

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF082918\
 Data File : VF060185.D
 Acq On : 29 Aug 2018 9:40
 Operator : VA/AP
 Sample : J4663-01
 Misc : 6.36g/5mL/MSVOA F/SOIL
 ALS Vial : 48 Sample Multiplier: 1

Instrument :
 MSVOA_F
 ClientSampleId :

Quant Time: Aug 29 10:54:21 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_F\METHODS\82F082918S.M
 Quant Title : SW846 8260
 QLast Update : Wed Aug 29 03:22:03 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.03	168	104396	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.75	114	144421	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.91	117	158501	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.62	152	81687	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	5.00	65	58004	88.96	ug/l	0.00
Spiked Amount			Recovery	=	177.92%	
35) Dibromofluoromethane	4.29	113	56550	60.87	ug/l	0.02
Spiked Amount			Recovery	=	121.74%	
50) Toluene-d8	7.71	98	153095	48.17	ug/l	0.00
Spiked Amount			Recovery	=	96.34%	
62) 4-Bromofluorobenzene	11.51	95	72098	61.52	ug/l	0.00
Spiked Amount			Recovery	=	123.04%	

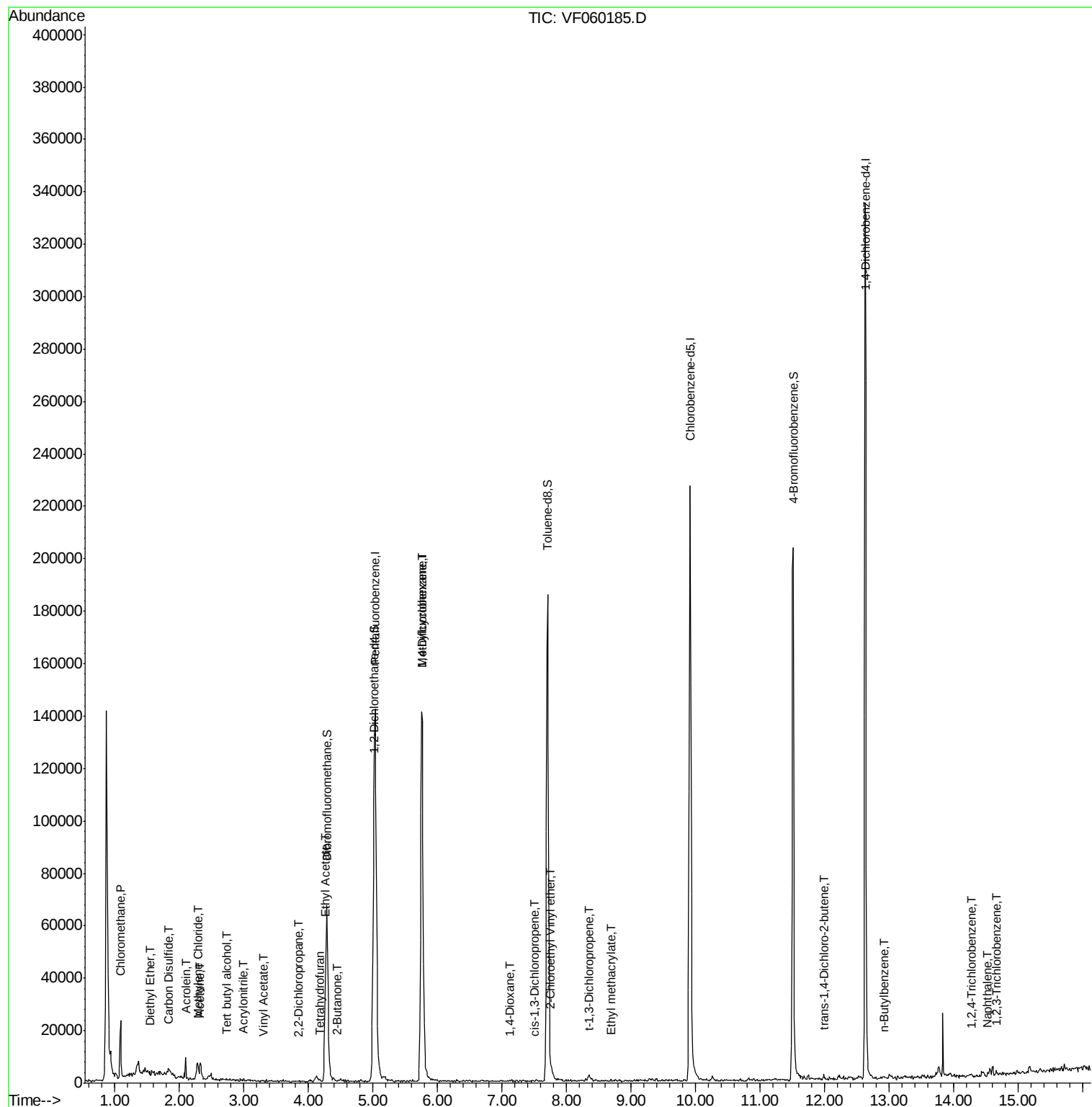
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.08	50	1834	2.290	ug/l #	80
8) Diethyl Ether	1.54	74	152	1.108	ug/l	89
11) Tert butyl alcohol	2.74	59	75	40.297	ug/l #	64
13) Acrolein	2.10	56	122	8.851	ug/l	96
15) Acrylonitrile	3.00	53	82	2.587	ug/l #	18
16) Acetone	2.32	43	8438	97.002	ug/l	97
17) Carbon Disulfide	1.84	76	3134	1.059	ug/l	99
18) Methyl Acetate	2.44	43	1335	Below Cal	#	67
20) Methylene Chloride	2.27	84	2601	1.343	ug/l #	75
23) Vinyl Acetate	3.31	43	61	26.619	ug/l #	82
25) 2-Butanone	4.46	43	77	1.003	ug/l #	44
26) 2,2-Dichloropropane	3.83	77	73	3.989	ug/l #	66
29) Tetrahydrofuran	4.17	42	170	17.384	ug/l #	42
37) Ethyl Acetate	4.26	43	81	4.273	ug/l #	1
39) Methylcyclohexane	5.76	83	2517	1.304	ug/l #	33
48) Methyl methacrylate	6.88	41	64	Below Cal	#	32
49) 1,4-Dioxane	7.12	88	66	128.066	ug/l #	19
53) t-1,3-Dichloropropene	8.36	75	65	3.517	ug/l #	42
54) cis-1,3-Dichloropropene	7.50	75	77	5.423	ug/l #	7
56) Ethyl methacrylate	8.68	69	62	4.637	ug/l #	10
58) 2-Chloroethyl Vinyl ether	7.75	63	155	1.790	ug/l	100
81) trans-1,4-Dichloro-2-buten	11.98	75	155	4.856	ug/l #	4
89) n-Butylbenzene	12.92	91	630	3.712	ug/l #	82
93) 1,2,4-Trichlorobenzene	14.26	180	229	4.721	ug/l #	64
95) Naphthalene	14.52	128	986	8.719	ug/l #	82
96) 1,2,3-Trichlorobenzene	14.66	180	269	5.644	ug/l #	55

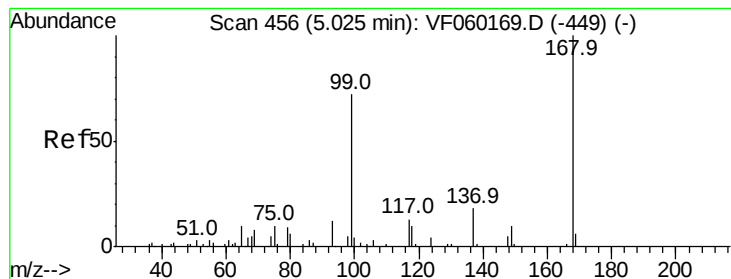
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260
QLast Update : Wed Aug 29 03:22:03 2018
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.03 min Scan# 457

Delta R.T. 0.01 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

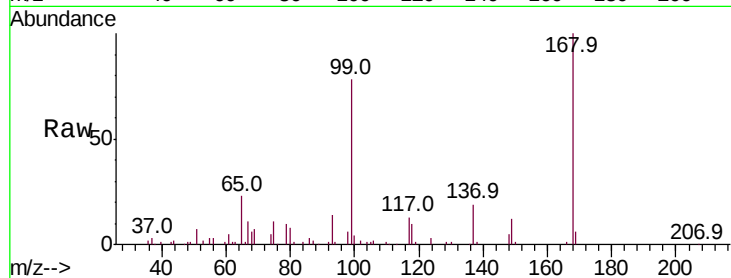
Instrument :
MSVOA_F
ClientSampleId :

Tot Ion:168 Resp: 104396

Ion Ratio Lower Upper

168 100

99 78.3 57.9 86.9



Abundance Ion 168.00 (167.70 to 168.70): VF0

Ion 99.00 (98.70 to 99.70): VF0

5.03

40000

30000

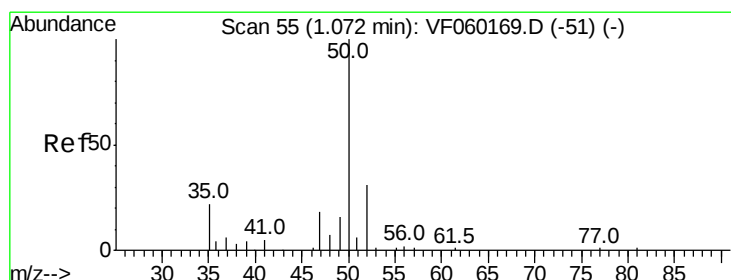
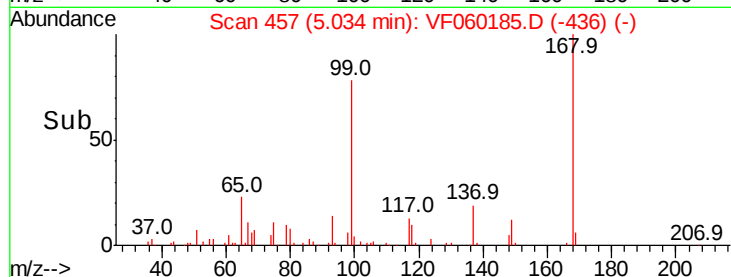
20000

