

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF021219\
 Data File : VF061607.D
 Acq On : 12 Feb 2019 14:24
 Operator : VA/AP
 Sample : K1343-01
 Misc : 6.65g/5mL/MSVOA-F/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :
 JC-02-021119-A

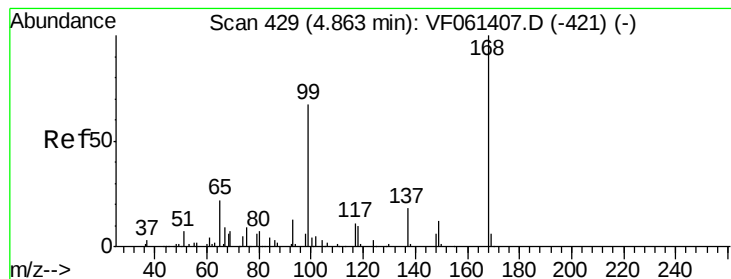
Quant Time: Feb 13 02:48:34 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F011519S.M
 Quant Title : SW846 8260
 QLast Update : Wed Jan 16 04:51:59 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.86	168	187521	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.58	114	344827	50.00	ug/l	-0.01
63) Chlorobenzene-d5	9.76	117	283163	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.54	152	113451	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	4.83	65	122098	52.74	ug/l	0.00
Spiked Amount			Recovery	=	105.48%	
35) Dibromofluoromethane	4.10	113	133568	49.09	ug/l	0.00
Spiked Amount			Recovery	=	98.18%	
50) Toluene-d8	7.54	98	291575	39.11	ug/l	0.00
Spiked Amount			Recovery	=	78.22%	
62) 4-Bromofluorobenzene	11.40	95	117151	33.63	ug/l	0.00
Spiked Amount			Recovery	=	67.26%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	2.55	59	478	4.878	ug/l #	15
13) Acrolein	1.93	56	582	16.947	ug/l	96
14) Allyl chloride	2.09	41	405	Below Cal	#	73
15) Acrylonitrile	2.93	53	755	3.008	ug/l	90
16) Acetone	2.23	43	20273	43.649	ug/l	94
18) Methyl Acetate	2.33	43	1927	2.092	ug/l #	92
20) Methylene Chloride	2.17	84	2599	Below Cal	#	80
23) Vinyl Acetate	3.20	43	1654	3.819	ug/l #	78
25) 2-Butanone	4.33	43	4116	5.329	ug/l #	87
29) Tetrahydrofuran	4.04	42	825	2.481	ug/l #	44
40) Benzene	4.62	78	11242	1.264	ug/l	95
49) 1,4-Dioxane	6.41	88	82	Below Cal	#	13
51) 4-Methyl-2-Pentanone	8.25	43	4866	3.300	ug/l	98
52) Toluene	7.61	92	8193	1.398	ug/l	98
56) Ethyl methacrylate	8.61	69	2885	1.491	ug/l #	79
58) 2-Chloroethyl Vinyl ether	7.28	63	574	30.034	ug/l #	69
59) 2-Hexanone	9.48	43	3102	3.017	ug/l	88
69) o-Xylene	10.71	106	10926	2.664	ug/l	86
74) N-amyl acetate	11.37	43	3919	1.796	ug/l #	66
75) 1,1,2,2-Tetrachloroethane	11.66	83	1962	1.194	ug/l #	1
76) 1,2,3-Trichloropropane	11.82	75	1188	1.006	ug/l #	1
79) 2-Chlorotoluene	11.70	91	7387	1.154	ug/l #	50
80) 1,3,5-Trimethylbenzene	11.81	105	51900	6.970	ug/l	100
84) 1,2,4-Trimethylbenzene	12.20	105	33355	4.349	ug/l	97
86) p-Isopropyltoluene	12.42	119	34071	3.965	ug/l	97
89) n-Butylbenzene	12.83	91	19286	2.176	ug/l #	23
92) 1,2-Dibromo-3-Chloropropan	13.60	75	312	1.070	ug/l #	1
95) Naphthalene	14.45	128	19055	3.927	ug/l #	65

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.86 min Scan# 429

Delta R.T. -0.00 min

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Instrument :

MSVOA_F

ClientSampleId :

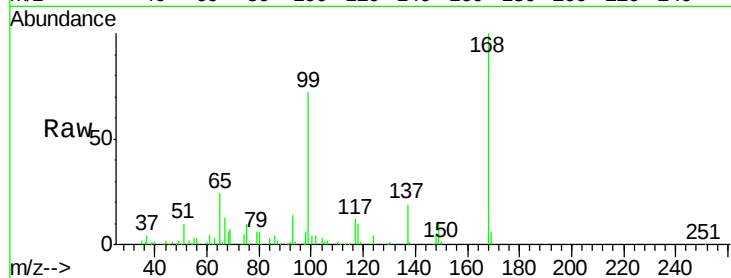
JC-02-021119-A

Tot Ion:168 Resp: 187521

Ion Ratio Lower Upper

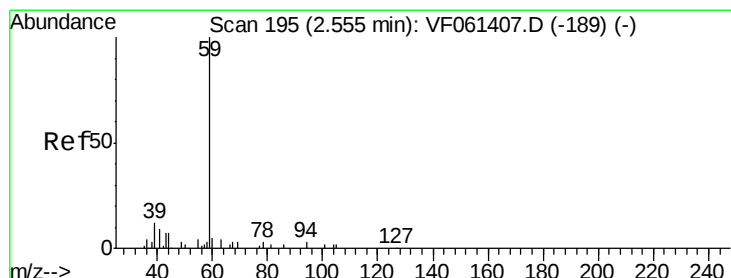
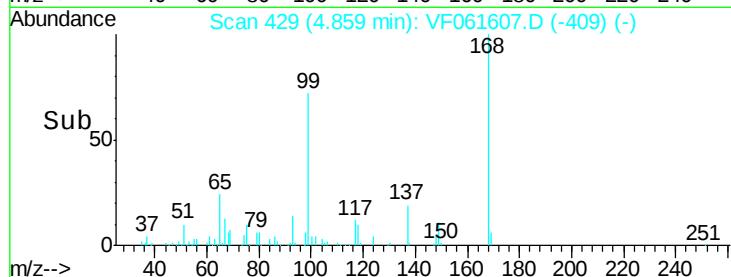
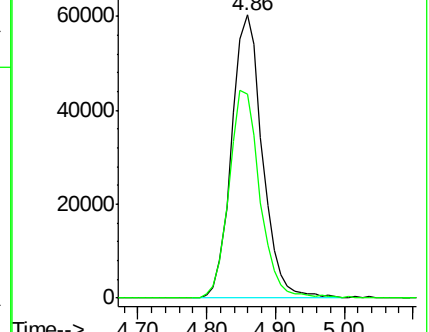
168 100

99 72.1 53.5 80.3



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0



#11

Tert butyl alcohol

Concen: 4.878 ug/l

RT: 2.55 min Scan# 195

Delta R.T. -0.00 min

Lab File: VF061607.D

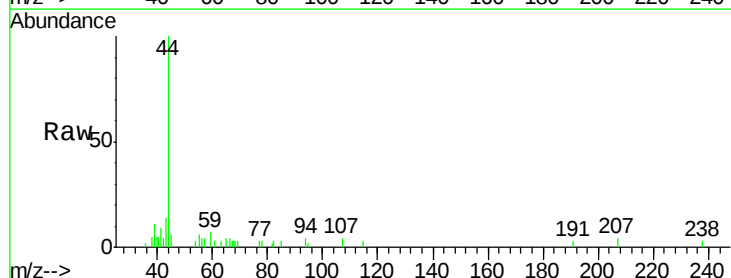
Acq: 12 Feb 2019 14:24

Tgt Ion: 59 Resp: 478

Ion Ratio Lower Upper

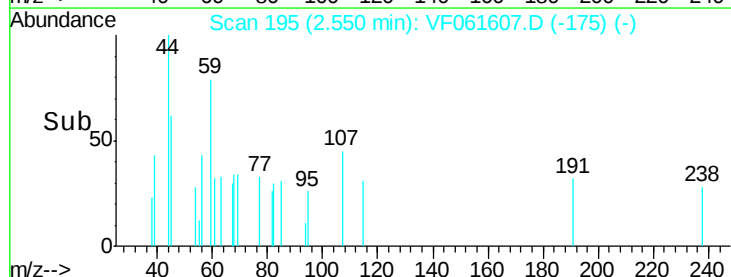
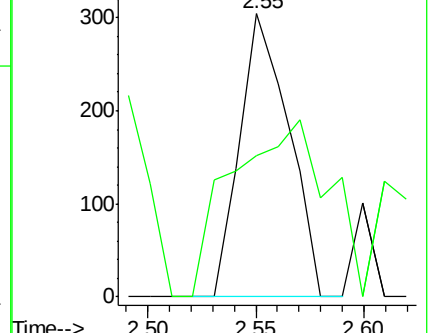
59 100

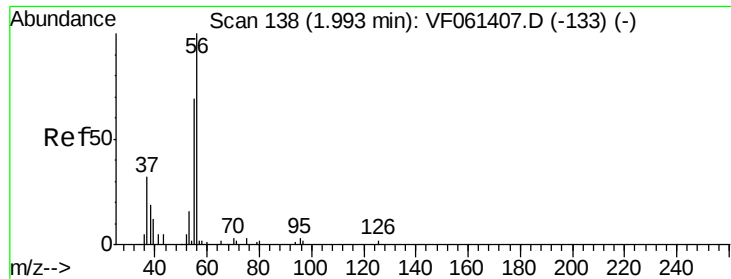
57 50.0 11.9 17.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0





#13

Acrolein

Concen: 16.947 ug/l

RT: 1.93 min Scan# 132

Delta R.T. -0.06 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

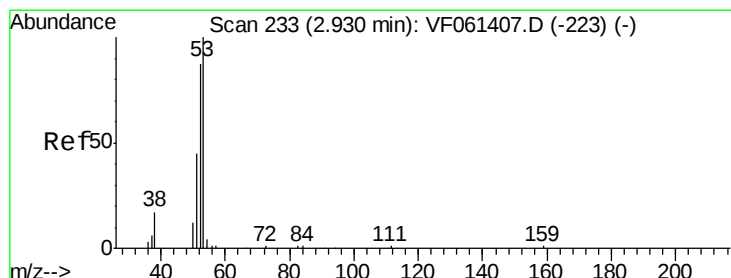
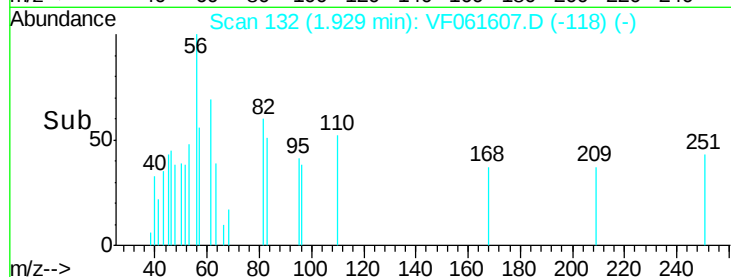
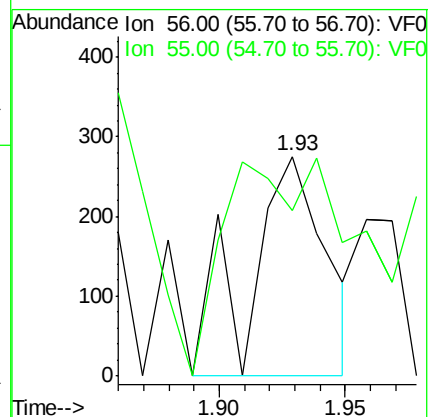
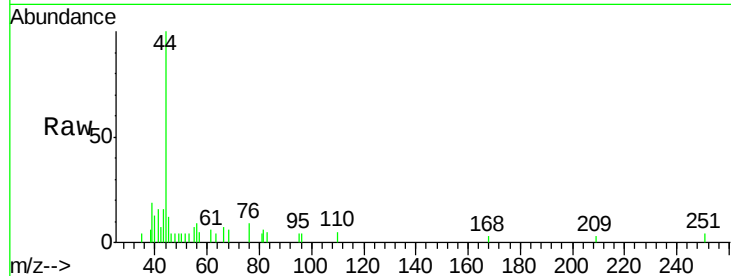
JC-02-021119-A

