

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031020\
 Data File : VX015161.D
 Acq On : 10 Mar 2020 11:33
 Operator : JC/SP
 Sample : L1842-12
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Mar 11 07:27:02 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X030420W.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 04 14:19:10 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	333743	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	560409	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	537278	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	266555	50.00	ug/l	0.00

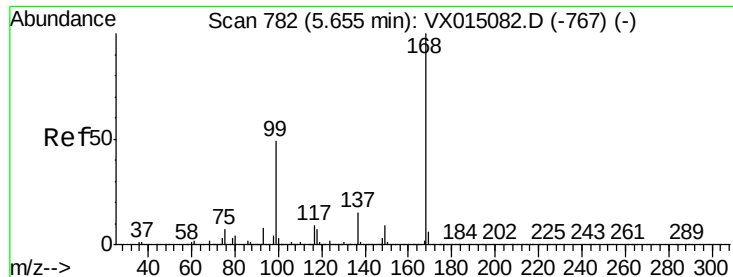
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.06	65	205625	51.93	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.86%	
35) Dibromofluoromethane	5.49	113	172616	48.82	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.64%	
50) Toluene-d8	8.71	98	687627	51.13	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.26%	
62) 4-Bromofluorobenzene	11.14	95	248125	51.73	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.46%	

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	1.19	85	4558	1.560	ug/l	99
3) Chloromethane	1.32	50	2206	0.533	ug/l #	87
5) Bromomethane	1.66	94	795	0.308	ug/l #	79
9) 1,1,2-Trichlorotrifluoroet	2.38	101	29738	9.463	ug/l	96
10) Methyl Iodide	2.51	142	1390	0.392	ug/l #	86
11) Tert butyl alcohol	3.04	59	1128	1.642	ug/l #	64
12) 1,1-Dichloroethene	2.37	96	6972	2.150	ug/l	94
13) Acrolein	2.28	56	420	0.651	ug/l #	79
15) Acrylonitrile	3.12	53	756	0.442	ug/l #	29
16) Acetone	2.43	43	3486	2.174	ug/l #	84
20) Methylene Chloride	2.86	84	1078	0.287	ug/l #	35
24) 1,1-Dichloroethane	3.69	63	4550	0.728	ug/l #	85
27) cis-1,2-Dichloroethene	4.59	96	6452	1.661	ug/l	75
28) Bromochloromethane	5.01	49	798	0.280	ug/l #	72
29) Tetrahydrofuran	5.12	42	768	0.508	ug/l #	71
30) Chloroform	5.20	83	5706	0.936	ug/l	95
32) 1,1,1-Trichloroethane	5.50	97	1909	0.378	ug/l #	40
36) 1,1-Dichloropropene	5.65	75	24150	4.661	ug/l #	42
38) Carbon Tetrachloride	5.78	117	3324	0.680	ug/l	90
42) 1,2-Dichloroethane	6.18	62	2168	0.411	ug/l	94
44) Trichloroethene	7.21	130	384840	89.903	ug/l	98
46) Dibromomethane	7.67	93	616	0.238	ug/l #	39
49) 1,4-Dioxane	7.75	88	1793	19.273	ug/l #	33
52) Toluene	8.78	92	2749	0.293	ug/l	96
55) 1,1,2-Trichloroethane	9.21	97	2108	0.545	ug/l #	92
76) 1,2,3-Trichloropropane	11.13	75	122798	23.095	ug/l #	34
81) trans-1,4-Dichloro-2-buten	11.13	75	122798	65.545	ug/l #	11
93) 1,2,4-Trichlorobenzene	13.63	180	1239	0.215	ug/l	78
95) Naphthalene	13.83	128	1318	1.492	ug/l #	55

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 782

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

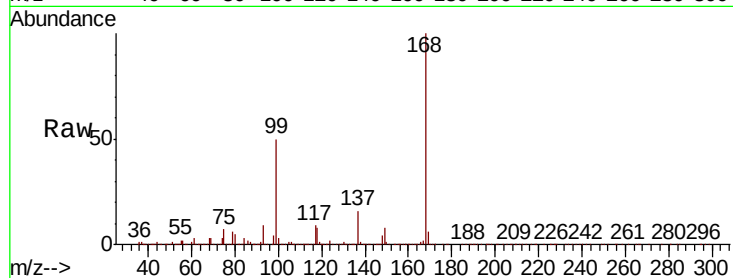
ClientSampleId :

Tot Ion:168 Resp: 333743

Ion Ratio Lower Upper

168 100

99 50.1 39.4 59.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

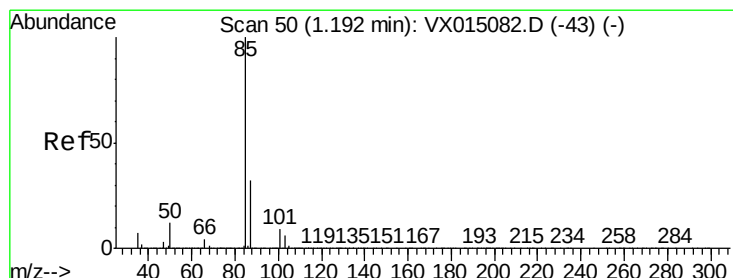
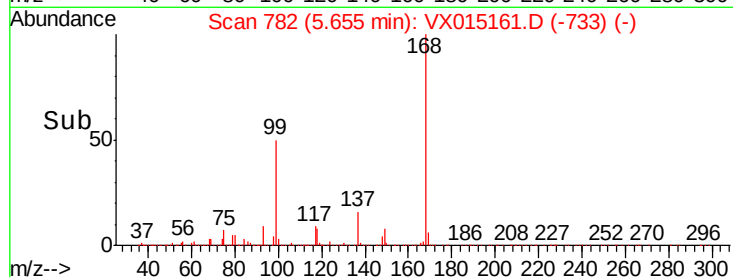
5.65

100000

50000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 1.560 ug/l

RT: 1.19 min Scan# 50

Delta R.T. 0.00 min

Lab File: VX015161.D

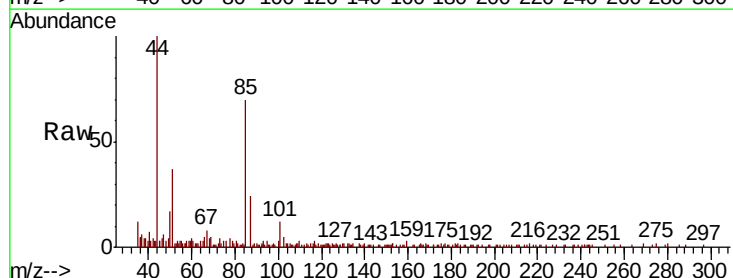
Acq: 10 Mar 2020 11:33

Tgt Ion: 85 Resp: 4558

Ion Ratio Lower Upper

85 100

87 31.5 16.2 48.5



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0

1.19

5000

4000

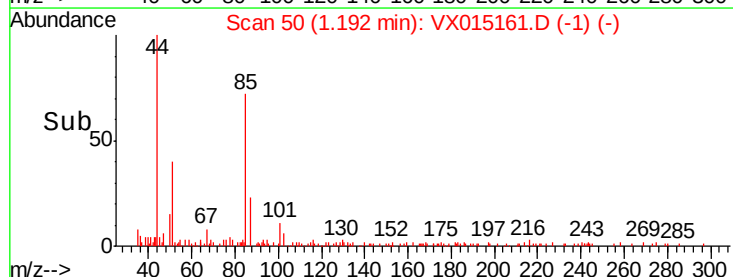
3000

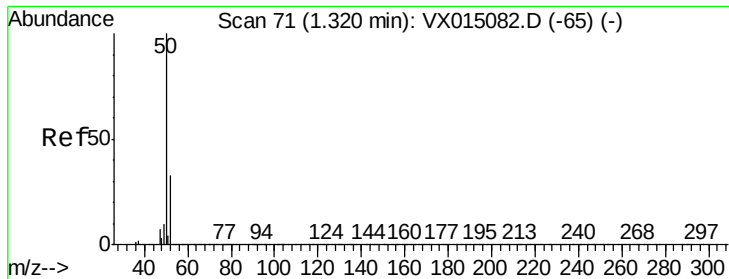
2000

1000

0

Time-->





#3

Chloromethane

Concen: 0.533 ug/l

RT: 1.32 min Scan# 71

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

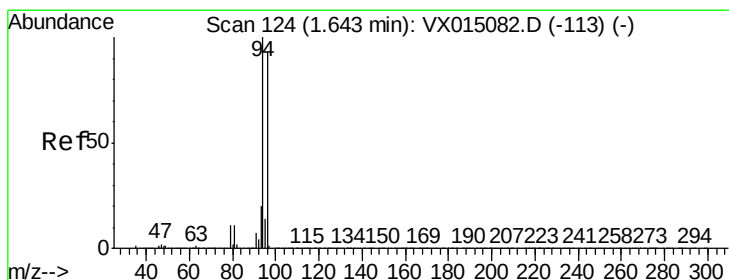
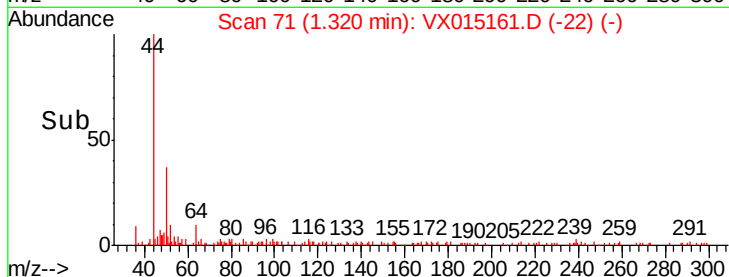
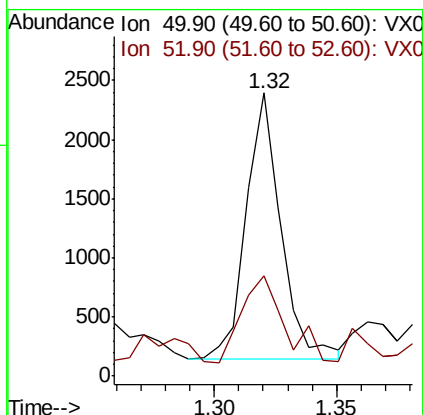
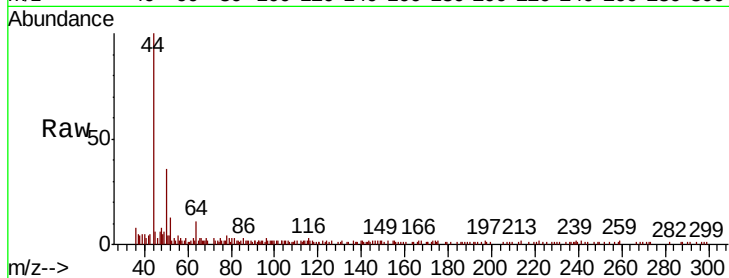
Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 50 Resp: 2206

Ion Ratio Lower Upper

50 100

52 25.6 26.2 39.2#



#5

Bromomethane

Concen: 0.308 ug/l

RT: 1.66 min Scan# 126

Delta R.T. 0.01 min

Lab File: VX015161.D

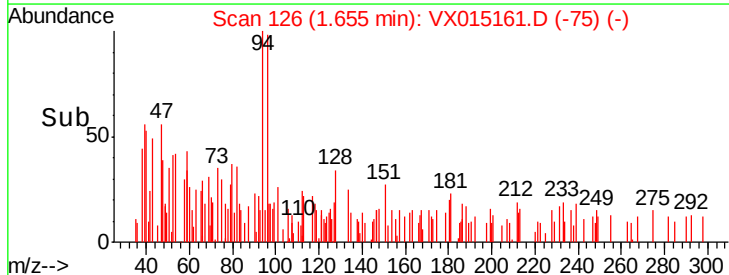
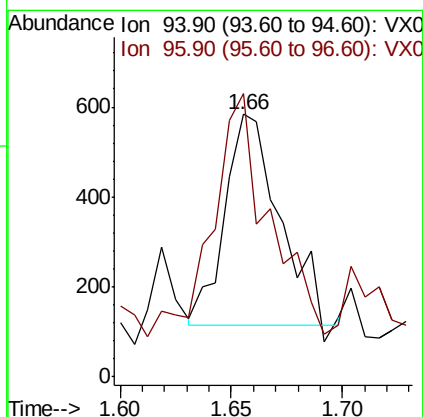
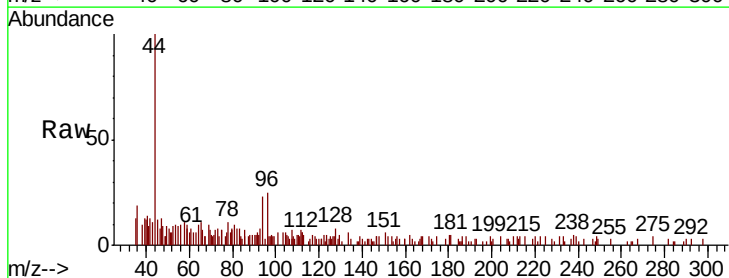
Acq: 10 Mar 2020 11:33

