

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VW102122\
 Data File : VW028673.D
 Acq On : 21 Oct 2022 19:57
 Operator : SY/MD
 Sample : N5233-01
 Misc : 25.0mL/MSVOA_V/WATER
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 BHA51

Quant Time: Oct 21 23:06:02 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVTR102022WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Fri Oct 21 22:58:36 2022
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.612	114	169764	5.000	ug/L	0.01
28) Chlorobenzene-d5	8.847	117	163074	5.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.242	152	79949	5.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.304	65	81712	4.862	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	97.200%
7) Chloroethane-d5	1.564	69	70543	5.340	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	106.800%
11) 1,1-Dichloroethene-d2	2.105	63	117499	4.023	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	80.400%
20) 2-Butanone-d5	3.908	46	124450	39.340	ug/L	-0.04
Spiked Amount	50.000	Range	40 - 130	Recovery	=	78.680%
24) Chloroform-d	4.342	84	118842	4.767	ug/L	0.01
Spiked Amount	5.000	Range	70 - 125	Recovery	=	95.400%
26) 1,2-Dichloroethane-d4	5.030	65	58356	4.322	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	86.400%
32) Benzene-d6	5.047	84	252766	3.562	ug/L	0.02
Spiked Amount	5.000	Range	70 - 125	Recovery	=	71.200%
36) 1,2-Dichloropropane-d6	6.066	67	84149	3.782	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	75.600%
41) Toluene-d8	7.310	98	217913	4.246	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	85.000%
43) trans-1,3-Dichloroprop...	7.622	79	19428	3.597	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	72.000%
46) 2-Hexanone-d5	8.088	63	114284	50.962	ug/L	-0.02
Spiked Amount	50.000	Range	45 - 130	Recovery	=	101.920%
56) 1,1,2,2-Tetrachloroeth...	10.210	84	53109	5.054	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	101.000%
66) 1,2-Dichlorobenzene-d4	11.615	152	71508	4.976	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	99.600%
Target Compounds						
					Qvalue	
3) Chloromethane	1.236	50	1104	0.067	ug/L	87
5) Vinyl chloride	1.307	62	874	0.055	ug/L #	1
6) Bromomethane	1.523	94	742	0.096	ug/L	81
8) Chloroethane	1.580	64	13985	1.306	ug/L	95
10) 1,1,2-Trichloro-1,2,2-...	2.105	101	1204	0.103	ug/L #	30
12) 1,1-Dichloroethene	2.111	96	1232	0.112	ug/L #	1
13) Acetone	2.526	43	34511	17.018	ug/L	52
15) Methyl Acetate	2.526	43	50377	8.350	ug/L #	60
17) Methyl tert-butyl Ether	2.767	73	9599	0.320	ug/L #	1
18) trans-1,2-Dichloroethene	2.757	96	2077	0.174	ug/L	70
19) 1,1-Dichloroethane	3.188	63	1859	0.067	ug/L #	81
27) 1,2-Dichloroethane	5.137	62	851	0.051	ug/L #	29
30) Cyclohexane	4.670	56	56621	1.839	ug/L	98
33) Benzene	5.095	78	100289	1.311	ug/L	100
35) Methylcyclohexane	6.127	83	27526	0.993	ug/L	85
40) 4-Methyl-2-pentanone	7.284	43	9359	0.944	ug/L #	50
42) Toluene	7.387	91	19186	0.303	ug/L	97
44) trans-1,3-Dichloropropene	7.622	75	1326	0.088	ug/L #	70
45) 1,1,2-Trichloroethane	7.786	97	3918	0.406	ug/L #	21

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

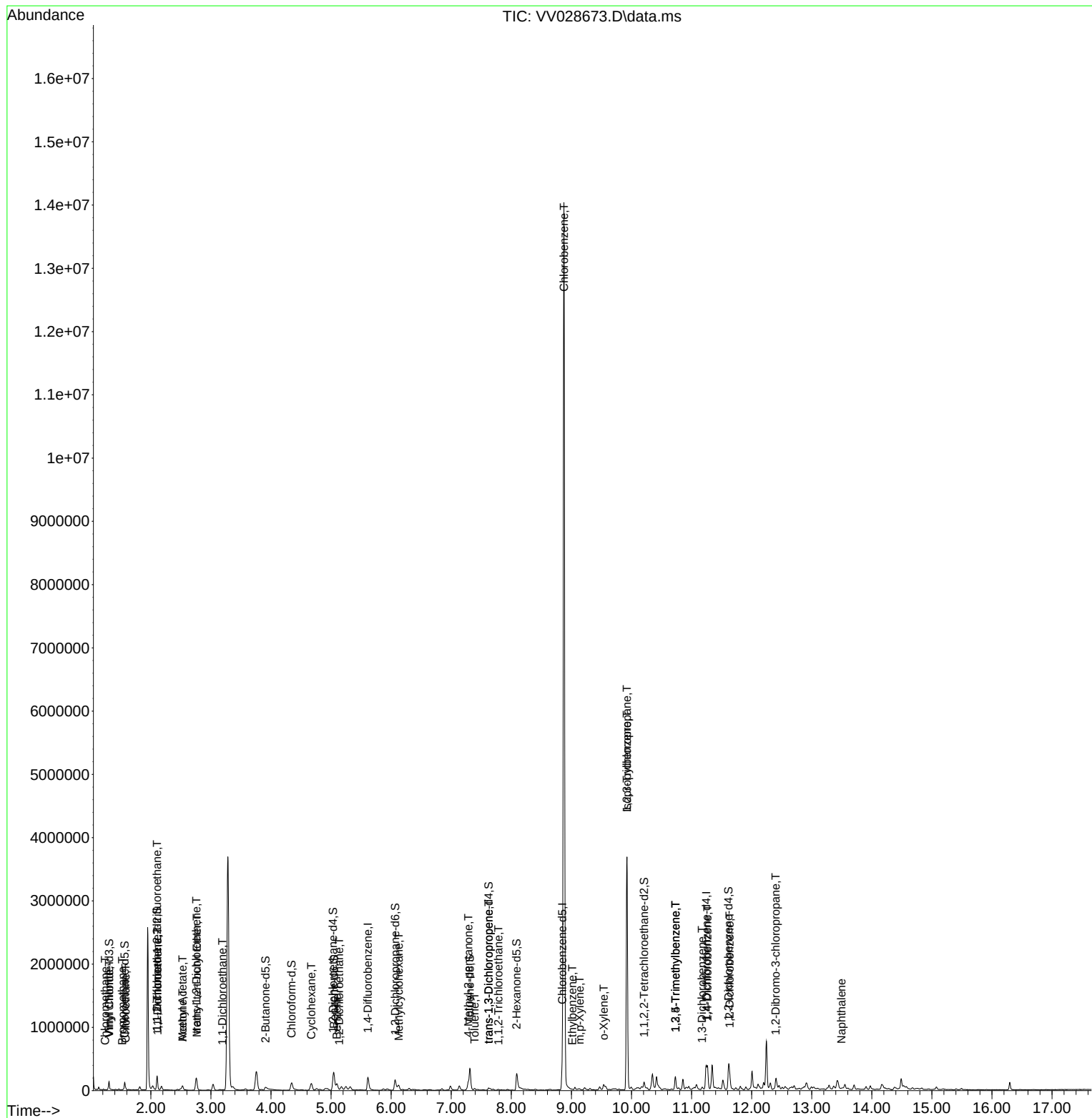
51) Chlorobenzene	8.876	112	6350180	171.445	ug/L	96
52) Ethylbenzene	9.014	91	5194	0.079	ug/L	96
53) m,p-Xylene	9.136	106	2473	0.103	ug/L	74
54) o-Xylene	9.538	106	17549	0.739	ug/L	100
60) Isopropylbenzene	9.924	105	2194904	32.849	ug/L	99
61) 1,2,3-Trichloropropane	9.924	75	28259	3.262	ug/L #	1
62) 1,3,5-Trimethylbenzene	10.731	105	114983	5.991	ug/L #	72
63) 1,2,4-Trimethylbenzene	10.731	105	114983	2.225	ug/L #	75
64) 1,3-Dichlorobenzene	11.175	146	14720	0.557	ug/L	96
65) 1,4-Dichlorobenzene	11.265	146	127064	4.758	ug/L	98
67) 1,2-Dichlorobenzene	11.635	146	63581	2.585	ug/L	99
68) 1,2-Dibromo-3-chloropr...	12.400	75	1287	0.847	ug/L #	9
71) Naphthalene	13.496	128	1885	0.075	ug/L #	60

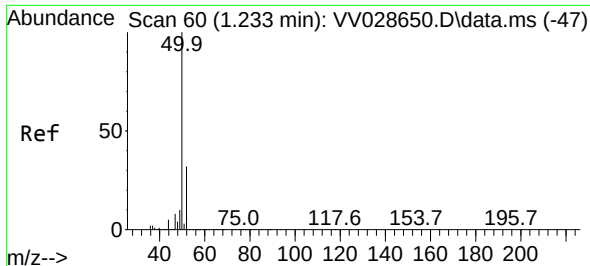
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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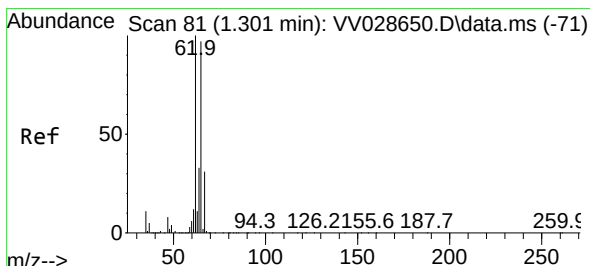
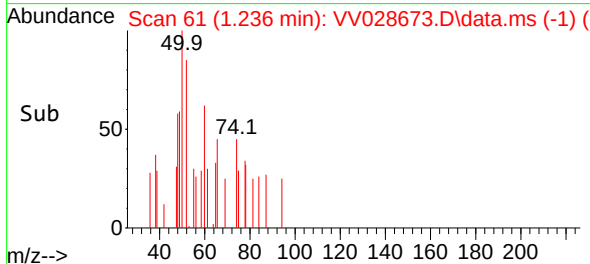
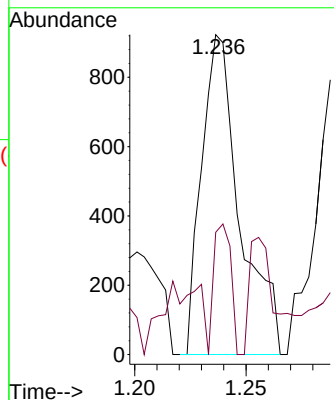
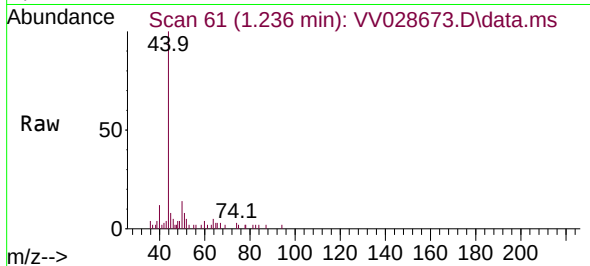




