

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV092420\
 Data File : VV018431.D
 Acq On : 24 Sep 2020 15:59
 Operator : SY/MD
 Sample : L4109-10
 Misc : 6.37g/5.0mL/100uL/5.0mL/MSVOA_V/MEOH
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 BG3X0

Quant Time: Sep 25 04:46:26 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVLM090920WMA.M
 Quant Title : VOC Analysis
 QLast Update : Fri Sep 25 04:36:20 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.64	114	367976	50.00	ug/L	0.00
28) Chlorobenzene-d5	8.88	117	359747	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.28	152	196826	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.31	65	86357	28.80	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	57.60%#
7) Chloroethane-d5	1.58	69	73016	29.76	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	59.52%#
11) 1,1-Dichloroethene-d2	2.10	63	130347	23.70	ug/L	-0.02
Spiked Amount	50.000	Range	60 - 125	Recovery	=	47.40%#
21) 2-Butanone-d5	3.93	46	86799	47.29	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	47.29%
24) Chloroform-d	4.37	84	182582	35.09	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	70.18%
26) 1,2-Dichloroethane-d4	5.05	65	121172	36.33	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	72.66%
32) Benzene-d6	5.07	84	378084	36.71	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	73.42%
36) 1,2-Dichloropropane-d6	6.09	67	124510	38.05	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	76.10%
41) Toluene-d8	7.34	98	361839	38.55	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	77.10%#
43) trans-1,3-Dichloropropene-	7.65	79	62300	37.47	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	74.94%
47) 2-Hexanone-d5	8.14	63	109015	87.95	ug/L	0.04
Spiked Amount	100.000	Range	45 - 130	Recovery	=	87.95%
57) 1,1,2,2-Tetrachloroethane-	10.25	84	178661	43.50	ug/L	0.02
Spiked Amount	50.000	Range	65 - 120	Recovery	=	87.00%
64) 1,2-Dichlorobenzene-d4	11.65	152	166858	41.28	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	82.56%

Target Compounds

					Ovalue
12) 1,1-Dichloroethene	2.11	96	3256	1.348 ug/L #	1
19) 1,1-Dichloroethane	3.21	63	8450	1.795 ug/L	92
20) cis-1,2-Dichloroethene	3.93	96	62241	23.383 ug/L	96
29) Cyclohexane	4.69	56	481352	115.873 ug/L	99
30) 1,1,1-Trichloroethane	4.63	97	499785	119.709 ug/L	99
31) Carbon tetrachloride	4.63	117	66421	18.093 ug/L	100
34) Trichloroethene	5.94	95	5135	1.833 ug/L	97
35) Methylcyclohexane	6.15	83	18566	4.401 ug/L	97
39) cis-1,3-Dichloropropene	7.01	75	3563	0.848 ug/L #	60
40) 4-Methyl-2-pentanone	7.28	43	35895	10.856 ug/L #	65
42) Toluene	7.41	91	8333592	765.609 ug/L	95
45) 1,1,2-Trichloroethane	7.81	97	27750	10.985 ug/L #	20
46) Tetrachloroethene	8.00	164	2037	0.927 ug/L	93
48) 2-Hexanone	8.10	43	29910	11.474 ug/L #	22
51) Chlorobenzene	8.91	112	25399	3.593 ug/L	97
52) Ethylbenzene	9.04	91	2344280	197.269 ug/L	99
53) m,p-Xylene	9.16	106	3729339	840.768 ug/L	89

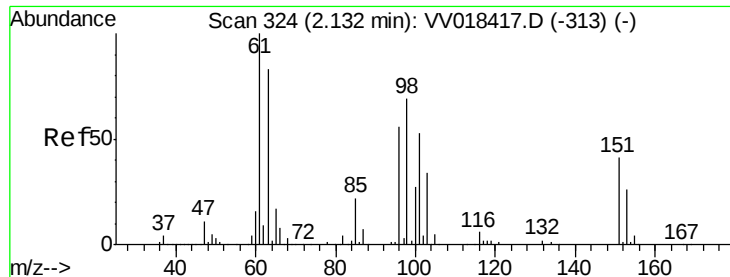
Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV092420\
 Data File : VV018431.D
 Acq On : 24 Sep 2020 15:59
 Operator : SY/MD
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 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
54) o-xylene	9.57	106	1597691	373.883	ug/L	96
55) Styrene	9.57	104	78224	10.532	ug/L #	1
56) Isopropylbenzene	9.95	105	1983930	172.265	ug/L	99
58) 1,1,2,2-Tetrachloroethane	10.26	83	27088	7.249	ug/L #	57
59) 1,2,3-Trichloropropane	10.38	75	59959	18.704	ug/L #	1
62) 1,3-Dichlorobenzene	11.21	146	23394	3.997	ug/L #	66
63) 1,4-Dichlorobenzene	11.30	146	25368	4.217	ug/L #	75
65) 1,2-Dichlorobenzene	11.67	146	150137	25.379	ug/L	97
66) 1,2-Dibromo-3-chloropropan	12.44	75	19070	22.844	ug/L #	1
68) 1,2,4-trichlorobenzene	13.29	180	19048	4.636	ug/L #	63
69) Naphthalene	13.53	128	4517278	434.497	ug/L	99
70) 1,2,3-Trichlorobenzene	13.77	180	12159	3.005	ug/L #	52

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



#12

1,1-Dichloroethene

Concen: 1.348 ug/L

RT: 2.11 min Scan# 317

Delta R.T. -0.02 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampled :

BG3X0

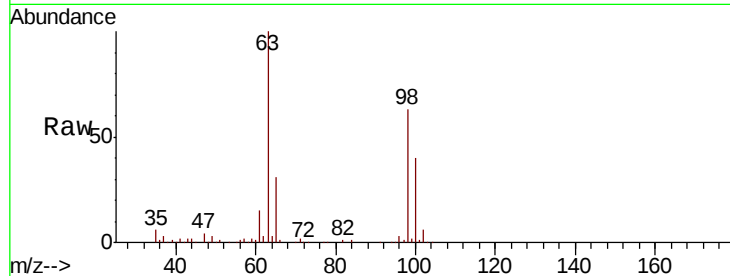
Tot Ion: 96 Resp: 3256

Ion Ratio Lower Upper

96 100

61 464.5 122.9 228.3#

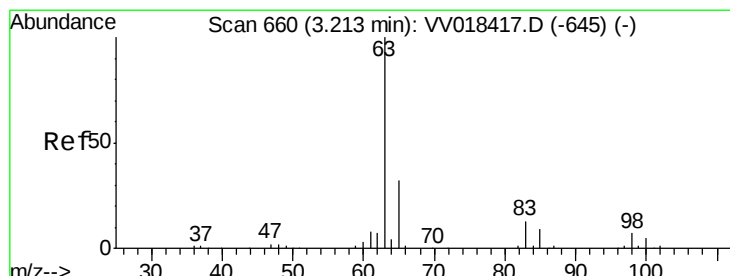
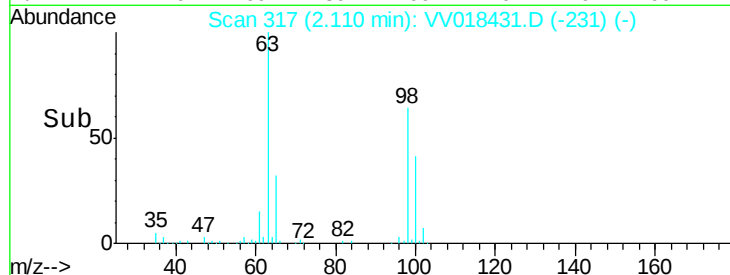
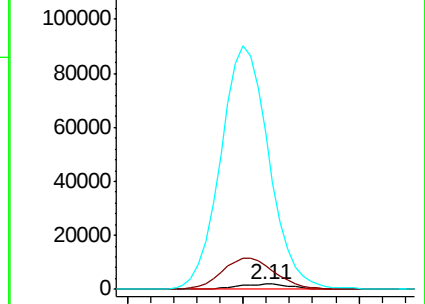
63 3074.9 91.9 170.7#



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0



#19

1,1-Dichloroethane

Concen: 1.795 ug/L

RT: 3.21 min Scan# 658

Delta R.T. -0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

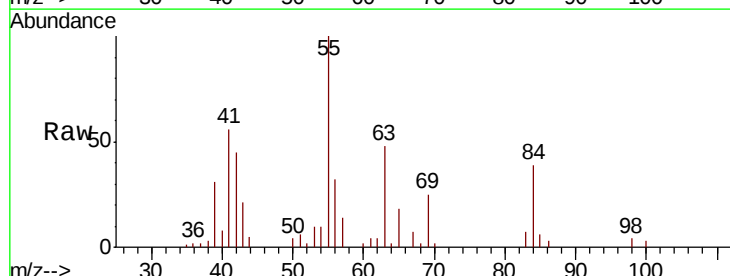
Tgt Ion: 63 Resp: 8450

Ion Ratio Lower Upper

63 100

65 38.1 22.5 41.7

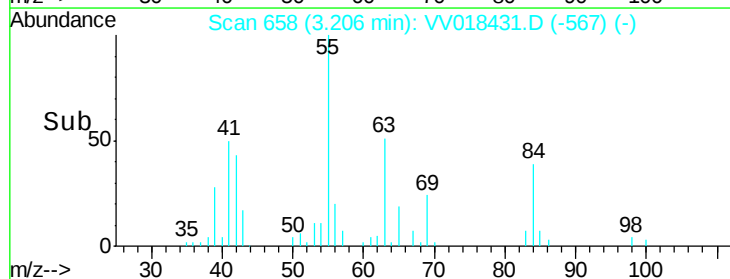
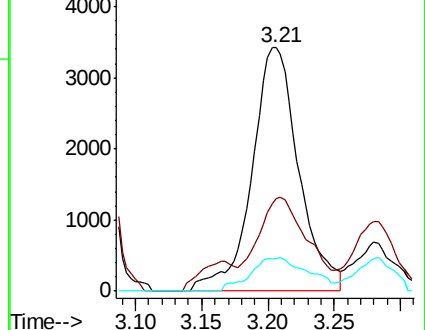
83 13.5 9.3 17.3

