

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU090319\
 Data File : VU034209.D
 Acq On : 02 Sep 2019 17:55
 Operator : JC/SP
 Sample : K4625-05
 Misc : 5.0mL/MSVOA_U/WATER
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 HF-01

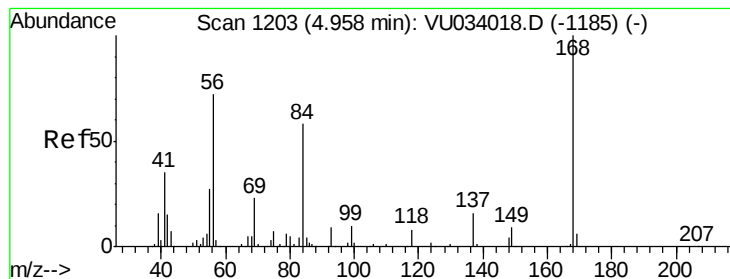
Quant Time: Sep 03 05:56:54 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\82U082919W.M
 Quant Title : SW846 8260
 QLast Update : Thu Aug 29 04:11:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.96	168	425413	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.87	114	696376	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	691455	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.46	152	344902	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.29	65	273264	50.13	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.26%	
35) Dibromofluoromethane	4.86	113	226398	46.87	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.74%	
50) Toluene-d8	7.55	98	902248	49.89	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.78%	
62) 4-Bromofluorobenzene	10.29	95	315710	44.88	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.76%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	530	Below Cal		95
5) Bromomethane	1.63	94	749	Below Cal		87
11) Tert butyl alcohol	2.82	59	5297	4.214	ug/l #	73
13) Acrolein	2.19	56	243	0.460	ug/l #	5
16) Acetone	2.31	43	44680	16.064	ug/l	94
17) Carbon Disulfide	2.47	76	3113	0.231	ug/l #	83
18) Methyl Acetate	2.61	43	4123	0.574	ug/l	98
20) Methylene Chloride	2.69	84	12322	2.340	ug/l	99
31) Cyclohexane	4.96	56	7797	0.958	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	30134	4.575	ug/l #	49
37) Ethyl Acetate	4.30	43	2319	0.314	ug/l #	68
38) Carbon Tetrachloride	4.96	117	39027	6.138	ug/l #	16
43) Isopropyl Acetate	5.53	43	90602	8.074	ug/l	99
48) Methyl methacrylate	6.53	41	5770	1.066	ug/l #	14
49) 1,4-Dioxane	6.68	88	155	1.142	ug/l #	1
51) 4-Methyl-2-Pentanone	7.40	43	83069	10.719	ug/l #	46
52) Toluene	7.61	92	4005	0.326	ug/l	96
54) cis-1,3-Dichloropropene	7.40	75	39194	4.676	ug/l #	63
56) Ethyl methacrylate	7.94	69	98	0.983	ug/l #	27
57) 1,3-Dichloropropane	8.40	76	5873	0.666	ug/l #	42
59) 2-Hexanone	8.40	43	78180	13.363	ug/l #	52
76) 1,2,3-Trichloropropane	10.29	75	151348	19.470	ug/l #	37
81) trans-1,4-Dichloro-2-buten	10.29	75	151348	65.559	ug/l #	100
86) p-Isopropyltoluene	11.46	119	23094	1.102	ug/l	91
95) Naphthalene	13.77	128	111	1.795	ug/l #	70

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. 0.00 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

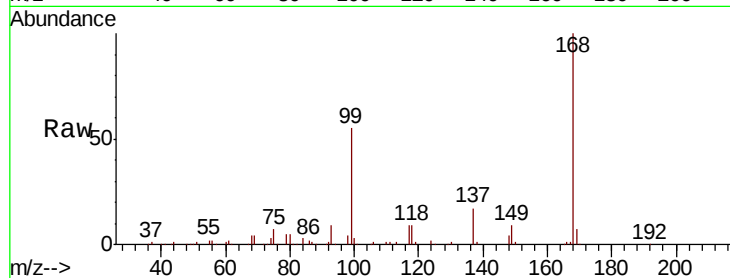
HF-01

Tgt Ion: 168 Resp: 425413

Ion Ratio Lower Upper

168 100

99 54.8 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): VU034018.D (-1185) (-)

Ion 98.90 (98.60 to 99.60): VU034018.D (-1185) (-)

4.96

200000

150000

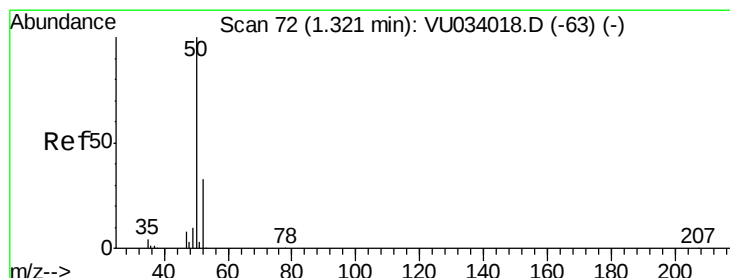
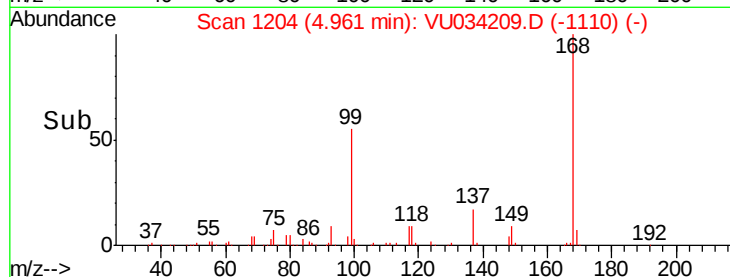
100000

50000

0

4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VU034209.D

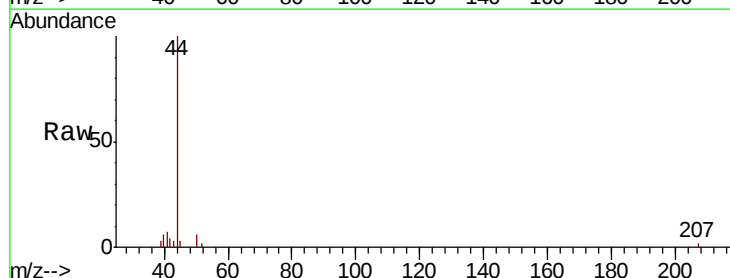
Acq: 02 Sep 2019 17:55

Tgt Ion: 50 Resp: 530

Ion Ratio Lower Upper

50 100

52 35.9 26.2 39.4



Abundance Ion 49.90 (49.60 to 50.60): VU034018.D (-63) (-)

Ion 51.90 (51.60 to 52.60): VU034018.D (-63) (-)

1.32

500

400

300

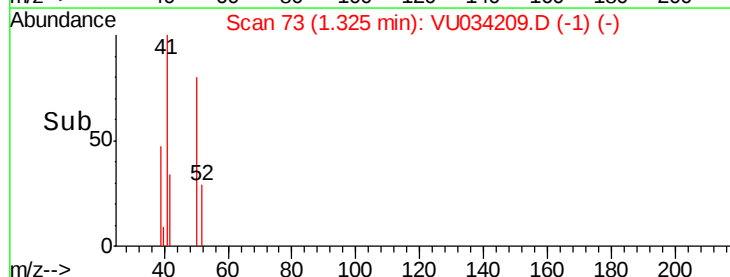
200

100

0

1.30 1.32 1.34 1.36

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.63 min Scan# 169

Delta R.T. 0.04 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

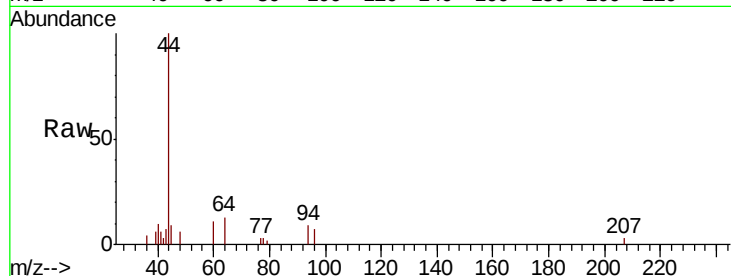
HF-01

Tgt Ion: 94 Resp: 749

Ion Ratio Lower Upper

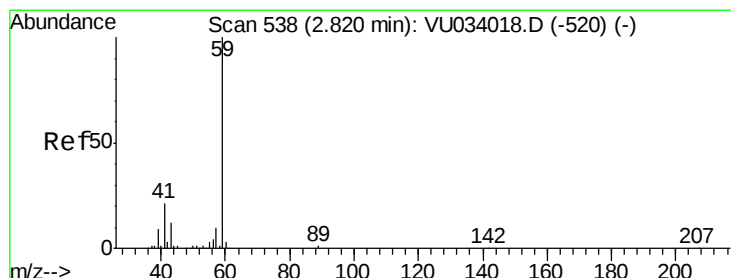
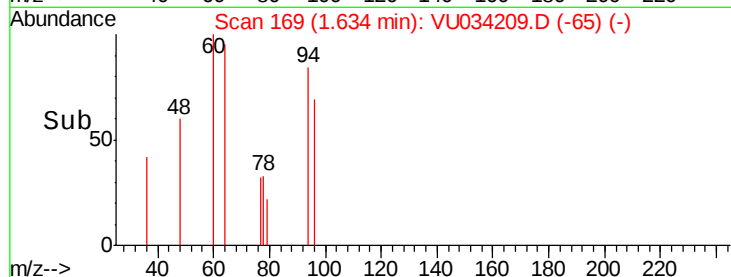
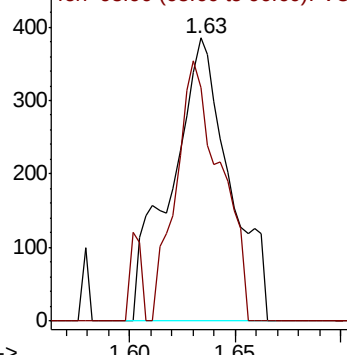
94 100

96 82.3 76.3 114.5



Abundance Ion 93.90 (93.60 to 94.60): VU0

Ion 95.90 (95.60 to 96.60): VU0



#11

Tert butyl alcohol

Concen: 4.214 ug/l

RT: 2.82 min Scan# 538

Delta R.T. 0.00 min

Lab File: VU034209.D

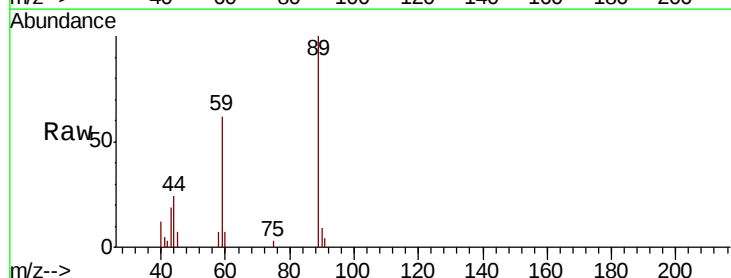
Acq: 02 Sep 2019 17:55

Tgt Ion: 59 Resp: 5297

Ion Ratio Lower Upper

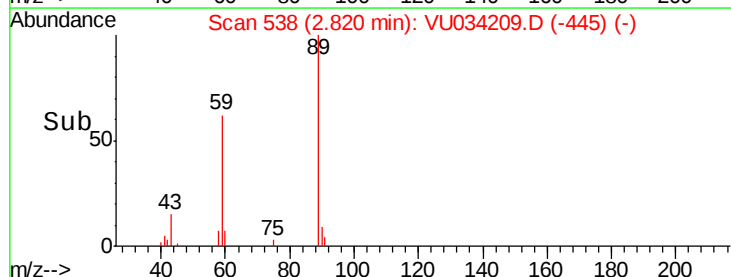
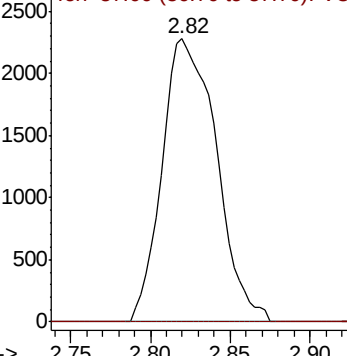
59 100

