

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100920\
 Data File : VV018794.D
 Acq On : 09 Oct 2020 04:59
 Operator : SY/MD
 Sample : L4239-09 80X
 Misc : 5.0mL/MSVOA V/WATER
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 BG3P2

Quant Time: Oct 09 07:35:35 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVLM100820WMA.M
 Quant Title : VOC Analysis
 QLast Update : Fri Oct 09 07:31:27 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.64	114	332974	50.00	ug/L	0.00
28) Chlorobenzene-d5	8.87	117	299113	50.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.27	152	163404	50.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.32	65	132370	43.75	ug/L	0.00
Spiked Amount	50.000	Range	60 - 135	Recovery	=	87.50%
7) Chloroethane-d5	1.58	69	113166	46.47	ug/L	0.00
Spiked Amount	50.000	Range	70 - 130	Recovery	=	92.94%
11) 1,1-Dichloroethene-d2	2.12	63	202644	34.74	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	69.48%
21) 2-Butanone-d5	3.90	46	197016	106.05	ug/L	0.00
Spiked Amount	100.000	Range	40 - 130	Recovery	=	106.05%
24) Chloroform-d	4.37	84	241522	45.25	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	90.50%
26) 1,2-Dichloroethane-d4	5.05	65	174789	48.31	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	96.62%
32) Benzene-d6	5.07	84	500845	52.03	ug/L	0.00
Spiked Amount	50.000	Range	70 - 125	Recovery	=	104.06%
36) 1,2-Dichloropropane-d6	6.09	67	156647	49.91	ug/L	0.00
Spiked Amount	50.000	Range	70 - 120	Recovery	=	99.82%
41) Toluene-d8	7.34	98	416249	48.71	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	97.42%
43) trans-1,3-Dichloropropene-	7.64	79	70938	46.24	ug/L	0.00
Spiked Amount	50.000	Range	60 - 125	Recovery	=	92.48%
47) 2-Hexanone-d5	8.11	63	107004	97.27	ug/L	0.00
