

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU082919\
 Data File : VU034040.D
 Acq On : 28 Aug 2019 21:57
 Operator : JC/SP
 Sample : K4525-29
 Misc : 5.0mL/MSVOA_U/WATER
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 T9-12-13-A4-(1.9)

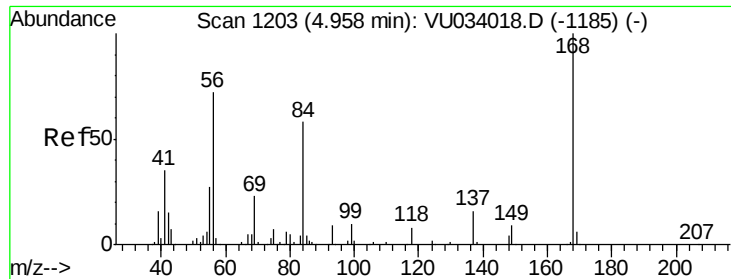
Quant Time: Aug 29 04:20:36 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\82U082919W.M
 Quant Title : SW846 8260
 QLast Update : Thu Aug 29 04:11:12 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	4.96	168	480399	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.87	114	783895	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	763914	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.47	152	375744	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	304482	49.46	ug/l	0.00
Spiked Amount			Recovery	=	98.92%	
35) Dibromofluoromethane	4.86	113	249924	45.97	ug/l	0.00
Spiked Amount			Recovery	=	91.94%	
50) Toluene-d8	7.55	98	997167	48.98	ug/l	0.00
Spiked Amount			Recovery	=	97.96%	
62) 4-Bromofluorobenzene	10.29	95	354113	44.72	ug/l	0.00
Spiked Amount			Recovery	=	89.44%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	923	Below Cal		96
5) Bromomethane	1.64	94	635	Below Cal	#	67
8) Diethyl Ether	2.10	74	940	0.295	ug/l	73
11) Tert butyl alcohol	2.83	59	3712	2.615	ug/l #	73
13) Acrolein	2.19	56	219	0.367	ug/l	97
16) Acetone	2.31	43	19965	6.357	ug/l	96
18) Methyl Acetate	2.61	43	4162	0.513	ug/l	93
20) Methylene Chloride	2.69	84	38619	6.495	ug/l	99
31) Cyclohexane	4.96	56	8713	0.948	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	34977	4.717	ug/l #	49
38) Carbon Tetrachloride	4.96	117	43619	6.095	ug/l #	15
43) Isopropyl Acetate	5.53	43	104098	8.241	ug/l	98
48) Methyl methacrylate	6.69	41	175867	28.852	ug/l #	40
49) 1,4-Dioxane	6.69	88	114	0.746	ug/l #	1
51) 4-Methyl-2-Pentanone	7.40	43	91420	10.480	ug/l #	46
54) cis-1,3-Dichloropropene	7.40	75	46192	4.895	ug/l #	62
56) Ethyl methacrylate	7.90	69	169	0.989	ug/l #	27
57) 1,3-Dichloropropane	8.40	76	8194	0.826	ug/l #	42
59) 2-Hexanone	8.40	43	117868	17.898	ug/l #	50
74) N-amyl acetate	9.92	43	3739	0.352	ug/l #	47
76) 1,2,3-Trichloropropane	10.29	75	169511	20.016	ug/l #	37
81) trans-1,4-Dichloro-2-buten	10.29	75	169511	67.400	ug/l #	100
95) Naphthalene	13.80	128	235	1.800	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: VU034040.D

Acq: 28 Aug 2019 21:57

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MSVOA_U

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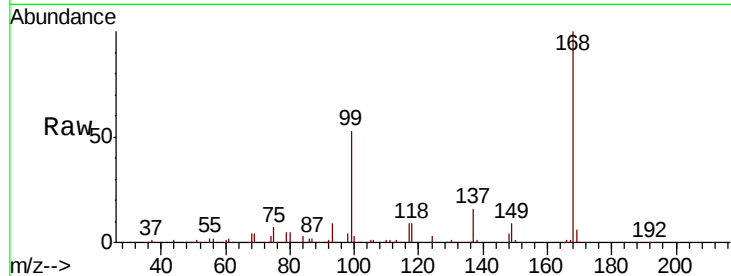
T9-12-13-A4-(1.9)

Tgt Ion:168 Resp: 480399

Ion Ratio Lower Upper

168 100

99 53.4 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

250000

200000

150000

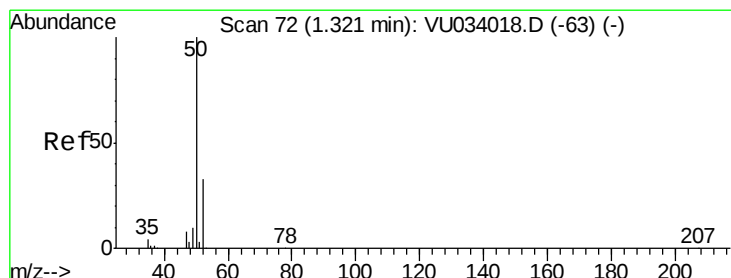
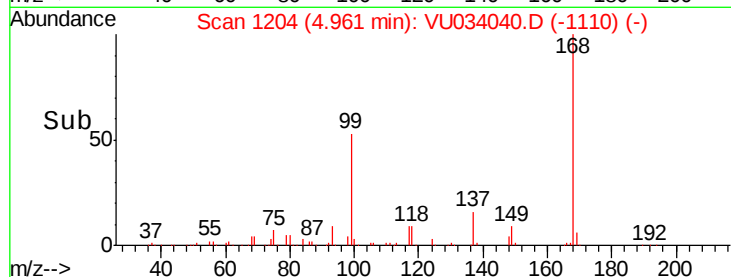
100000

