

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV011720\
 Data File : VV014335.D
 Acq On : 17 Jan 2020 14:01
 Operator : SY/MD
 Sample : L1169-05
 Misc : 25.0mL/MSVOA V/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 BF764

Quant Time: Jan 17 22:55:03 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_V\METHOD\SOMVTR010220WMA.M
 Quant Title : TRACE VOA SOM01.0
 QLast Update : Fri Jan 17 22:51:36 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	5.66	114	818614	5.00	ug/L	0.00
28) Chlorobenzene-d5	8.89	117	750672	5.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	11.29	152	342801	5.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	1.32	65	244878	4.28	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	85.60%
7) Chloroethane-d5	1.59	69	191577	4.33	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	86.60%
11) 1,1-Dichloroethene-d2	2.13	63	317131	3.75	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	75.00%
20) 2-Butanone-d5	3.93	46	673644	48.96	ug/L	-0.01
Spiked Amount	50.000	Range	40 - 130	Recovery	=	97.92%
24) Chloroform-d	4.40	84	489247	4.42	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	88.40%
26) 1,2-Dichloroethane-d4	5.08	65	245788	4.43	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	88.60%
32) Benzene-d6	5.10	84	1040346	4.64	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	92.80%
36) 1,2-Dichloropropane-d6	6.12	67	333430	4.80	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	96.00%
41) Toluene-d8	7.36	98	925333	4.52	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	90.40%
43) trans-1,3-Dichloropropene-	7.66	79	128949	4.20	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	84.00%
46) 2-Hexanone-d5	8.13	63	623875	47.96	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	95.92%
57) 1,1,2,2-Tetrachloroethane-	10.26	84	229509	4.73	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	94.60%
64) 1,2-Dichlorobenzene-d4	11.67	152	306849	4.77	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	95.40%

Target Compounds

					Ovalue
5) Vinyl chloride	1.33	62	4275068	74.618	ug/L 100
8) Chloroethane	1.60	64	310537	9.646	ug/L 97
10) 1,1,2-Trichloro-1,2,2-trif	2.13	101	3183	0.087	ug/L # 28
12) 1,1-Dichloroethene	2.14	96	84305	2.305	ug/L # 68
13) Acetone	2.31	43	757565	79.952	ug/L 46
15) Methyl Acetate	2.31	43	757465	34.340	ug/L # 52
18) trans-1,2-Dichloroethene	2.79	96	2255586	41.028	ug/L 95
19) 1,1-Dichloroethane	3.23	63	2163042	20.074	ug/L 99
22) cis-1,2-Dichloroethene	3.96	96	10183103	168.973	ug/L # 97
25) Chloroform	4.42	83	22811	0.221	ug/L 87
27) 1,2-Dichloroethane	5.18	62	314208	5.091	ug/L 95
30) Cyclohexane	4.73	56	10319	0.105	ug/L # 87
33) Benzene	5.14	78	4617724	19.974	ug/L 100
34) Trichloroethene	5.96	95	1662406	27.982	ug/L 99
35) Methylcyclohexane	6.11	83	75900	0.781	ug/L # 19
37) 1,2-Dichloropropane	6.12	63	34631	0.593	ug/L # 90
42) Toluene	7.43	91	98517	0.404	ug/L 95

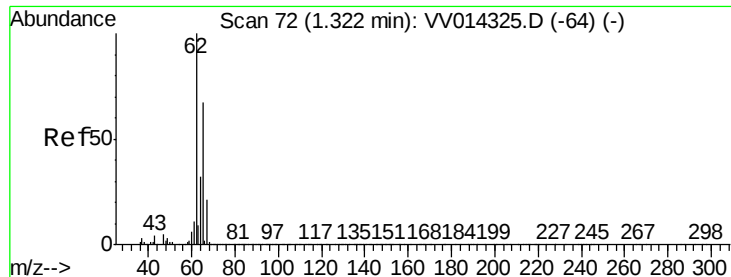
Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV011720\
Data File : VV014335.D
Acq On : 17 Jan 2020 14:01
Operator : SY/MD
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Quant Title : TRACE VOA SOM01.0
QLast Update : Fri Jan 17 22:51:36 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,1,2-Trichloroethane	7.88	97	19152	0.514	ug/L	97
47) Tetrachloroethene	8.02	164	9707	0.239	ug/L	89
48) 2-Hexanone	8.13	43	68578	2.695	ug/L #	70
51) Chlorobenzene	8.92	112	5426561	36.158	ug/L	98
52) Ethylbenzene	9.05	91	33229	0.122	ug/L	97
53) m,p-xylene	9.18	106	13628	0.135	ug/L	89
54) o-xylene	9.59	106	15338	0.155	ug/L	98
58) 1,1,2,2-Tetrachloroethane	10.28	83	39762	0.865	ug/L #	97
63) 1,4-Dichlorobenzene	11.32	146	7005	0.066	ug/L #	79

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



#5

Vinyl chloride

Concen: 74.618 ug/L

RT: 1.33 min Scan# 73

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

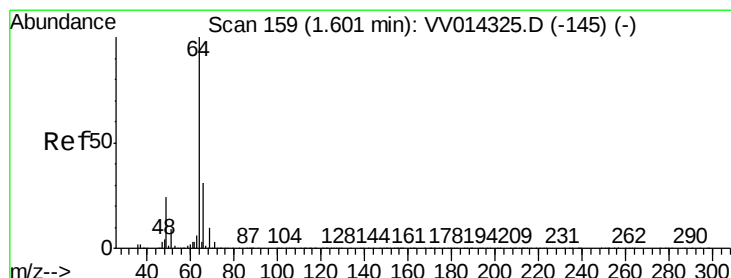
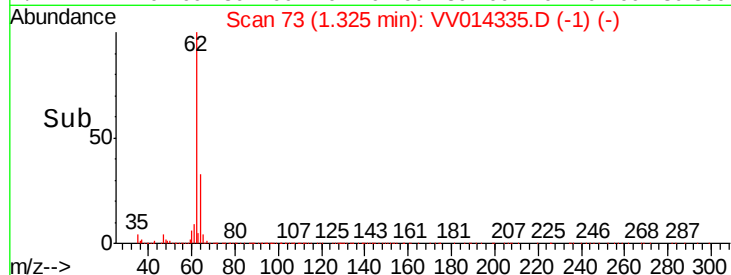
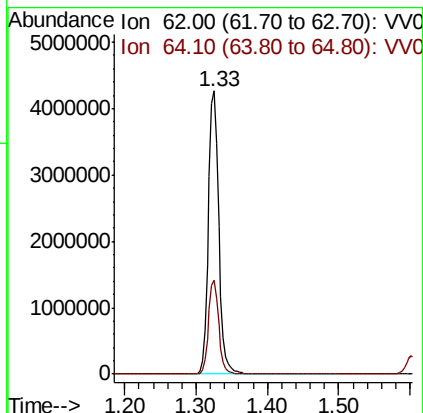
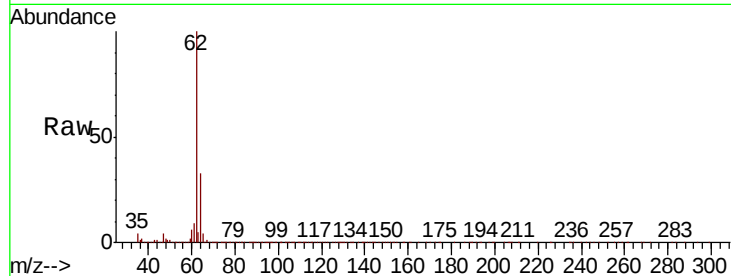
BF764

Tot Ion: 62 Resp: 4275068

Ion Ratio Lower Upper

62 100

64 33.1 23.0 42.6



#8

Chloroethane

Concen: 9.646 ug/L

RT: 1.60 min Scan# 159

Delta R.T. 0.00 min

Lab File: VV014335.D

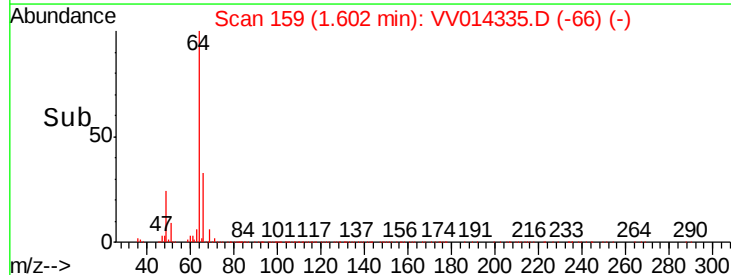
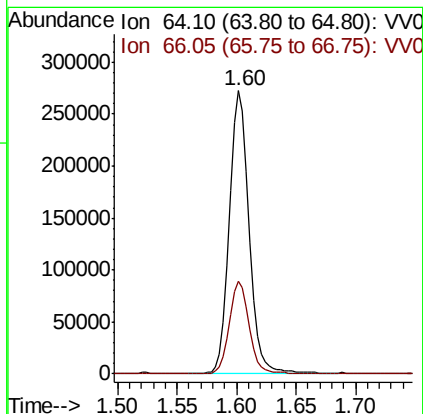
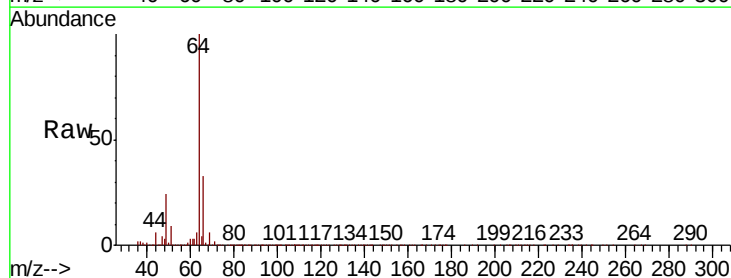
Acq: 17 Jan 2020 14:01