Spiked Amount	100.000	Range	45 - 130	Recovery	=	97.27%
57) 1,1,2,2-Tetrachloroethane-	10.23	84	165764	45.91	ug/L	0.00
Spiked Amount	50.000	Range	65 - 120	Recovery	=	91.82%
64) 1,2-Dichlorobenzene-d4	11.65	152	180897	50.02	ug/L	0.00
Spiked Amount	50.000	Range	80 - 120	Recovery	=	100.04%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
10) 1,1,2-Trichloro-1,2,2-trif	2.12	101	1793	0.749	ug/L #	21
12) 1,1-Dichloroethene	2.13	96	2640	1.146	ug/L #	1
20) cis-1,2-Dichloroethene	3.94	96	105396	40.997	ug/L	99
27) 1,2-Dichloroethane	5.07	62	3204	0.804	ug/L	97
29) Cyclohexane	4.70	56	25774	7.115	ug/L	99
30) 1,1,1-Trichloroethane	4.63	97	139850	35.080	ug/L	99
31) Carbon tetrachloride	4.64	117	18045	5.370	ug/L	99
39) cis-1,3-Dichloropropene	7.01	75	4702	1.277	ug/L #	68
42) Toluene	7.41	91	2226705	228.448	ug/L	98
46) Tetrachloroethene	8.00	164	1548	0.773	ug/L	88
48) 2-Hexanone	8.16	43	8569	3.204	ug/L #	69
49) Dibromochloromethane	8.00	129	1440	0.563	ug/L #	10
52) Ethylbenzene	9.03	91	62385	5.636	ug/L	97
53) m,p-Xylene	9.16	106	87796	21.609	ug/L	98
54) o-xylene	9.56	106	47570	12.327	ug/L	99
56) Isopropylbenzene	9.96	105	23983	2.246	ug/L	99
59) 1,2,3-Trichloropropane	11.27	75	20887	6.734	ug/L	91

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV100920\
Data File : VV018794.D
Acq On : 09 Oct 2020 04:59
Operator : SY/MD
Sample : L4239-09 80X
Misc : 5.0mL/MSVOA V/WATER
ALS Vial : 25 Sample Multiplier: 1

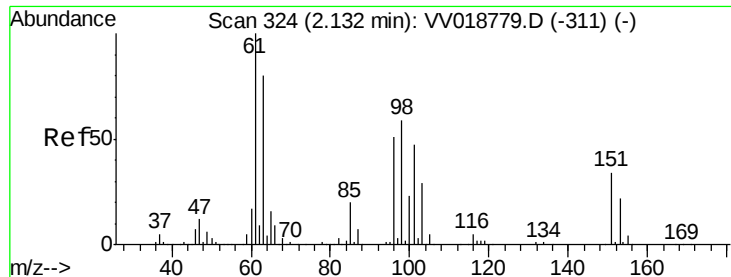
Instrument :
MSVOA_V
ClientSampleId :
BG3P2

Quant Time: Oct 09 07:35:35 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVLM100820WMA.M
Quant Title : VOC Analysis
QLast Update : Fri Oct 09 07:31:27 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
67) 1,3,5-Trichlorobenzene	13.29	180	14294	4.142	ug/L	97
