

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_F\DATA\VF112718\
 Data File : VF060844.D
 Acq On : 27 Nov 2018 17:53
 Operator : VA/AP
 Sample : J6083-01RE
 Misc : 5.77g/5mL/MSVOA-F/SOIL
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 WC-1RE

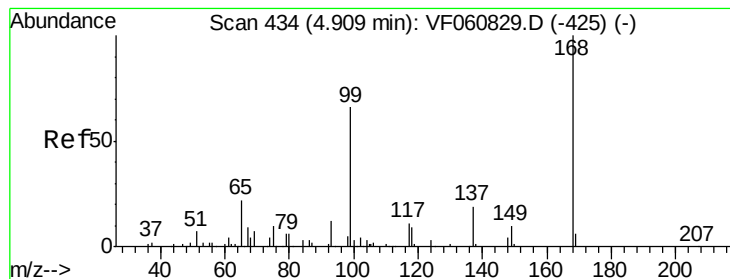
Quant Time: Nov 28 03:10:24 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F112618S.M
 Quant Title : SW846 8260
 QLast Update : Tue Nov 27 01:36:26 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.94	168	63	50.00	ug/l	0.03
34) 1,4-Difluorobenzene	0.00	114	0	0.00	ug/l	-5.64
63) Chlorobenzene-d5	0.00	117	0	0.00	ug/l	-9.81
72) 1,4-Dichlorobenzene-d4	0.00	152	0	0.00	ug/l	-12.57

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	4.94	65	67	90.28	ug/l	0.06
Spiked Amount	50.000		Recovery	=	180.56%	
35) Dibromofluoromethane	0.00	113	0	0.00	ug/l	
Spiked Amount	50.000		Recovery	=	0.00%	
50) Toluene-d8	0.00	98	0	0.00	ug/l	
Spiked Amount	50.000		Recovery	=	0.00%	
62) 4-Bromofluorobenzene	0.00	95	0	0.00	ug/l	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.93	85	59	62.63	ug/l #	41
3) Chloromethane	1.10	50	184	300.18	ug/l #	41
5) Bromomethane	1.35	94	404	1002.07	ug/l #	2
6) Chloroethane	1.36	64	60	242.77	ug/l #	1
8) Diethyl Ether	1.58	74	118	668.91	ug/l	78
11) Tert butyl alcohol	2.57	59	59	1939.32	ug/l #	62
12) 1,1-Dichloroethene	1.82	96	81	162.38	ug/l #	1
13) Acrolein	2.04	56	133	4614.09	ug/l	83
14) Allyl chloride	2.16	41	282	453.56	ug/l #	52
15) Acrylonitrile	2.94	53	62	909.01	ug/l #	66
16) Acetone	2.24	43	105	767.21	ug/l #	84
17) Carbon Disulfide	1.71	76	59	44.11	ug/l #	1
18) Methyl Acetate	2.39	43	955	4299.64	ug/l #	61
19) Methyl tert-butyl Ether	2.53	73	80	71.20	ug/l #	58
20) Methylene Chloride	2.27	84	133	264.90	ug/l #	2
21) trans-1,2-Dichloroethene	2.32	96	65	135.16	ug/l #	1
22) Diisopropyl ether	2.88	45	67	39.59	ug/l #	40
23) Vinyl Acetate	3.26	43	350	452.42	ug/l #	80
25) 2-Butanone	4.40	43	402	1698.23	ug/l #	57
27) cis-1,2-Dichloroethene	3.63	96	65	83.02	ug/l	1
29) Tetrahydrofuran	4.15	42	64	637.82	ug/l #	37
31) Cyclohexane	3.70	56	143	136.84	ug/l #	15

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



#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 4.94 min Scan# 437

Delta R.T. 0.03 min

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MSVOA_F

ClientSampleId :

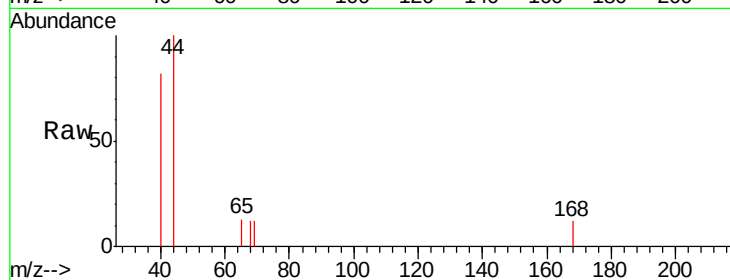
WC-1RE

Tgt Ion:168 Resp: 63

Ion Ratio Lower Upper

168 100

99 0.0 52.6 79.0#



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

4.94

100

80

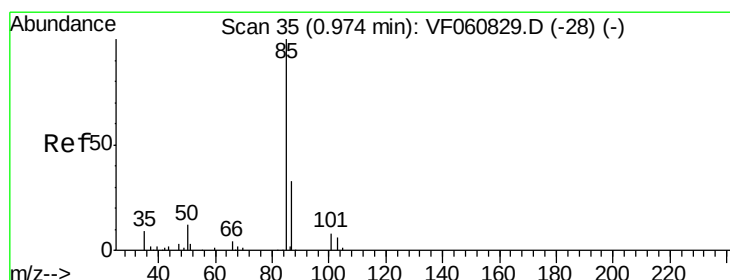
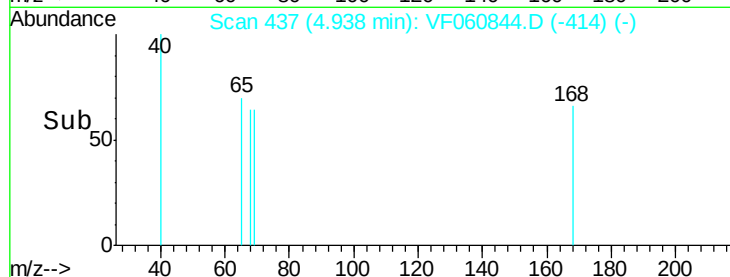
60

40

20

0

Time--> 4.90 4.92 4.94 4.96



#2

Dichlorodifluoromethane

Concen: 62.63 ug/l

RT: 0.93 min Scan# 31

Delta R.T. -0.04 min

Lab File: VF060844.D

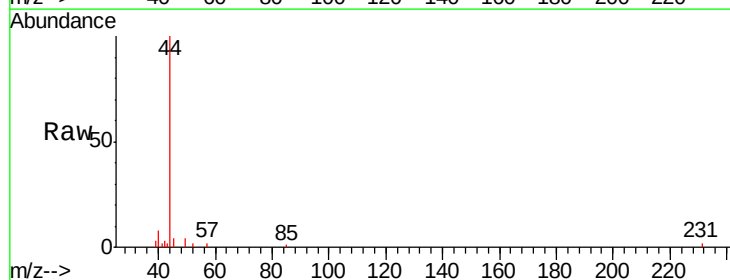
Acq: 27 Nov 2018 17:53

Tgt Ion: 85 Resp: 59

Ion Ratio Lower Upper

85 100

87 0.0 16.7 50.0#



Abundance Ion 85.00 (84.70 to 85.70): VF0

Ion 87.00 (86.70 to 87.70): VF0

0.93

100

80

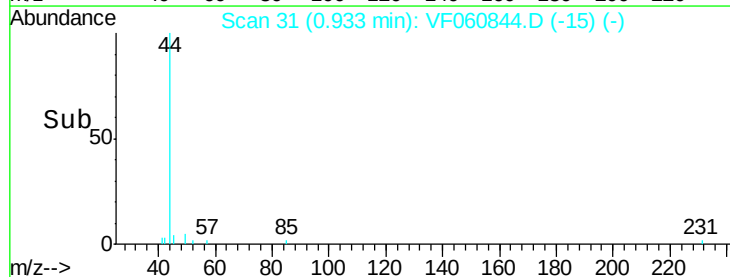
60

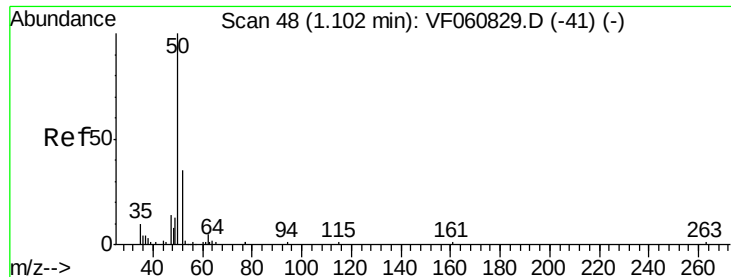
40

20

0

Time--> 0.90 0.92 0.94 0.96





#3

Chloromethane

Concen: 300.18 ug/l

RT: 1.10 min Scan# 48

Delta R.T. -0.00 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampled :

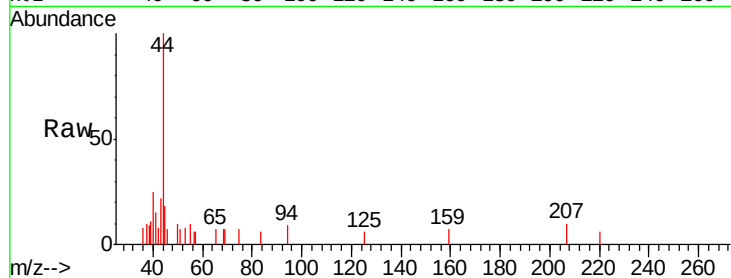
WC-1RE

Tgt Ion: 50 Resp: 184

Ion Ratio Lower Upper

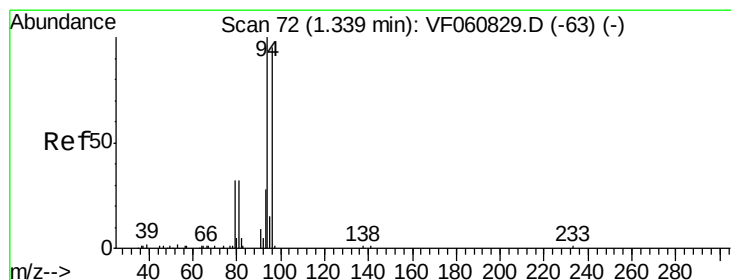
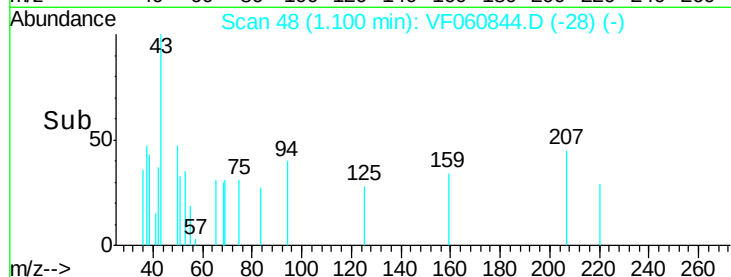
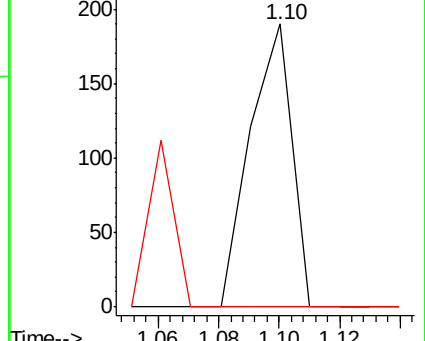
50 100

