

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX031320\
 Data File : VX015264.D
 Acq On : 13 Mar 2020 16:51
 Operator : JC/SP
 Sample : L1903-20
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 RE103D3-20200310

Quant Time: Mar 16 08:22:37 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	247143	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	392057	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	385352	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.07	152	200746	50.00	ug/l	0.00

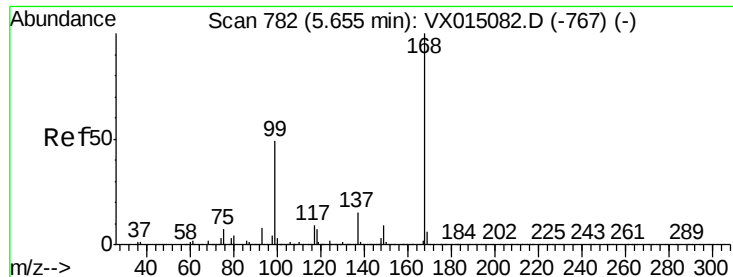
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	6.06	65	143198	48.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.68%	
35) Dibromofluoromethane	5.49	113	120774	48.83	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.66%	
50) Toluene-d8	8.71	98	485346	51.59	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.18%	
62) 4-Bromofluorobenzene	11.13	95	179500	53.49	ug/l	0.00
Spiked Amount	50.000		Recovery	=	106.98%	

Target Compounds

						Qvalue
3) Chloromethane	1.32	50	1134	0.370	ug/l #	85
5) Bromomethane	1.65	94	756	0.396	ug/l #	79
9) 1,1,2-Trichlorotrifluoroet	2.38	101	8074	3.470	ug/l	97
11) Tert butyl alcohol	3.02	59	294	0.578	ug/l #	72
12) 1,1-Dichloroethene	2.36	96	1040	0.433	ug/l #	67
13) Acrolein	2.28	56	200	0.418	ug/l #	15
14) Allyl chloride	2.73	41	919	0.219	ug/l #	58
15) Acrylonitrile	3.12	53	273	0.215	ug/l #	1
16) Acetone	2.44	43	4812	4.052	ug/l #	84
24) 1,1-Dichloroethane	3.69	63	1875	0.405	ug/l #	66
27) cis-1,2-Dichloroethene	4.58	96	2461	0.855	ug/l	79
29) Tetrahydrofuran	5.12	42	232	0.207	ug/l #	1
36) 1,1-Dichloropropene	5.64	75	15942	4.399	ug/l #	54
38) Carbon Tetrachloride	5.65	117	21578	6.307	ug/l #	16
44) Trichloroethene	7.21	130	1398573	467.020	ug/l	99
46) Dibromomethane	7.67	93	471	0.260	ug/l #	9
49) 1,4-Dioxane	7.76	88	221	3.396	ug/l #	1
52) Toluene	8.78	92	1851	0.282	ug/l	78
55) 1,1,2-Trichloroethane	9.21	97	997	0.368	ug/l #	86
64) Tetrachloroethene	9.33	164	2739	0.860	ug/l #	84
71) Bromoform	10.86	173	1296	0.573	ug/l #	99
76) 1,2,3-Trichloropropane	11.13	75	85810	21.430	ug/l #	34
81) trans-1,4-Dichloro-2-buten	11.13	75	85810	60.817	ug/l #	11
92) 1,2-Dibromo-3-Chloropropan	13.03	75	277	0.324	ug/l #	25
95) Naphthalene	13.82	128	387	1.448	ug/l #	65

(#) = 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

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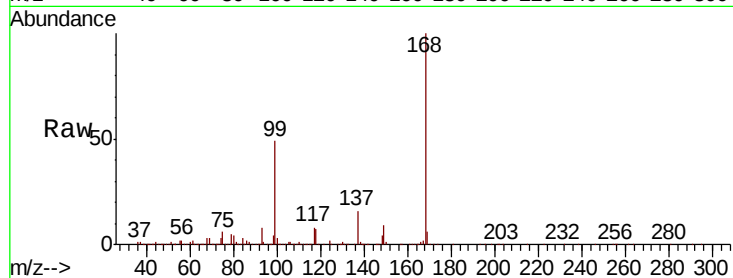
RE103D3-20200310

Tot Ion:168 Resp: 247143

Ion Ratio Lower Upper

168 100

99 48.5 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

80000

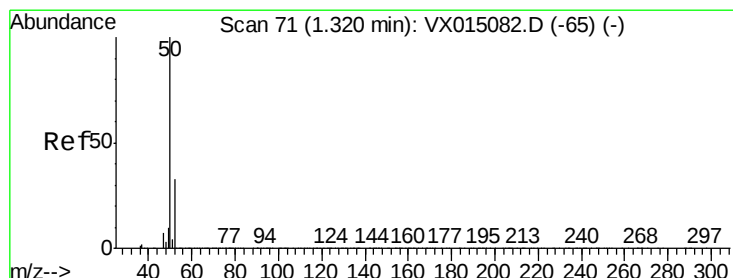
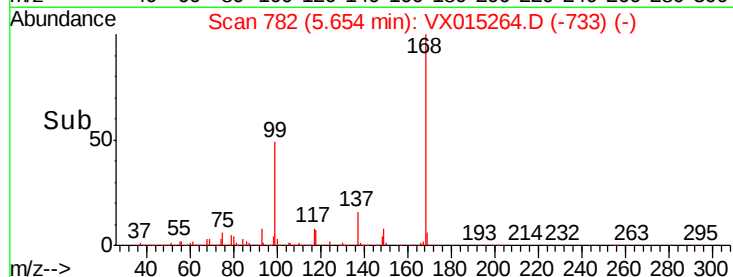
60000

40000

20000

0

Time--> 5.50 5.60 5.70 5.80



#3

Chloromethane

Concen: 0.370 ug/l

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VX015264.D

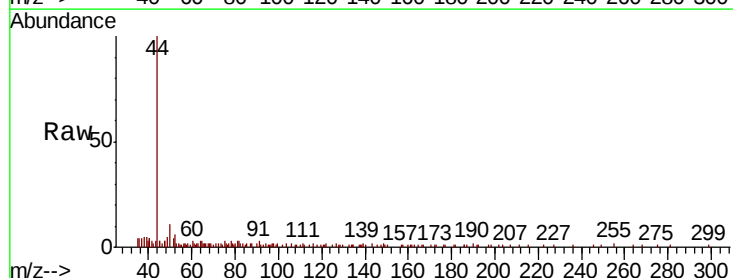
Acq: 13 Mar 2020 16:51

Tgt Ion: 50 Resp: 1134

Ion Ratio Lower Upper

50 100

52 41.3 26.2 39.2#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

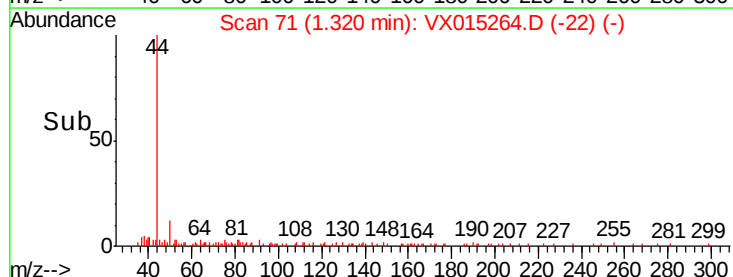
600

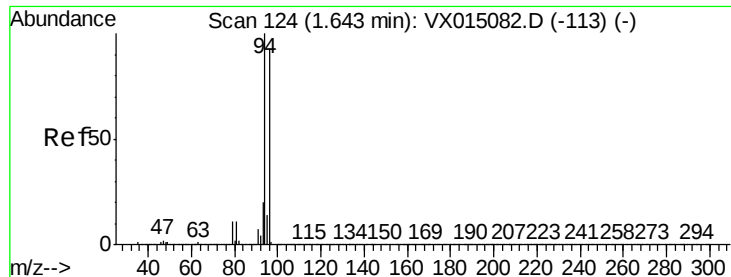
400

200

0

Time--> 1.25 1.30 1.35





#5

Bromomethane

Concen: 0.396 ug/l

RT: 1.65 min Scan# 126

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

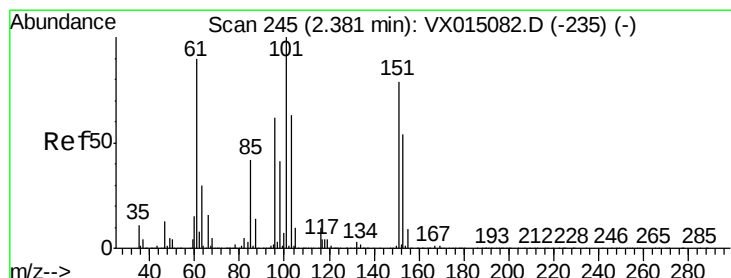
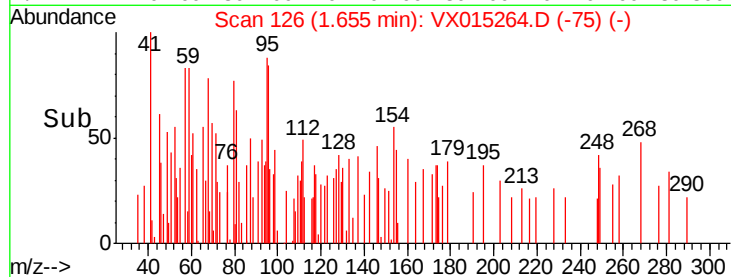
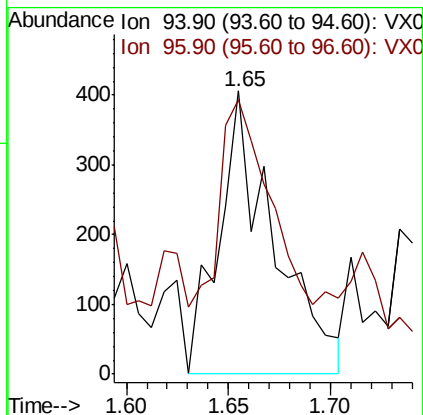
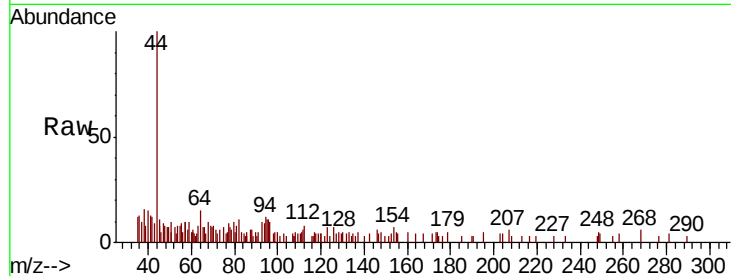
RE103D3-20200310