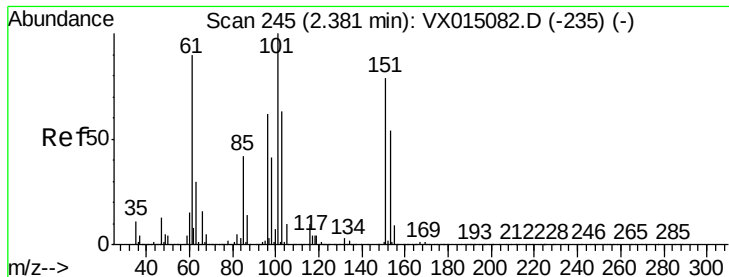
Tgt Ion: 94 Resp: 795

Ion Ratio Lower Upper

94 100

96 113.5 74.6 111.8#





#9

1,1,2-Trichlorotrifluoroethane

Concen: 9.463 ug/l

RT: 2.38 min Scan# 245

Delta R.T. 0.00 min

Lab File: VX015161.D

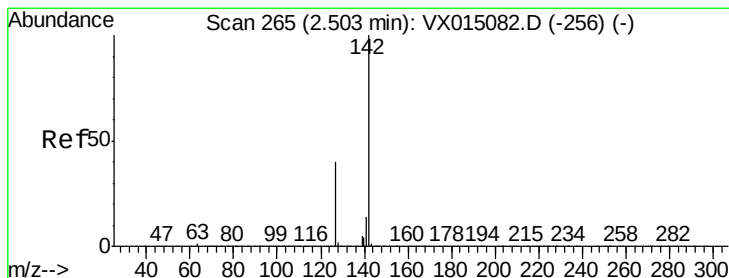
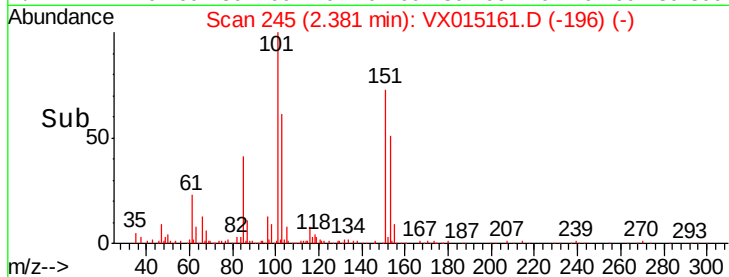
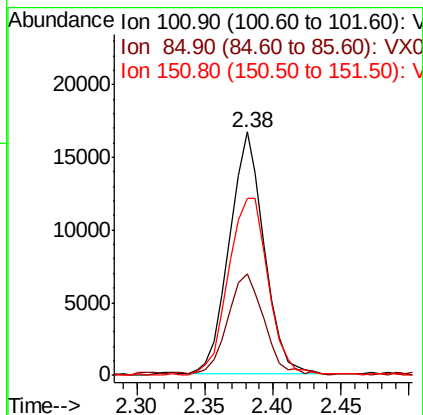
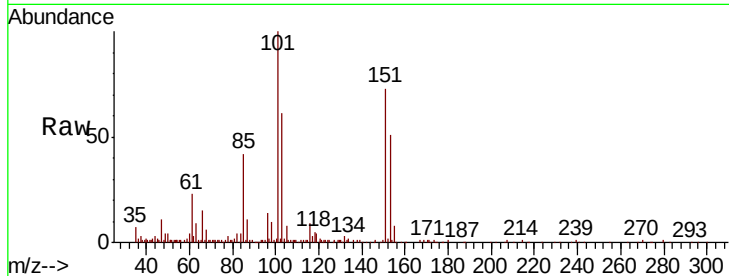
Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

ClientSampleId :

Tot Ion:	101	Resp:	29738
Ion	Ratio	Lower	Upper
101	100		
85	44.3	33.7	50.5
151	84.2	64.0	96.0



#10

Methyl Iodide

Concen: 0.392 ug/l

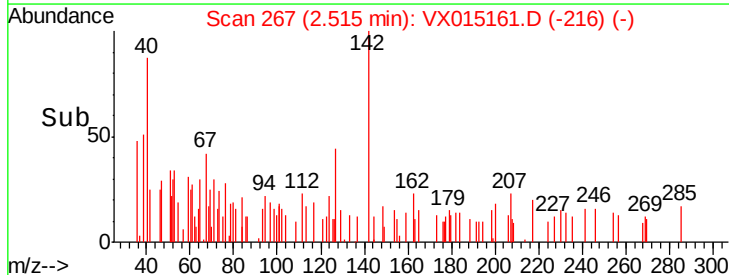
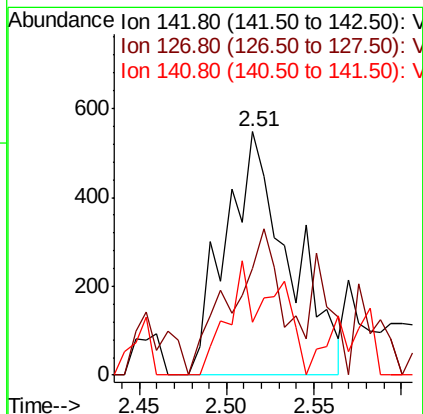
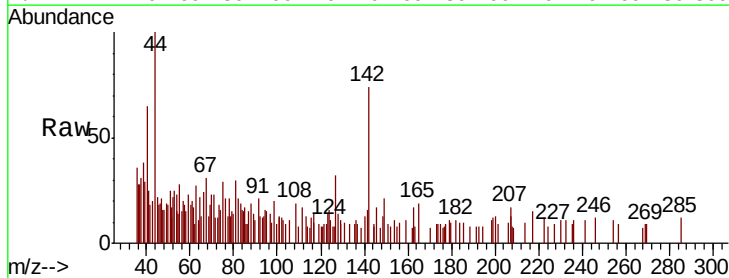
RT: 2.51 min Scan# 267

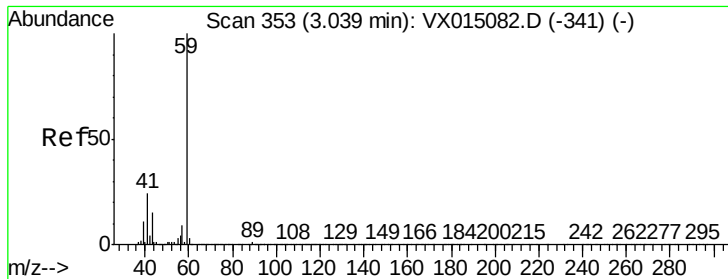
Delta R.T. 0.01 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Tgt Ion:	142	Resp:	1390
Ion	Ratio	Lower	Upper
142	100		
127	49.0	31.7	47.5#
141	17.8	11.3	16.9#



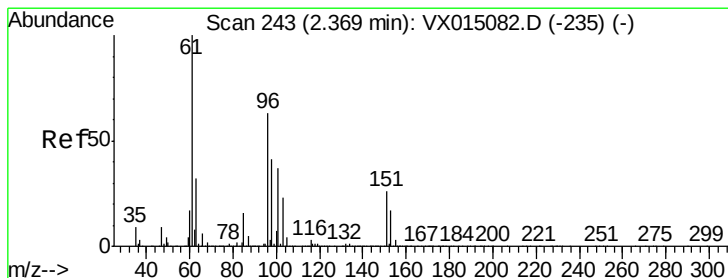
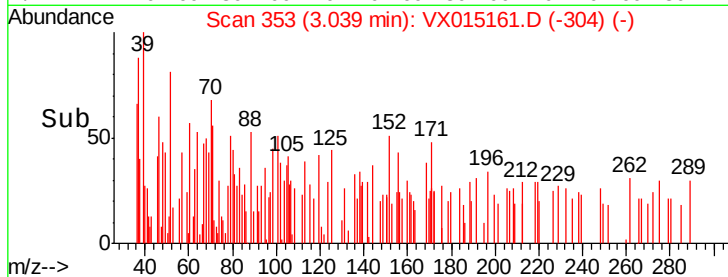
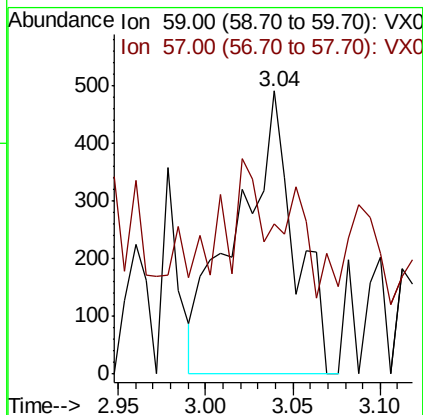
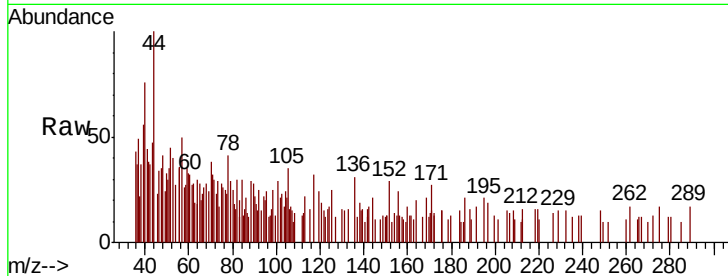


#11

Tert butyl alcohol
Concen: 1.642 ug/l
RT: 3.04 min Scan# 353
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Instrument :
MSVOA_X
ClientSampled :

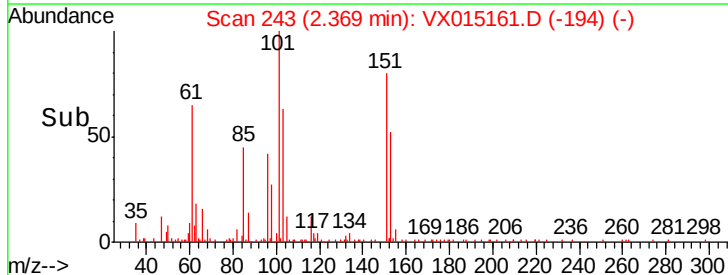
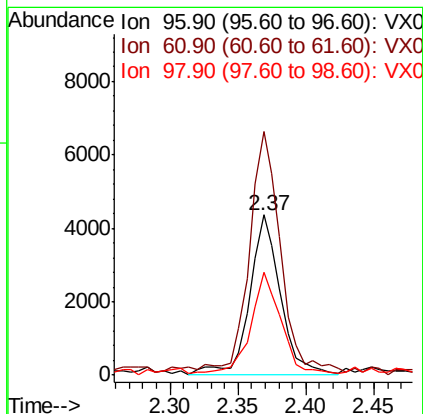
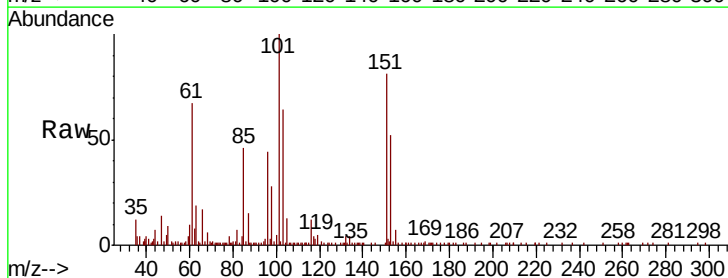
Tot Ion: 59 Resp: 1128
Ion Ratio Lower Upper
59 100
57 23.7 8.2 12.4#

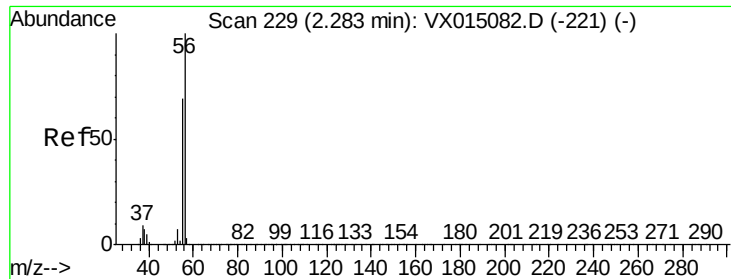


#12

1,1-Dichloroethene
Concen: 2.150 ug/l
RT: 2.37 min Scan# 243
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion: 96 Resp: 6972
Ion Ratio Lower Upper
96 100
61 147.4 126.2 189.4
98 63.1 51.4 77.0