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



#5

Bromomethane

Concen: 1002.07 ug/l

RT: 1.35 min Scan# 73

Delta R.T. 0.01 min

Lab File: VF060844.D

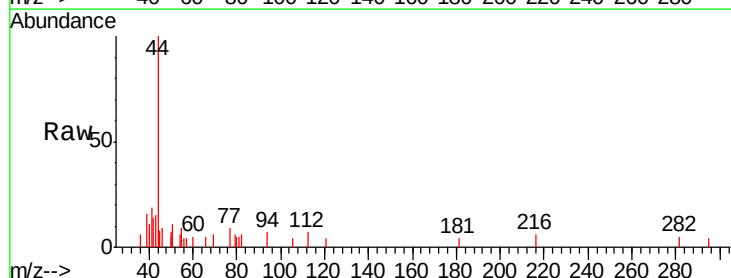
Acq: 27 Nov 2018 17:53

Tgt Ion: 94 Resp: 404

Ion Ratio Lower Upper

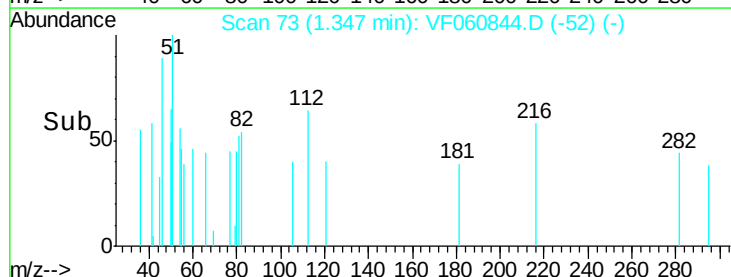
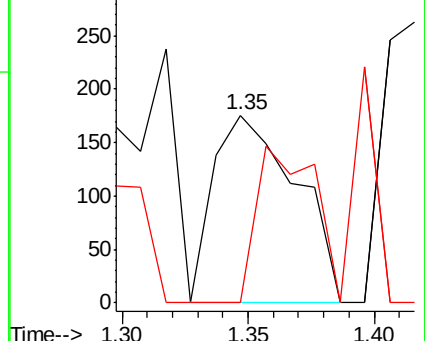
94 100

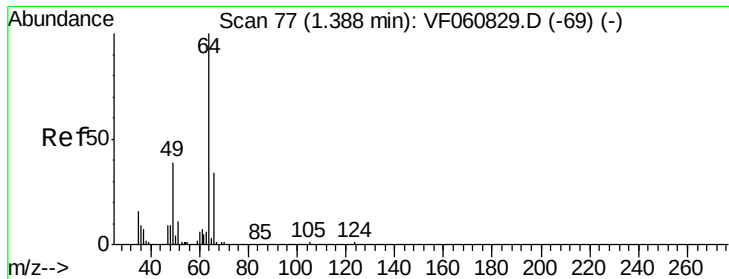
96 0.0 75.9 113.9#



Abundance Ion 94.00 (93.70 to 94.70): VF0

Ion 96.00 (95.70 to 96.70): VF0





#6

Chloroethane

Concen: 242.77 ug/l

RT: 1.36 min Scan# 74

Delta R.T. -0.03 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampleId :

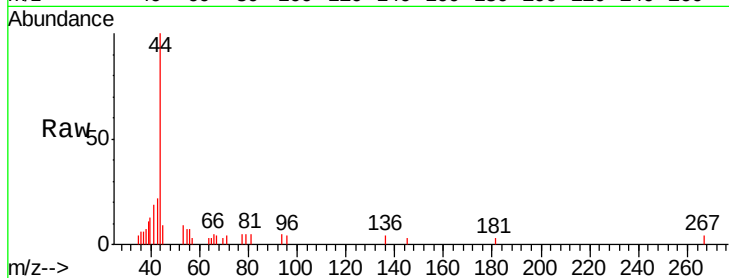
WC-1RE

Tgt Ion: 64 Resp: 60

Ion Ratio Lower Upper

64 100

66 170.3 28.1 42.1#



Abundance Ion 64.00 (63.70 to 64.70): VF0

Ion 66.00 (65.70 to 66.70): VF0

200

150

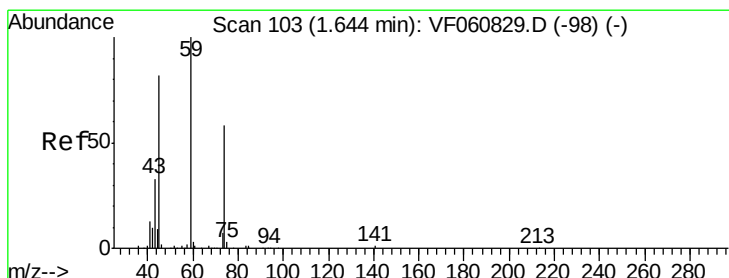
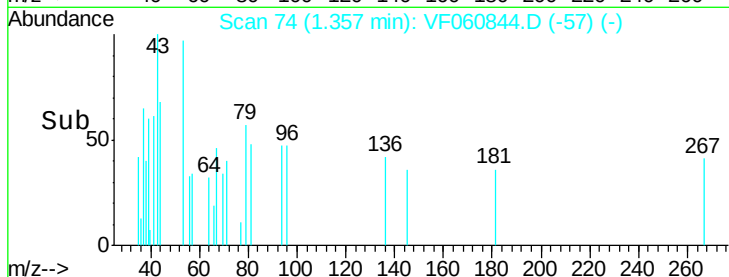
100

50

0

1.32 1.34 1.36 1.38

Time-->



#8

Diethyl Ether

Concen: 668.91 ug/l

RT: 1.58 min Scan# 97

Delta R.T. -0.06 min

Lab File: VF060844.D

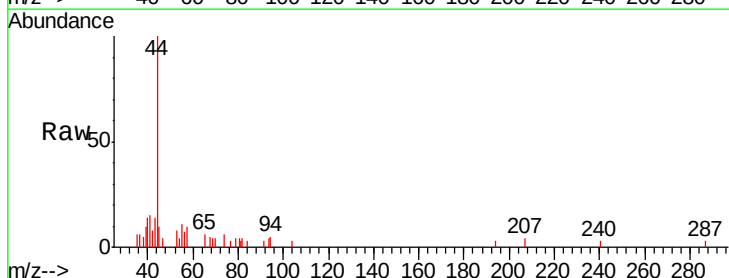
Acq: 27 Nov 2018 17:53

Tgt Ion: 74 Resp: 118

Ion Ratio Lower Upper

74 100

45 168.3 71.0 212.8



Abundance Ion 74.00 (73.70 to 74.70): VF0

Ion 45.00 (44.70 to 45.70): VF0

600

500

400

300

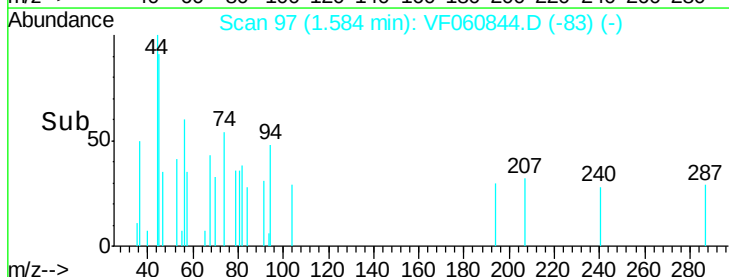
200

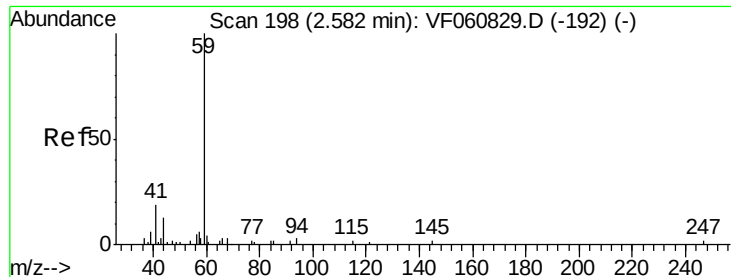
100

0

1.56 1.58 1.60

Time-->



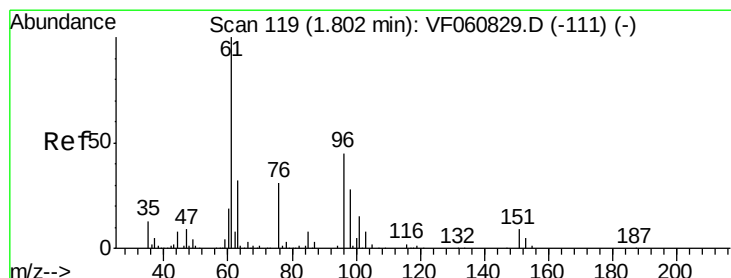
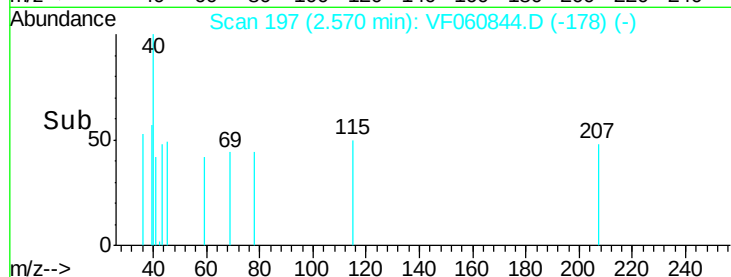
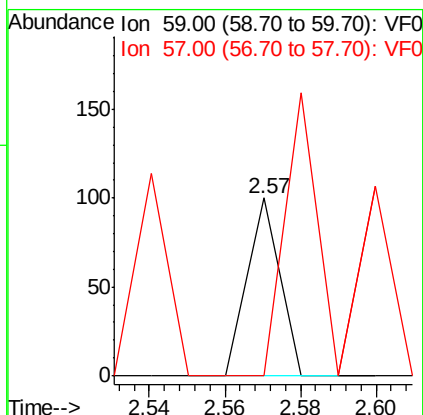
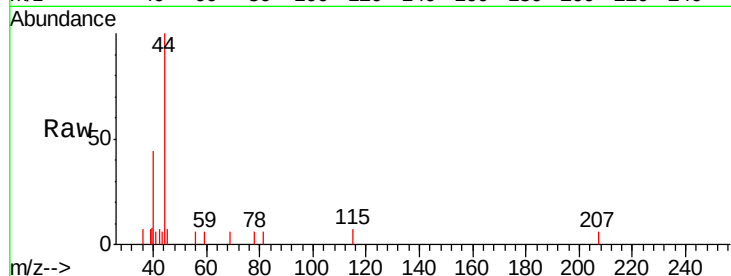


