

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU090219\
 Data File : VU034173.D
 Acq On : 01 Sep 2019 16:52
 Operator : JC/SP
 Sample : K4527-23
 Misc : 5.0mL/MSVOA U/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :

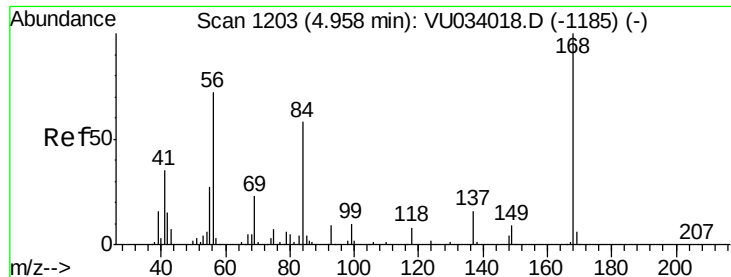
Quant Time: Sep 02 08:34:06 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\82U082919W.M
 Quant Title : SW846 8260
 QLast Update : Thu Aug 29 04:11:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.96	168	439087	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.86	114	714474	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	706465	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.46	152	343700	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	5.29	65	279857	49.74	ug/l	0.00
Spiked Amount			Recovery	=	99.48%	
35) Dibromofluoromethane	4.86	113	232048	46.83	ug/l	0.00
Spiked Amount			Recovery	=	93.66%	
50) Toluene-d8	7.55	98	926764	49.95	ug/l	0.00
Spiked Amount			Recovery	=	99.90%	
62) 4-Bromofluorobenzene	10.29	95	325619	45.11	ug/l	0.00
Spiked Amount			Recovery	=	90.22%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	687	Below Cal	#	68
5) Bromomethane	1.57	94	65	Below Cal	#	2
11) Tert butyl alcohol	2.82	59	2950	2.274	ug/l #	73
13) Acrolein	2.18	56	110	0.202	ug/l #	68
16) Acetone	2.31	43	14132	4.923	ug/l	98
18) Methyl Acetate	2.61	43	4110	0.554	ug/l #	85
20) Methylene Chloride	2.69	84	12402	2.282	ug/l	97
31) Cyclohexane	4.96	56	7875	0.937	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	31206	4.618	ug/l #	48
38) Carbon Tetrachloride	4.96	117	40115	6.150	ug/l #	16
43) Isopropyl Acetate	5.53	43	86280	7.494	ug/l	98
48) Methyl methacrylate	6.52	41	4854	0.874	ug/l #	14
49) 1,4-Dioxane	6.69	88	242	1.738	ug/l #	1
51) 4-Methyl-2-Pentanone	7.40	43	73417	9.234	ug/l #	47
54) cis-1,3-Dichloropropene	7.40	75	37769	4.392	ug/l #	63
56) Ethyl methacrylate	7.91	69	305	1.005	ug/l #	27
57) 1,3-Dichloropropane	8.40	76	6539	0.723	ug/l #	42
59) 2-Hexanone	8.29	43	87858	14.637	ug/l #	23
74) N-amyl acetate	9.92	43	2332	0.240	ug/l #	46
76) 1,2,3-Trichloropropane	10.29	75	156279	20.174	ug/l #	37
81) trans-1,4-Dichloro-2-buten	10.29	75	156279	67.932	ug/l #	100
93) 1,2,4-Trichlorobenzene	13.54	180	44	1.120	ug/l #	78
95) Naphthalene	13.77	128	45	1.792	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: VU034173.D

Acq: 01 Sep 2019 16:52

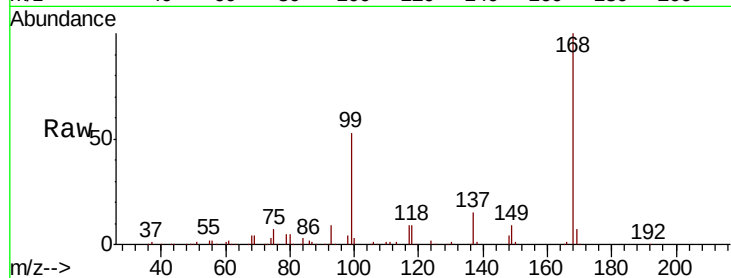
Instrument :
MSVOA_U
ClientSampled :

Tot Ion:168 Resp: 439087

Ion Ratio Lower Upper

168 100

99 53.4 42.3 63.5



Abundance Ion 167.90 (167.60 to 168.60): VU034173.D (-1185) (-)

Ion 98.90 (98.60 to 99.60): VU034173.D (-1185) (-)

4.96

200000

150000

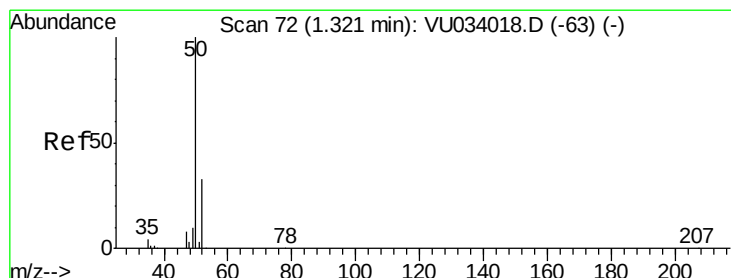
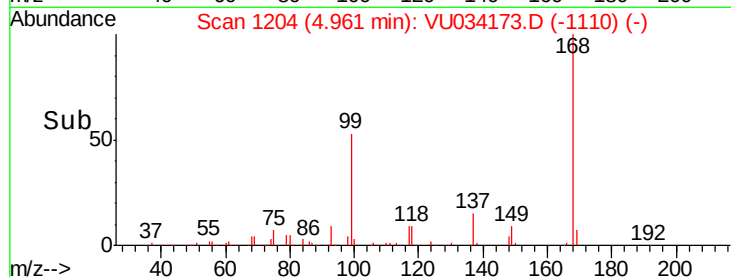
100000

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: VU034173.D

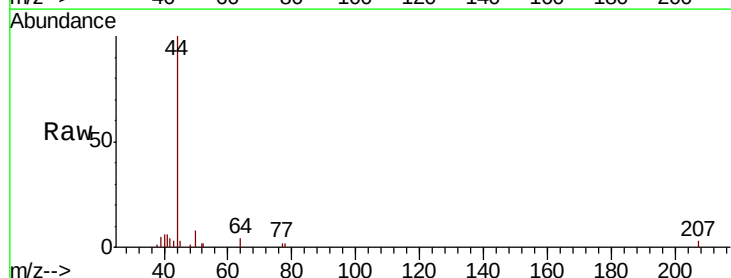
Acq: 01 Sep 2019 16:52

Tgt Ion: 50 Resp: 687

Ion Ratio Lower Upper

50 100

52 51.1 26.2 39.4#



Abundance Ion 49.90 (49.60 to 50.60): VU034173.D (-1185) (-)

Ion 51.90 (51.60 to 52.60): VU034173.D (-1185) (-)

1.32

600

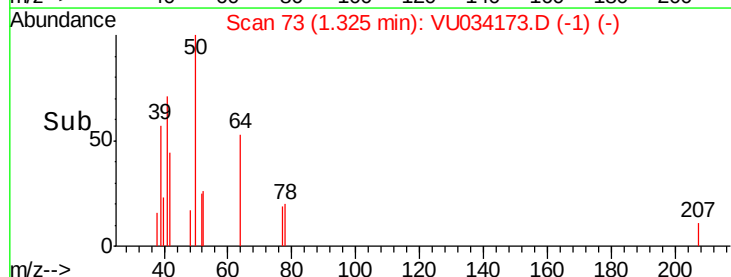
400

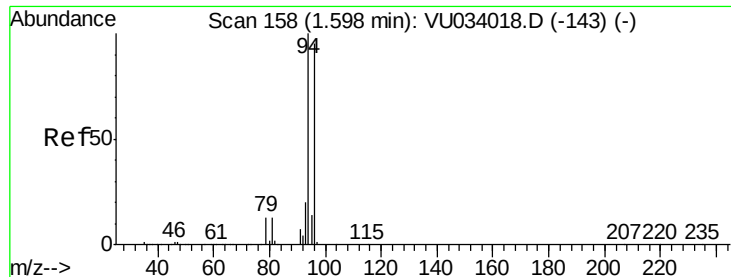
200

0

1.30 1.32 1.34

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.57 min Scan# 150

Delta R.T. -0.03 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

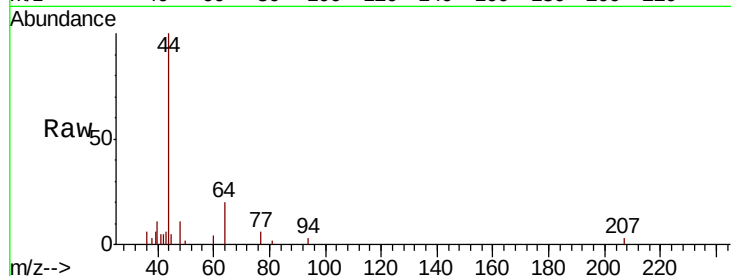
ClientSampled :

Tot Ion: 94 Resp: 65

Ion Ratio Lower Upper

94 100

96 0.0 76.3 114.5#



Abundance Ion 93.90 (93.60 to 94.60): VU034173.D (-143) (-)

Ion 95.90 (95.60 to 96.60): VU034173.D (-143) (-)

150

100

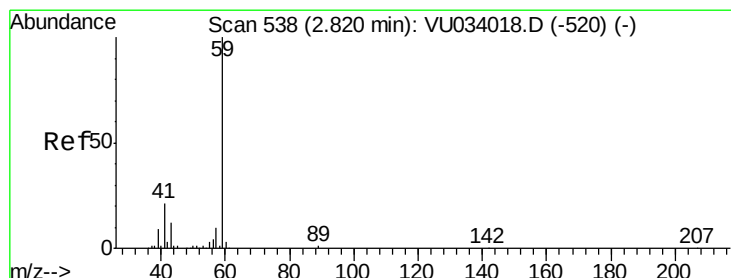
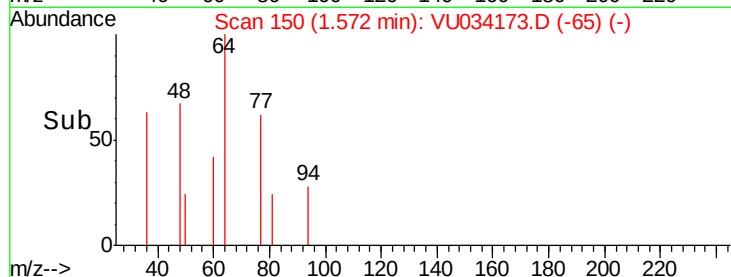
50

