

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX122419\
 Data File : VX014237.D
 Acq On : 24 Dec 2019 12:09
 Operator : JC/SP
 Sample : K6393-05
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TB-12-20-19

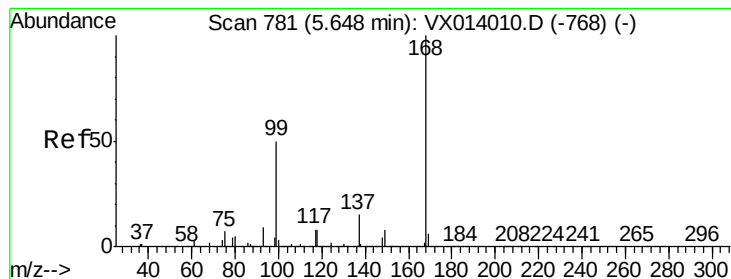
Quant Time: Dec 25 05:38:48 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X121319W.M
 Quant Title : SW846 8260
 QLast Update : Tue Dec 17 03:01:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.65	168	502399	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	769960	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	680493	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	295052	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.05	65	278252	48.87	ug/l	0.00
Spiked Amount			Recovery	=	97.74%	
35) Dibromofluoromethane	5.49	113	227914	48.69	ug/l	0.00
Spiked Amount			Recovery	=	97.38%	
50) Toluene-d8	8.71	98	919286	50.45	ug/l	0.00
Spiked Amount			Recovery	=	100.90%	
62) 4-Bromofluorobenzene	11.13	95	299329	44.94	ug/l	0.00
Spiked Amount			Recovery	=	89.88%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.64	94	1152	0.255	ug/l #	76
6) Chloroethane	1.66	64	861	0.219	ug/l #	72
10) Methyl Iodide	2.50	142	2183	2.951	ug/l #	67
11) Tert butyl alcohol	3.02	59	829	0.674	ug/l #	69
13) Acrolein	2.28	56	326	0.463	ug/l #	1
16) Acetone	2.43	43	49452	13.378	ug/l	100
17) Carbon Disulfide	2.56	76	3111	0.979	ug/l #	85
20) Methylene Chloride	2.85	84	10968	1.884	ug/l	98
25) 2-Butanone	4.67	43	14907	3.271	ug/l #	82
28) Bromochloromethane	5.00	49	414	0.565	ug/l #	59
29) Tetrahydrofuran	5.14	42	2101	0.824	ug/l #	63
36) 1,1-Dichloropropene	5.65	75	33351	4.721	ug/l #	51
37) Ethyl Acetate	4.67	43	14850	1.903	ug/l #	71
38) Carbon Tetrachloride	5.65	117	44699	6.945	ug/l #	17
42) 1,2-Dichloroethane	6.20	62	1936	0.263	ug/l	82
49) 1,4-Dioxane	7.75	88	294	2.285	ug/l #	38
51) 4-Methyl-2-Pentanone	8.64	43	5017	0.619	ug/l	90
76) 1,2,3-Trichloropropane	11.13	75	146761	22.912	ug/l #	39
81) trans-1,4-Dichloro-2-buten	11.13	75	146761	64.669	ug/l #	11
93) 1,2,4-Trichlorobenzene	13.64	180	1910	0.291	ug/l	82
94) Hexachlorobutadiene	13.77	225	767	0.243	ug/l	83
95) Naphthalene	13.83	128	5202	0.270	ug/l #	77
96) 1,2,3-Trichlorobenzene	14.02	180	1738	0.269	ug/l #	88

(#) = 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. 0.01 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampleId :

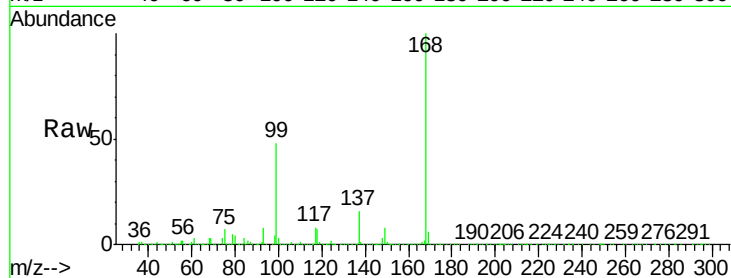
TB-12-20-19

Tgt Ion: 168 Resp: 502399

Ion Ratio Lower Upper

168 100

99 47.4 40.3 60.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

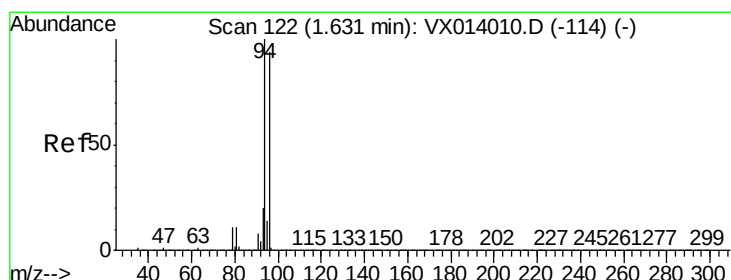
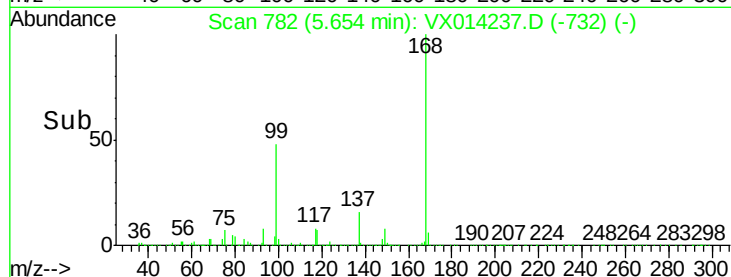
150000

100000

50000

0

Time--> 5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.255 ug/l

RT: 1.64 min Scan# 124

Delta R.T. 0.01 min

Lab File: VX014237.D

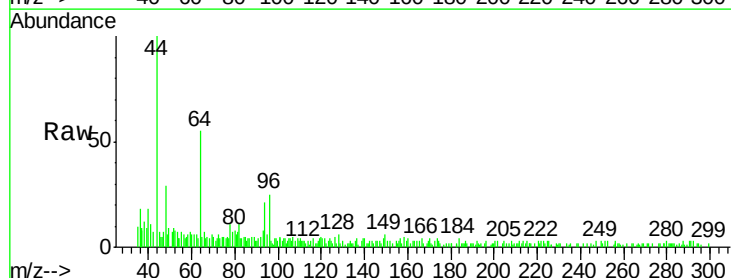
Acq: 24 Dec 2019 12:09

Tgt Ion: 94 Resp: 1152

Ion Ratio Lower Upper

94 100

96 117.4 75.2 112.8#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.64

1200

1000

800

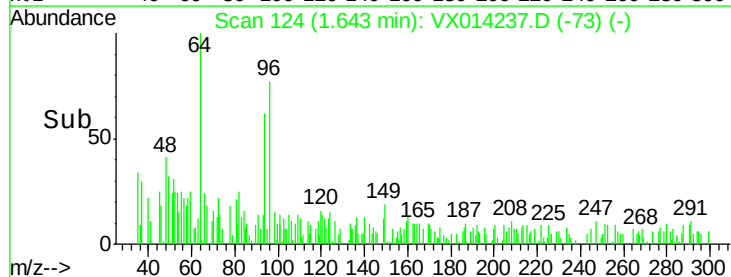
600

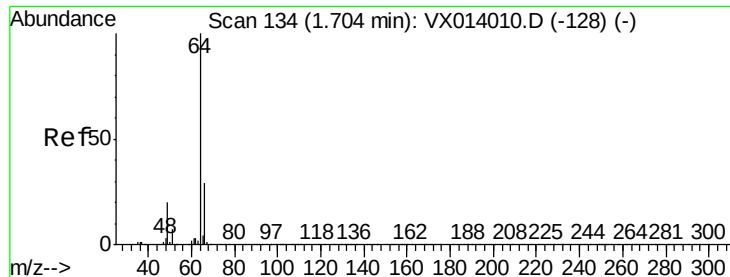
400

200

0

Time--> 1.62 1.64 1.66 1.68





#6

Chloroethane

Concen: 0.219 ug/l

RT: 1.66 min Scan# 127

Delta R.T. -0.04 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampleId :

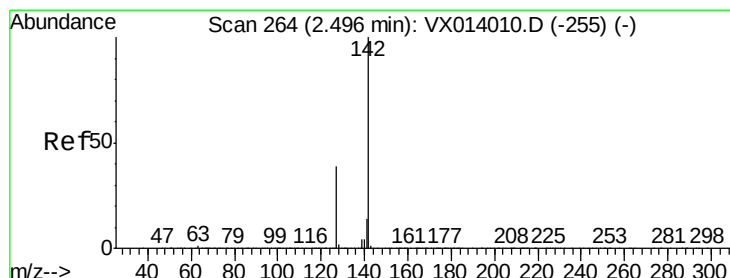
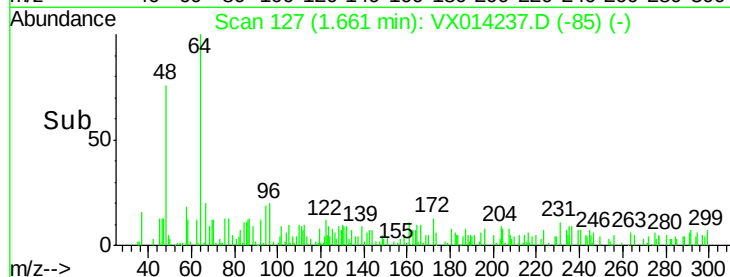
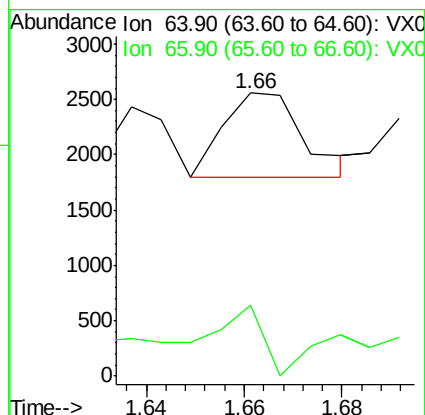
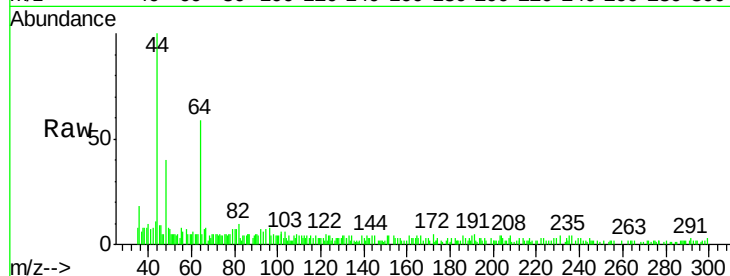
TB-12-20-19

