

Data File : VF060182.D
Acq On : 29 Aug 2018 8:17
Operator : VA/AP
Sample : J4274-05
Misc : 6.29g/5mL/MSVOA_F/SOIL
ALS Vial : 45 Sample Multiplier: 1

Instrument :
MSVOA_F
ClientSampleId :
HD-01-082718

Quant Time: Aug 29 08:38:50 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	114000	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.75	114	154706	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.91	117	130249	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.62	152	51474	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.01	65	59078	82.98	ug/l	0.00
Spiked Amount	50.000		Recovery	=	165.96%	
35) Dibromofluoromethane	4.29	113	61265	61.56	ug/l	0.02
Spiked Amount	50.000		Recovery	=	123.12%	
50) Toluene-d8	7.71	98	123919	36.40	ug/l	0.00
Spiked Amount	50.000		Recovery	=	72.80%	
62) 4-Bromofluorobenzene	11.51	95	56891	45.31	ug/l	0.00
Spiked Amount	50.000		Recovery	=	90.62%	

Target Compounds			Qvalue			
5) Bromomethane	1.32	94	804	1.836	ug/l	97
11) Tert butyl alcohol	2.64	59	290	53.540	ug/l #	64
13) Acrolein	2.09	56	67	4.451	ug/l #	30
16) Acetone	2.32	43	17445	210.631	ug/l	100
18) Methyl Acetate	2.43	43	1707	Below Cal	#	67
20) Methylene Chloride	2.27	84	8191	11.896	ug/l #	87
23) Vinyl Acetate	3.29	43	178	26.843	ug/l #	82
25) 2-Butanone	4.48	43	395	4.710	ug/l #	44
26) 2,2-Dichloropropane	3.62	77	64	3.977	ug/l #	66
29) Tetrahydrofuran	4.19	42	66	14.754	ug/l #	42
37) Ethyl Acetate	4.13	43	350	5.122	ug/l #	1
52) Toluene	7.78	92	5860	2.609	ug/l	83
54) cis-1,3-Dichloropropene	7.38	75	60	5.404	ug/l #	21
56) Ethyl methacrylate	8.76	69	406	5.462	ug/l #	69
58) 2-Chloroethyl Vinyl ether	7.77	63	1199	12.928	ug/l	100
59) 2-Hexanone	9.64	43	357	1.755	ug/l #	36
81) trans-1,4-Dichloro-2-buten	12.10	75	63	4.496	ug/l #	24
84) 1,2,4-Trimethylbenzene	12.29	105	7171	1.972	ug/l	99
89) n-Butylbenzene	12.92	91	4837	4.564	ug/l	94
93) 1,2,4-Trichlorobenzene	14.26	180	173	4.759	ug/l #	31
95) Naphthalene	14.52	128	11736	25.191	ug/l	97
96) 1,2,3-Trichlorobenzene	14.66	180	525	6.203	ug/l #	83

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

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```
ALS Vial      : 45      Sample Multiplier: 1
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Instrument :
MSVOA_F
ClientSampleId :
HD-01-082718

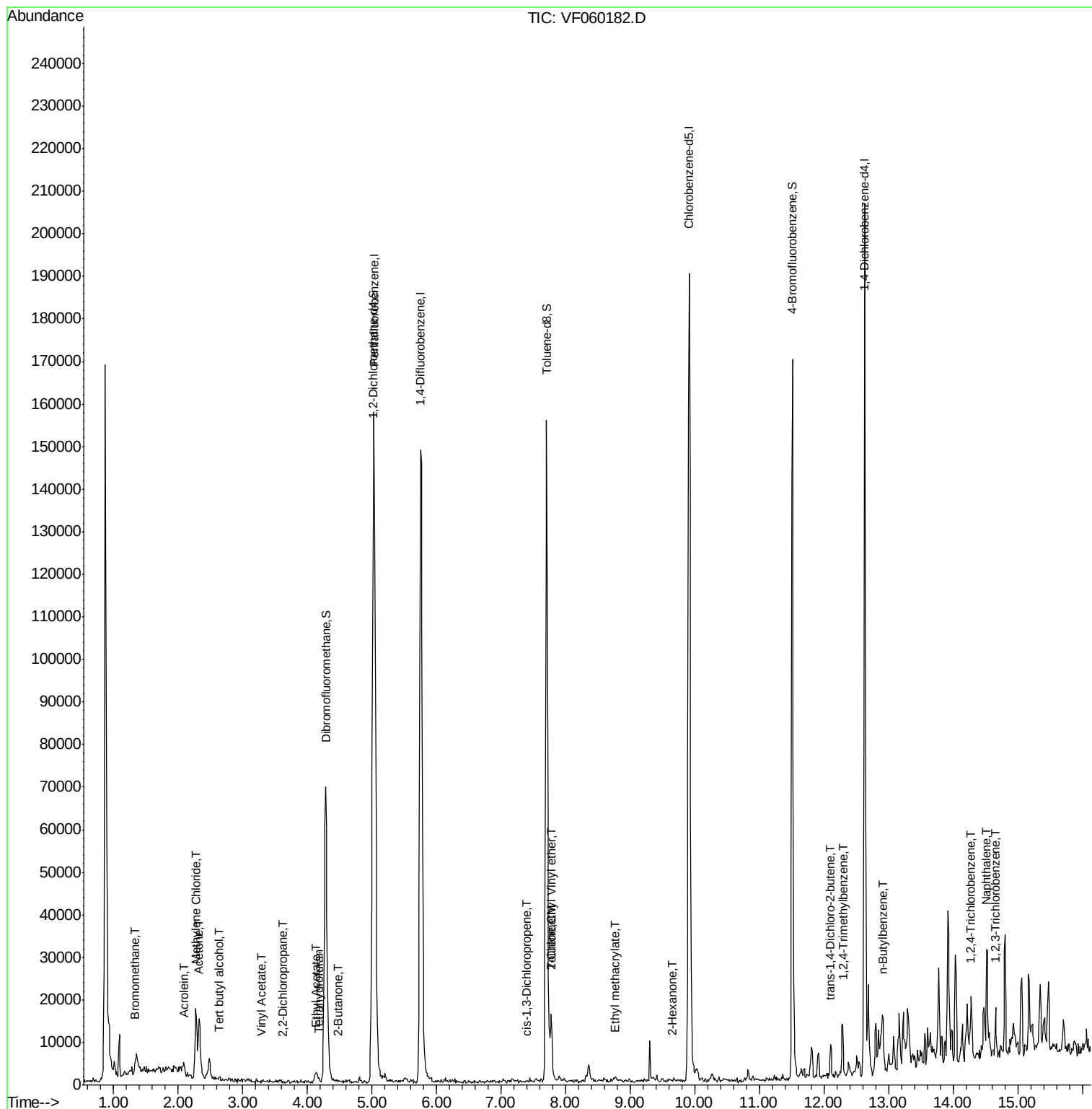
Quant Time: Aug 29 08:38:50 2018

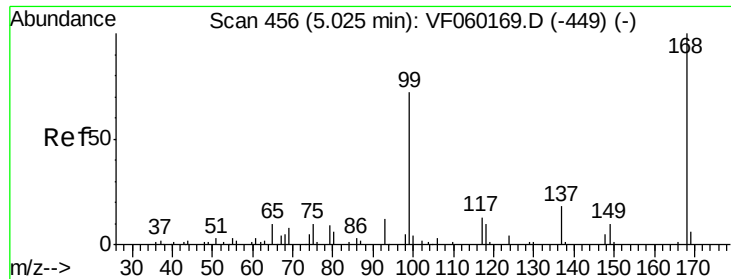
Quant Method : Z:\V0ASRV\HPCHEM1\MSV0A_F\METHODS\82F082918S.M

Quant Title : SW846 8260

QLast Update : Wed Aug 29 03:22:03 2018

Response via : Initial Calibration

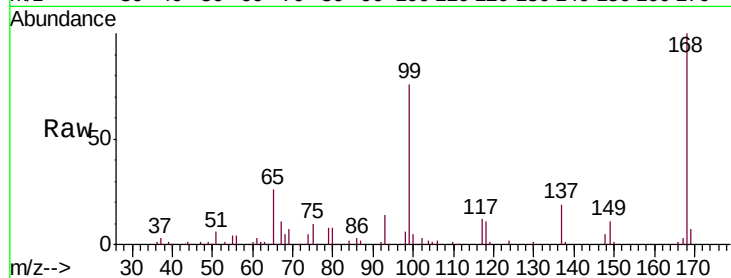




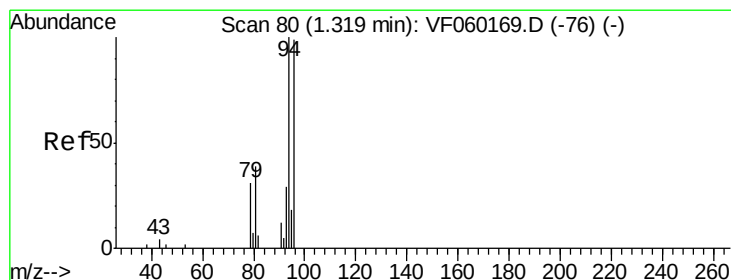
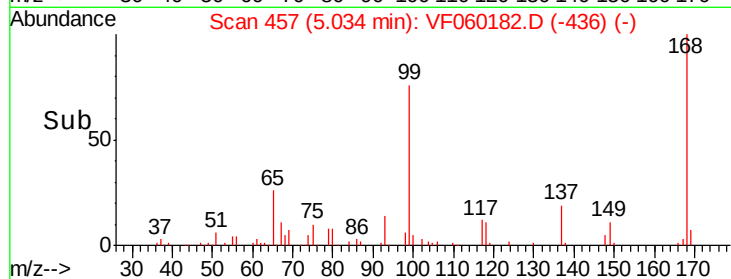
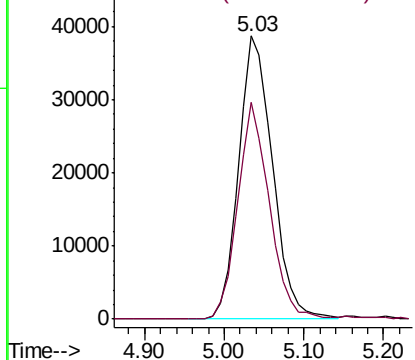
#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 5.03 min Scan# 457
Delta R.T. 0.01 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

