

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX040519\
 Data File : VX008680.D
 Acq On : 05 Apr 2019 13:18
 Operator : JC/SP
 Sample : K2256-09
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 CLEARWELL

Quant Time: Apr 06 01:20:41 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X032719W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Mar 27 12:01:15 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.03	128	6201	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.87	114	57851	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.12	117	38870	30.00	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	6.07	65	13925	26.84	ug/l	0.01
Spiked Amount	30.000	Range	50 - 169	Recovery	=	89.47%
60) 4-Bromofluorobenzene	11.14	95	16656	24.59	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	81.97%
63) Toluene-d8	8.72	98	66636	36.12	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	120.40%

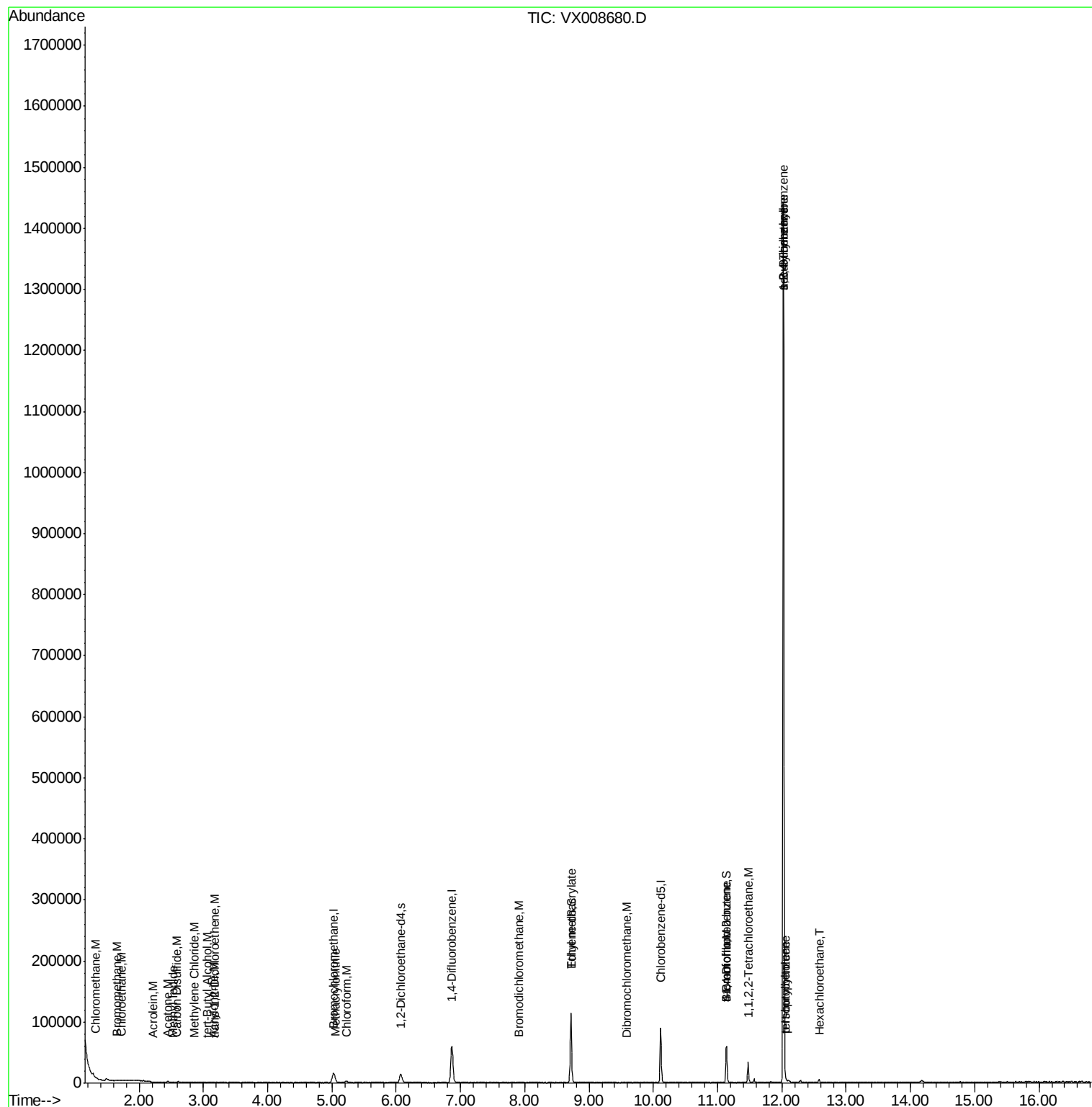
Target Compounds					Ovalue
3) Chloromethane	1.32	50	284	0.511 ug/l	# 40
5) Bromomethane	1.67	94	207	0.713 ug/l	# 79
6) Chloroethane	1.72	64	220	0.600 ug/l	# 45
11) Methyl Iodide	2.53	142	329	0.809 ug/l	# 82
13) Acrolein	2.21	56	61	0.668 ug/l	# 66
14) Acrylonitrile	3.16	53	92	0.313 ug/l	# 62
15) Acetone	2.44	58	645	7.108 ug/l	# 79
16) Carbon Disulfide	2.58	76	708	0.580 ug/l	# 60
18) Methylene Chloride	2.85	84	94	0.200 ug/l	# 19
19) trans-1,2-Dichloroethene	3.18	96	101	0.241 ug/l	# 27
23) tert-Butyl Alcohol	3.06	59	39	0.328 ug/l	# 1
25) Chloroform	5.22	83	2112	2.704 ug/l	# 84
35) Methacrylonitrile	5.07	41	319	0.438 ug/l	# 33
41) Bromodichloromethane	7.90	83	647	0.673 ug/l	# 91
51) Ethyl methacrylate	8.72	69	318	0.235 ug/l	# 83
53) Dibromochloromethane	9.59	129	319	0.447 ug/l	# 69
56) Bromoform	11.14	173	190	0.365 ug/l	# 1
71) 1,1,2,2-Tetrachloroethane	11.48	83	235	0.256 ug/l	# 25
77) t-1,4-Dichloro-2-butene	11.13	75	8417	28.255 ug/l	# 5
79) tert-butylbenzene	12.06	119	1819	0.847 ug/l	# 75
80) 1,2,4-Trimethylbenzene	12.02	105	16086	7.673 ug/l	# 47
81) sec-Butylbenzene	12.02	105	16086	6.696 ug/l	# 96
82) p-Isopropyltoluene	12.06	119	1819	0.847 ug/l	# 75
85) n-Butylbenzene	12.02	91	60966	29.861 ug/l	# 48
86) Hexachloroethane	12.58	117	90	0.251 ug/l	# 8

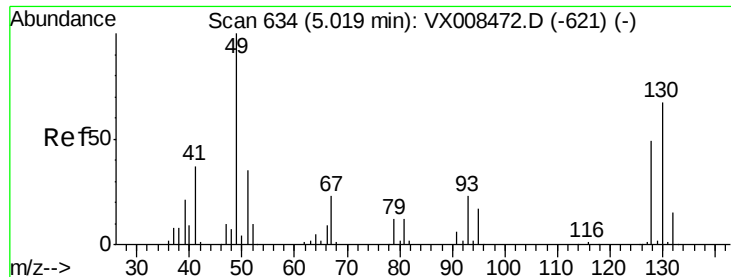
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X032719W.M
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QLast Update : Wed Mar 27 12:01:15 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 5.03 min Scan# 635

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

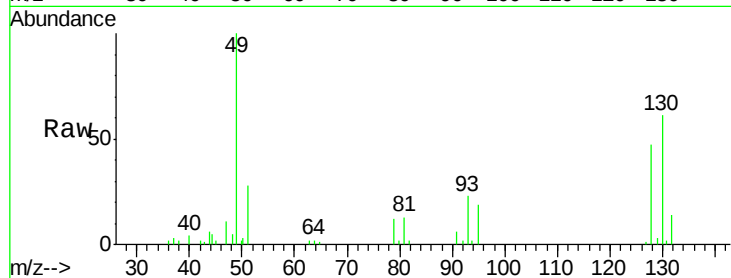
Tot Ion:128 Resp: 6201

Ion Ratio Lower Upper

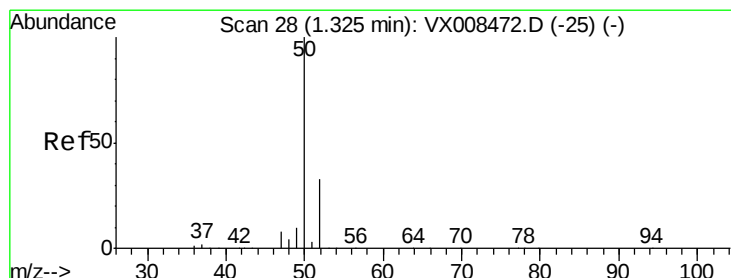
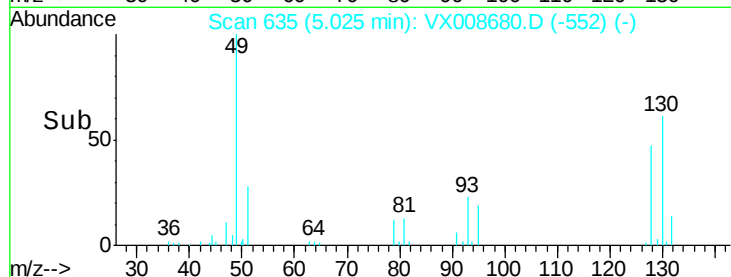
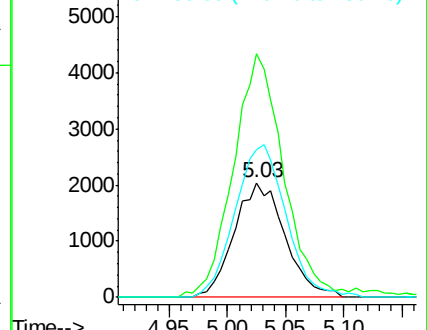
128 100

49 209.1 0.0 350.8

130 132.7 0.0 325.8



Abundance Ion 128.00 (127.70 to 128.70): V
Ion 49.00 (48.70 to 49.70): VX0
Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 0.511 ug/l

RT: 1.32 min Scan# 28

Delta R.T. -0.00 min

Lab File: VX008680.D

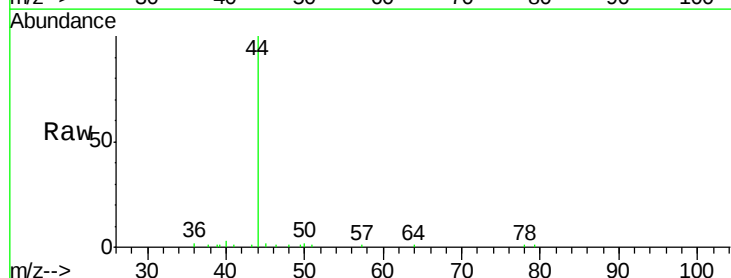
Acq: 05 Apr 2019 13:18

Tgt Ion: 50 Resp: 284

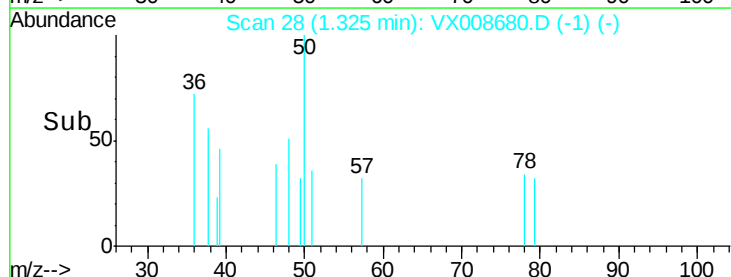
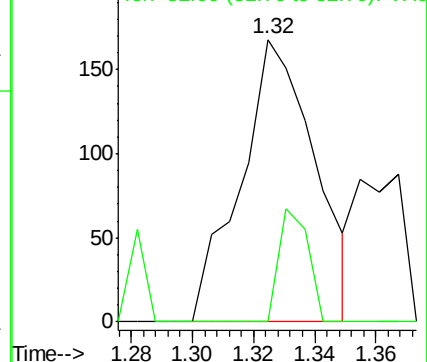
Ion Ratio Lower Upper