#11

Tert butyl alcohol
Concen: 1939.32 ug/l
RT: 2.57 min Scan# 197
Delta R.T. -0.01 min
Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

Instrument :
MSVOA_F
ClientSampled :
WC-1RE

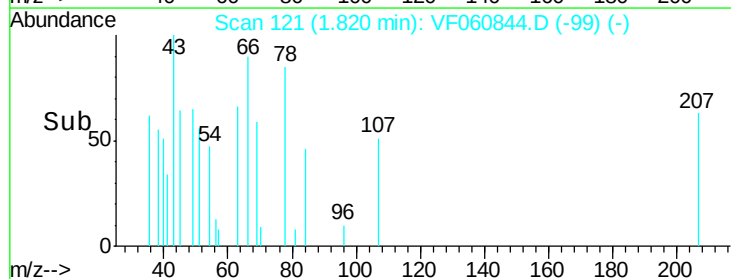
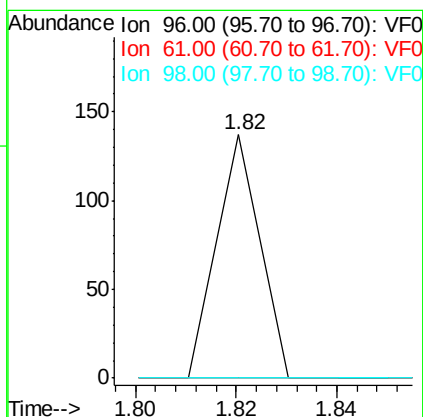
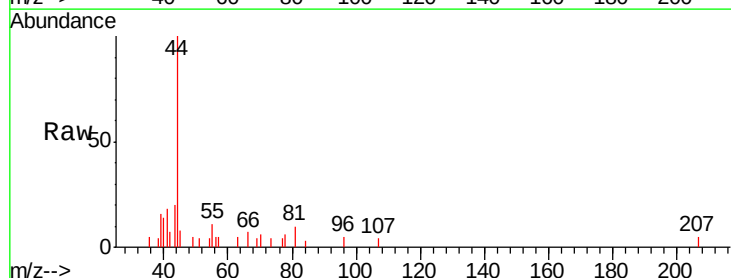
Tgt Ion: 59 Resp: 59
Ion Ratio Lower Upper
59 100
57 0.0 12.7 19.1#

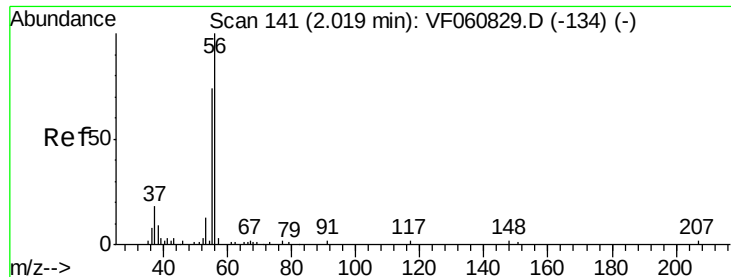


#12

1,1-Dichloroethene
Concen: 162.38 ug/l
RT: 1.82 min Scan# 121
Delta R.T. 0.02 min
Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

Tgt Ion: 96 Resp: 81
Ion Ratio Lower Upper
96 100
61 0.0 177.3 265.9#
98 0.0 49.6 74.4#





#13

Acrolein

Concen: 4614.09 ug/l

RT: 2.04 min Scan# 143

Delta R.T. 0.02 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampleId :

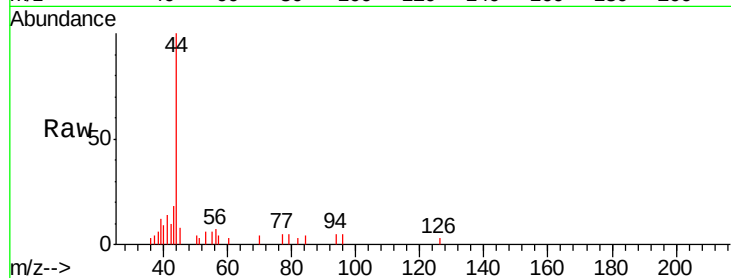
WC-1RE

Tgt Ion: 56 Resp: 133

Ion Ratio Lower Upper

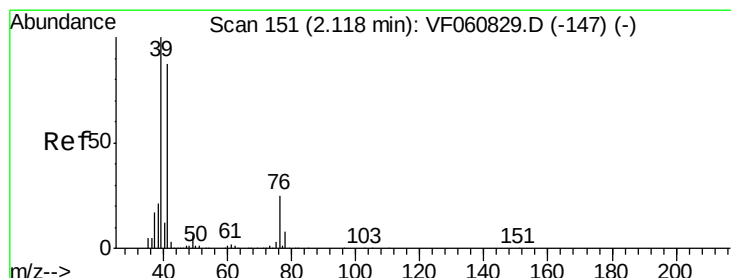
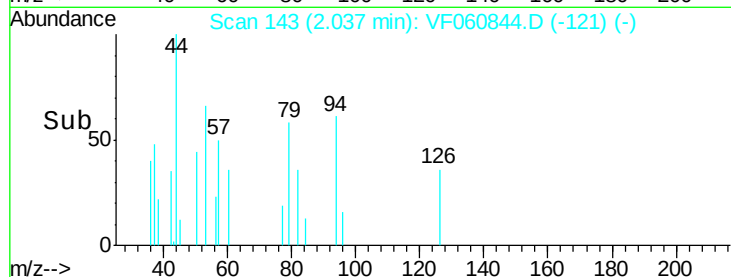
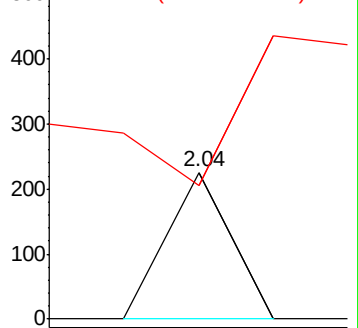
56 100

55 91.1 61.2 91.8



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0



#14

Allyl chloride

Concen: 453.56 ug/l

RT: 2.16 min Scan# 155

Delta R.T. 0.04 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

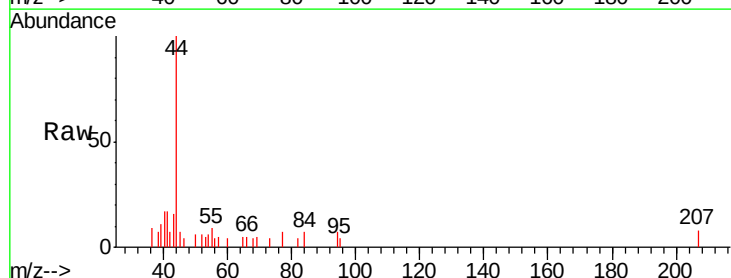
Tgt Ion: 41 Resp: 282

Ion Ratio Lower Upper

41 100

39 64.6 91.7 137.5#

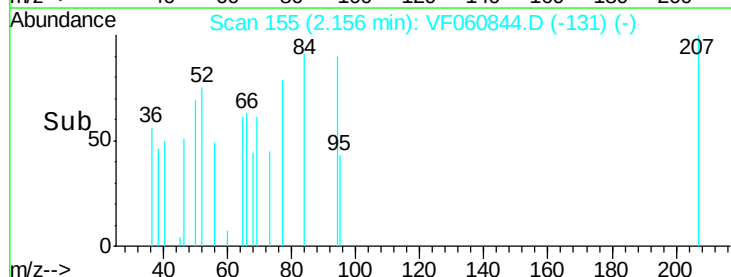
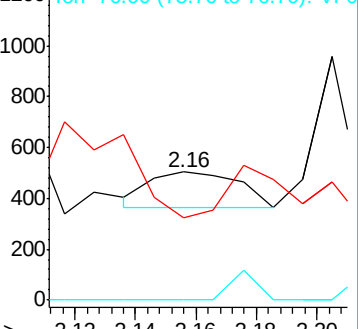
76 0.0 23.5 35.3#

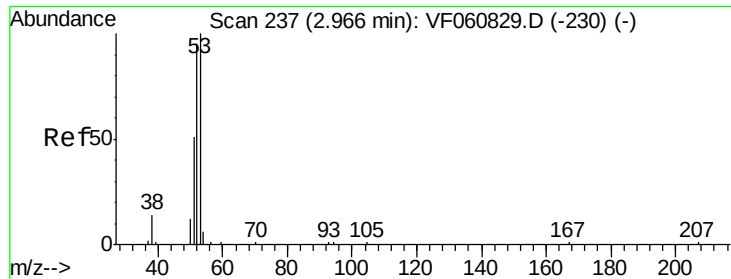


Abundance Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

Ion 76.00 (75.70 to 76.70): VF0





#15

Acrylonitrile

Concen: 909.01 ug/l

RT: 2.94 min Scan# 235

Delta R.T. -0.02 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampleId :