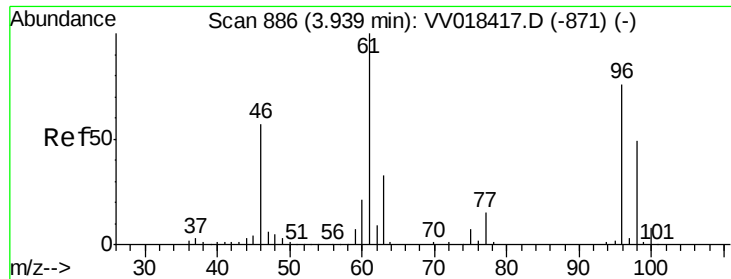


Abundance Ion 63.00 (62.70 to 63.70): VV0

Ion 65.00 (64.70 to 65.70): VV0

Ion 83.00 (82.70 to 83.70): VV0

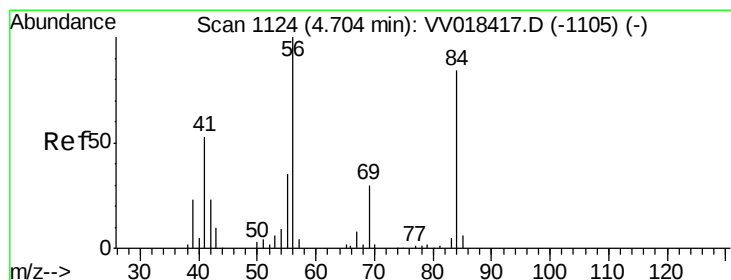
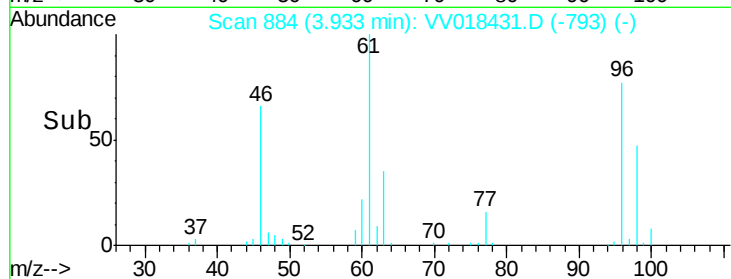
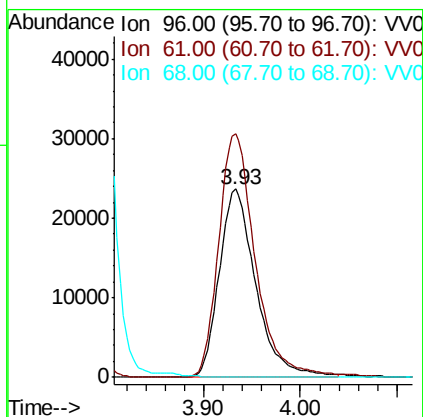
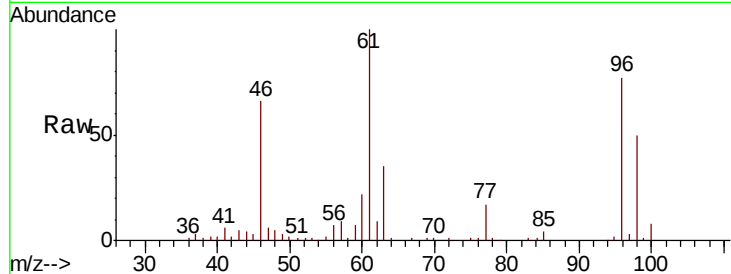




#20
 cis-1,2-Dichloroethene
 Concen: 23.383 ug/L
 RT: 3.93 min Scan# 884
 Delta R.T. -0.01 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

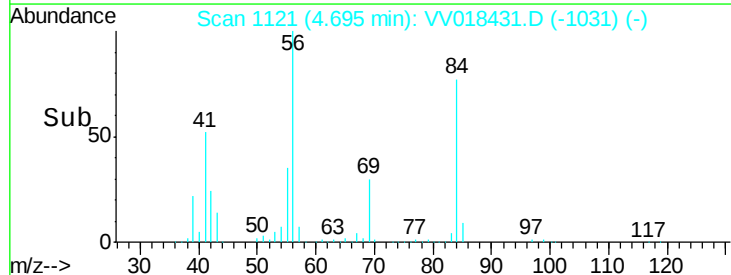
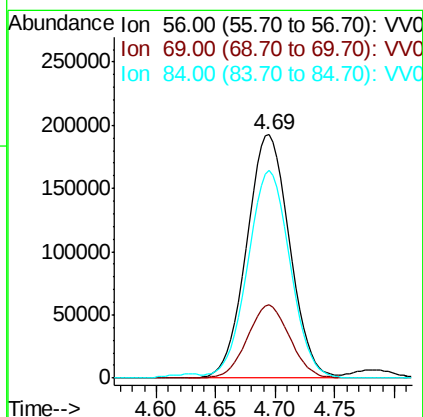
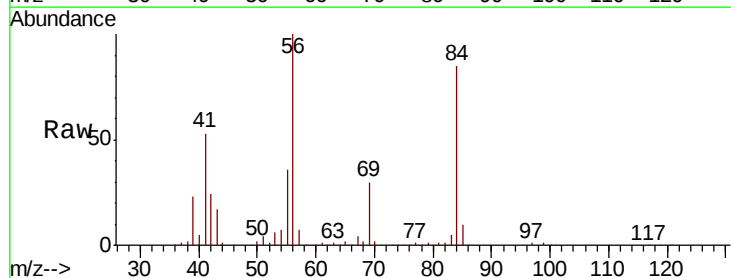
Instrument :
 MSVOA_V
 ClientSampleId :
 BG3X0

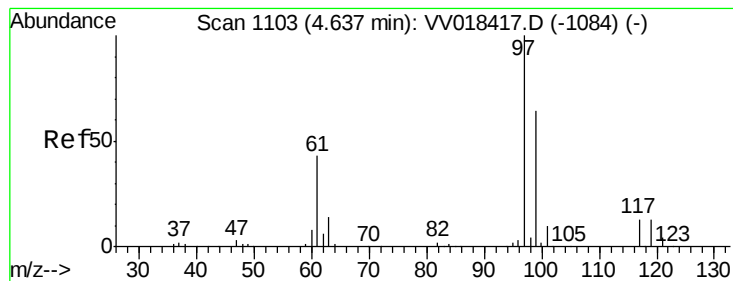
Tot Ion: 96 Resp: 62241
 Ion Ratio Lower Upper
 96 100
 61 129.3 93.6 173.8
 68 0.0 0.0 0.0



#29
 Cyclohexane
 Concen: 115.873 ug/L
 RT: 4.69 min Scan# 1121
 Delta R.T. -0.01 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

Tgt Ion: 56 Resp: 481352
 Ion Ratio Lower Upper
 56 100
 69 29.8 24.2 36.2
 84 84.7 68.3 102.5





#30

1,1,1-Trichloroethane

Concen: 119.709 ug/L

RT: 4.63 min Scan# 1100

Delta R.T. -0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampled :

BG3X0

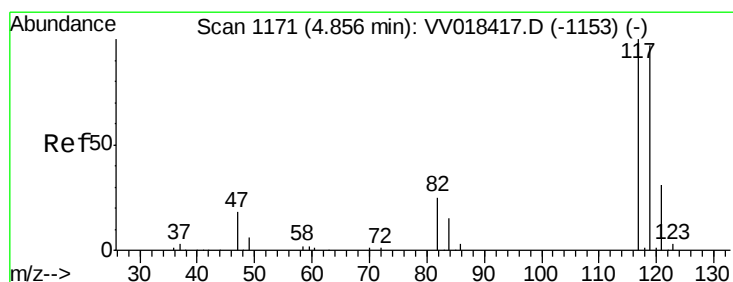
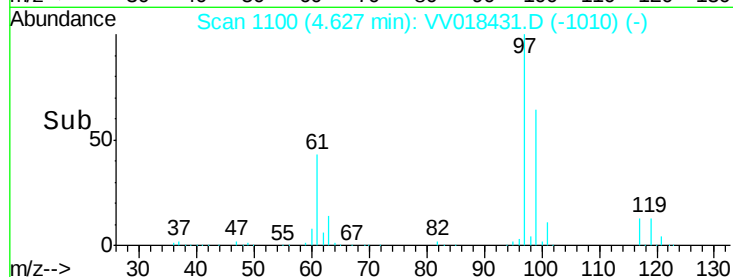
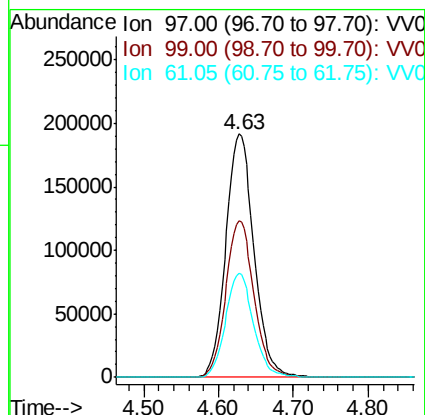
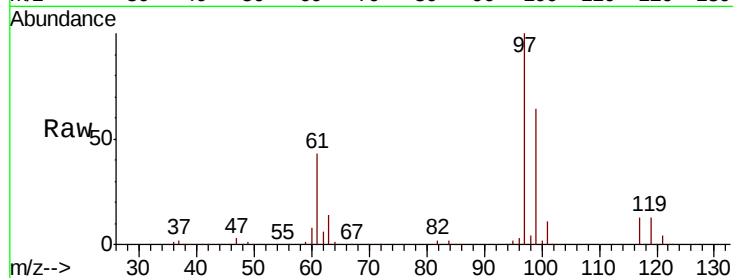
Tot Ion: 97 Resp: 499785

Ion Ratio Lower Upper

97 100

99 64.5 51.6 77.4

61 42.4 34.9 52.3



#31

Carbon tetrachloride

Concen: 18.093 ug/L

RT: 4.63 min Scan# 1100

Delta R.T. -0.23 min

Lab File: VV018431.D

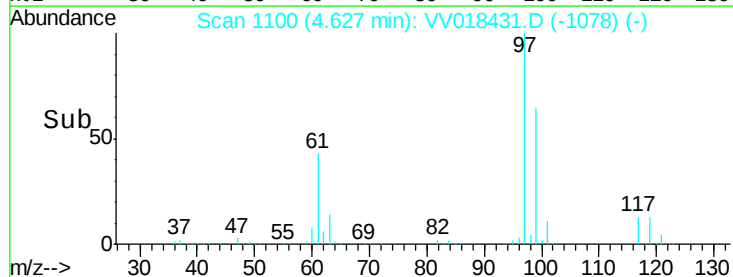
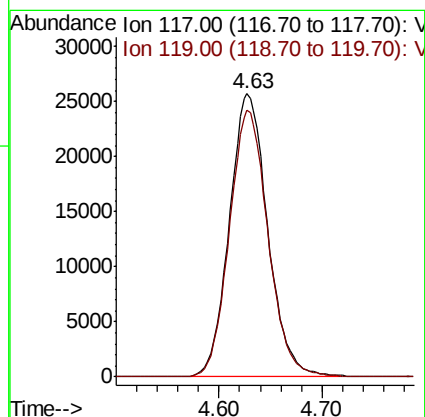
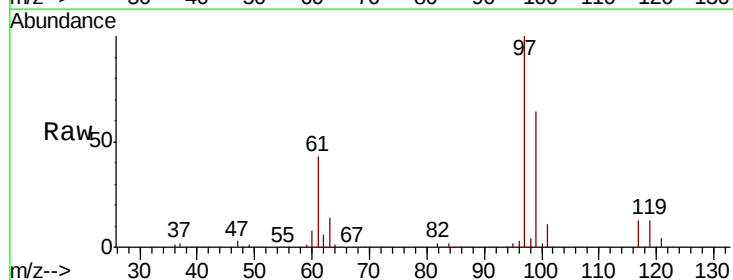
Acq: 24 Sep 2020 15:59