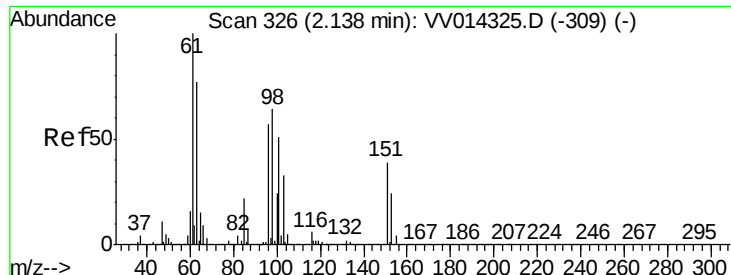
Tgt Ion: 64 Resp: 310537

Ion Ratio Lower Upper

64 100

66 32.7 21.8 40.6





#10

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

Concen: 0.087 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.01 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

BF764

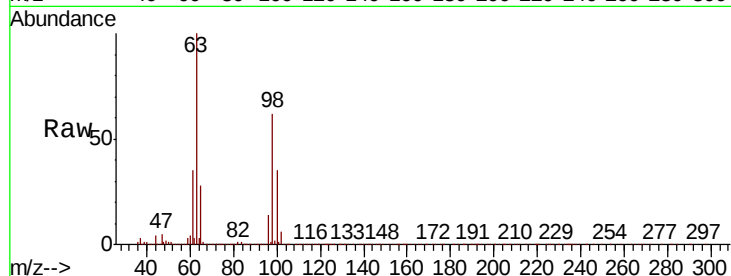
Tot Ion:101 Resp: 3183

Ion Ratio Lower Upper

101 100

85 0.0 34.9 52.3#

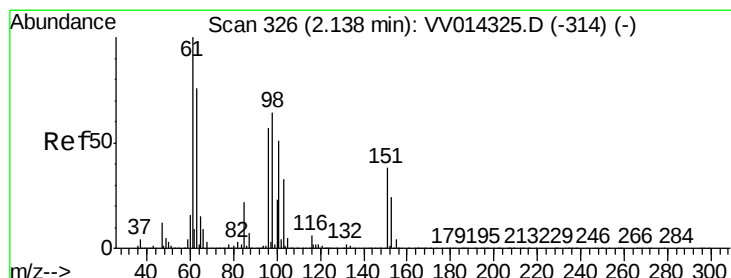
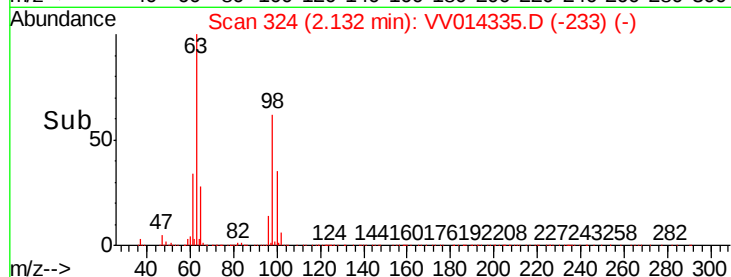
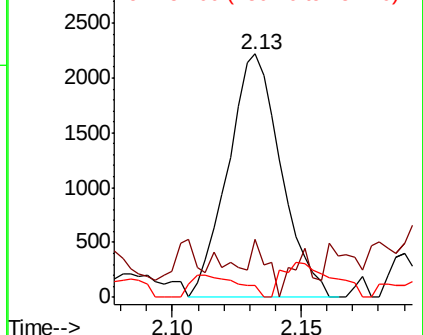
151 13.2 62.5 93.7#



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: 2.305 ug/L

RT: 2.14 min Scan# 327

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

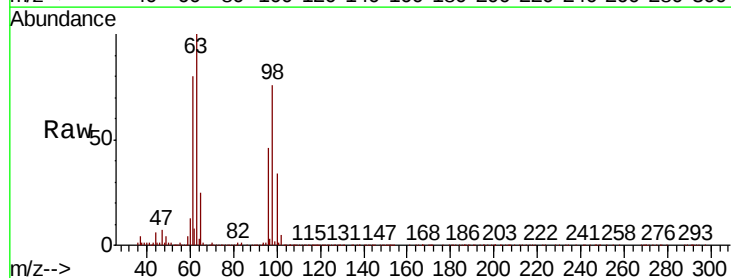
Tgt Ion: 96 Resp: 84305

Ion Ratio Lower Upper

96 100

61 172.8 121.5 225.7

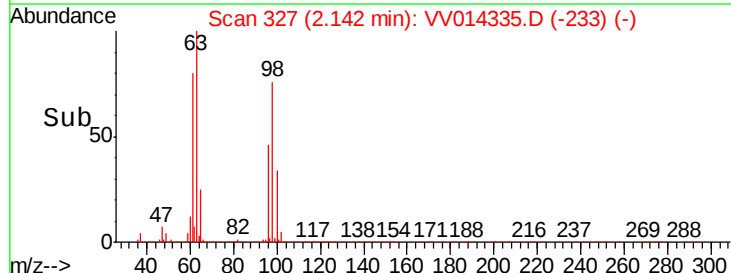
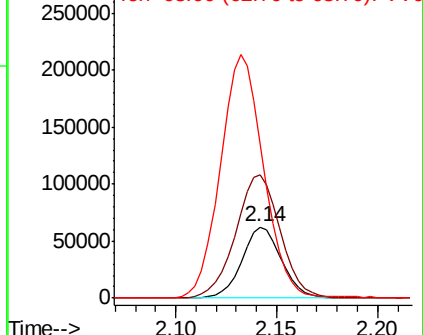
63 215.1 90.3 167.7#

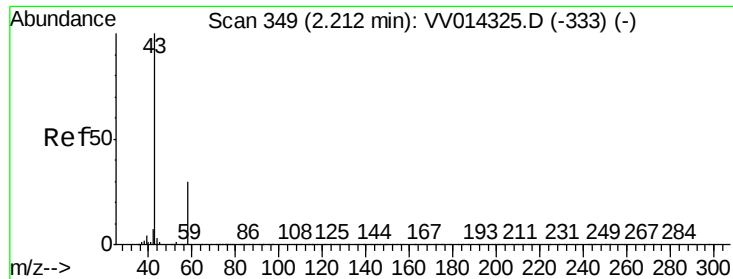


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 79.952 ug/L

RT: 2.31 min Scan# 379

Delta R.T. 0.10 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

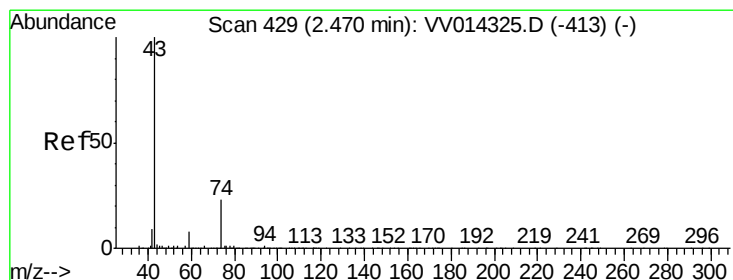
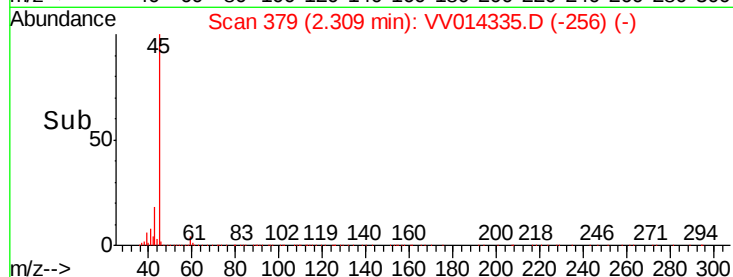
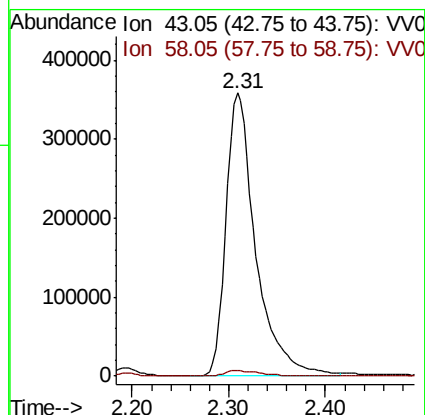
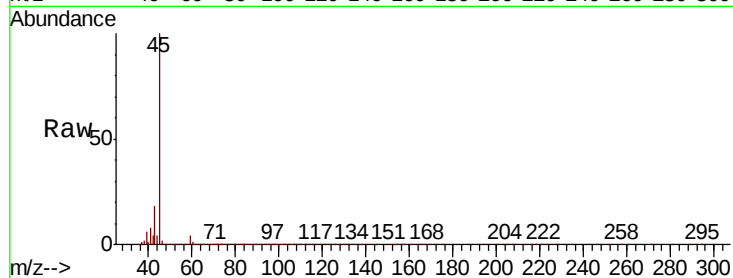
BF764