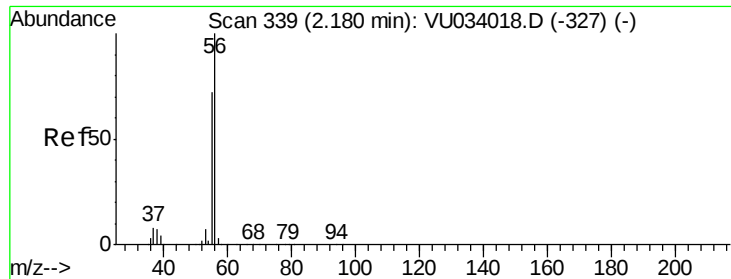
57 0.0 8.0 12.0#



Abundance Ion 59.00 (58.70 to 59.70): VU0

Ion 57.00 (56.70 to 57.70): VU0





#13

Acrolein

Concen: 0.460 ug/l

RT: 2.19 min Scan# 342

Delta R.T. 0.01 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampled :

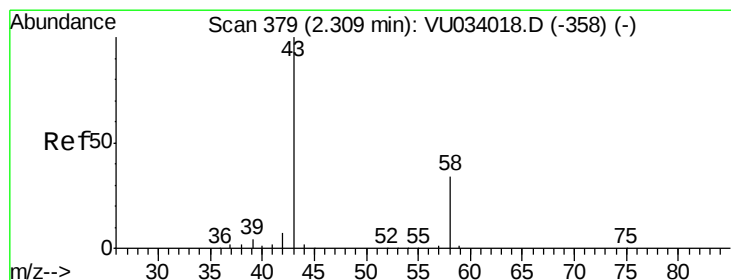
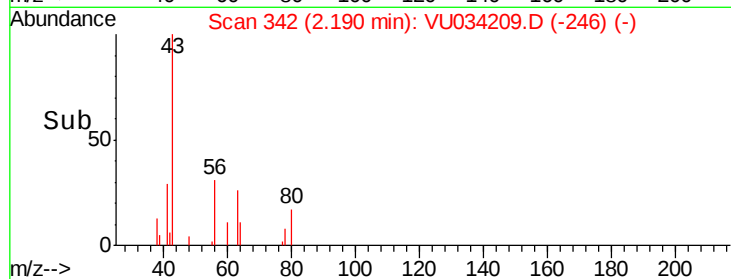
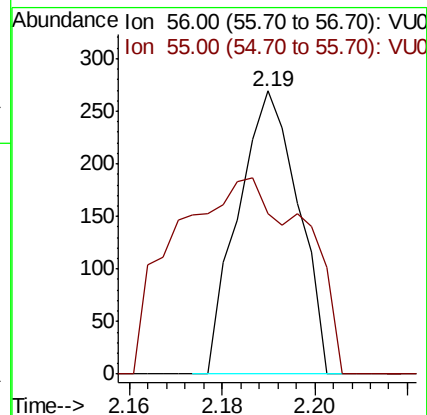
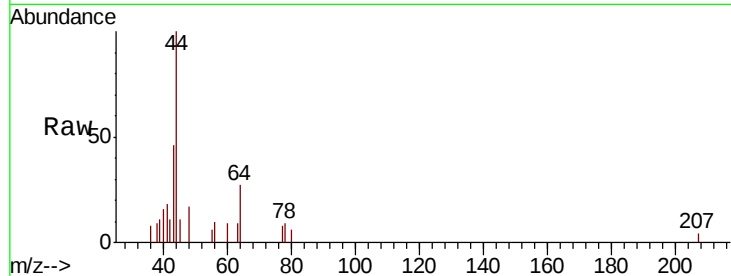
HF-01

Tgt Ion: 56 Resp: 243

Ion Ratio Lower Upper

56 100

55 149.8 57.1 85.7#



#16

Acetone

Concen: 16.064 ug/l

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VU034209.D

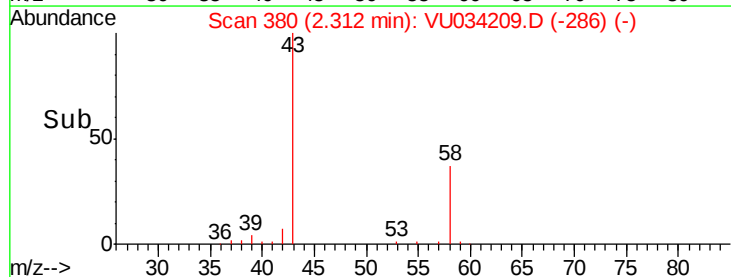
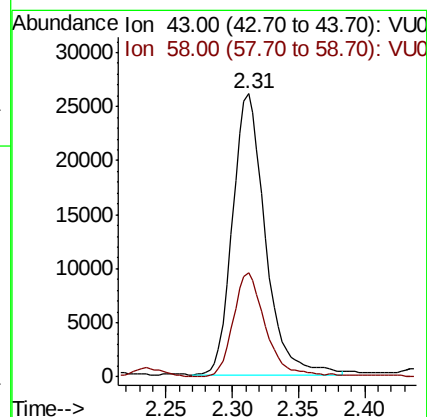
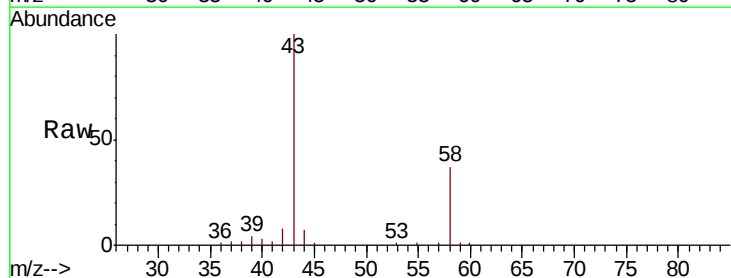
Acq: 02 Sep 2019 17:55

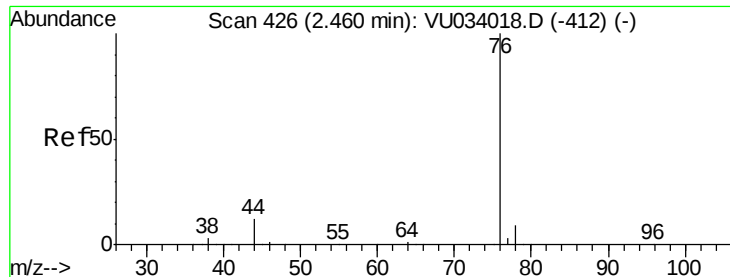
Tgt Ion: 43 Resp: 44680

Ion Ratio Lower Upper

43 100

58 37.1 26.8 40.2

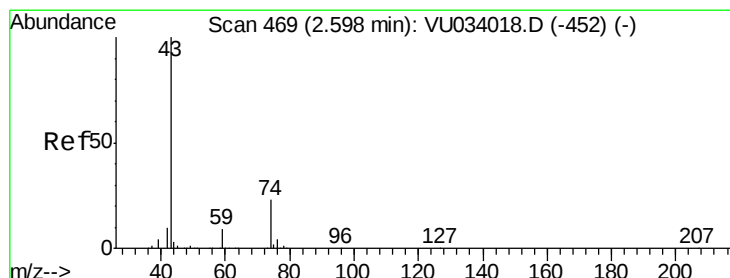
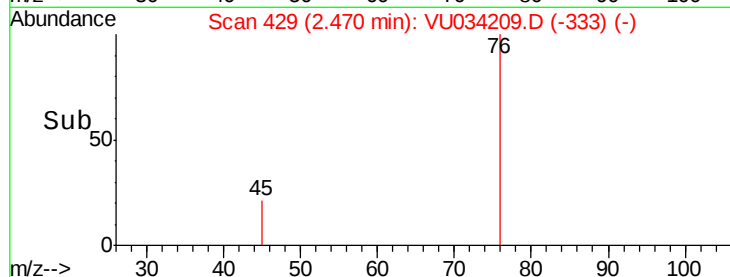
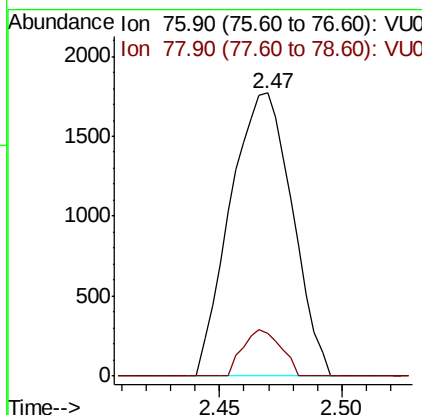
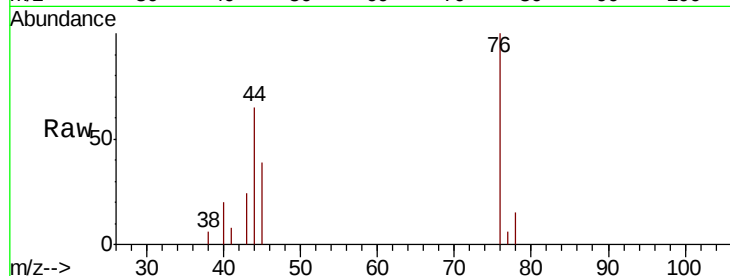




#17
Carbon Disulfide
Concen: 0.231 ug/l
RT: 2.47 min Scan# 429
Delta R.T. 0.01 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

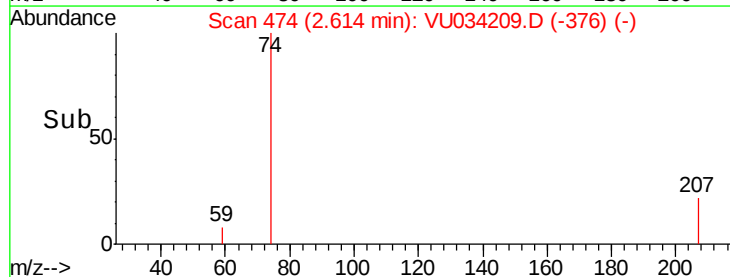
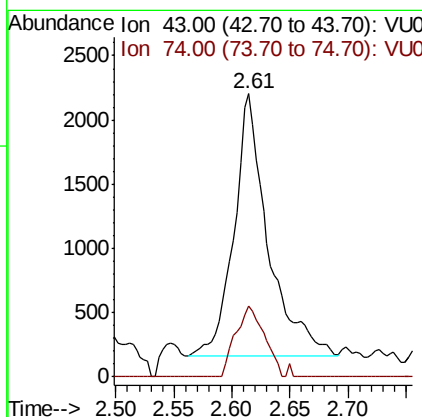
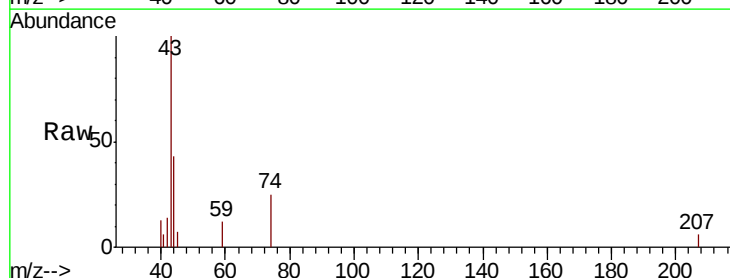
Instrument :
MSVOA_U
ClientSampleId :
HF-01

