

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF031319\
 Data File : VF061931.D
 Acq On : 13 Mar 2019 16:56
 Operator : VA/AP
 Sample : K1870-09
 Misc : 3.20g/5mL/MSVOA-F/SOIL
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 SP-3

Quant Time: Mar 14 01:17:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F030419S.M
 Quant Title : SW846 8260
 QLast Update : Tue Mar 05 04:50:44 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.85	168	13820	50.00	ug/l	-0.03
34) 1,4-Difluorobenzene	5.58	114	16838	50.00	ug/l	-0.03
63) Chlorobenzene-d5	9.76	117	11392	50.00	ug/l	-0.02
72) 1,4-Dichlorobenzene-d4	12.54	152	3542	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	4.83	65	2627	26.10	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	52.20%	
35) Dibromofluoromethane	4.10	113	5403	45.98	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	91.96%	
50) Toluene-d8	7.53	98	17961	51.42	ug/l	-0.03
Spiked Amount	50.000		Recovery	=	102.84%	
62) 4-Bromofluorobenzene	11.40	95	4016	29.35	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	58.70%	

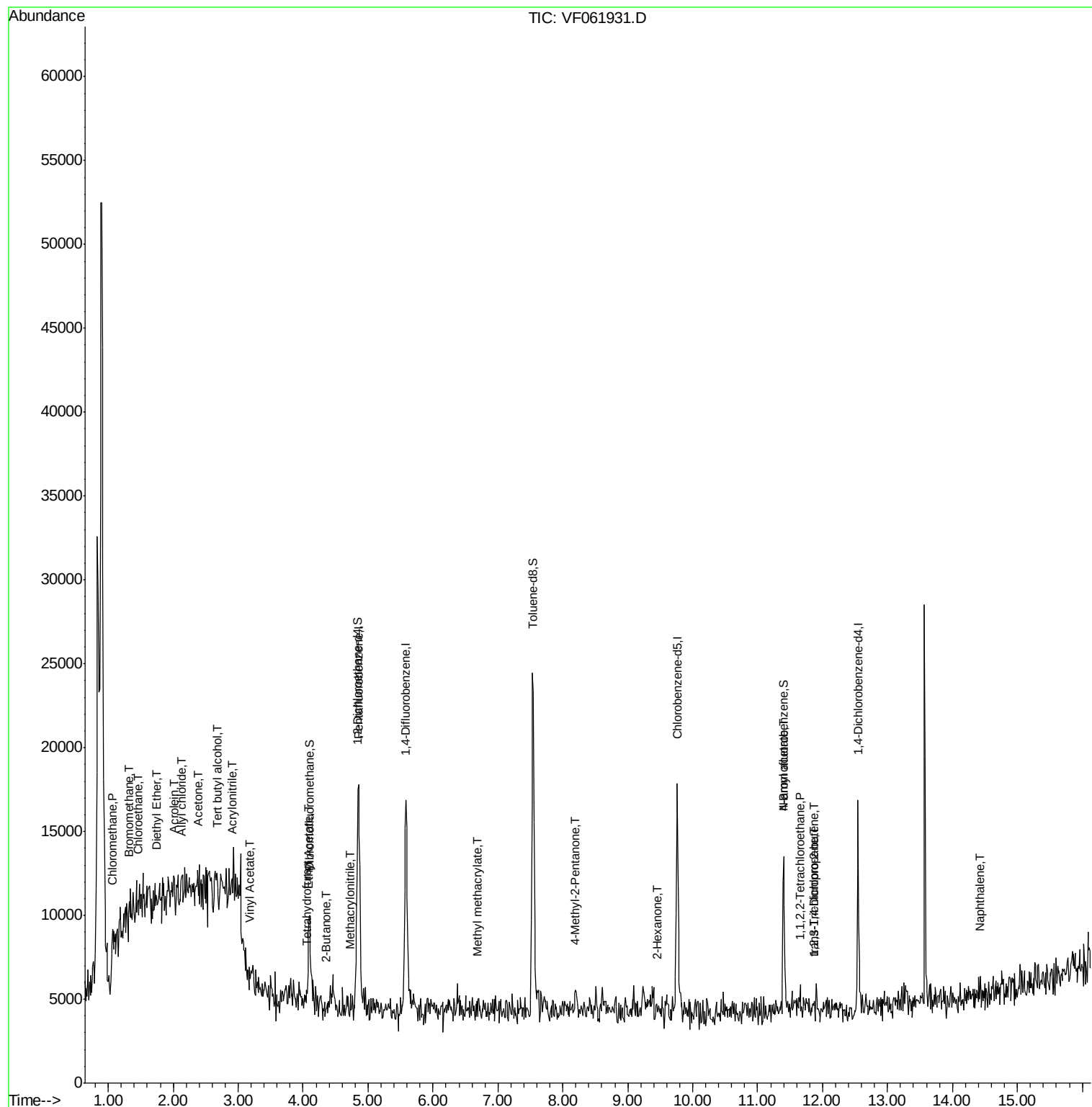
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.07	50	376	2.287	ug/l #	45
5) Bromomethane	1.32	94	773	7.266	ug/l #	26
6) Chloroethane	1.45	64	157	2.116	ug/l #	34
8) Diethyl Ether	1.74	74	77	1.776	ug/l	90
11) Tert butyl alcohol	2.66	59	64	11.204	ug/l #	64
13) Acrolein	2.02	56	267	36.887	ug/l	94
14) Allyl chloride	2.11	41	327	2.511	ug/l #	20
15) Acrylonitrile	2.91	53	185	10.170	ug/l #	16
16) Acetone	2.37	43	310	14.705	ug/l	92
18) Methyl Acetate	2.37	43	310	Below Cal	#	79
20) Methylene Chloride	2.18	84	232	Below Cal	#	21
23) Vinyl Acetate	3.19	43	180	1.190	ug/l #	76
25) 2-Butanone	4.35	43	222	5.177	ug/l #	56
29) Tetrahydrofuran	4.04	42	69	3.731	ug/l #	33
37) Ethyl Acetate	4.07	43	157	2.352	ug/l #	20
41) Methacrylonitrile	4.73	41	257	7.026	ug/l #	24
48) Methyl methacrylate	6.68	41	433	8.314	ug/l #	18
51) 4-Methyl-2-Pentanone	8.20	43	70	1.231	ug/l #	35
59) 2-Hexanone	9.45	43	176	4.289	ug/l #	22
74) N-amyl acetate	11.39	43	399	7.108	ug/l #	6
75) 1,1,2,2-Tetrachloroethane	11.66	83	79	1.949	ug/l #	23
76) 1,2,3-Trichloropropane	11.86	75	72	2.603	ug/l #	39
81) trans-1,4-Dichloro-2-buten	11.86	75	72	5.692	ug/l #	18
95) Naphthalene	14.44	128	152	1.153	ug/l #	70

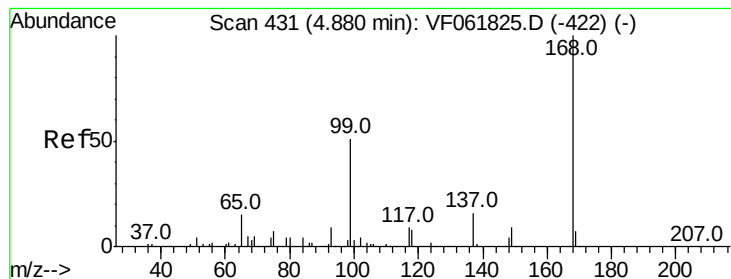
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA F\DATA\VF031319\
Data File : VF061931.D
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Quant Time: Mar 14 01:17:07 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_F\METHODS\82F030419S.M
Quant Title : SW846 8260
QLast Update : Tue Mar 05 04:50:44 2019
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.85 min Scan# 428

Delta R.T. -0.03 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

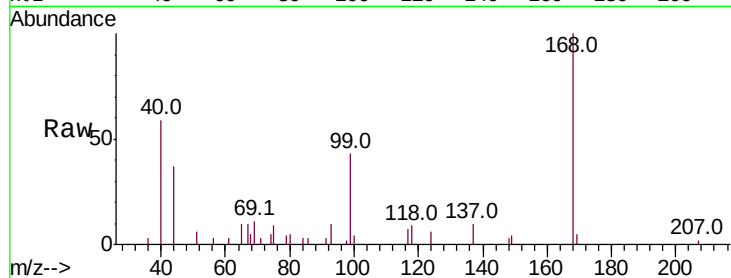
SP-3

Tot Ion:168 Resp: 13820

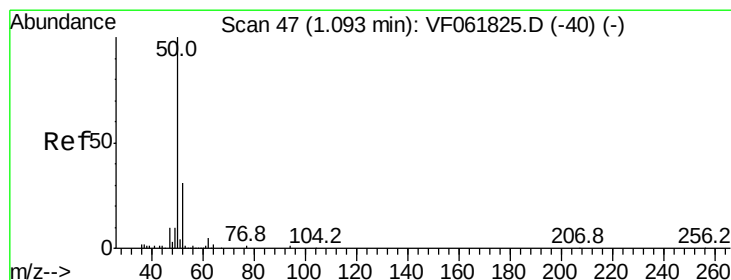
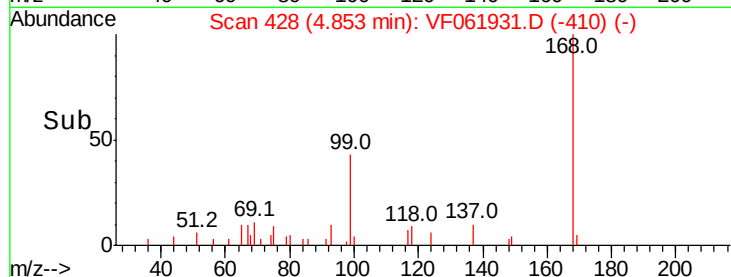
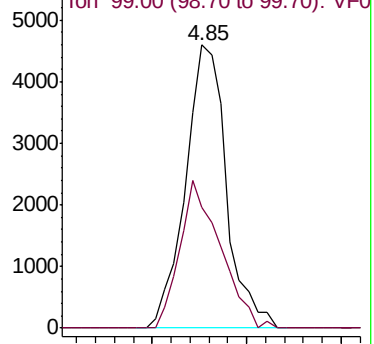
Ion Ratio Lower Upper

168 100

99 42.9 40.8 61.2



Abundance Ion 168.00 (167.70 to 168.70): VF0



#3

Chloromethane

Concen: 2.287 ug/l

RT: 1.07 min Scan# 44

Delta R.T. -0.03 min

Lab File: VF061931.D

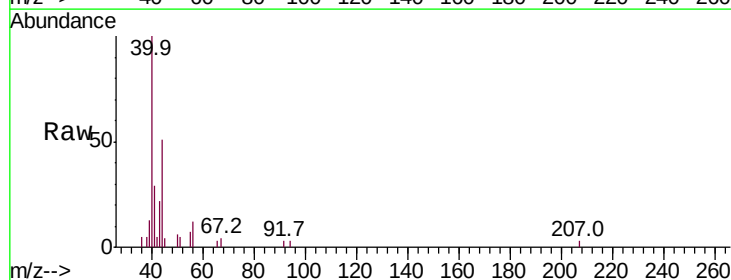
Acq: 13 Mar 2019 16:56

Tgt Ion: 50 Resp: 376

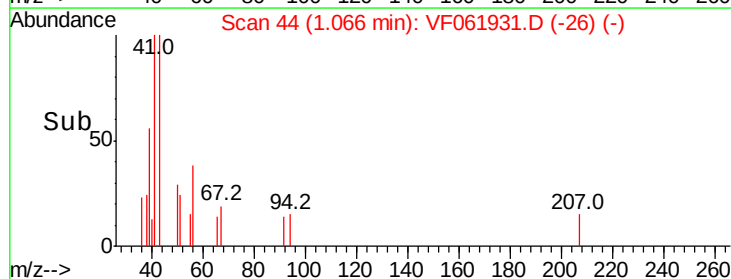
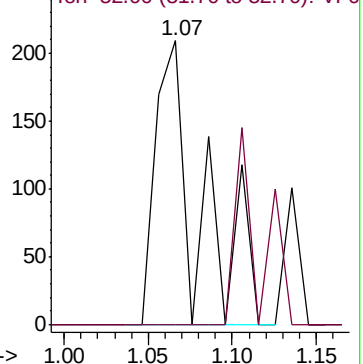
Ion Ratio Lower Upper