Instrument :
MSVOA_F
ClientSampleId :
HD-01-082718

Tgt Ion: 168 Resp: 114000
Ion Ratio Lower Upper
168 100
99 76.4 57.9 86.9

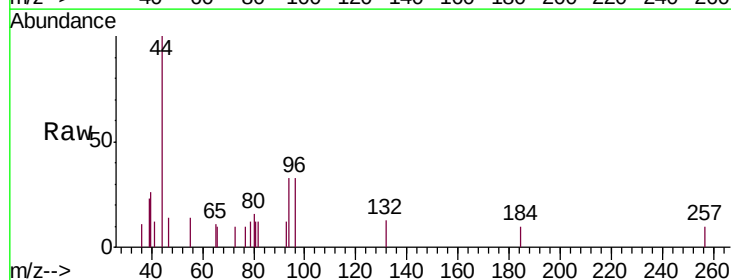


Abundance Ion 168.00 (167.70 to 168.70): VF0
Ion 99.00 (98.70 to 99.70): VF0

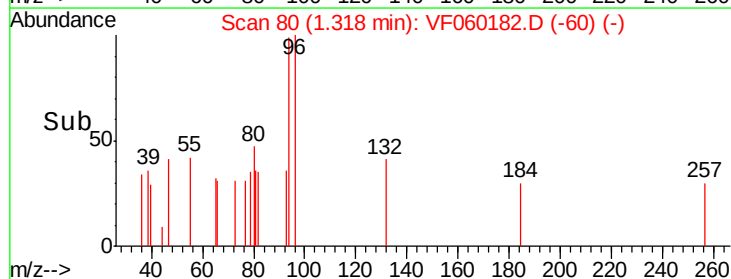
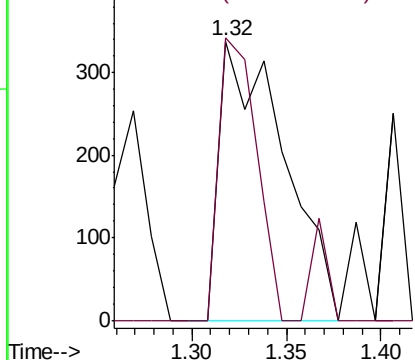


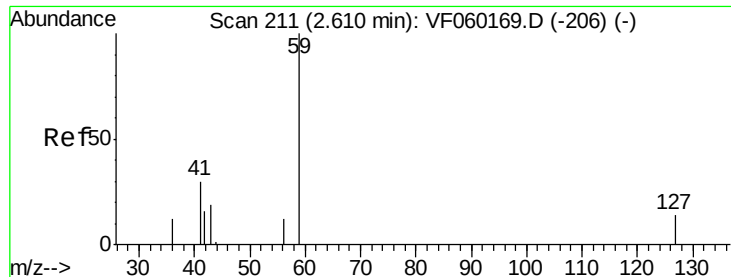
#5
Bromomethane
Concen: 1.836 ug/l
RT: 1.32 min Scan# 80
Delta R.T. -0.00 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

Tgt Ion: 94 Resp: 804
Ion Ratio Lower Upper
94 100
96 101.5 79.0 118.4



Abundance Ion 94.00 (93.70 to 94.70): VF0
Ion 96.00 (95.70 to 96.70): VF0





#11

Tert butyl alcohol

Concen: 53.540 ug/l

RT: 2.64 min Scan# 214

Delta R.T. 0.03 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

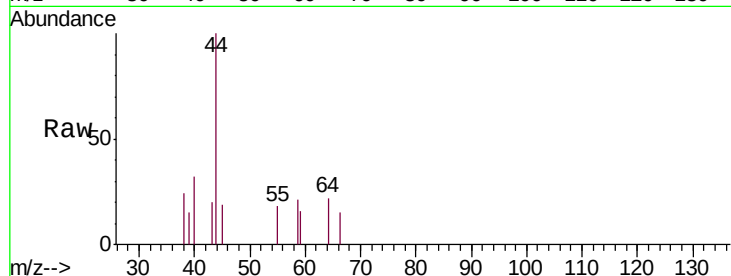
HD-01-082718

Tgt Ion: 59 Resp: 290

Ion Ratio Lower Upper

59 100

57 0.0 11.9 17.9#



Abundance Ion 59.00 (58.70 to 59.70): VF0

Ion 57.00 (56.70 to 57.70): VF0

2.64

2.64

2.64

2.64

2.64

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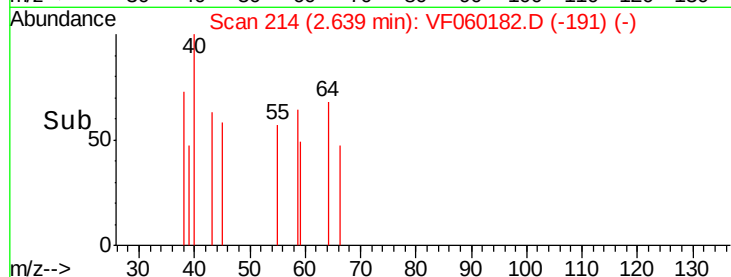
2.64

2.64

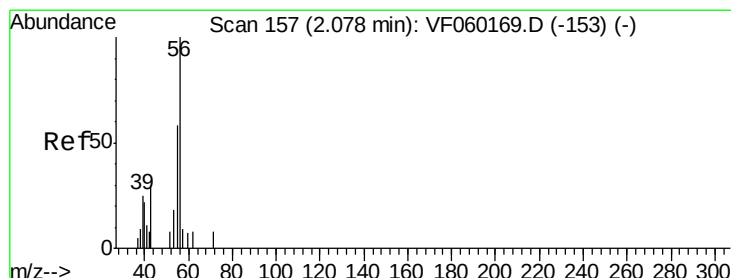
2.64

2.64

2.64



Time-->



#13

Acrolein

Concen: 4.451 ug/l

RT: 2.09 min Scan# 158

Delta R.T. 0.01 min

Lab File: VF060182.D

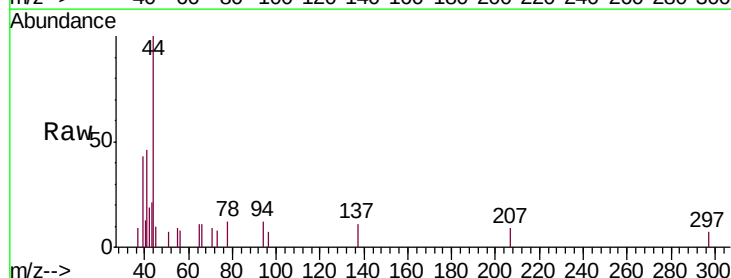
Acq: 29 Aug 2018 8:17

Tgt Ion: 56 Resp: 67

Ion Ratio Lower Upper

56 100

55 109.6 46.4 69.6#



Abundance Ion 56.00 (55.70 to 56.70): VF0

Ion 55.00 (54.70 to 55.70): VF0

2.09

2.09

2.09

2.09

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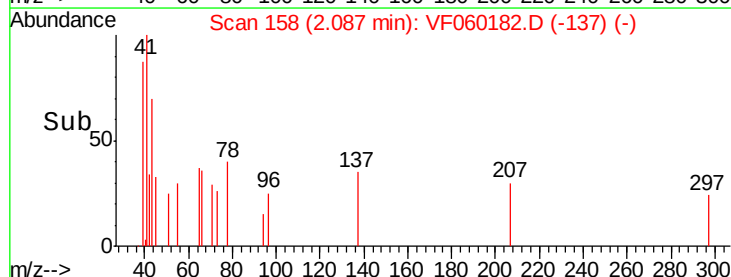
2.09

2.09

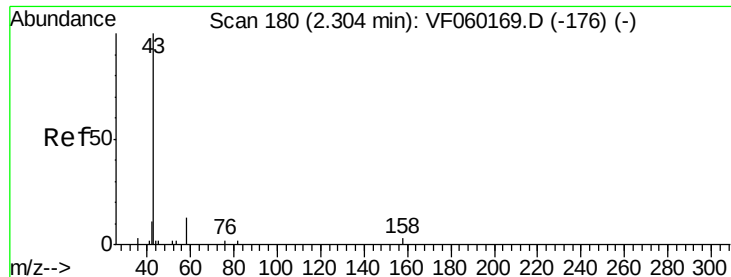
2.09

2.09

2.09



Time-->



#16

Acetone

Concen: 210.631 ug/l

RT: 2.32 min Scan# 182

Delta R.T. 0.02 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

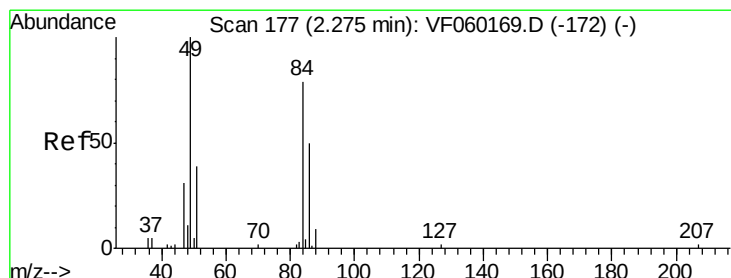
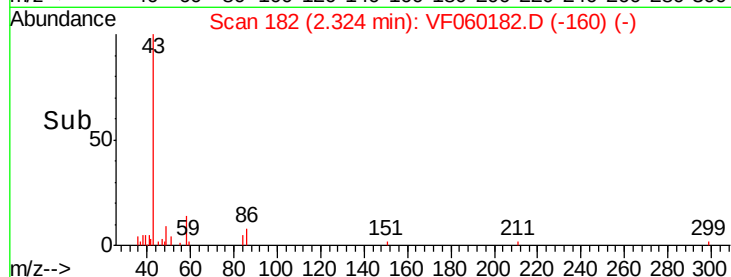
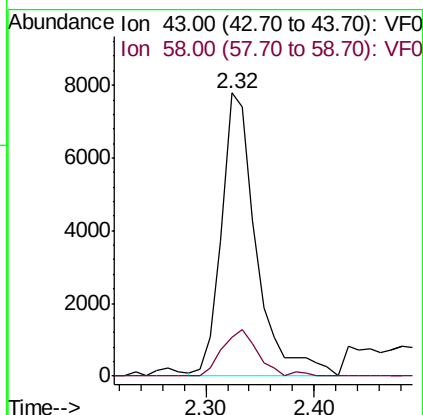
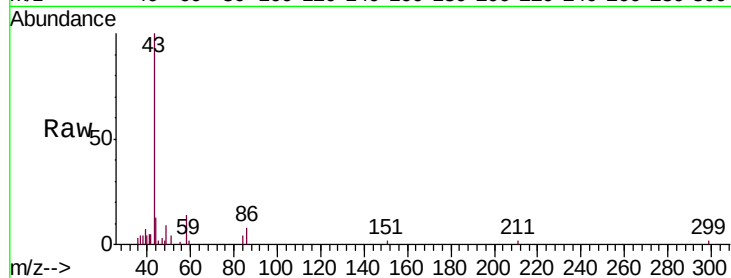
HD-01-082718

Tgt Ion: 43 Resp: 17445

Ion Ratio Lower Upper

43 100

58 13.5 10.7 16.1



#20

Methylene Chloride

Concen: 11.896 ug/l

RT: 2.27 min Scan# 177

Delta R.T. 0.00 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Tgt Ion: 84 Resp: 8191