Tot Ion: 94 Resp: 756

Ion Ratio Lower Upper

94 100

96 72.9 74.6 111.8#



#9

1,1,2-Trichlorotrifluoroethane

Concen: 3.470 ug/l

RT: 2.38 min Scan# 245

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

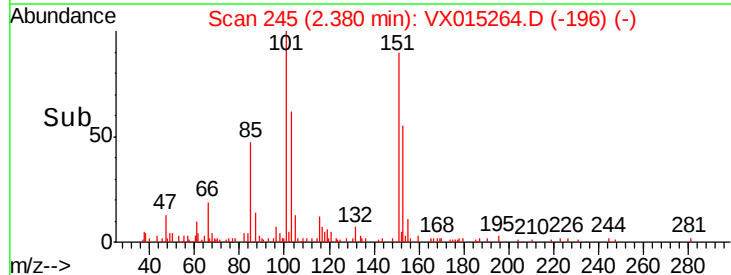
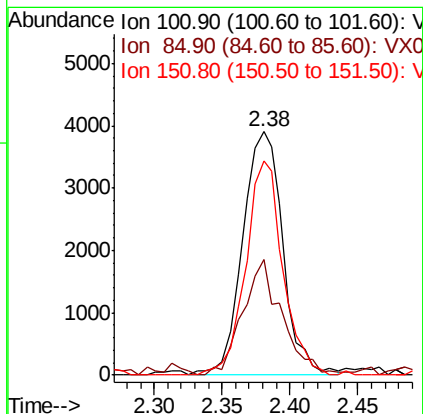
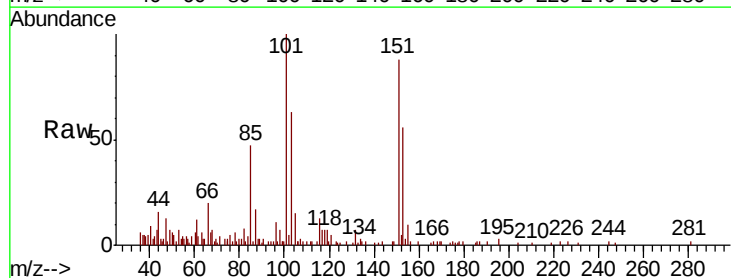
Tgt Ion:101 Resp: 8074

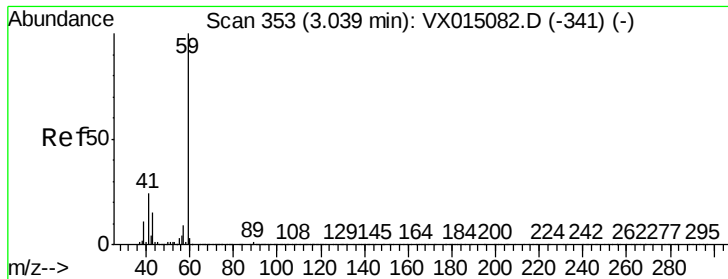
Ion Ratio Lower Upper

101 100

85 46.5 33.7 50.5

151 81.5 64.0 96.0

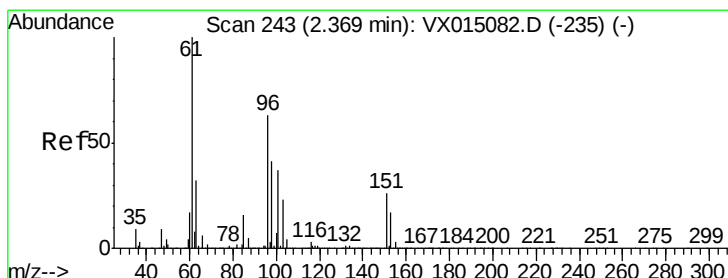
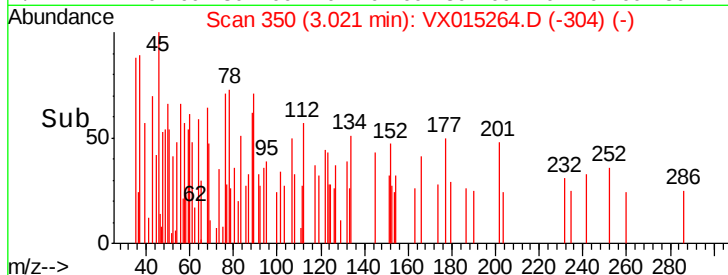
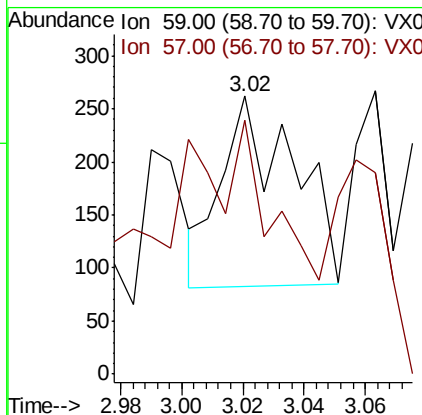
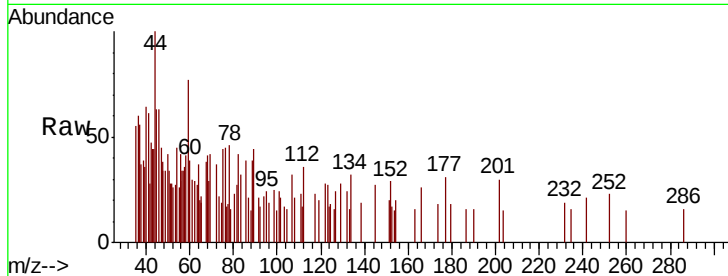




#11
Tert butyl alcohol
Concen: 0.578 ug/l
RT: 3.02 min Scan# 350
Delta R.T. -0.02 min
Lab File: VX015264.D
Acq: 13 Mar 2020 16:51

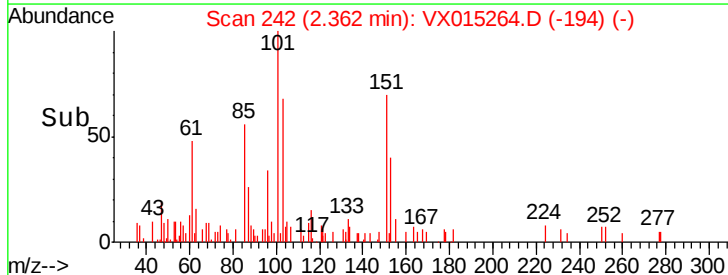
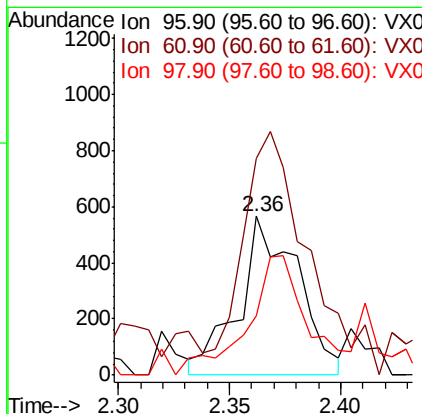
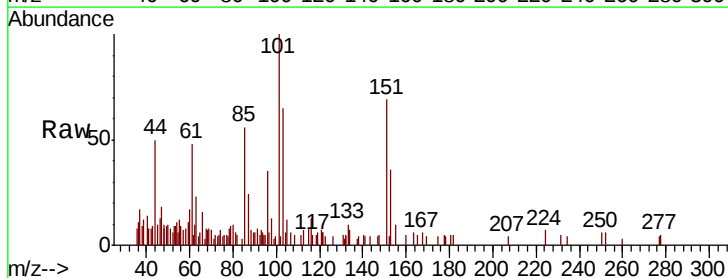
Instrument :
MSVOA_X
ClientSampleId :
RE103D3-20200310

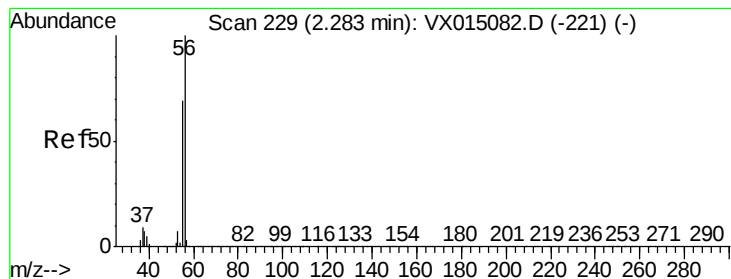
Tot Ion: 59 Resp: 294
Ion Ratio Lower Upper
59 100
57 0.0 8.2 12.4#



#12
1,1-Dichloroethene
Concen: 0.433 ug/l
RT: 2.36 min Scan# 242
Delta R.T. -0.01 min
Lab File: VX015264.D
Acq: 13 Mar 2020 16:51

Tgt Ion: 96 Resp: 1040
Ion Ratio Lower Upper
96 100
61 120.6 126.2 189.4#
98 29.2 51.4 77.0#





#13

Acrolein

Concen: 0.418 ug/l

RT: 2.28 min Scan# 229

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

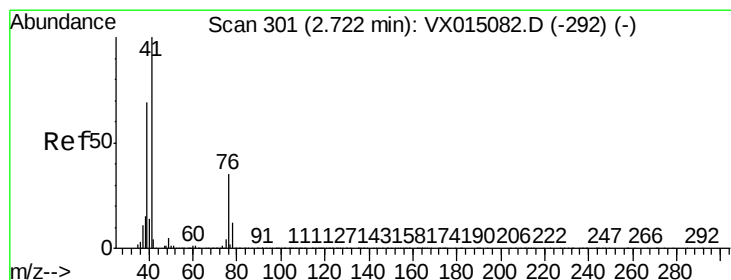
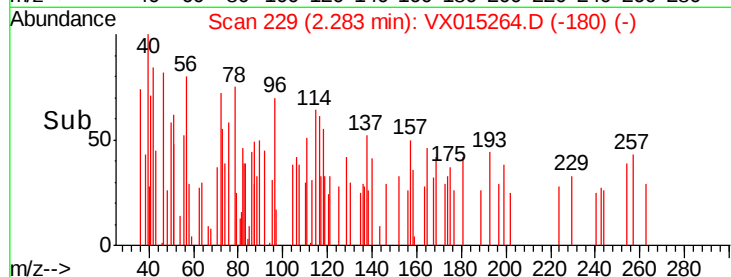
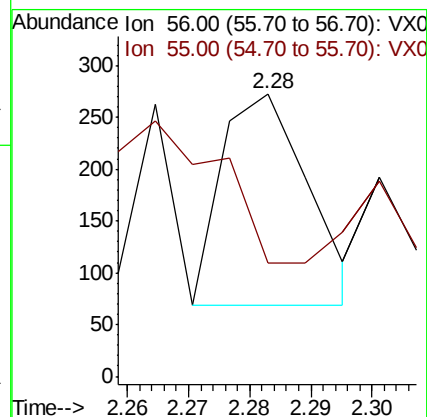
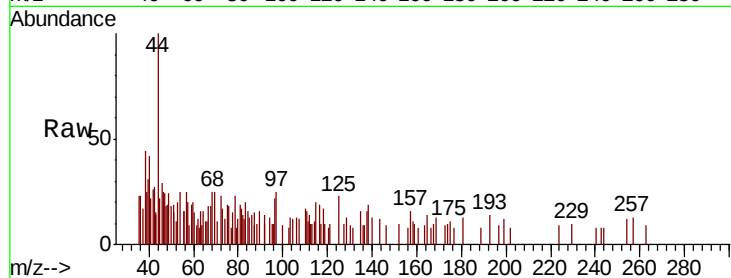
RE103D3-20200310

