

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV052820\
 Data File : VV016288.D
 Acq On : 28 May 2020 19:48
 Operator : SY/MD
 Sample : L2756-09
 Misc : 25.0mL/MSVOA V/WATER
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :

Quant Time: May 29 01:18:31 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR052620WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Fri May 29 01:10:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.64	114	83404	5.00	ug/L	0.00
28) Chlorobenzene-d5	8.87	117	83961	5.00	ug/L	0.00
61) 1,4-Dichlorobenzene-d4	11.27	152	42613	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.32	65	23101	4.31	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	86.20%
7) Chloroethane-d5	1.58	69	21489	4.57	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	91.40%
11) 1,1-Dichloroethene-d2	2.13	63	32956	3.28	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	65.60%
20) 2-Butanone-d5	3.94	46	73891	55.61	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	111.22%
24) Chloroform-d	4.38	84	49100	4.60	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	92.00%
26) 1,2-Dichloroethane-d4	5.06	65	28156	4.99	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	99.80%
32) Benzene-d6	5.08	84	97832	4.70	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	94.00%
36) 1,2-Dichloropropane-d6	6.10	67	31152	4.84	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	96.80%
41) Toluene-d8	7.34	98	88541	4.47	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	89.40%
45) trans-1,3-Dichloropropene-	7.64	79	10548	4.40	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	88.00%
48) 2-Hexanone-d5	8.11	63	54131	49.21	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	98.42%
59) 1,1,2,2-Tetrachloroethane-	10.24	84	22707	4.77	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	95.40%
65) 1,2-Dichlorobenzene-d4	11.65	152	33848	4.76	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	95.20%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl chloride	1.32	62	686	0.094	ug/L #	7
10) 1,1,2-Trichloro-1,2,2-trif	2.13	101	395	0.077	ug/L #	21
12) 1,1-Dichloroethene	2.13	96	547	0.111	ug/L #	1
19) 1,1-Dichloroethane	3.21	63	3002	0.294	ug/L	94
22) cis-1,2-Dichloroethene	3.94	96	17981	2.824	ug/L	99
25) Chloroform	4.41	83	1535	0.142	ug/L	98
27) 1,2-Dichloroethane	5.08	62	561	0.079	ug/L #	79
29) 1,1,1-Trichloroethane	4.63	97	23128	2.321	ug/L	99
30) Cyclohexane	4.70	56	3086	0.289	ug/L	99
31) Carbon tetrachloride	4.63	117	2805	0.332	ug/L	98
33) Benzene	5.14	78	3759	0.156	ug/L	100
34) Trichloroethene	5.94	95	47738	7.584	ug/L	98
35) Methylcyclohexane	6.15	83	7051	0.664	ug/L	95
37) 1,2-Dichloropropane	6.10	63	3739	0.631	ug/L #	88
39) cis-1,3-Dichloropropene	7.01	75	867	0.103	ug/L #	61
42) Toluene	7.41	91	640725	24.317	ug/L	99
43) 1,3,5-Trimethylbenzene	10.56	105	60358	2.516	ug/L	99

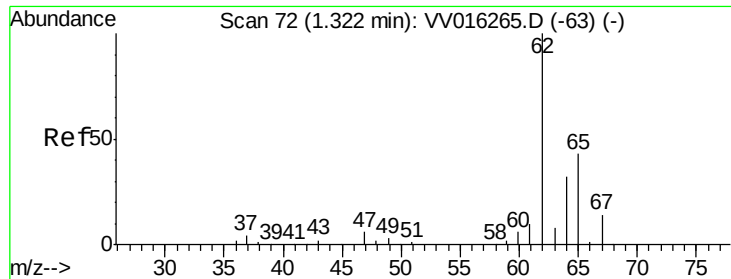
Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV052820\
 Data File : VV016288.D
 Acq On : 28 May 2020 19:48
 Operator : SY/MD
 Sample : L2756-09
 Misc : 25.0mL/MSVOA V/WATER
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :

Quant Time: May 29 01:18:31 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR052620WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Fri May 29 01:10:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 1,2,4-Trimethylbenzene	10.94	105	154590	6.257	ug/L	100
46) trans-1,3-Dichloropropene	7.64	75	555	0.080	ug/L #	78
47) 1,1,2-Trichloroethane	7.81	97	1787	0.458	ug/L #	21
49) Tetrachloroethene	8.00	164	159515	35.300	ug/L	99
51) Dibromochloromethane	8.00	129	157714	38.204	ug/L #	10
54) Ethylbenzene	9.04	91	147991	5.039	ug/L	99
55) m,p-xylene	9.16	106	154764	14.053	ug/L	98
56) o-xylene	9.57	106	177391	16.902	ug/L	97
57) Styrene	9.58	104	277055	15.863	ug/L	99
58) Isopropylbenzene	9.95	105	41922	1.458	ug/L	98
70) Naphthalene	13.53	128	2740361	155.216	ug/L	100

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



#5

Vinyl chloride

Concen: 0.094 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :

MSVOA_V

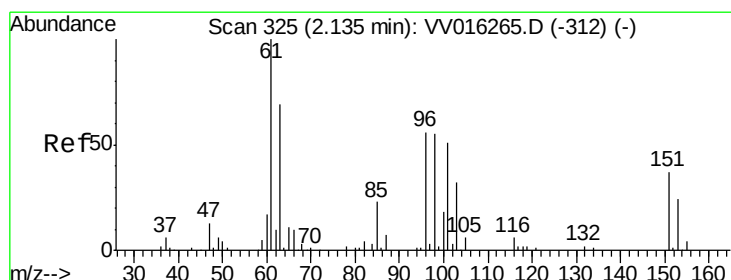
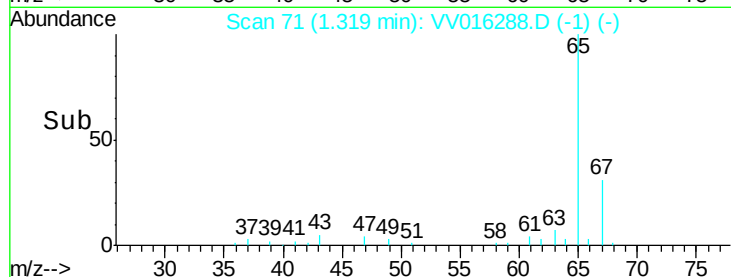
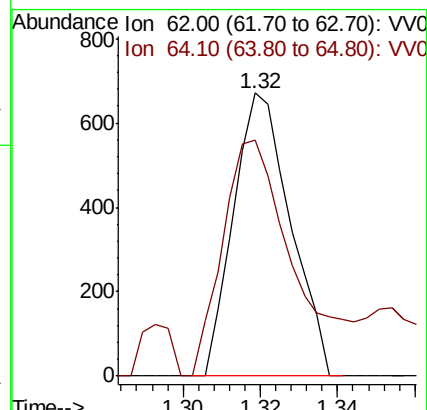
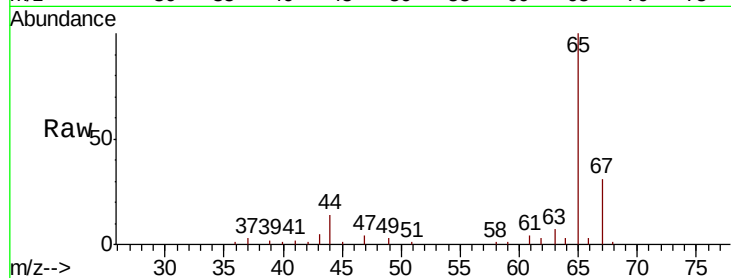
ClientSampleId :

Tot Ion: 62 Resp: 686

Ion Ratio Lower Upper

62 100

64 83.3 22.1 41.1#



#10

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

Concen: 0.077 ug/L

RT: 2.13 min Scan# 322

Delta R.T. -0.01 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

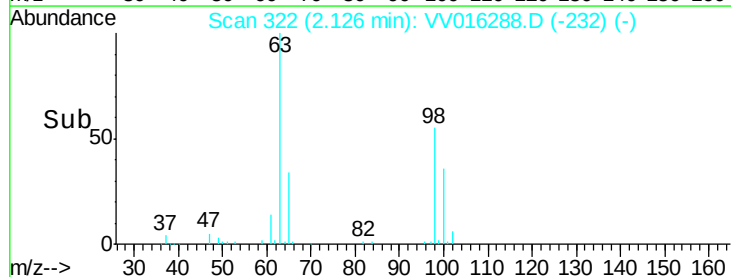
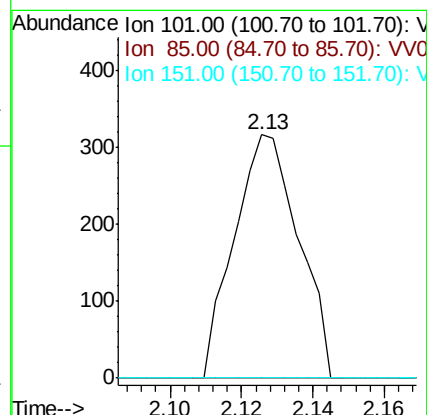
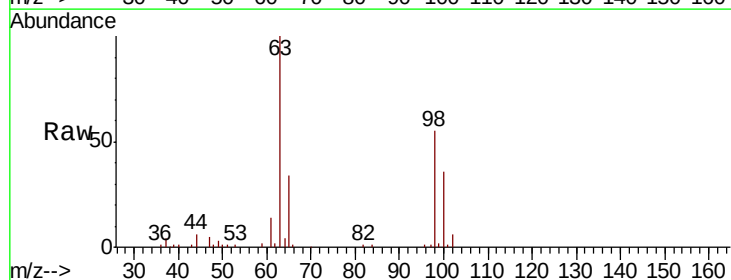
Tgt Ion: 101 Resp: 395