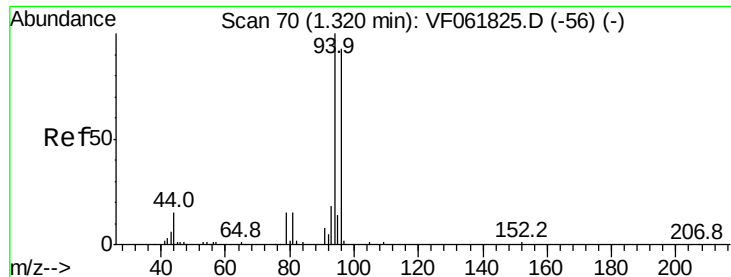
50 100

52 0.0 23.8 35.8#



Abundance Ion 50.00 (49.70 to 50.70): VF0





#5

Bromomethane

Concen: 7.266 ug/l

RT: 1.32 min Scan# 70

Delta R.T. 0.00 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

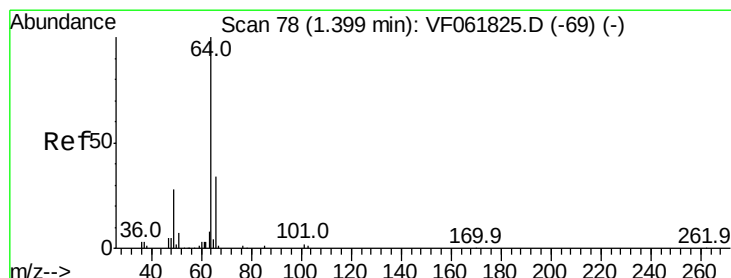
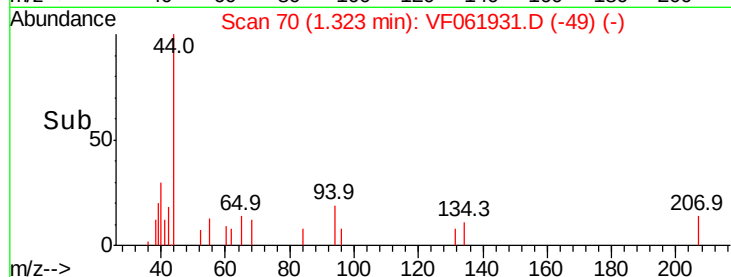
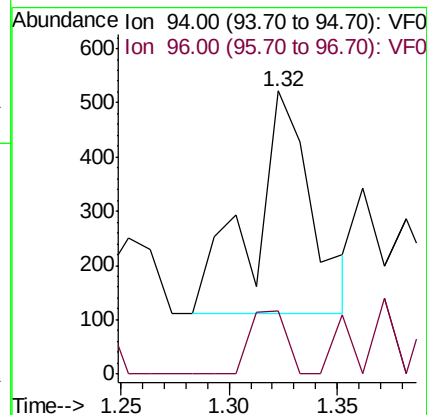
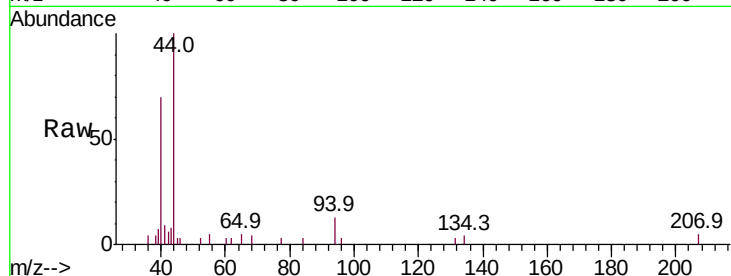
SP-3

Tot Ion: 94 Resp: 773

Ion Ratio Lower Upper

94 100

96 22.2 75.2 112.8#



#6

Chloroethane

Concen: 2.116 ug/l

RT: 1.45 min Scan# 83

Delta R.T. 0.05 min

Lab File: VF061931.D

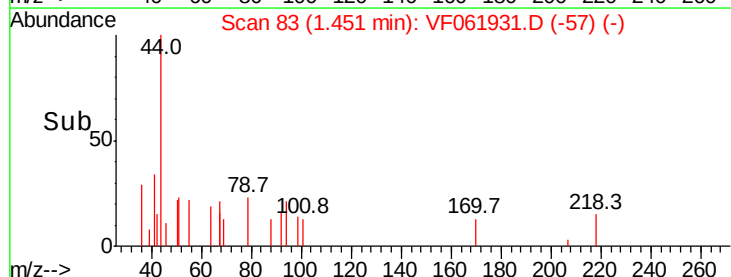
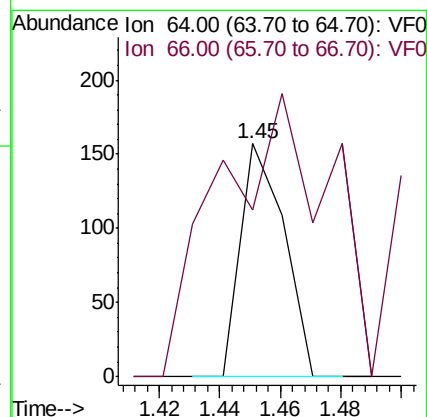
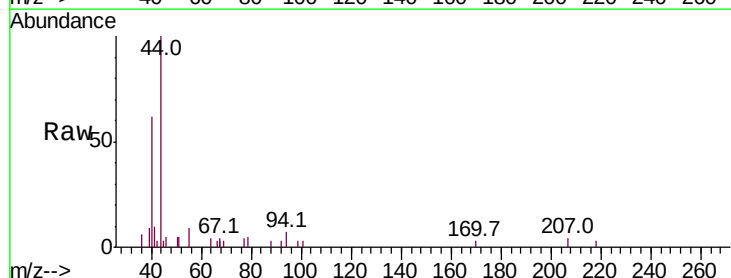
Acq: 13 Mar 2019 16:56

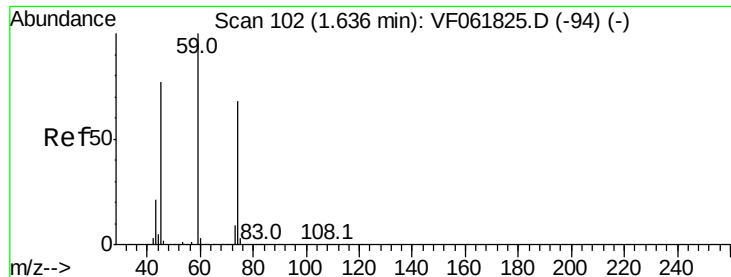
Tgt Ion: 64 Resp: 157

Ion Ratio Lower Upper

64 100

66 71.3 27.0 40.4#





#8

Diethyl Ether

Concen: 1.776 ug/l

RT: 1.74 min Scan# 112

Delta R.T. 0.10 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampleId :

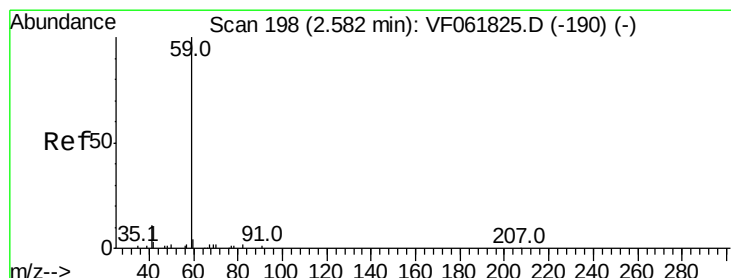
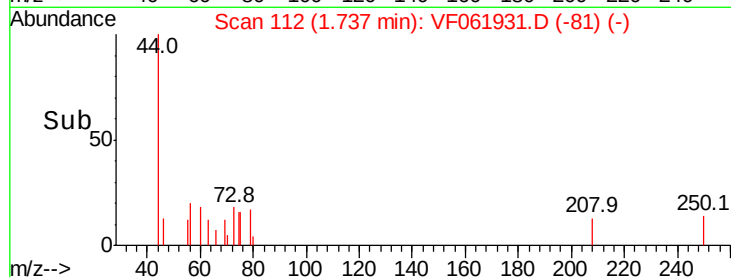
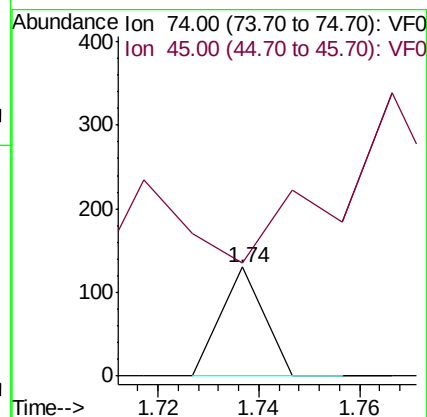
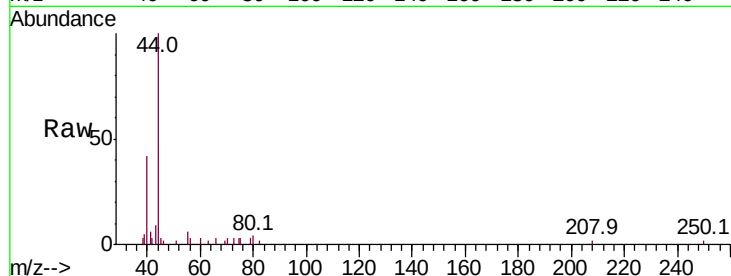
SP-3

Tot Ion: 74 Resp: 77

Ion Ratio Lower Upper

74 100

45 103.8 57.2 171.6



#11

Tert butyl alcohol

Concen: 11.204 ug/l

RT: 2.66 min Scan# 206

Delta R.T. 0.08 min

Lab File: VF061931.D

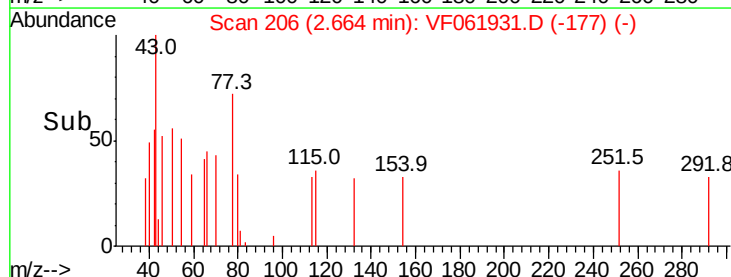
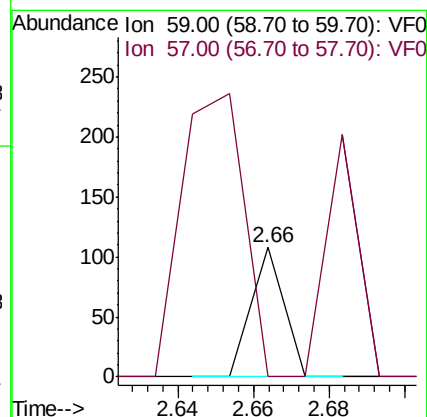
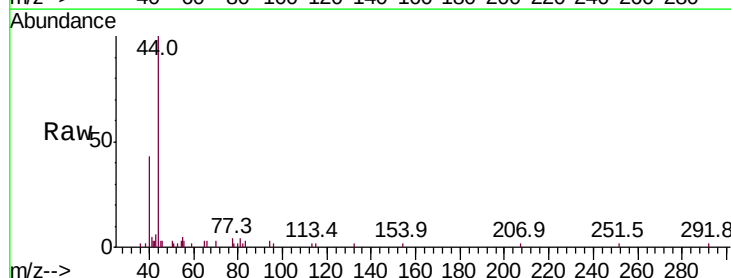
Acq: 13 Mar 2019 16:56