68) 1,2,4-trichlorobenzene	13.29	180	14294	4.405	ug/L	97
69) Naphthalene	13.53	128	54290	5.938	ug/L	100
70) 1,2,3-Trichlorobenzene	13.77	180	5450	1.692	ug/L	99

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA V\DATA\VV100920\
Data File : VV018794.D
Acq On    : 09 Oct 2020 04:59
Operator  : SY/MD
Sample    : L4239-09 80X
Misc      : 5.0mL/MSVOA V/WATER
ALS Vial  : 25 Sample Multiplier: 1
```



#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.749 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

BG3P2

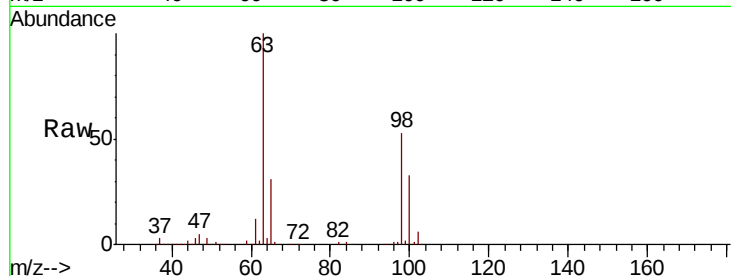
Tot Ion:101 Resp: 1793

Ion Ratio Lower Upper

101 100

85 3.4 35.9 53.9#

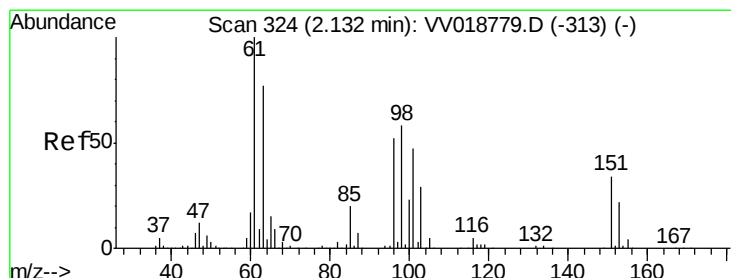
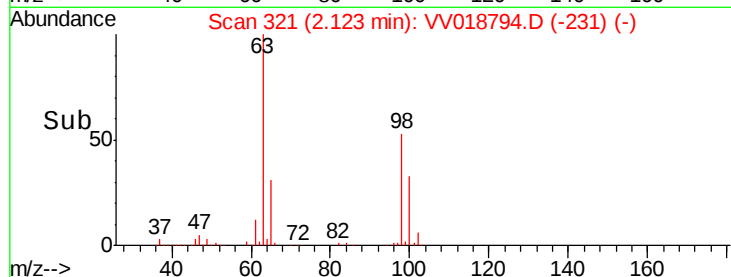
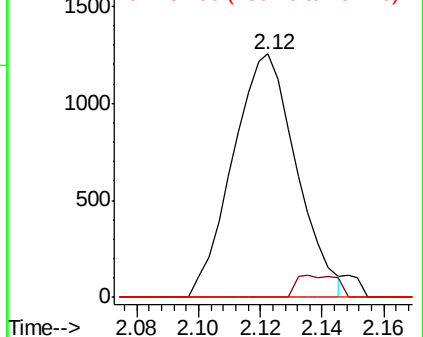
151 0.0 59.8 89.8#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 1.146 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.01 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

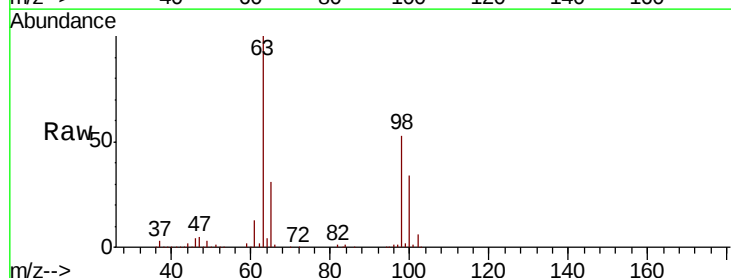
Tgt Ion: 96 Resp: 2640

Ion Ratio Lower Upper

96 100

61 1053.2 133.6 248.0#

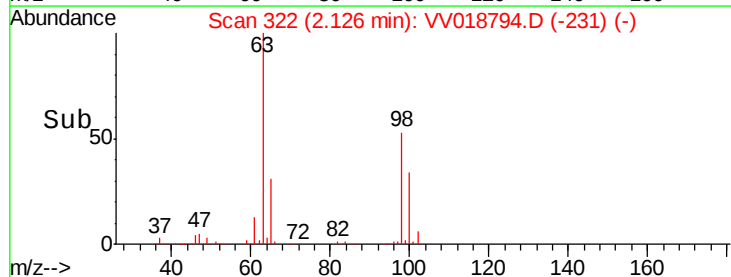
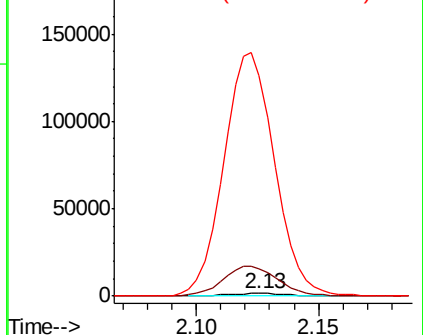
63 8344.2 108.4 201.4#

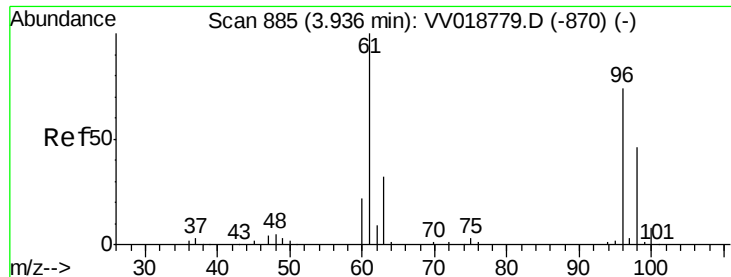


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0

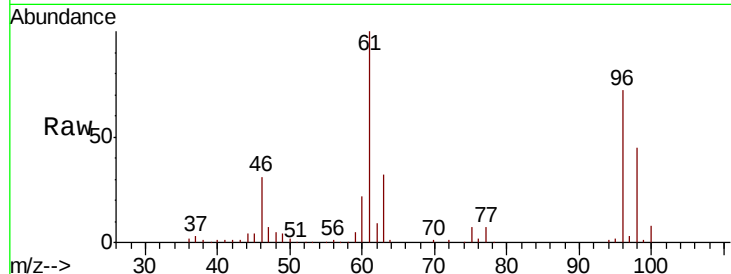




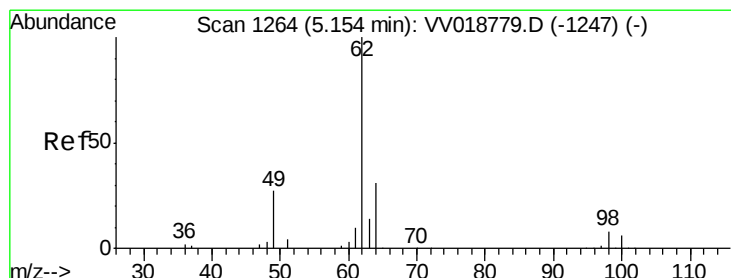
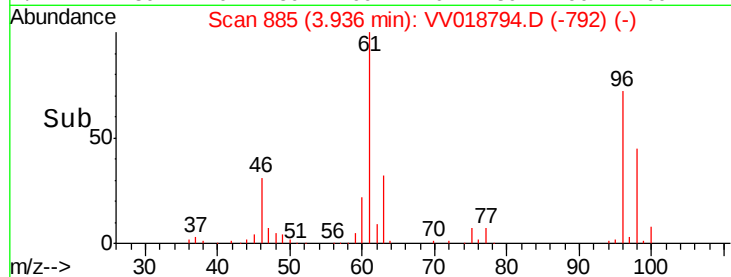
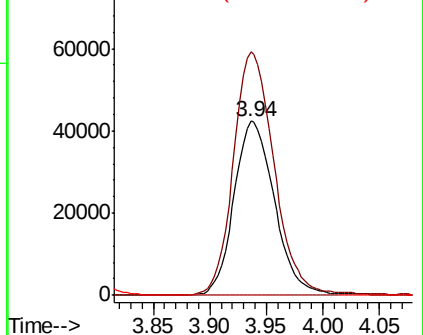
#20
 cis-1,2-Dichloroethene
 Concen: 40.997 ug/L
 RT: 3.94 min Scan# 885
 Delta R.T. 0.00 min
 Lab File: VV018794.D
 Acq: 09 Oct 2020 04:59

Instrument :
 MSVOA_V
 ClientSampleId :
 BG3P2

Tot Ion: 96 Resp: 105396
 Ion Ratio Lower Upper
 96 100
 61 139.7 97.3 180.7
 68 0.0 0.0 0.0

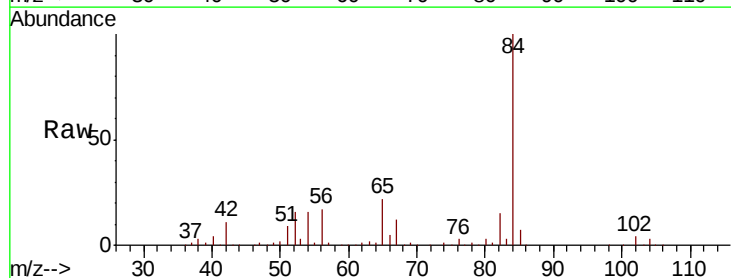