Tot Ion: 56 Resp: 200

Ion Ratio Lower Upper

56 100

55 0.0 55.4 83.0#



#14

Allyl chloride

Concen: 0.219 ug/l

RT: 2.73 min Scan# 303

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

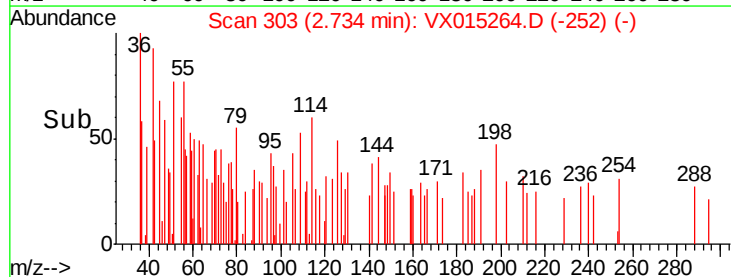
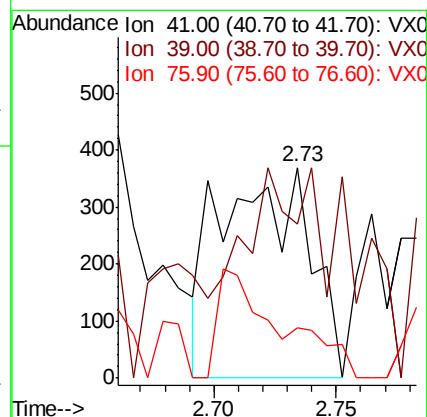
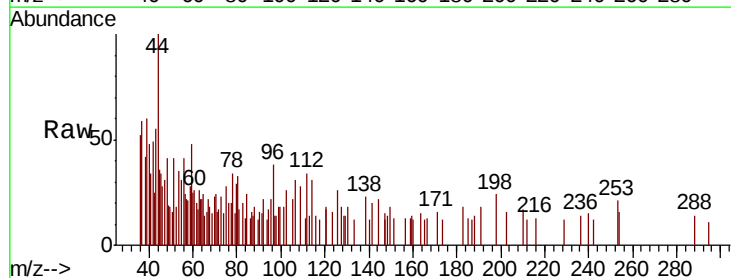
Tgt Ion: 41 Resp: 919

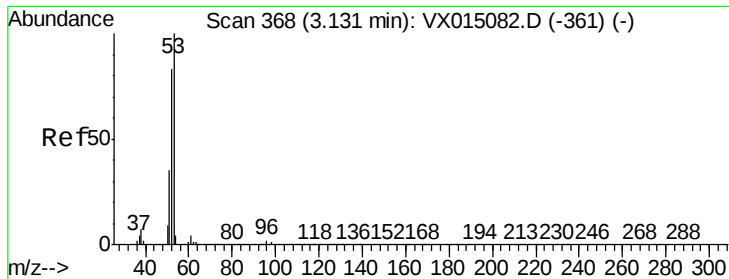
Ion Ratio Lower Upper

41 100

39 39.0 52.9 79.3#

76 0.0 26.8 40.2#





#15

Acrylonitrile

Concen: 0.215 ug/l

RT: 3.12 min Scan# 366

Delta R.T. -0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

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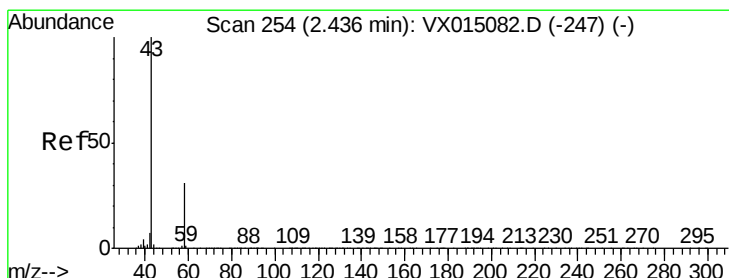
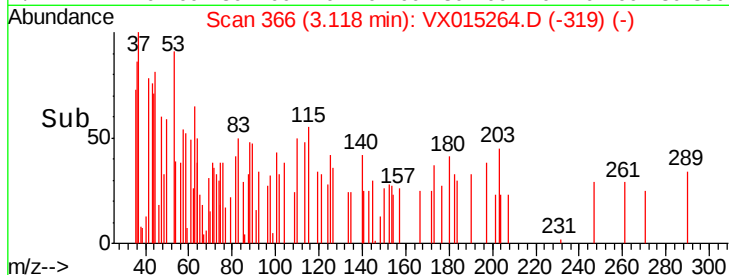
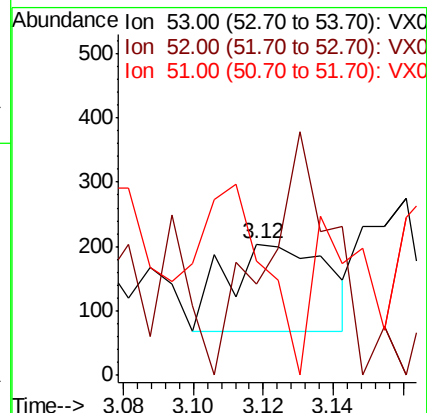
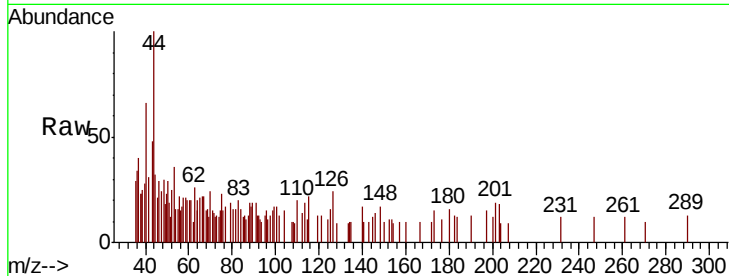
Tot Ion: 53 Resp: 273

Ion Ratio Lower Upper

53 100

52 0.0 66.6 100.0#

51 142.9 29.0 43.6#



#16

Acetone

Concen: 4.052 ug/l

RT: 2.44 min Scan# 254

Delta R.T. -0.00 min

Lab File: VX015264.D

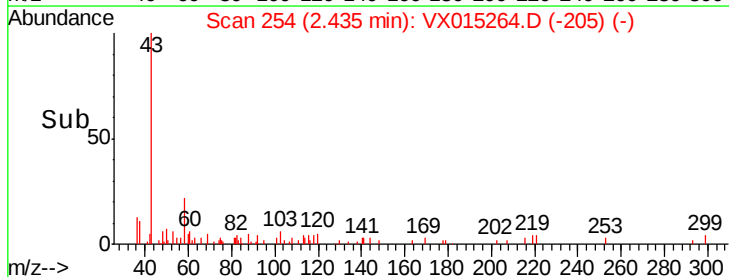
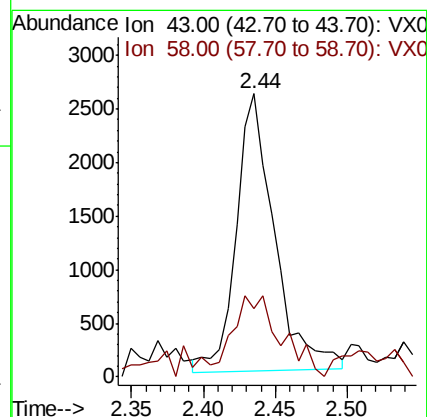
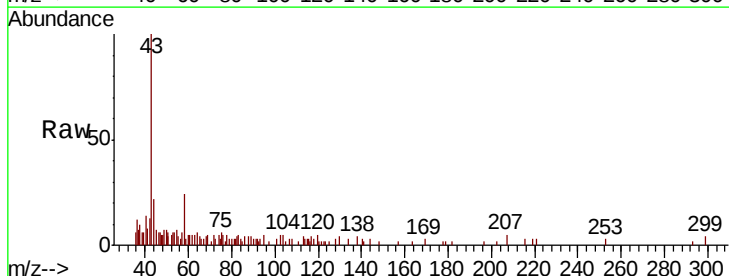
Acq: 13 Mar 2020 16:51

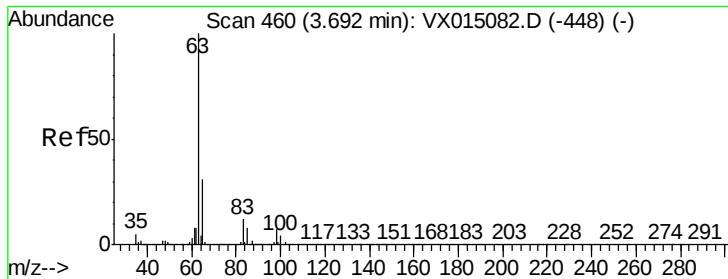
Tgt Ion: 43 Resp: 4812

Ion Ratio Lower Upper

43 100

58 22.1 24.8 37.2#





#24

1,1-Dichloroethane

Concen: 0.405 ug/l

RT: 3.69 min Scan# 460

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

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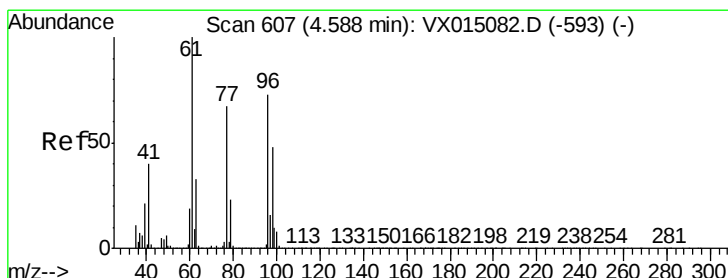
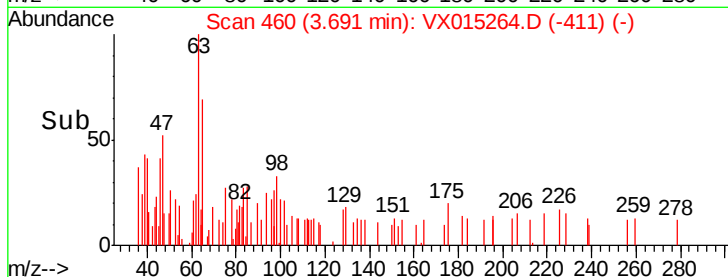
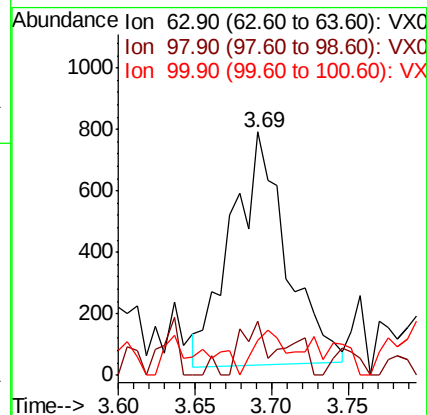
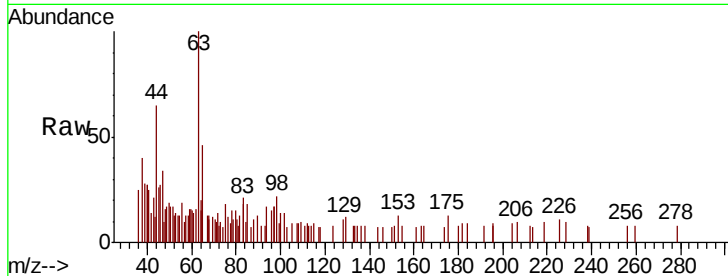
Tot Ion: 63 Resp: 1875

Ion Ratio Lower Upper

63 100

98 24.4 3.7 11.1#

100 7.4 2.1 6.5#



#27

cis-1,2-Dichloroethene

Concen: 0.855 ug/l

RT: 4.58 min Scan# 606

Delta R.T. -0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

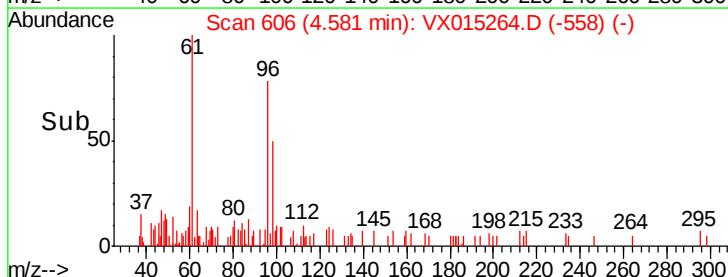
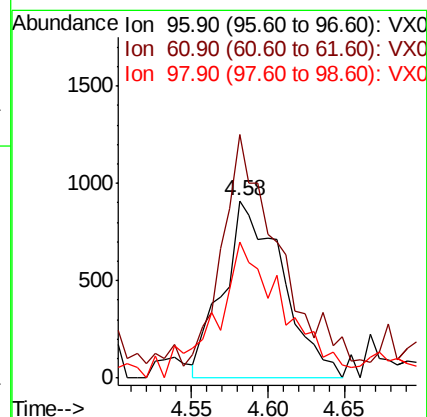
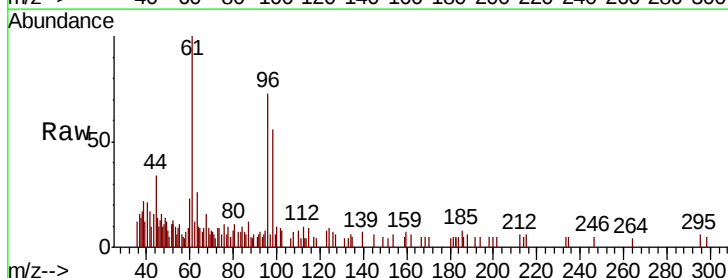
Tgt Ion: 96 Resp: 2461