#13

Acrolein

Concen: 0.651 ug/l

RT: 2.28 min Scan# 229

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

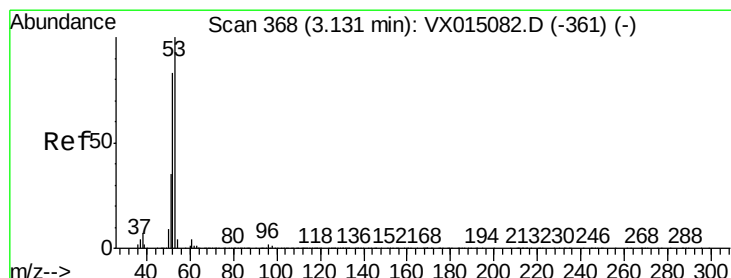
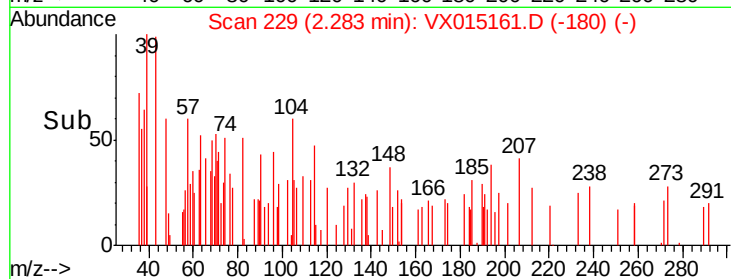
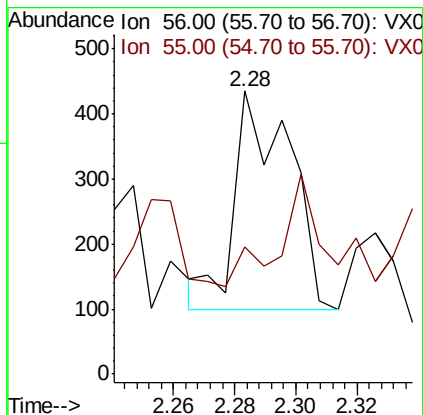
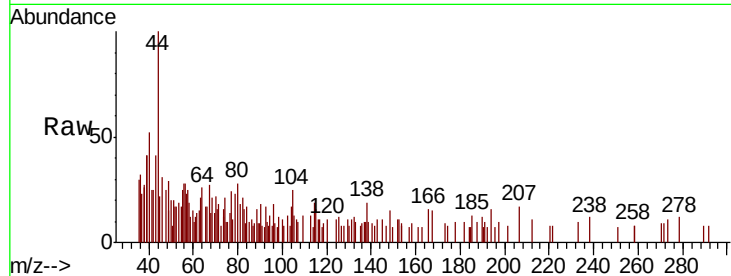
ClientSampleId :

Tot Ion: 56 Resp: 420

Ion Ratio Lower Upper

56 100

55 52.4 55.4 83.0#



#15

Acrylonitrile

Concen: 0.442 ug/l

RT: 3.12 min Scan# 367

Delta R.T. -0.01 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

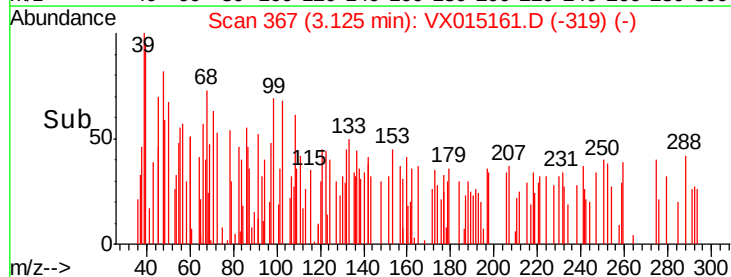
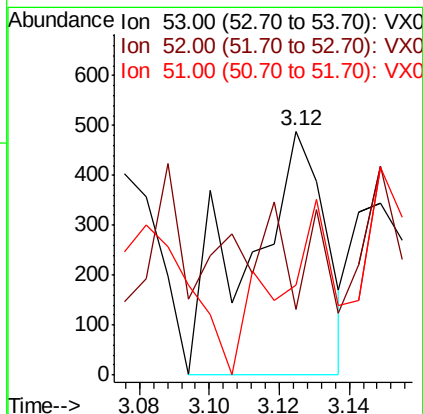
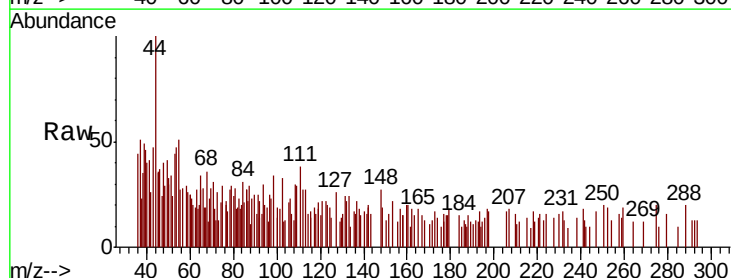
Tgt Ion: 53 Resp: 756

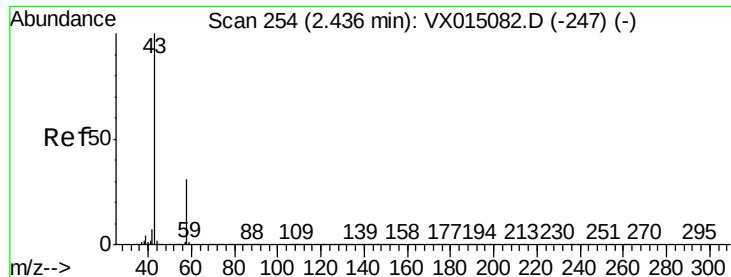
Ion Ratio Lower Upper

53 100

52 0.0 66.6 100.0#

51 49.9 29.0 43.6#

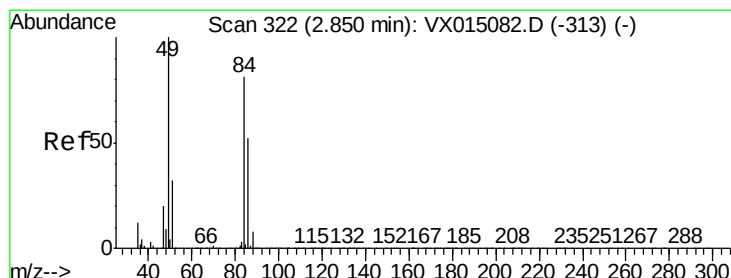
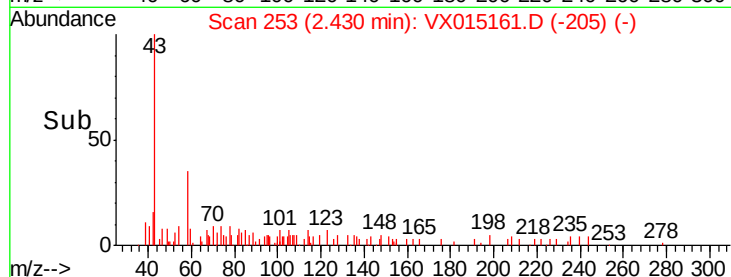
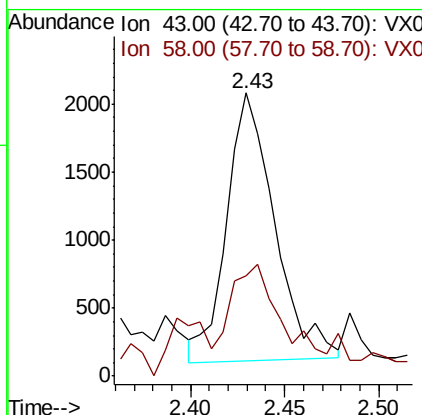
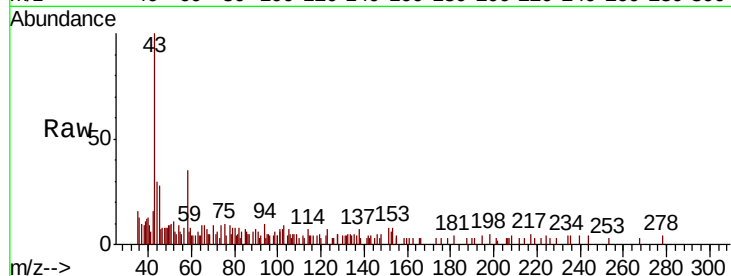




#16
Acetone
Concen: 2.174 ug/l
RT: 2.43 min Scan# 253
Delta R.T. -0.01 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

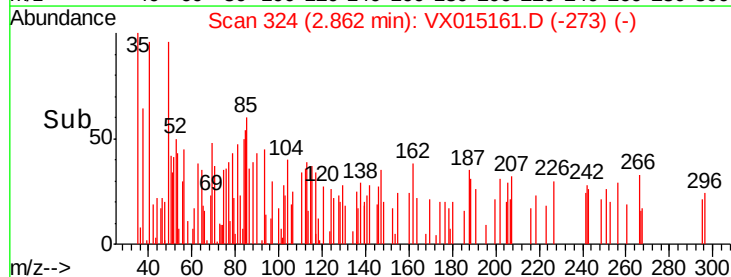
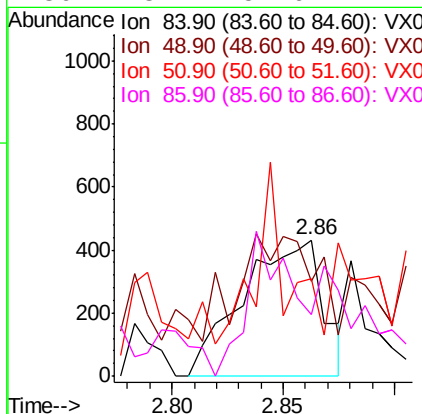
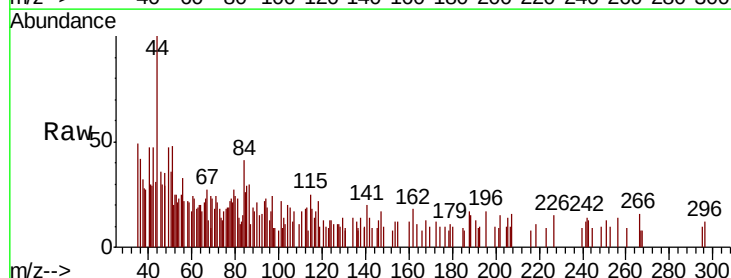
Instrument :
MSVOA_X
ClientSampled :

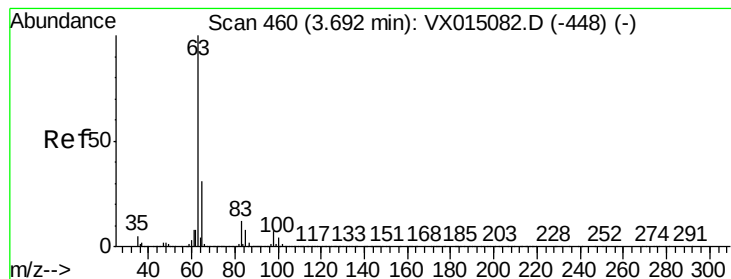
Tot Ion: 43 Resp: 3486
Ion Ratio Lower Upper
43 100
58 22.1 24.8 37.2#



#20
Methylene Chloride
Concen: 0.287 ug/l
RT: 2.86 min Scan# 324
Delta R.T. 0.01 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion: 84 Resp: 1078
Ion Ratio Lower Upper
84 100
49 39.4 99.4 149.2#
51 73.6 31.5 47.3#
86 23.4 51.6 77.4#





#24

1,1-Dichloroethane

Concen: 0.728 ug/l

RT: 3.69 min Scan# 459

Delta R.T. -0.01 min

Lab File: VX015161.D

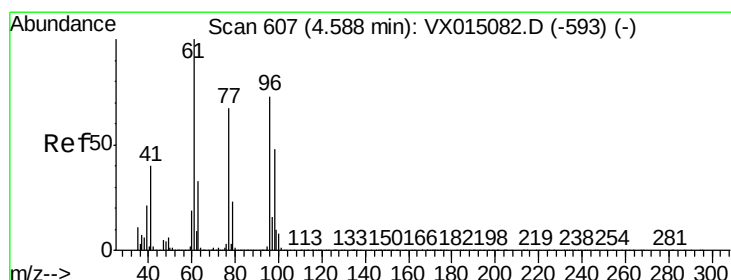
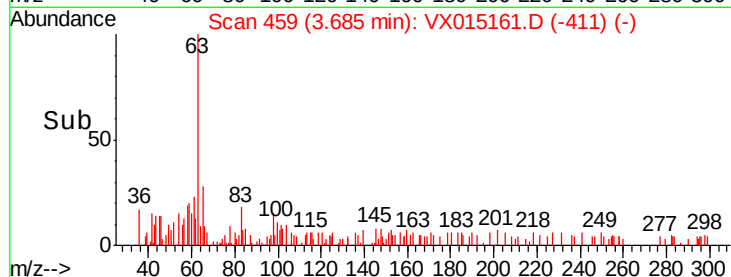
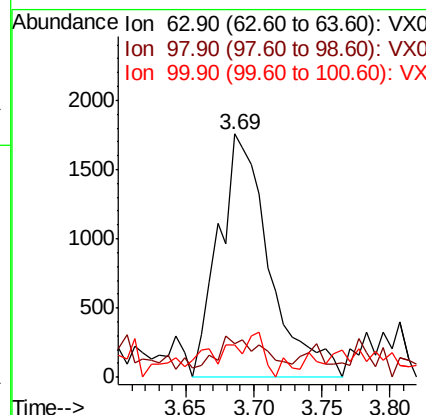
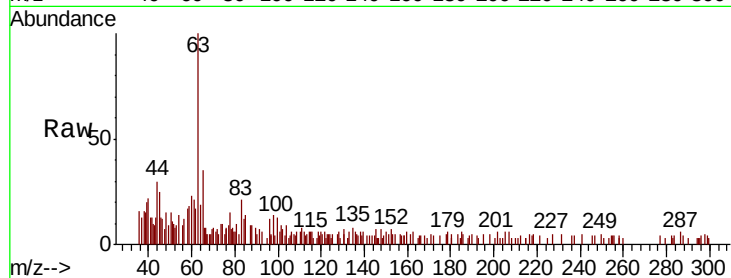
Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