Tot Ion: 56 Resp: 582

Ion Ratio Lower Upper

56 100

55 75.3 57.5 86.3



#15

Acrylonitrile

Concen: 3.008 ug/l

RT: 2.93 min Scan# 233

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

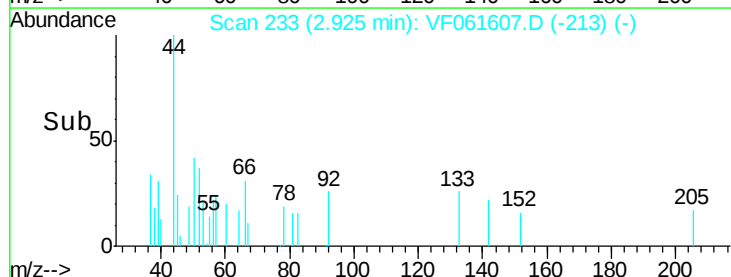
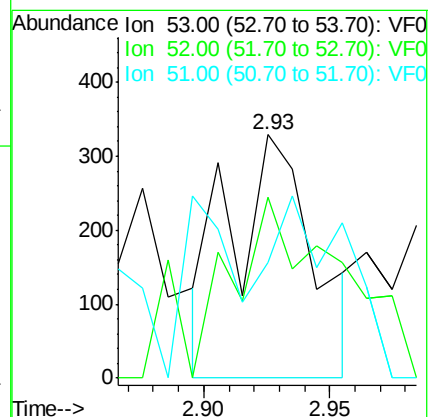
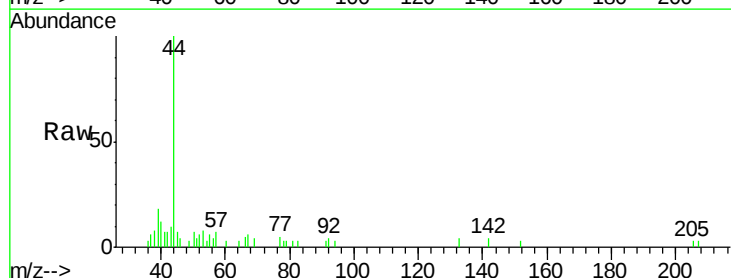
Tgt Ion: 53 Resp: 755

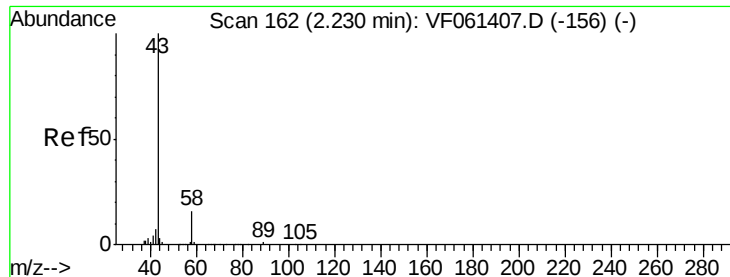
Ion Ratio Lower Upper

53 100

52 74.2 69.6 104.4

51 47.7 36.8 55.2





#16

Acetone

Concen: 43.649 ug/l

RT: 2.23 min Scan# 163

Delta R.T. 0.01 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

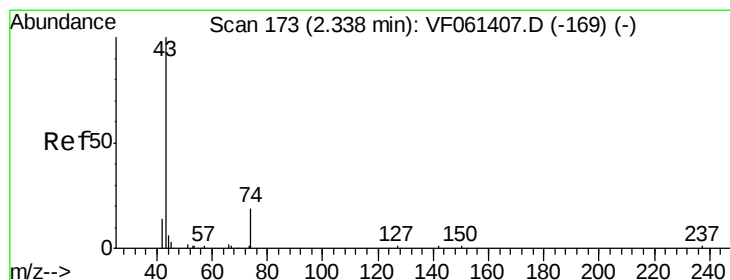
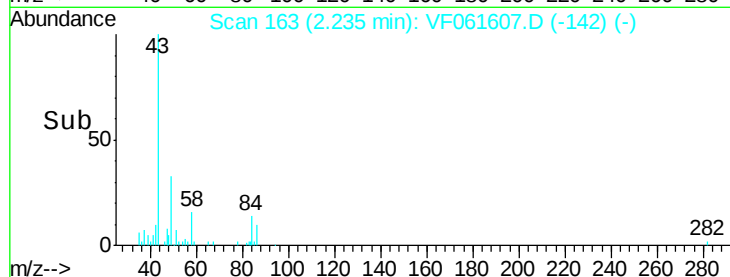
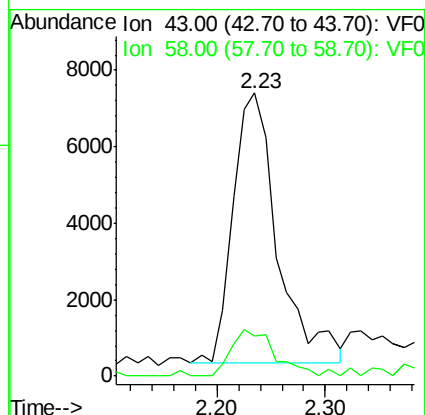
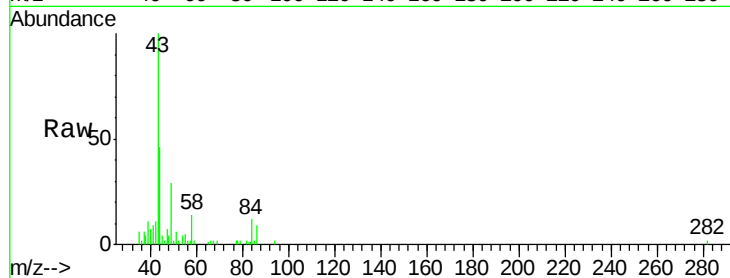
JC-02-021119-A

Tot Ion: 43 Resp: 20273

Ion Ratio Lower Upper

43 100

58 14.2 13.3 19.9



#18

Methyl Acetate

Concen: 2.092 ug/l

RT: 2.33 min Scan# 173

Delta R.T. -0.00 min

Lab File: VF061607.D

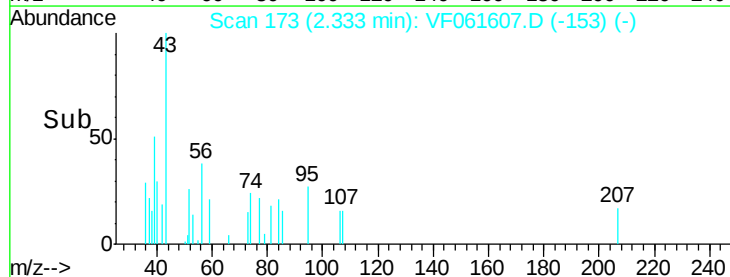
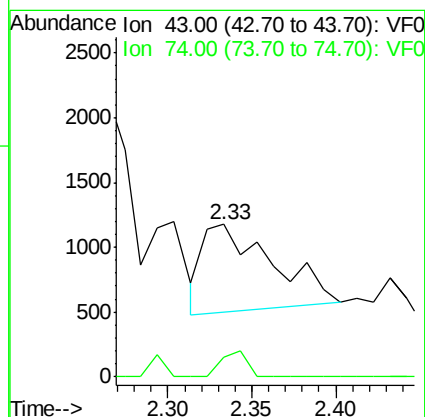
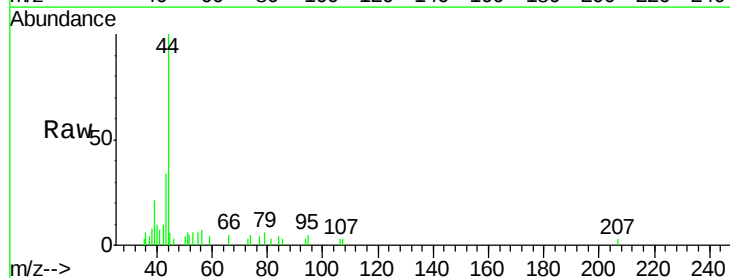
Acq: 12 Feb 2019 14:24

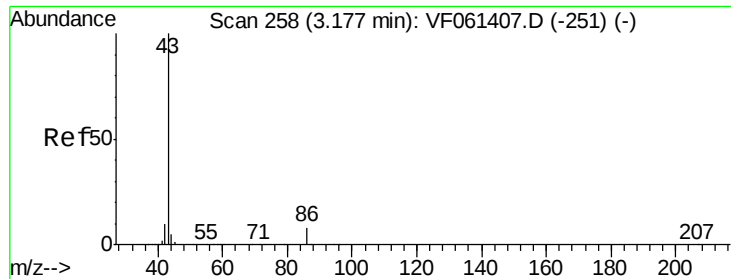
Tgt Ion: 43 Resp: 1927

Ion Ratio Lower Upper

43 100

74 13.3 13.4 20.0#





#23

Vinyl Acetate

Concen: 3.819 ug/l

RT: 3.20 min Scan# 261

Delta R.T. 0.03 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

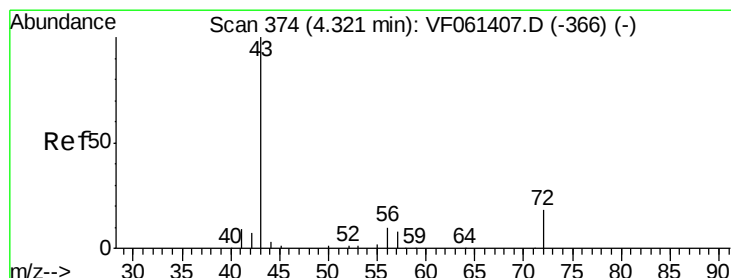
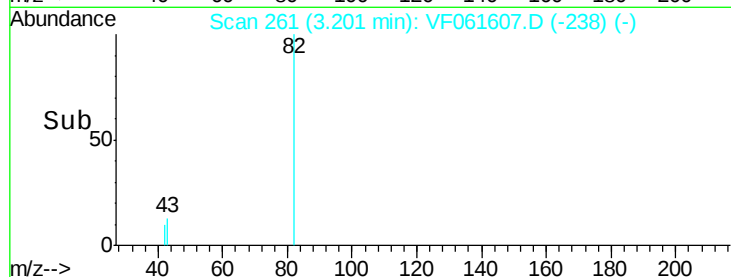
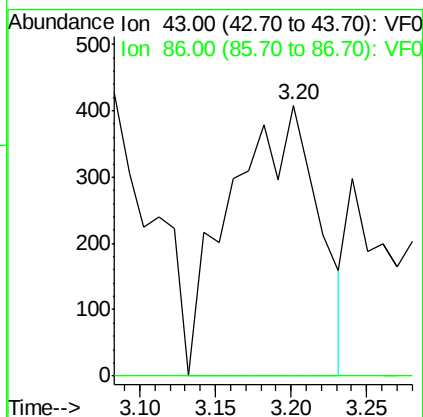
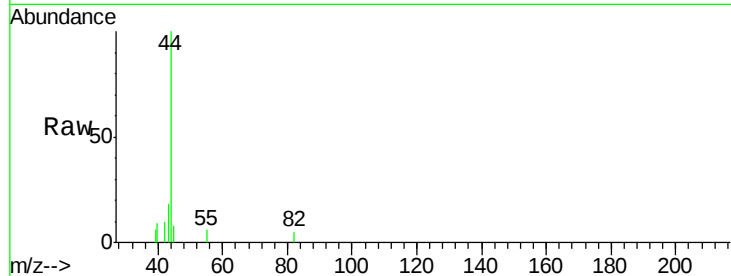
JC-02-021119-A

Tot Ion: 43 Resp: 1654

Ion Ratio Lower Upper

43 100

86 0.0 6.2 9.4#



#25

2-Butanone

Concen: 5.329 ug/l

RT: 4.33 min Scan# 375

Delta R.T. 0.01 min

Lab File: VF061607.D

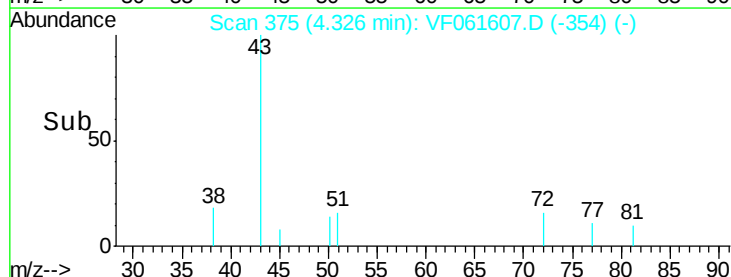
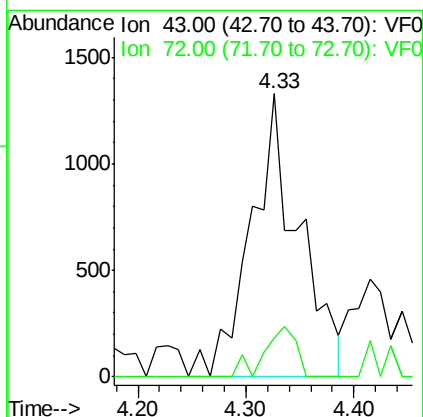
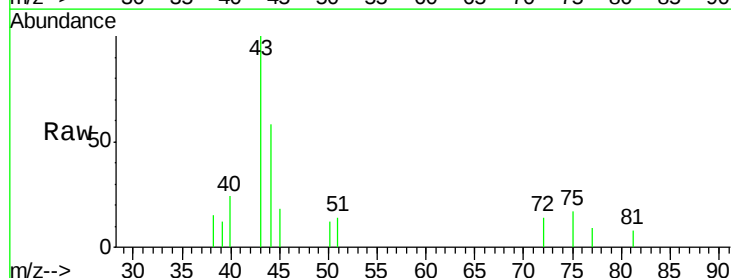
Acq: 12 Feb 2019 14:24