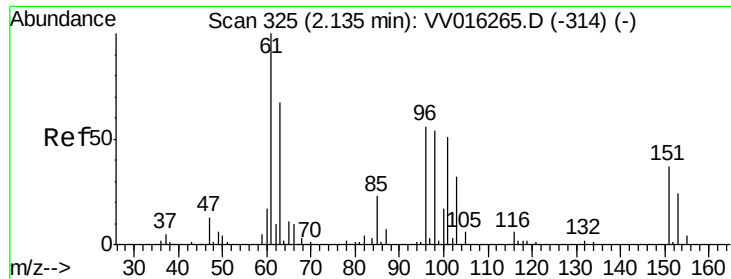
Ion Ratio Lower Upper

101 100

85 0.0 35.0 52.6#

151 0.0 56.3 84.5#

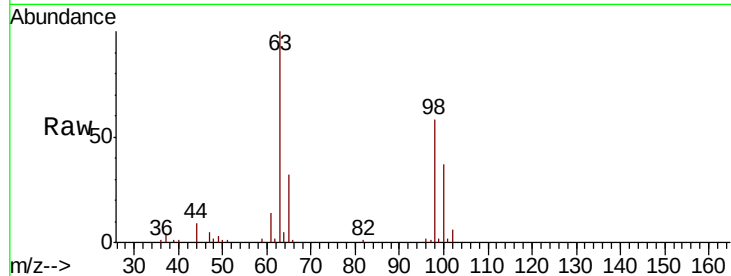




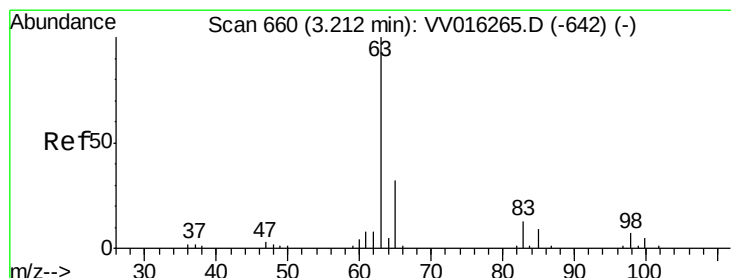
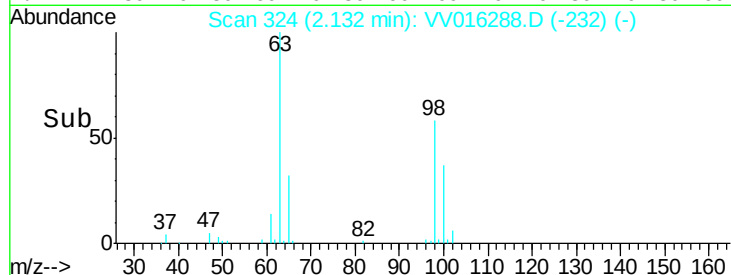
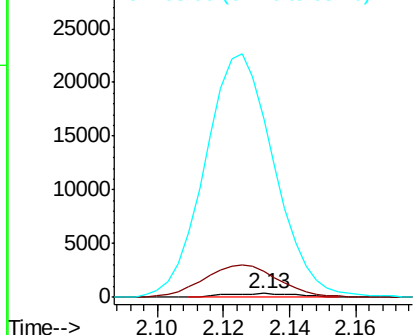
#12
 1,1-Dichloroethene
 Concen: 0.111 ug/L
 RT: 2.13 min Scan# 324
 Delta R.T. -0.00 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

Instrument :
 MSVOA_V
 ClientSampled :

Tot Ion: 96 Resp: 547
 Ion Ratio Lower Upper
 96 100
 61 711.5 124.9 231.9#
 63 4918.3 80.4 149.2#

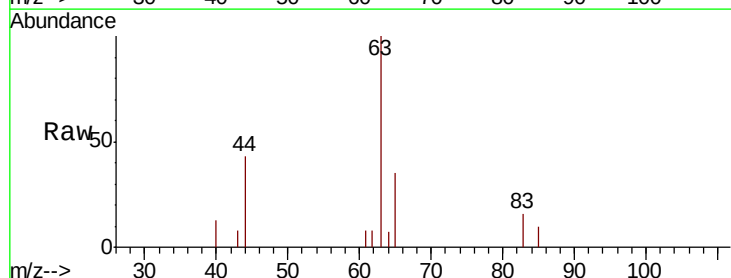


Abundance Ion 96.00 (95.70 to 96.70): VV0
 Ion 61.05 (60.75 to 61.75): VV0
 Ion 63.00 (62.70 to 63.70): VV0

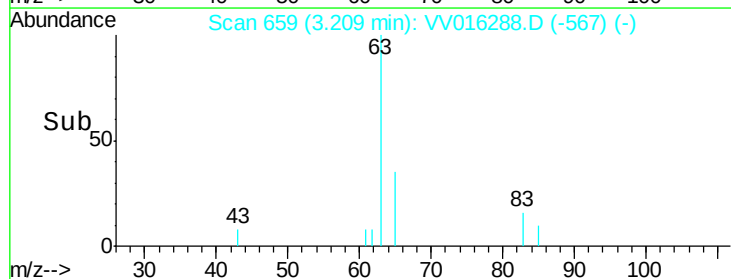
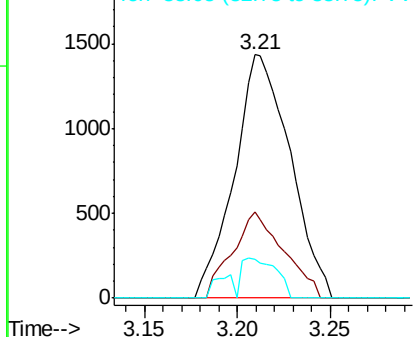


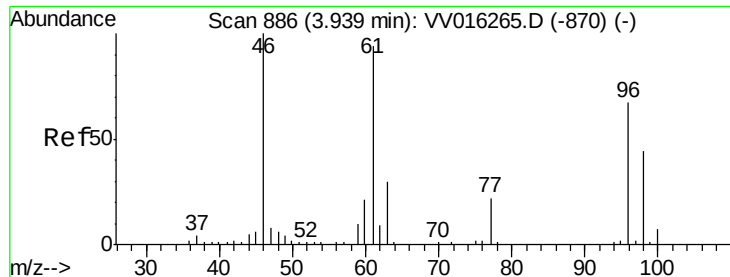
#19
 1,1-Dichloroethane
 Concen: 0.294 ug/L
 RT: 3.21 min Scan# 659
 Delta R.T. -0.00 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

Tgt Ion: 63 Resp: 3002
 Ion Ratio Lower Upper
 63 100
 65 35.5 22.3 41.5
 83 15.7 9.4 17.4



Abundance Ion 63.10 (62.80 to 63.80): VV0
 Ion 65.10 (64.80 to 65.80): VV0
 Ion 83.05 (82.75 to 83.75): VV0



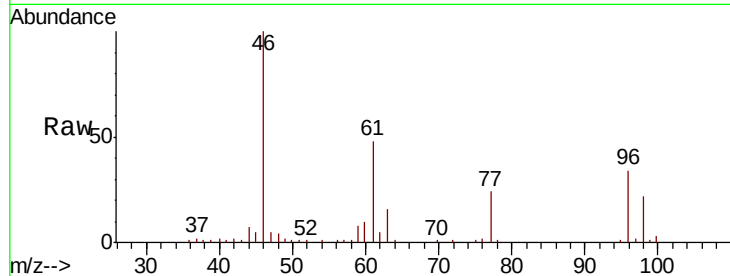


#22

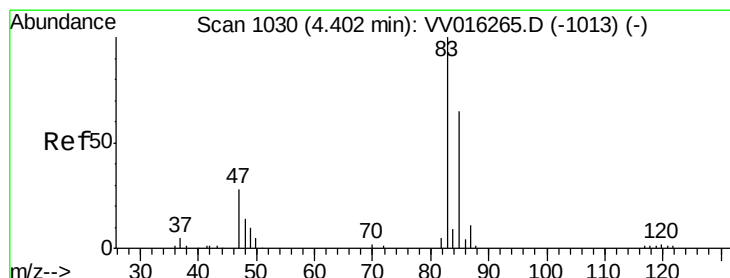
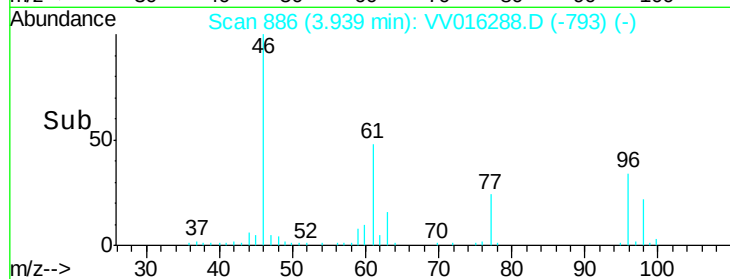
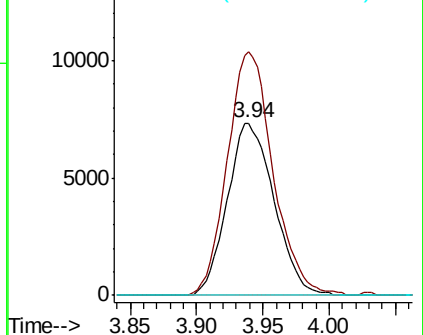
cis-1,2-Dichloroethene
Concen: 2.824 ug/L
RT: 3.94 min Scan# 886
Delta R.T. -0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampled :

Tot Ion: 96 Resp: 17981
Ion Ratio Lower Upper
96 100
61 141.2 99.7 185.1
68 0.0 0.0 0.0



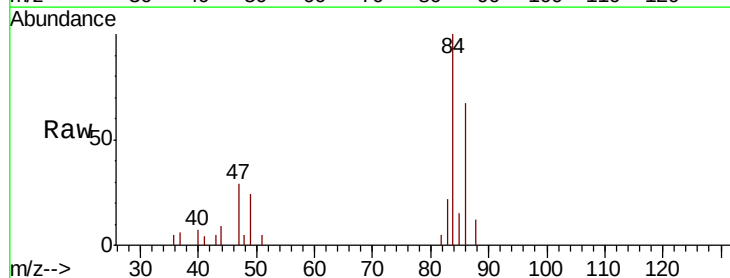
Abundance Ion 96.00 (95.70 to 96.70): VV0
Ion 61.05 (60.75 to 61.75): VV0
Ion 68.15 (67.85 to 68.85): VV0



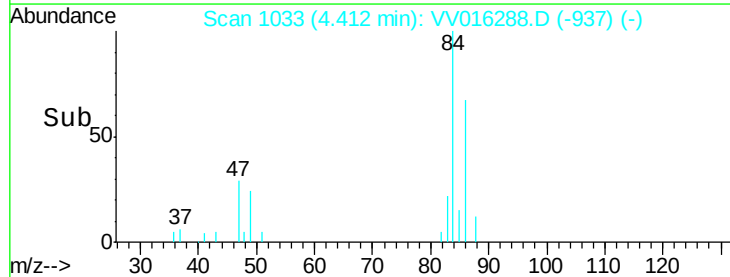
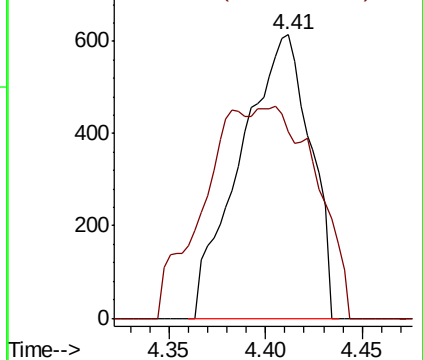
#25