ClientSampleId :

Tot Ion:	63	Resp:	4550
Ion	Ratio	Lower	Upper
63	100		
98	14.6	3.7	11.1#
100	6.1	2.1	6.5



#27

cis-1,2-Dichloroethene

Concen: 1.661 ug/l

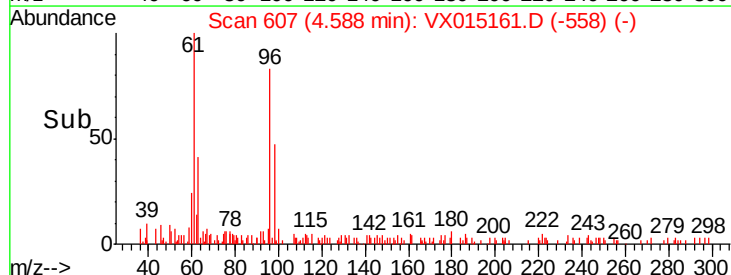
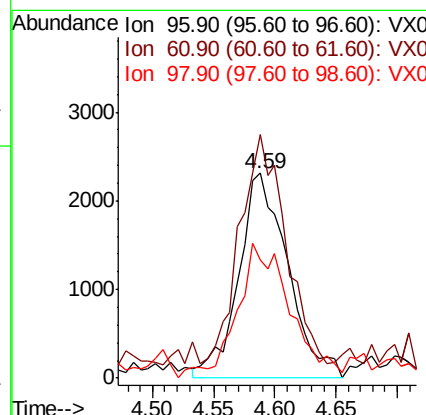
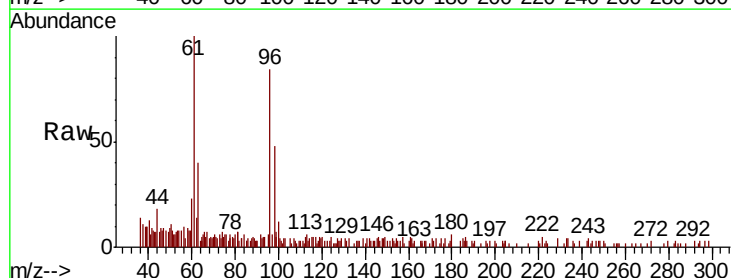
RT: 4.59 min Scan# 607

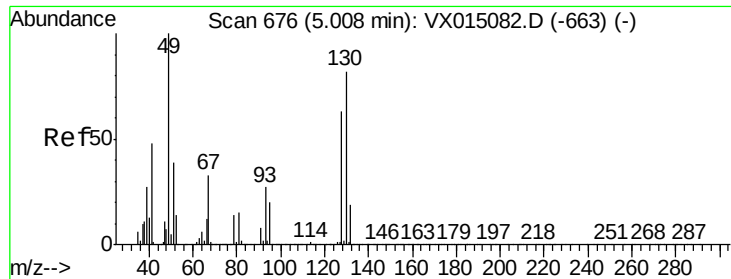
Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Tgt Ion:	96	Resp:	6452
Ion	Ratio	Lower	Upper
96	100		
61	104.0	0.0	286.8
98	70.9	0.0	128.4





#28

Bromochloromethane

Concen: 0.280 ug/l

RT: 5.01 min Scan# 676

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

ClientSampled :

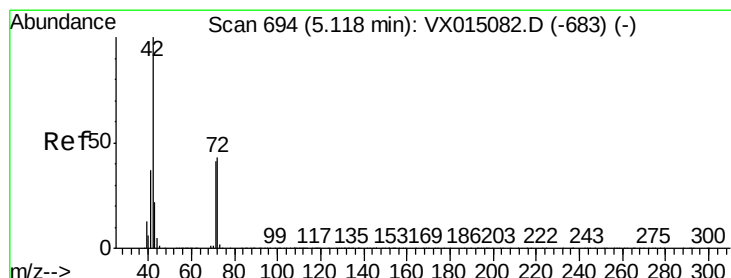
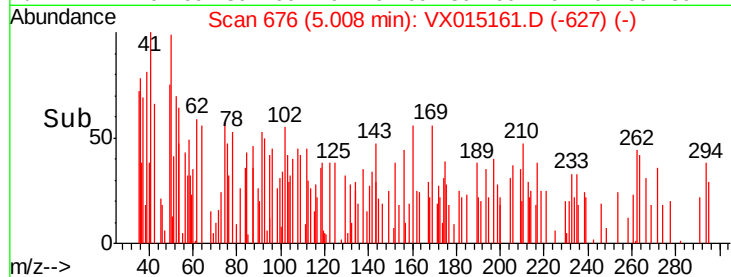
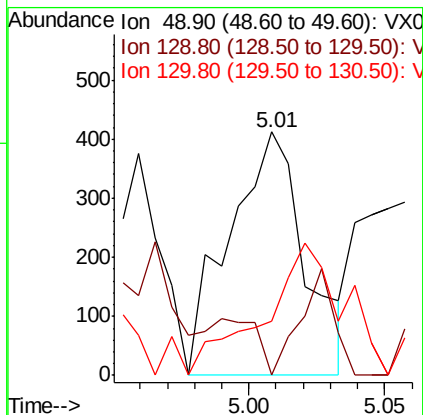
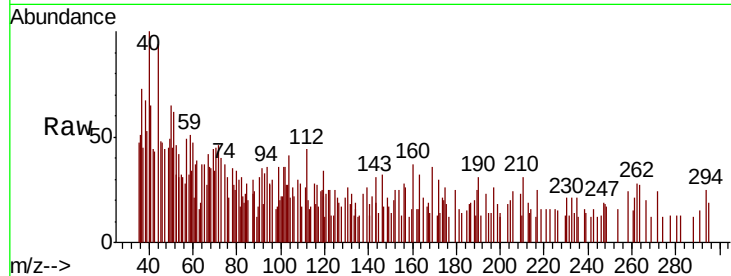
Tot Ion: 49 Resp: 798

Ion Ratio Lower Upper

49 100

129 19.3 0.0 4.4#

130 56.8 65.0 97.6#



#29

Tetrahydrofuran

Concen: 0.508 ug/l

RT: 5.12 min Scan# 694

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

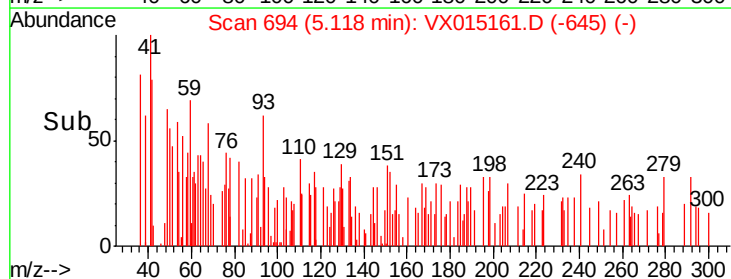
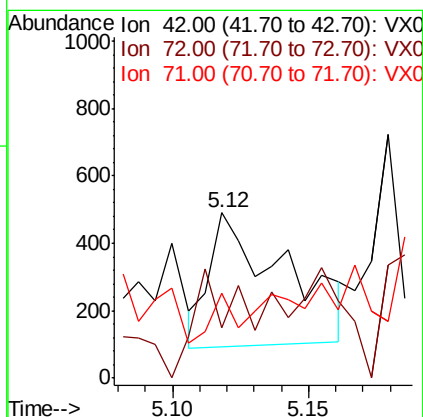
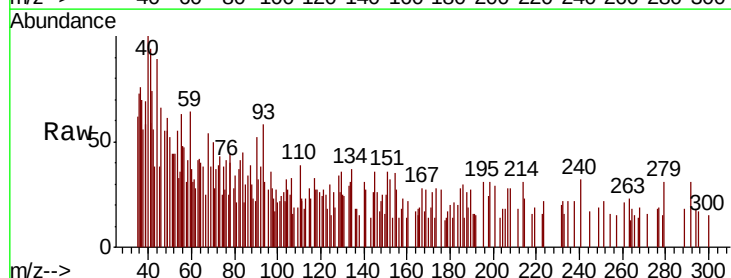
Tgt Ion: 42 Resp: 768

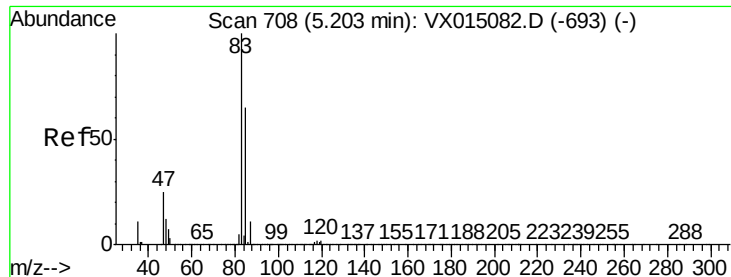
Ion Ratio Lower Upper

42 100

72 48.0 36.4 54.6

71 6.1 33.3 49.9#

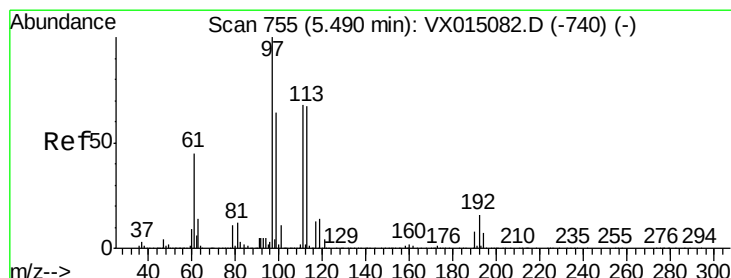
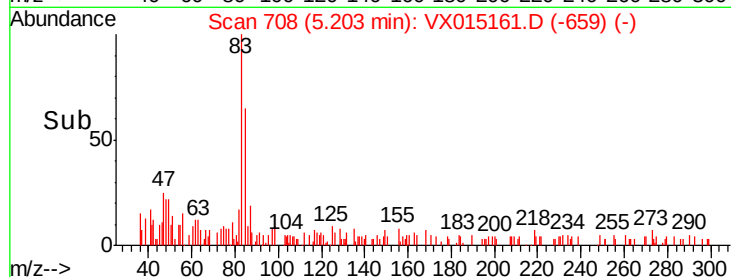
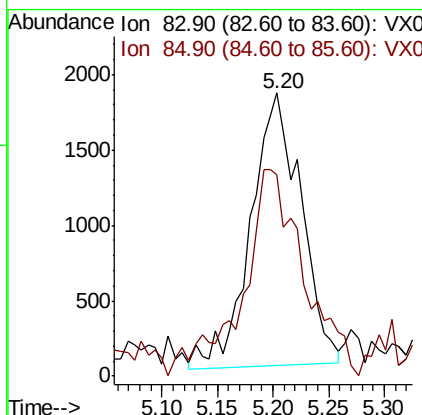
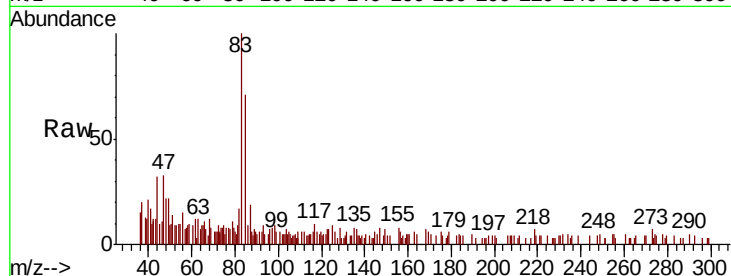




#30
Chloroform
Concen: 0.936 ug/l
RT: 5.20 min Scan# 708
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

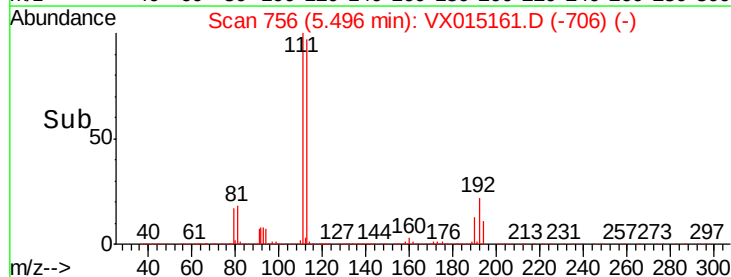
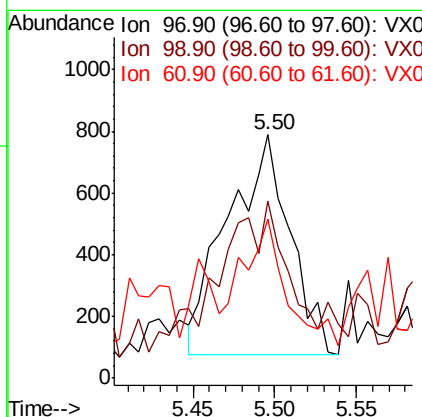
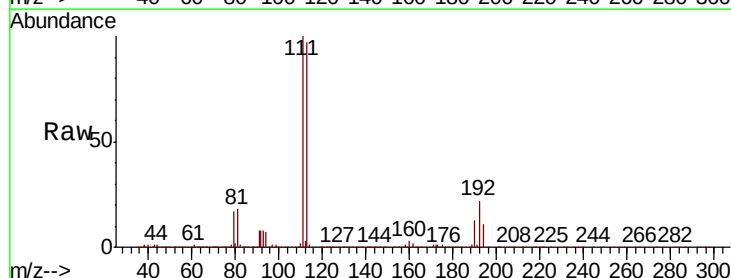
Instrument :
MSVOA_X
ClientSampleId :