WC-1RE

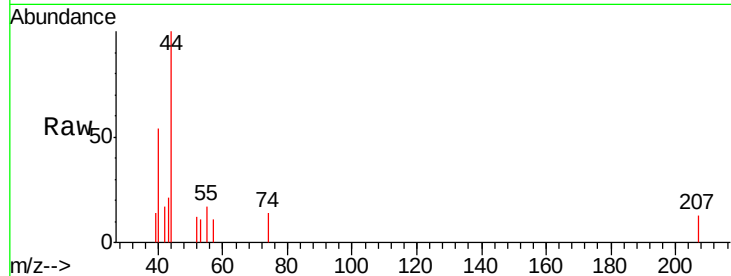
Tgt Ion: 53 Resp: 62

Ion Ratio Lower Upper

53 100

52 108.6 76.5 114.7

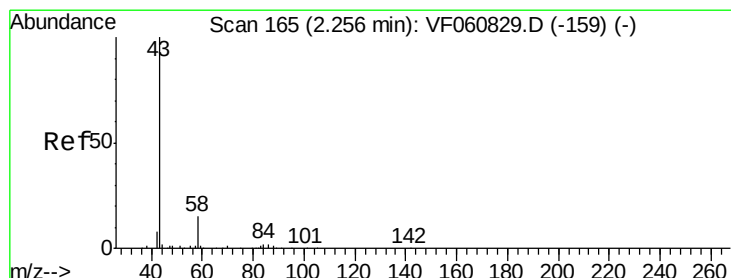
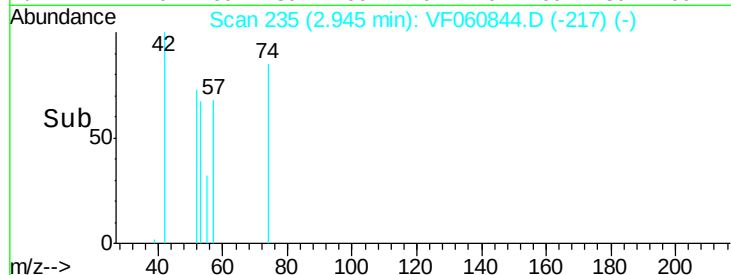
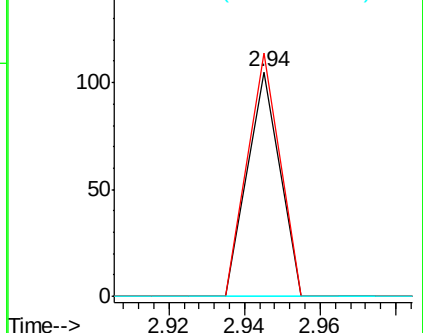
51 0.0 40.7 61.1#



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: 767.21 ug/l

RT: 2.24 min Scan# 164

Delta R.T. -0.01 min

Lab File: VF060844.D

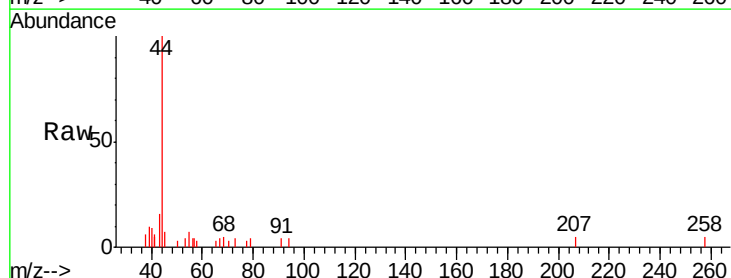
Acq: 27 Nov 2018 17:53

Tgt Ion: 43 Resp: 105

Ion Ratio Lower Upper

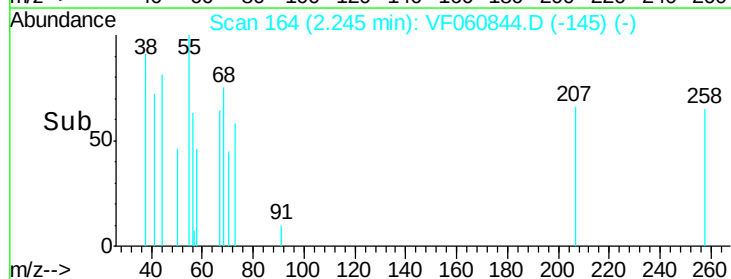
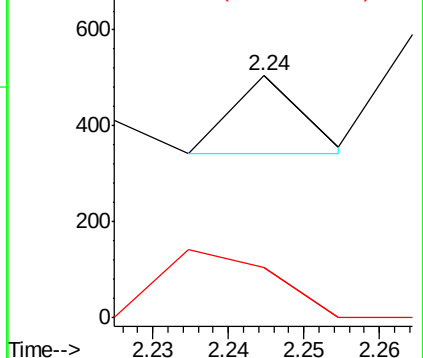
43 100

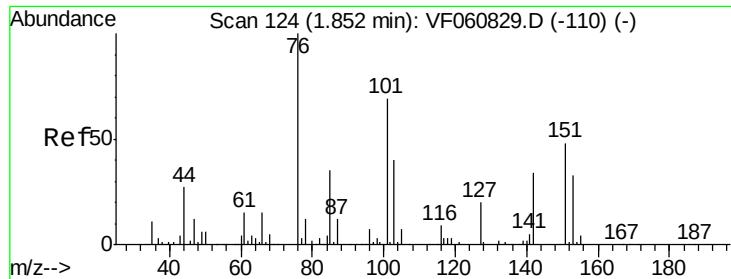
58 20.8 11.4 17.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0

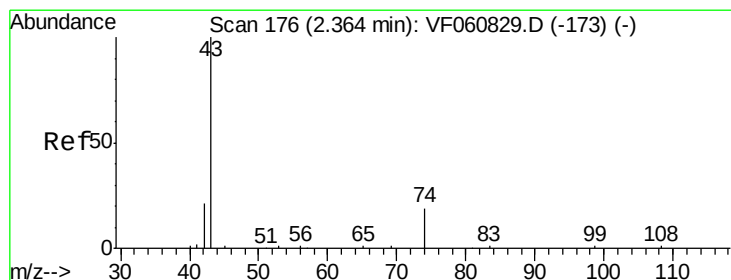
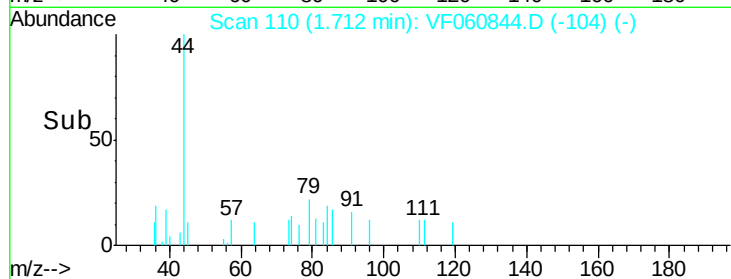
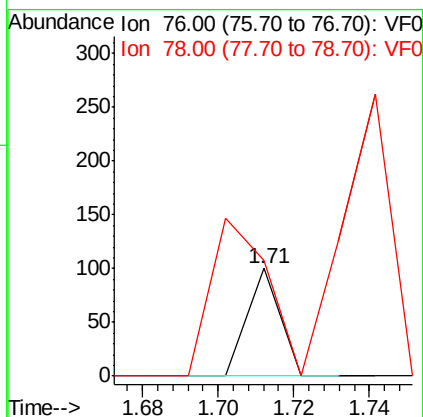
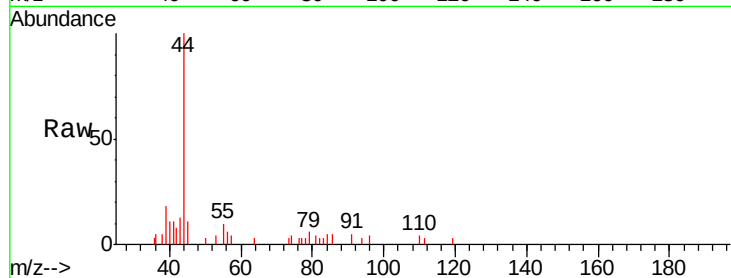




#17
Carbon Disulfide
Concen: 44.11 ug/l
RT: 1.71 min Scan# 110
Delta R.T. -0.14 min
Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

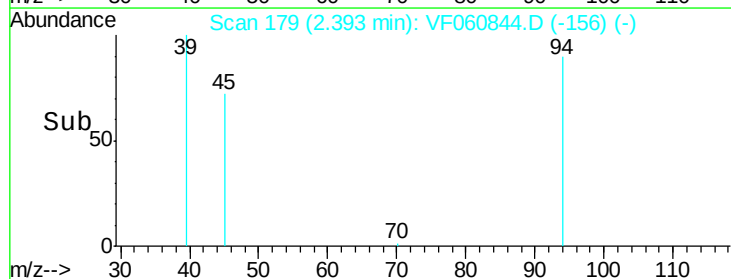
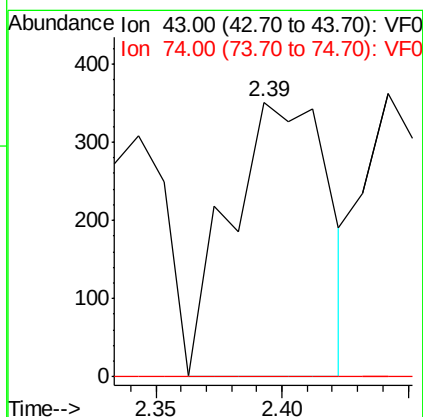
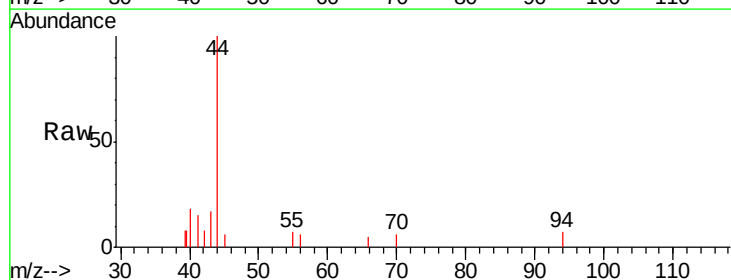
Instrument :
MSVOA_F
ClientSampleId :
WC-1RE