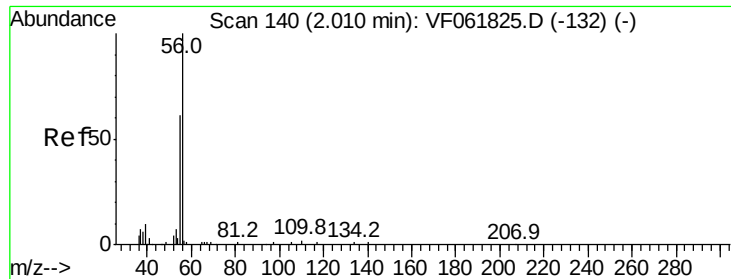
Tgt Ion: 59 Resp: 64

Ion Ratio Lower Upper

59 100

57 0.0 11.8 17.6#





#13

Acrolein

Concen: 36.887 ug/l

RT: 2.02 min Scan# 141

Delta R.T. 0.01 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampleId :

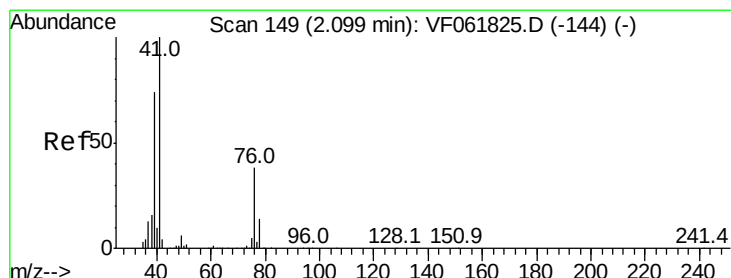
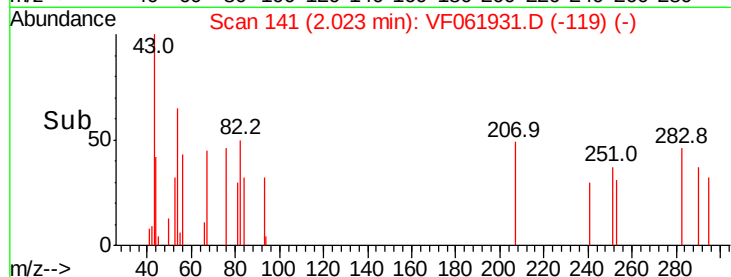
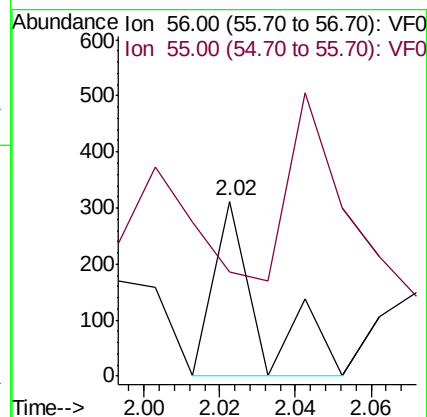
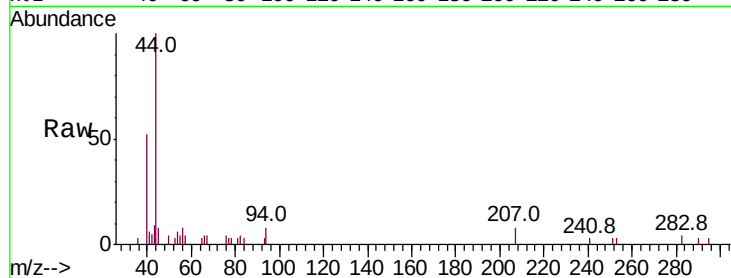
SP-3

Tot Ion: 56 Resp: 267

Ion Ratio Lower Upper

56 100

55 59.3 51.3 76.9



#14

Allyl chloride

Concen: 2.511 ug/l

RT: 2.11 min Scan# 150

Delta R.T. 0.01 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

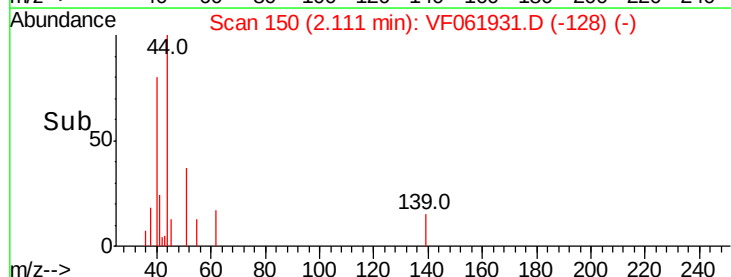
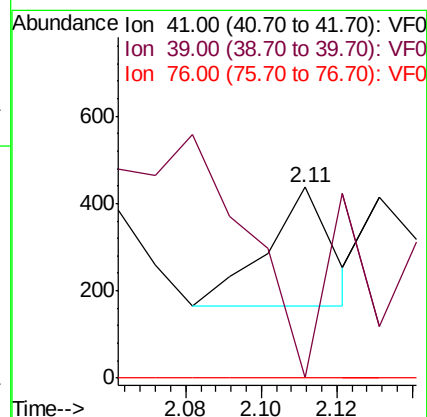
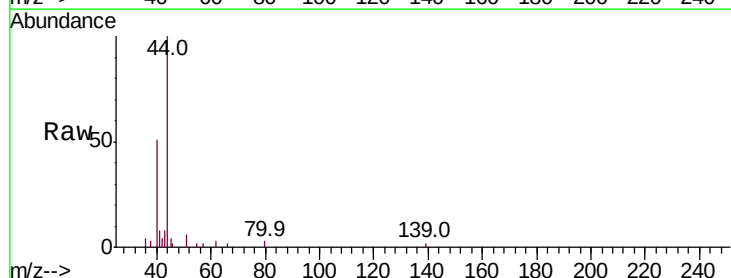
Tgt Ion: 41 Resp: 327

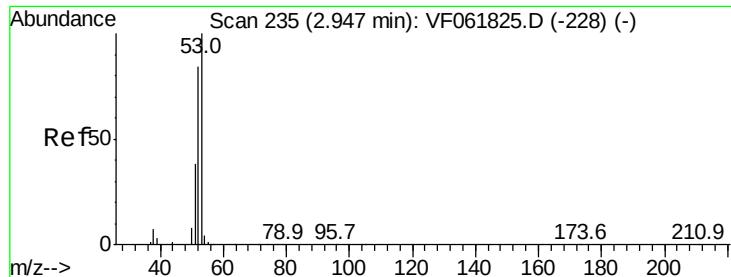
Ion Ratio Lower Upper

41 100

39 0.0 59.6 89.4#

76 0.0 32.3 48.5#





#15

Acrylonitrile

Concen: 10.170 ug/l

RT: 2.91 min Scan# 231

Delta R.T. -0.04 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

SP-3

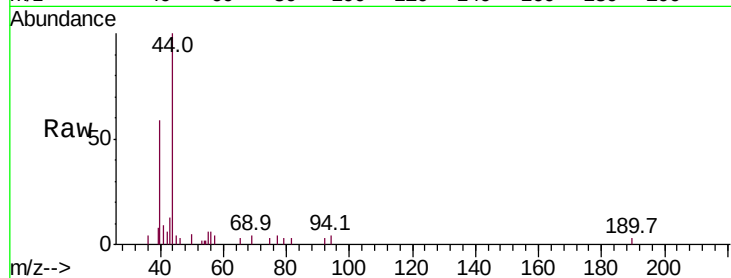
Tot Ion: 53 Resp: 185

Ion Ratio Lower Upper

53 100

52 0.0 67.4 101.0#

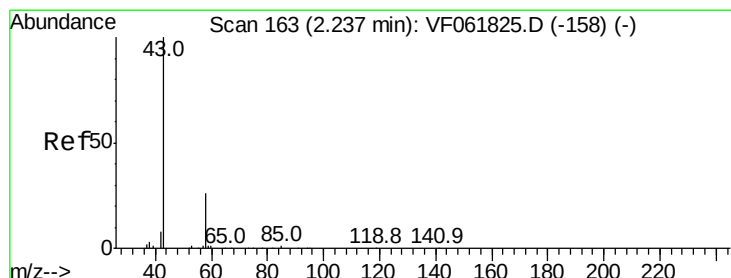
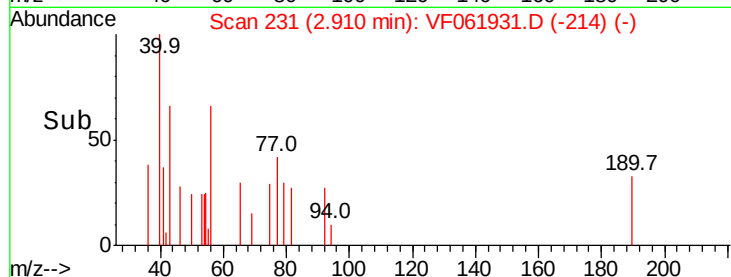
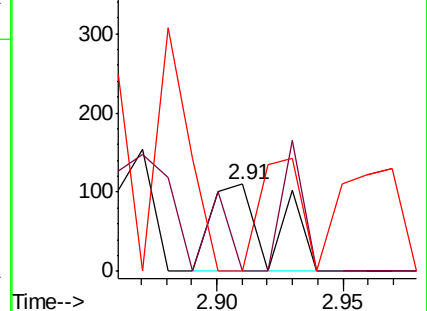
51 0.0 30.7 46.1#



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: 14.705 ug/l

RT: 2.37 min Scan# 176

Delta R.T. 0.13 min

Lab File: VF061931.D

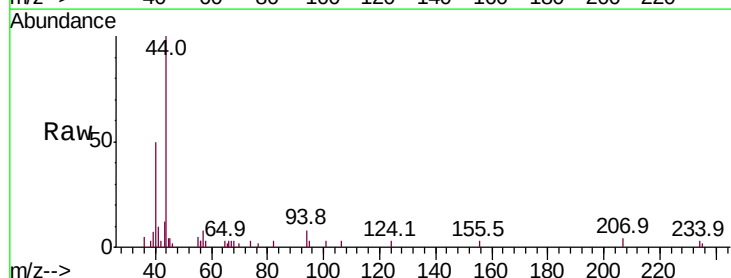
Acq: 13 Mar 2019 16:56

Tgt Ion: 43 Resp: 310

Ion Ratio Lower Upper

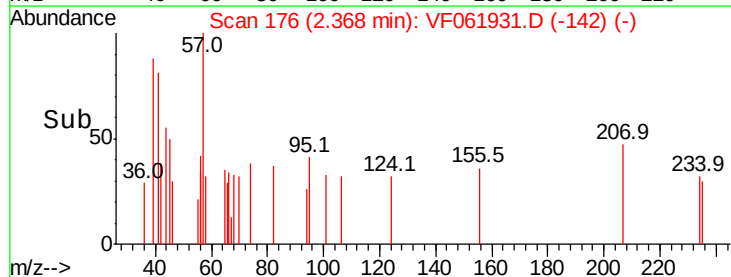
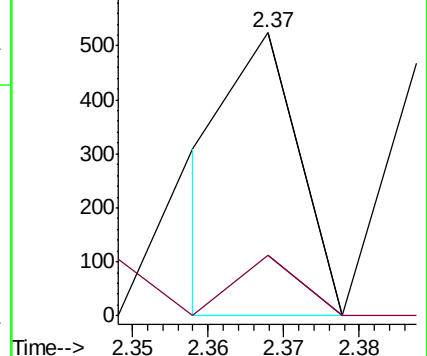
43 100