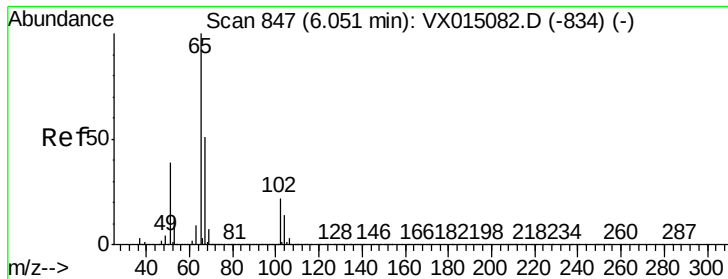
Tot Ion: 83 Resp: 5706
Ion Ratio Lower Upper
83 100
85 68.9 52.0 78.0



#32
1,1,1-Trichloroethane
Concen: 0.378 ug/l
RT: 5.50 min Scan# 756
Delta R.T. 0.01 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion: 97 Resp: 1909
Ion Ratio Lower Upper
97 100
99 0.0 52.8 79.2#
61 28.0 36.6 54.8#

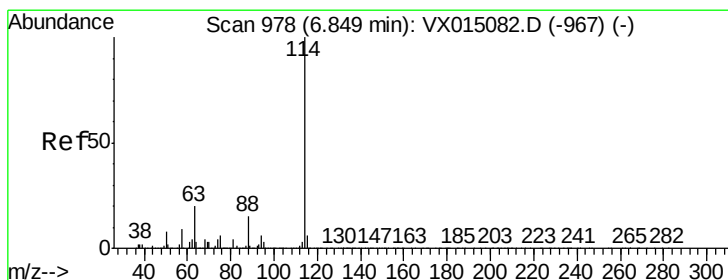
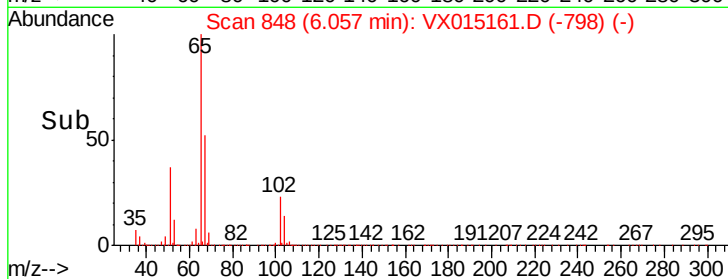
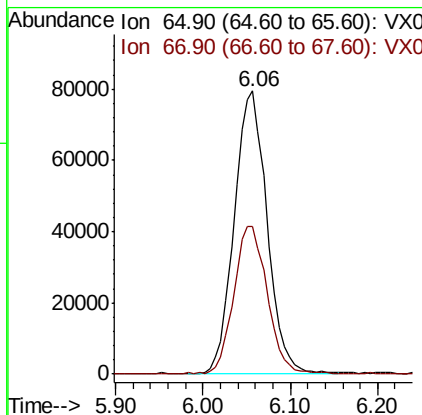
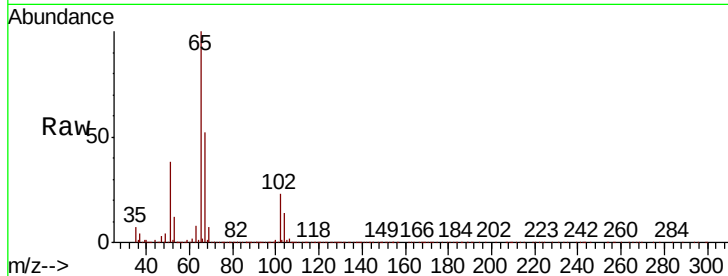




#33
 1,2-Dichloroethane-d4
 Concen: 51.933 ug/l
 RT: 6.06 min Scan# 848
 Delta R.T. 0.01 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

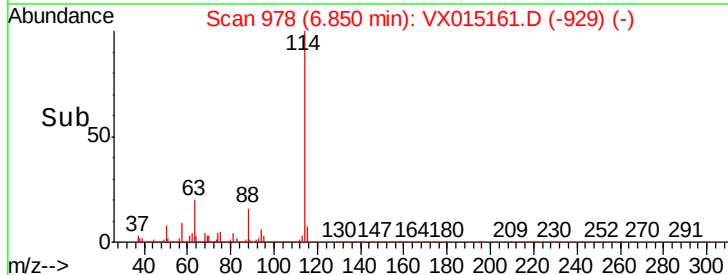
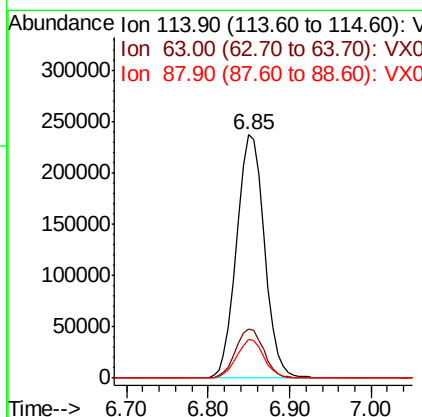
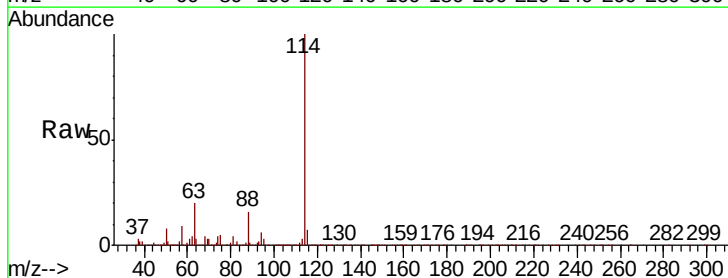
Instrument :
 MSVOA_X
 ClientSampleId :

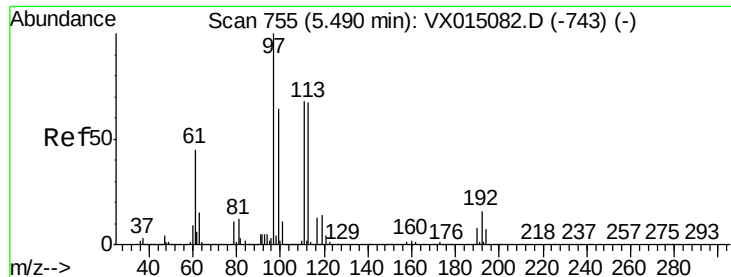
Tot Ion: 65 Resp: 205625
 Ion Ratio Lower Upper
 65 100
 67 54.0 0.0 105.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.85 min Scan# 978
 Delta R.T. 0.00 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

Tgt Ion: 114 Resp: 560409
 Ion Ratio Lower Upper
 114 100
 63 20.2 0.0 40.0
 88 15.8 0.0 30.6

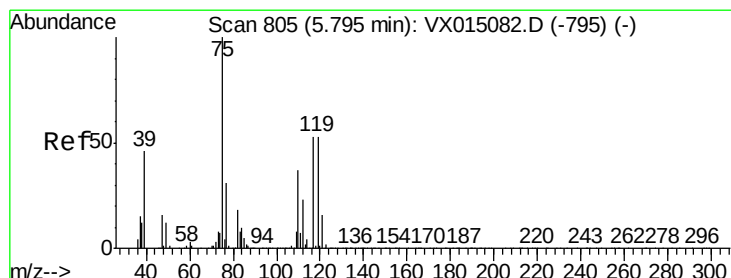
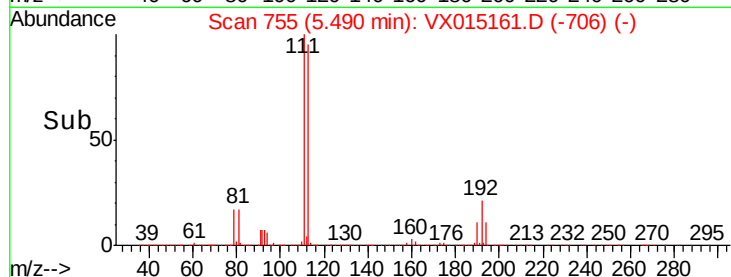
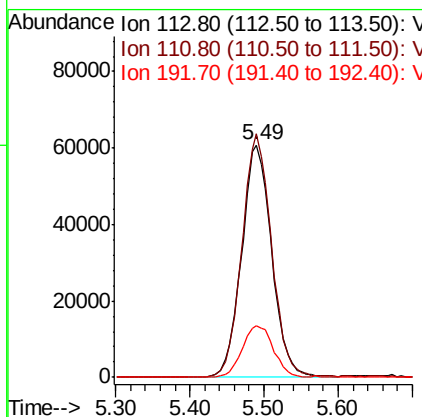
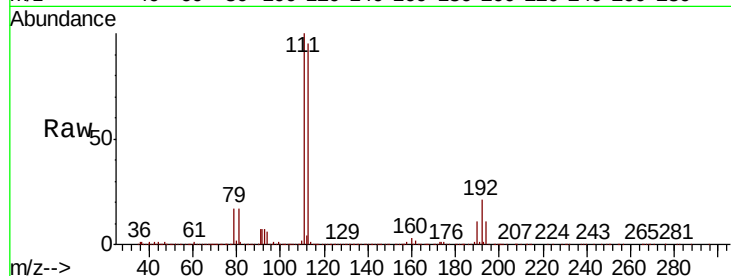




#35
 Dibromofluoromethane
 Concen: 48.824 ug/l
 RT: 5.49 min Scan# 755
 Delta R.T. 0.00 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

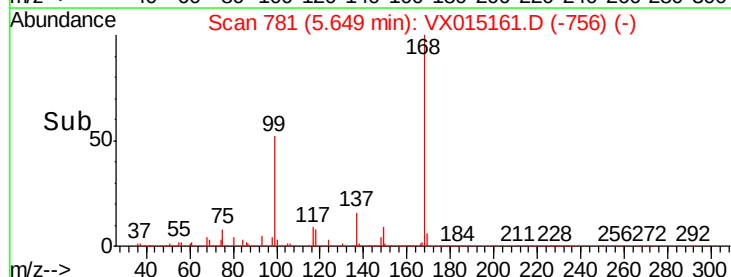
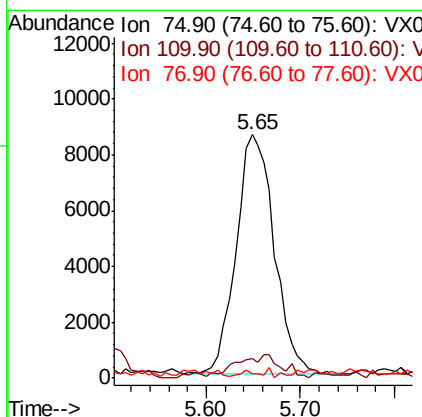
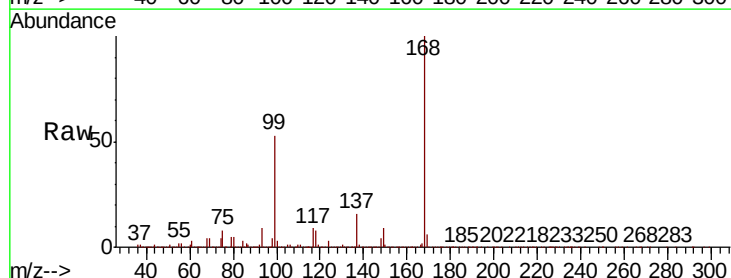
Instrument :
 MSVOA_X
 ClientSampleId :

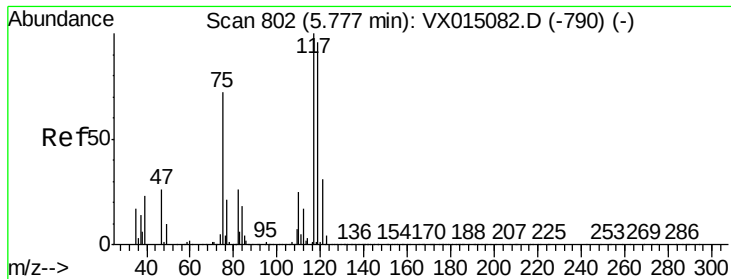
Tot Ion	Ratio	Lower	Upper
113	100		
111	102.4	82.6	123.8
192	23.3	18.6	28.0



#36
 1,1-Dichloropropene
 Concen: 4.661 ug/l
 RT: 5.65 min Scan# 781
 Delta R.T. -0.15 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

Tgt Ion	Ratio	Lower	Upper
75	100		
110	0.0	17.9	53.8#
77	0.9	24.8	37.2#





#38

Carbon Tetrachloride

Concen: 0.680 ug/l

RT: 5.78 min Scan# 802

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

ClientSampled :