Tgt Ion: 64 Resp: 861

Ion Ratio Lower Upper

64 100

66 44.5 23.4 35.2#



#10

Methyl Iodide

Concen: 2.951 ug/l

RT: 2.50 min Scan# 265

Delta R.T. 0.01 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

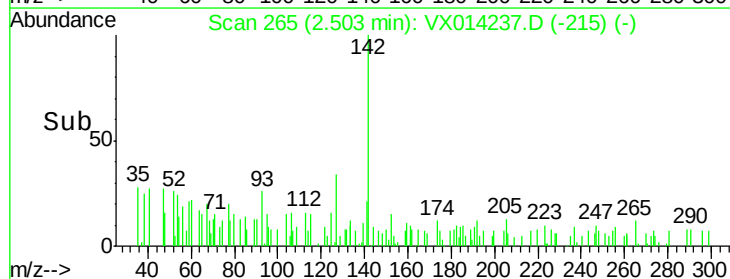
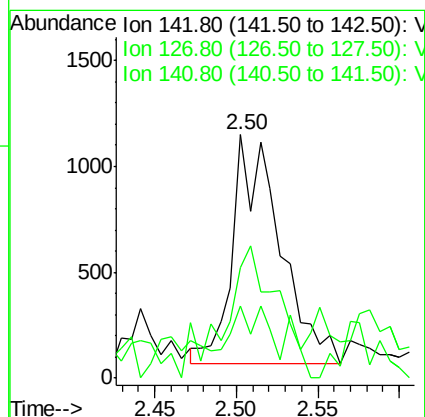
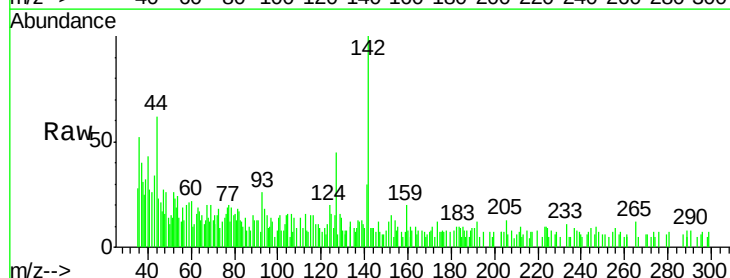
Tgt Ion: 142 Resp: 2183

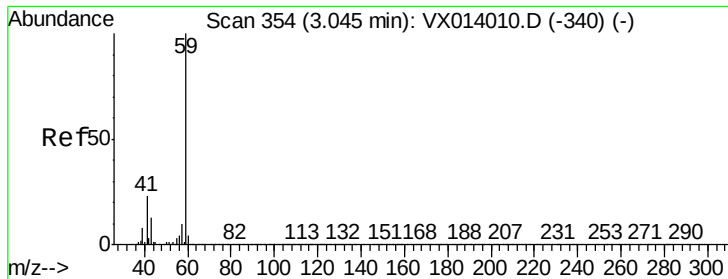
Ion Ratio Lower Upper

142 100

127 63.6 31.6 47.4#

141 21.0 11.6 17.4#



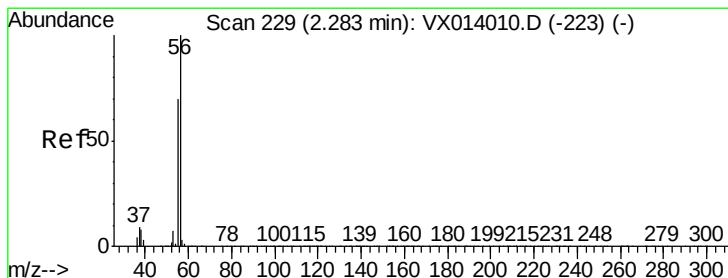
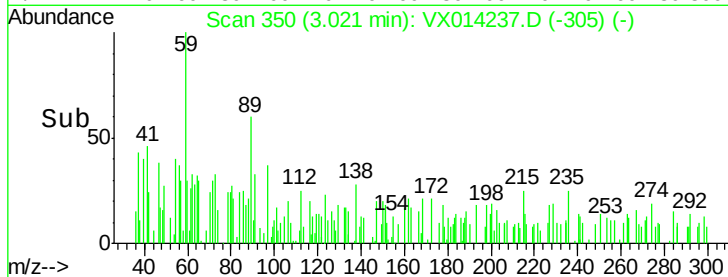
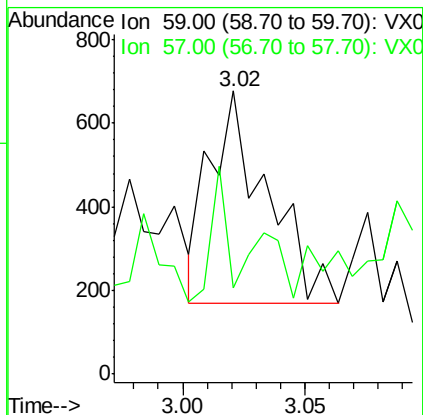
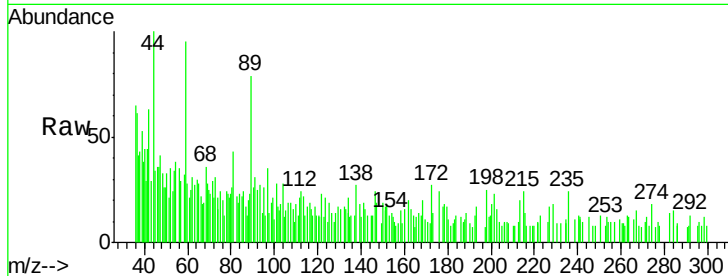


#11

Tert butyl alcohol
Concen: 0.674 ug/l
RT: 3.02 min Scan# 350
Delta R.T. -0.02 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

Instrument :
MSVOA_X
ClientSampled :
TB-12-20-19

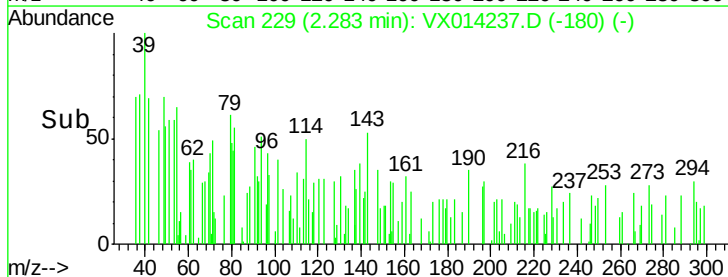
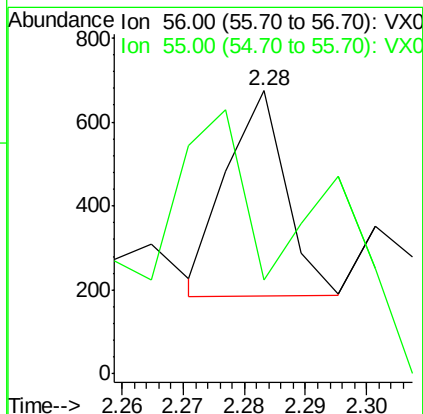
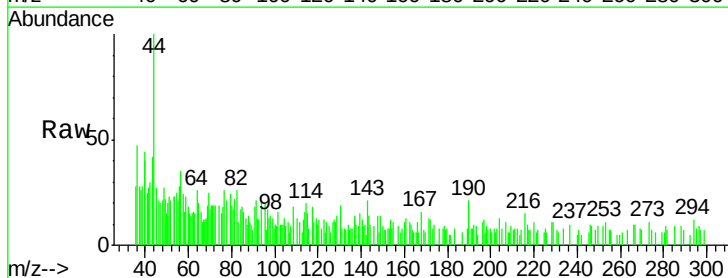
Tgt Ion: 59 Resp: 829
Ion Ratio Lower Upper
59 100
57 22.2 8.4 12.6#

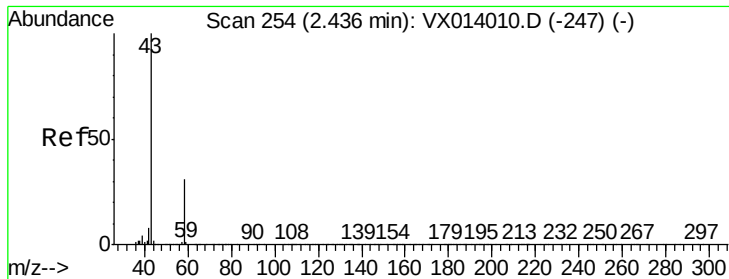


#13

Acrolein
Concen: 0.463 ug/l
RT: 2.28 min Scan# 229
Delta R.T. 0.00 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

Tgt Ion: 56 Resp: 326
Ion Ratio Lower Upper
56 100
55 303.7 56.9 85.3#





#16

Acetone

Concen: 13.378 ug/l

RT: 2.43 min Scan# 253

Delta R.T. -0.01 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampleId :

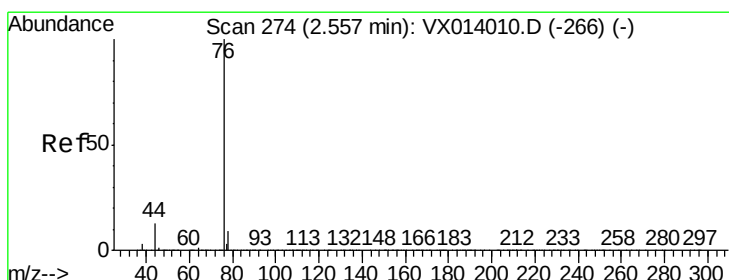
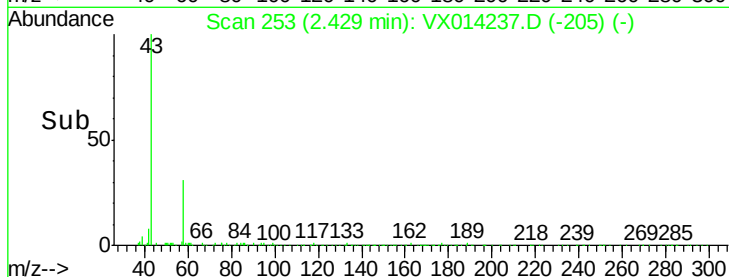
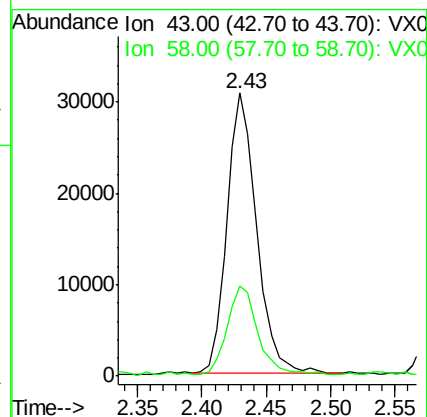
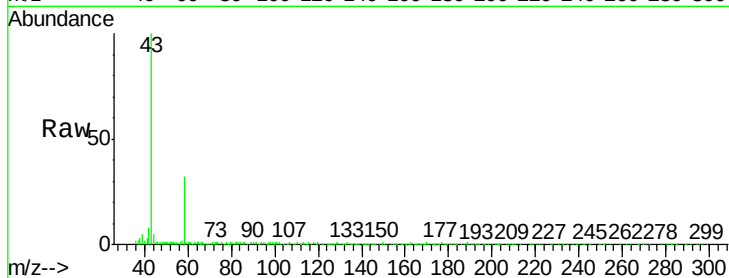
TB-12-20-19