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: VU034040.D

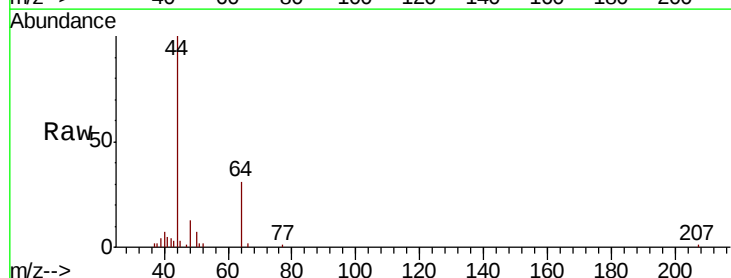
Acq: 28 Aug 2019 21:57

Tgt Ion: 50 Resp: 923

Ion Ratio Lower Upper

50 100

52 30.6 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

600

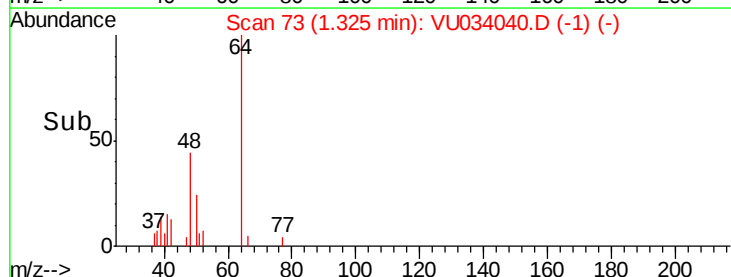
400

200

0

1.30 1.35

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 171

Delta R.T. 0.04 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

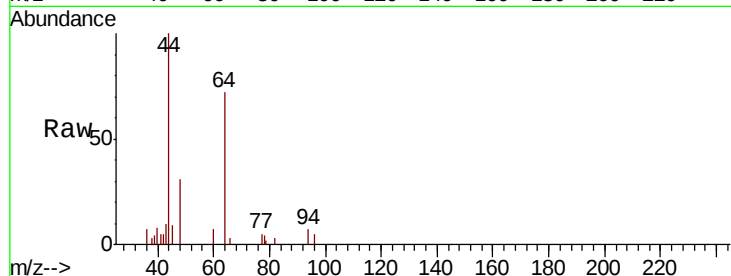
T9-12-13-A4-(1.9)

Tgt Ion: 94 Resp: 635

Ion Ratio Lower Upper

94 100

96 63.7 76.3 114.5#



Abundance Ion 93.90 (93.60 to 94.60): VU034040.D (-171) (-)

Ion 95.90 (95.60 to 96.60): VU034040.D (-171) (-)

1.64

300

200

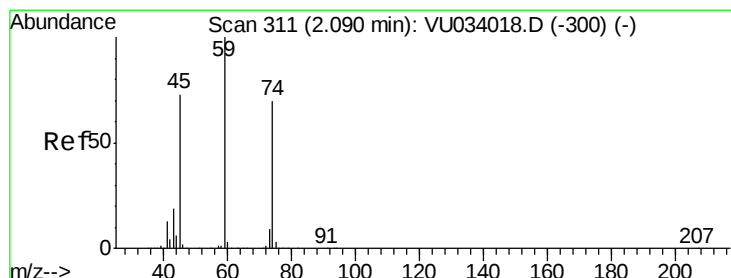
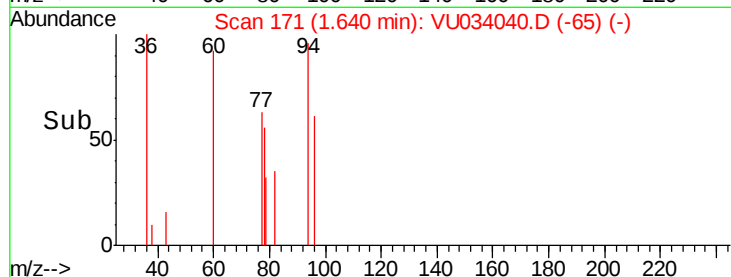
100

0

1.60

1.65

Time-->



#8

Diethyl Ether

Concen: 0.295 ug/l

RT: 2.10 min Scan# 314

Delta R.T. 0.01 min

Lab File: VU034040.D

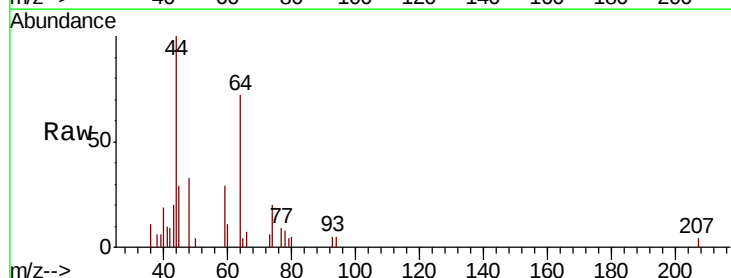
Acq: 28 Aug 2019 21:57

Tgt Ion: 74 Resp: 940

Ion Ratio Lower Upper

74 100

45 131.5 51.8 155.5



Abundance Ion 74.00 (73.70 to 74.70): VU034040.D (-314) (-)

Ion 45.00 (44.70 to 45.70): VU034040.D (-314) (-)