#3
Chloromethane
Concen: 0.067 ug/L
RT: 1.236 min Scan# 61
Delta R.T. 0.003 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

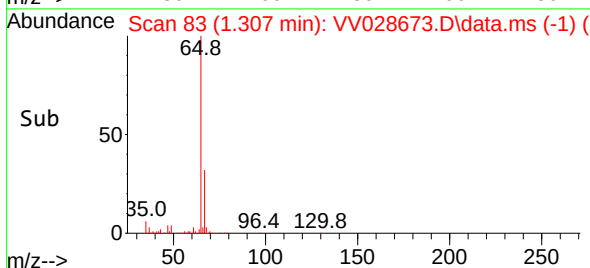
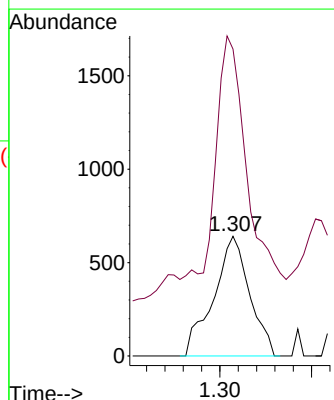
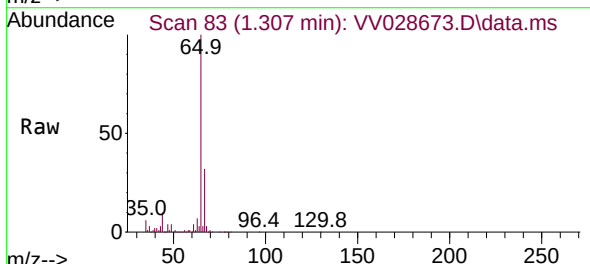
Instrument :
MSVOA_V
ClientSampleId :
BHA51

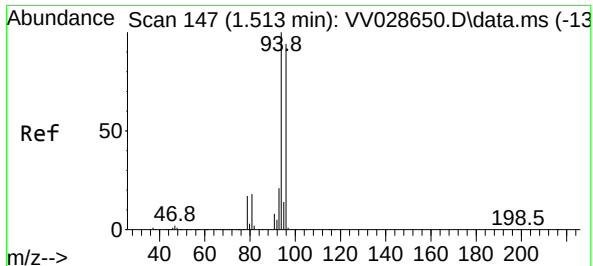
Tgt Ion: 50 Resp: 1104
Ion Ratio Lower Upper
50 100
52 38.2 21.8 40.6



#5
Vinyl chloride
Concen: 0.055 ug/L
RT: 1.307 min Scan# 83
Delta R.T. 0.006 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 62 Resp: 874
Ion Ratio Lower Upper
62 100
64 256.3 22.0 41.0#

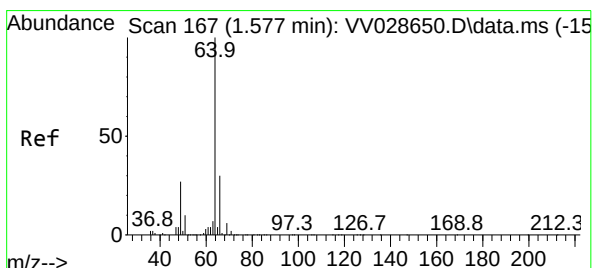
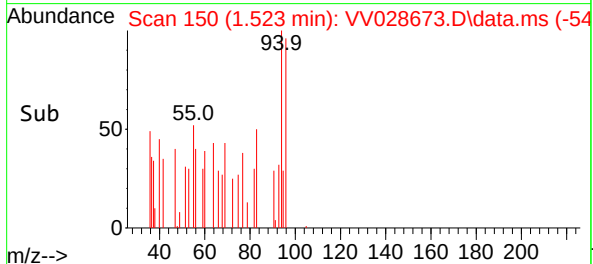
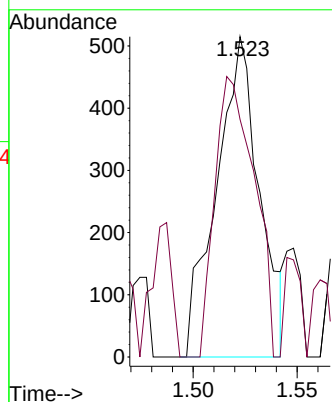
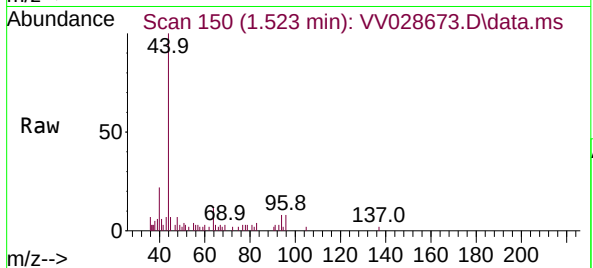




#6
Bromomethane
Concen: 0.096 ug/L
RT: 1.523 min Scan# 11
Delta R.T. 0.010 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

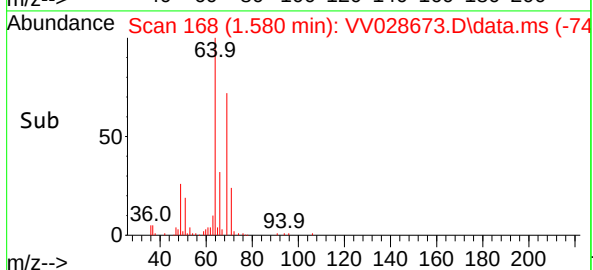
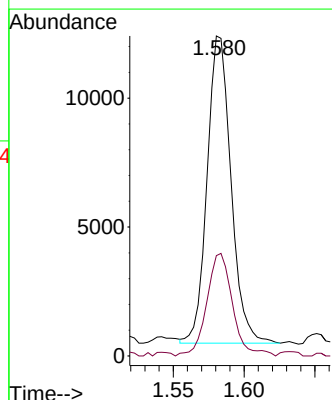
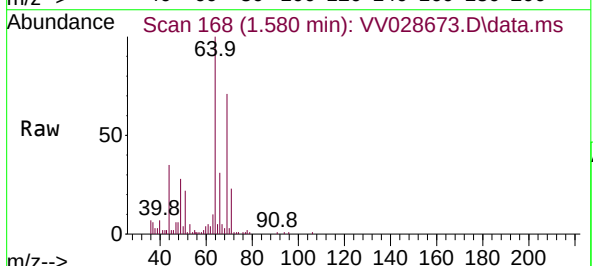
Instrument :
MSVOA_V
ClientSampleId :
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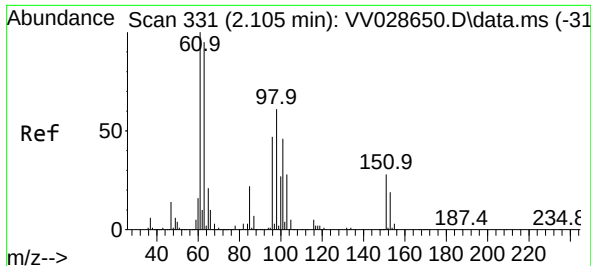
Tgt Ion: 94 Resp: 742
Ion Ratio Lower Upper
94 100
96 74.2 64.3 119.3



#8
Chloroethane
Concen: 1.306 ug/L
RT: 1.580 min Scan# 168
Delta R.T. 0.003 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 64 Resp: 13985
Ion Ratio Lower Upper
64 100
66 31.4 23.9 44.5

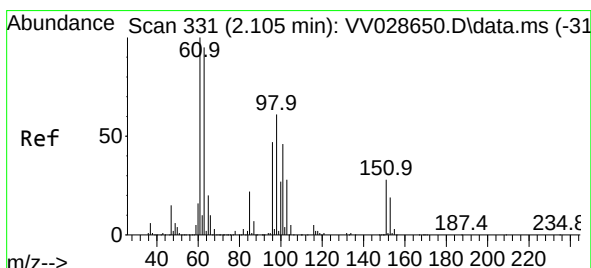
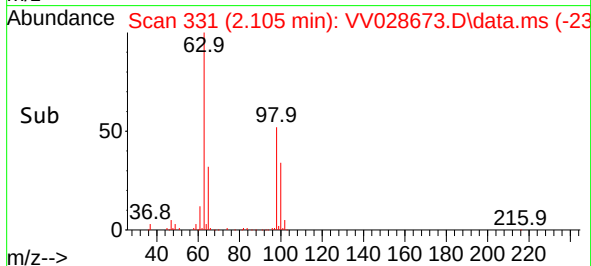
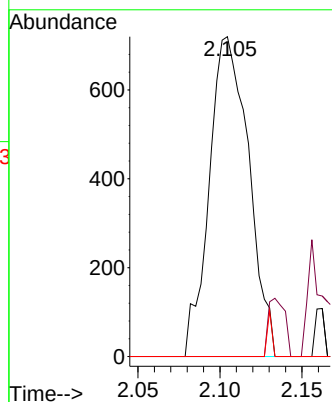
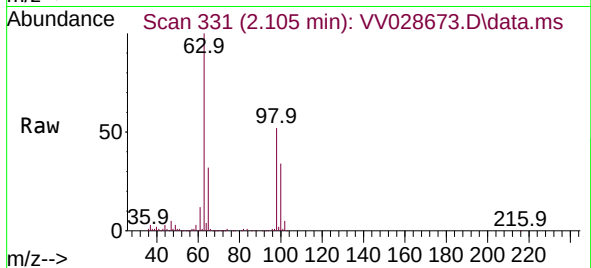




#10
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 0.103 ug/L
RT: 2.105 min Scan# 311
Delta R.T. -0.000 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