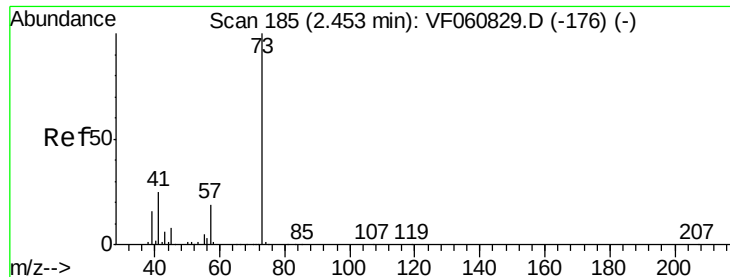
Tgt Ion: 76 Resp: 59
Ion Ratio Lower Upper
76 100
78 108.0 10.2 15.2#



#18
Methyl Acetate
Concen: 4299.64 ug/l
RT: 2.39 min Scan# 179
Delta R.T. 0.03 min
Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

Tgt Ion: 43 Resp: 955
Ion Ratio Lower Upper
43 100
74 0.0 13.3 19.9#





#19

Methyl tert-butyl Ether

Concen: 71.20 ug/l

RT: 2.53 min Scan# 193

Delta R.T. 0.08 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampled :

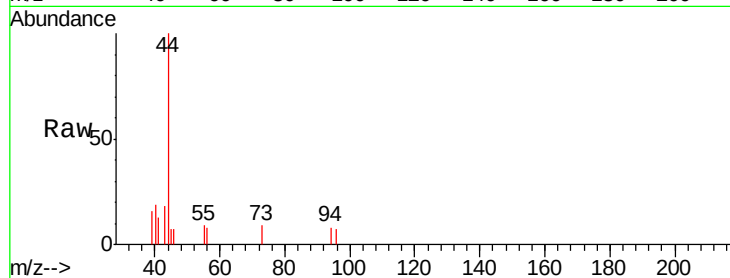
WC-1RE

Tgt Ion: 73 Resp: 80

Ion Ratio Lower Upper

73 100

57 0.0 15.3 22.9#



Abundance Ion 73.00 (72.70 to 73.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.53

2.53

2.53

2.53

2.53

2.53

2.53

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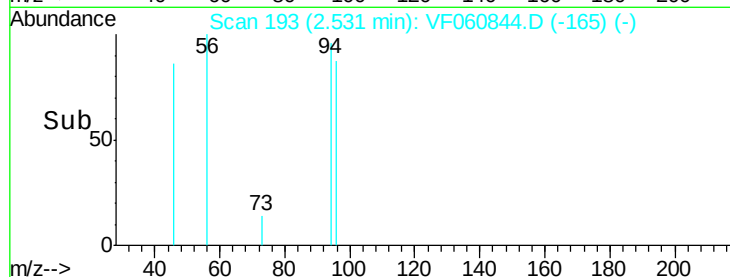
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Abundance Ion 73.00 (72.70 to 73.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

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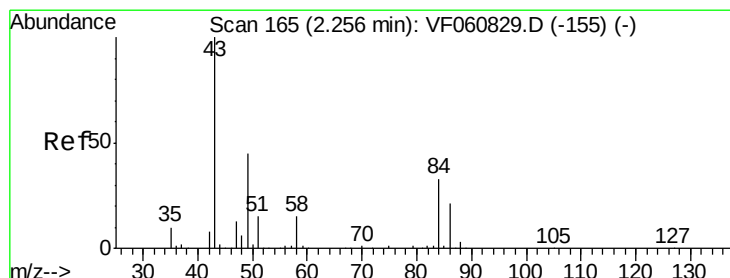
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#20

Methylene Chloride

Concen: 264.90 ug/l

RT: 2.27 min Scan# 167

Delta R.T. 0.02 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Tgt Ion: 84 Resp: 133

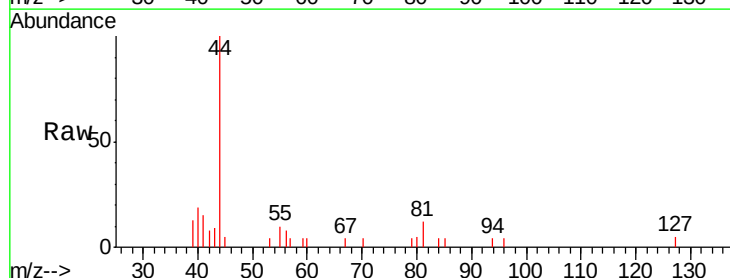
Ion Ratio Lower Upper

84 100

49 0.0 111.3 166.9#

51 0.0 38.0 57.0#

86 0.0 49.8 74.8#



Abundance Ion 84.00 (83.70 to 84.70): VF0

Ion 49.00 (48.70 to 49.70): VF0

Ion 51.00 (50.70 to 51.70): VF0

Ion 86.00 (85.70 to 86.70): VF0

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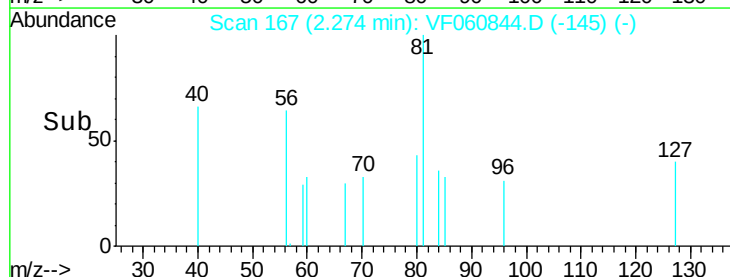
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Abundance Ion 84.00 (83.70 to 84.70): VF0

Ion 49.00 (48.70 to 49.70): VF0

Ion 51.00 (50.70 to 51.70): VF0

Ion 86.00 (85.70 to 86.70): VF0

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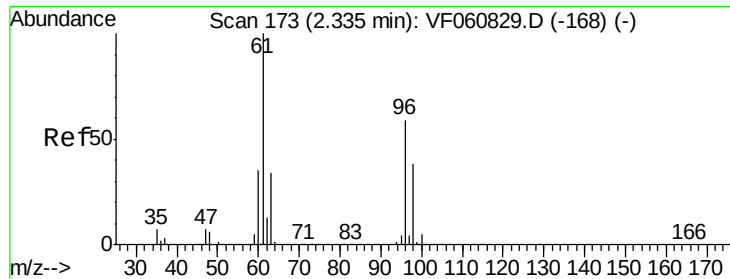
2.27

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#21

trans-1,2-Dichloroethene

Concen: 135.16 ug/l

RT: 2.32 min Scan# 172

Delta R.T. -0.01 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampled :

WC-1RE

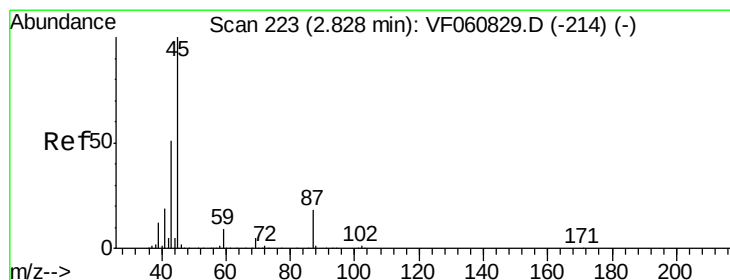
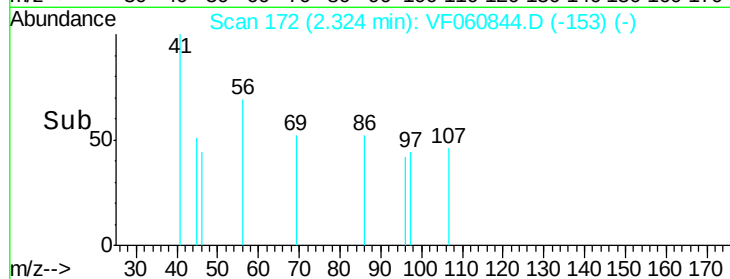
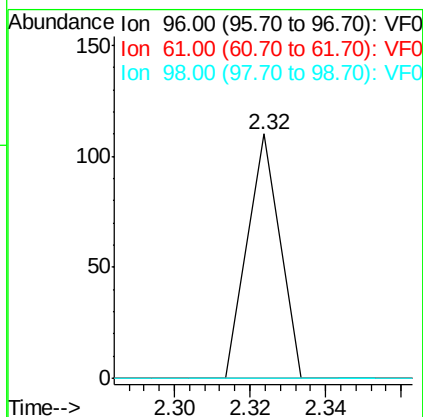
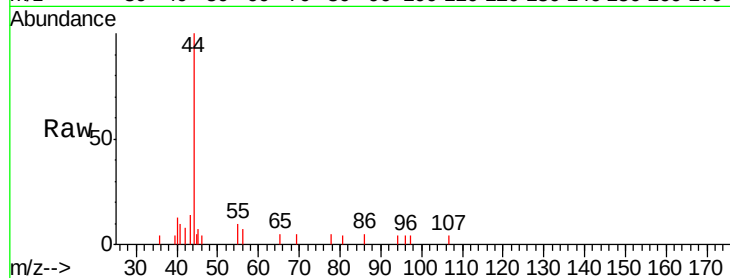
Tgt Ion: 96 Resp: 65

Ion Ratio Lower Upper

96 100

61 0.0 134.5 201.7#

98 0.0 51.6 77.4#



#22

Diisopropyl ether

Concen: 39.59 ug/l

RT: 2.88 min Scan# 228

Delta R.T. 0.05 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Tgt Ion: 45 Resp: 67