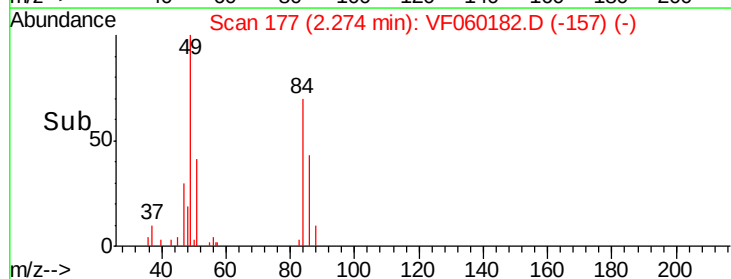
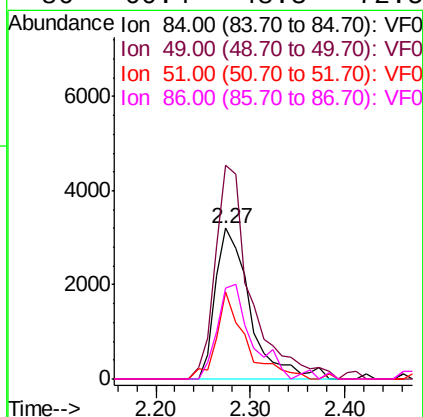
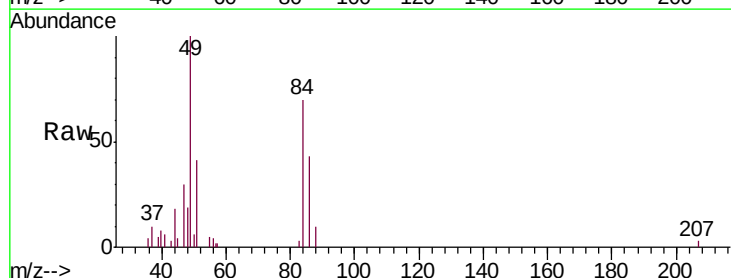
Ion Ratio Lower Upper

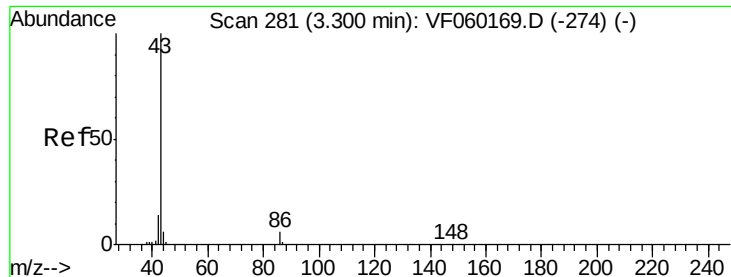
84 100

49 142.0 97.0 145.4

51 57.7 38.2 57.2#

86 60.4 48.3 72.5





#23

Vinyl Acetate

Concen: 26.843 ug/l

RT: 3.29 min Scan# 280

Delta R.T. -0.01 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

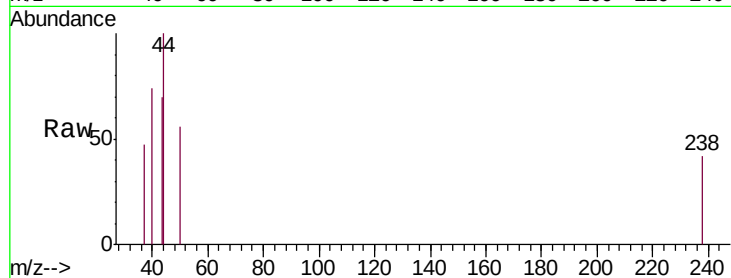
HD-01-082718

Tgt Ion: 43 Resp: 178

Ion Ratio Lower Upper

43 100

86 0.0 4.9 7.3#



Abundance Ion 43.00 (42.70 to 43.70): VF0

Ion 86.00 (85.70 to 86.70): VF0

3.29

200

150

100

50

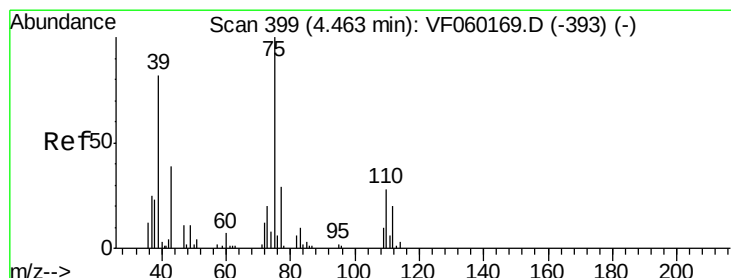
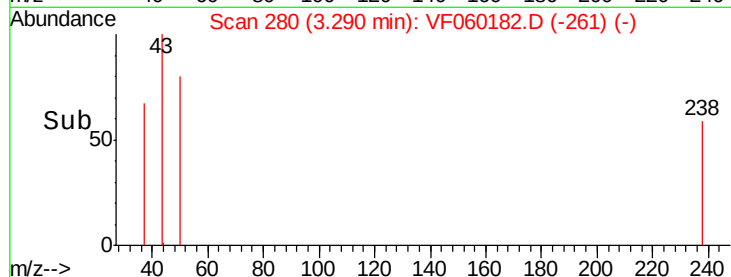
0

Time-->

3.25

3.30

3.35



#25

2-Butanone

Concen: 4.710 ug/l

RT: 4.48 min Scan# 401

Delta R.T. 0.02 min

Lab File: VF060182.D

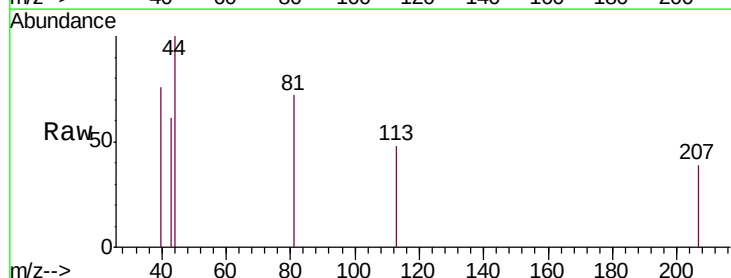
Acq: 29 Aug 2018 8:17

Tgt Ion: 43 Resp: 395

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

200

150

100

50

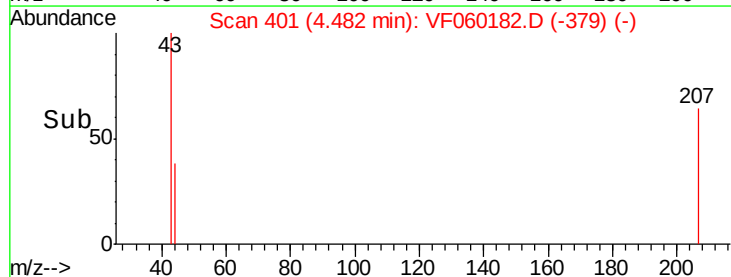
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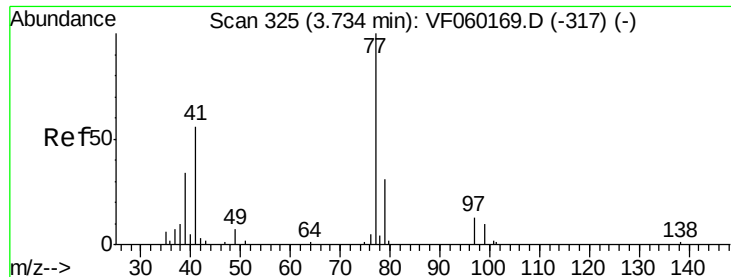
Time-->

4.45

4.50

4.55





#26

2,2-Dichloropropane

Concen: 3.977 ug/l

RT: 3.62 min Scan# 314

Delta R.T. -0.11 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

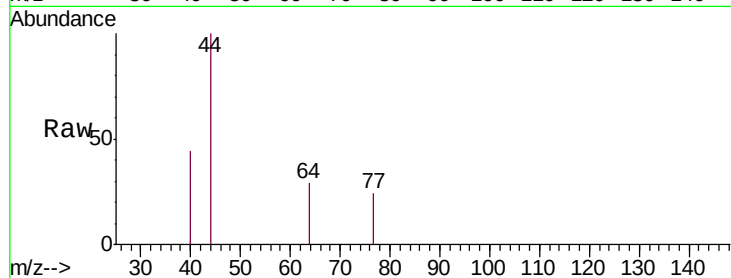
HD-01-082718

Tgt Ion: 77 Resp: 64

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

3.62

120

100

80

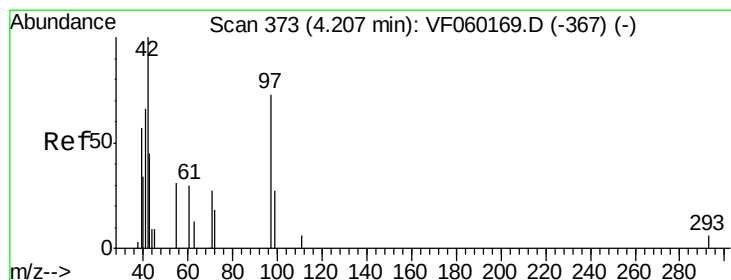
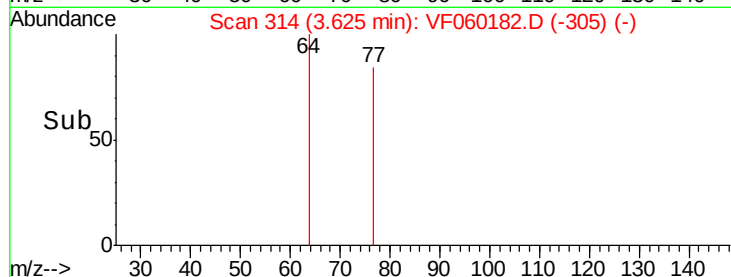
60