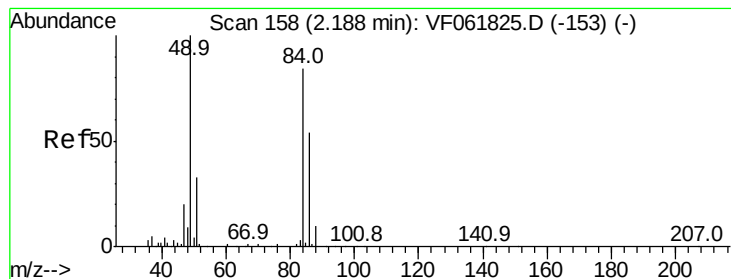
58 21.4 20.3 30.5



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#20

Methvlene Chloride

Concen: Below Cal

RT: 2.18 min Scan# 157

Delta R.T. -0.01 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

SP-3

Tot Ion: 84 Resp: 232

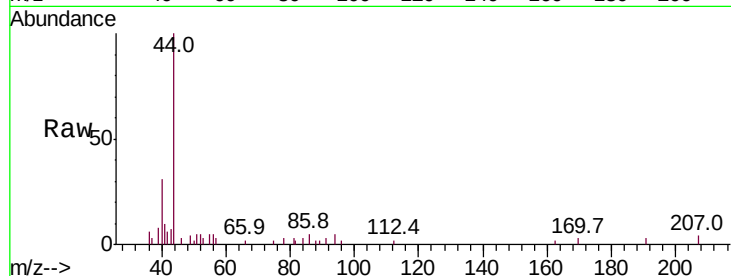
Ion Ratio Lower Upper

84 100

49 141.4 96.8 145.2

51 153.3 31.8 47.6#

86 165.8 51.6 77.4#

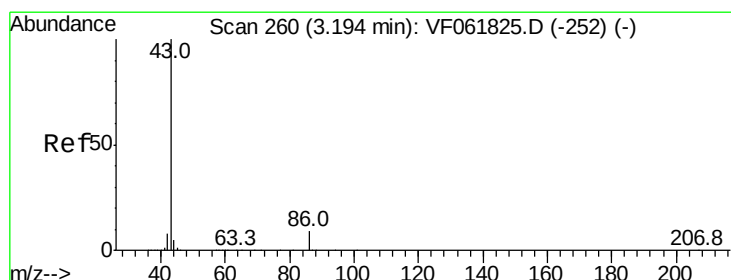
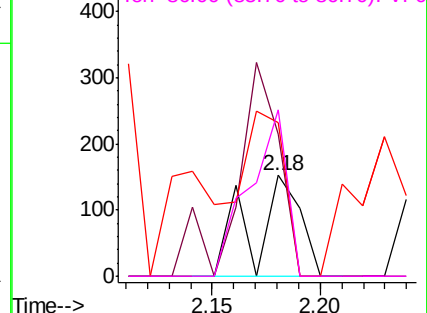
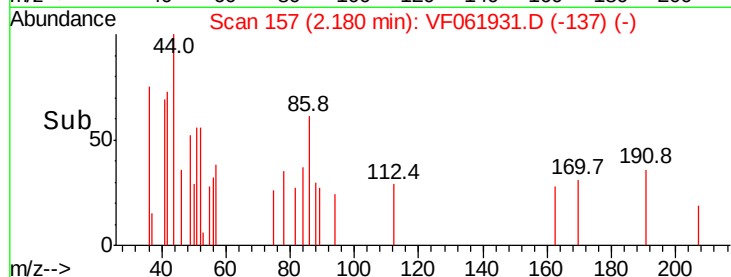


Abundance Ion 84.00 (83.70 to 84.70): VF0

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



#23

Vinyl Acetate

Concen: 1.190 ug/l

RT: 3.19 min Scan# 259

Delta R.T. -0.01 min

Lab File: VF061931.D

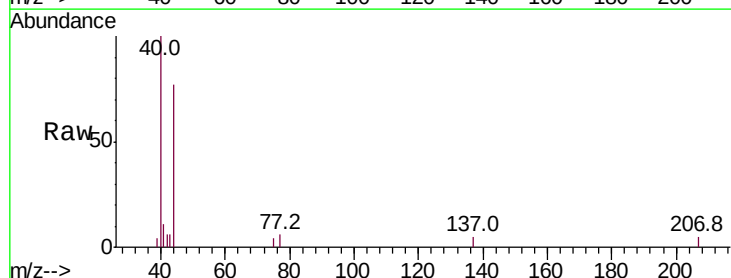
Acq: 13 Mar 2019 16:56

Tgt Ion: 43 Resp: 180

Ion Ratio Lower Upper

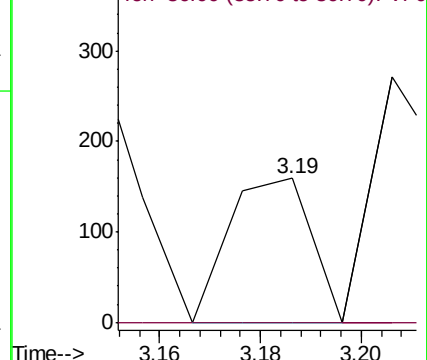
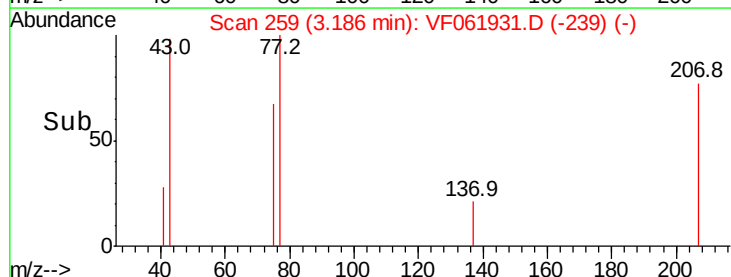
43 100

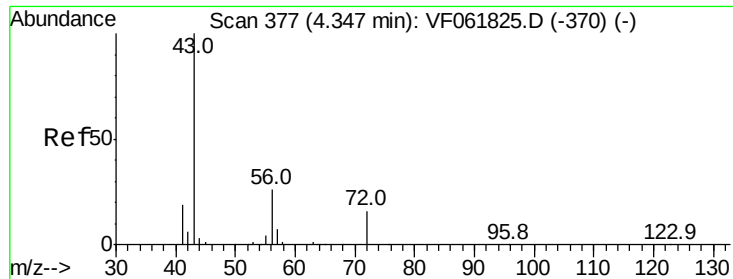
86 0.0 7.0 10.4#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0

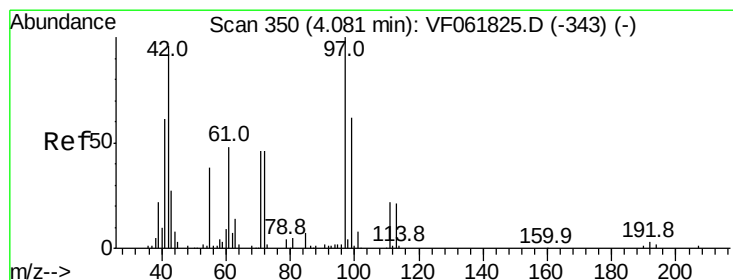
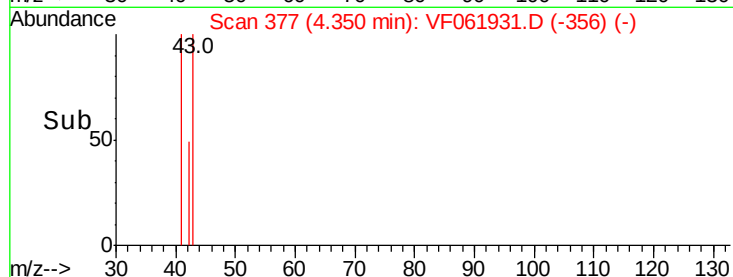
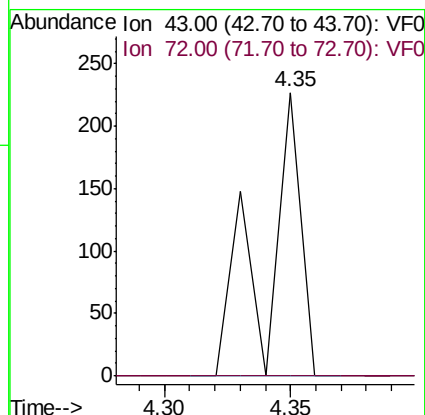
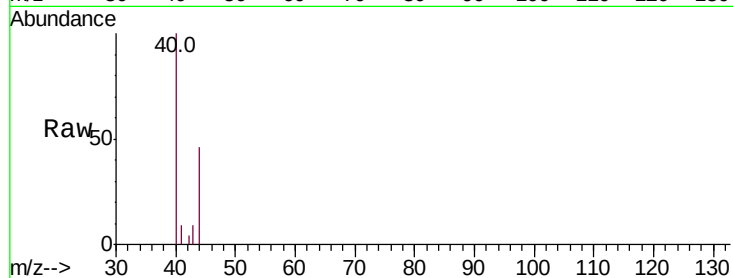




#25
2-Butanone
Concen: 5.177 ug/l
RT: 4.35 min Scan# 377
Delta R.T. 0.00 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

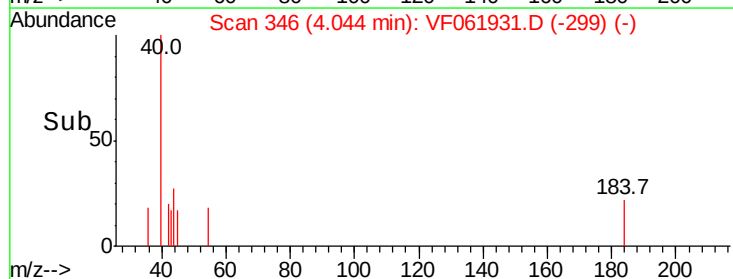
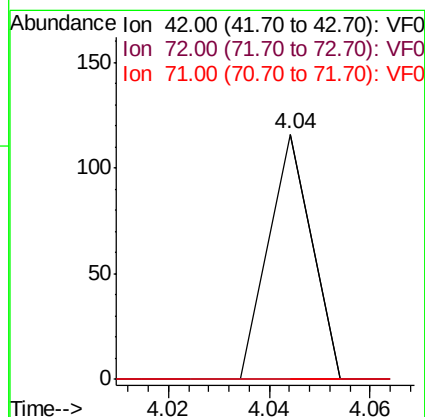
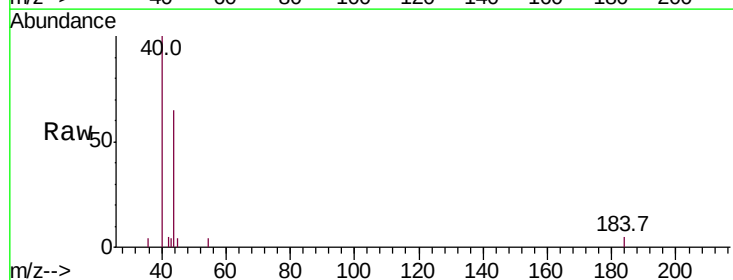
Instrument :
MSVOA_F
ClientSampled :
SP-3

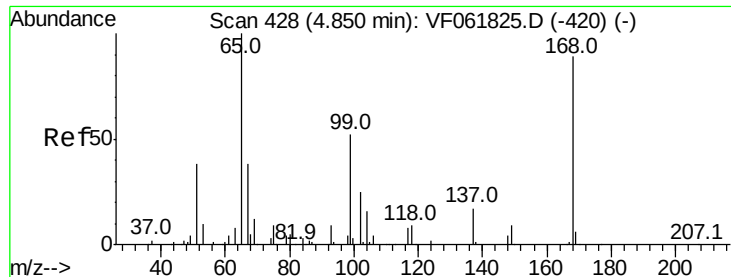
Tot Ion: 43 Resp: 222
Ion Ratio Lower Upper
43 100
72 0.0 16.2 24.4#