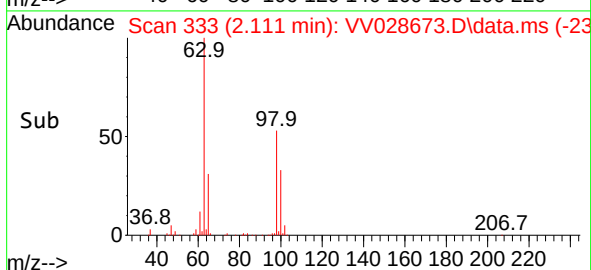
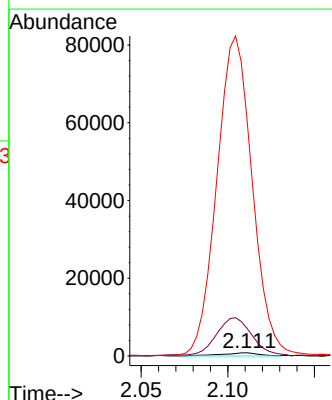
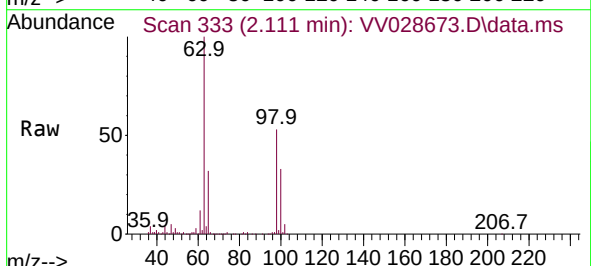
Instrument :
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ClientSampleId :
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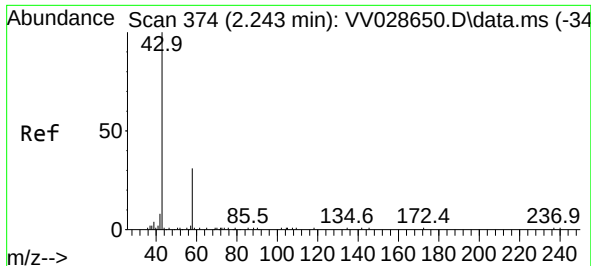
Tgt Ion:101 Resp: 1204
Ion Ratio Lower Upper
101 100
85 7.6 37.0 55.6#
151 1.7 50.2 75.2#



#12
1,1-Dichloroethene
Concen: 0.112 ug/L
RT: 2.111 min Scan# 333
Delta R.T. 0.006 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 96 Resp: 1232
Ion Ratio Lower Upper
96 100
61 886.2 148.1 275.1#
63 7575.4 133.3 247.7#

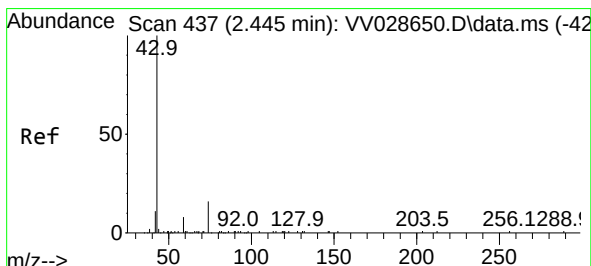
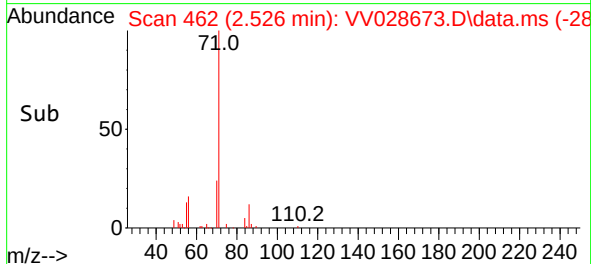
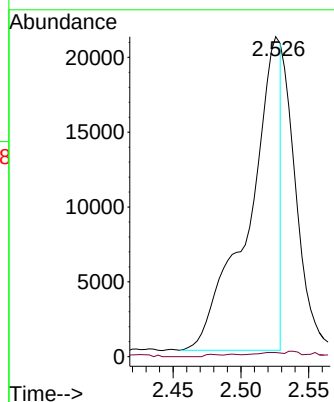
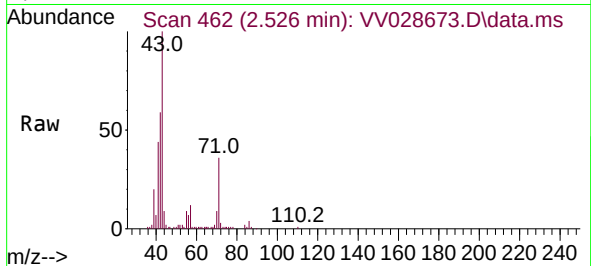




#13
Acetone
Concen: 17.018 ug/L
RT: 2.526 min Scan# 41
Delta R.T. 0.283 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

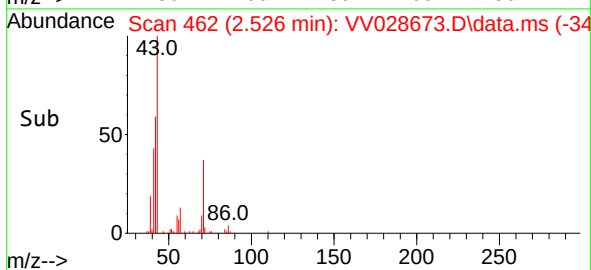
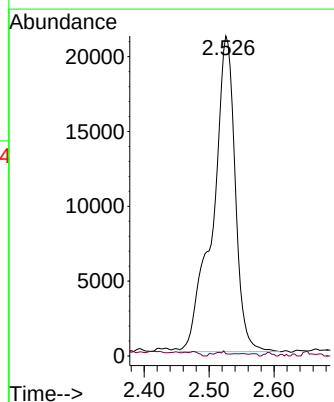
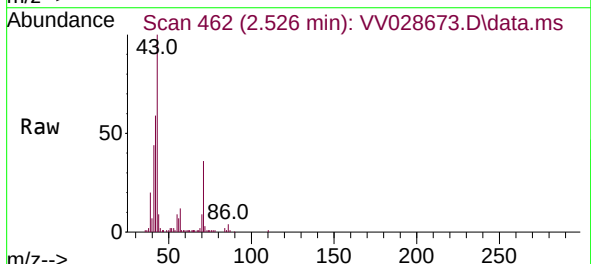
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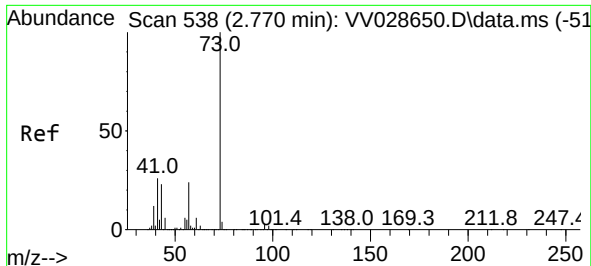
Tgt Ion: 43 Resp: 34511
Ion Ratio Lower Upper
43 100
58 1.1 0.0 50.2



#15
Methyl Acetate
Concen: 8.350 ug/L
RT: 2.526 min Scan# 462
Delta R.T. 0.080 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 43 Resp: 50377
Ion Ratio Lower Upper
43 100
74 0.8 14.9 22.3#





#17

Methyl tert-butyl Ether

Concen: 0.320 ug/L

RT: 2.767 min Scan# 51

Delta R.T. -0.003 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

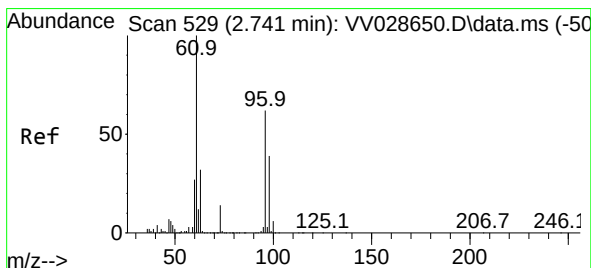
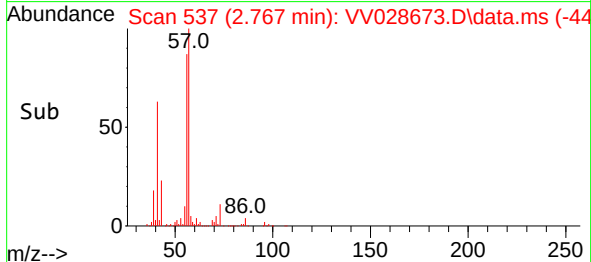
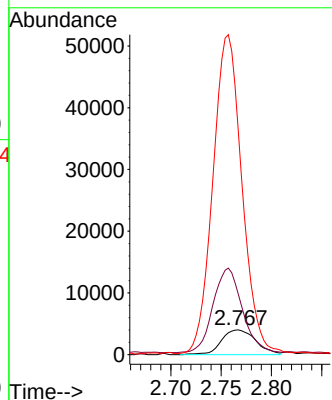
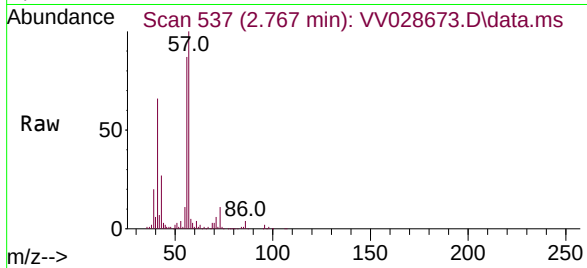
MSVOA_V

ClientSampleId :

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Tgt Ion: 73 Resp: 9599

Ion	Ratio	Lower	Upper
73	100		
43	286.3	18.0	27.0#
57	1078.5	20.0	30.0#



#18

trans-1,2-Dichloroethene

Concen: 0.174 ug/L

RT: 2.757 min Scan# 534

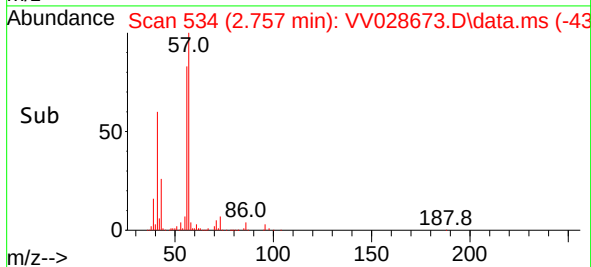
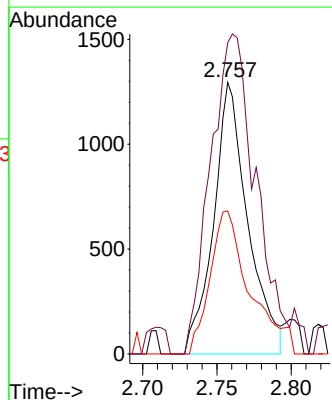
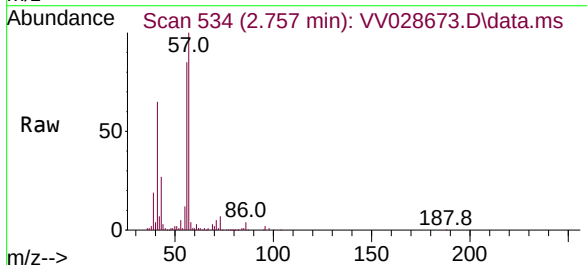
Delta R.T. 0.016 min