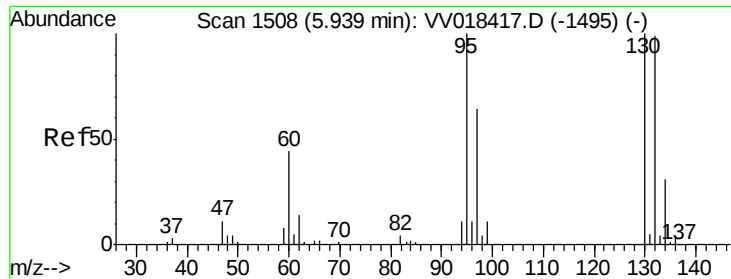
Tgt Ion: 117 Resp: 66421

Ion Ratio Lower Upper

117 100

119 94.8 75.7 113.5





#34

Trichloroethene

Concen: 1.833 ug/L

RT: 5.94 min Scan# 1509

Delta R.T. 0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

BG3X0

Tot Ion: 95 Resp: 5135

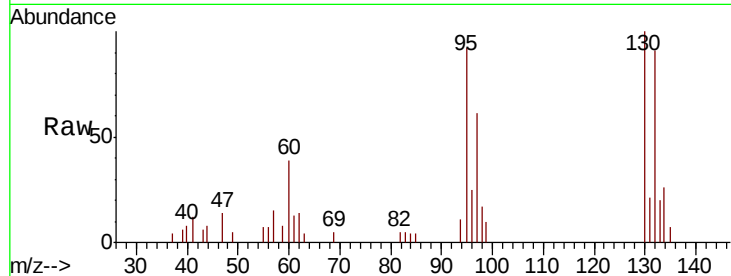
Ion Ratio Lower Upper

95 100

97 66.5 46.3 85.9

132 99.3 68.1 126.5

130 108.9 71.5 132.9

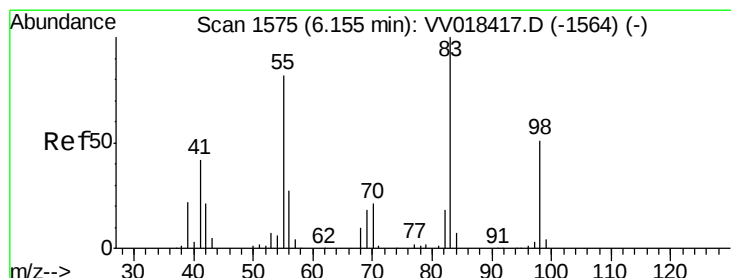
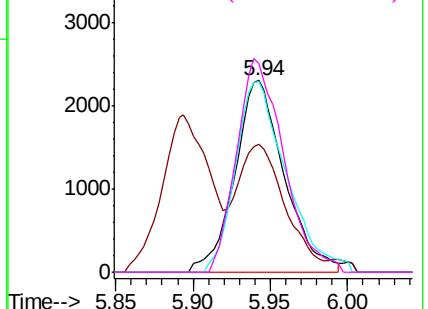
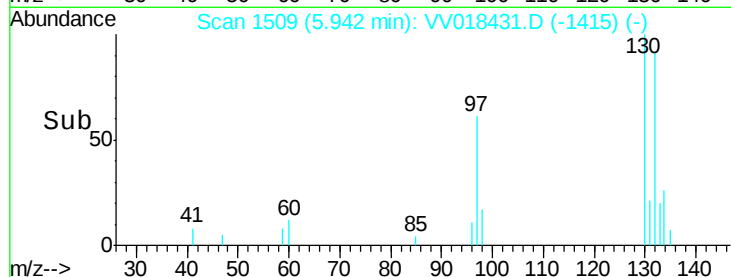


Abundance Ion 95.00 (94.70 to 95.70): VV018431.D (-1415) (-)

Ion 97.00 (96.70 to 97.70): VV018431.D (-1415) (-)

Ion 132.00 (131.70 to 132.70): VV018431.D (-1415) (-)

Ion 130.00 (129.70 to 130.70): VV018431.D (-1415) (-)



#35

Methylcyclohexane

Concen: 4.401 ug/L

RT: 6.15 min Scan# 1574

Delta R.T. -0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

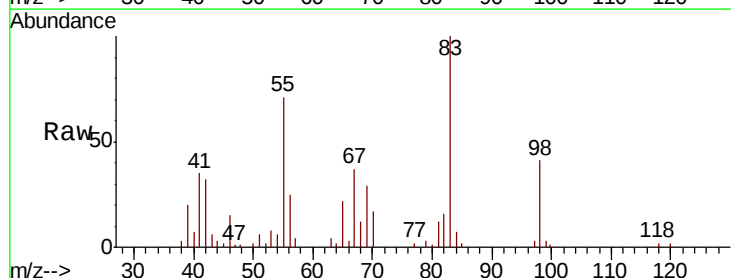
Tgt Ion: 83 Resp: 18566

Ion Ratio Lower Upper

83 100

55 81.6 63.4 95.2

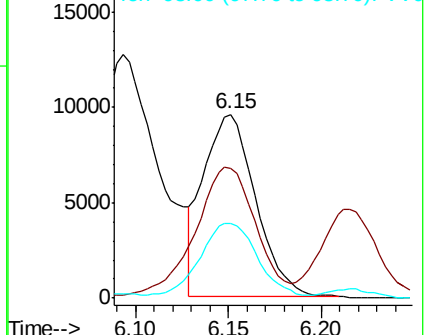
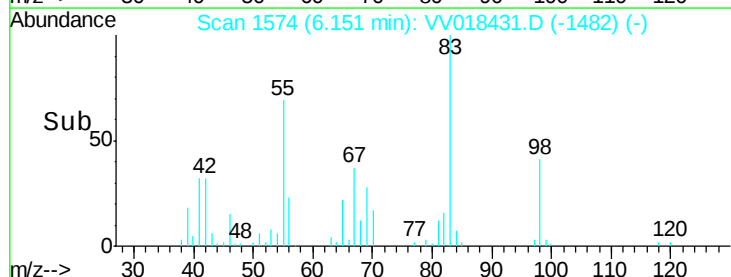
98 46.4 38.8 58.2

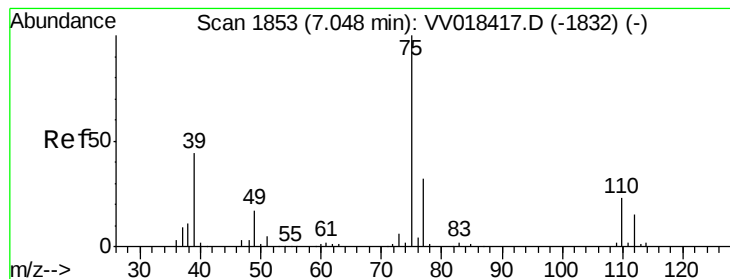


Abundance Ion 83.00 (82.70 to 83.70): VV018431.D (-1482) (-)

Ion 55.00 (54.70 to 55.70): VV018431.D (-1482) (-)

Ion 98.00 (97.70 to 98.70): VV018431.D (-1482) (-)



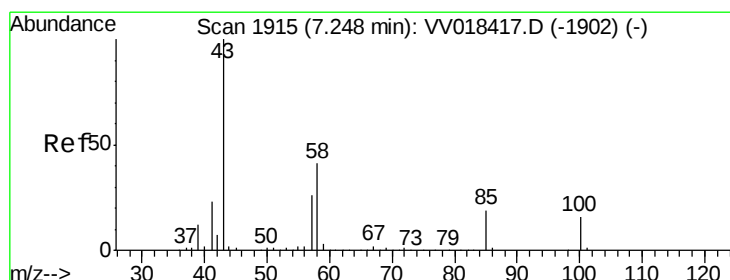
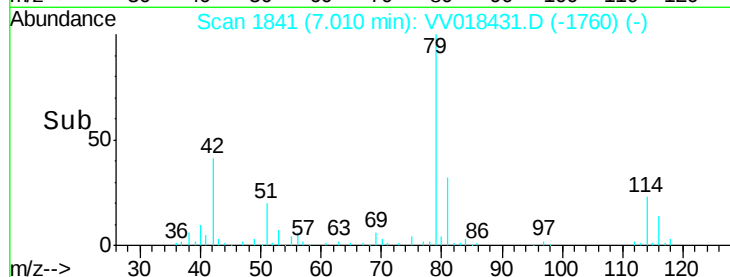
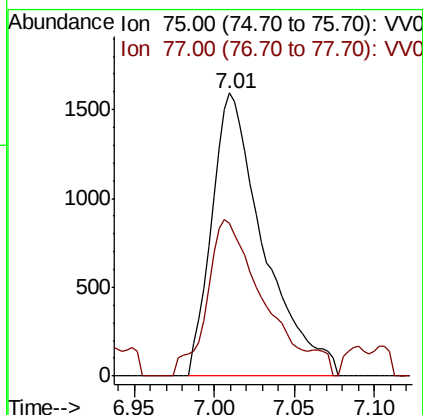
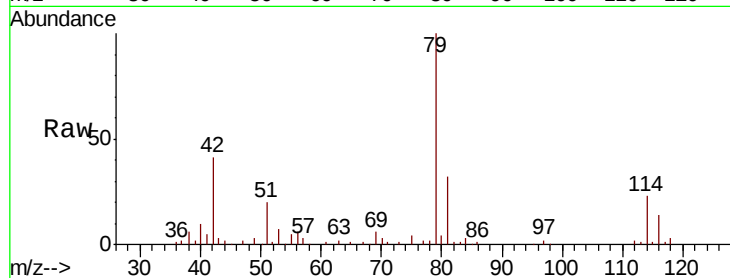


#39

cis-1,3-Dichloropropene
Concen: 0.848 ug/L
RT: 7.01 min Scan# 1841
Delta R.T. -0.04 min
Lab File: VV018431.D
Acq: 24 Sep 2020 15:59

Instrument :
MSVOA_V
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BG3X0

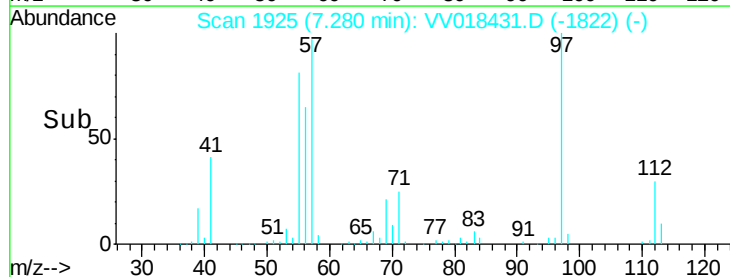
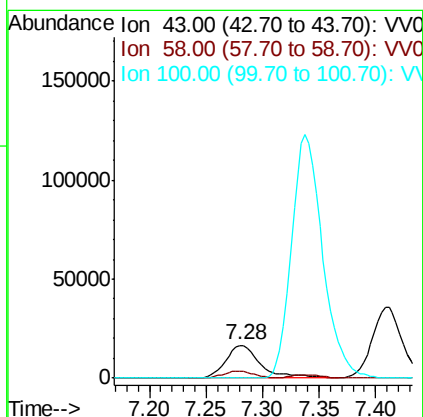
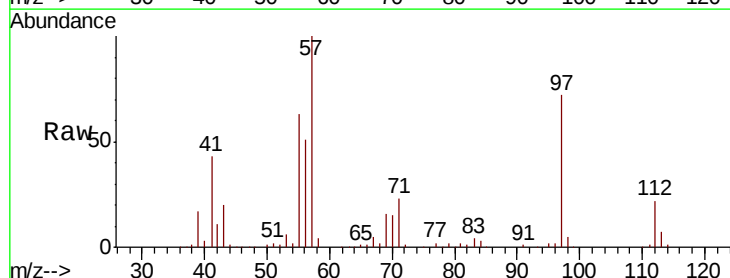
Tot Ion: 75 Resp: 3563
Ion Ratio Lower Upper
75 100
77 53.9 22.3 41.3#