Tot Ion: 43 Resp: 757565

Ion Ratio Lower Upper

43 100

58 2.3 0.0 66.0



#15

Methyl Acetate

Concen: 34.340 ug/L

RT: 2.31 min Scan# 379

Delta R.T. -0.16 min

Lab File: VV014335.D

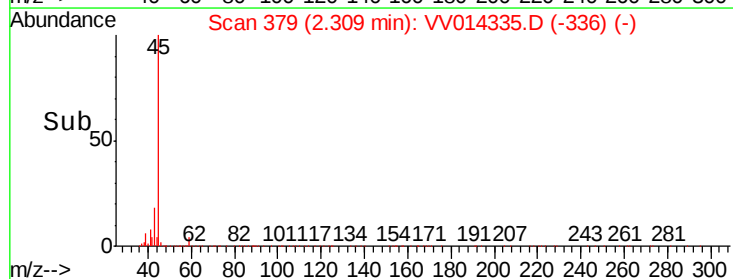
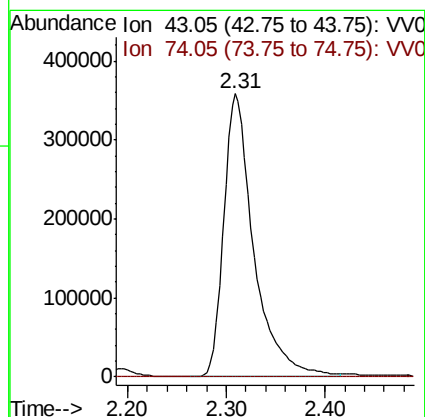
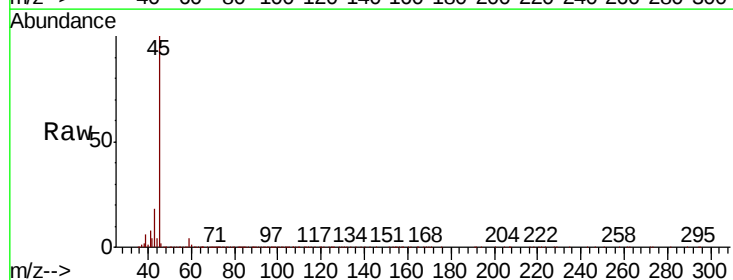
Acq: 17 Jan 2020 14:01

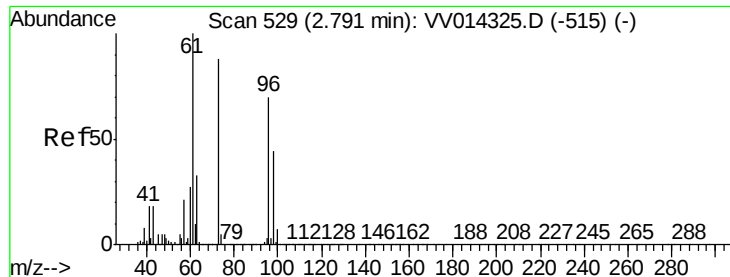
Tgt Ion: 43 Resp: 757465

Ion Ratio Lower Upper

43 100

74 0.1 18.6 28.0#





#18

trans-1,2-Dichloroethene

Concen: 41.028 ug/L

RT: 2.79 min Scan# 529

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

BF764

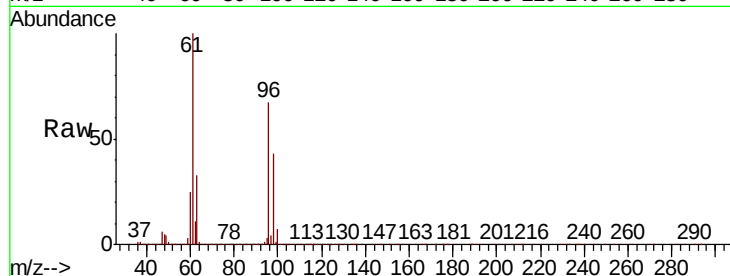
Tot Ion: 96 Resp: 2255586

Ion Ratio Lower Upper

96 100

61 148.5 99.2 184.2

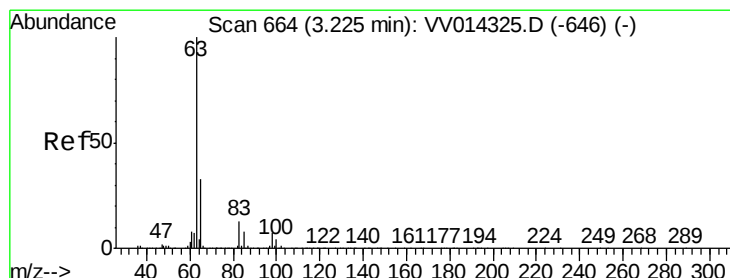
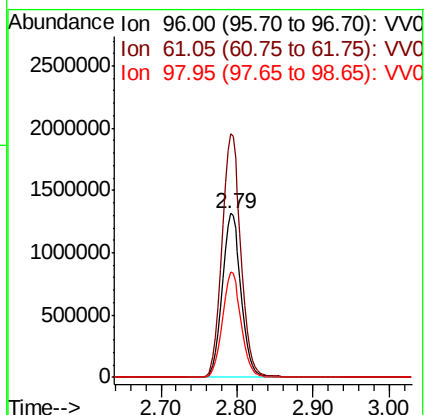
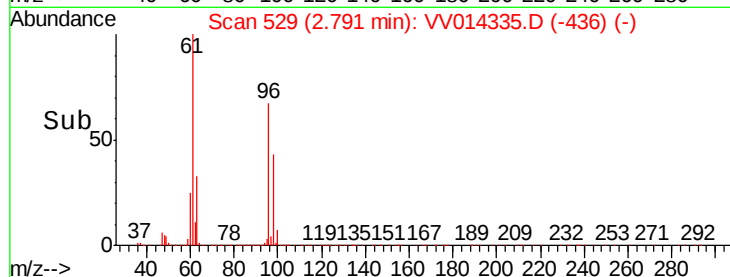
98 64.0 43.1 80.1



Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 97.95 (97.65 to 98.65): VV0



#19

1,1-Dichloroethane

Concen: 20.074 ug/L

RT: 3.23 min Scan# 665

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

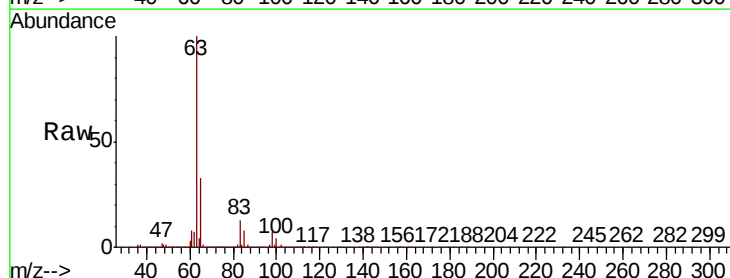
Tgt Ion: 63 Resp: 2163042

Ion Ratio Lower Upper

63 100

65 32.5 22.7 42.3

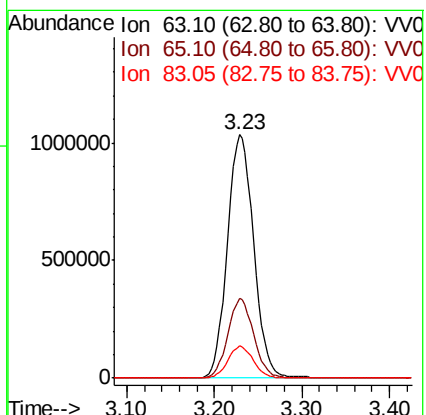
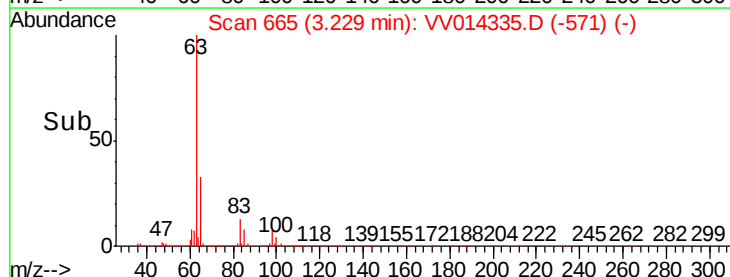
83 13.1 10.0 18.6

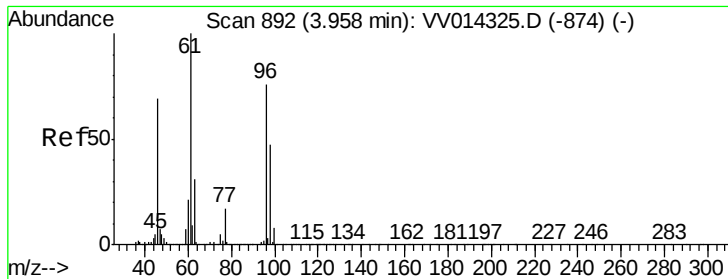


Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 65.10 (64.80 to 65.80): VV0