Tgt Ion: 43 Resp: 49452

Ion Ratio Lower Upper

43 100

58 31.1 24.9 37.3



#17

Carbon Disulfide

Concen: 0.979 ug/l

RT: 2.56 min Scan# 275

Delta R.T. 0.01 min

Lab File: VX014237.D

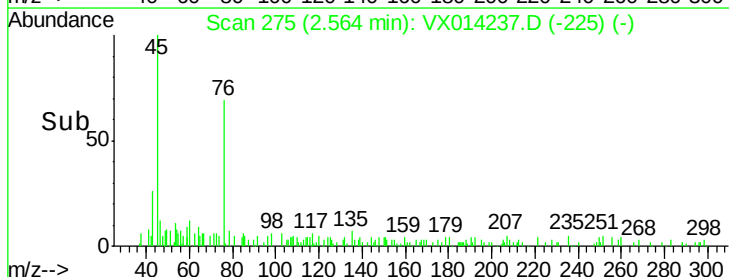
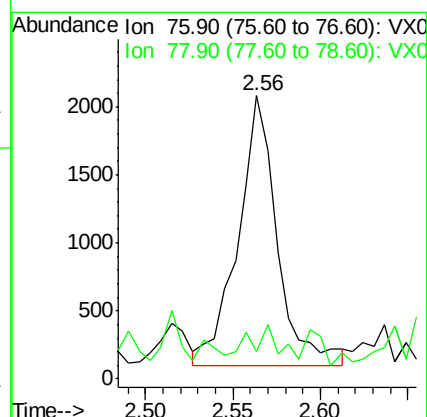
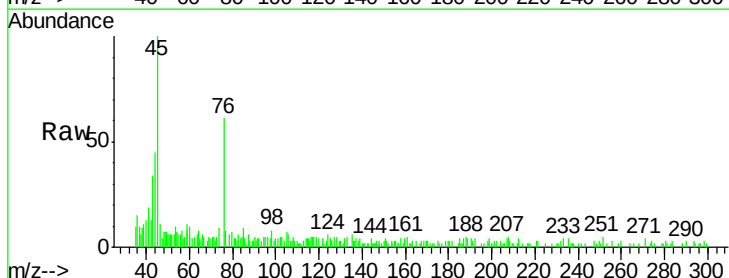
Acq: 24 Dec 2019 12:09

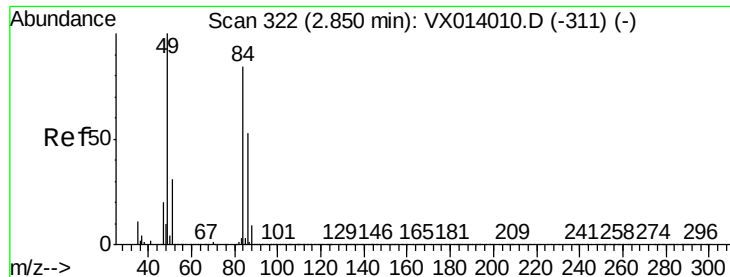
Tgt Ion: 76 Resp: 3111

Ion Ratio Lower Upper

76 100

78 3.7 7.2 10.8#

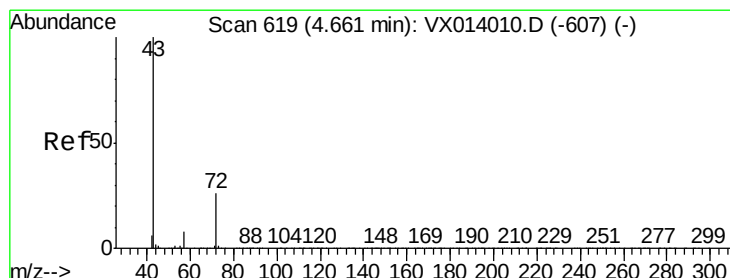
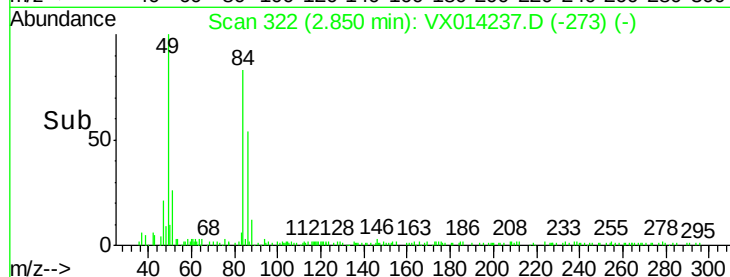
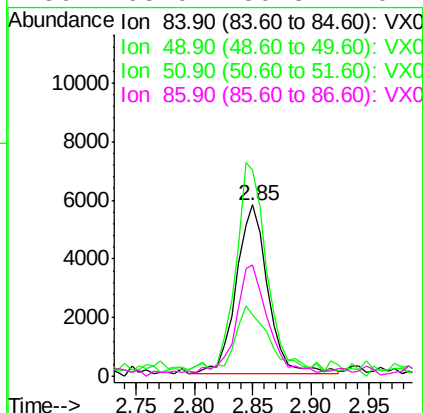
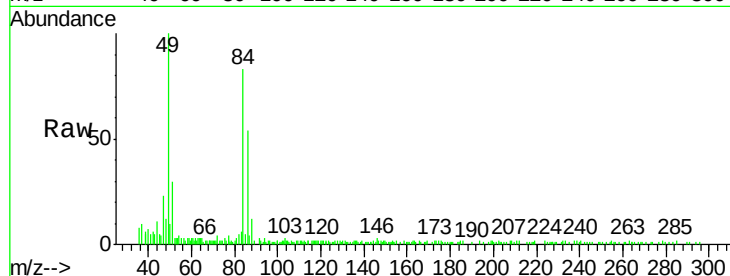




#20
Methylene Chloride
Concen: 1.884 ug/l
RT: 2.85 min Scan# 322
Delta R.T. 0.00 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

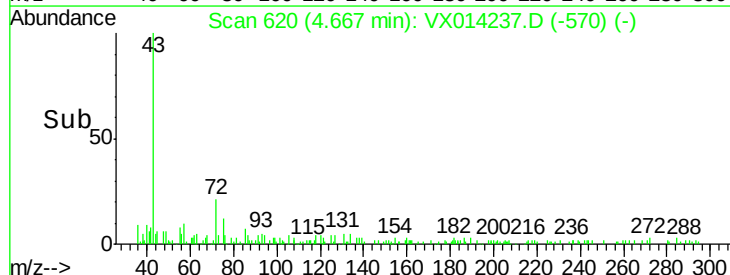
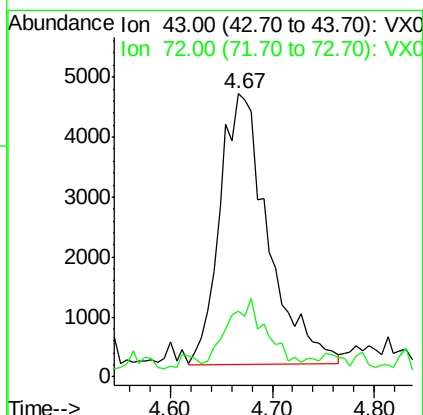
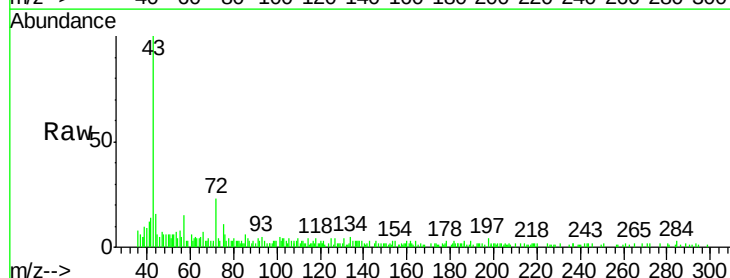
Instrument :
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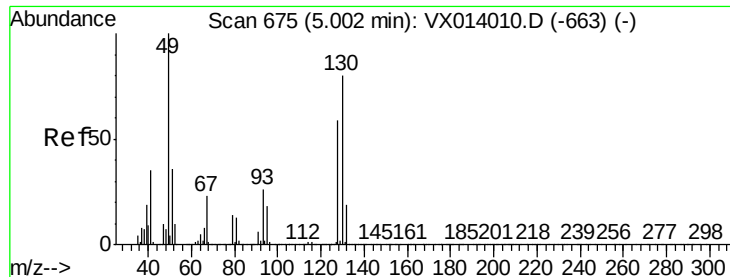
Tgt Ion:	84	Resp:	10968
Ion	Ratio	Lower	Upper
84	100		
49	118.9	95.8	143.6
51	33.3	29.8	44.8
86	63.0	50.8	76.2



#25
2-Butanone
Concen: 3.271 ug/l
RT: 4.67 min Scan# 620
Delta R.T. 0.01 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

Tgt Ion:	43	Resp:	14907
Ion	Ratio	Lower	Upper
43	100		
72	16.8	21.0	31.4#





#28

Bromochloromethane

Concen: 0.565 ug/l

RT: 5.00 min Scan# 675

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampled :

TB-12-20-19

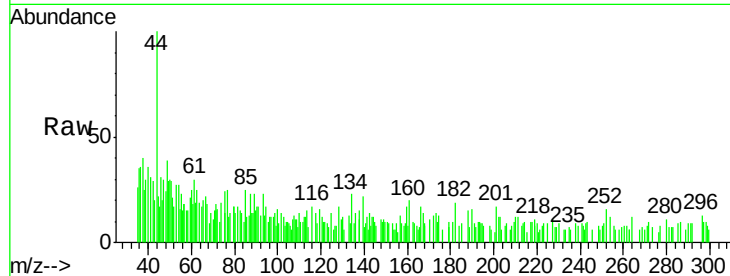
Tgt Ion: 49 Resp: 414

Ion Ratio Lower Upper

49 100

129 30.2 0.0 5.0#

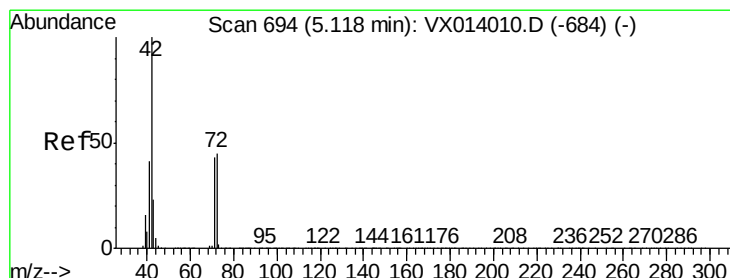
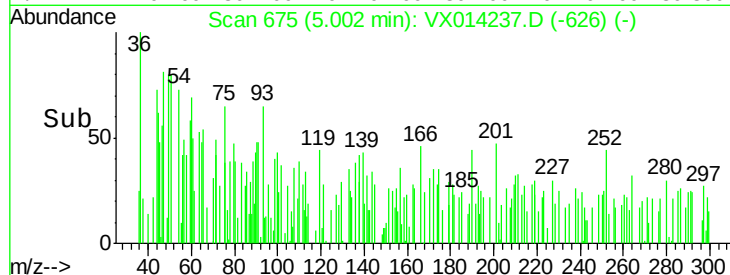
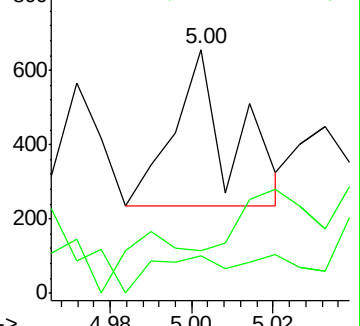
130 45.7 64.6 97.0#



