

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF121018\
 Data File : VF060957.D
 Acq On : 10 Dec 2018 16:54
 Operator : VA/AP
 Sample : J6327-02RE
 Misc : 5.07g/5mL/MSVOA-F/SOIL
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :

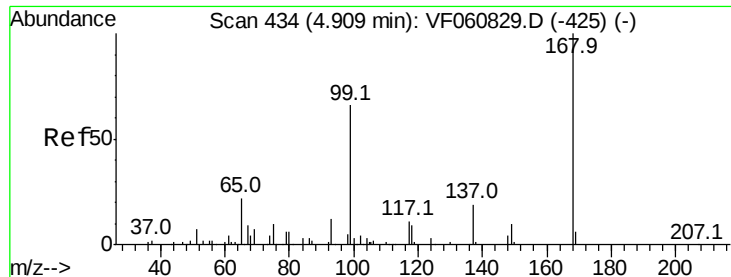
Quant Time: Dec 11 04:57:34 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F112618S.M
 Quant Title : SW846 8260
 QLast Update : Tue Nov 27 01:36:26 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.88	168	14581	50.00	ug/l	-0.03
34) 1,4-Difluorobenzene	5.60	114	17358	50.00	ug/l	-0.04
63) Chlorobenzene-d5	9.77	117	11384	50.00	ug/l	-0.04
72) 1,4-Dichlorobenzene-d4	12.55	152	4059	50.00	ug/l	-0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	4.84	65	2134	12.42	ug/l	-0.04
Spiked Amount			Recovery	=	24.84%	
35) Dibromofluoromethane	4.10	113	3233	23.48	ug/l	-0.05
Spiked Amount			Recovery	=	46.96%	
50) Toluene-d8	7.55	98	14241	35.11	ug/l	-0.04
Spiked Amount			Recovery	=	70.22%	
62) 4-Bromofluorobenzene	11.41	95	3495	18.96	ug/l	-0.03
Spiked Amount			Recovery	=	37.92%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.08	50	351	2.474	ug/l #	41
5) Bromomethane	1.34	94	291	3.119	ug/l #	63
6) Chloroethane	1.40	64	60	1.049	ug/l #	1
8) Diethyl Ether	1.55	74	154	3.772	ug/l	46
11) Tert butyl alcohol	2.48	59	85	12.072	ug/l #	1
13) Acrolein	2.09	56	329	49.315	ug/l	94
14) Allyl chloride	2.12	41	518	3.600	ug/l #	64
15) Acrylonitrile	2.94	53	835	52.895	ug/l #	26
16) Acetone	2.30	43	797	25.162	ug/l	98
18) Methyl Acetate	2.38	43	837	14.581	ug/l #	61
23) Vinyl Acetate	3.22	43	726	4.055	ug/l #	80
25) 2-Butanone	4.37	43	990	18.070	ug/l #	57
26) 2,2-Dichloropropane	3.68	77	310	2.052	ug/l #	60
29) Tetrahydrofuran	4.08	42	153	6.588	ug/l #	37
37) Ethyl Acetate	4.16	43	223	2.850	ug/l #	14
41) Methacrylonitrile	4.73	41	383	6.045	ug/l #	39
43) Isopropyl Acetate	6.90	43	982	7.882	ug/l #	49
48) Methyl methacrylate	6.72	41	376	5.309	ug/l #	40
49) 1,4-Dioxane	6.81	88	71	136.984	ug/l #	17
51) 4-Methyl-2-Pentanone	8.25	43	586	8.122	ug/l #	38
59) 2-Hexanone	9.47	43	398	7.863	ug/l #	27
74) N-amyl acetate	11.39	43	732	9.883	ug/l #	48
75) 1,1,2,2-Tetrachloroethane	11.67	83	65	1.231	ug/l #	25
92) 1,2-Dibromo-3-Chloropropan	13.63	75	59	5.781	ug/l #	1
95) Naphthalene	14.46	128	861	1.627	ug/l #	59

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.88 min Scan# 431

Delta R.T. -0.03 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

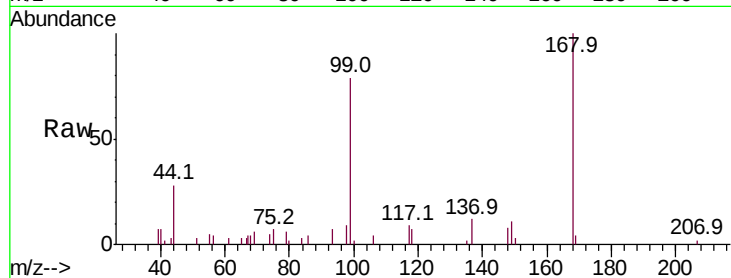
ClientSampleId :

Tot Ion:168 Resp: 14581

Ion Ratio Lower Upper

168 100

99 78.9 52.6 79.0



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.88

5000

4000

3000

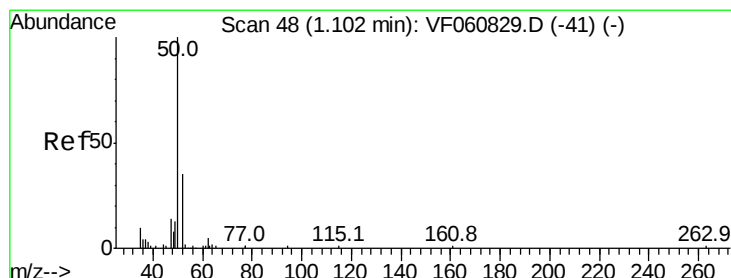
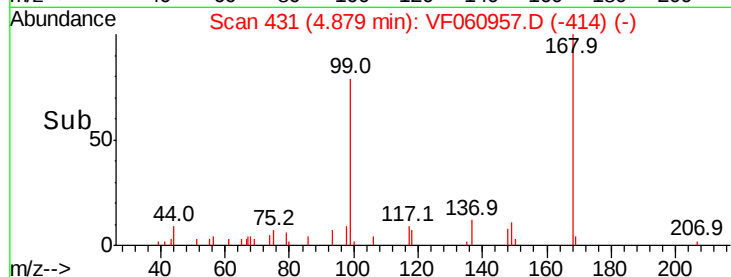
2000

1000

0

Time-->

4.80 4.90 5.00



#3

Chloromethane

Concen: 2.474 ug/l

RT: 1.08 min Scan# 46

Delta R.T. -0.02 min

Lab File: VF060957.D

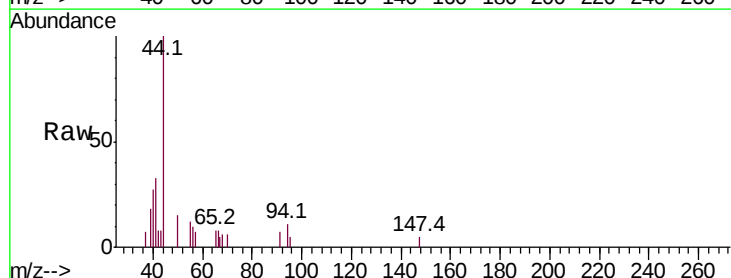
Acq: 10 Dec 2018 16:54

Tgt Ion: 50 Resp: 351

Ion Ratio Lower Upper

50 100

52 0.0 27.0 40.4#



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

1.08

300

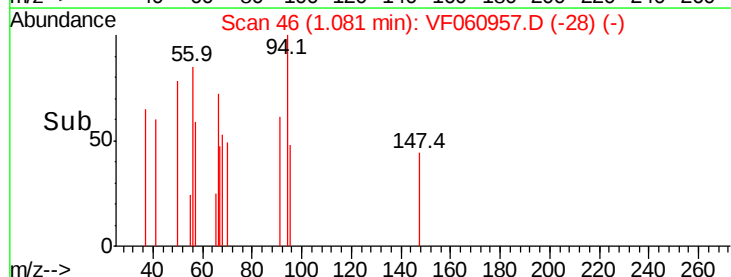
200

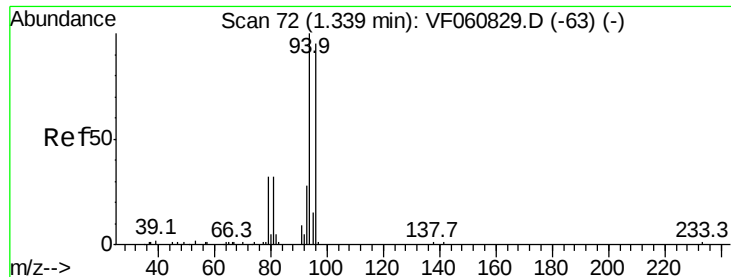
100

0

Time-->

1.06 1.08 1.10





#5

Bromomethane

Concen: 3.119 ug/l

RT: 1.34 min Scan# 72

Delta R.T. -0.00 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

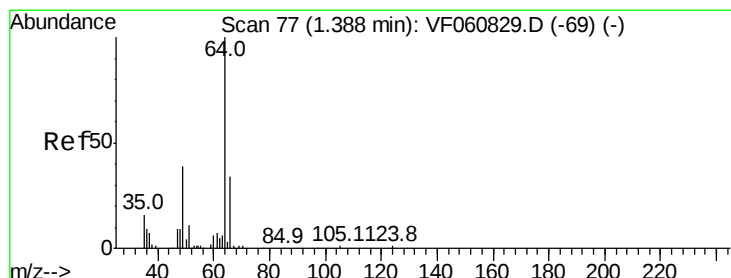
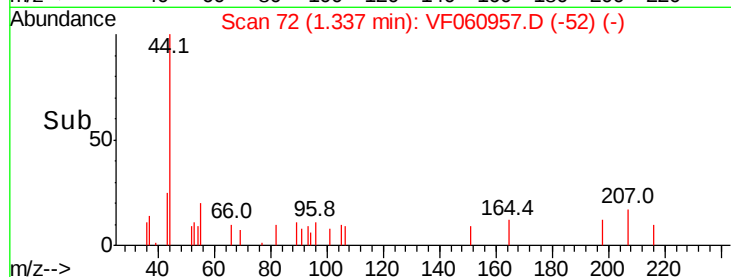
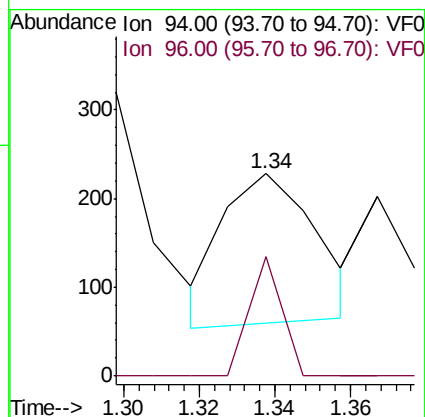
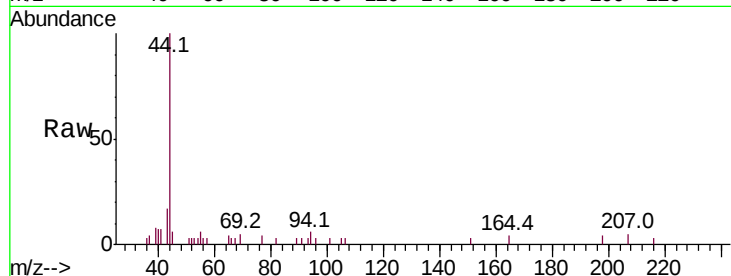
Instrument :
MSVOA_F
ClientSampleId :

