

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031020\
 Data File : VX015163.D
 Acq On : 10 Mar 2020 12:18
 Operator : JC/SP
 Sample : L1842-18
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Mar 11 07:27:44 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	329417	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	545416	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	531587	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	262735	50.00	ug/l	0.00

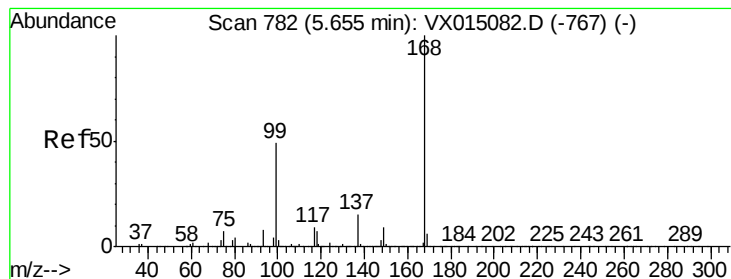
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.05	65	206810	52.92	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.84%	
35) Dibromofluoromethane	5.49	113	171353	49.80	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.60%	
50) Toluene-d8	8.71	98	674601	51.54	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.08%	
62) 4-Bromofluorobenzene	11.13	95	239863	51.38	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.76%	

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	1.19	85	3317	1.150	ug/l	96
3) Chloromethane	1.31	50	1366	0.334	ug/l #	62
5) Bromomethane	1.66	94	796	0.312	ug/l	96
6) Chloroethane	1.74	64	530	0.213	ug/l #	42
8) Diethyl Ether	2.19	74	496	0.222	ug/l	51
9) 1,1,2-Trichlorotrifluoroet	2.38	101	16056	5.176	ug/l	95
12) 1,1-Dichloroethene	2.37	96	2520	0.787	ug/l	87
13) Acrolein	2.31	56	227	0.356	ug/l #	74
15) Acrylonitrile	3.11	53	437	0.259	ug/l #	17
16) Acetone	2.44	43	4174	2.637	ug/l	89
20) Methylene Chloride	2.85	84	1050	0.283	ug/l #	75
24) 1,1-Dichloroethane	3.70	63	2297	0.372	ug/l #	90
25) 2-Butanone	4.69	43	971	0.419	ug/l	93
27) cis-1,2-Dichloroethene	4.59	96	5321	1.388	ug/l	70
29) Tetrahydrofuran	5.12	42	351	0.235	ug/l	94
36) 1,1-Dichloropropene	5.65	75	24313	4.822	ug/l #	53
38) Carbon Tetrachloride	5.65	117	29830	6.268	ug/l #	17
42) 1,2-Dichloroethane	6.21	62	1567	0.305	ug/l	85
44) Trichloroethene	7.21	130	305825	73.408	ug/l	98
49) 1,4-Dioxane	7.75	88	1583	17.483	ug/l #	86
55) 1,1,2-Trichloroethane	9.21	97	1016	0.270	ug/l #	77
64) Tetrachloroethene	9.33	164	5120	1.165	ug/l	93
76) 1,2,3-Trichloropropane	11.13	75	118174	22.549	ug/l #	34
81) trans-1,4-Dichloro-2-buten	11.13	75	118174	63.994	ug/l #	11
95) Naphthalene	13.84	128	1040	1.478	ug/l #	69

(#) = 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: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

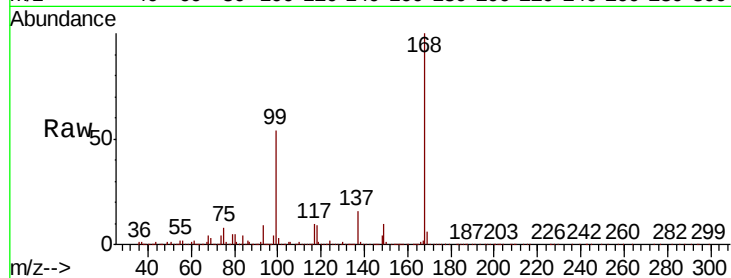
ClientSampleId :

Tot Ion:168 Resp: 329417

Ion Ratio Lower Upper

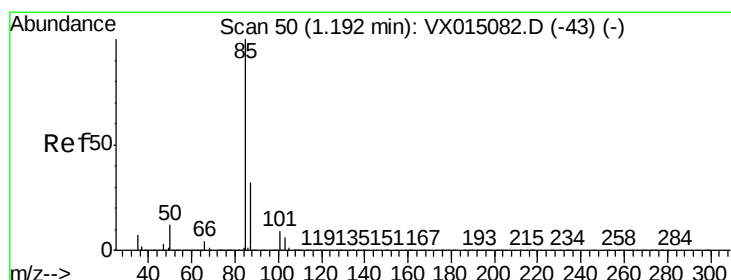
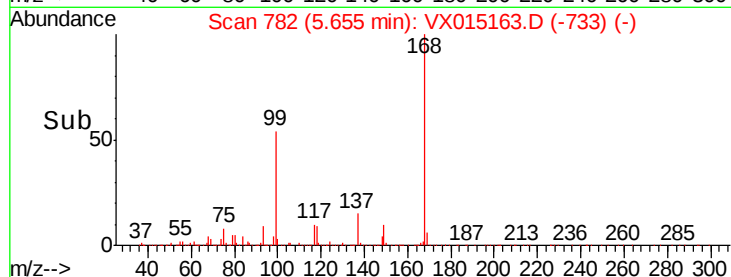
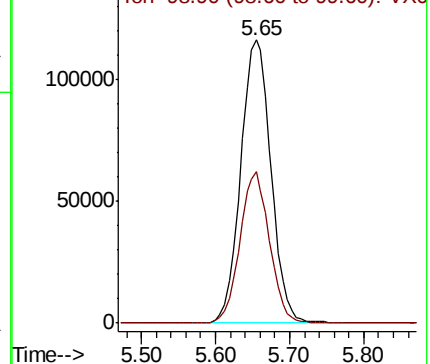
168 100

99 53.6 39.4 59.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0



#2

Dichlorodifluoromethane

Concen: 1.150 ug/l

RT: 1.19 min Scan# 50

Delta R.T. 0.00 min

Lab File: VX015163.D

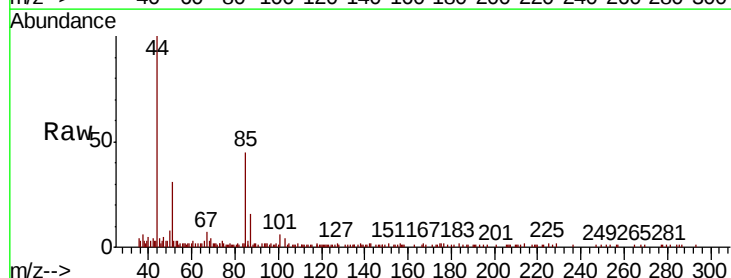
Acq: 10 Mar 2020 12:18

Tgt Ion: 85 Resp: 3317

Ion Ratio Lower Upper

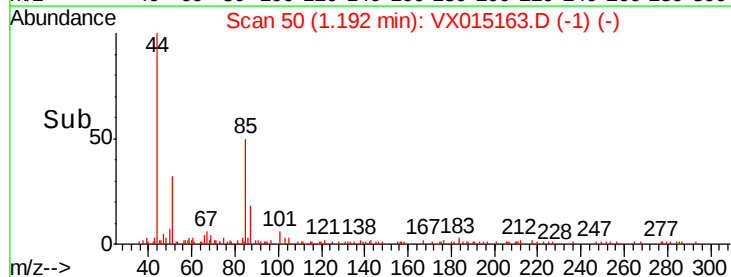
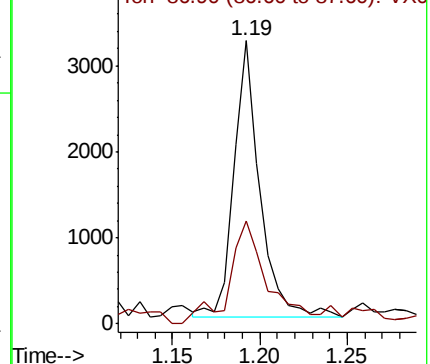
85 100

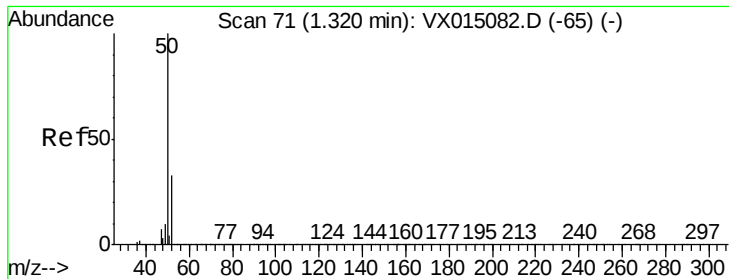
87 34.5 16.2 48.5



Abundance Ion 84.90 (84.60 to 85.60): VX0

Ion 86.90 (86.60 to 87.60): VX0





#3

Chloromethane

Concen: 0.334 ug/l

RT: 1.31 min Scan# 70

Delta R.T. -0.01 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

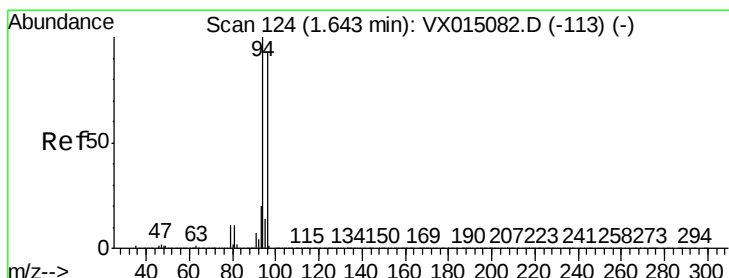
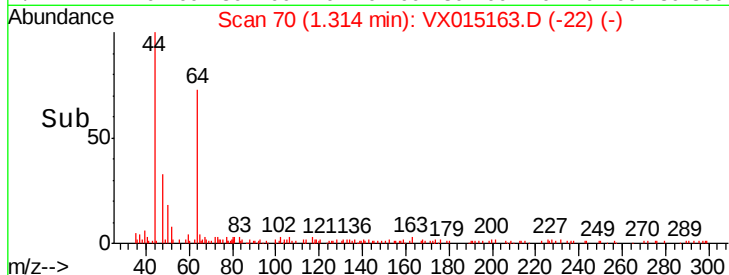
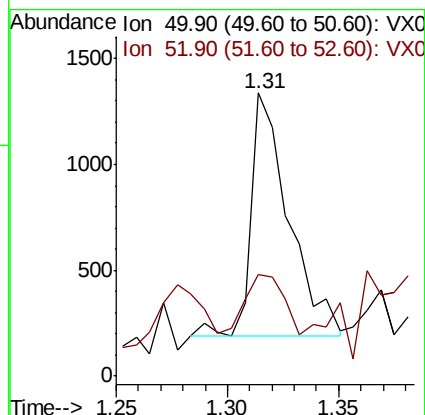
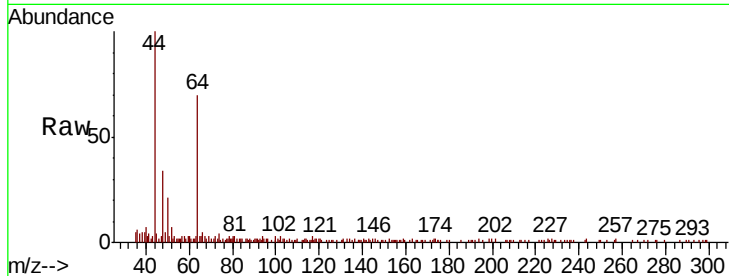
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion: 50 Resp: 1366