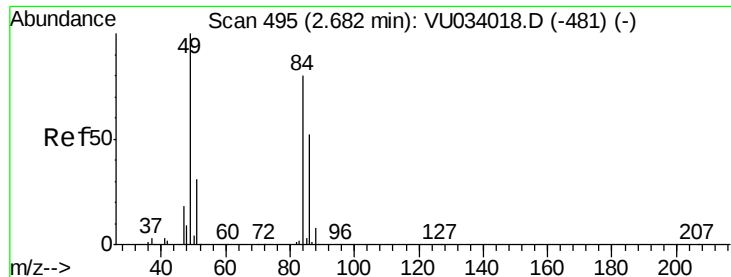
Tgt Ion: 76 Resp: 3113
Ion Ratio Lower Upper
76 100
78 15.1 7.1 10.7#



#18
Methyl Acetate
Concen: 0.574 ug/l
RT: 2.61 min Scan# 474
Delta R.T. 0.02 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

Tgt Ion: 43 Resp: 4123
Ion Ratio Lower Upper
43 100
74 22.9 19.2 28.8

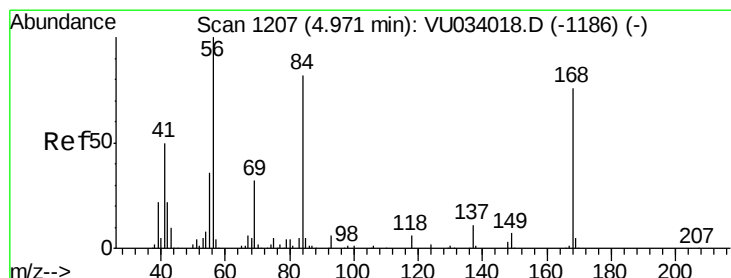
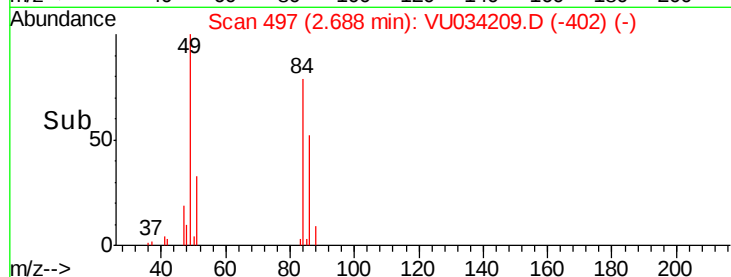
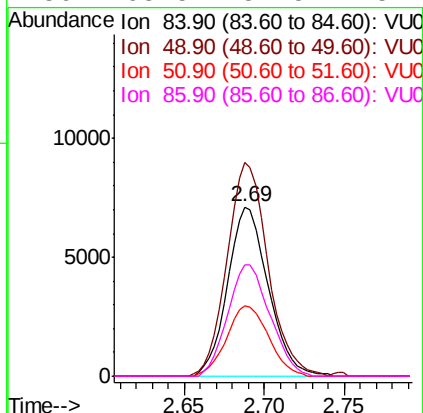
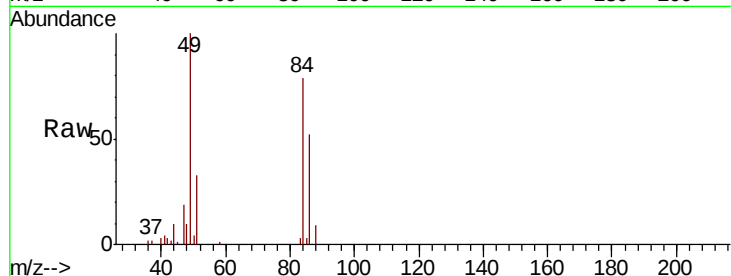




#20
Methylene Chloride
Concen: 2.340 ug/l
RT: 2.69 min Scan# 497
Delta R.T. 0.01 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

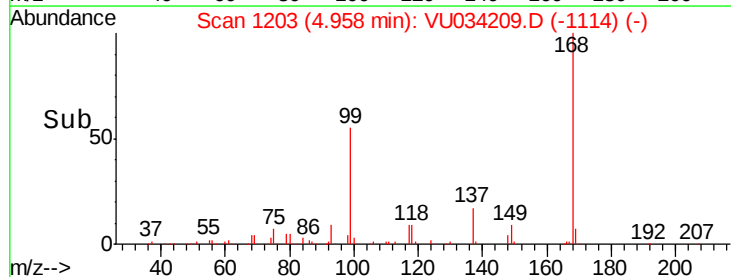
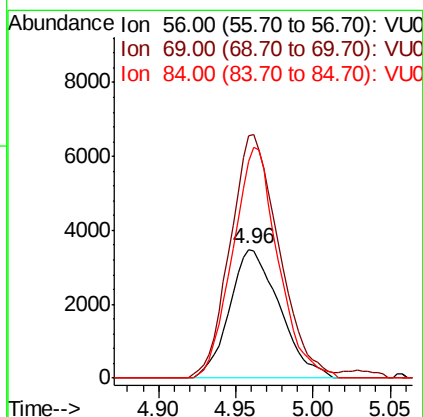
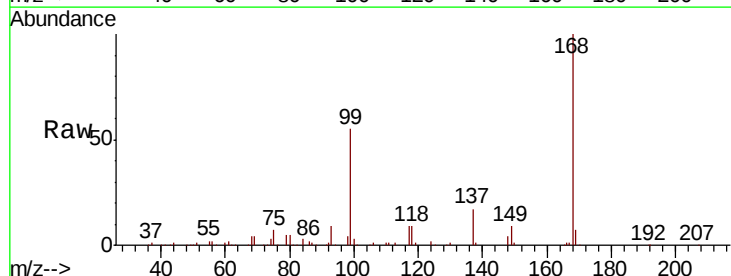
Instrument :
MSVOA_U
ClientSampled :
HF-01

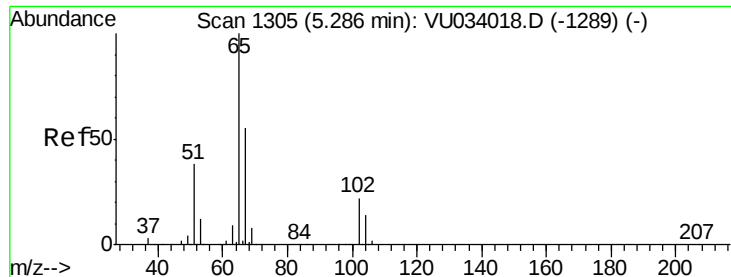
Tgt Ion:	84	Resp:	12322
Ion	Ratio	Lower	Upper
84	100		
49	126.1	100.2	150.4
51	41.3	30.8	46.2
86	65.5	52.5	78.7



#31
Cyclohexane
Concen: 0.958 ug/l
RT: 4.96 min Scan# 1203
Delta R.T. -0.01 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

Tgt Ion:	56	Resp:	7797
Ion	Ratio	Lower	Upper
56	100		
69	188.2	25.4	38.0#
84	168.2	65.8	98.8#

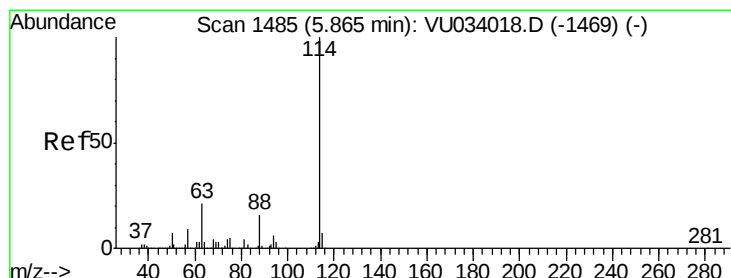
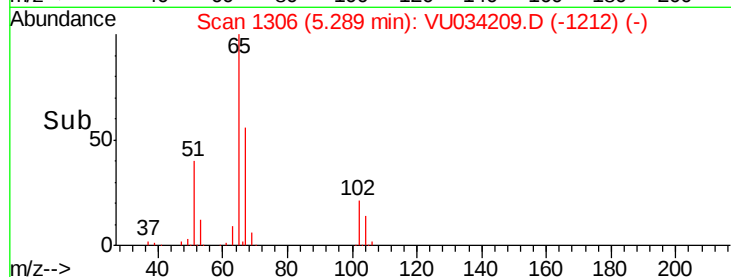
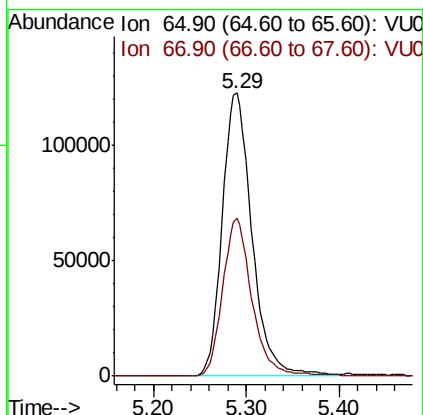
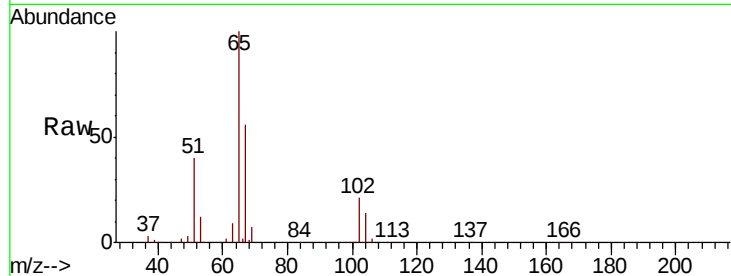




#33
 1,2-Dichloroethane-d4
 Concen: 50.131 ug/l
 RT: 5.29 min Scan# 1306
 Delta R.T. 0.00 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

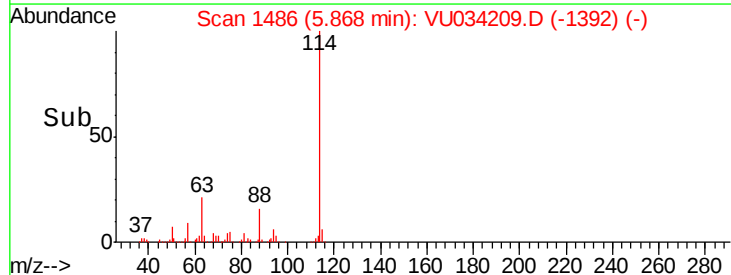
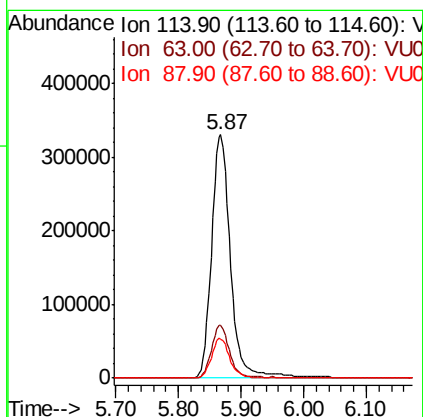
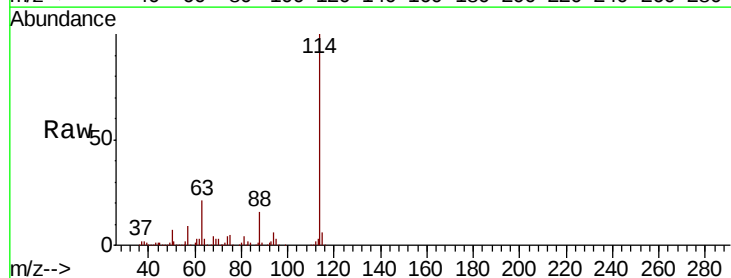
Instrument :
 MSVOA_U
 ClientSampled :
 HF-01

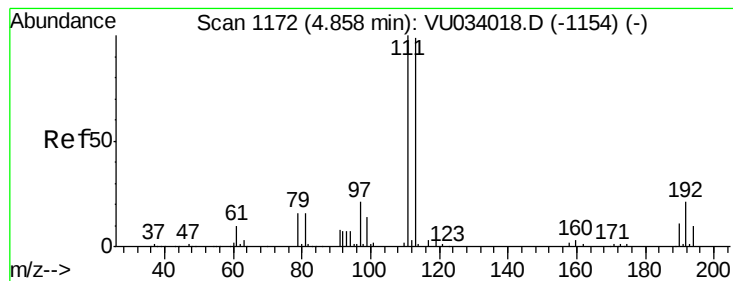
Tgt Ion: 65 Resp: 273264
 Ion Ratio Lower Upper
 65 100
 67 55.0 0.0 110.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.87 min Scan# 1486
 Delta R.T. 0.00 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

