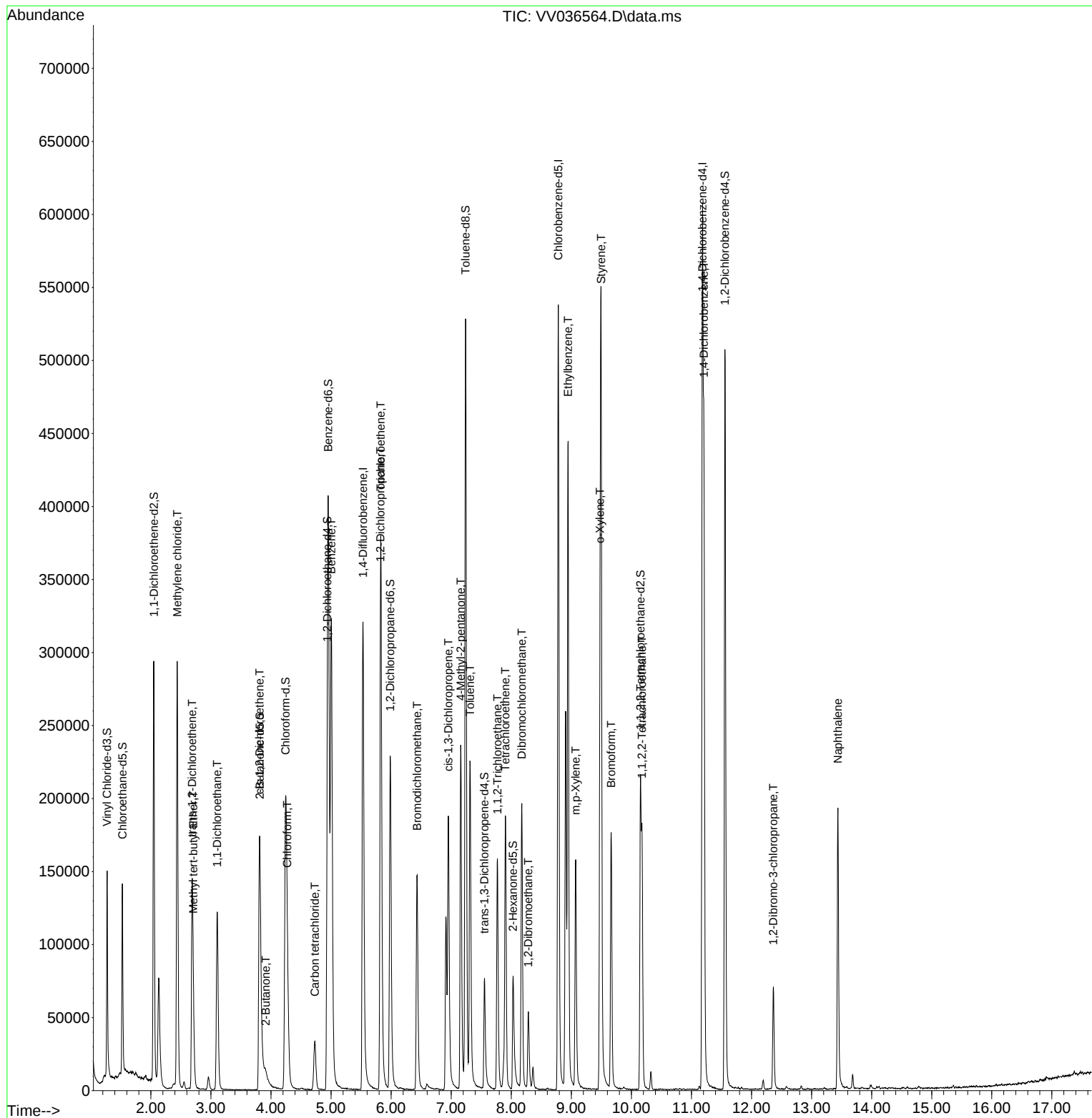
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
52) Ethylbenzene	8.947	91	299421	16.510	ug/L	99
53) m,p-Xylene	9.072	106	45514	6.518	ug/L	99
54) o-Xylene	9.477	106	69262	10.418	ug/L	100
55) Styrene	9.497	104	255747	21.501	ug/L	98
57) 1,1,2,2-Tetrachloroethane	10.175	83	80801	22.300	ug/L	99
59) Bromoform	9.664	173	82478	29.565	ug/L	99
65) 1,4-Dichlorobenzene	11.207	146	181560	18.189	ug/L	99
68) 1,2-Dibromo-3-chloropr...	12.361	75	16767	27.672	ug/L	96
71) Naphthalene	13.439	128	161234	18.753	ug/L	99

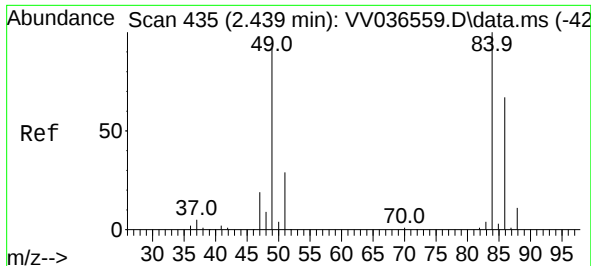
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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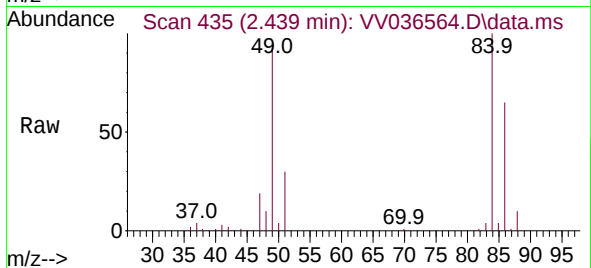
Quant Time: Jul 17 02:27:30 2024
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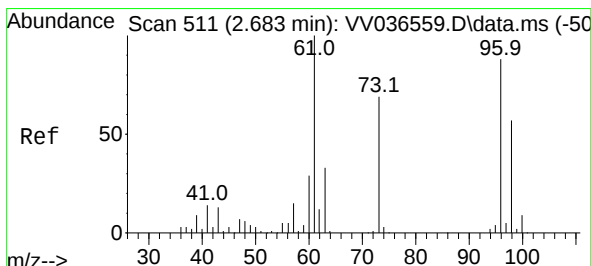
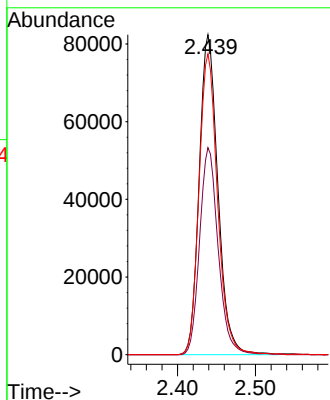
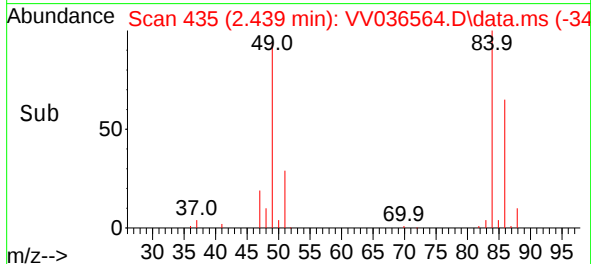


#16
Methylene chloride
Concen: 21.850 ug/L
RT: 2.439 min Scan# 41
Delta R.T. 0.000 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

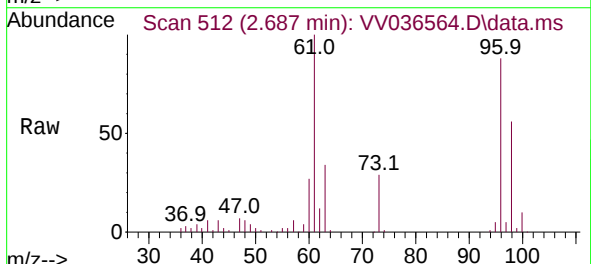
Instrument :
MSVOA_V
ClientSampleId :



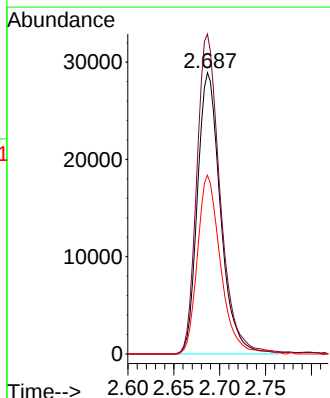
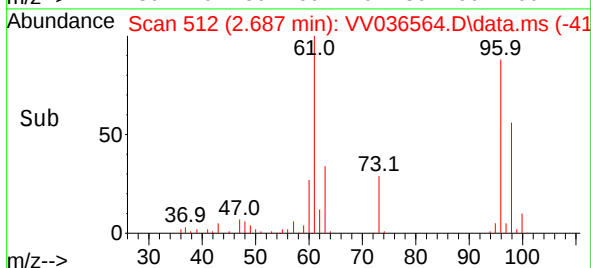
Tgt Ion: 84 Resp: 137399
Ion Ratio Lower Upper
84 100
86 64.7 46.3 86.1
49 94.0 68.1 126.5