10000

0

Time-->

4.90 5.00 5.10 5.20



#3

Chloromethane

Concen: 2.290 ug/l

RT: 1.08 min Scan# 56

Delta R.T. 0.01 min

Lab File: VF060185.D

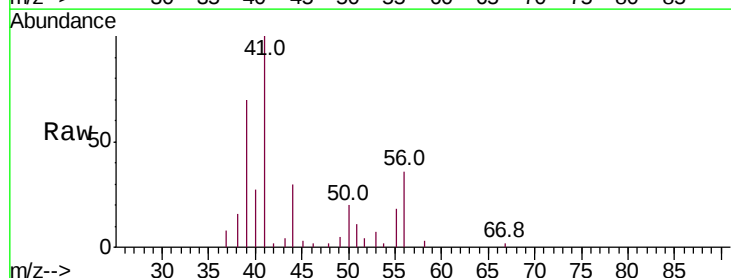
Acq: 29 Aug 2018 9:40

Tgt Ion: 50 Resp: 1834

Ion Ratio Lower Upper

50 100

52 19.4 24.4 36.6#



Abundance Ion 50.00 (49.70 to 50.70): VF0

Ion 52.00 (51.70 to 52.70): VF0

1200

1000

800

600

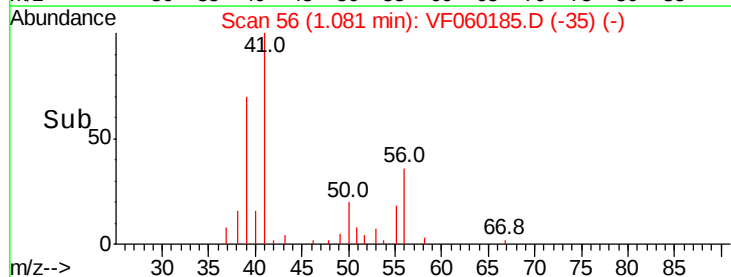
400

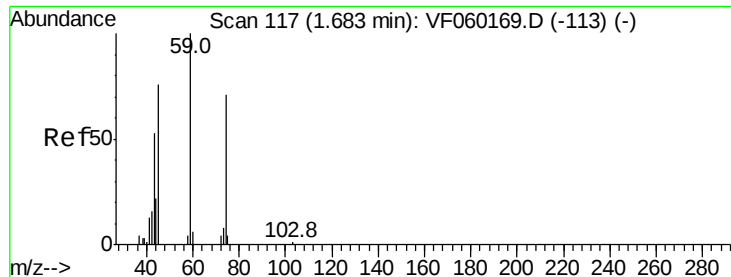
200

0

Time-->

1.05 1.10 1.15





#8

Diethyl Ether

Concen: 1.108 ug/l

RT: 1.54 min Scan# 103

Delta R.T. -0.14 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

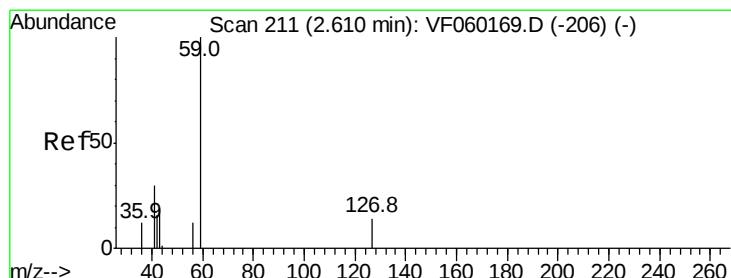
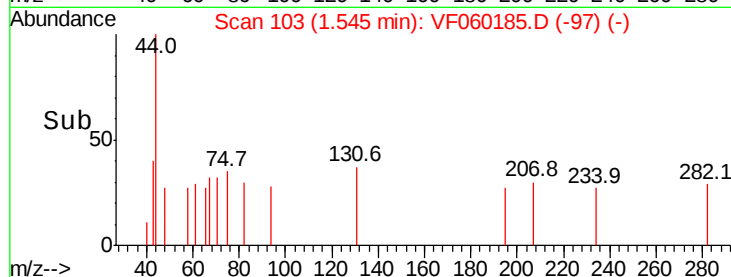
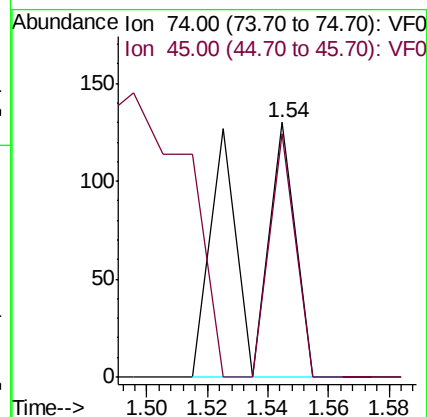
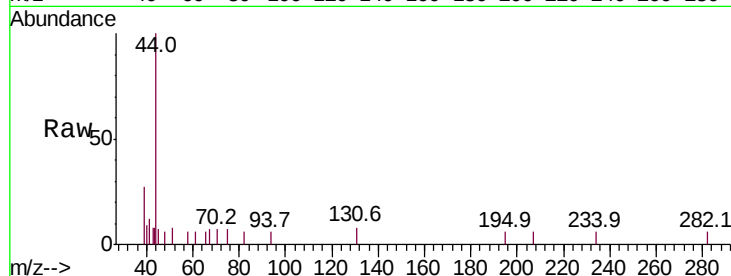
Instrument :
MSVOA_F
ClientSampleId :

Tot Ion: 74 Resp: 152

Ion Ratio Lower Upper

74 100

45 95.4 53.5 160.7



#11

Tert butyl alcohol

Concen: 40.297 ug/l

RT: 2.74 min Scan# 224

Delta R.T. 0.13 min

Lab File: VF060185.D

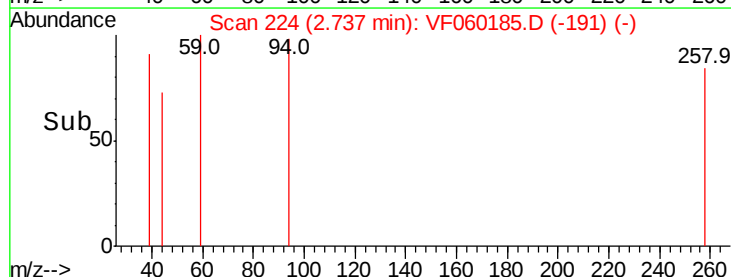
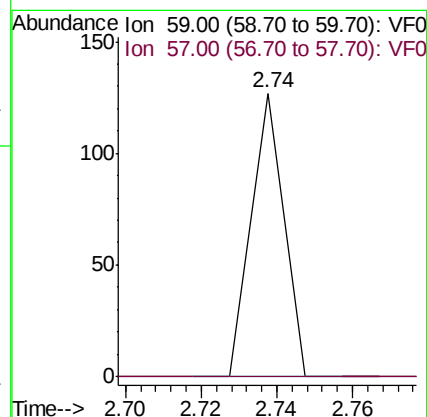
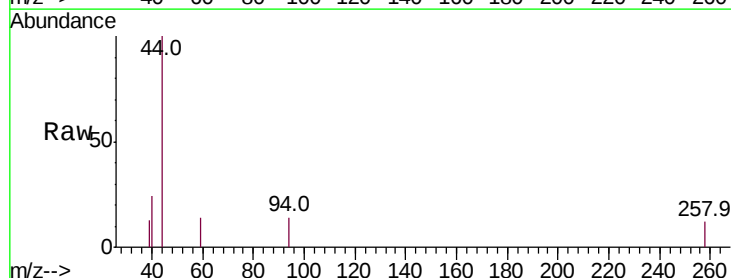
Acq: 29 Aug 2018 9:40

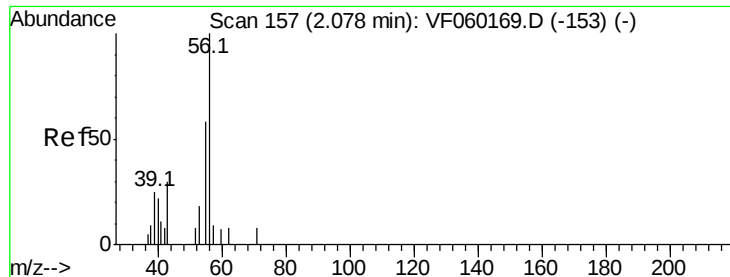
Tgt Ion: 59 Resp: 75

Ion Ratio Lower Upper

59 100

57 0.0 11.9 17.9#





#13

Acrolein

Concen: 8.851 ug/l

RT: 2.10 min Scan# 159

Delta R.T. 0.02 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

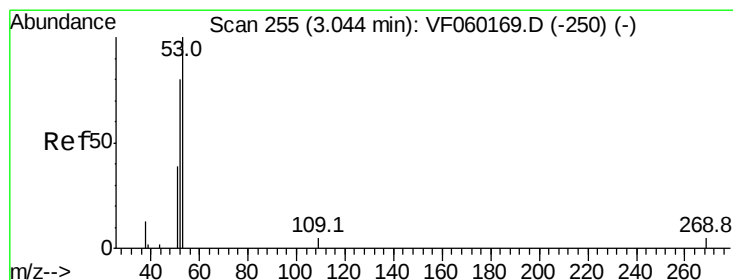
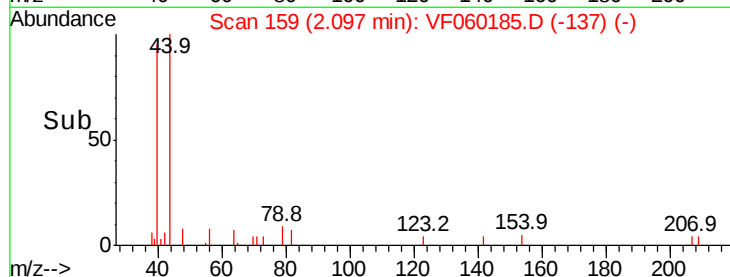
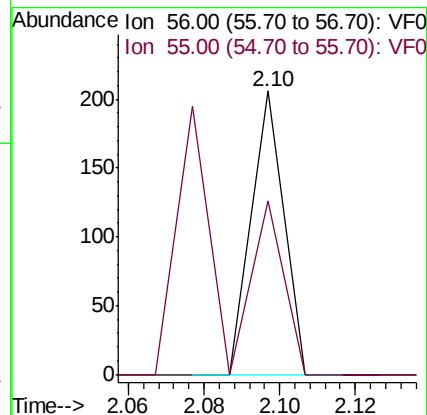
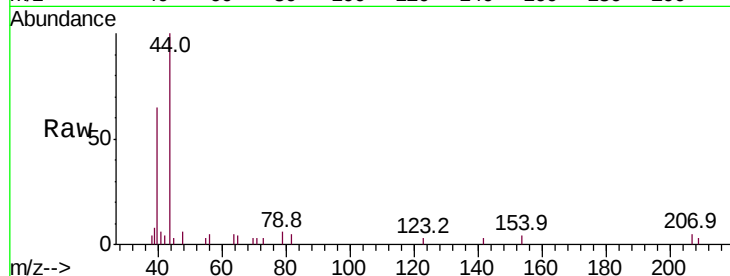
Instrument :
MSVOA_F
ClientSampled :

Tot Ion: 56 Resp: 122

Ion Ratio Lower Upper

56 100

55 61.2 46.4 69.6



#15

Acrylonitrile

Concen: 2.587 ug/l

RT: 3.00 min Scan# 251

Delta R.T. -0.04 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

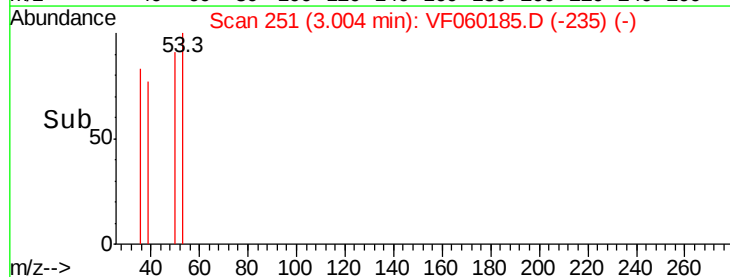
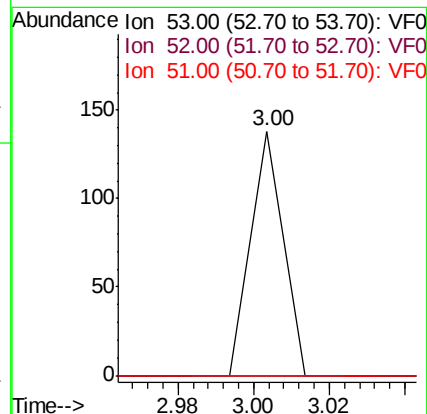
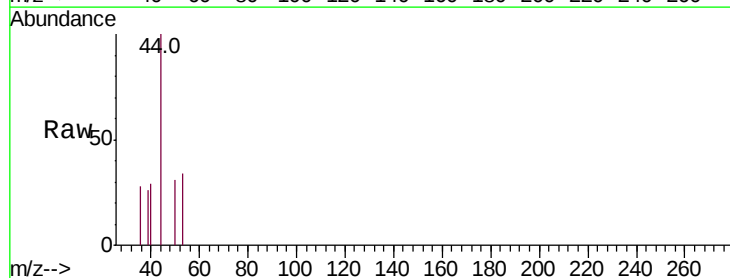
Tgt Ion: 53 Resp: 82