Tgt Ion: 114 Resp: 696376
 Ion Ratio Lower Upper
 114 100
 63 21.5 0.0 42.0
 88 16.2 0.0 32.0





#35

Dibromofluoromethane

Concen: 46.873 ug/l

RT: 4.86 min Scan# 1173

Delta R.T. 0.00 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampled :

HF-01

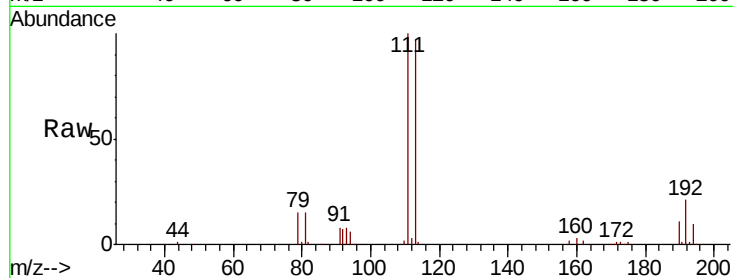
Tgt Ion: 113 Resp: 226398

Ion Ratio Lower Upper

113 100

111 103.9 81.7 122.5

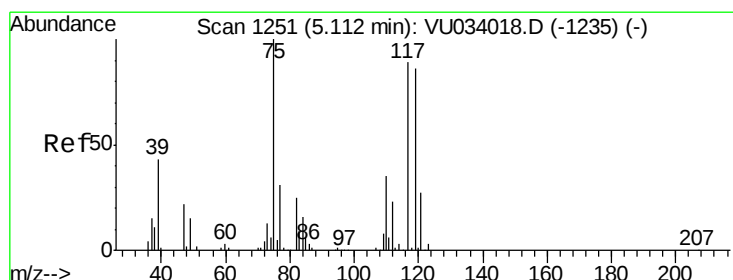
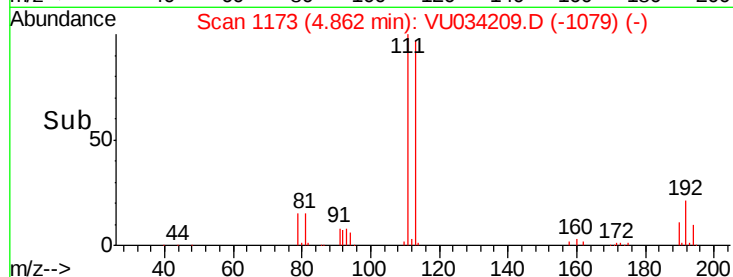
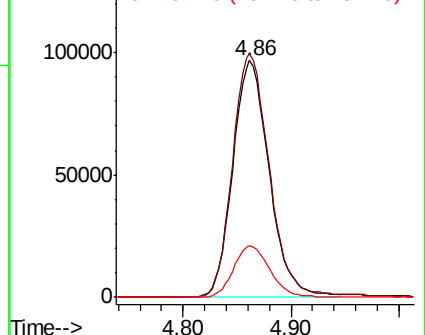
192 21.8 17.1 25.7



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.575 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. -0.15 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

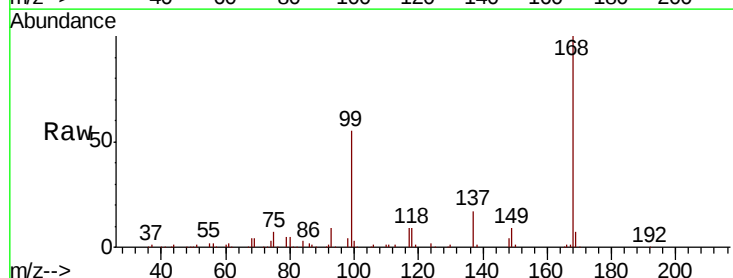
Tgt Ion: 75 Resp: 30134

Ion Ratio Lower Upper

75 100

110 8.5 17.8 53.5#

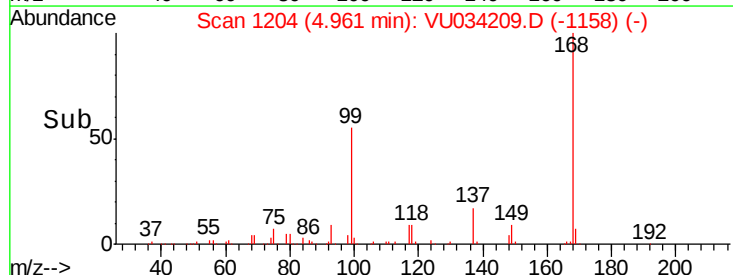
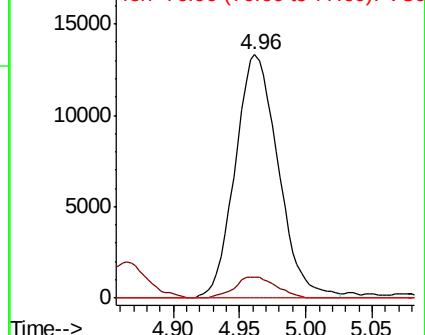
77 0.0 25.0 37.4#

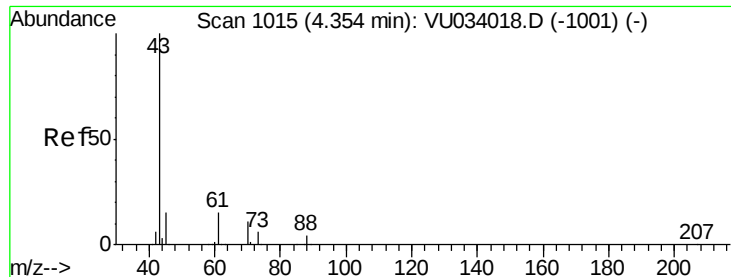


Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VU0

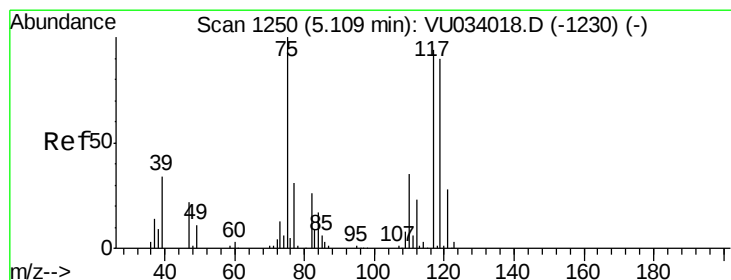
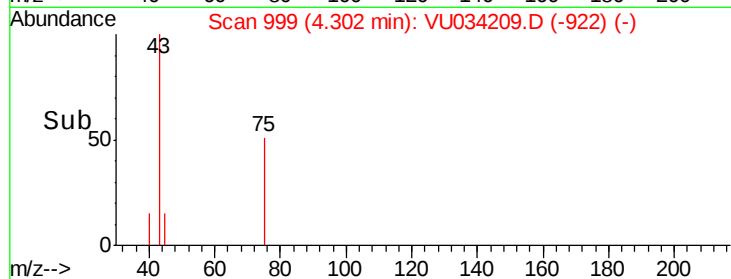
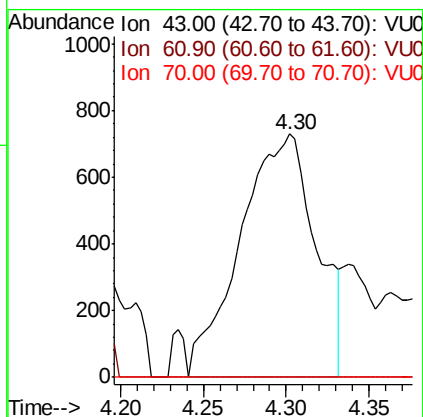
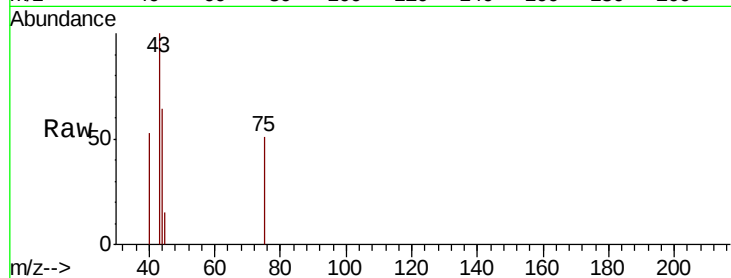




#37
 Ethyl Acetate
 Concen: 0.314 ug/l
 RT: 4.30 min Scan# 999
 Delta R.T. -0.05 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

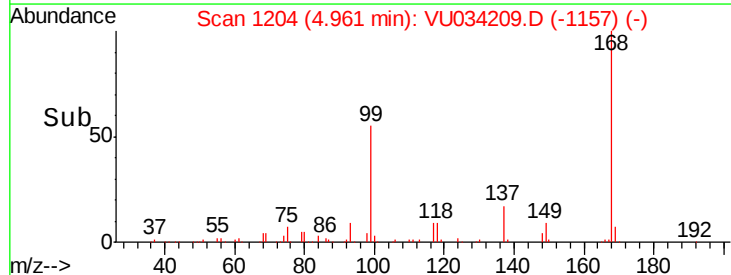
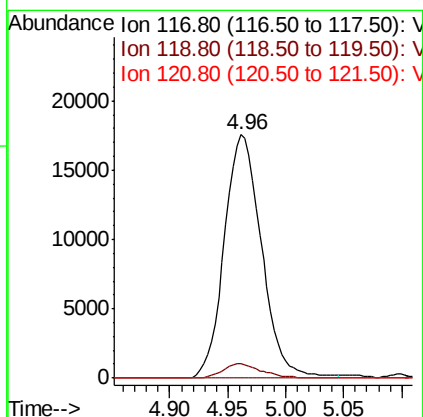
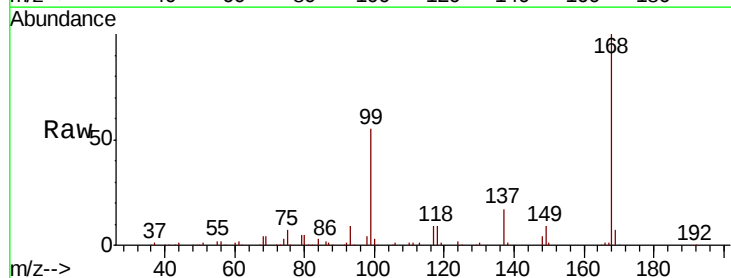
Instrument :
 MSVOA_U
 ClientSampleID :
 HF-01

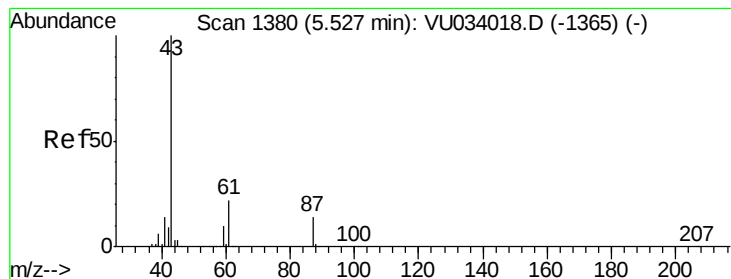
Tgt Ion: 43 Resp: 2319
 Ion Ratio Lower Upper
 43 100
 61 0.0 11.5 17.3#
 70 0.0 8.6 12.8#



#38
 Carbon Tetrachloride
 Concen: 6.138 ug/l
 RT: 4.96 min Scan# 1204
 Delta R.T. -0.15 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

Tgt Ion: 117 Resp: 39027
 Ion Ratio Lower Upper
 117 100
 119 5.9 77.0 115.4#
 121 0.0 23.9 35.9#