Abundance Ion 96.00 (95.70 to 96.70): VV0
 Ion 61.00 (60.70 to 61.70): VV0
 Ion 68.00 (67.70 to 68.70): VV0

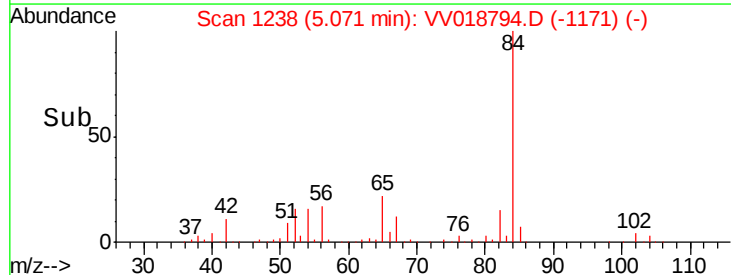
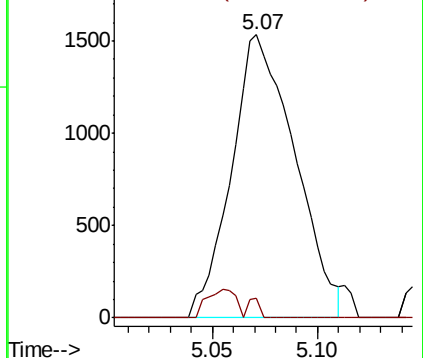


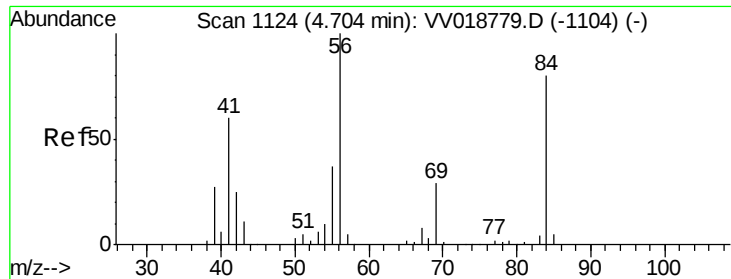
#27
 1,2-Dichloroethane
 Concen: 0.804 ug/L
 RT: 5.07 min Scan# 1238
 Delta R.T. -0.08 min
 Lab File: VV018794.D
 Acq: 09 Oct 2020 04:59

Tgt Ion: 62 Resp: 3204
 Ion Ratio Lower Upper
 62 100
 98 7.2 6.6 10.0



Abundance Ion 62.00 (61.70 to 62.70): VV0
 Ion 98.00 (97.70 to 98.70): VV0

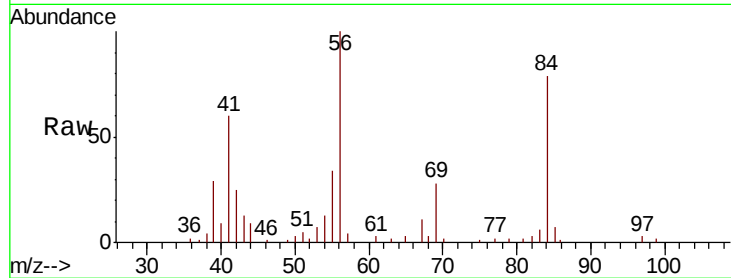




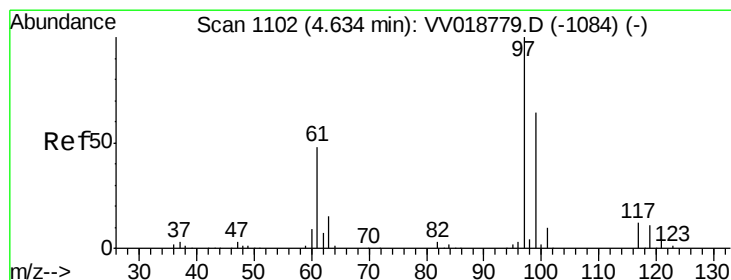
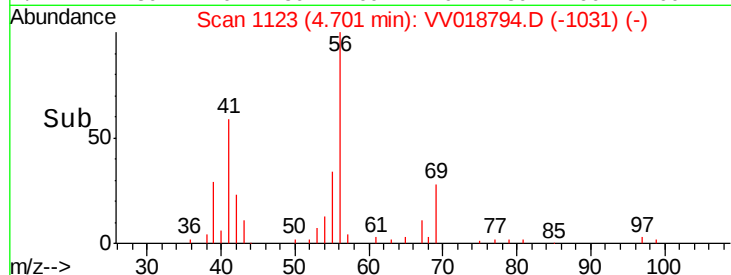
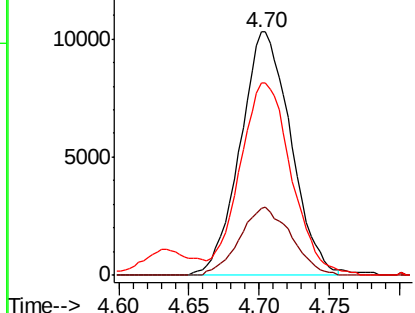
#29
Cyclohexane
Concen: 7.115 ug/L
RT: 4.70 min Scan# 1123
Delta R.T. -0.00 min
Lab File: VV018794.D
Acq: 09 Oct 2020 04:59

Instrument :
MSVOA_V
ClientSampleId :
BG3P2

Tot Ion: 56 Resp: 25774
Ion Ratio Lower Upper
56 100
69 28.4 23.1 34.7
84 80.6 65.2 97.8

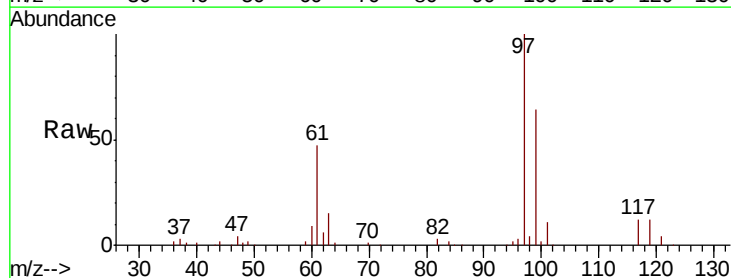


Abundance Ion 56.00 (55.70 to 56.70): VV0
Ion 69.00 (68.70 to 69.70): VV0
Ion 84.00 (83.70 to 84.70): VV0

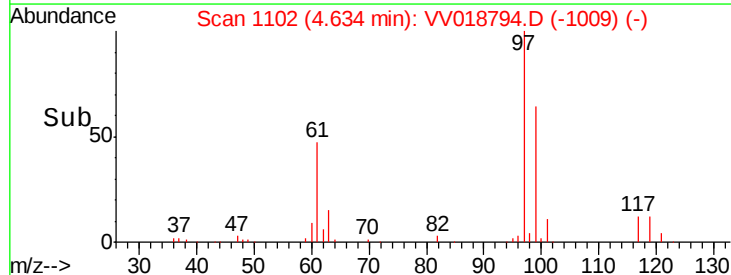
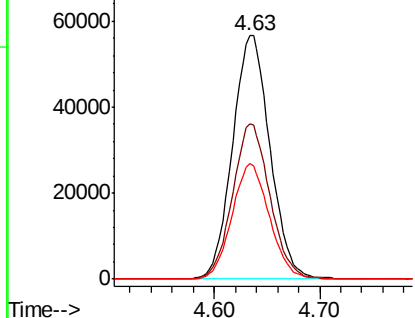


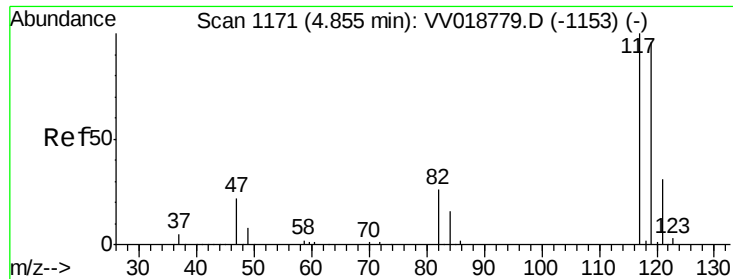
#30
1,1,1-Trichloroethane
Concen: 35.080 ug/L
RT: 4.63 min Scan# 1102
Delta R.T. 0.00 min
Lab File: VV018794.D
Acq: 09 Oct 2020 04:59

Tgt Ion: 97 Resp: 139850
Ion Ratio Lower Upper
97 100
99 63.5 51.0 76.4
61 47.5 37.0 55.4



Abundance Ion 97.00 (96.70 to 97.70): VV0
Ion 99.00 (98.70 to 99.70): VV0
Ion 61.05 (60.75 to 61.75): VV0





#31

Carbon tetrachloride

Concen: 5.370 ug/L

RT: 4.64 min Scan# 1103

Delta R.T. -0.22 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

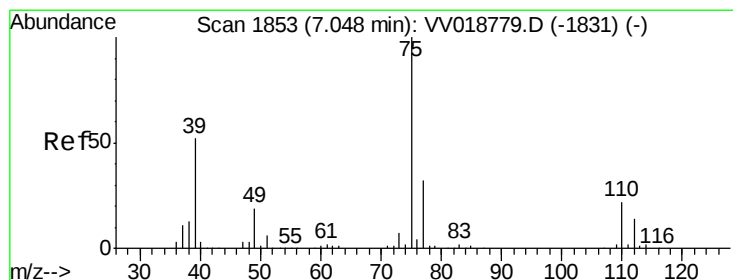