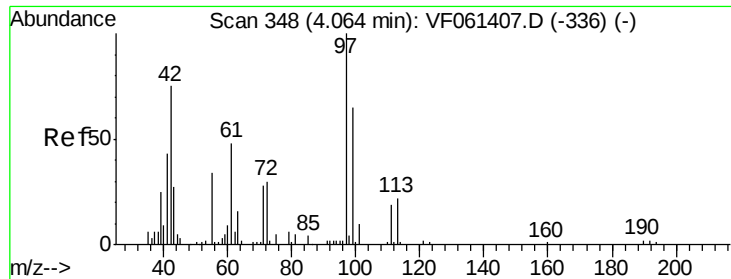
Tgt Ion: 43 Resp: 4116

Ion Ratio Lower Upper

43 100

72 13.7 15.8 23.6#





#29

Tetrahydrofuran

Concen: 2.481 ug/l

RT: 4.04 min Scan# 346

Delta R.T. -0.02 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

JC-02-021119-A

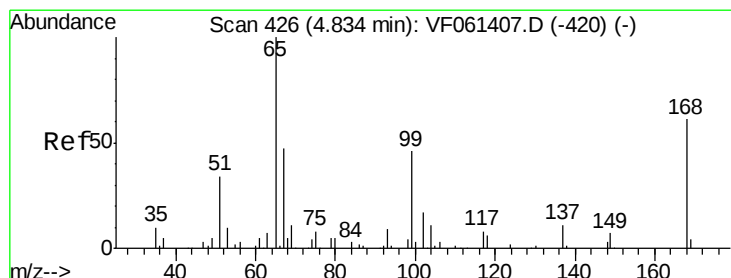
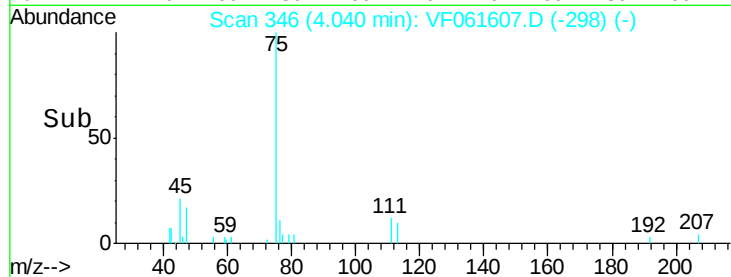
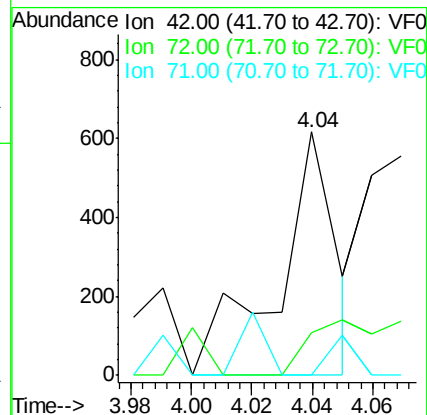
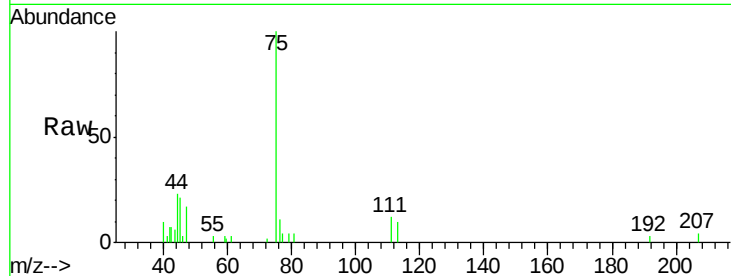
Tot Ion: 42 Resp: 825

Ion Ratio Lower Upper

42 100

72 0.0 28.9 43.3#

71 7.3 29.6 44.4#



#33

1,2-Dichloroethane-d4

Concen: 52.738 ug/l

RT: 4.83 min Scan# 426

Delta R.T. -0.00 min

Lab File: VF061607.D

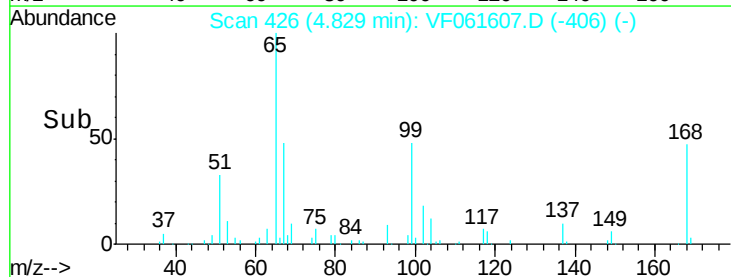
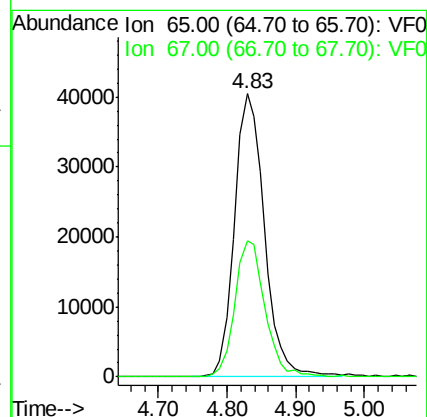
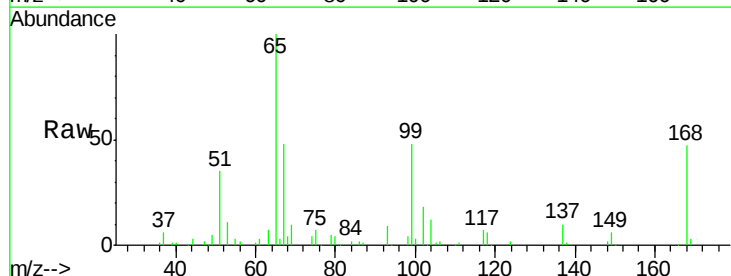
Acq: 12 Feb 2019 14:24

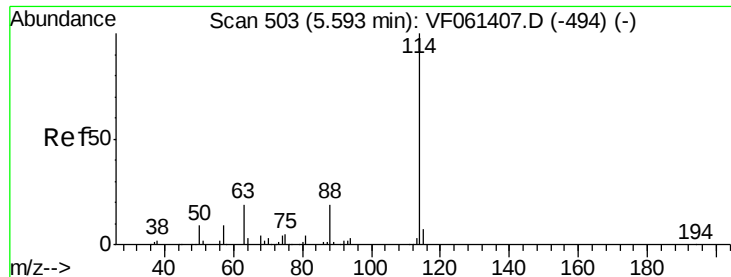
Tgt Ion: 65 Resp: 122098

Ion Ratio Lower Upper

65 100

67 48.1 0.0 99.8





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.58 min Scan# 502

Delta R.T. -0.01 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

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ClientSampleId :

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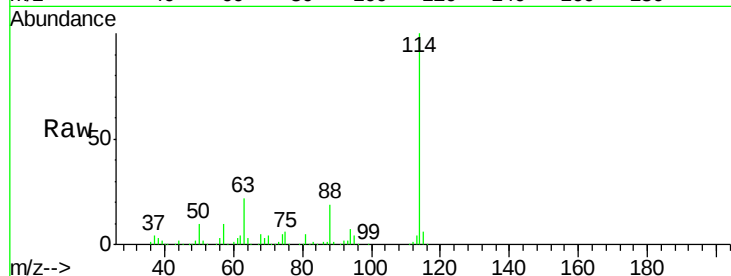
Tot Ion:114 Resp: 344827

Ion Ratio Lower Upper

114 100

63 22.4 0.0 39.0

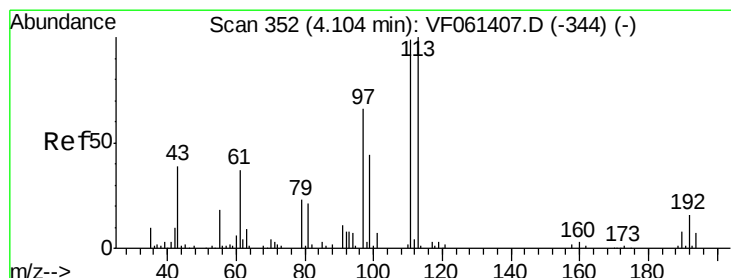
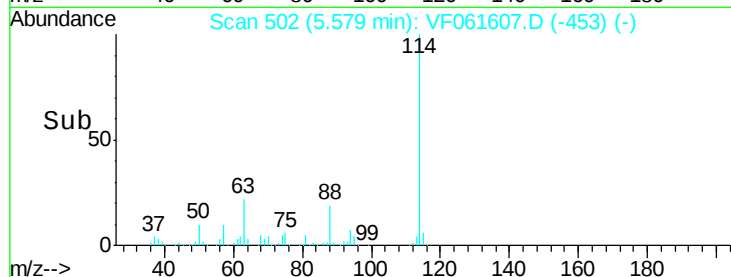
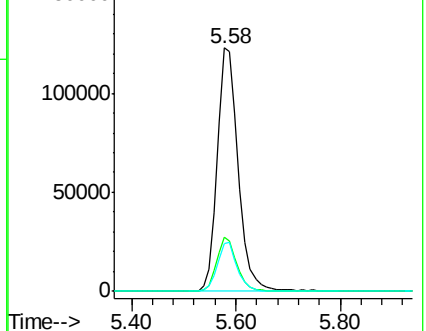
88 19.4 0.0 37.4



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: 49.088 ug/l

RT: 4.10 min Scan# 352

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

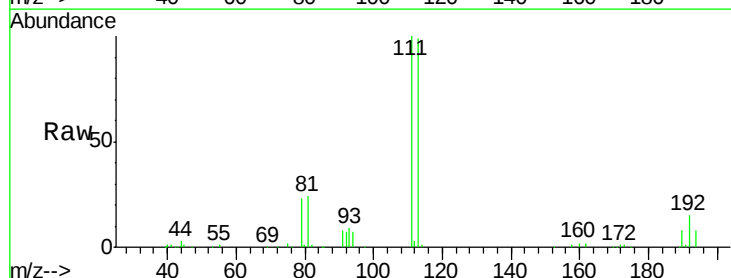
Tgt Ion:113 Resp: 133568

Ion Ratio Lower Upper

113 100

111 100.6 79.4 119.0

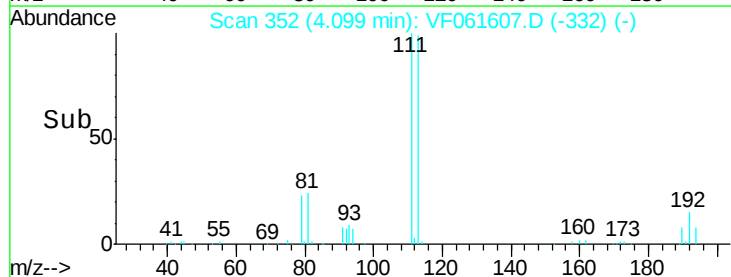
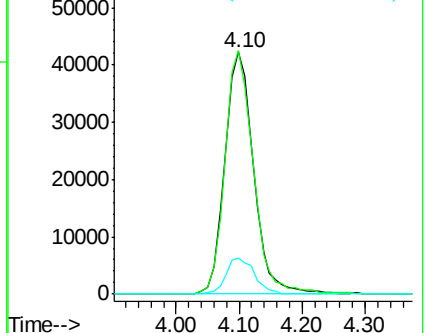
192 15.0 12.4 18.6