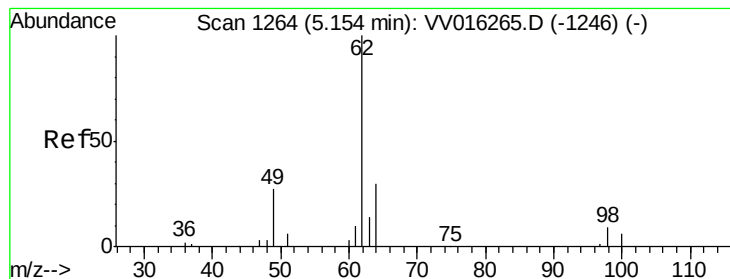
Chloroform
Concen: 0.142 ug/L
RT: 4.41 min Scan# 1033
Delta R.T. 0.01 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Tgt Ion: 83 Resp: 1535
Ion Ratio Lower Upper
83 100
85 65.8 45.1 83.7



Abundance Ion 83.05 (82.75 to 83.75): VV0
Ion 85.00 (84.70 to 85.70): VV0





#27

1,2-Dichloroethane

Concen: 0.079 ug/L

RT: 5.08 min Scan# 1240

Delta R.T. -0.08 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :

MSVOA_V

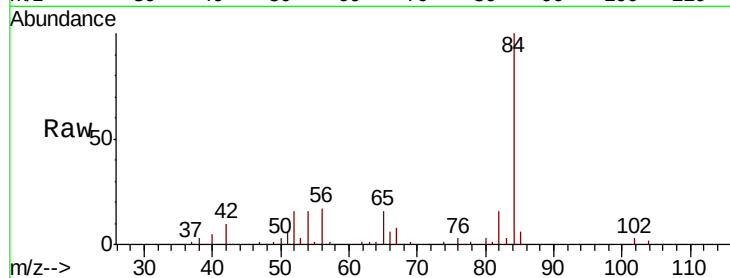
ClientSampleId :

Tot Ion: 62 Resp: 561

Ion Ratio Lower Upper

62 100

98 0.0 5.7 8.5#



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 98.05 (97.75 to 98.75): VV0

5.08

300

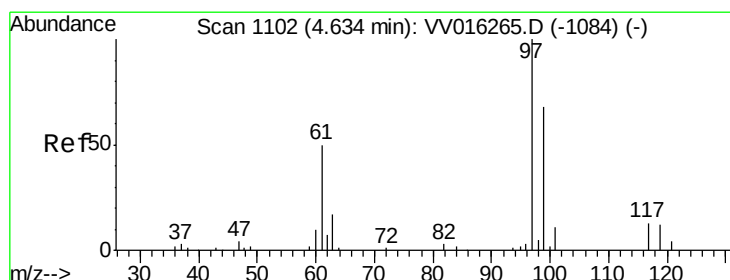
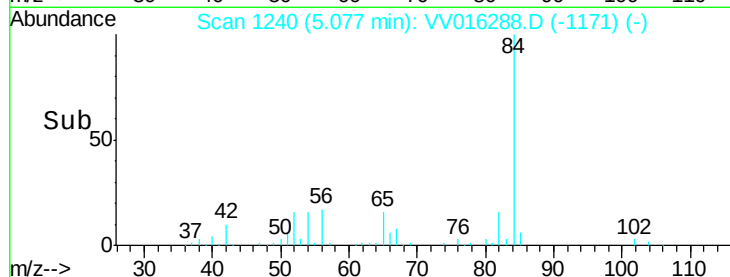
200

100

0

5.04 5.06 5.08 5.10 5.12

Time-->



#29

1,1,1-Trichloroethane

Concen: 2.321 ug/L

RT: 4.63 min Scan# 1102

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

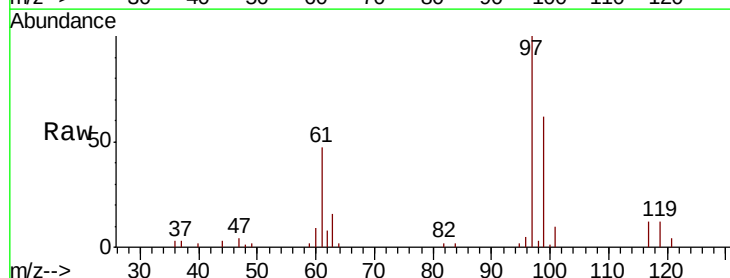
Tgt Ion: 97 Resp: 23128

Ion Ratio Lower Upper

97 100

99 63.7 51.2 76.8

61 47.6 38.6 57.8



Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 61.05 (60.75 to 61.75): VV0

12000

10000

8000

6000

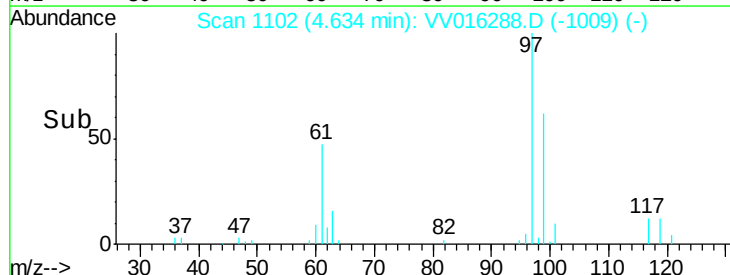
4000

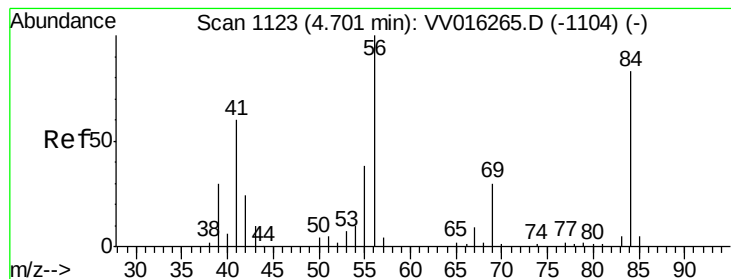
2000

0

4.55 4.60 4.65 4.70

Time-->





#30

Cyclohexane

Concen: 0.289 ug/L

RT: 4.70 min Scan# 1123

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampleId :

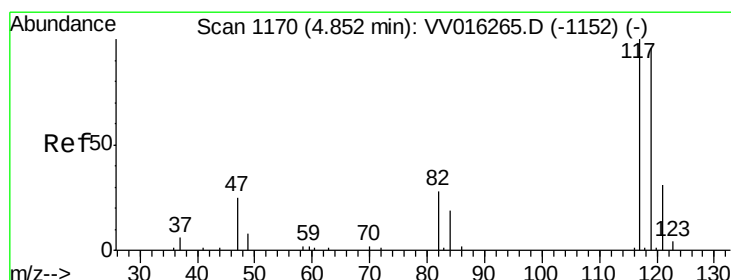
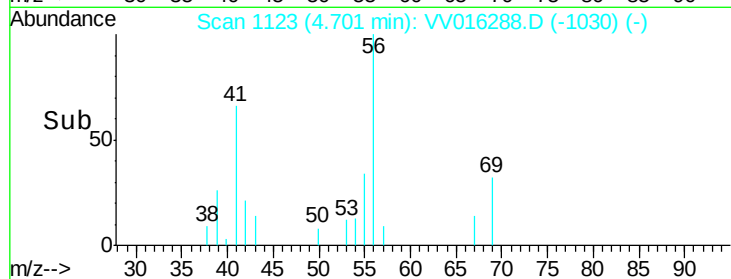
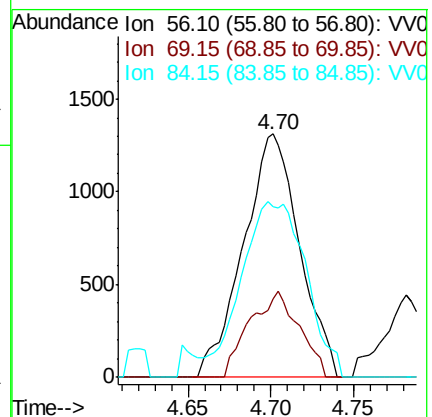
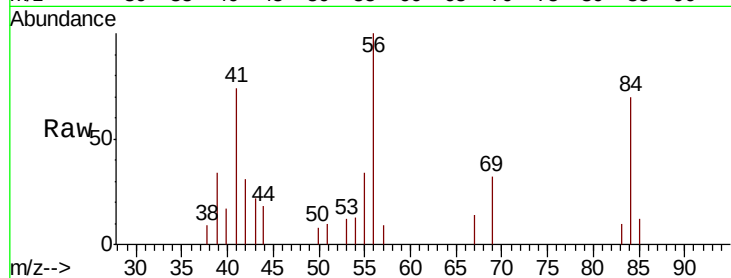
Tot Ion: 56 Resp: 3086

Ion Ratio Lower Upper

56 100

69 31.3 24.6 36.8

84 82.8 67.1 100.7



#31

Carbon tetrachloride

Concen: 0.332 ug/L

RT: 4.63 min Scan# 1102

Delta R.T. -0.22 min

Lab File: VV016288.D

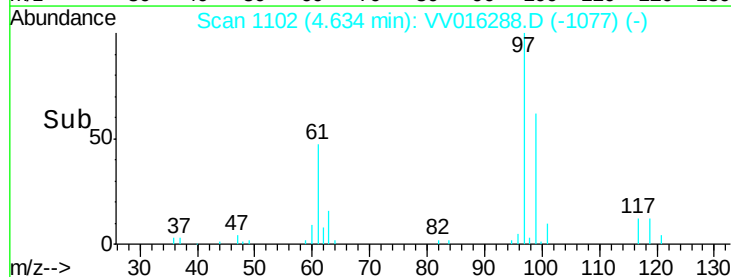
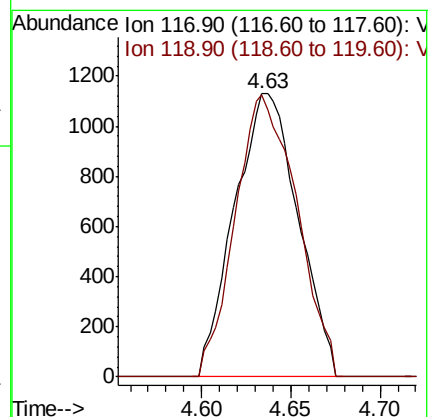
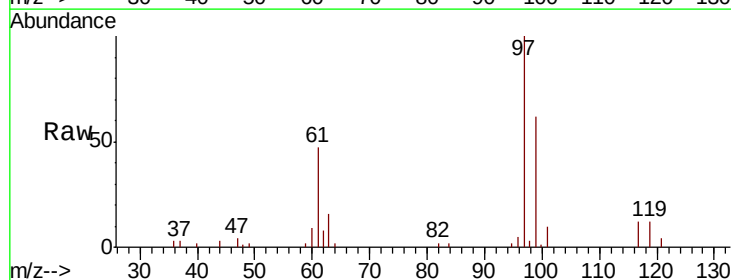
Acq: 28 May 2020 19:48