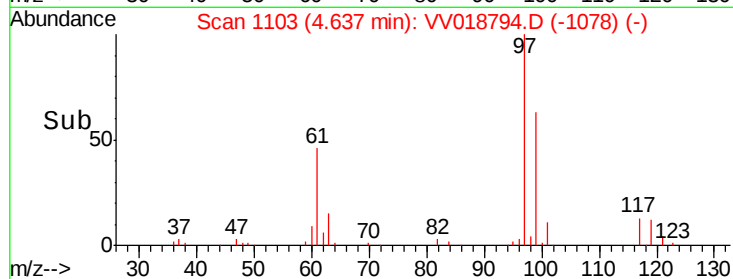
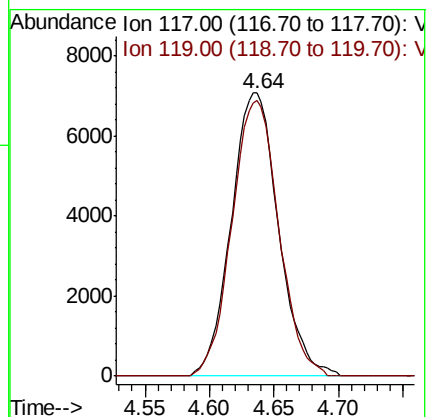
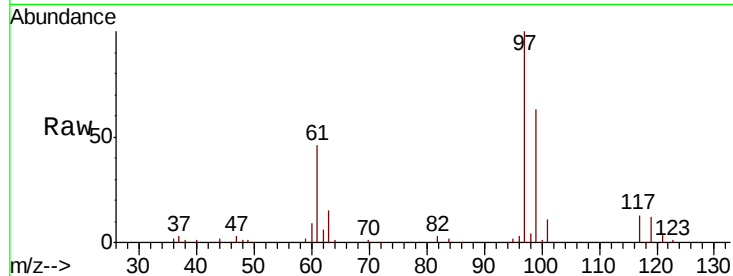
BG3P2

Tot Ion:117 Resp: 18045

Ion Ratio Lower Upper

117 100

119 96.3 76.3 114.5



#39

cis-1,3-Dichloropropene

Concen: 1.277 ug/L

RT: 7.01 min Scan# 1841

Delta R.T. -0.04 min

Lab File: VV018794.D

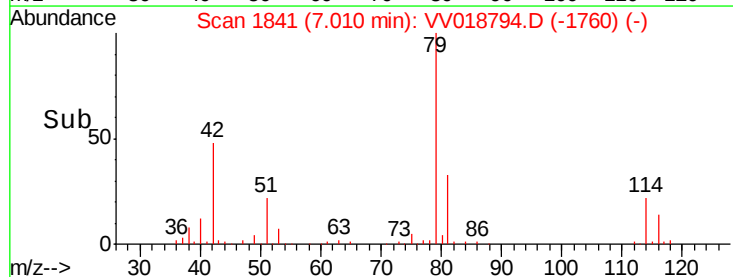
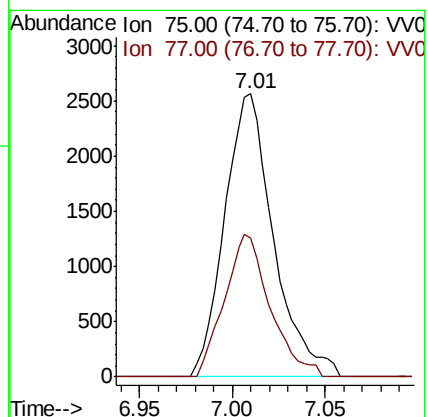
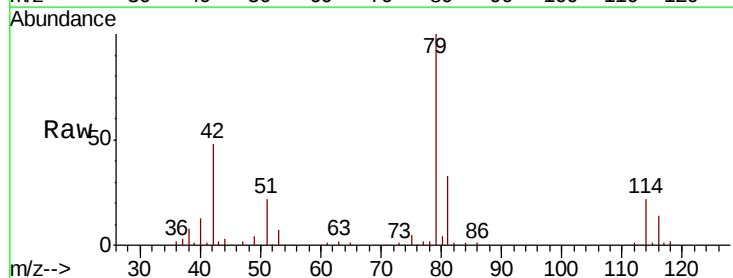
Acq: 09 Oct 2020 04:59

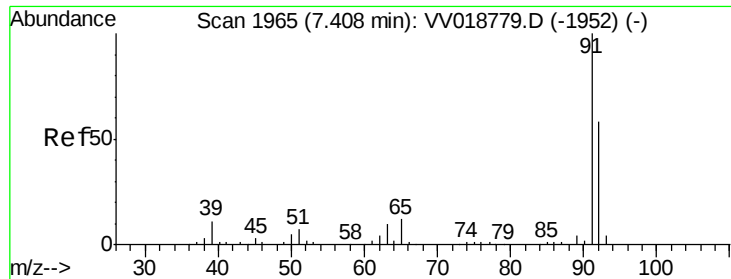
Tgt Ion: 75 Resp: 4702

Ion Ratio Lower Upper

75 100

77 49.0 21.8 40.6#





#42

Toluene

Concen: 228.448 ug/L

RT: 7.41 min Scan# 1965

Delta R.T. 0.00 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

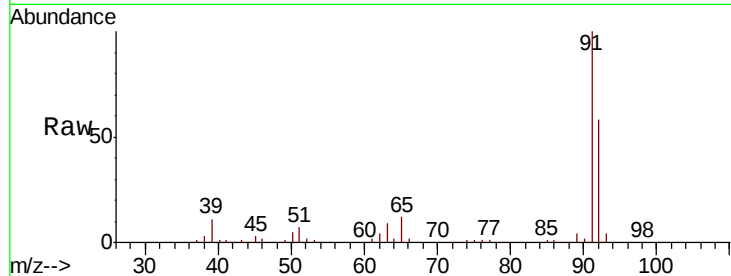
BG3P2

Tot Ion: 91 Resp: 2226705

Ion Ratio Lower Upper

91 100

92 58.4 39.8 74.0



Abundance Ion 91.00 (90.70 to 91.70): VV0

Ion 92.00 (91.70 to 92.70): VV0

7.41

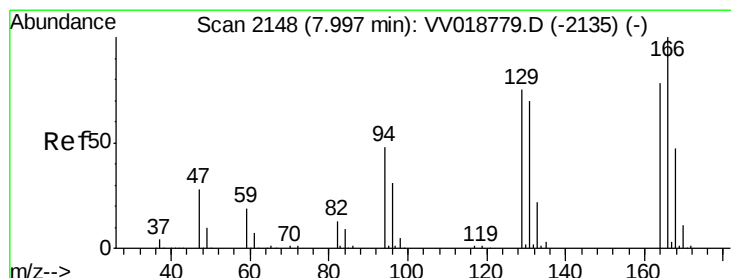
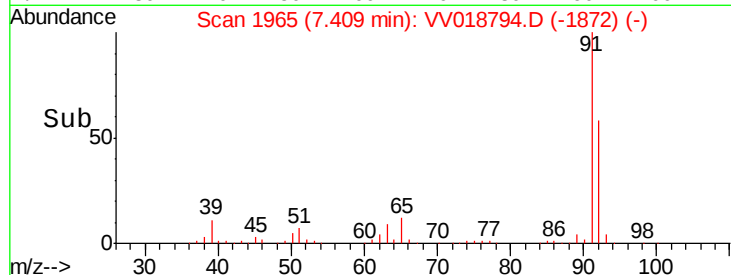
1500000

1000000

500000

0

Time--> 7.30 7.40 7.50



#46

Tetrachloroethene

Concen: 0.773 ug/L

RT: 8.00 min Scan# 2150

Delta R.T. 0.01 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Tgt Ion:164 Resp: 1548

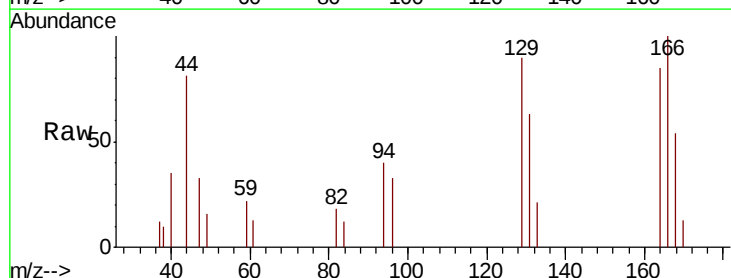
Ion Ratio Lower Upper

164 100

129 106.5 64.6 120.0

131 74.9 63.6 118.0

166 118.1 88.3 164.1



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

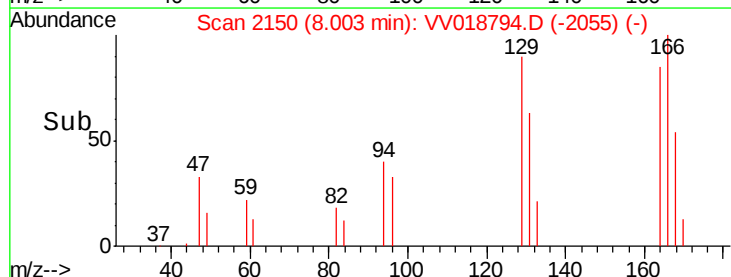
1500

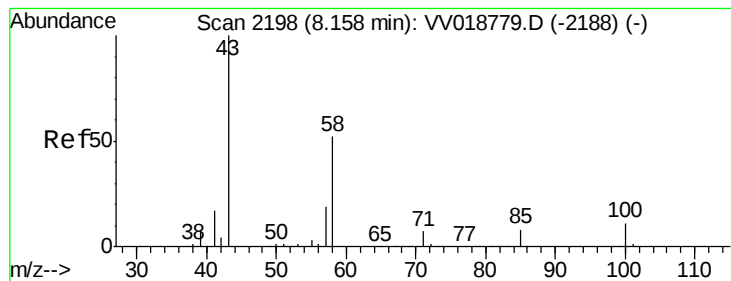
1000

500

0

Time--> 7.95 8.00





#48

2-Hexanone

Concen: 3.204 ug/L

RT: 8.16 min Scan# 2200

Delta R.T. 0.01 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

BG3P2

Tot Ion: 43 Resp: 8569

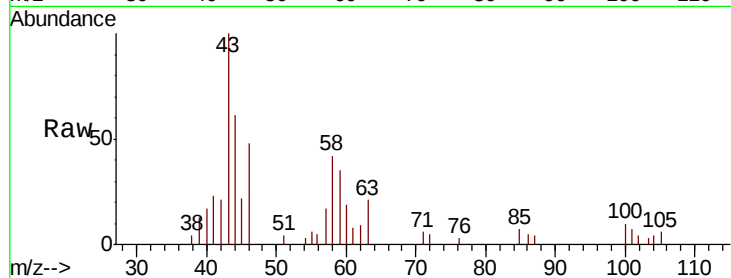