Ion 83.05 (82.75 to 83.75): VV0



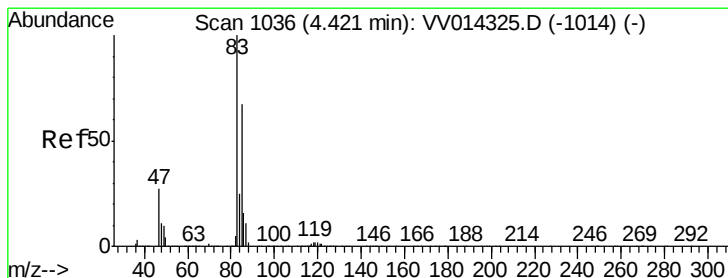
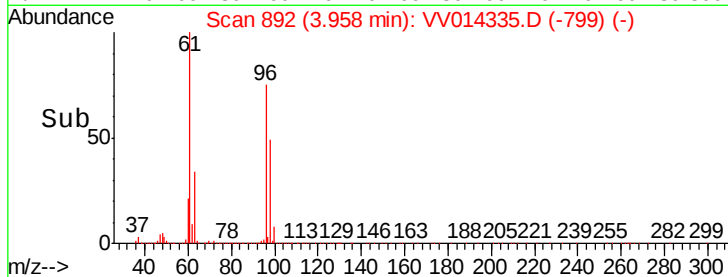
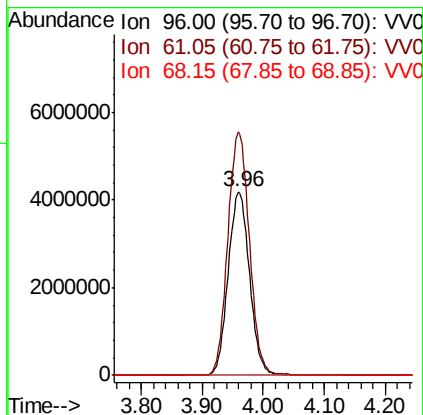
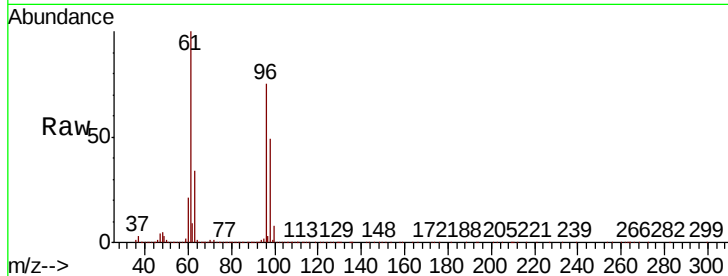


#22

cis-1,2-Dichloroethene
Concen: 168.973 ug/L
RT: 3.96 min Scan# 892
Delta R.T. 0.00 min
Lab File: VV014335.D
Acq: 17 Jan 2020 14:01

Instrument :
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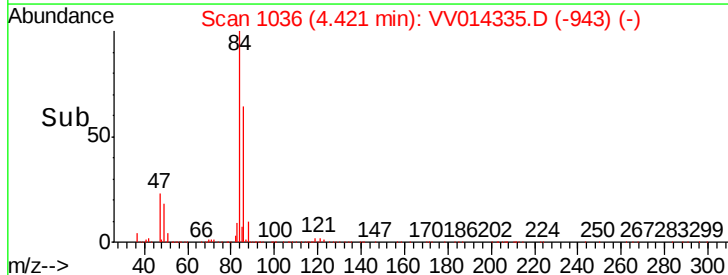
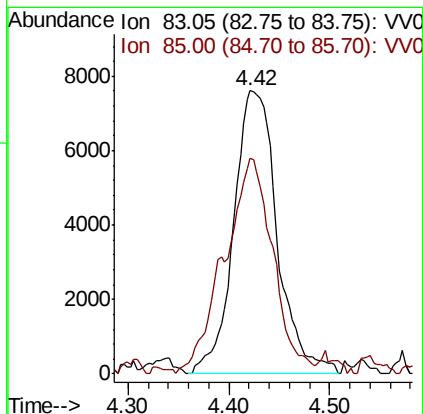
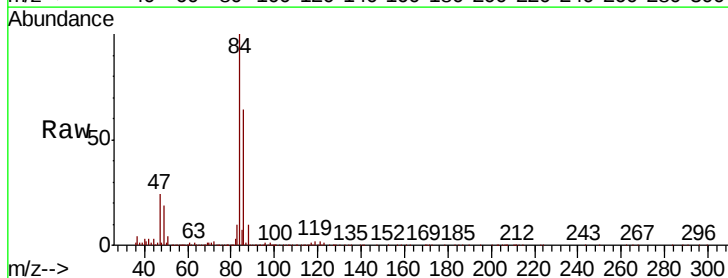
Tot Ion: 96 Resp:10183103
Ion Ratio Lower Upper
96 100
61 132.6 90.6 168.3
68 0.0 0.3 0.7#

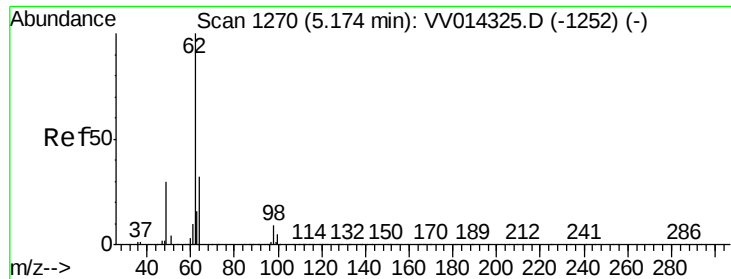


#25

Chloroform
Concen: 0.221 ug/L
RT: 4.42 min Scan# 1036
Delta R.T. 0.00 min
Lab File: VV014335.D
Acq: 17 Jan 2020 14:01

Tgt Ion: 83 Resp: 22811
Ion Ratio Lower Upper
83 100
85 76.1 46.2 85.8

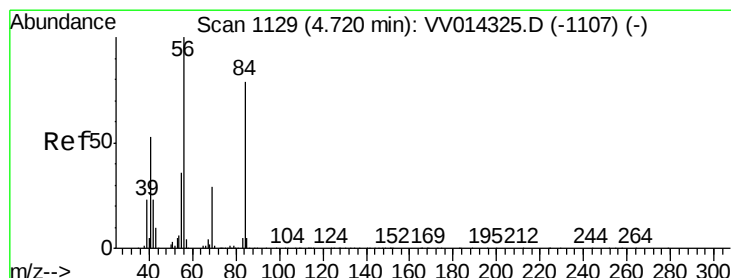
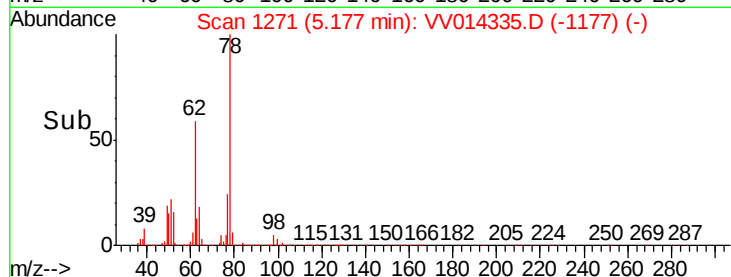
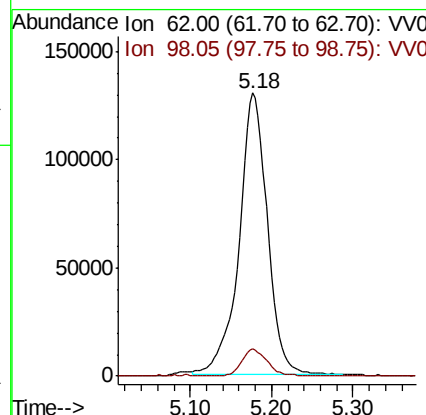
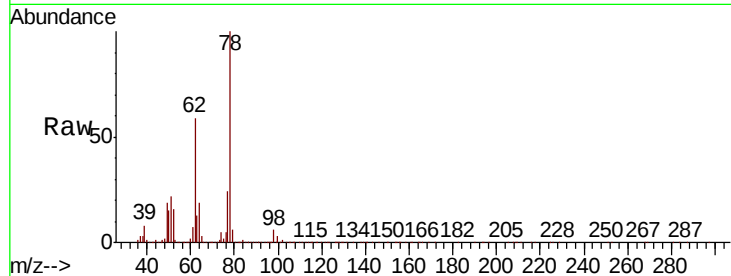




#27
 1,2-Dichloroethane
 Concen: 5.091 ug/L
 RT: 5.18 min Scan# 1271
 Delta R.T. 0.00 min
 Lab File: VV014335.D
 Acq: 17 Jan 2020 14:01

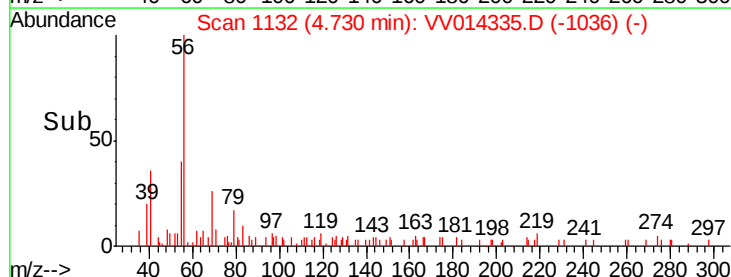
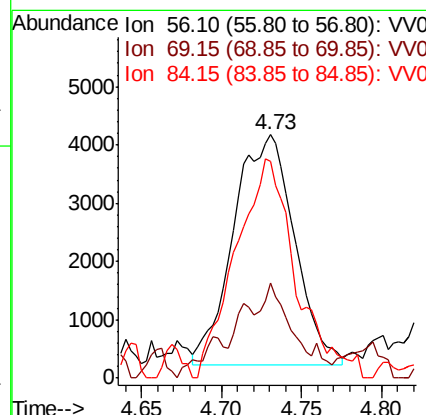
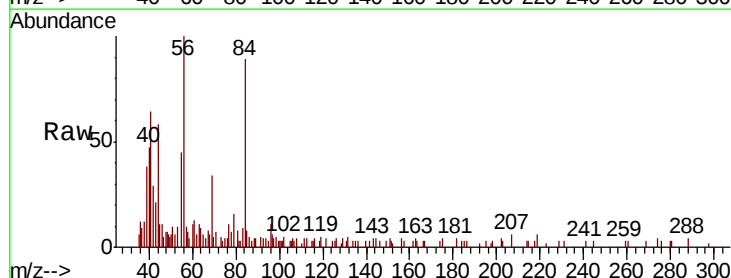
Instrument :
 MSVOA_V
 ClientSampleId :
 BF764