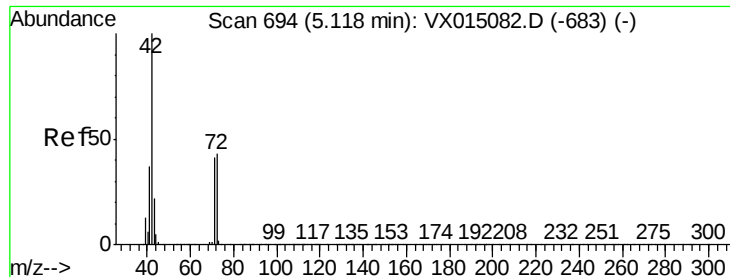
Ion Ratio Lower Upper

96 100

61 122.7 0.0 286.8

98 89.3 0.0 128.4





#29

Tetrahydrofuran

Concen: 0.207 ug/l

RT: 5.12 min Scan# 695

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

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ClientSampleId :

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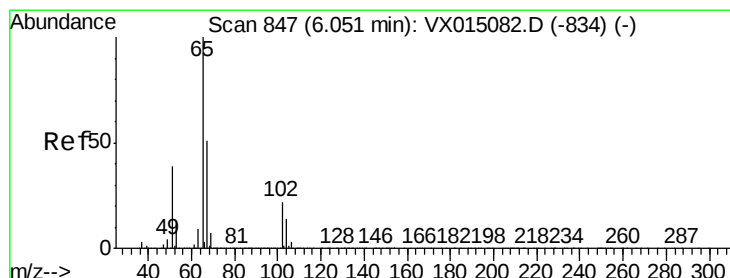
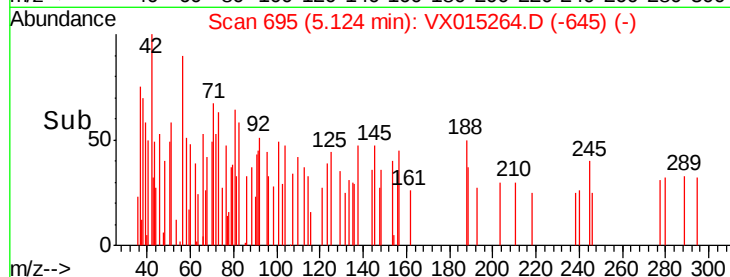
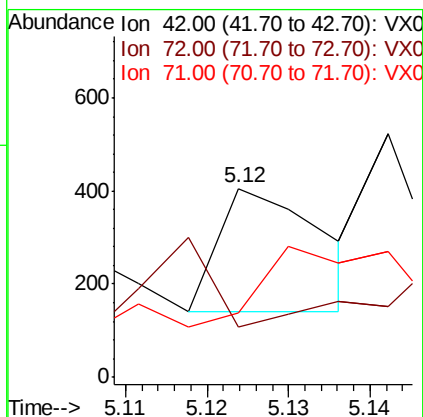
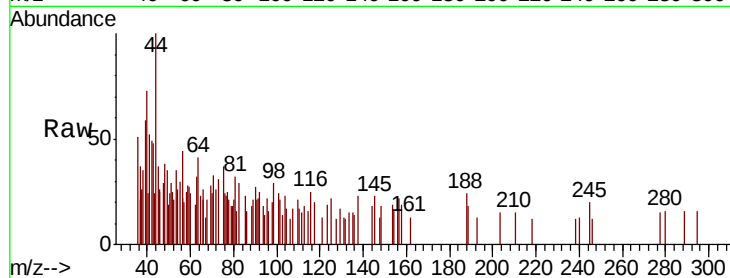
Tot Ion: 42 Resp: 232

Ion Ratio Lower Upper

42 100

72 157.3 36.4 54.6#

71 178.0 33.3 49.9#



#33

1,2-Dichloroethane-d4

Concen: 48.839 ug/l

RT: 6.06 min Scan# 848

Delta R.T. 0.01 min

Lab File: VX015264.D

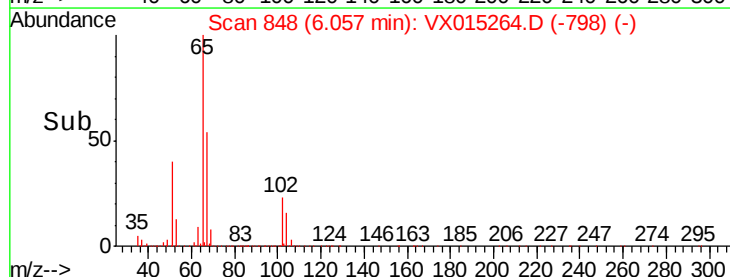
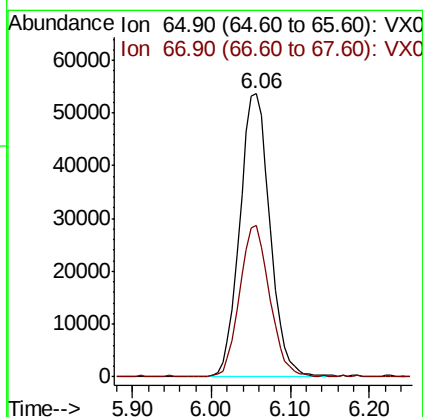
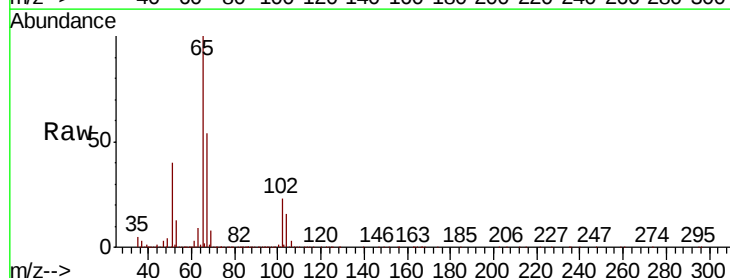
Acq: 13 Mar 2020 16:51

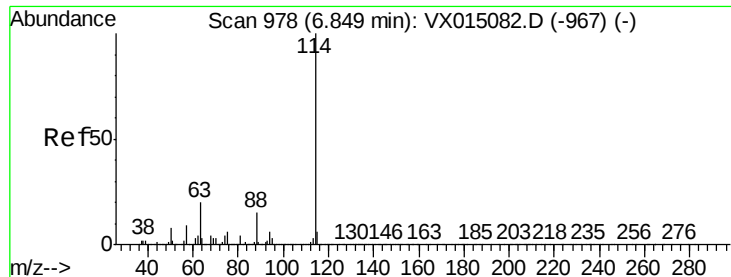
Tgt Ion: 65 Resp: 143198

Ion Ratio Lower Upper

65 100

67 53.2 0.0 105.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 979

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

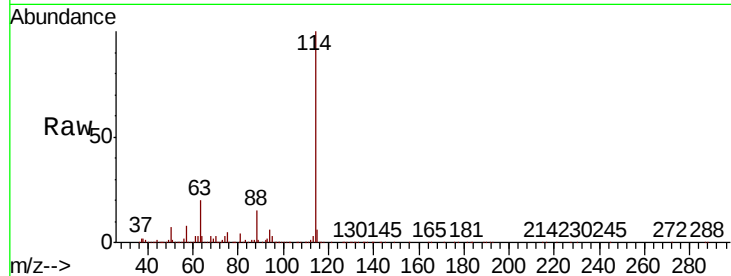
Tot Ion:114 Resp: 392057

Ion Ratio Lower Upper

114 100

63 19.7 0.0 40.0

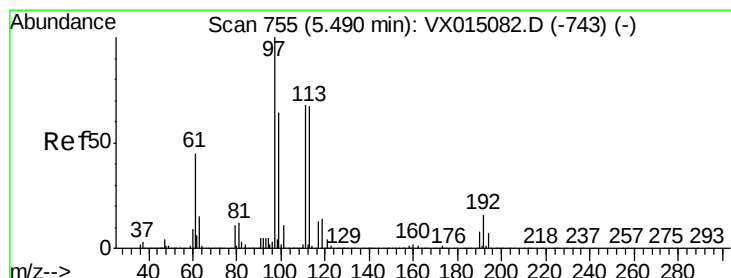
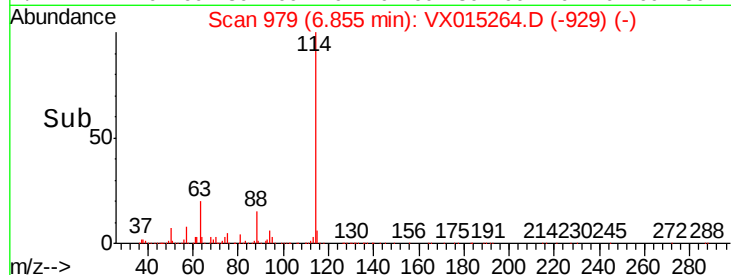
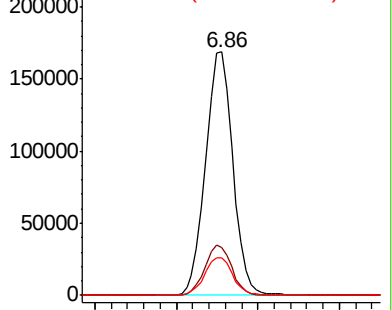
88 15.4 0.0 30.6



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: 48.830 ug/l

RT: 5.49 min Scan# 755

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

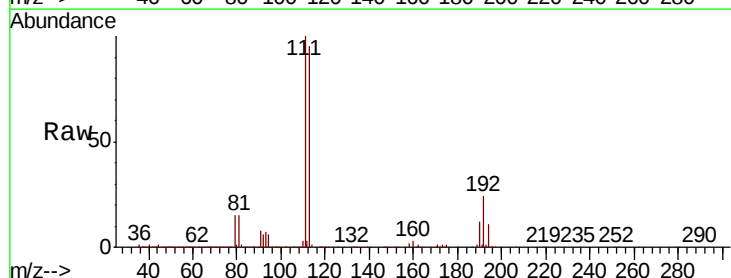
Tgt Ion:113 Resp: 120774

Ion Ratio Lower Upper

113 100

111 103.0 82.6 123.8

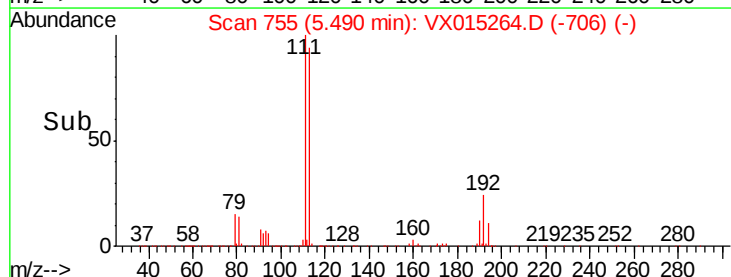
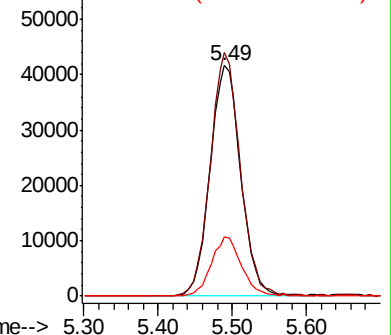
192 25.2 18.6 28.0