Tot Ion: 94 Resp: 291

Ion Ratio Lower Upper

94 100

96 58.8 75.9 113.9#



#6

Chloroethane

Concen: 1.049 ug/l

RT: 1.40 min Scan# 78

Delta R.T. 0.01 min

Lab File: VF060957.D

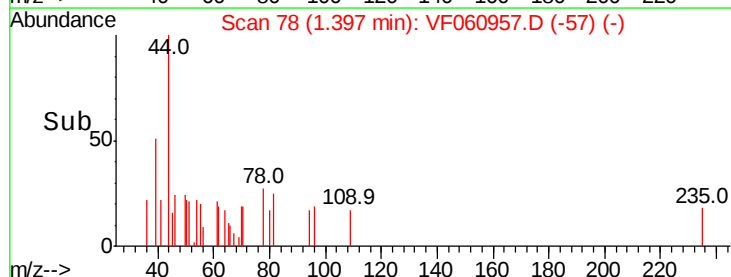
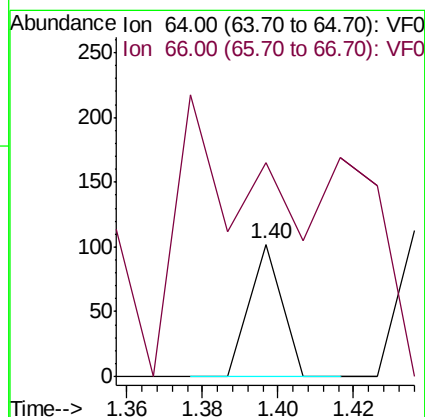
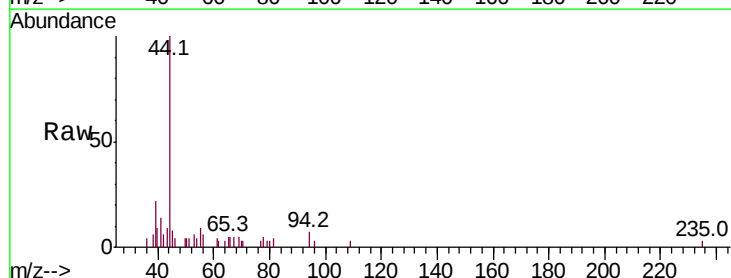
Acq: 10 Dec 2018 16:54

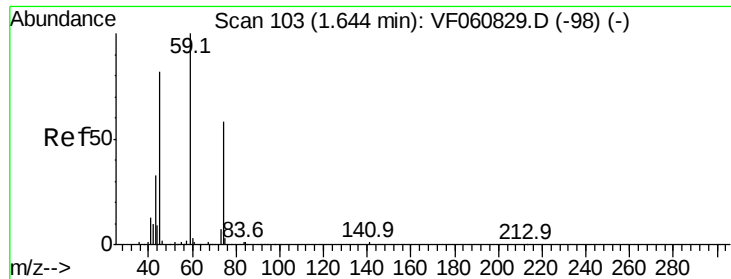
Tgt Ion: 64 Resp: 60

Ion Ratio Lower Upper

64 100

66 161.8 28.1 42.1#





#8

Diethyl Ether

Concen: 3.772 ug/l

RT: 1.55 min Scan# 94

Delta R.T. -0.09 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

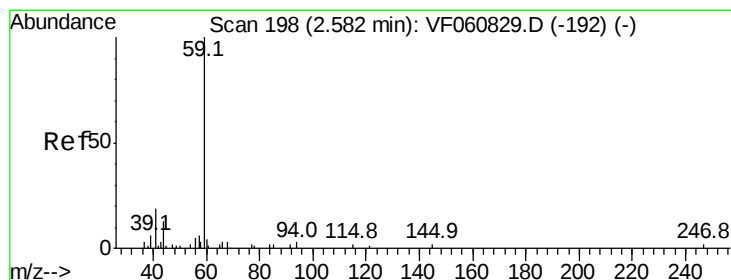
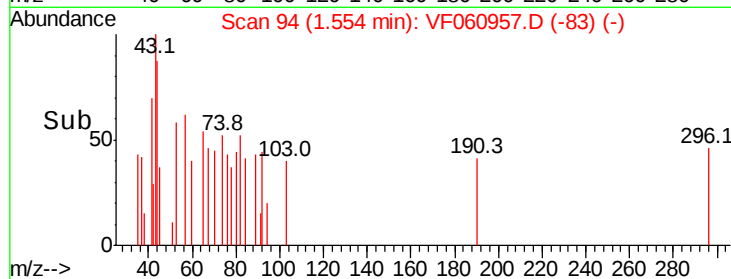
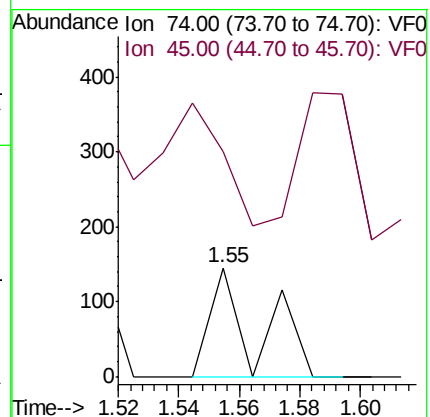
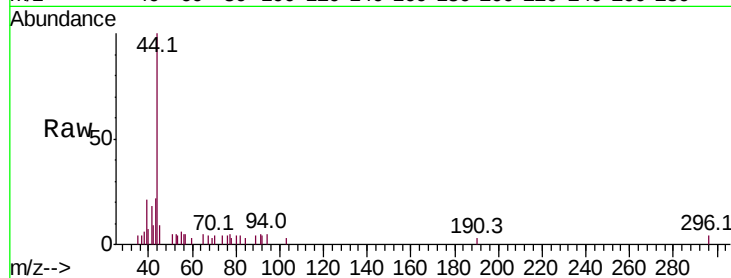
Instrument :
MSVOA_F
ClientSampled :

Tot Ion: 74 Resp: 154

Ion Ratio Lower Upper

74 100

45 207.6 71.0 212.8



#11

Tert butyl alcohol

Concen: 12.072 ug/l

RT: 2.48 min Scan# 188

Delta R.T. -0.10 min

Lab File: VF060957.D

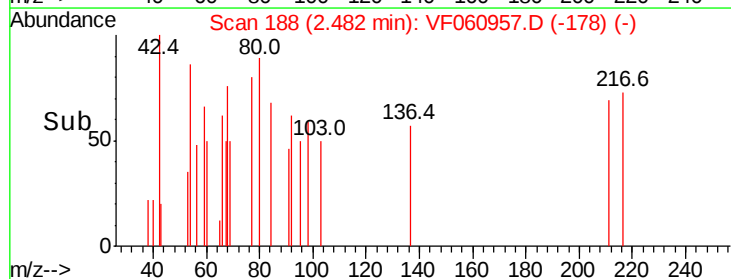
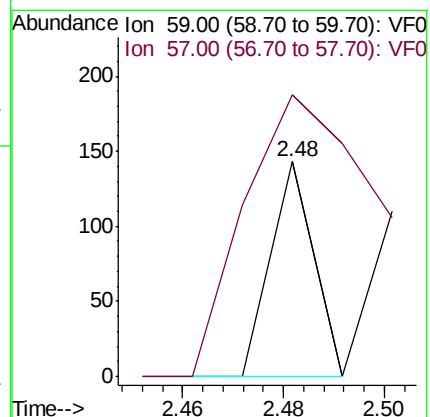
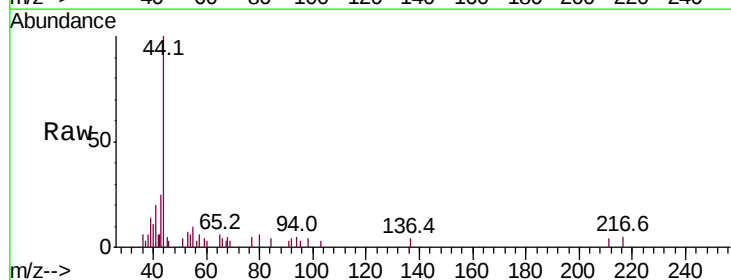
Acq: 10 Dec 2018 16:54

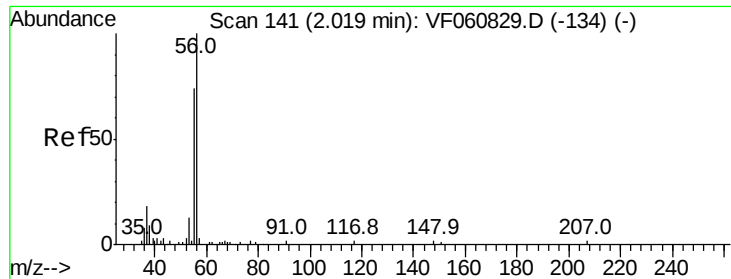
Tgt Ion: 59 Resp: 85

Ion Ratio Lower Upper

59 100

57 131.5 12.7 19.1#

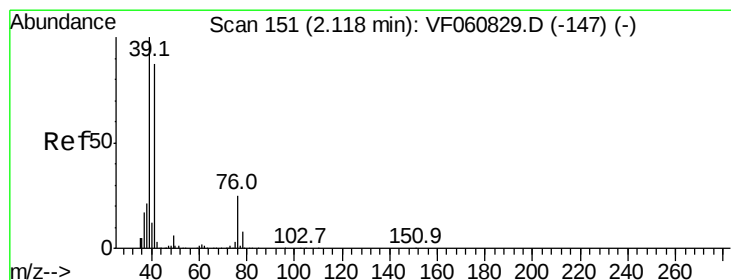
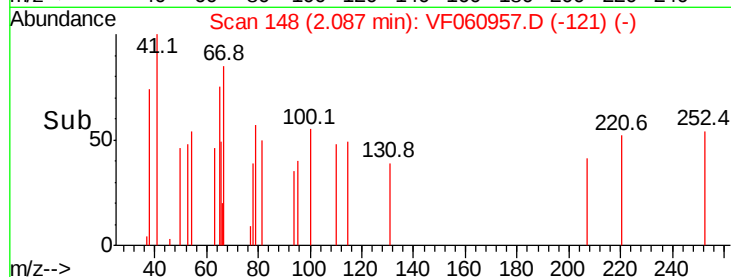
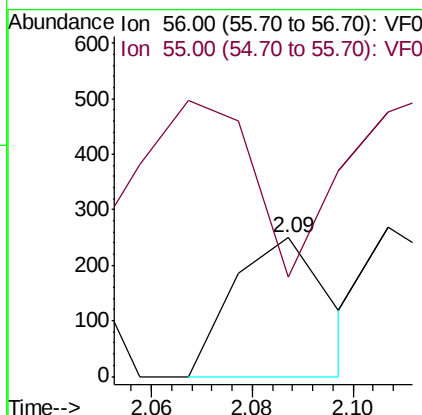
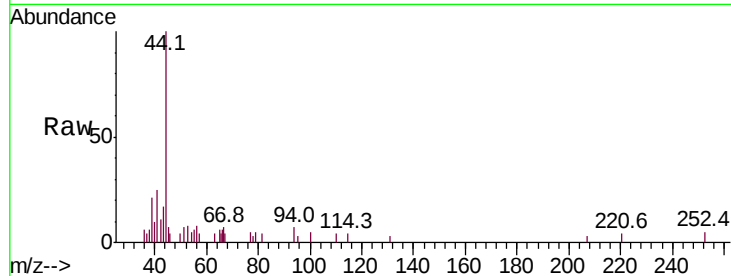




#13
Acrolein
Concen: 49.315 ug/l
RT: 2.09 min Scan# 148
Delta R.T. 0.07 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