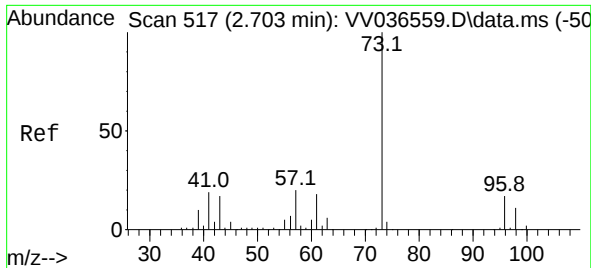


#17
trans-1,2-Dichloroethene
Concen: 12.316 ug/L
RT: 2.687 min Scan# 512
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39



Tgt Ion: 96 Resp: 50572
Ion Ratio Lower Upper
96 100
61 113.8 80.7 149.9
98 63.6 44.6 82.8

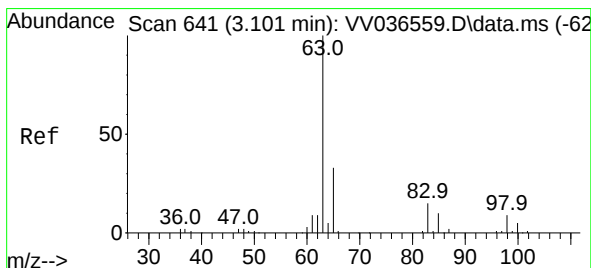
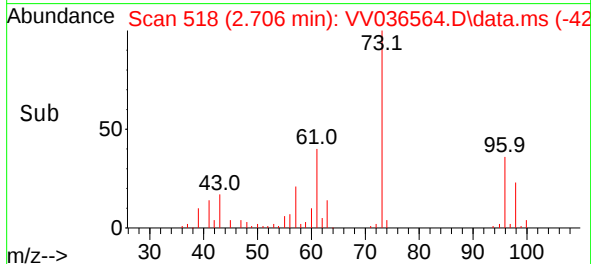
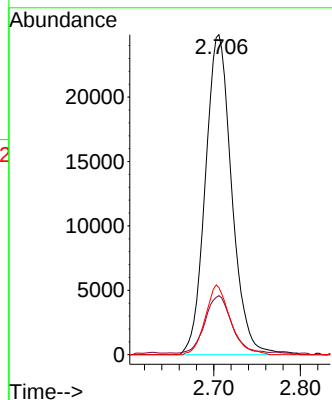
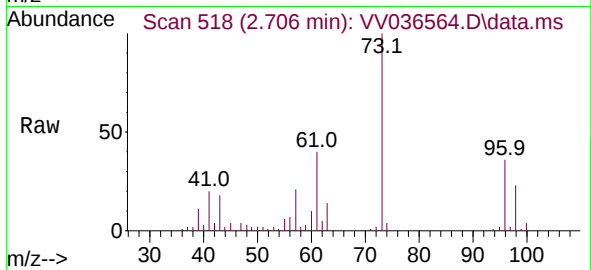




#18
Methyl tert-butyl Ether
Concen: 5.703 ug/L
RT: 2.706 min Scan# 51
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

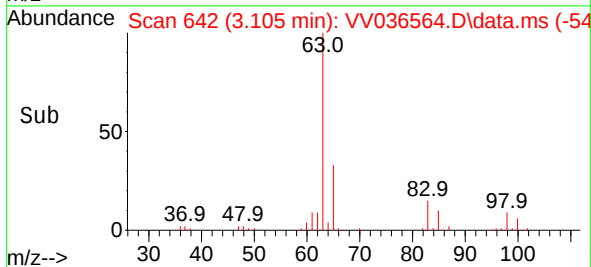
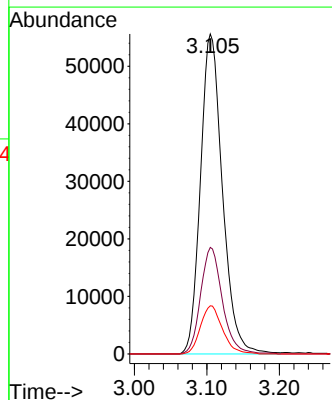
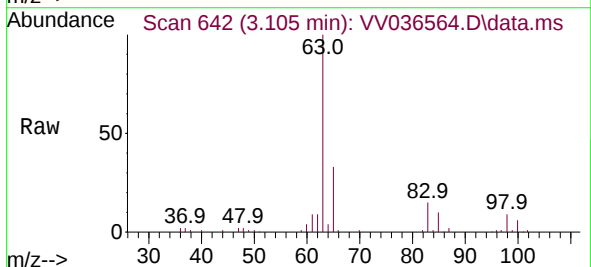
Instrument :
MSVOA_V
ClientSampleId :

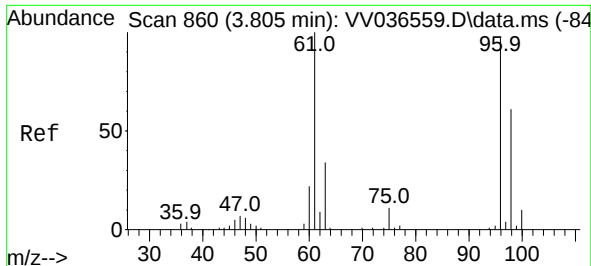
Tgt Ion: 73 Resp: 52473
Ion Ratio Lower Upper
73 100
43 17.8 14.3 21.5
57 20.6 16.5 24.7



#19
1,1-Dichloroethane
Concen: 15.760 ug/L
RT: 3.105 min Scan# 642
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

Tgt Ion: 63 Resp: 117137
Ion Ratio Lower Upper
63 100
65 33.3 22.7 42.1
83 15.0 10.9 20.2





#20

cis-1,2-Dichloroethene

Concen: 20.631 ug/L

RT: 3.809 min Scan# 861

Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

ClientSampleId :

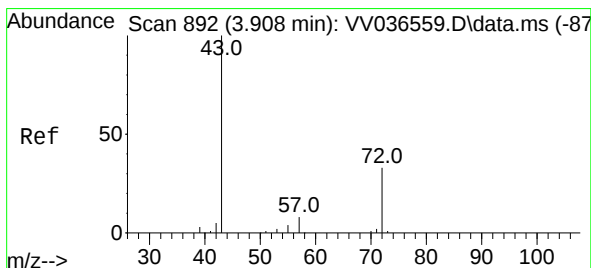
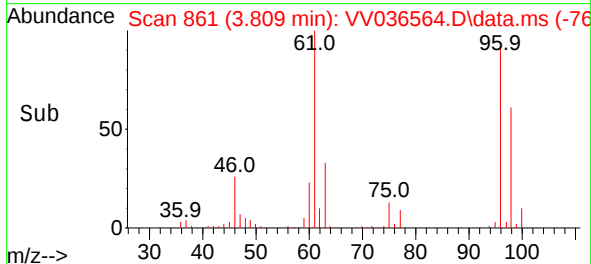
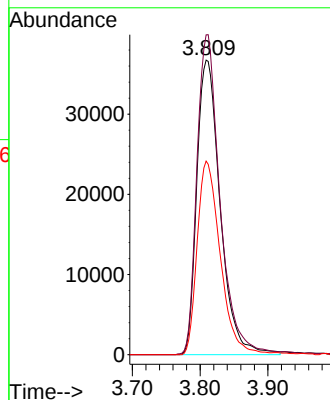
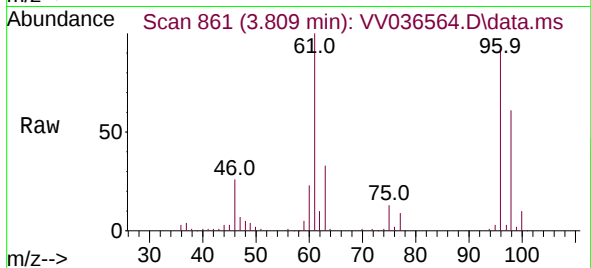
Tgt Ion: 96 Resp: 88048