40

20

0

Time-->



#29

Tetrahydrofuran

Concen: 14.754 ug/l

RT: 4.19 min Scan# 371

Delta R.T. -0.02 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

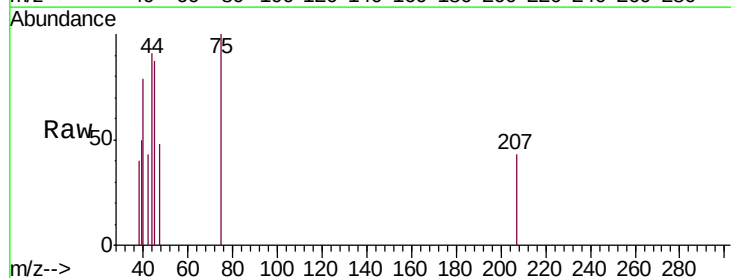
Tgt Ion: 42 Resp: 66

Ion Ratio Lower Upper

42 100

72 0.0 27.0 40.4#

71 0.0 24.6 36.8#



Abundance Ion 42.00 (41.70 to 42.70): VF0

Ion 72.00 (71.70 to 72.70): VF0

Ion 71.00 (70.70 to 71.70): VF0

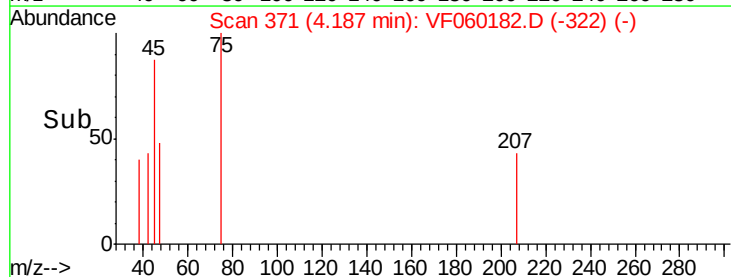
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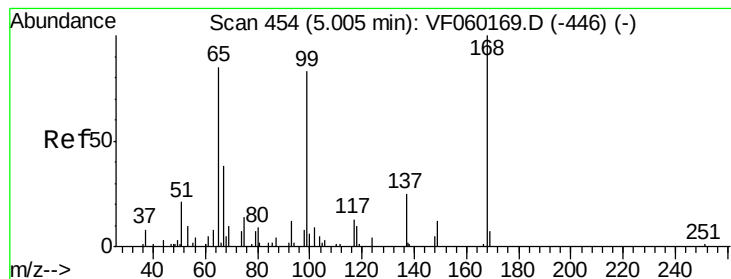
100

50

0

Time-->





#33

1,2-Dichloroethane-d4

Concen: 82.976 ug/l

RT: 5.01 min Scan# 455

Delta R.T. 0.01 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

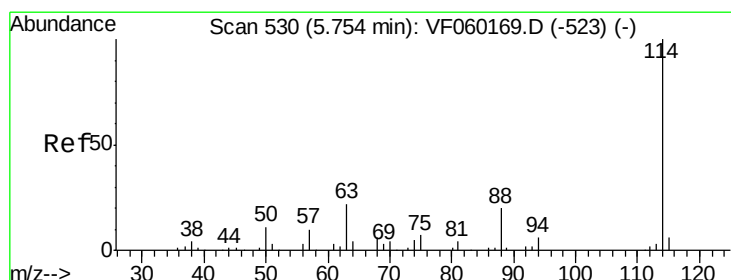
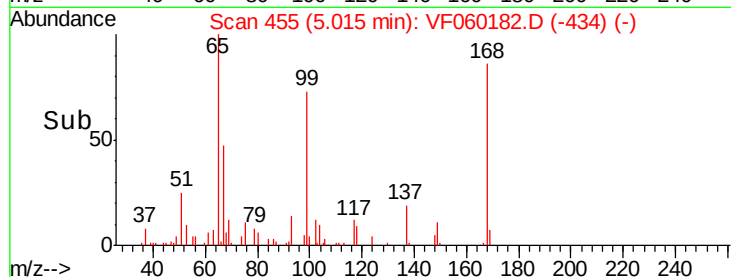
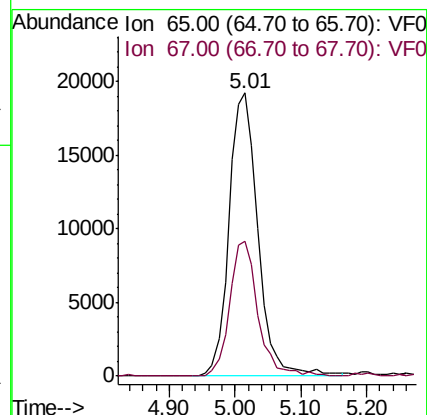
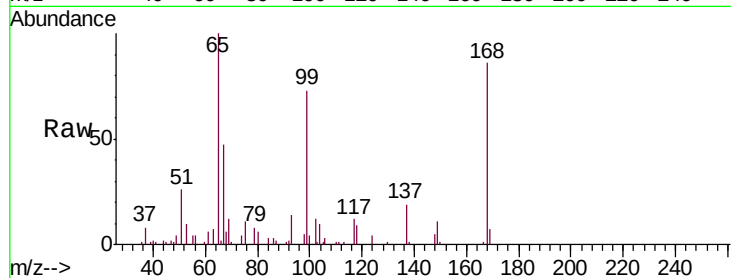
HD-01-082718

Tgt Ion: 65 Resp: 59078

Ion Ratio Lower Upper

65 100

67 47.4 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: VF060182.D

Acq: 29 Aug 2018 8:17

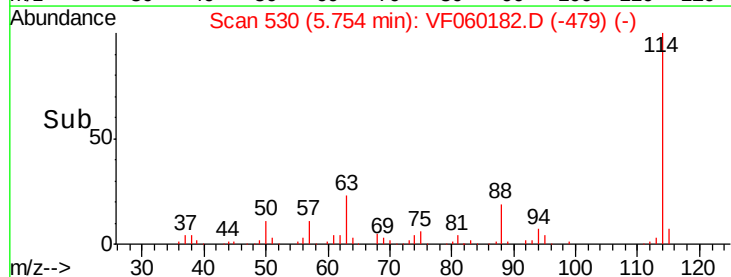
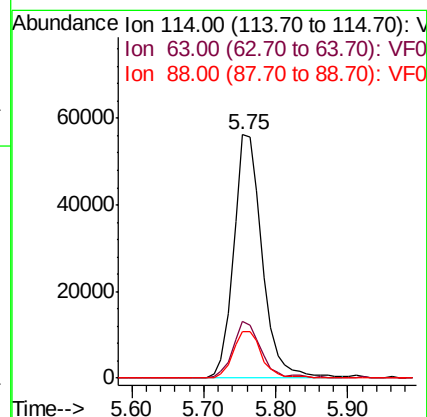
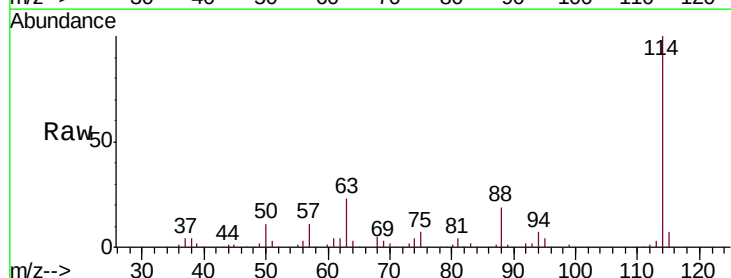
Tgt Ion: 114 Resp: 154706

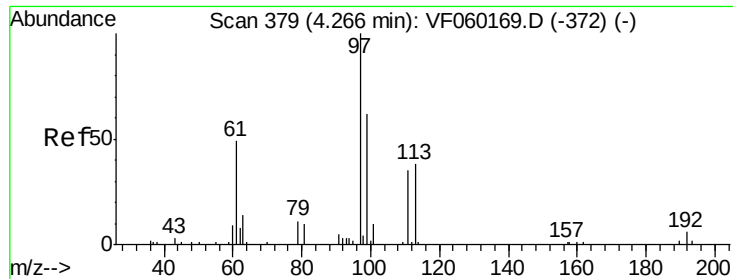
Ion Ratio Lower Upper

114 100

63 23.2 0.0 45.8

88 19.1 0.0 40.2

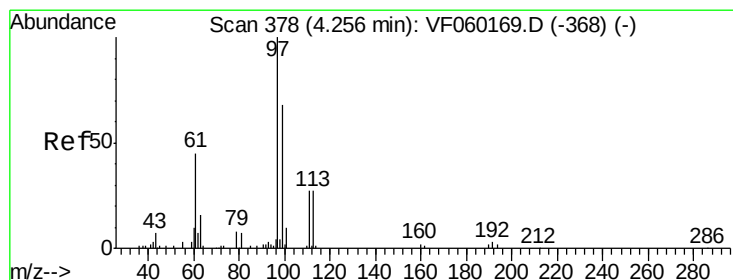
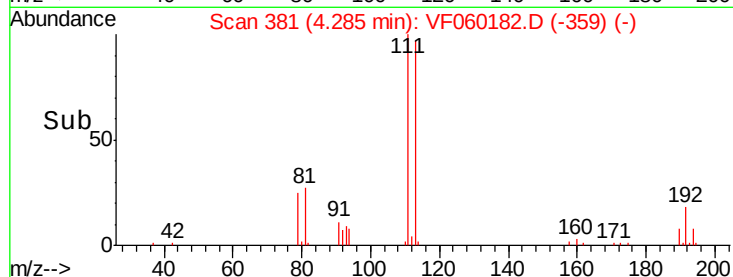
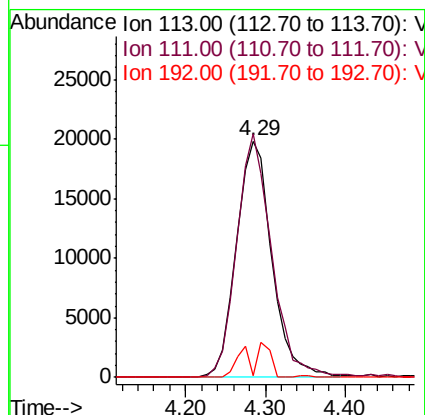
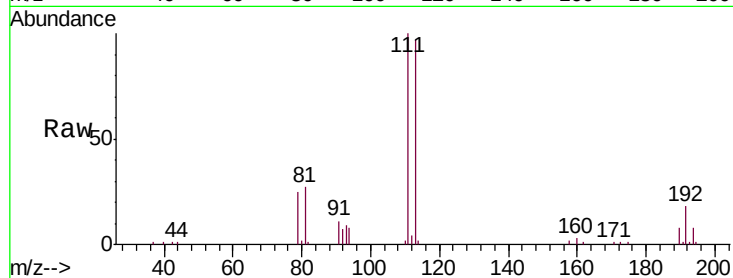




#35
Dibromofluoromethane
Concen: 61.558 ug/l
RT: 4.29 min Scan# 381
Delta R.T. 0.02 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