Ion Ratio Lower Upper

50 100

52 11.1 26.2 39.2#



#5

Bromomethane

Concen: 0.312 ug/l

RT: 1.66 min Scan# 126

Delta R.T. 0.01 min

Lab File: VX015163.D

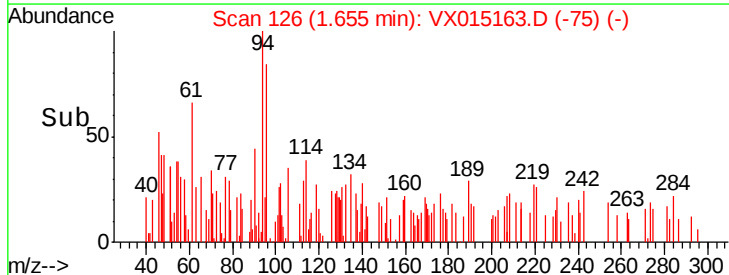
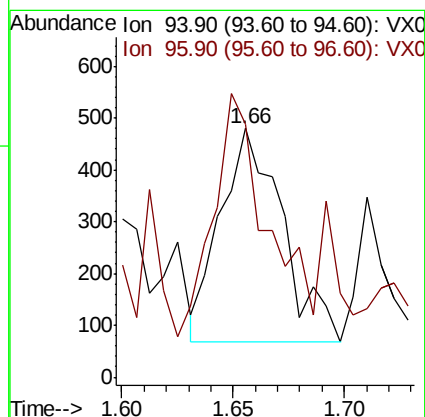
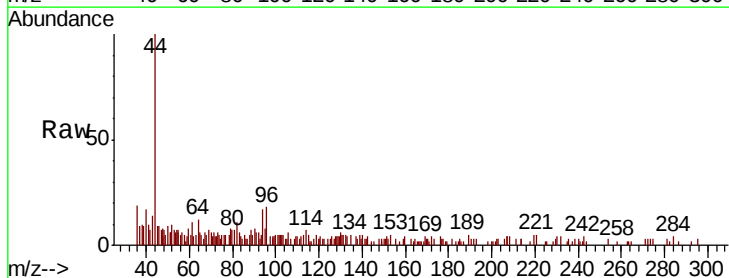
Acq: 10 Mar 2020 12:18

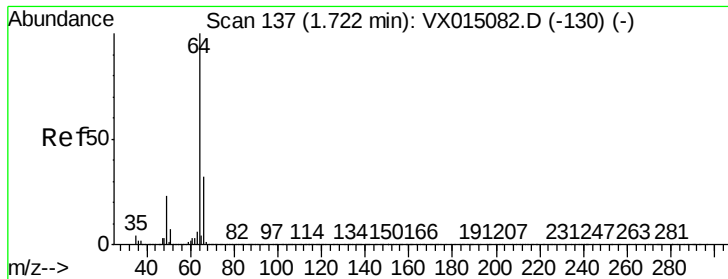
Tgt Ion: 94 Resp: 796

Ion Ratio Lower Upper

94 100

96 97.5 74.6 111.8





#6

Chloroethane

Concen: 0.213 ug/l

RT: 1.74 min Scan# 140

Delta R.T. 0.02 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

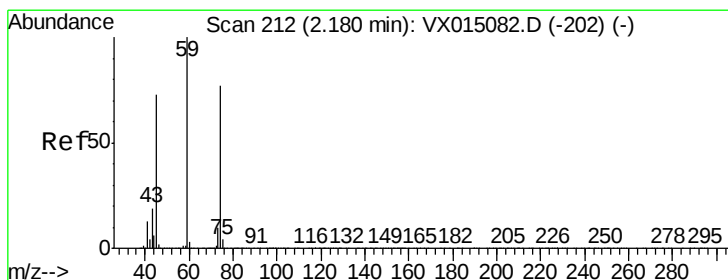
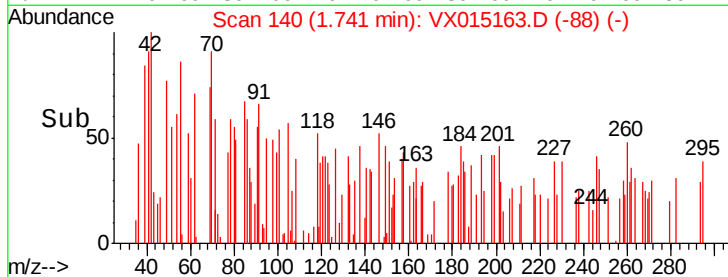
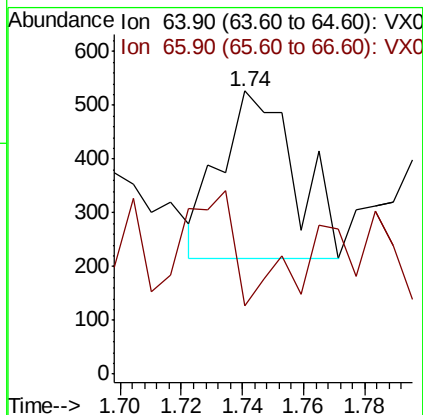
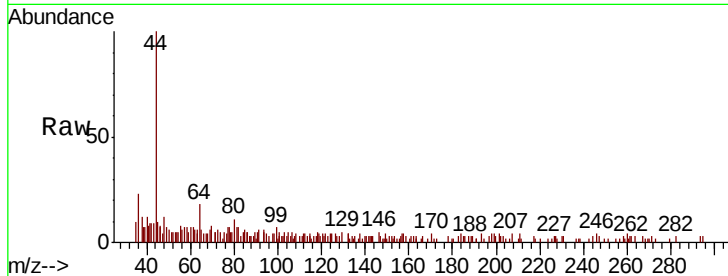
Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 64 Resp: 530

Ion Ratio Lower Upper

64 100

66 0.0 25.8 38.8#



#8

Diethyl Ether

Concen: 0.222 ug/l

RT: 2.19 min Scan# 213

Delta R.T. 0.01 min

Lab File: VX015163.D

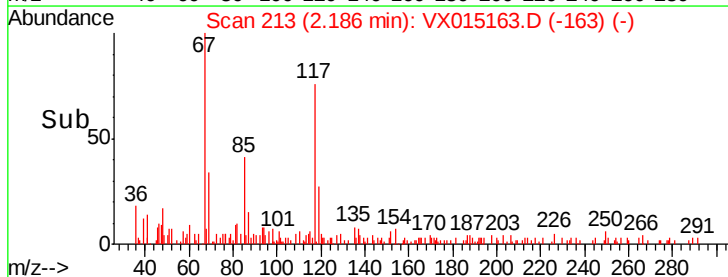
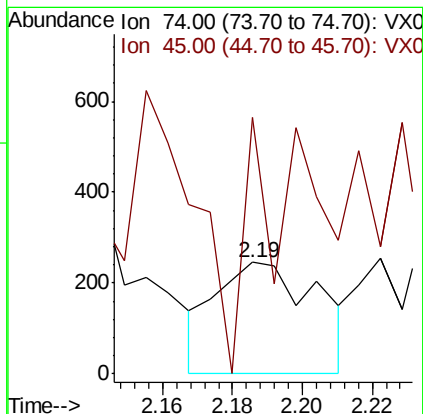
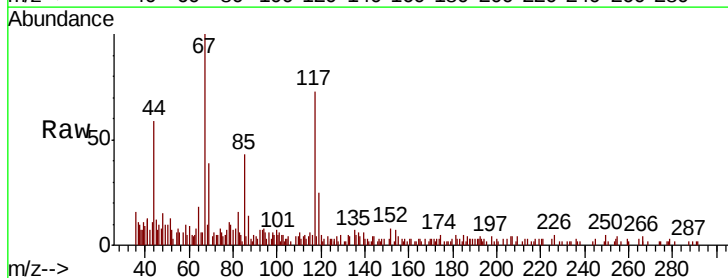
Acq: 10 Mar 2020 12:18

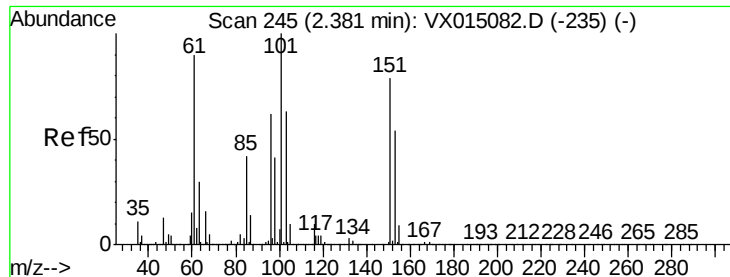
Tgt Ion: 74 Resp: 496

Ion Ratio Lower Upper

74 100

45 146.8 49.2 147.6





#9

1,1,2-Trichlorotrifluoroethane

Concen: 5.176 ug/l

RT: 2.38 min Scan# 245

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

ClientSampleId :

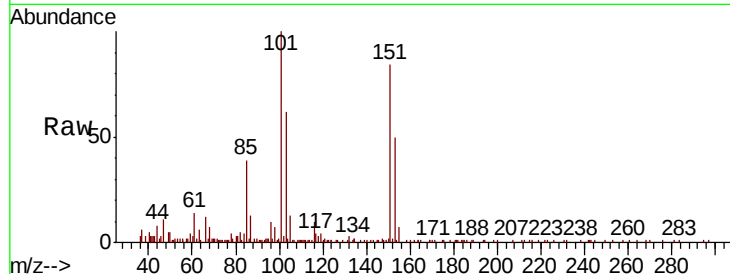
Tot Ion:101 Resp: 16056

Ion Ratio Lower Upper

101 100

85 46.3 33.7 50.5

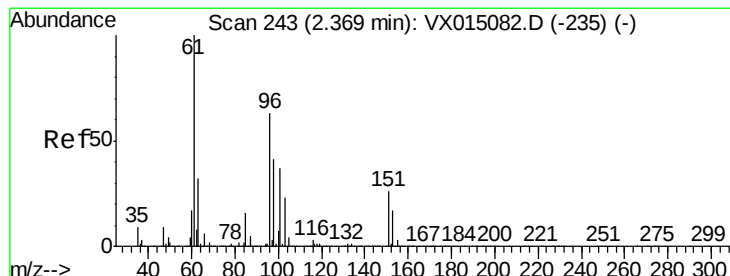
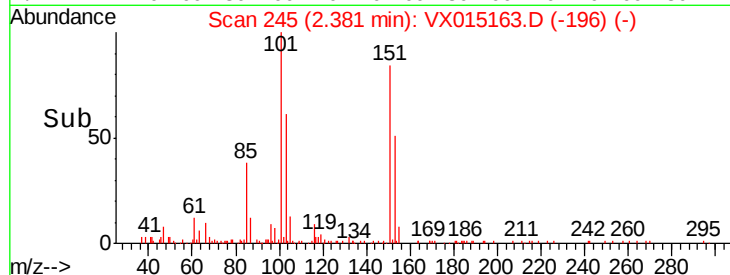
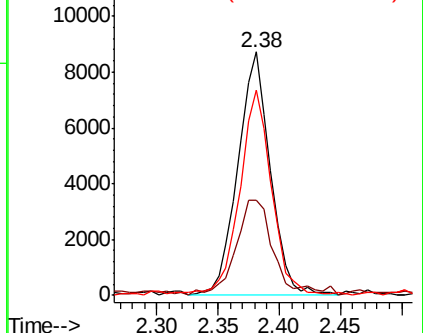
151 83.6 64.0 96.0