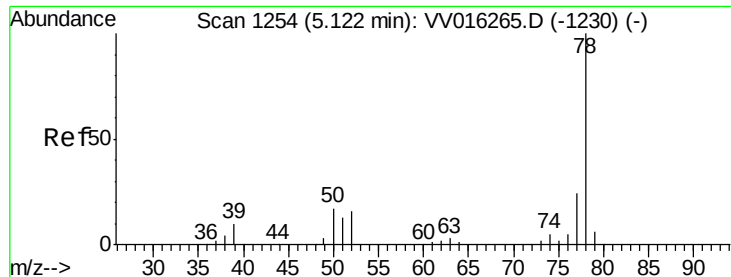
Tgt Ion: 117 Resp: 2805

Ion Ratio Lower Upper

117 100

119 96.4 75.2 112.8





#33

Benzene

Concen: 0.156 ug/L

RT: 5.14 min Scan# 1258

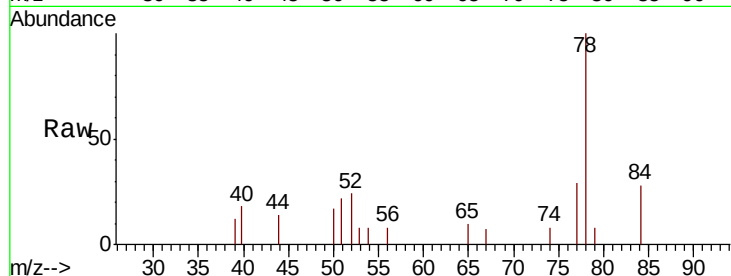
Delta R.T. 0.01 min

Lab File: VV016288.D

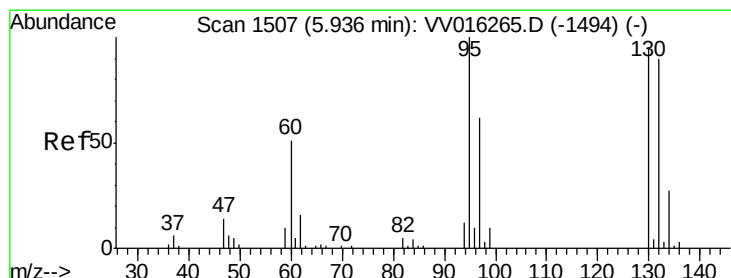
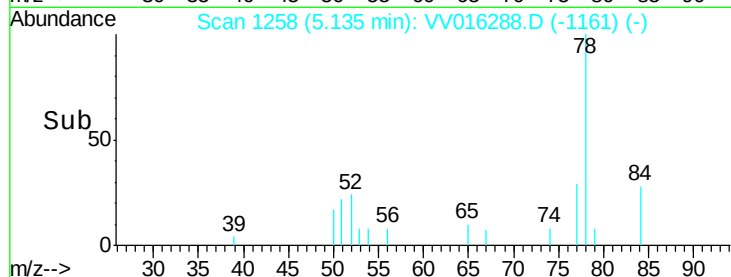
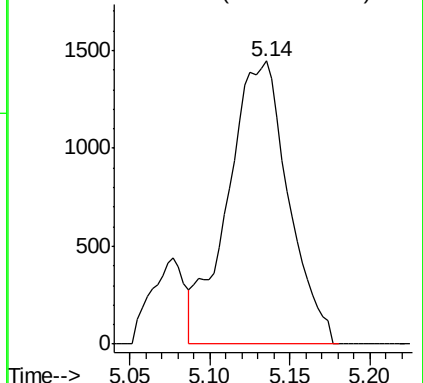
Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampleId :

Tgt Ion: 78 Resp: 3759



Abundance Ion 78.10 (77.80 to 78.80): VV0



#34

Trichloroethene

Concen: 7.584 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Tgt Ion: 95 Resp: 47738

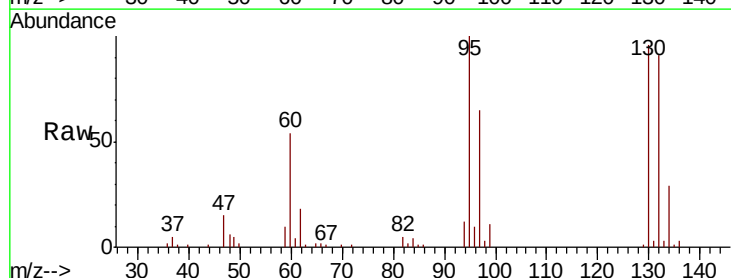
Ion Ratio Lower Upper

95 100

97 64.7 43.6 81.0

132 91.1 63.9 118.7

130 96.1 65.2 121.0

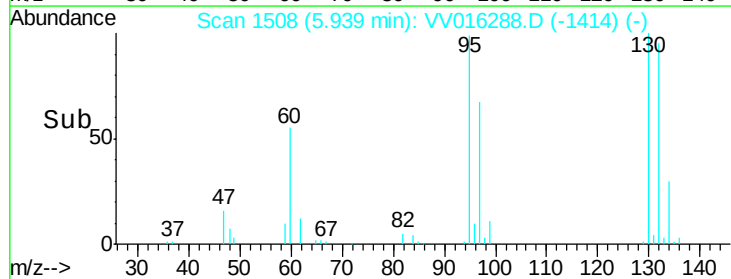
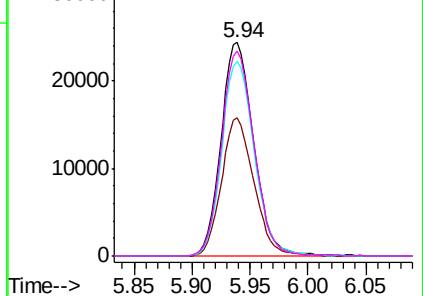


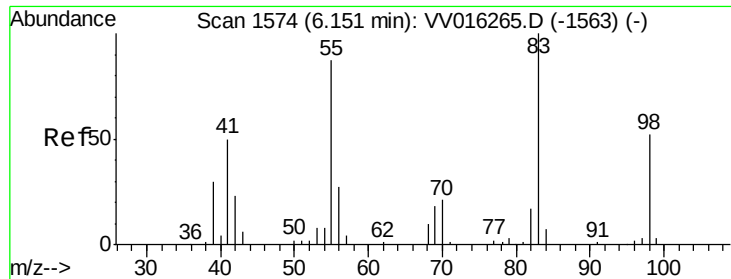
Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0

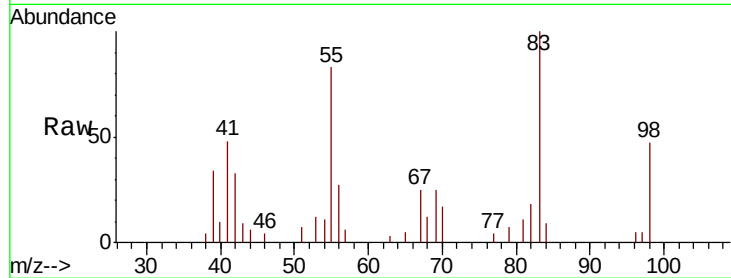




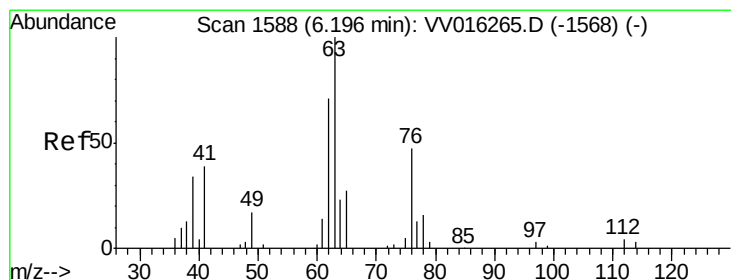
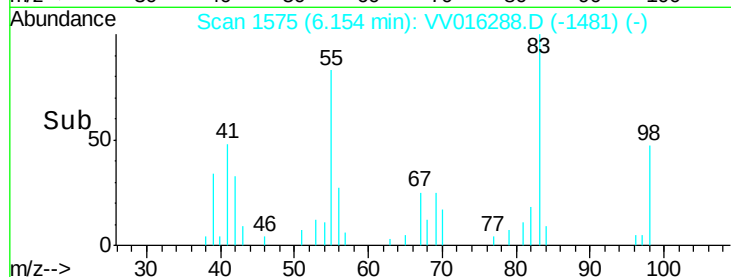
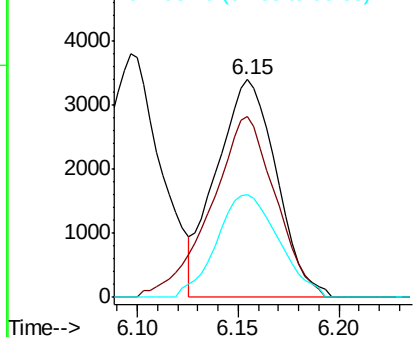
#35
Methylvlcyclohexane
Concen: 0.664 ug/L
RT: 6.15 min Scan# 1575
Delta R.T. 0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampled :

Tot Ion: 83 Resp: 7051
Ion Ratio Lower Upper
83 100
55 89.1 65.4 98.0
98 48.9 39.3 58.9