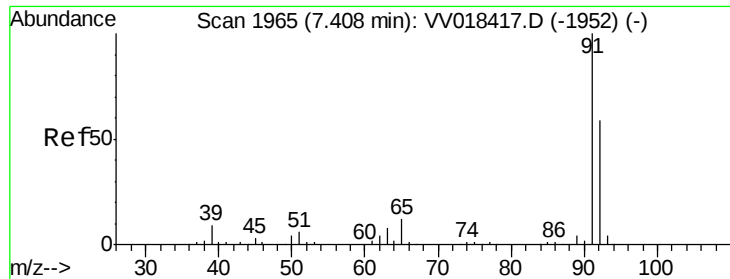


#40

4-Methyl-2-pentanone
Concen: 10.856 ug/L
RT: 7.28 min Scan# 1925
Delta R.T. 0.03 min
Lab File: VV018431.D
Acq: 24 Sep 2020 15:59

Tgt Ion: 43 Resp: 35895
Ion Ratio Lower Upper
43 100
58 19.2 32.4 48.6#
100 0.0 12.7 19.1#





#42

Toluene

Concen: 765.609 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

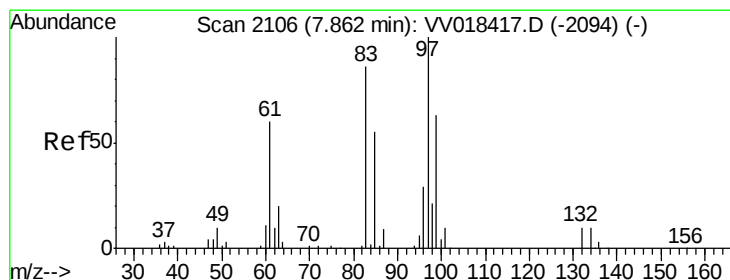
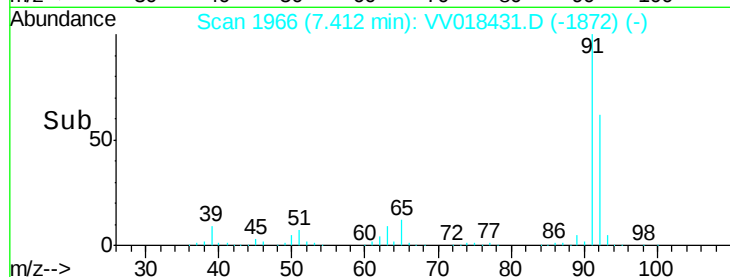
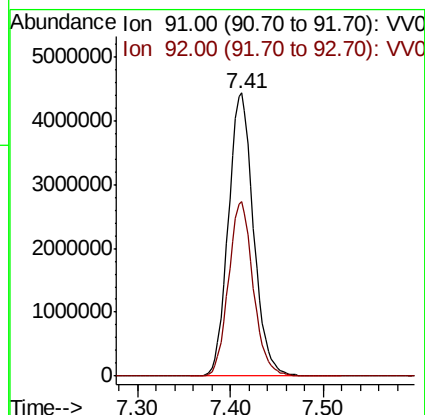
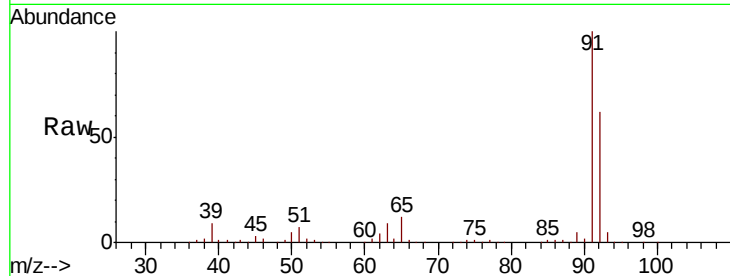
BG3X0

Tot Ion: 91 Resp: 8333592

Ion Ratio Lower Upper

91 100

92 61.6 40.7 75.5



#45

1,1,2-Trichloroethane

Concen: 10.985 ug/L

RT: 7.81 min Scan# 2089

Delta R.T. -0.05 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Tgt Ion: 97 Resp: 27750

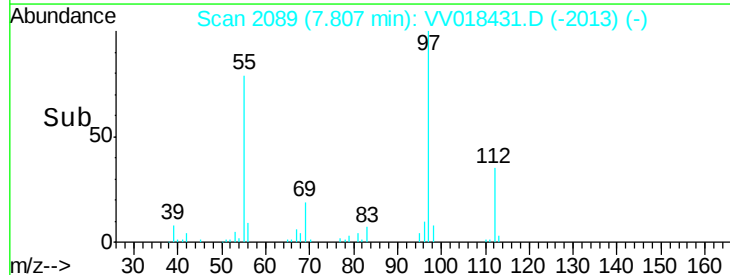
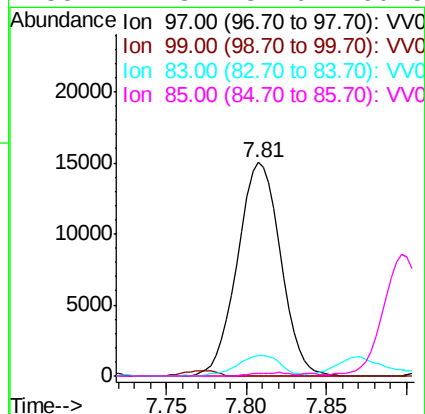
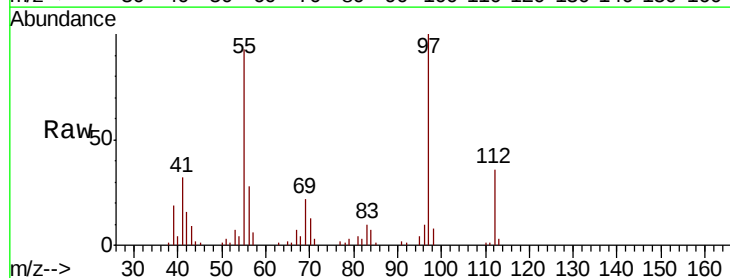
Ion Ratio Lower Upper

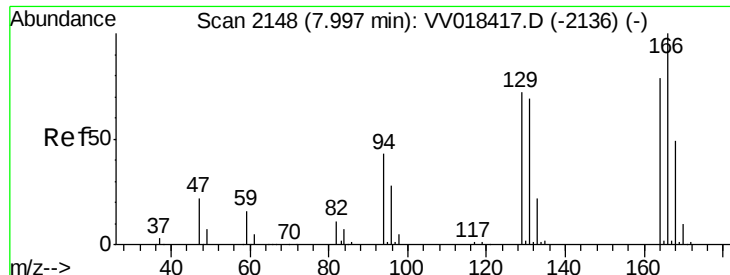
97 100

99 0.0 43.7 81.1#

83 9.8 59.9 111.3#

85 1.3 37.6 69.8#





#46

Tetrachloroethene

Concen: 0.927 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. -0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

BG3X0

Tot Ion:164 Resp: 2037

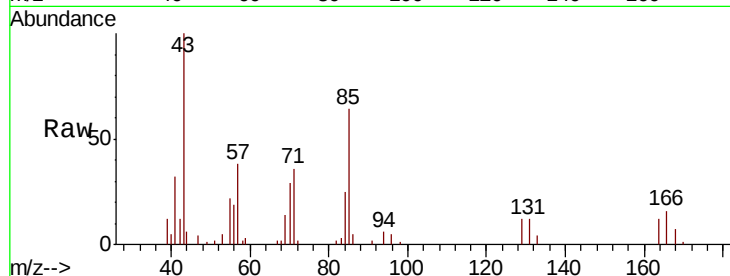
Ion Ratio Lower Upper

164 100

129 99.1 64.5 119.7

131 99.8 61.8 114.8

166 132.6 90.6 168.2

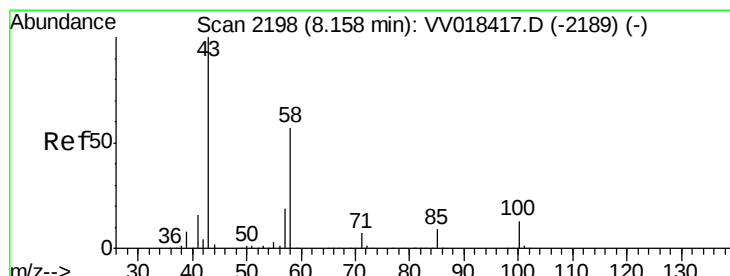
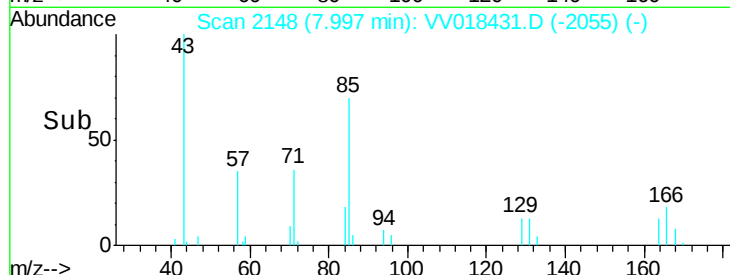
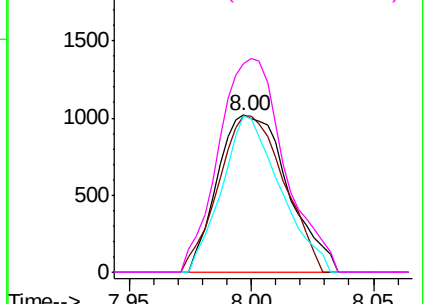


Abundance Ion 164.00 (163.70 to 164.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V

Ion 166.00 (165.70 to 166.70): V



#48

2-Hexanone

Concen: 11.474 ug/L

RT: 8.10 min Scan# 2180

Delta R.T. -0.06 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Tgt Ion: 43 Resp: 29910