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VX0

Ion 150.80 (150.50 to 151.50): V



#12

1,1-Dichloroethene

Concen: 0.787 ug/l

RT: 2.37 min Scan# 244

Delta R.T. 0.01 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

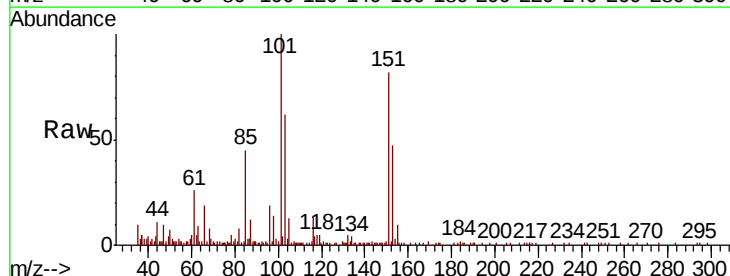
Tgt Ion: 96 Resp: 2520

Ion Ratio Lower Upper

96 100

61 137.3 126.2 189.4

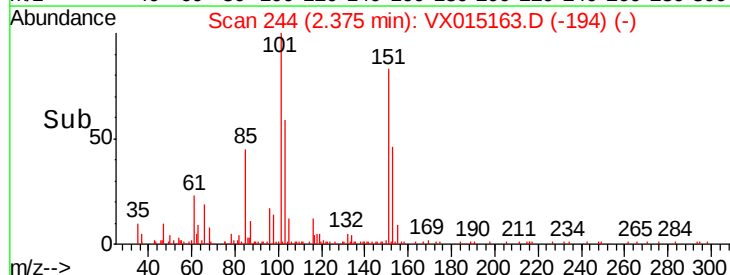
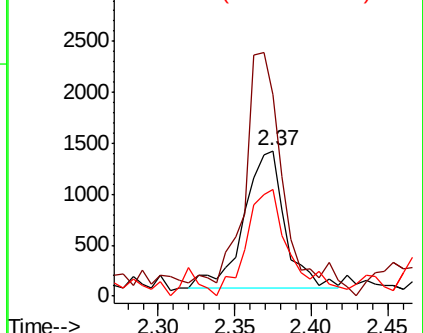
98 70.3 51.4 77.0

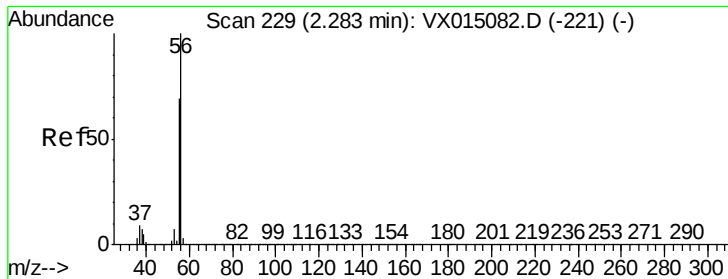


Abundance Ion 95.90 (95.60 to 96.60): VX0

Ion 60.90 (60.60 to 61.60): VX0

Ion 97.90 (97.60 to 98.60): VX0

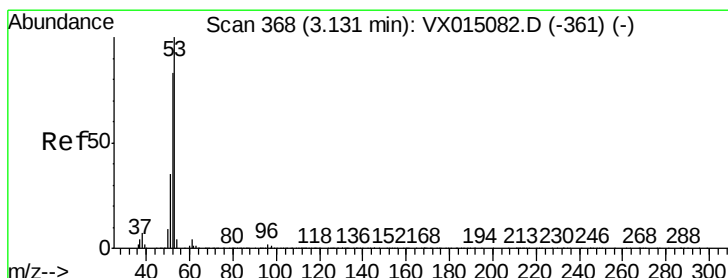
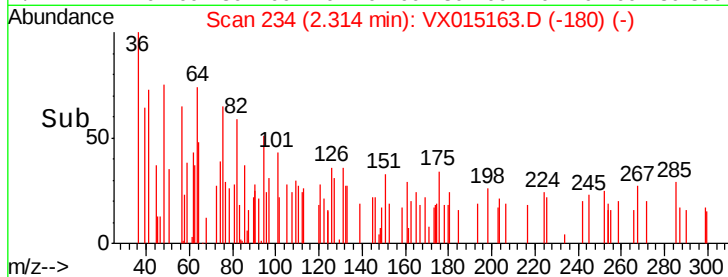
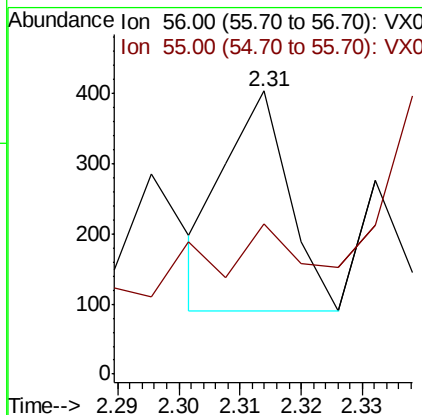
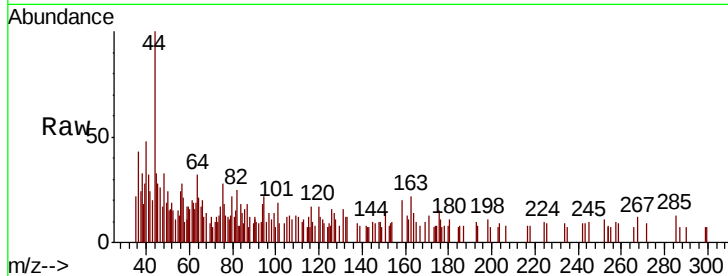




#13
Acrolein
Concen: 0.356 ug/l
RT: 2.31 min Scan# 234
Delta R.T. 0.03 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

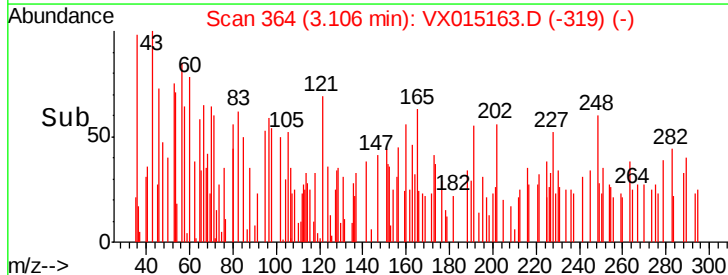
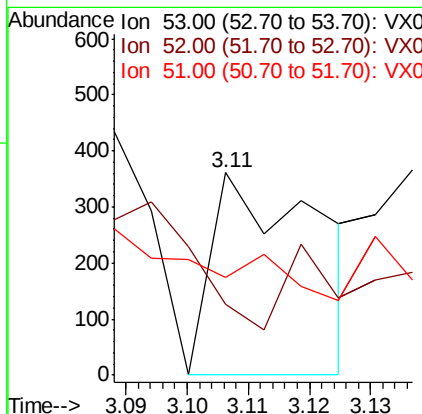
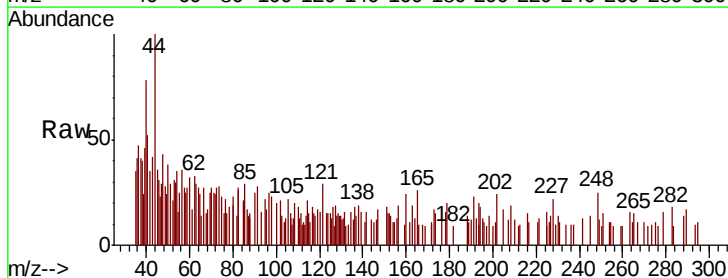
Instrument :
MSVOA_X
ClientSampled :

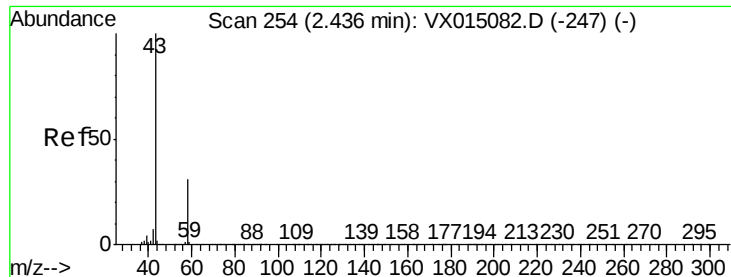
Tot Ion: 56 Resp: 227
Ion Ratio Lower Upper
56 100
55 48.0 55.4 83.0#



#15
Acrylonitrile
Concen: 0.259 ug/l
RT: 3.11 min Scan# 364
Delta R.T. -0.02 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Tgt Ion: 53 Resp: 437
Ion Ratio Lower Upper
53 100
52 0.0 66.6 100.0#
51 0.0 29.0 43.6#

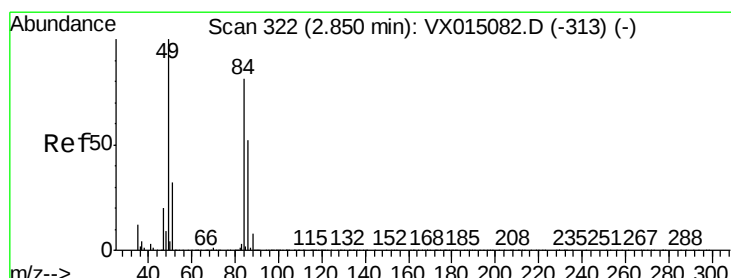
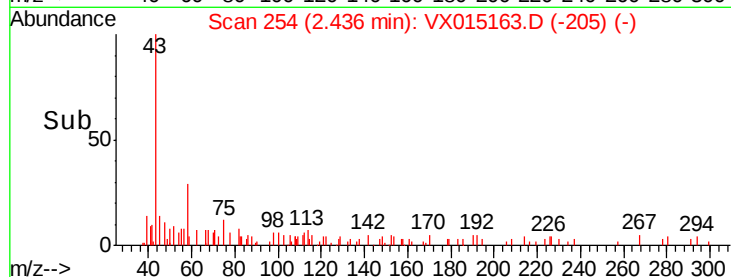
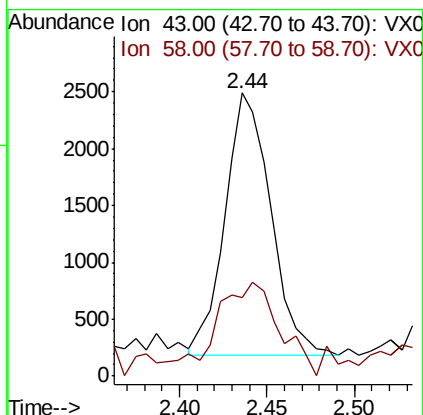
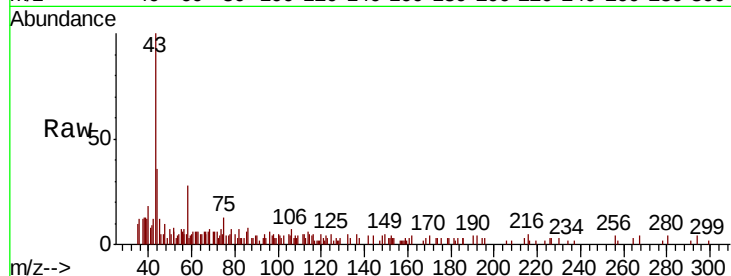




#16
Acetone
Concen: 2.637 ug/l
RT: 2.44 min Scan# 254
Delta R.T. 0.00 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