0

1.57

1.58

Time-->



#11

Tert butyl alcohol

Concen: 2.274 ug/l

RT: 2.82 min Scan# 539

Delta R.T. 0.00 min

Lab File: VU034173.D

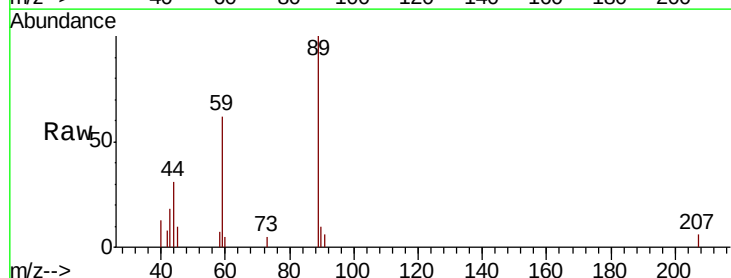
Acq: 01 Sep 2019 16:52

Tgt Ion: 59 Resp: 2950

Ion Ratio Lower Upper

59 100

57 0.0 8.0 12.0#



Abundance Ion 59.00 (58.70 to 59.70): VU034173.D (-445) (-)

Ion 57.00 (56.70 to 57.70): VU034173.D (-445) (-)

1500

1000

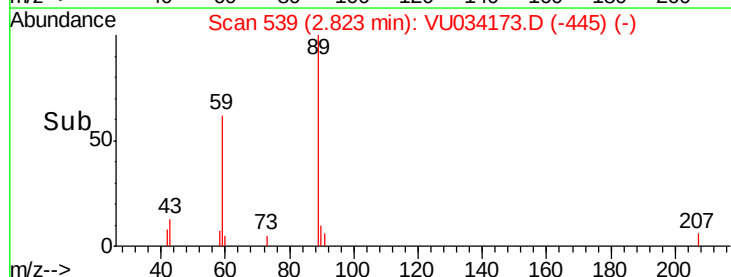
500

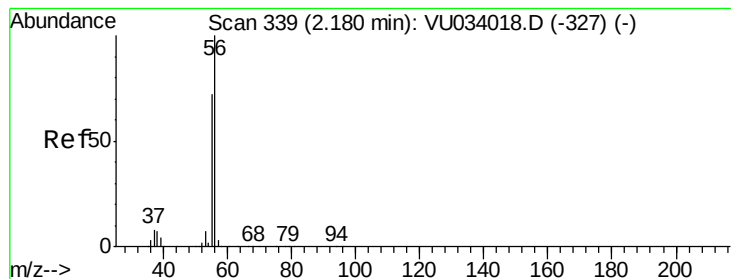
0

2.82

2.85

Time-->





#13

Acrolein

Concen: 0.202 ug/l

RT: 2.18 min Scan# 339

Delta R.T. 0.00 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

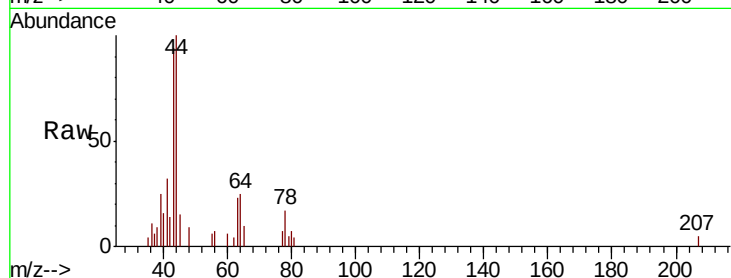
ClientSampleId :

Tot Ion: 56 Resp: 110

Ion Ratio Lower Upper

56 100

55 98.2 57.1 85.7#



Abundance Ion 56.00 (55.70 to 56.70): VU034018.D (-327) (-)

Ion 55.00 (54.70 to 55.70): VU034018.D (-327) (-)

2.18

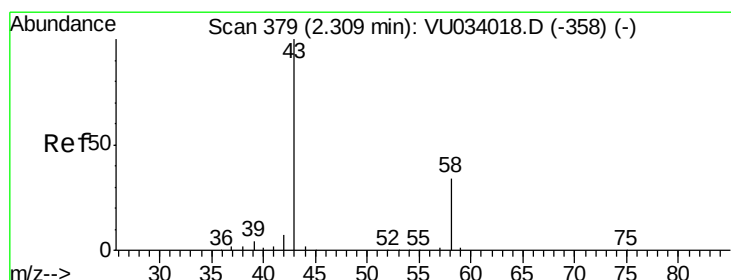
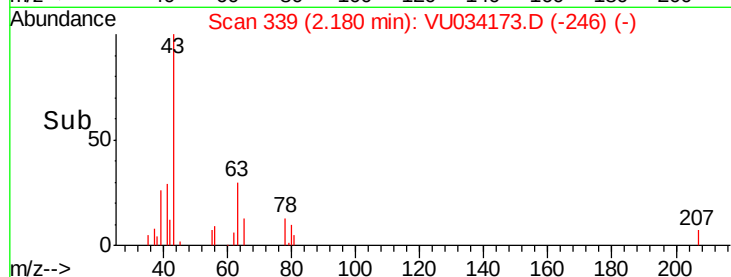
150

100

50

0

2.16 2.17 2.18 2.19 2.20



#16

Acetone

Concen: 4.923 ug/l

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VU034173.D

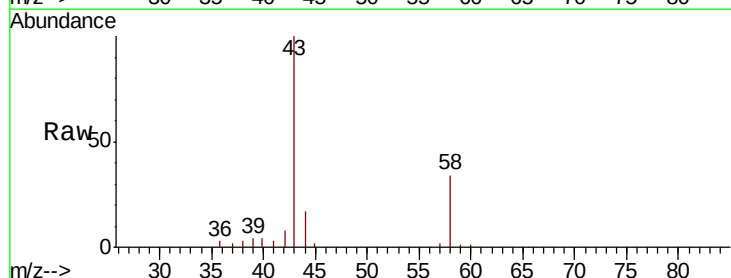
Acq: 01 Sep 2019 16:52

Tgt Ion: 43 Resp: 14132

Ion Ratio Lower Upper

43 100

58 34.9 26.8 40.2



Abundance Ion 43.00 (42.70 to 43.70): VU034018.D (-358) (-)

Ion 58.00 (57.70 to 58.70): VU034018.D (-358) (-)

2.31

8000

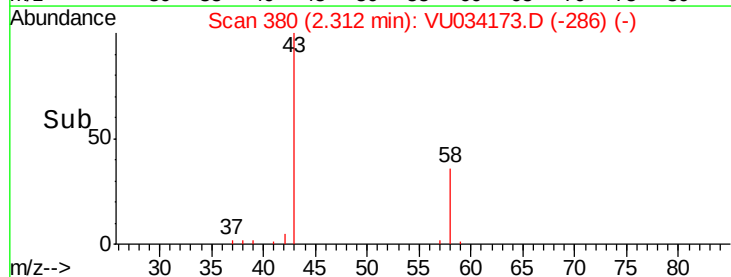
6000

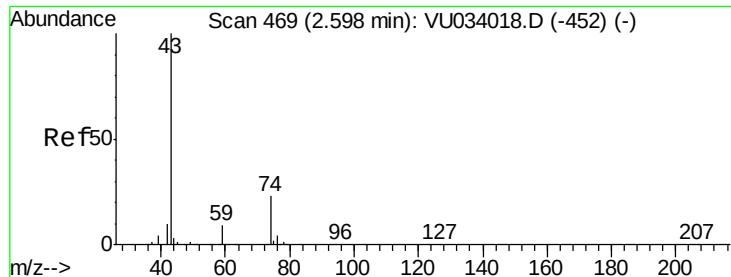
4000

2000

0

2.25 2.30 2.35 2.40

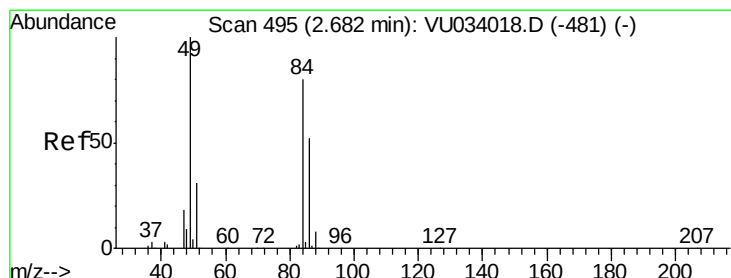
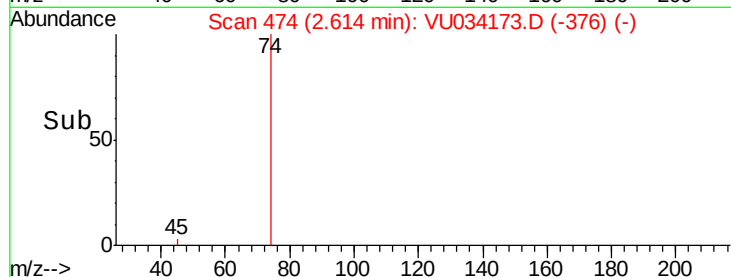
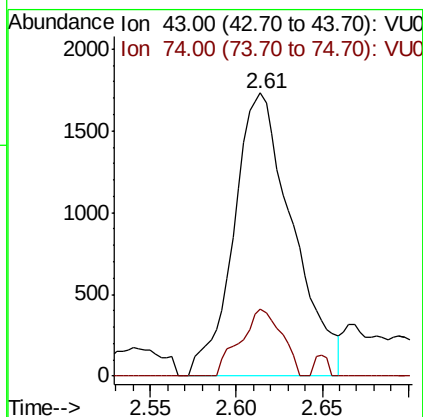
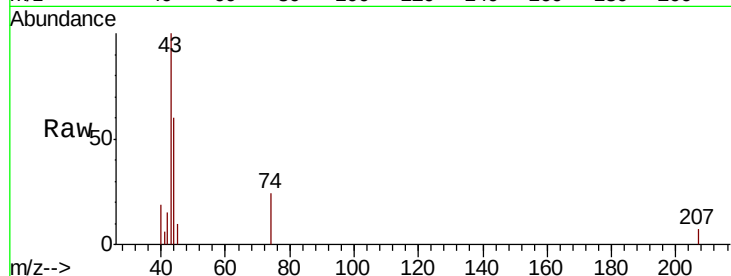




#18
Methyl Acetate
Concen: 0.554 ug/l
RT: 2.61 min Scan# 474
Delta R.T. 0.02 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

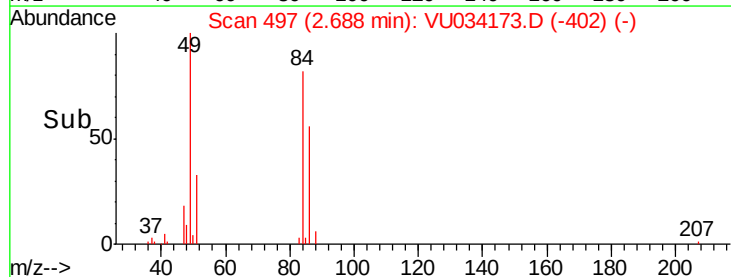
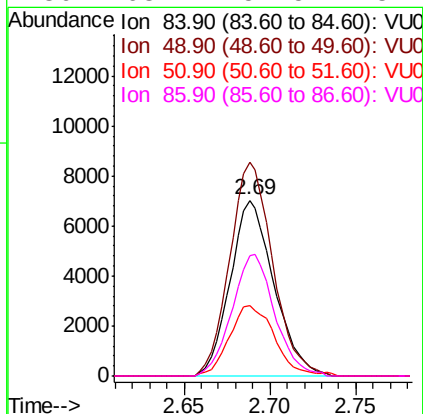
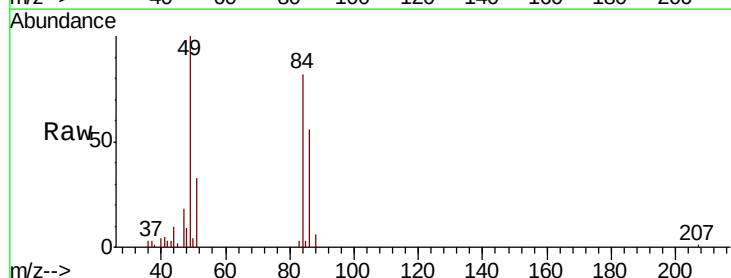
Instrument :
MSVOA_U
ClientSampleId :