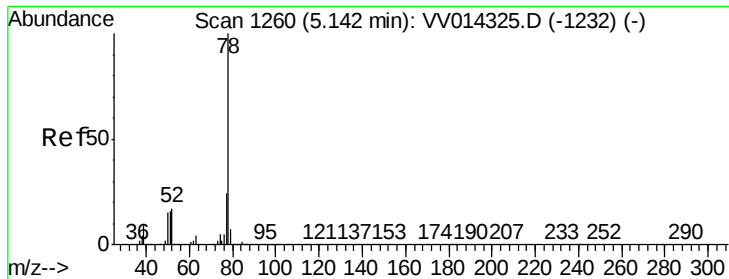
Tot Ion: 62 Resp: 314208
 Ion Ratio Lower Upper
 62 100
 98 9.5 9.2 13.8



#30
 Cyclohexane
 Concen: 0.105 ug/L
 RT: 4.73 min Scan# 1132
 Delta R.T. 0.01 min
 Lab File: VV014335.D
 Acq: 17 Jan 2020 14:01

Tgt Ion: 56 Resp: 10319
 Ion Ratio Lower Upper
 56 100
 69 16.0 23.9 35.9#
 84 94.3 68.9 103.3





#33

Benzene

Concen: 19.974 ug/L

RT: 5.14 min Scan# 1261

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

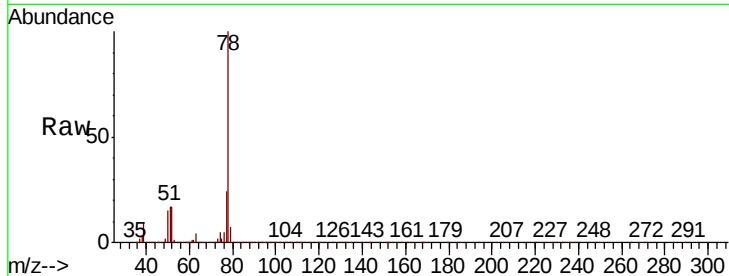
Instrument :

MSVOA_V

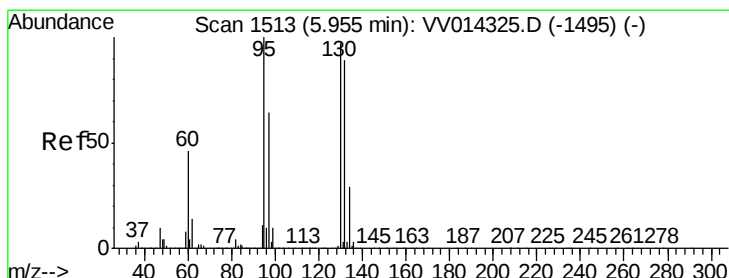
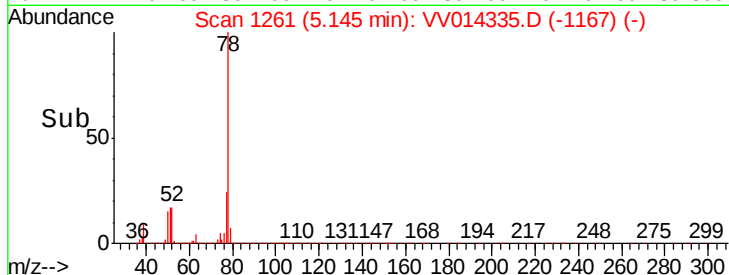
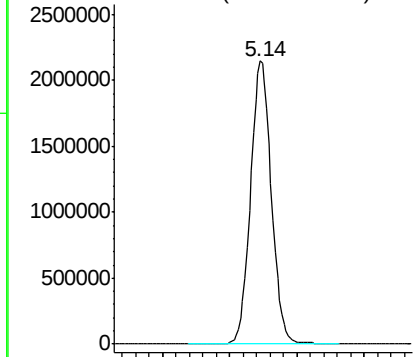
ClientSampleId :

BF764

Tgt Ion: 78 Resp: 4617724



Abundance Ion 78.10 (77.80 to 78.80): VV0



#34

Trichloroethene

Concen: 27.982 ug/L

RT: 5.96 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Tgt Ion: 95 Resp: 1662406

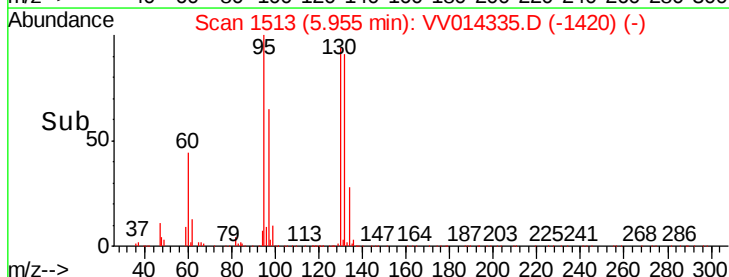
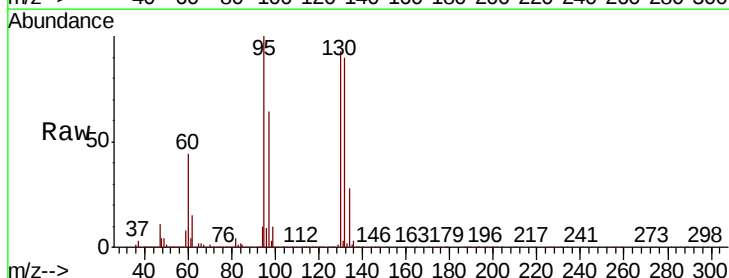
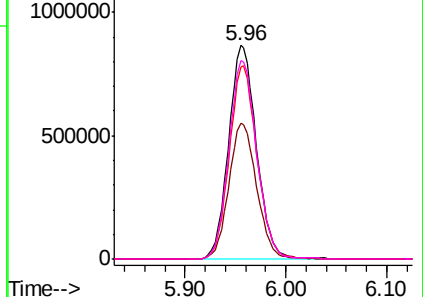
Ion	Ratio	Lower	Upper
95	100		
97	63.8	43.8	81.3
132	89.8	63.4	117.8
130	92.6	65.7	122.1

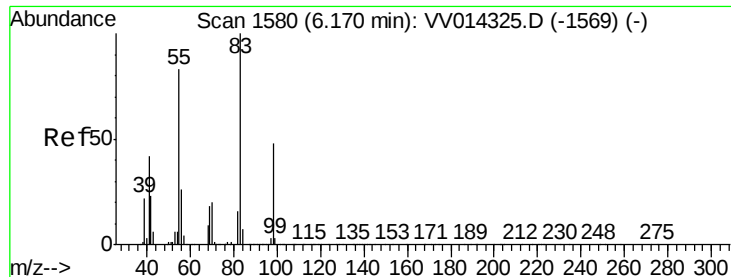
Abundance Ion 95.00 (94.70 to 95.70): VV0

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

Methylcyclohexane

Concen: 0.781 ug/L

RT: 6.11 min Scan# 1562

Delta R.T. -0.06 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampled :

BF764

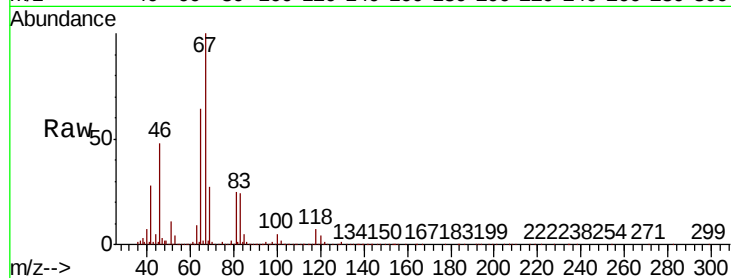
Tot Ion: 83 Resp: 75900

Ion Ratio Lower Upper

83 100

55 0.5 61.7 92.5#

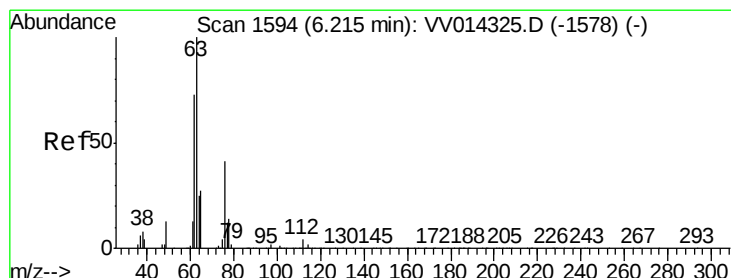
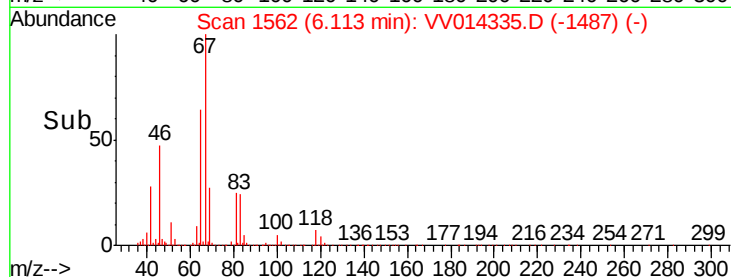
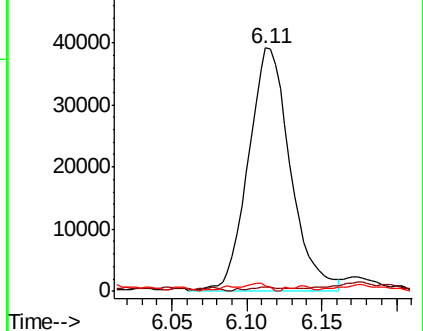
98 1.7 38.1 57.1#