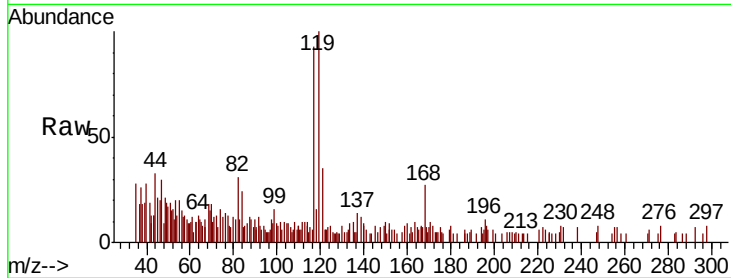
Tot Ion:117 Resp: 3324

Ion Ratio Lower Upper

117 100

119 107.5 76.9 115.3

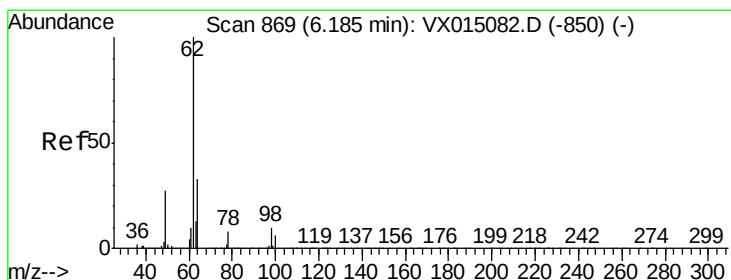
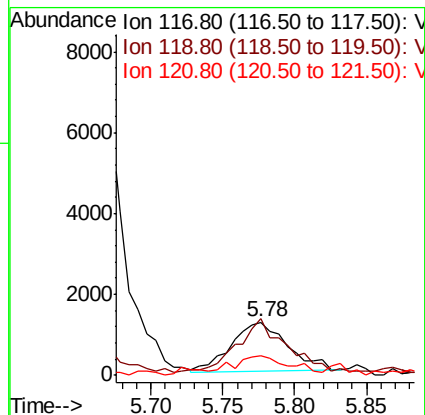
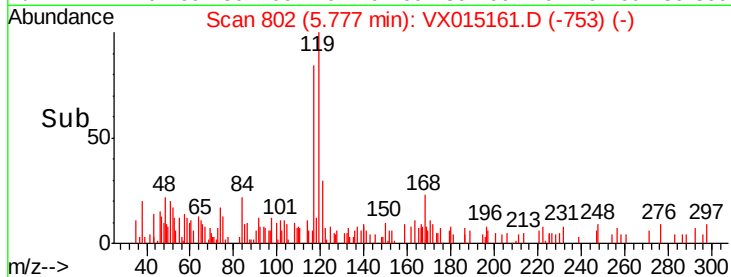
121 29.2 24.6 37.0



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#42

1,2-Dichloroethane

Concen: 0.411 ug/l

RT: 6.18 min Scan# 869

Delta R.T. 0.00 min

Lab File: VX015161.D

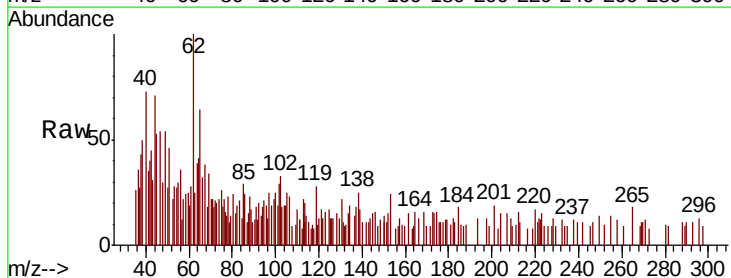
Acq: 10 Mar 2020 11:33

Tgt Ion: 62 Resp: 2168

Ion Ratio Lower Upper

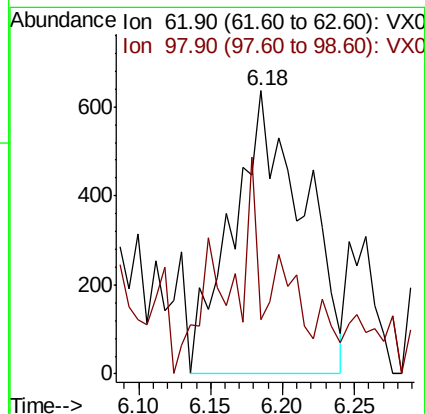
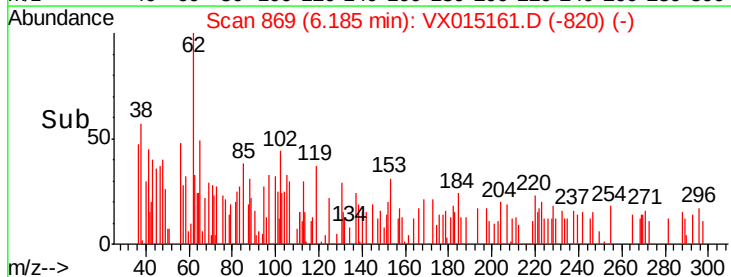
62 100

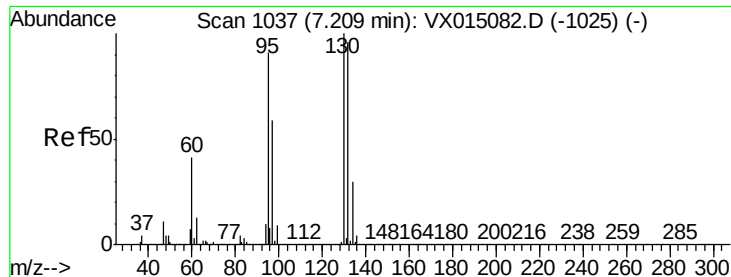
98 12.4 0.0 20.6



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 97.90 (97.60 to 98.60): VX0





#44

Trichloroethene

Concen: 89.903 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Instrument :

MSVOA_X

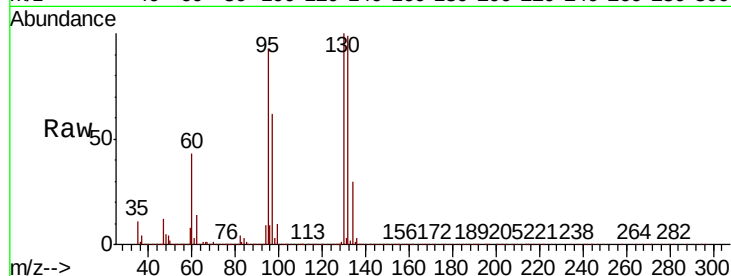
ClientSampleId :

Tot Ion:130 Resp: 384840

Ion Ratio Lower Upper

130 100

95 92.8 0.0 181.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VX0

7.21

200000

150000

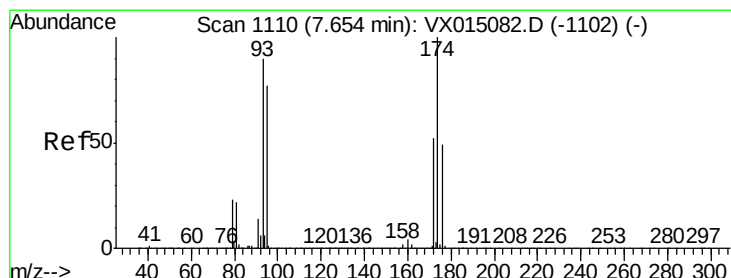
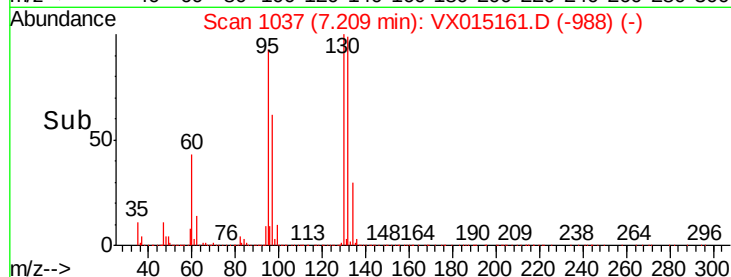
100000

50000

0

7.10 7.20 7.30 7.40

Time-->



#46

Dibromomethane

Concen: 0.238 ug/l

RT: 7.67 min Scan# 1112

Delta R.T. 0.01 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

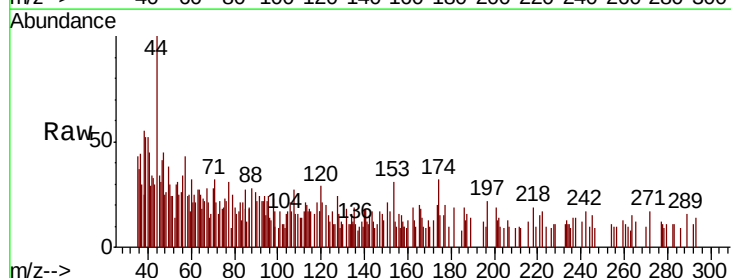
Tgt Ion: 93 Resp: 616

Ion Ratio Lower Upper

93 100

95 36.2 67.8 101.8#

174 42.7 91.0 136.4#



Abundance Ion 92.80 (92.50 to 93.50): VX0

Ion 94.80 (94.50 to 95.50): VX0

Ion 173.70 (173.40 to 174.40): V

400

300

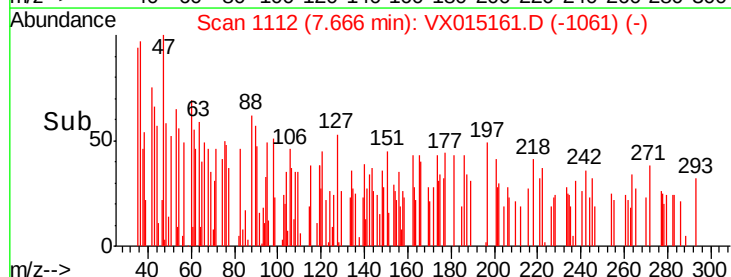
200

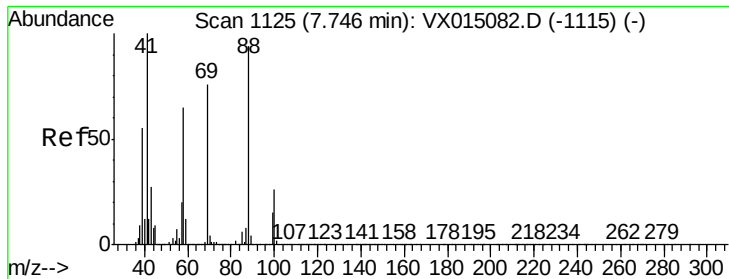
100

0

7.60 7.65 7.70

Time-->

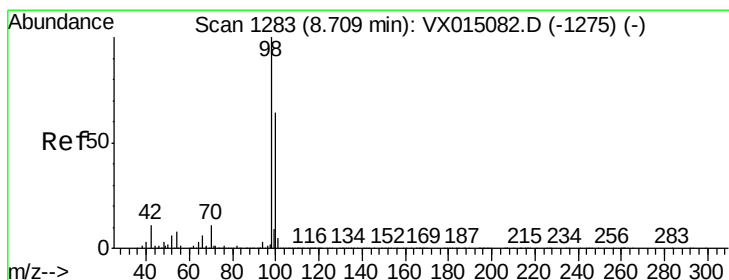
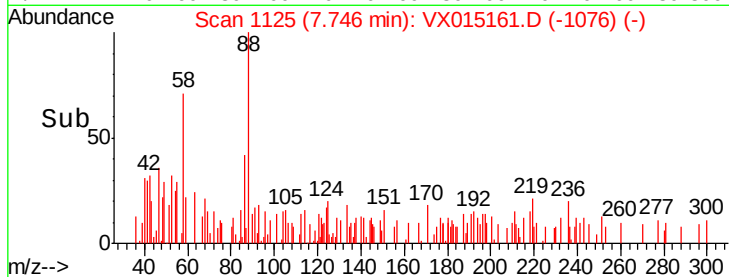
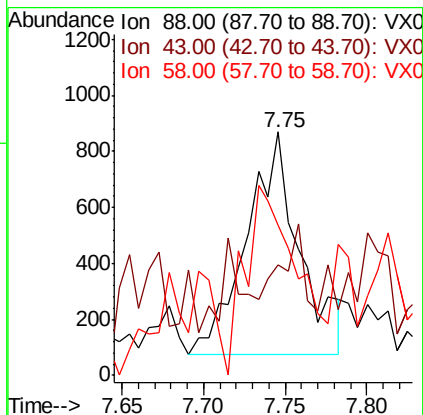
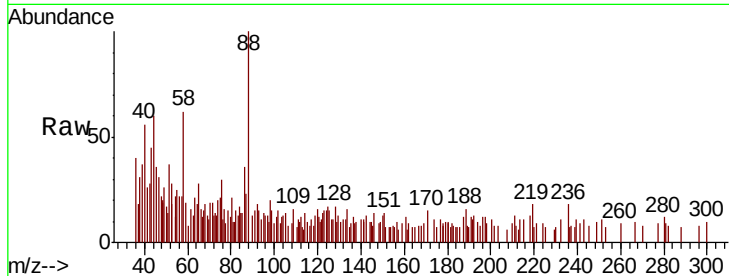




#49
1,4-Dioxane
Concen: 19.273 ug/l
RT: 7.75 min Scan# 1125
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