2.10

1000

800

600

400

200

0

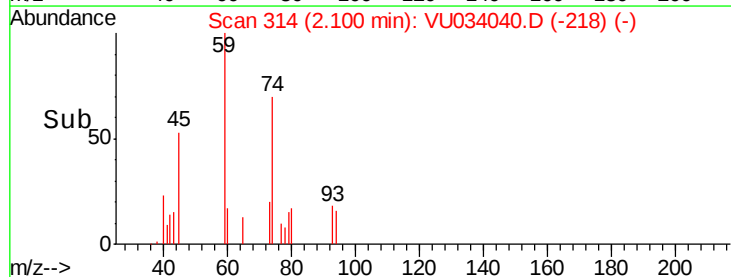
2.06

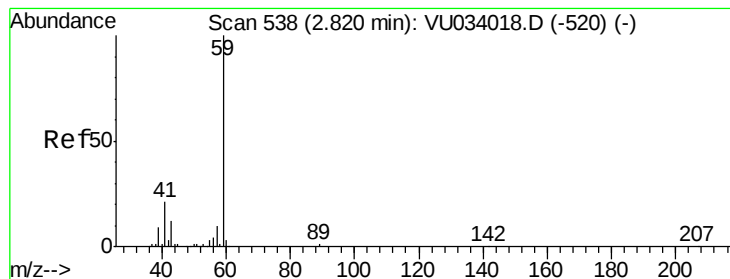
2.08

2.10

2.12

Time-->



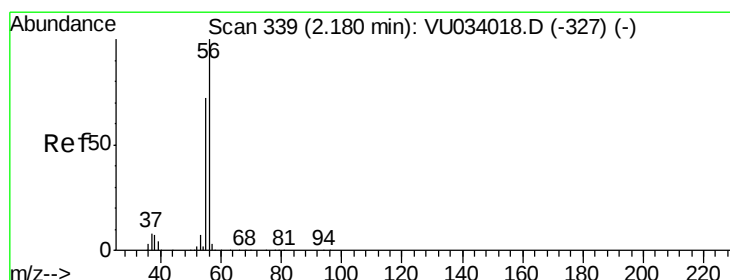
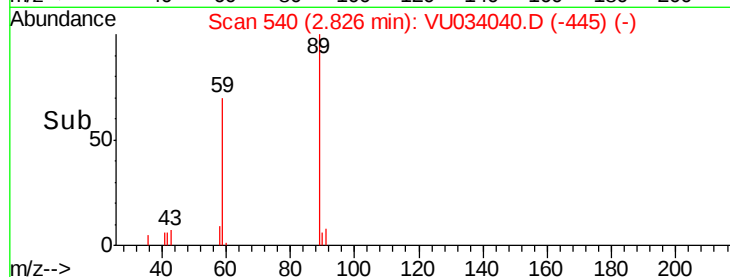
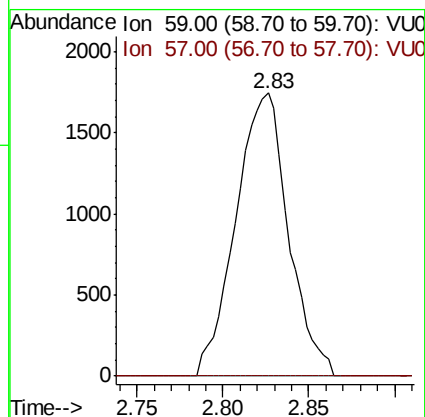
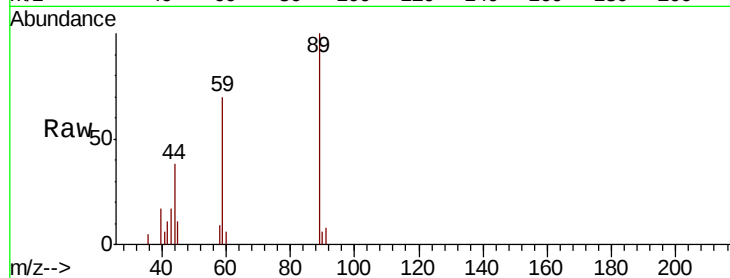


#11

Tert butyl alcohol
 Concen: 2.615 ug/l
 RT: 2.83 min Scan# 540
 Delta R.T. 0.01 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

Instrument :
 MSVOA_U
 ClientSampleId :
 T9-12-13-A4-(1.9)

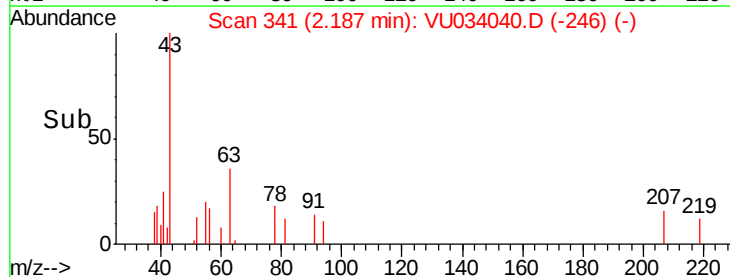
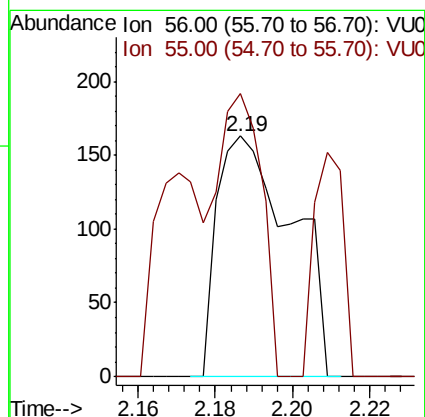
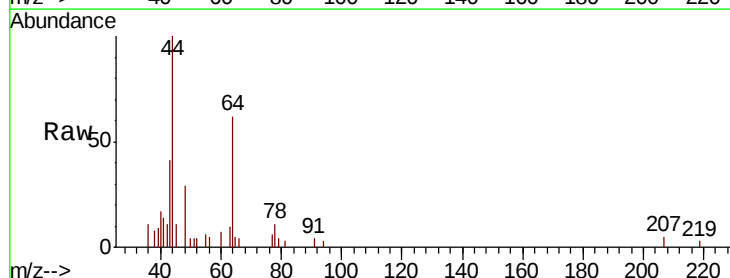
Tgt Ion: 59 Resp: 3712
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.0 12.0#

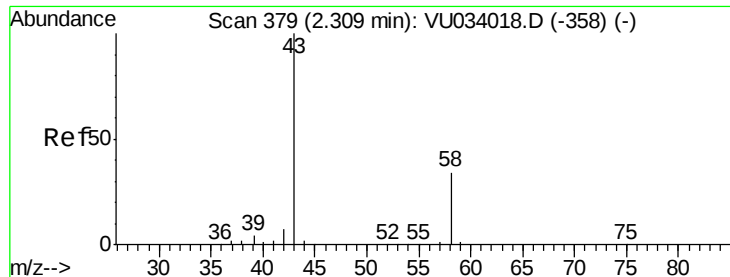


#13

Acrolein
 Concen: 0.367 ug/l
 RT: 2.19 min Scan# 341
 Delta R.T. 0.01 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

Tgt Ion: 56 Resp: 219
 Ion Ratio Lower Upper
 56 100
 55 68.9 57.1 85.7

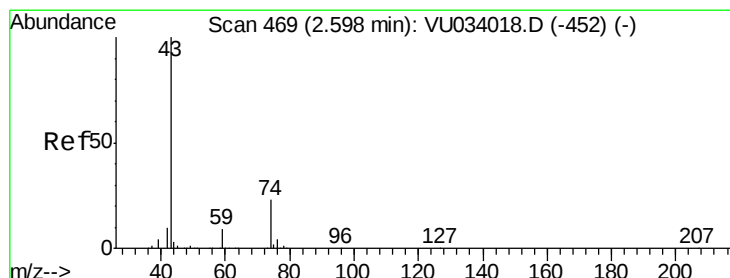
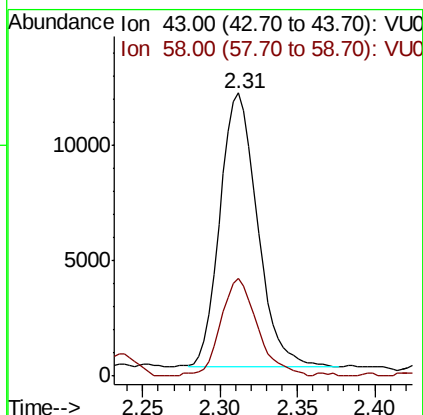
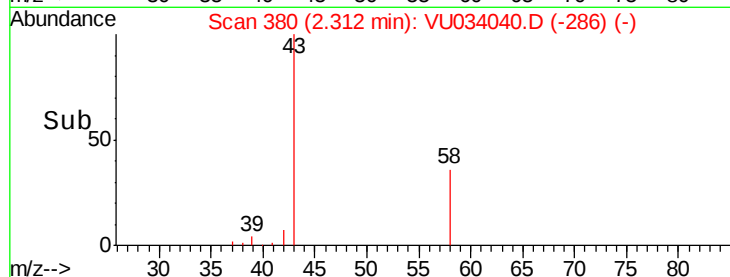
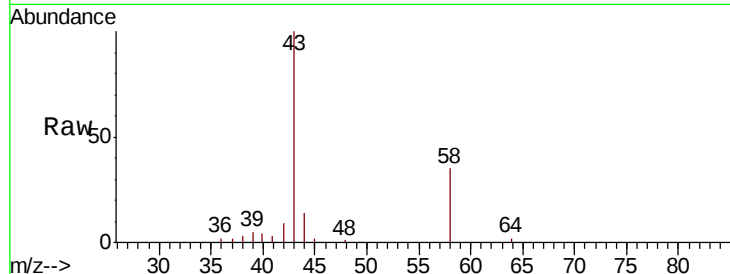