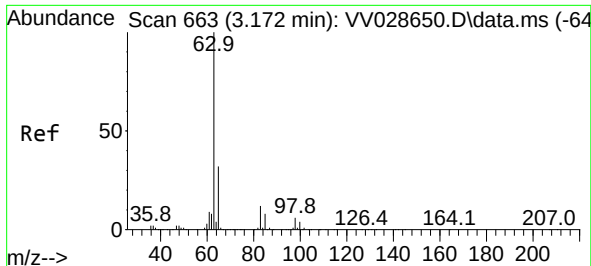
Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Tgt Ion: 96 Resp: 2077

Ion	Ratio	Lower	Upper
96	100		
61	114.6	114.3	212.3
98	52.7	45.0	83.6





#19

1,1-Dichloroethane

Concen: 0.067 ug/L

RT: 3.188 min Scan# 6

Delta R.T. 0.016 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

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ClientSampleId :

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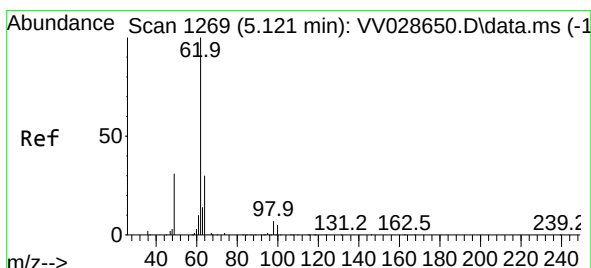
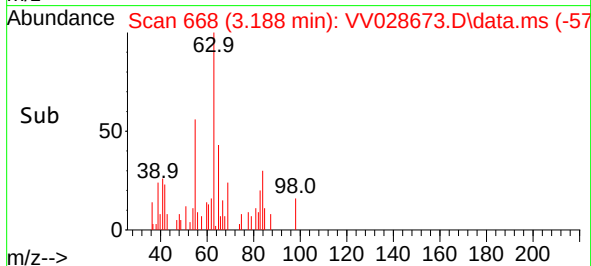
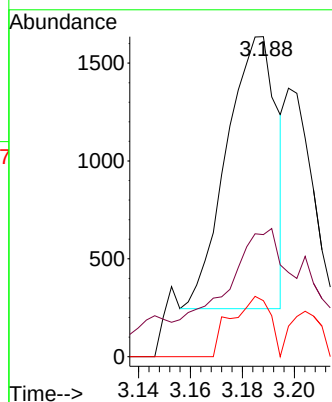
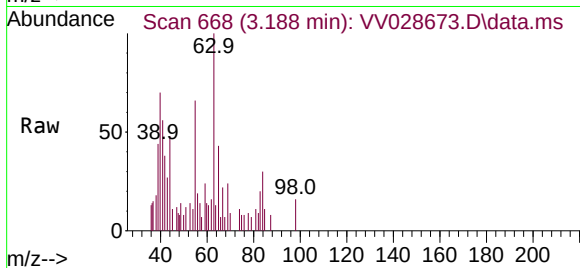
Tgt Ion: 63 Resp: 1859

Ion Ratio Lower Upper

63 100

65 44.5 23.1 42.9#

83 17.5 7.9 14.7#



#27

1,2-Dichloroethane

Concen: 0.051 ug/L

RT: 5.137 min Scan# 1274

Delta R.T. 0.016 min

Lab File: VV028673.D

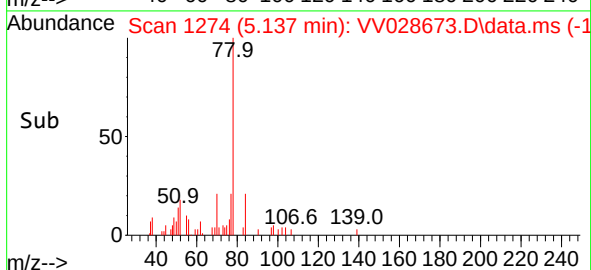
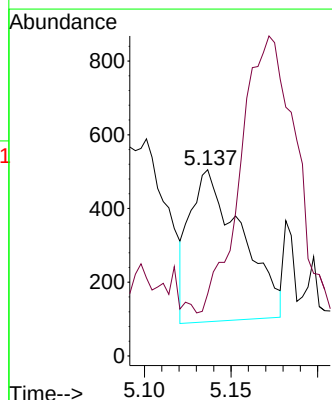
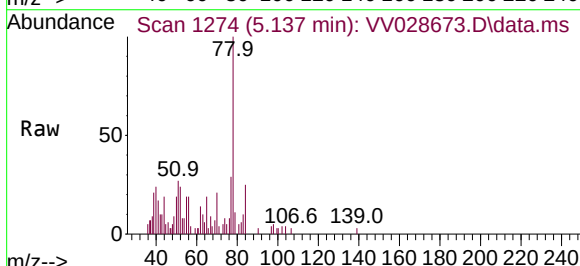
Acq: 21 Oct 2022 19:57

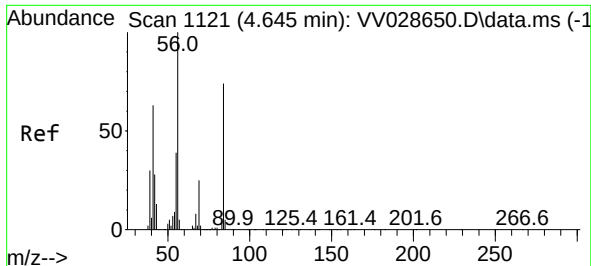
Tgt Ion: 62 Resp: 851

Ion Ratio Lower Upper

62 100

98 33.5 6.6 9.8#

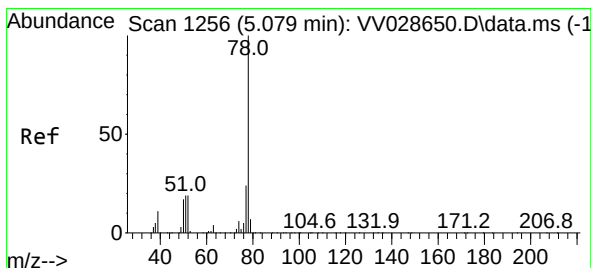
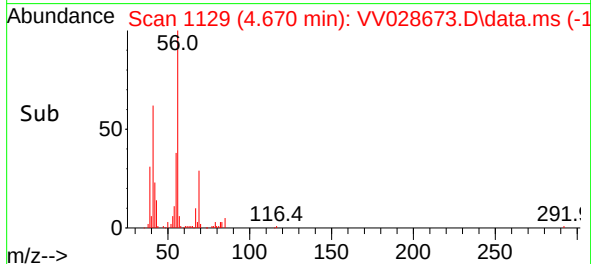
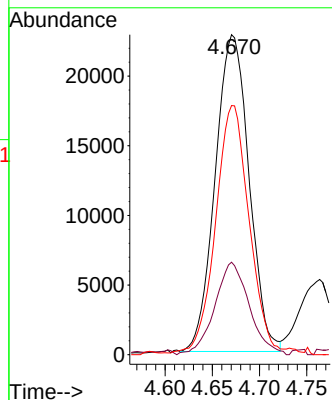
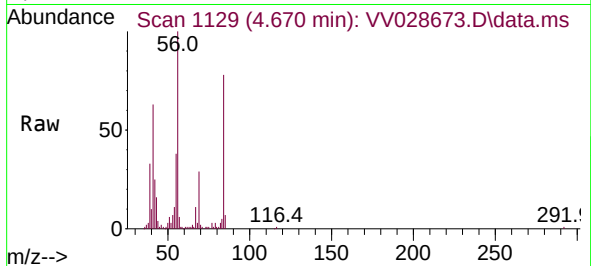




#30
Cyclohexane
Concen: 1.839 ug/L
RT: 4.670 min Scan# 1121
Delta R.T. 0.026 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

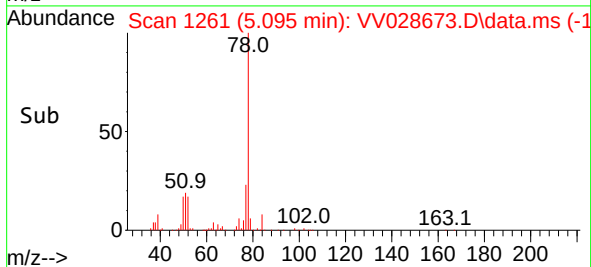
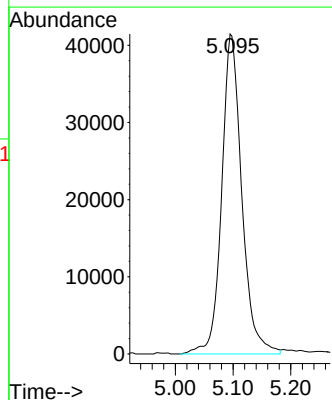
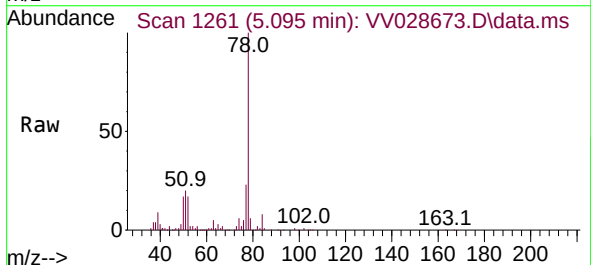
Instrument :
MSVOA_V
ClientSampleId :
BHA51

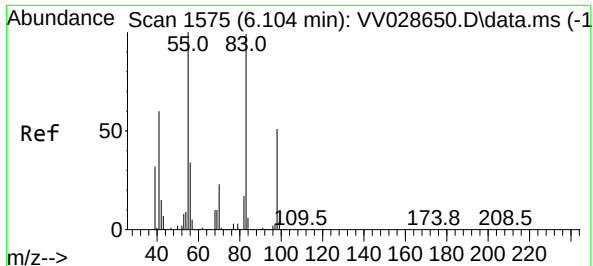
Tgt Ion: 56 Resp: 56621
Ion Ratio Lower Upper
56 100
69 29.6 22.6 34.0
84 76.7 60.4 90.6