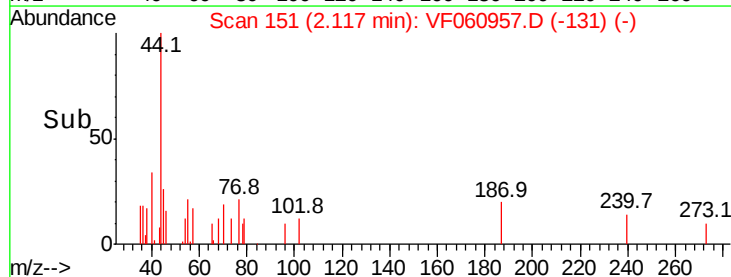
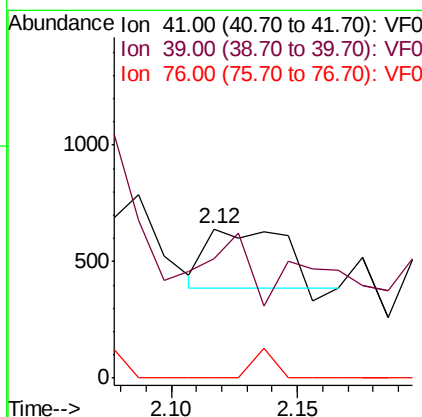
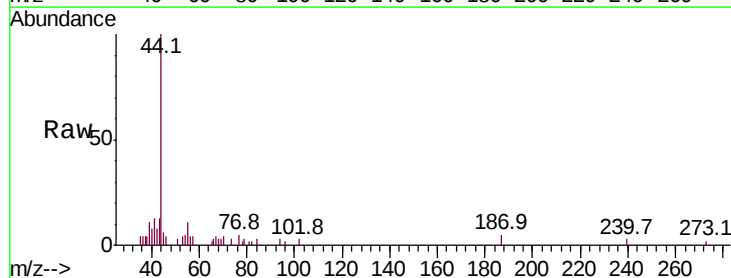
Instrument :
MSVOA_F
ClientSampled :

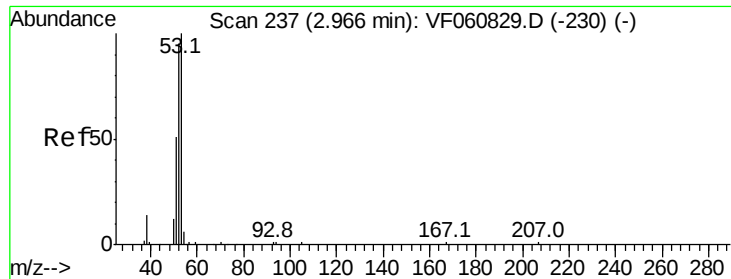
Tot Ion: 56 Resp: 329
Ion Ratio Lower Upper
56 100
55 71.2 61.2 91.8



#14
Allyl chloride
Concen: 3.600 ug/l
RT: 2.12 min Scan# 151
Delta R.T. -0.00 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

Tgt Ion: 41 Resp: 518
Ion Ratio Lower Upper
41 100
39 80.5 91.7 137.5#
76 0.0 23.5 35.3#





#15

Acrylonitrile

Concen: 52.895 ug/l

RT: 2.94 min Scan# 234

Delta R.T. -0.03 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

ClientSampled :

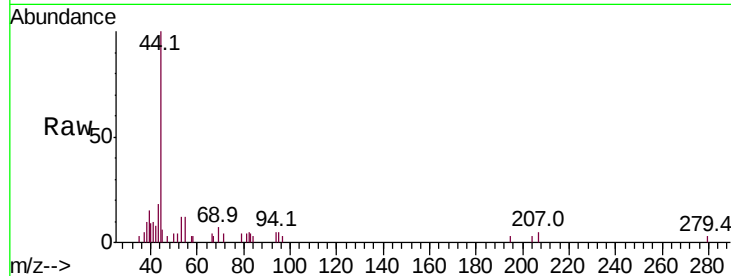
Tot Ion: 53 Resp: 835

Ion Ratio Lower Upper

53 100

52 0.0 76.5 114.7#

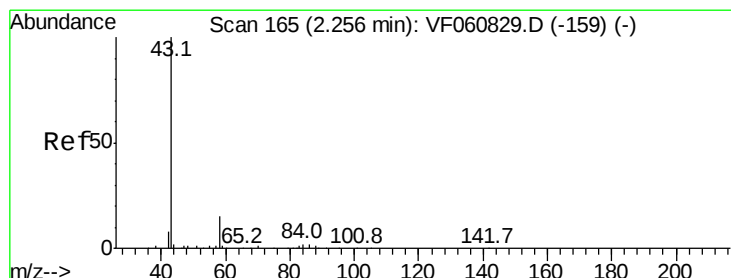
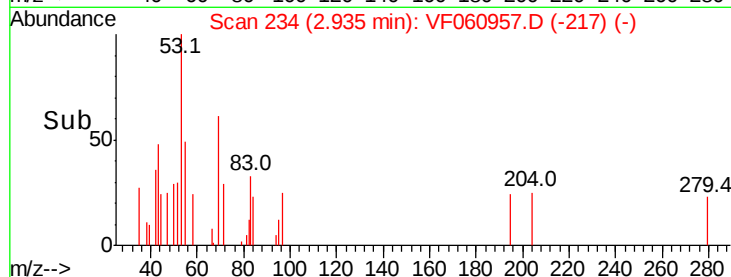
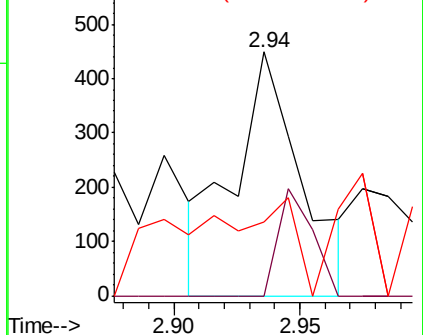
51 30.1 40.7 61.1#



Abundance Ion 53.00 (52.70 to 53.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

Ion 51.00 (50.70 to 51.70): VF0



#16

Acetone

Concen: 25.162 ug/l

RT: 2.30 min Scan# 170

Delta R.T. 0.05 min

Lab File: VF060957.D

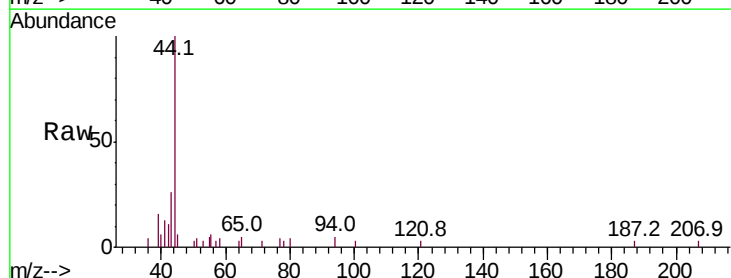
Acq: 10 Dec 2018 16:54

Tgt Ion: 43 Resp: 797

Ion Ratio Lower Upper

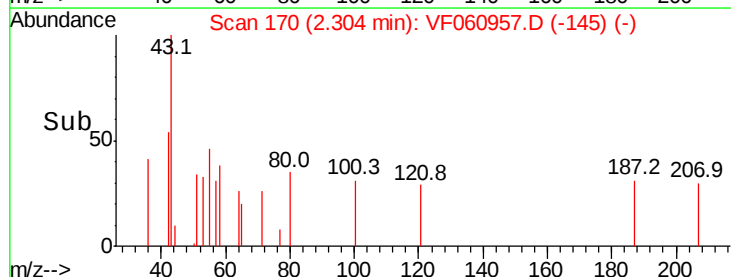
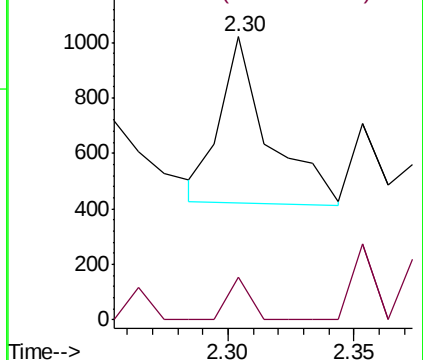
43 100

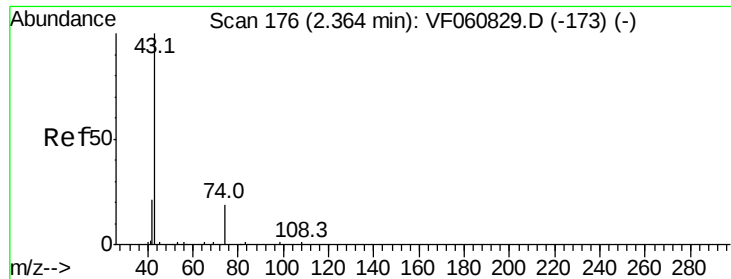
58 15.2 11.4 17.2



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

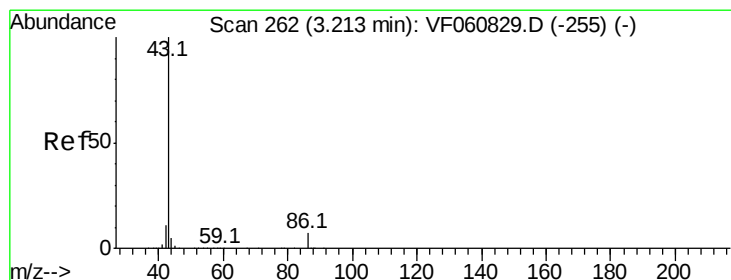
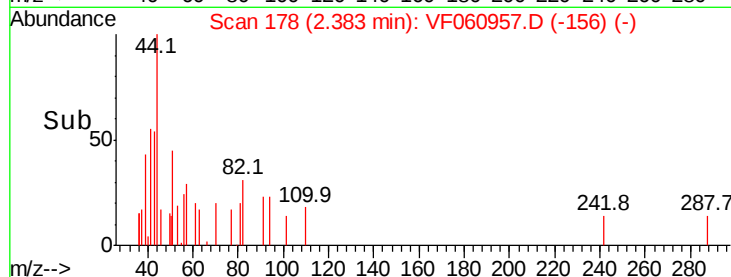
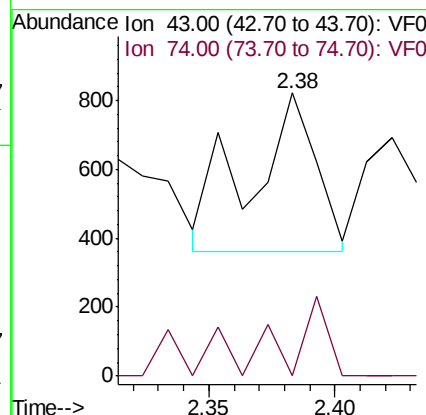
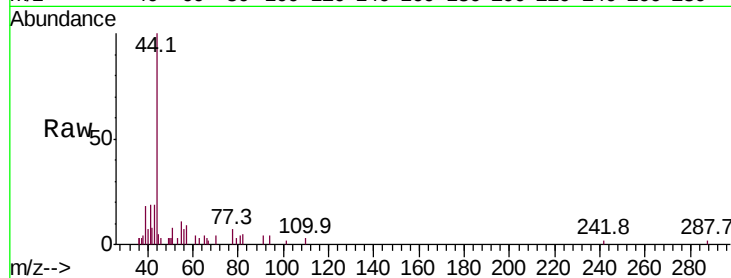




#18
Methyl Acetate
Concen: 14.581 ug/l
RT: 2.38 min Scan# 178
Delta R.T. 0.02 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

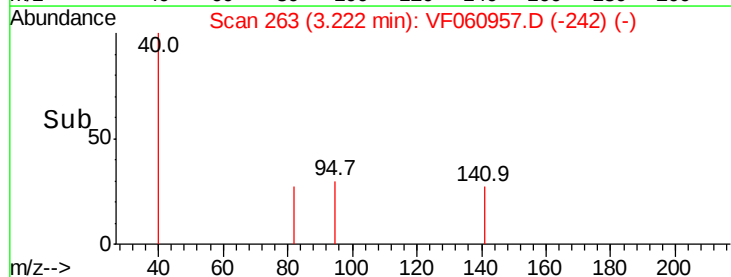
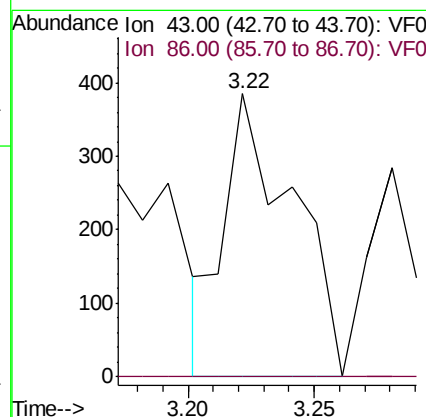
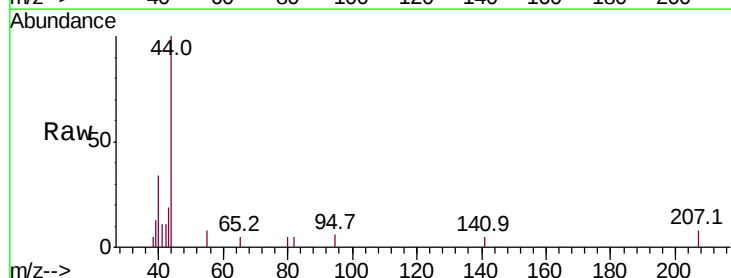
Instrument :
MSVOA_F
ClientSampleId :