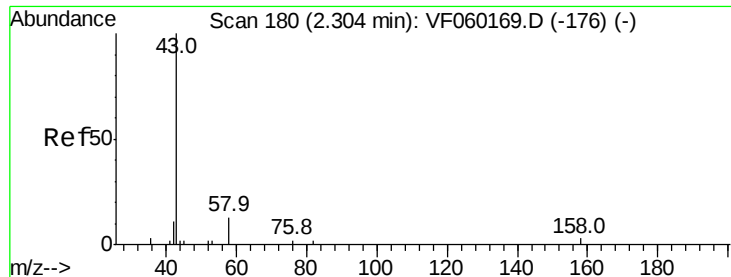
Ion Ratio Lower Upper

53 100

52 0.0 64.4 96.6#

51 0.0 31.0 46.4#





#16

Acetone

Concen: 97.002 ug/l

RT: 2.32 min Scan# 182

Delta R.T. 0.02 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

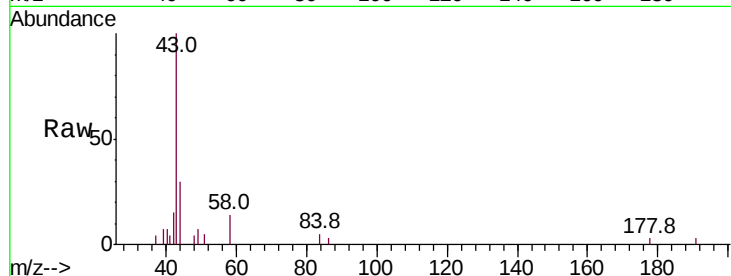
Instrument :
MSVOA_F
ClientSampleId :

Tot Ion: 43 Resp: 8438

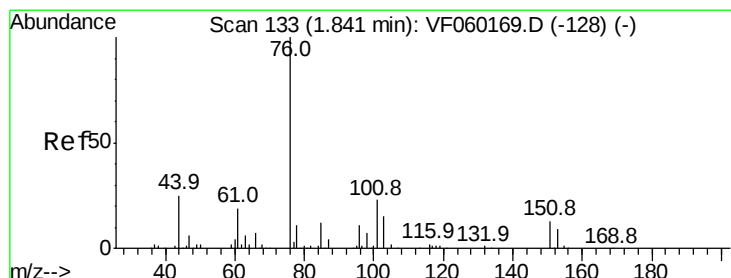
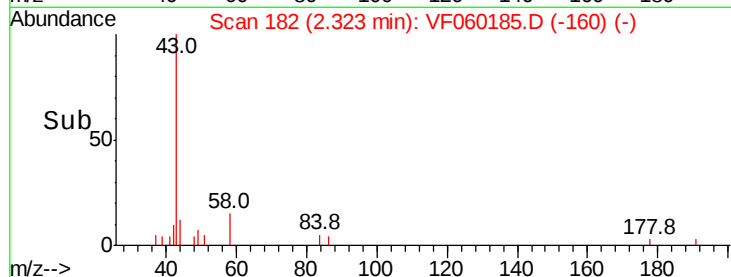
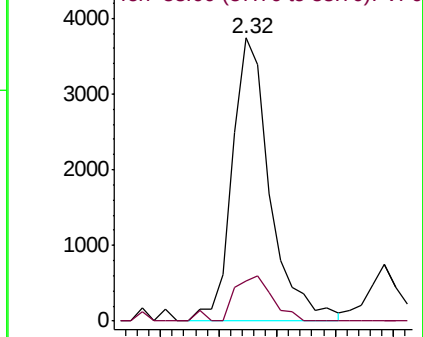
Ion Ratio Lower Upper

43 100

58 14.4 10.7 16.1



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



#17

Carbon Disulfide

Concen: 1.059 ug/l

RT: 1.84 min Scan# 133

Delta R.T. -0.00 min

Lab File: VF060185.D

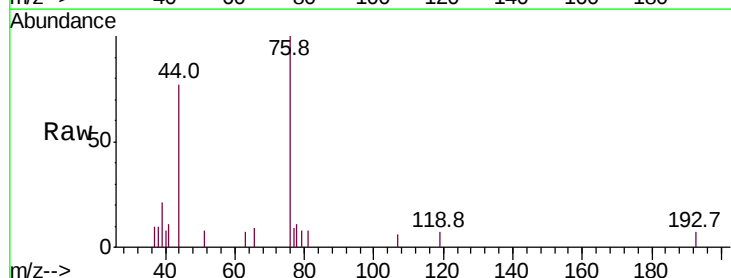
Acq: 29 Aug 2018 9:40

Tgt Ion: 76 Resp: 3134

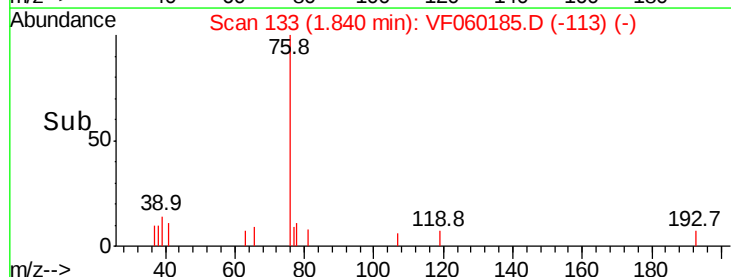
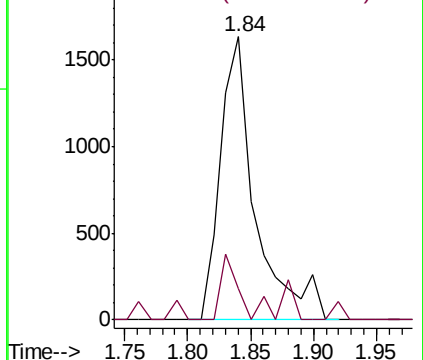
Ion Ratio Lower Upper

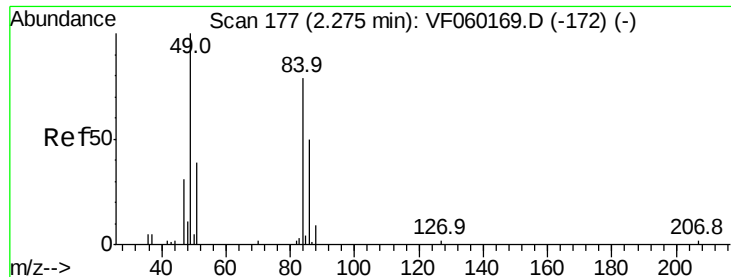
76 100

78 11.2 8.6 12.8



Abundance Ion 76.00 (75.70 to 76.70): VF0
Ion 78.00 (77.70 to 78.70): VF0

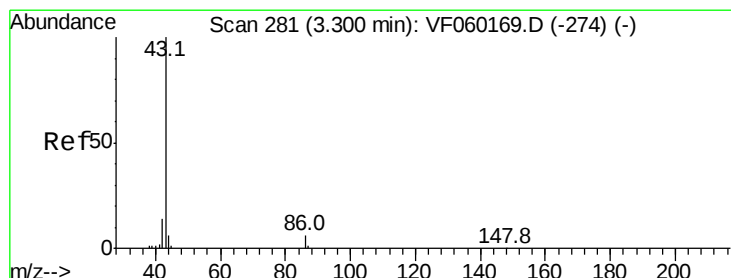
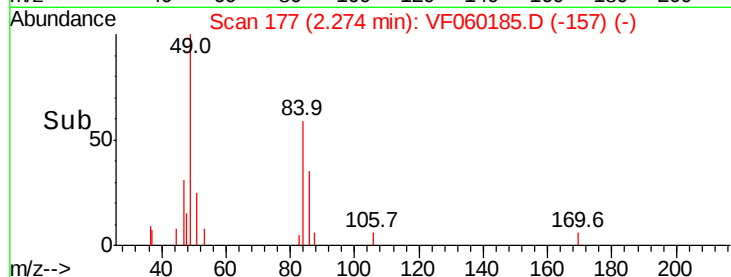
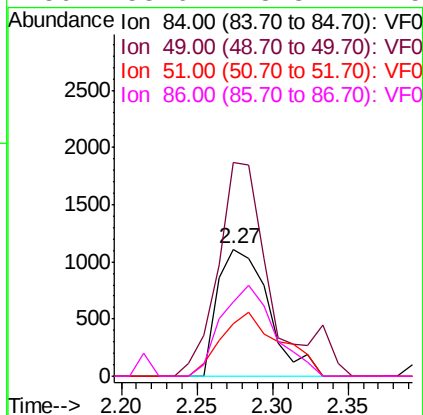
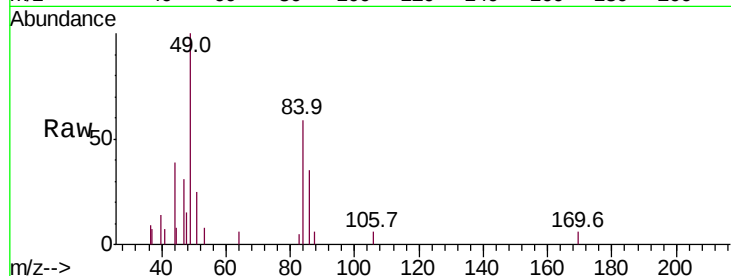




#20
Methvlene Chloride
Concen: 1.343 ug/l
RT: 2.27 min Scan# 177
Delta R.T. 0.00 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

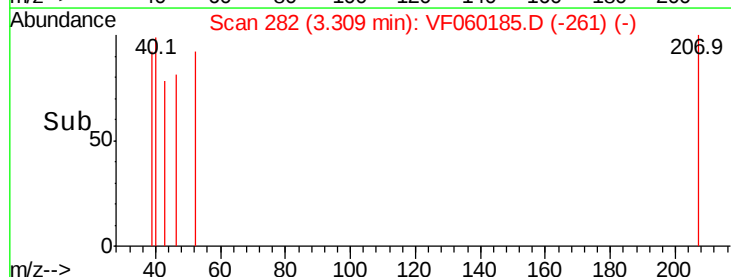
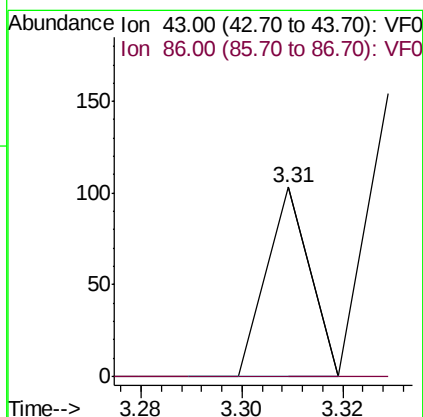
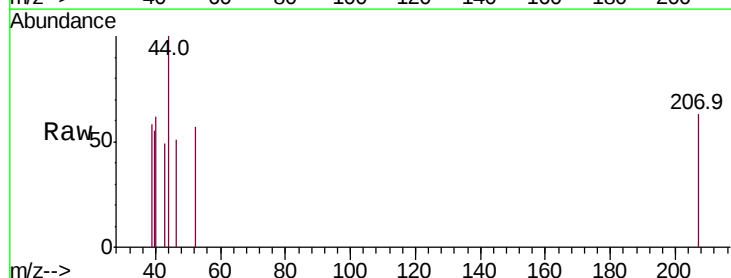
Instrument :
MSVOA_F
ClientSampled :

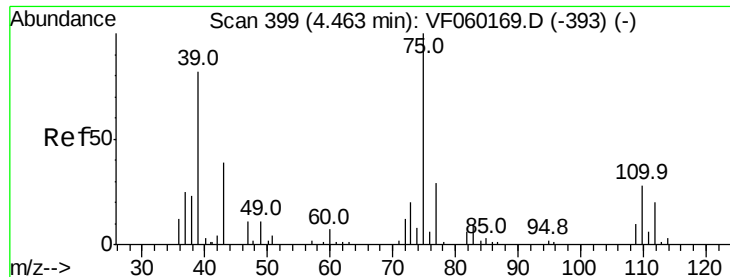
Tot Ion: 84 Resp: 2601
Ion Ratio Lower Upper
84 100
49 168.2 97.0 145.4#
51 41.4 38.2 57.2
86 58.6 48.3 72.5



#23
Vinyl Acetate
Concen: 26.619 ug/l
RT: 3.31 min Scan# 282
Delta R.T. 0.01 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