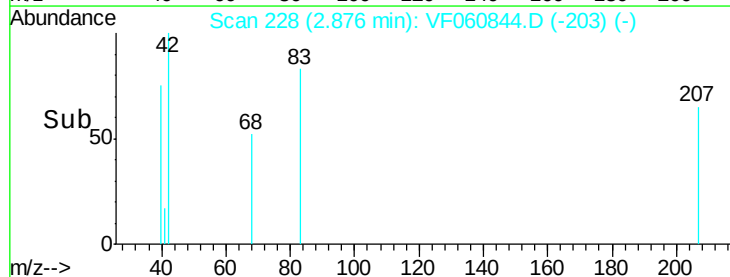
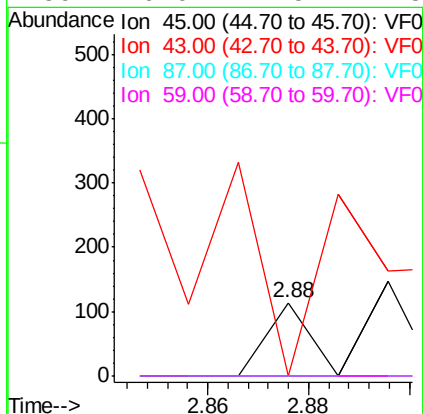
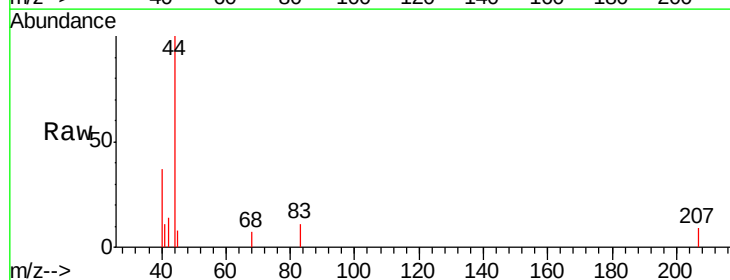
Ion Ratio Lower Upper

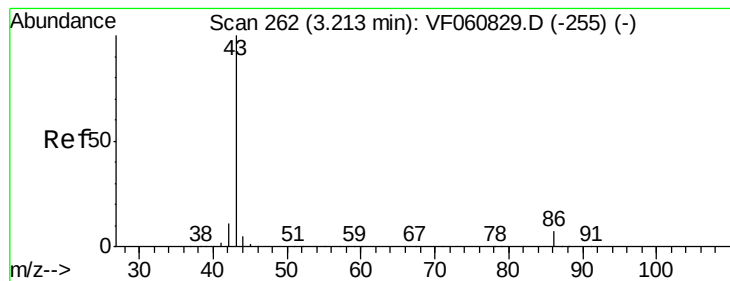
45 100

43 0.0 41.0 61.6#

87 0.0 14.6 22.0#

59 0.0 7.5 11.3#





#23

Vinyl Acetate

Concen: 452.42 ug/l

RT: 3.26 min Scan# 267

Delta R.T. 0.05 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampleId :

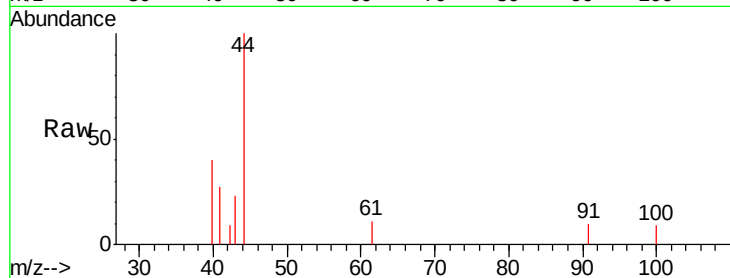
WC-1RE

Tgt Ion: 43 Resp: 350

Ion Ratio Lower Upper

43 100

86 0.0 5.4 8.0#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0

3.26

250

200

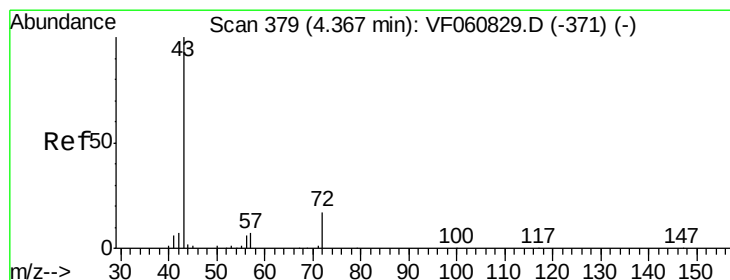
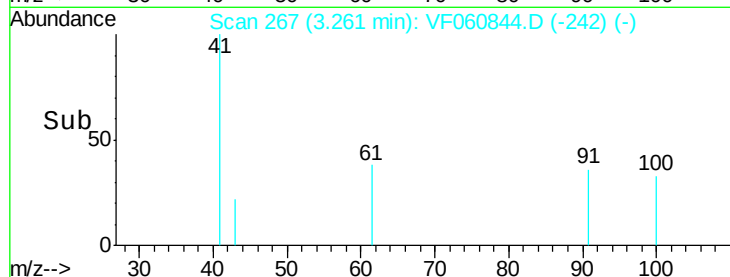
150

100

50

0

Time-->



#25

2-Butanone

Concen: 1698.23 ug/l

RT: 4.40 min Scan# 383

Delta R.T. 0.04 min

Lab File: VF060844.D

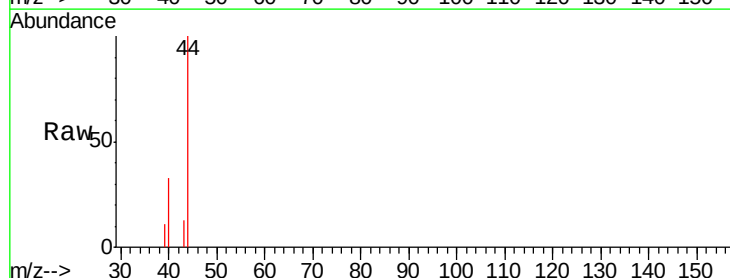
Acq: 27 Nov 2018 17:53

Tgt Ion: 43 Resp: 402

Ion Ratio Lower Upper

43 100

72 0.0 15.4 23.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

4.40

200

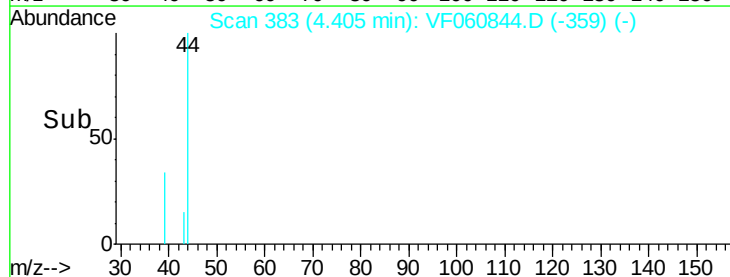
150

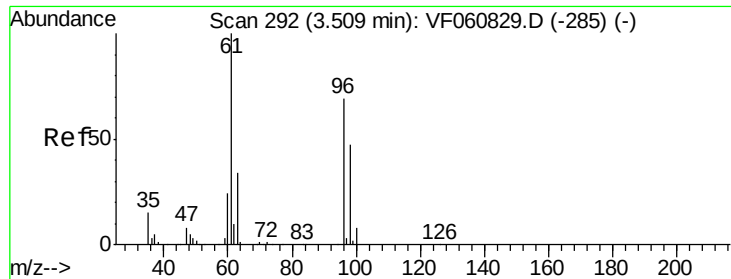
100

50

0

Time-->





#27

cis-1,2-Dichloroethene

Concen: 83.02 ug/l

RT: 3.63 min Scan# 304

Delta R.T. 0.12 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampled :

WC-1RE

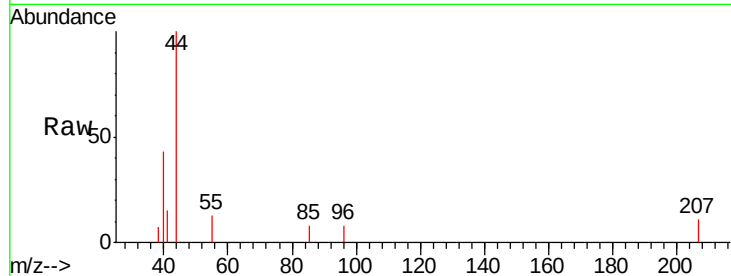
Tgt Ion: 96 Resp: 65

Ion Ratio Lower Upper

96 100

61 0.0 0.0 290.6

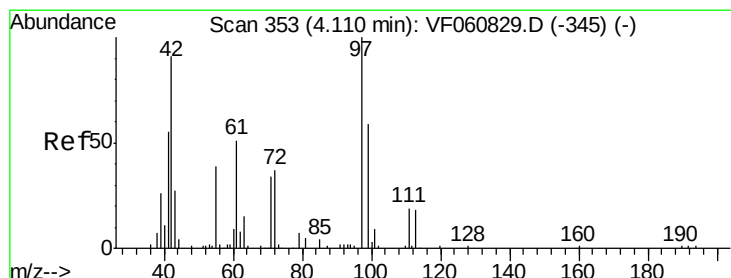
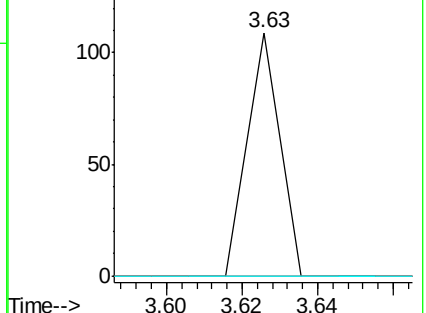
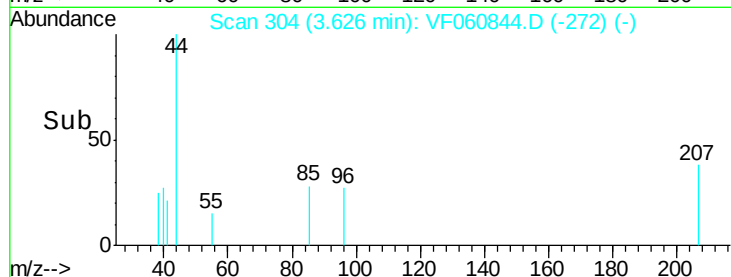
98 0.0 0.0 137.8



Abundance Ion 96.00 (95.70 to 96.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 98.00 (97.70 to 98.70): VF0