Ion Ratio Lower Upper

96 100

61 108.6 74.8 138.8

98 65.8 45.2 84.0



#22

2-Butanone

Concen: 13.355 ug/L

RT: 3.912 min Scan# 893

Delta R.T. 0.003 min

Lab File: VV036564.D

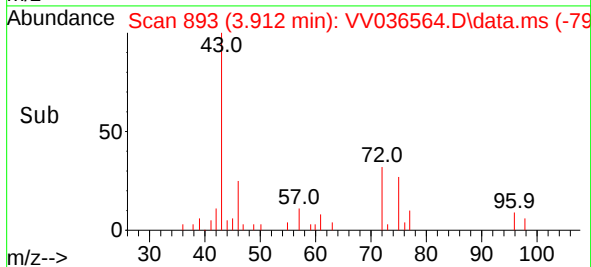
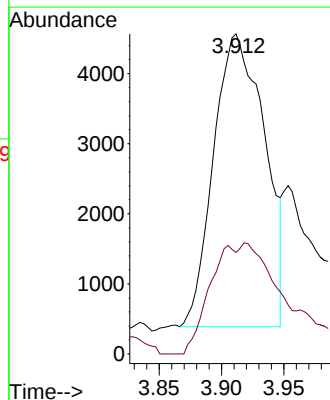
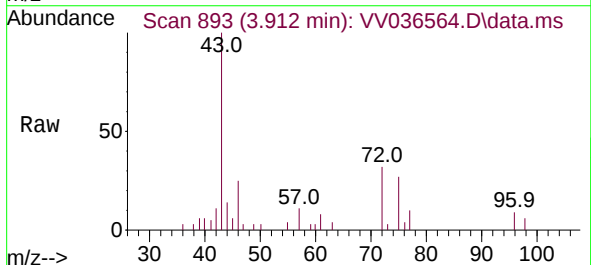
Acq: 16 Jul 2024 13:39

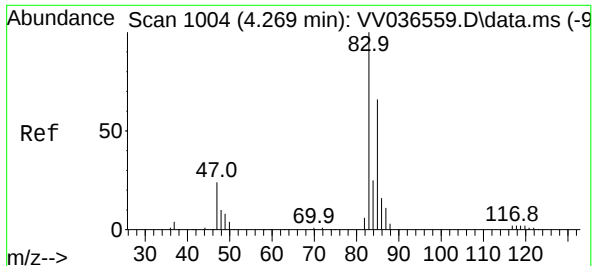
Tgt Ion: 43 Resp: 11889

Ion Ratio Lower Upper

43 100

72 20.1 5.9 17.6#





#25

Chloroform

Concen: 9.163 ug/L

RT: 4.272 min Scan# 1

Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

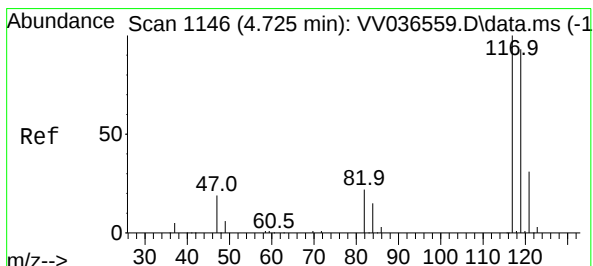
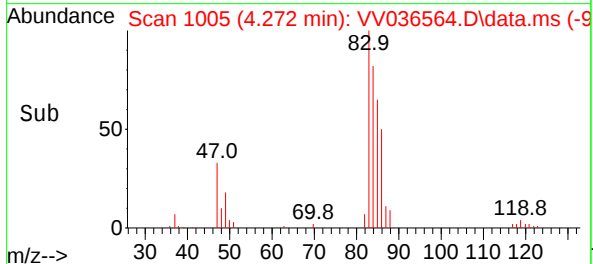
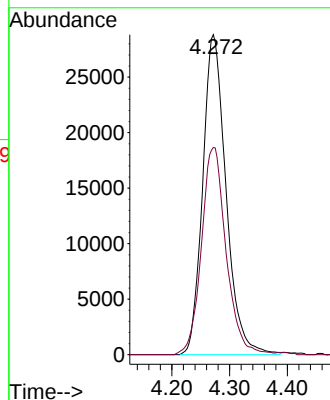
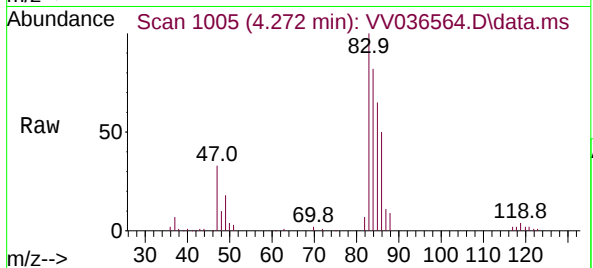
ClientSampleId :

Tgt Ion: 83 Resp: 80864

Ion Ratio Lower Upper

83 100

85 64.8 45.6 84.6



#31

Carbon tetrachloride

Concen: 3.999 ug/L

RT: 4.732 min Scan# 1148

Delta R.T. 0.006 min

Lab File: VV036564.D

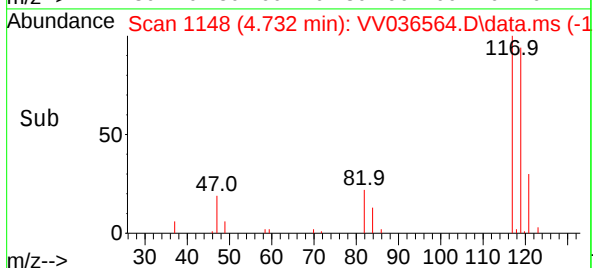
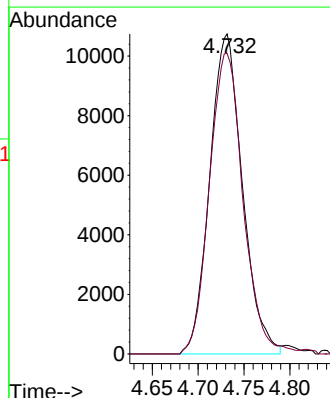
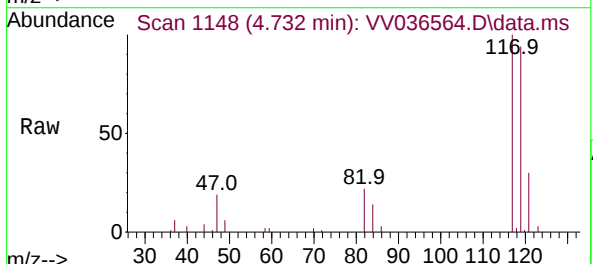
Acq: 16 Jul 2024 13:39

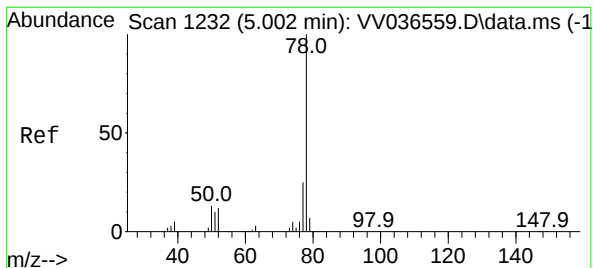
Tgt Ion: 117 Resp: 26582

Ion Ratio Lower Upper

117 100

119 97.1 77.6 116.4





#33

Benzene

Concen: 22.243 ug/L

RT: 5.005 min Scan# 1233

Delta R.T. 0.003 min

Lab File: VV036564.D

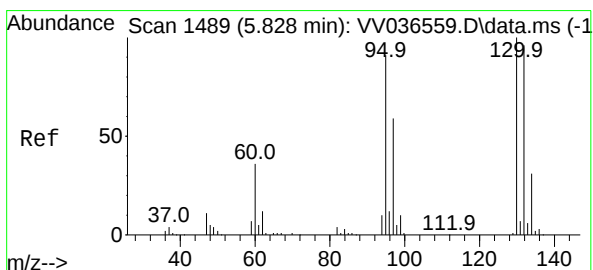
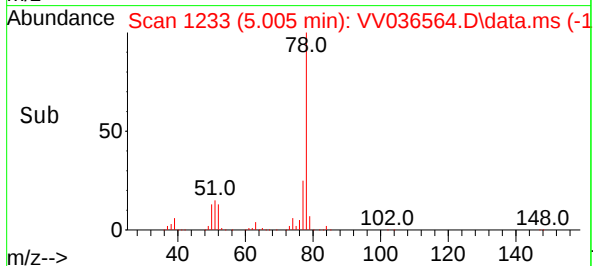
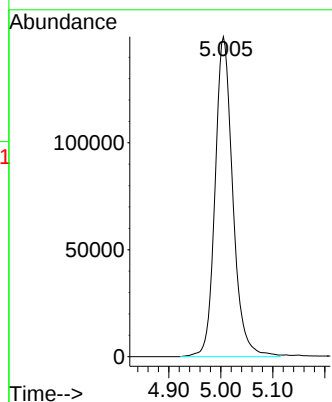
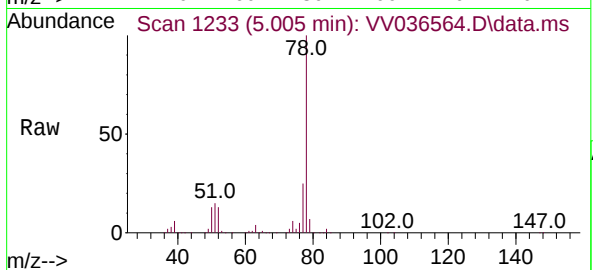
Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion: 78 Resp: 354917