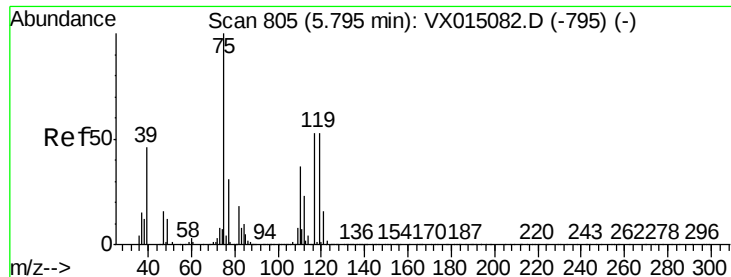


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.399 ug/l

RT: 5.64 min Scan# 780

Delta R.T. -0.15 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

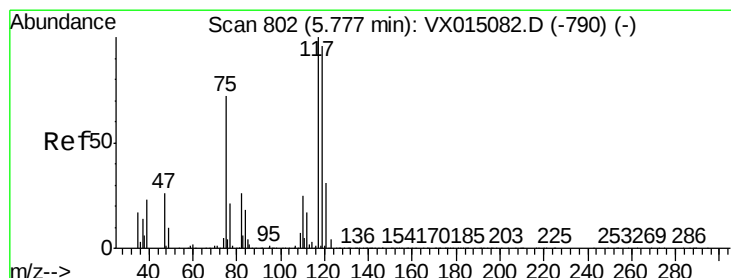
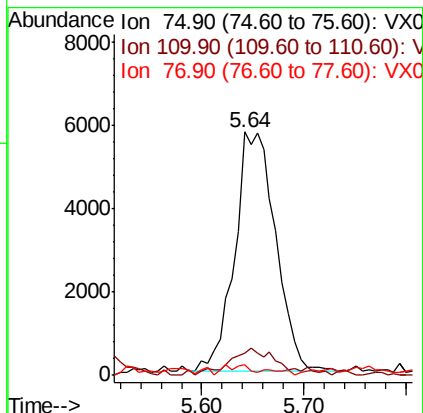
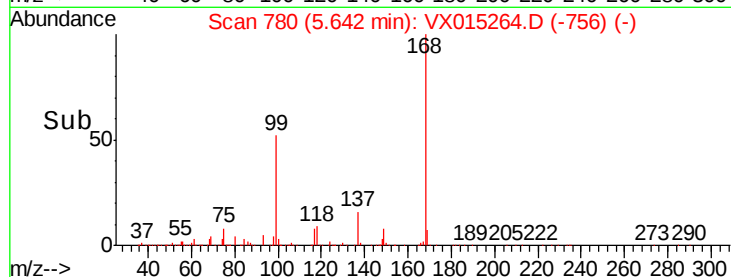
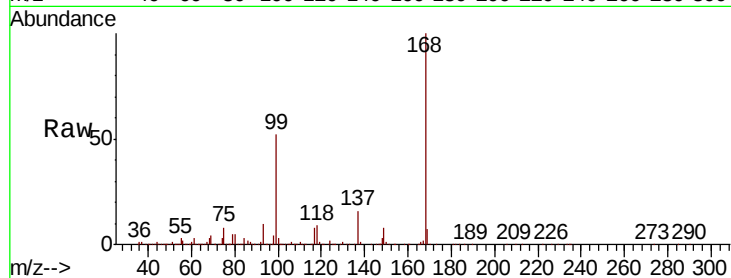
Tot Ion: 75 Resp: 15942

Ion Ratio Lower Upper

75 100

110 13.8 17.9 53.8#

77 0.0 24.8 37.2#



#38

Carbon Tetrachloride

Concen: 6.307 ug/l

RT: 5.65 min Scan# 782

Delta R.T. -0.12 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

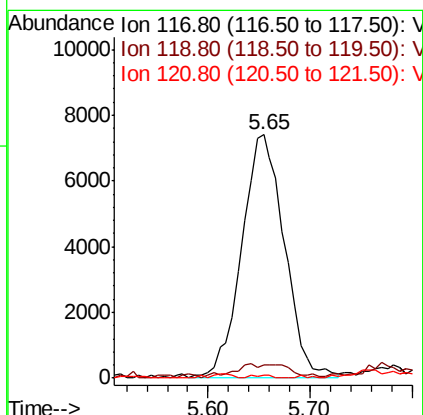
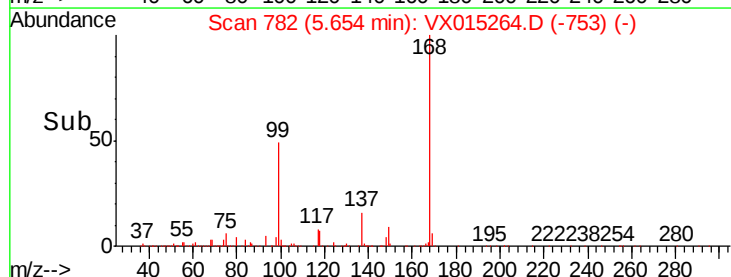
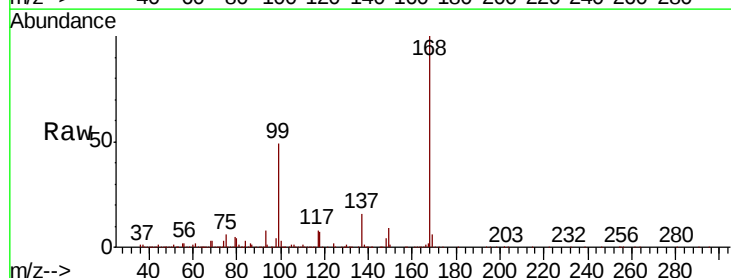
Tgt Ion: 117 Resp: 21578

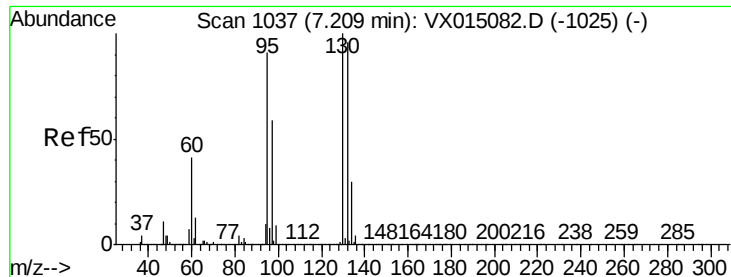
Ion Ratio Lower Upper

117 100

119 4.1 76.9 115.3#

121 1.4 24.6 37.0#





#44

Trichloroethene

Concen: 467.020 ug/l

RT: 7.21 min Scan# 1037

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

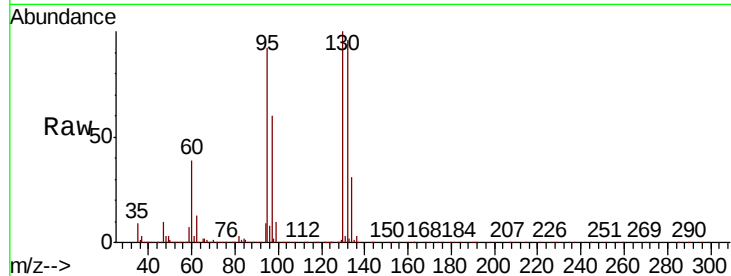
RE103D3-20200310

Tot Ion:130 Resp: 1398573

Ion Ratio Lower Upper

130 100

95 91.8 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

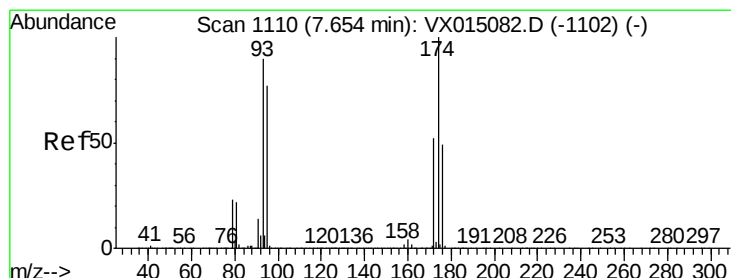
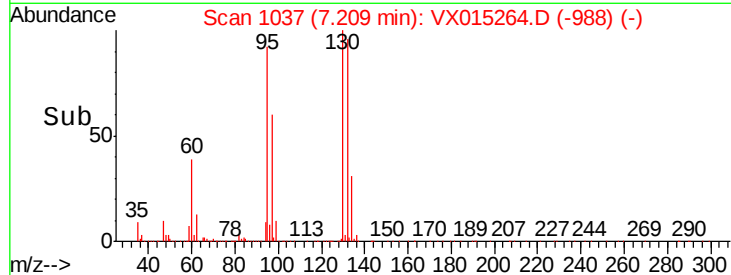
600000