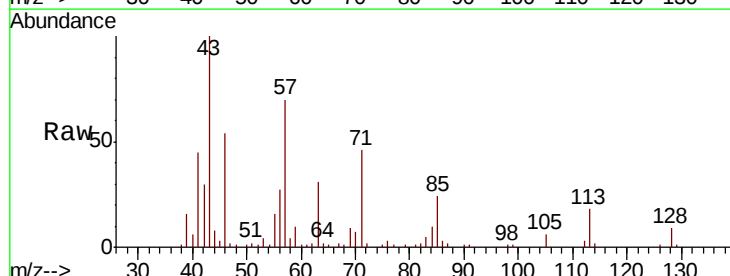
Ion Ratio Lower Upper

43 100

58 4.5 44.8 67.2#

57 78.1 15.8 23.6#

100 0.0 10.2 15.4#

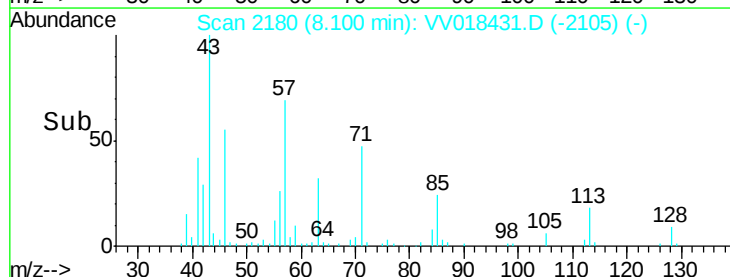
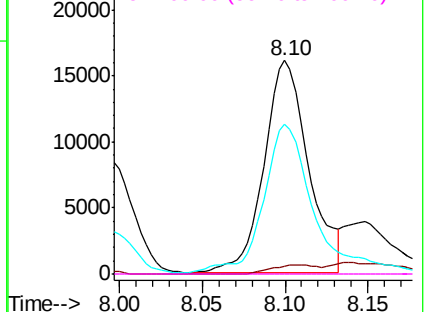


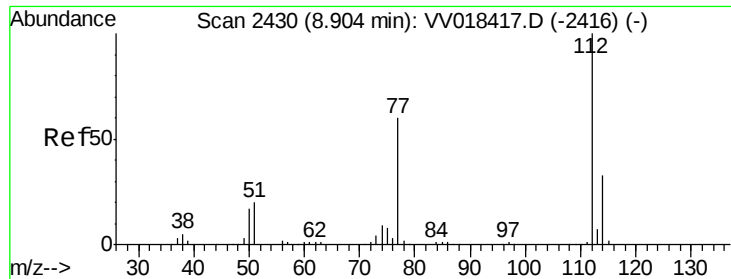
Abundance Ion 43.00 (42.70 to 43.70): VV0

Ion 58.00 (57.70 to 58.70): VV0

Ion 57.00 (56.70 to 57.70): VV0

Ion 100.00 (99.70 to 100.70): VV0

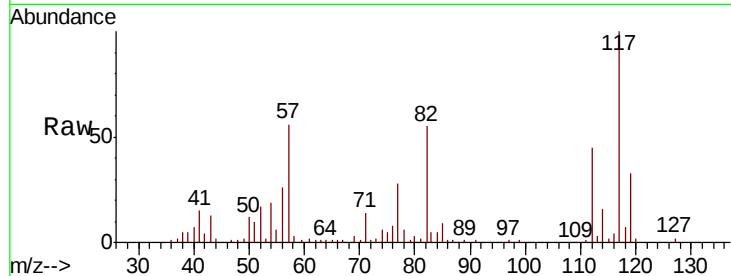




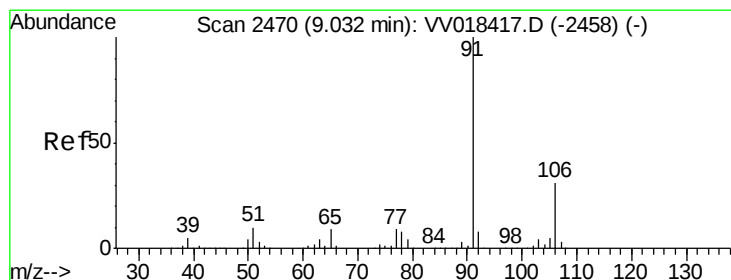
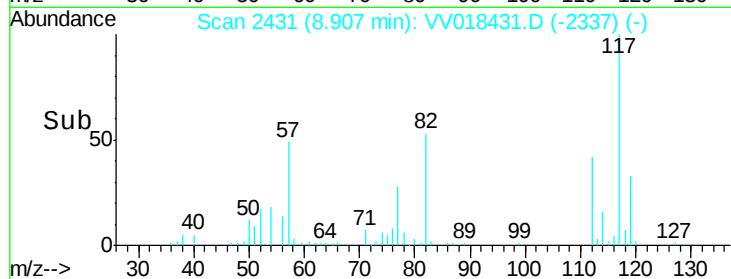
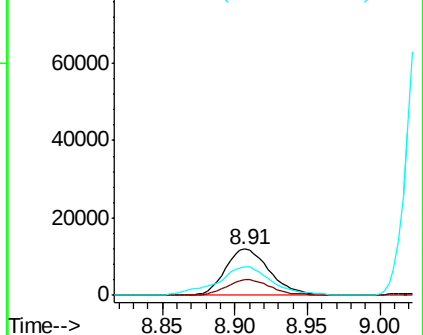
#51
Chlorobenzene
Concen: 3.593 ug/L
RT: 8.91 min Scan# 2431
Delta R.T. 0.00 min
Lab File: VV018431.D
Acq: 24 Sep 2020 15:59

Instrument :
MSVOA_V
ClientSampled :
BG3X0

Tot Ion:112 Resp: 25399
Ion Ratio Lower Upper
112 100
114 34.3 22.6 42.0
77 62.4 48.0 72.0

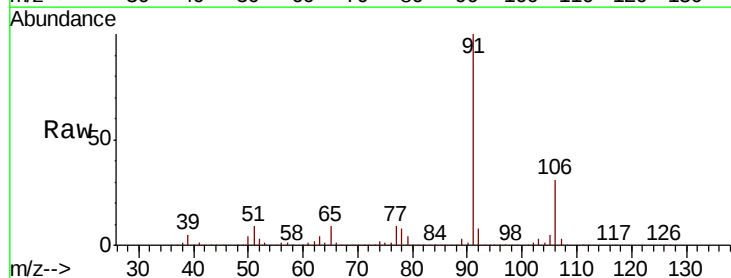


Abundance Ion 112.00 (111.70 to 112.70): V
Ion 114.00 (113.70 to 114.70): V
Ion 77.00 (76.70 to 77.70): V

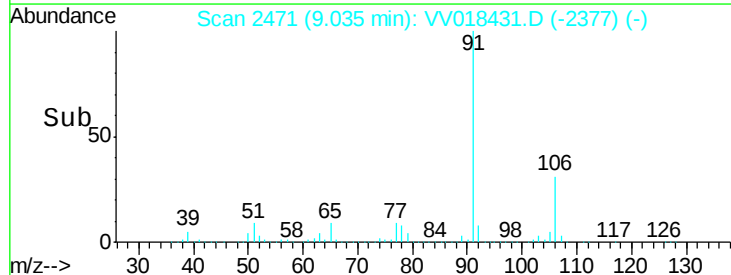
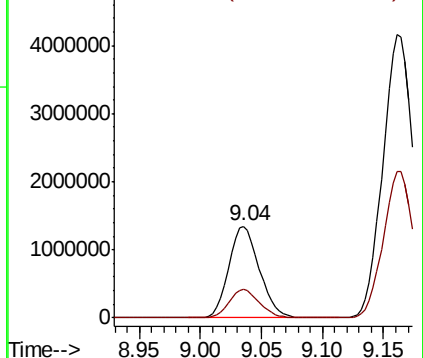


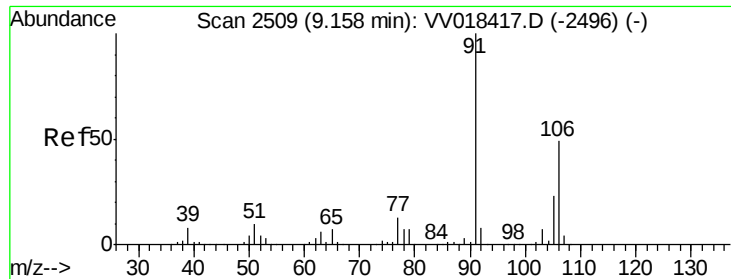
#52
Ethylbenzene
Concen: 197.269 ug/L
RT: 9.04 min Scan# 2471
Delta R.T. 0.00 min
Lab File: VV018431.D
Acq: 24 Sep 2020 15:59

Tgt Ion: 91 Resp: 2344280
Ion Ratio Lower Upper
91 100
106 30.9 21.3 39.5



Abundance Ion 91.00 (90.70 to 91.70): VV0
Ion 106.00 (105.70 to 106.70): V

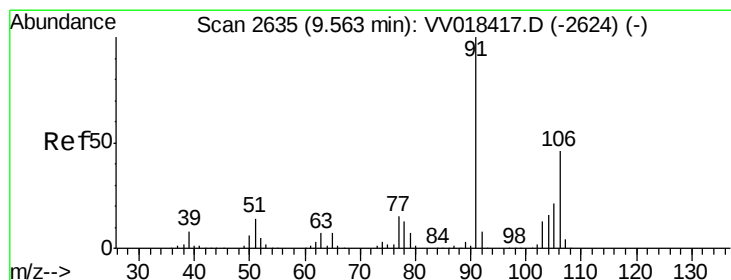
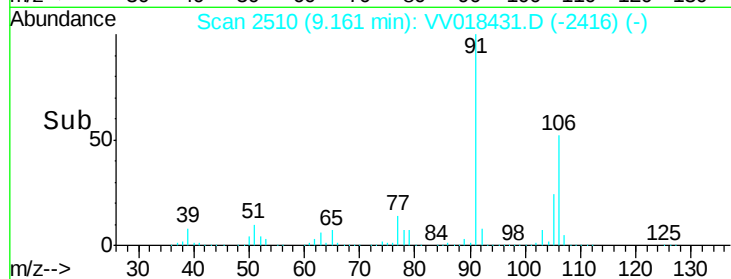
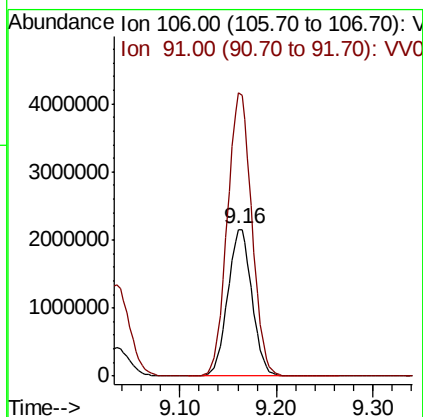
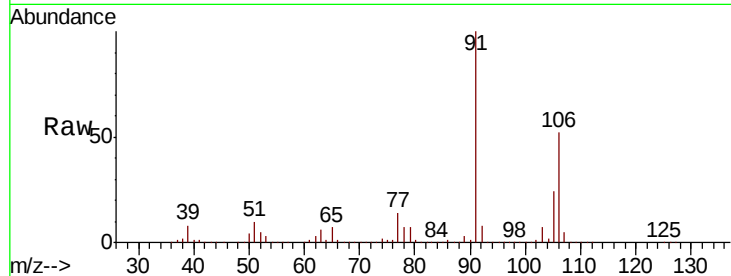