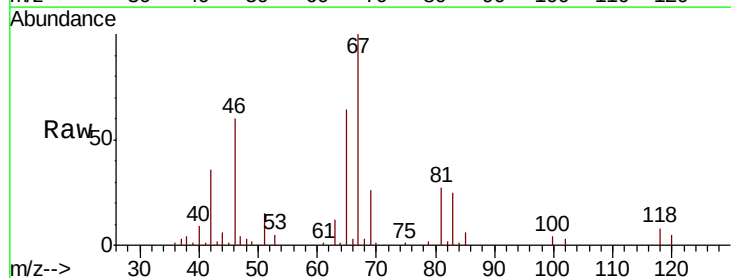


Abundance Ion 83.15 (82.85 to 83.85): VV0
Ion 55.10 (54.80 to 55.80): VV0
Ion 98.15 (97.85 to 98.85): VV0

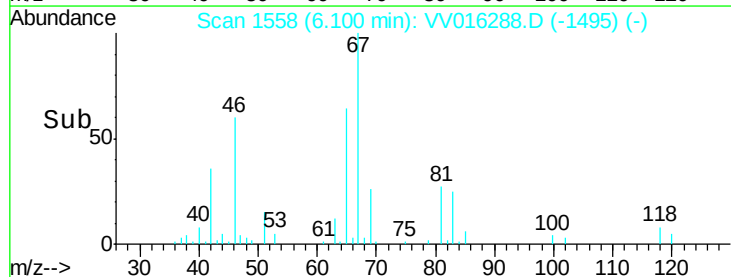
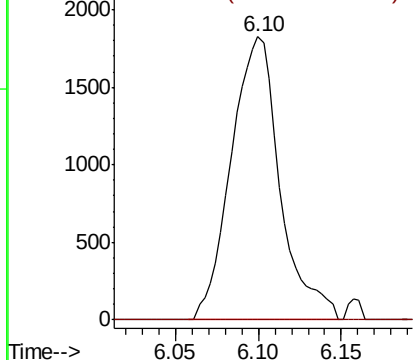


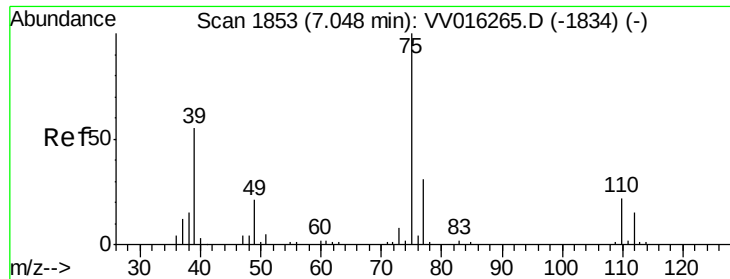
#37
1,2-Dichloropropane
Concen: 0.631 ug/L
RT: 6.10 min Scan# 1558
Delta R.T. -0.10 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Tgt Ion: 63 Resp: 3739
Ion Ratio Lower Upper
63 100
112 0.0 3.1 4.7#



Abundance Ion 63.10 (62.80 to 63.80): VV0
Ion 112.10 (111.80 to 112.80): V

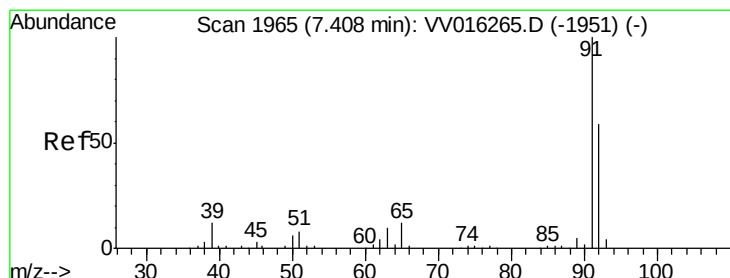
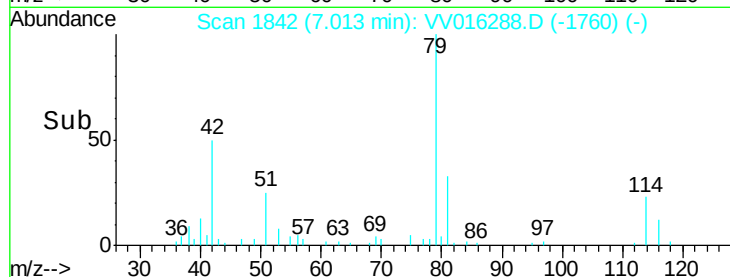
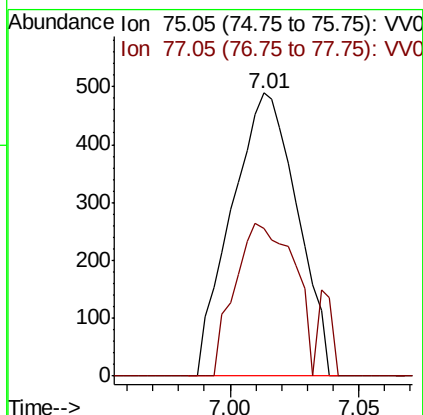
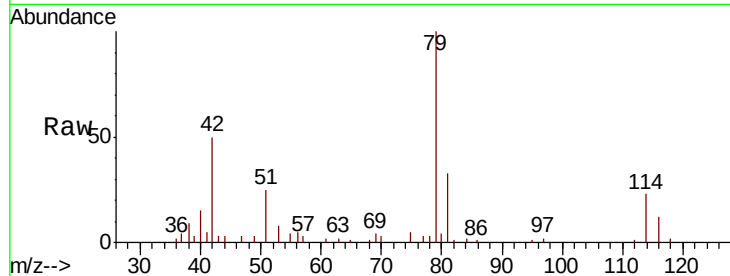




#39
 cis-1,3-Dichloropropene
 Concen: 0.103 ug/L
 RT: 7.01 min Scan# 1842
 Delta R.T. -0.04 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

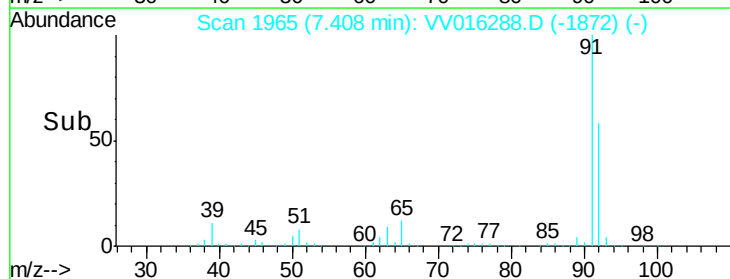
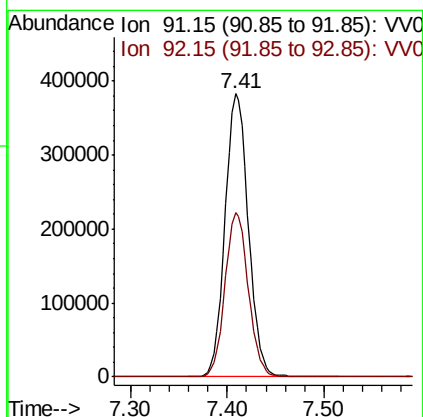
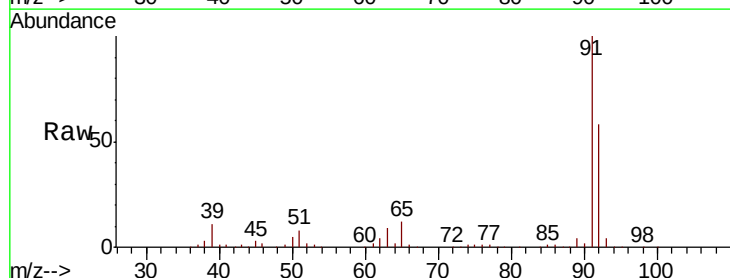
Instrument :
 MSVOA_V
 ClientSampleId :

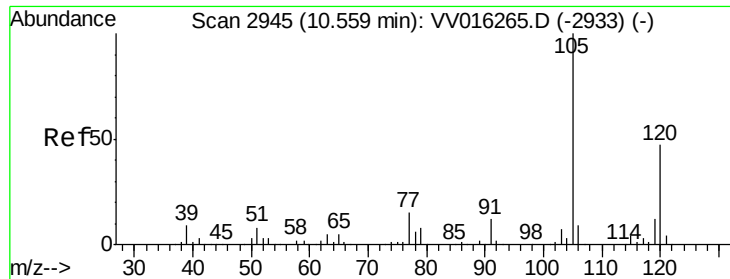
Tot Ion: 75 Resp: 867
 Ion Ratio Lower Upper
 75 100
 77 52.4 21.7 40.3#



#42
 Toluene
 Concen: 24.317 ug/L
 RT: 7.41 min Scan# 1965
 Delta R.T. 0.00 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

Tgt Ion: 91 Resp: 640725
 Ion Ratio Lower Upper
 91 100
 92 57.9 40.9 76.0

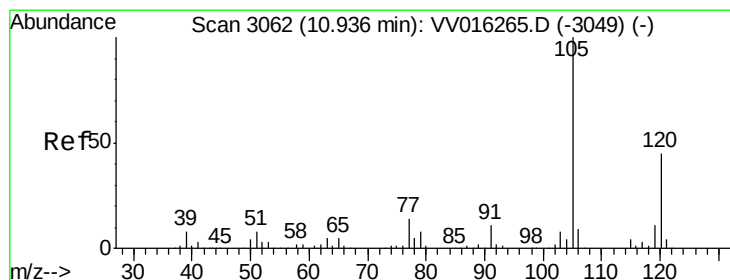
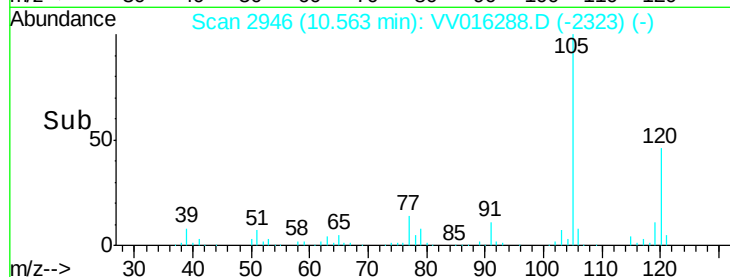
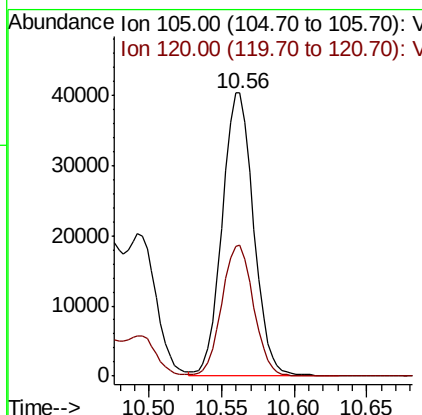
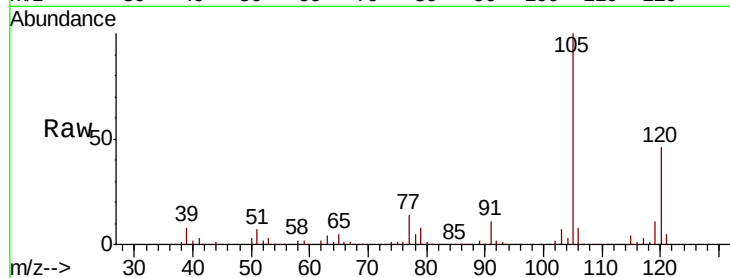