400000

200000

0

Time-->



#46

Dibromomethane

Concen: 0.260 ug/l

RT: 7.67 min Scan# 1112

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

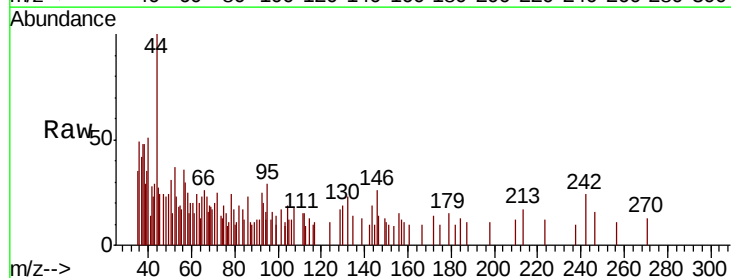
Tgt Ion: 93 Resp: 471

Ion Ratio Lower Upper

93 100

95 9.8 67.8 101.8#

174 9.3 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

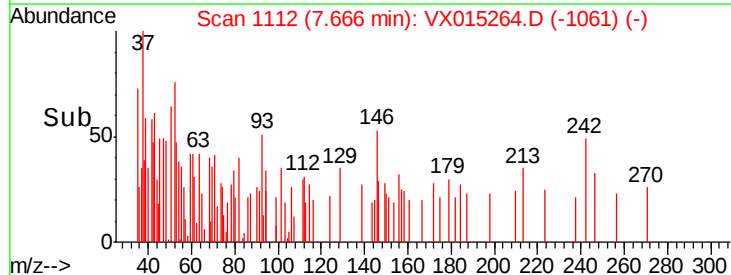
300

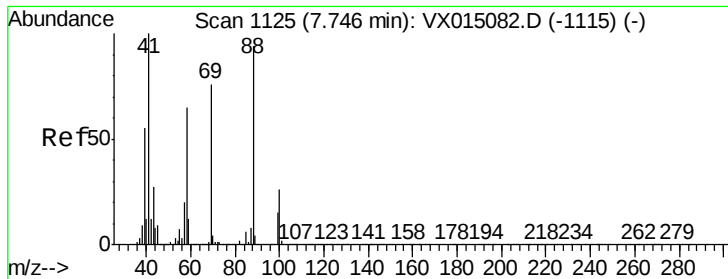
200

100

0

Time-->

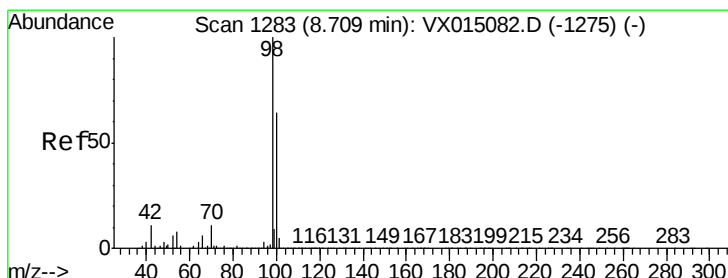
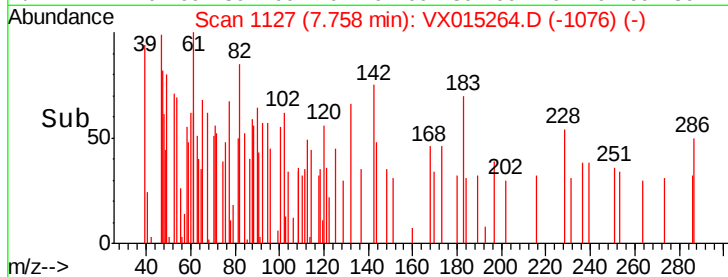
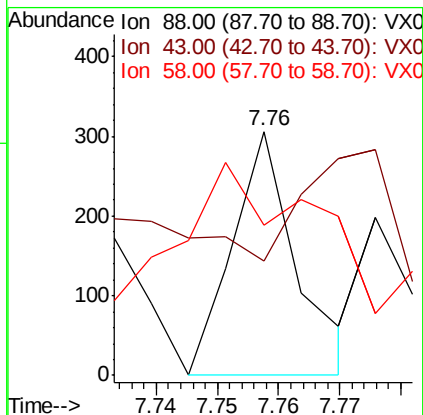
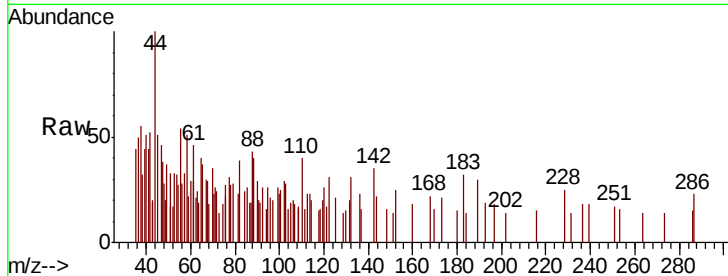




#49
1,4-Dioxane
Concen: 3.396 ug/l
RT: 7.76 min Scan# 1127
Delta R.T. 0.01 min
Lab File: VX015264.D
Acq: 13 Mar 2020 16:51

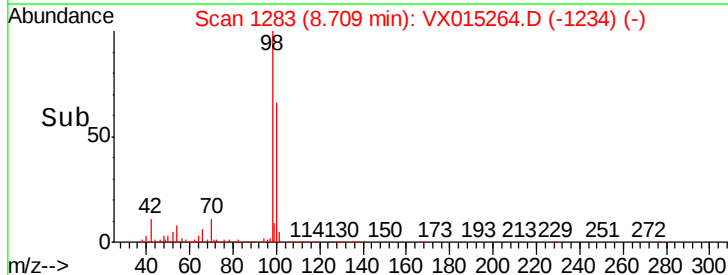
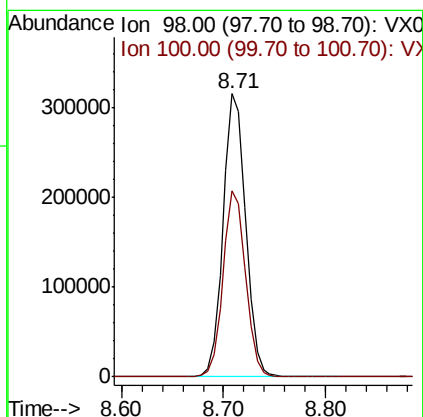
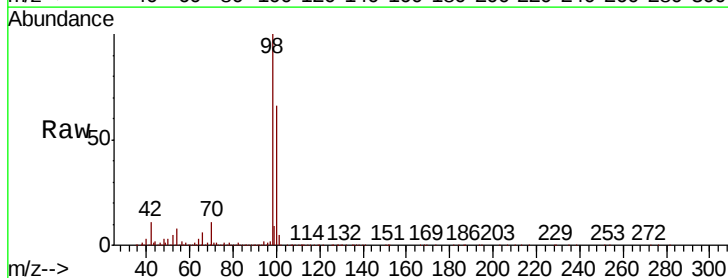
Instrument :
MSVOA_X
ClientSampleId :
RE103D3-20200310

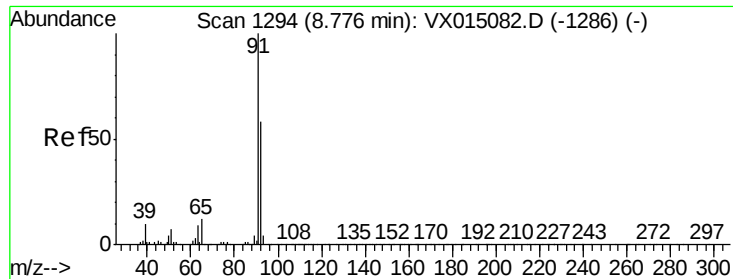
Tot Ion: 88 Resp: 221
Ion Ratio Lower Upper
88 100
43 0.0 27.0 40.4#
58 226.2 55.6 83.4#



#50
Toluene-d8
Concen: 51.587 ug/l
RT: 8.71 min Scan# 1283
Delta R.T. -0.00 min
Lab File: VX015264.D
Acq: 13 Mar 2020 16:51

Tgt Ion: 98 Resp: 485346
Ion Ratio Lower Upper
98 100
100 65.4 52.4 78.6





#52

Toluene

Concen: 0.282 ug/l

RT: 8.78 min Scan# 1295

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

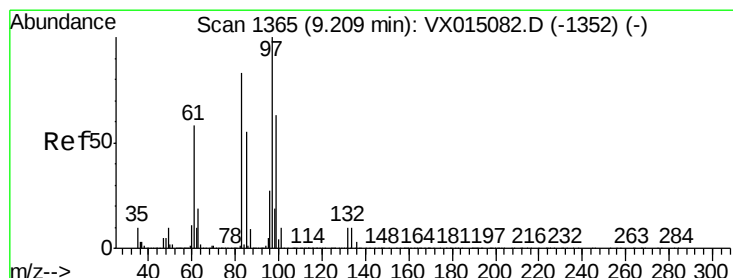
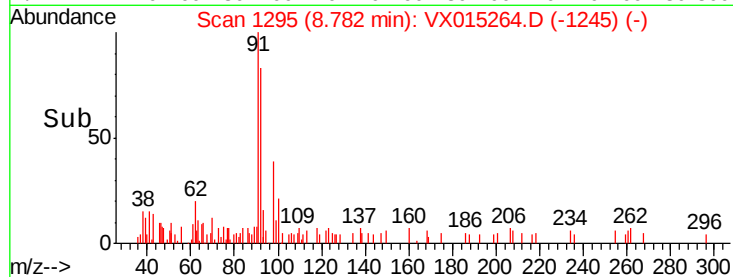
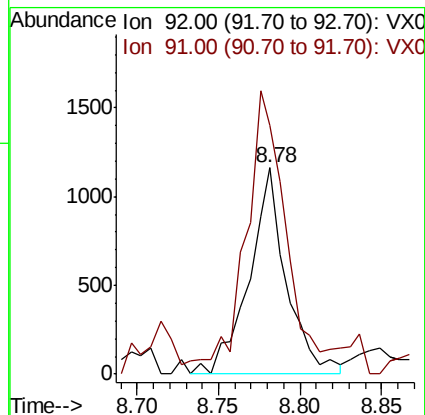
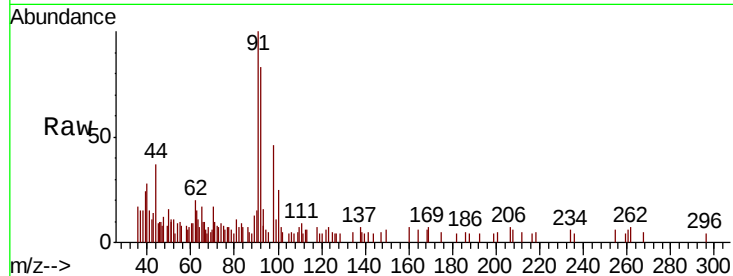
RE103D3-20200310

Tot Ion: 92 Resp: 1851

Ion Ratio Lower Upper

92 100

91 140.5 136.9 205.3



#55

1,1,2-Trichloroethane

Concen: 0.368 ug/l

RT: 9.21 min Scan# 1366

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Tgt Ion: 97 Resp: 997

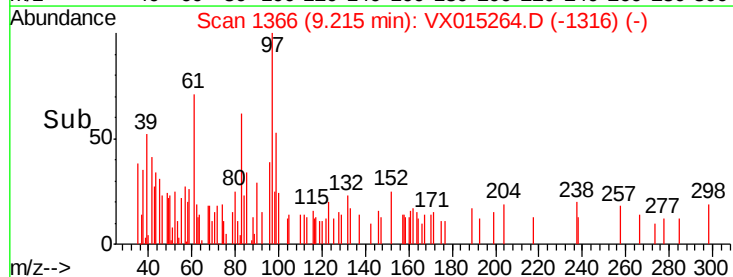
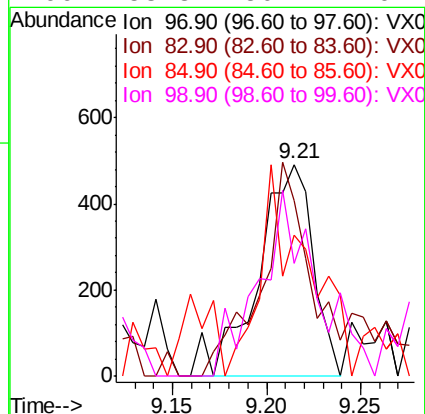
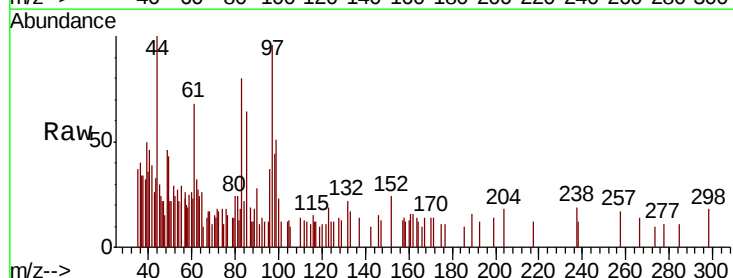
Ion Ratio Lower Upper