#53
 m,p-Xylene
 Concen: 840.768 ug/L
 RT: 9.16 min Scan# 2510
 Delta R.T. 0.00 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

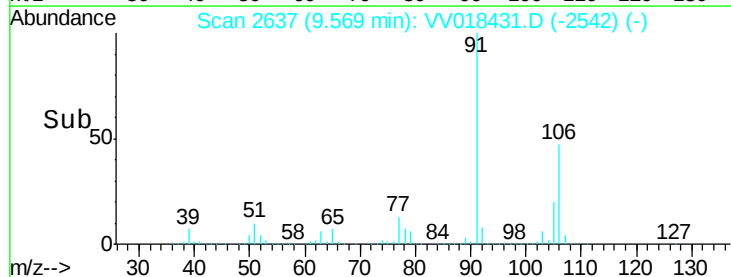
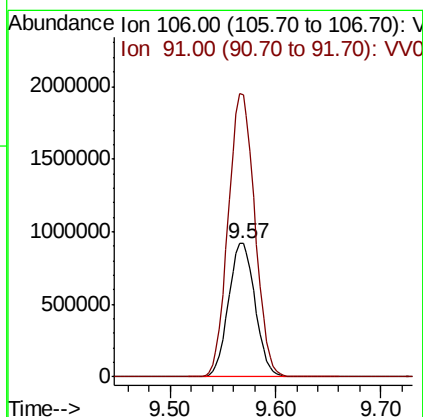
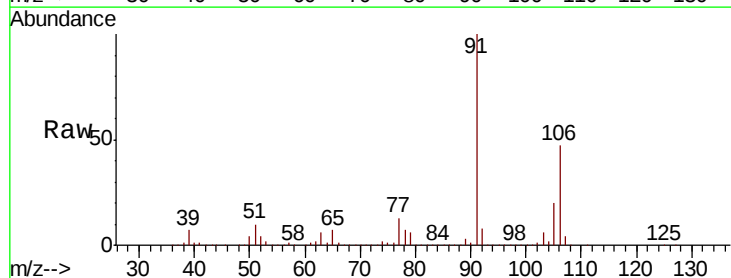
Instrument :
 MSVOA_V
 ClientSampleId :
 BG3X0

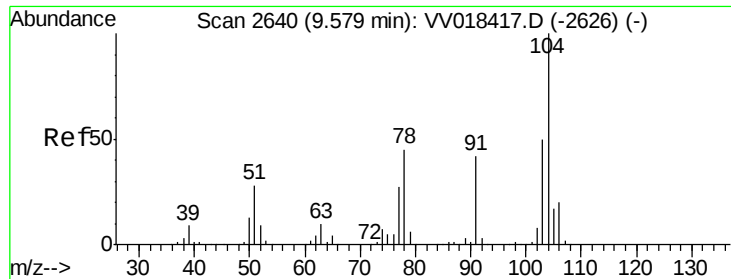
Tot Ion:106 Resp: 3729339
 Ion Ratio Lower Upper
 106 100
 91 193.1 146.7 272.5



#54
 o-xylene
 Concen: 373.883 ug/L
 RT: 9.57 min Scan# 2637
 Delta R.T. 0.01 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

Tgt Ion:106 Resp: 1597691
 Ion Ratio Lower Upper
 106 100
 91 211.4 152.2 282.6





#55

Stvrene

Concen: 10.532 ug/L

RT: 9.57 min Scan# 2637

Delta R.T. -0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampled :

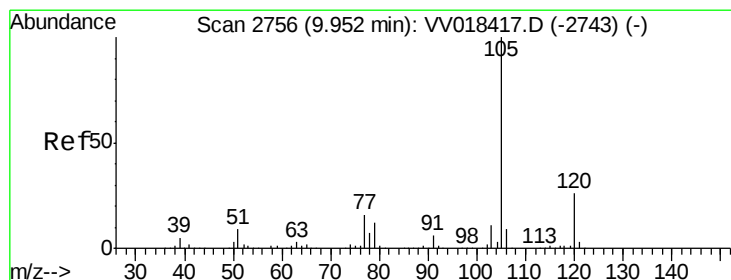
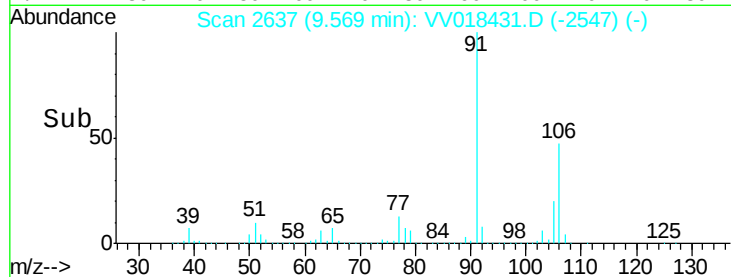
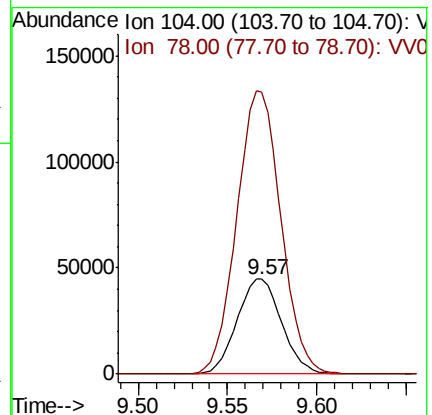
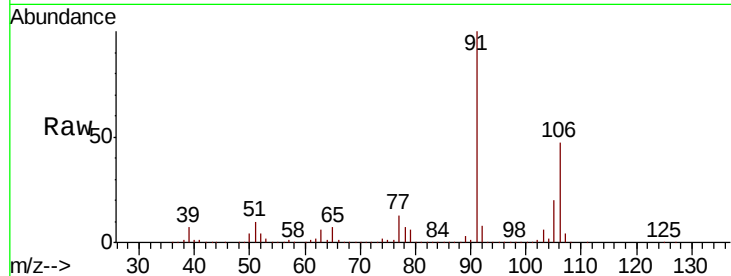
BG3X0

Tot Ion:104 Resp: 78224

Ion Ratio Lower Upper

104 100

78 296.6 31.4 58.2#



#56

Isopropylbenzene

Concen: 172.265 ug/L

RT: 9.95 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

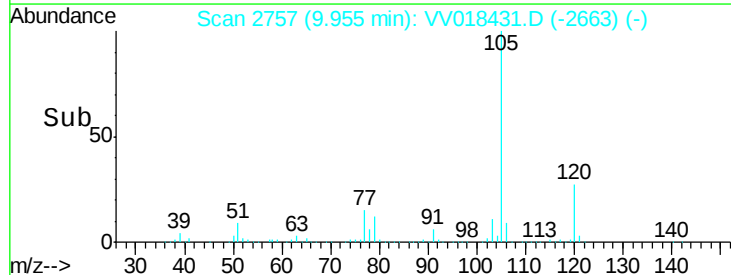
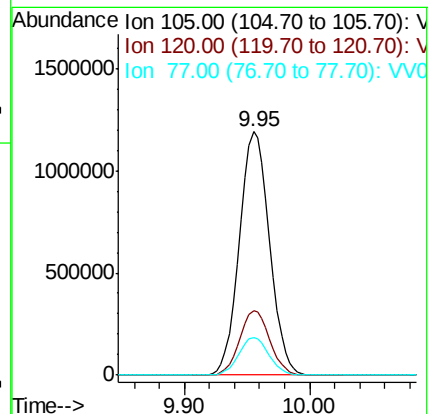
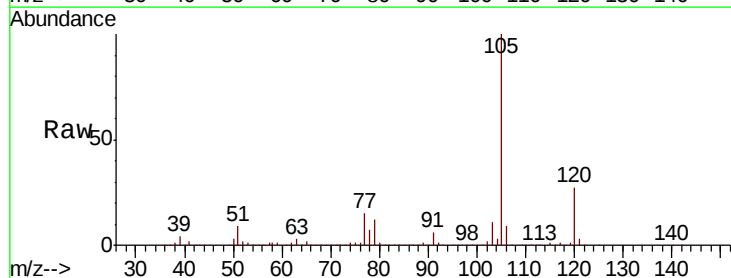
Tgt Ion:105 Resp: 1983930

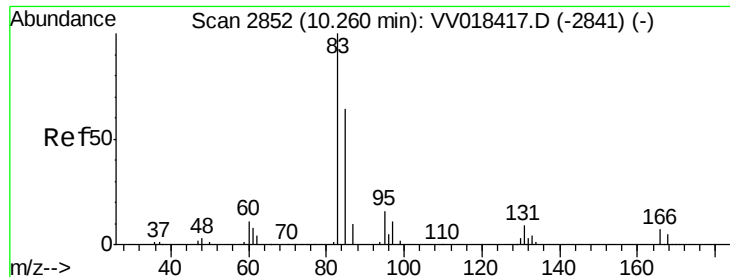
Ion Ratio Lower Upper

105 100

120 26.5 20.9 31.3

77 15.5 12.5 18.7





#58

1,1,2,2-Tetrachloroethane

Concen: 7.249 ug/L

RT: 10.26 min Scan# 2852

Delta R.T. -0.00 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

BG3X0

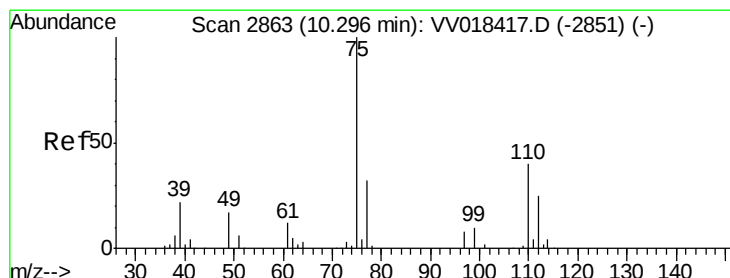
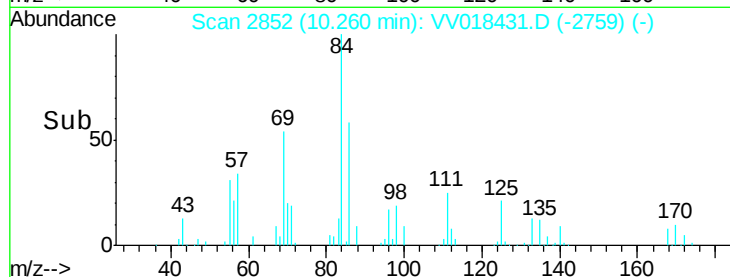
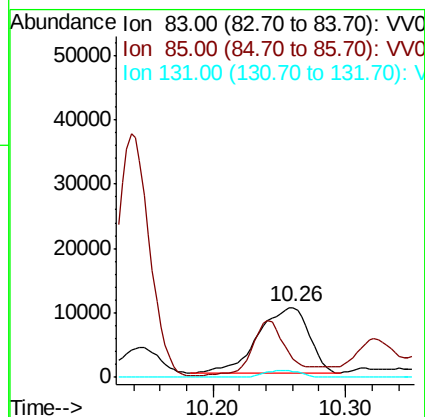
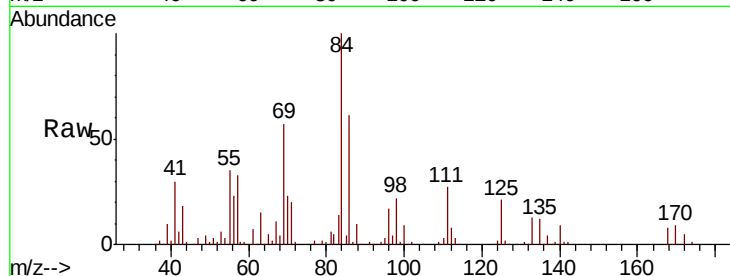
Tot Ion: 83 Resp: 27088