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: 0.593 ug/L

RT: 6.12 min Scan# 1563

Delta R.T. -0.10 min

Lab File: VV014335.D

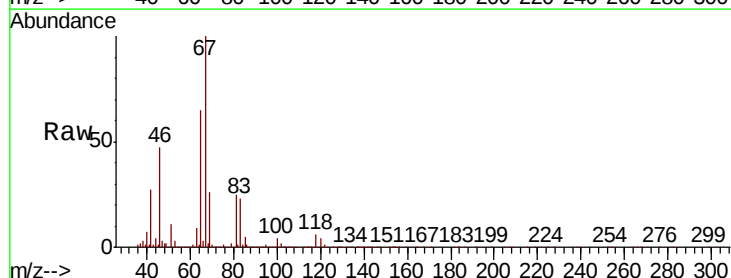
Acq: 17 Jan 2020 14:01

Tgt Ion: 63 Resp: 34631

Ion Ratio Lower Upper

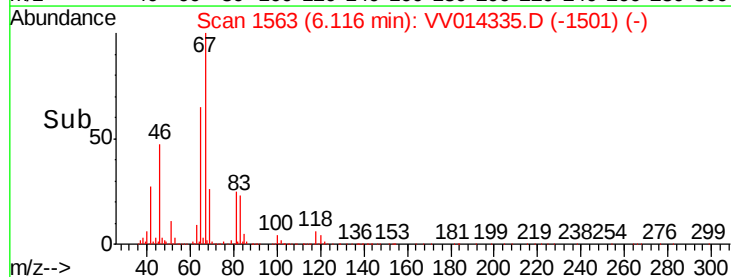
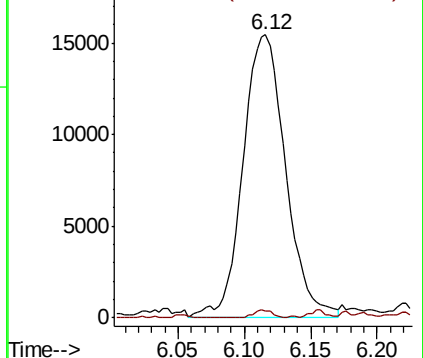
63 100

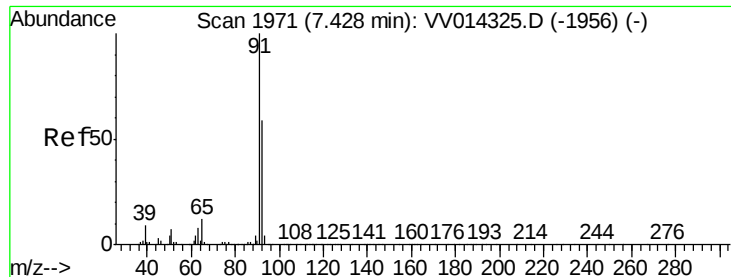
112 1.2 3.7 5.5#



Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 112.10 (111.80 to 112.80): V





#42

Toluene

Concen: 0.404 ug/L

RT: 7.43 min Scan# 1972

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

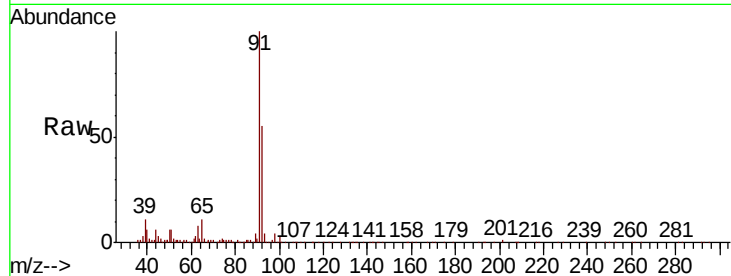
BF764

Tot Ion: 91 Resp: 98517

Ion Ratio Lower Upper

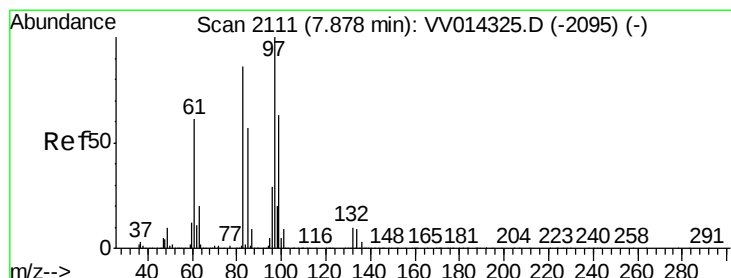
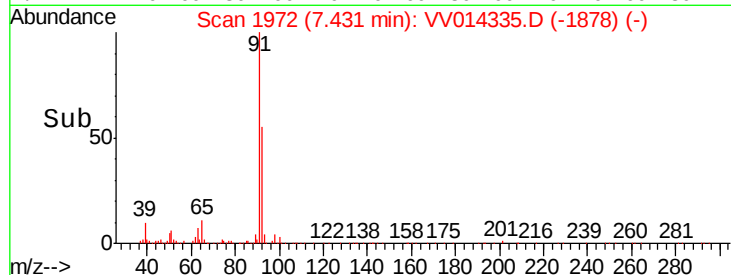
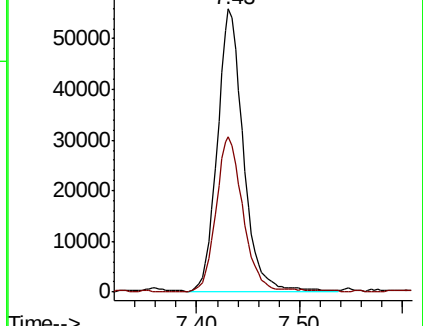
91 100

92 54.8 41.2 76.6



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0



#45

1,1,2-Trichloroethane

Concen: 0.514 ug/L

RT: 7.88 min Scan# 2112

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Tgt Ion: 97 Resp: 19152

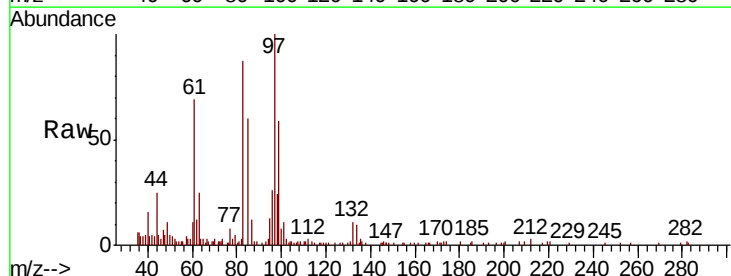
Ion Ratio Lower Upper

97 100

99 58.7 43.7 81.1

83 86.6 60.0 111.4

85 59.6 39.2 72.8

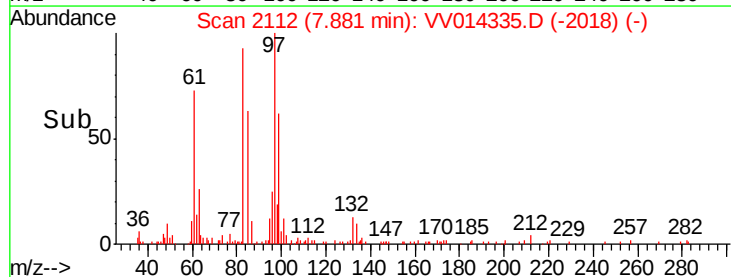
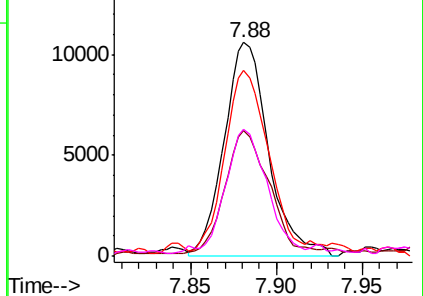


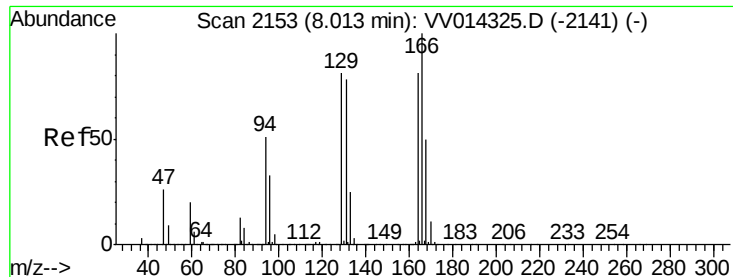
Abundance Ion 96.95 (96.65 to 97.65): VV0