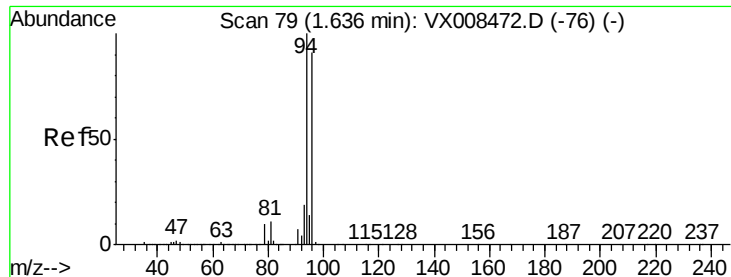
50 100

52 0.0 27.5 41.3#



Abundance Ion 50.00 (49.70 to 50.70): VX0
Ion 52.00 (51.70 to 52.70): VX0





#5

Bromomethane

Concen: 0.713 ug/l

RT: 1.67 min Scan# 84

Delta R.T. 0.03 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampled :

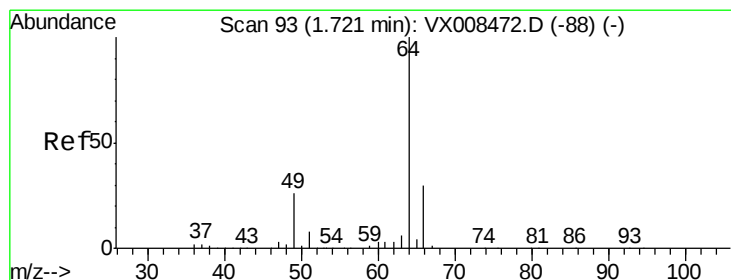
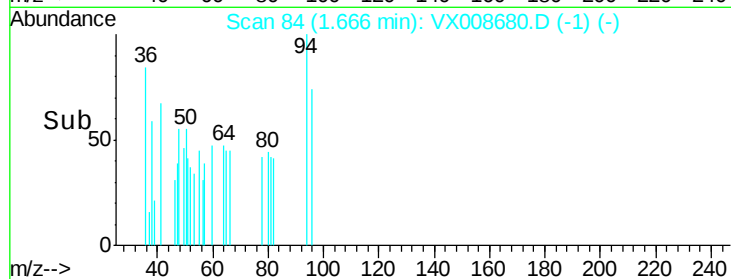
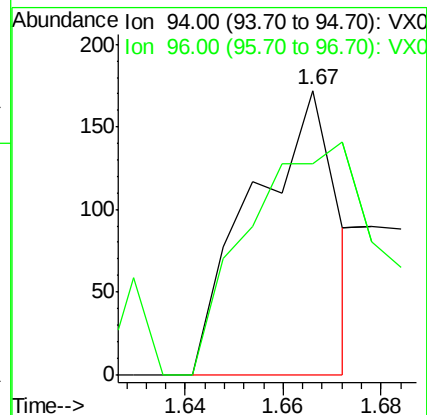
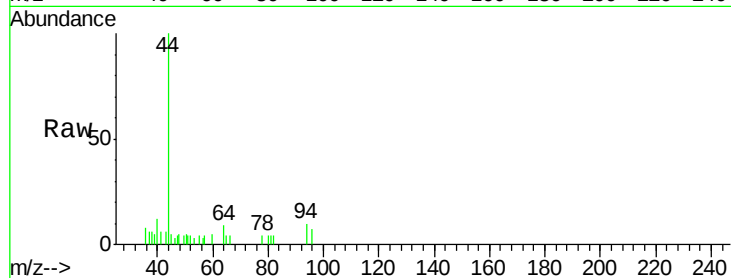
CLEARWELL

Tot Ion: 94 Resp: 207

Ion Ratio Lower Upper

94 100

96 74.4 75.6 113.4#



#6

Chloroethane

Concen: 0.600 ug/l

RT: 1.72 min Scan# 93

Delta R.T. -0.00 min

Lab File: VX008680.D

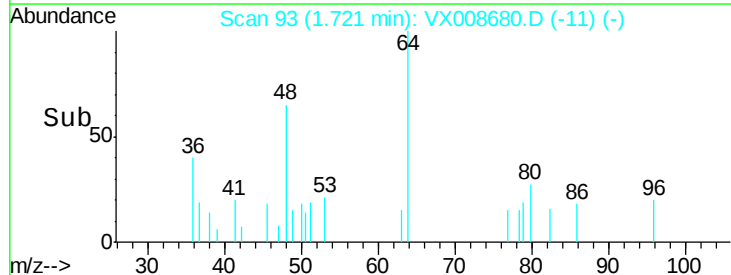
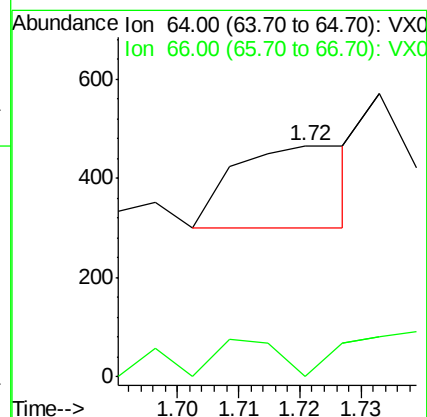
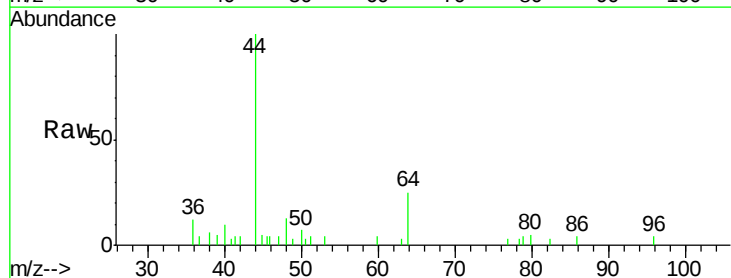
Acq: 05 Apr 2019 13:18

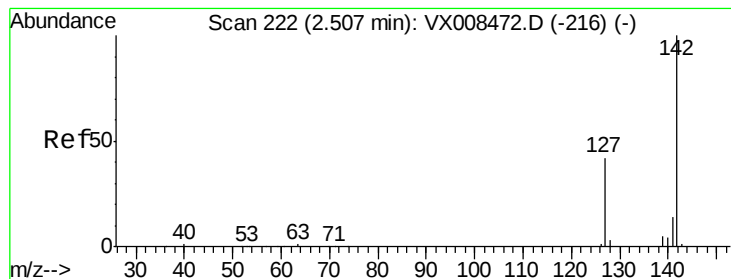
Tgt Ion: 64 Resp: 220

Ion Ratio Lower Upper

64 100

66 0.0 23.9 35.9#

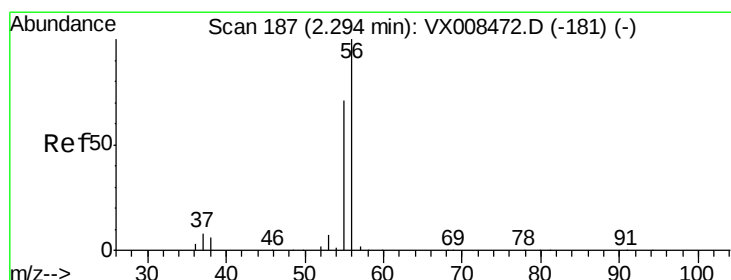
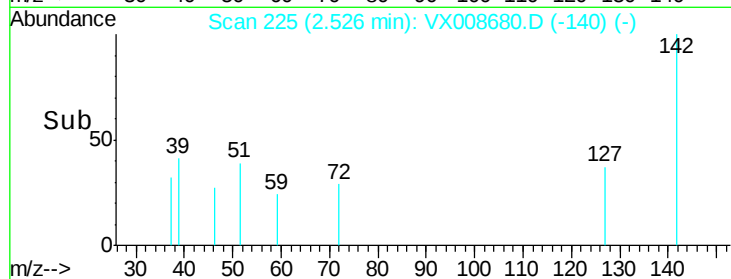
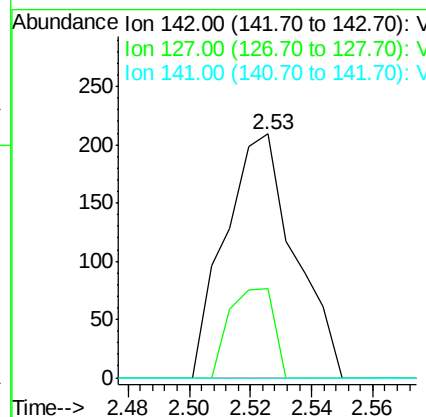
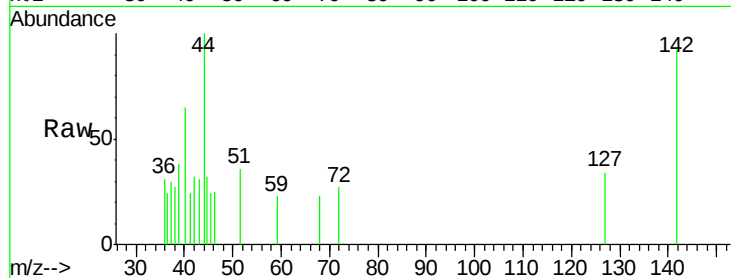




#11
Methvl Iodide
Concen: 0.809 ug/l
RT: 2.53 min Scan# 225
Delta R.T. 0.02 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

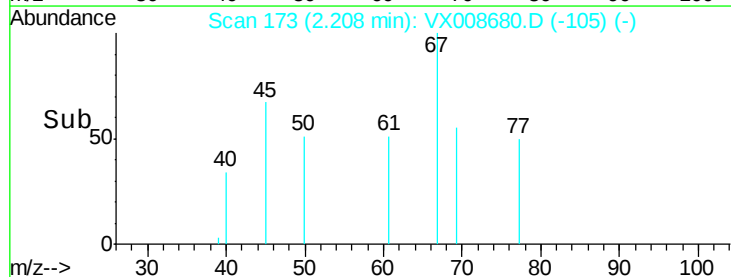
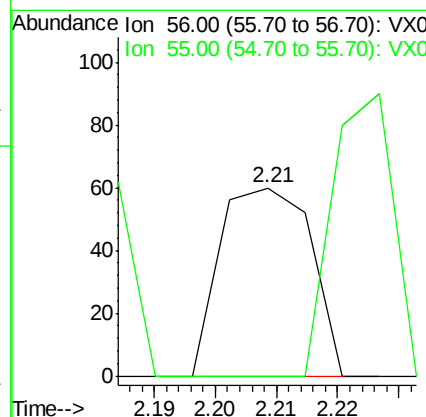
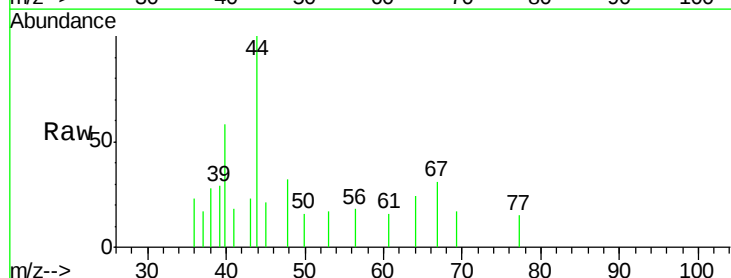
Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