#33
Benzene
Concen: 1.311 ug/L
RT: 5.095 min Scan# 1261
Delta R.T. 0.016 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 78 Resp: 100289

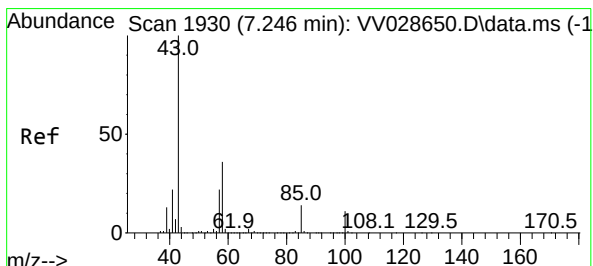
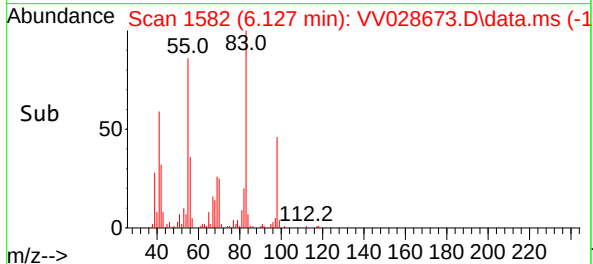
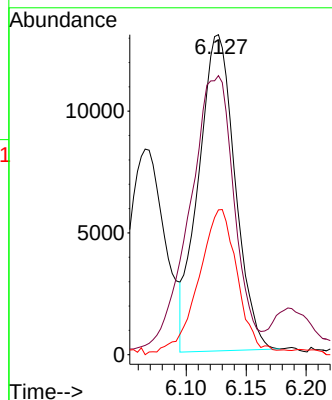
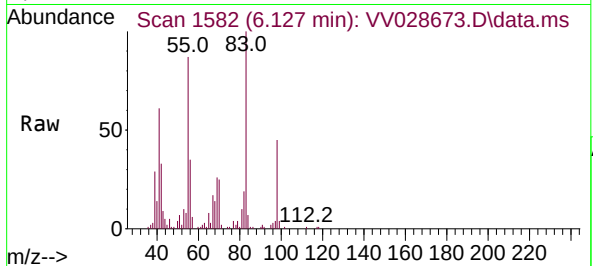




#35
Methylcyclohexane
Concen: 0.993 ug/L
RT: 6.127 min Scan# 11
Delta R.T. 0.022 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

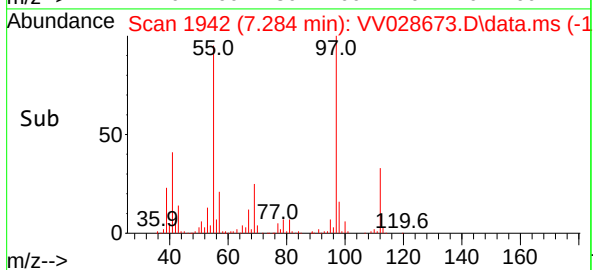
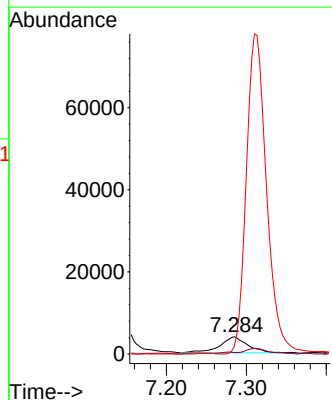
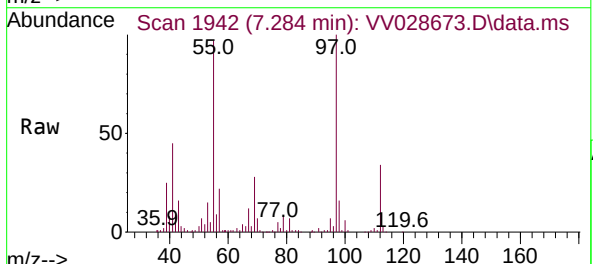
Instrument :
MSVOA_V
ClientSampleId :
BHA51

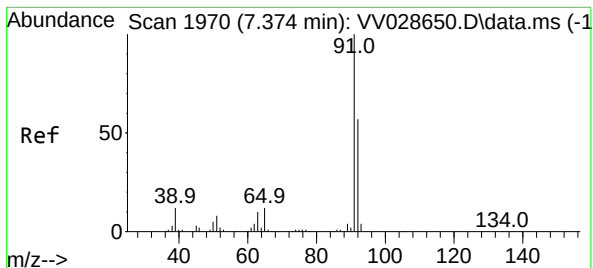
Tgt Ion: 83 Resp: 27526
Ion Ratio Lower Upper
83 100
55 104.5 70.0 105.0
98 49.7 35.6 53.4



#40
4-Methyl-2-pentanone
Concen: 0.944 ug/L
RT: 7.284 min Scan# 1942
Delta R.T. 0.039 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 43 Resp: 9359
Ion Ratio Lower Upper
43 100
58 3.5 29.6 44.4#
100 0.0 9.4 14.0#





#42

Toluene

Concen: 0.303 ug/L

RT: 7.387 min Scan# 1970

Delta R.T. 0.013 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

MSVOA_V

ClientSampleId :

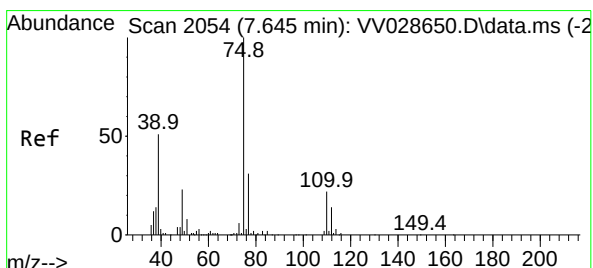
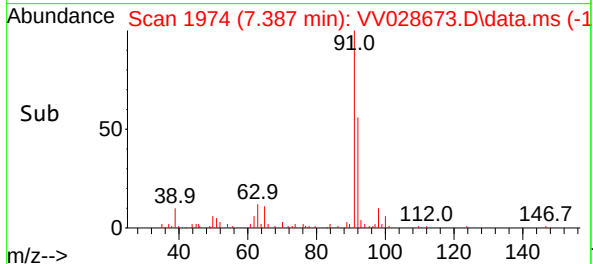
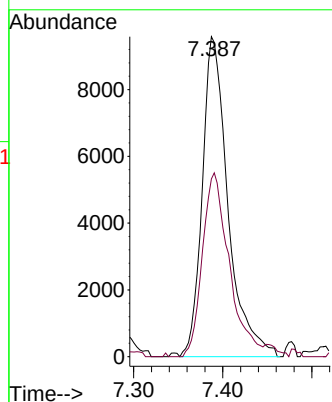
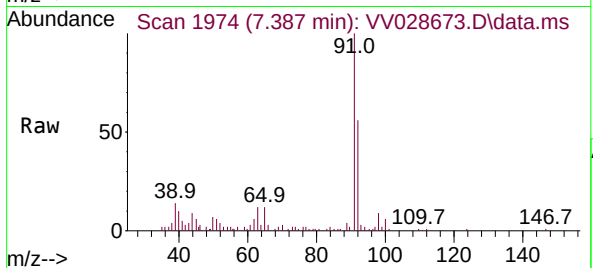
BHA51

Tgt Ion: 91 Resp: 19186

Ion Ratio Lower Upper

91 100

92 55.6 40.5 75.3



#44

trans-1,3-Dichloropropene

Concen: 0.088 ug/L

RT: 7.622 min Scan# 2047

Delta R.T. -0.023 min

Lab File: VV028673.D

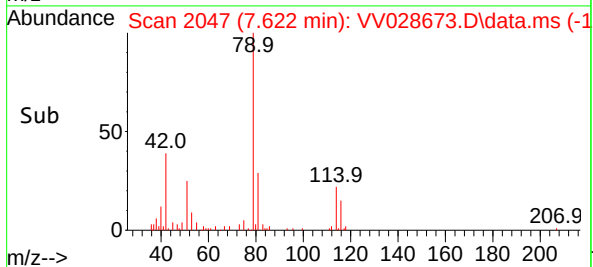
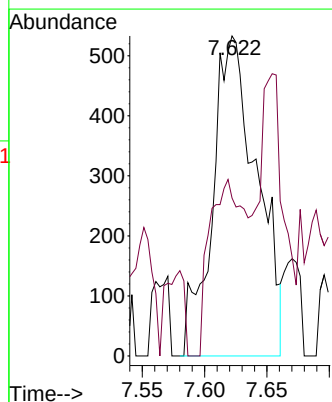
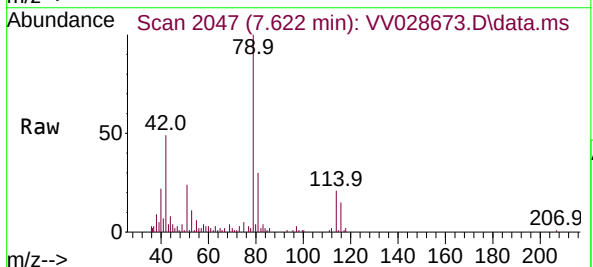
Acq: 21 Oct 2022 19:57