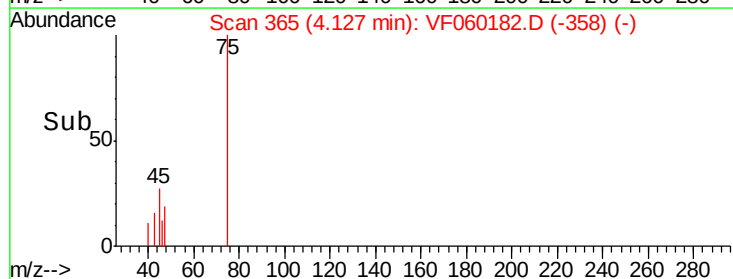
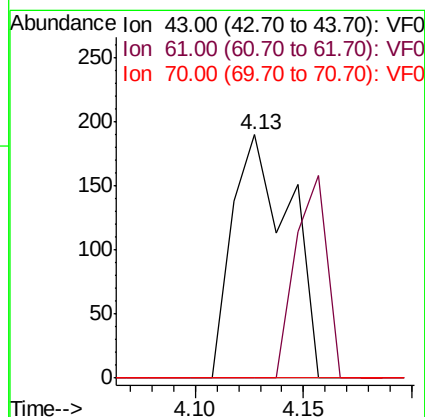
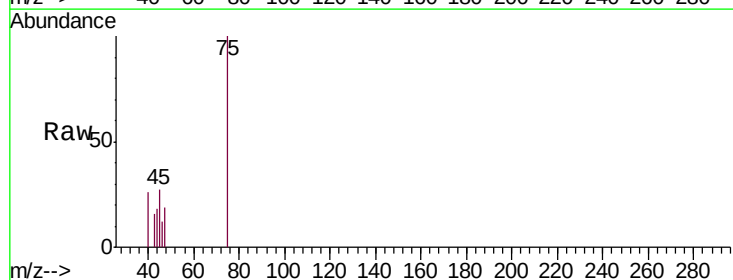
Instrument :
MSVOA_F
ClientSampleId :
HD-01-082718

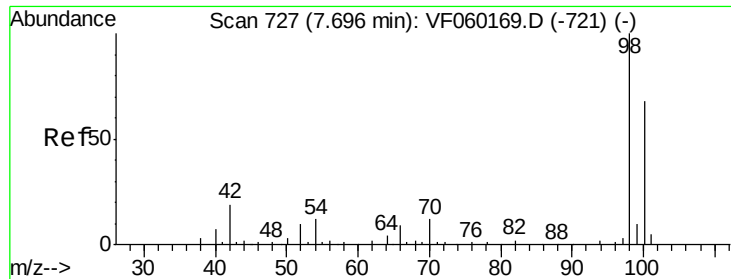
Tgt Ion: 113 Resp: 61265
Ion Ratio Lower Upper
113 100
111 102.9 75.5 113.3
192 0.6 12.5 18.7#



#37
Ethyl Acetate
Concen: 5.122 ug/l
RT: 4.13 min Scan# 365
Delta R.T. -0.13 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

Tgt Ion: 43 Resp: 350
Ion Ratio Lower Upper
43 100
61 0.0 517.6 776.4#
70 0.0 15.4 23.2#

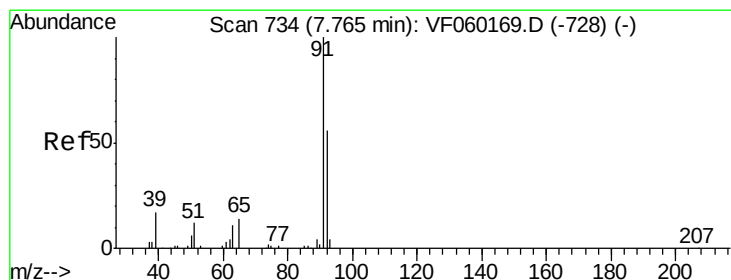
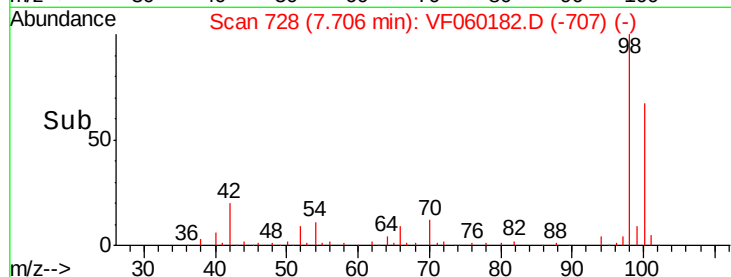
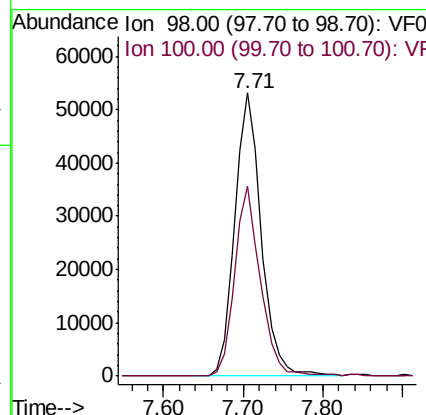
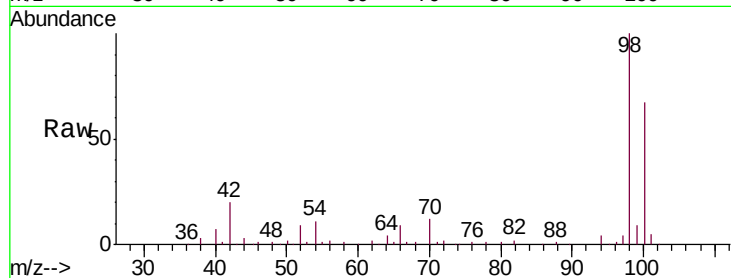




#50
Toluene-d8
Concen: 36.398 ug/l
RT: 7.71 min Scan# 728
Delta R.T. 0.01 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

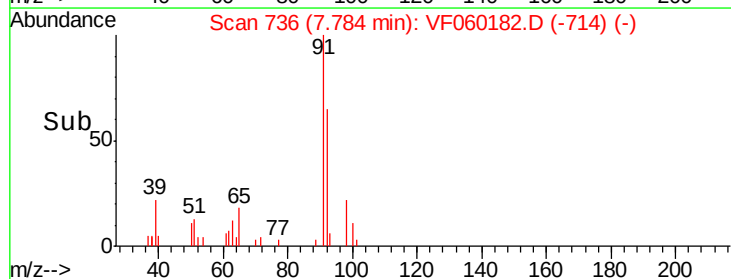
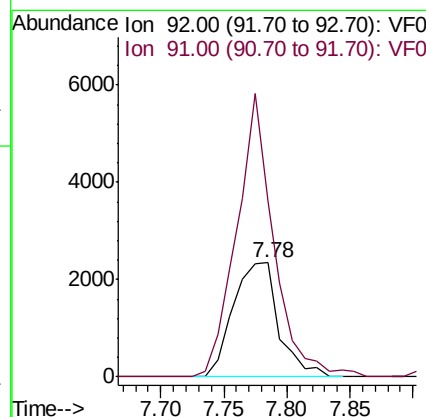
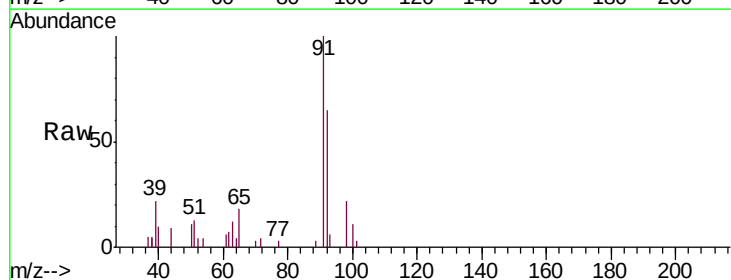
Instrument :
MSVOA_F
ClientSampleId :
HD-01-082718

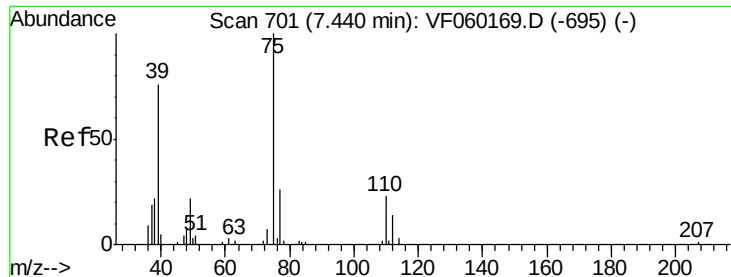
Tgt Ion: 98 Resp: 123919
Ion Ratio Lower Upper
98 100
100 67.3 54.5 81.7



#52
Toluene
Concen: 2.609 ug/l
RT: 7.78 min Scan# 736
Delta R.T. 0.02 min
Lab File: VF060182.D
Acq: 29 Aug 2018 8:17

Tgt Ion: 92 Resp: 5860
Ion Ratio Lower Upper
92 100
91 154.1 141.9 212.9





#54

cis-1,3-Dichloropropene

Concen: 5.404 ug/l

RT: 7.38 min Scan# 695

Delta R.T. -0.06 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampled :

HD-01-082718

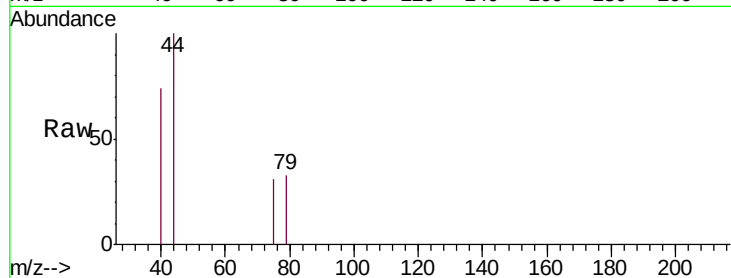
Tgt Ion: 75 Resp: 60

Ion Ratio Lower Upper

75 100

77 0.0 20.7 31.1#

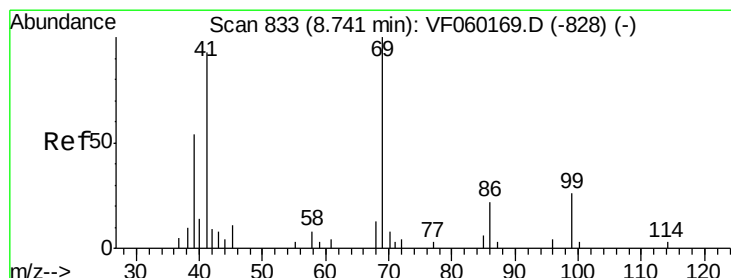
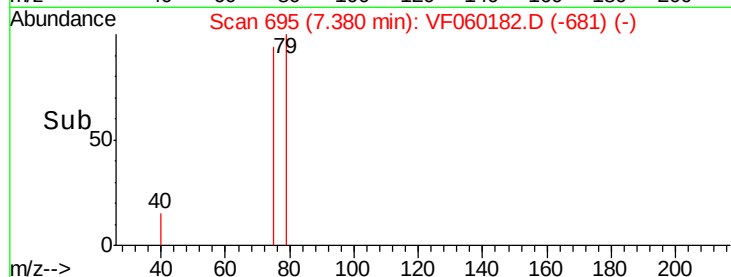
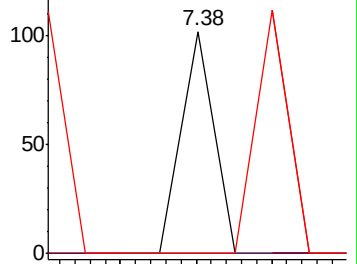
39 0.0 60.9 91.3#