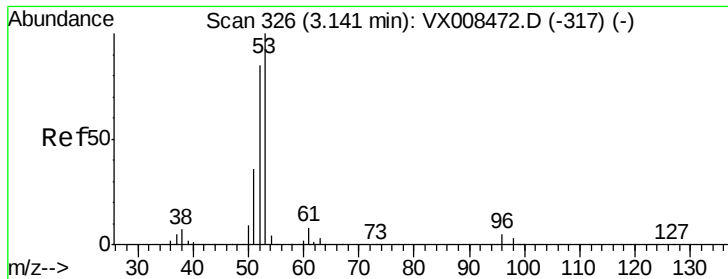
Tot Ion:142 Resp: 329
Ion Ratio Lower Upper
142 100
127 36.8 22.1 66.5
141 0.0 7.4 22.3#



#13
Acrolein
Concen: 0.668 ug/l
RT: 2.21 min Scan# 173
Delta R.T. -0.09 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

Tgt Ion: 56 Resp: 61
Ion Ratio Lower Upper
56 100
55 101.6 58.6 87.8#





#14

Acrylonitrile

Concen: 0.313 ug/l

RT: 3.16 min Scan# 329

Delta R.T. 0.02 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampled :

CLEARWELL

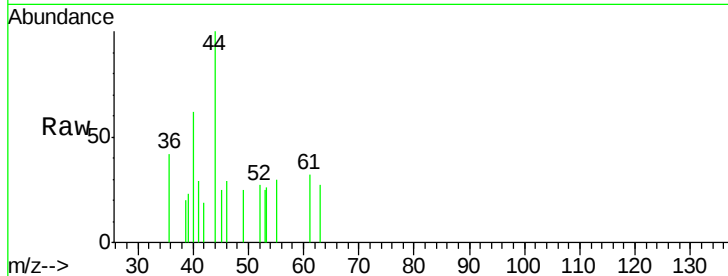
Tot Ion: 53 Resp: 92

Ion Ratio Lower Upper

53 100

52 56.5 41.3 124.1

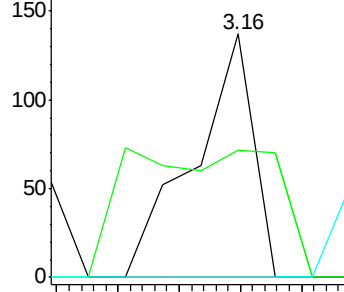
51 0.0 17.5 52.6#



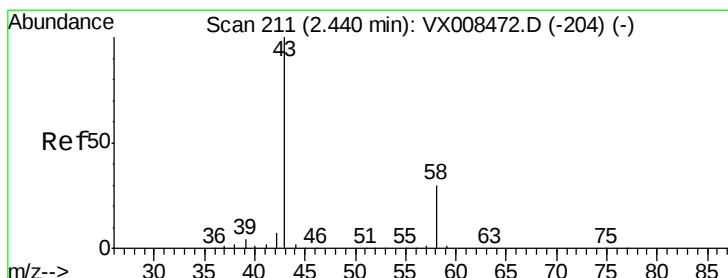
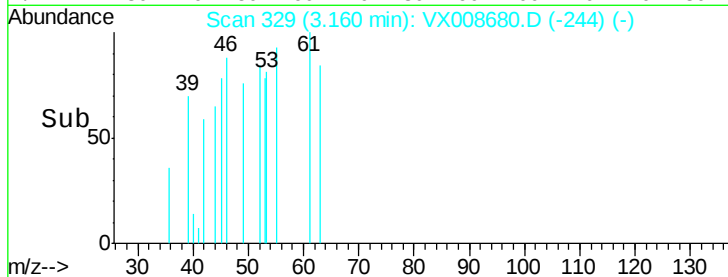
Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



Time-->



#15

Acetone

Concen: 7.108 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.00 min

Lab File: VX008680.D

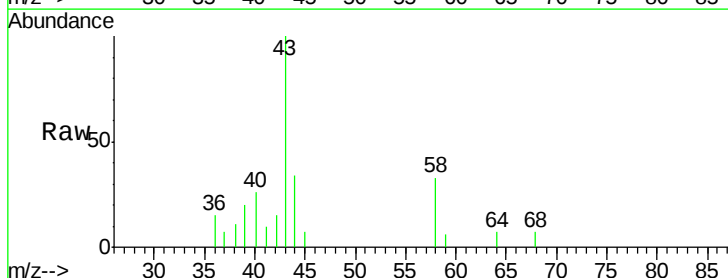
Acq: 05 Apr 2019 13:18

Tgt Ion: 58 Resp: 645

Ion Ratio Lower Upper

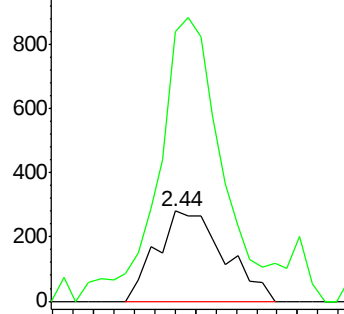
58 100

43 269.0 249.8 374.6

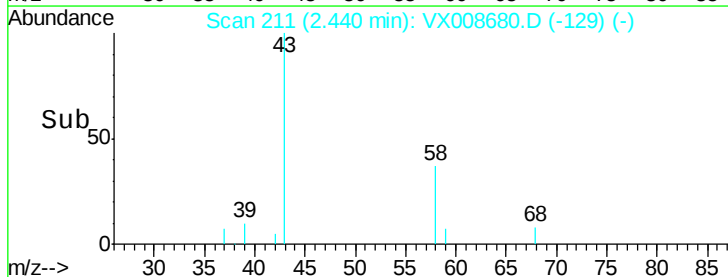


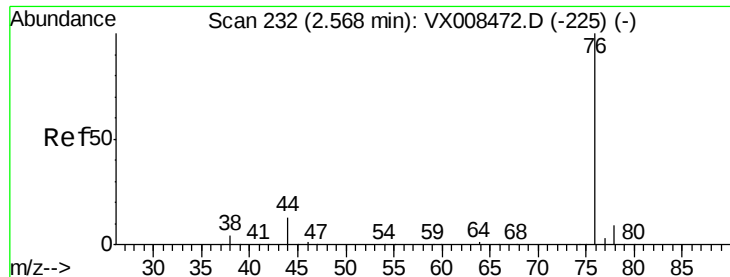
Abundance Ion 58.00 (57.70 to 58.70): VX0

Ion 43.00 (42.70 to 43.70): VX0



Time-->





#16

Carbon Disulfide

Concen: 0.580 ug/l

RT: 2.58 min Scan# 234

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampled :

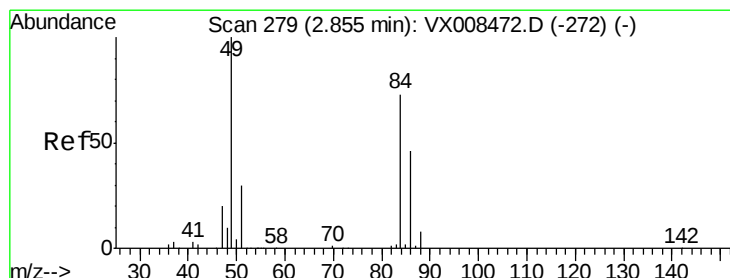
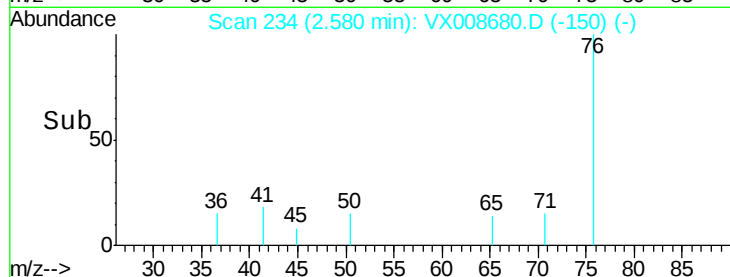
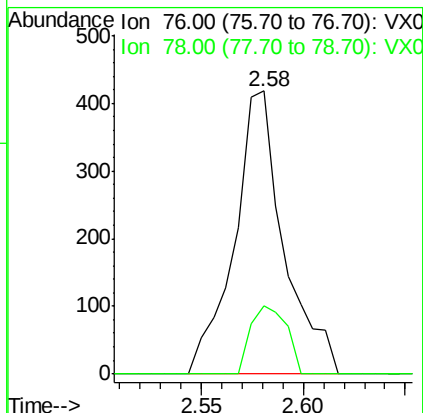
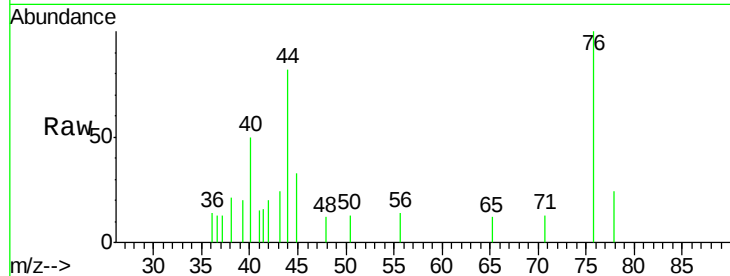
CLEARWELL

Tot Ion: 76 Resp: 708

Ion Ratio Lower Upper

76 100

78 23.9 7.5 11.3#



#18

Methylene Chloride

Concen: 0.200 ug/l

RT: 2.85 min Scan# 279

Delta R.T. -0.00 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Tgt Ion: 84 Resp: 94

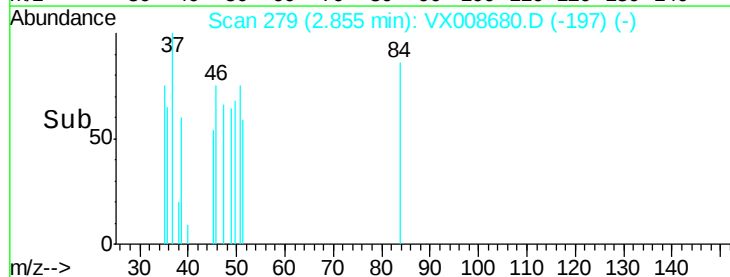
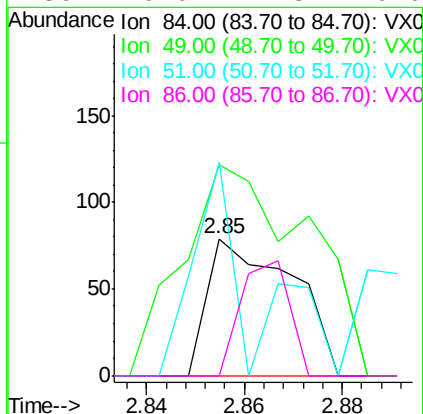
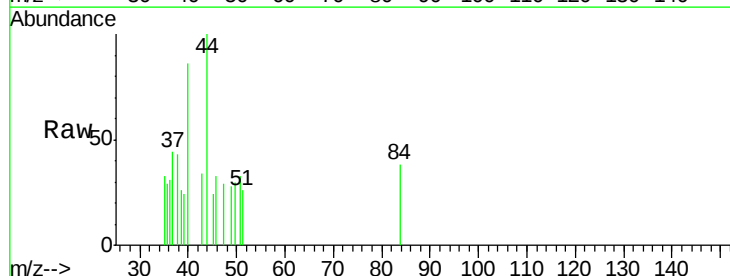
Ion Ratio Lower Upper

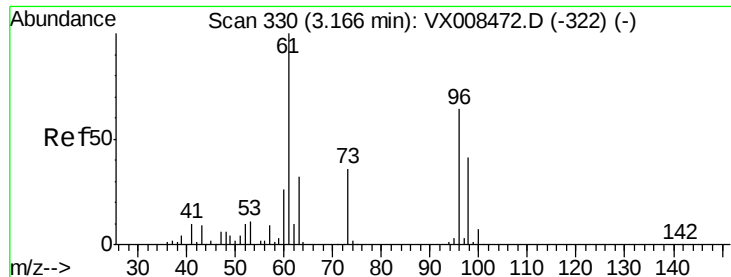
84 100

49 69.6 96.1 144.1#

51 155.7 29.1 43.7#

86 0.0 47.3 70.9#





#19

trans-1,2-Dichloroethene

Concen: 0.241 ug/l

RT: 3.18 min Scan# 332

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampled :

CLEARWELL

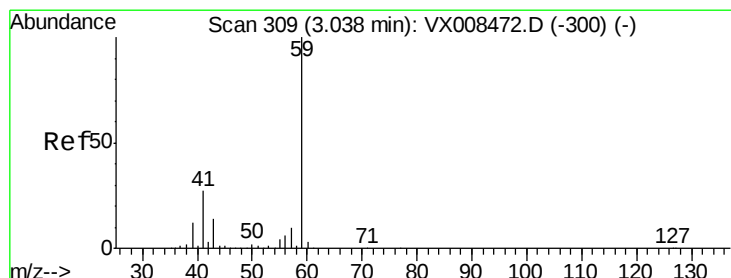
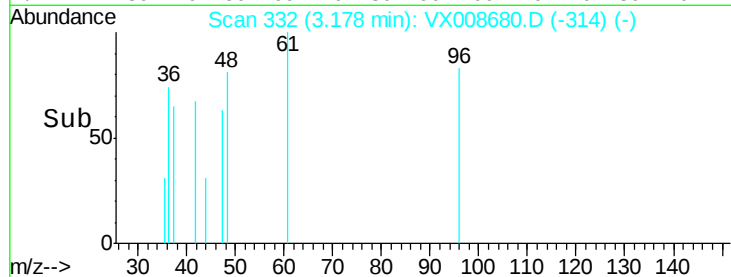
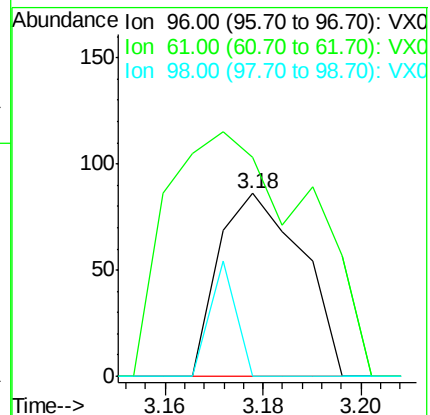
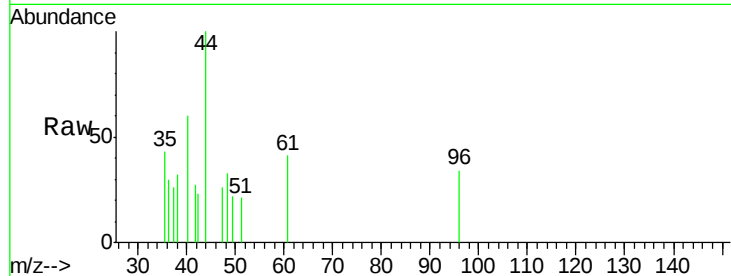
Tot Ion: 96 Resp: 101

Ion Ratio Lower Upper

96 100

61 53.5 109.9 164.9#

98 0.0 50.4 75.6#



#23

tert-Butyl Alcohol

Concen: 0.328 ug/l

RT: 3.06 min Scan# 313

Delta R.T. 0.02 min

Lab File: VX008680.D

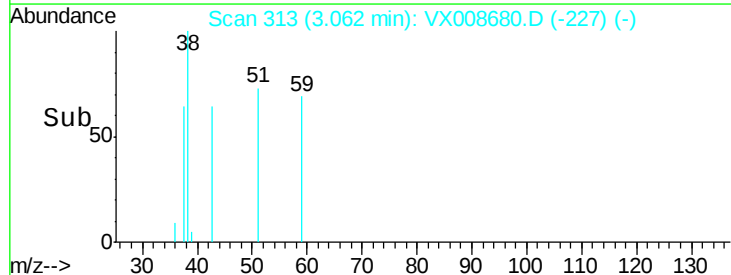
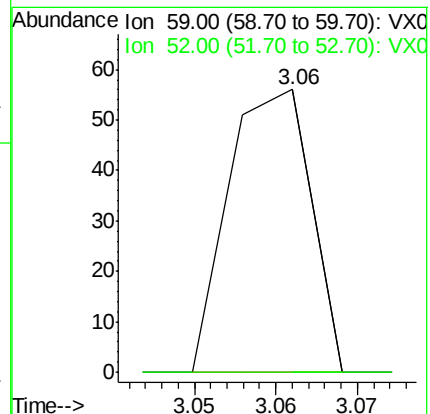
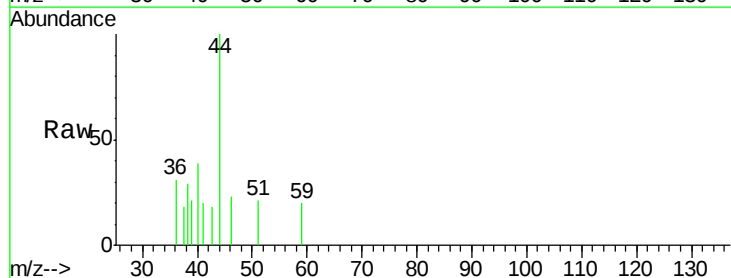
Acq: 05 Apr 2019 13:18

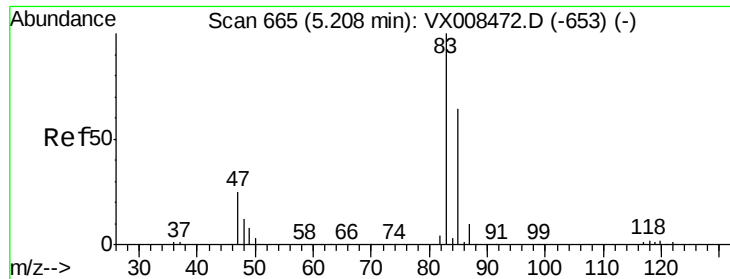
Tgt Ion: 59 Resp: 39

Ion Ratio Lower Upper

59 100

52 184.6 0.2 0.2#

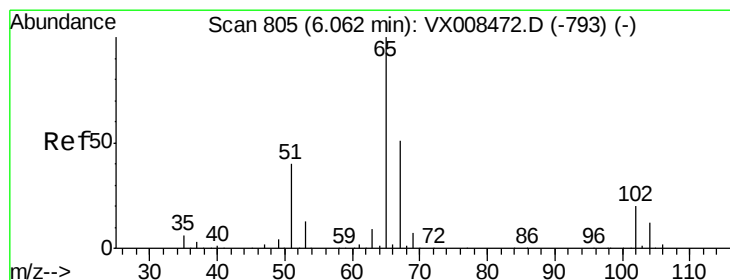
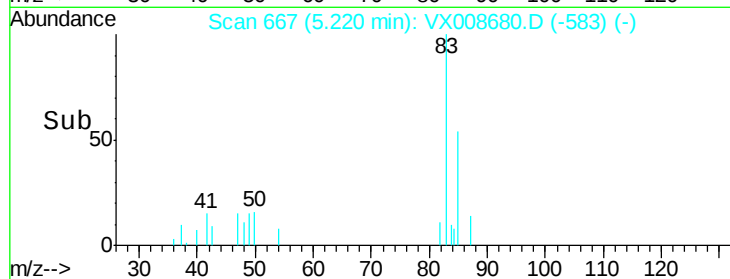
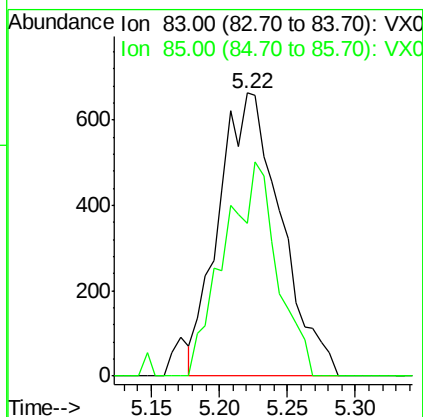
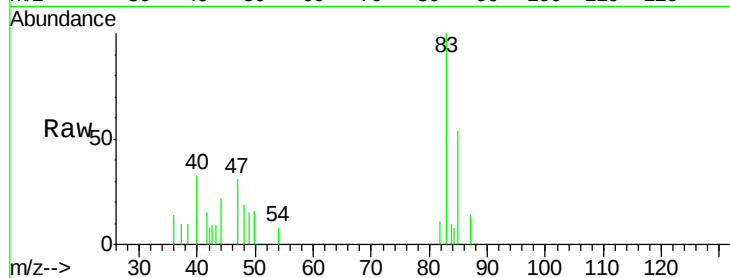




#25
Chloroform
Concen: 2.704 ug/l
RT: 5.22 min Scan# 667
Delta R.T. 0.01 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

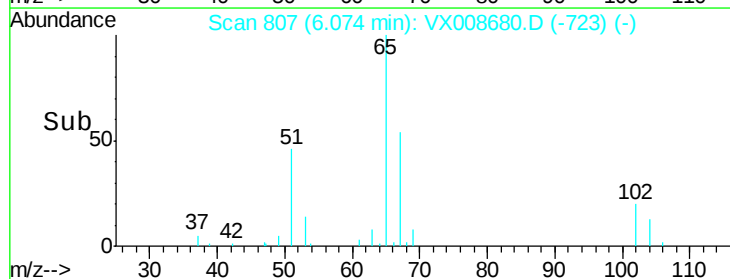
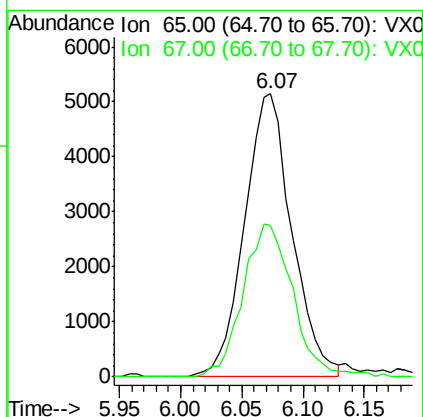
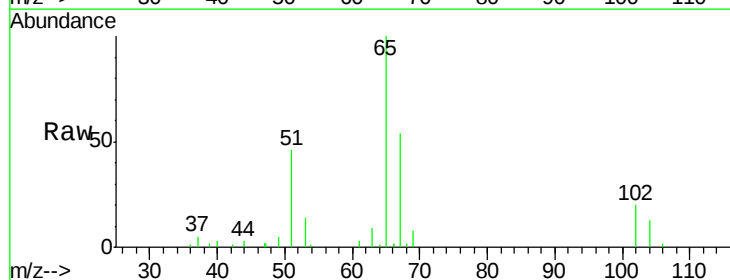
Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

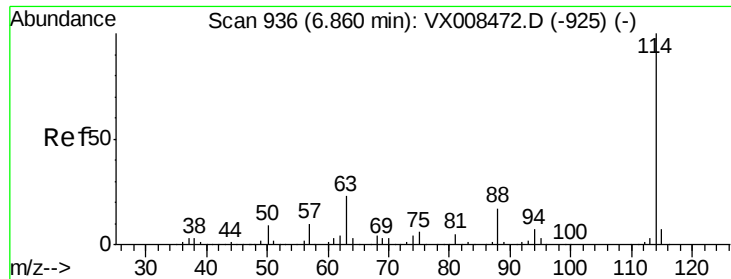
Tot Ion: 83 Resp: 2112
Ion Ratio Lower Upper
83 100
85 54.0 53.8 80.6



#27
1,2-Dichloroethane-d4
Concen: 26.844 ug/l
RT: 6.07 min Scan# 807
Delta R.T. 0.01 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