#34

Trichloroethene

Concen: 25.553 ug/L

RT: 5.828 min Scan# 1489

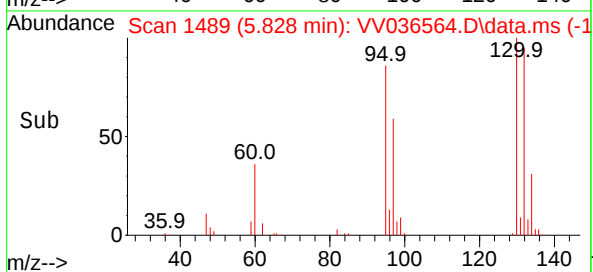
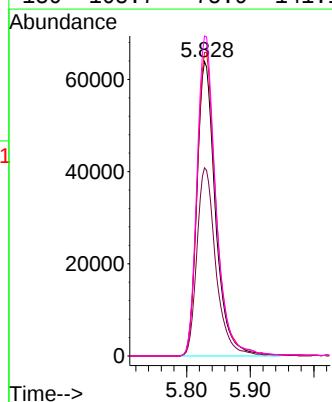
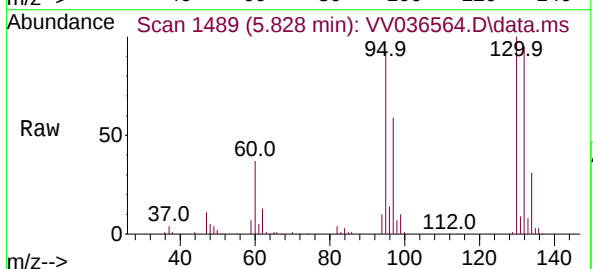
Delta R.T. 0.000 min

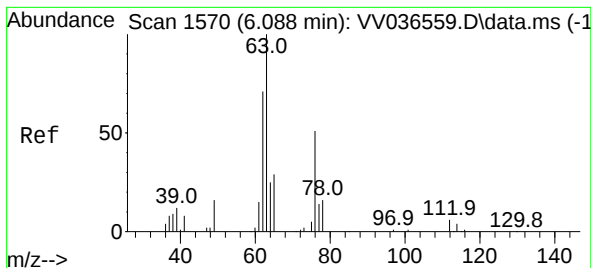
Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Tgt Ion: 95 Resp: 129744

Ion	Ratio	Lower	Upper
95	100		
97	63.9	44.4	82.4
132	103.1	73.0	135.6
130	108.7	75.9	141.1





#37

1,2-Dichloropropane

Concen: 0.516 ug/L

RT: 5.822 min Scan# 1487

Delta R.T. -0.267 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

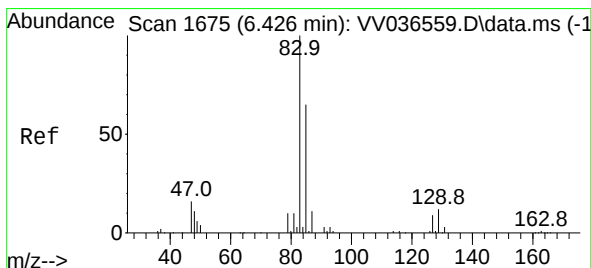
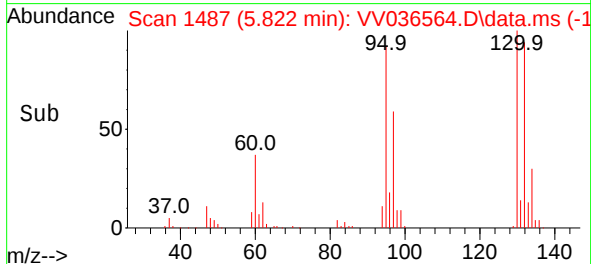
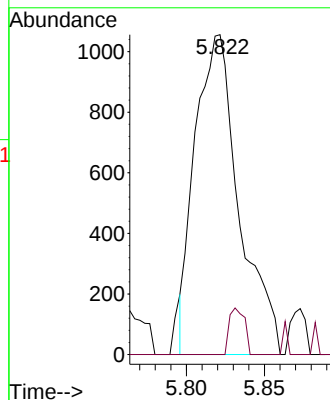
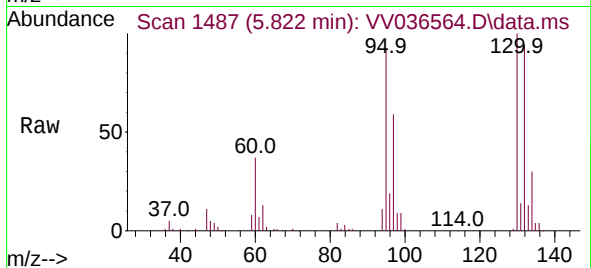
ClientSampleId :

Tgt Ion: 63 Resp: 2076

Ion Ratio Lower Upper

63 100

112 5.1 4.5 6.7



#38

Bromodichloromethane

Concen: 16.335 ug/L

RT: 6.432 min Scan# 1677

Delta R.T. 0.006 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

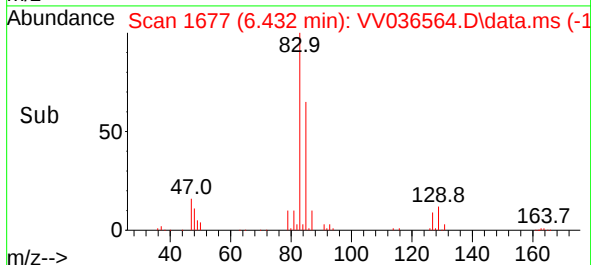
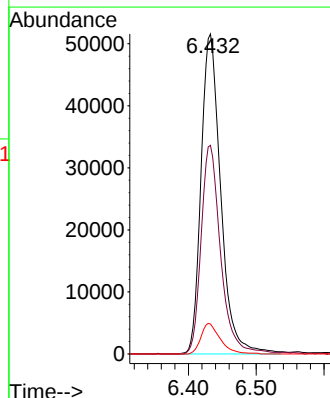
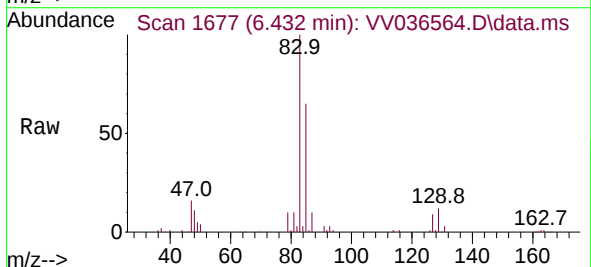
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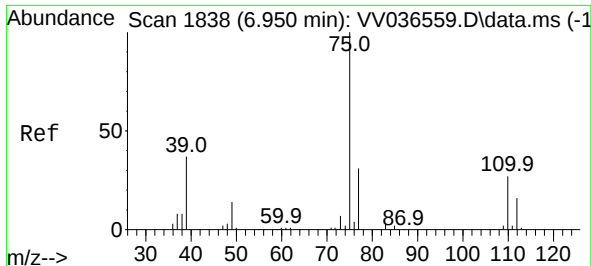
Ion Ratio Lower Upper

83 100

85 65.2 44.3 82.3

127 9.4 7.0 10.4

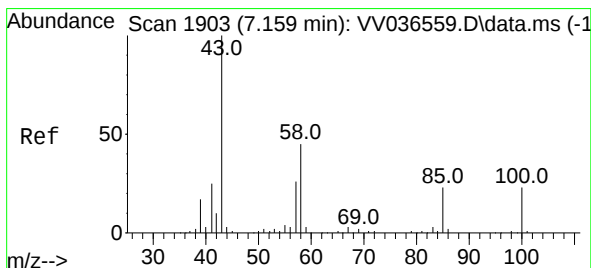
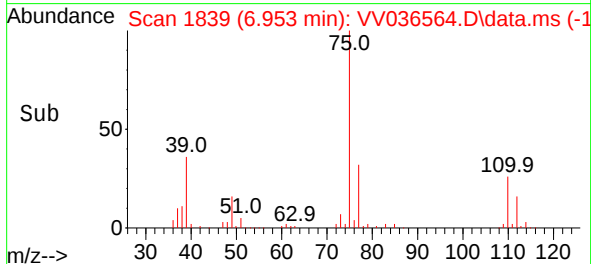
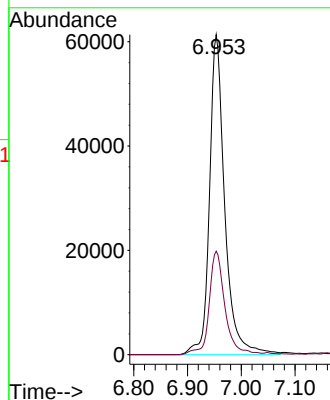
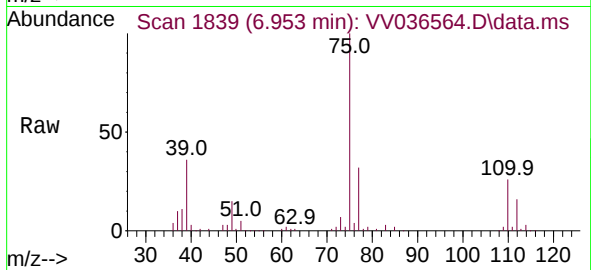