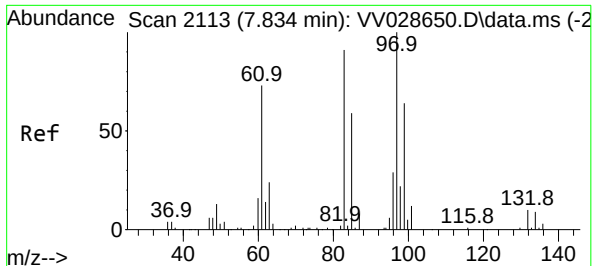
Tgt Ion: 75 Resp: 1326

Ion Ratio Lower Upper

75 100

77 49.3 22.6 42.0#

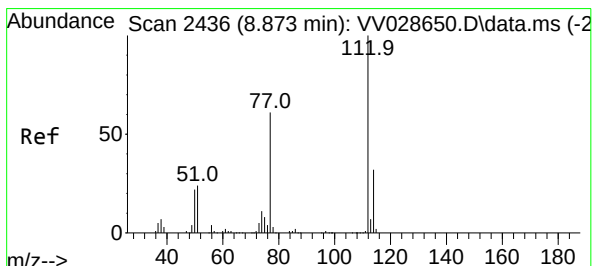
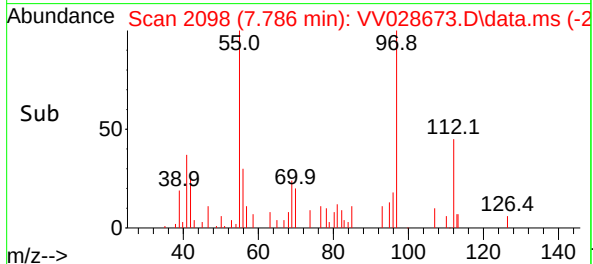
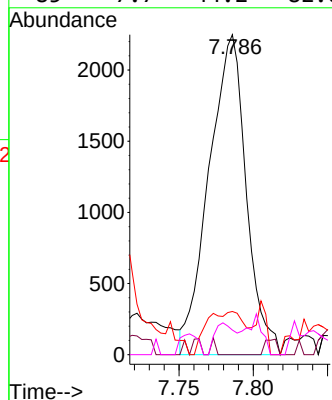
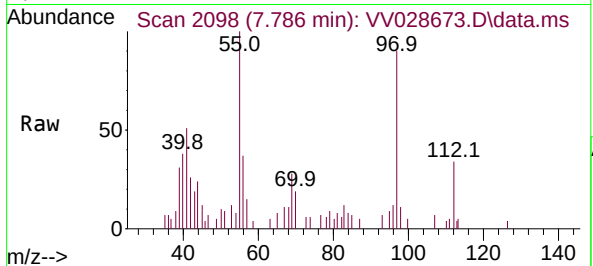




#45
1,1,2-Trichloroethane
Concen: 0.406 ug/L
RT: 7.786 min Scan# 2098
Delta R.T. -0.048 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

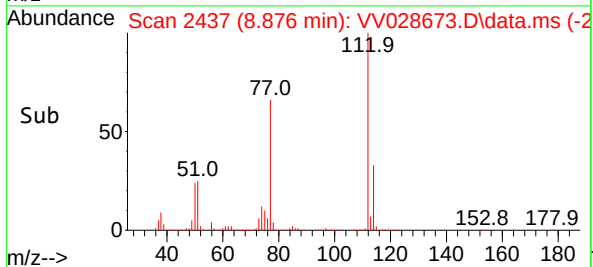
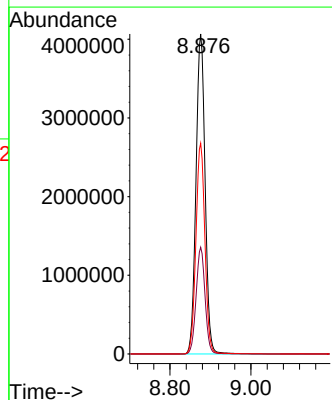
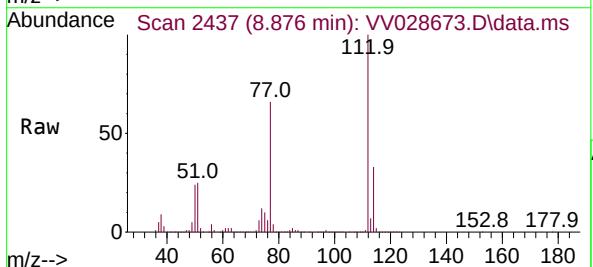
Instrument :
MSVOA_V
ClientSampleId :
BHA51

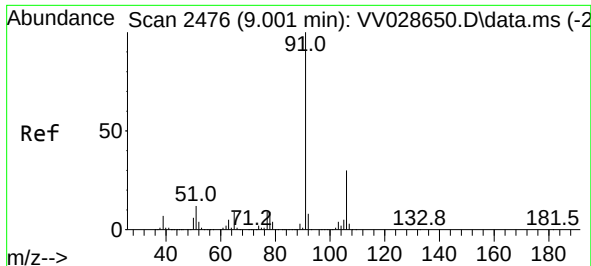
Tgt Ion: 97 Resp: 3918
Ion Ratio Lower Upper
97 100
99 0.0 44.0 81.6#
83 13.5 66.2 123.0#
85 7.7 44.2 82.0#



#51
Chlorobenzene
Concen: 171.445 ug/L
RT: 8.876 min Scan# 2437
Delta R.T. 0.003 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 112 Resp: 6350180
Ion Ratio Lower Upper
112 100
114 33.3 22.0 41.0
77 65.8 50.0 75.0

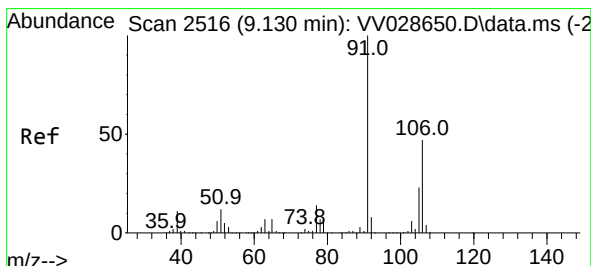
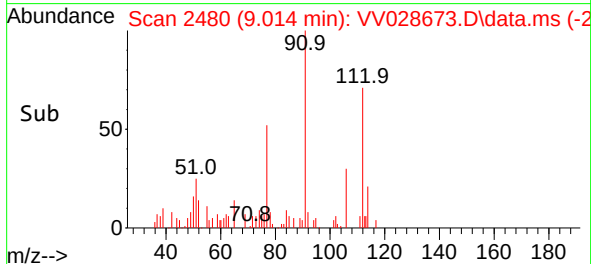
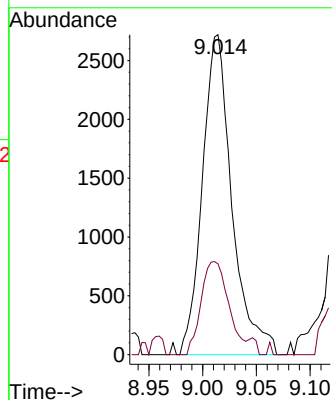
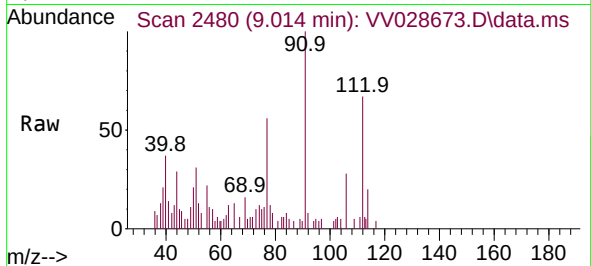




#52
Ethylbenzene
Concen: 0.079 ug/L
RT: 9.014 min Scan# 2476
Delta R.T. 0.013 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

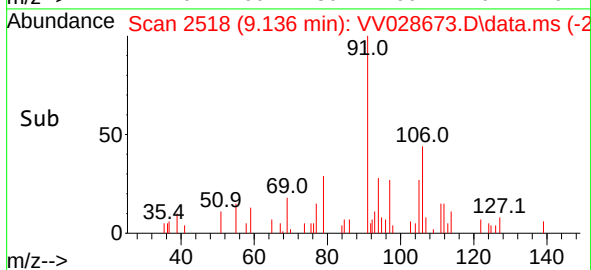
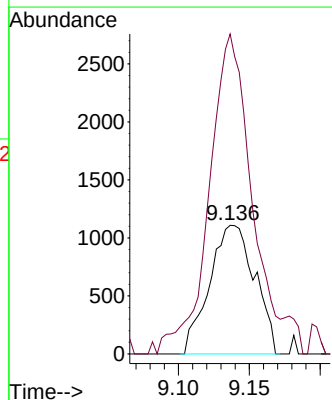
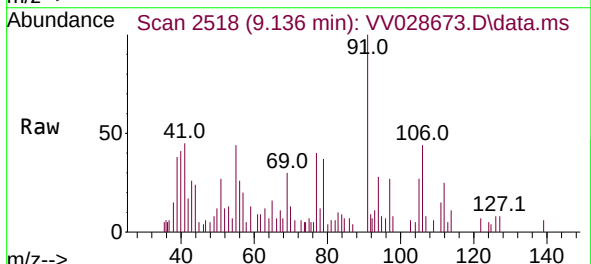
Instrument :
MSVOA_V
ClientSampleId :
BHA51

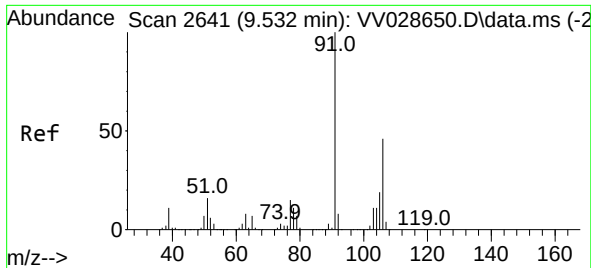
Tgt Ion: 91 Resp: 5194
Ion Ratio Lower Upper
91 100
106 28.4 21.3 39.6



#53
m,p-Xylene
Concen: 0.103 ug/L
RT: 9.136 min Scan# 2518
Delta R.T. 0.006 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 106 Resp: 2473
Ion Ratio Lower Upper
106 100
91 248.7 145.5 270.1

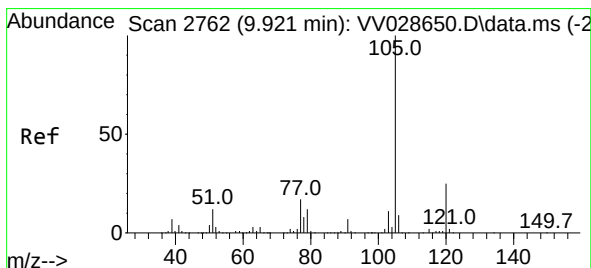
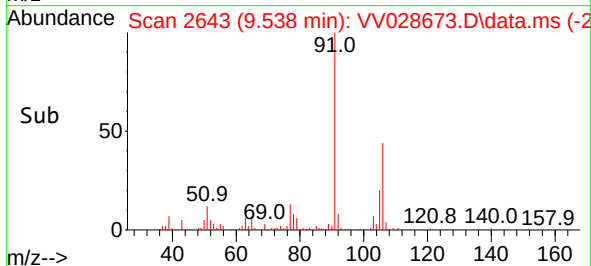
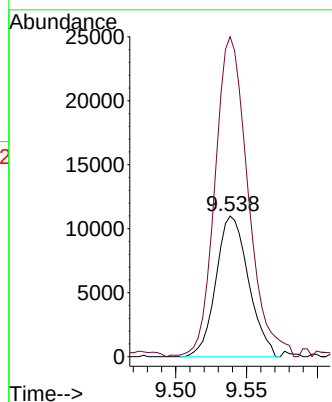
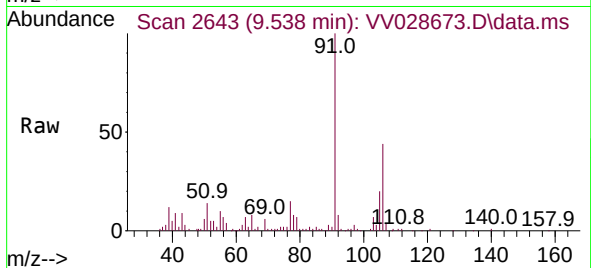