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





#47

Tetrachloroethene

Concen: 0.239 ug/L

RT: 8.02 min Scan# 2154

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

BF764

Tot Ion:164 Resp: 9707

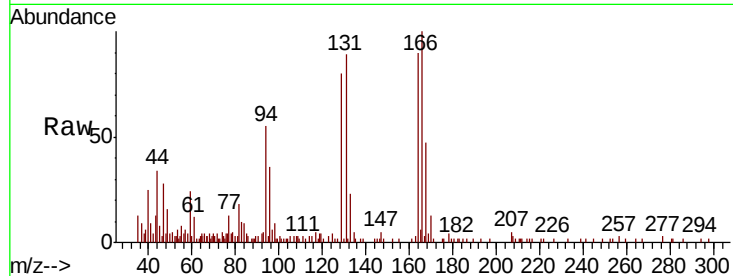
Ion Ratio Lower Upper

164 100

129 88.2 71.7 133.3

131 98.7 70.4 130.8

166 111.0 90.3 167.7

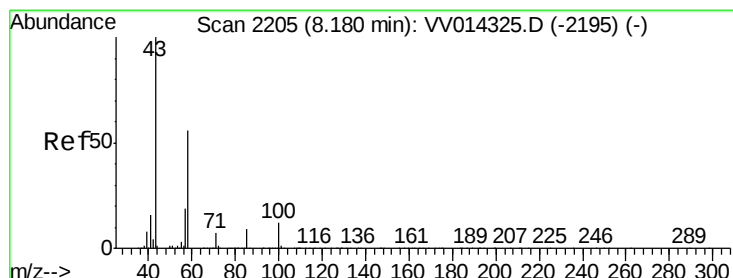
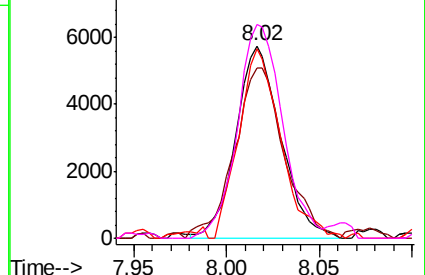
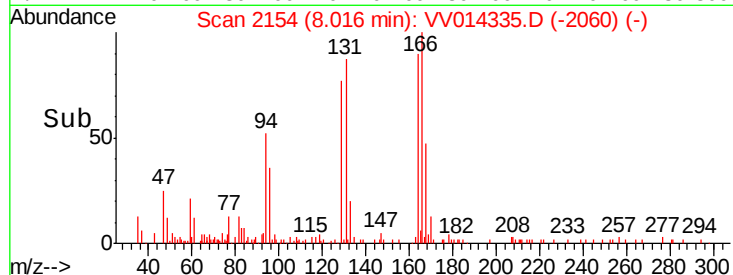


Abundance Ion 163.90 (163.60 to 164.60): V

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



#48

2-Hexanone

Concen: 2.695 ug/L

RT: 8.13 min Scan# 2189

Delta R.T. -0.05 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Tgt Ion: 43 Resp: 68578

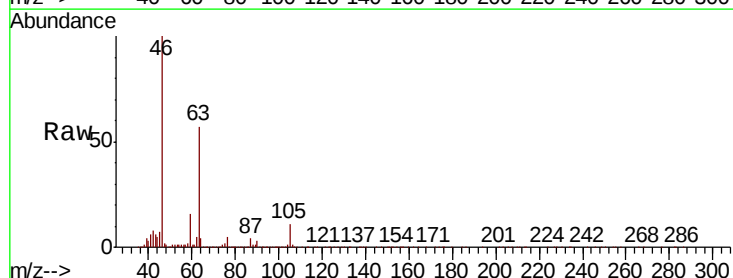
Ion Ratio Lower Upper

43 100

58 28.0 45.4 68.0#

57 21.2 15.8 23.8

100 0.2 10.2 15.4#

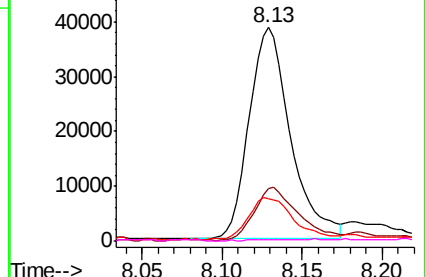
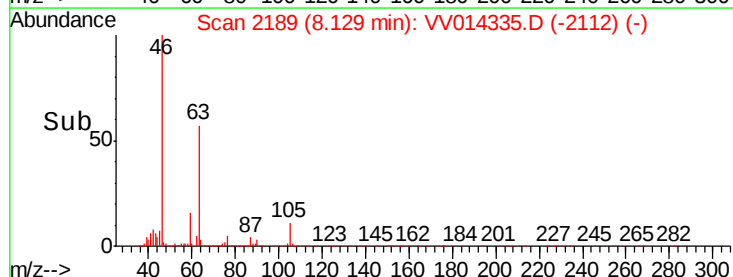


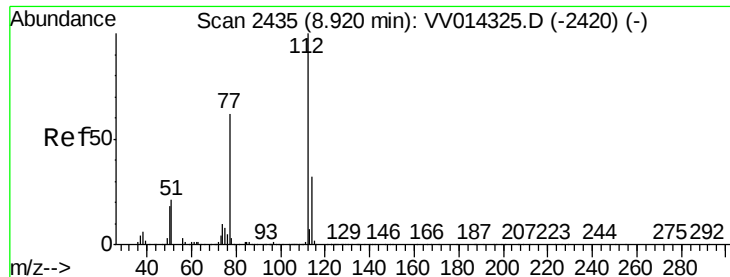
Abundance Ion 43.05 (42.75 to 43.75): VV0

Ion 58.05 (57.75 to 58.75): VV0

Ion 57.20 (56.90 to 57.90): VV0

Ion 100.15 (99.85 to 100.85): VV0





#51

Chlorobenzene

Concen: 36.158 ug/L

RT: 8.92 min Scan# 2435

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

BF764

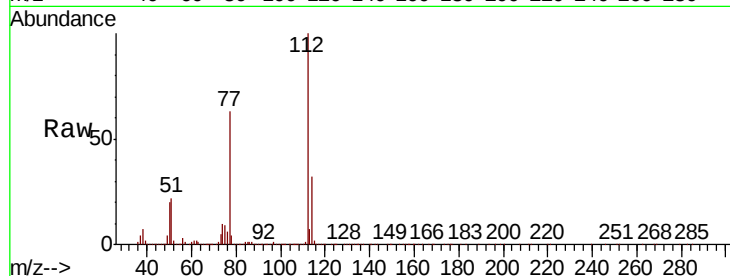
Tot Ion:112 Resp: 5426561

Ion Ratio Lower Upper

112 100

114 32.3 22.5 41.7

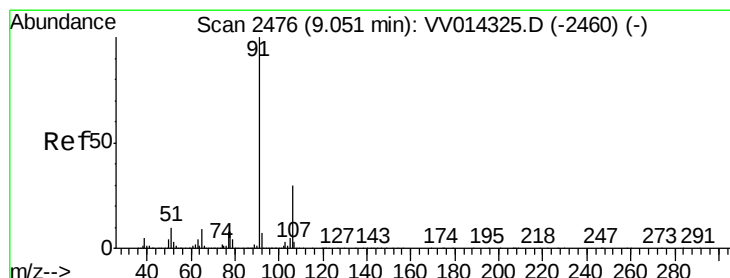
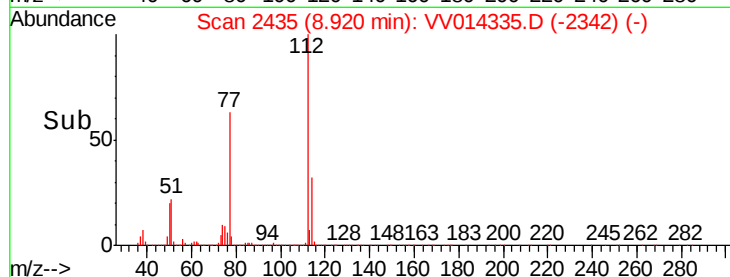
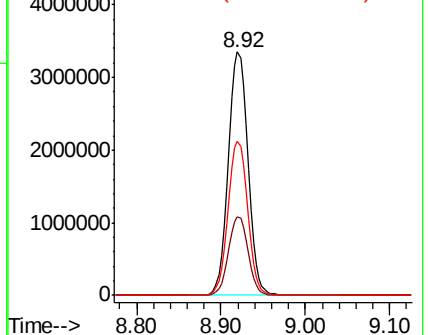
77 63.4 49.3 73.9



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 114.05 (113.75 to 114.75): V

Ion 77.10 (76.80 to 77.80): VV0



#52

Ethylbenzene

Concen: 0.122 ug/L

RT: 9.05 min Scan# 2477

Delta R.T. 0.00 min

Lab File: VV014335.D

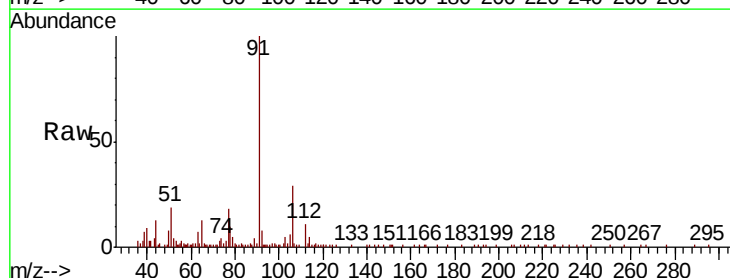
Acq: 17 Jan 2020 14:01

Tgt Ion: 91 Resp: 33229

Ion Ratio Lower Upper

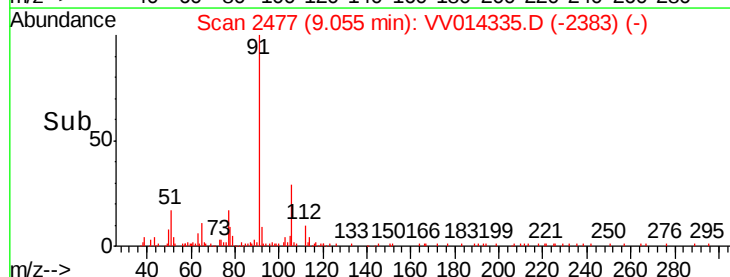
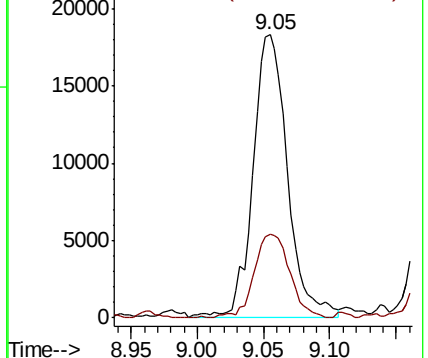
91 100