#43

Isopropyl Acetate

Concen: 8.074 ug/l

RT: 5.53 min Scan# 1382

Delta R.T. 0.01 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

HF-01

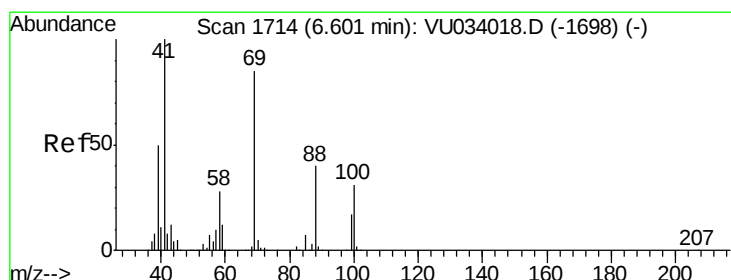
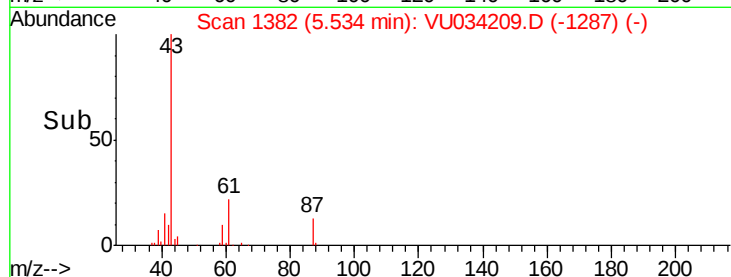
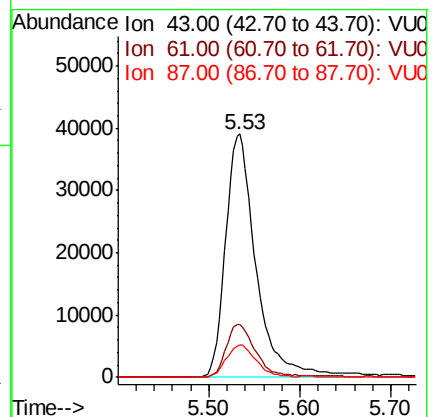
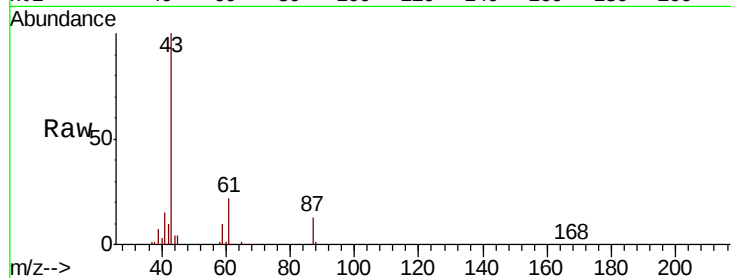
Tgt Ion: 43 Resp: 90602

Ion Ratio Lower Upper

43 100

61 20.8 17.2 25.8

87 13.1 10.8 16.2



#48

Methyl methacrylate

Concen: 1.066 ug/l

RT: 6.53 min Scan# 1691

Delta R.T. -0.07 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

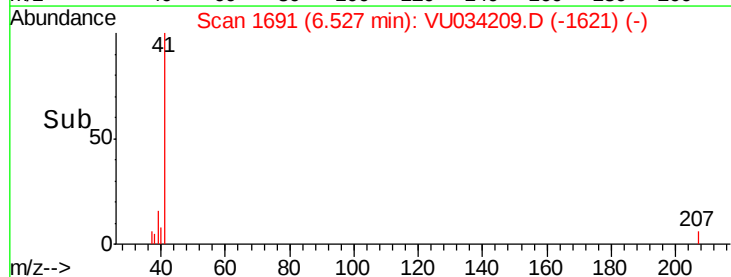
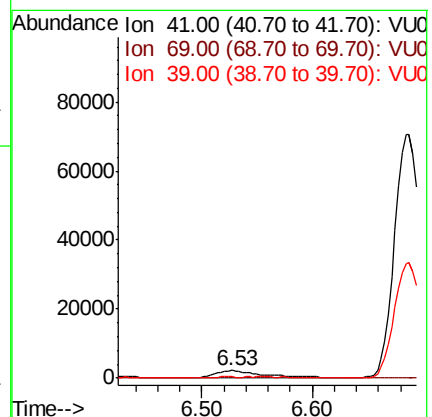
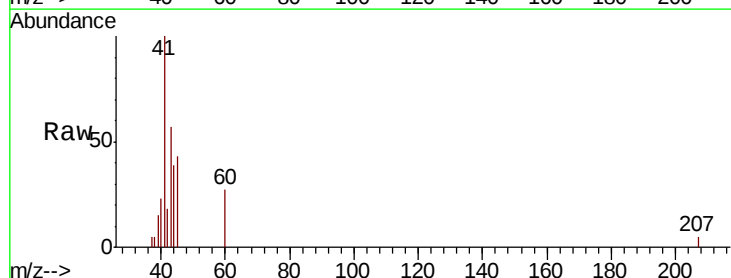
Tgt Ion: 41 Resp: 5770

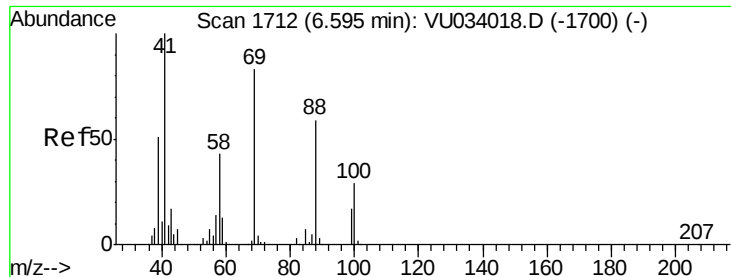
Ion Ratio Lower Upper

41 100

69 0.0 69.5 104.3#

39 0.0 40.3 60.5#





#49

1,4-Dioxane

Concen: 1.142 ug/l

RT: 6.68 min Scan# 1738

Delta R.T. 0.08 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampled :

HF-01

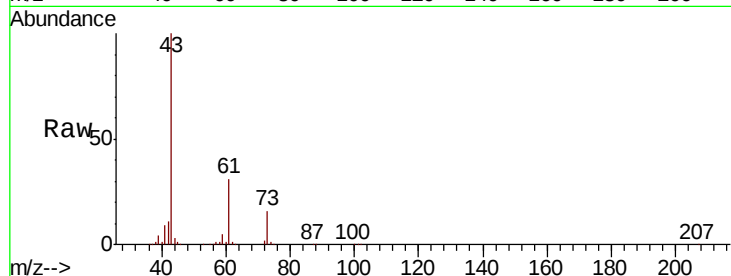
Tgt Ion: 88 Resp: 155

Ion Ratio Lower Upper

88 100

43 923583.9 24.8 37.2#

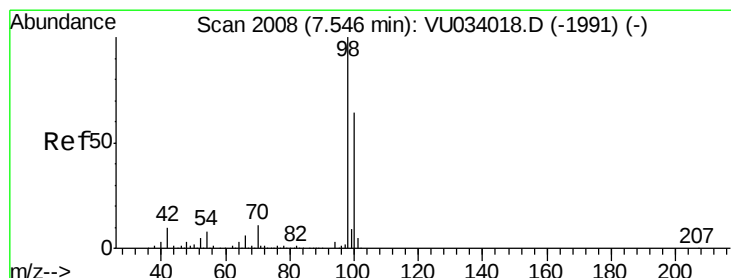
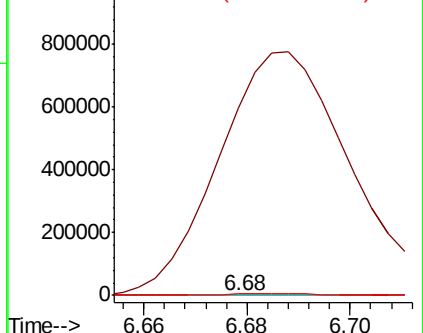
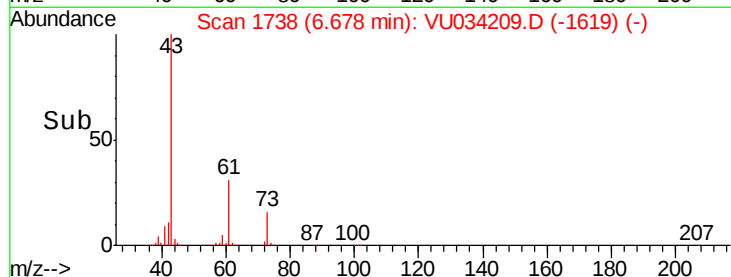
58 5189.7 59.3 88.9#



Abundance Ion 88.00 (87.70 to 88.70): VU034209.D (-1738) (-)

Ion 43.00 (42.70 to 43.70): VU034209.D (-1738) (-)

Ion 58.00 (57.70 to 58.70): VU034209.D (-1738) (-)



#50

Toluene-d8

Concen: 49.888 ug/l

RT: 7.55 min Scan# 2008

Delta R.T. 0.00 min

Lab File: VU034209.D

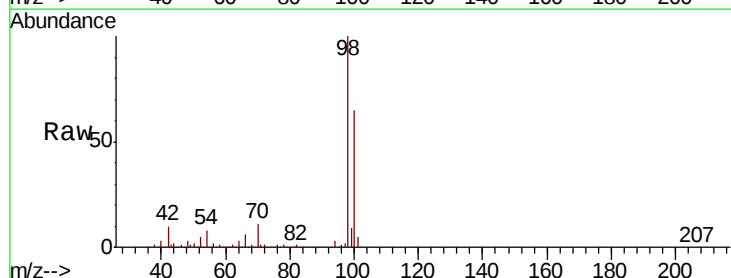
Acq: 02 Sep 2019 17:55

Tgt Ion: 98 Resp: 902248

Ion Ratio Lower Upper

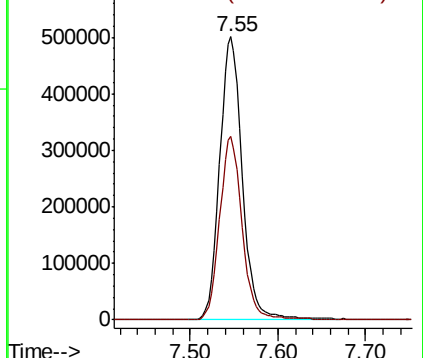
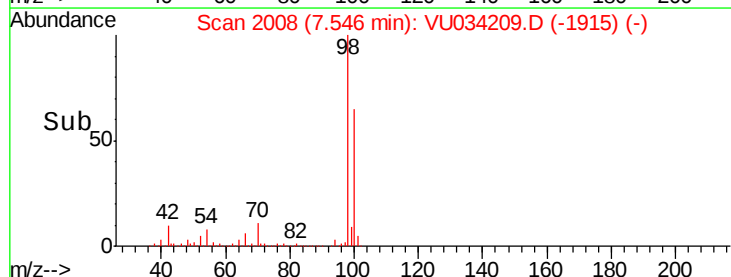
98 100

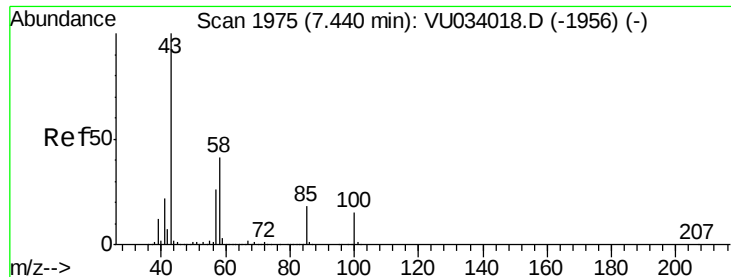
100 64.7 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VU034209.D (-2008) (-)

Ion 100.00 (99.70 to 100.70): VU034209.D (-2008) (-)