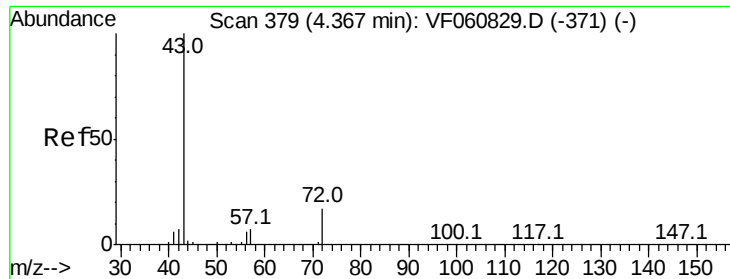
Tot Ion: 43 Resp: 837
Ion Ratio Lower Upper
43 100
74 0.0 13.3 19.9#



#23
Vinyl Acetate
Concen: 4.055 ug/l
RT: 3.22 min Scan# 263
Delta R.T. 0.01 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

Tgt Ion: 43 Resp: 726
Ion Ratio Lower Upper
43 100
86 0.0 5.4 8.0#





#25

2-Butanone

Concen: 18.070 ug/l

RT: 4.37 min Scan# 379

Delta R.T. -0.00 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

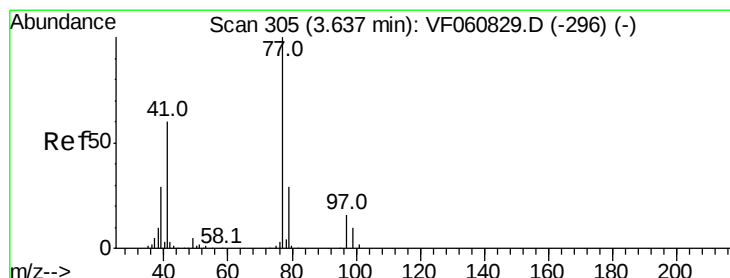
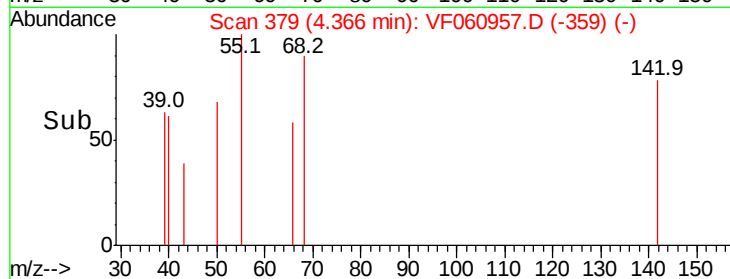
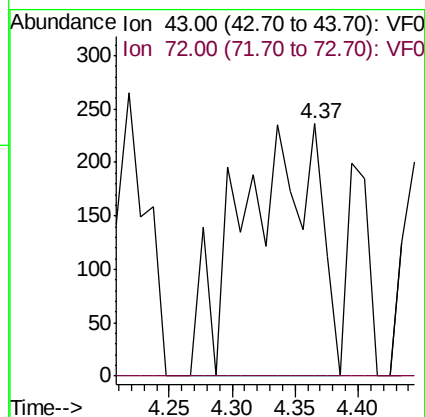
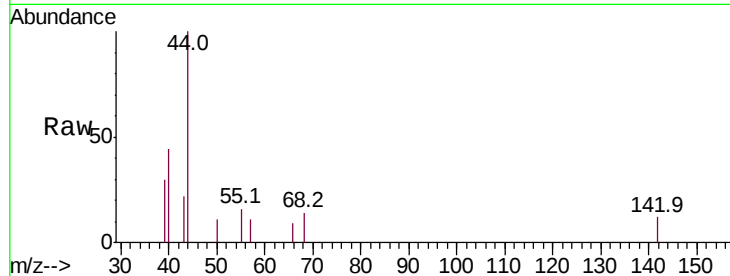
ClientSampleId :

Tot Ion: 43 Resp: 990

Ion Ratio Lower Upper

43 100

72 0.0 15.4 23.2#



#26

2,2-Dichloropropane

Concen: 2.052 ug/l

RT: 3.68 min Scan# 309

Delta R.T. 0.04 min

Lab File: VF060957.D

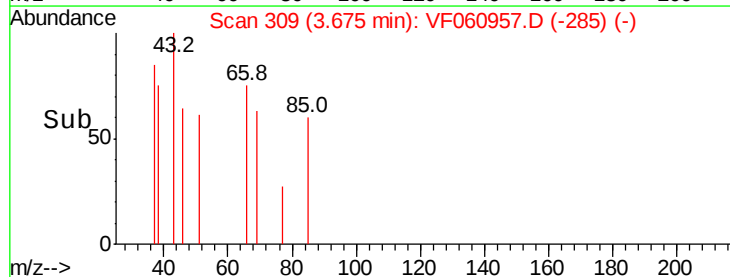
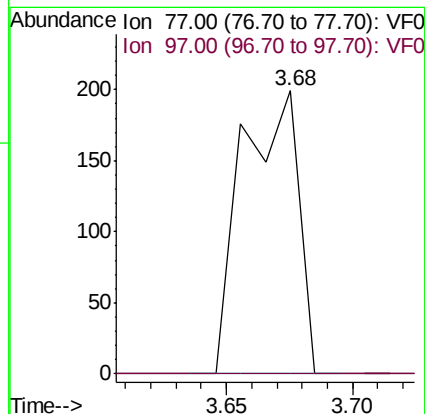
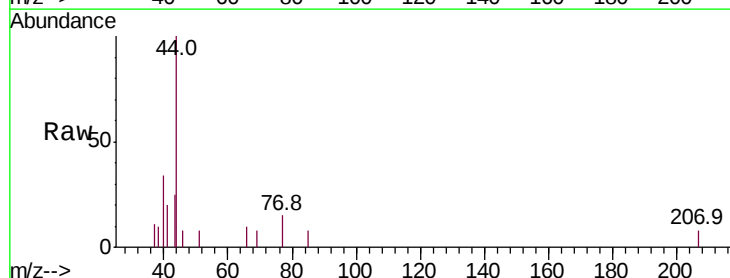
Acq: 10 Dec 2018 16:54

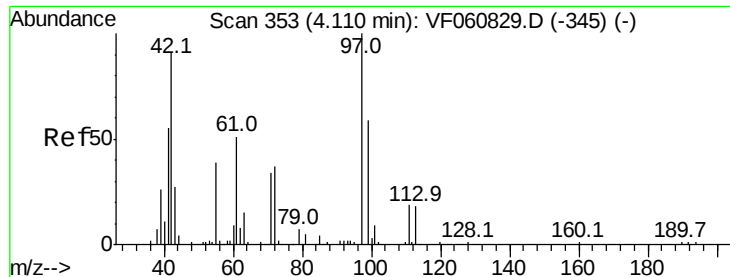
Tgt Ion: 77 Resp: 310

Ion Ratio Lower Upper

77 100

97 0.0 8.6 25.8#





#29

Tetrahydrofuran

Concen: 6.588 ug/l

RT: 4.08 min Scan# 350

Delta R.T. -0.03 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :
MSVOA_F
ClientSampled :

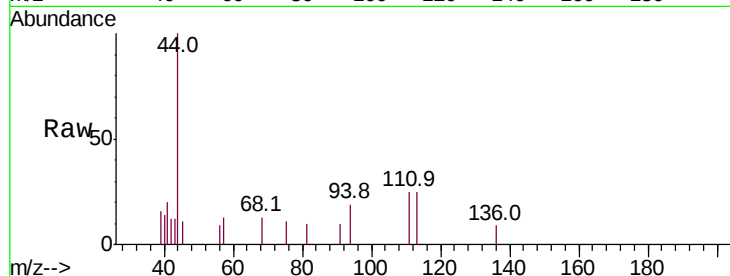
Tot Ion: 42 Resp: 153

Ion Ratio Lower Upper

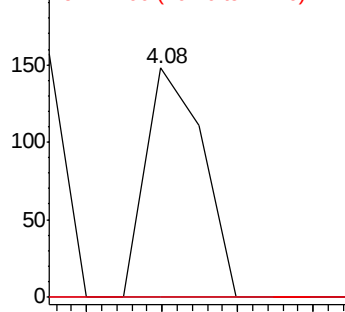
42 100

72 0.0 31.9 47.9#

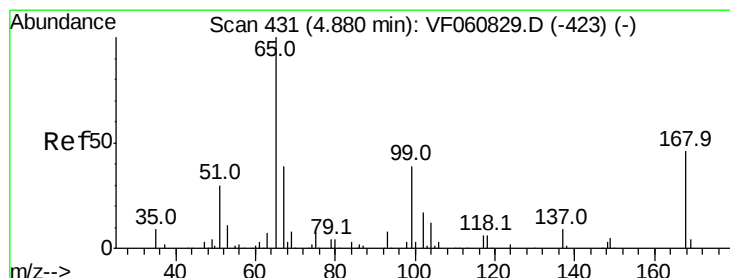
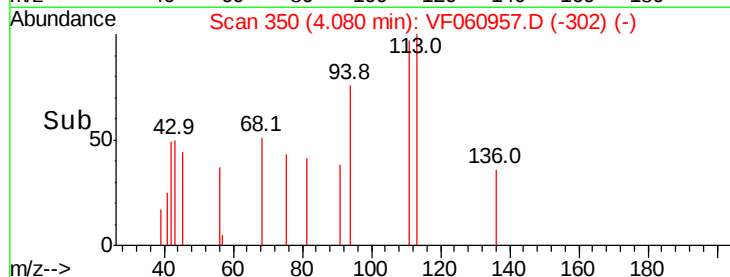
71 0.0 28.7 43.1#



Abundance Ion 42.00 (41.70 to 42.70): VF0
Ion 72.00 (71.70 to 72.70): VF0
Ion 71.00 (70.70 to 71.70): VF0