Tgt Ion: 43 Resp: 61
Ion Ratio Lower Upper
43 100
86 0.0 4.9 7.3#





#25

2-Butanone

Concen: 1.003 ug/l

RT: 4.46 min Scan# 399

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

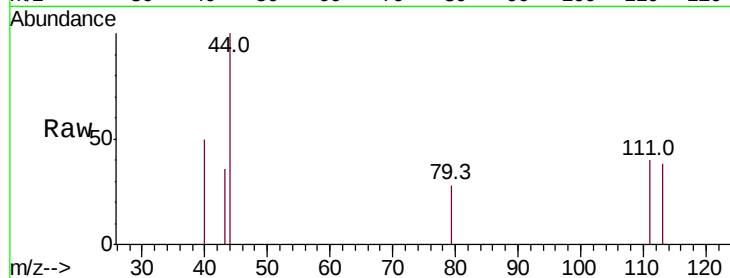
Instrument :
MSVOA_F
ClientSampled :

Tot Ion: 43 Resp: 77

Ion Ratio Lower Upper

43 100

72 0.0 24.2 36.2#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

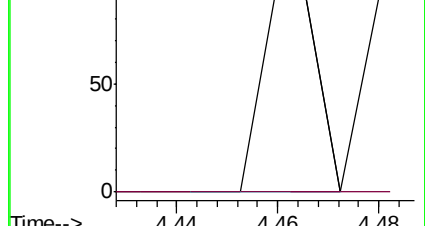
150

100

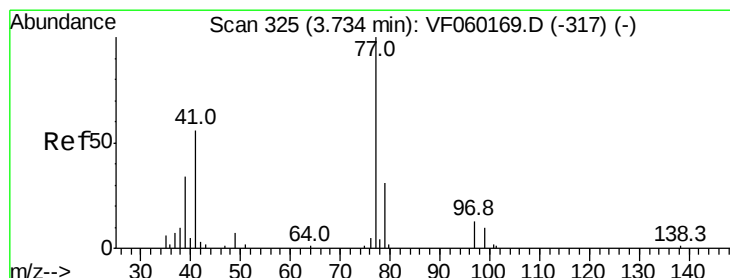
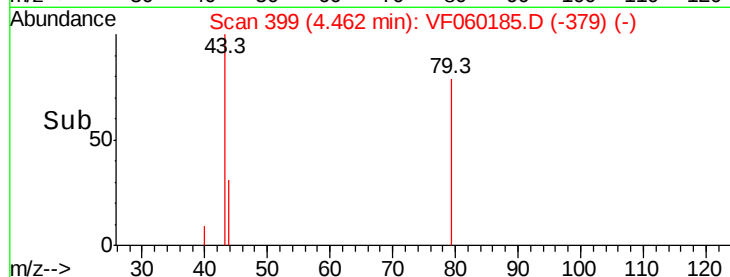
50

0

4.44 4.46 4.48



Time-->



#26

2,2-Dichloropropane

Concen: 3.989 ug/l

RT: 3.83 min Scan# 335

Delta R.T. 0.10 min

Lab File: VF060185.D

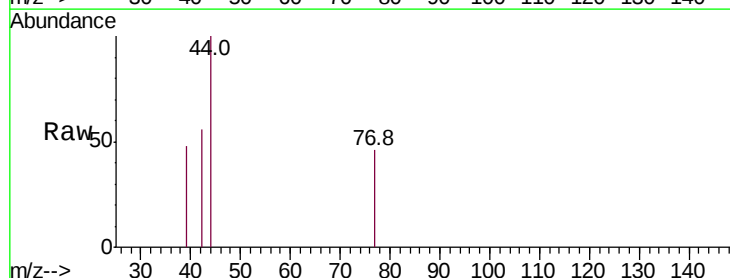
Acq: 29 Aug 2018 9:40

Tgt Ion: 77 Resp: 73

Ion Ratio Lower Upper

77 100

97 0.0 7.0 21.0#



Abundance Ion 77.00 (76.70 to 77.70): VF0

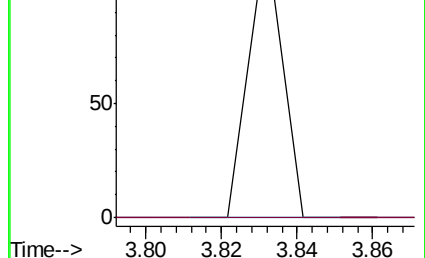
Ion 97.00 (96.70 to 97.70): VF0

100

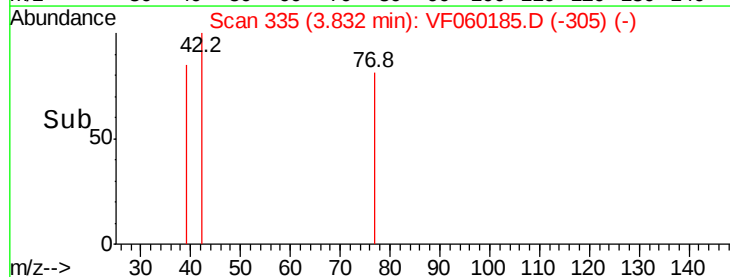
50

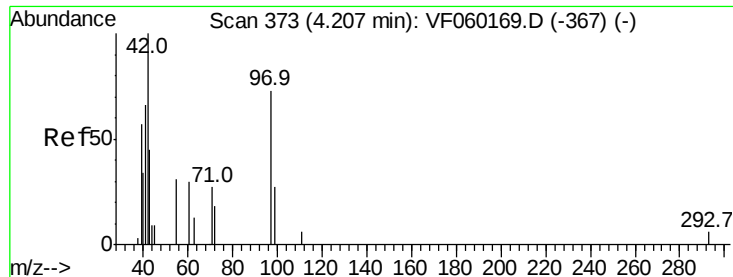
0

3.80 3.82 3.84 3.86



Time-->

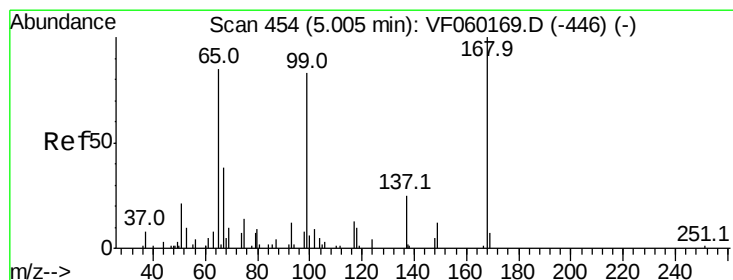
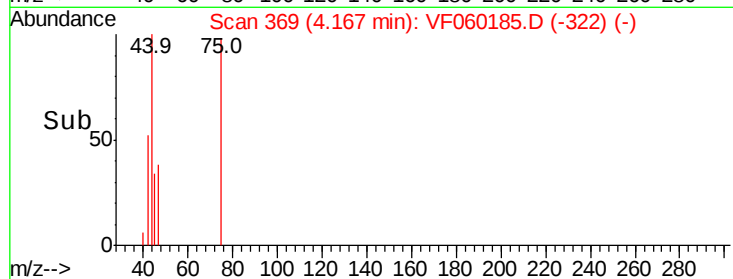
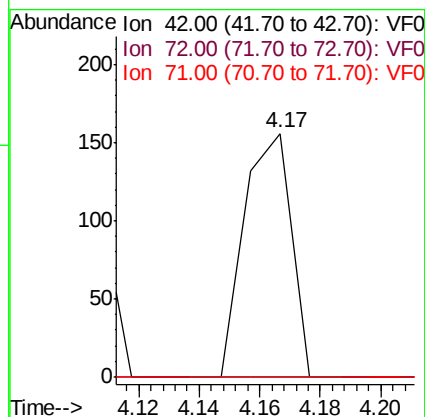
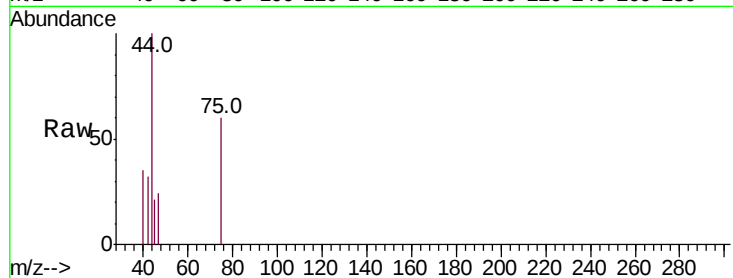




#29
Tetrahydrofuran
Concen: 17.384 ug/l
RT: 4.17 min Scan# 369
Delta R.T. -0.04 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

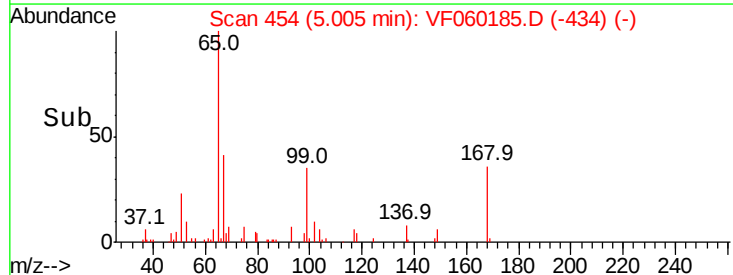
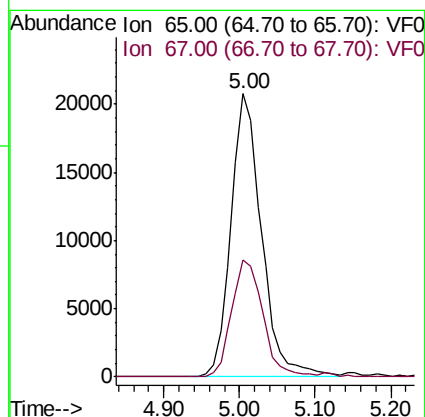
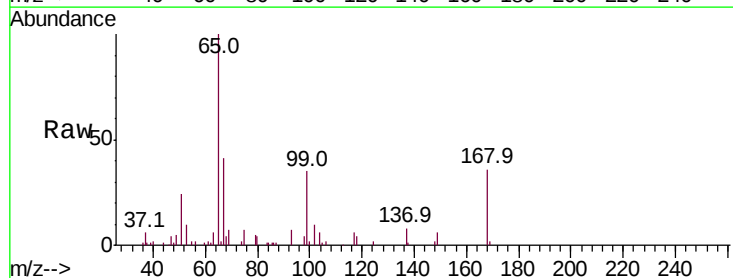
Instrument :
MSVOA_F
ClientSampleId :

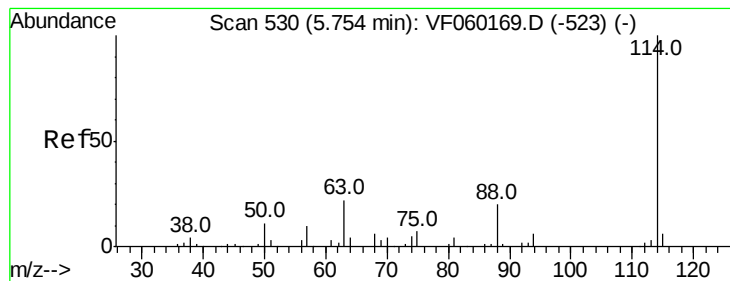
Tot Ion: 42 Resp: 170
Ion Ratio Lower Upper
42 100
72 0.0 27.0 40.4#
71 0.0 24.6 36.8#



#33
1,2-Dichloroethane-d4
Concen: 88.963 ug/l
RT: 5.00 min Scan# 454
Delta R.T. -0.00 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

Tgt Ion: 65 Resp: 58004
Ion Ratio Lower Upper
65 100
67 41.2 0.0 92.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.75 min Scan# 530

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :

MSVOA_F

ClientSampleId :