#54
o-Xylene
Concen: 0.739 ug/L
RT: 9.538 min Scan# 21
Delta R.T. 0.006 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

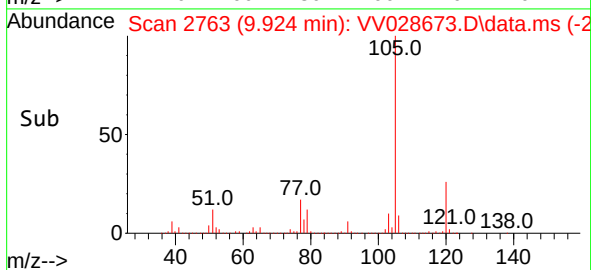
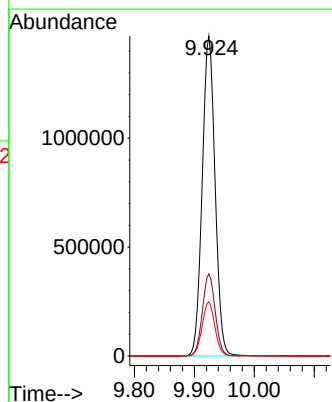
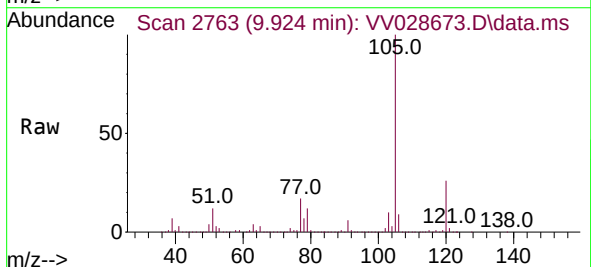
Instrument :
MSVOA_V
ClientSampleId :
BHA51

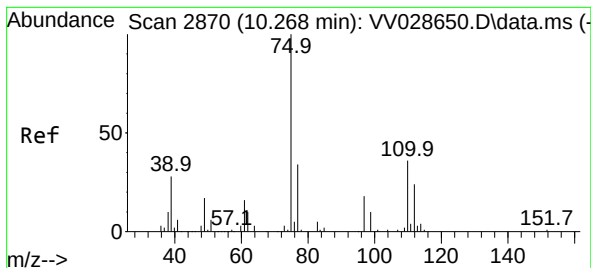
Tgt Ion:106 Resp: 17549
Ion Ratio Lower Upper
106 100
91 227.6 159.0 295.4



#60
Isopropylbenzene
Concen: 32.849 ug/L
RT: 9.924 min Scan# 2763
Delta R.T. 0.003 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion:105 Resp: 2194904
Ion Ratio Lower Upper
105 100
120 25.5 20.1 30.1
77 16.8 13.4 20.0





#61

1,2,3-Trichloropropane

Concen: 3.262 ug/L

RT: 9.924 min Scan# 21

Delta R.T. -0.344 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

MSVOA_V

ClientSampleId :

BHA51

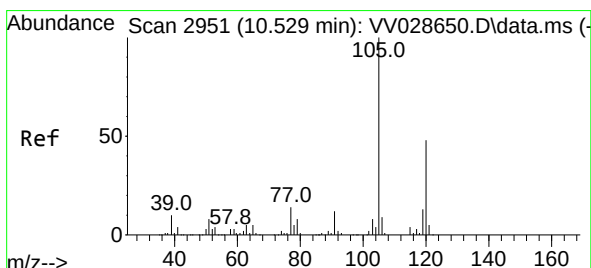
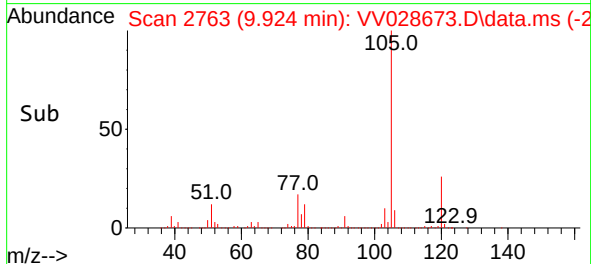
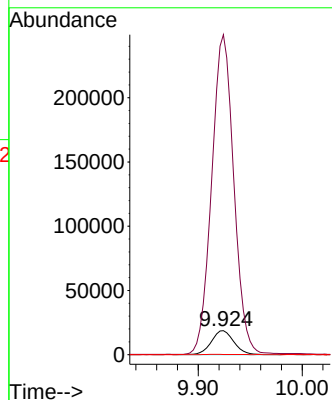
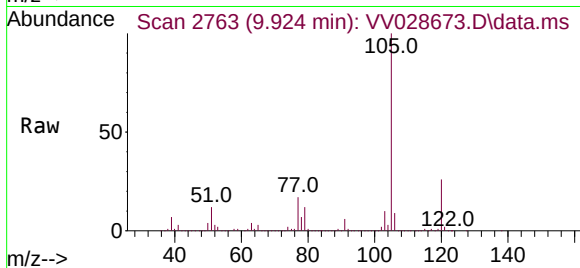
Tgt Ion: 75 Resp: 28259

Ion Ratio Lower Upper

75 100

77 1303.1 25.2 37.8#

110 1.7 27.9 41.9#



#62

1,3,5-Trimethylbenzene

Concen: 5.991 ug/L

RT: 10.731 min Scan# 3014

Delta R.T. 0.202 min

Lab File: VV028673.D

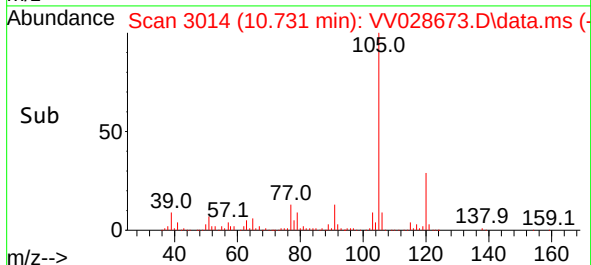
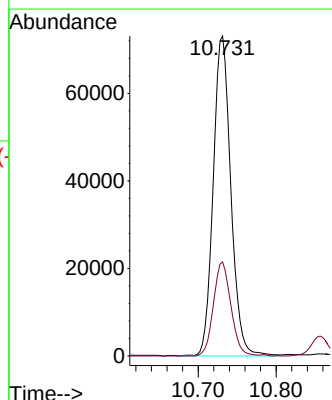
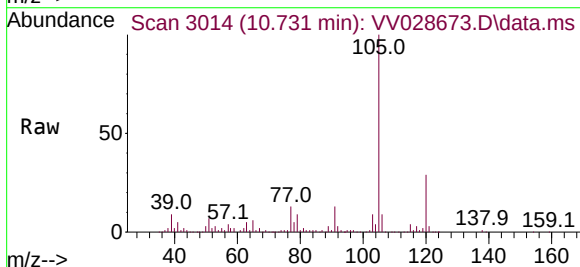
Acq: 21 Oct 2022 19:57

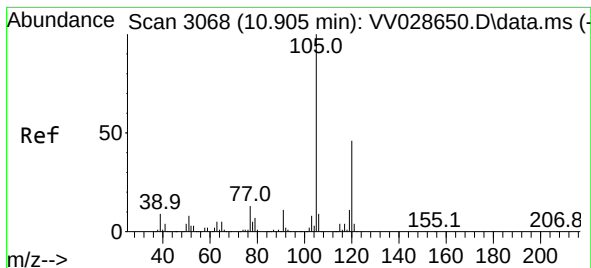
Tgt Ion: 105 Resp: 114983

Ion Ratio Lower Upper

105 100

120 29.0 38.3 57.5#





#63

1,2,4-Trimethylbenzene

Concen: 2.225 ug/L

RT: 10.731 min Scan# 3068

Delta R.T. -0.174 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

MSVOA_V

ClientSampleId :

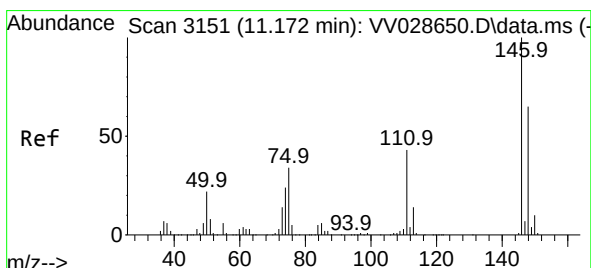
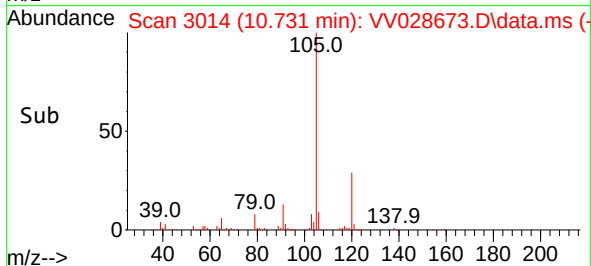
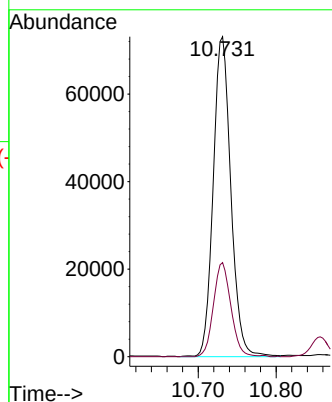
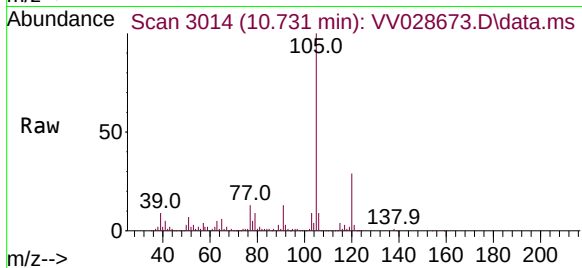
BHA51