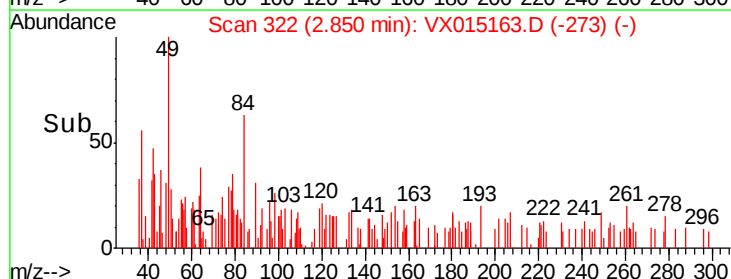
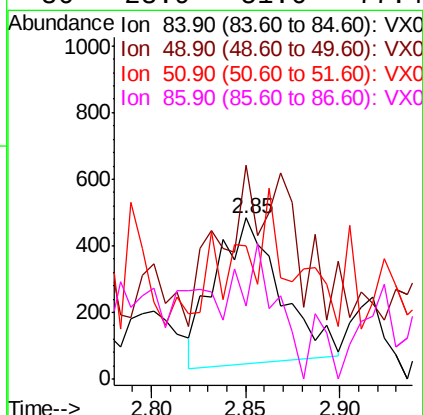
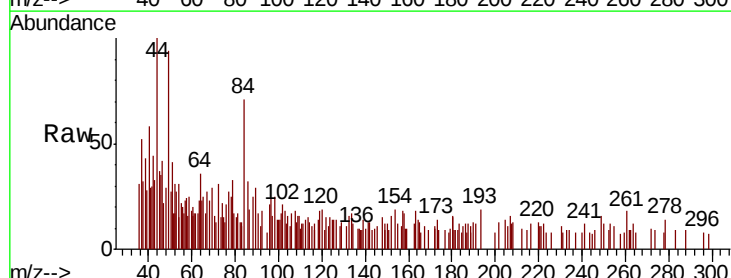
Instrument :
MSVOA_X
ClientSampled :

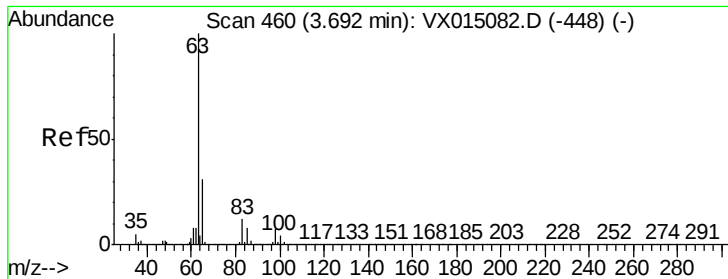
Tot Ion: 43 Resp: 4174
Ion Ratio Lower Upper
43 100
58 25.0 24.8 37.2



#20
Methylene Chloride
Concen: 0.283 ug/l
RT: 2.85 min Scan# 322
Delta R.T. 0.00 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Tgt Ion: 84 Resp: 1050
Ion Ratio Lower Upper
84 100
49 133.9 99.4 149.2
51 66.7 31.5 47.3#
86 28.9 51.6 77.4#





#24

1,1-Dichloroethane

Concen: 0.372 ug/l

RT: 3.70 min Scan# 461

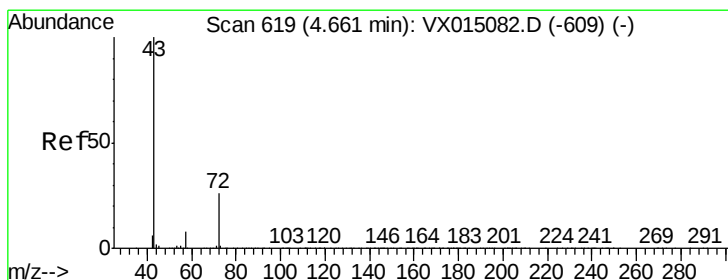
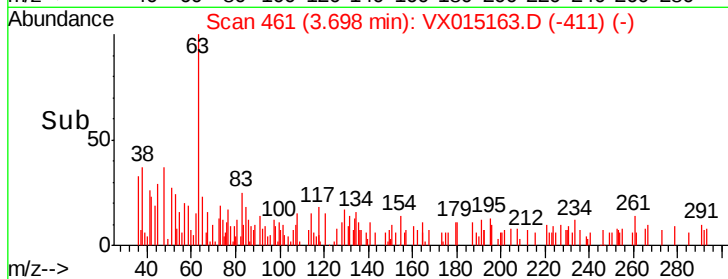
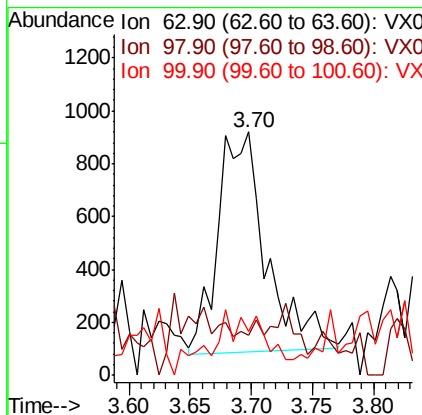
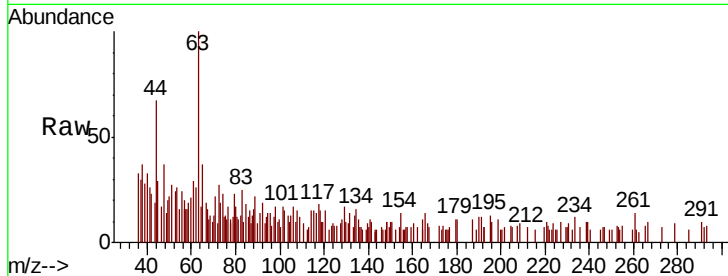
Delta R.T. 0.01 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:	63	Resp:	2297
Ion	Ratio	Lower	Upper
63	100		
98	8.4	3.7	11.1
100	11.2	2.1	6.5#



#25

2-Butanone

Concen: 0.419 ug/l

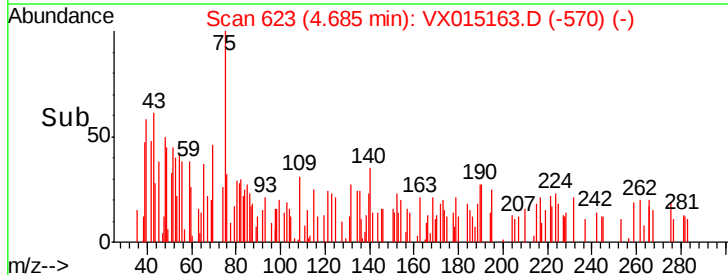
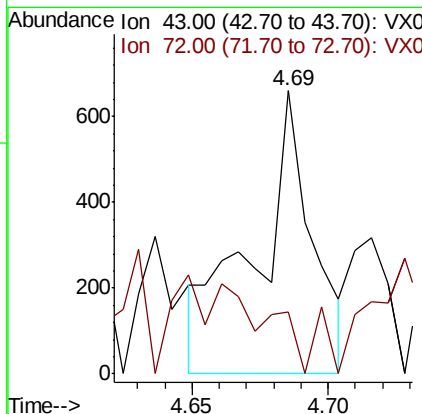
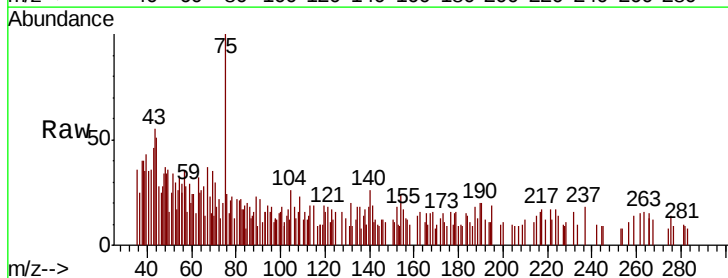
RT: 4.69 min Scan# 623

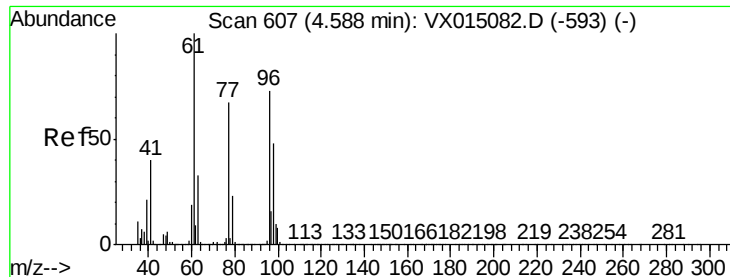
Delta R.T. 0.02 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Tgt Ion:	43	Resp:	971
Ion	Ratio	Lower	Upper
43	100		
72	29.4	20.6	30.8



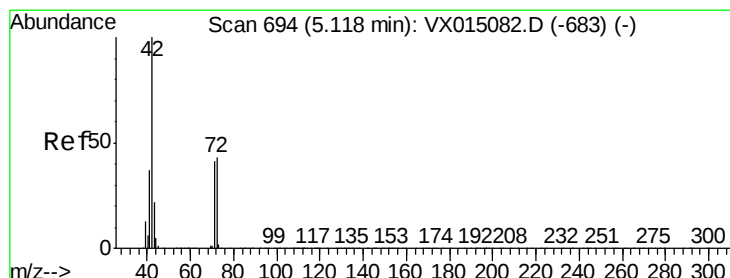
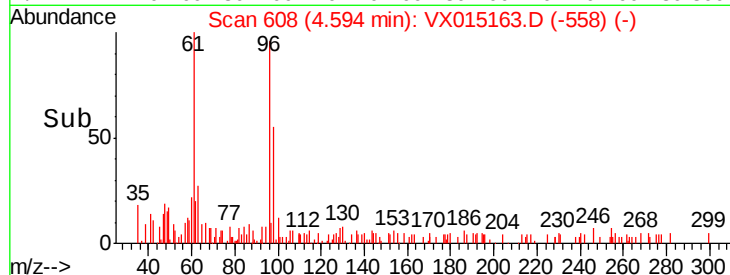
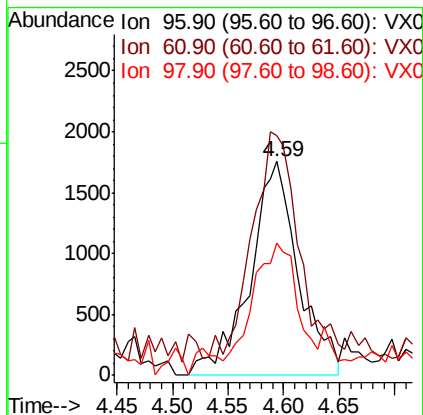
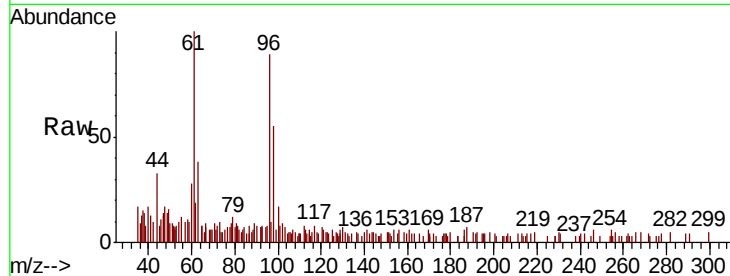


#27

cis-1,2-Dichloroethene
Concen: 1.388 ug/l
RT: 4.59 min Scan# 608
Delta R.T. 0.01 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Instrument :
MSVOA_X
ClientSampled :

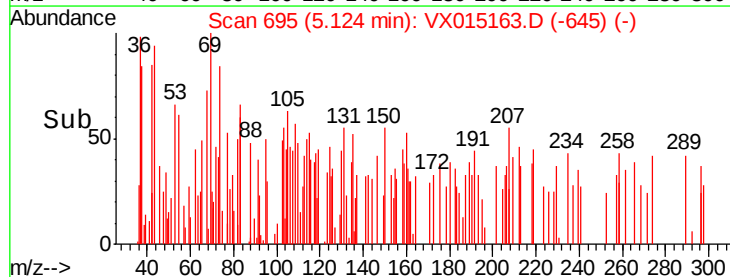
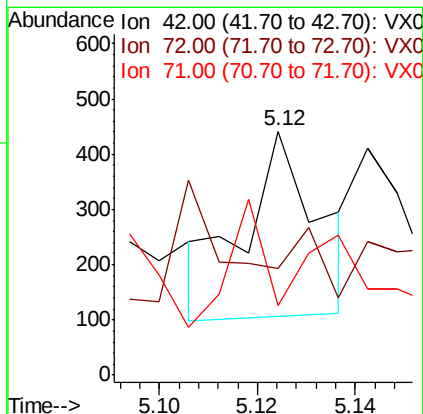
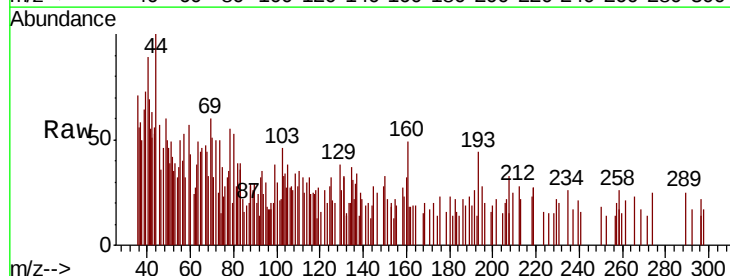
Tot Ion	Ratio	Lower	Upper
96	100		
61	101.3	0.0	286.8
98	47.5	0.0	128.4