#16
Acetone
Concen: 6.357 ug/l
RT: 2.31 min Scan# 380
Delta R.T. 0.00 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

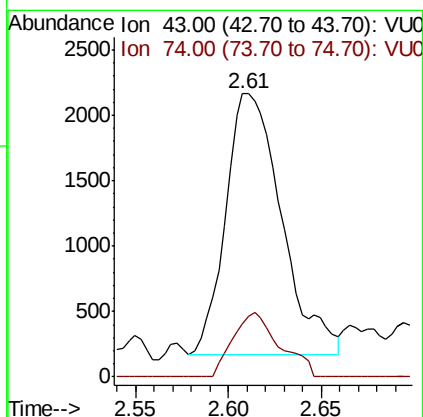
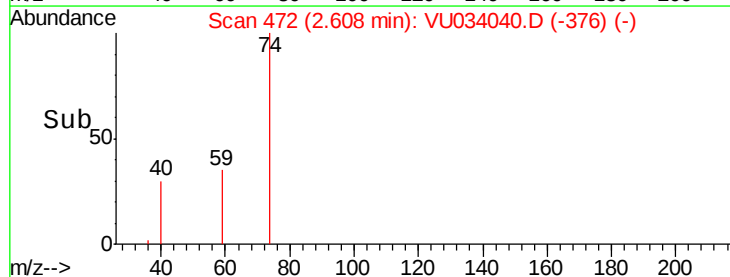
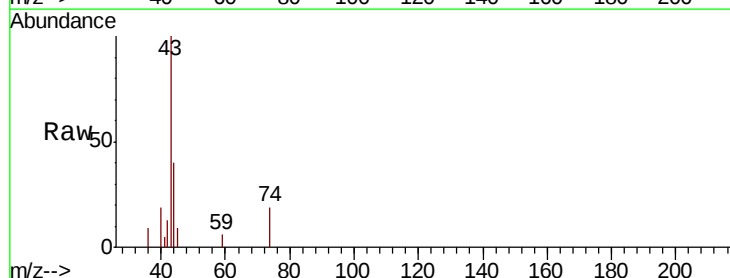
Instrument :
MSVOA_U
ClientSampleId :
T9-12-13-A4-(1.9)

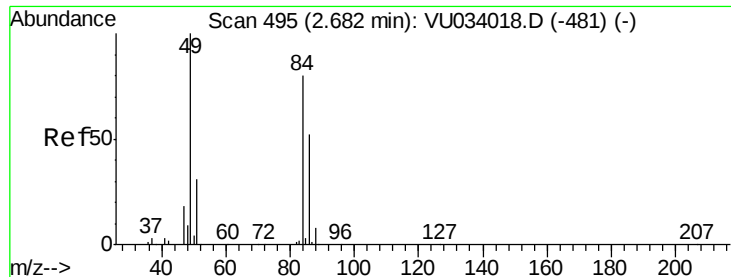
Tgt Ion: 43 Resp: 19965
Ion Ratio Lower Upper
43 100
58 35.7 26.8 40.2



#18
Methyl Acetate
Concen: 0.513 ug/l
RT: 2.61 min Scan# 472
Delta R.T. 0.01 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

Tgt Ion: 43 Resp: 4162
Ion Ratio Lower Upper
43 100
74 20.7 19.2 28.8

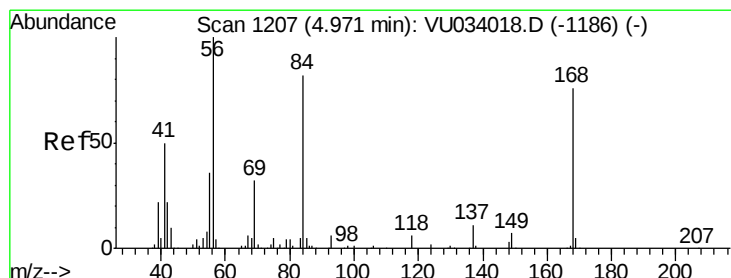
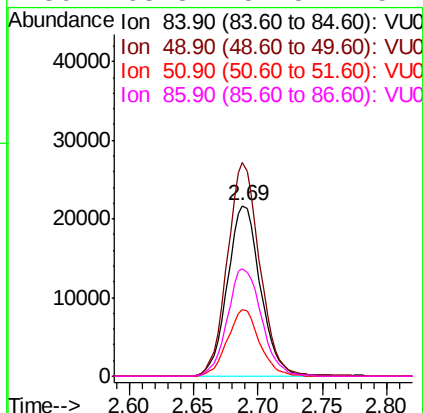
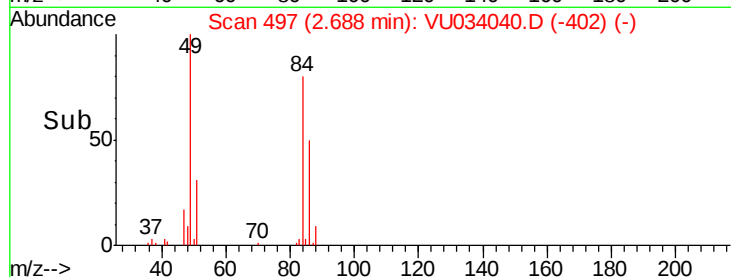
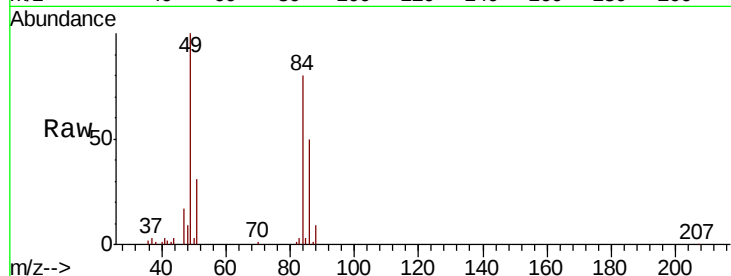