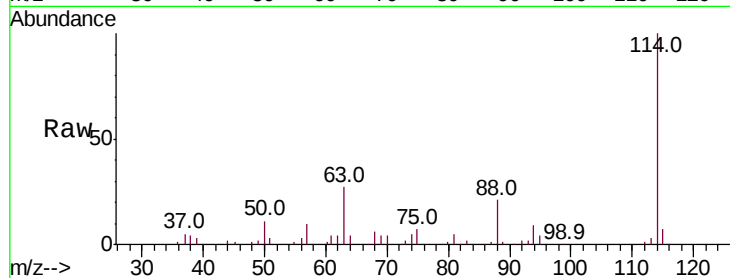
Tot Ion:114 Resp: 144421

Ion Ratio Lower Upper

114 100

63 26.6 0.0 45.8

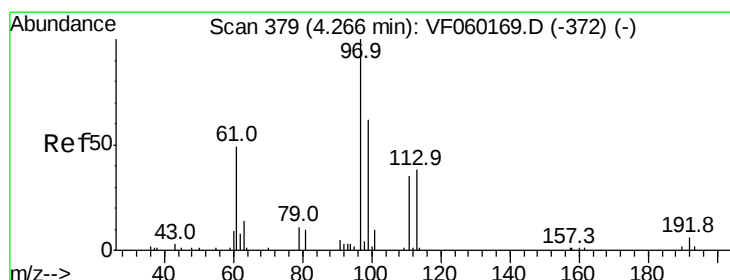
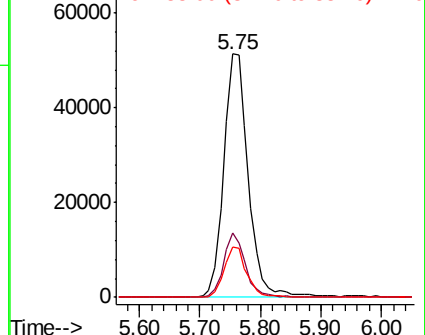
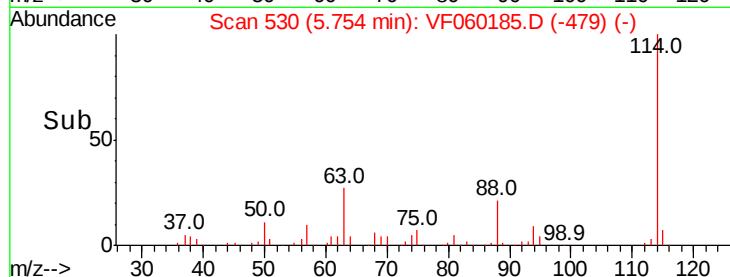
88 20.7 0.0 40.2



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: 60.867 ug/l

RT: 4.29 min Scan# 381

Delta R.T. 0.02 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

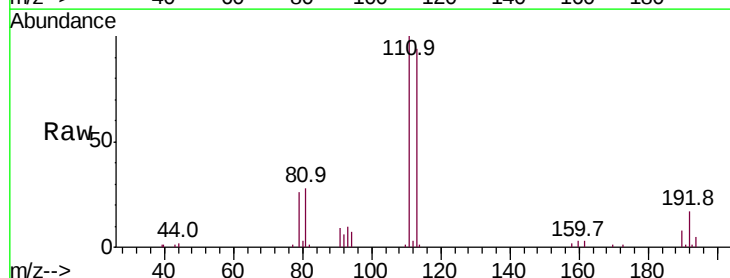
Tgt Ion:113 Resp: 56550

Ion Ratio Lower Upper

113 100

111 106.2 75.5 113.3

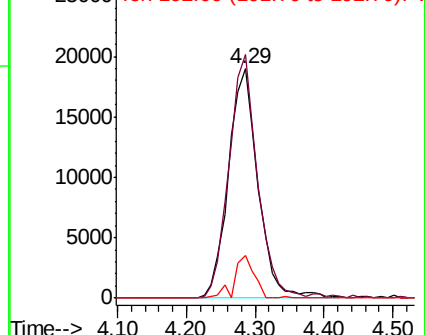
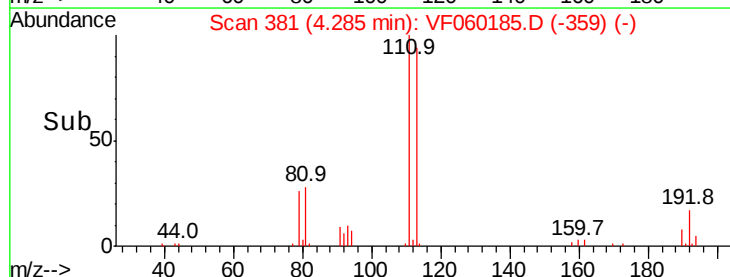
192 18.4 12.5 18.7

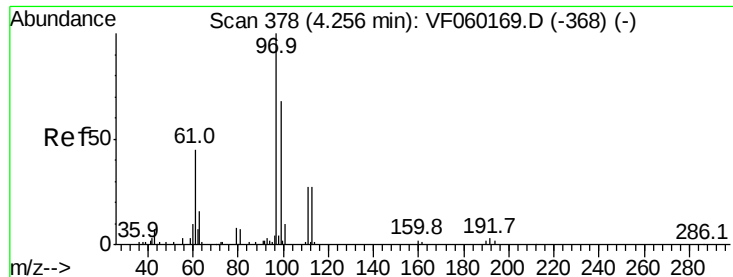


Abundance Ion 113.00 (112.70 to 113.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 192.00 (191.70 to 192.70): V





#37

Ethyl Acetate

Concen: 4.273 ug/l

RT: 4.26 min Scan# 378

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :

MSVOA_F

ClientSampleId :

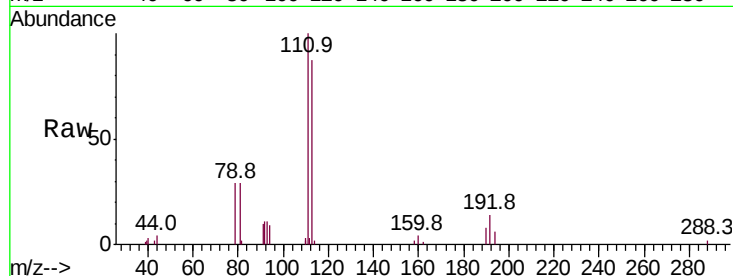
Tot Ion: 43 Resp: 81

Ion Ratio Lower Upper

43 100

61 0.0 517.6 776.4#

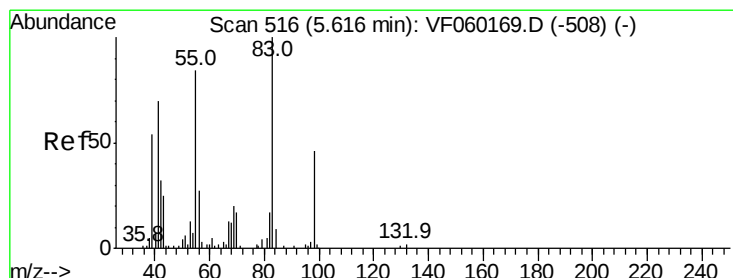
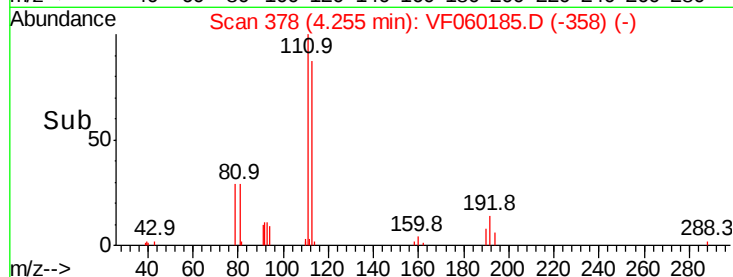
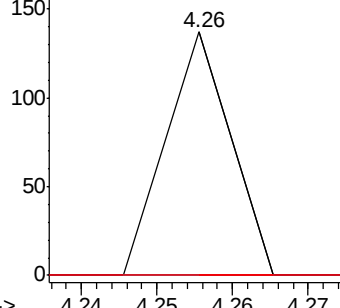
70 0.0 15.4 23.2#



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



#39

Methylcyclohexane

Concen: 1.304 ug/l

RT: 5.76 min Scan# 531

Delta R.T. 0.15 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

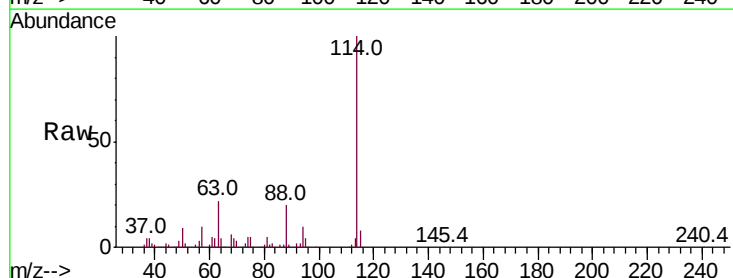
Tgt Ion: 83 Resp: 2517

Ion Ratio Lower Upper

83 100

55 24.8 67.4 101.2#

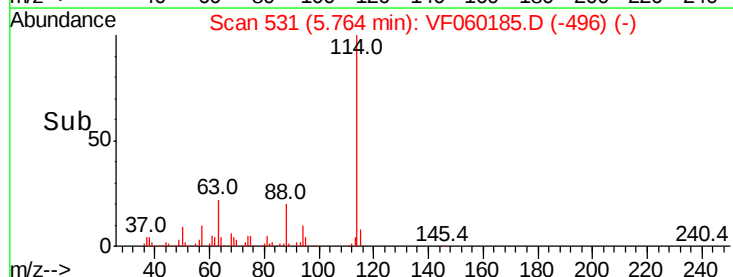
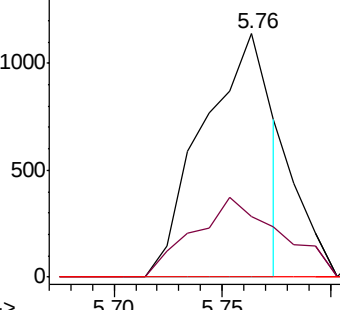
98 0.0 37.0 55.6#

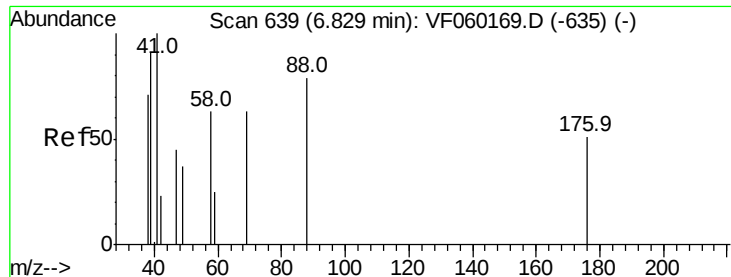


Abundance Ion 83.00 (82.70 to 83.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

Ion 98.00 (97.70 to 98.70): VF0





#49

1,4-Dioxane

Concen: 128.066 ug/l

RT: 7.12 min Scan# 669

Delta R.T. 0.30 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :
MSVOA_F
ClientSampleId :

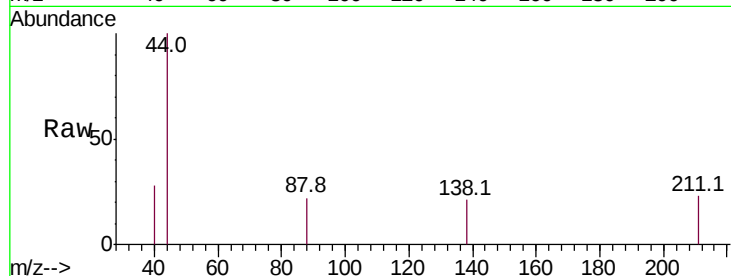
Tot Ion: 88 Resp: 66

Ion Ratio Lower Upper

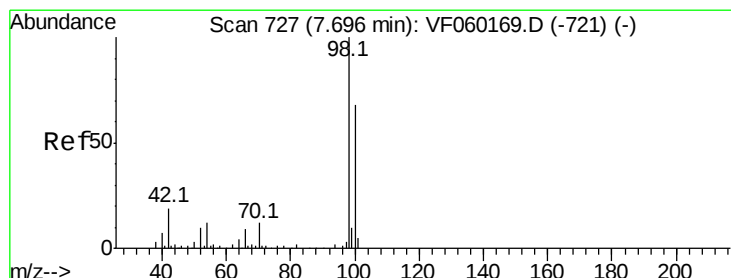
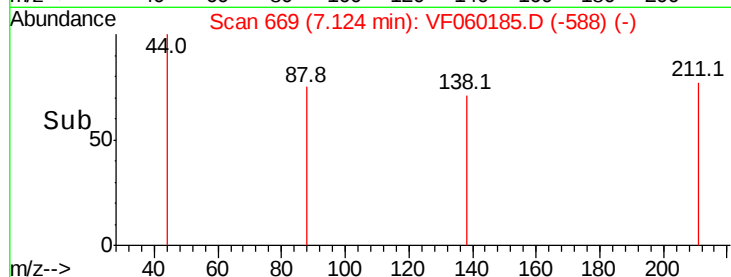
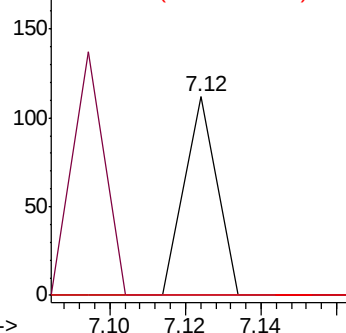
88 100