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: 5.462 ug/l

RT: 8.76 min Scan# 835

Delta R.T. 0.02 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

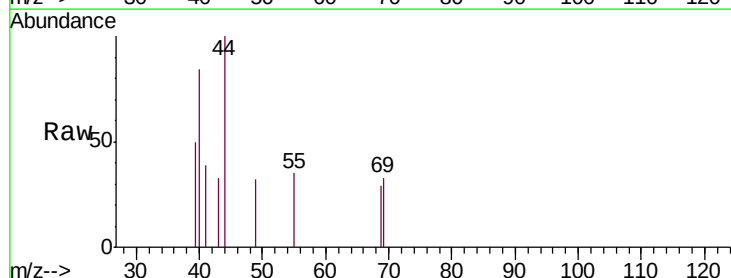
Tgt Ion: 69 Resp: 406

Ion Ratio Lower Upper

69 100

41 63.5 74.6 111.8#

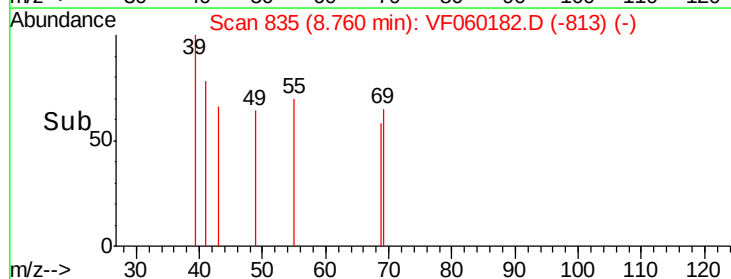
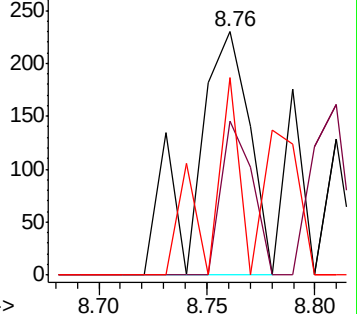
39 81.3 46.2 69.4#

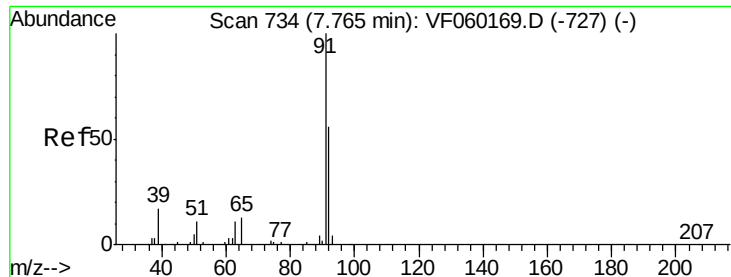


Abundance Ion 69.00 (68.70 to 69.70): VF0

Ion 41.00 (40.70 to 41.70): VF0

Ion 39.00 (38.70 to 39.70): VF0

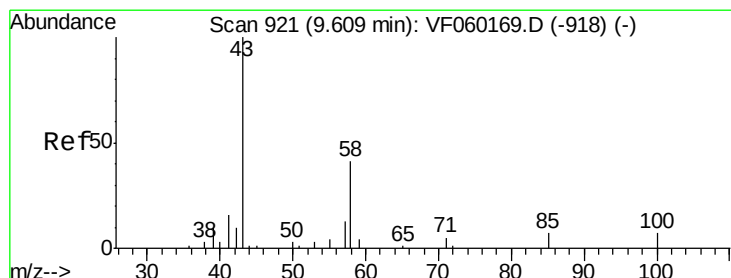
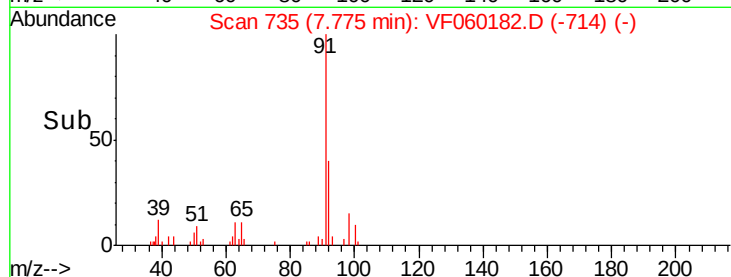
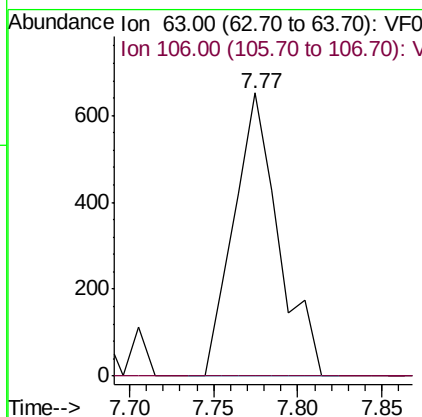
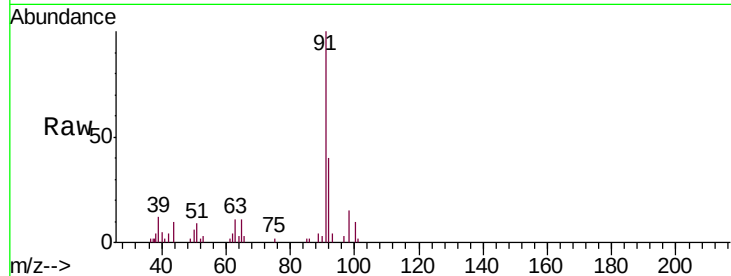




#58
 2-Chloroethyl Vinyl ether
 Concen: 12.928 ug/l
 RT: 7.77 min Scan# 735
 Delta R.T. 0.01 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

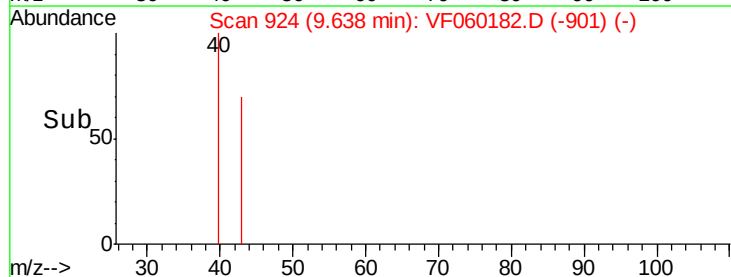
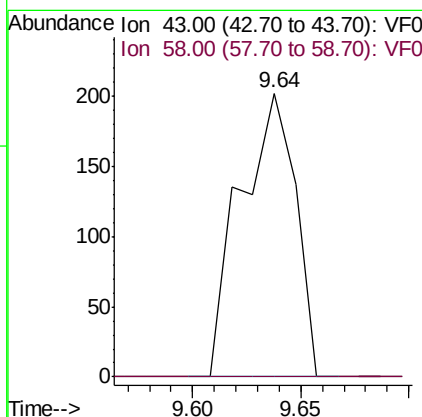
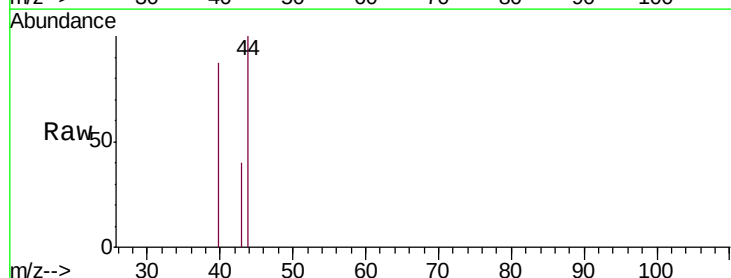
Instrument :
 MSVOA_F
 ClientSampleId :
 HD-01-082718

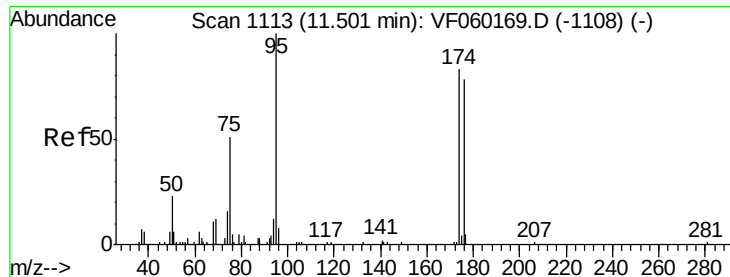
Tgt Ion: 63 Resp: 1199
 Ion Ratio Lower Upper
 63 100
 106 0.0 0.0 0.0



#59
 2-Hexanone
 Concen: 1.755 ug/l
 RT: 9.64 min Scan# 924
 Delta R.T. 0.03 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

Tgt Ion: 43 Resp: 357
 Ion Ratio Lower Upper
 43 100
 58 0.0 19.4 58.4#





#62

4-Bromofluorobenzene

Concen: 45.314 ug/l

RT: 11.51 min Scan# 1114

Delta R.T. 0.01 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

HD-01-082718

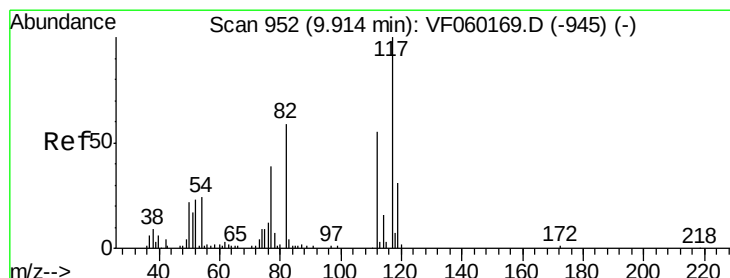
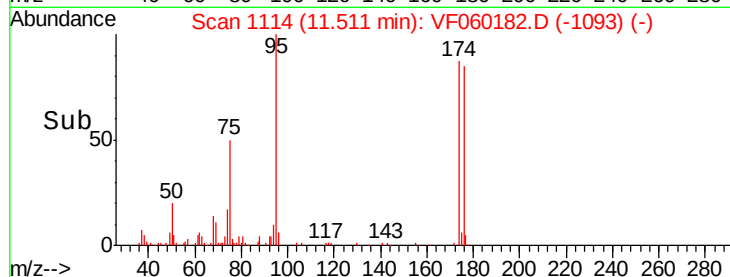
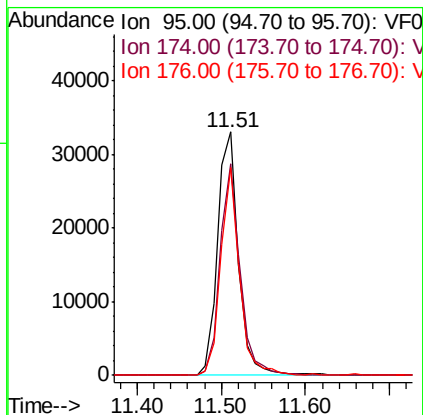
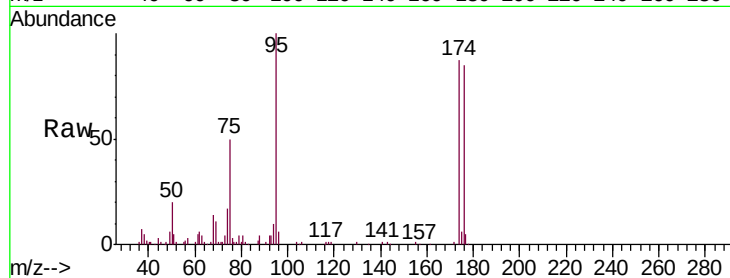
Tgt Ion: 95 Resp: 56891