#39
 cis-1,3-Dichloropropene
 Concen: 19.474 ug/L
 RT: 6.953 min Scan# 1839
 Delta R.T. 0.003 min
 Lab File: VV036564.D
 Acq: 16 Jul 2024 13:39

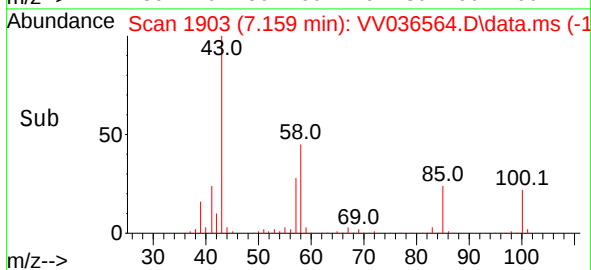
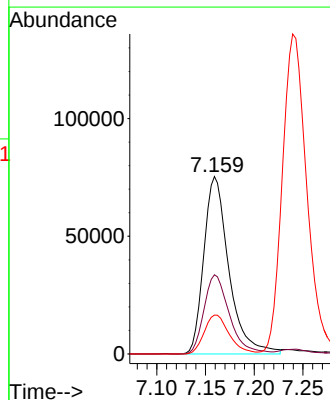
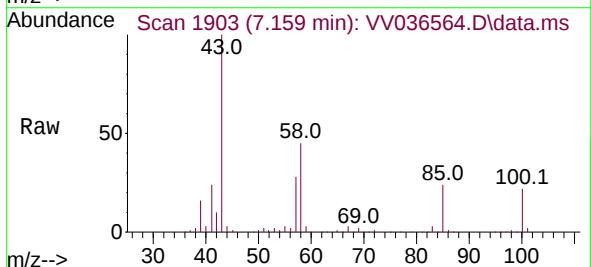
Instrument :
 MSVOA_V
 ClientSampleId :

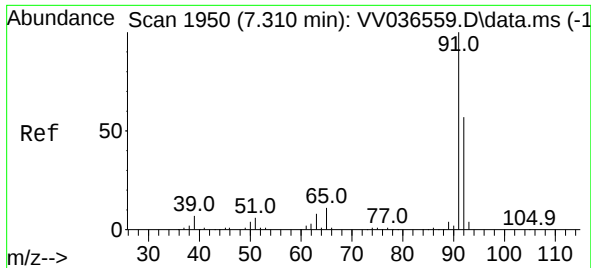
Tgt Ion: 75 Resp: 120925
 Ion Ratio Lower Upper
 75 100
 77 32.4 22.2 41.2



#40
 4-Methyl-2-pentanone
 Concen: 73.791 ug/L
 RT: 7.159 min Scan# 1903
 Delta R.T. 0.000 min
 Lab File: VV036564.D
 Acq: 16 Jul 2024 13:39

Tgt Ion: 43 Resp: 135034
 Ion Ratio Lower Upper
 43 100
 58 45.2 32.9 49.3
 100 22.0 15.5 23.3

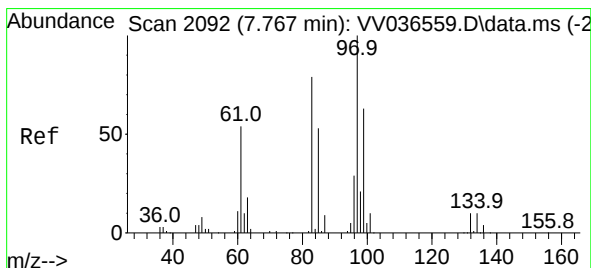
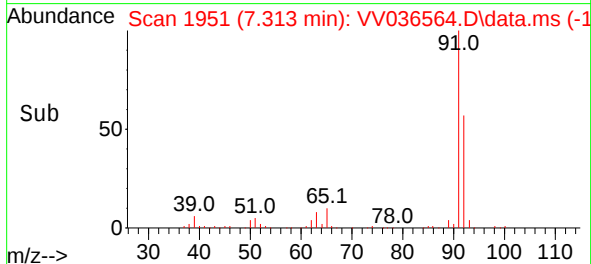
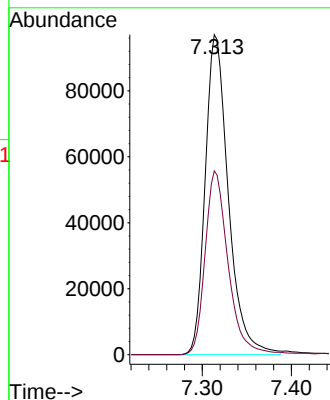
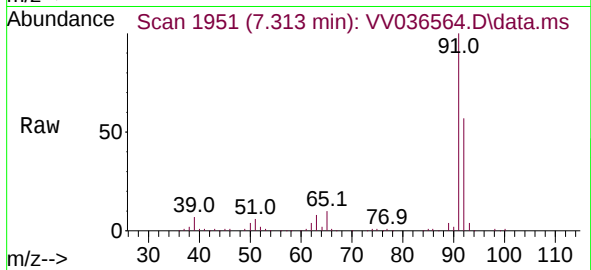




#42
Toluene
Concen: 10.345 ug/L
RT: 7.313 min Scan# 1950
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

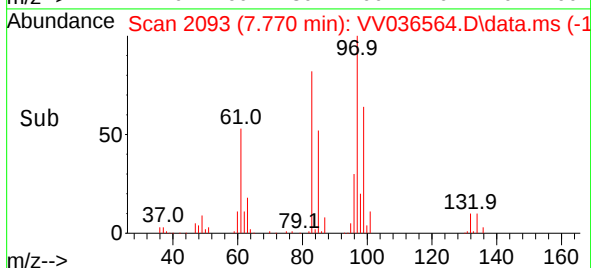
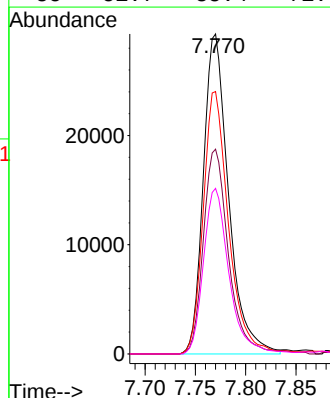
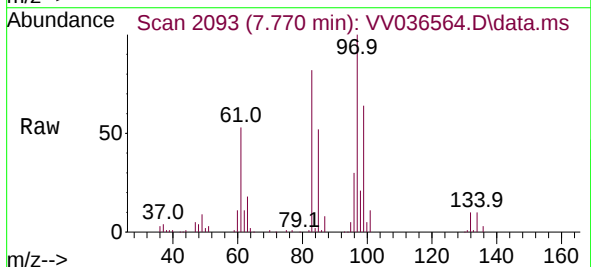
Instrument :
MSVOA_V
ClientSampleId :

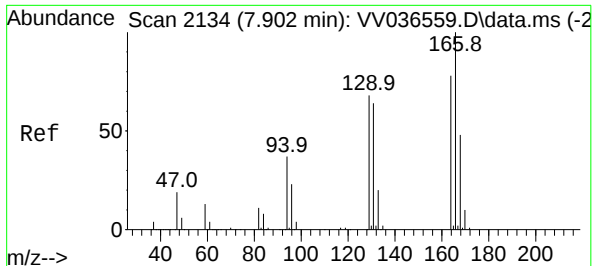
Tgt Ion: 91 Resp: 174904
Ion Ratio Lower Upper
91 100
92 57.5 40.1 74.5



#45
1,1,2-Trichloroethane
Concen: 12.901 ug/L
RT: 7.770 min Scan# 2093
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

Tgt Ion: 97 Resp: 51190
Ion Ratio Lower Upper
97 100
99 64.0 42.6 79.2
83 82.0 58.0 107.6
85 51.7 38.4 71.4





#46

Tetrachloroethene

Concen: 11.222 ug/L

RT: 7.902 min Scan# 2134

Delta R.T. 0.000 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion:164 Resp: 46070