Ion Ratio Lower Upper

43 100

58 30.9 41.8 62.8#

57 0.0 14.9 22.3#

100 6.0 9.2 13.8#

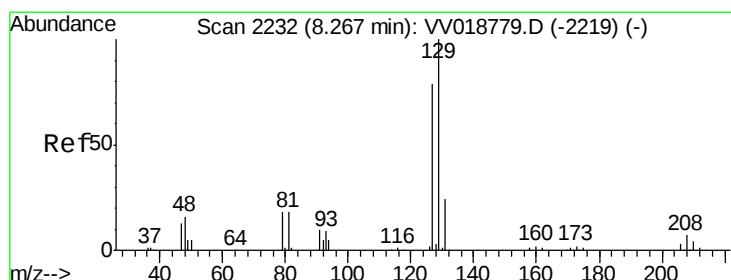
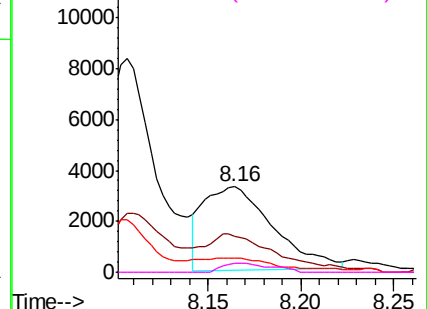
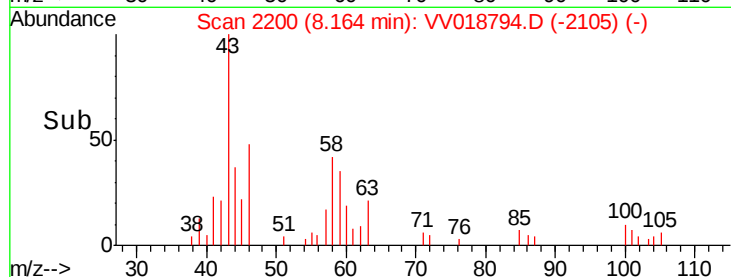


Abundance Ion 43.00 (42.70 to 43.70): VV018779.D (-2188) (-)

Ion 58.00 (57.70 to 58.70): VV018779.D (-2188) (-)

Ion 57.00 (56.70 to 57.70): VV018779.D (-2188) (-)

Ion 100.00 (99.70 to 100.70): VV018779.D (-2188) (-)



#49

Dibromochloromethane

Concen: 0.563 ug/L

RT: 8.00 min Scan# 2149

Delta R.T. -0.27 min

Lab File: VV018794.D

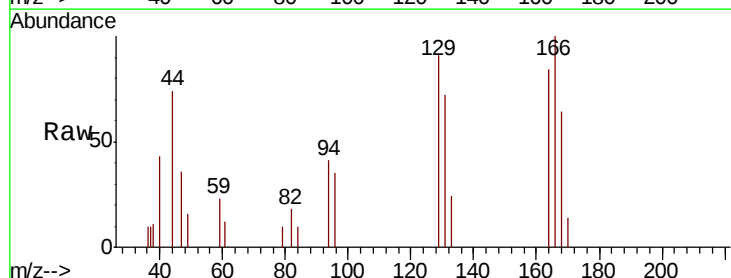
Acq: 09 Oct 2020 04:59

Tgt Ion: 129 Resp: 1440

Ion Ratio Lower Upper

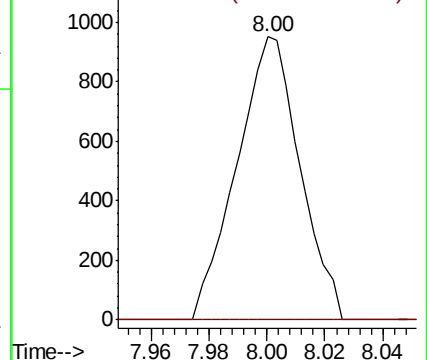
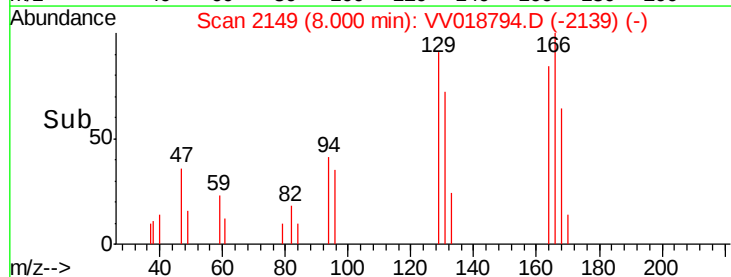
129 100

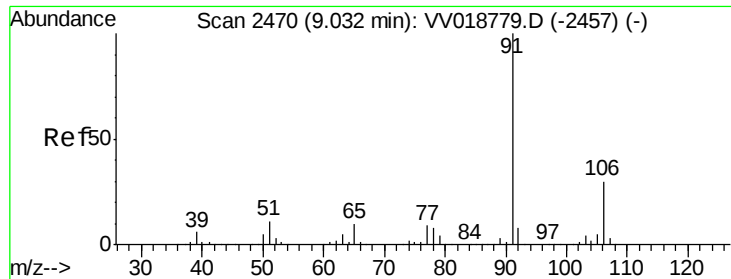
127 0.0 55.3 102.7#



Abundance Ion 129.00 (128.70 to 129.70): VV018779.D (-2219) (-)

Ion 127.00 (126.70 to 127.70): VV018779.D (-2219) (-)





#52

Ethylbenzene

Concen: 5.636 ug/L

RT: 9.03 min Scan# 2470

Delta R.T. 0.00 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

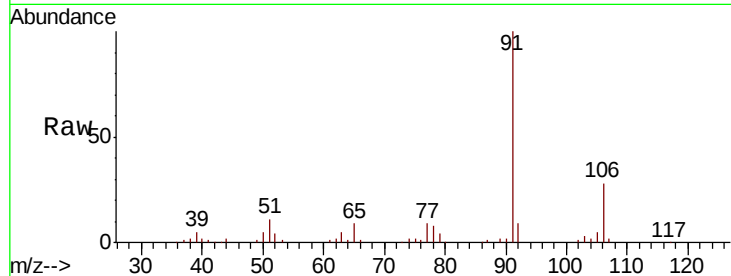
BG3P2

Tot Ion: 91 Resp: 62385

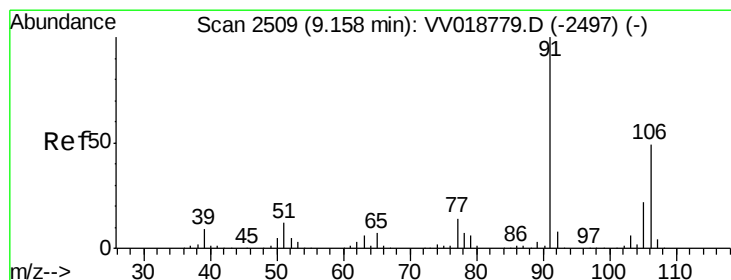
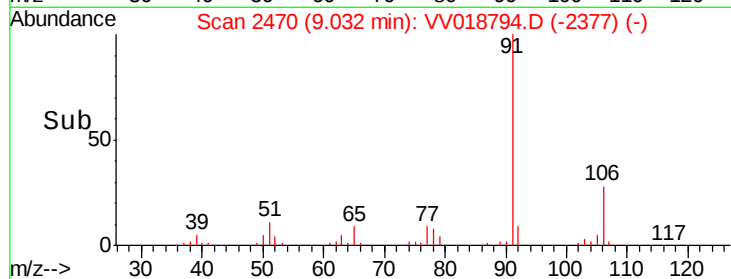
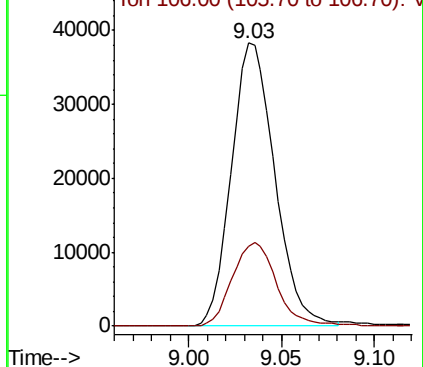
Ion Ratio Lower Upper

91 100

106 28.4 20.9 38.9



Abundance Ion 91.00 (90.70 to 91.70): VV018779.D (-2457) (-)



#53

m,p-Xylene

Concen: 21.609 ug/L

RT: 9.16 min Scan# 2509

Delta R.T. 0.00 min

Lab File: VV018794.D

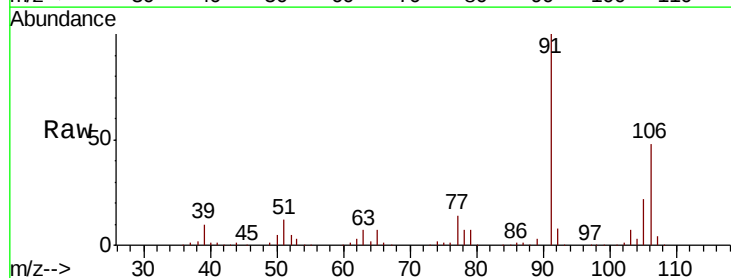
Acq: 09 Oct 2020 04:59

Tgt Ion: 106 Resp: 87796

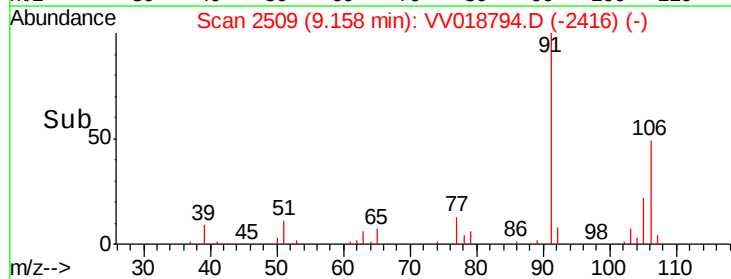
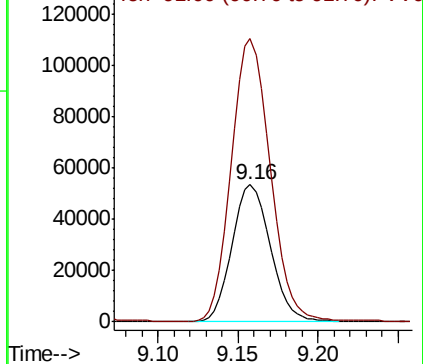
Ion Ratio Lower Upper

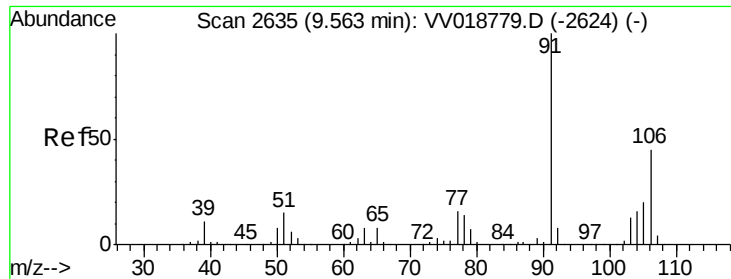