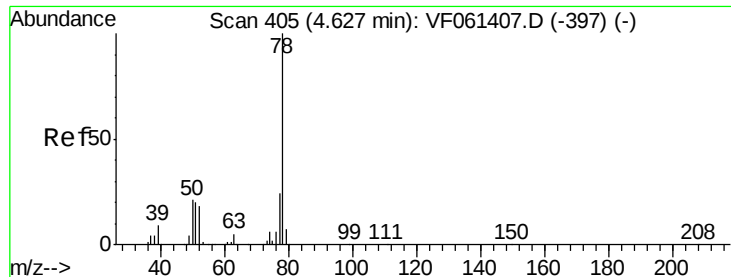


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#40

Benzene

Concen: 1.264 ug/l

RT: 4.62 min Scan# 405

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

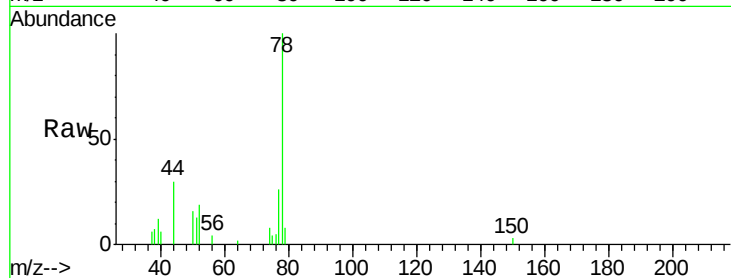
JC-02-021119-A

Tot Ion: 78 Resp: 11242

Ion Ratio Lower Upper

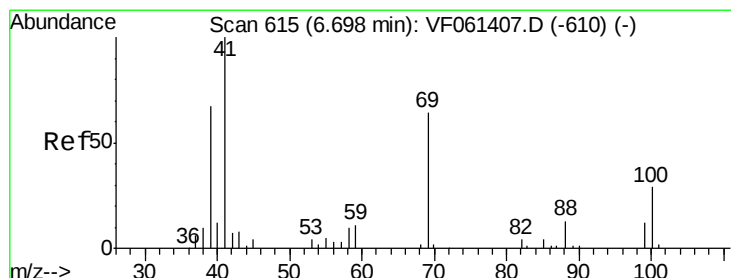
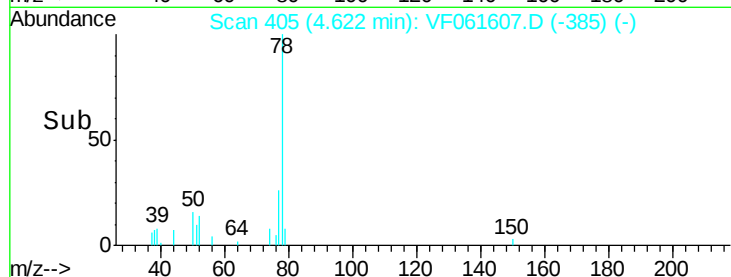
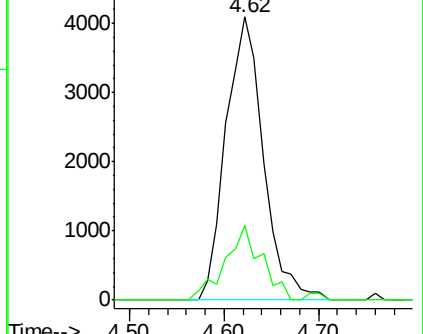
78 100

77 26.2 19.0 28.6



Abundance Ion 78.10 (77.80 to 78.80): VF0

Ion 77.00 (76.70 to 77.70): VF0



#49

1,4-Dioxane

Concen: Below Cal

RT: 6.41 min Scan# 586

Delta R.T. -0.29 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

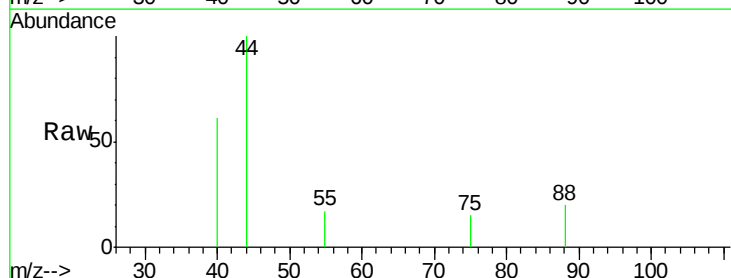
Tgt Ion: 88 Resp: 82

Ion Ratio Lower Upper

88 100

43 0.0 55.5 83.3#

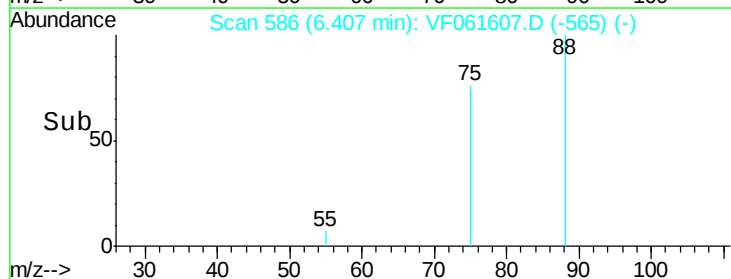
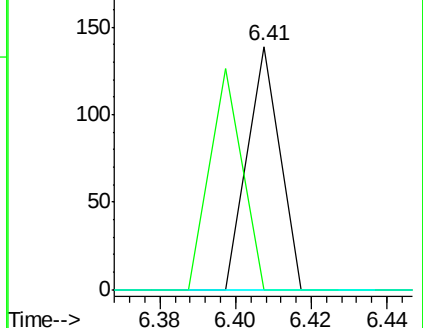
58 0.0 59.9 89.9#

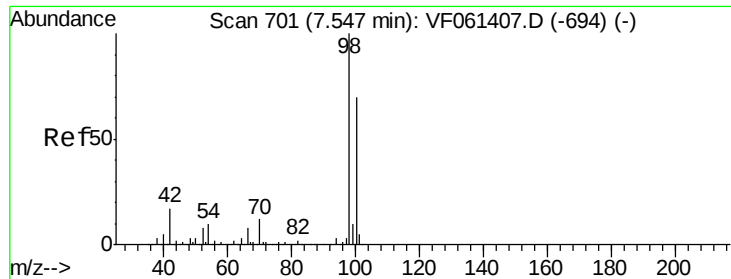


Abundance Ion 88.00 (87.70 to 88.70): VF0

Ion 43.00 (42.70 to 43.70): VF0

Ion 58.00 (57.70 to 58.70): VF0





#50

Toluene-d8

Concen: 39.111 ug/l

RT: 7.54 min Scan# 701

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

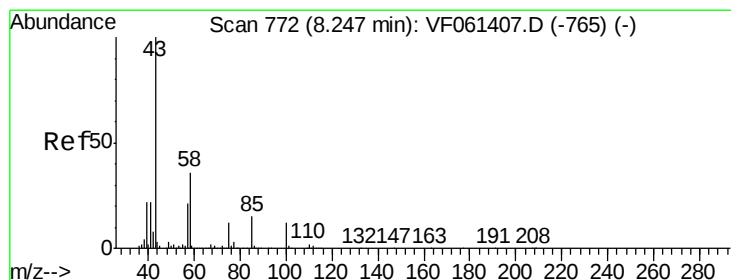
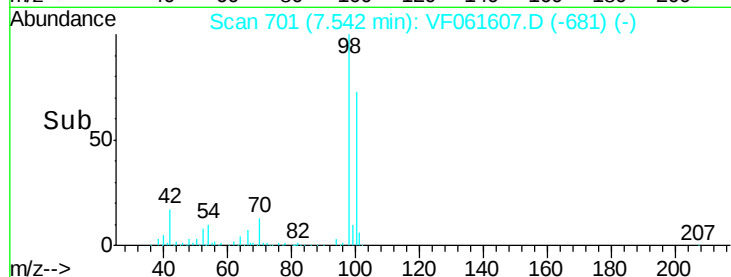
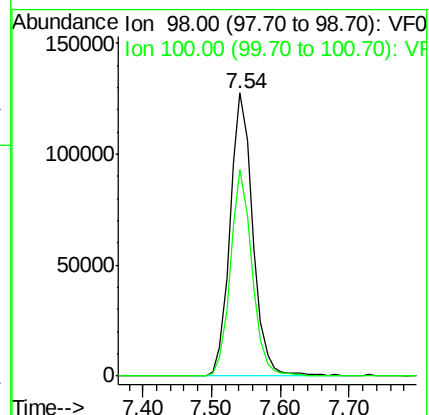
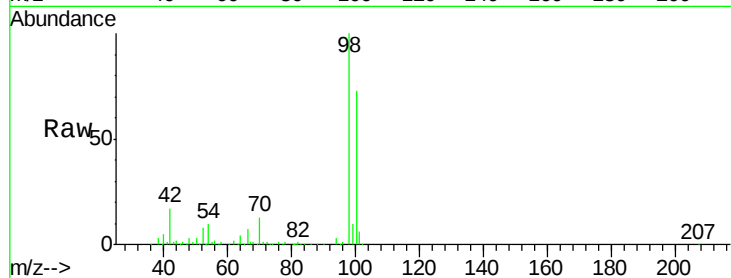
JC-02-021119-A

Tot Ion: 98 Resp: 291575

Ion Ratio Lower Upper

98 100

100 72.8 55.6 83.4



#51

4-Methyl-2-Pentanone

Concen: 3.300 ug/l

RT: 8.25 min Scan# 773

Delta R.T. 0.01 min

Lab File: VF061607.D

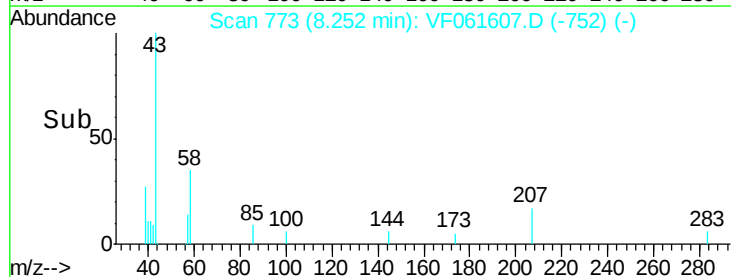
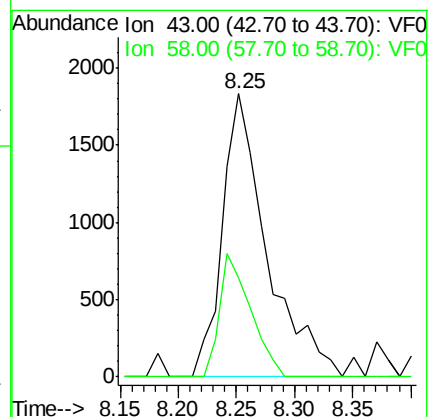
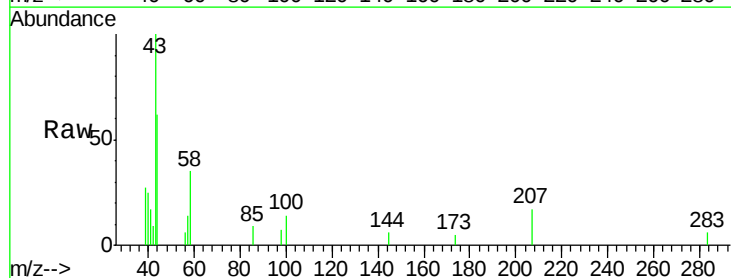
Acq: 12 Feb 2019 14:24