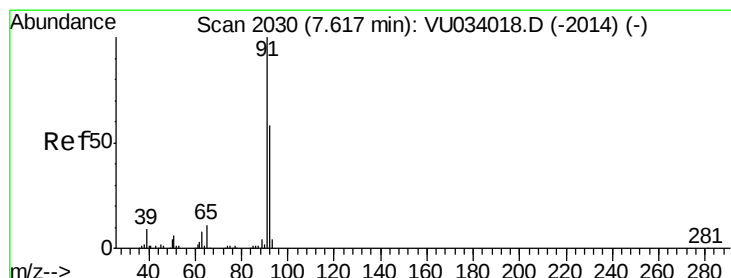
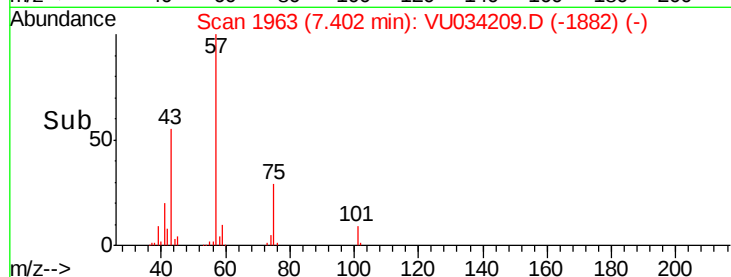
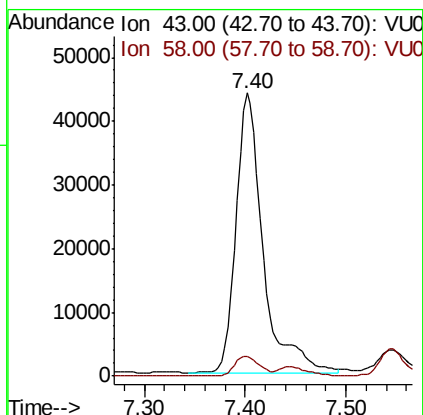
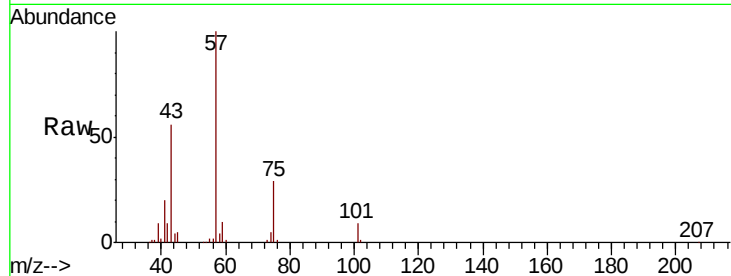




#51
 4-Methyl-2-Pentanone
 Concen: 10.719 ug/l
 RT: 7.40 min Scan# 1963
 Delta R.T. -0.04 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

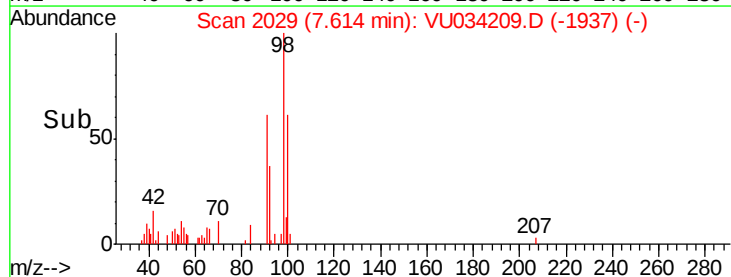
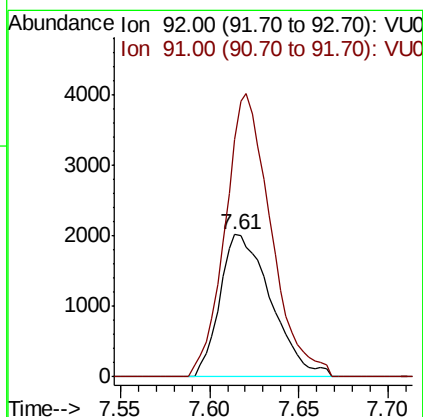
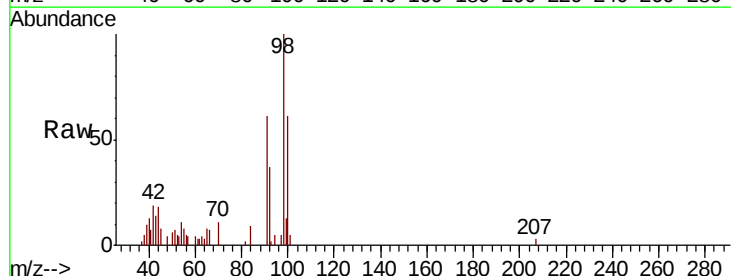
Instrument :
 MSVOA_U
 ClientSampleId :
 HF-01

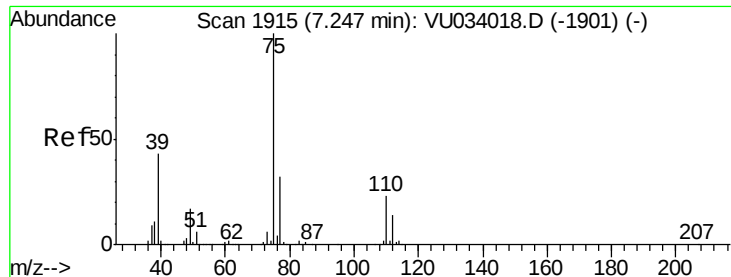
Tgt Ion: 43 Resp: 83069
 Ion Ratio Lower Upper
 43 100
 58 6.6 32.2 48.4#



#52
 Toluene
 Concen: 0.326 ug/l
 RT: 7.61 min Scan# 2029
 Delta R.T. -0.00 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

Tgt Ion: 92 Resp: 4005
 Ion Ratio Lower Upper
 92 100
 91 178.9 138.3 207.5



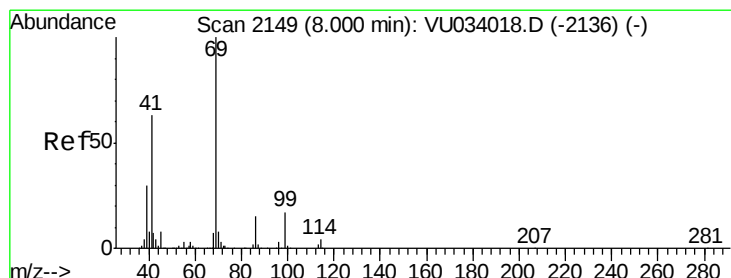
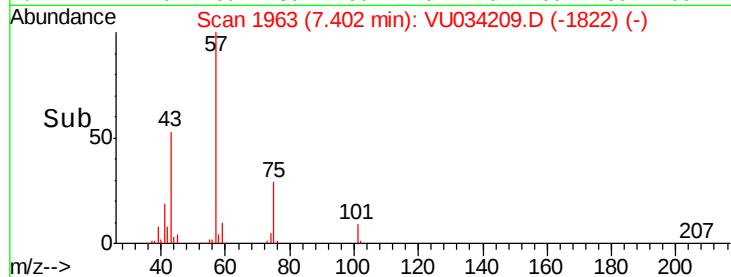
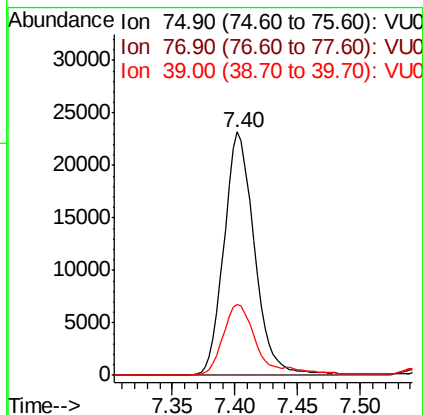
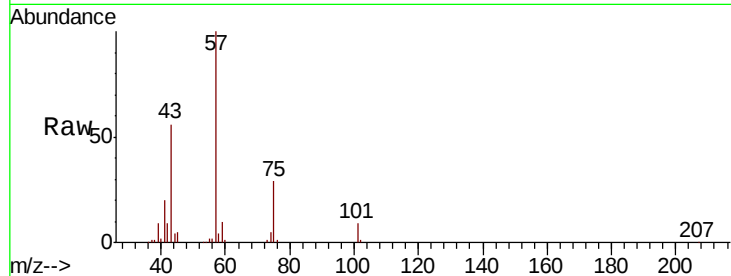


#54

cis-1,3-Dichloropropene
 Concen: 4.676 ug/l
 RT: 7.40 min Scan# 1963
 Delta R.T. 0.15 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

Instrument :
 MSVOA_U
 ClientSampleId :
 HF-01

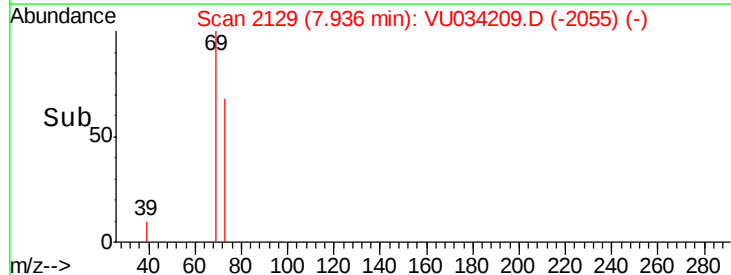
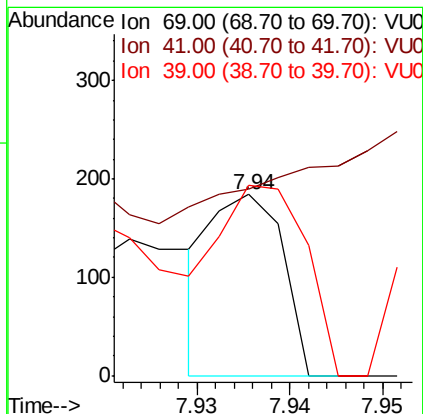
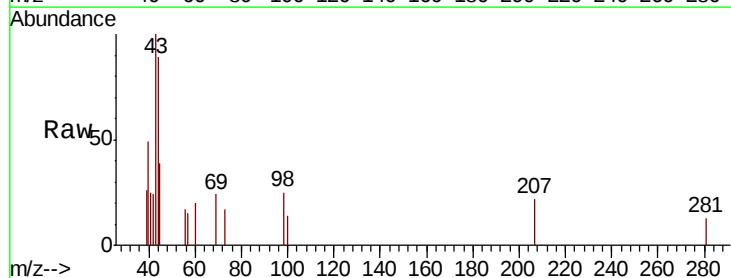
Tgt Ion	Ratio	Lower	Upper
75	100		
77	0.0	25.2	37.8#
39	29.3	34.6	51.8#

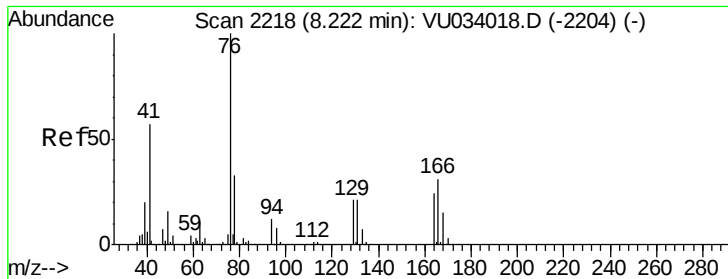


#56

Ethyl methacrylate
 Concen: 0.983 ug/l
 RT: 7.94 min Scan# 2129
 Delta R.T. -0.06 min
 Lab File: VU034209.D
 Acq: 02 Sep 2019 17:55

Tgt Ion	Ratio	Lower	Upper
69	100		
41	0.0	50.7	76.1#
39	0.0	24.2	36.2#





#57

1,3-Dichloropropane

Concen: 0.666 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.18 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