#20
Methylene Chloride
Concen: 6.495 ug/l
RT: 2.69 min Scan# 497
Delta R.T. 0.01 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

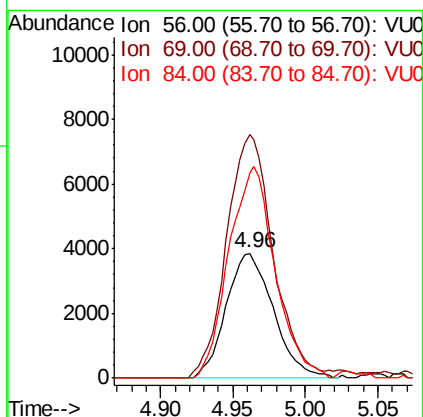
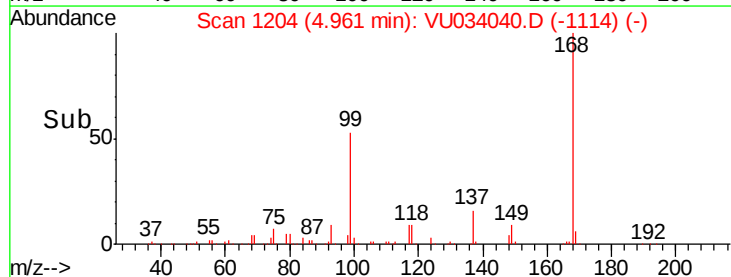
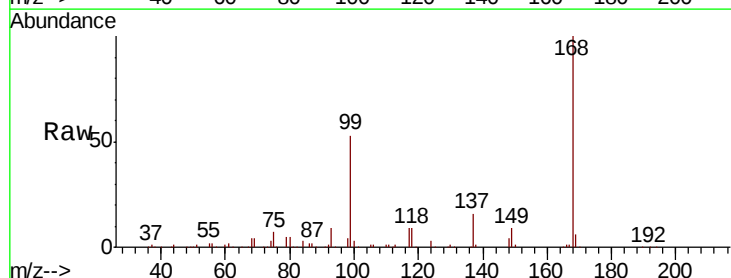
Instrument :
MSVOA_U
ClientSampleId :
T9-12-13-A4-(1.9)

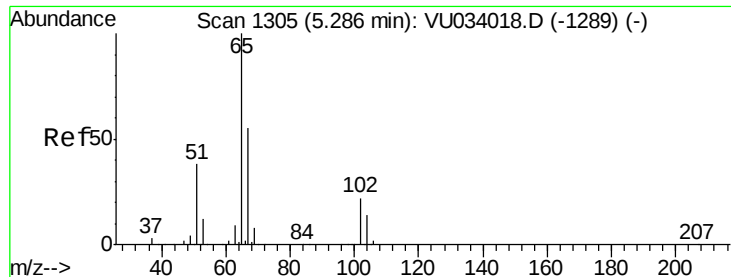
Tgt Ion:	84	Resp:	38619
Ion	Ratio	Lower	Upper
84	100		
49	125.3	100.2	150.4
51	39.1	30.8	46.2
86	63.3	52.5	78.7



#31
Cyclohexane
Concen: 0.948 ug/l
RT: 4.96 min Scan# 1204
Delta R.T. -0.01 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

Tgt Ion:	56	Resp:	8713
Ion	Ratio	Lower	Upper
56	100		
69	195.2	25.4	38.0#
84	164.6	65.8	98.8#





#33

1,2-Dichloroethane-d4

Concen: 49.465 ug/l

RT: 5.29 min Scan# 1306

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

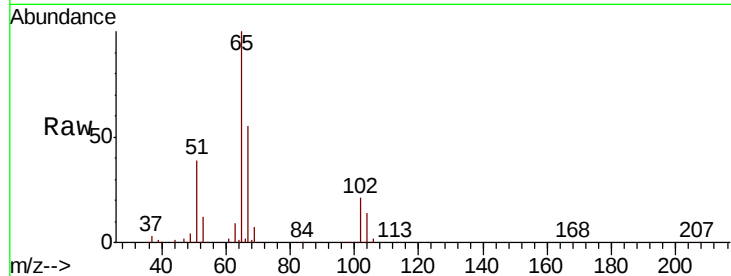
T9-12-13-A4-(1.9)

Tgt Ion: 65 Resp: 304482

Ion Ratio Lower Upper

65 100

67 54.5 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VU034018.D (-1289) (-)

Ion 66.90 (66.60 to 67.60): VU034018.D (-1289) (-)

5.29

150000

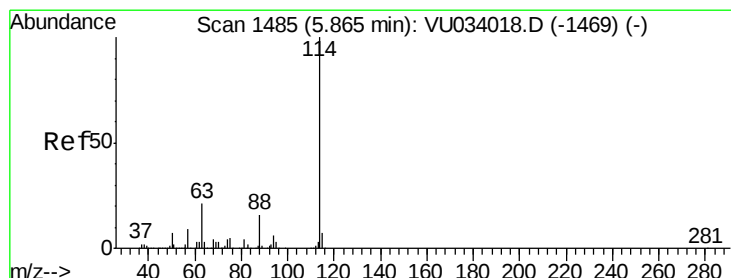
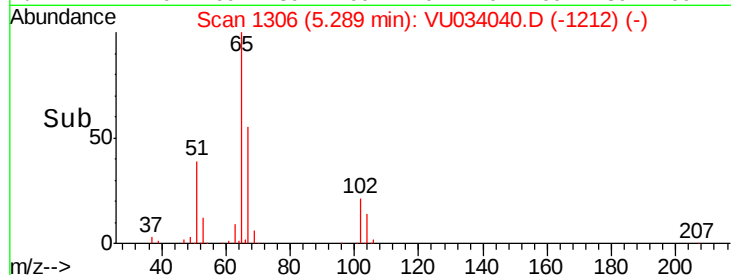
100000