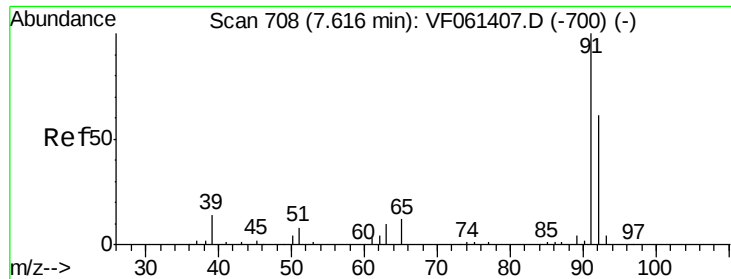
Tgt Ion: 43 Resp: 4866

Ion Ratio Lower Upper

43 100

58 35.0 28.8 43.2





#52

Toluene

Concen: 1.398 ug/l

RT: 7.61 min Scan# 708

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

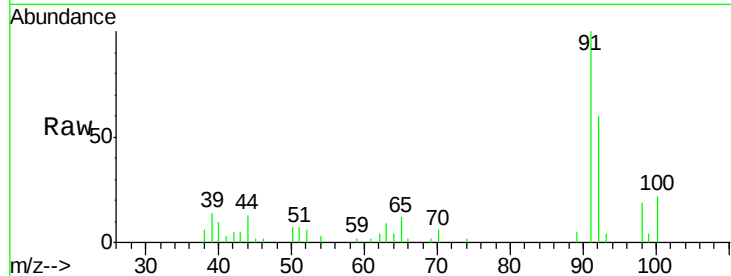
JC-02-021119-A

Tot Ion: 92 Resp: 8193

Ion Ratio Lower Upper

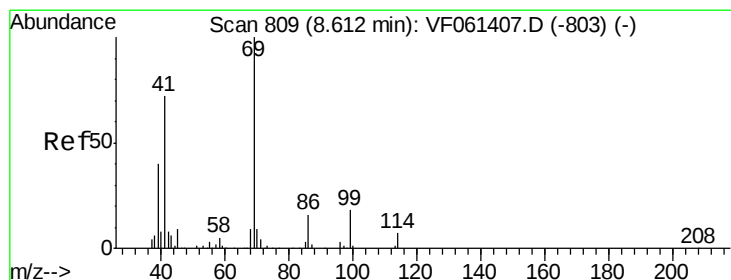
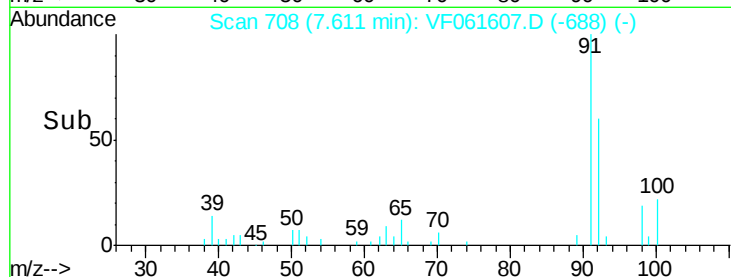
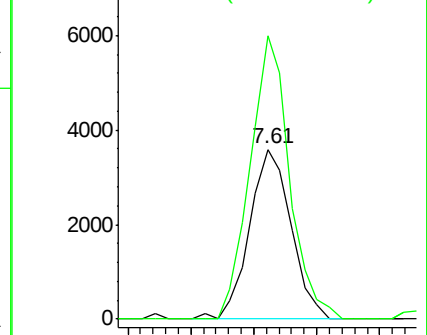
92 100

91 166.8 131.2 196.8



Abundance Ion 92.00 (91.70 to 92.70): VF0

Ion 91.00 (90.70 to 91.70): VF0



#56

Ethyl methacrylate

Concen: 1.491 ug/l

RT: 8.61 min Scan# 809

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

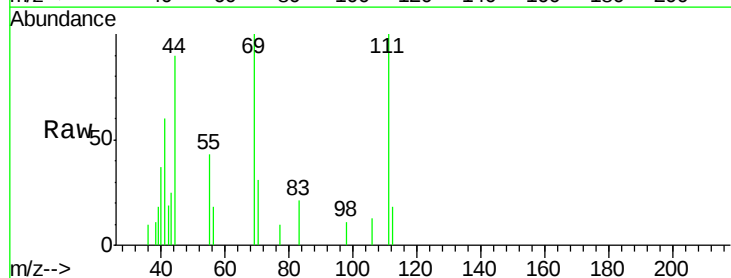
Tgt Ion: 69 Resp: 2885

Ion Ratio Lower Upper

69 100

41 60.4 57.5 86.3

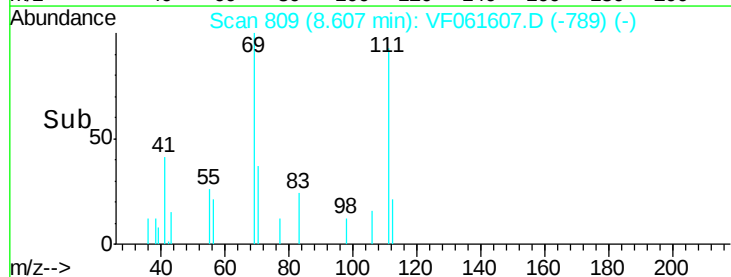
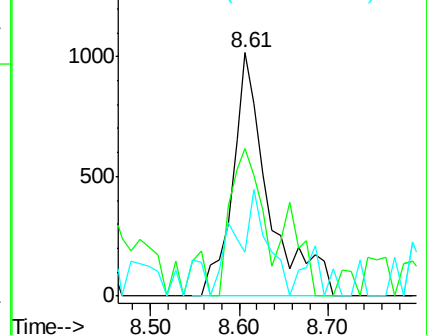
39 18.2 32.0 48.0#

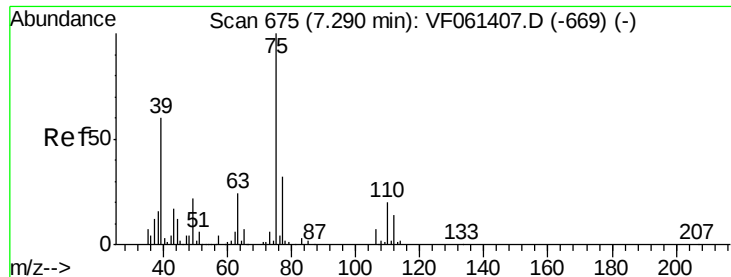


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

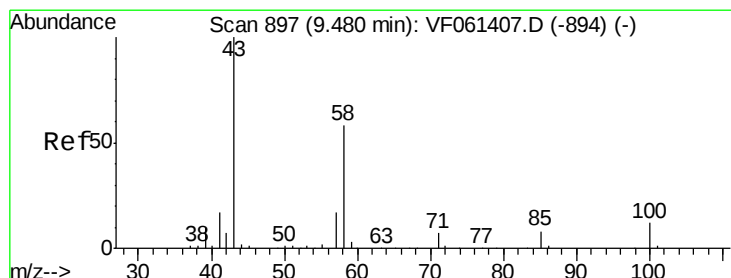
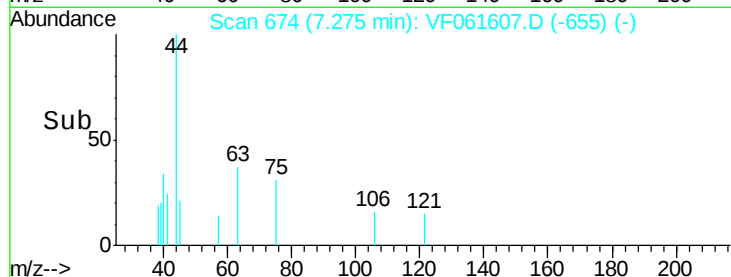
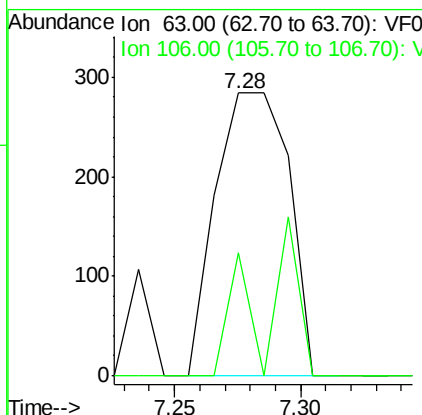
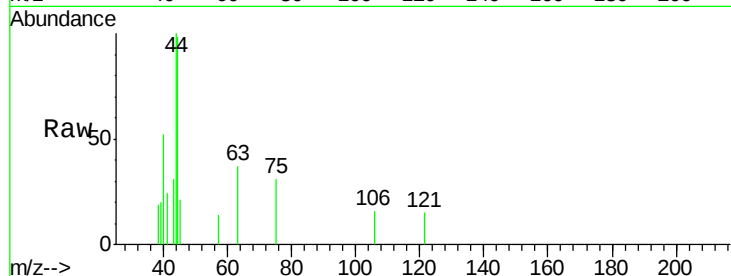




#58
 2-Chloroethyl Vinyl ether
 Concen: 30.034 ug/l
 RT: 7.28 min Scan# 674
 Delta R.T. -0.01 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

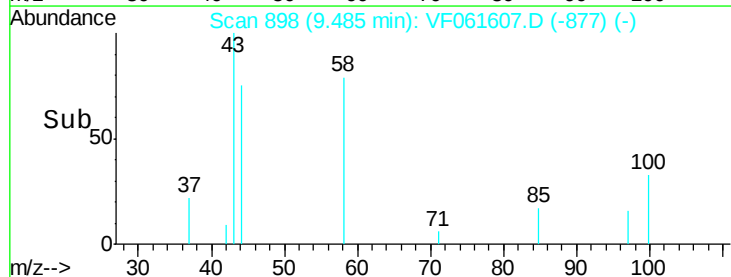
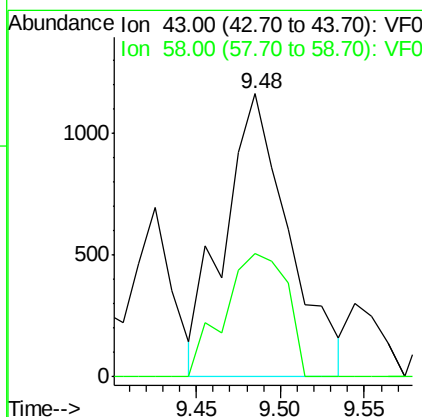
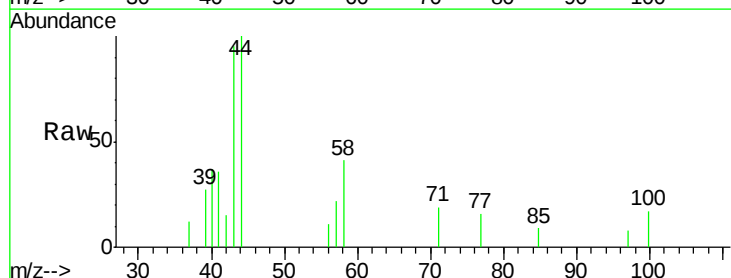
Instrument :
 MSVOA_F
 ClientSampleId :
 JC-02-021119-A

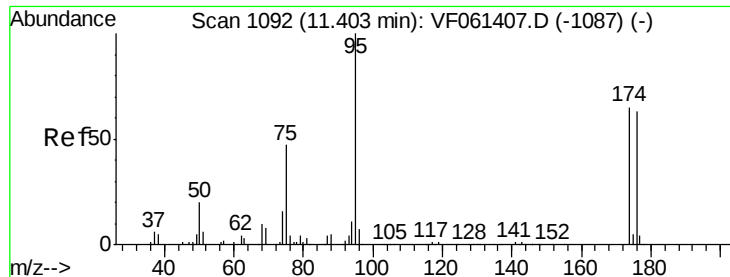
Tot Ion: 63 Resp: 574
 Ion Ratio Lower Upper
 63 100
 106 43.7 21.9 32.9#



#59
 2-Hexanone
 Concen: 3.017 ug/l
 RT: 9.48 min Scan# 898
 Delta R.T. 0.01 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

Tgt Ion: 43 Resp: 3102
 Ion Ratio Lower Upper
 43 100
 58 43.5 25.9 77.6

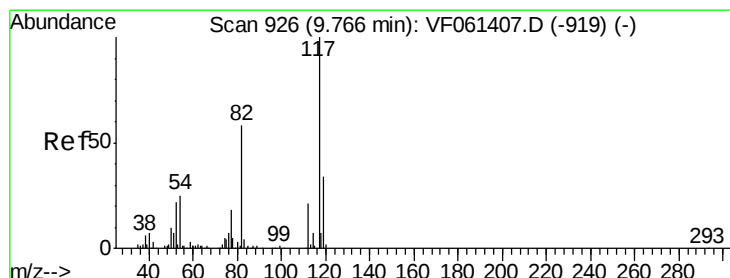
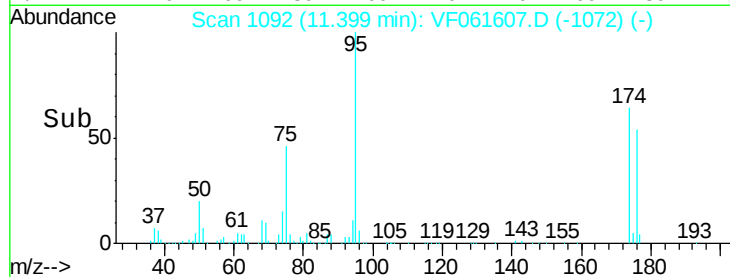
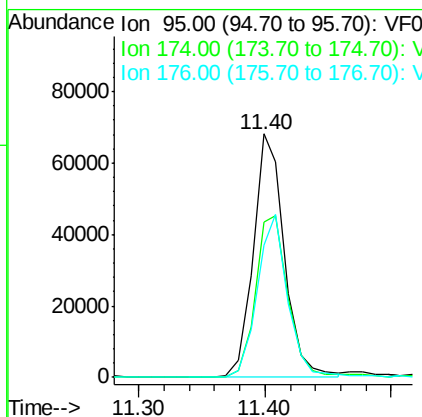
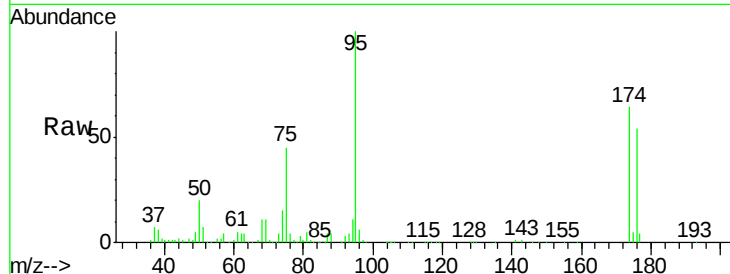