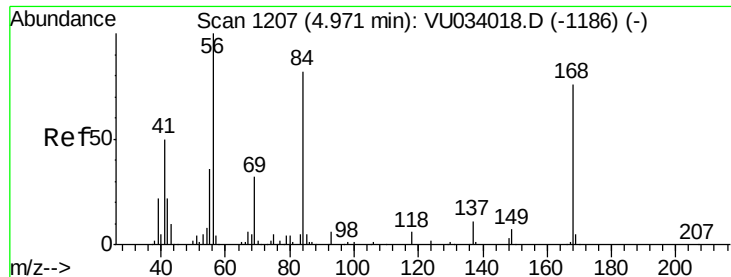
Tot Ion: 43 Resp: 4110
Ion Ratio Lower Upper
43 100
74 16.7 19.2 28.8#



#20
Methylene Chloride
Concen: 2.282 ug/l
RT: 2.69 min Scan# 497
Delta R.T. 0.01 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Tgt Ion: 84 Resp: 12402
Ion Ratio Lower Upper
84 100
49 121.4 100.2 150.4
51 40.1 30.8 46.2
86 68.4 52.5 78.7

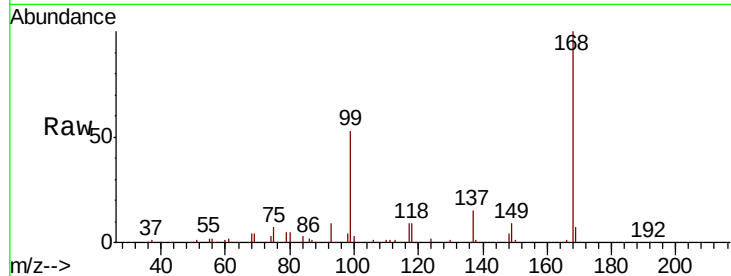




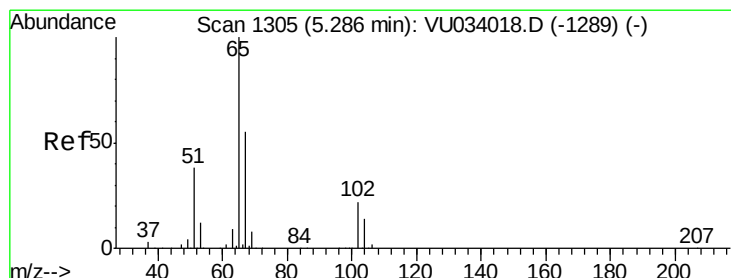
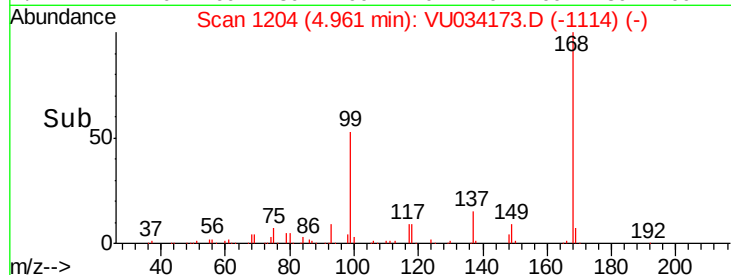
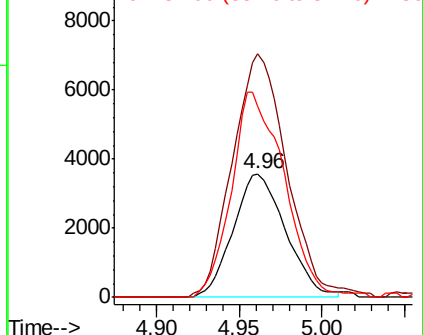
#31
Cyclohexane
Concen: 0.937 ug/l
RT: 4.96 min Scan# 1204
Delta R.T. -0.01 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Instrument :
MSVOA_U
ClientSampled :

Tot Ion: 56 Resp: 7875
Ion Ratio Lower Upper
56 100
69 196.5 25.4 38.0#
84 153.9 65.8 98.8#

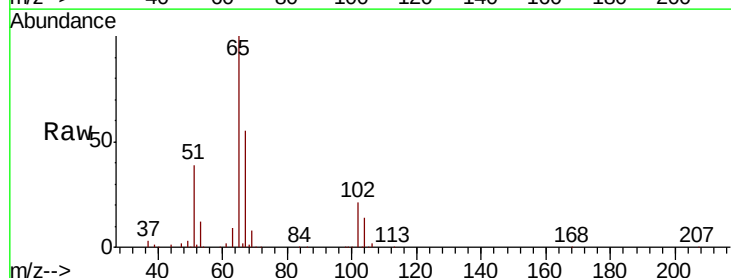


Abundance Ion 56.00 (55.70 to 56.70): VU0
Ion 69.00 (68.70 to 69.70): VU0
Ion 84.00 (83.70 to 84.70): VU0

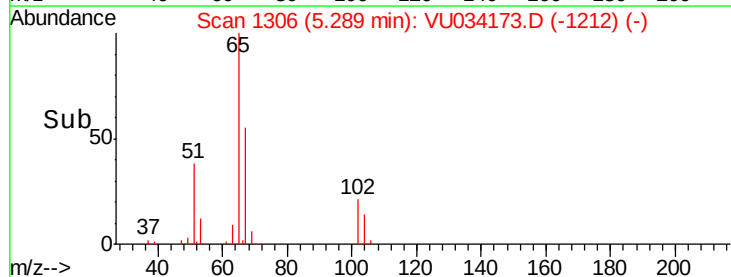
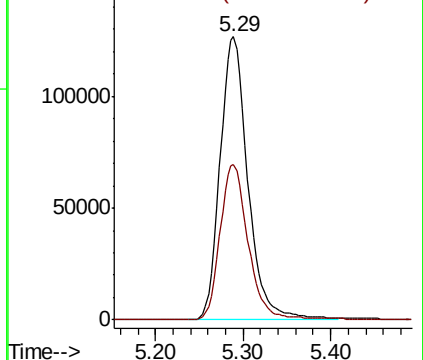


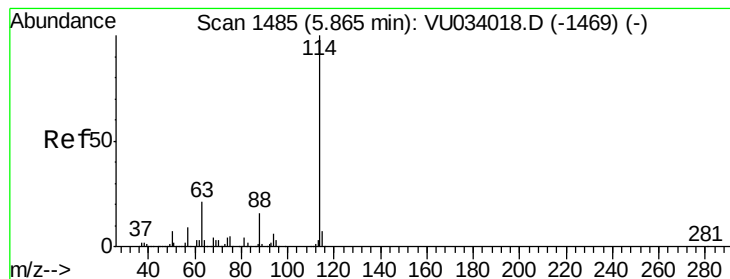
#33
1,2-Dichloroethane-d4
Concen: 49.742 ug/l
RT: 5.29 min Scan# 1306
Delta R.T. 0.00 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Tgt Ion: 65 Resp: 279857
Ion Ratio Lower Upper
65 100
67 55.6 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VU0
Ion 66.90 (66.60 to 67.60): VU0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.86 min Scan# 1485

Delta R.T. 0.00 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

ClientSampleId :

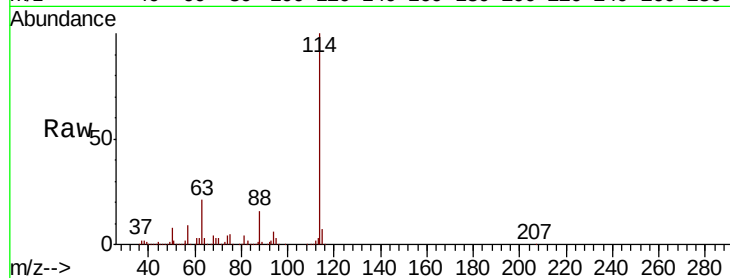
Tot Ion:114 Resp: 714474

Ion Ratio Lower Upper

114 100

63 21.5 0.0 42.0

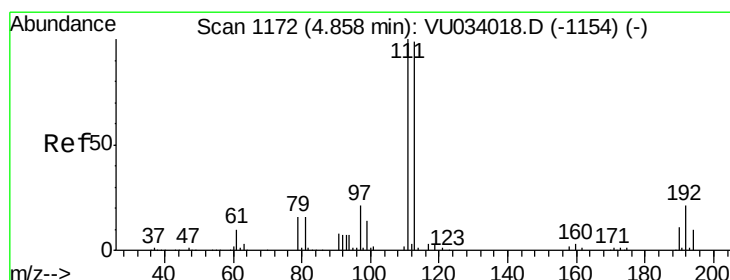
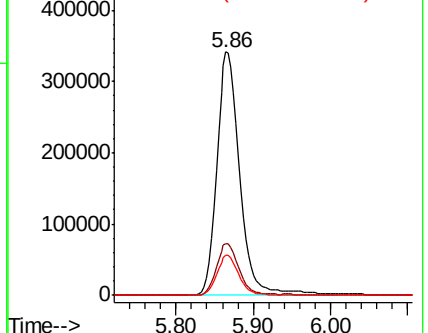
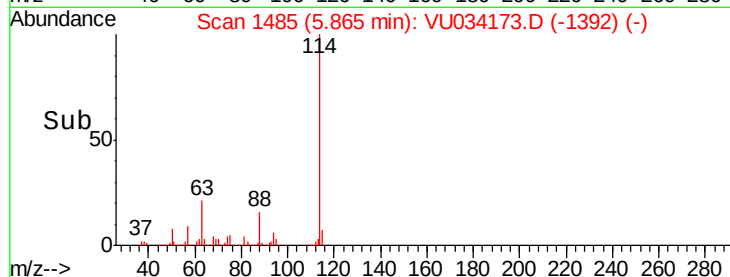
88 16.2 0.0 32.0