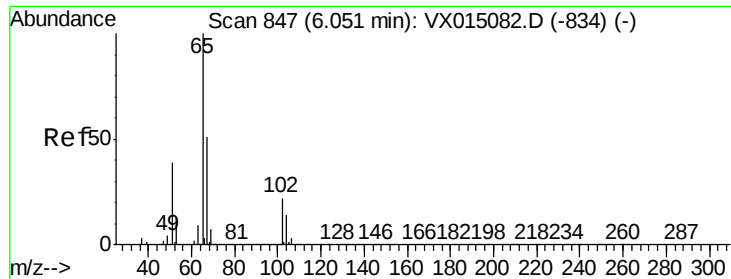


#29

Tetrahydrofuran
Concen: 0.235 ug/l
RT: 5.12 min Scan# 695
Delta R.T. 0.01 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Tgt Ion	Ratio	Lower	Upper
42	100		
72	44.2	36.4	54.6
71	34.5	33.3	49.9





#33

1,2-Dichloroethane-d4

Concen: 52.918 ug/l

RT: 6.05 min Scan# 847

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

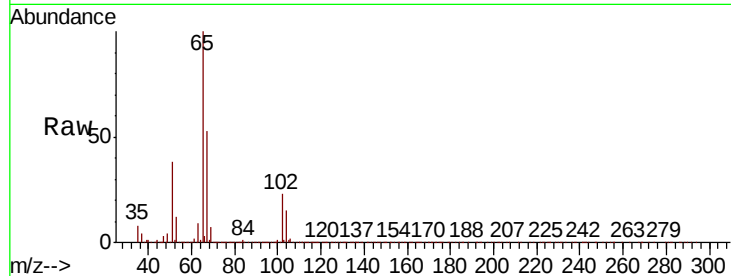
ClientSampleId :

Tot Ion: 65 Resp: 206810

Ion Ratio Lower Upper

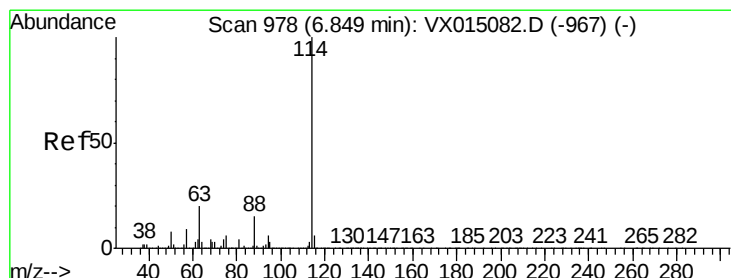
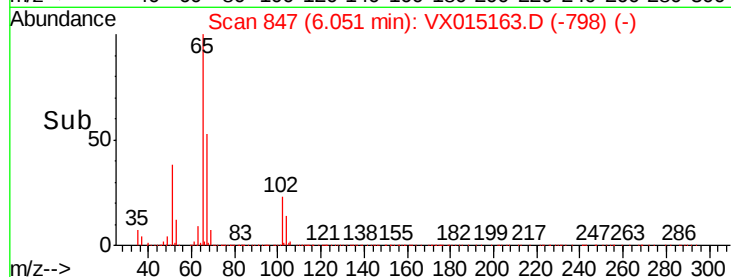
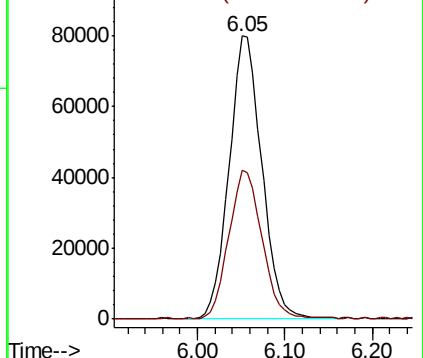
65 100

67 53.2 0.0 105.6



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

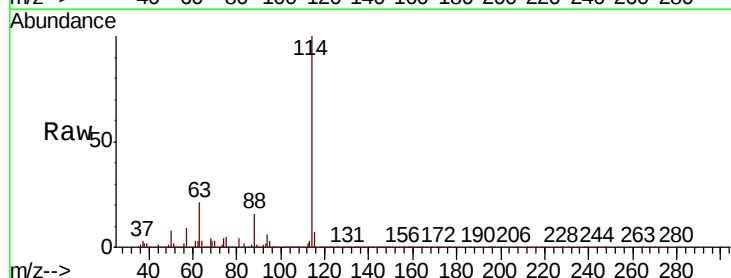
Tgt Ion: 114 Resp: 545416

Ion Ratio Lower Upper

114 100

63 21.2 0.0 40.0

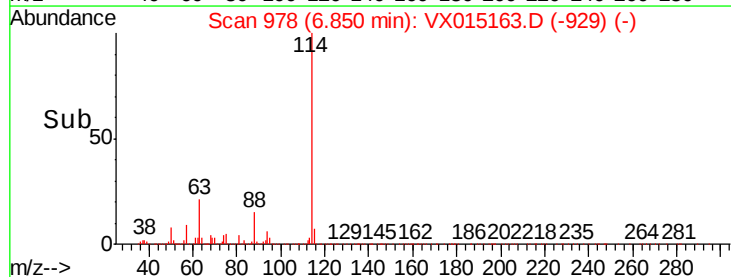
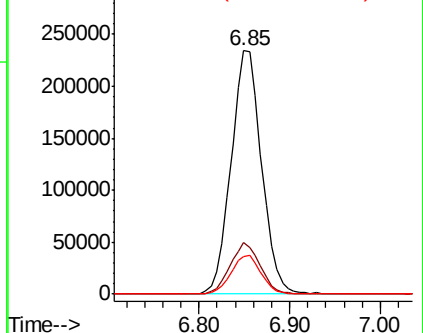
88 15.4 0.0 30.6

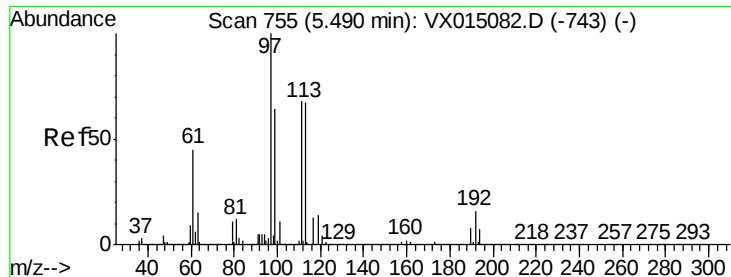


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0





#35

Dibromofluoromethane

Concen: 49.799 ug/l

RT: 5.49 min Scan# 755

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :
MSVOA_X
ClientSampleId :

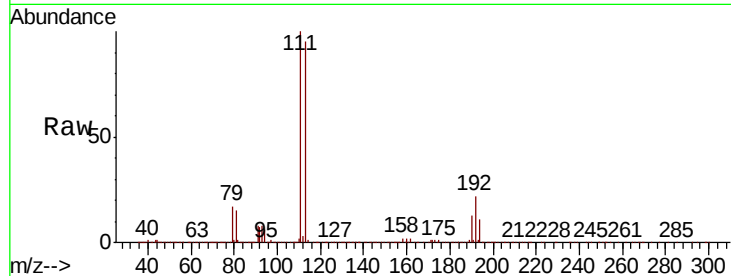
Tot Ion:113 Resp: 171353

Ion Ratio Lower Upper

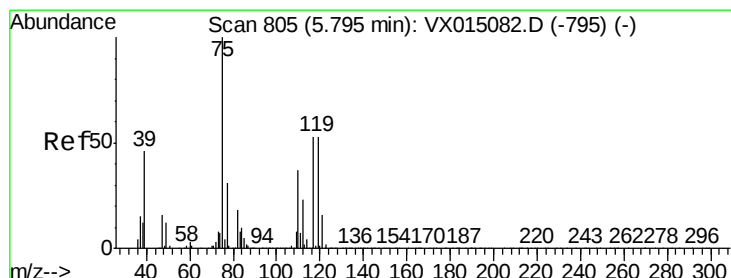
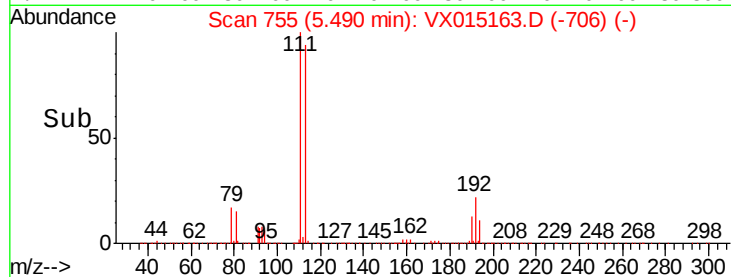
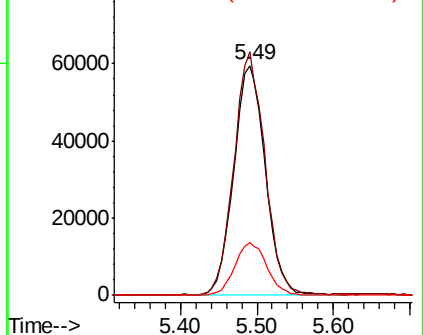
113 100

111 103.0 82.6 123.8

192 23.4 18.6 28.0



Abundance Ion 112.80 (112.50 to 113.50): V
Ion 110.80 (110.50 to 111.50): V
Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.822 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.15 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

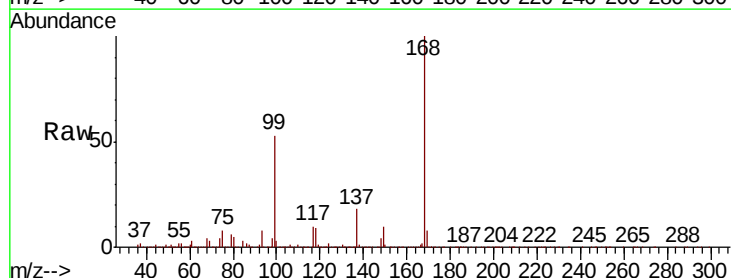
Tgt Ion: 75 Resp: 24313

Ion Ratio Lower Upper

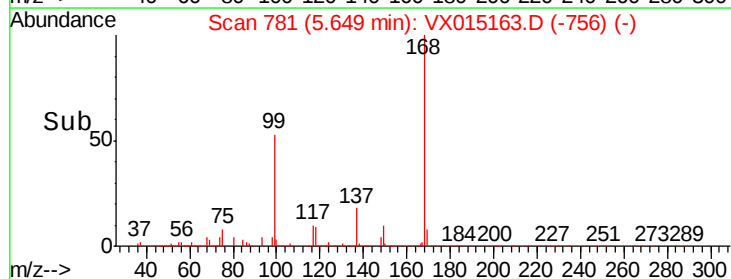
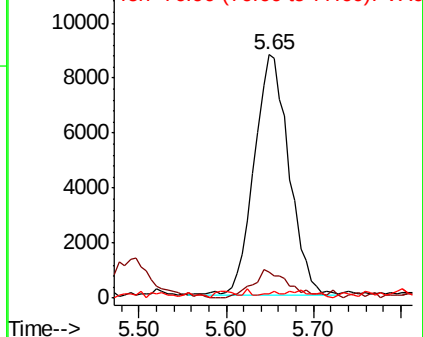
75 100