#29
Tetrahydrofuran
Concen: 3.731 ug/l
RT: 4.04 min Scan# 346
Delta R.T. -0.04 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

Tgt Ion: 42 Resp: 69
Ion Ratio Lower Upper
42 100
72 0.0 34.4 51.6#
71 0.0 34.6 52.0#





#33

1,2-Dichloroethane-d4

Concen: 26.102 ug/l

RT: 4.83 min Scan# 426

Delta R.T. -0.02 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

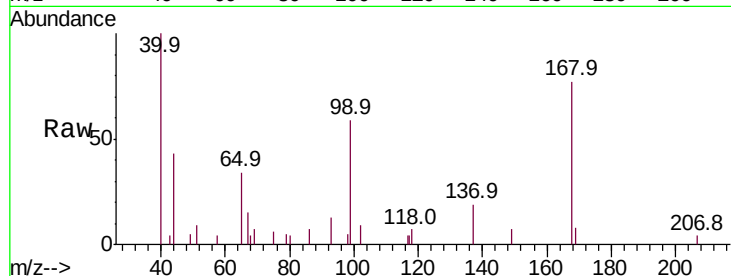
SP-3

Tot Ion: 65 Resp: 2627

Ion Ratio Lower Upper

65 100

67 45.8 0.0 108.6



Abundance Ion 65.00 (64.70 to 65.70): VF0

Ion 67.00 (66.70 to 67.70): VF0

4.83

800

600

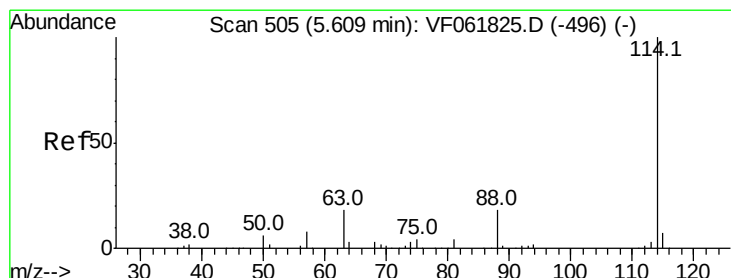
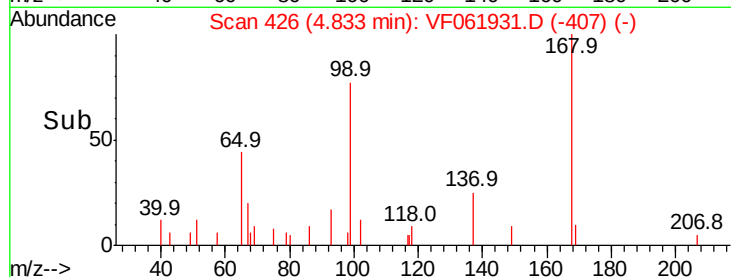
400

200

0

4.75 4.80 4.85 4.90

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.58 min Scan# 502

Delta R.T. -0.03 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

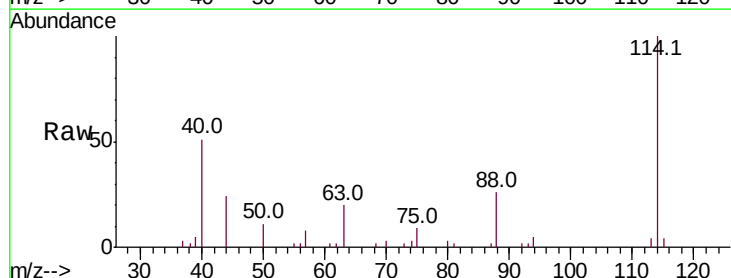
Tgt Ion:114 Resp: 16838

Ion Ratio Lower Upper

114 100

63 19.6 0.0 35.6

88 26.3 0.0 35.6



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

5.58

6000

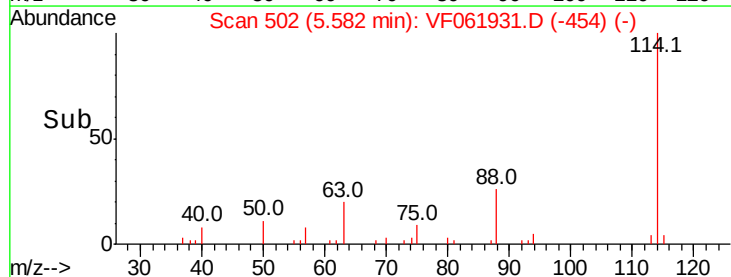
4000

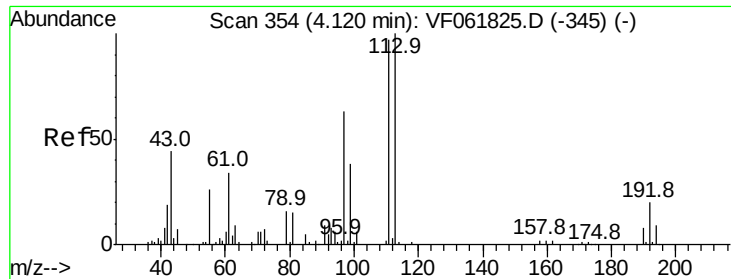
2000

0

5.50 5.55 5.60 5.65 5.70

Time-->





#35

Dibromofluoromethane

Concen: 45.980 ug/l

RT: 4.10 min Scan# 352

Delta R.T. -0.02 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

SP-3

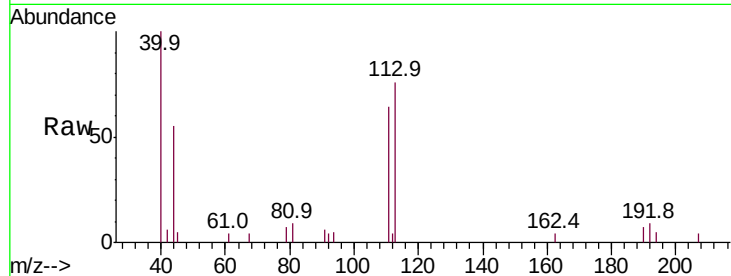
Tot Ion:113 Resp: 5403

Ion Ratio Lower Upper

113 100

111 84.1 77.6 116.4

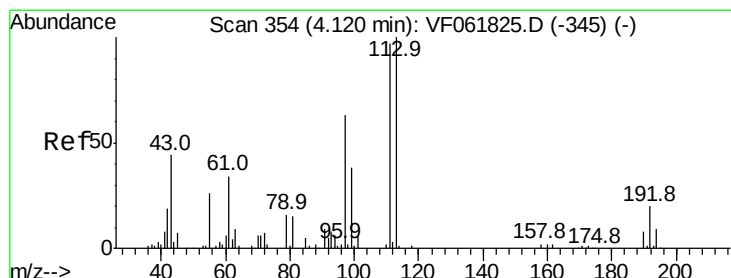
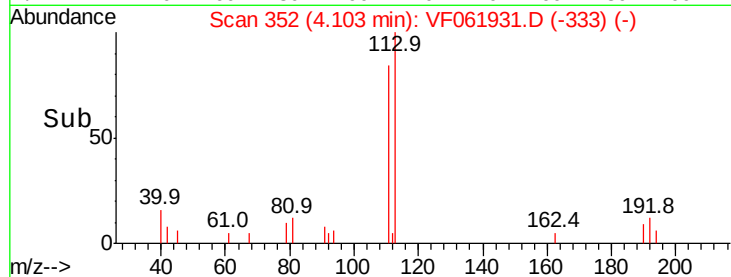
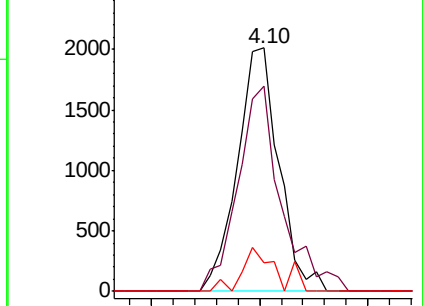
192 11.8 15.9 23.9#



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: 2.352 ug/l

RT: 4.07 min Scan# 349

Delta R.T. -0.05 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

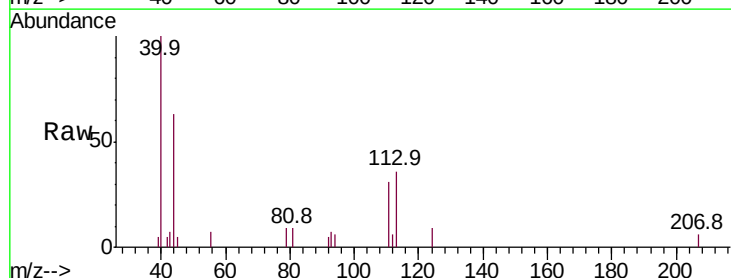
Tgt Ion: 43 Resp: 157

Ion Ratio Lower Upper

43 100

61 0.0 60.7 91.1#

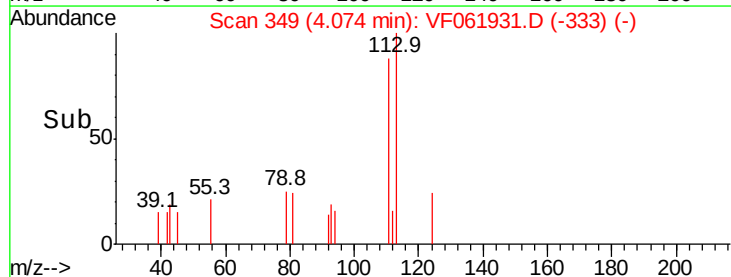
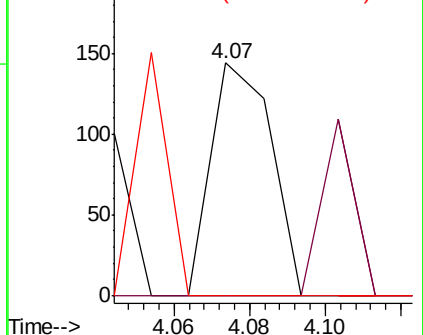
70 0.0 10.6 15.8#

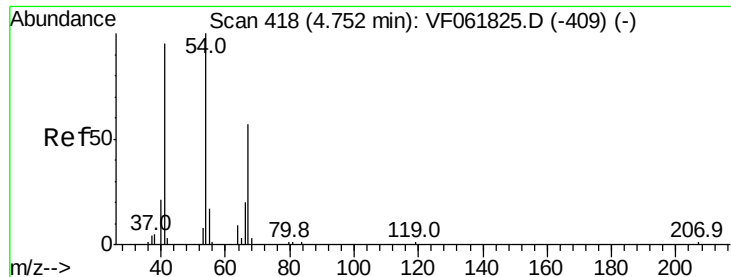


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 61.00 (60.70 to 61.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