#43
 1,3,5-Trimethylbenzene
 Concen: 2.516 ug/L
 RT: 10.56 min Scan# 2946
 Delta R.T. 0.00 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

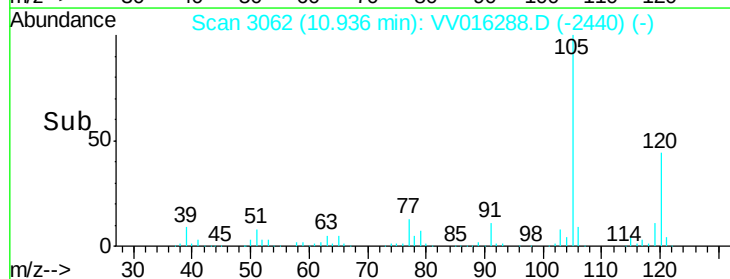
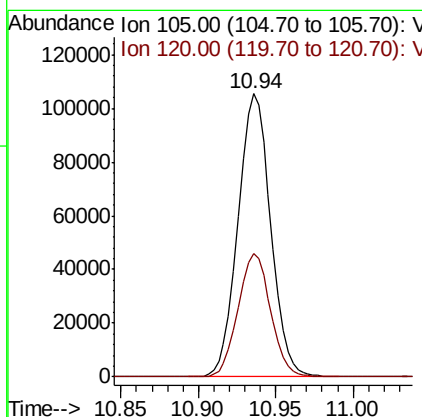
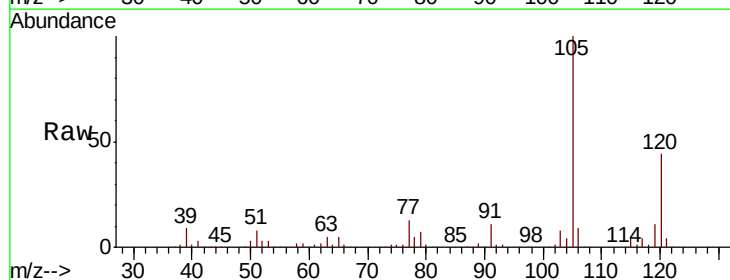
Instrument :
 MSVOA_V
 ClientSampled :

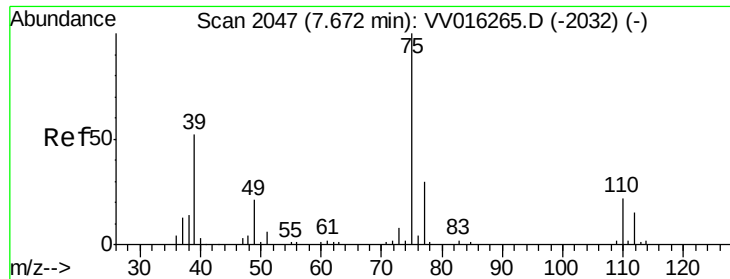
Tot Ion:105 Resp: 60358
 Ion Ratio Lower Upper
 105 100
 120 46.2 37.4 56.0



#44
 1,2,4-Trimethylbenzene
 Concen: 6.257 ug/L
 RT: 10.94 min Scan# 3062
 Delta R.T. 0.00 min
 Lab File: VV016288.D
 Acq: 28 May 2020 19:48

Tgt Ion:105 Resp: 154590
 Ion Ratio Lower Upper
 105 100
 120 43.5 34.6 52.0





#46

trans-1,3-Dichloropropene

Concen: 0.080 ug/L

RT: 7.64 min Scan# 2038

Delta R.T. -0.03 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :

MSVOA_V

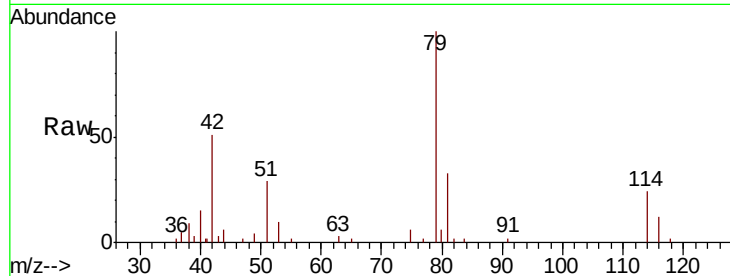
ClientSampleId :

Tot Ion: 75 Resp: 555

Ion Ratio Lower Upper

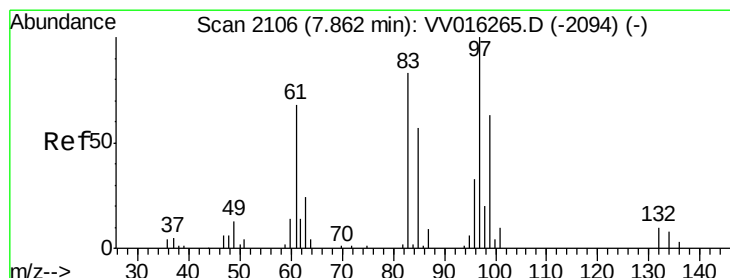
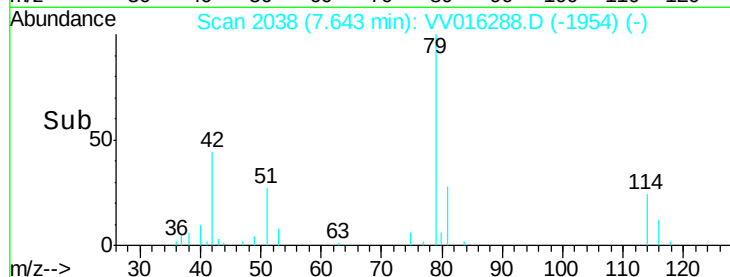
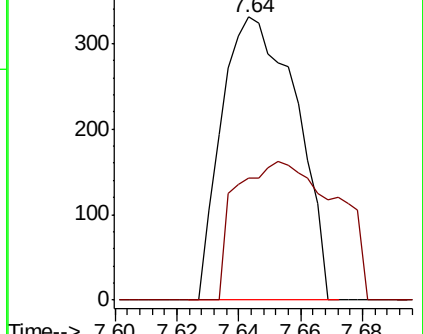
75 100

77 42.9 21.7 40.3#



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0



#47

1,1,2-Trichloroethane

Concen: 0.458 ug/L

RT: 7.81 min Scan# 2089

Delta R.T. -0.05 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Tgt Ion: 97 Resp: 1787

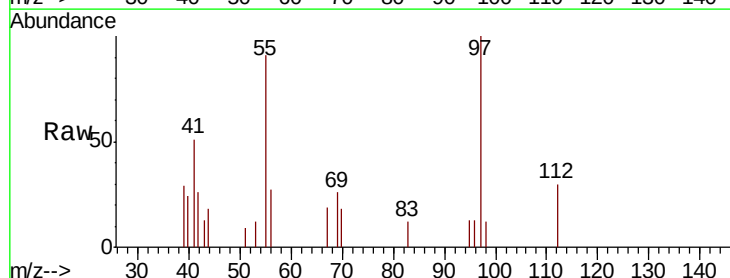
Ion Ratio Lower Upper

97 100

99 0.0 40.8 75.8#

83 11.6 60.0 111.4#

85 0.0 39.3 73.1#

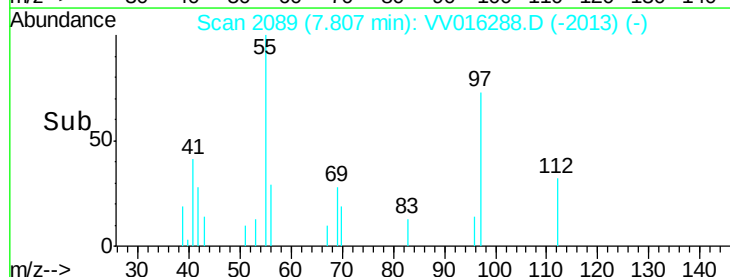
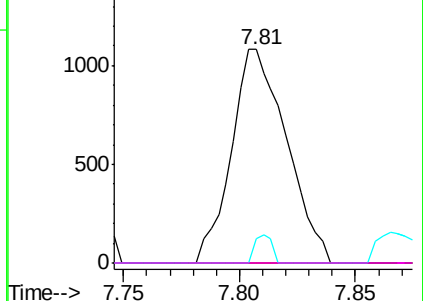


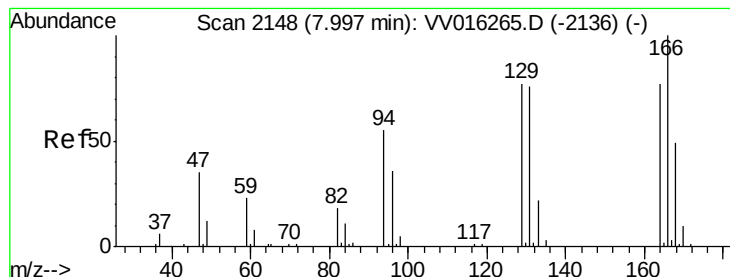
Abundance Ion 96.95 (96.65 to 97.65): VV0

Ion 99.05 (98.75 to 99.75): VV0

Ion 82.95 (82.65 to 83.65): VV0

Ion 85.00 (84.70 to 85.70): VV0





#49

Tetrachloroethene

Concen: 35.300 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampleId :

Tot Ion:164 Resp: 159515

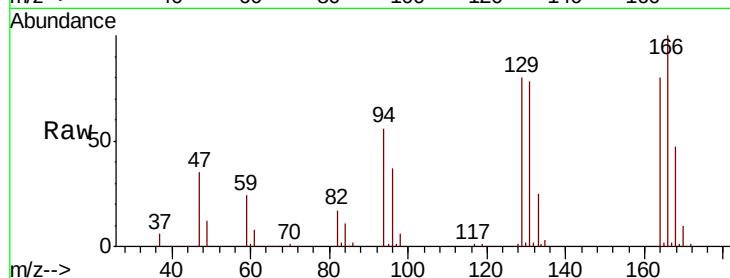
Ion Ratio Lower Upper

164 100

129 101.0 70.7 131.3

131 97.5 66.6 123.8

166 125.6 86.9 161.5

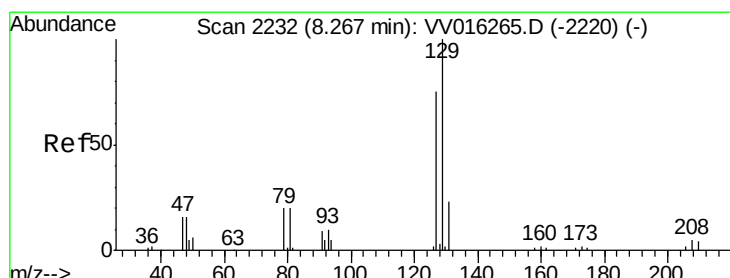
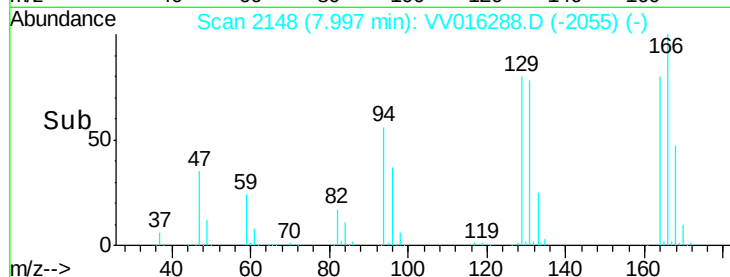
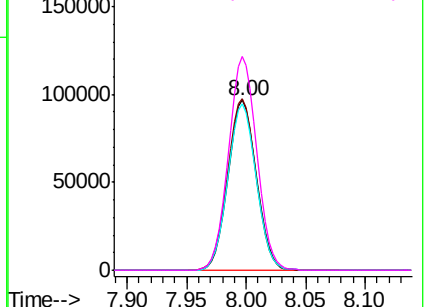


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 128.95 (128.65 to 129.65): V

Ion 130.95 (130.65 to 131.65): V

Ion 165.90 (165.60 to 166.60): V



#51

Dibromochloromethane

Concen: 38.204 ug/L

RT: 8.00 min Scan# 2148

Delta R.T. -0.27 min

Lab File: VV016288.D

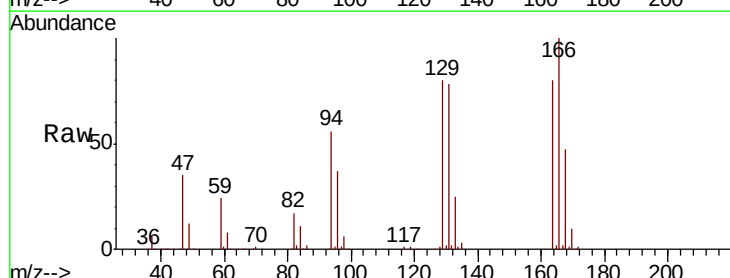
Acq: 28 May 2020 19:48

Tgt Ion:129 Resp: 157714

Ion Ratio Lower Upper

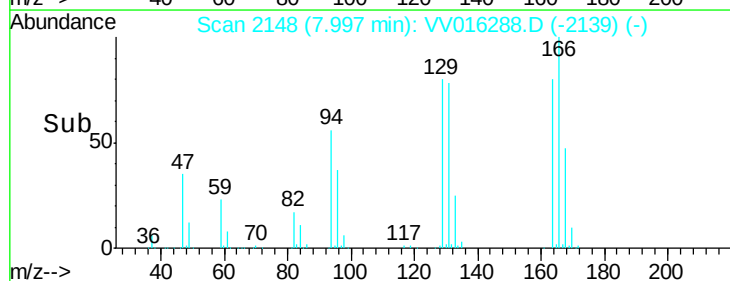
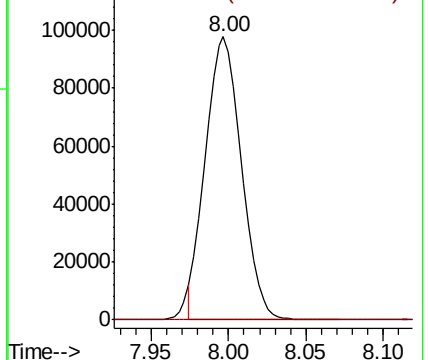
129 100

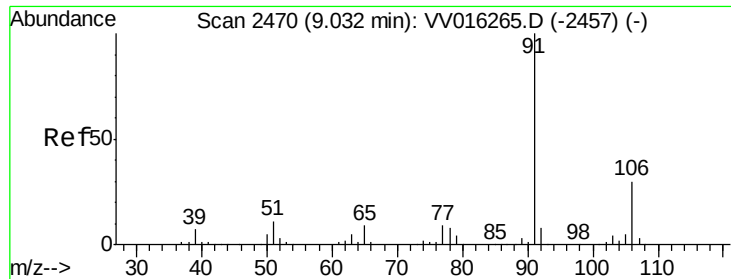
127 0.0 55.2 102.4#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V

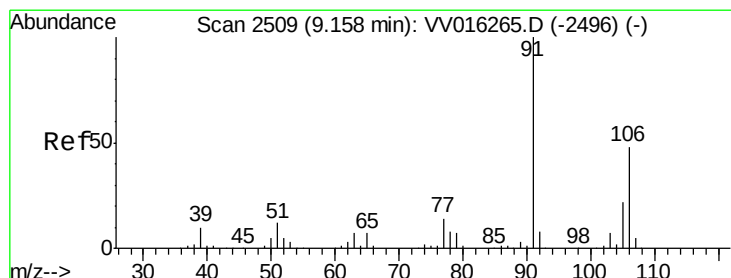
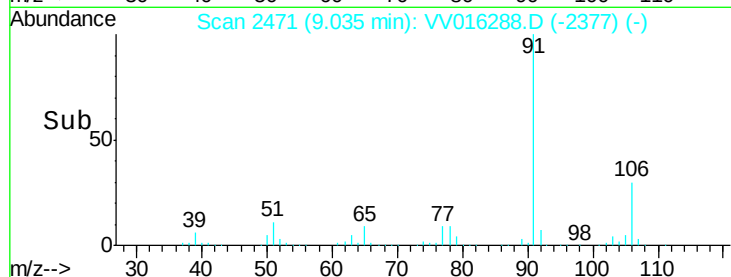
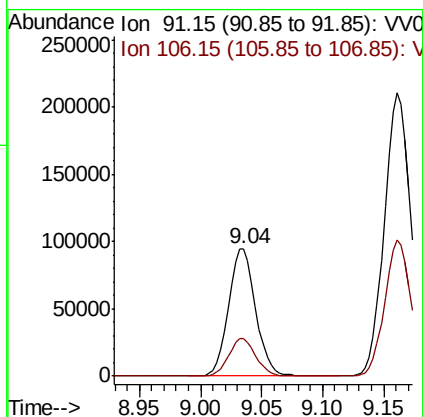
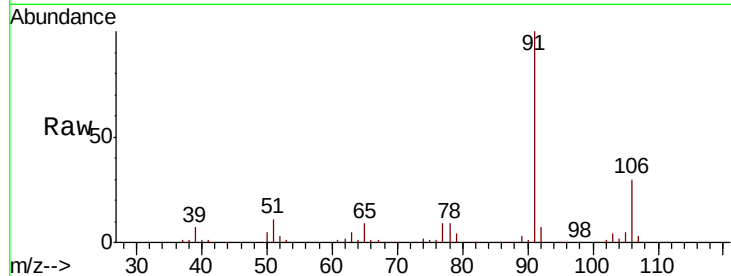




#54
Ethylbenzene
Concen: 5.039 ug/L
RT: 9.04 min Scan# 2471
Delta R.T. 0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

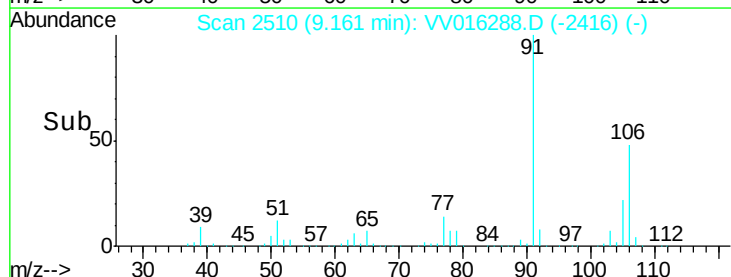
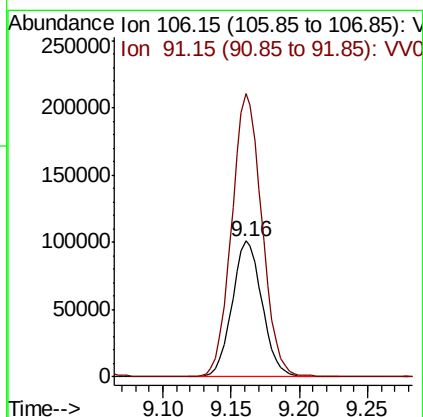
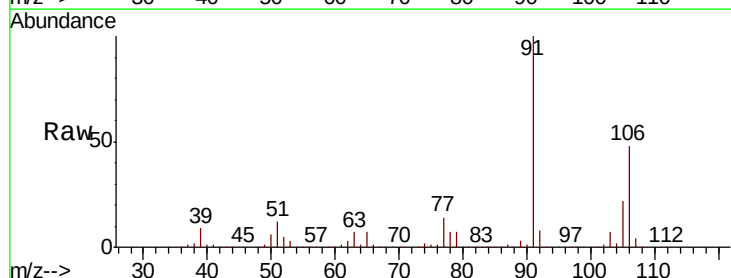
Instrument :
MSVOA_V
ClientSampled :