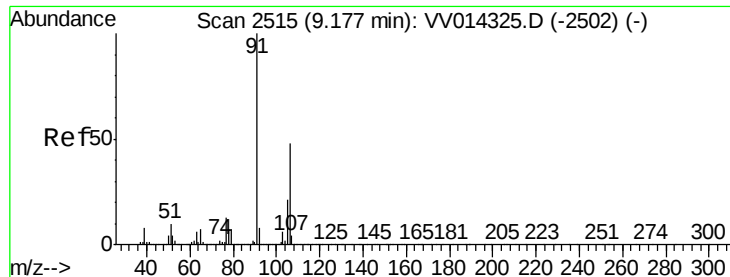
106 29.4 21.6 40.0



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 106.15 (105.85 to 106.85): V





#53

m,p-xylene

Concen: 0.135 ug/L

RT: 9.18 min Scan# 2516

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

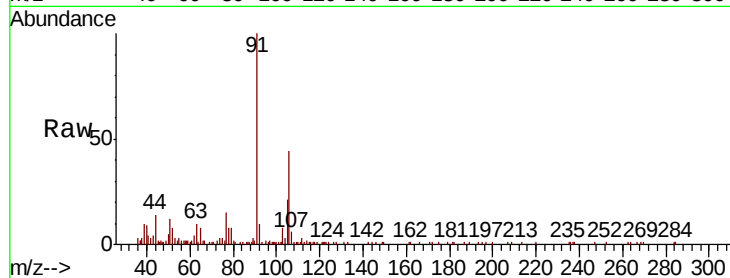
BF764

Tot Ion:106 Resp: 13628

Ion Ratio Lower Upper

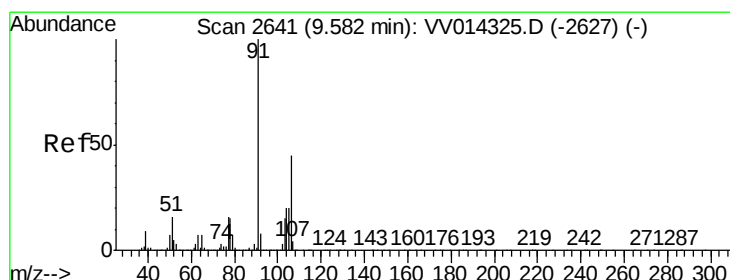
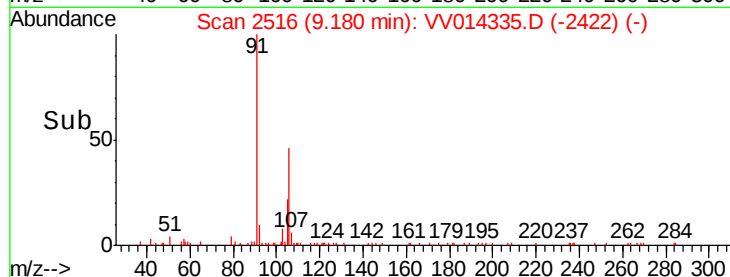
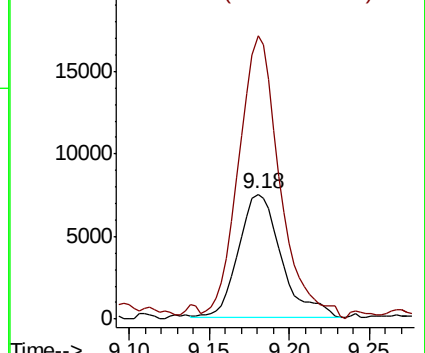
106 100

91 226.2 146.8 272.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#54

o-xylene

Concen: 0.155 ug/L

RT: 9.59 min Scan# 2642

Delta R.T. 0.00 min

Lab File: VV014335.D

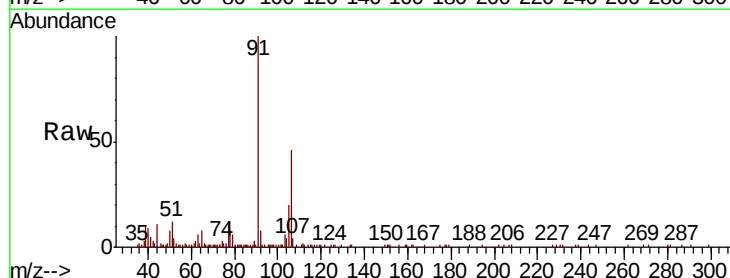
Acq: 17 Jan 2020 14:01

Tgt Ion:106 Resp: 15338

Ion Ratio Lower Upper

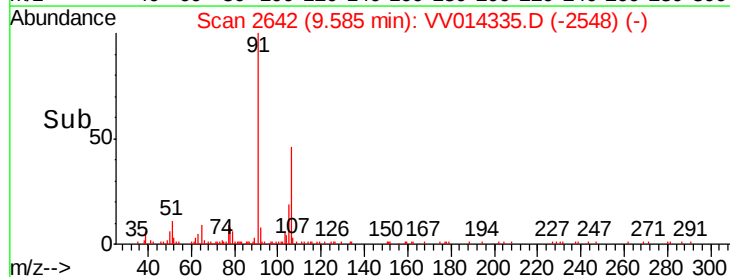
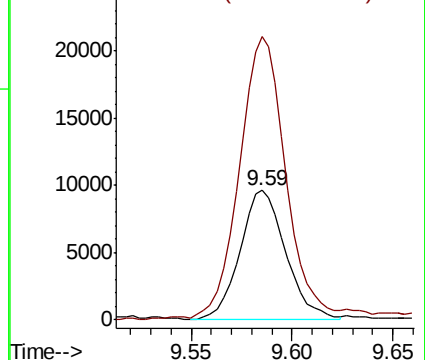
106 100

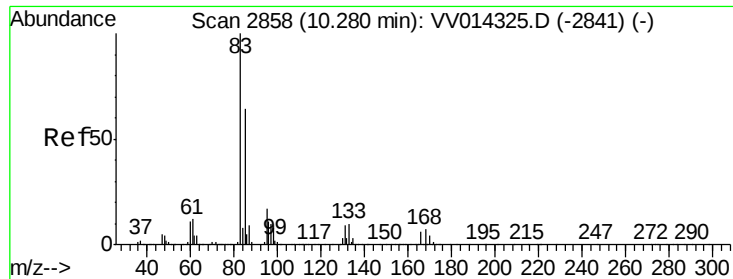
91 218.2 150.9 280.3



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0





#58

1,1,2,2-Tetrachloroethane

Concen: 0.865 ug/L

RT: 10.28 min Scan# 2858

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Instrument :

MSVOA_V

ClientSampleId :

BF764

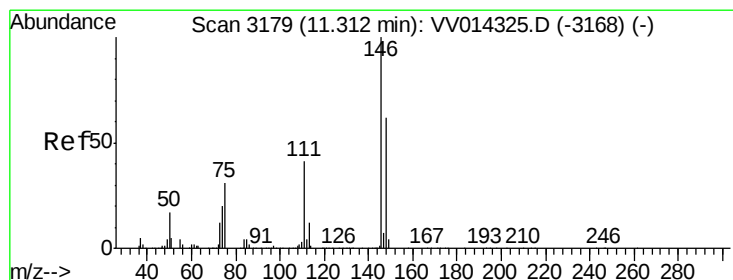
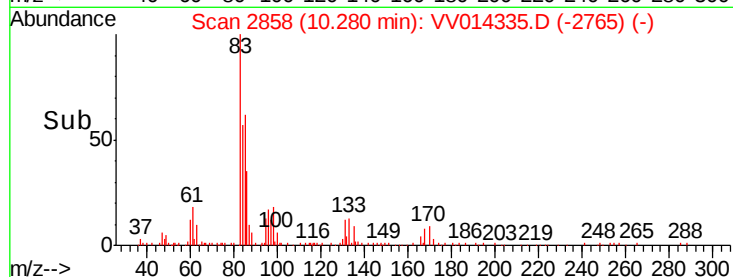
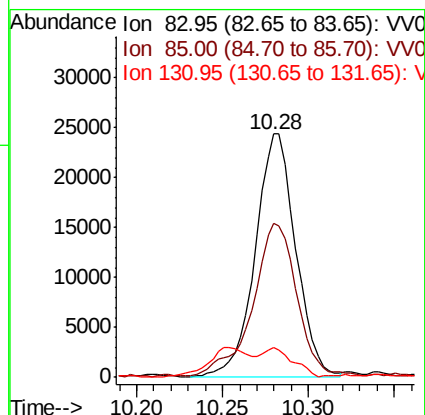
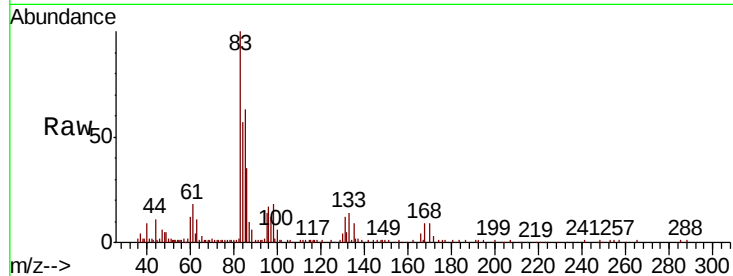
Tot Ion: 83 Resp: 39762

Ion Ratio Lower Upper

83 100

85 63.4 45.9 85.3

131 12.1 7.8 11.8#



#63

1,4-Dichlorobenzene

Concen: 0.066 ug/L

RT: 11.32 min Scan# 3180

Delta R.T. 0.00 min

Lab File: VV014335.D

Acq: 17 Jan 2020 14:01

Tgt Ion: 146 Resp: 7005

Ion Ratio Lower Upper

146 100

111 62.7 28.8 53.4#

148 73.7 44.5 82.7