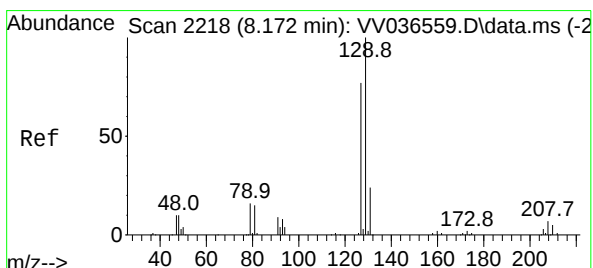
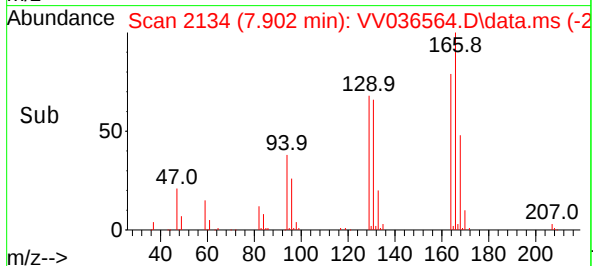
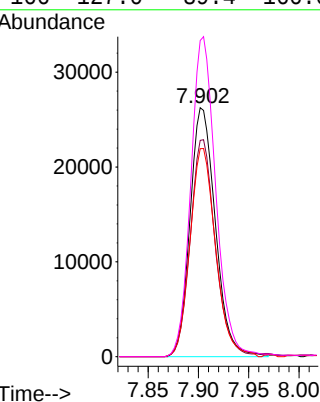
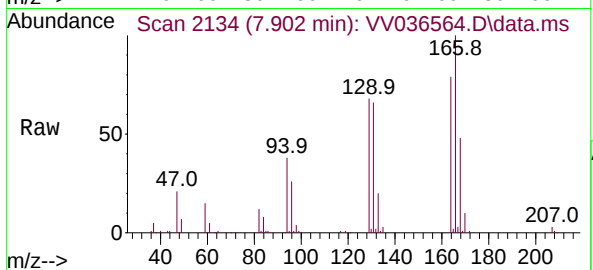
Ion Ratio Lower Upper

164 100

129 86.9 61.0 113.4

131 83.5 59.8 111.1

166 127.0 89.4 166.0



#49

Dibromochloromethane

Concen: 21.824 ug/L

RT: 8.175 min Scan# 2219

Delta R.T. 0.003 min

Lab File: VV036564.D

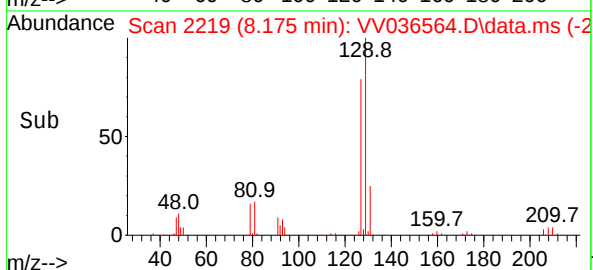
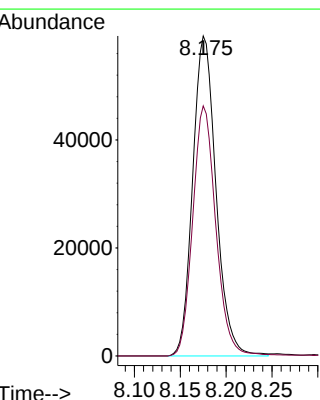
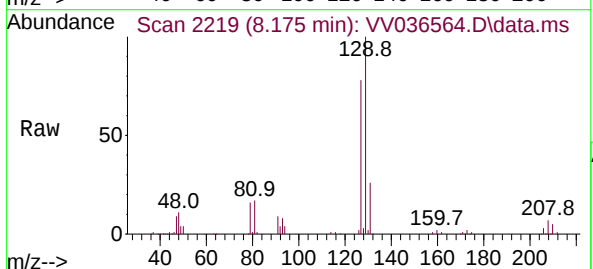
Acq: 16 Jul 2024 13:39

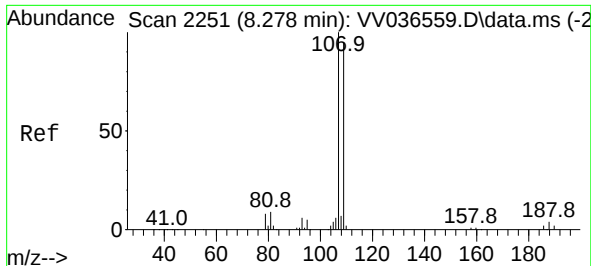
Tgt Ion:129 Resp: 104717

Ion Ratio Lower Upper

129 100

127 78.1 53.7 99.7





#50

1,2-Dibromoethane

Concen: 9.899 ug/L

RT: 8.284 min Scan# 21

Delta R.T. 0.006 min

Lab File: VV036564.D

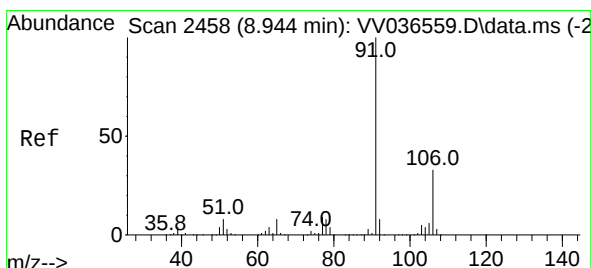
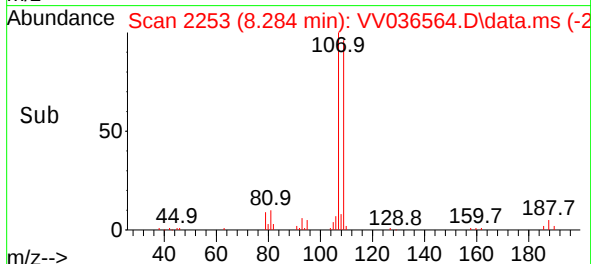
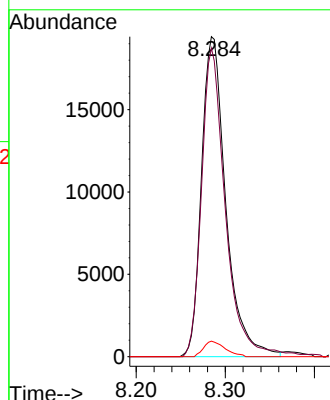
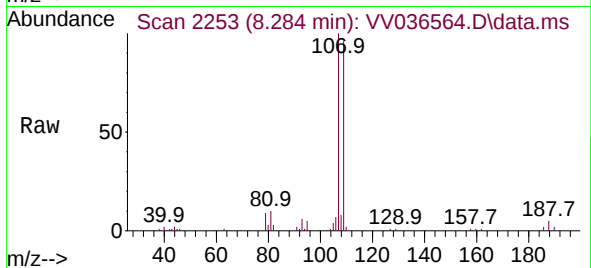
Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

ClientSampleId :

Tgt Ion:107	Resp:	36864
Ion	Ratio	Lower Upper
107	100	
109	96.4	66.2 123.0
188	4.9	3.4 5.0



#52

Ethylbenzene

Concen: 16.510 ug/L

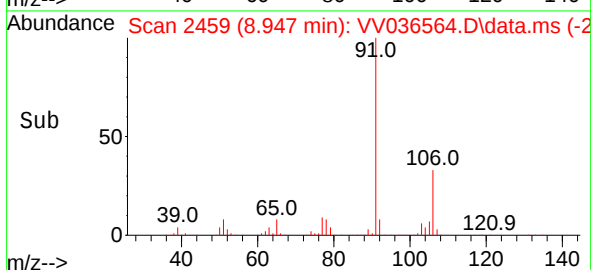
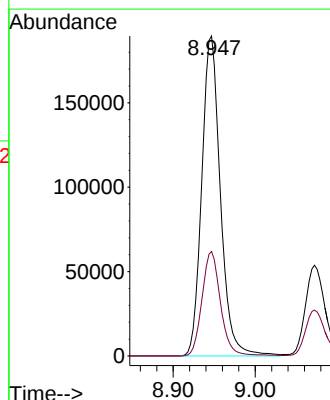
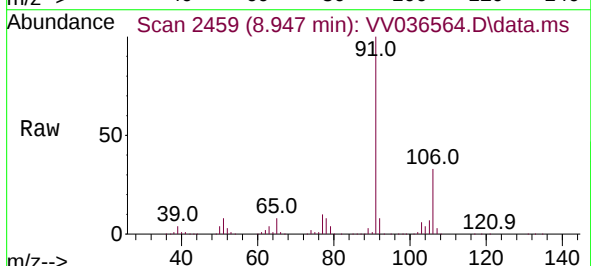
RT: 8.947 min Scan# 2459