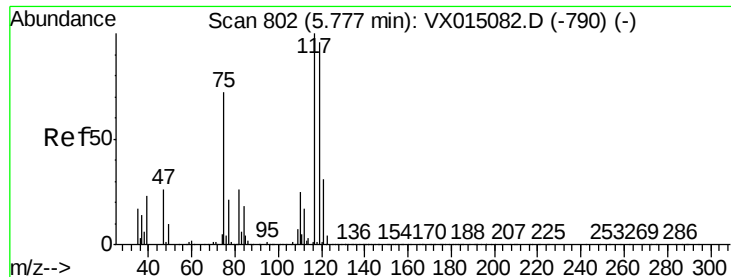
110 12.2 17.9 53.8#

77 0.5 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.268 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

ClientSampled :

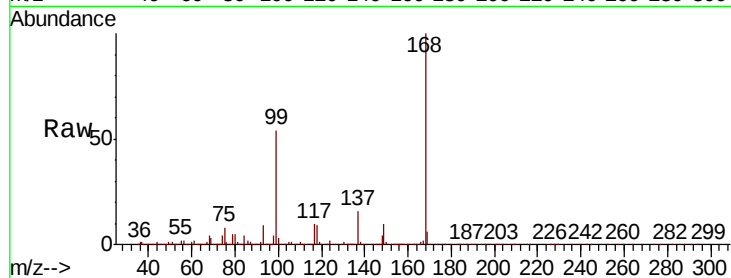
Tot Ion:117 Resp: 29830

Ion Ratio Lower Upper

117 100

119 6.7 76.9 115.3#

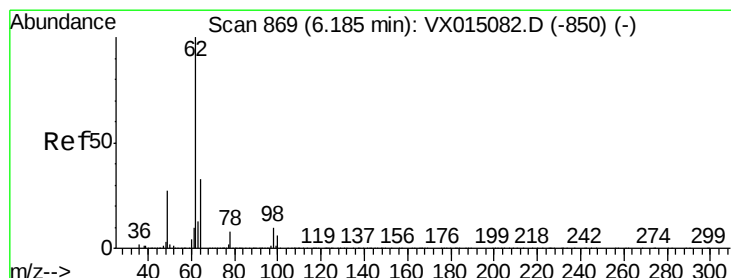
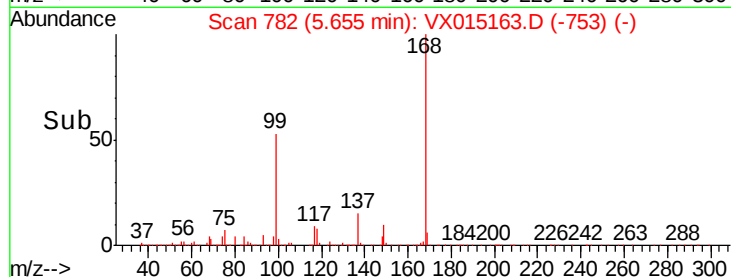
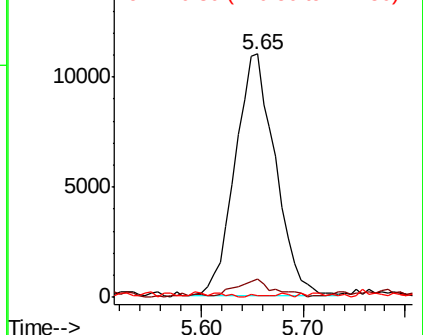
121 0.0 24.6 37.0#



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: 0.305 ug/l

RT: 6.21 min Scan# 873

Delta R.T. 0.02 min

Lab File: VX015163.D

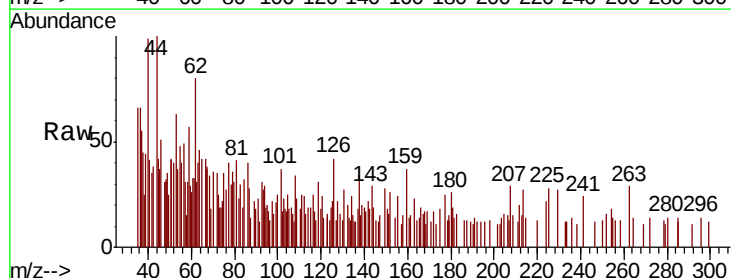
Acq: 10 Mar 2020 12:18

Tgt Ion: 62 Resp: 1567

Ion Ratio Lower Upper

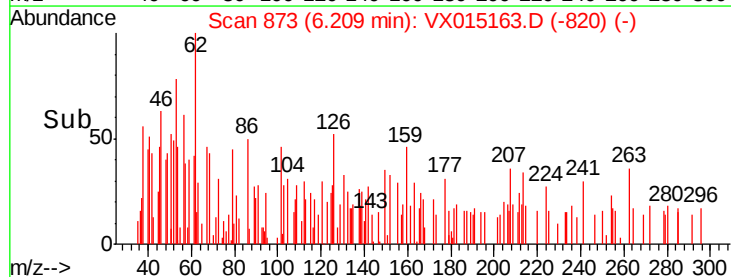
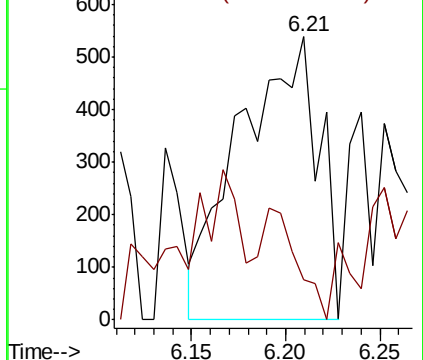
62 100

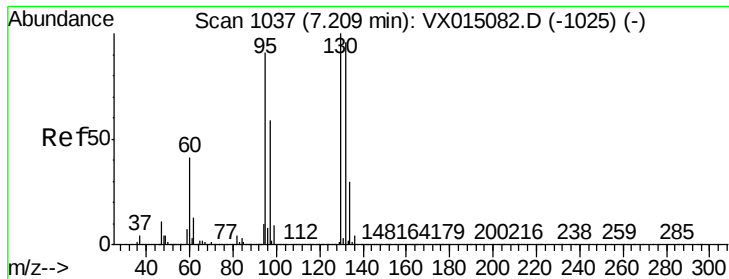
98 16.1 0.0 20.6



Abundance Ion 61.90 (61.60 to 62.60): VX0

Ion 97.90 (97.60 to 98.60): VX0

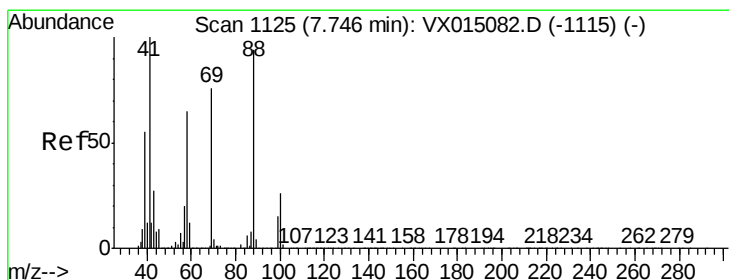
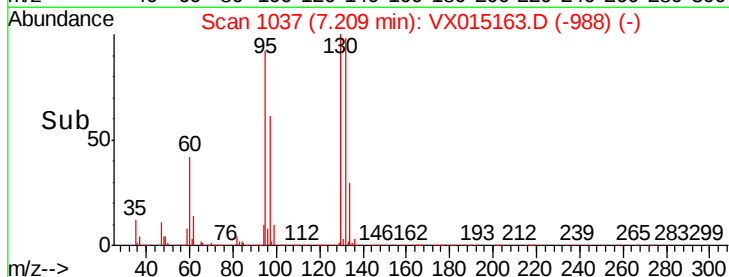
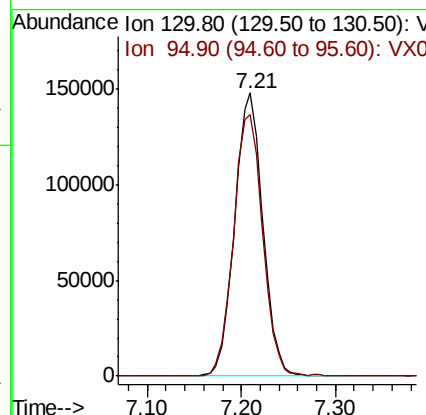
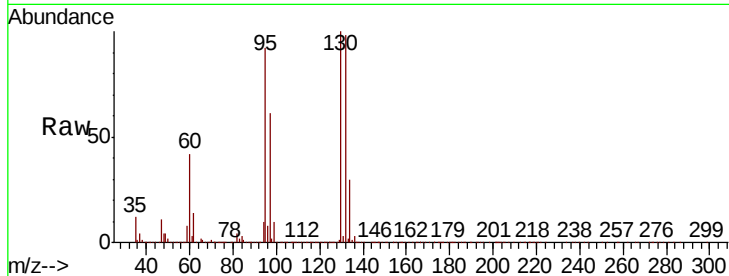




#44
 Trichloroethene
 Concen: 73.408 ug/l
 RT: 7.21 min Scan# 1037
 Delta R.T. 0.00 min
 Lab File: VX015163.D
 Acq: 10 Mar 2020 12:18

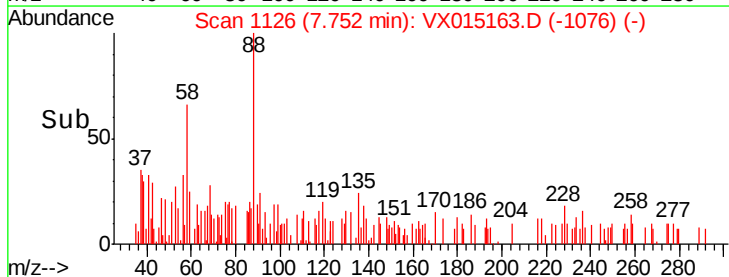
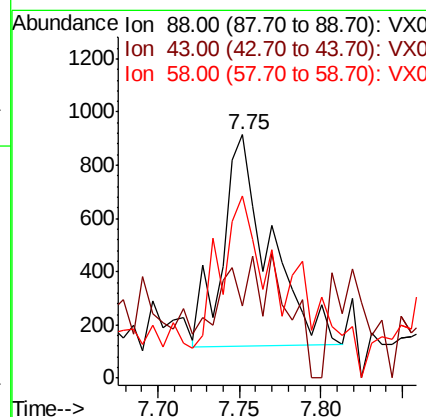
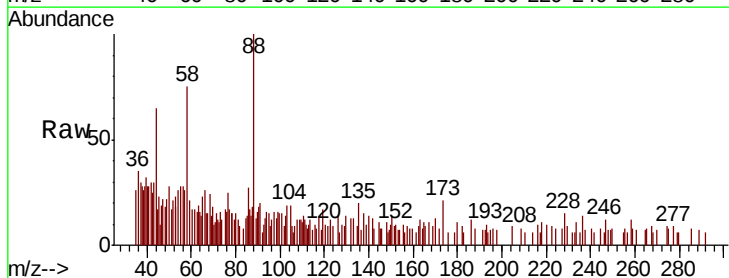
Instrument :
 MSVOA_X
 ClientSampleId :