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VU0

Ion 87.90 (87.60 to 88.60): VU0



#35

Dibromofluoromethane

Concen: 46.826 ug/l

RT: 4.86 min Scan# 1173

Delta R.T. 0.00 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

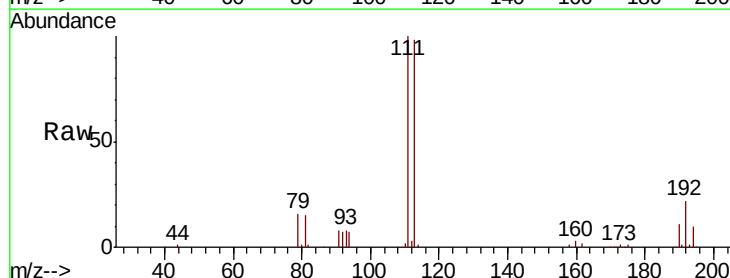
Tgt Ion:113 Resp: 232048

Ion Ratio Lower Upper

113 100

111 103.0 81.7 122.5

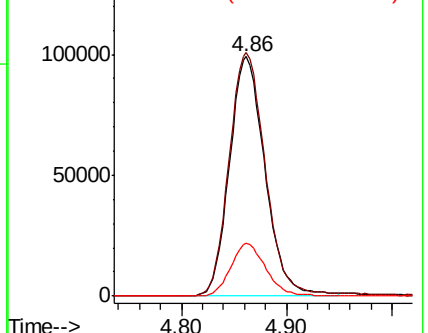
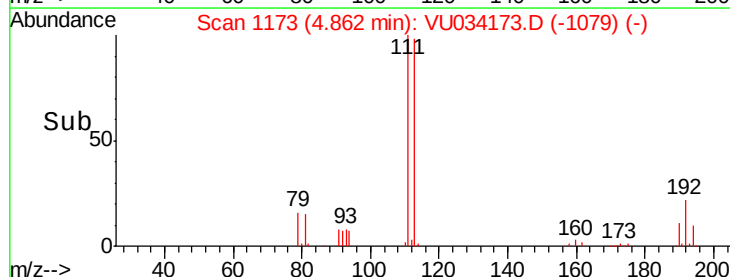
192 22.0 17.1 25.7

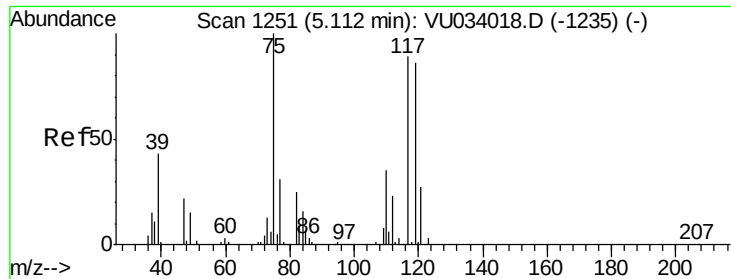


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

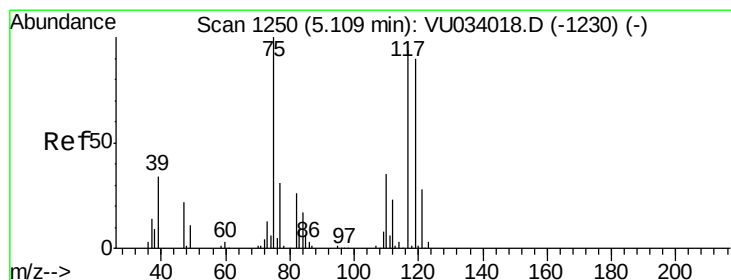
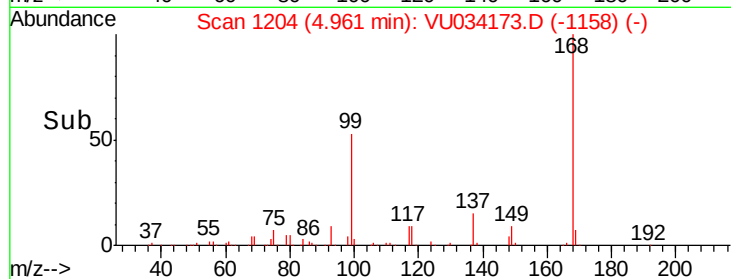
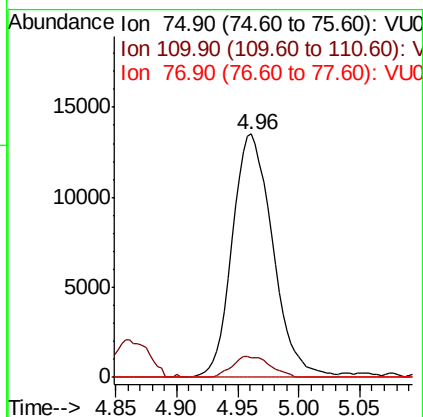
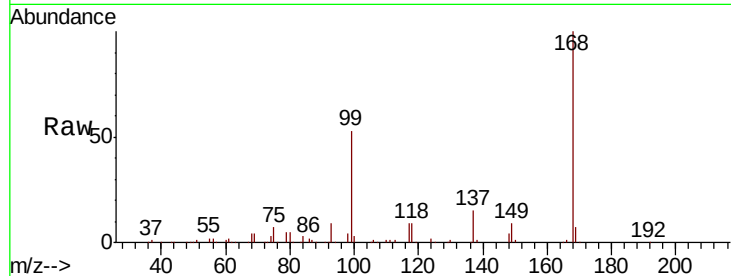




#36
 1,1-Dichloropropene
 Concen: 4.618 ug/l
 RT: 4.96 min Scan# 1204
 Delta R.T. -0.15 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

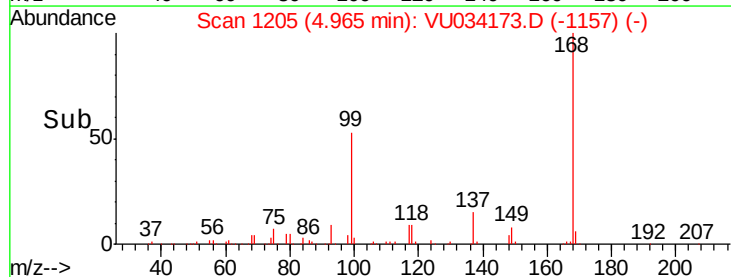
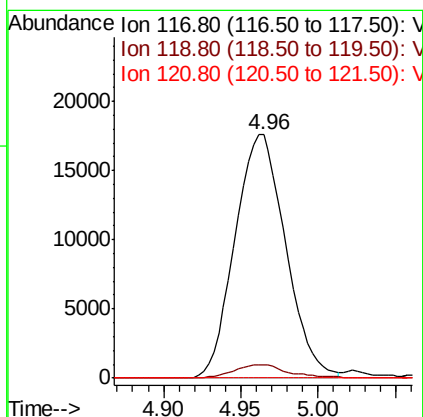
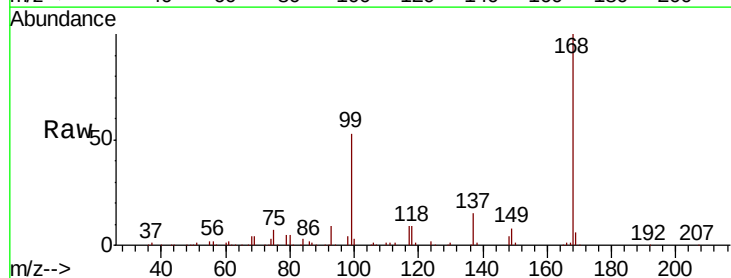
Instrument :
 MSVOA_U
 ClientSampled :

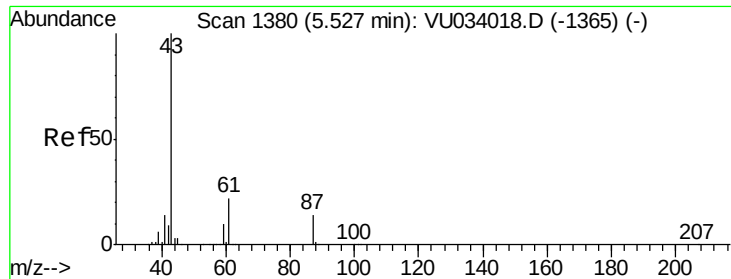
Tot Ion	Ratio	Lower	Upper
75	100		
110	8.0	17.8	53.5#
77	0.0	25.0	37.4#



#38
 Carbon Tetrachloride
 Concen: 6.150 ug/l
 RT: 4.96 min Scan# 1205
 Delta R.T. -0.14 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

Tgt Ion	Ratio	Lower	Upper
117	100		
119	5.5	77.0	115.4#
121	0.0	23.9	35.9#





#43

Isopropyl Acetate

Concen: 7.494 ug/l

RT: 5.53 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

ClientSampleId :

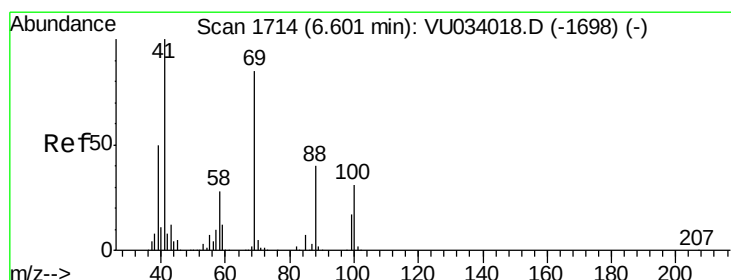
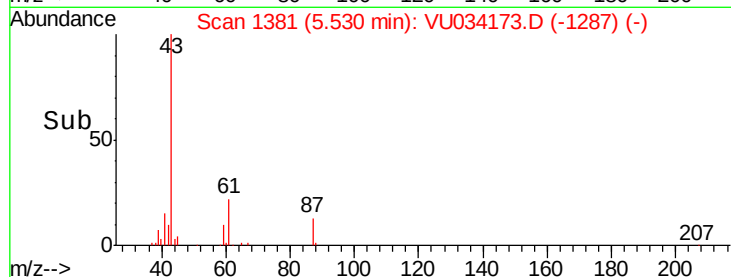
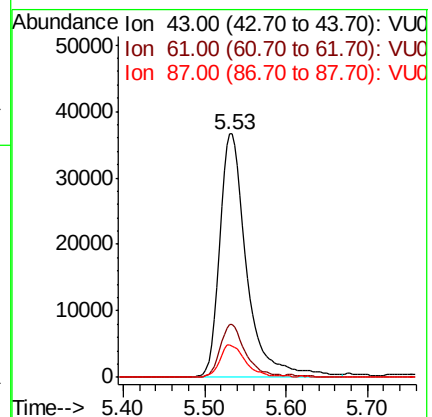
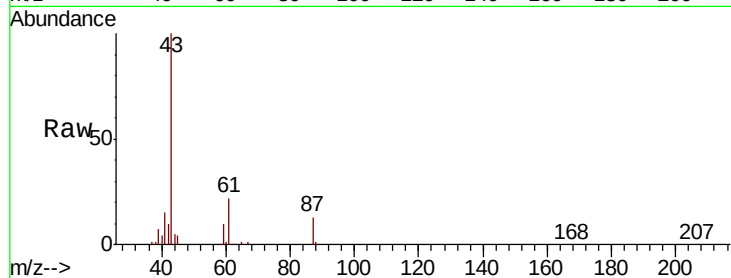
Tot Ion: 43 Resp: 86280