Time-->



#33

1,2-Dichloroethane-d4

Concen: 12.424 ug/l

RT: 4.84 min Scan# 427

Delta R.T. -0.04 min

Lab File: VF060957.D

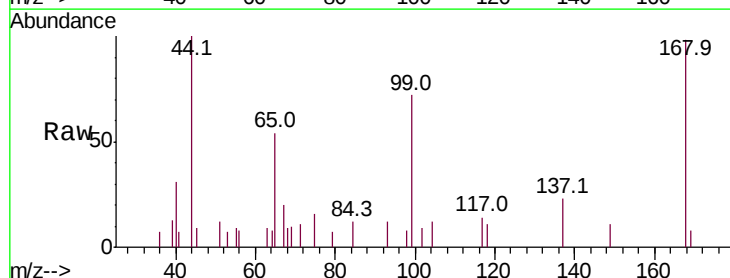
Acq: 10 Dec 2018 16:54

Tgt Ion: 65 Resp: 2134

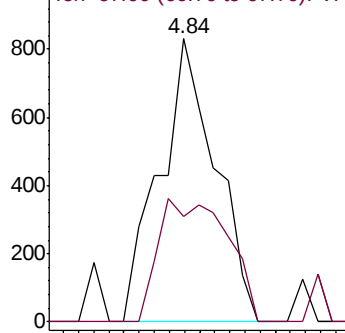
Ion Ratio Lower Upper

65 100

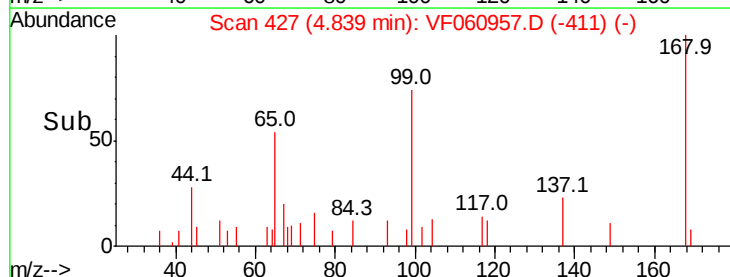
67 37.1 0.0 96.4

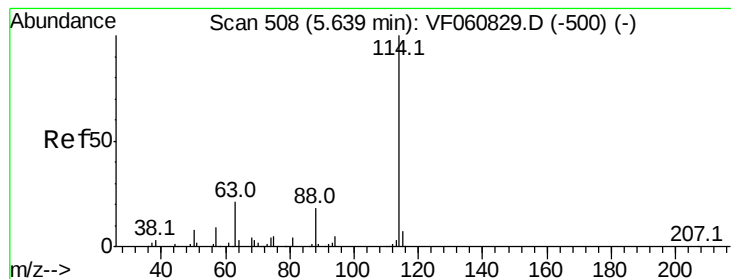


Abundance Ion 65.00 (64.70 to 65.70): VF0
Ion 67.00 (66.70 to 67.70): VF0



Time-->





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.60 min Scan# 504

Delta R.T. -0.04 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

ClientSampleId :

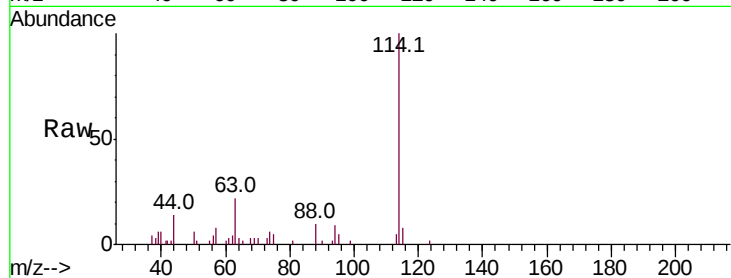
Tot Ion:114 Resp: 17358

Ion Ratio Lower Upper

114 100

63 22.0 0.0 41.6

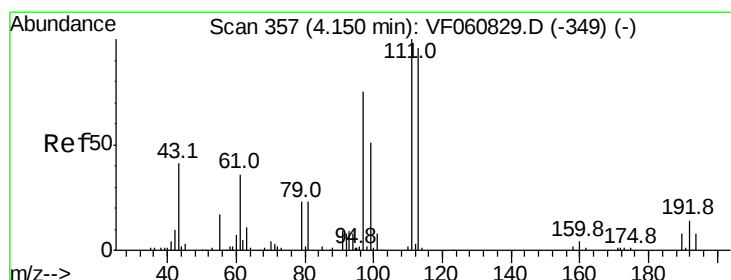
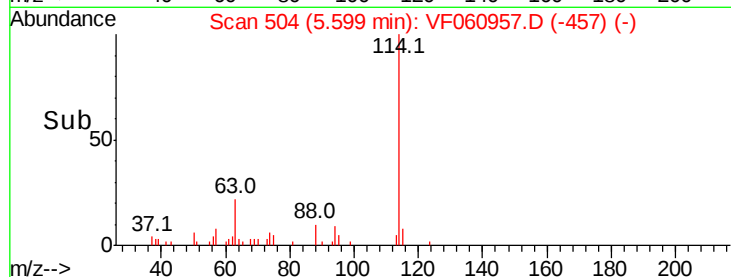
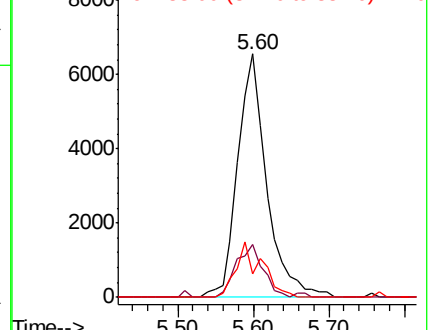
88 9.8 0.0 36.6



Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VF0

Ion 88.00 (87.70 to 88.70): VF0



#35

Dibromofluoromethane

Concen: 23.478 ug/l

RT: 4.10 min Scan# 352

Delta R.T. -0.05 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

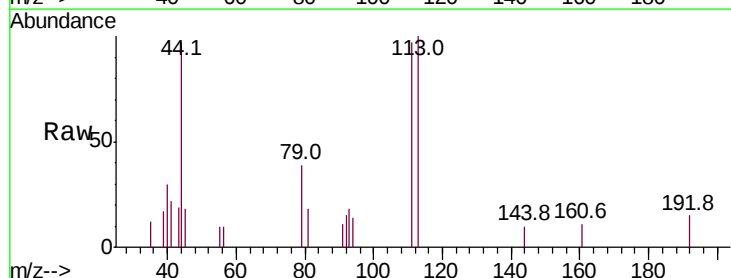
Tgt Ion:113 Resp: 3233

Ion Ratio Lower Upper

113 100

111 97.2 83.0 124.6

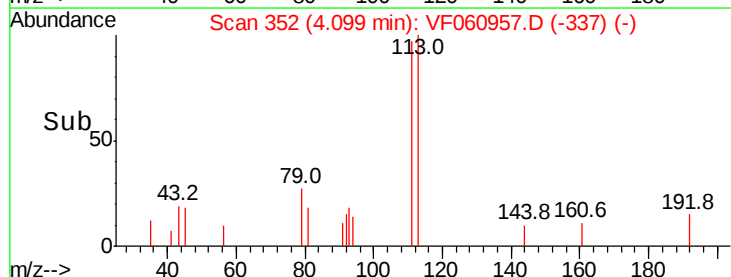
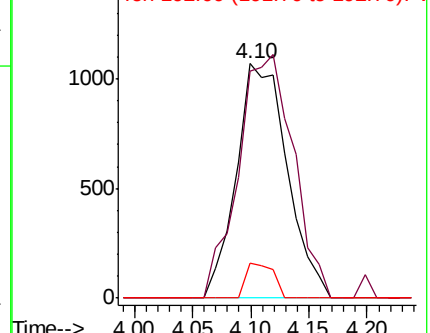
192 15.2 12.3 18.5

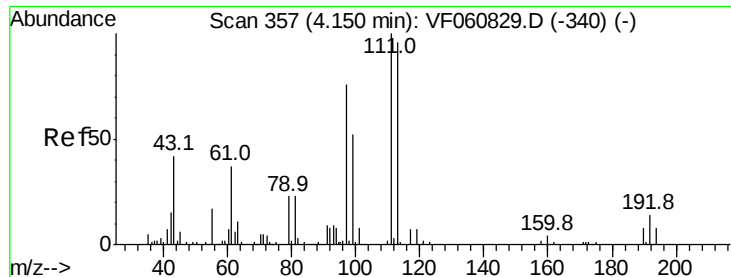


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V

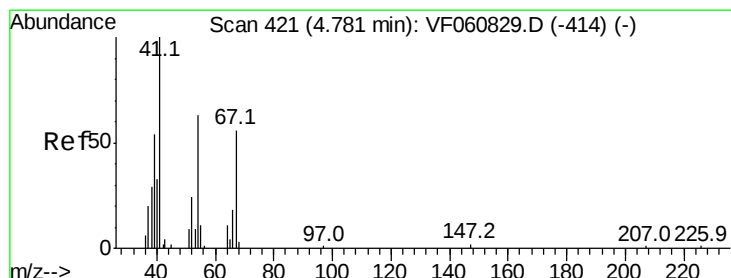
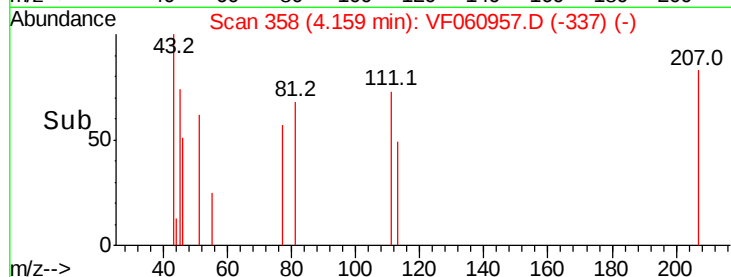
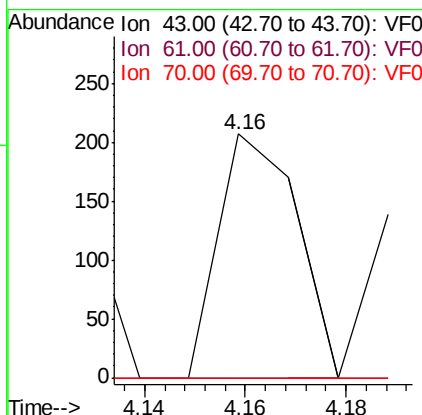
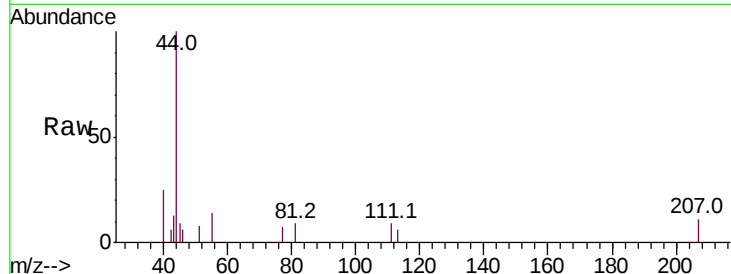




#37
Ethyl Acetate
Concen: 2.850 ug/l
RT: 4.16 min Scan# 358
Delta R.T. 0.01 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

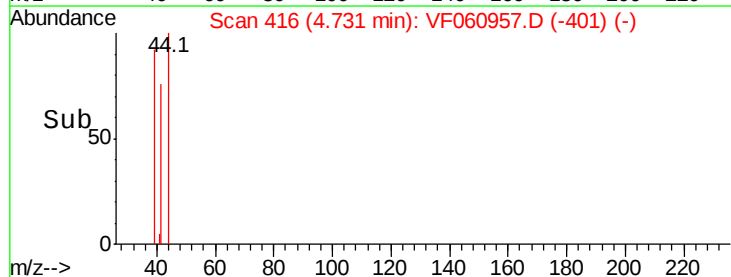
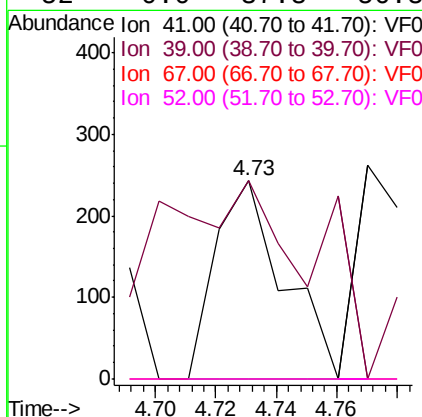
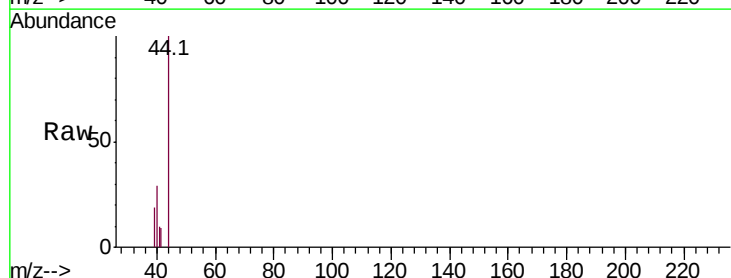
Instrument :
MSVOA_F
ClientSampled :