Ion Ratio Lower Upper

95 100

174 86.8 0.0 165.2

176 85.3 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: VF060182.D

Acq: 29 Aug 2018 8:17

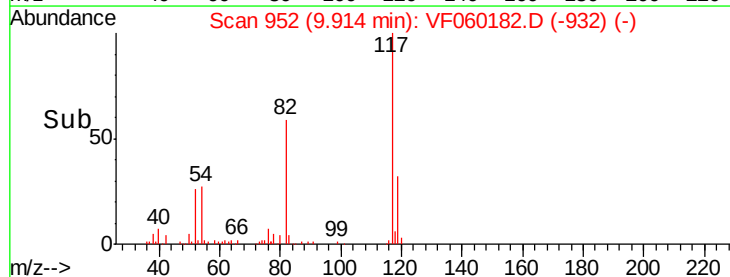
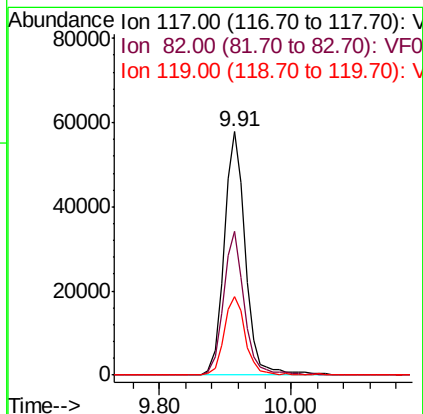
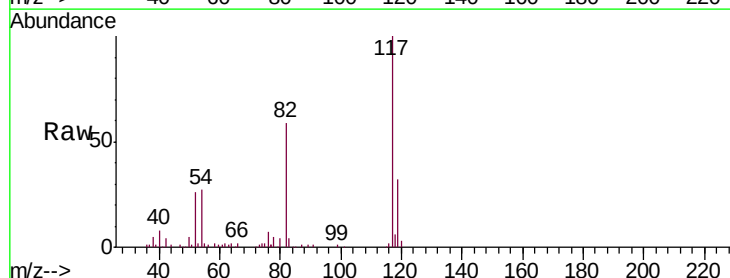
Tgt Ion: 117 Resp: 130249

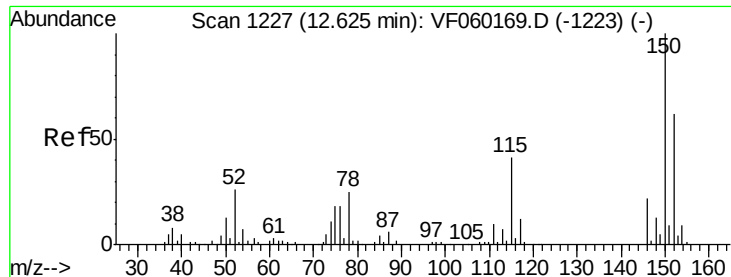
Ion Ratio Lower Upper

117 100

82 59.0 47.2 70.8

119 32.1 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: VF060182.D

Acq: 29 Aug 2018 8:17

Instrument :

MSVOA_F

ClientSampleId :

HD-01-082718

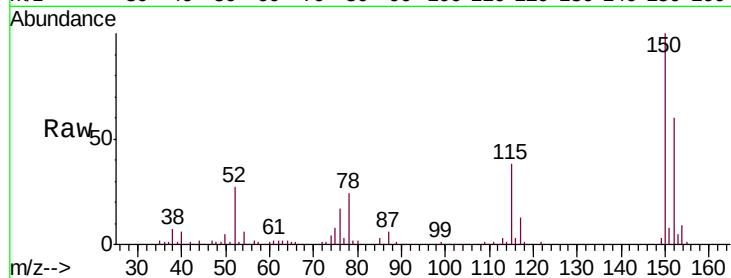
Tgt Ion:152 Resp: 51474

Ion Ratio Lower Upper

152 100

115 62.9 33.2 99.6

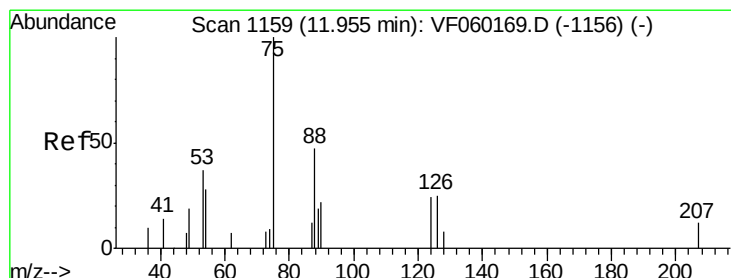
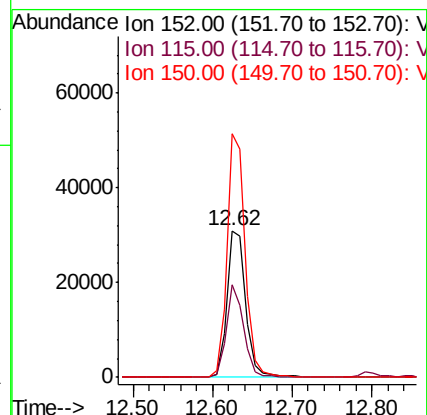
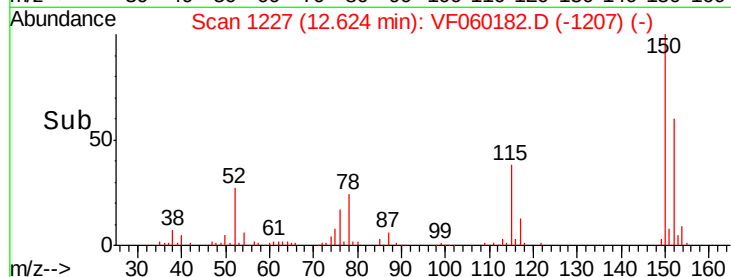
150 166.1 0.0 325.6



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: 4.496 ug/l

RT: 12.10 min Scan# 1174

Delta R.T. 0.15 min

Lab File: VF060182.D

Acq: 29 Aug 2018 8:17

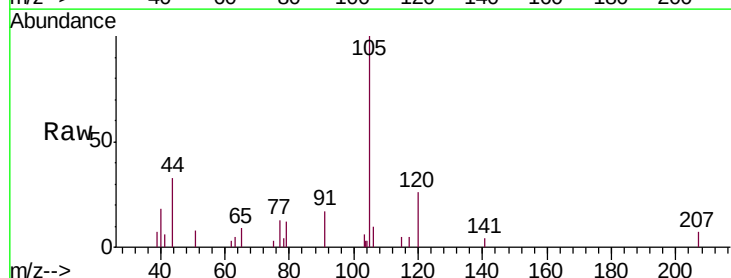
Tgt Ion: 75 Resp: 63

Ion Ratio Lower Upper

75 100

53 0.0 53.4 80.0#

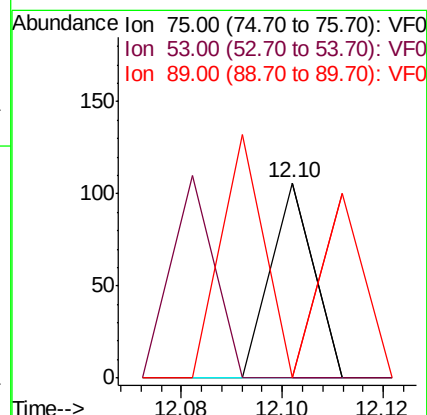
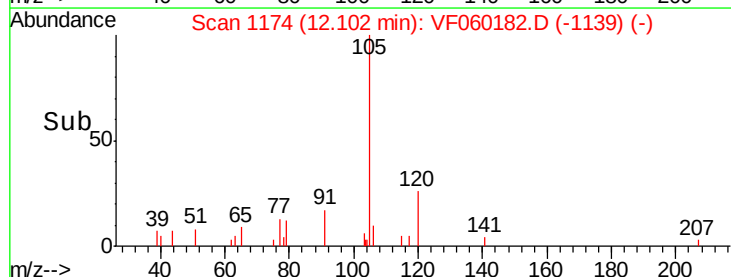
89 0.0 28.9 43.3#

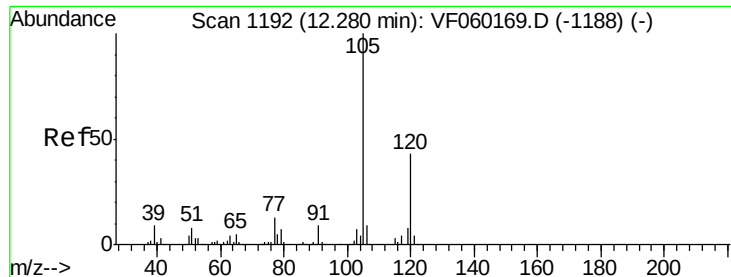


Abundance Ion 75.00 (74.70 to 75.70): VF0

Ion 53.00 (52.70 to 53.70): VF0

Ion 89.00 (88.70 to 89.70): VF0

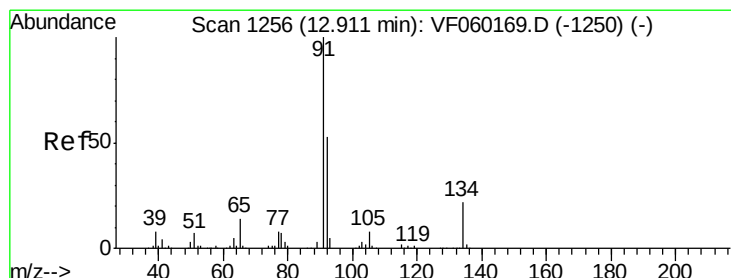
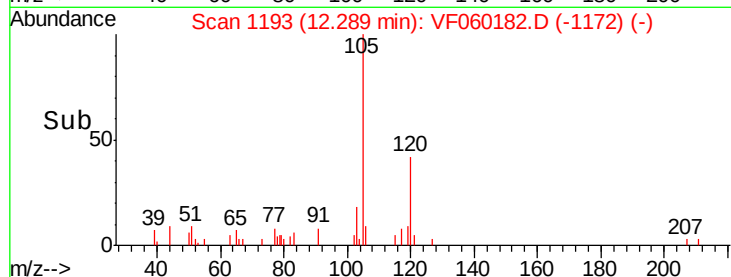
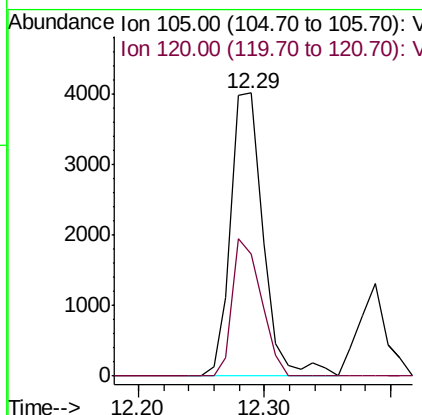
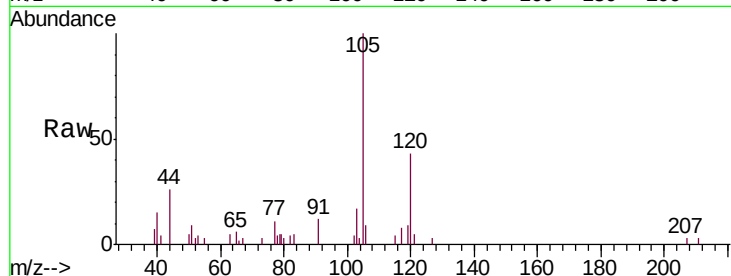