Ion Ratio Lower Upper

43 100

61 20.2 17.2 25.8

87 12.7 10.8 16.2



#48

Methyl methacrylate

Concen: 0.874 ug/l

RT: 6.52 min Scan# 1690

Delta R.T. -0.08 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

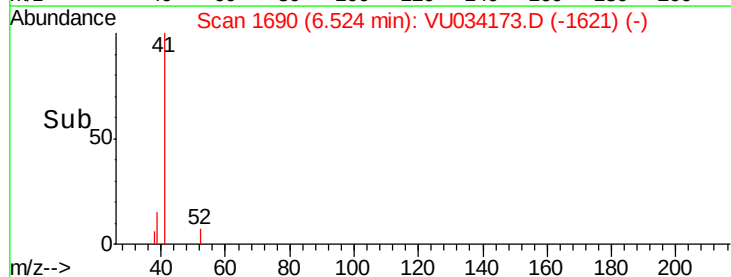
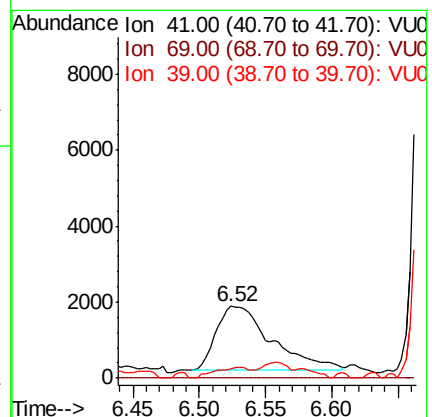
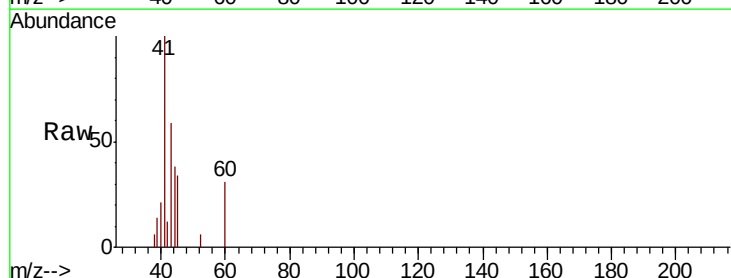
Tgt Ion: 41 Resp: 4854

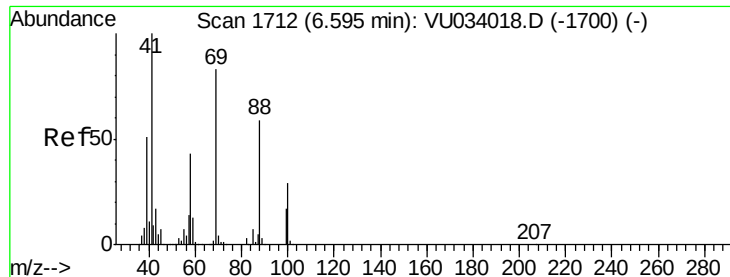
Ion Ratio Lower Upper

41 100

69 0.0 69.5 104.3#

39 0.0 40.3 60.5#

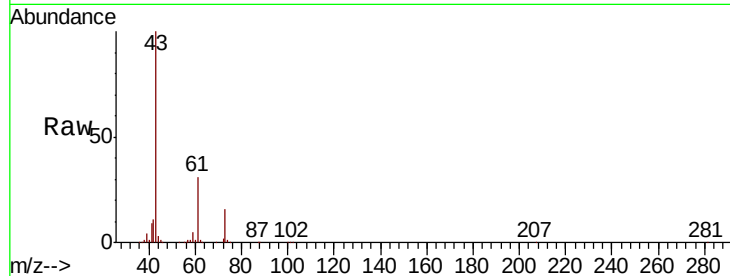




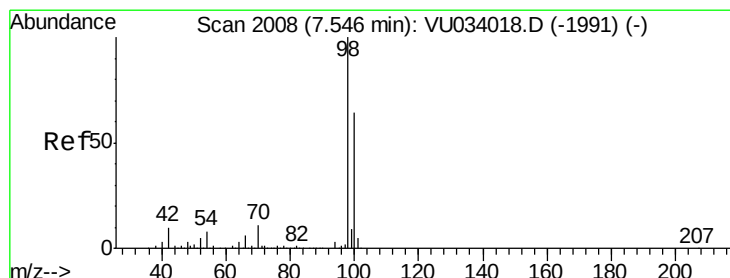
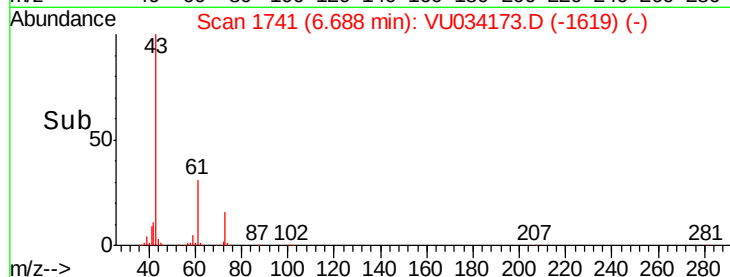
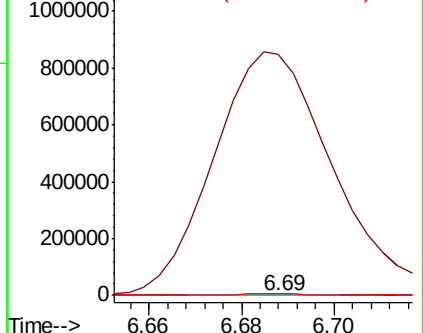
#49
 1,4-Dioxane
 Concen: 1.738 ug/l
 RT: 6.69 min Scan# 1741
 Delta R.T. 0.09 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

Instrument :
 MSVOA_U
 ClientSampleId :

Tot Ion: 88 Resp: 242
 Ion Ratio Lower Upper
 88 100
 43 658321.1 24.8 37.2#
 58 3451.2 59.3 88.9#

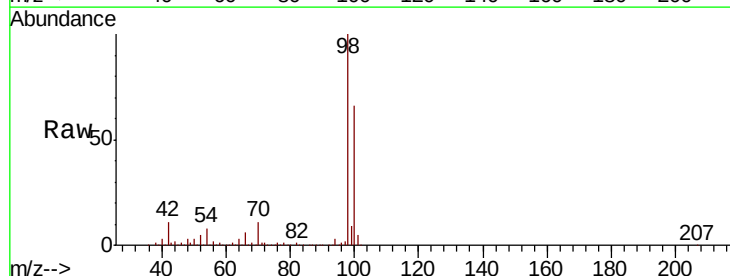


Abundance Ion 88.00 (87.70 to 88.70): VU0
 Ion 43.00 (42.70 to 43.70): VU0
 Ion 58.00 (57.70 to 58.70): VU0

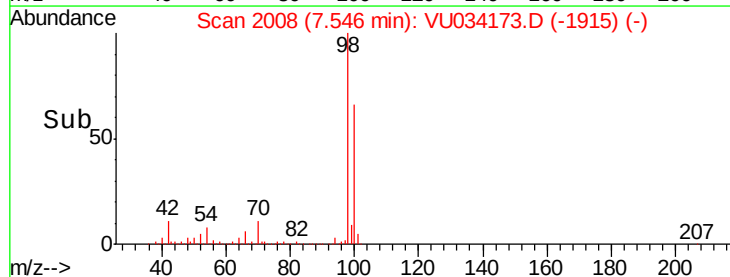
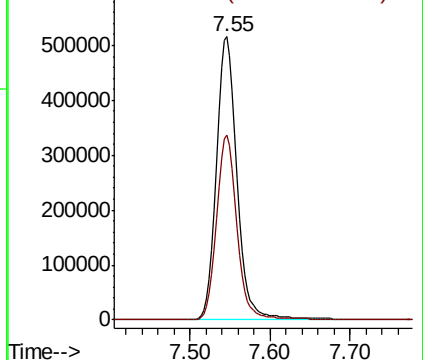


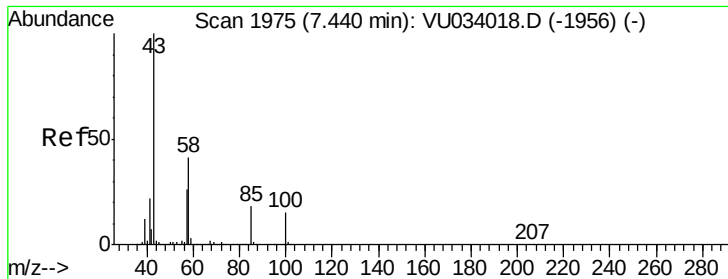
#50
 Toluene-d8
 Concen: 49.946 ug/l
 RT: 7.55 min Scan# 2008
 Delta R.T. 0.00 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

Tgt Ion: 98 Resp: 926764
 Ion Ratio Lower Upper
 98 100
 100 64.8 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VU0
 Ion 100.00 (99.70 to 100.70): VU0





#51

4-Methyl-2-Pentanone

Concen: 9.234 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. -0.04 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

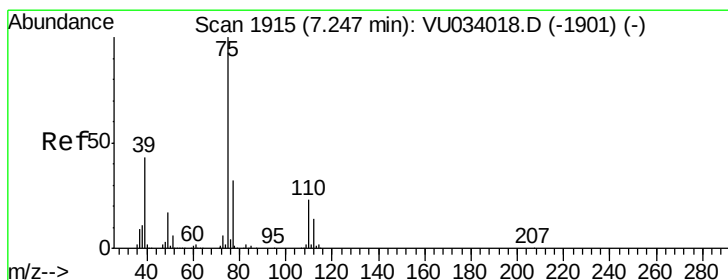
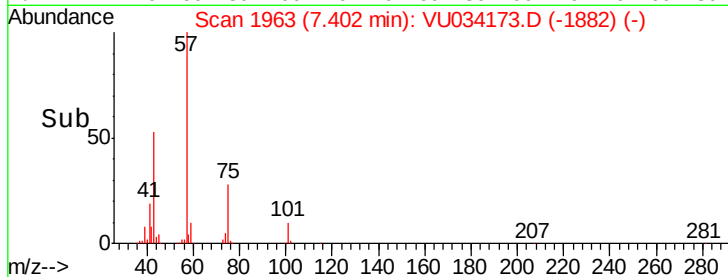
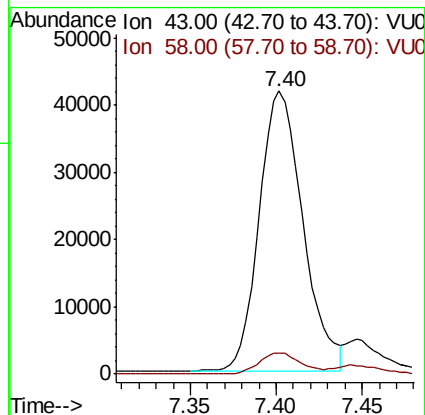
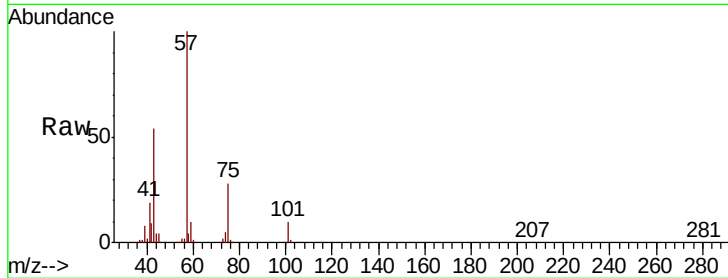
ClientSampleId :