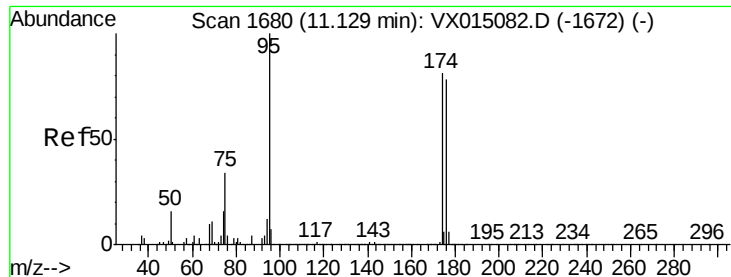
97 100

83 82.9 66.4 99.6

85 28.7 43.5 65.3#

99 53.3 50.7 76.1





#62

4-Bromofluorobenzene

Concen: 53.489 ug/l

RT: 11.13 min Scan# 1681

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

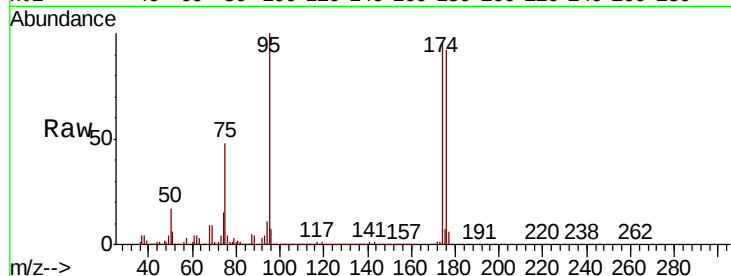
Tot Ion: 95 Resp: 179500

Ion Ratio Lower Upper

95 100

174 91.3 0.0 177.6

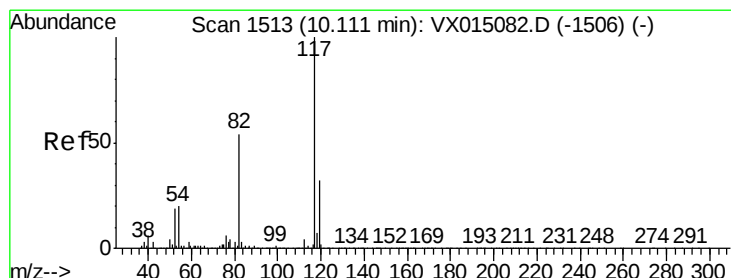
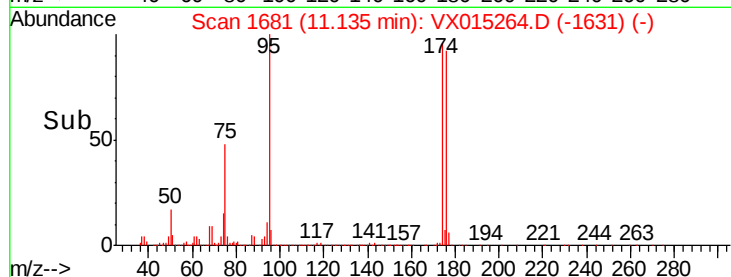
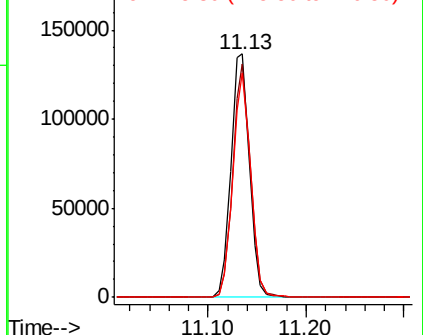
176 88.4 0.0 170.2



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.11 min Scan# 1513

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

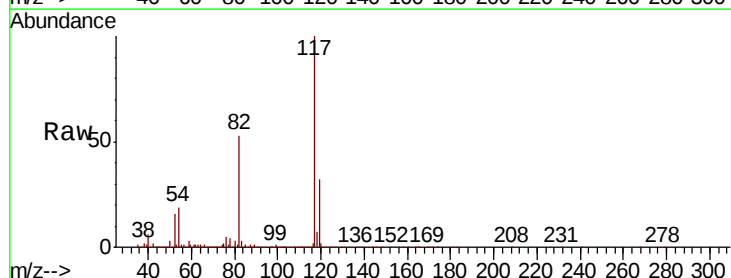
Tgt Ion: 117 Resp: 385352

Ion Ratio Lower Upper

117 100

82 53.4 43.3 64.9

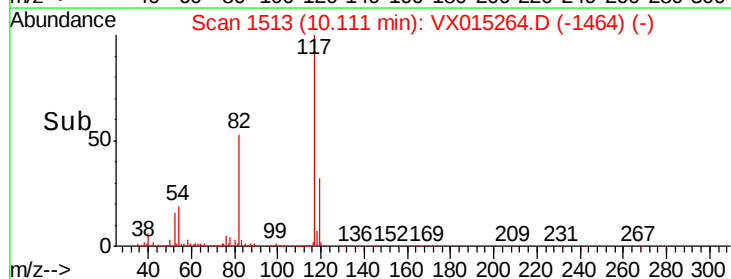
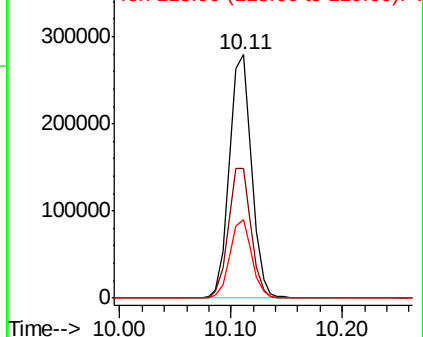
119 32.3 25.8 38.8

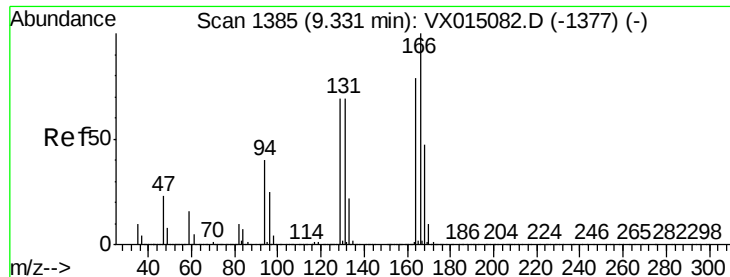


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#64

Tetrachloroethene

Concen: 0.860 ug/l

RT: 9.33 min Scan# 1385

Delta R.T. -0.00 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

Tot Ion:164 Resp: 2739

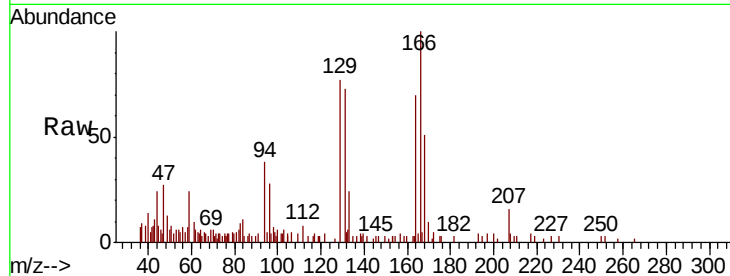
Ion Ratio Lower Upper

164 100

166 139.1 101.1 151.7

129 110.3 69.4 104.0#

131 99.5 69.8 104.8

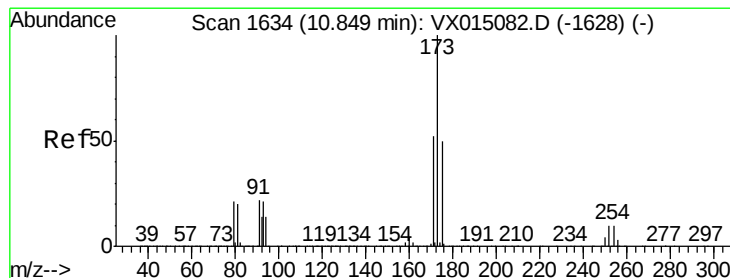
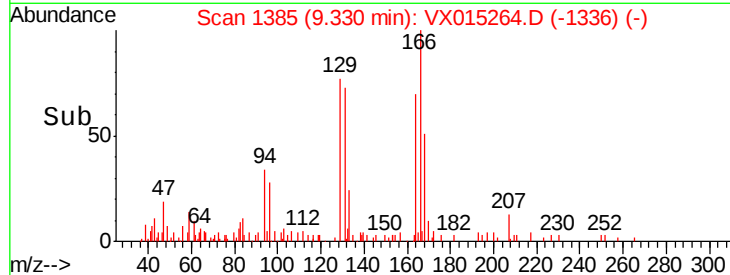
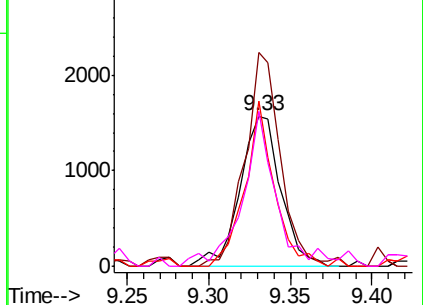


Abundance Ion 163.80 (163.50 to 164.50): V

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



#71

Bromoform

Concen: 0.573 ug/l

RT: 10.86 min Scan# 1636

Delta R.T. 0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

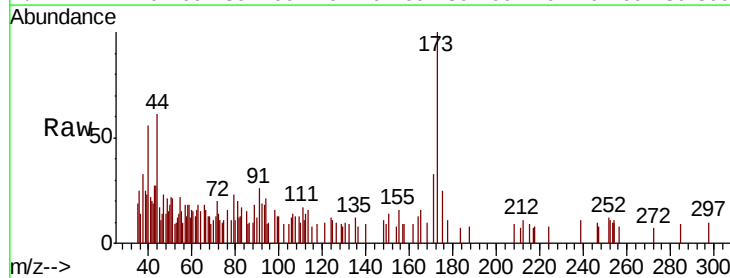
Tgt Ion:173 Resp: 1296

Ion Ratio Lower Upper

173 100

175 50.5 24.9 74.7

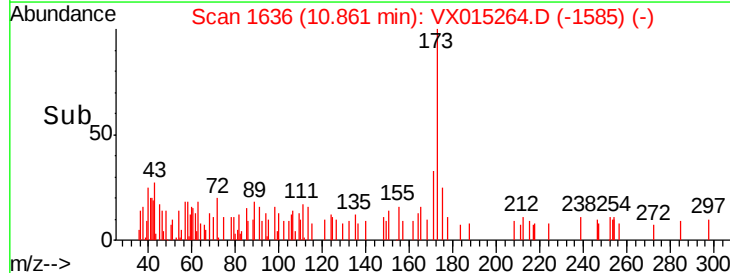
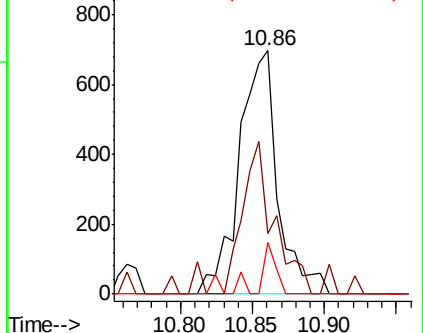
254 6.2 0.2 0.2#

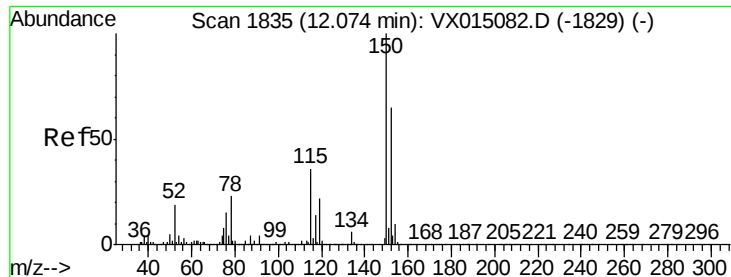


Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): 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: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