#84
 1,2,4-Trimethylbenzene
 Concen: 1.972 ug/l
 RT: 12.29 min Scan# 1193
 Delta R.T. 0.01 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

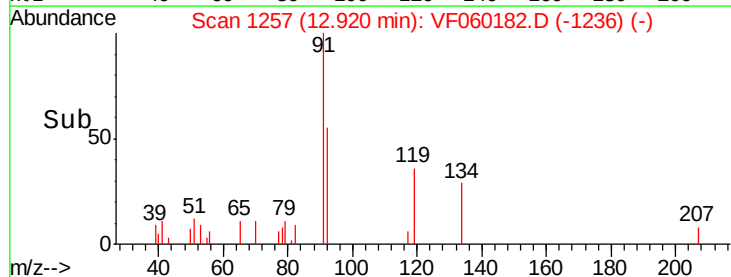
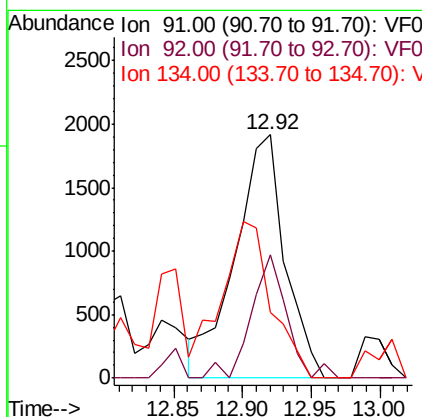
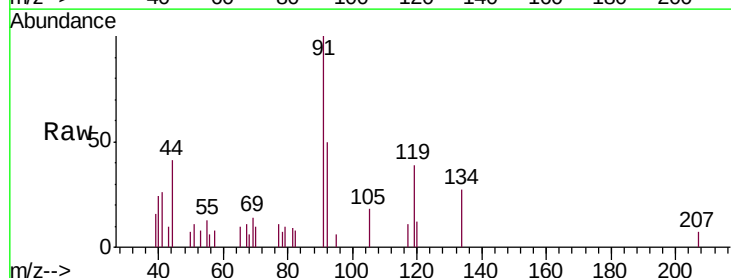
Instrument :
 MSVOA_F
 ClientSampleId :
 HD-01-082718

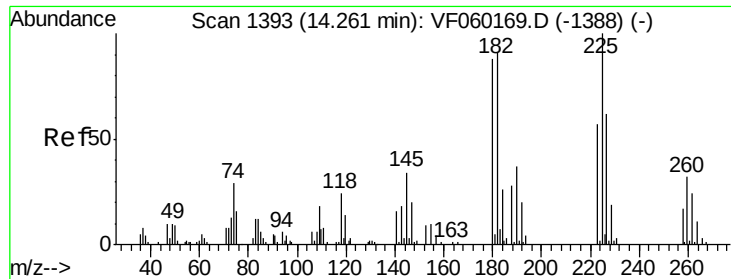
Tgt Ion: 105 Resp: 7171
 Ion Ratio Lower Upper
 105 100
 120 43.1 21.9 65.7



#89
 n-Butylbenzene
 Concen: 4.564 ug/l
 RT: 12.92 min Scan# 1257
 Delta R.T. 0.01 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

Tgt Ion: 91 Resp: 4837
 Ion Ratio Lower Upper
 91 100
 92 50.4 26.7 80.0
 134 26.8 11.0 33.0

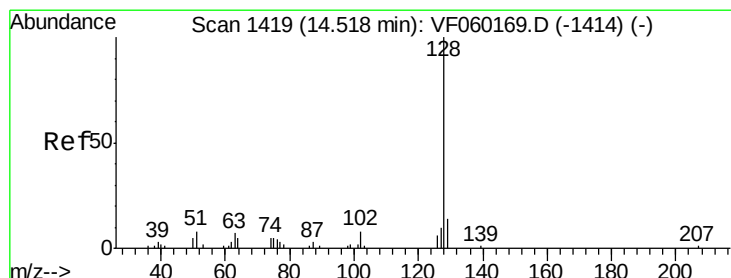
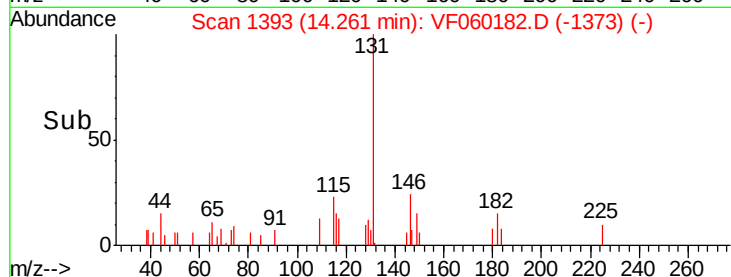
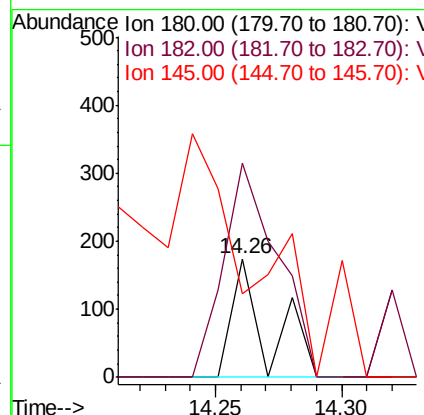
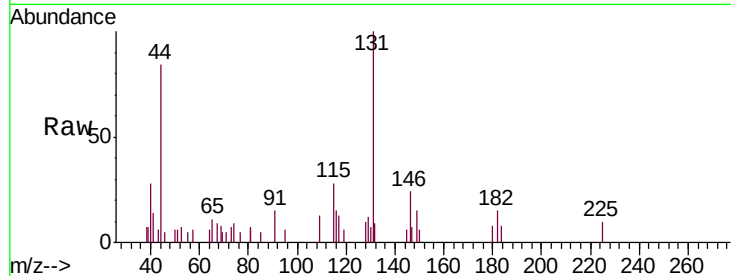




#93
 1,2,4-Trichlorobenzene
 Concen: 4.759 ug/l
 RT: 14.26 min Scan# 1393
 Delta R.T. -0.00 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

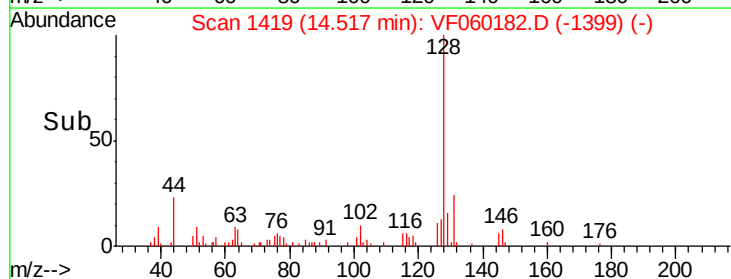
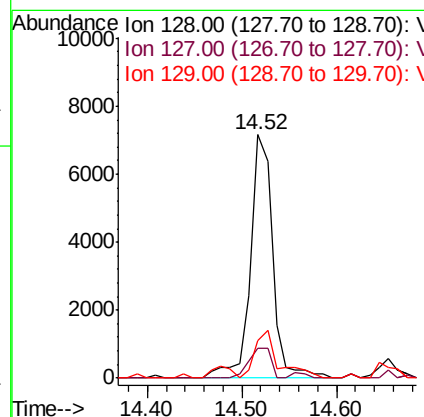
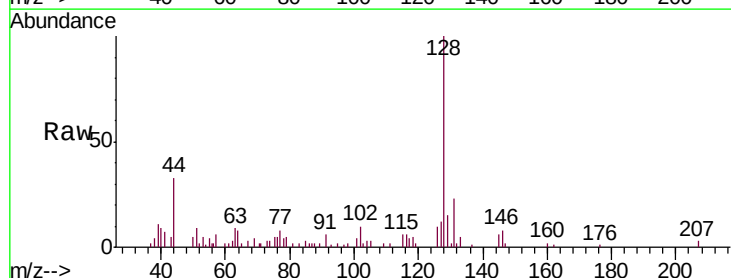
Instrument :
 MSVOA_F
 ClientSampleId :
 HD-01-082718

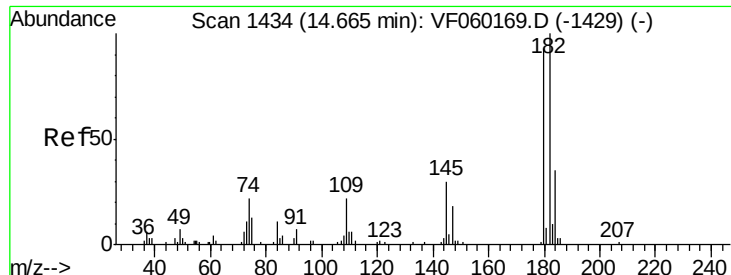
Tgt Ion:180 Resp: 173
 Ion Ratio Lower Upper
 180 100
 182 180.5 51.8 155.5#
 145 70.7 19.3 57.9#



#95
 Naphthalene
 Concen: 25.191 ug/l
 RT: 14.52 min Scan# 1419
 Delta R.T. -0.00 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

Tgt Ion:128 Resp: 11736
 Ion Ratio Lower Upper
 128 100
 127 12.3 8.3 12.5
 129 15.2 11.5 17.3





#96
 1,2,3-Trichlorobenzene
 Concen: 6.203 ug/l
 RT: 14.66 min Scan# 1434
 Delta R.T. -0.00 min
 Lab File: VF060182.D
 Acq: 29 Aug 2018 8:17

Instrument :
 MSVOA_F
 ClientSampleId :
 HD-01-082718

Tgt Ion:180 Resp: 525
 Ion Ratio Lower Upper
 180 100
 182 115.9 53.6 160.8
 145 56.8 16.2 48.6#