50000

0

5.20 5.30 5.40

Time-->



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 5.87 min Scan# 1486

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

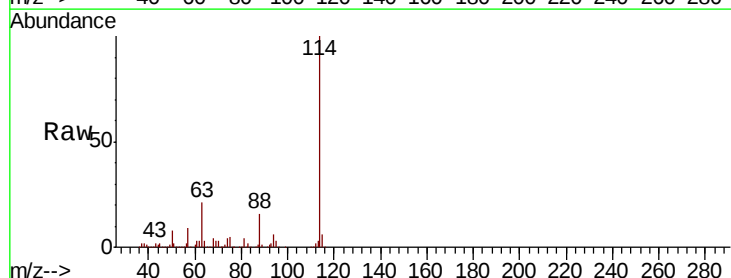
Tgt Ion: 114 Resp: 783895

Ion Ratio Lower Upper

114 100

63 21.4 0.0 42.0

88 16.2 0.0 32.0



Abundance Ion 113.90 (113.60 to 114.60): VU034018.D (-1469) (-)

Ion 63.00 (62.70 to 63.70): VU034018.D (-1469) (-)

Ion 87.90 (87.60 to 88.60): VU034018.D (-1469) (-)

5.87

500000

400000

300000

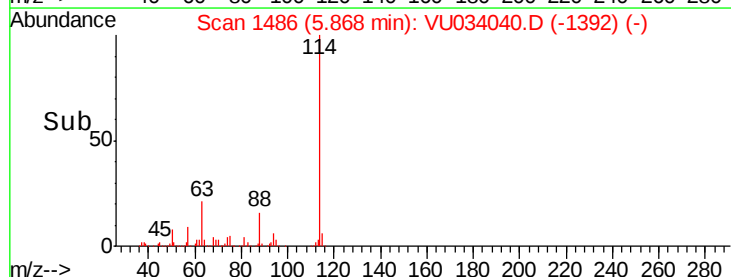
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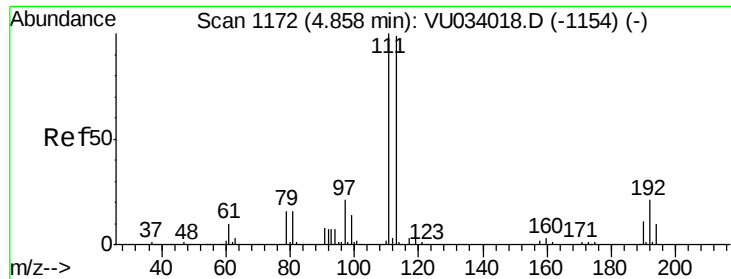
100000

0

5.70 5.80 5.90 6.00 6.10

Time-->

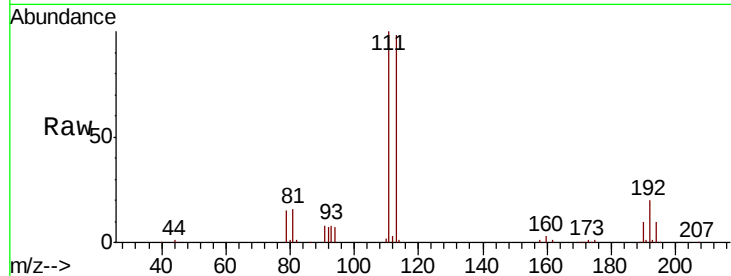




#35
 Dibromofluoromethane
 Concen: 45.967 ug/l
 RT: 4.86 min Scan# 1173
 Delta R.T. 0.00 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

Instrument :
 MSVOA_U
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 T9-12-13-A4-(1.9)

Tgt Ion	Ratio	Lower	Upper
113	100		
111	103.9	81.7	122.5
192	21.1	17.1	25.7

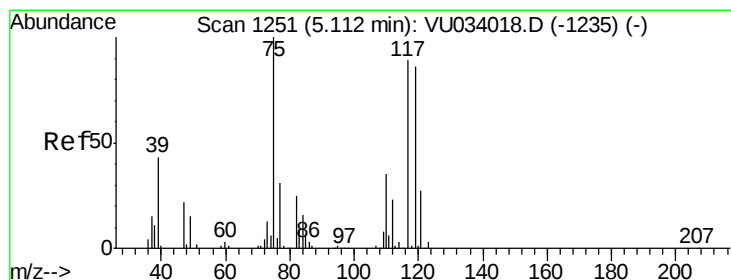
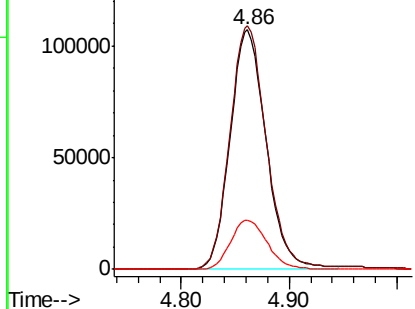
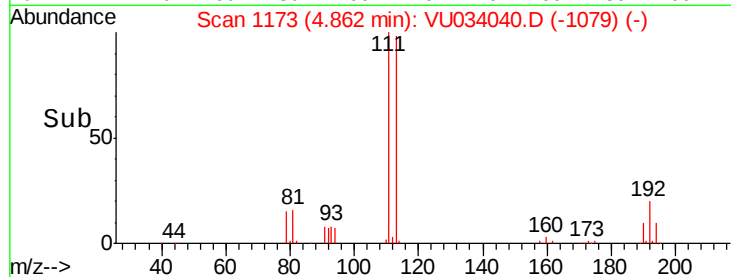


Abundance

Ion 112.80 (112.50 to 113.50): V

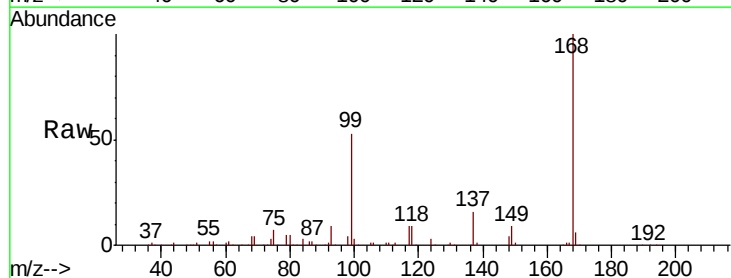
Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36
 1,1-Dichloropropene
 Concen: 4.717 ug/l
 RT: 4.96 min Scan# 1204
 Delta R.T. -0.15 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