Abundance Ion 48.90 (48.60 to 49.60): VX0

Ion 128.80 (128.50 to 129.50): V

Ion 129.80 (129.50 to 130.50): V



#29

Tetrahydrofuran

Concen: 0.824 ug/l

RT: 5.14 min Scan# 698

Delta R.T. 0.02 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

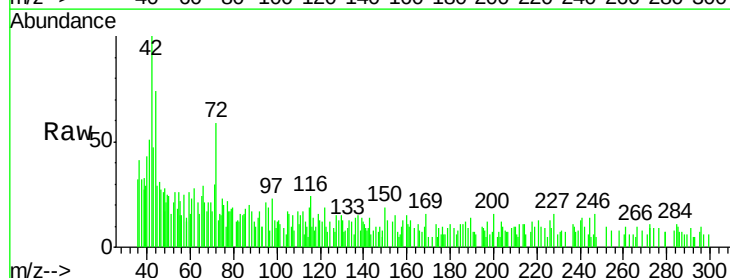
Tgt Ion: 42 Resp: 2101

Ion Ratio Lower Upper

42 100

72 11.9 35.8 53.8#

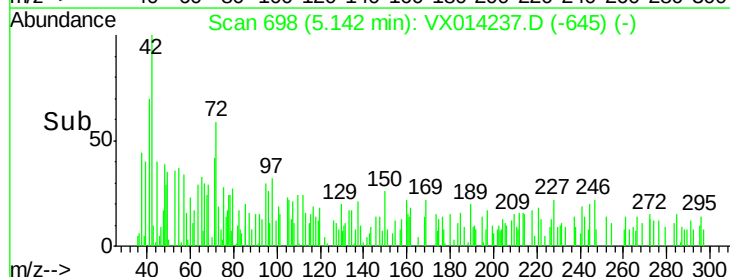
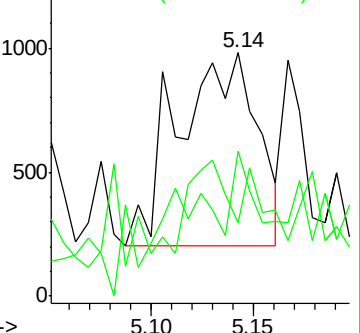
71 27.7 33.6 50.4#

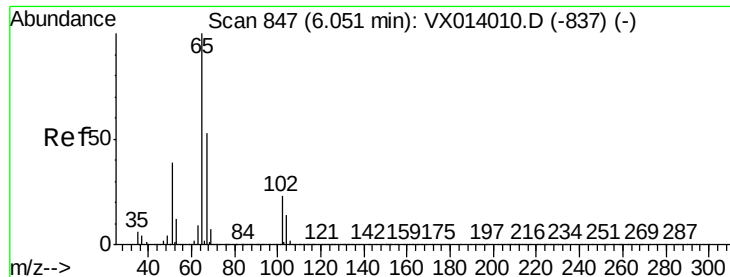


Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

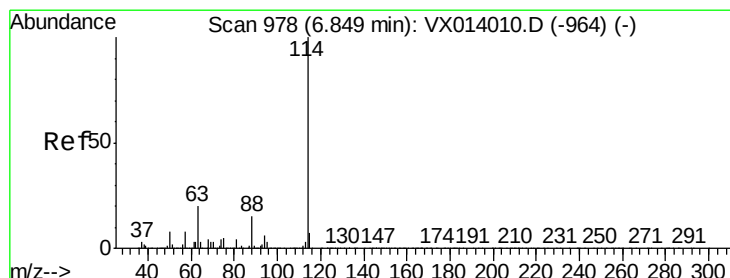
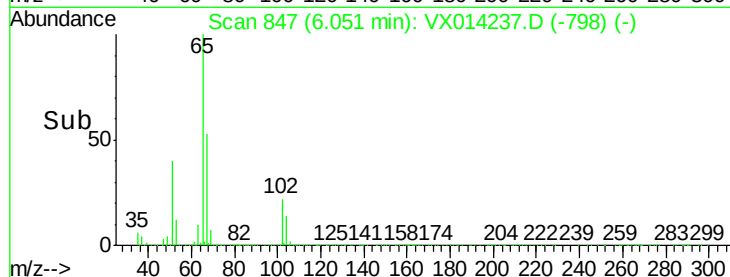
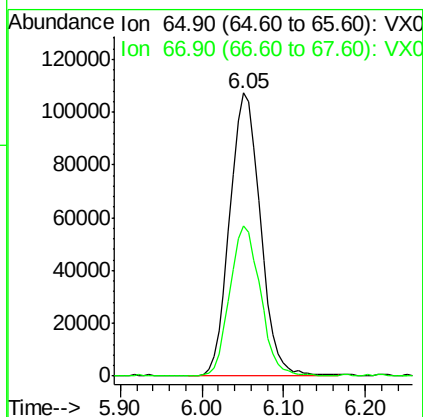
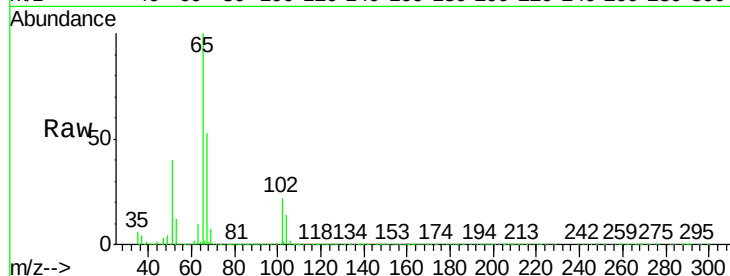




#33
 1,2-Dichloroethane-d4
 Concen: 48.868 ug/l
 RT: 6.05 min Scan# 847
 Delta R.T. 0.00 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

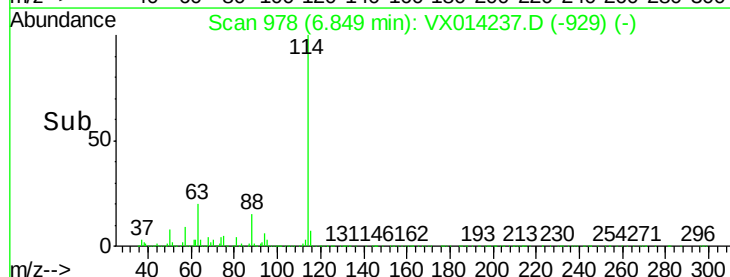
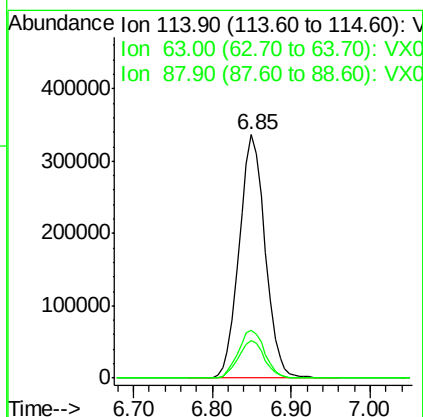
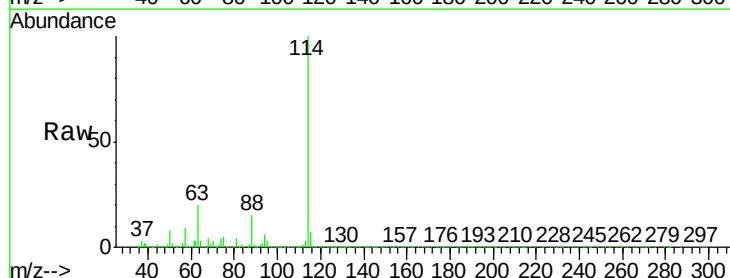
Instrument :
 MSVOA_X
 ClientSampleId :
 TB-12-20-19

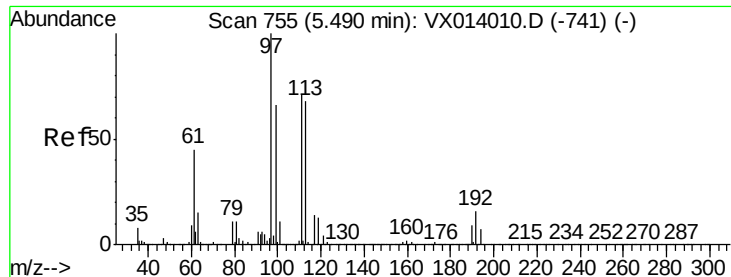
Tgt Ion: 65 Resp: 278252
 Ion Ratio Lower Upper
 65 100
 67 52.5 0.0 106.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 6.85 min Scan# 978
 Delta R.T. 0.00 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

Tgt Ion: 114 Resp: 769960
 Ion Ratio Lower Upper
 114 100
 63 19.6 0.0 40.8
 88 15.4 0.0 30.4

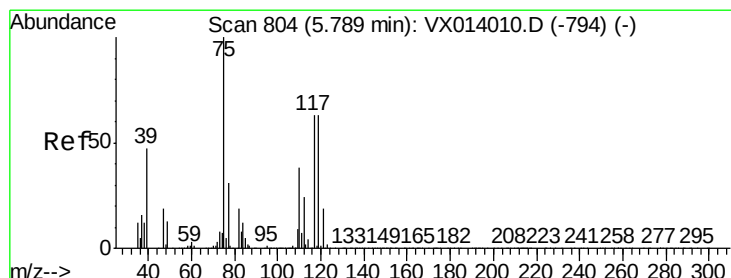
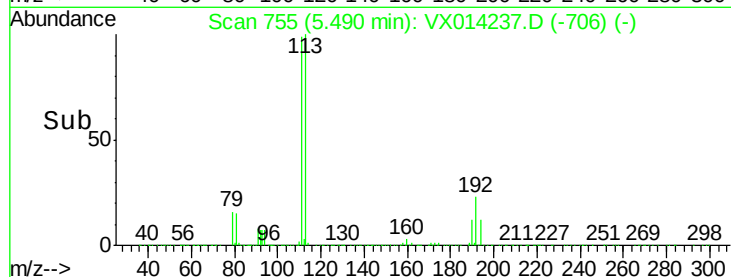
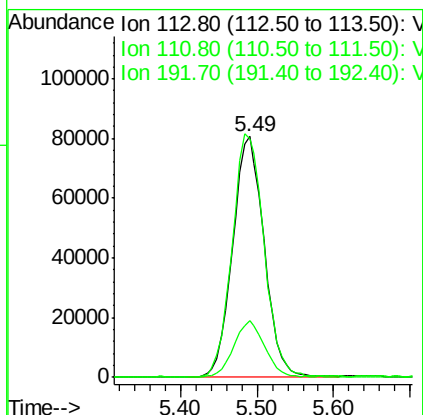
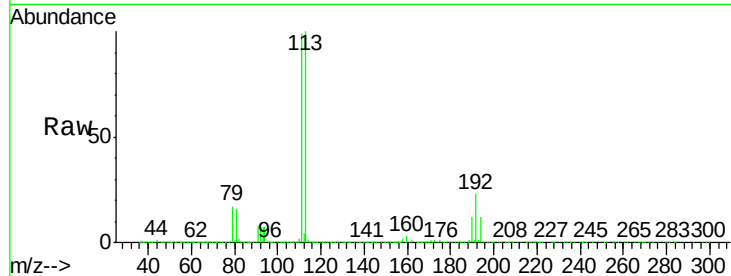