Tgt Ion: 65 Resp: 13925
Ion Ratio Lower Upper
65 100
67 56.4 42.9 64.3

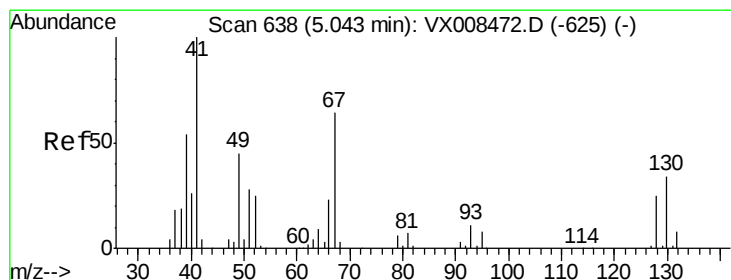
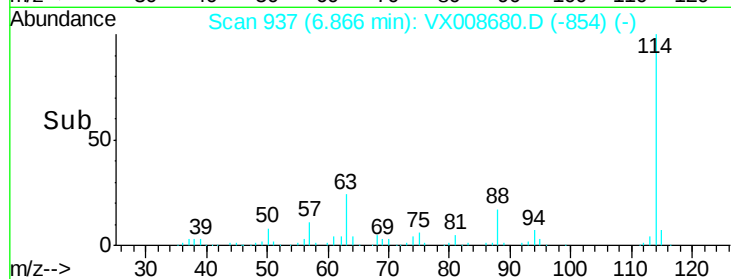
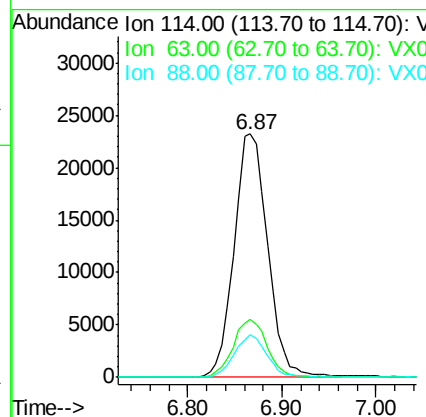
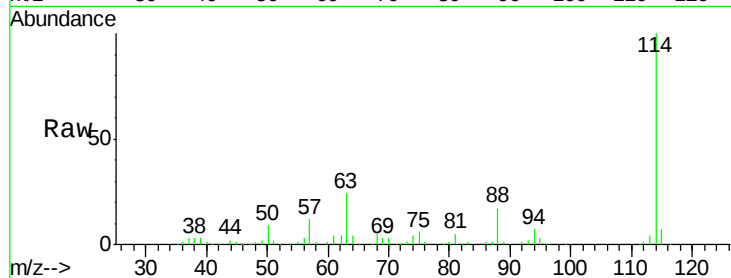




#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.87 min Scan# 937
 Delta R.T. 0.01 min
 Lab File: VX008680.D
 Acq: 05 Apr 2019 13:18

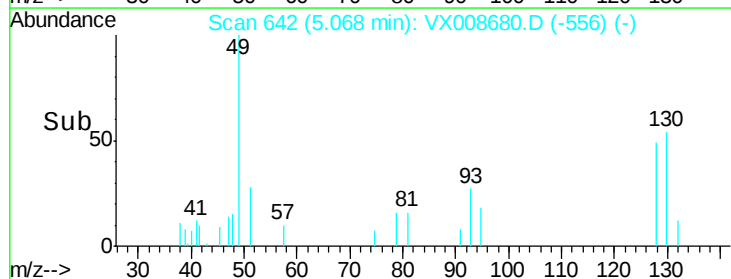
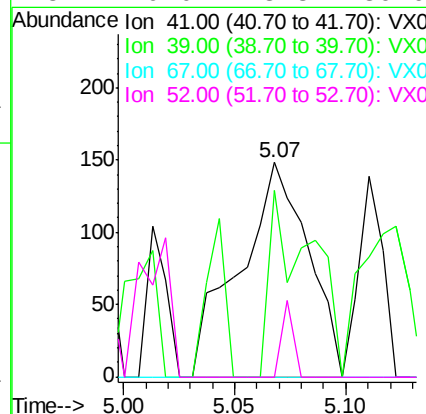
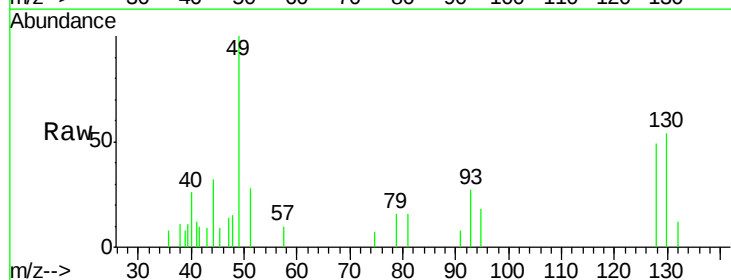
Instrument :
 MSVOA_X
 ClientSampleId :
 CLEARWELL

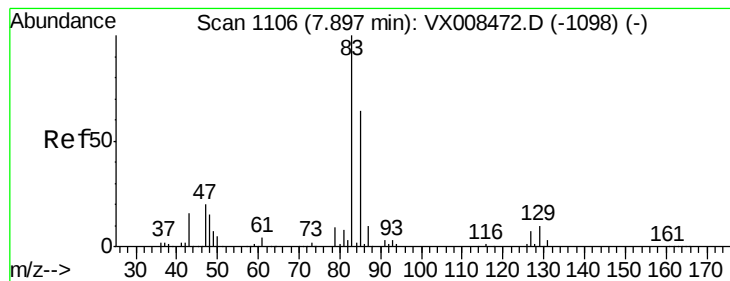
Tot Ion:114 Resp: 57851
 Ion Ratio Lower Upper
 114 100
 63 24.0 14.2 21.4#
 88 16.7 11.9 17.9



#35
 Methacrylonitrile
 Concen: 0.438 ug/l
 RT: 5.07 min Scan# 642
 Delta R.T. 0.02 min
 Lab File: VX008680.D
 Acq: 05 Apr 2019 13:18

Tgt Ion: 41 Resp: 319
 Ion Ratio Lower Upper
 41 100
 39 87.2 27.4 82.0#
 67 0.0 37.9 113.6#
 52 0.0 13.3 39.9#





#41

Bromodichloromethane

Concen: 0.673 ug/l

RT: 7.90 min Scan# 1107

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampled :

CLEARWELL

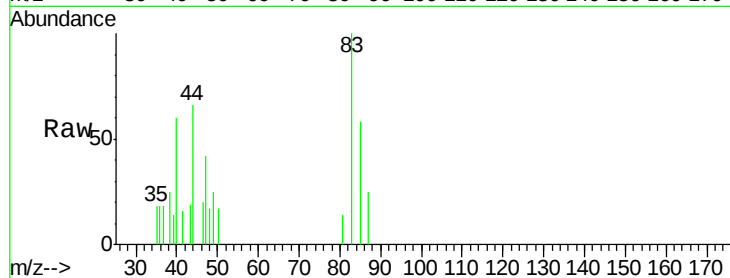
Tot Ion: 83 Resp: 647

Ion Ratio Lower Upper

83 100

85 58.5 51.1 76.7

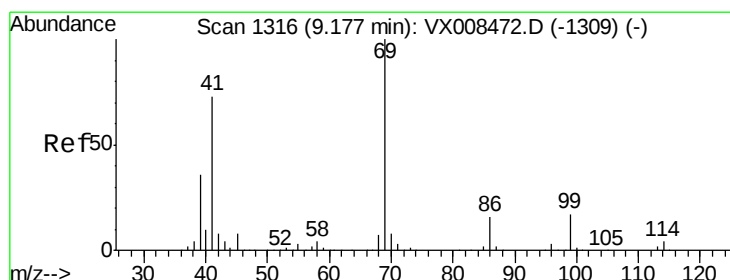
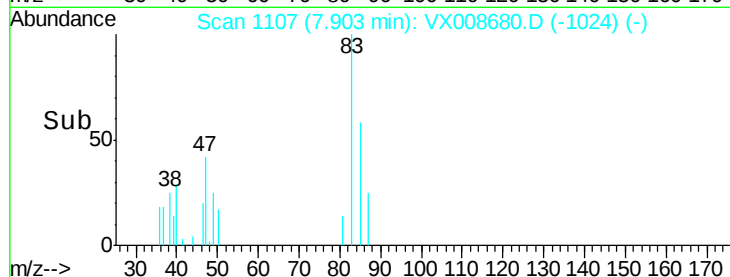
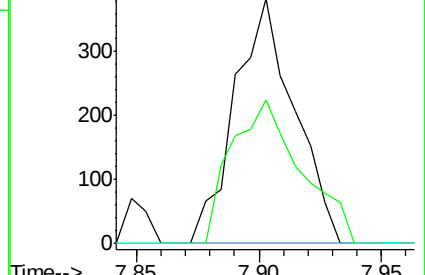
127 0.0 7.2 10.8#



Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 85.00 (84.70 to 85.70): VX0

Ion 127.00 (126.70 to 127.70): V



#51

Ethyl methacrylate

Concen: 0.235 ug/l

RT: 8.72 min Scan# 1241

Delta R.T. -0.46 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

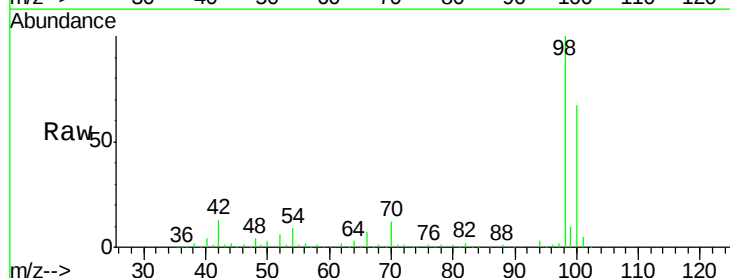
Tgt Ion: 69 Resp: 318

Ion Ratio Lower Upper

69 100

41 73.9 32.1 96.5

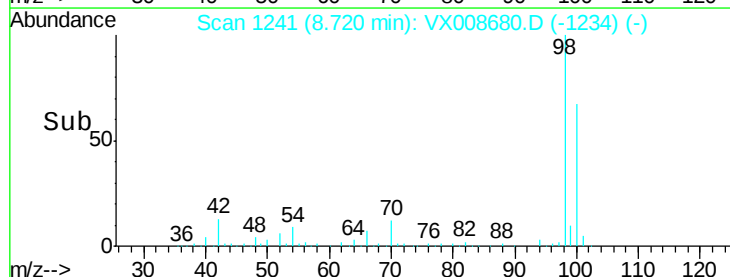
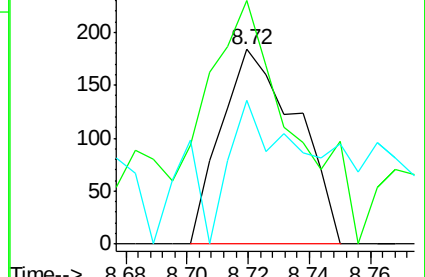
39 22.3 18.8 56.3

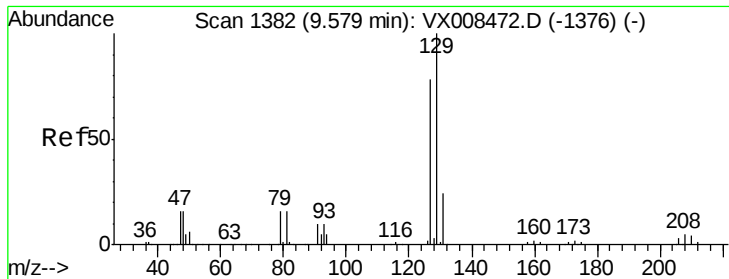


Abundance Ion 69.00 (68.70 to 69.70): VX0

Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0





#53

Dibromochloromethane

Concen: 0.447 ug/l

RT: 9.59 min Scan# 1384

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampleId :

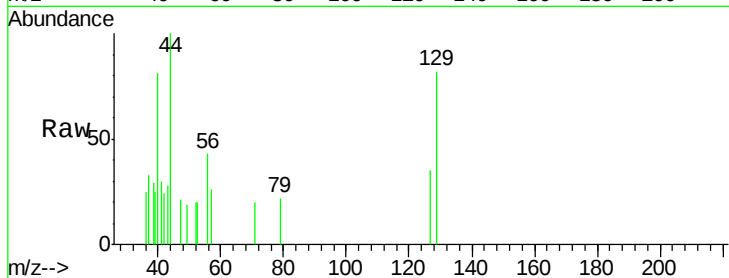
CLEARWELL

Tot Ion:129 Resp: 319

Ion Ratio Lower Upper

129 100

127 49.8 38.4 115.2



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

9.59

250

200

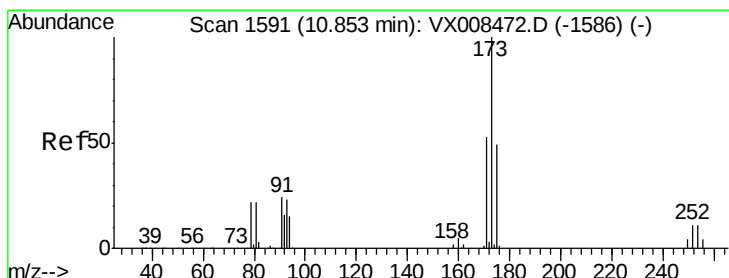
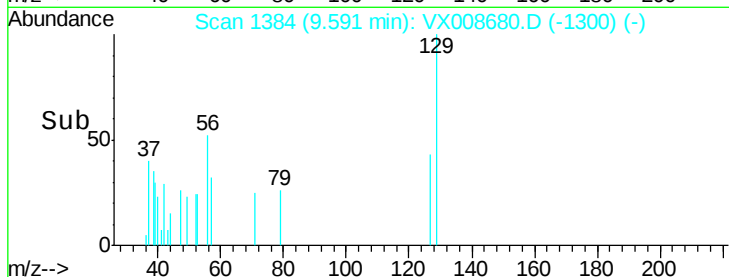
150

100

50

0

Time--> 9.54 9.56 9.58 9.60



#56

Bromoform

Concen: 0.365 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.29 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

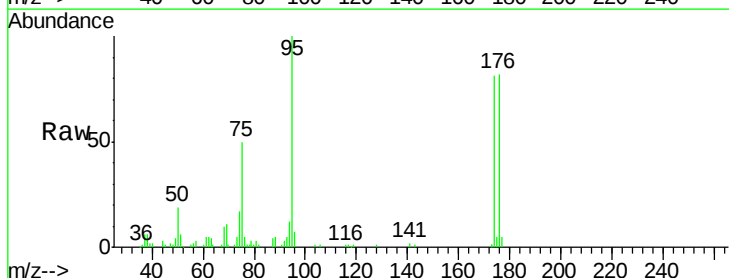
Tgt Ion:173 Resp: 190

Ion Ratio Lower Upper

173 100

175 474.7 38.5 57.7#

254 0.0 7.4 11.2#



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V

800

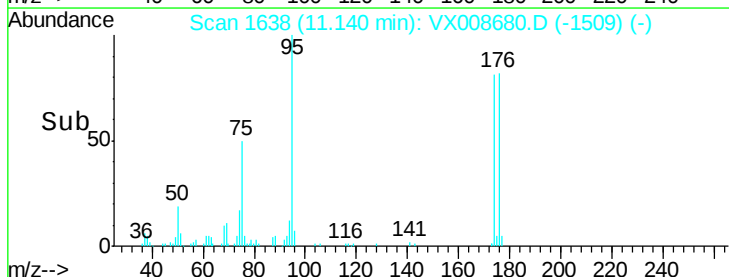
600

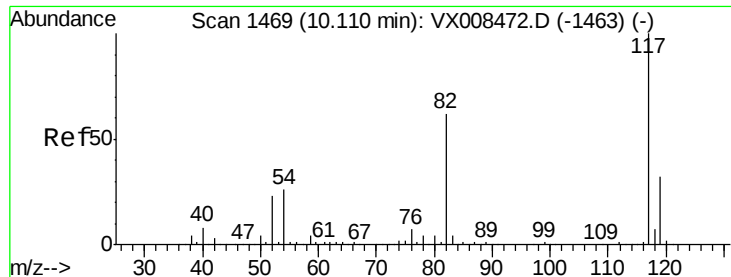
400

200

0

Time--> 11.12 11.14 11.16

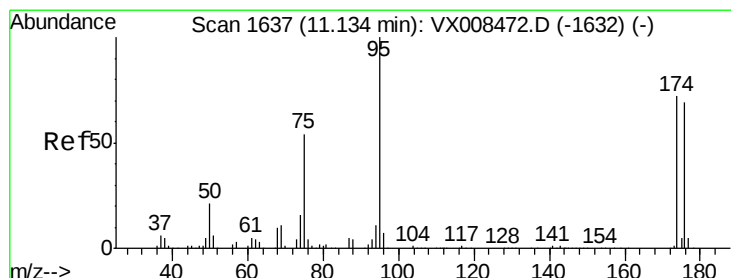
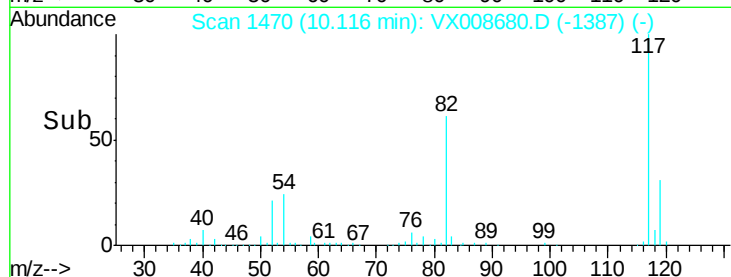
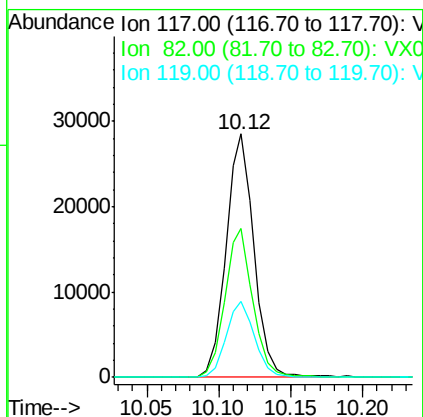
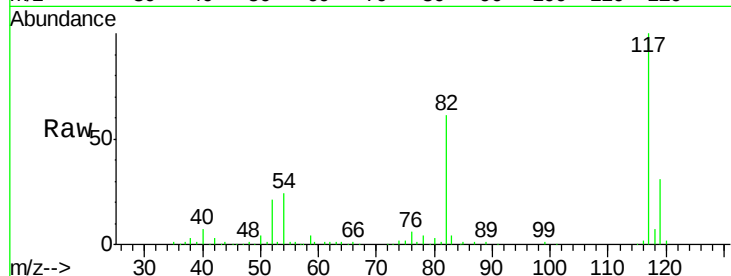




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.12 min Scan# 1470
Delta R.T. 0.01 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

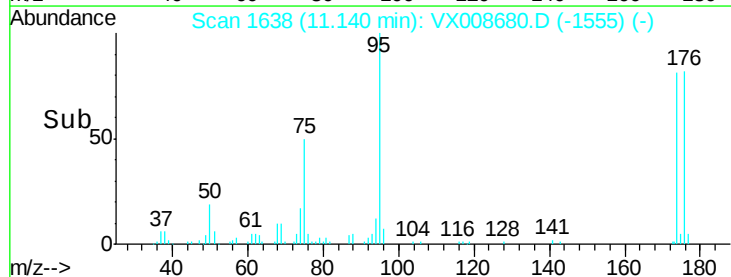
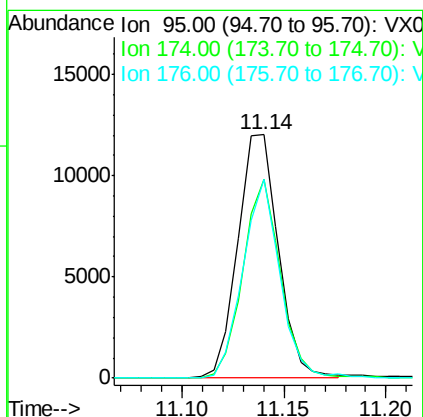
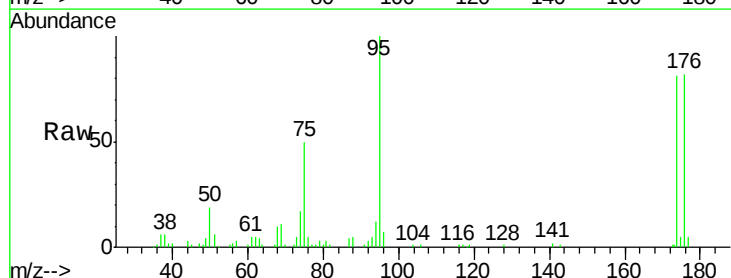
Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

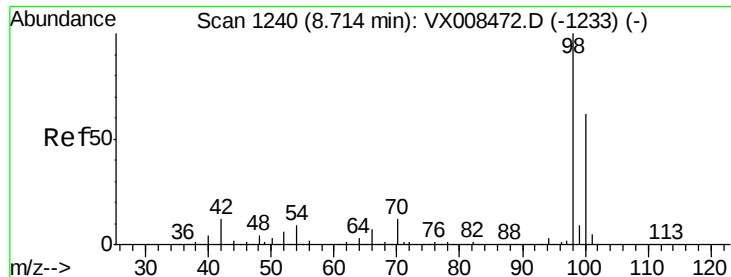
Tot Ion:117 Resp: 38870
Ion Ratio Lower Upper
117 100
82 61.2 40.4 60.6#
119 31.7 25.8 38.6



#60
4-Bromofluorobenzene
Concen: 24.594 ug/l
RT: 11.14 min Scan# 1638
Delta R.T. 0.01 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

Tgt Ion: 95 Resp: 16656
Ion Ratio Lower Upper
95 100
174 75.3 74.9 112.3
176 74.6 70.7 106.1





#63

Toluene-d8

Concen: 36.116 ug/l

RT: 8.72 min Scan# 1241

Delta R.T. 0.01 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampleId :

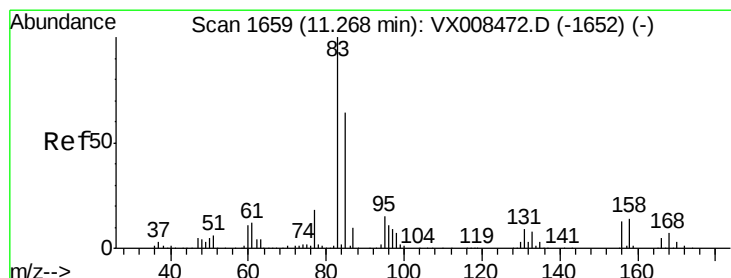
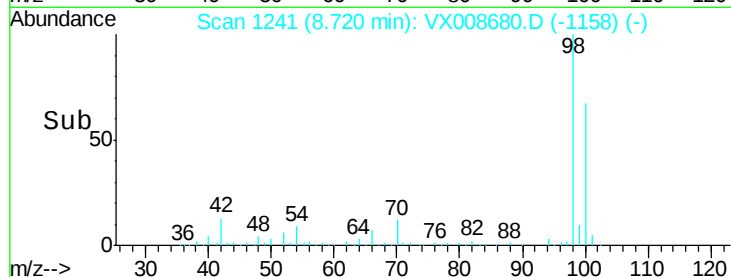
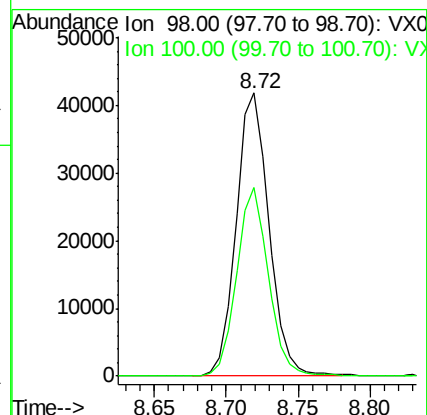
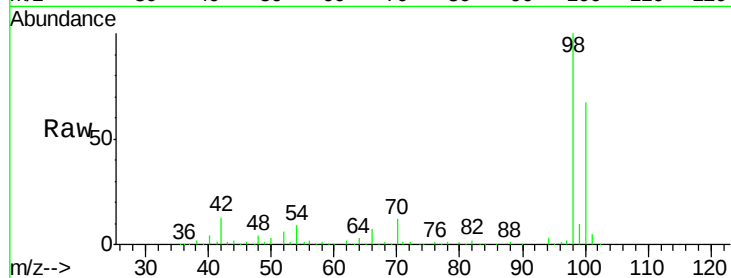
CLEARWELL