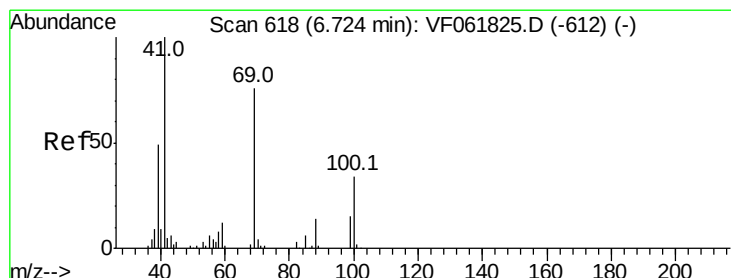
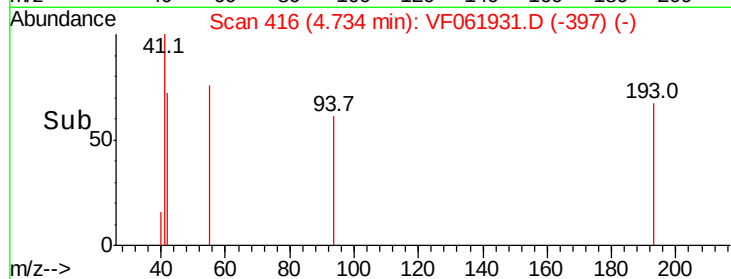
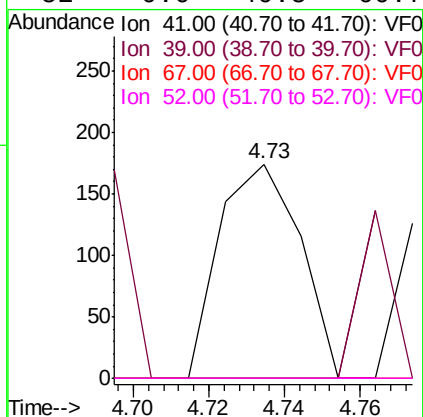
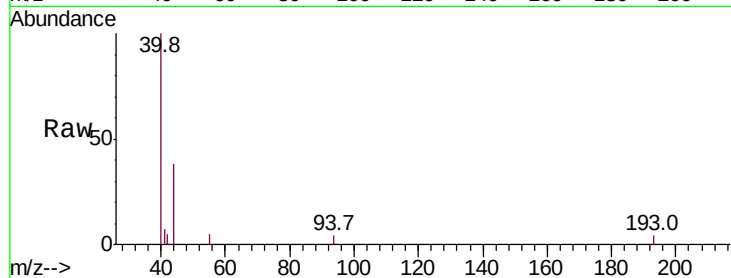




#41
Methacrylonitrile
Concen: 7.026 ug/l
RT: 4.73 min Scan# 416
Delta R.T. -0.02 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

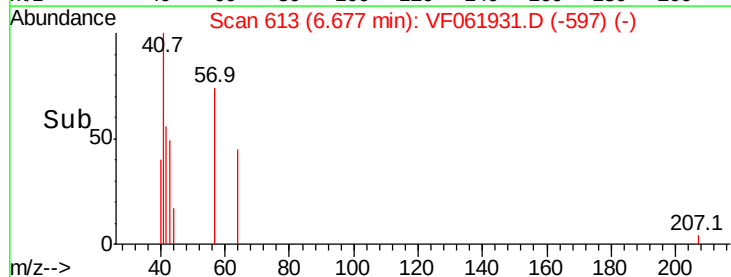
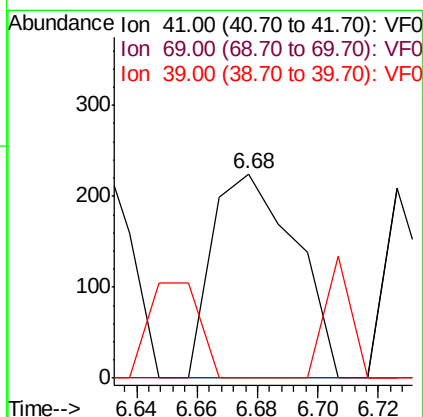
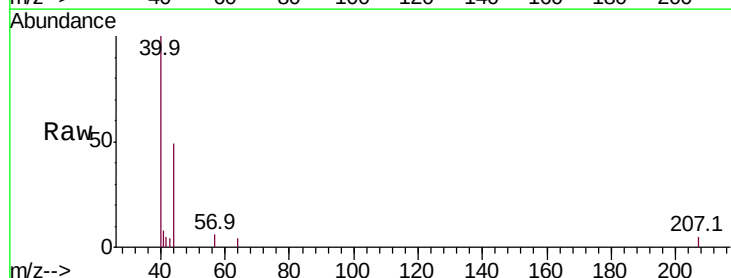
Instrument :
MSVOA_F
ClientSampled :
SP-3

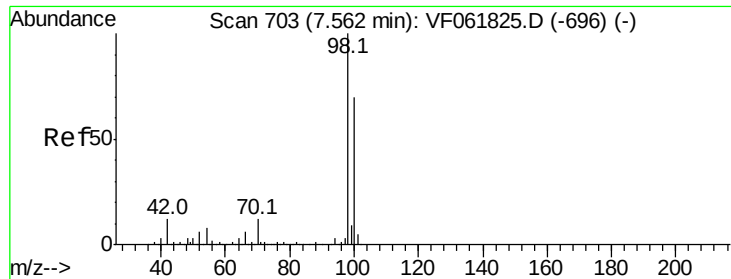
Tot Ion:	41	Resp:	257
Ion	Ratio	Lower	Upper
41	100		
39	0.0	43.0	64.6#
67	0.0	47.8	71.8#
52	0.0	40.5	60.7#



#48
Methyl methacrylate
Concen: 8.314 ug/l
RT: 6.68 min Scan# 613
Delta R.T. -0.05 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

Tgt Ion:	41	Resp:	433
Ion	Ratio	Lower	Upper
41	100		
69	0.0	60.4	90.6#
39	0.0	39.7	59.5#





#50

Toluene-d8

Concen: 51.425 ug/l

RT: 7.53 min Scan# 700

Delta R.T. -0.03 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

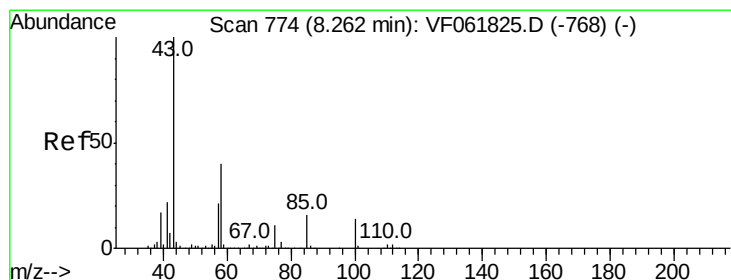
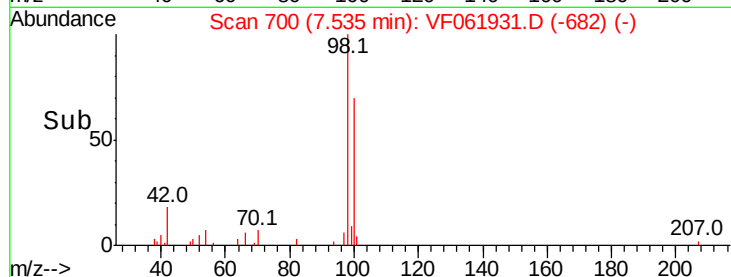
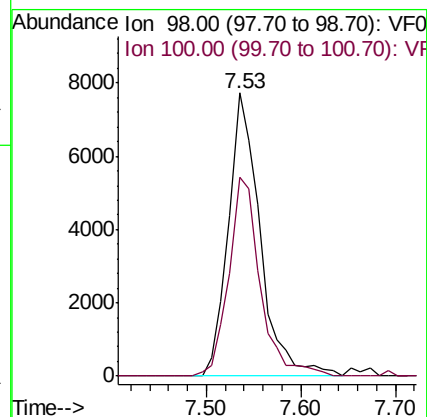
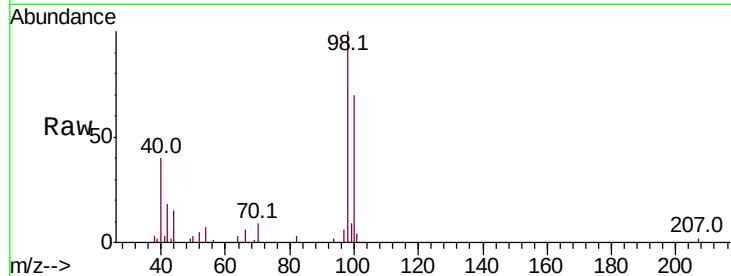
SP-3

Tot Ion: 98 Resp: 17961

Ion Ratio Lower Upper

98 100

100 70.2 56.0 84.0



#51

4-Methyl-2-Pentanone

Concen: 1.231 ug/l

RT: 8.20 min Scan# 767

Delta R.T. -0.07 min

Lab File: VF061931.D

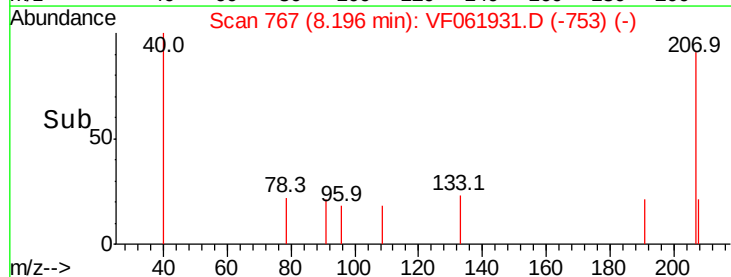
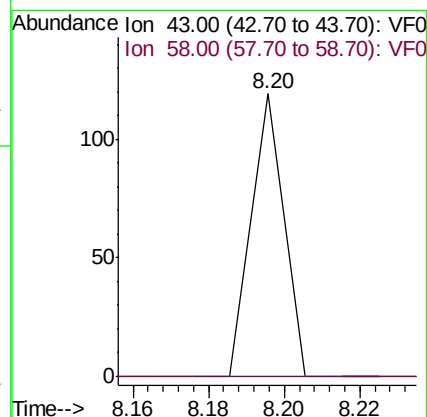
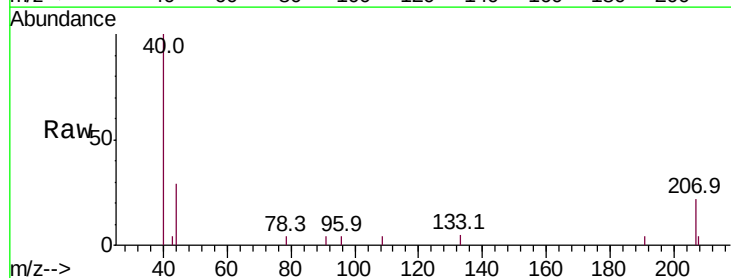
Acq: 13 Mar 2019 16:56