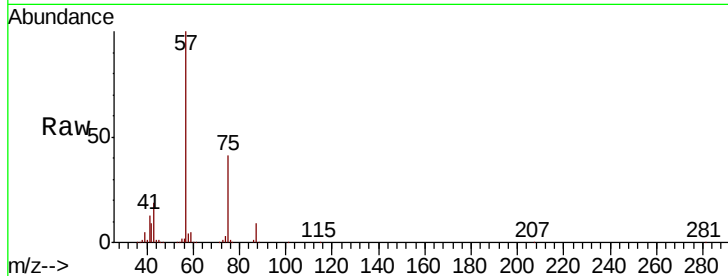
HF-01

Tgt Ion: 76 Resp: 5873

Ion Ratio Lower Upper

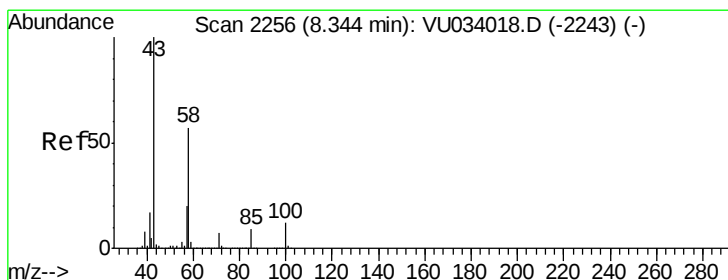
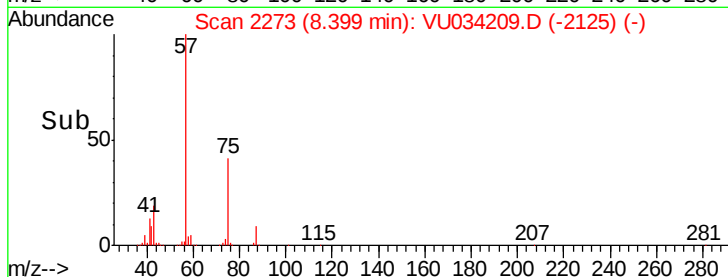
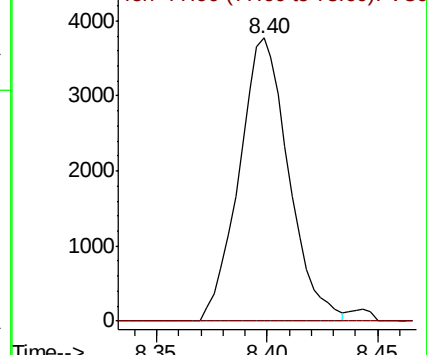
76 100

78 0.0 26.2 39.4#



Abundance Ion 75.90 (75.60 to 76.60): VU034209.D (-2125) (-)

Ion 77.90 (77.60 to 78.60): VU034209.D (-2125) (-)



#59

2-Hexanone

Concen: 13.363 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.05 min

Lab File: VU034209.D

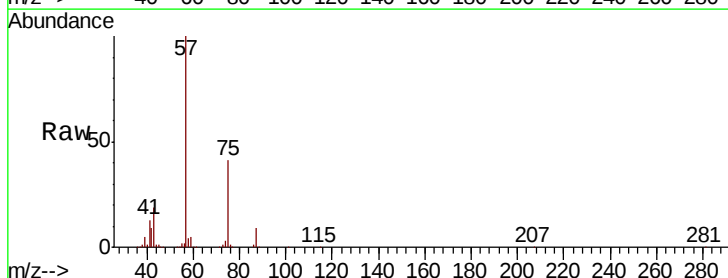
Acq: 02 Sep 2019 17:55

Tgt Ion: 43 Resp: 78180

Ion Ratio Lower Upper

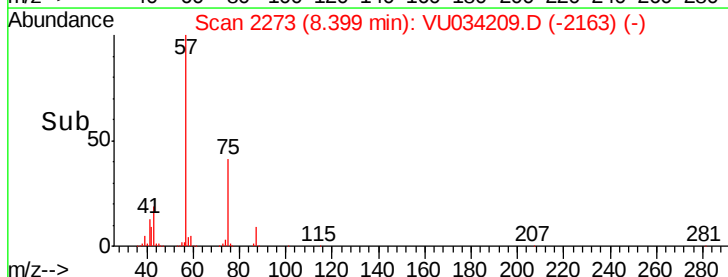
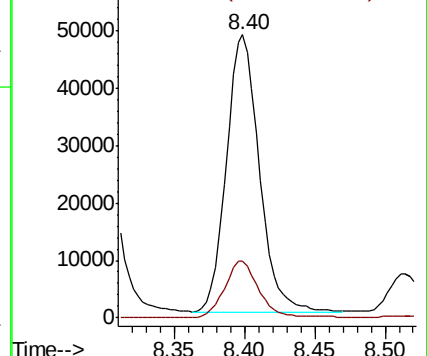
43 100

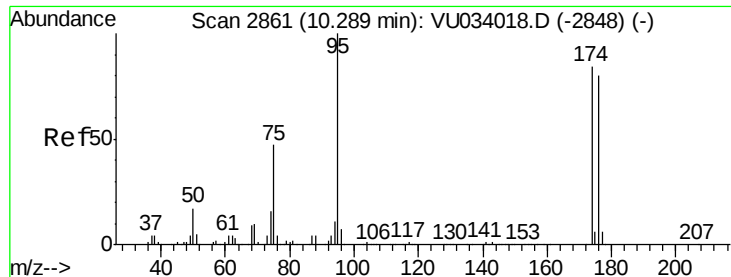
58 21.4 28.4 85.3#



Abundance Ion 43.00 (42.70 to 43.70): VU034209.D (-2163) (-)

Ion 58.00 (57.70 to 58.70): VU034209.D (-2163) (-)

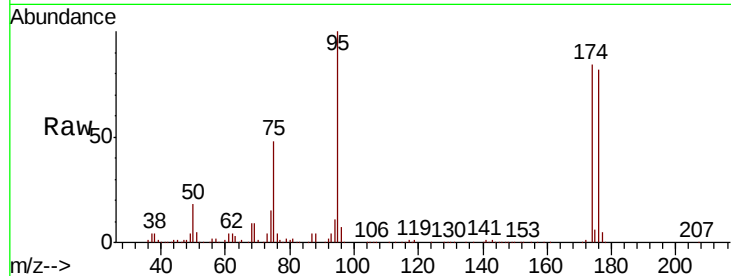




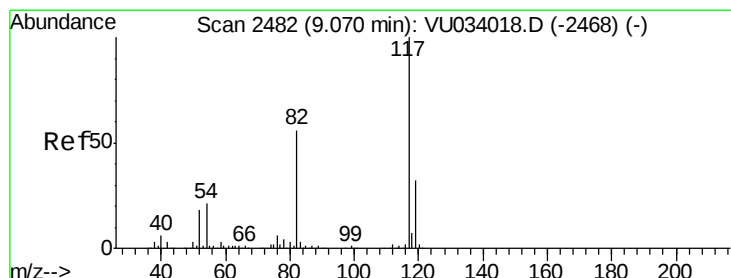
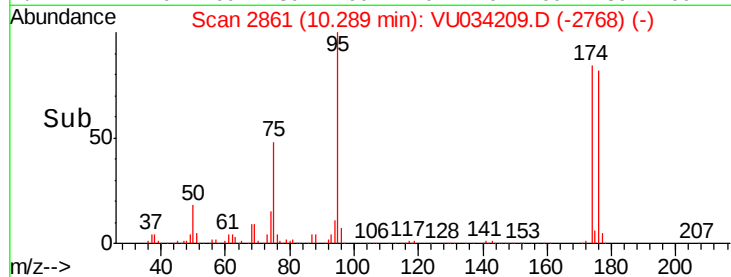
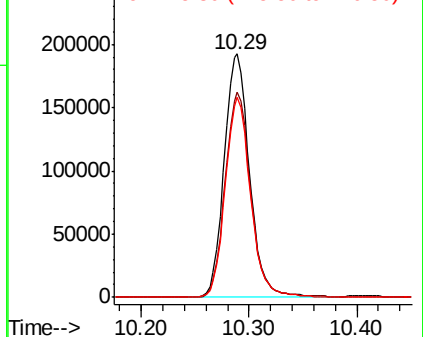
#62
4-Bromofluorobenzene
Concen: 44.877 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. 0.00 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

Instrument :
MSVOA_U
ClientSampled :
HF-01

Tgt Ion: 95 Resp: 315710
Ion Ratio Lower Upper
95 100
174 85.4 0.0 168.8
176 82.0 0.0 161.8

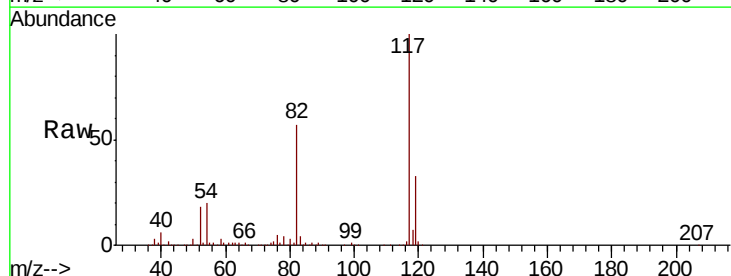


Abundance Ion 94.90 (94.60 to 95.60): VU
Ion 173.80 (173.50 to 174.50): V
Ion 175.80 (175.50 to 176.50): V

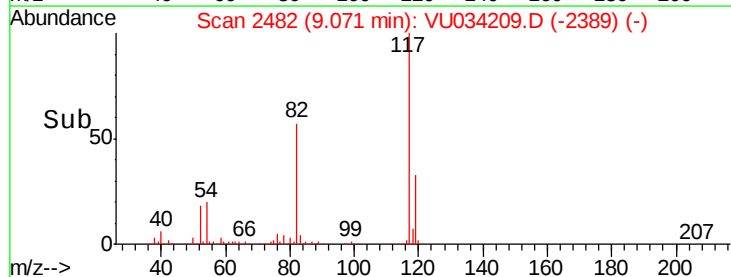
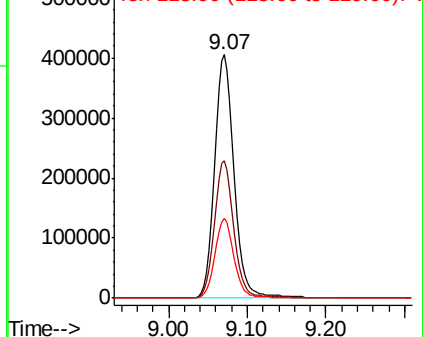


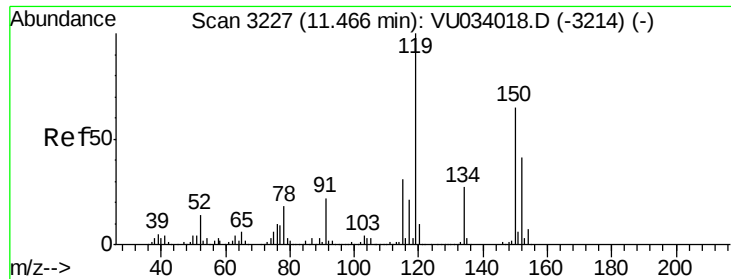
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.07 min Scan# 2482
Delta R.T. 0.00 min
Lab File: VU034209.D
Acq: 02 Sep 2019 17:55

Tgt Ion: 117 Resp: 691455
Ion Ratio Lower Upper
117 100
82 56.7 45.1 67.7
119 32.7 25.4 38.0



Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VU
Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.46 min Scan# 3226