Tot Ion: 43 Resp: 73417

Ion Ratio Lower Upper

43 100

58 7.3 32.2 48.4#



#54

cis-1,3-Dichloropropene

Concen: 4.392 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. 0.15 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

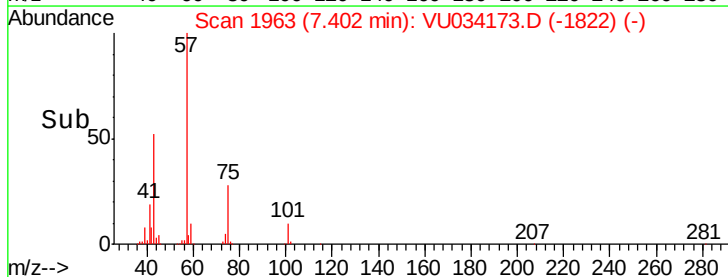
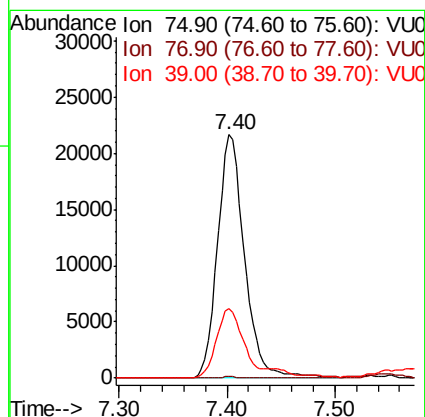
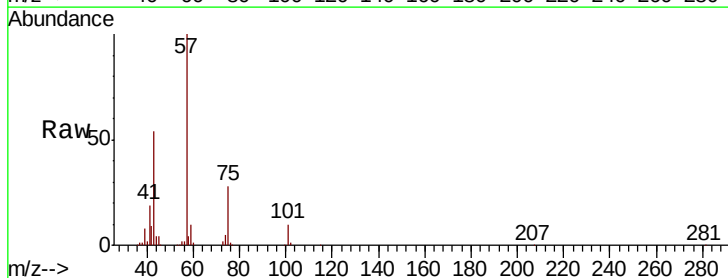
Tgt Ion: 75 Resp: 37769

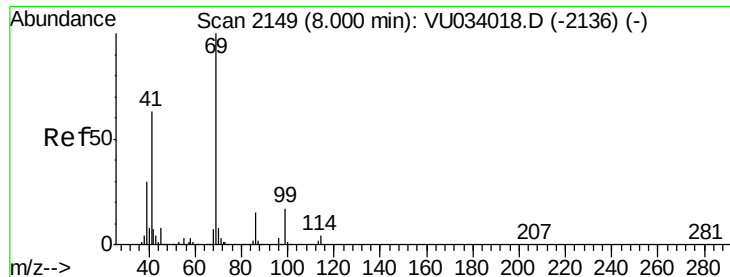
Ion Ratio Lower Upper

75 100

77 0.6 25.2 37.8#

39 28.8 34.6 51.8#





#56

Ethyl methacrylate

Concen: 1.005 ug/l

RT: 7.91 min Scan# 2121

Delta R.T. -0.09 min

Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :
MSVOA_U
ClientSampleId :

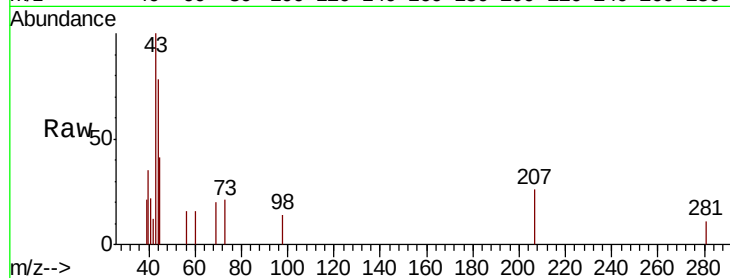
Tot Ion: 69 Resp: 305

Ion Ratio Lower Upper

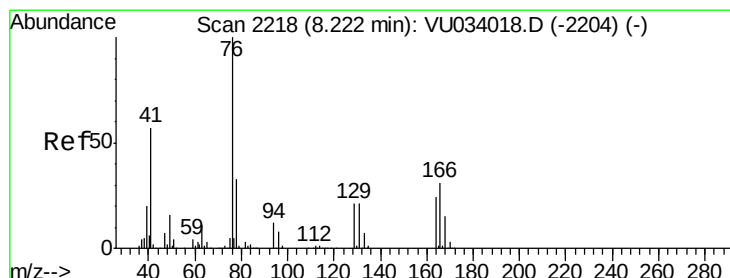
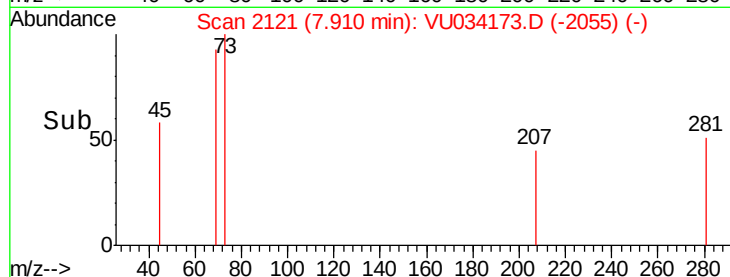
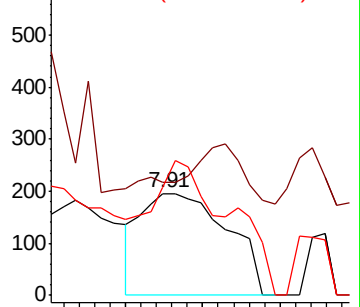
69 100

41 0.0 50.7 76.1#

39 0.0 24.2 36.2#



Abundance Ion 69.00 (68.70 to 69.70): VU0
Ion 41.00 (40.70 to 41.70): VU0
Ion 39.00 (38.70 to 39.70): VU0



#57

1,3-Dichloropropane

Concen: 0.723 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.18 min

Lab File: VU034173.D

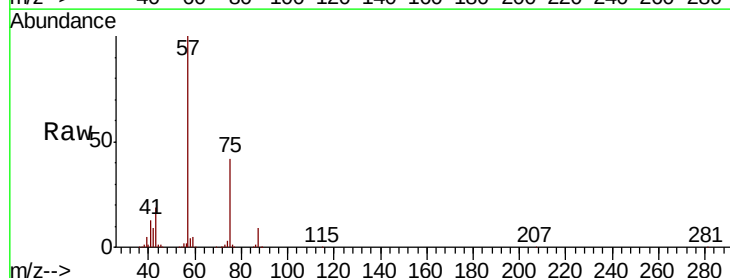
Acq: 01 Sep 2019 16:52

Tgt Ion: 76 Resp: 6539

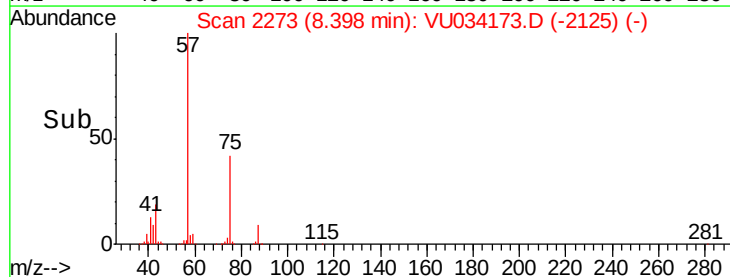
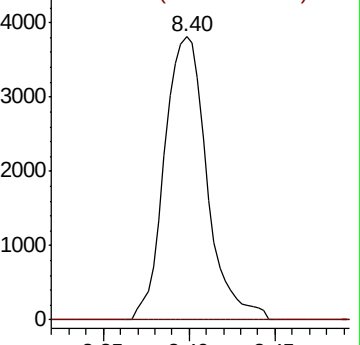
Ion Ratio Lower Upper

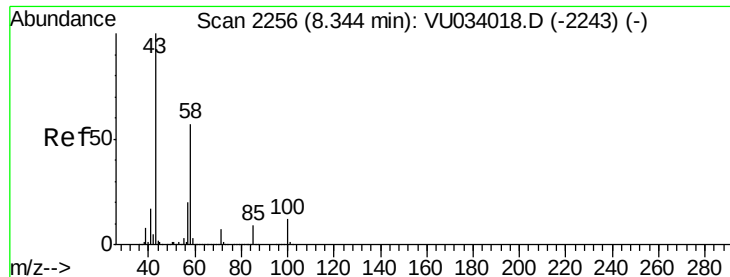
76 100

78 0.0 26.2 39.4#



Abundance Ion 75.90 (75.60 to 76.60): VU0
Ion 77.90 (77.60 to 78.60): VU0

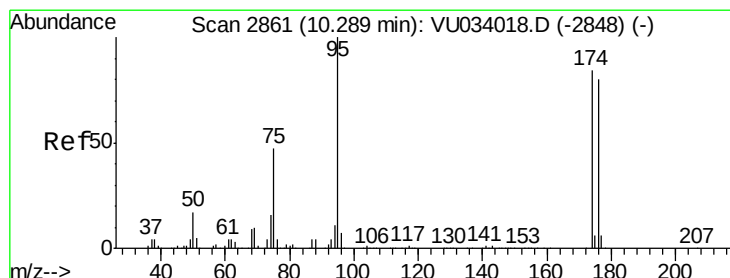
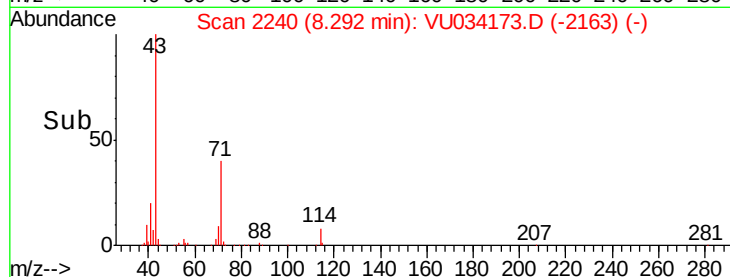
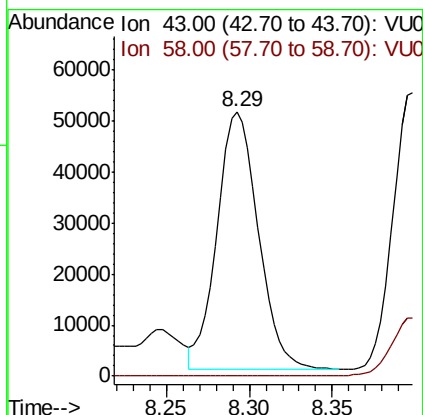
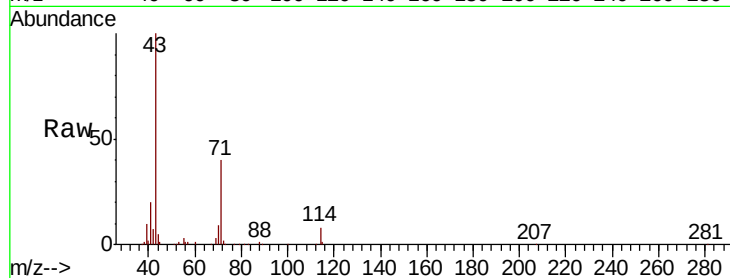