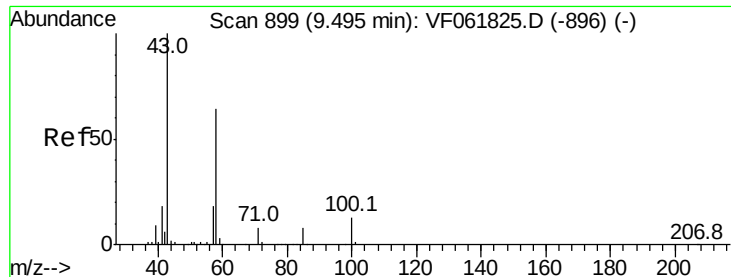
Tgt Ion: 43 Resp: 70

Ion Ratio Lower Upper

43 100

58 0.0 31.8 47.8#

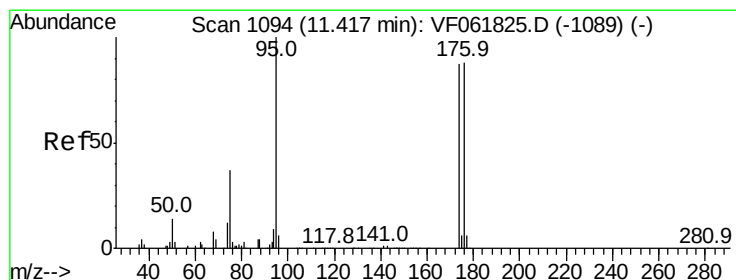
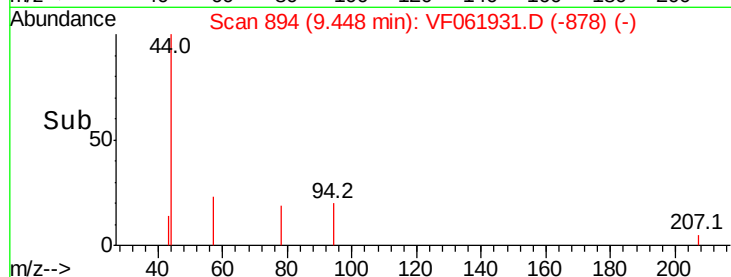
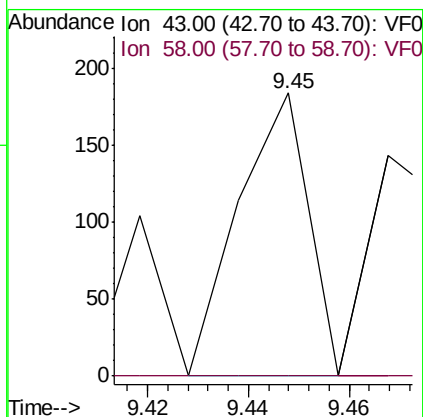
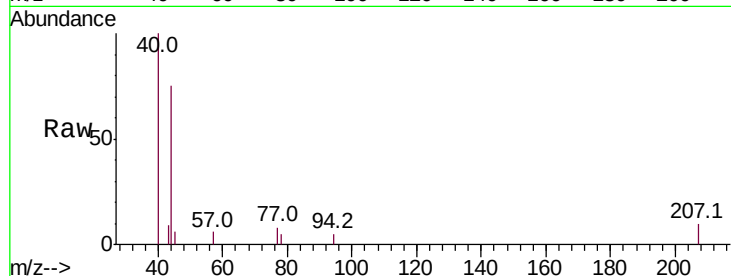




#59
2-Hexanone
Concen: 4.289 ug/l
RT: 9.45 min Scan# 894
Delta R.T. -0.05 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

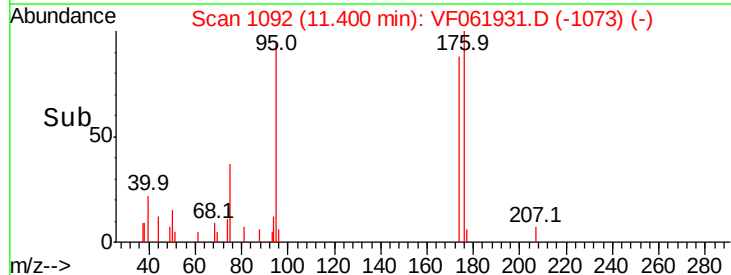
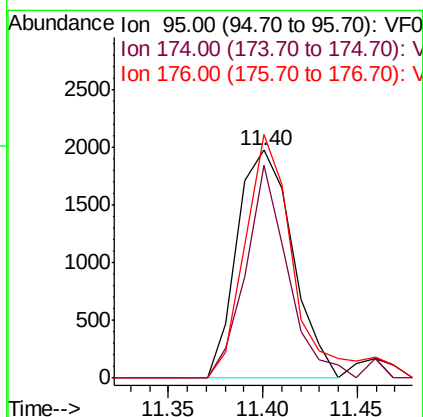
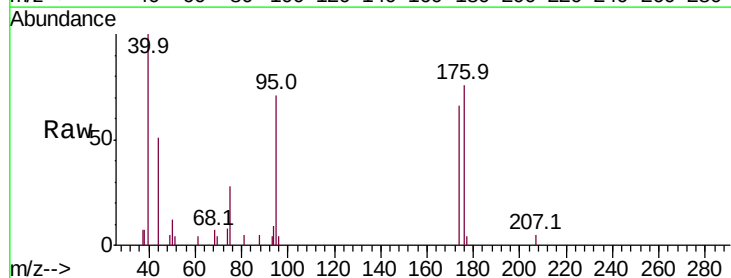
Instrument :
MSVOA_F
ClientSampled :
SP-3

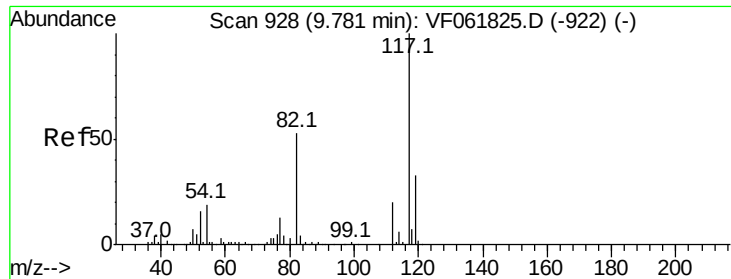
Tot Ion: 43 Resp: 176
Ion Ratio Lower Upper
43 100
58 0.0 28.8 86.4#



#62
4-Bromofluorobenzene
Concen: 29.353 ug/l
RT: 11.40 min Scan# 1092
Delta R.T. -0.02 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

Tgt Ion: 95 Resp: 4016
Ion Ratio Lower Upper
95 100
174 93.7 0.0 174.0
176 106.9 0.0 175.2

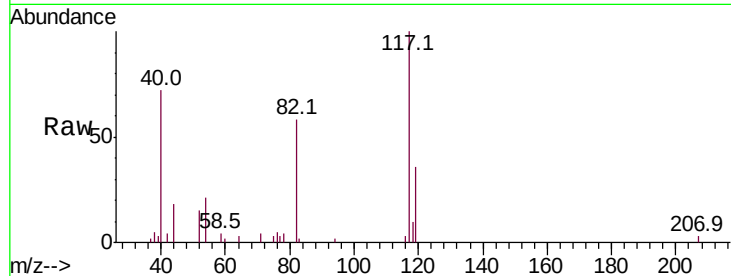




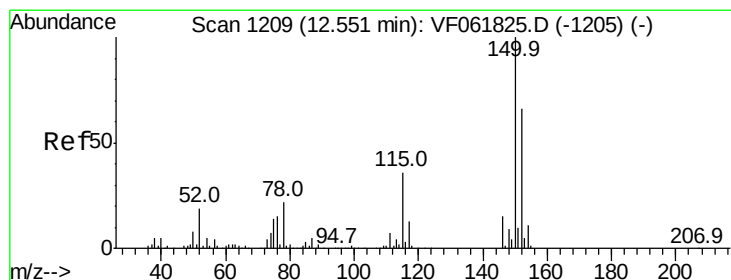
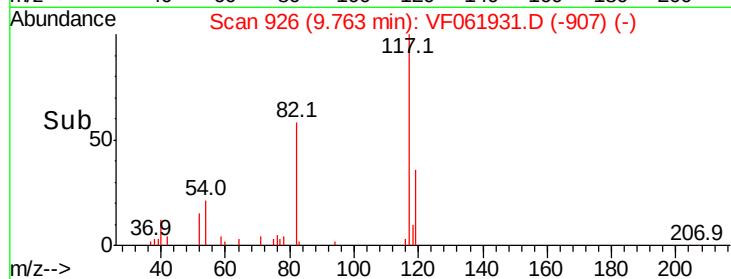
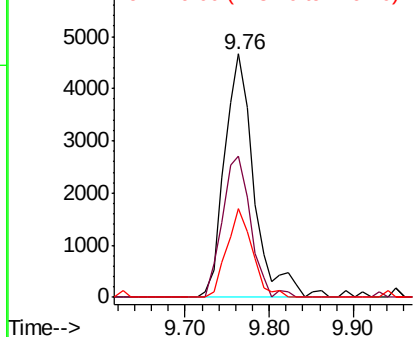
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.76 min Scan# 926
Delta R.T. -0.02 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

Instrument :
MSVOA_F
ClientSampleId :
SP-3

Tot Ion:117 Resp: 11392
Ion Ratio Lower Upper
117 100
82 58.2 42.6 63.8
119 36.4 26.0 39.0

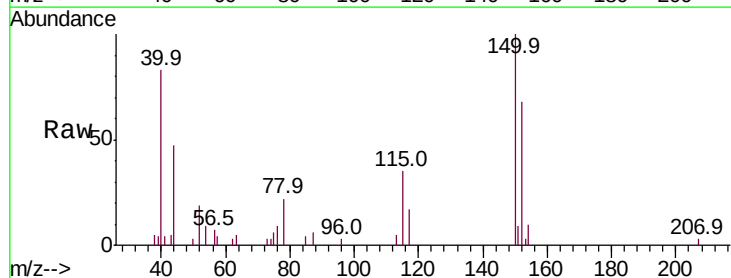


Abundance Ion 117.00 (116.70 to 117.70): V
Ion 82.00 (81.70 to 82.70): V
Ion 119.00 (118.70 to 119.70): V

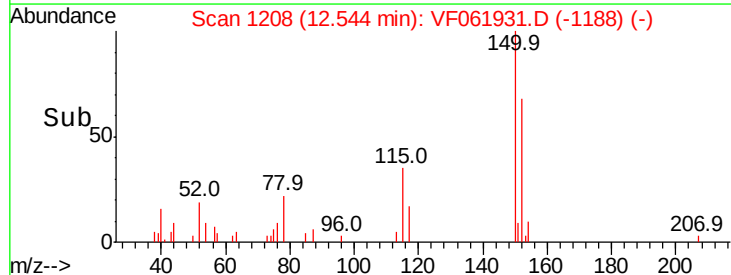
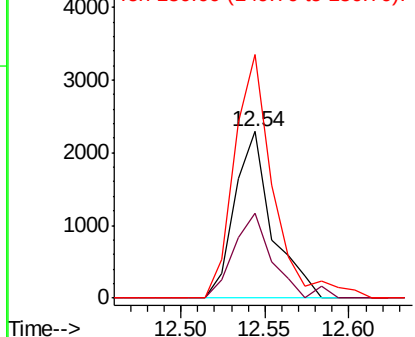


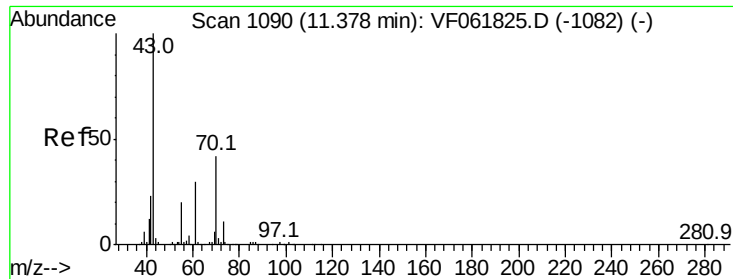
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.54 min Scan# 1208
Delta R.T. -0.01 min
Lab File: VF061931.D
Acq: 13 Mar 2019 16:56

Tgt Ion:152 Resp: 3542
Ion Ratio Lower Upper
152 100
115 50.7 27.7 83.1
150 146.1 0.0 304.2



Abundance Ion 152.00 (151.70 to 152.70): V
Ion 115.00 (114.70 to 115.70): V
Ion 150.00 (149.70 to 150.70): V