#35
 Dibromofluoromethane
 Concen: 48.694 ug/l
 RT: 5.49 min Scan# 755
 Delta R.T. 0.00 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

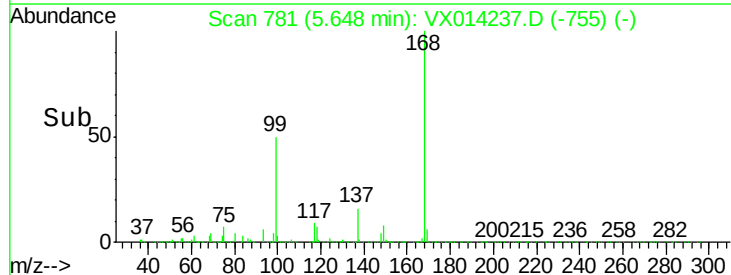
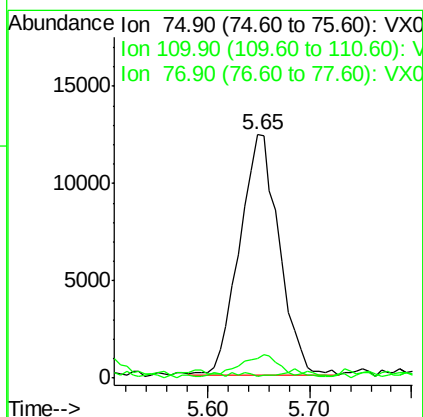
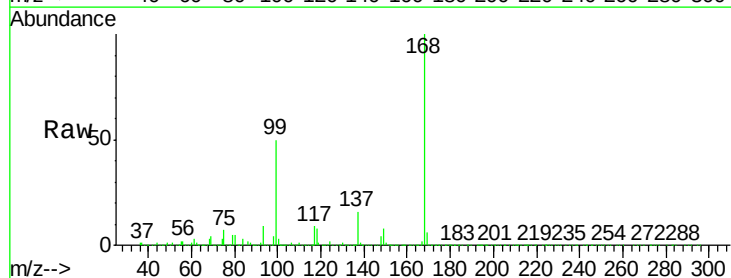
Instrument :
 MSVOA_X
 ClientSampled :
 TB-12-20-19

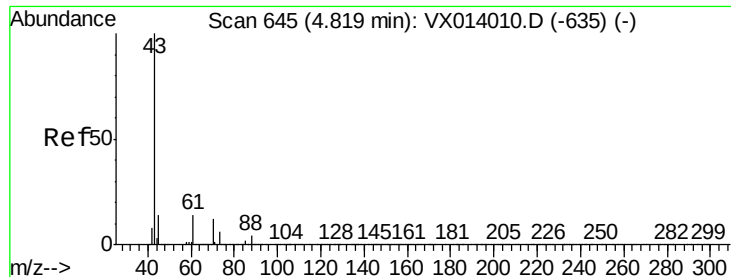
Tgt Ion: 113 Resp: 227914
 Ion Ratio Lower Upper
 113 100
 111 103.1 82.0 123.0
 192 23.3 19.3 28.9



#36
 1,1-Dichloropropene
 Concen: 4.721 ug/l
 RT: 5.65 min Scan# 781
 Delta R.T. -0.14 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

Tgt Ion: 75 Resp: 33351
 Ion Ratio Lower Upper
 75 100
 110 10.5 18.3 54.9#
 77 0.5 24.8 37.2#

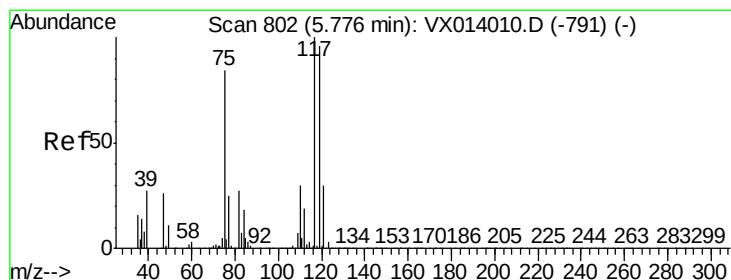
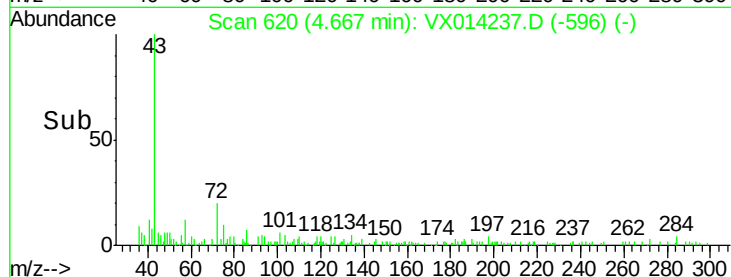
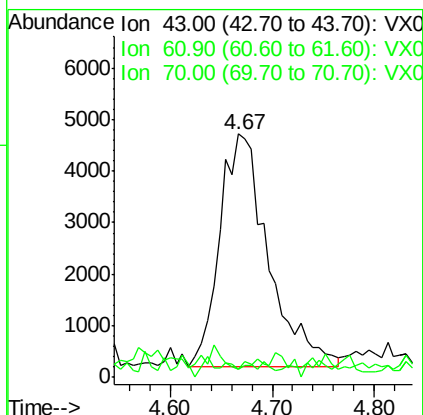
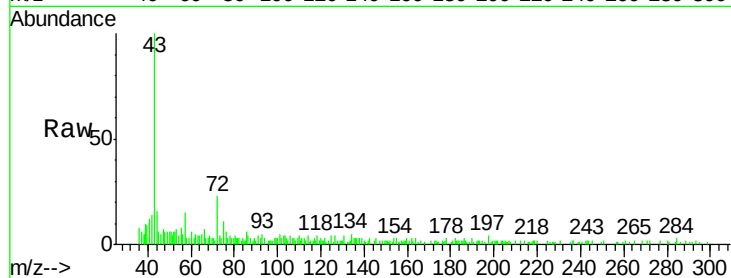




#37
Ethyl Acetate
Concen: 1.903 ug/l
RT: 4.67 min Scan# 620
Delta R.T. -0.15 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

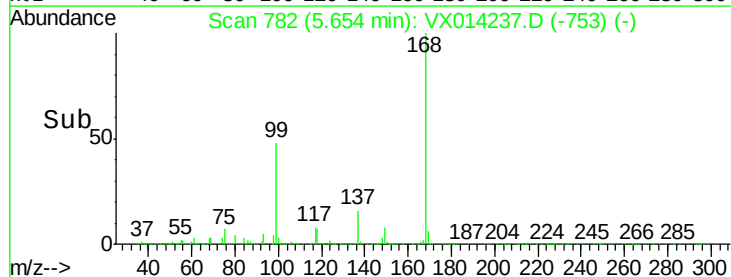
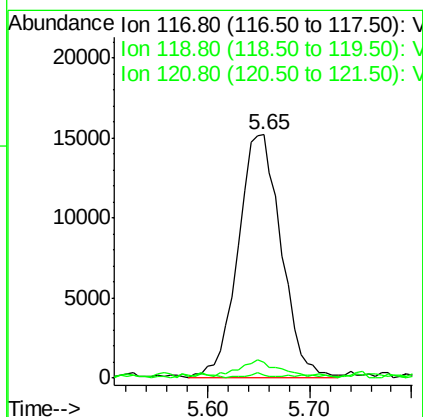
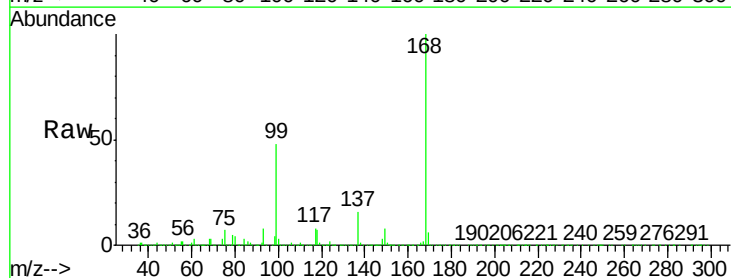
Instrument :
MSVOA_X
ClientSampleId :
TB-12-20-19

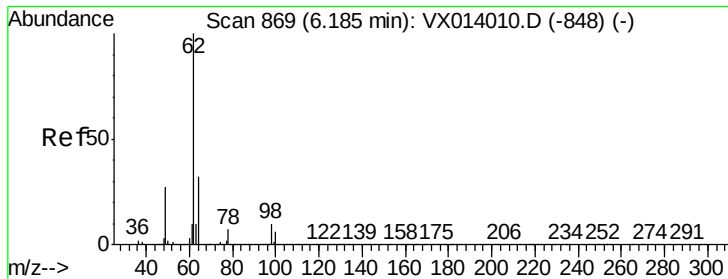
Tgt Ion	Ratio	Lower	Upper
43	100		
61	1.3	10.8	16.2#
70	0.8	8.6	12.8#



#38
Carbon Tetrachloride
Concen: 6.945 ug/l
RT: 5.65 min Scan# 782
Delta R.T. -0.12 min
Lab File: VX014237.D
Acq: 24 Dec 2019 12:09

Tgt Ion	Ratio	Lower	Upper
117	100		
119	5.6	76.2	114.4#
121	0.4	23.6	35.4#

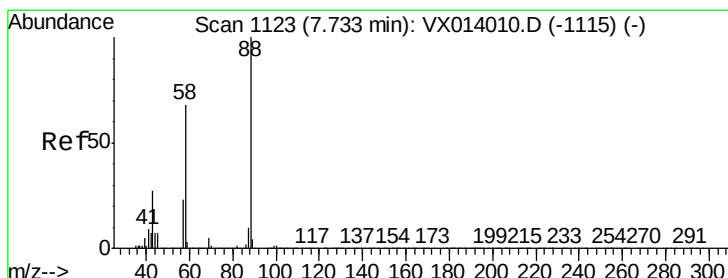
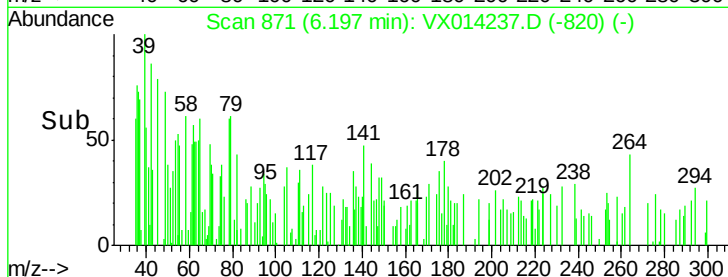
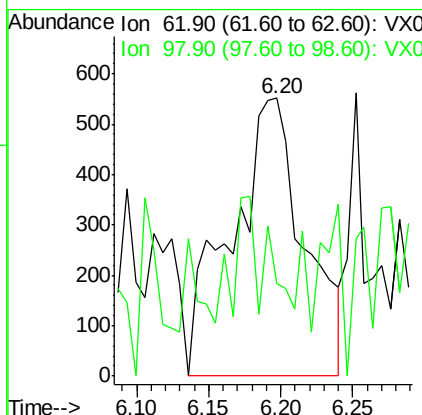
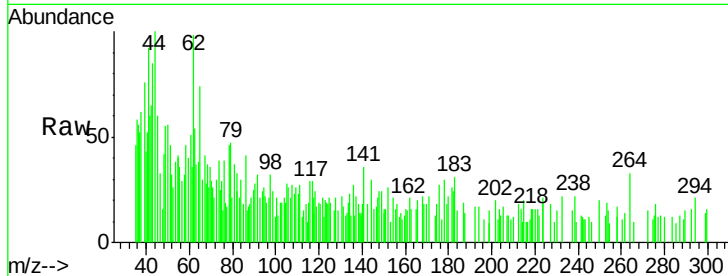