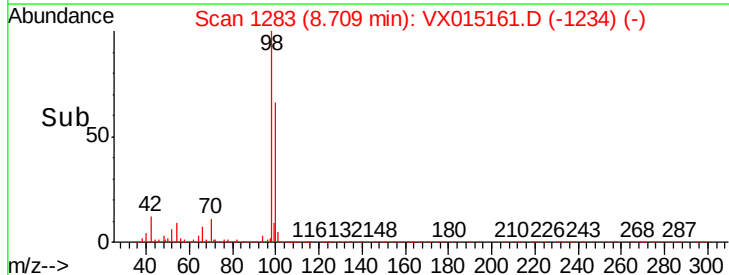
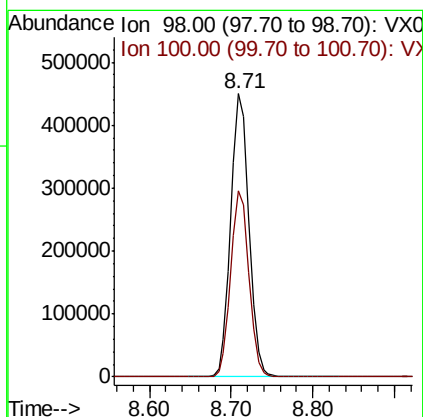
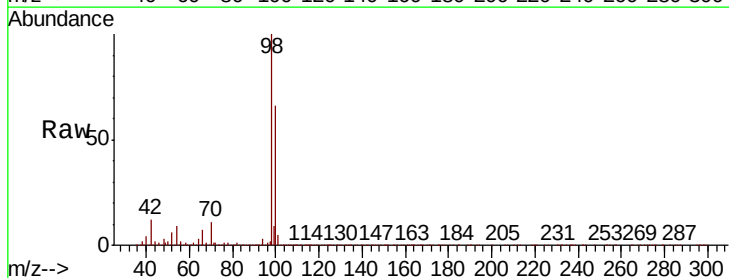
Instrument :
MSVOA_X
ClientSampled :

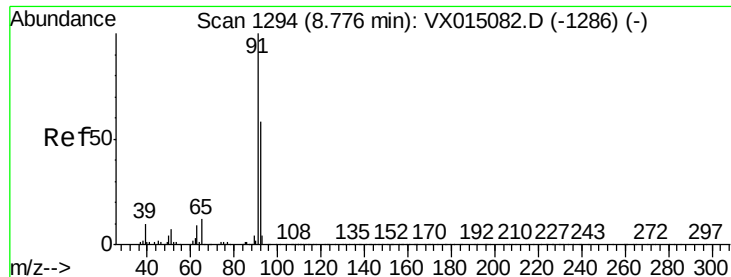
Tot Ion: 88 Resp: 1793
Ion Ratio Lower Upper
88 100
43 17.4 27.0 40.4#
58 0.0 55.6 83.4#



#50
Toluene-d8
Concen: 51.131 ug/l
RT: 8.71 min Scan# 1283
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion: 98 Resp: 687627
Ion Ratio Lower Upper
98 100
100 65.5 52.4 78.6





#52

Toluene

Concen: 0.293 ug/l

RT: 8.78 min Scan# 1294

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

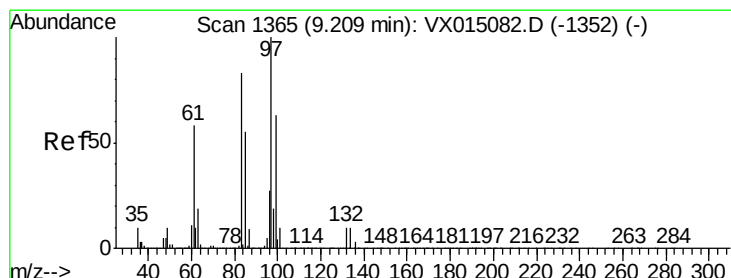
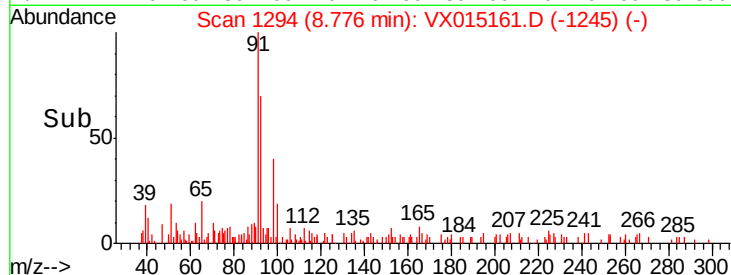
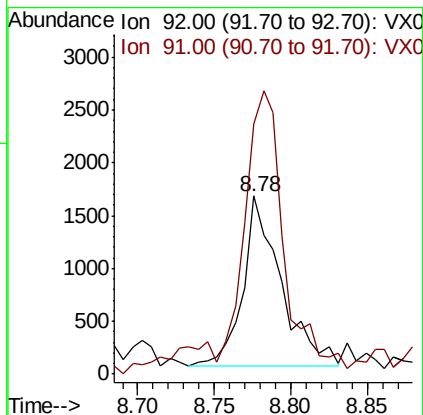
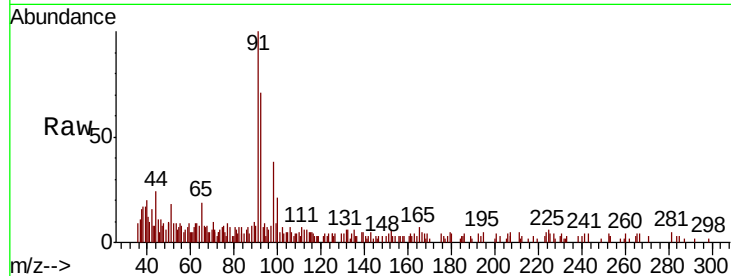
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion: 92 Resp: 2749

Ion Ratio Lower Upper

92 100

91 165.6 136.9 205.3



#55

1,1,2-Trichloroethane

Concen: 0.545 ug/l

RT: 9.21 min Scan# 1365

Delta R.T. 0.00 min

Lab File: VX015161.D

Acq: 10 Mar 2020 11:33

Tgt Ion: 97 Resp: 2108

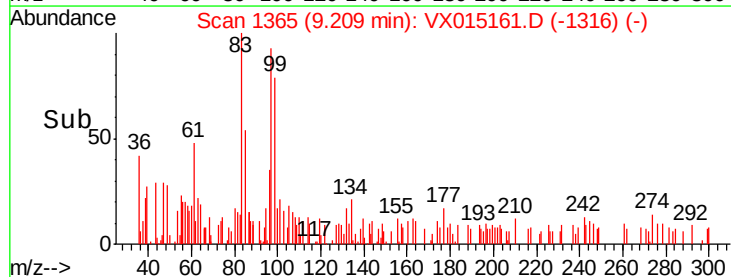
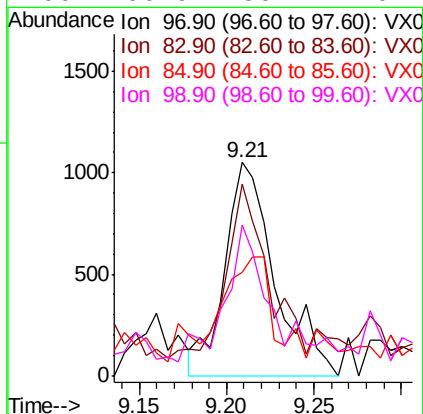
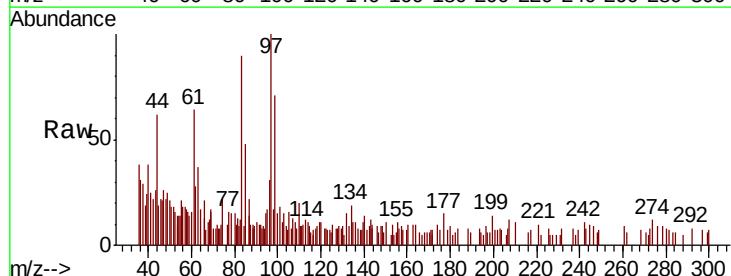
Ion Ratio Lower Upper

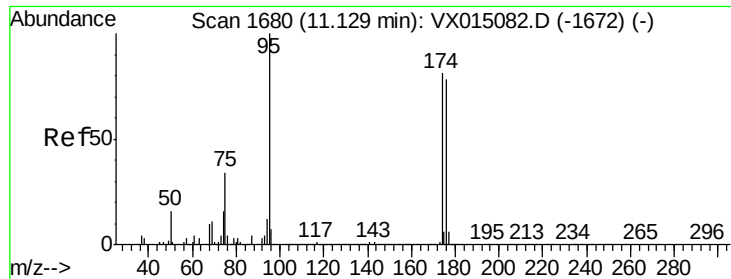
97 100

83 87.2 66.4 99.6

85 41.5 43.5 65.3#

99 66.9 50.7 76.1

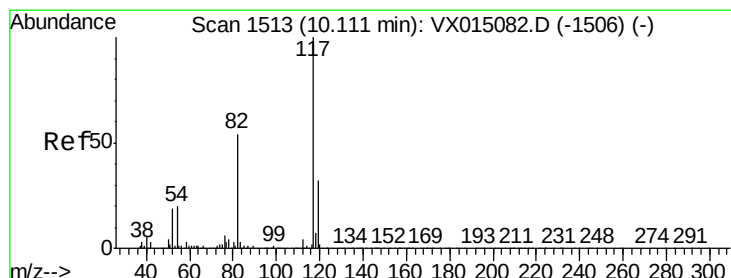
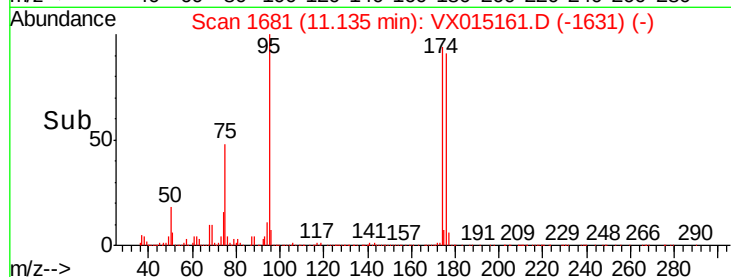
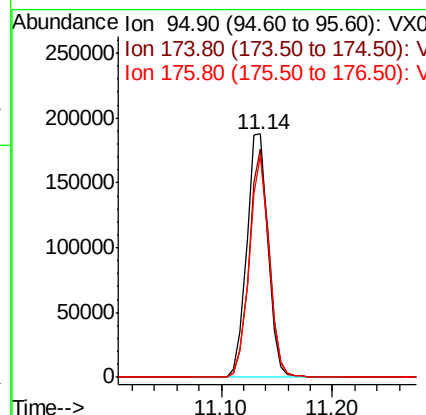
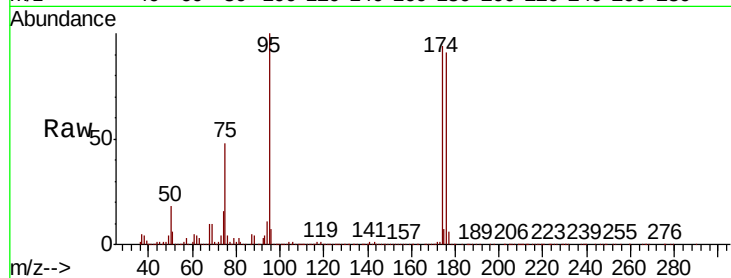




#62
4-Bromofluorobenzene
Concen: 51.726 ug/l
RT: 11.14 min Scan# 1681
Delta R.T. 0.01 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

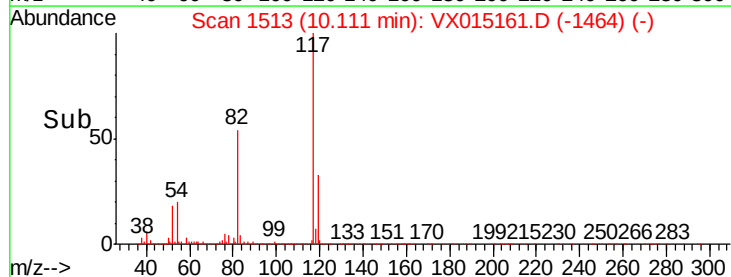
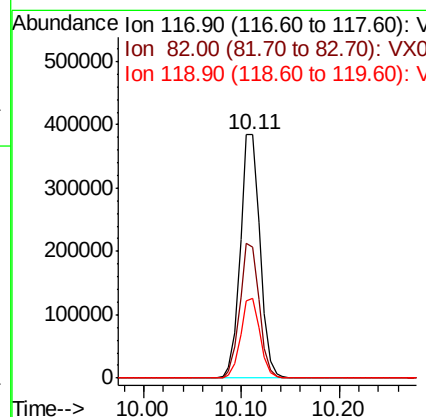
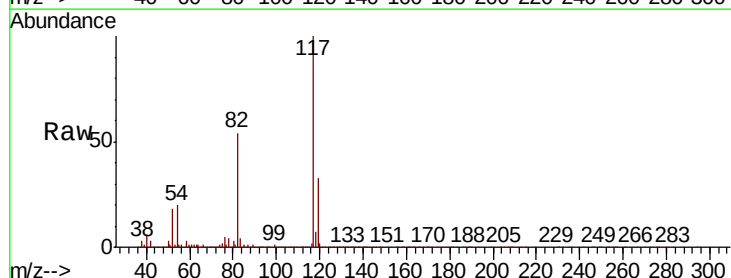
Instrument :
MSVOA_X
ClientSampled :