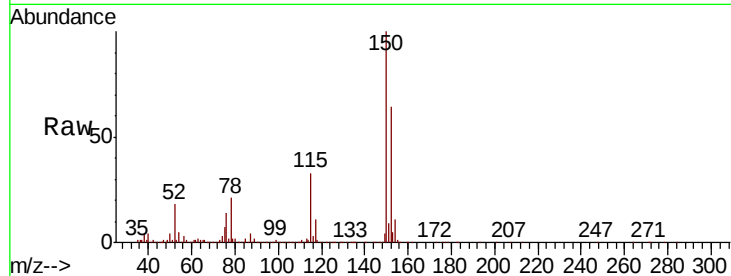
Tot Ion:152 Resp: 200746

Ion Ratio Lower Upper

152 100

115 54.0 38.2 114.6

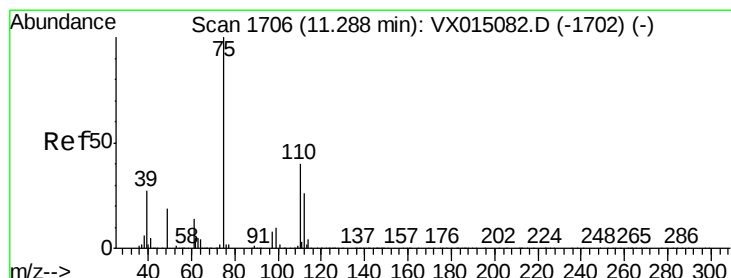
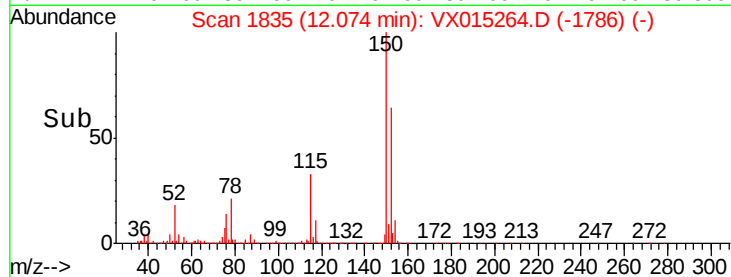
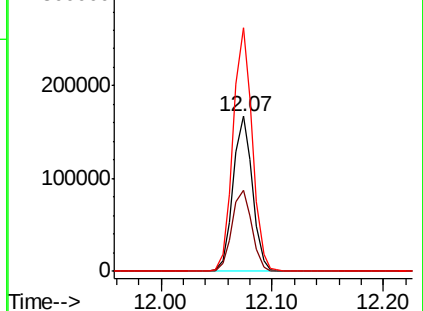
150 156.2 0.0 343.8



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: 21.430 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. -0.16 min

Lab File: VX015264.D

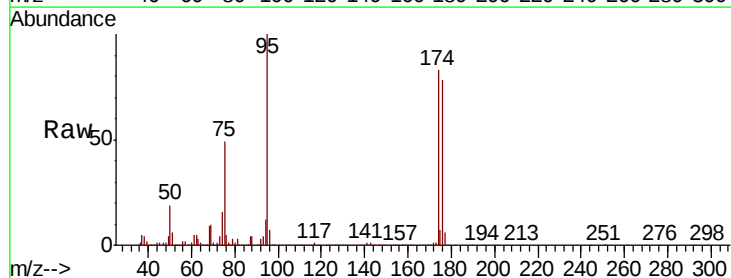
Acq: 13 Mar 2020 16:51

Tgt Ion: 75 Resp: 85810

Ion Ratio Lower Upper

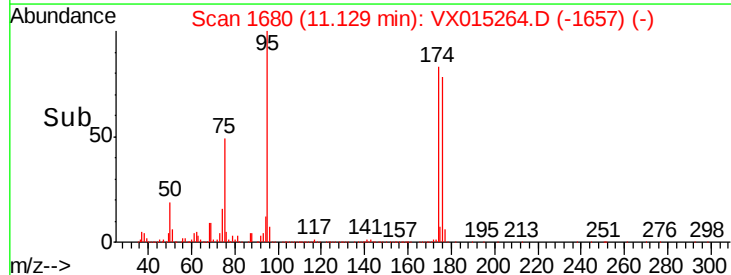
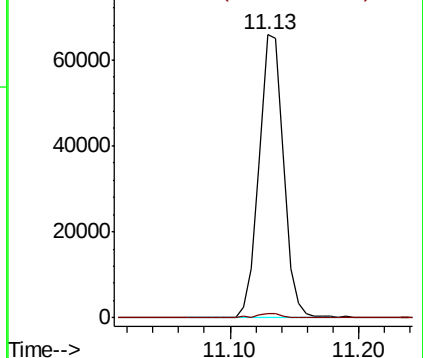
75 100

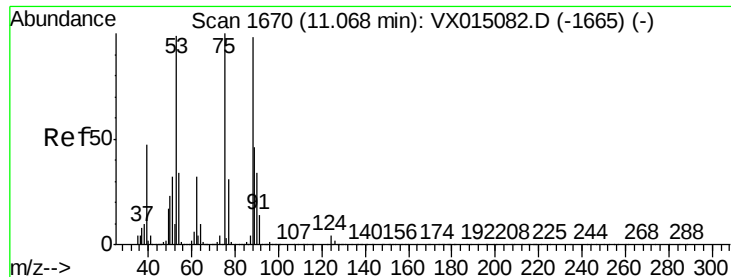
77 1.9 22.6 67.8#



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: 60.817 ug/l

RT: 11.13 min Scan# 1680

Delta R.T. 0.06 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

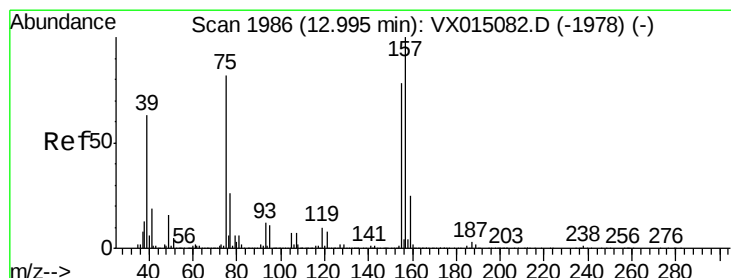
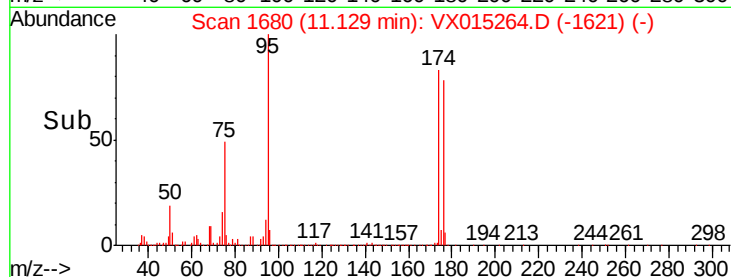
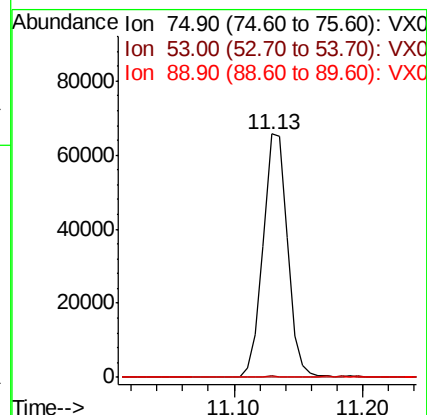
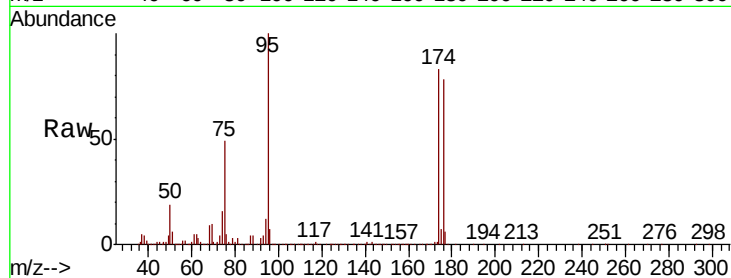
Tot Ion: 75 Resp: 85810

Ion Ratio Lower Upper

75 100

53 0.3 77.9 116.9#

89 0.0 36.2 54.2#



#92

1,2-Dibromo-3-Chloropropane

Concen: 0.324 ug/l

RT: 13.03 min Scan# 1992

Delta R.T. 0.04 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

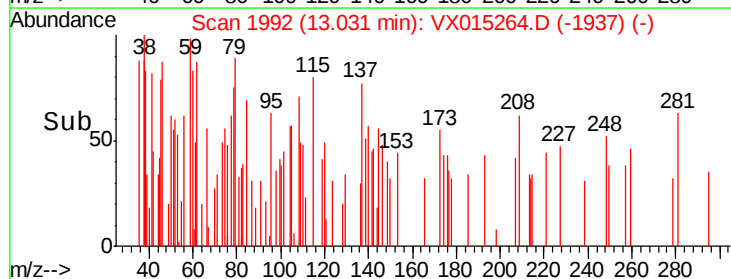
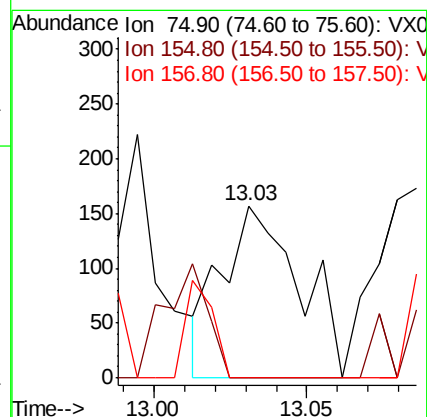
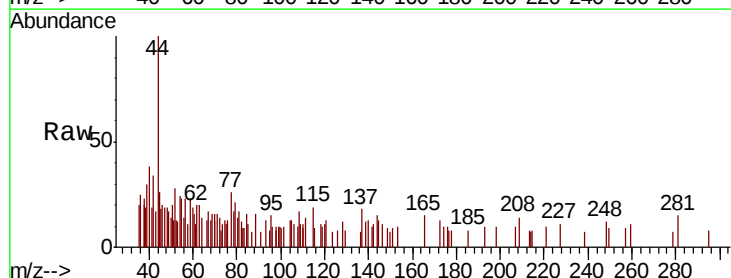
Tgt Ion: 75 Resp: 277

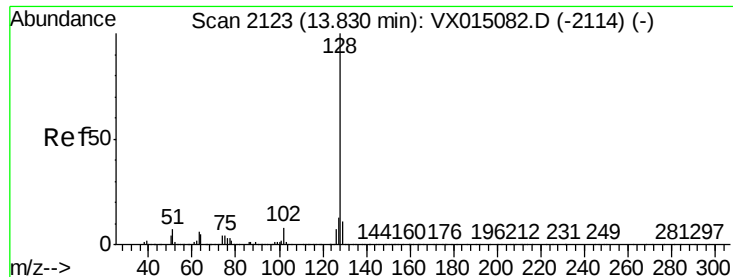
Ion Ratio Lower Upper

75 100

155 37.5 46.6 139.7#

157 20.2 59.2 177.5#





#95

Napthalene

Concen: 1.448 ug/l

RT: 13.82 min Scan# 2122

Delta R.T. -0.01 min

Lab File: VX015264.D

Acq: 13 Mar 2020 16:51

Instrument :

MSVOA_X

ClientSampleId :

RE103D3-20200310

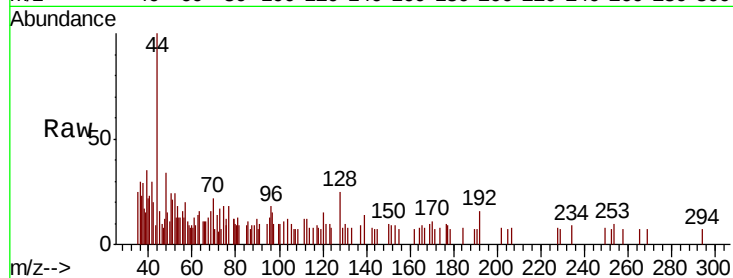
Tot Ion:128 Resp: 387

Ion Ratio Lower Upper

128 100

127 28.9 10.3 15.5#

129 0.0 8.6 13.0#



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