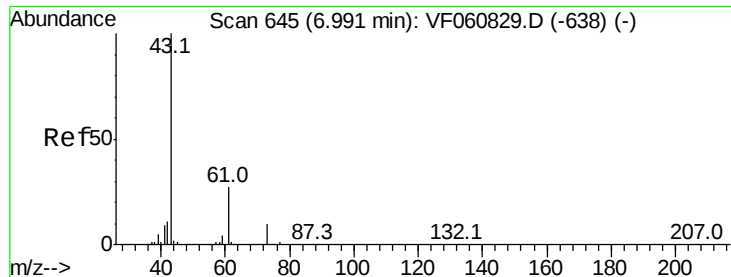
Tot Ion: 43 Resp: 223
Ion Ratio Lower Upper
43 100
61 0.0 68.6 103.0#
70 0.0 9.0 13.4#



#41
Methacrylonitrile
Concen: 6.045 ug/l
RT: 4.73 min Scan# 416
Delta R.T. -0.05 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

Tgt Ion: 41 Resp: 383
Ion Ratio Lower Upper
41 100
39 100.0 53.0 79.6#
67 0.0 43.8 65.6#
52 0.0 37.8 56.8#





#43

Isopropyl Acetate

Concen: 7.882 ug/l

RT: 6.90 min Scan# 636

Delta R.T. -0.09 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :
MSVOA_F
ClientSampled :

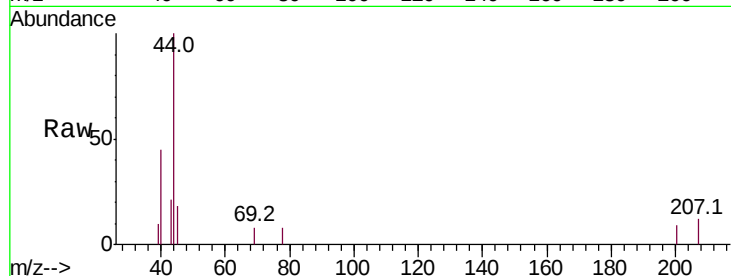
Tot Ion: 43 Resp: 982

Ion Ratio Lower Upper

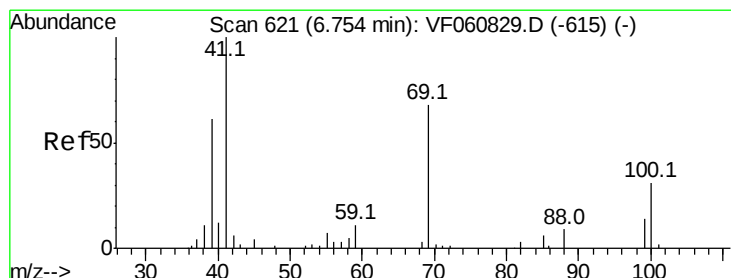
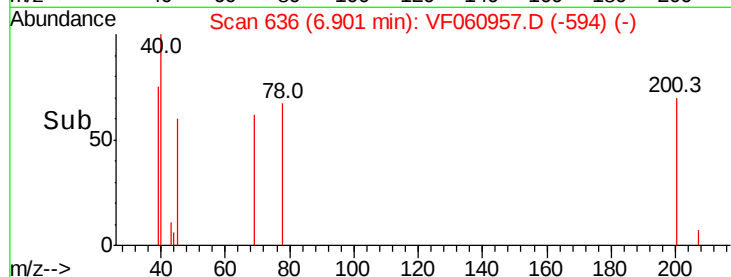
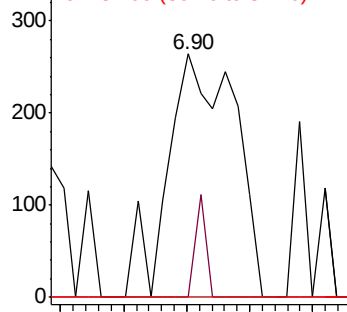
43 100

61 0.0 21.4 32.0#

87 0.0 0.2 0.4#



Abundance Ion 43.00 (42.70 to 43.70): VF0
Ion 61.00 (60.70 to 61.70): VF0
Ion 87.00 (86.70 to 87.70): VF0



#48

Methyl methacrylate

Concen: 5.309 ug/l

RT: 6.72 min Scan# 618

Delta R.T. -0.03 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

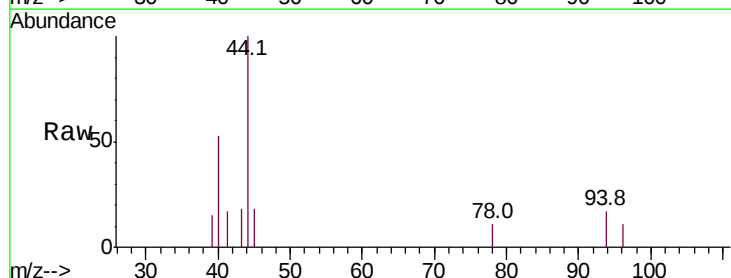
Tgt Ion: 41 Resp: 376

Ion Ratio Lower Upper

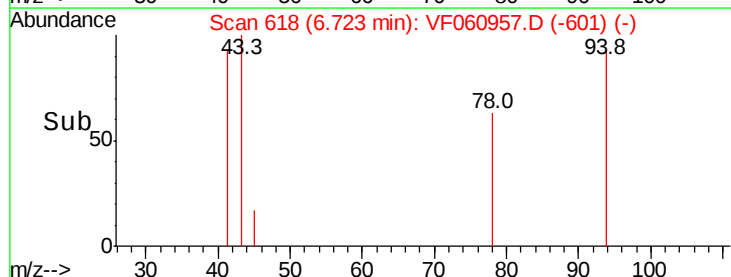
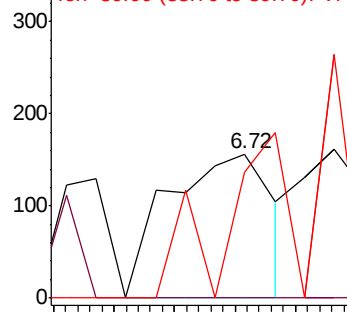
41 100

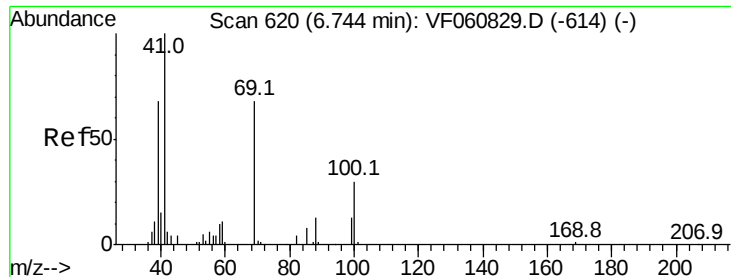
69 0.0 53.9 80.9#

39 87.8 49.0 73.6#



Abundance Ion 41.00 (40.70 to 41.70): VF0
Ion 69.00 (68.70 to 69.70): VF0
Ion 39.00 (38.70 to 39.70): VF0





#49

1,4-Dioxane

Concen: 136.984 ug/l

RT: 6.81 min Scan# 627

Delta R.T. 0.07 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :
MSVOA_F
ClientSampled :

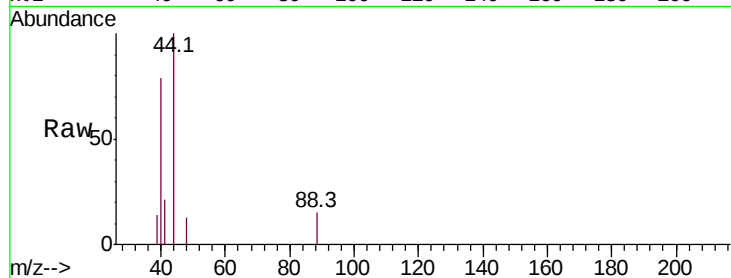
Tot Ion: 88 Resp: 71

Ion Ratio Lower Upper

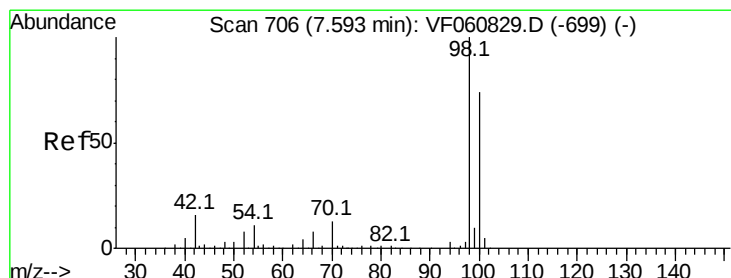
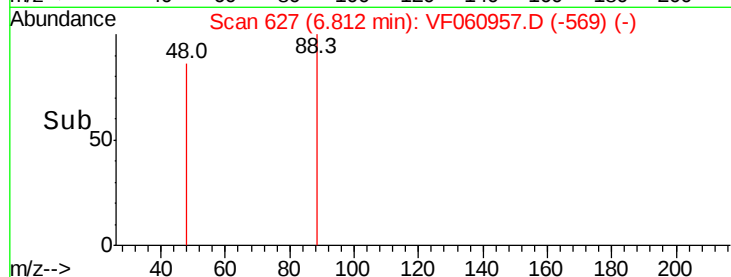
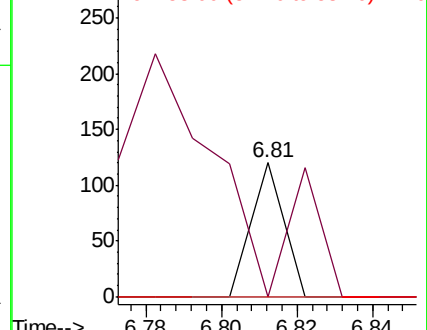
88 100

43 0.0 42.0 63.0#

58 0.0 61.8 92.8#



Abundance Ion 88.00 (87.70 to 88.70): VF0
Ion 43.00 (42.70 to 43.70): VF0
Ion 58.00 (57.70 to 58.70): VF0



#50

Toluene-d8

Concen: 35.108 ug/l

RT: 7.55 min Scan# 702

Delta R.T. -0.04 min

Lab File: VF060957.D

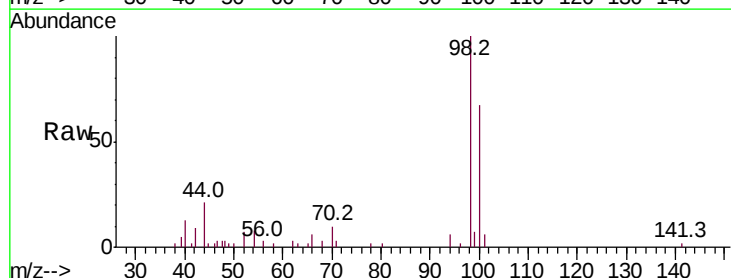
Acq: 10 Dec 2018 16:54

Tgt Ion: 98 Resp: 14241

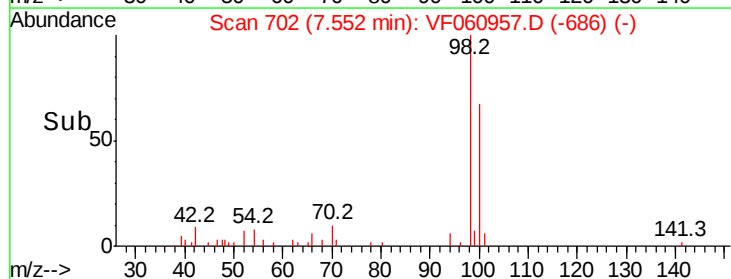
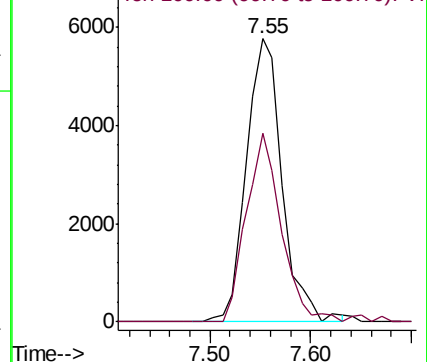
Ion Ratio Lower Upper