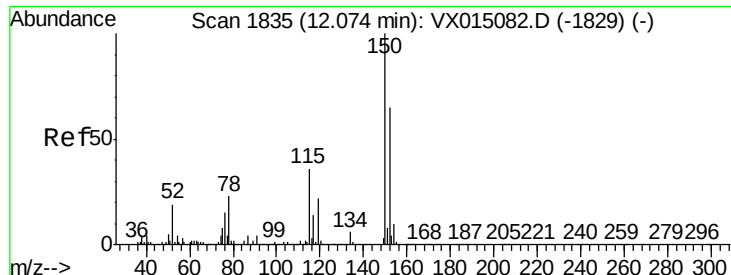
Tot Ion	Ratio	Lower	Upper
95	100		
174	87.9	0.0	177.6
176	84.9	0.0	170.2



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1513
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion	Ratio	Lower	Upper
117	100		
82	53.9	43.3	64.9
119	32.6	25.8	38.8

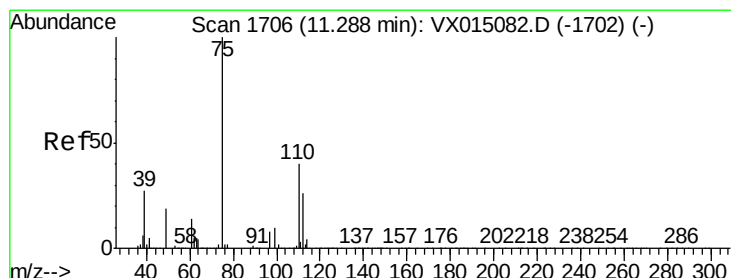
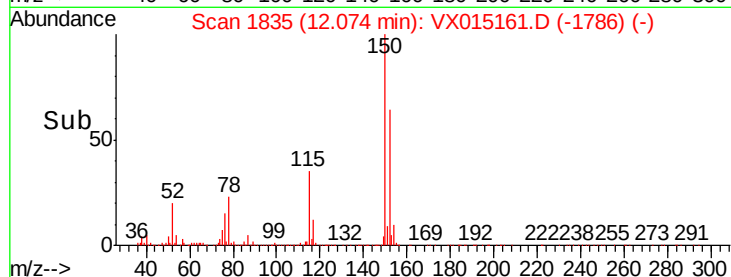
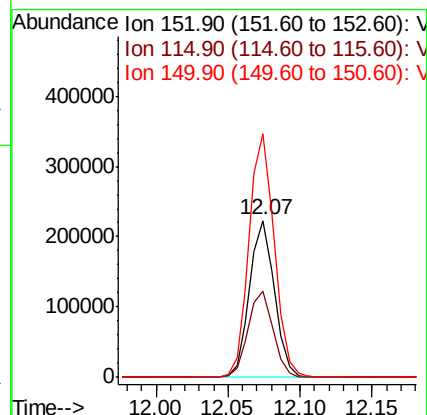
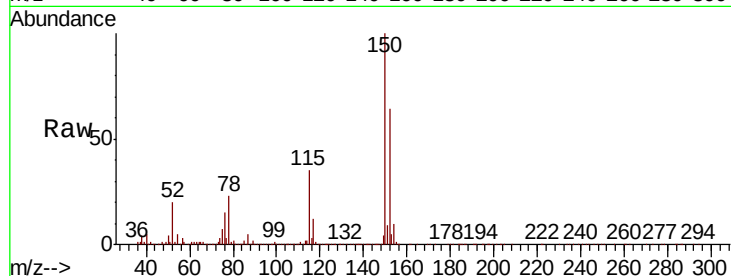




#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 12.07 min Scan# 1835
 Delta R.T. 0.00 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

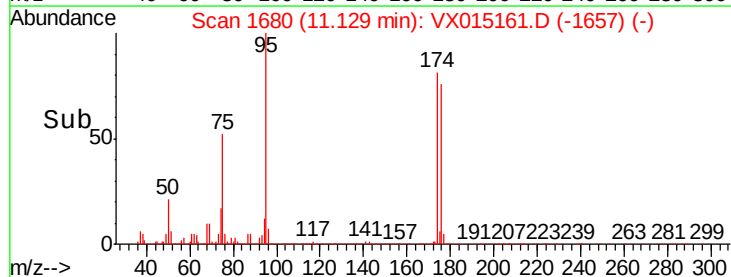
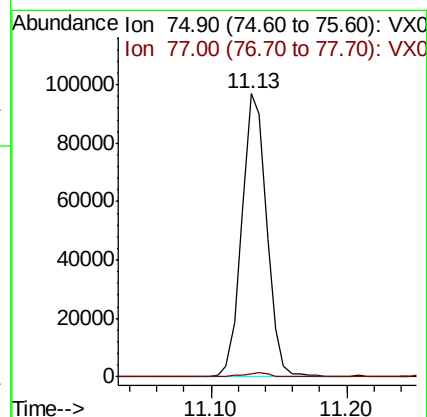
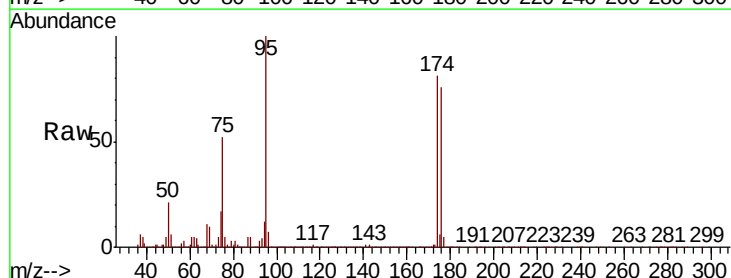
Instrument :
 MSVOA_X
 ClientSampleId :

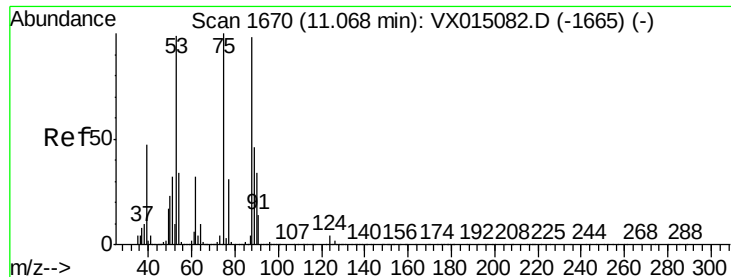
Tot Ion	Ratio	Lower	Upper
152	100		
115	55.7	38.2	114.6
150	156.9	0.0	343.8



#76
 1,2,3-Trichloropropane
 Concen: 23.095 ug/l
 RT: 11.13 min Scan# 1680
 Delta R.T. -0.16 min
 Lab File: VX015161.D
 Acq: 10 Mar 2020 11:33

Tgt Ion	Ratio	Lower	Upper
75	100		
77	1.9	22.6	67.8#

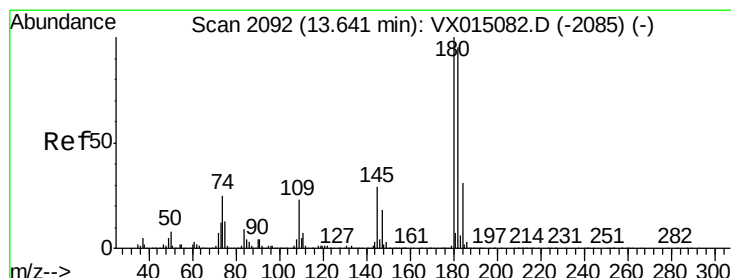
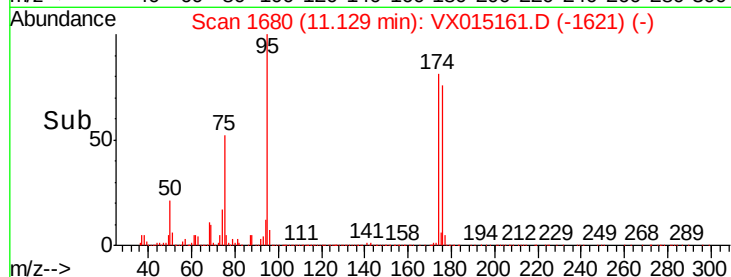
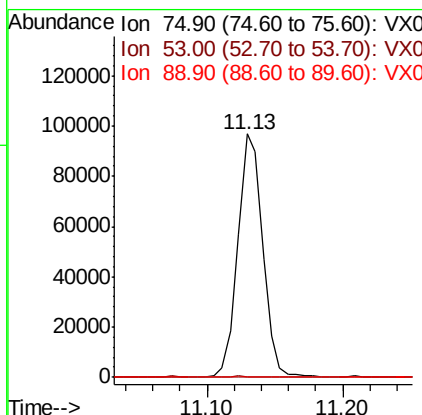
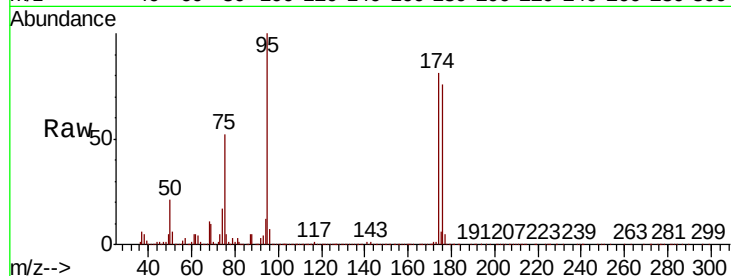




#81
trans-1,4-Dichloro-2-butene
Concen: 65.545 ug/l
RT: 11.13 min Scan# 1680
Delta R.T. 0.06 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

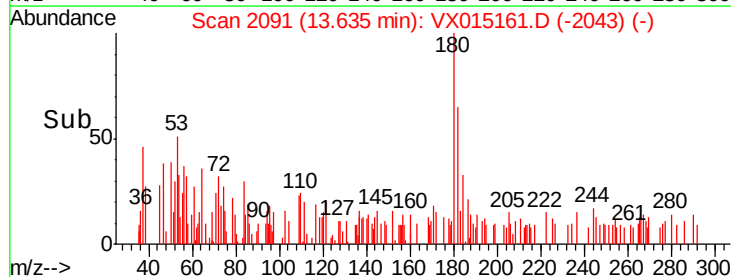
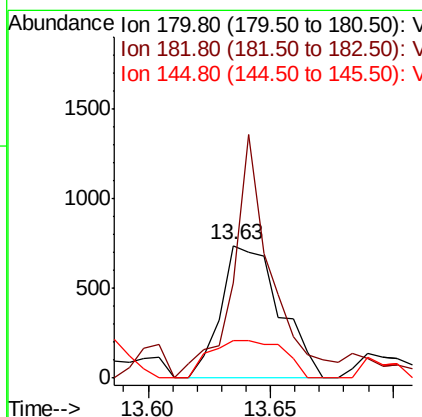
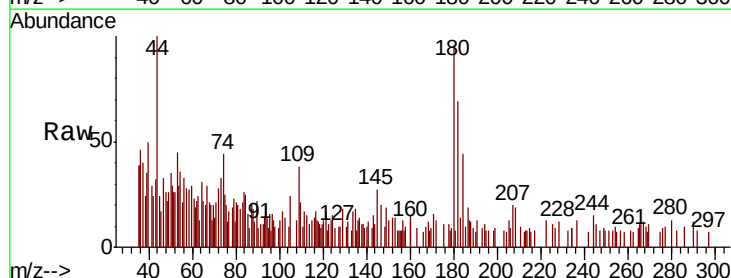
Instrument :
MSVOA_X
ClientSampleId :

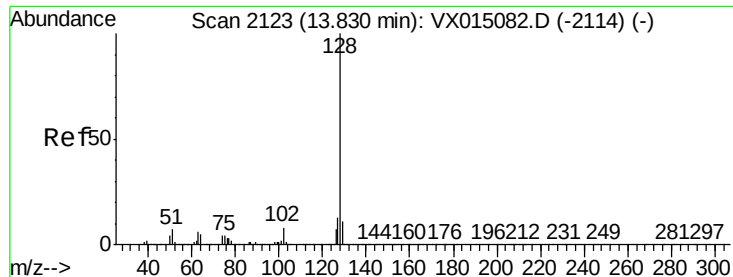
Tot Ion: 75 Resp: 122798
Ion Ratio Lower Upper
75 100
53 0.2 77.9 116.9#
89 0.1 36.2 54.2#



#93
1,2,4-Trichlorobenzene
Concen: 0.215 ug/l
RT: 13.63 min Scan# 2091
Delta R.T. -0.01 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Tgt Ion:180 Resp: 1239
Ion Ratio Lower Upper
180 100
182 119.1 47.6 142.8
145 35.8 14.1 42.2





#95
Naphthalene
Concen: 1.492 ug/l
RT: 13.83 min Scan# 2123
Delta R.T. 0.00 min
Lab File: VX015161.D
Acq: 10 Mar 2020 11:33

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion	Ratio	Lower	Upper
128	100		
127	22.8	10.3	15.5#
129	36.6	8.6	13.0#