Delta R.T. -0.00 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

HF-01

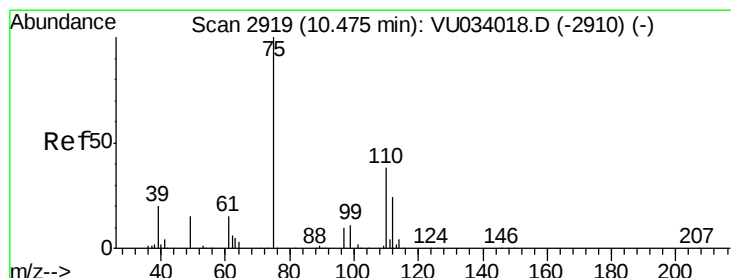
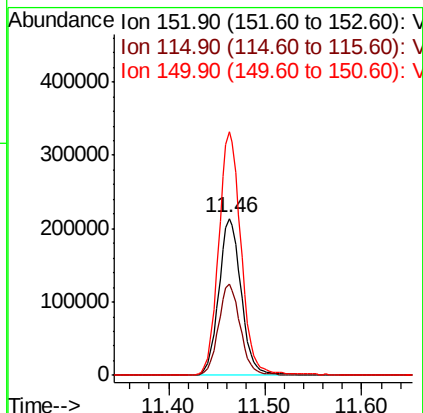
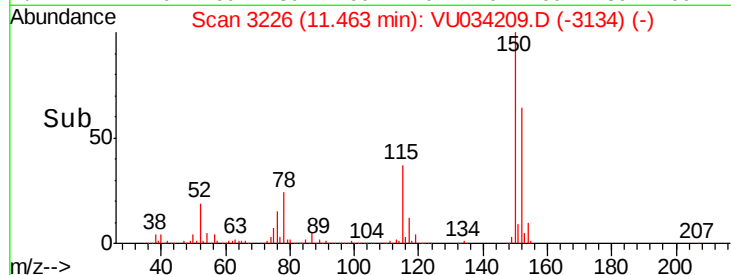
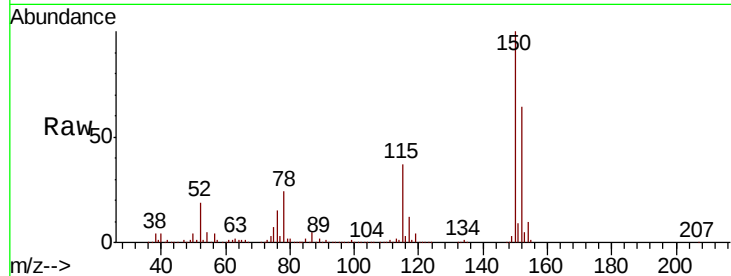
Tgt Ion:152 Resp: 344902

Ion Ratio Lower Upper

152 100

115 57.2 41.1 123.3

150 154.9 0.0 348.8



#76

1,2,3-Trichloropropane

Concen: 19.470 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.19 min

Lab File: VU034209.D

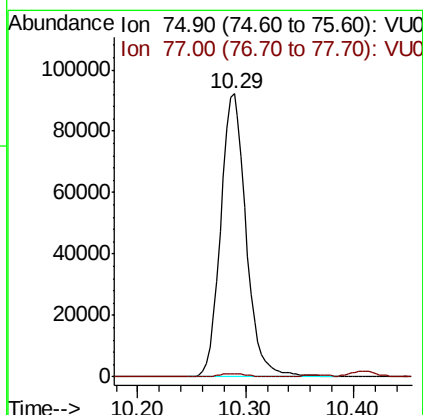
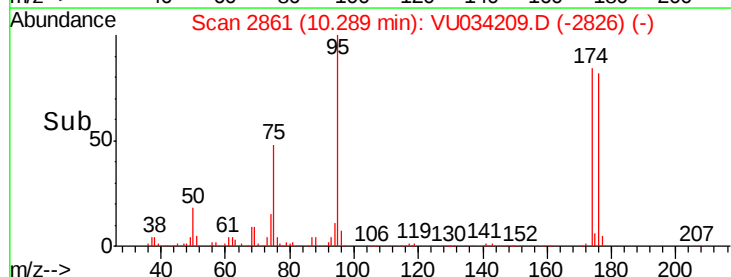
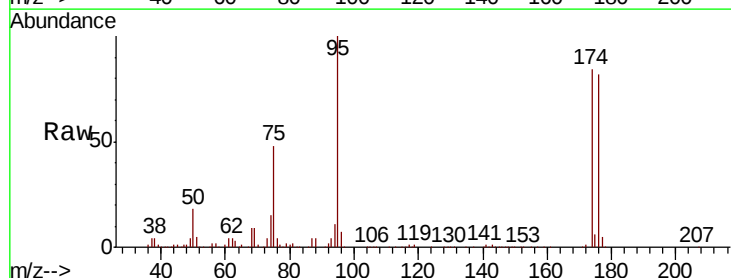
Acq: 02 Sep 2019 17:55

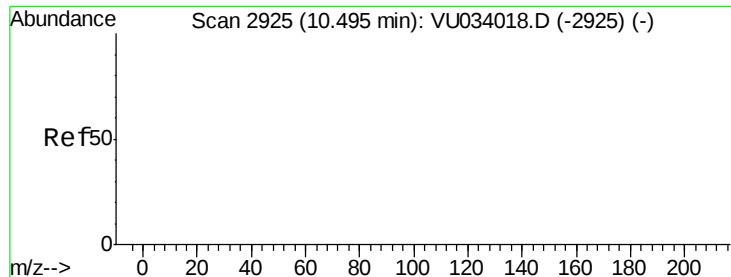
Tgt Ion: 75 Resp: 151348

Ion Ratio Lower Upper

75 100

77 1.3 20.1 60.2#





#81

trans-1,4-Dichloro-2-butene

Concen: 65.559 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.21 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

HF-01

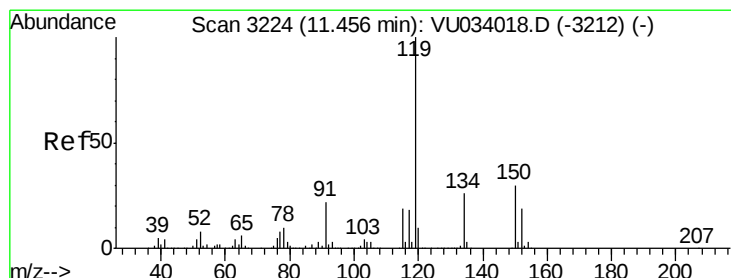
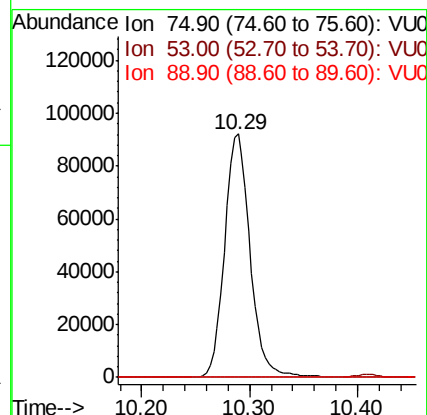
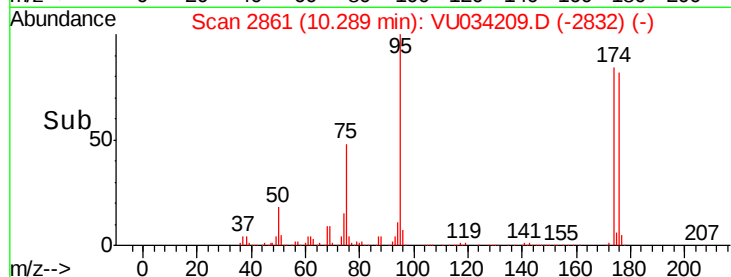
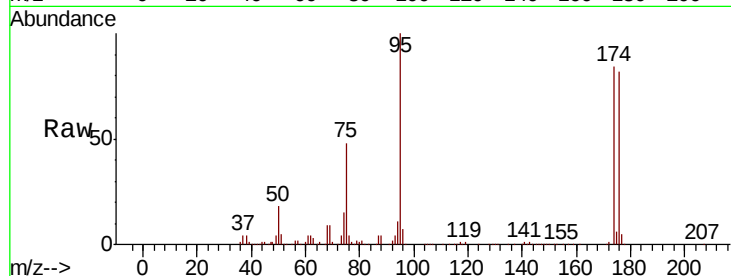
Tgt Ion: 75 Resp: 151348

Ion Ratio Lower Upper

75 100

53 0.1 0.0 0.0#

89 0.0 0.0 0.0



#86

p-Isopropyltoluene

Concen: 1.102 ug/l

RT: 11.46 min Scan# 3224

Delta R.T. 0.00 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

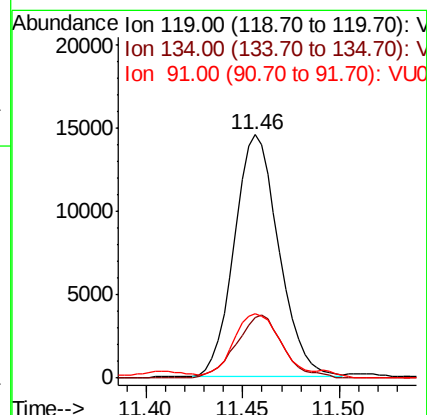
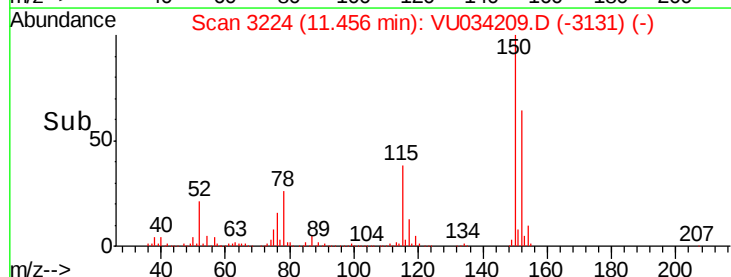
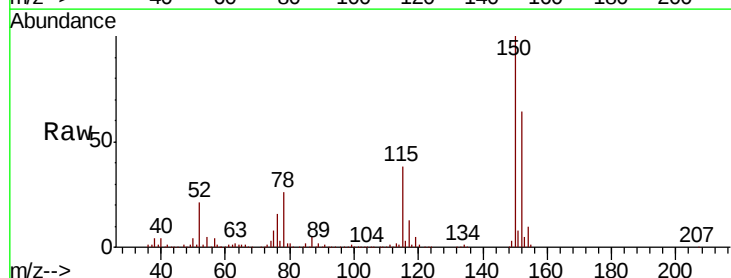
Tgt Ion: 119 Resp: 23094

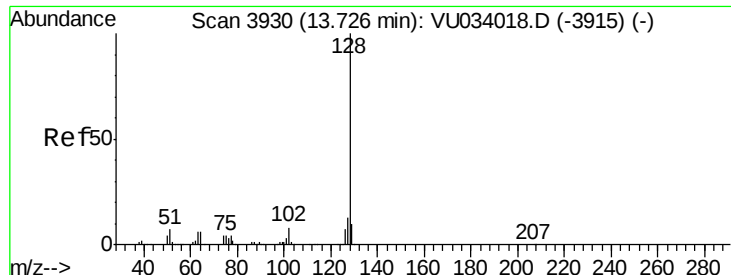
Ion Ratio Lower Upper

119 100

134 27.4 13.1 39.1

91 30.2 11.2 33.6





#95

Naphthalene

Concen: 1.795 ug/l

RT: 13.77 min Scan# 3944

Delta R.T. 0.05 min

Lab File: VU034209.D

Acq: 02 Sep 2019 17:55

Instrument :

MSVOA_U

ClientSampleId :

HF-01

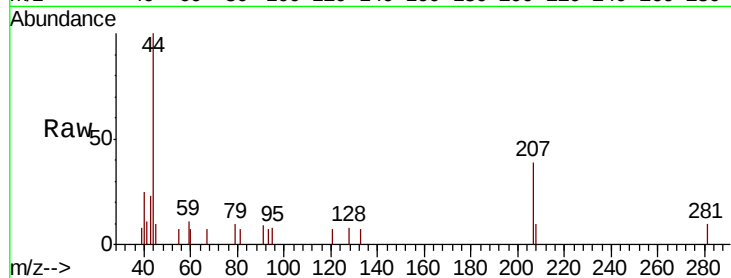
Tgt Ion:128 Resp: 111

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.4#

129 0.0 8.4 12.6#



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