#62
4-Bromofluorobenzene
Concen: 33.633 ug/l
RT: 11.40 min Scan# 1092
Delta R.T. -0.00 min
Lab File: VF061607.D
Acq: 12 Feb 2019 14:24

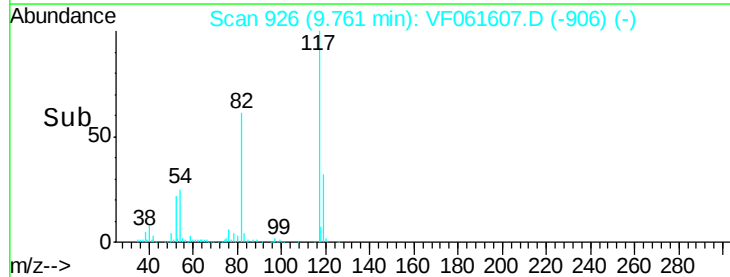
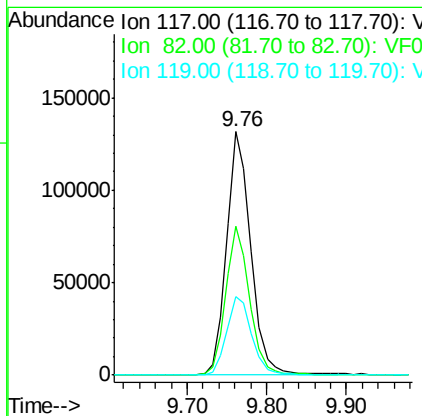
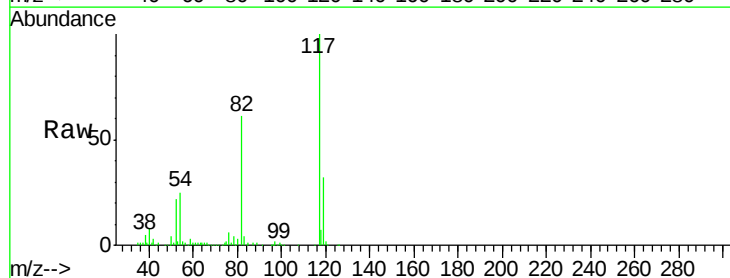
Instrument :
MSVOA_F
ClientSampleId :
JC-02-021119-A

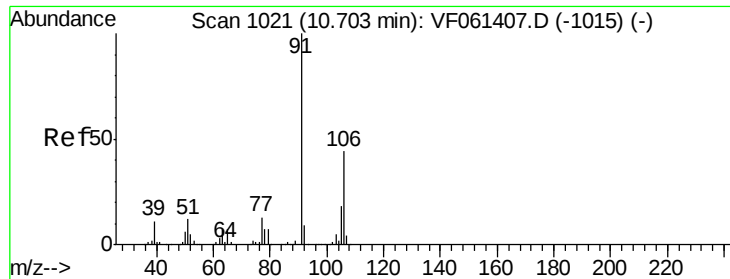
Tot Ion: 95 Resp: 117151
Ion Ratio Lower Upper
95 100
174 64.0 0.0 130.4
176 54.1 0.0 126.2



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.76 min Scan# 926
Delta R.T. -0.00 min
Lab File: VF061607.D
Acq: 12 Feb 2019 14:24

Tgt Ion: 117 Resp: 283163
Ion Ratio Lower Upper
117 100
82 61.0 46.4 69.6
119 32.1 27.2 40.8

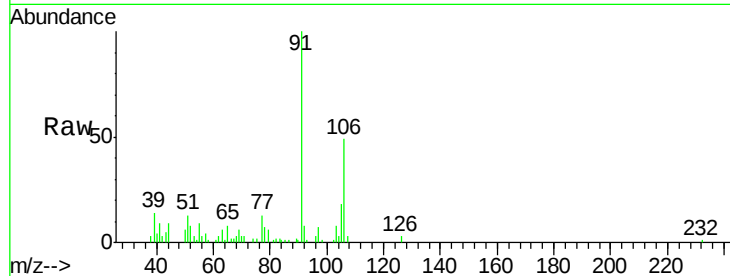




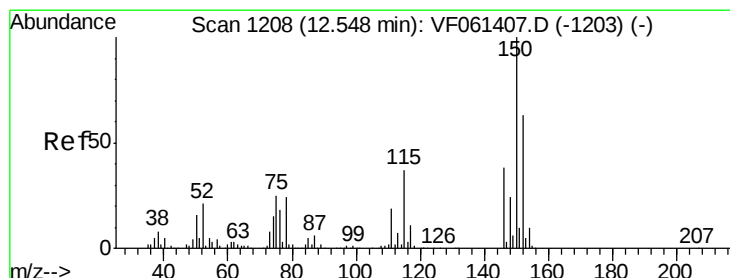
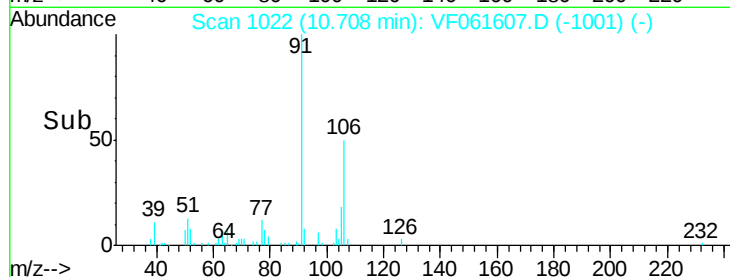
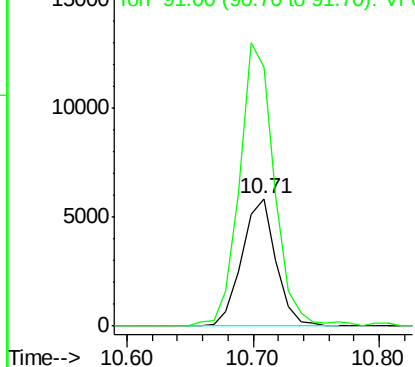
#69
o-Xylene
Concen: 2.664 ug/l
RT: 10.71 min Scan# 1022
Delta R.T. 0.01 min
Lab File: VF061607.D
Acq: 12 Feb 2019 14:24

Instrument :
MSVOA_F
ClientSampleId :
JC-02-021119-A

Tot Ion:106 Resp: 10926
Ion Ratio Lower Upper
106 100
91 203.7 113.3 339.8

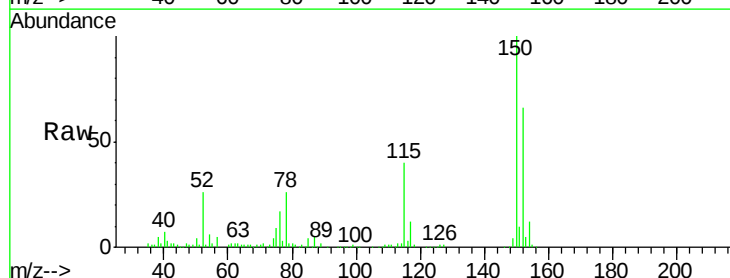


Abundance Ion 106.00 (105.70 to 106.70): V
Ion 91.00 (90.70 to 91.70): VF0

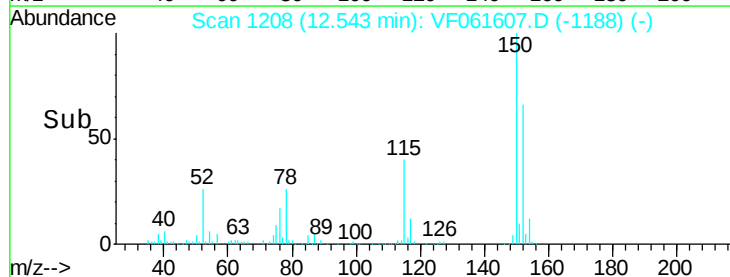
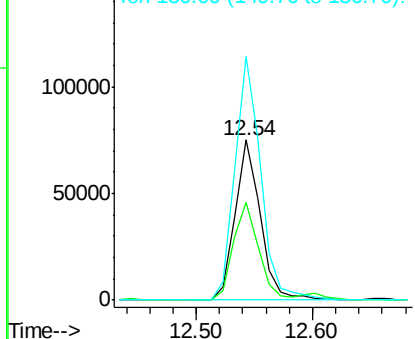


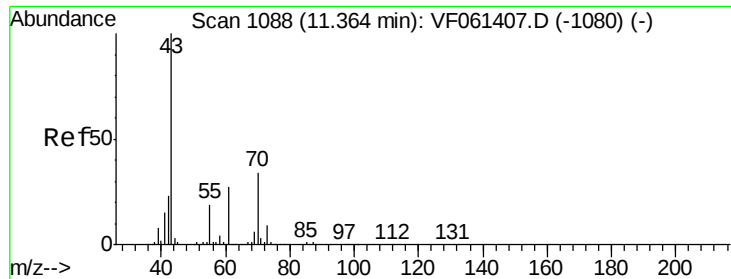
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.54 min Scan# 1208
Delta R.T. -0.00 min
Lab File: VF061607.D
Acq: 12 Feb 2019 14:24

Tgt Ion:152 Resp: 113451
Ion Ratio Lower Upper
152 100
115 61.3 30.0 90.0
150 152.2 0.0 321.4



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: 1.796 ug/l

RT: 11.37 min Scan# 1089

Delta R.T. 0.01 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

JC-02-021119-A

Tot Ion: 43 Resp: 3919

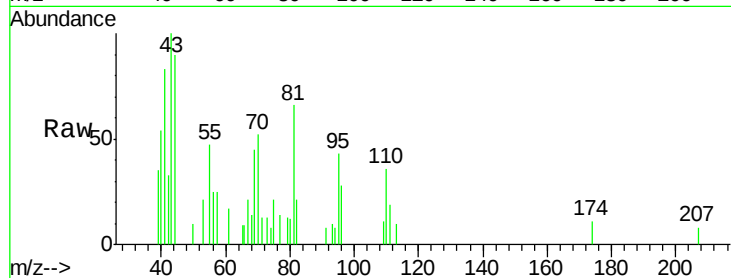
Ion Ratio Lower Upper

43 100

70 52.5 27.6 41.4#

55 46.7 15.4 23.2#

61 17.4 21.8 32.6#

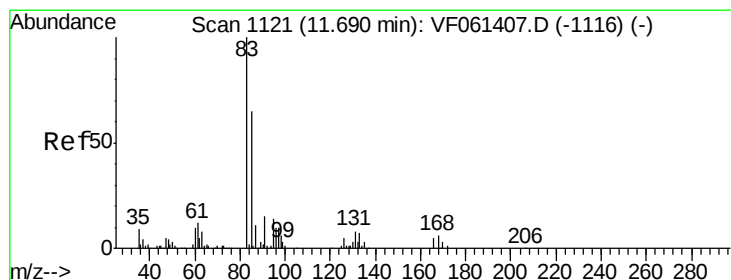
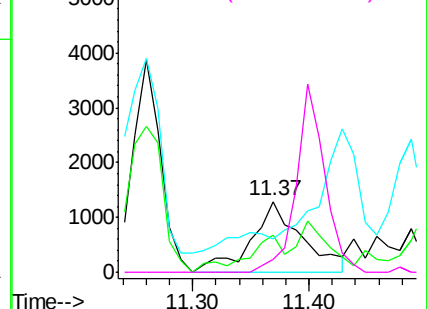
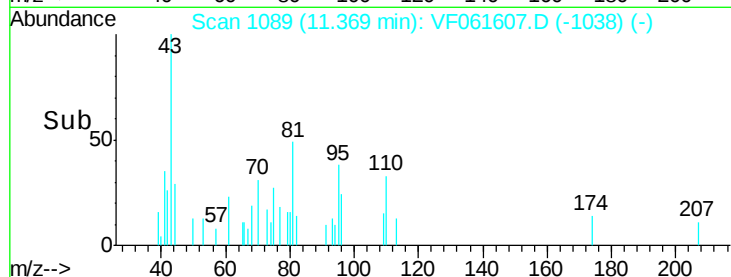


Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 70.00 (69.70 to 70.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 61.00 (60.70 to 61.70): VF0



#75

1,1,2,2-Tetrachloroethane

Concen: 1.194 ug/l

RT: 11.66 min Scan# 1119

Delta R.T. -0.02 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

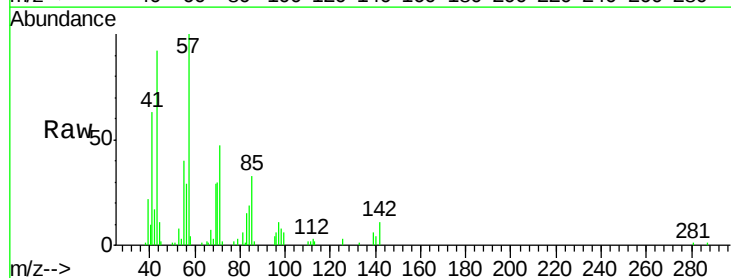
Tgt Ion: 83 Resp: 1962

Ion Ratio Lower Upper

83 100

131 0.0 4.0 12.2#

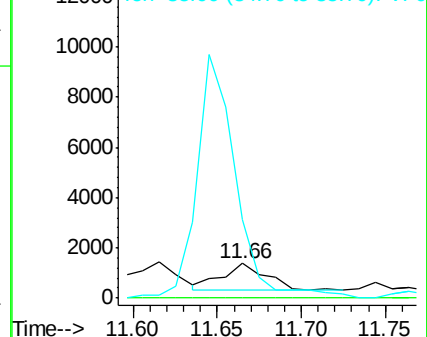
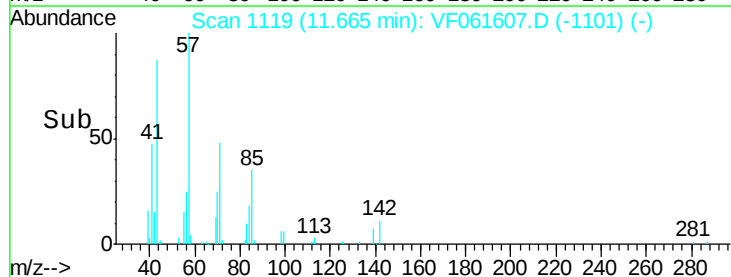
85 225.1 32.7 98.1#

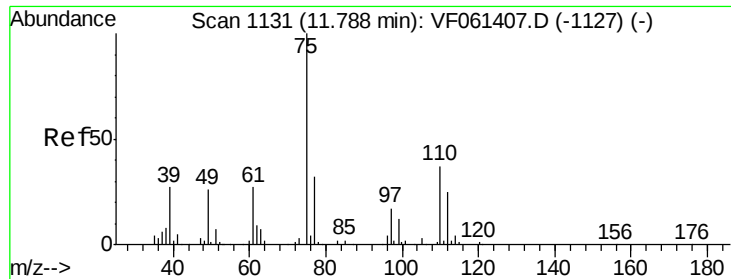


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 131.00 (130.70 to 131.70): V

Ion 85.00 (84.70 to 85.70): VF0

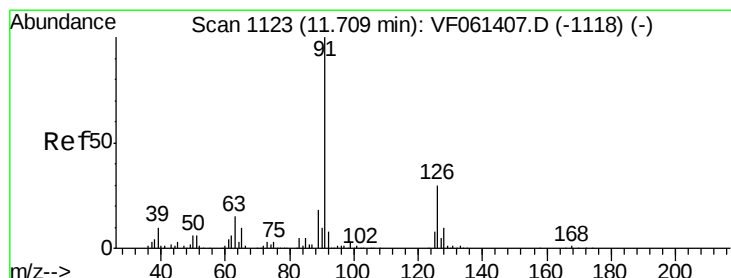
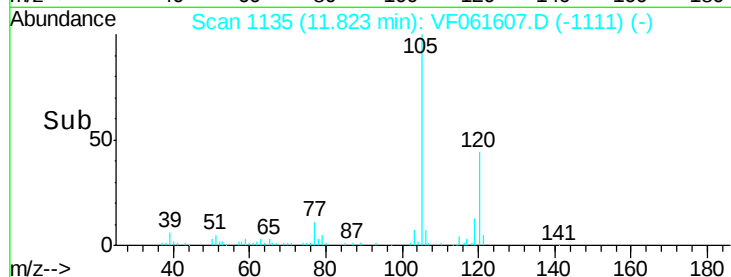
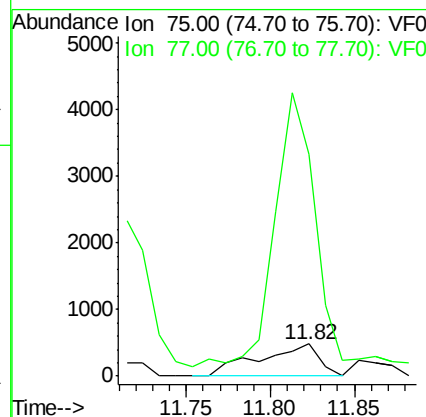
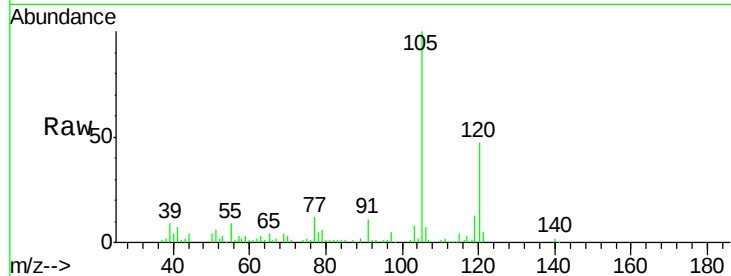




#76
 1,2,3-Trichloropropane
 Concen: 1.006 ug/l
 RT: 11.82 min Scan# 1135
 Delta R.T. 0.03 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

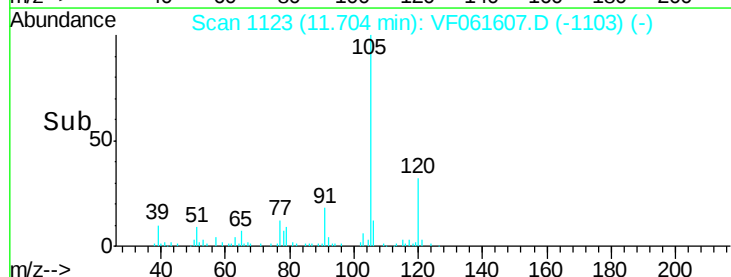
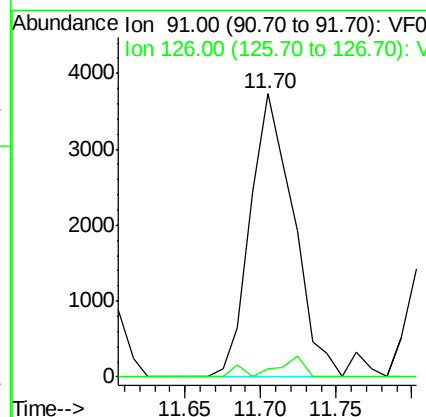
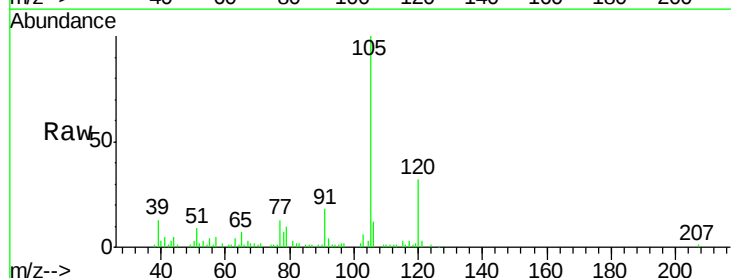
Instrument :
 MSVOA_F
 ClientSampleId :
 JC-02-021119-A

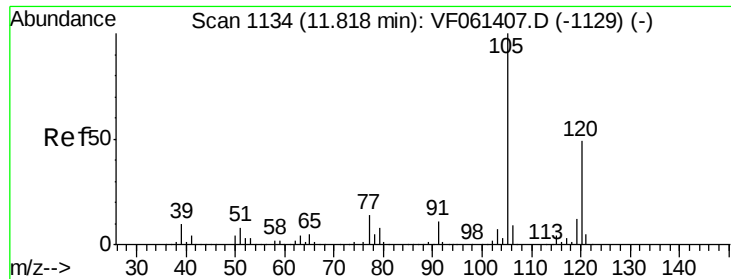
Tot Ion: 75 Resp: 1188
 Ion Ratio Lower Upper
 75 100
 77 686.8 16.1 48.3#



#79
 2-Chlorotoluene
 Concen: 1.154 ug/l
 RT: 11.70 min Scan# 1123
 Delta R.T. -0.00 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

Tgt Ion: 91 Resp: 7387
 Ion Ratio Lower Upper
 91 100
 126 2.7 15.0 45.1#





#80

1,3,5-Trimethylbenzene

Concen: 6.970 ug/l

RT: 11.81 min Scan# 1134

Delta R.T. -0.00 min

Lab File: VF061607.D

Acq: 12 Feb 2019 14:24

Instrument :

MSVOA_F

ClientSampleId :

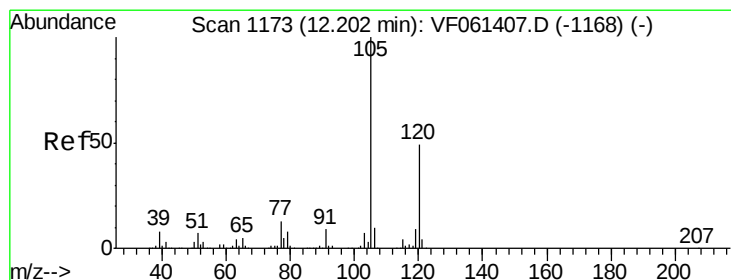
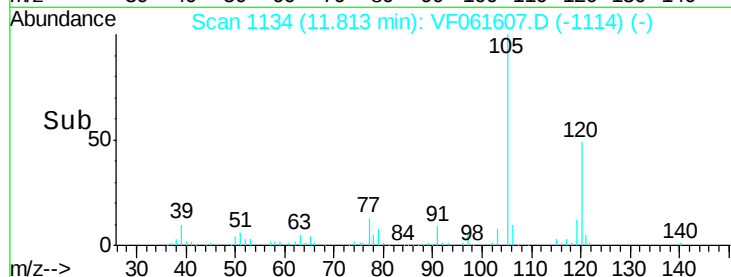
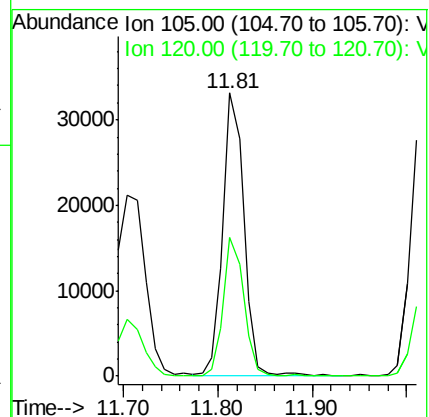
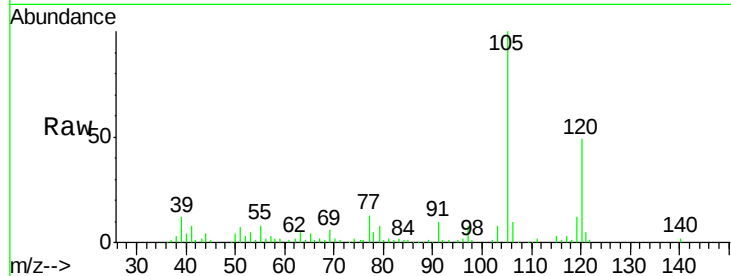
JC-02-021119-A