#29

Tetrahydrofuran

Concen: 637.82 ug/l

RT: 4.15 min Scan# 357

Delta R.T. 0.04 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

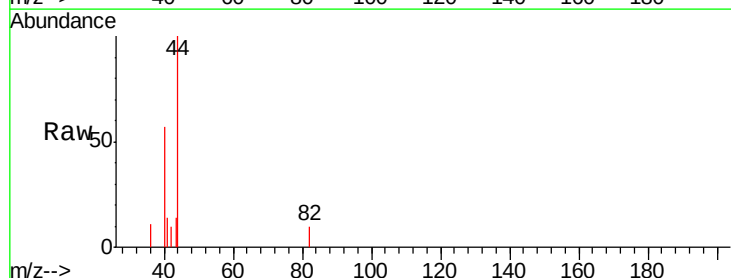
Tgt Ion: 42 Resp: 64

Ion Ratio Lower Upper

42 100

72 0.0 31.9 47.9#

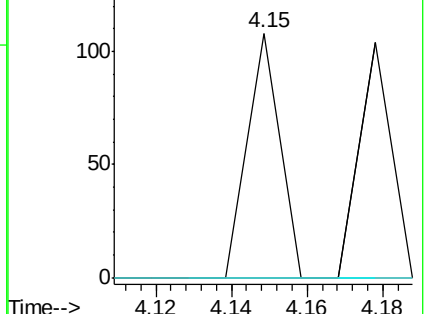
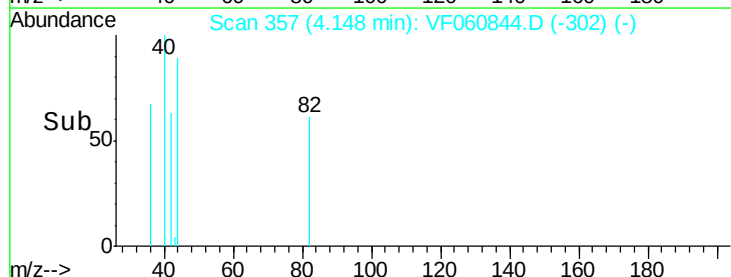
71 0.0 28.7 43.1#

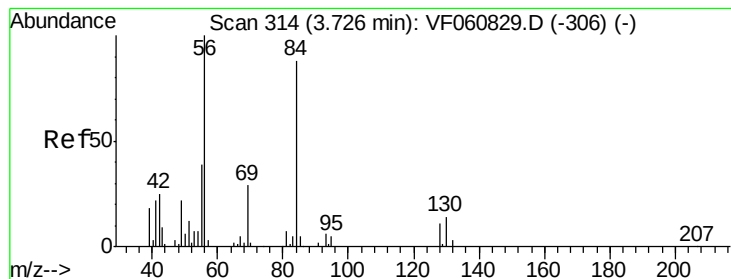


Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0





#31

Cyclohexane

Concen: 136.84 ug/l

RT: 3.70 min Scan# 312

Delta R.T. -0.02 min

Lab File: VF060844.D

Acq: 27 Nov 2018 17:53

Instrument :

MSVOA_F

ClientSampleId :

WC-1RE

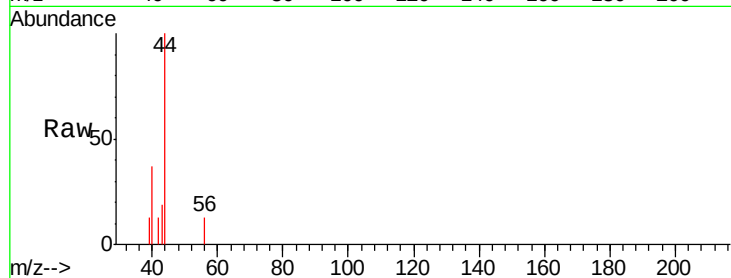
Tgt Ion: 56 Resp: 143

Ion Ratio Lower Upper

56 100

69 0.0 23.0 34.4#

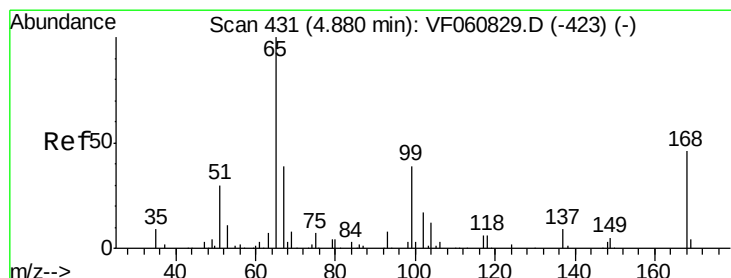
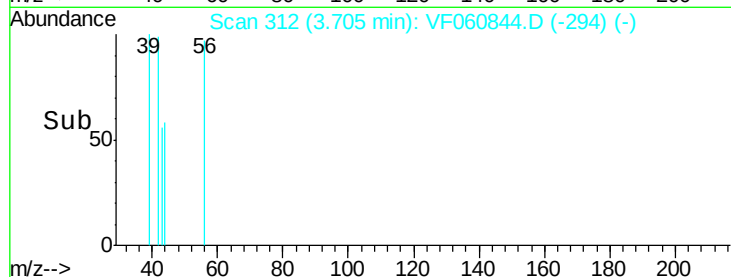
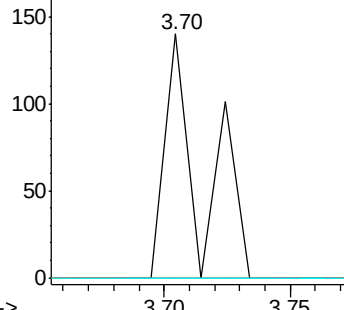
84 0.0 70.4 105.6#



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 69.00 (68.70 to 69.70): VF0

Ion 84.00 (83.70 to 84.70): VF0



#33

1,2-Dichloroethane-d4

Concen: 90.28 ug/l

RT: 4.94 min Scan# 437

Delta R.T. 0.06 min

Lab File: VF060844.D

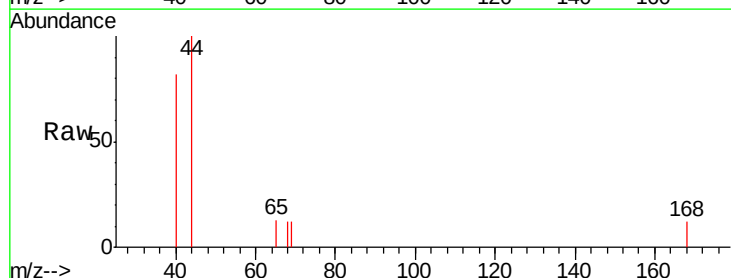
Acq: 27 Nov 2018 17:53

Tgt Ion: 65 Resp: 67

Ion Ratio Lower Upper

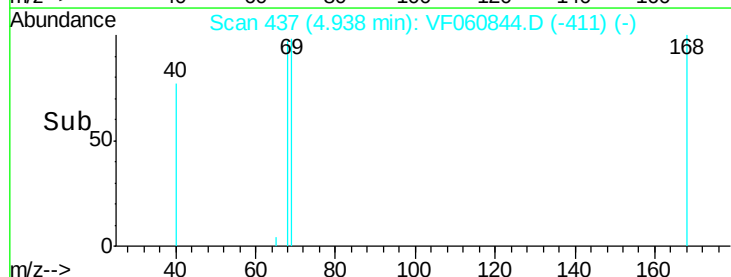
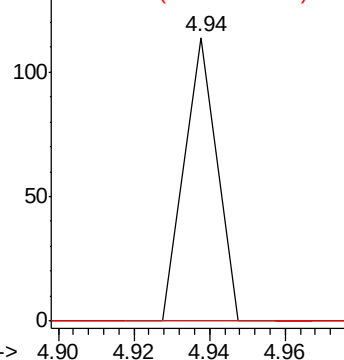
65 100

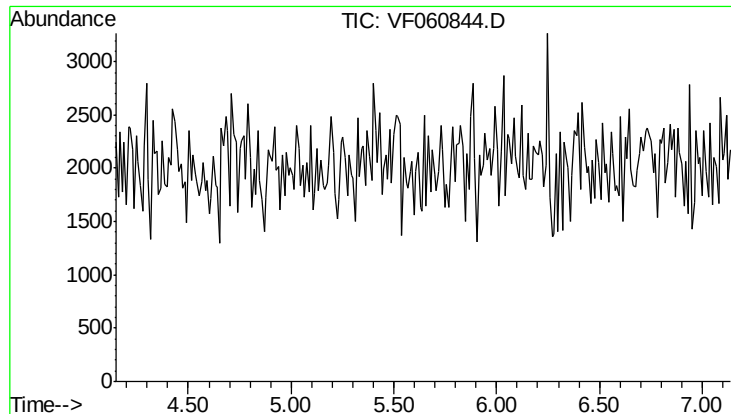
67 0.0 0.0 96.4



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0

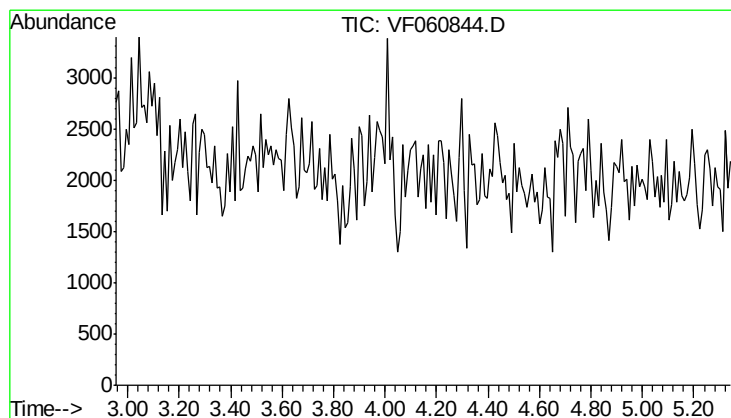
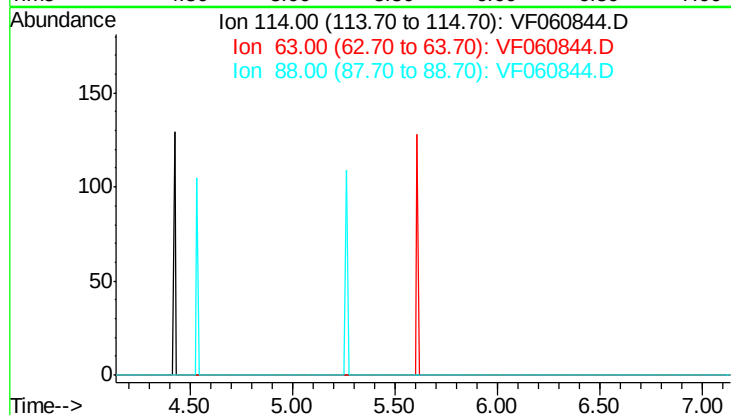