Ion Ratio Lower Upper

83 100

85 26.6 45.8 85.2#

131 8.5 8.0 12.0



#59

1,2,3-Trichloropropane

Concen: 18.704 ug/L

RT: 10.38 min Scan# 2889

Delta R.T. 0.08 min

Lab File: VV018431.D

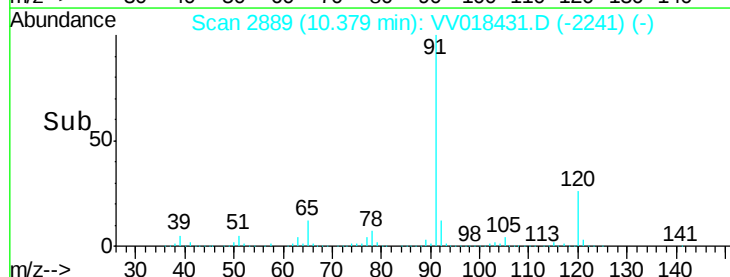
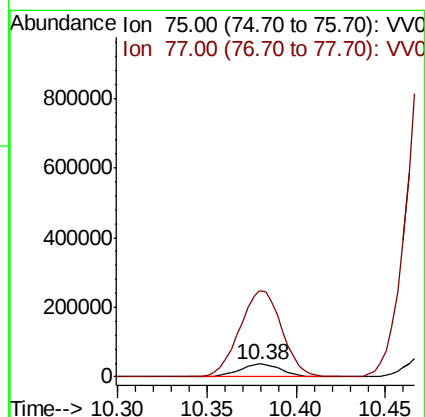
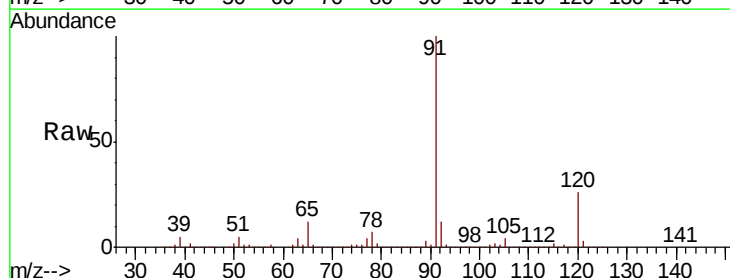
Acq: 24 Sep 2020 15:59

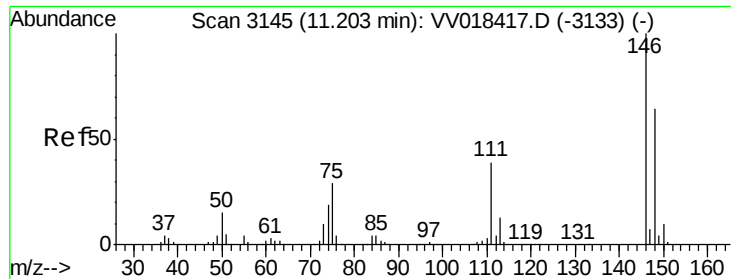
Tgt Ion: 75 Resp: 59959

Ion Ratio Lower Upper

75 100

77 679.3 25.8 38.6#





#62

1,3-Dichlorobenzene

Concen: 3.997 ug/L

RT: 11.21 min Scan# 3147

Delta R.T. 0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

BG3X0

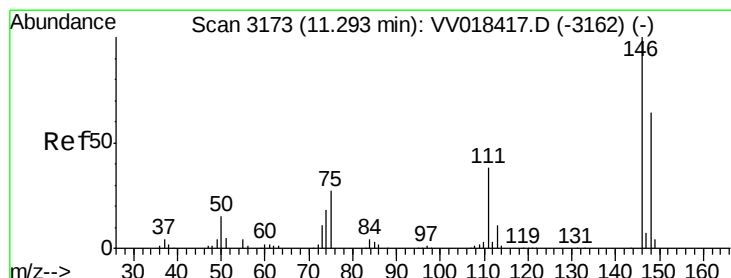
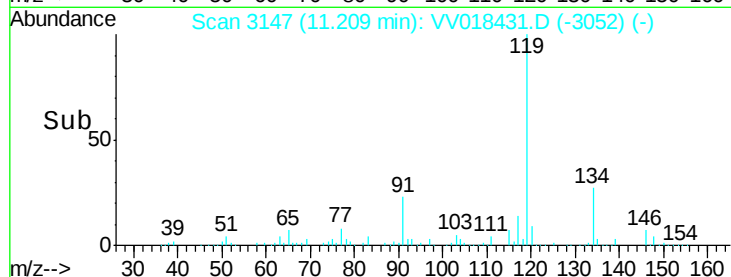
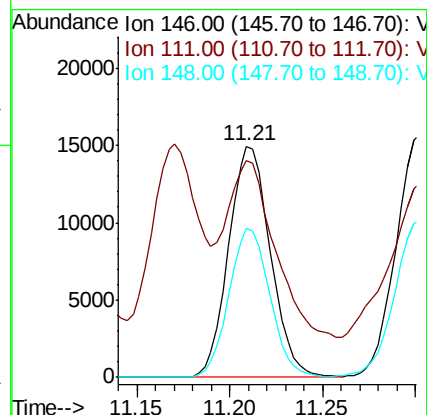
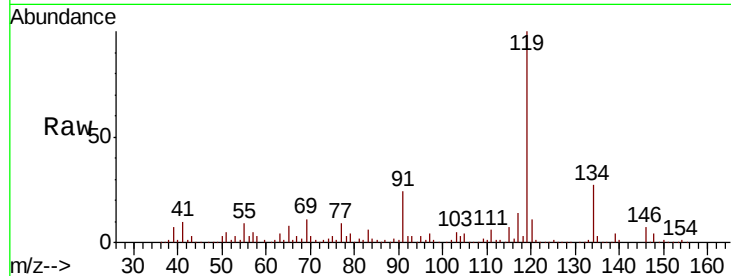
Tot Ion:146 Resp: 23394

Ion Ratio Lower Upper

146 100

111 93.9 27.6 51.2#

148 64.3 45.4 84.2



#63

1,4-Dichlorobenzene

Concen: 4.217 ug/L

RT: 11.30 min Scan# 3176

Delta R.T. 0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

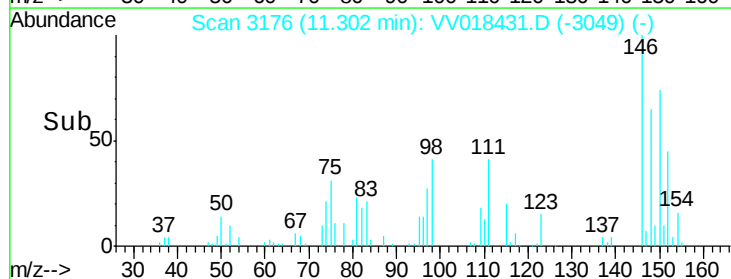
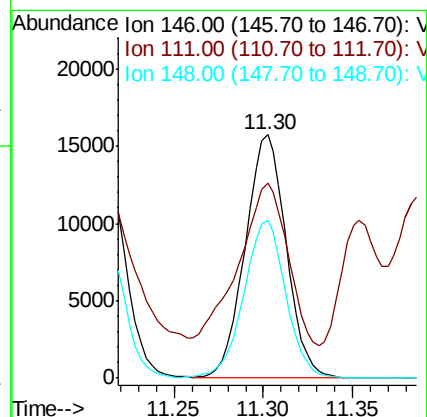
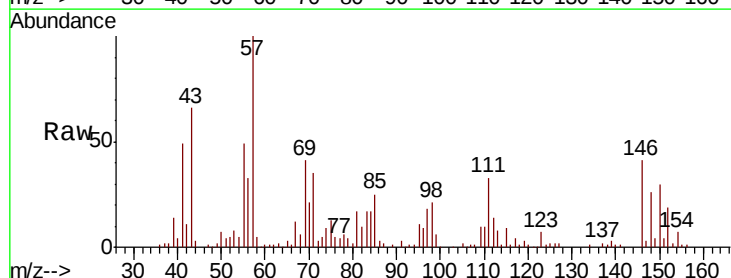
Tgt Ion:146 Resp: 25368

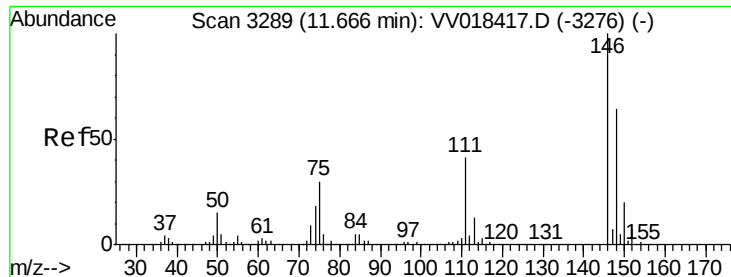
Ion Ratio Lower Upper

146 100

111 79.9 27.1 50.3#

148 64.6 45.4 84.2





#65

1,2-Dichlorobenzene

Concen: 25.379 ug/L

RT: 11.67 min Scan# 3291

Delta R.T. 0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

Instrument :

MSVOA_V

ClientSampleId :