106 100

91 206.3 147.1 273.1



Abundance Ion 106.00 (105.70 to 106.70): VV018794.D (-2416) (-)





#54

o-xylene

Concen: 12.327 ug/L

RT: 9.56 min Scan# 2635

Delta R.T. 0.00 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

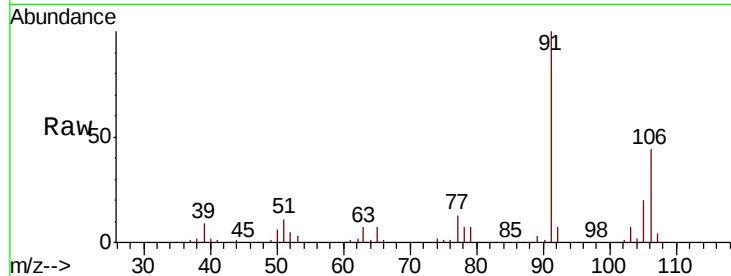
Instrument :
MSVOA_V
ClientSampleId :
BG3P2

Tot Ion:106 Resp: 47570

Ion Ratio Lower Upper

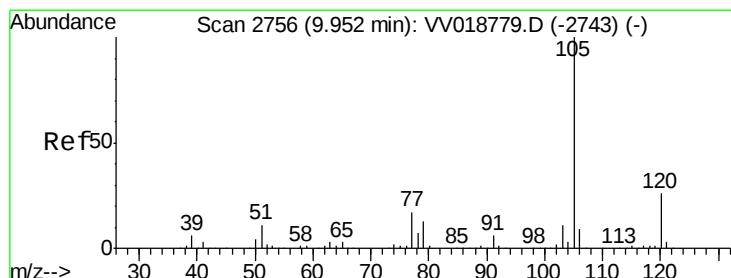
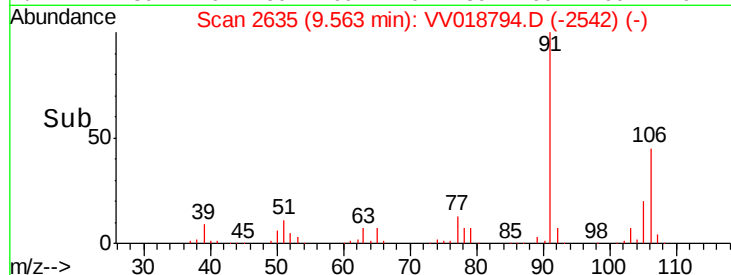
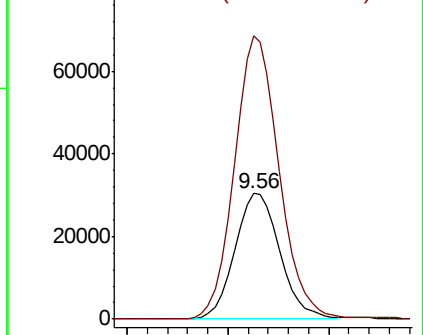
106 100

91 225.0 156.8 291.2



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VV0



#56

Isopropylbenzene

Concen: 2.246 ug/L

RT: 9.96 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

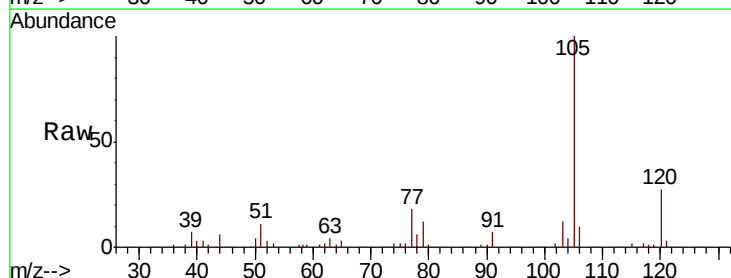
Tgt Ion:105 Resp: 23983

Ion Ratio Lower Upper

105 100

120 25.8 20.4 30.6

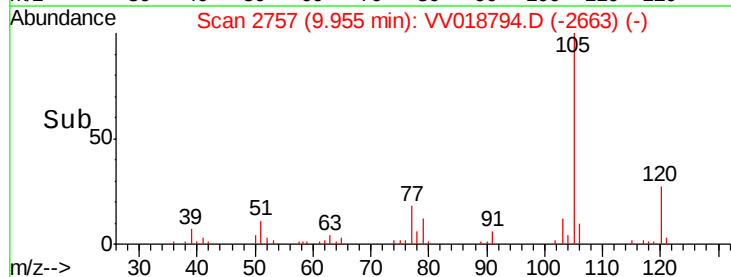
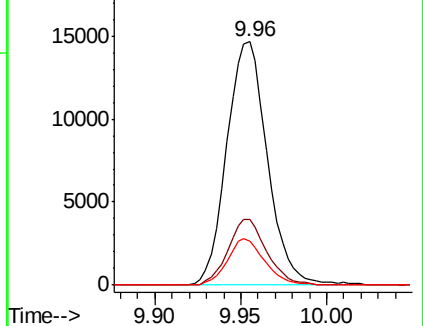
77 17.4 13.0 19.6

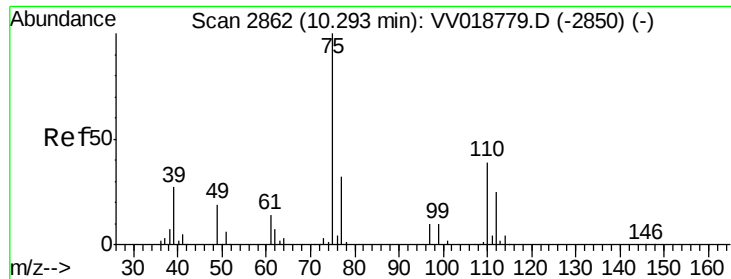


Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): VV0





#59

1,2,3-Trichloropropane

Concen: 6.734 ug/L

RT: 11.27 min Scan# 3166

Delta R.T. 0.98 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampled :

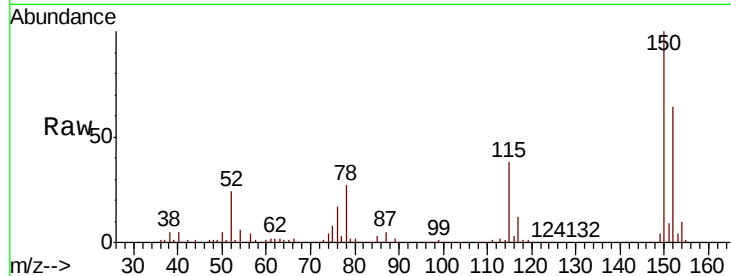
BG3P2

Tot Ion: 75 Resp: 20887

Ion Ratio Lower Upper

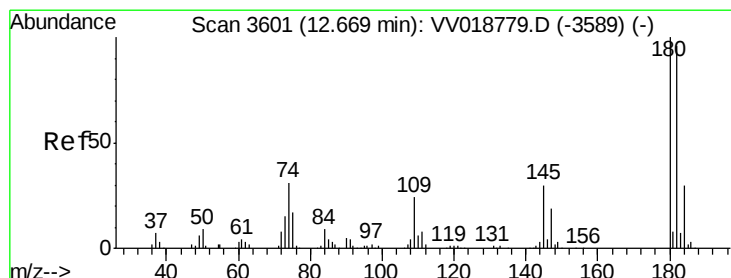
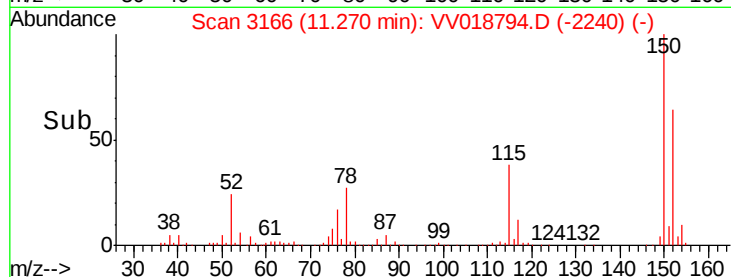
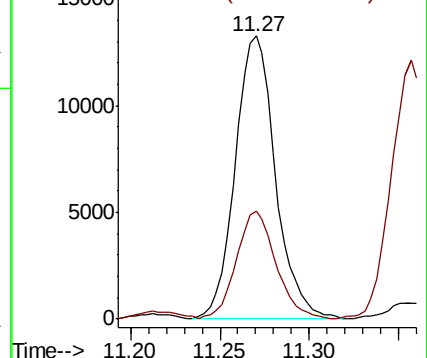
75 100

77 37.6 25.9 38.9



Abundance Ion 75.00 (74.70 to 75.70): VV0

Ion 77.00 (76.70 to 77.70): VV0



#67

1,3,5-Trichlorobenzene

Concen: 4.142 ug/L

RT: 13.29 min Scan# 3793

Delta R.T. 0.62 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Tgt Ion:180 Resp: 14294

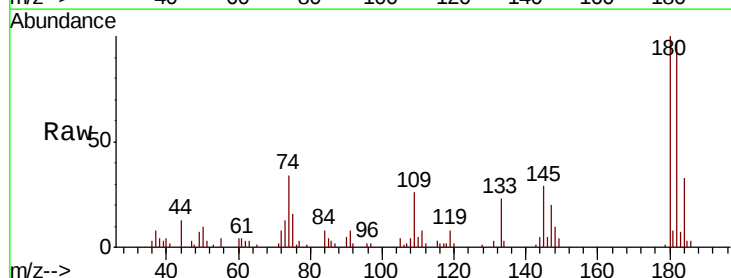
Ion Ratio Lower Upper

180 100

182 92.8 77.0 115.6