43 0.0 24.5 36.7#

58 0.0 63.8 95.8#



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



#50

Toluene-d8

Concen: 48.170 ug/l

RT: 7.71 min Scan# 728

Delta R.T. 0.01 min

Lab File: VF060185.D

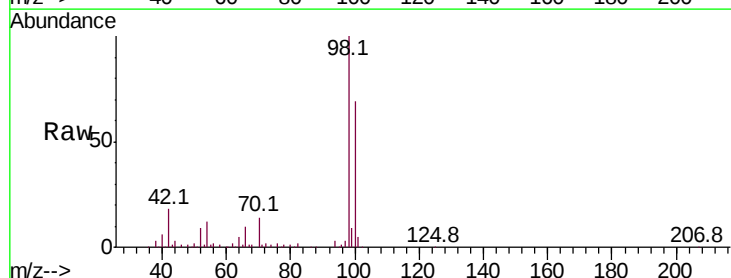
Acq: 29 Aug 2018 9:40

Tgt Ion: 98 Resp: 153095

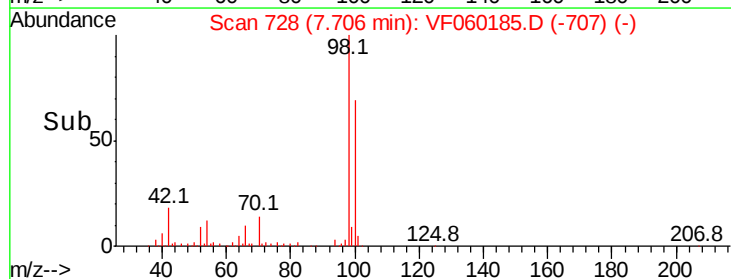
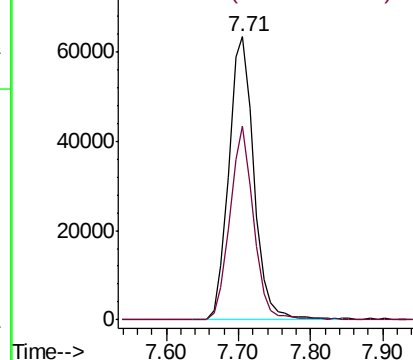
Ion Ratio Lower Upper

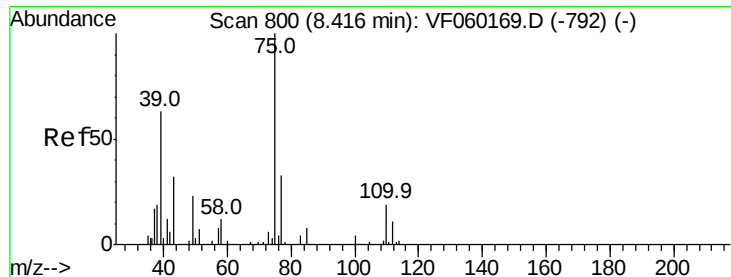
98 100

100 68.6 54.5 81.7



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





#53

t-1,3-Dichloropropene

Concen: 3.517 ug/l

RT: 8.36 min Scan# 794

Delta R.T. -0.06 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

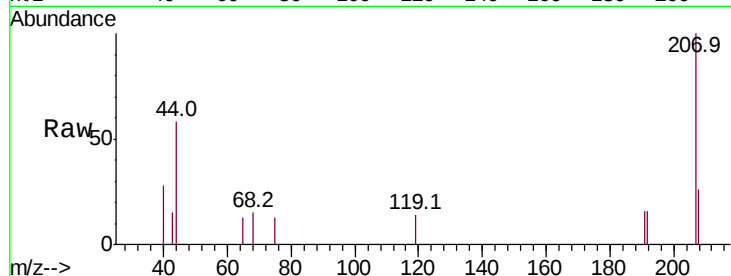
Instrument :
MSVOA_F
ClientSampleId :

Tot Ion: 75 Resp: 65

Ion Ratio Lower Upper

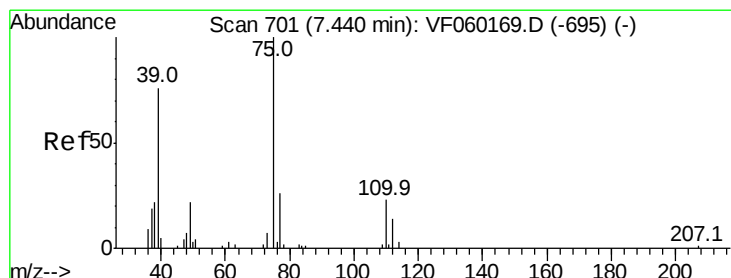
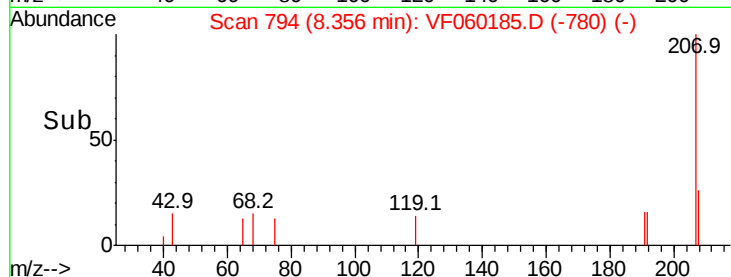
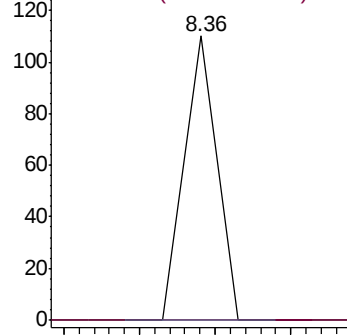
75 100

77 0.0 26.4 39.6#



Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0



#54

cis-1,3-Dichloropropene

Concen: 5.423 ug/l

RT: 7.50 min Scan# 707

Delta R.T. 0.06 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

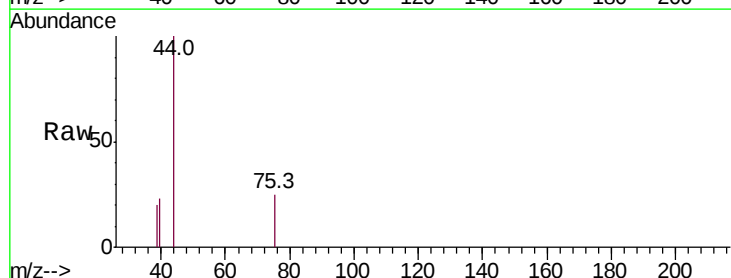
Tgt Ion: 75 Resp: 77

Ion Ratio Lower Upper

75 100

77 0.0 20.7 31.1#

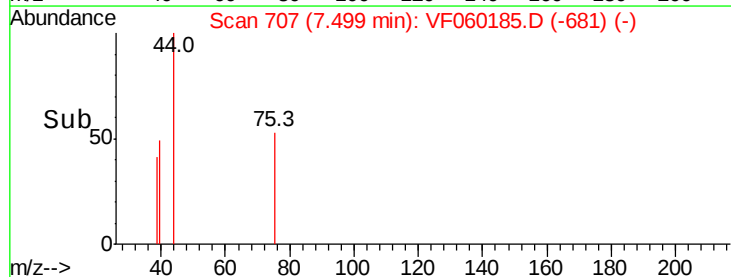
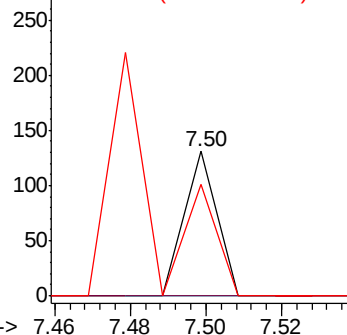
39 167.9 60.9 91.3#

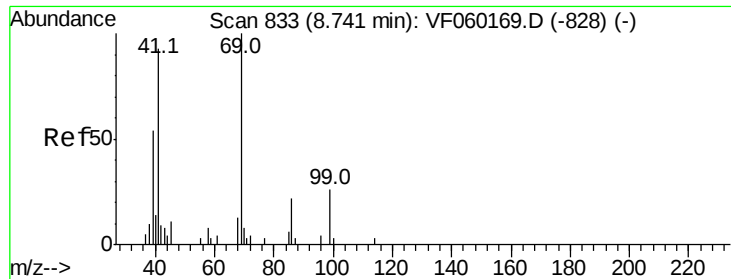


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 77.00 (76.70 to 77.70): VF0

Ion 39.00 (38.70 to 39.70): VF0





#56

Ethyl methacrylate

Concen: 4.637 ug/l

RT: 8.68 min Scan# 827

Delta R.T. -0.06 min

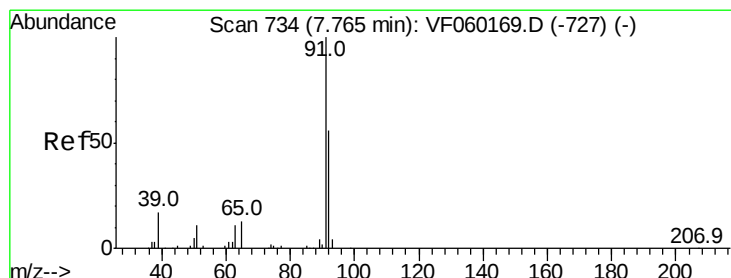
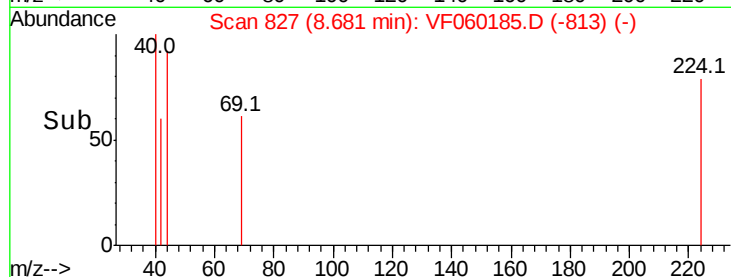
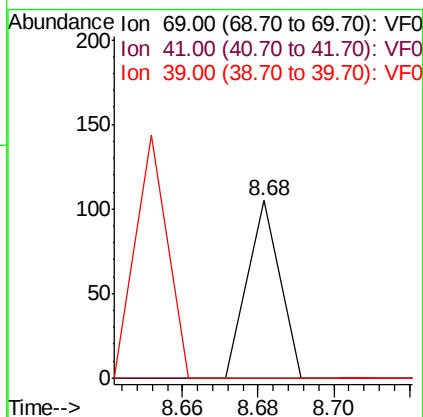
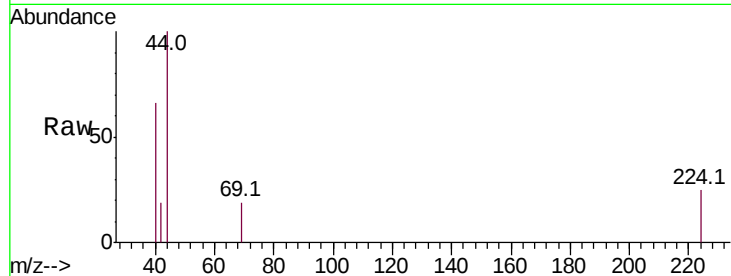
Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :
MSVOA_F
ClientSampleId :