Tgt Ion	Ratio	Lower	Upper
75	100		
110	8.4	17.8	53.5#
77	0.0	25.0	37.4#

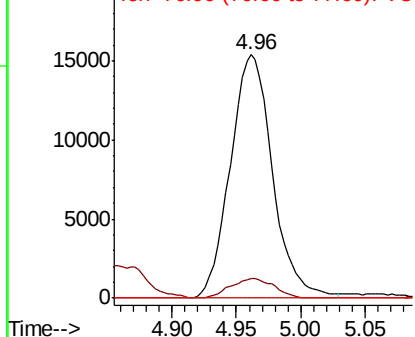
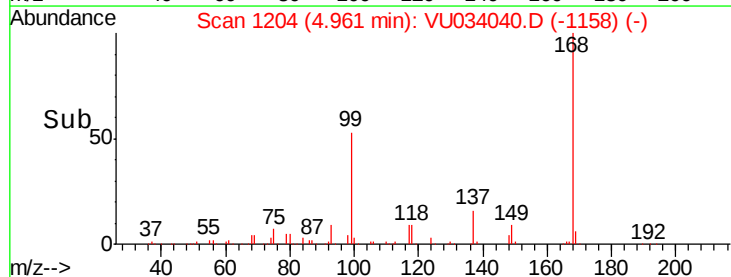


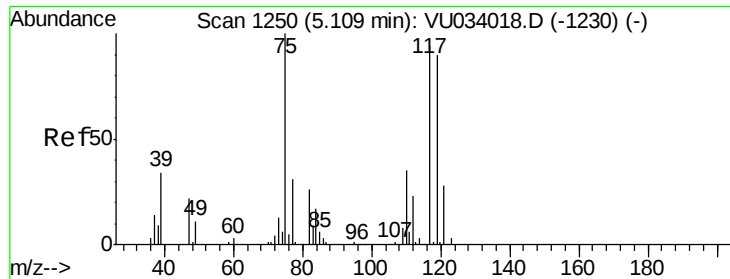
Abundance

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





#38

Carbon Tetrachloride

Concen: 6.095 ug/l

RT: 4.96 min Scan# 1204

Delta R.T. -0.15 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A4-(1.9)

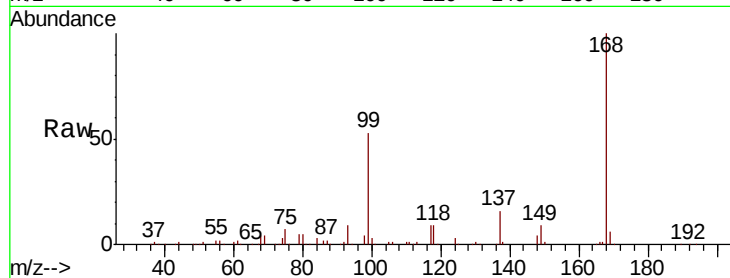
Tgt Ion:117 Resp: 43619

Ion Ratio Lower Upper

117 100

119 4.6 77.0 115.4#

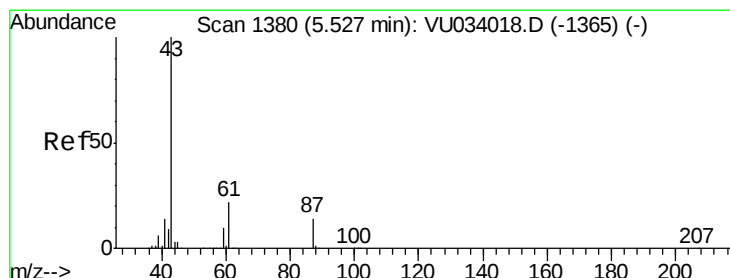
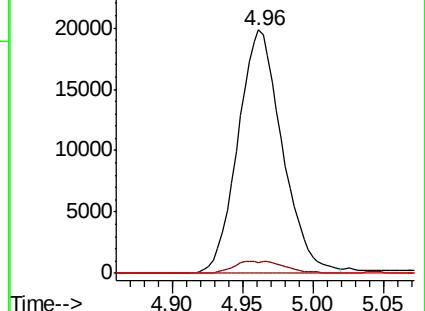
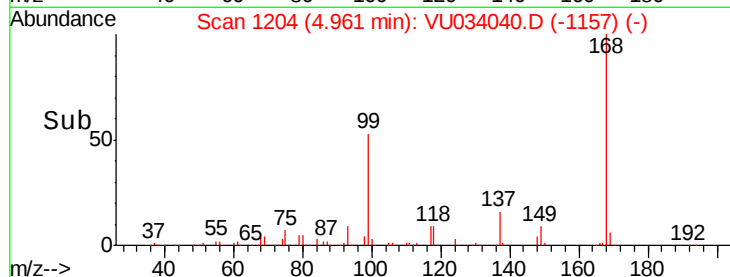
121 0.0 23.9 35.9#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 8.241 ug/l

RT: 5.53 min Scan# 1381

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

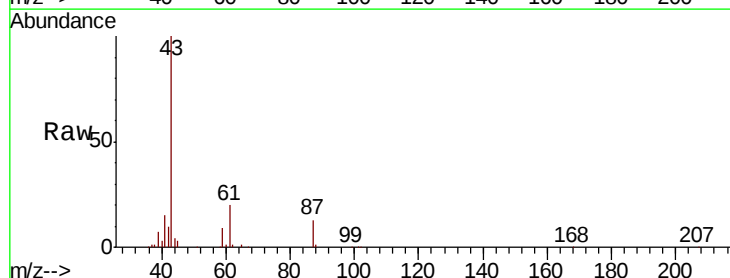
Tgt Ion: 43 Resp: 104098

Ion Ratio Lower Upper

43 100

61 20.1 17.2 25.8

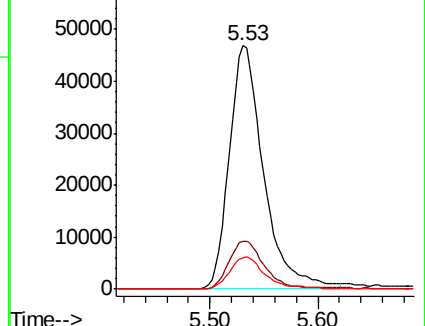
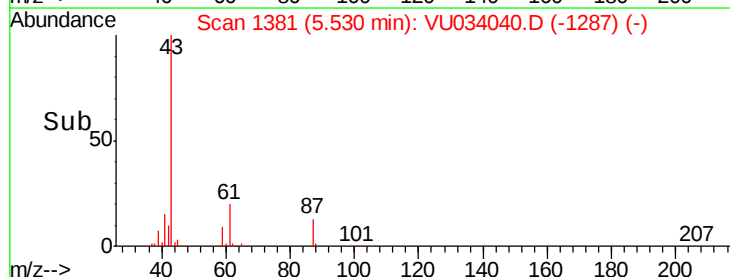
87 13.6 10.8 16.2