#42
 1,2-Dichloroethane
 Concen: 0.263 ug/l
 RT: 6.20 min Scan# 871
 Delta R.T. 0.01 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

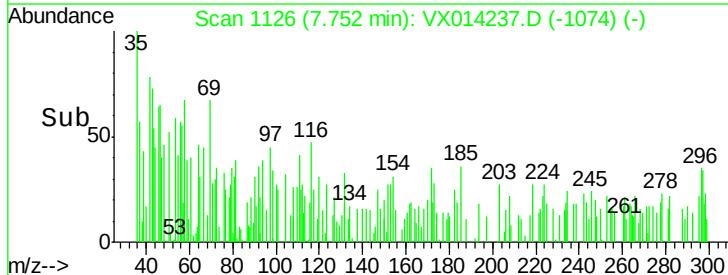
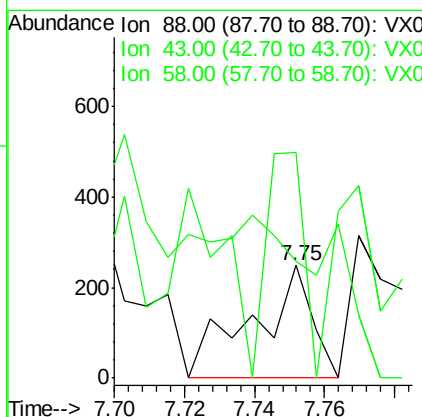
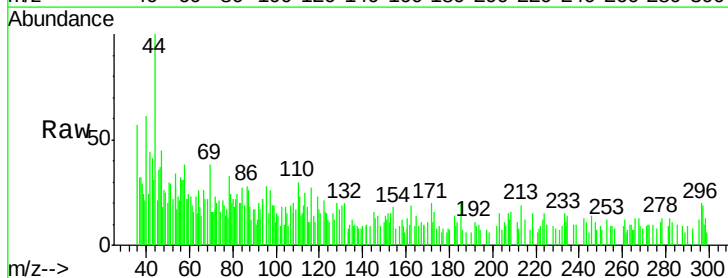
Instrument :
 MSVOA_X
 ClientSampled :
 TB-12-20-19

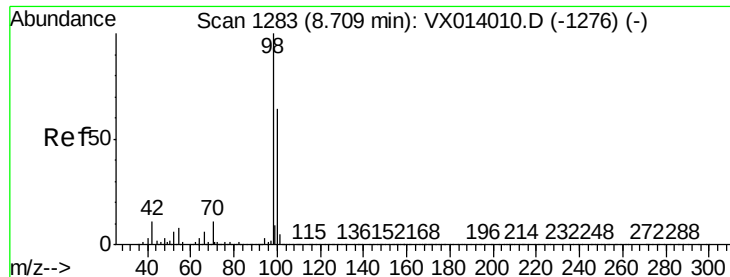
Tgt Ion: 62 Resp: 1936
 Ion Ratio Lower Upper
 62 100
 98 3.8 0.0 21.0



#49
 1,4-Dioxane
 Concen: 2.285 ug/l
 RT: 7.75 min Scan# 1126
 Delta R.T. 0.02 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

Tgt Ion: 88 Resp: 294
 Ion Ratio Lower Upper
 88 100
 43 0.0 26.5 39.7#
 58 123.8 56.8 85.2#





#50

Toluene-d8

Concen: 50.448 ug/l

RT: 8.71 min Scan# 1283

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampleId :

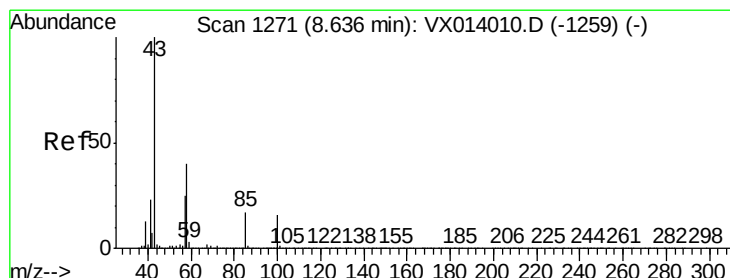
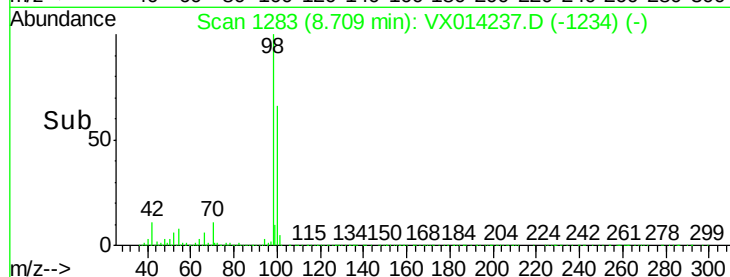
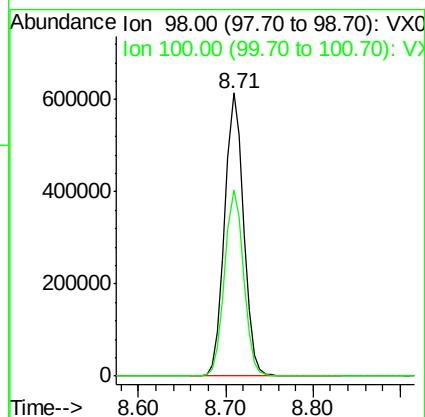
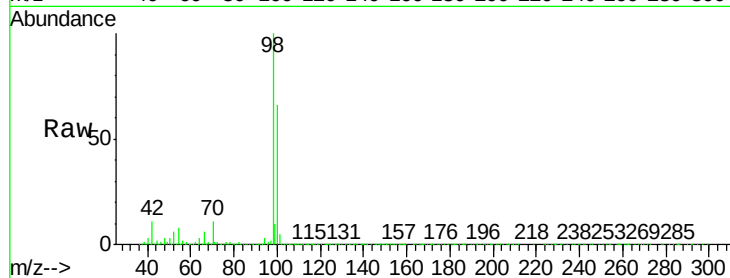
TB-12-20-19

Tgt Ion: 98 Resp: 919286

Ion Ratio Lower Upper

98 100

100 65.8 52.9 79.3



#51

4-Methyl-2-Pentanone

Concen: 0.619 ug/l

RT: 8.64 min Scan# 1271

Delta R.T. 0.00 min

Lab File: VX014237.D

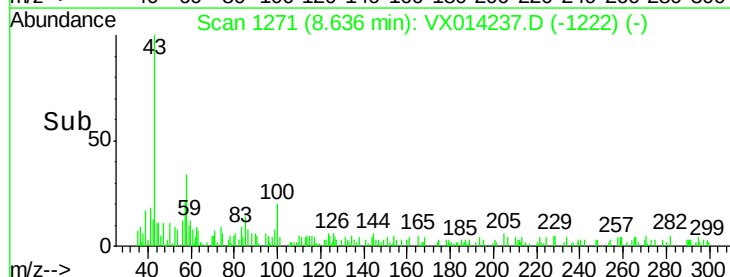
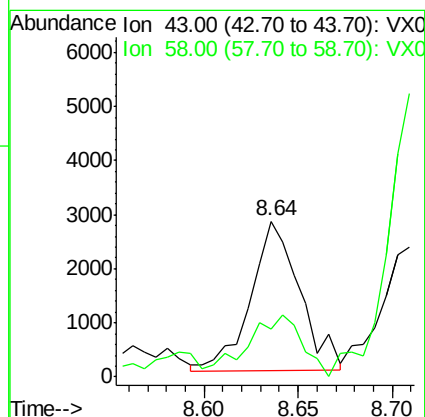
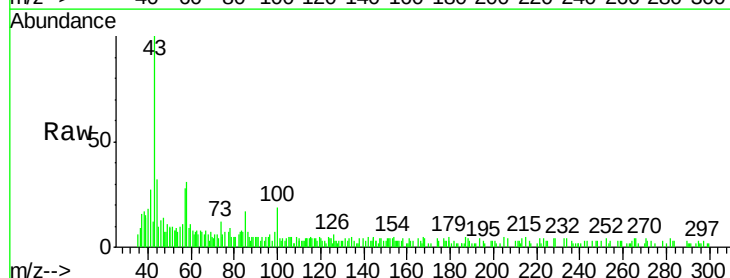
Acq: 24 Dec 2019 12:09

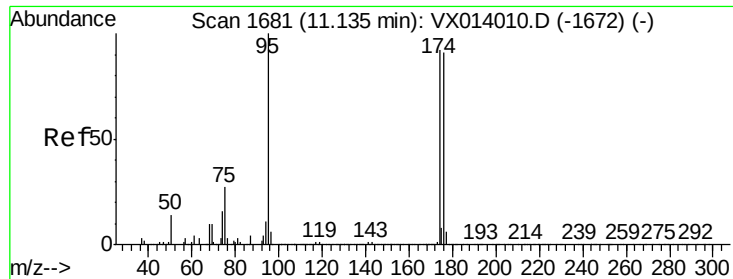
Tgt Ion: 43 Resp: 5017

Ion Ratio Lower Upper

43 100

58 46.2 32.2 48.2





#62

4-Bromofluorobenzene

Concen: 44.937 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.01 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampleId :

TB-12-20-19

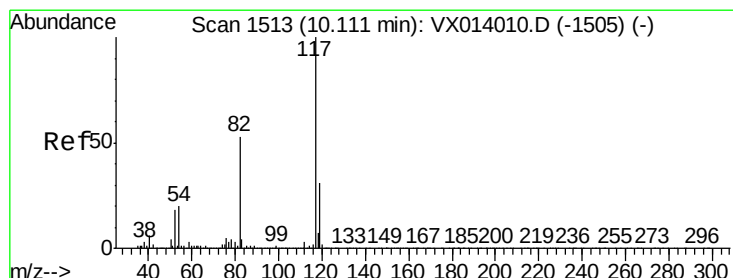
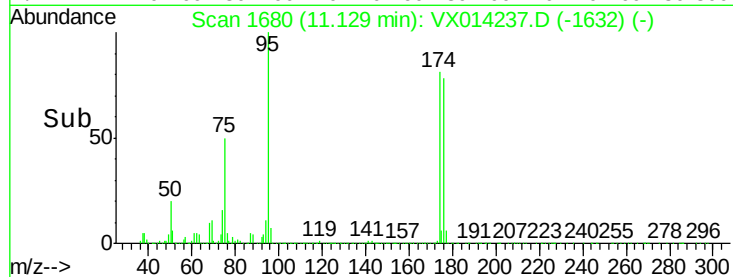
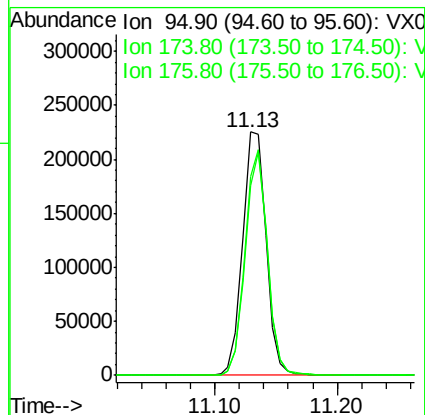
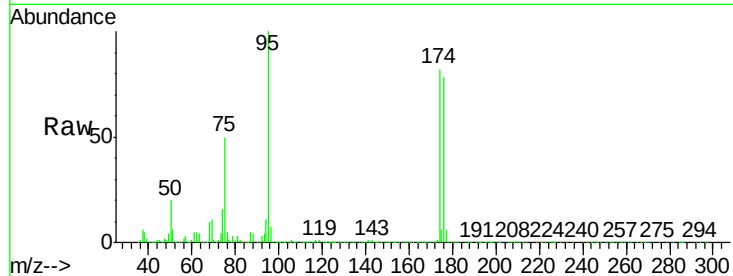
Tgt Ion: 95 Resp: 299329

Ion Ratio Lower Upper

95 100

174 89.1 0.0 175.8

176 86.8 0.0 173.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

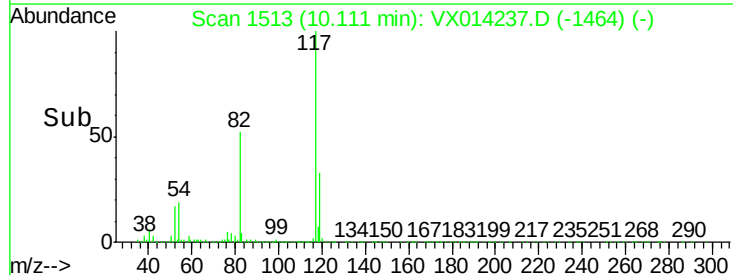
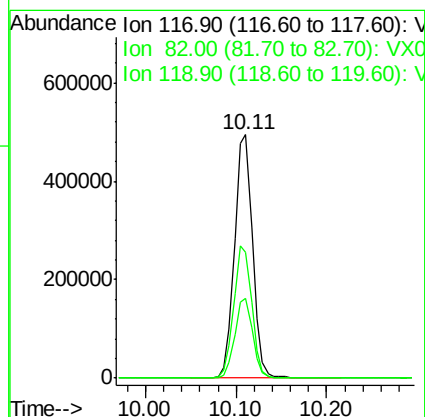
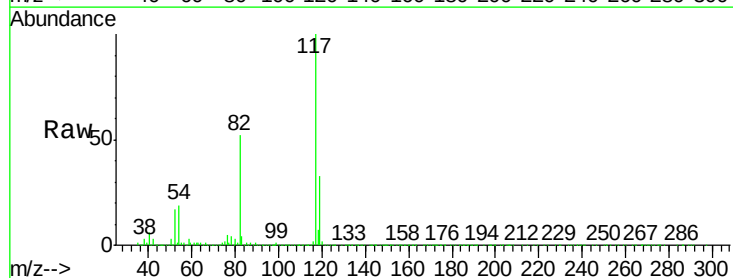
Tgt Ion: 117 Resp: 680493

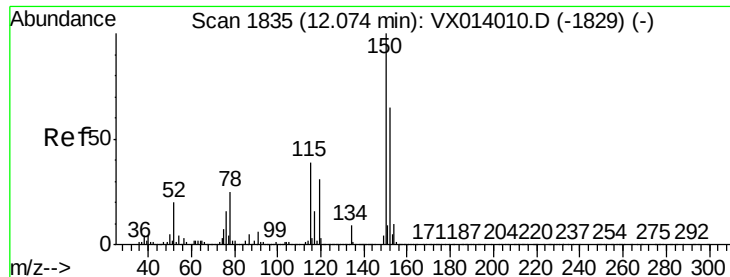
Ion Ratio Lower Upper

117 100

82 51.9 42.2 63.4

119 32.9 25.1 37.7

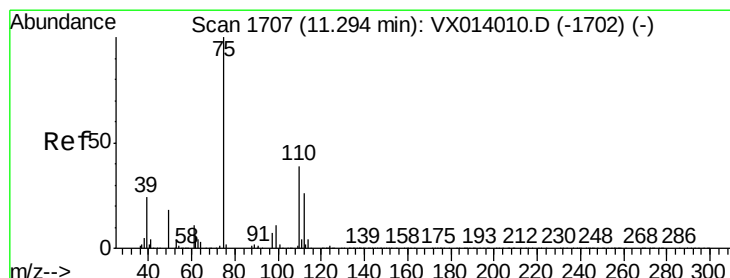
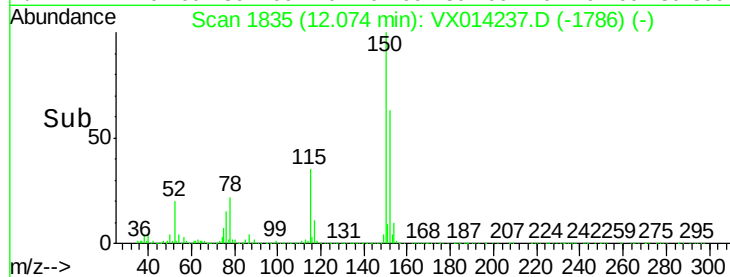
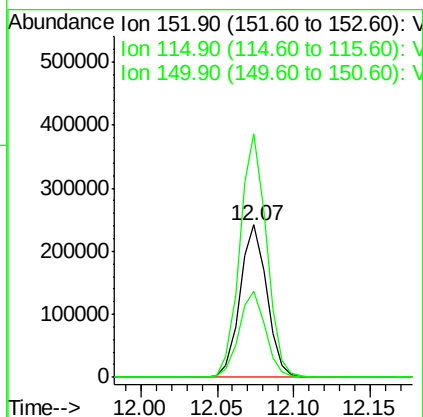
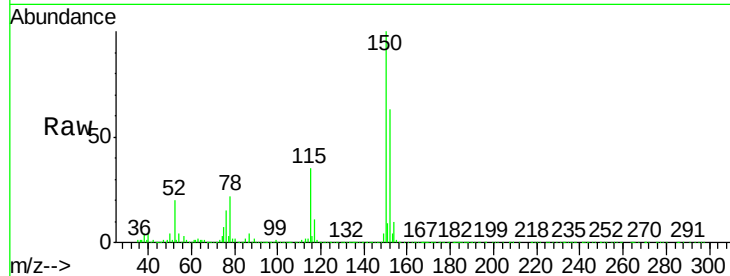




#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 12.07 min Scan# 1835
 Delta R.T. 0.00 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

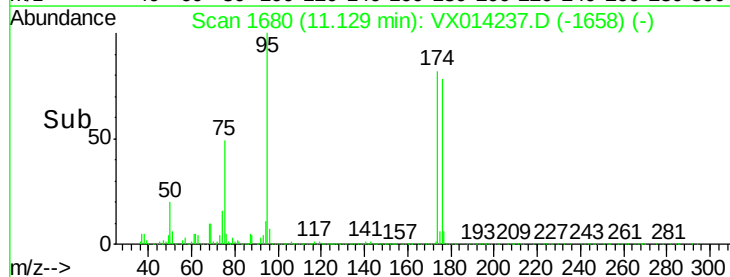
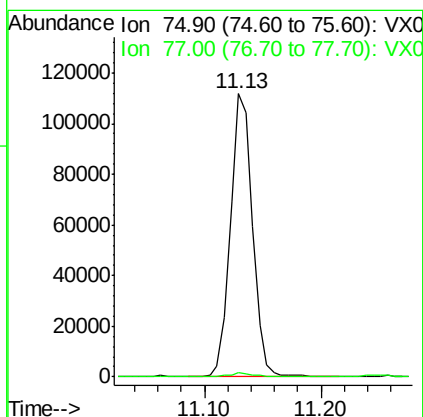
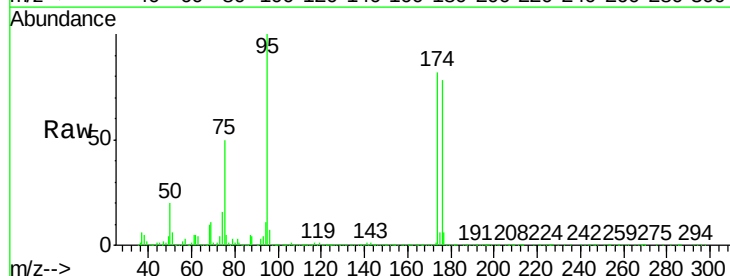
Instrument :
 MSVOA_X
 ClientSampleId :
 TB-12-20-19

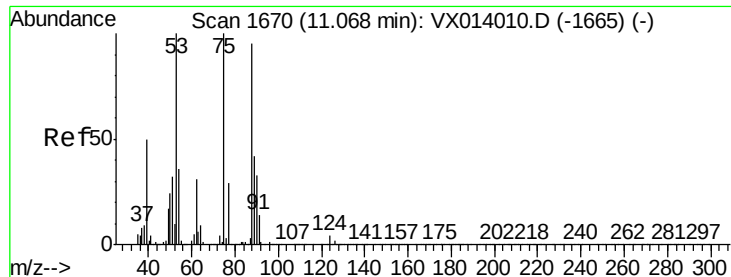
Tgt Ion	Ratio	Lower	Upper
152	100		
115	55.5	38.3	114.9
150	158.1	0.0	345.4



#76
 1,2,3-Trichloropropane
 Concen: 22.912 ug/l
 RT: 11.13 min Scan# 1680
 Delta R.T. -0.16 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

Tgt Ion	Ratio	Lower	Upper
75	100		
77	1.6	19.3	57.8#





#81

trans-1,4-Dichloro-2-butene

Concen: 64.669 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

Instrument :

MSVOA_X

ClientSampled :