Tot Ion: 98 Resp: 66636

Ion Ratio Lower Upper

98 100

100 64.6 50.9 76.3



#71

1,1,2,2-Tetrachloroethane

Concen: 0.256 ug/l

RT: 11.48 min Scan# 1693

Delta R.T. 0.21 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

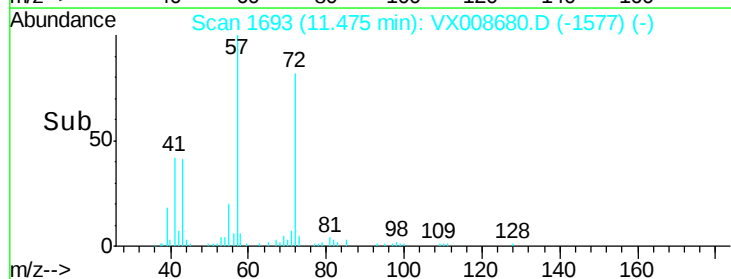
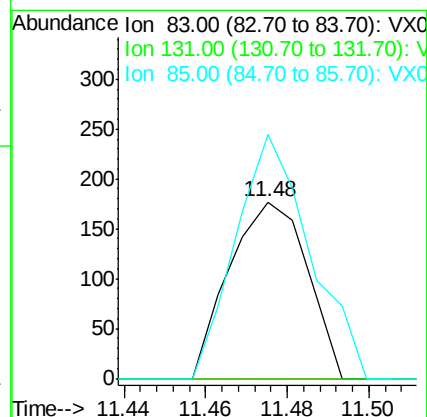
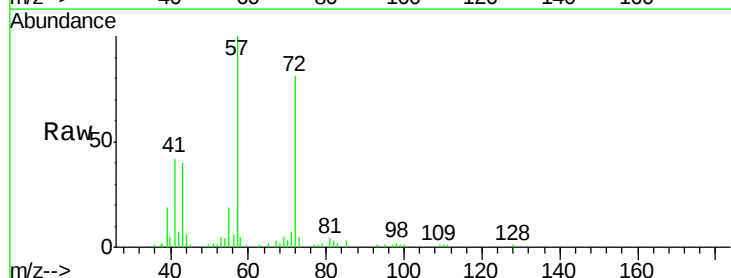
Tgt Ion: 83 Resp: 235

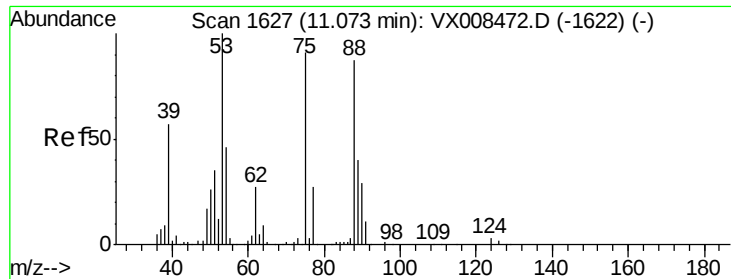
Ion Ratio Lower Upper

83 100

131 0.0 5.4 16.2#

85 131.5 32.8 98.4#

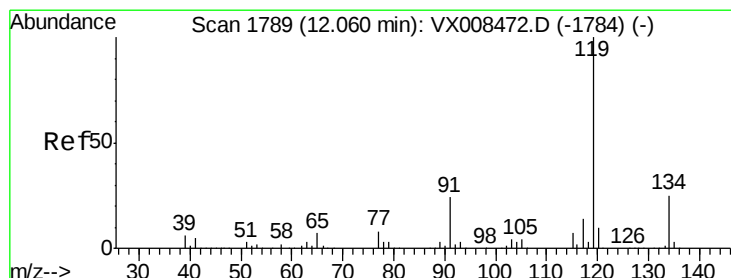
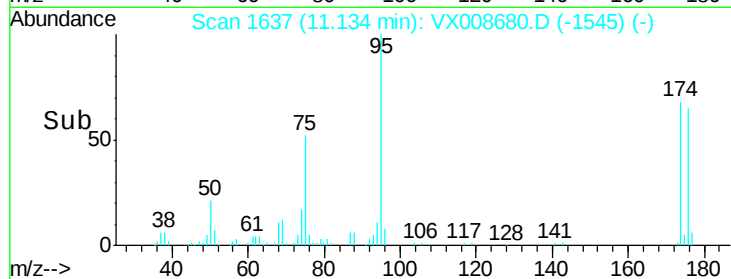
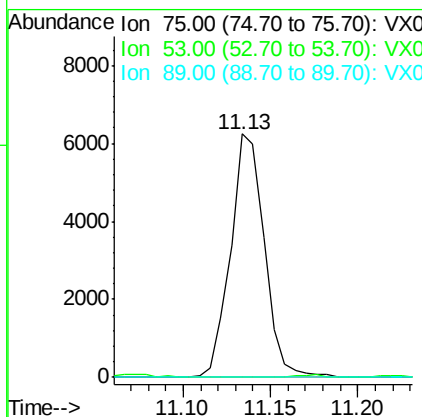
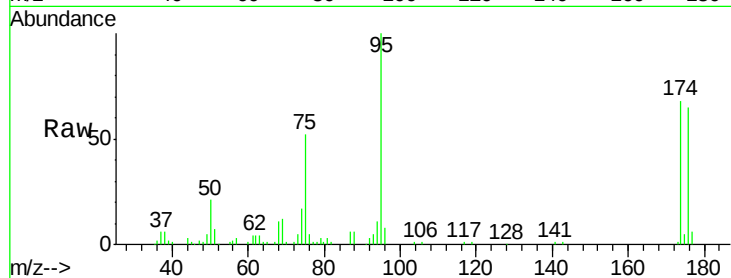




#77
t-1,4-Dichloro-2-butene
Concen: 28.255 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. 0.06 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

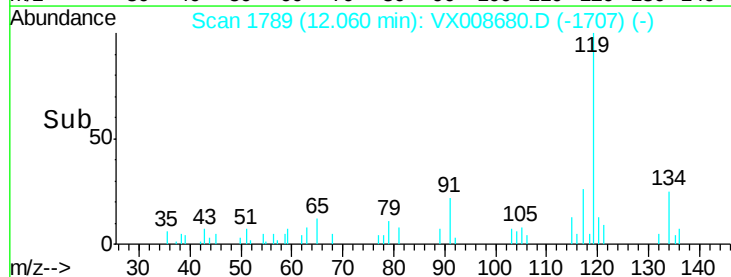
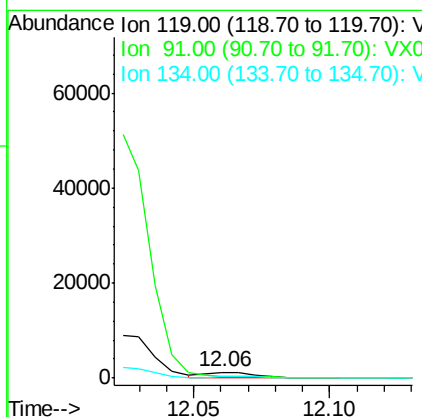
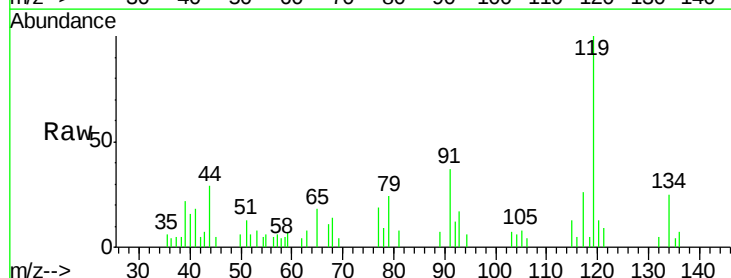
Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

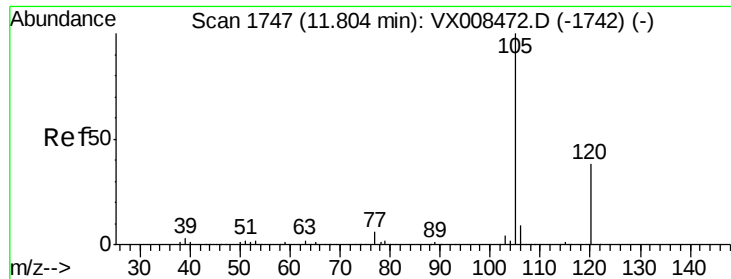
Tot Ion: 75 Resp: 8417
Ion Ratio Lower Upper
75 100
53 0.0 55.5 166.7#
89 0.0 24.4 73.2#



#79
tert-butylbenzene
Concen: 0.847 ug/l
RT: 12.06 min Scan# 1789
Delta R.T. -0.00 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

Tgt Ion: 119 Resp: 1819
Ion Ratio Lower Upper
119 100
91 0.0 0.0 45.0
134 23.6 0.0 55.4

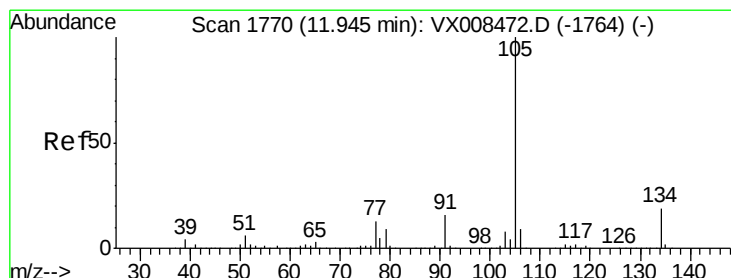
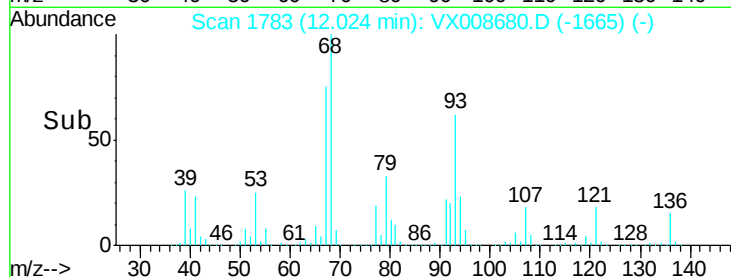
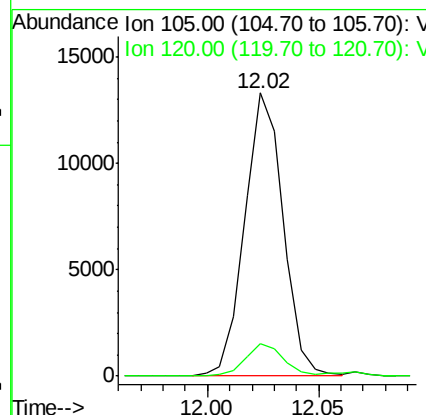
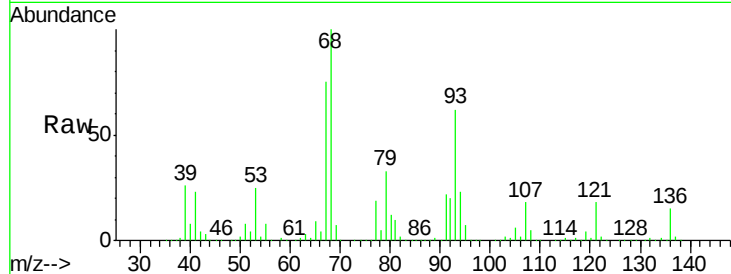