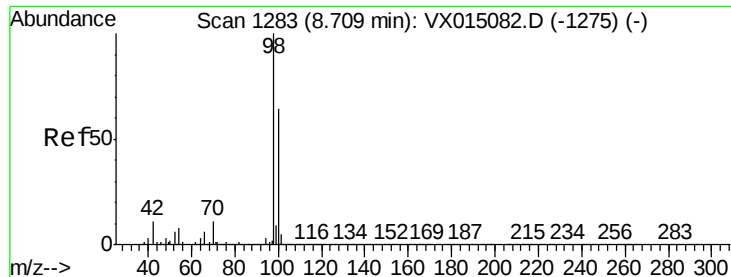
Tot Ion:130 Resp: 305825
 Ion Ratio Lower Upper
 130 100
 95 92.1 0.0 181.2



#49
 1,4-Dioxane
 Concen: 17.483 ug/l
 RT: 7.75 min Scan# 1126
 Delta R.T. 0.01 min
 Lab File: VX015163.D
 Acq: 10 Mar 2020 12:18

Tgt Ion: 88 Resp: 1583
 Ion Ratio Lower Upper
 88 100
 43 15.1 27.0 40.4#
 58 65.1 55.6 83.4





#50

Toluene-d8

Concen: 51.541 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

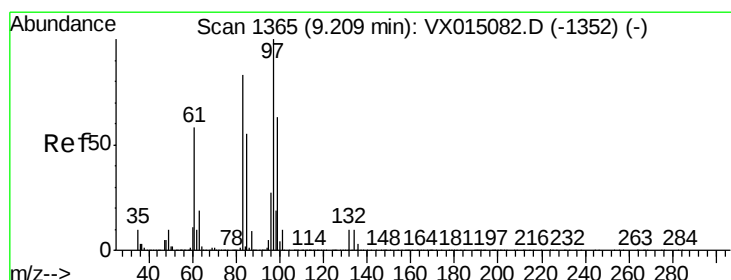
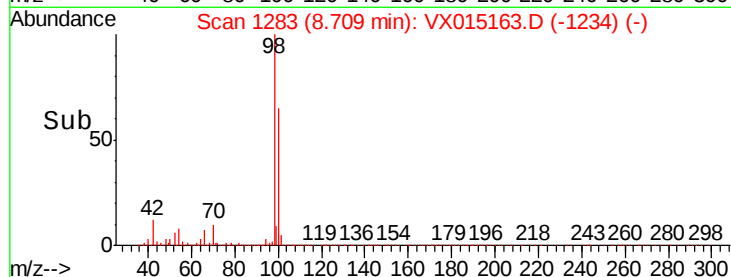
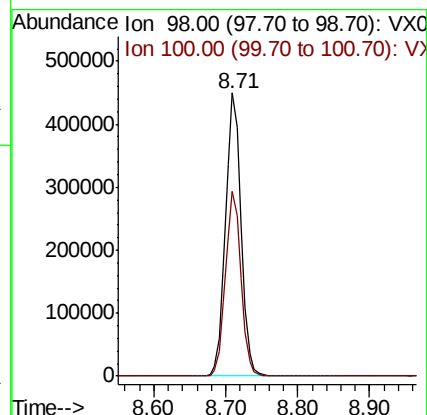
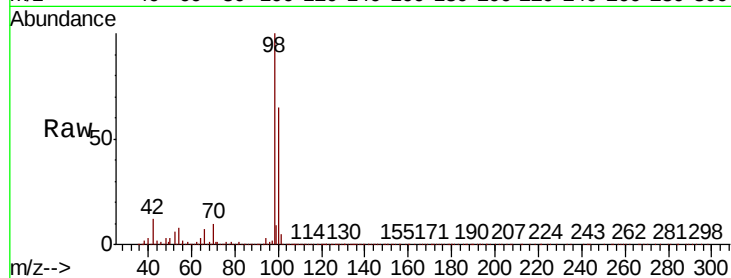
ClientSampleId :

Tot Ion: 98 Resp: 674601

Ion Ratio Lower Upper

98 100

100 65.0 52.4 78.6



#55

1,1,2-Trichloroethane

Concen: 0.270 ug/l

RT: 9.21 min Scan# 1365

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Tgt Ion: 97 Resp: 1016

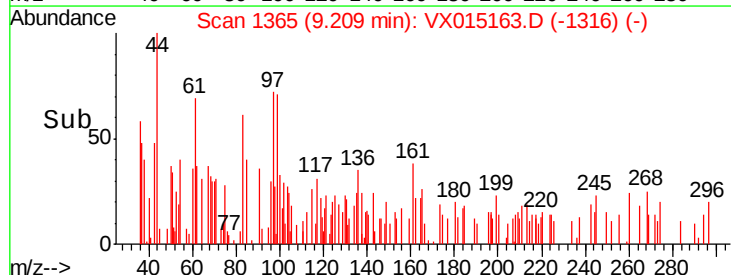
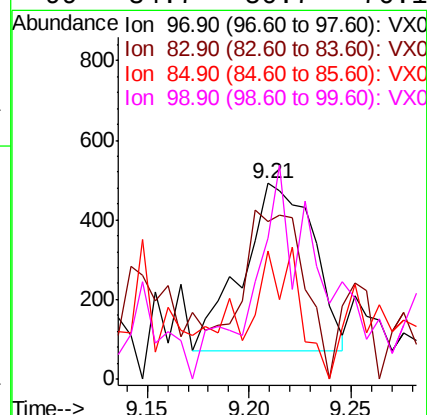
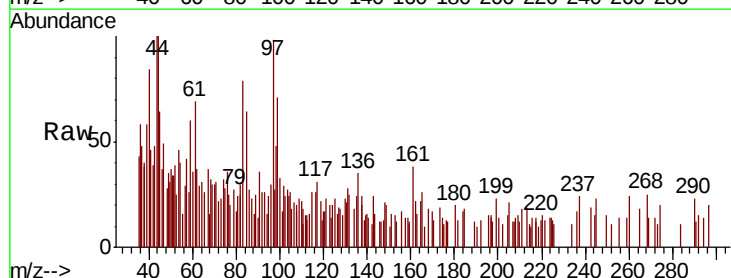
Ion Ratio Lower Upper

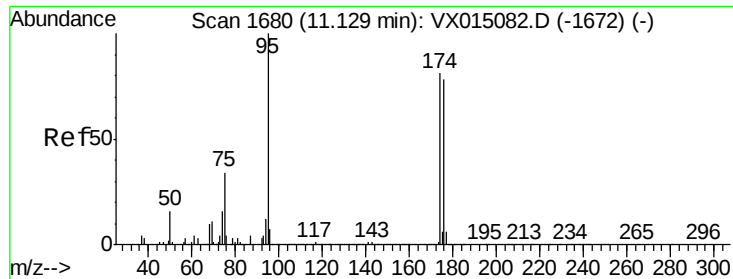
97 100

83 54.2 66.4 99.6#

85 50.1 43.5 65.3

99 84.7 50.7 76.1#

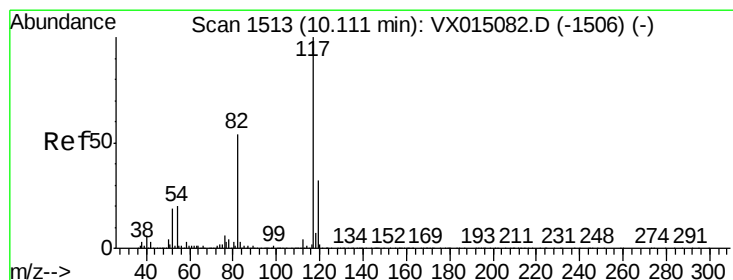
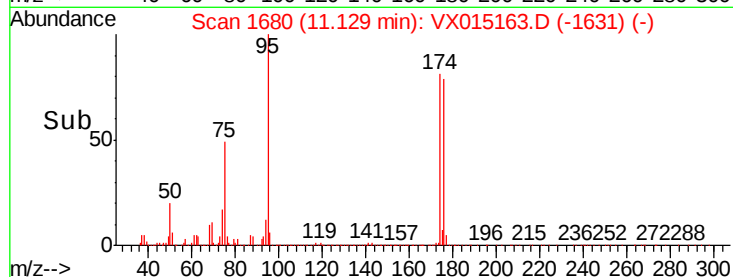
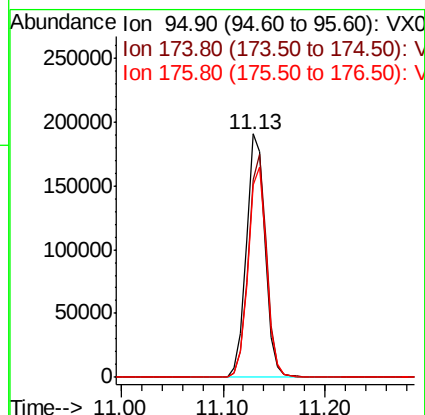
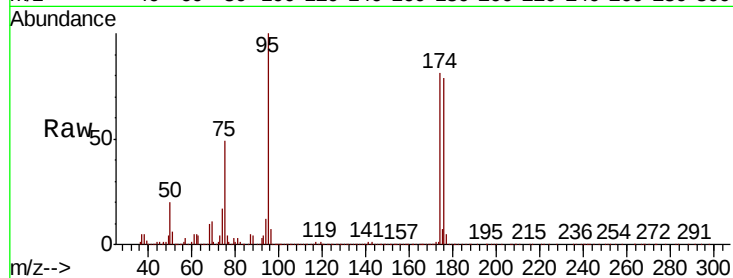




#62
4-Bromofluorobenzene
Concen: 51.379 ug/l
RT: 11.13 min Scan# 1680
Delta R.T. 0.00 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

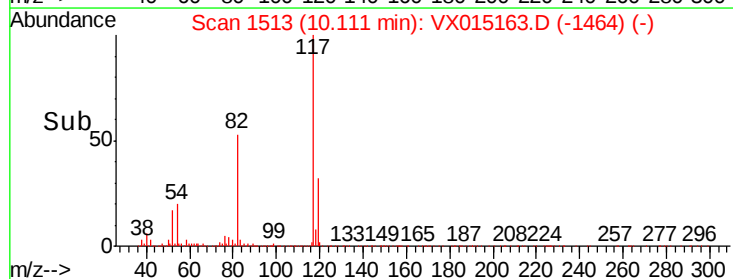
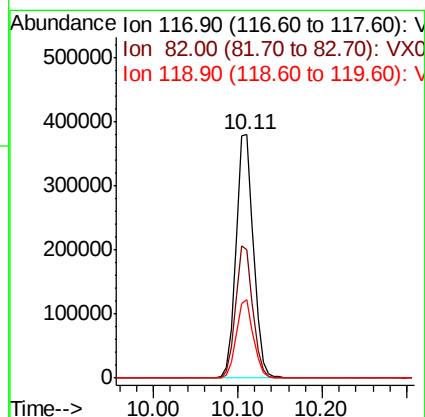
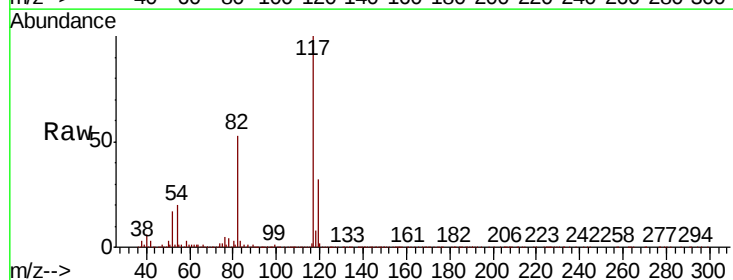
Instrument :
MSVOA_X
ClientSampled :