#59
2-Hexanone
Concen: 14.637 ug/l
RT: 8.29 min Scan# 2240
Delta R.T. -0.05 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

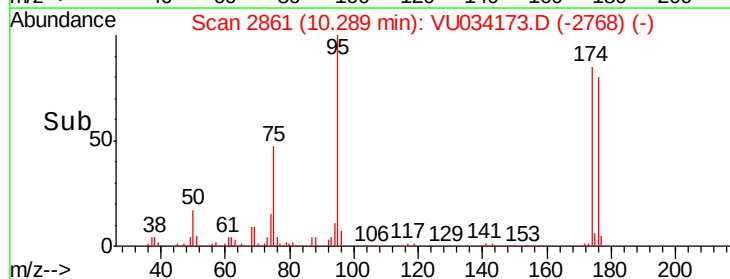
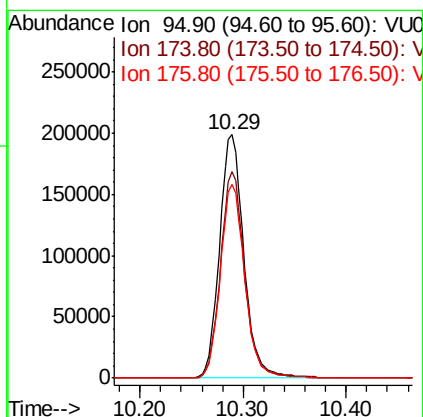
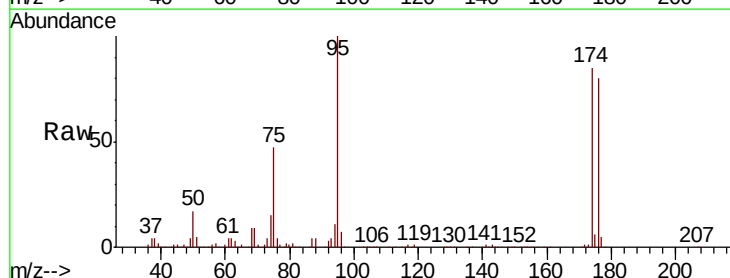
Instrument :
MSVOA_U
ClientSampleId :

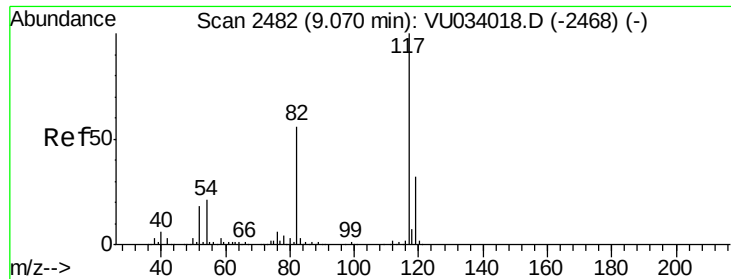
Tot Ion: 43 Resp: 87858
Ion Ratio Lower Upper
43 100
58 0.0 28.4 85.3#



#62
4-Bromofluorobenzene
Concen: 45.113 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. 0.00 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Tgt Ion: 95 Resp: 325619
Ion Ratio Lower Upper
95 100
174 84.4 0.0 168.8
176 80.3 0.0 161.8

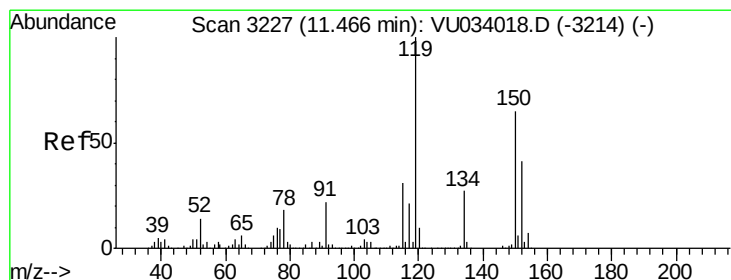
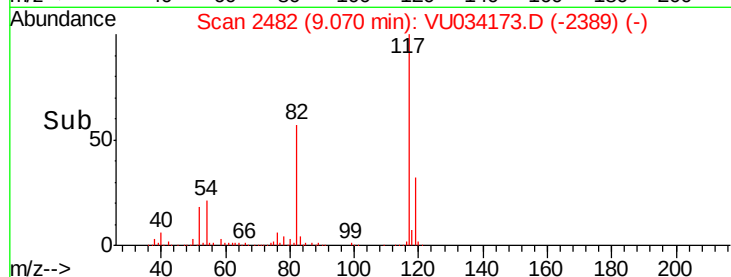
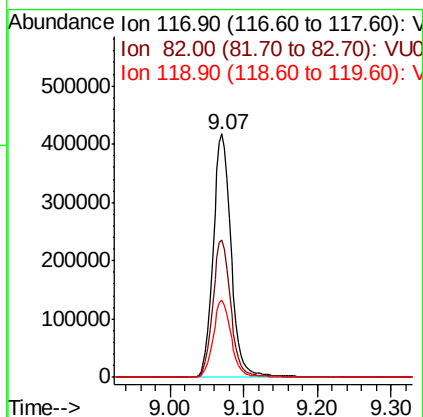
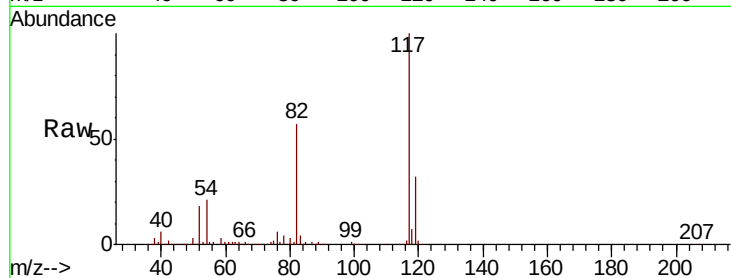




#63
 Chlorobenzene-d5
 Concen: 50.000 ug/l
 RT: 9.07 min Scan# 2482
 Delta R.T. 0.00 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

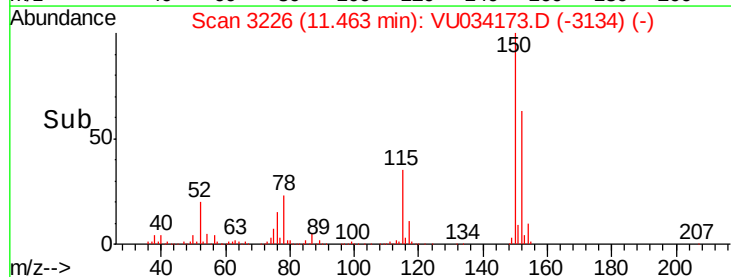
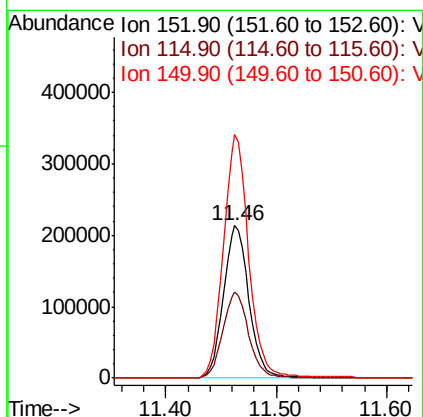
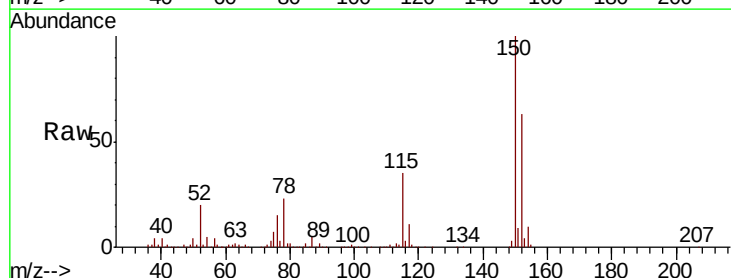
Instrument :
 MSVOA_U
 ClientSampleId :

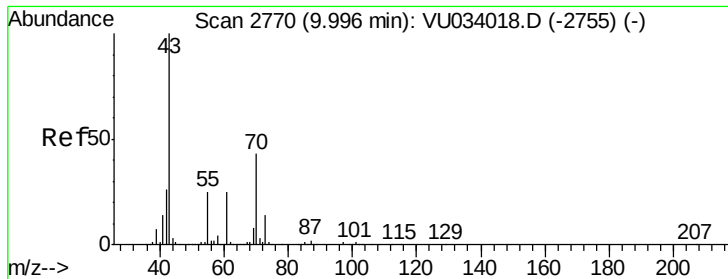
Tot Ion	Ratio	Lower	Upper
117	100		
82	56.5	45.1	67.7
119	31.5	25.4	38.0



#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 11.46 min Scan# 3226
 Delta R.T. -0.00 min
 Lab File: VU034173.D
 Acq: 01 Sep 2019 16:52

Tgt Ion	Ratio	Lower	Upper
152	100		
115	57.0	41.1	123.3
150	157.4	0.0	348.8

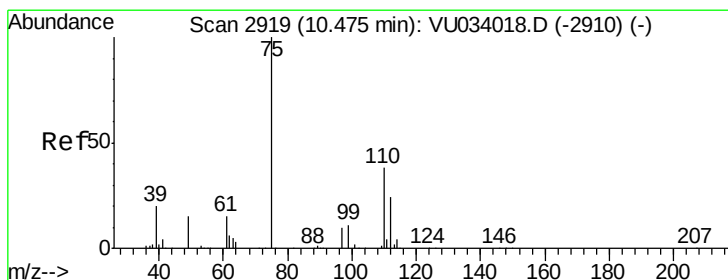
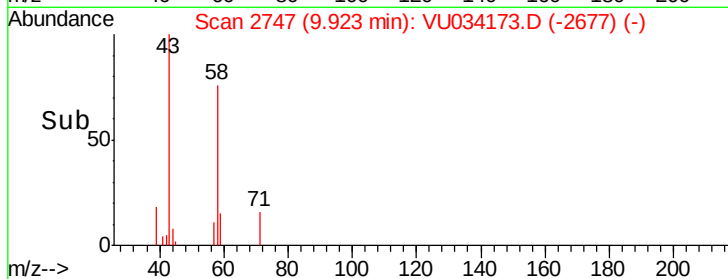
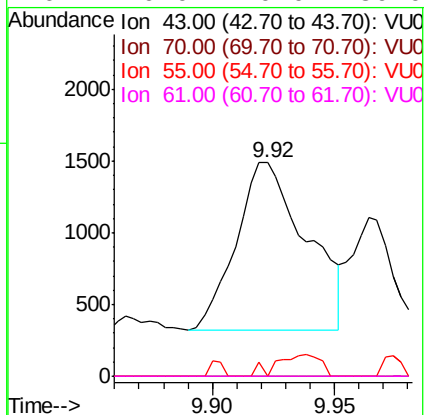
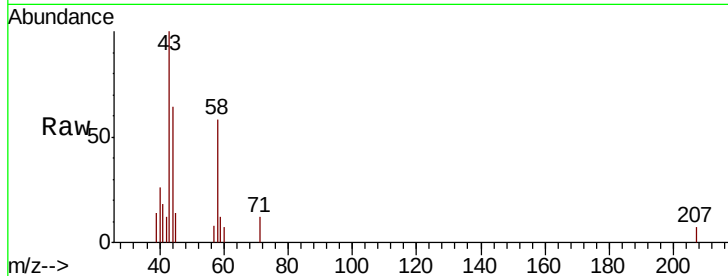