Tot Ion: 69 Resp: 62

Ion	Ratio	Lower	Upper
69	100		
41	0.0	74.6	111.8#
39	0.0	46.2	69.4#



#58

2-Chloroethyl Vinyl ether

Concen: 1.790 ug/l

RT: 7.75 min Scan# 733

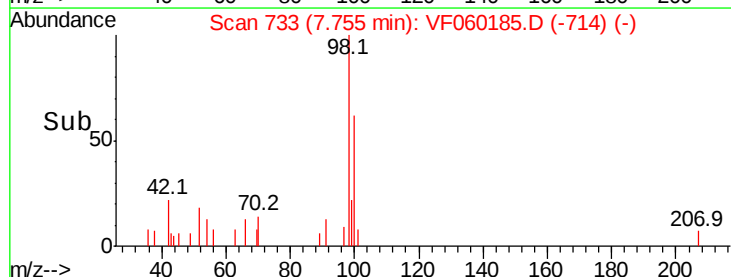
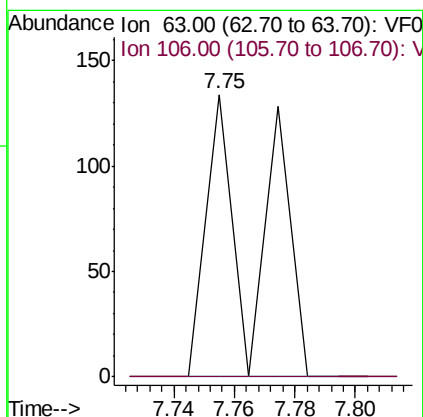
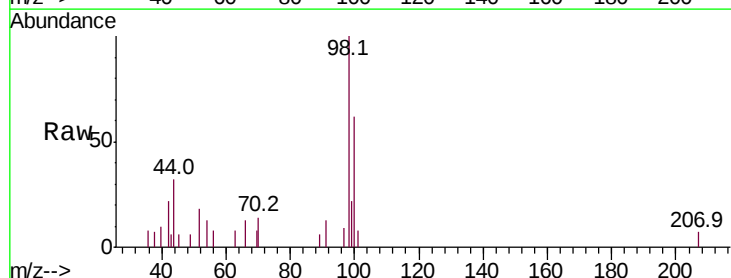
Delta R.T. -0.01 min

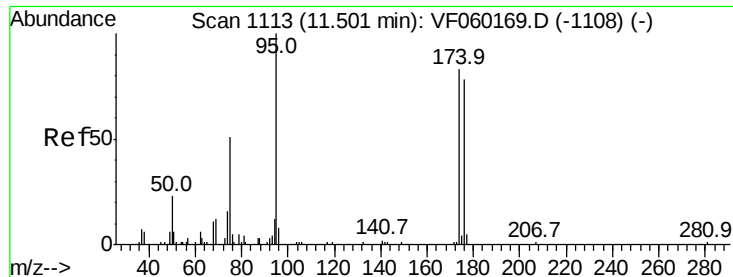
Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Tgt Ion: 63 Resp: 155

Ion	Ratio	Lower	Upper
63	100		
106	0.0	0.0	0.0





#62

4-Bromofluorobenzene

Concen: 61.516 ug/l

RT: 11.51 min Scan# 1114

Delta R.T. 0.01 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :

MSVOA_F

ClientSampleId :

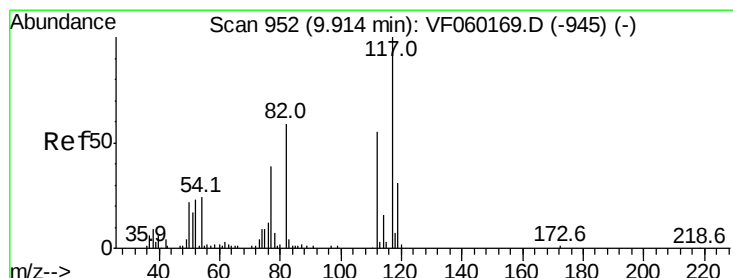
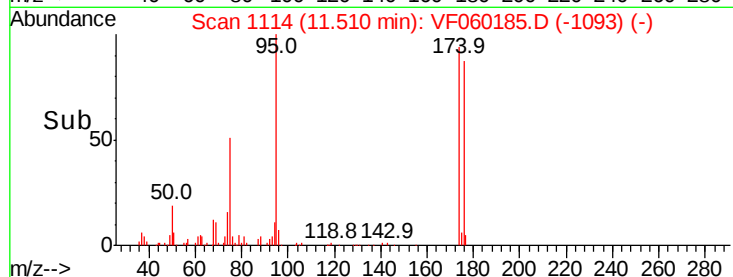
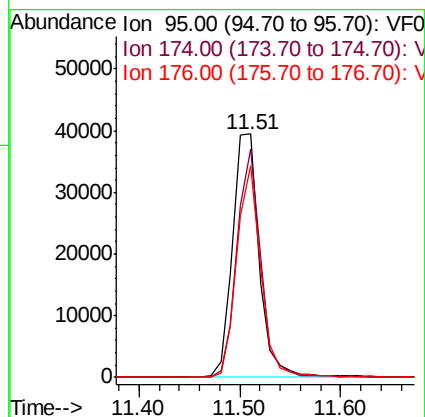
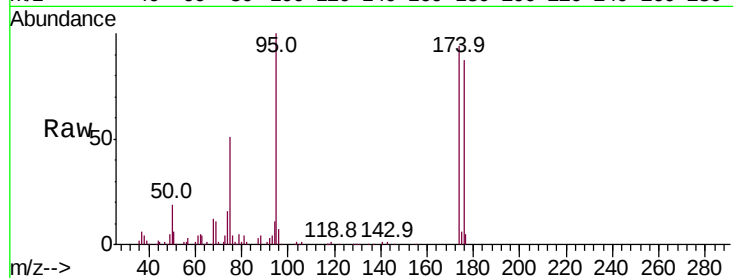
Tot Ion: 95 Resp: 72098

Ion Ratio Lower Upper

95 100

174 93.9 0.0 165.2

176 86.9 0.0 156.6



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 9.91 min Scan# 952

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

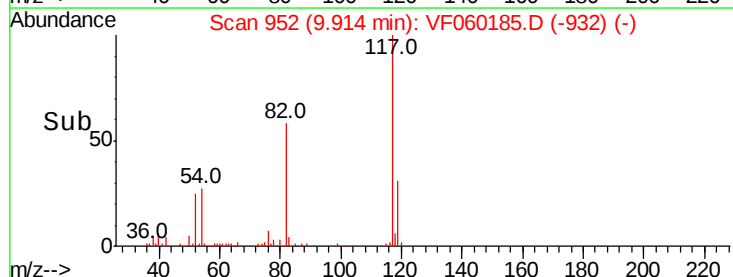
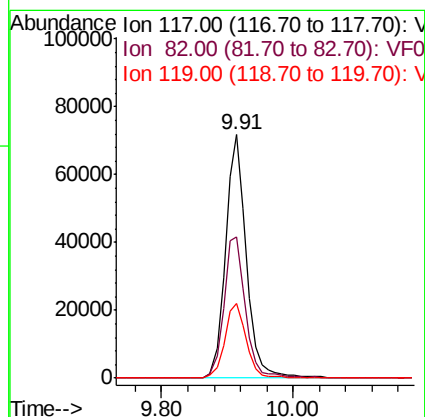
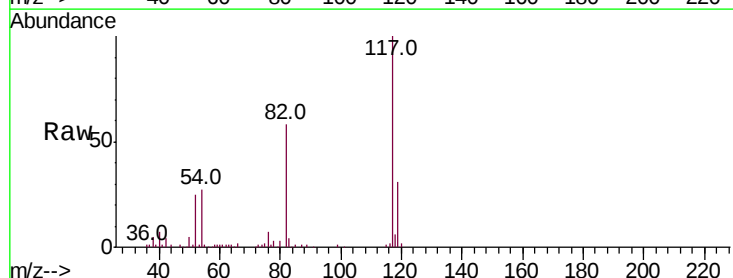
Tgt Ion: 117 Resp: 158501

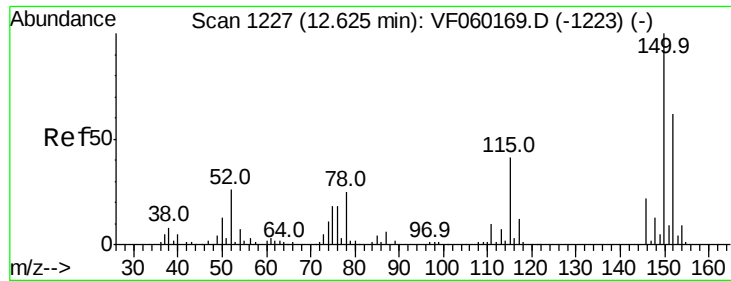
Ion Ratio Lower Upper

117 100

82 58.0 47.2 70.8

119 30.7 25.0 37.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.62 min Scan# 1227

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :

MSVOA_F

ClientSampleId :

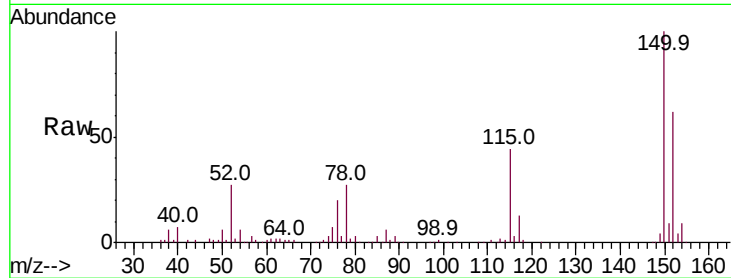
Tot Ion:152 Resp: 81687

Ion Ratio Lower Upper

152 100

115 69.8 33.2 99.6

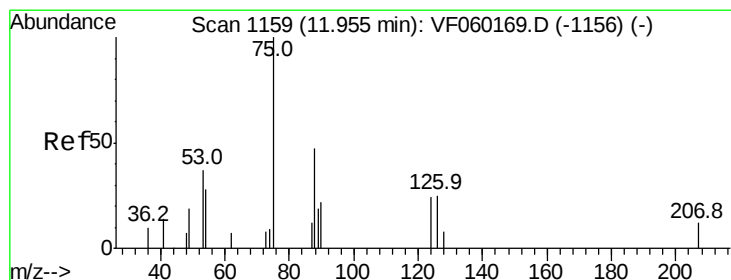
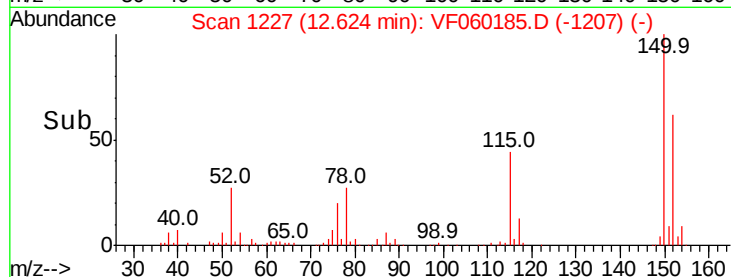
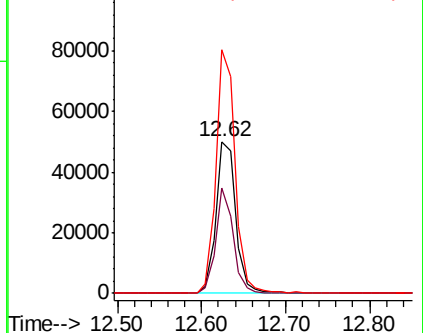
150 160.4 0.0 325.6