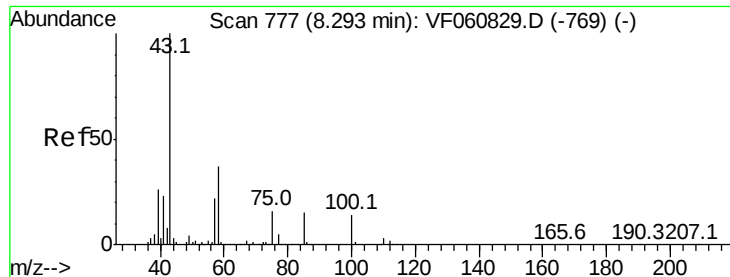
98 100

100 66.7 59.3 88.9



Abundance Ion 98.00 (97.70 to 98.70): VF0
Ion 100.00 (99.70 to 100.70): VF0





#51

4-Methyl-2-Pentanone

Concen: 8.122 ug/l

RT: 8.25 min Scan# 773

Delta R.T. -0.04 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

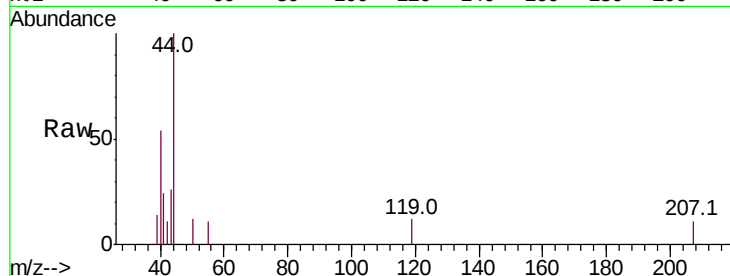
ClientSampleId :

Tot Ion: 43 Resp: 586

Ion Ratio Lower Upper

43 100

58 0.0 29.7 44.5#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

8.25

250

200

150

100

50

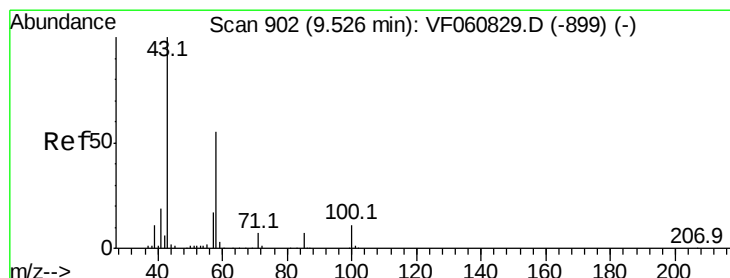
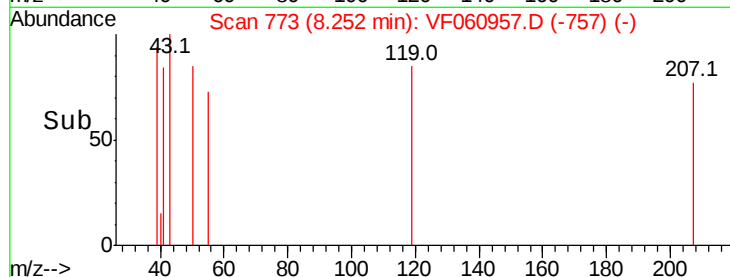
0

8.20

8.25

8.30

Time-->



#59

2-Hexanone

Concen: 7.863 ug/l

RT: 9.47 min Scan# 896

Delta R.T. -0.06 min

Lab File: VF060957.D

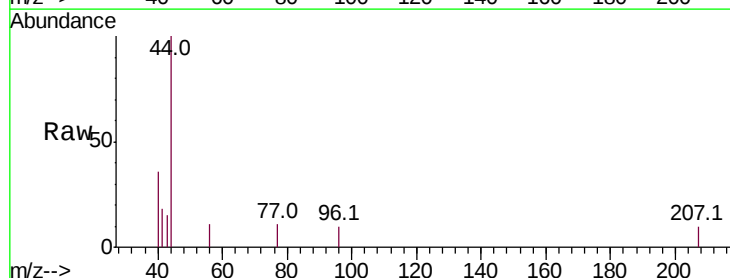
Acq: 10 Dec 2018 16:54

Tgt Ion: 43 Resp: 398

Ion Ratio Lower Upper

43 100

58 0.0 25.6 76.6#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

9.47

250

200

150

100

50

0

9.42

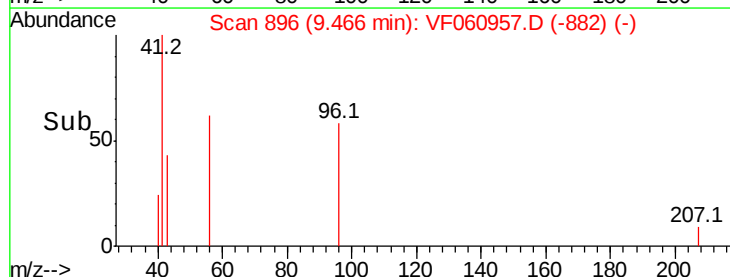
9.44

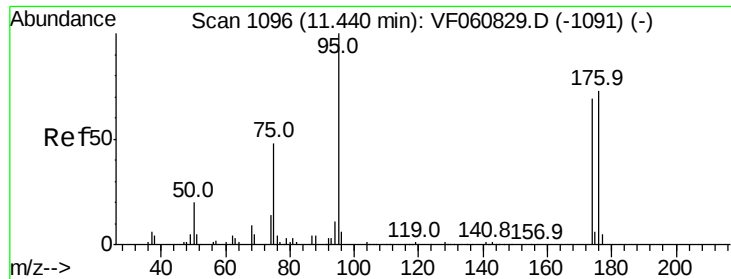
9.46

9.48

9.50

Time-->





#62

4-Bromofluorobenzene

Concen: 18.958 ug/l

RT: 11.41 min Scan# 1093

Delta R.T. -0.03 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

ClientSampled :

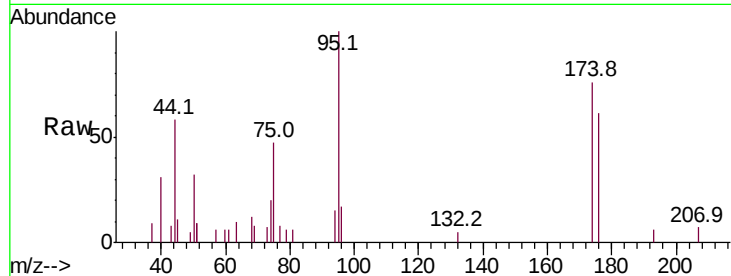
Tot Ion: 95 Resp: 3495

Ion Ratio Lower Upper

95 100

174 75.8 0.0 138.2

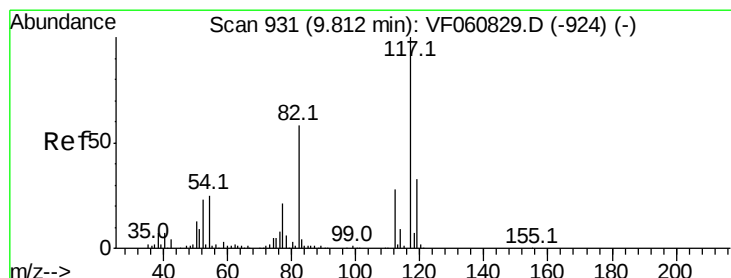
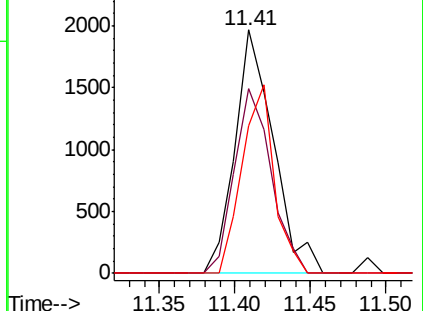
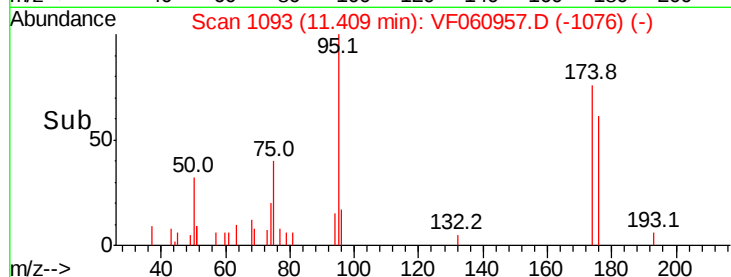
176 60.8 0.0 146.2



Abundance Ion 95.00 (94.70 to 95.70): VF0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.77 min Scan# 927

Delta R.T. -0.04 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

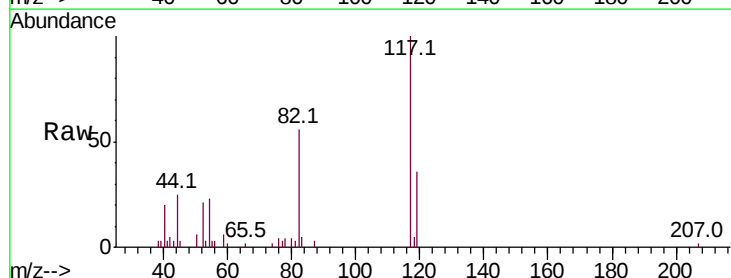
Tgt Ion: 117 Resp: 11384

Ion Ratio Lower Upper

117 100

82 56.0 46.6 69.8

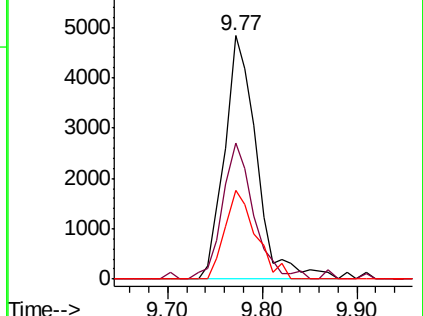
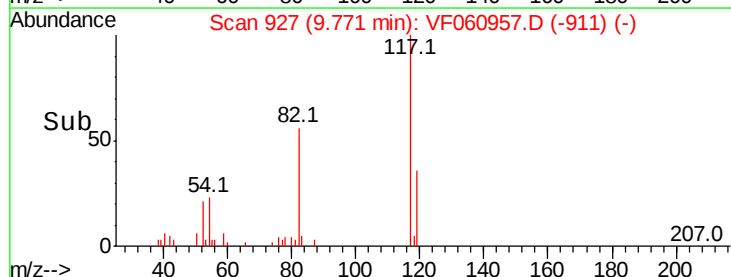
119 36.3 26.4 39.6