#74
N-amvl acetate
Concen: 0.240 ug/l
RT: 9.92 min Scan# 2747
Delta R.T. -0.07 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

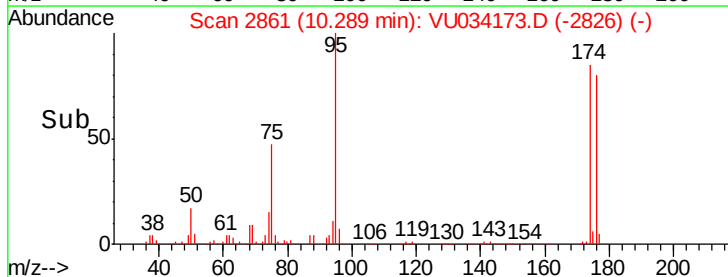
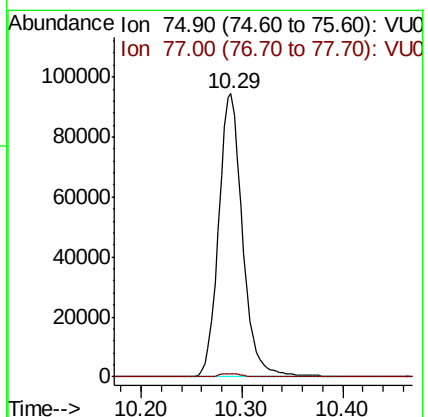
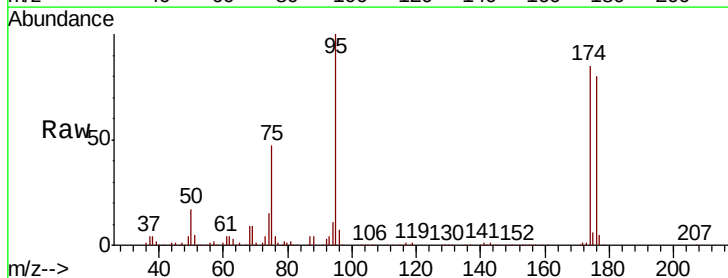
Instrument :
MSVOA_U
ClientSampleId :

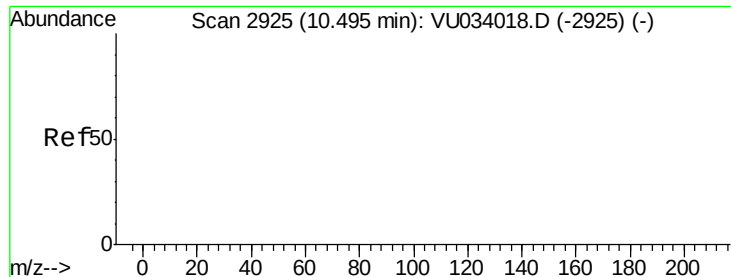
Tot Ion: 43 Resp: 2332
Ion Ratio Lower Upper
43 100
70 0.0 35.2 52.8#
55 8.0 20.5 30.7#
61 0.0 20.0 30.0#



#76
1,2,3-Trichloropropane
Concen: 20.174 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. -0.19 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Tgt Ion: 75 Resp: 156279
Ion Ratio Lower Upper
75 100
77 1.2 20.1 60.2#

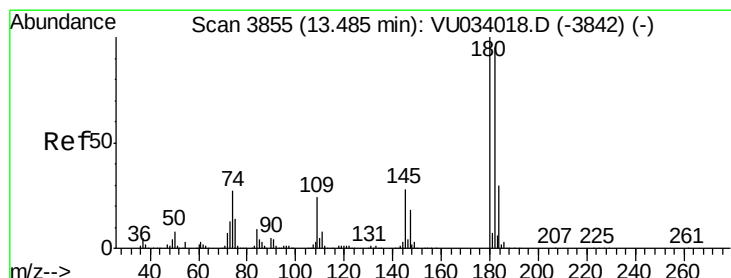
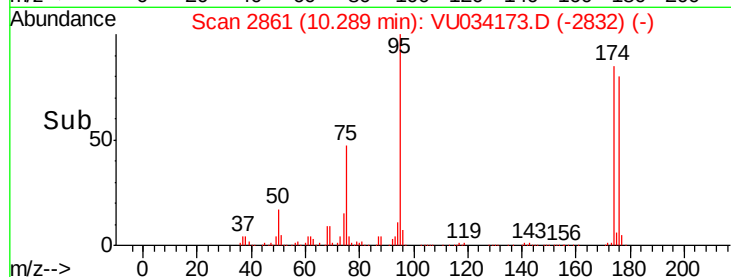
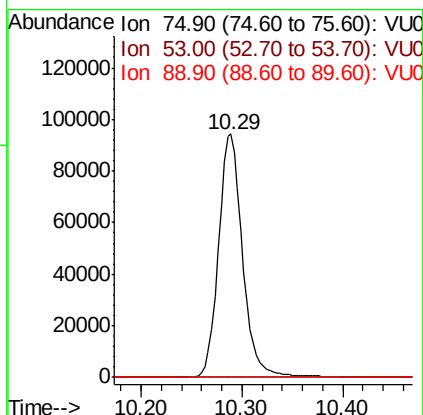
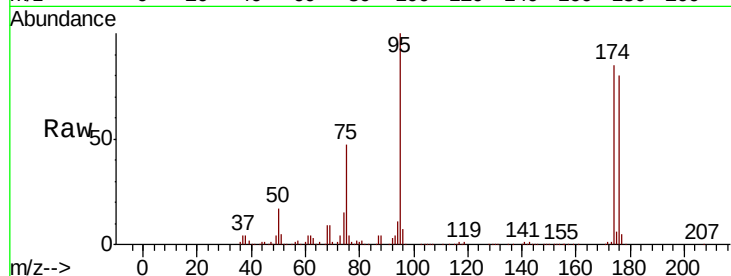




#81
trans-1,4-Dichloro-2-butene
Concen: 67.932 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. -0.21 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

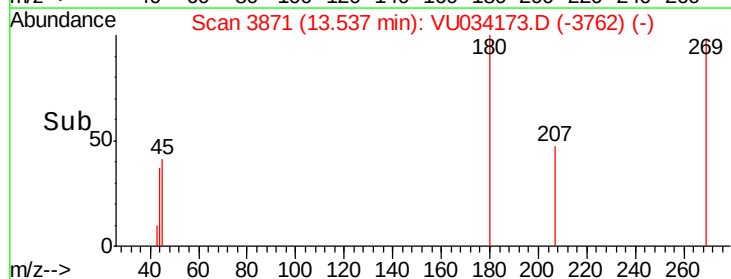
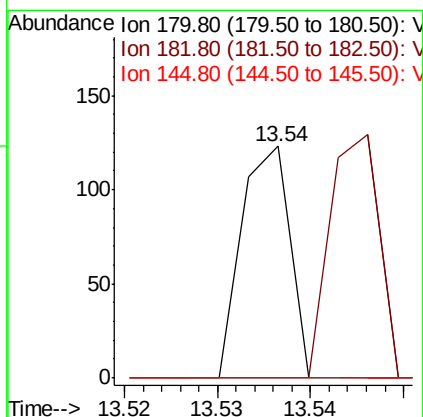
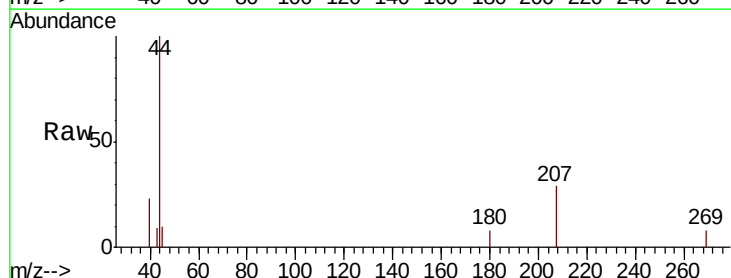
Instrument :
MSVOA_U
ClientSampleId :

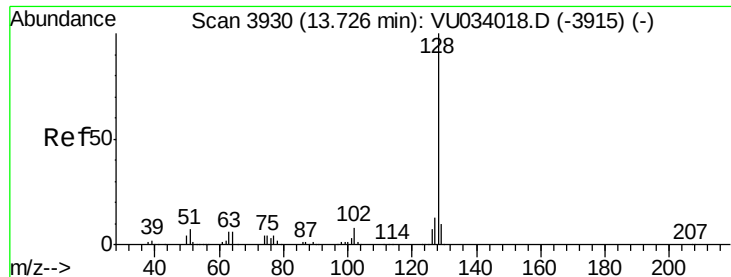
Tot Ion: 75 Resp: 156279
Ion Ratio Lower Upper
75 100
53 0.2 0.0 0.0#
89 0.0 0.0 0.0



#93
1,2,4-Trichlorobenzene
Concen: 1.120 ug/l
RT: 13.54 min Scan# 3871
Delta R.T. 0.05 min
Lab File: VU034173.D
Acq: 01 Sep 2019 16:52

Tgt Ion:180 Resp: 44
Ion Ratio Lower Upper
180 100
182 106.8 47.4 142.2
145 0.0 14.1 42.3#





#95

Naphthalene

Concen: 1.792 ug/l

RT: 13.77 min Scan# 3943

Delta R.T. 0.04 min

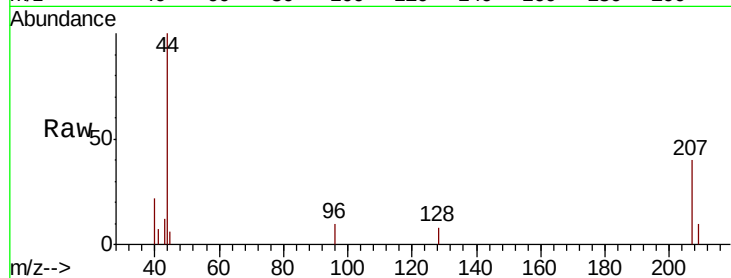
Lab File: VU034173.D

Acq: 01 Sep 2019 16:52

Instrument :

MSVOA_U

ClientSampleId :



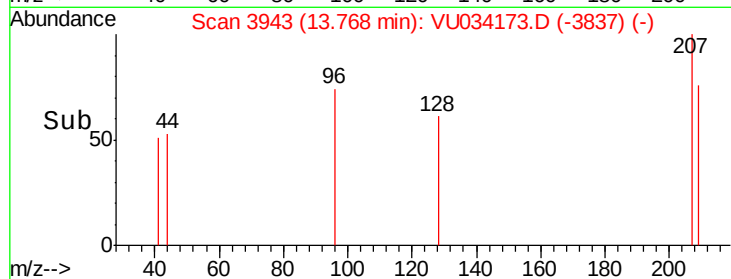
Tot Ion:128 Resp: 45

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