TB-12-20-19

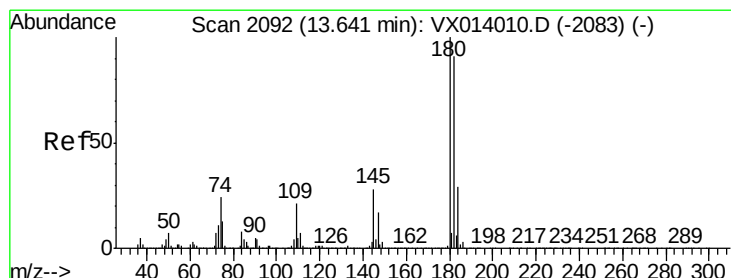
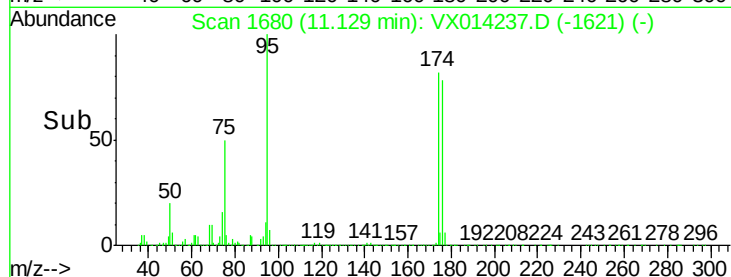
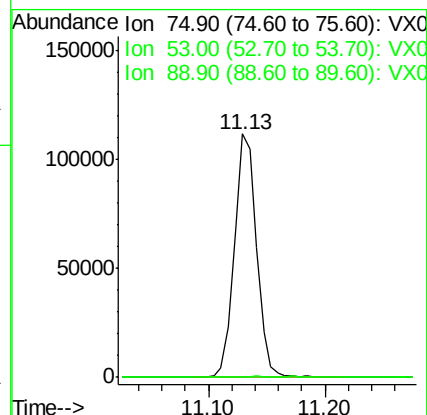
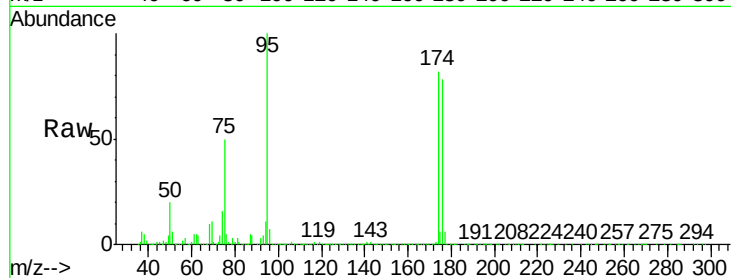
Tgt Ion: 75 Resp: 146761

Ion Ratio Lower Upper

75 100

53 0.0 76.7 115.1#

89 0.0 34.6 51.8#



#93

1,2,4-Trichlorobenzene

Concen: 0.291 ug/l

RT: 13.64 min Scan# 2092

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

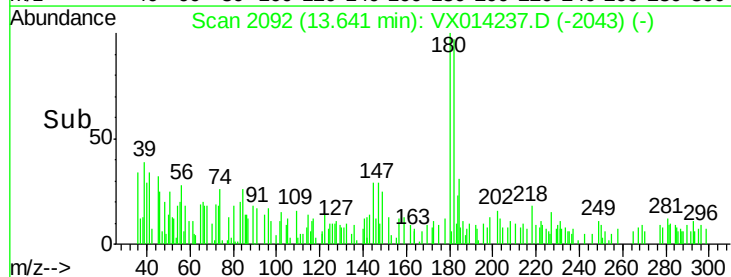
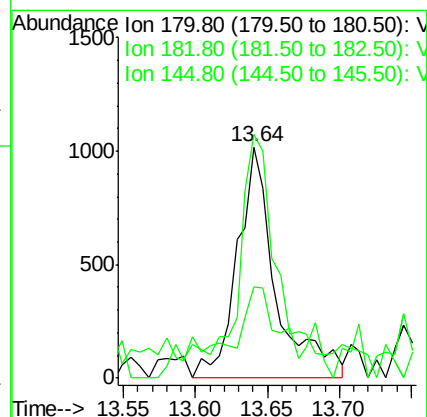
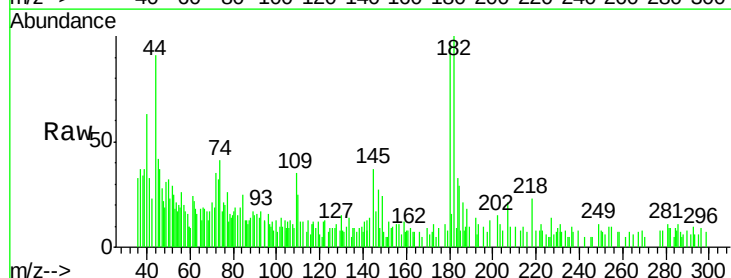
Tgt Ion: 180 Resp: 1910

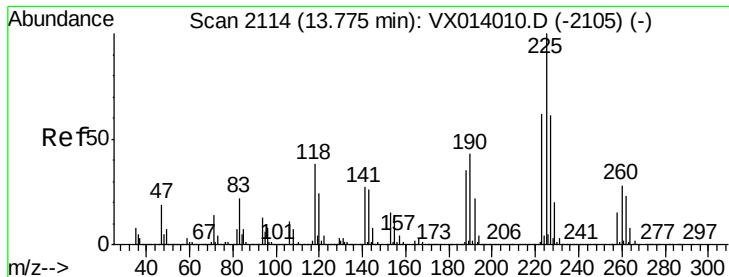
Ion Ratio Lower Upper

180 100

182 114.5 46.6 139.8

145 25.8 14.2 42.6





#94

Hexachlorobutadiene

Concen: 0.243 ug/l

RT: 13.77 min Scan# 2114

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

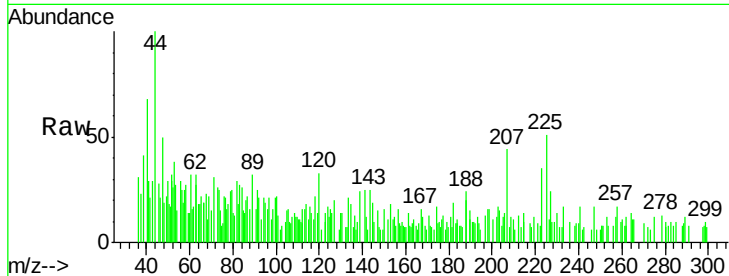
Instrument :

MSVOA_X

ClientSampled :

TB-12-20-19

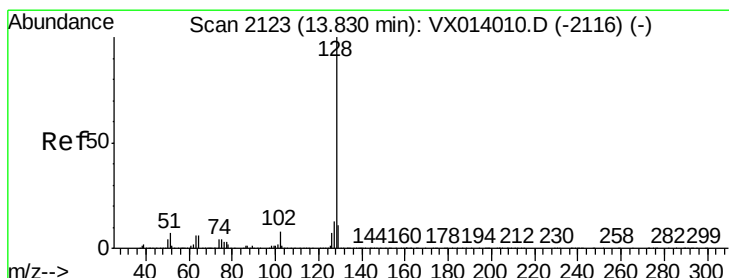
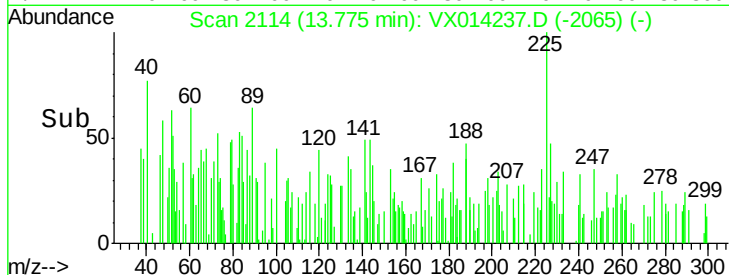
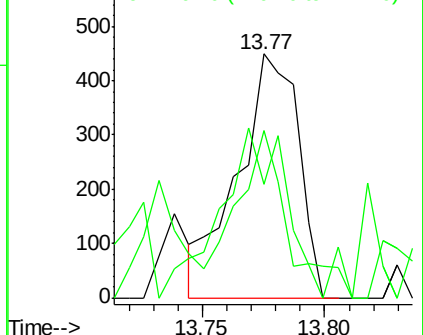
Tgt Ion:	225	Resp:	767
Ion	Ratio	Lower	Upper
225	100		
223	46.4	30.9	92.5
227	72.4	30.9	92.7



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 0.270 ug/l

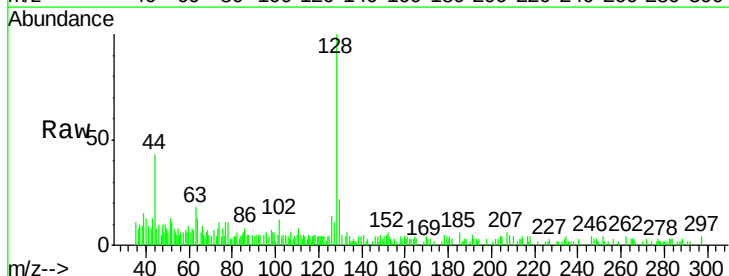
RT: 13.83 min Scan# 2123

Delta R.T. 0.00 min

Lab File: VX014237.D

Acq: 24 Dec 2019 12:09

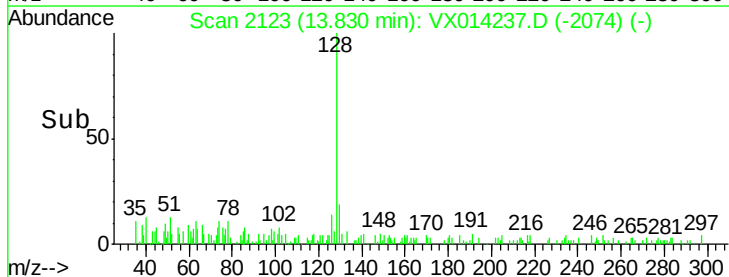
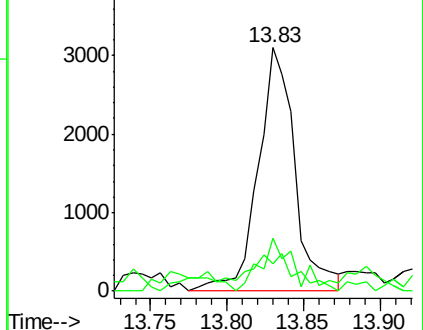
Tgt Ion:	128	Resp:	5202
Ion	Ratio	Lower	Upper
128	100		
127	20.3	10.2	15.4#
129	21.4	8.7	13.1#

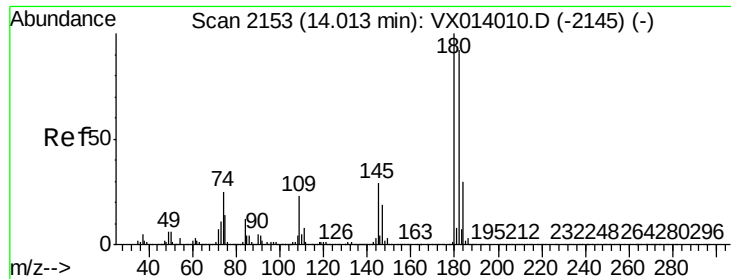


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96
 1,2,3-Trichlorobenzene
 Concen: 0.269 ug/l
 RT: 14.02 min Scan# 2154
 Delta R.T. 0.01 min
 Lab File: VX014237.D
 Acq: 24 Dec 2019 12:09

Instrument :
 MSVOA_X
 ClientSampleId :
 TB-12-20-19

Tgt Ion	Ratio	Lower	Upper
180	100		
182	92.4	46.8	140.3
145	55.1	14.8	44.4