184 29.8 24.6 37.0

145 29.2 23.4 35.0

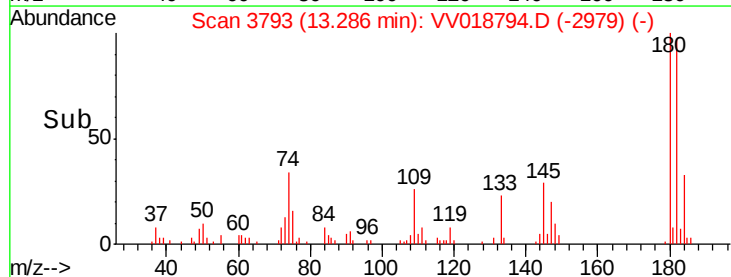
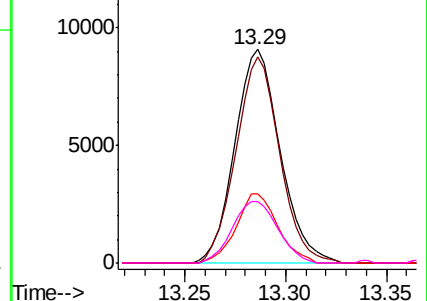


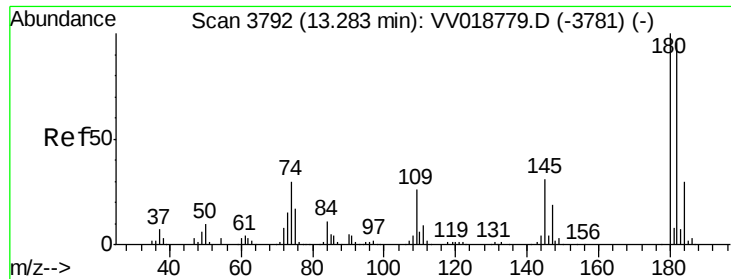
Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 184.00 (183.70 to 184.70): V

Ion 145.00 (144.70 to 145.70): V

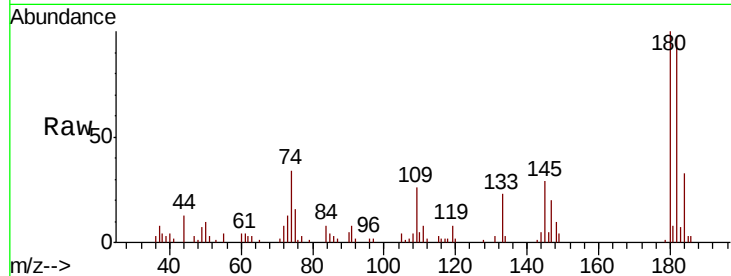




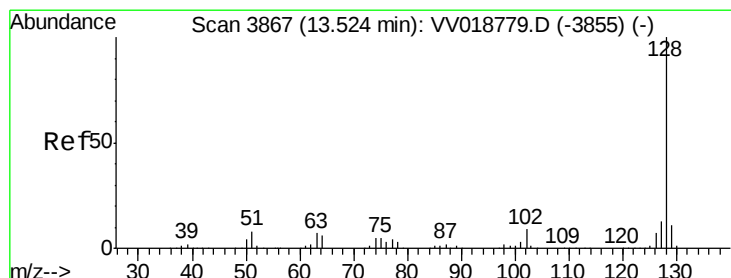
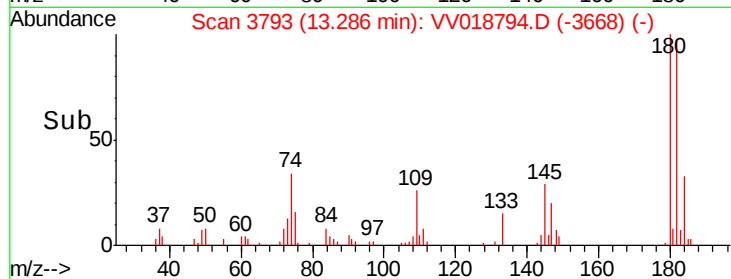
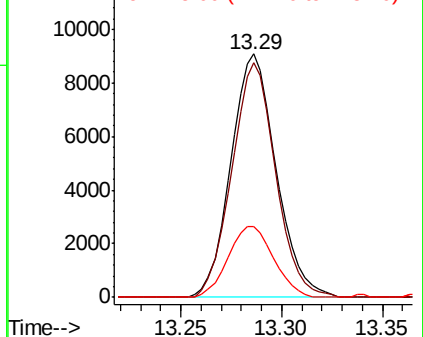
#68
 1,2,4-trichlorobenzene
 Concen: 4.405 ug/L
 RT: 13.29 min Scan# 3793
 Delta R.T. 0.00 min
 Lab File: VV018794.D
 Acq: 09 Oct 2020 04:59

Instrument :
 MSVOA_V
 ClientSampleId :
 BG3P2

Tot Ion:180 Resp: 14294
 Ion Ratio Lower Upper
 180 100
 182 92.8 76.7 115.1
 145 29.2 24.0 36.0

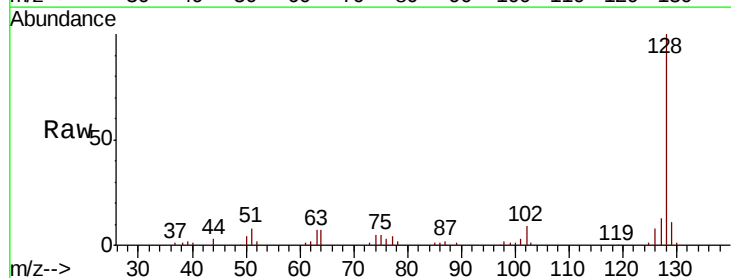


Abundance Ion 180.00 (179.70 to 180.70): V
 Ion 182.00 (181.70 to 182.70): V
 Ion 145.00 (144.70 to 145.70): V

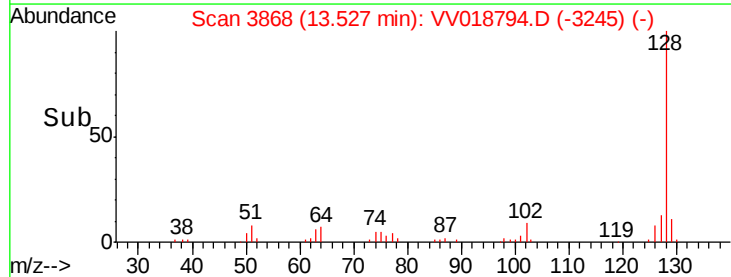
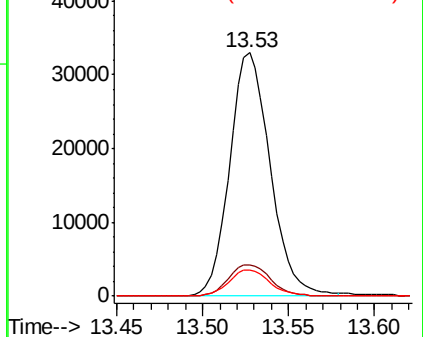


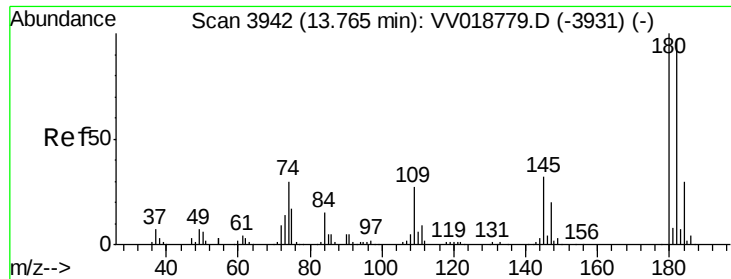
#69
 Naphthalene
 Concen: 5.938 ug/L
 RT: 13.53 min Scan# 3868
 Delta R.T. 0.00 min
 Lab File: VV018794.D
 Acq: 09 Oct 2020 04:59

Tgt Ion:128 Resp: 54290
 Ion Ratio Lower Upper
 128 100
 127 13.3 10.4 15.6
 129 10.8 8.6 13.0



Abundance Ion 128.00 (127.70 to 128.70): V
 Ion 127.00 (126.70 to 127.70): V
 Ion 129.00 (128.70 to 129.70): V





#70

1,2,3-Trichlorobenzene

Concen: 1.692 ug/L

RT: 13.77 min Scan# 3943

Delta R.T. 0.00 min

Lab File: VV018794.D

Acq: 09 Oct 2020 04:59

Instrument :

MSVOA_V

ClientSampleId :

BG3P2

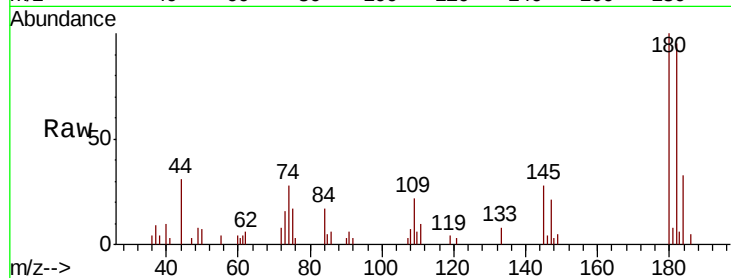
Tot Ion:180 Resp: 5450

Ion Ratio Lower Upper

180 100

182 95.1 75.9 113.9

145 30.5 25.2 37.8



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