#34
 1,4-Difluorobenzene
 Concen: 0.00 ug/l
 Expected RT: 5.64 min
 Lab File: VF060844.D
 Acq: 27 Nov 2018 17:53

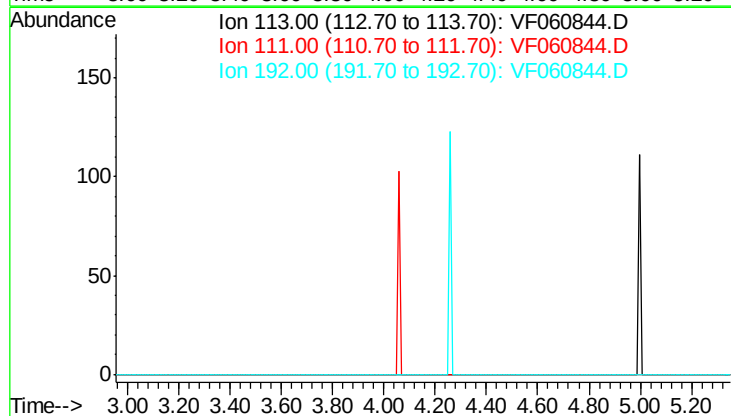
Instrument :
 MSVOA_F
 ClientSampleId :
 WC-1RE

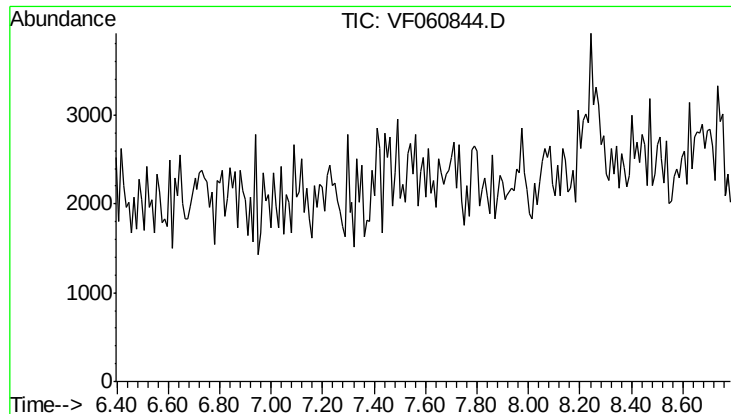
Tgt Ion	Exp Ratio
114	100
63	20.8
88	18.3



#35
 Dibromofluoromethane
 Concen: 0.00 ug/l
 Expected RT: 4.15 min
 Lab File: VF060844.D
 Acq: 27 Nov 2018 17:53

Tgt Ion	Exp Ratio
113	100
111	103.8
192	15.4



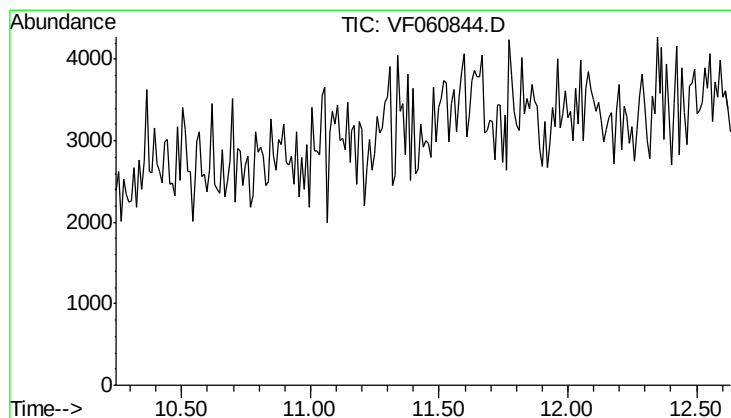
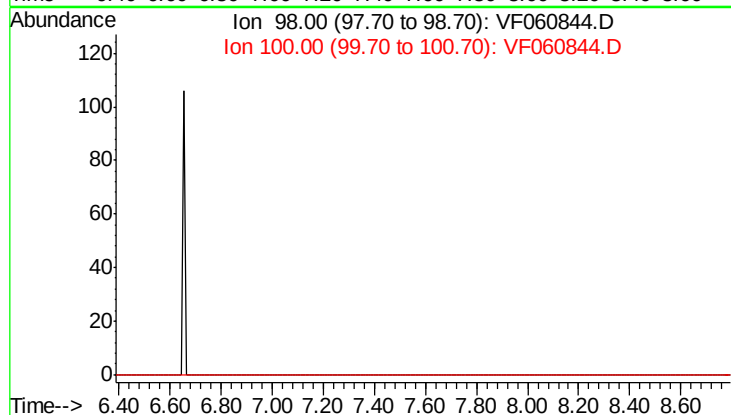


#50
Toluene-d8
Concen: 0.00 ug/l
Expected RT: 7.59 min

Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

Instrument :
MSVOA_F
ClientSampleId :
WC-1RE

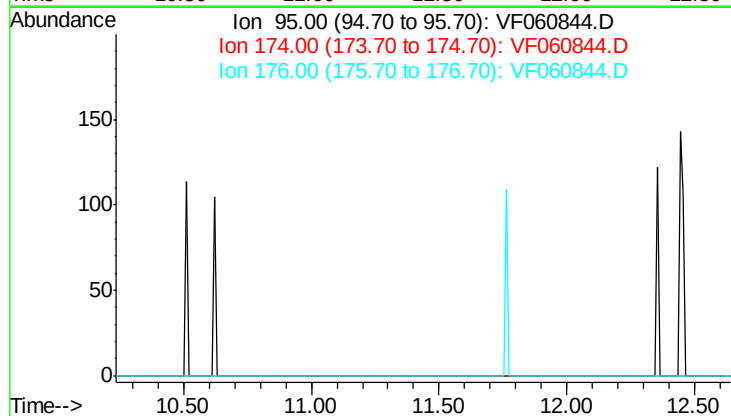
Tgt Ion: 98
Sig Exp Ratio
98 100
100 74.1

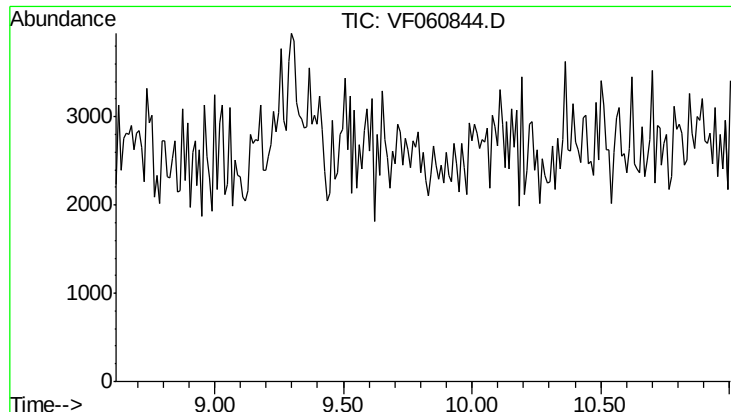


#62
4-Bromofluorobenzene
Concen: 0.00 ug/l
Expected RT: 11.44 min

Lab File: VF060844.D
Acq: 27 Nov 2018 17:53

Tgt Ion: 95
Sig Exp Ratio
95 100
174 69.1
176 73.1

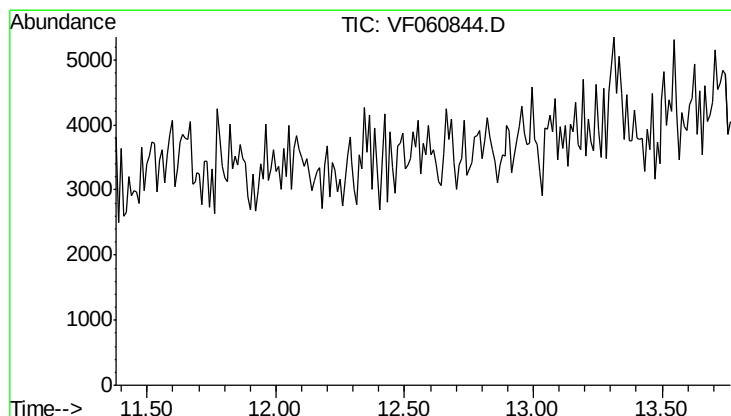
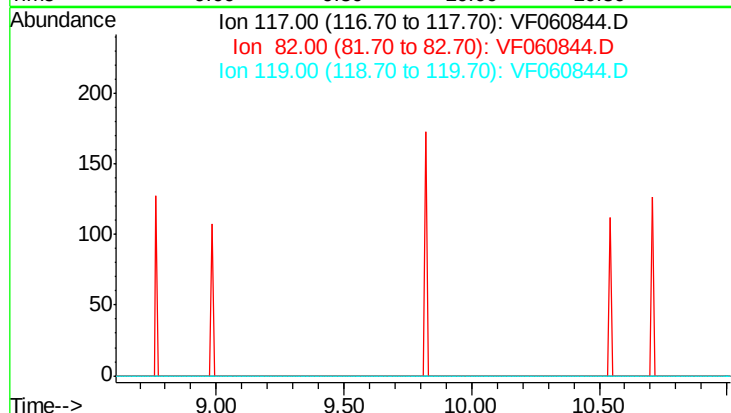




#63
 Chlorobenzene-d5
 Concen: 0.00 ug/l
 Expected RT: 9.81 min
 Lab File: VF060844.D
 Acq: 27 Nov 2018 17:53

Instrument :
 MSVOA_F
 ClientSampleId :
 WC-1RE

Tgt Ion	Exp Ratio
117	100
82	58.2
119	33.0



#72
 1,4-Dichlorobenzene-d4
 Concen: 0.00 ug/l
 Expected RT: 12.57 min
 Lab File: VF060844.D
 Acq: 27 Nov 2018 17:53

Tgt Ion	Exp Ratio
152	100
115	60.3
150	163.8