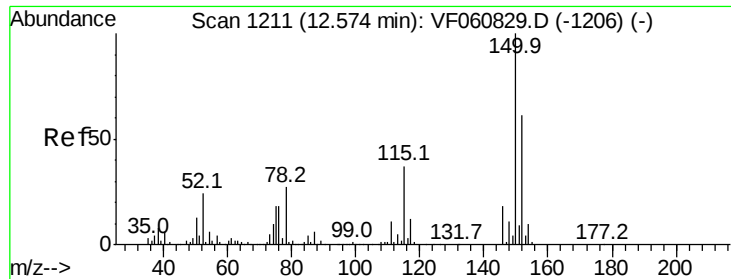


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): VF0

Ion 119.00 (118.70 to 119.70): V



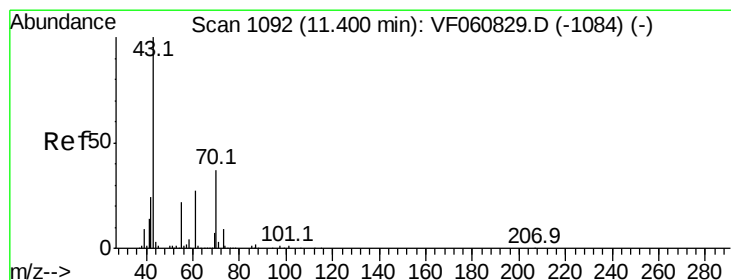
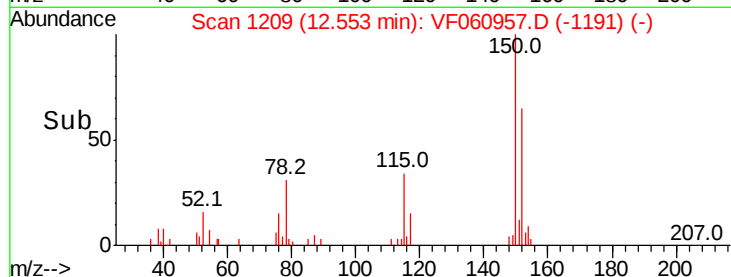
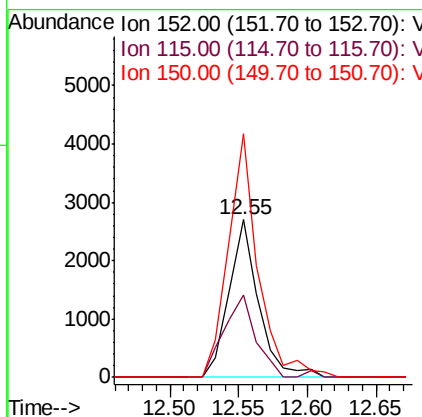
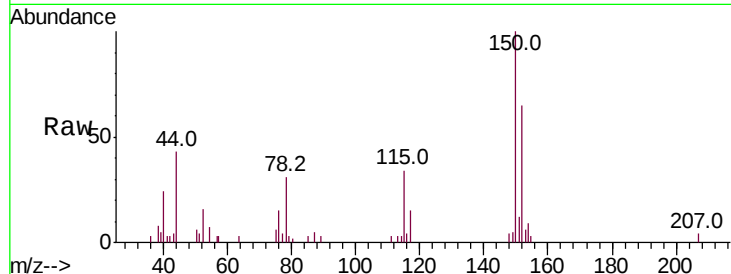


#72

1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.55 min Scan# 1209
Delta R.T. -0.02 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

Instrument :
MSVOA_F
ClientSampleId :

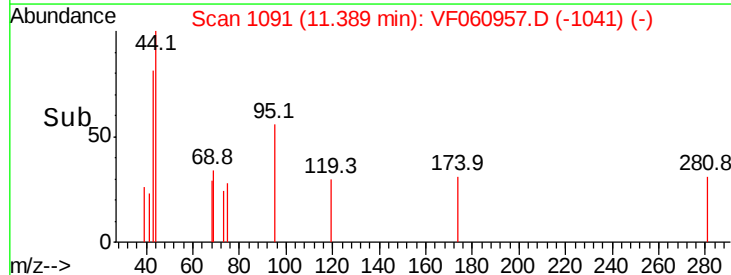
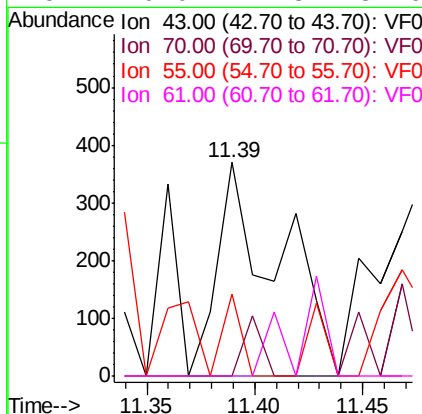
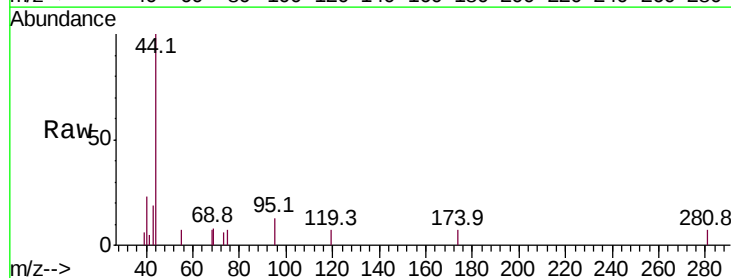
Tot Ion:152 Resp: 4059
Ion Ratio Lower Upper
152 100
115 52.6 30.1 90.5
150 154.5 0.0 327.6

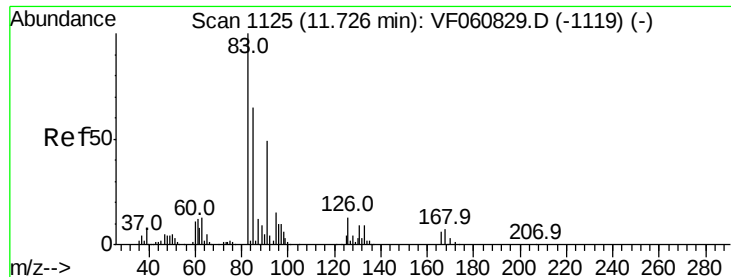


#74

N-ethyl acetate
Concen: 9.883 ug/l
RT: 11.39 min Scan# 1091
Delta R.T. -0.01 min
Lab File: VF060957.D
Acq: 10 Dec 2018 16:54

Tgt Ion: 43 Resp: 732
Ion Ratio Lower Upper
43 100
70 0.0 29.6 44.4#
55 38.4 17.2 25.8#
61 0.0 21.8 32.6#





#75

1,1,2,2-Tetrachloroethane

Concen: 1.231 ug/l

RT: 11.67 min Scan# 1119

Delta R.T. -0.06 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

ClientSampled :

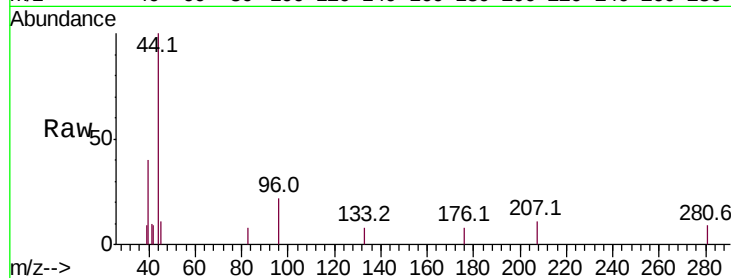
Tot Ion: 83 Resp: 65

Ion Ratio Lower Upper

83 100

131 0.0 4.7 14.1#

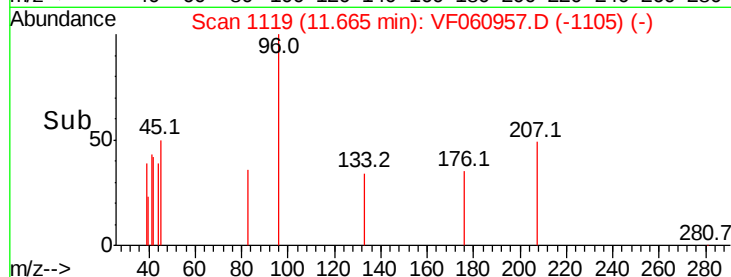
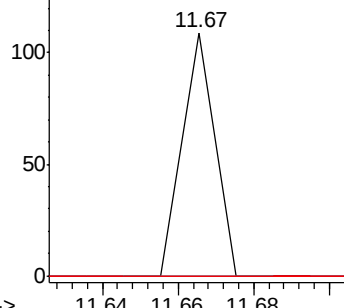
85 0.0 32.6 97.8#



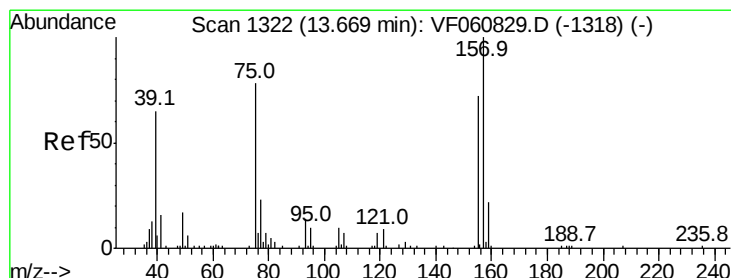
Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0



Time-->



#92

1,2-Dibromo-3-Chloropropane

Concen: 5.781 ug/l

RT: 13.63 min Scan# 1318

Delta R.T. -0.04 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

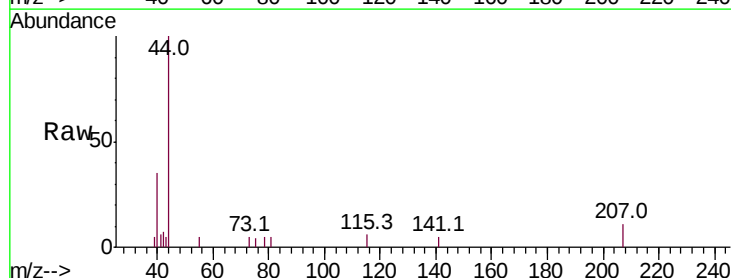
Tgt Ion: 75 Resp: 59

Ion Ratio Lower Upper

75 100

155 0.0 45.6 136.9#

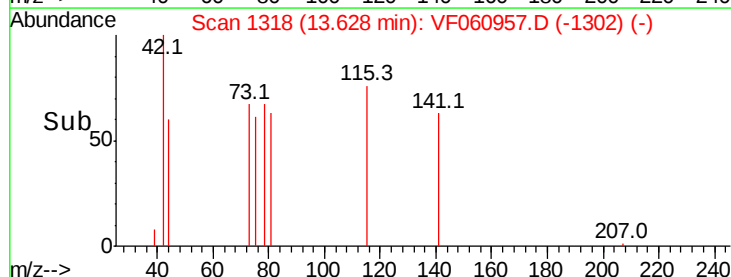
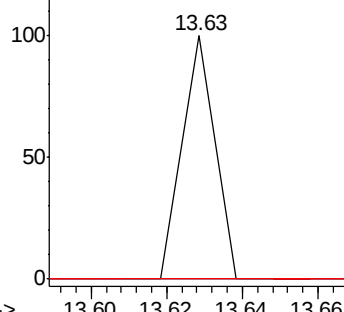
157 0.0 63.8 191.5#



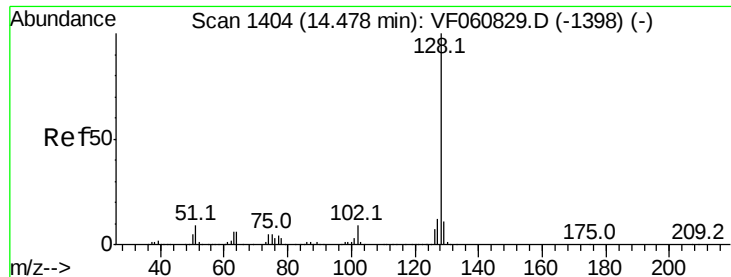
Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V



Time-->



#95

Naphthalene

Concen: 1.627 ug/l

RT: 14.46 min Scan# 1402

Delta R.T. -0.02 min

Lab File: VF060957.D

Acq: 10 Dec 2018 16:54

Instrument :

MSVOA_F

ClientSampleId :

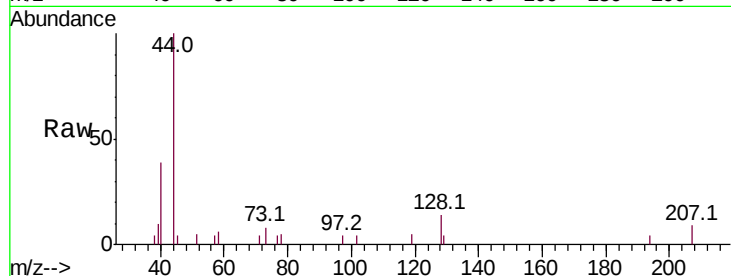
Tot Ion:128 Resp: 861

Ion Ratio Lower Upper

128 100

127 0.0 9.9 14.9#

129 31.2 9.1 13.7#



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