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



#81

trans-1,4-Dichloro-2-butene

Concen: 4.856 ug/l

RT: 11.98 min Scan# 1162

Delta R.T. 0.03 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

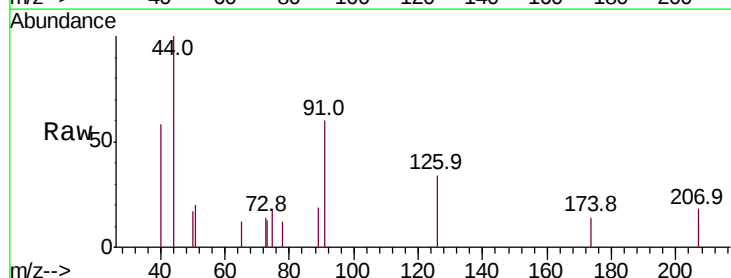
Tgt Ion: 75 Resp: 155

Ion Ratio Lower Upper

75 100

53 0.0 53.4 80.0#

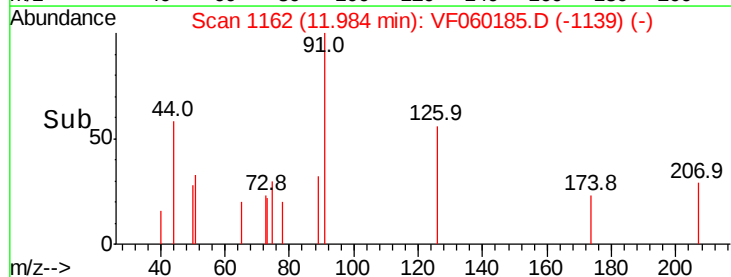
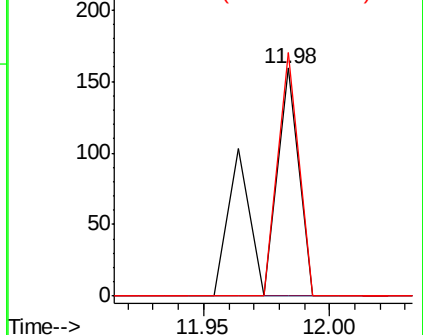
89 106.9 28.9 43.3#

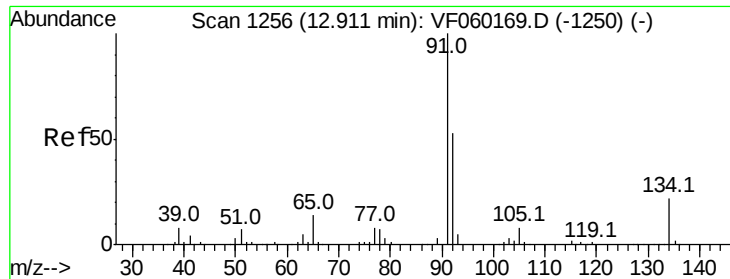


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 89.00 (88.70 to 89.70): VF0

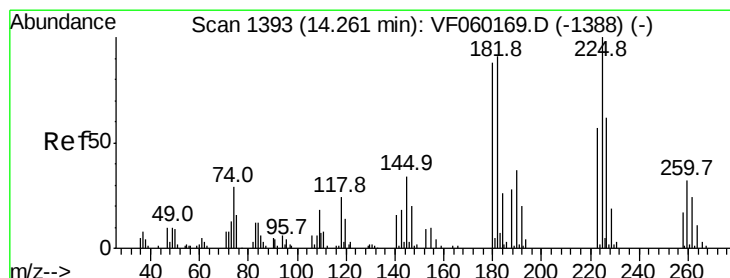
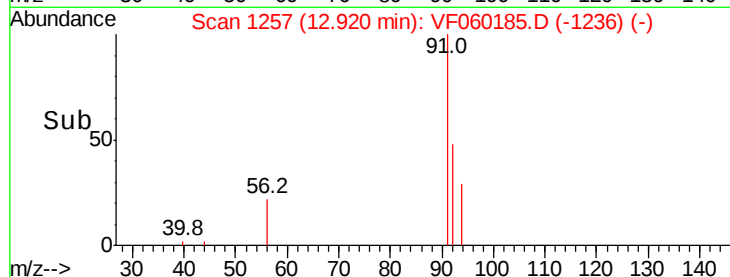
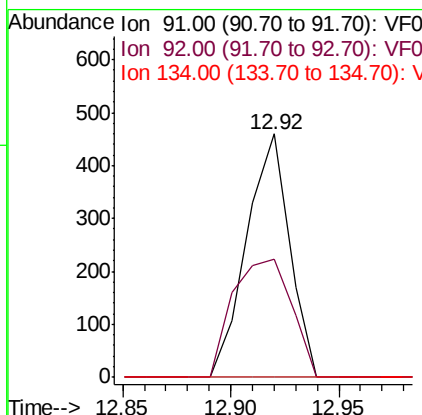
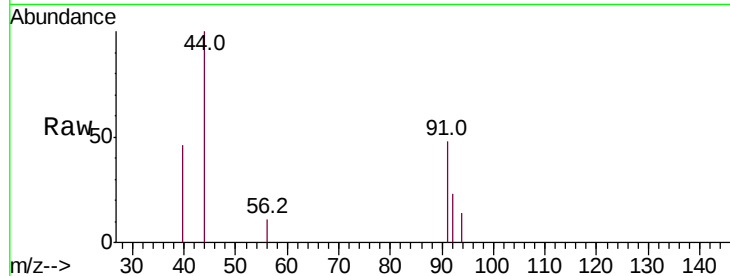




#89
n-Butylbenzene
Concen: 3.712 ug/l
RT: 12.92 min Scan# 1257
Delta R.T. 0.01 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

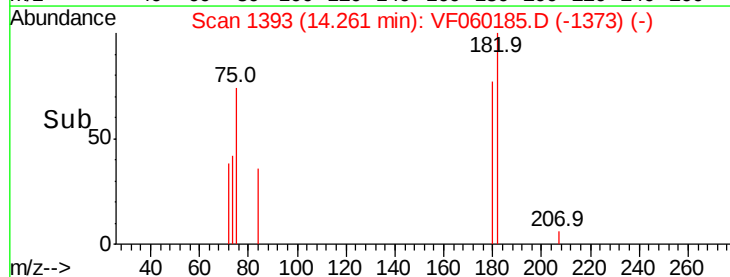
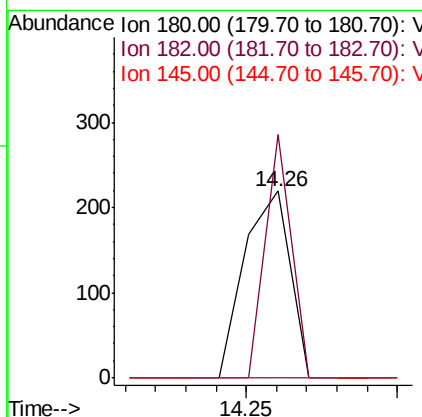
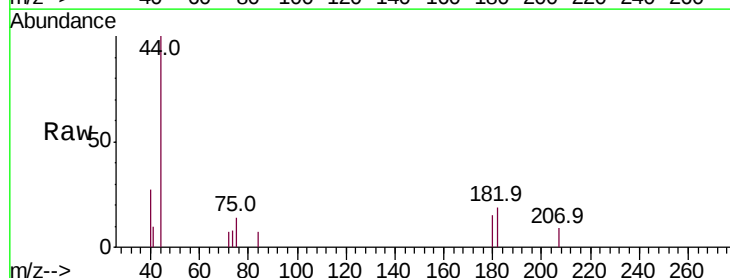
Instrument :
MSVOA_F
ClientSampleId :

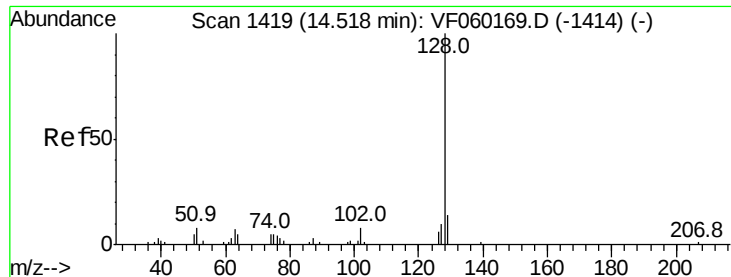
Tot Ion: 91 Resp: 630
Ion Ratio Lower Upper
91 100
92 48.5 26.7 80.0
134 0.0 11.0 33.0#



#93
1,2,4-Trichlorobenzene
Concen: 4.721 ug/l
RT: 14.26 min Scan# 1393
Delta R.T. -0.00 min
Lab File: VF060185.D
Acq: 29 Aug 2018 9:40

Tgt Ion: 180 Resp: 229
Ion Ratio Lower Upper
180 100
182 130.6 51.8 155.5
145 0.0 19.3 57.9#





#95

Naphthalene

Concen: 8.719 ug/l

RT: 14.52 min Scan# 1419

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

Instrument :

MSVOA_F

ClientSampleId :

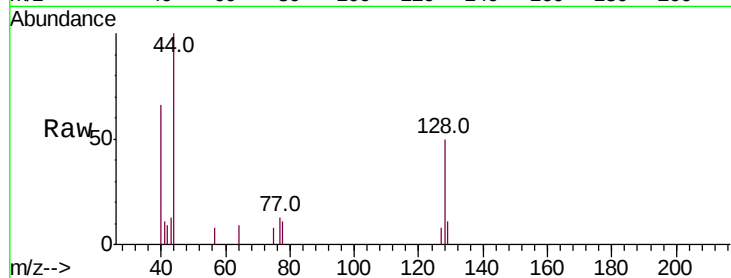
Tot Ion:128 Resp: 986

Ion Ratio Lower Upper

128 100

127 16.1 8.3 12.5#

129 22.7 11.5 17.3#



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

14.52

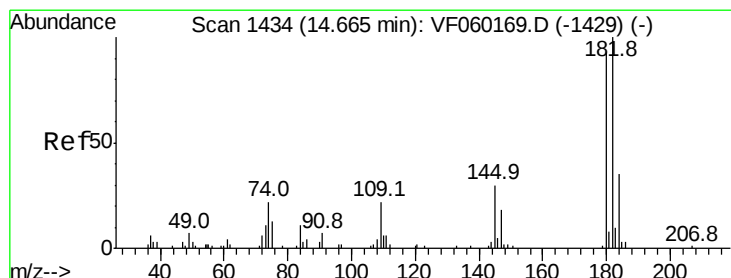
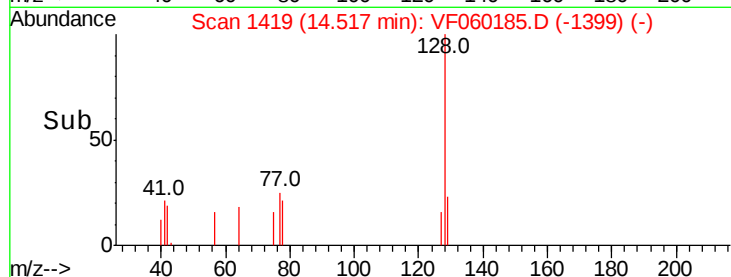
600

400

200

0

Time-->



#96

1,2,3-Trichlorobenzene

Concen: 5.644 ug/l

RT: 14.66 min Scan# 1434

Delta R.T. -0.00 min

Lab File: VF060185.D

Acq: 29 Aug 2018 9:40

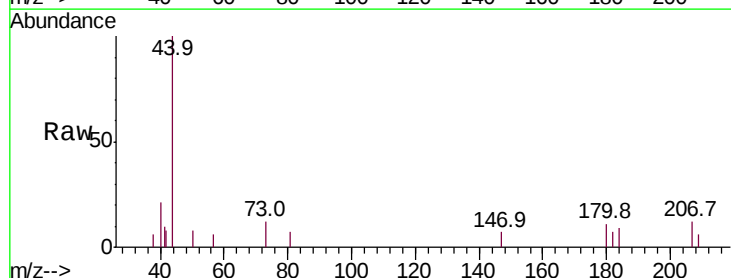
Tgt Ion:180 Resp: 269

Ion Ratio Lower Upper

180 100

182 63.9 53.6 160.8

145 0.0 16.2 48.6#



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

14.66

250

200

150

100

50

0

Time-->