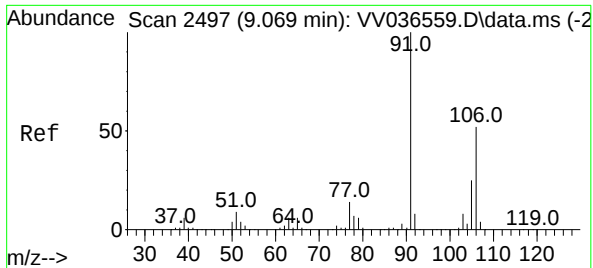
Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Tgt Ion: 91	Resp:	299421
Ion	Ratio	Lower Upper
91	100	
106	32.6	22.6 42.0

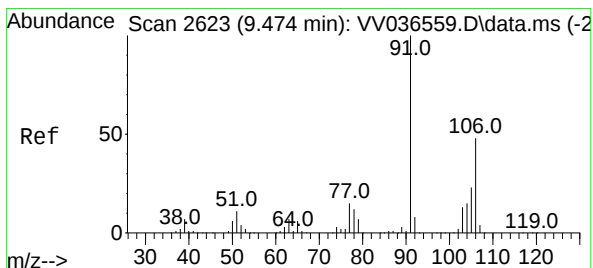
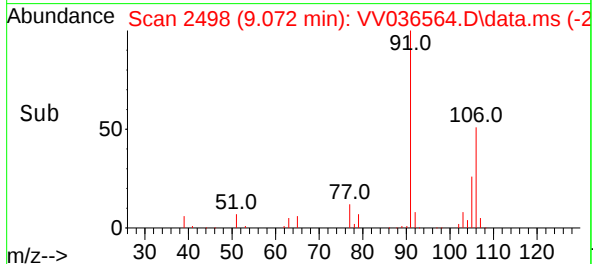
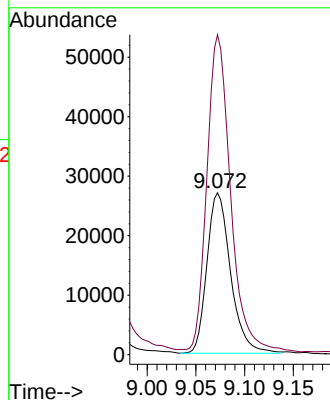
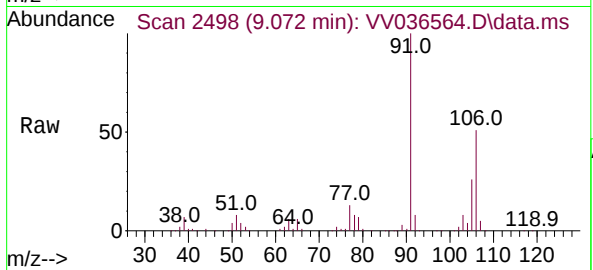




#53
m,p-Xylene
Concen: 6.518 ug/L
RT: 9.072 min Scan# 2498
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

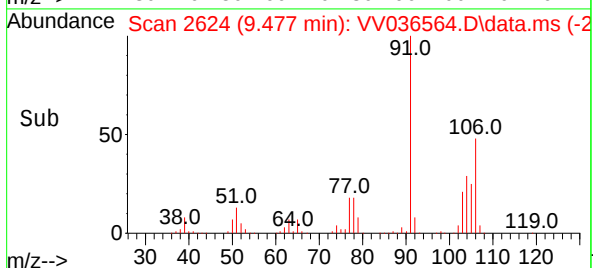
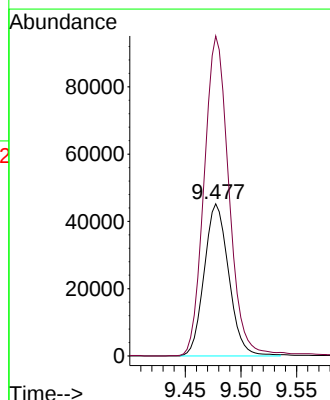
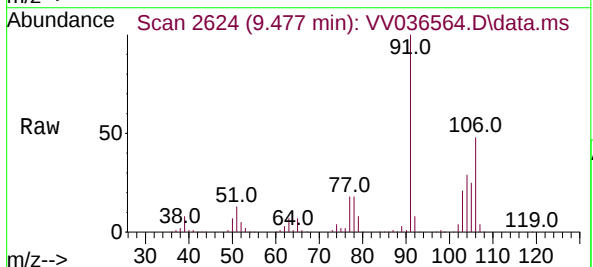
Instrument :
MSVOA_V
ClientSampleId :

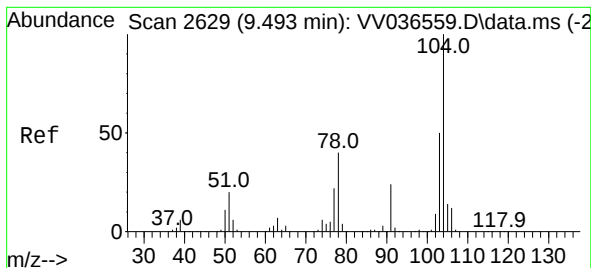
Tgt Ion:106 Resp: 45514
Ion Ratio Lower Upper
106 100
91 197.6 137.1 254.7



#54
o-Xylene
Concen: 10.418 ug/L
RT: 9.477 min Scan# 2624
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

Tgt Ion:106 Resp: 69262
Ion Ratio Lower Upper
106 100
91 210.3 147.3 273.6





#55

Styrene

Concen: 21.501 ug/L

RT: 9.497 min Scan# 2

Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

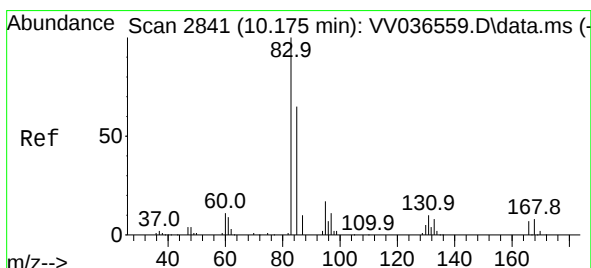
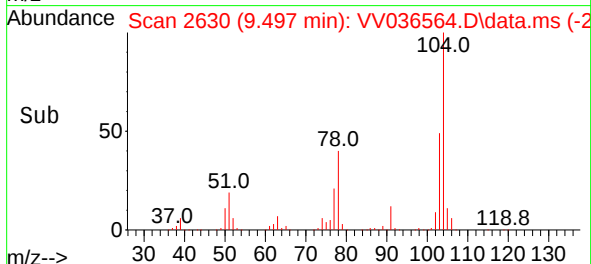
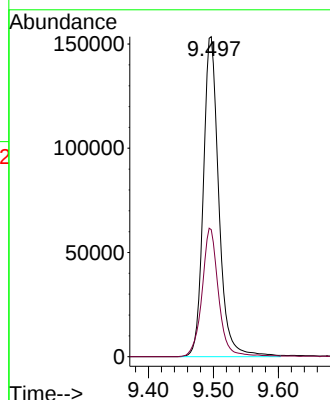
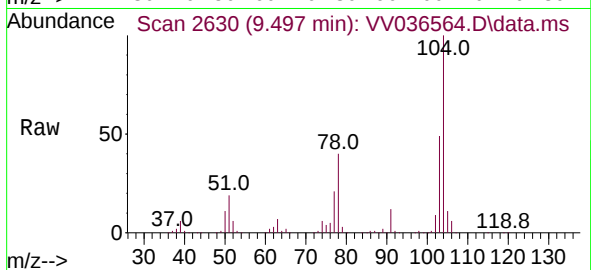
ClientSampleId :

Tgt Ion:104 Resp: 255747

Ion Ratio Lower Upper

104 100

78 39.7 28.8 53.6



#57

1,1,2,2-Tetrachloroethane

Concen: 22.300 ug/L

RT: 10.175 min Scan# 2841

Delta R.T. 0.000 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

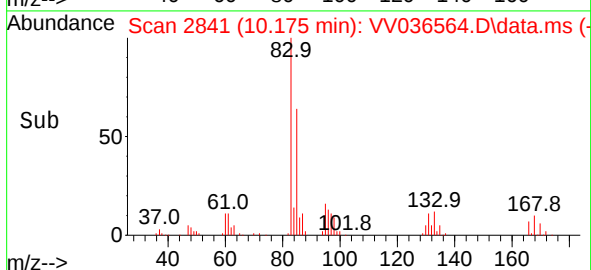
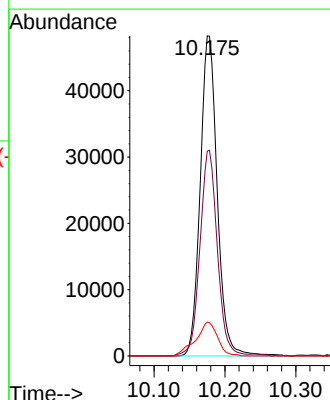
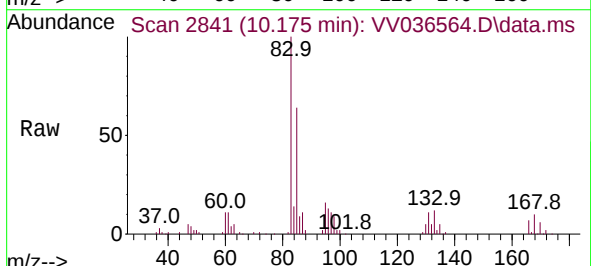
Tgt Ion: 83 Resp: 80801