BG3X0

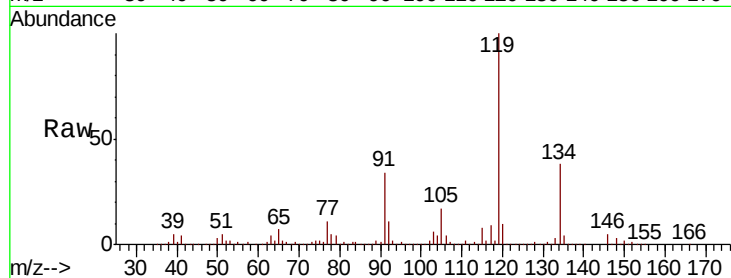
Tot Ion:146 Resp: 150137

Ion Ratio Lower Upper

146 100

111 45.3 32.8 49.2

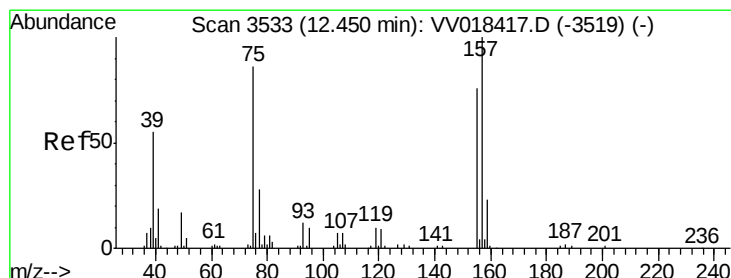
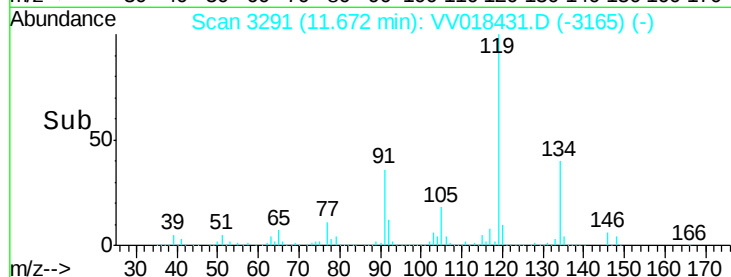
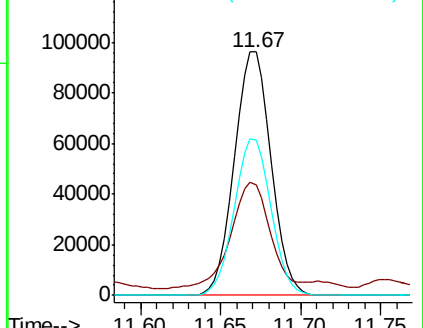
148 63.6 50.7 76.1



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#66

1,2-Dibromo-3-chloropropane

Concen: 22.844 ug/L

RT: 12.44 min Scan# 3529

Delta R.T. -0.01 min

Lab File: VV018431.D

Acq: 24 Sep 2020 15:59

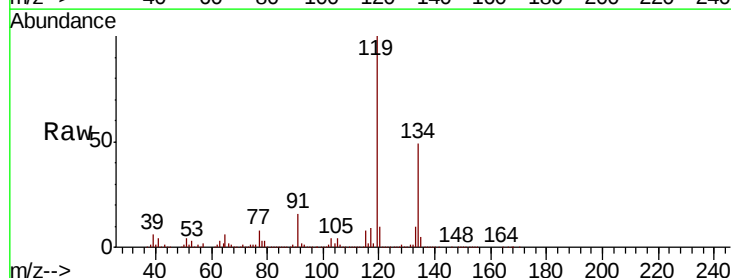
Tgt Ion: 75 Resp: 19070

Ion Ratio Lower Upper

75 100

155 2.2 69.7 104.5#

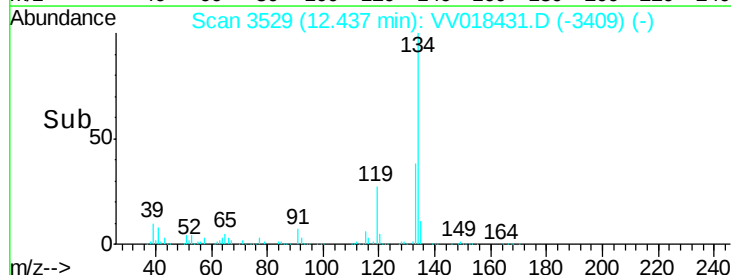
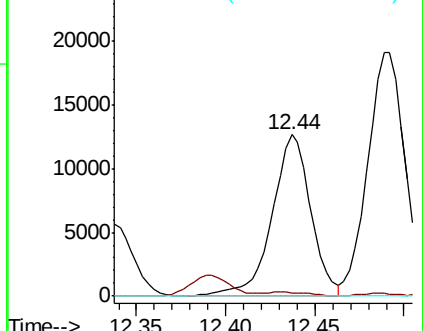
157 0.0 88.2 132.4#

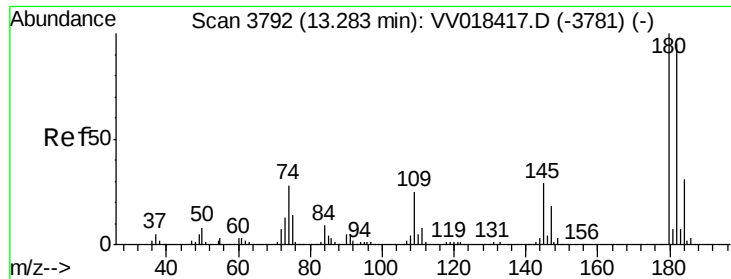


Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

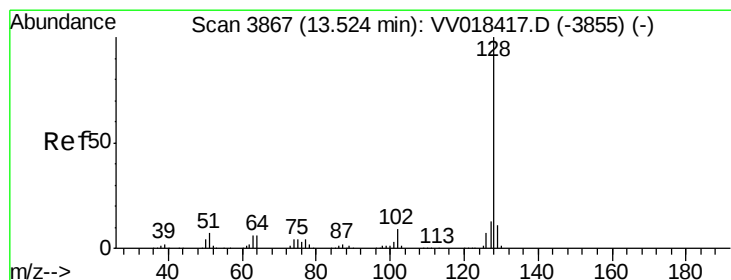
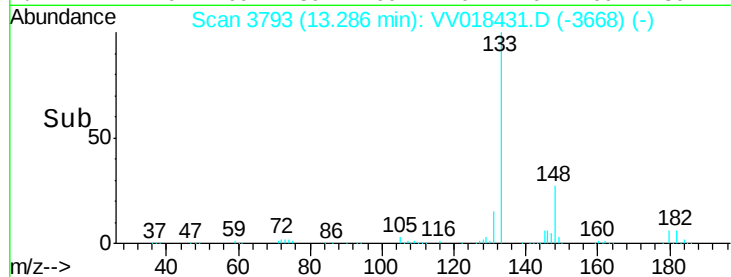
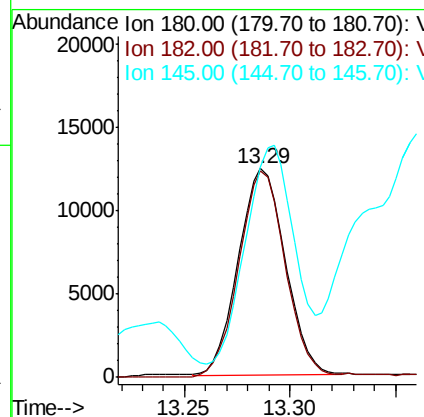
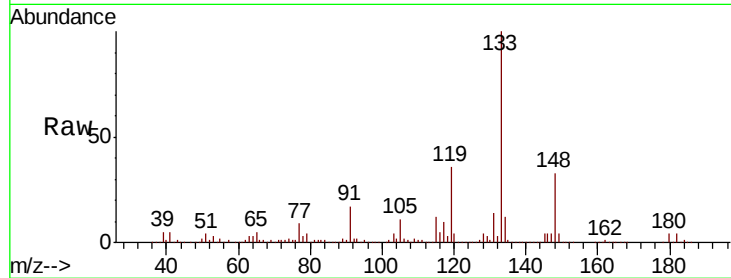




#68
 1,2,4-trichlorobenzene
 Concen: 4.636 ug/L
 RT: 13.29 min Scan# 3793
 Delta R.T. 0.00 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

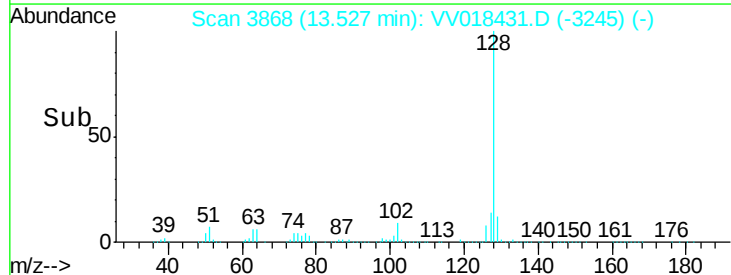
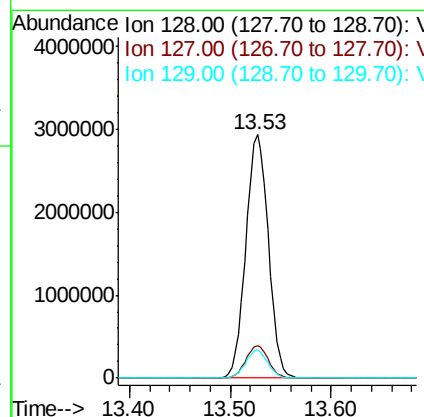
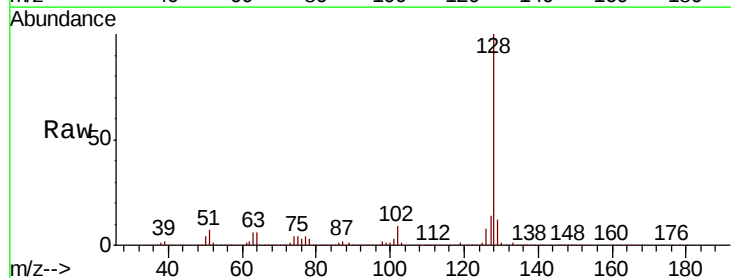
Instrument :
 MSVOA_V
 ClientSampleId :
 BG3X0

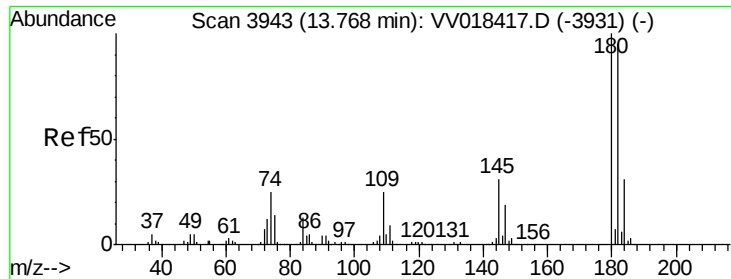
Tot Ion:180 Resp: 19048
 Ion Ratio Lower Upper
 180 100
 182 99.5 77.4 116.2
 145 110.2 23.2 34.8#



#69
 Naphthalene
 Concen: 434.497 ug/L
 RT: 13.53 min Scan# 3868
 Delta R.T. 0.00 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

Tgt Ion:128 Resp: 4517278
 Ion Ratio Lower Upper
 128 100
 127 13.4 10.6 15.8
 129 11.5 8.6 13.0





#70
 1,2,3-Trichlorobenzene
 Concen: 3.005 ug/L
 RT: 13.77 min Scan# 3943
 Delta R.T. -0.00 min
 Lab File: VV018431.D
 Acq: 24 Sep 2020 15:59

Instrument :
 MSVOA_V
 ClientSampleId :
 BG3X0

Tot Ion	Ion	Ratio	Lower	Upper
180	100			
182	95.4	76.5	114.7	
145	138.1	24.9	37.3	