#74

N-amvl acetate

Concen: 7.108 ug/l

RT: 11.39 min Scan# 1091

Delta R.T. 0.01 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

SP-3

Tot Ion: 43 Resp: 399

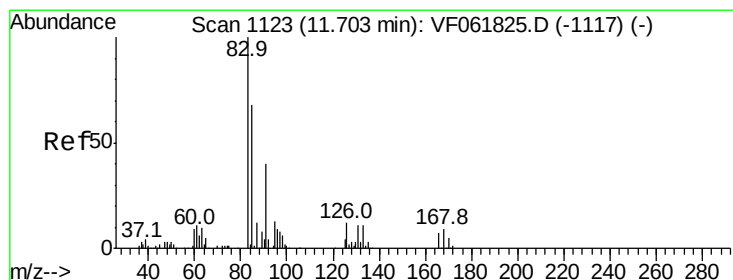
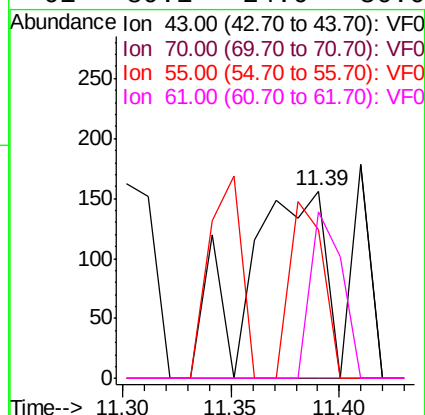
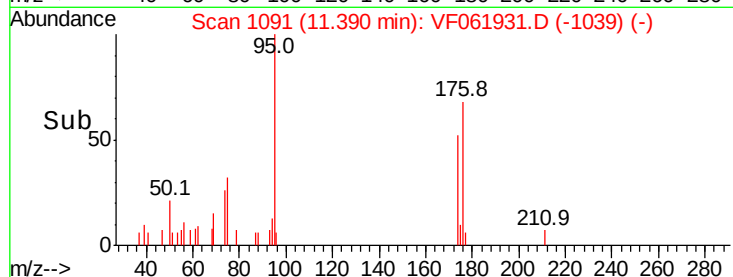
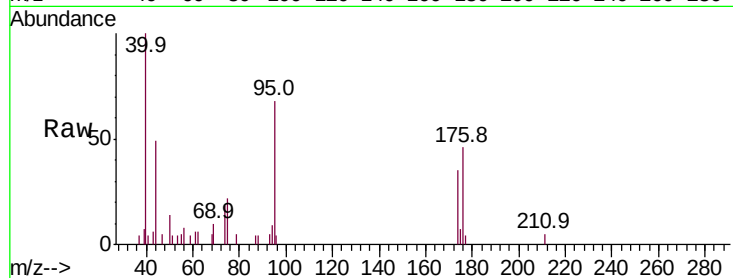
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.0#

55 79.5 16.3 24.5#

61 89.1 24.0 36.0#



#75

1,1,2,2-Tetrachloroethane

Concen: 1.949 ug/l

RT: 11.66 min Scan# 1118

Delta R.T. -0.05 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

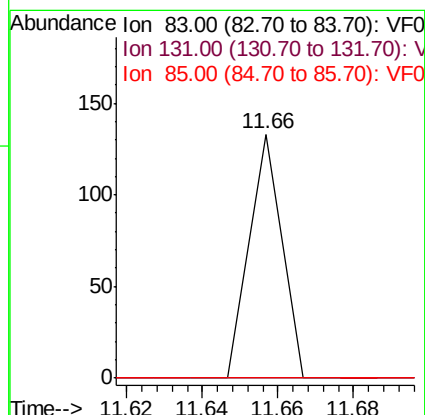
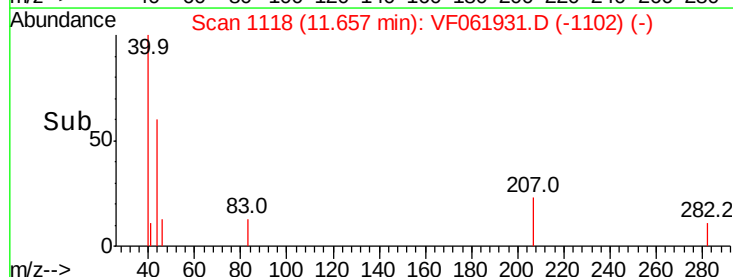
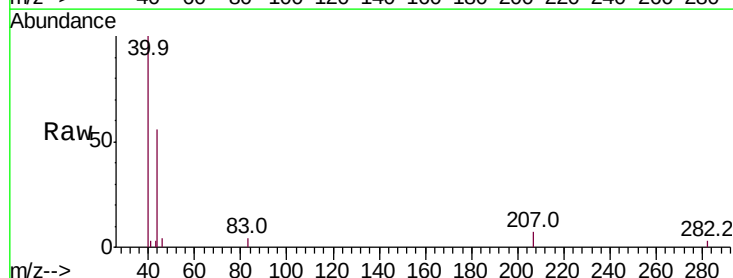
Tgt Ion: 83 Resp: 79

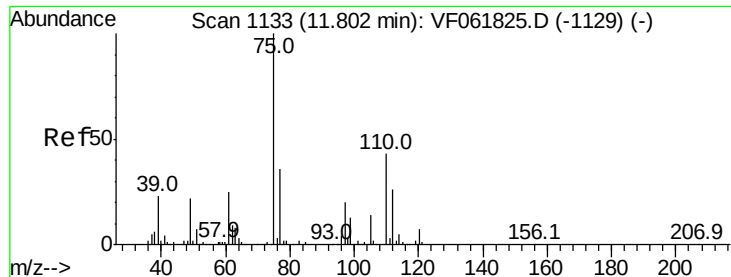
Ion Ratio Lower Upper

83 100

131 0.0 5.5 16.7#

85 0.0 34.2 102.6#





#76

1,2,3-Trichloropropane

Concen: 2.603 ug/l

RT: 11.86 min Scan# 1139

Delta R.T. 0.06 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampled :

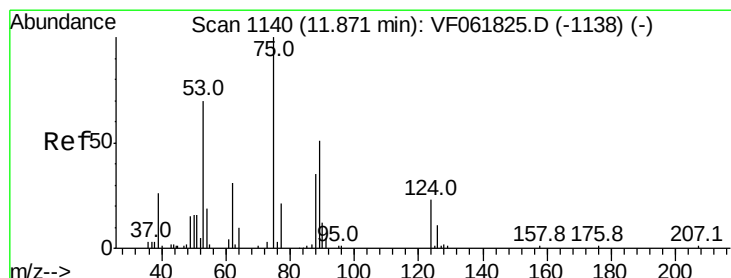
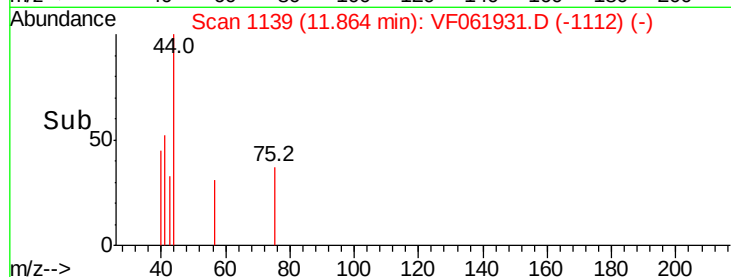
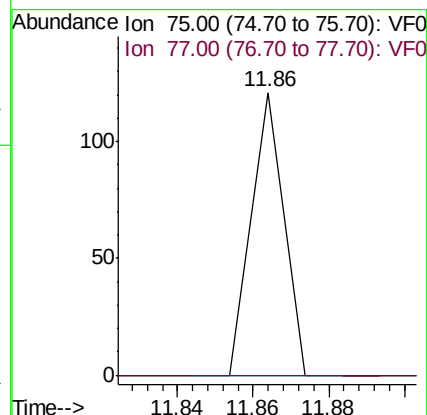
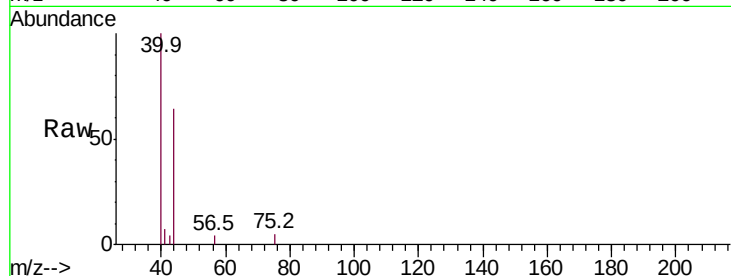
SP-3

Tot Ion: 75 Resp: 72

Ion Ratio Lower Upper

75 100

77 0.0 18.1 54.4#



#81

trans-1,4-Dichloro-2-butene

Concen: 5.692 ug/l

RT: 11.86 min Scan# 1139

Delta R.T. -0.01 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

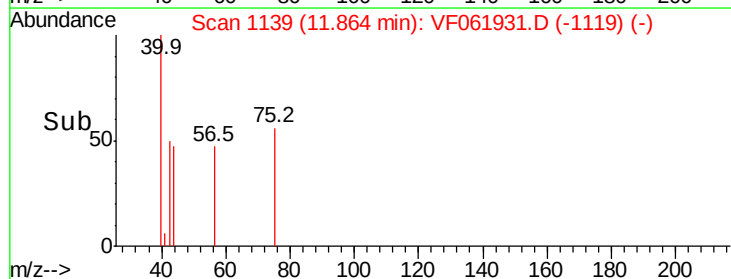
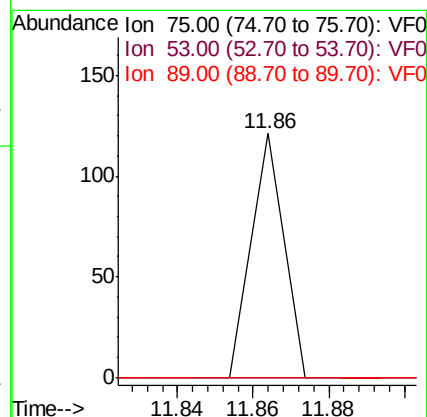
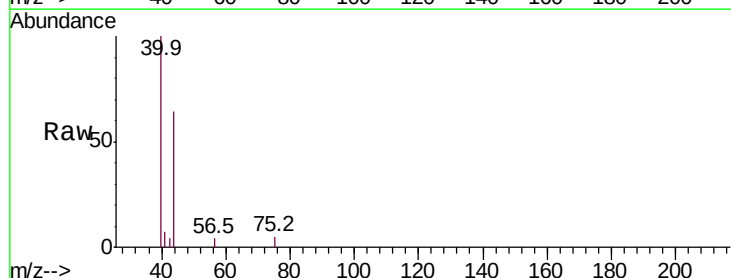
Tgt Ion: 75 Resp: 72

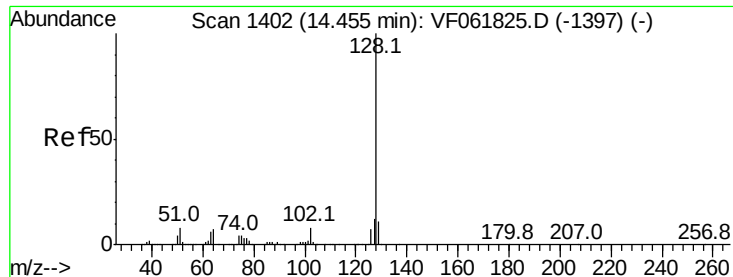
Ion Ratio Lower Upper

75 100

53 0.0 58.6 88.0#

89 0.0 41.4 62.0#





#95

Naphthalene

Concen: 1.153 ug/l

RT: 14.44 min Scan# 1400

Delta R.T. -0.02 min

Lab File: VF061931.D

Acq: 13 Mar 2019 16:56

Instrument :

MSVOA_F

ClientSampleId :

SP-3

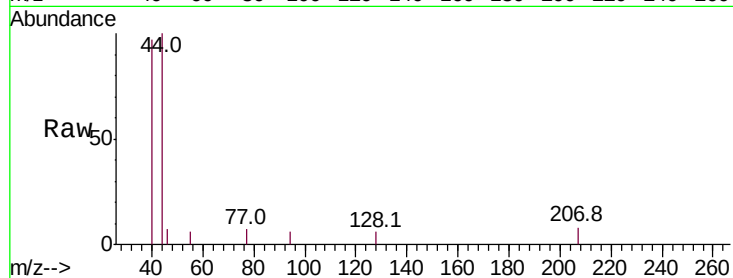
Tot Ion:128 Resp: 152

Ion Ratio Lower Upper

128 100

127 0.0 9.3 13.9#

129 0.0 8.8 13.2#



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