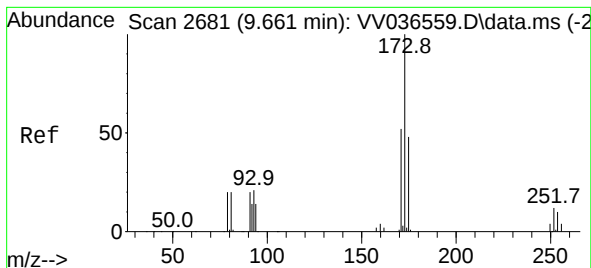
Ion Ratio Lower Upper

83 100

85 64.0 45.0 83.6

131 10.6 8.1 12.1





#59

Bromoform

Concen: 29.565 ug/L

RT: 9.664 min Scan# 2

Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

Instrument :

MSVOA_V

ClientSampleId :

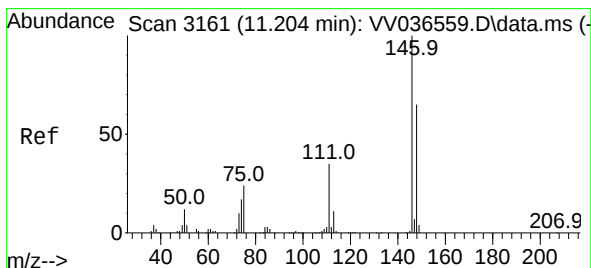
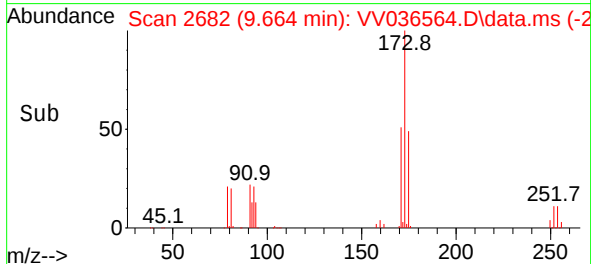
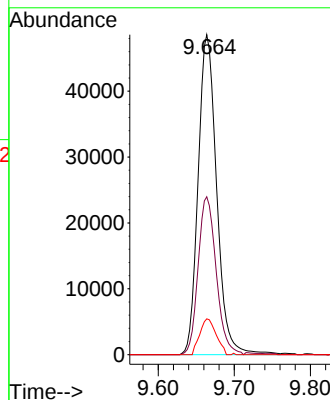
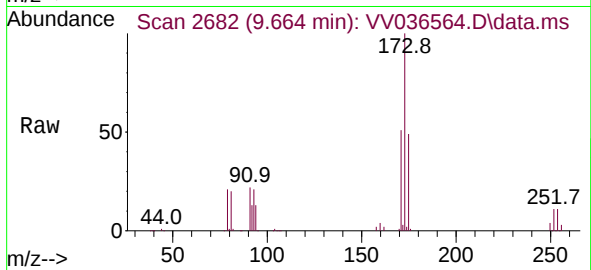
Tgt Ion:173 Resp: 82478

Ion Ratio Lower Upper

173 100

175 48.0 37.6 56.4

254 9.9 8.2 12.4



#65

1,4-Dichlorobenzene

Concen: 18.189 ug/L

RT: 11.207 min Scan# 3162

Delta R.T. 0.003 min

Lab File: VV036564.D

Acq: 16 Jul 2024 13:39

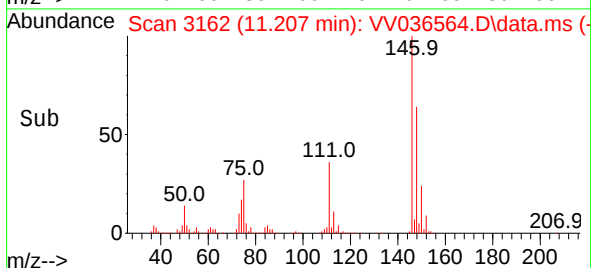
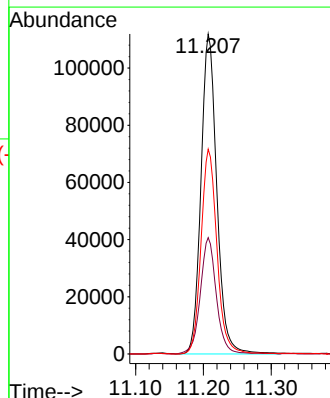
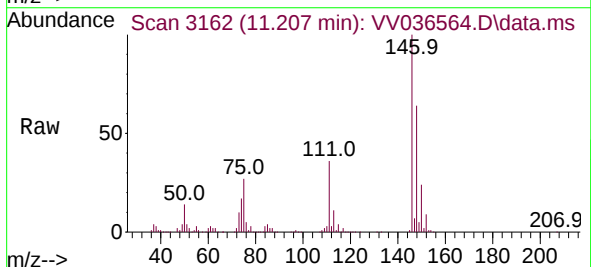
Tgt Ion:146 Resp: 181560

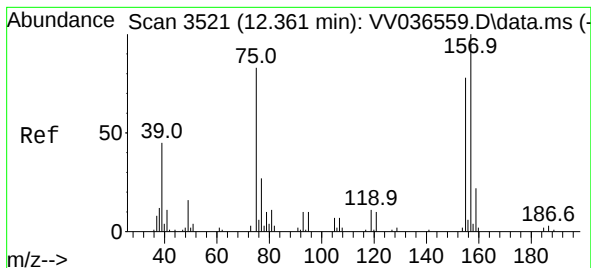
Ion Ratio Lower Upper

146 100

111 36.4 25.2 46.8

148 64.0 45.2 84.0

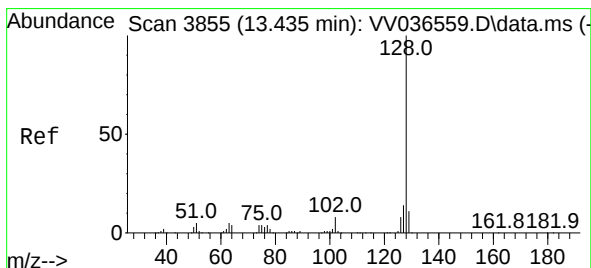
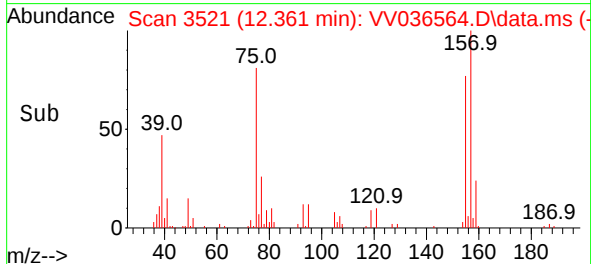
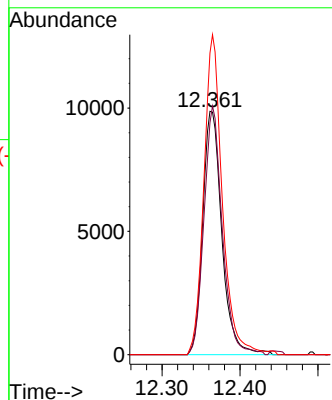
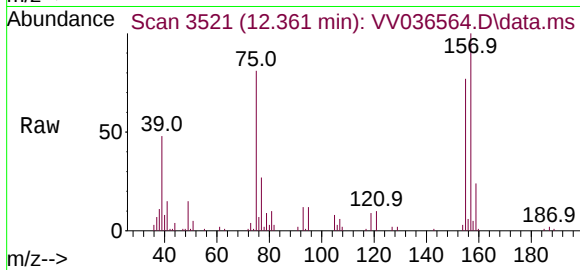




#68
1,2-Dibromo-3-chloropropane
Concen: 27.672 ug/L
RT: 12.361 min Scan# 3521
Delta R.T. 0.000 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

Instrument :
MSVOA_V
ClientSampleId :

Tgt Ion: 75 Resp: 16767
Ion Ratio Lower Upper
75 100
155 95.4 74.6 111.8
157 124.0 95.0 142.4



#71
Naphthalene
Concen: 18.753 ug/L
RT: 13.439 min Scan# 3856
Delta R.T. 0.003 min
Lab File: VV036564.D
Acq: 16 Jul 2024 13:39

Tgt Ion: 128 Resp: 161234
Ion Ratio Lower Upper
128 100
127 14.2 10.8 16.2
129 10.8 8.6 13.0