Tot Ion:105 Resp: 51900

Ion Ratio Lower Upper

105 100

120 49.2 24.7 74.1



#84

1,2,4-Trimethylbenzene

Concen: 4.349 ug/l

RT: 12.20 min Scan# 1173

Delta R.T. -0.00 min

Lab File: VF061607.D

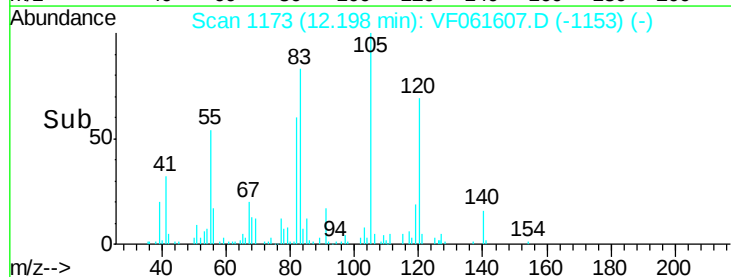
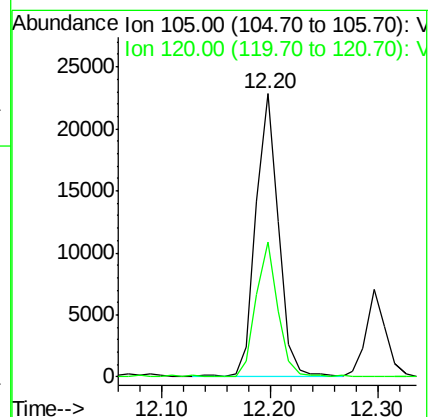
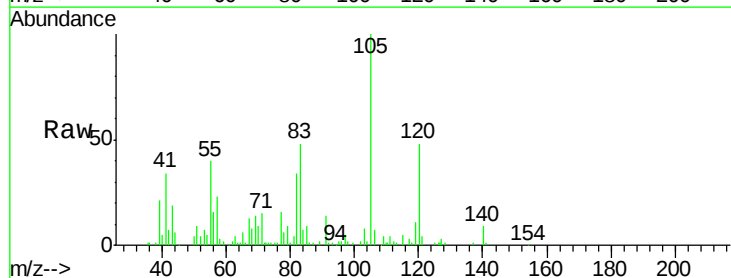
Acq: 12 Feb 2019 14:24

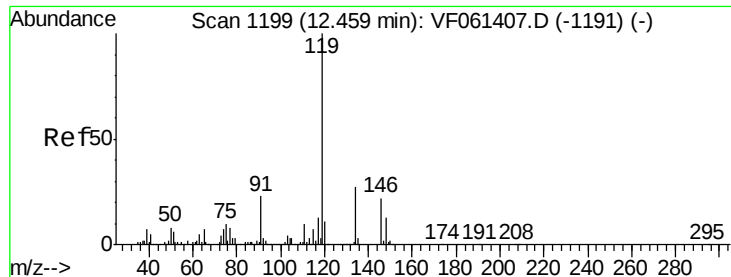
Tgt Ion:105 Resp: 33355

Ion Ratio Lower Upper

105 100

120 47.6 24.9 74.6

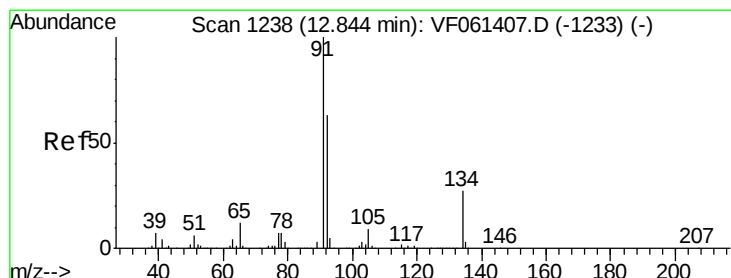
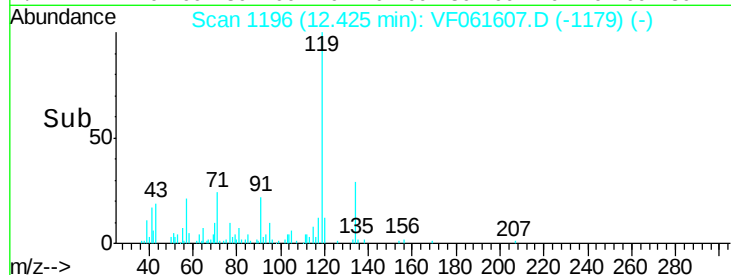
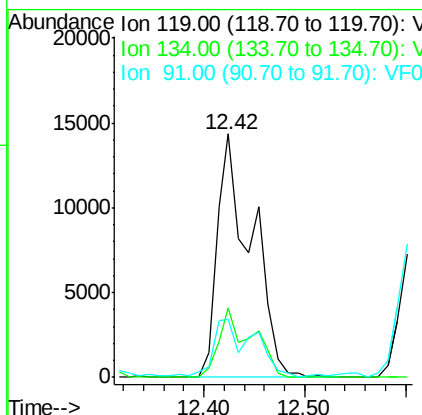
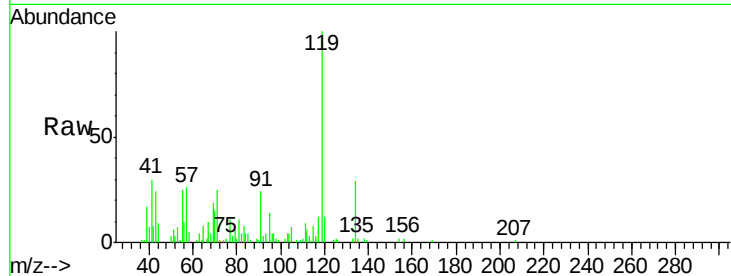




#86
 p-Isopropyltoluene
 Concen: 3.965 ug/l
 RT: 12.42 min Scan# 1196
 Delta R.T. -0.03 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

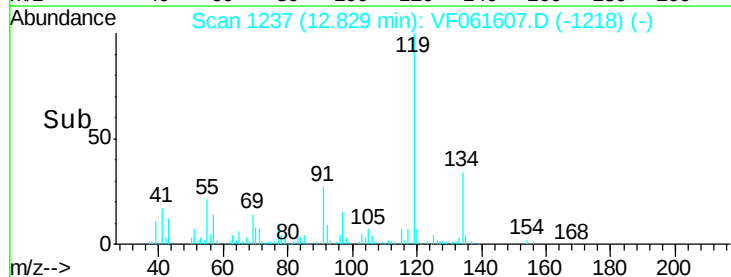
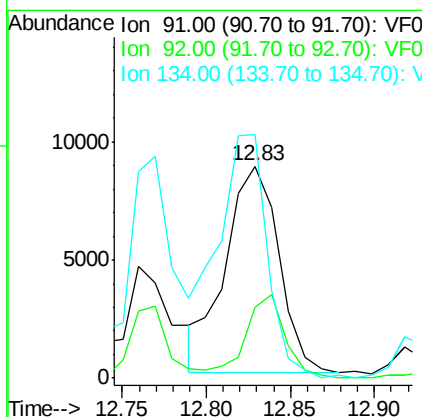
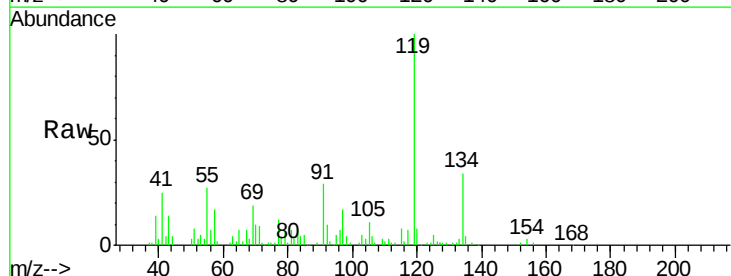
Instrument :
 MSVOA_F
 ClientSampleId :
 JC-02-021119-A

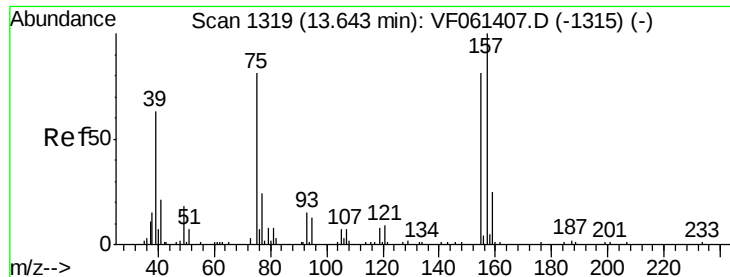
Tot Ion	Ratio	Lower	Upper
119	100		
134	28.6	13.4	40.2
91	24.0	11.4	34.2



#89
 n-Butylbenzene
 Concen: 2.176 ug/l
 RT: 12.83 min Scan# 1237
 Delta R.T. -0.01 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

Tgt Ion	Ratio	Lower	Upper
91	100		
92	33.5	31.6	94.7
134	114.9	13.6	40.8#

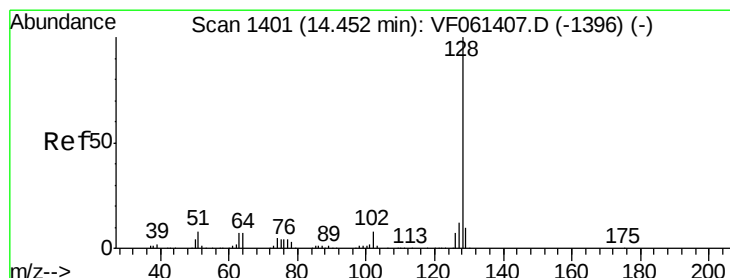
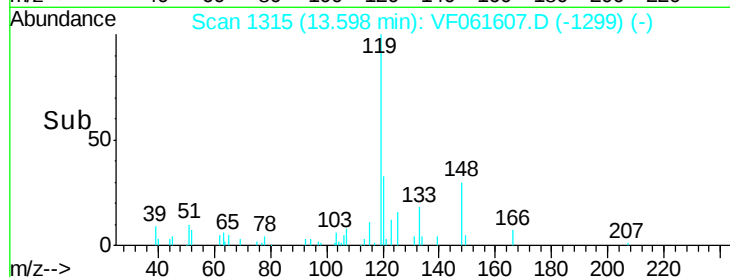
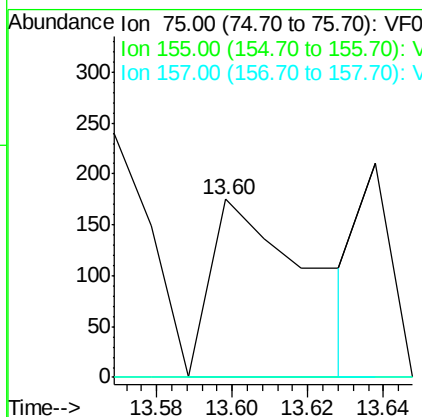
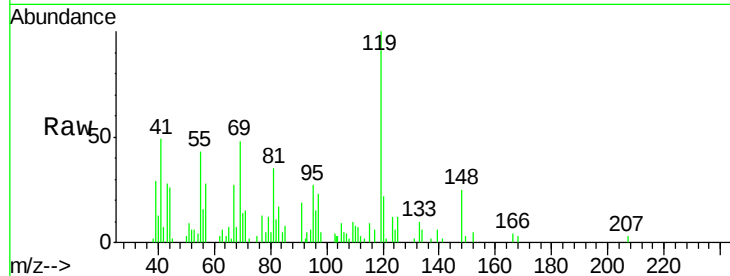




#92
 1,2-Dibromo-3-Chloropropane
 Concen: 1.070 ug/l
 RT: 13.60 min Scan# 1315
 Delta R.T. -0.04 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

Instrument :
 MSVOA_F
 ClientSampleId :
 JC-02-021119-A

Tot Ion: 75 Resp: 312
 Ion Ratio Lower Upper
 75 100
 155 0.0 49.7 149.1#
 157 0.0 61.4 184.1#



#95
 Naphthalene
 Concen: 3.927 ug/l
 RT: 14.45 min Scan# 1401
 Delta R.T. -0.00 min
 Lab File: VF061607.D
 Acq: 12 Feb 2019 14:24

Tgt Ion: 128 Resp: 19055
 Ion Ratio Lower Upper
 128 100
 127 26.8 9.5 14.3#
 129 22.5 8.4 12.6#