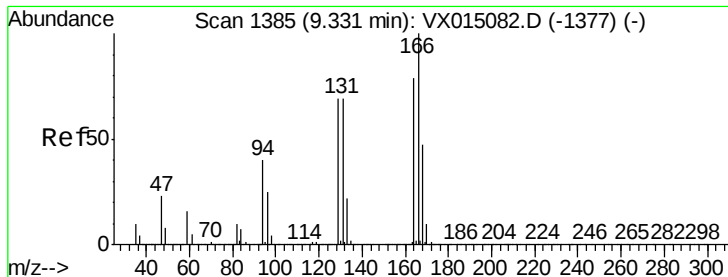
Tot Ion	Ratio	Lower	Upper
95	100		
174	90.4	0.0	177.6
176	86.5	0.0	170.2



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1513
Delta R.T. 0.00 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Tgt Ion	Ratio	Lower	Upper
117	100		
82	52.5	43.3	64.9
119	32.0	25.8	38.8





#64

Tetrachloroethene

Concen: 1.165 ug/l

RT: 9.33 min Scan# 1385

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :
MSVOA_X
ClientSampled :

Tot Ion:164 Resp: 5120

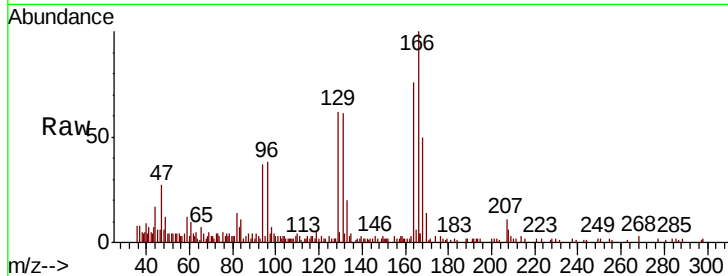
Ion Ratio Lower Upper

164 100

166 130.9 101.1 151.7

129 78.6 69.4 104.0

131 77.4 69.8 104.8

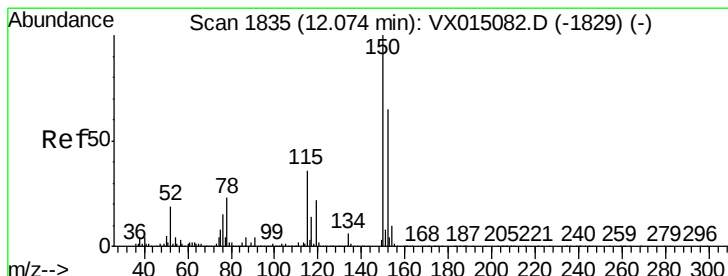
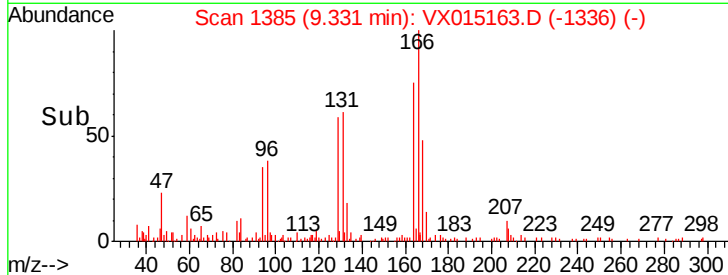
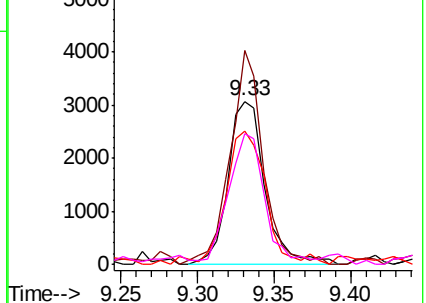


Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

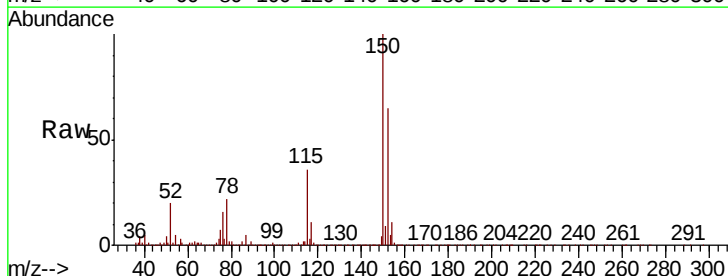
Tgt Ion:152 Resp: 262735

Ion Ratio Lower Upper

152 100

115 56.2 38.2 114.6

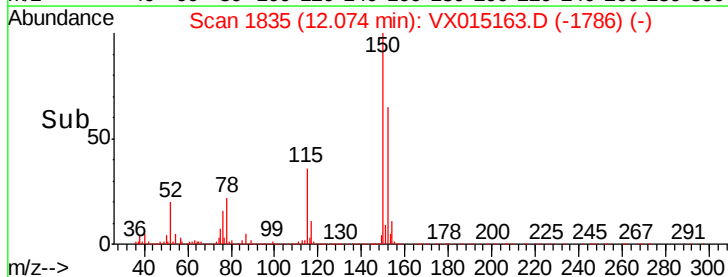
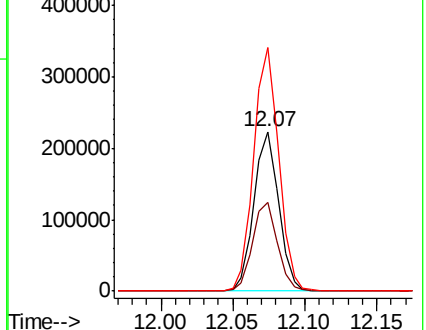
150 155.1 0.0 343.8

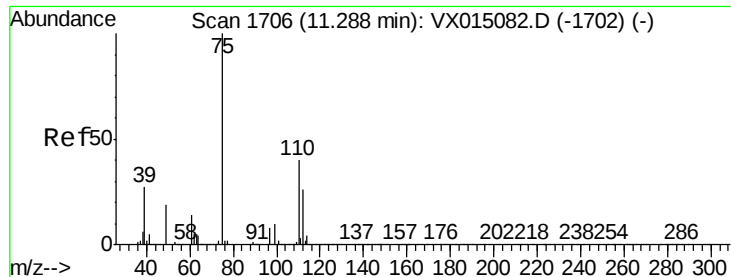


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 22.549 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

Instrument :

MSVOA_X

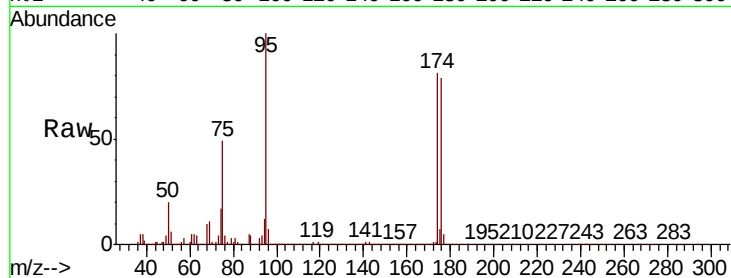
ClientSampleId :

Tot Ion: 75 Resp: 118174

Ion Ratio Lower Upper

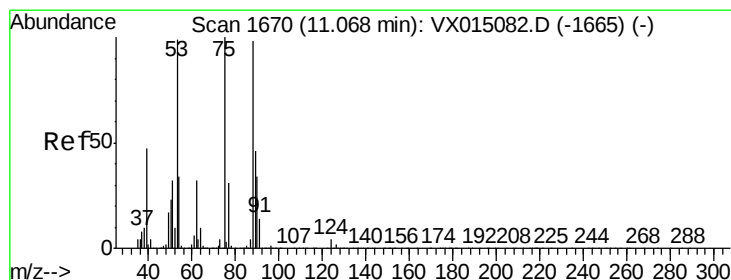
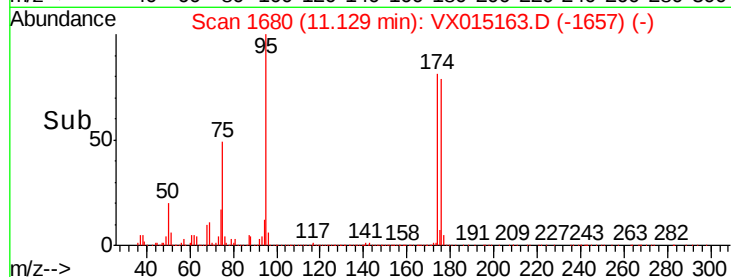
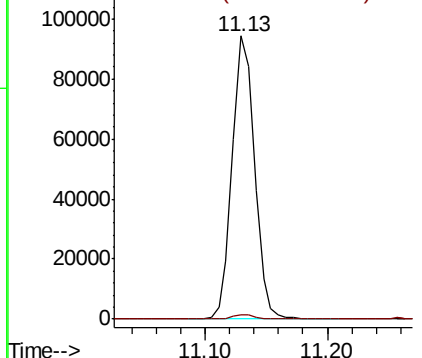
75 100

77 1.6 22.6 67.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0



#81

trans-1,4-Dichloro-2-butene

Concen: 63.994 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX015163.D

Acq: 10 Mar 2020 12:18

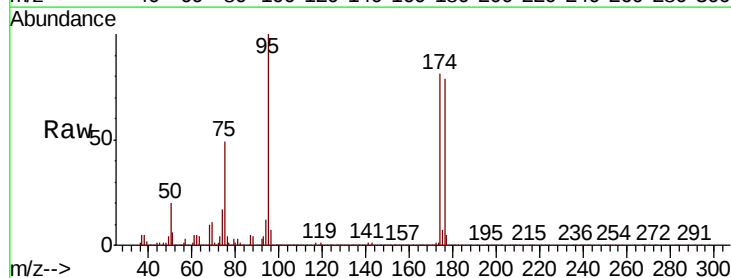
Tgt Ion: 75 Resp: 118174

Ion Ratio Lower Upper

75 100

53 0.1 77.9 116.9#

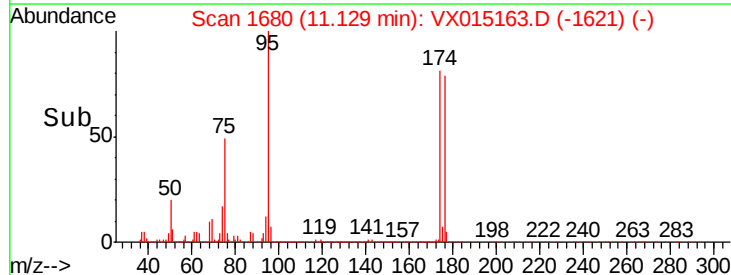
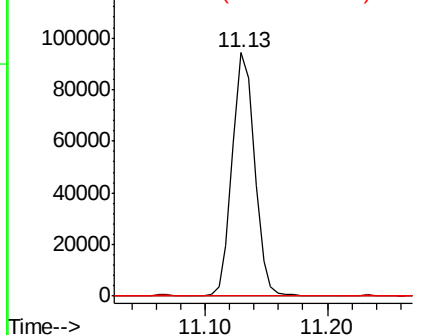
89 0.0 36.2 54.2#

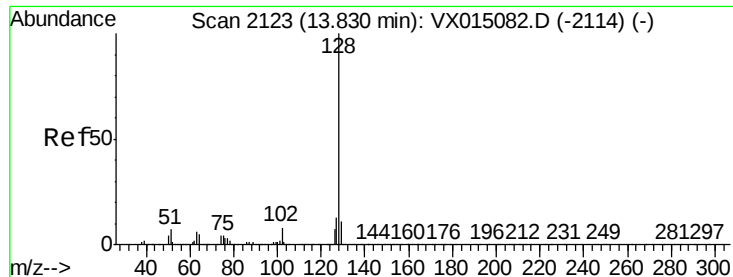


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0





#95
Naphthalene
Concen: 1.478 ug/l
RT: 13.84 min Scan# 2124
Delta R.T. 0.01 min
Lab File: VX015163.D
Acq: 10 Mar 2020 12:18

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion	Ratio	Lower	Upper
128	100		
127	27.1	10.3	15.5#
129	20.3	8.6	13.0#