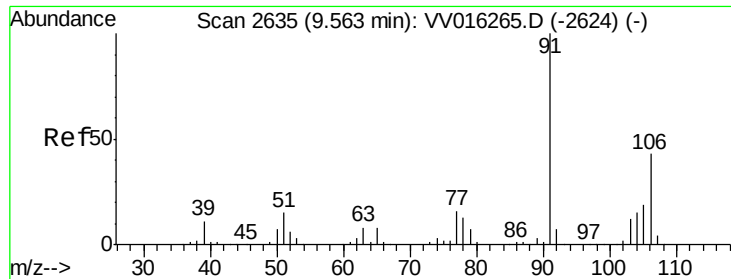
Tot Ion: 91 Resp: 147991
Ion Ratio Lower Upper
91 100
106 29.6 21.0 39.0



#55
m,p-xylene
Concen: 14.053 ug/L
RT: 9.16 min Scan# 2510
Delta R.T. 0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Tgt Ion: 106 Resp: 154764
Ion Ratio Lower Upper
106 100
91 208.4 148.1 275.0

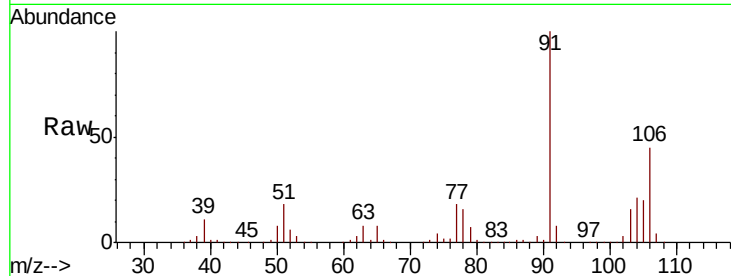




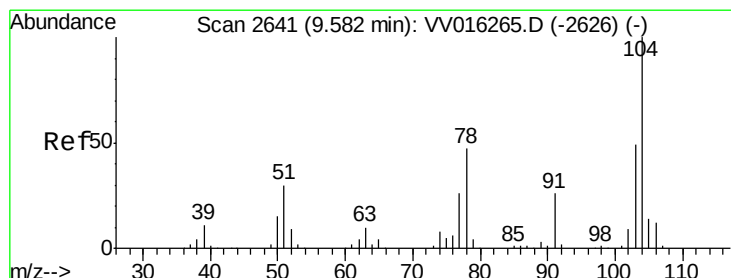
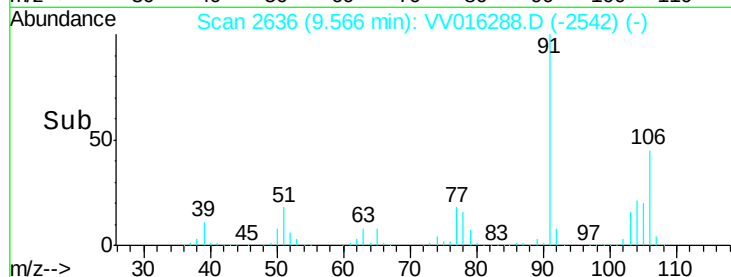
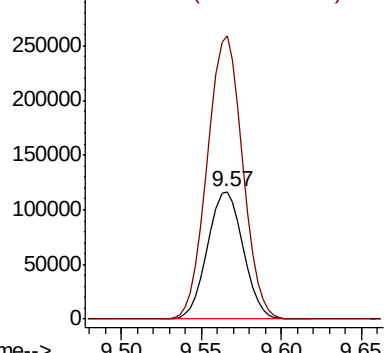
#56
o-xylene
Concen: 16.902 ug/L
RT: 9.57 min Scan# 2636
Delta R.T. 0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Instrument :
MSVOA_V
ClientSampled :

Tot Ion:106 Resp: 177391
Ion Ratio Lower Upper
106 100
91 222.1 158.8 294.8

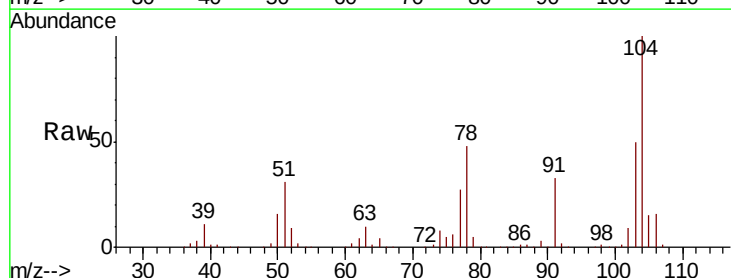


Abundance Ion 106.15 (105.85 to 106.85): V
Ion 91.15 (90.85 to 91.85): VV0

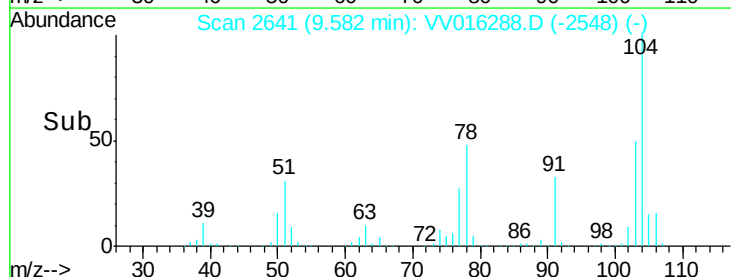
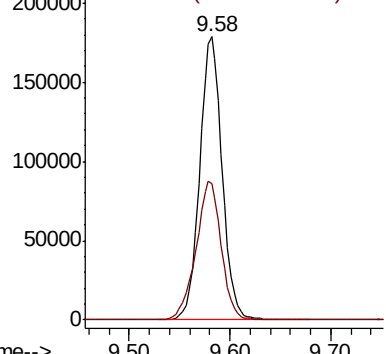


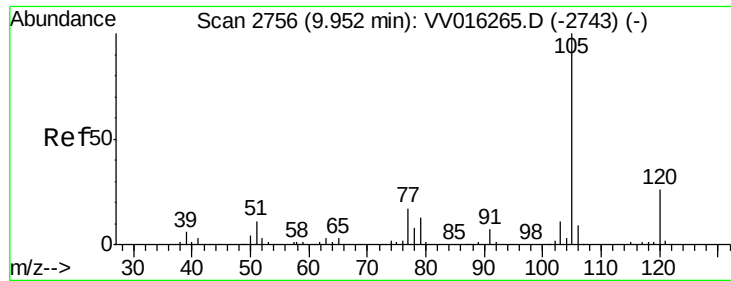
#57
Styrene
Concen: 15.863 ug/L
RT: 9.58 min Scan# 2641
Delta R.T. 0.00 min
Lab File: VV016288.D
Acq: 28 May 2020 19:48

Tgt Ion:104 Resp: 277055
Ion Ratio Lower Upper
104 100
78 48.3 33.2 61.7



Abundance Ion 104.10 (103.80 to 104.80): V
Ion 78.10 (77.80 to 78.80): VV0





#58

Isopropylbenzene

Concen: 1.458 ug/L

RT: 9.95 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

Instrument :

MSVOA_V

ClientSampleId :

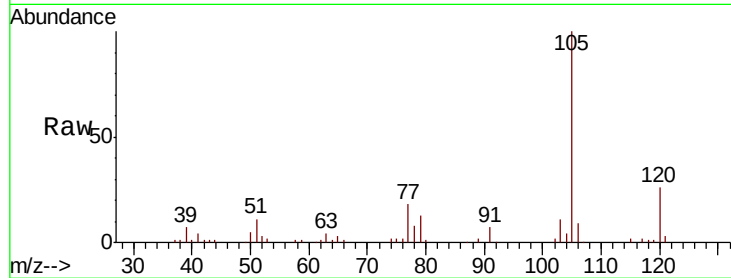
Tot Ion:105 Resp: 41922

Ion Ratio Lower Upper

105 100

120 26.9 20.9 31.3

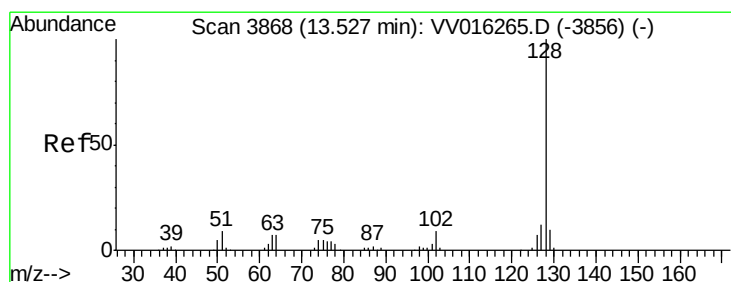
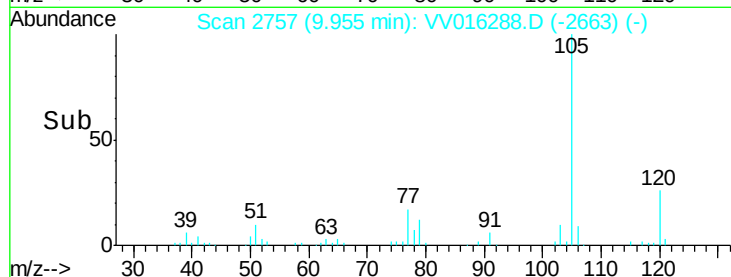
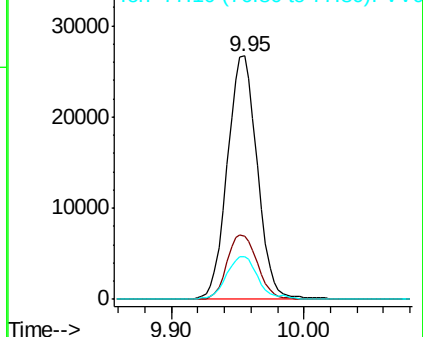
77 18.7 13.9 20.9



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#70

Naphthalene

Concen: 155.216 ug/L

RT: 13.53 min Scan# 3868

Delta R.T. 0.00 min

Lab File: VV016288.D

Acq: 28 May 2020 19:48

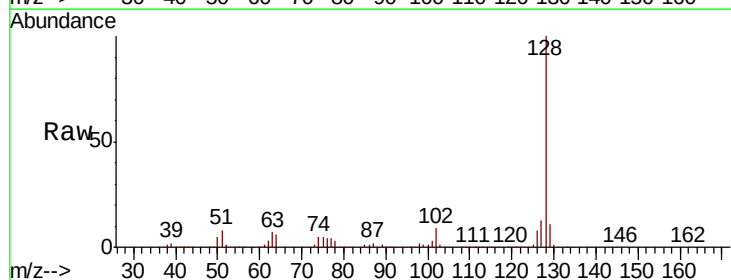
Tgt Ion:128 Resp: 2740361

Ion Ratio Lower Upper

128 100

129 10.9 8.6 13.0

127 13.2 10.6 15.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