#80
 1,2,4-Trimethylbenzene
 Concen: 7.673 ug/l
 RT: 12.02 min Scan# 1783
 Delta R.T. 0.22 min
 Lab File: VX008680.D
 Acq: 05 Apr 2019 13:18

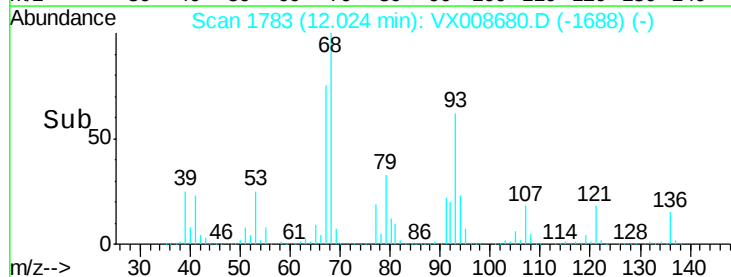
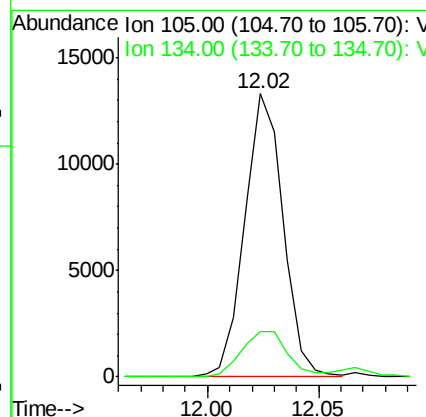
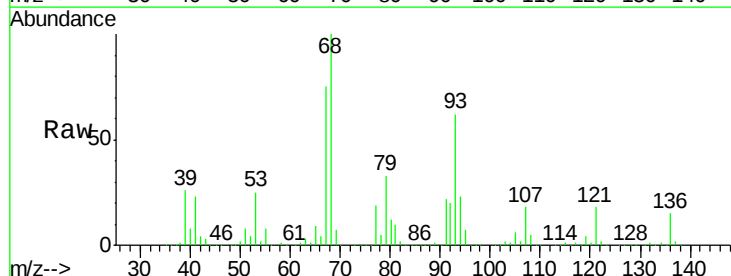
Instrument :
 MSVOA_X
 ClientSampleId :
 CLEARWELL

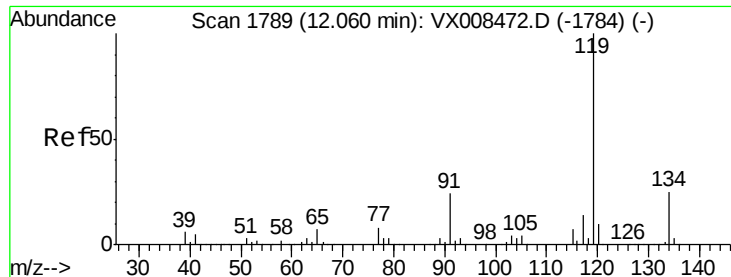
Tot Ion:105 Resp: 16086
 Ion Ratio Lower Upper
 105 100
 120 11.3 0.0 94.0



#81
 sec-Butylbenzene
 Concen: 6.696 ug/l
 RT: 12.02 min Scan# 1783
 Delta R.T. 0.08 min
 Lab File: VX008680.D
 Acq: 05 Apr 2019 13:18

Tgt Ion:105 Resp: 16086
 Ion Ratio Lower Upper
 105 100
 134 19.1 0.0 41.8

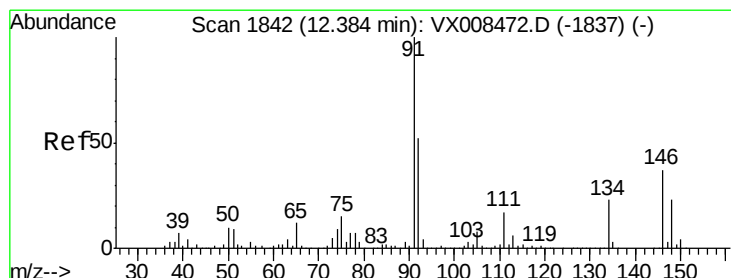
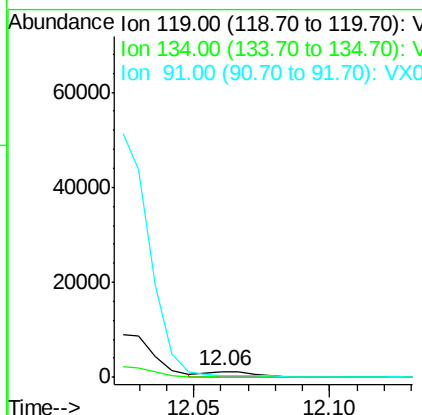
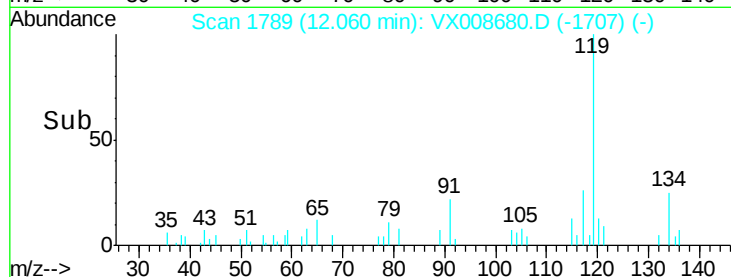
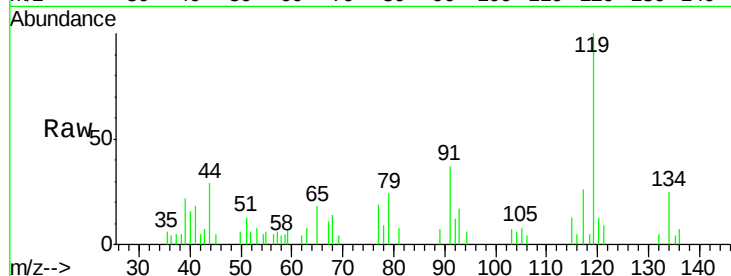




#82
p-Isopropyltoluene
Concen: 0.847 ug/l
RT: 12.06 min Scan# 1789
Delta R.T. -0.00 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

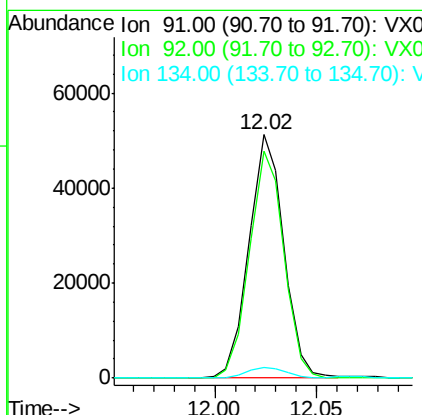
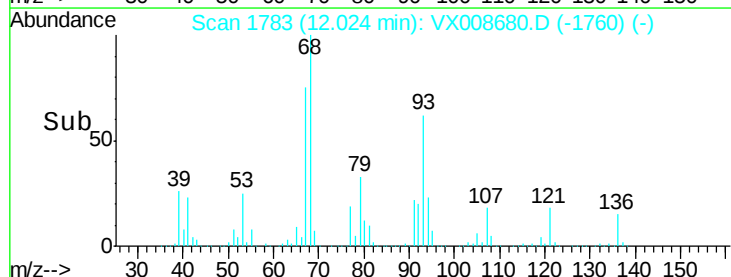
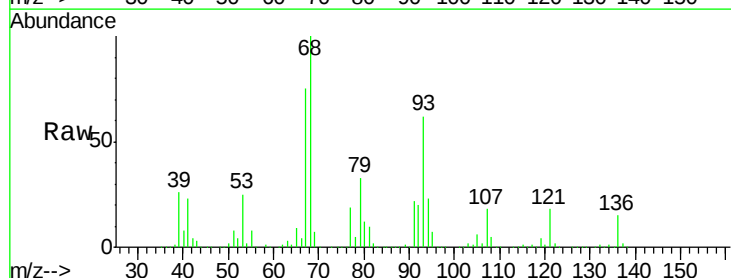
Instrument :
MSVOA_X
ClientSampled :
CLEARWELL

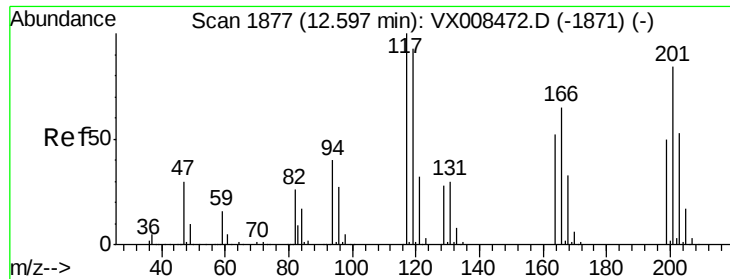
Tot Ion: 119 Resp: 1819
Ion Ratio Lower Upper
119 100
134 23.6 0.0 55.4
91 0.0 0.0 45.0



#85
n-Butylbenzene
Concen: 29.861 ug/l
RT: 12.02 min Scan# 1783
Delta R.T. -0.36 min
Lab File: VX008680.D
Acq: 05 Apr 2019 13:18

Tgt Ion: 91 Resp: 60966
Ion Ratio Lower Upper
91 100
92 92.2 0.0 105.2
134 5.0 0.0 56.4





#86

Hexachloroethane

Concen: 0.251 ug/l

RT: 12.58 min Scan# 1874

Delta R.T. -0.02 min

Lab File: VX008680.D

Acq: 05 Apr 2019 13:18

Instrument :

MSVOA_X

ClientSampleId :

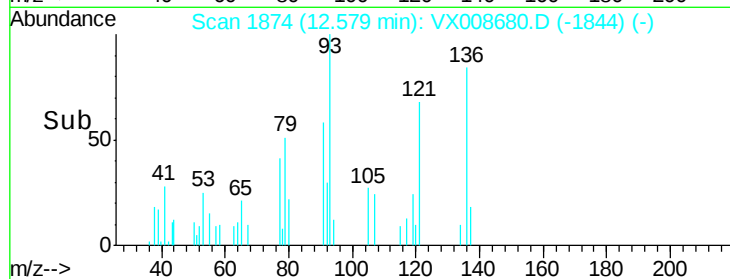
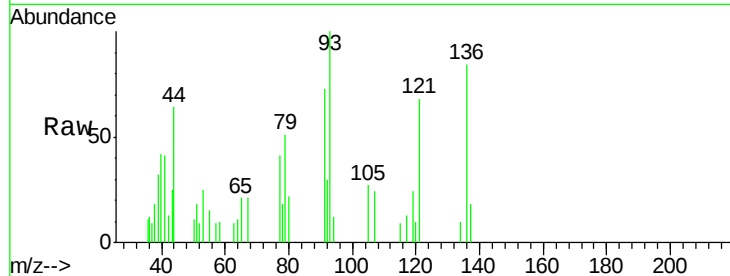
CLEARWELL

Tot Ion:117 Resp: 90

Ion Ratio Lower Upper

117 100

201 0.0 41.1 123.3#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 201.00 (200.70 to 201.70): V