Tgt Ion:105 Resp: 114983

Ion Ratio Lower Upper

105 100

120 29.0 36.2 54.2#



#64

1,3-Dichlorobenzene

Concen: 0.557 ug/L

RT: 11.175 min Scan# 3152

Delta R.T. 0.003 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

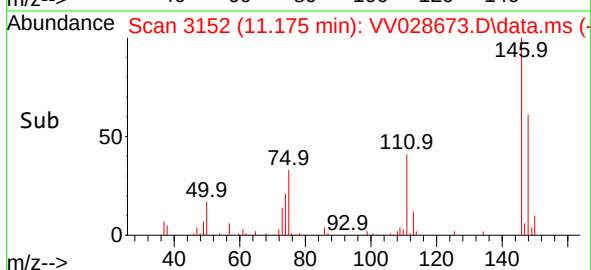
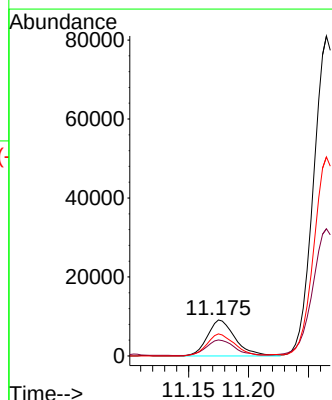
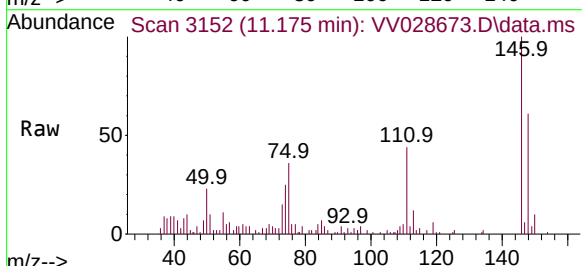
Tgt Ion:146 Resp: 14720

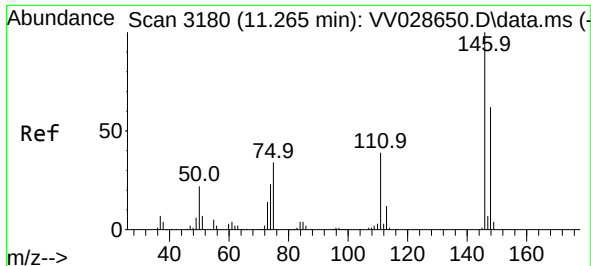
Ion Ratio Lower Upper

146 100

111 44.3 29.0 53.9

148 61.1 44.5 82.7





#65

1,4-Dichlorobenzene

Concen: 4.758 ug/L

RT: 11.265 min Scan# 3180

Delta R.T. -0.000 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

Instrument :

MSVOA_V

ClientSampleId :

BHA51

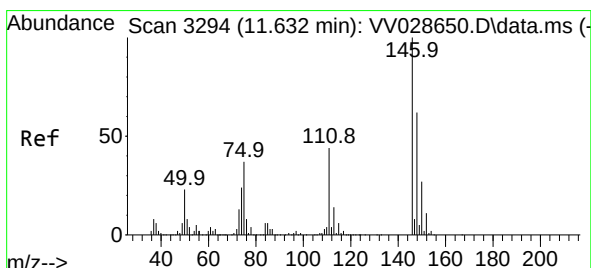
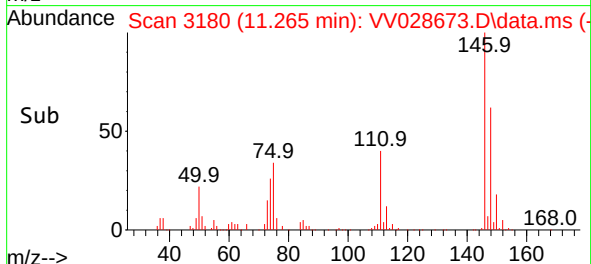
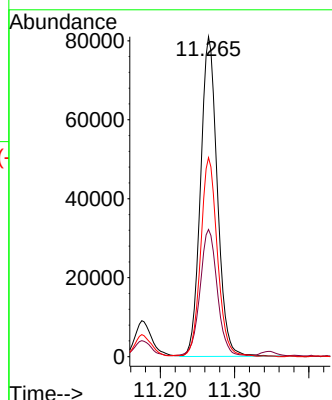
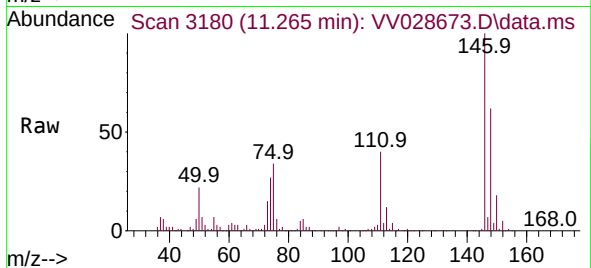
Tgt Ion:146 Resp: 127064

Ion Ratio Lower Upper

146 100

111 39.8 28.6 53.2

148 62.2 44.3 82.3



#67

1,2-Dichlorobenzene

Concen: 2.585 ug/L

RT: 11.635 min Scan# 3295

Delta R.T. 0.003 min

Lab File: VV028673.D

Acq: 21 Oct 2022 19:57

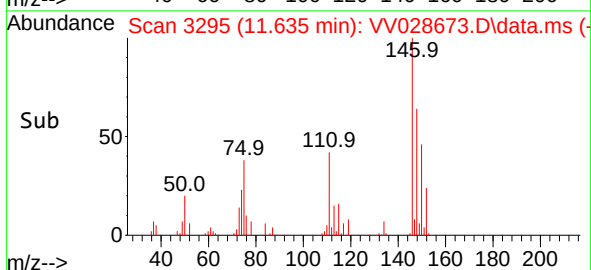
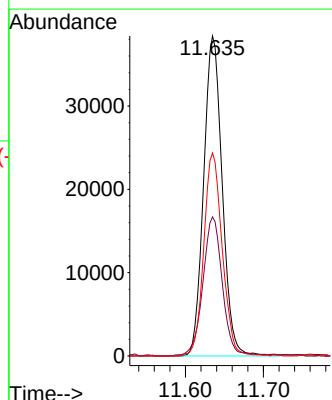
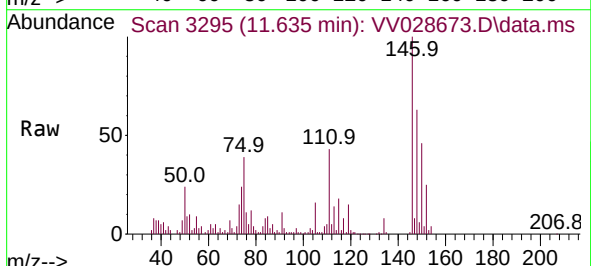
Tgt Ion:146 Resp: 63581

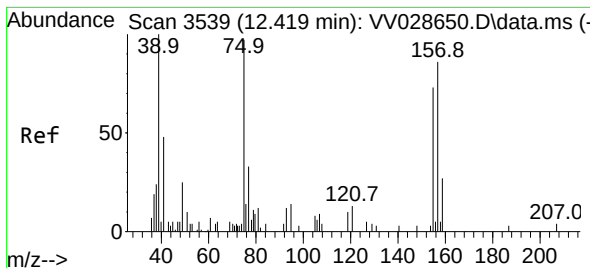
Ion Ratio Lower Upper

146 100

111 43.5 36.2 54.4

148 63.4 50.6 75.8

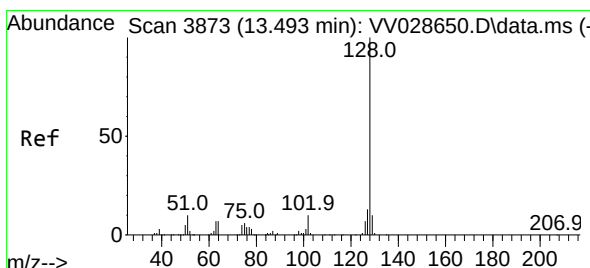
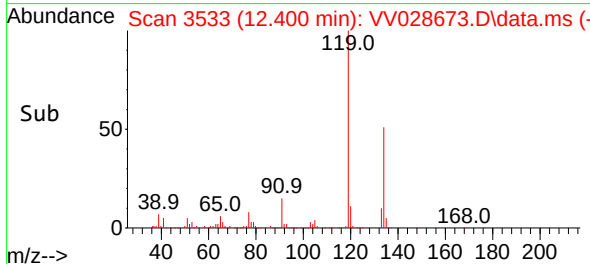
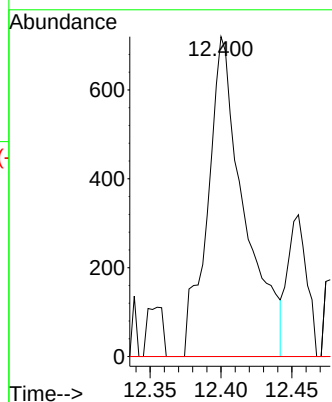
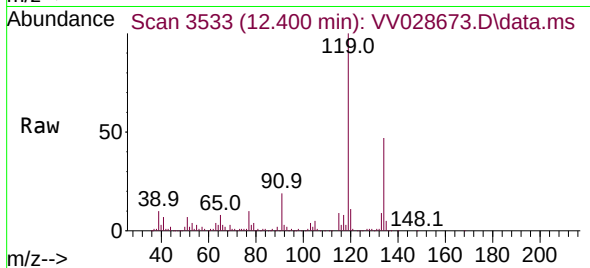




#68
1,2-Dibromo-3-chloropropane
Concen: 0.847 ug/L
RT: 12.400 min Scan# 3533
Delta R.T. -0.019 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Instrument :
MSVOA_V
ClientSampleId :
BHA51

Tgt Ion: 75 Resp: 1287
Ion Ratio Lower Upper
75 100
155 0.0 58.2 87.2#
157 0.0 71.5 107.3#



#71
Naphthalene
Concen: 0.075 ug/L
RT: 13.496 min Scan# 3874
Delta R.T. 0.003 min
Lab File: VV028673.D
Acq: 21 Oct 2022 19:57

Tgt Ion: 128 Resp: 1885
Ion Ratio Lower Upper
128 100
129 18.7 8.9 13.3#
127 35.8 10.2 15.4#