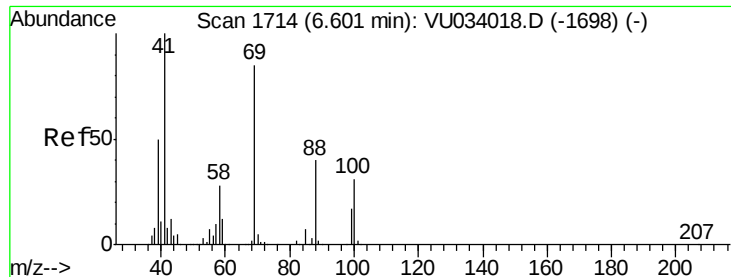


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 87.00 (86.70 to 87.70): VU0

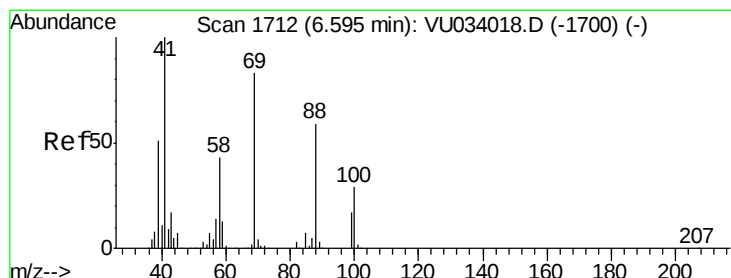
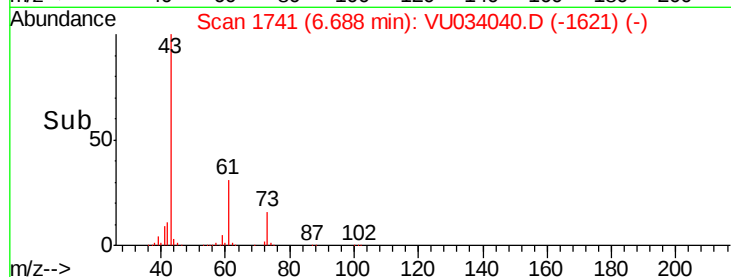
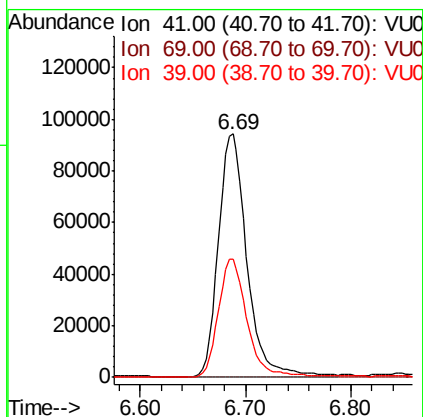
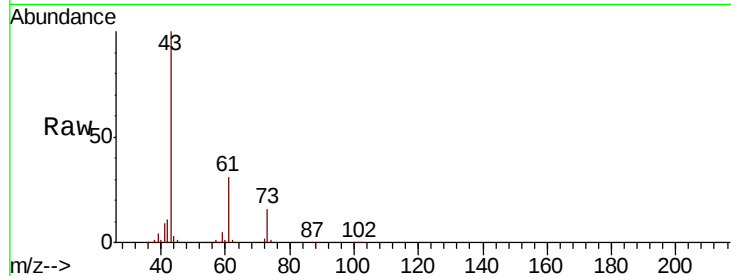




#48
Methyl methacrylate
Concen: 28.852 ug/l
RT: 6.69 min Scan# 1741
Delta R.T. 0.09 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

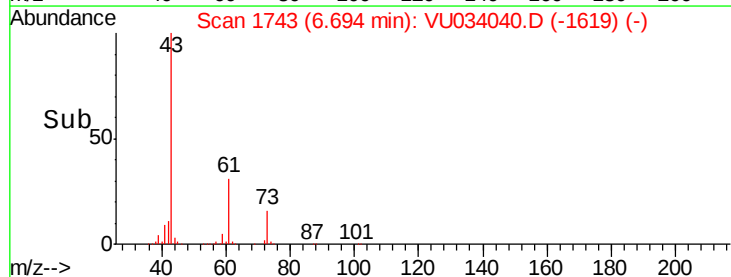
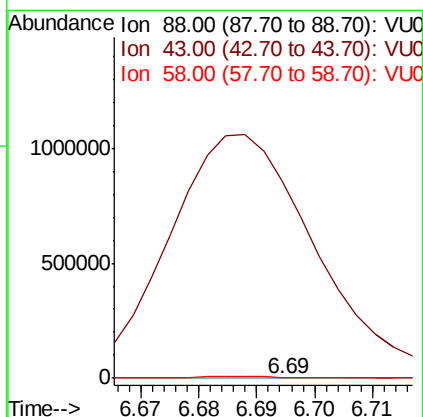
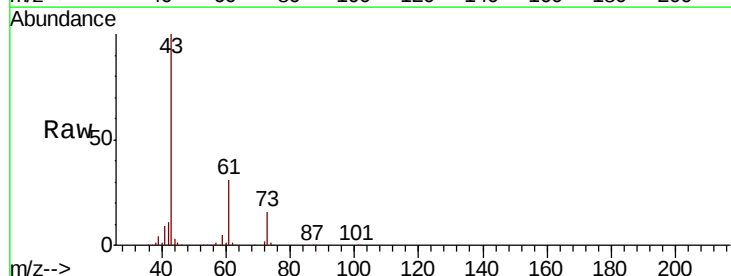
Instrument :
MSVOA_U
ClientSampleId :
T9-12-13-A4-(1.9)

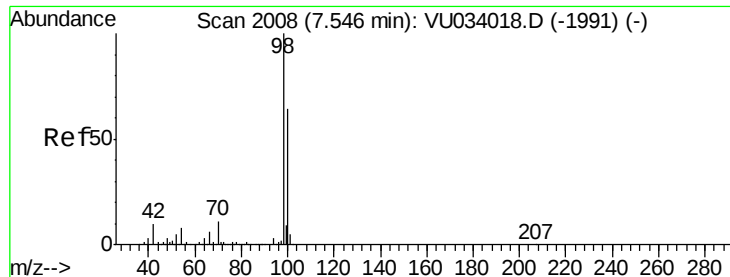
Tgt Ion: 41 Resp: 175867
Ion Ratio Lower Upper
41 100
69 0.1 69.5 104.3#
39 49.7 40.3 60.5



#49
1,4-Dioxane
Concen: 0.746 ug/l
RT: 6.69 min Scan# 1743
Delta R.T. 0.10 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

Tgt Ion: 88 Resp: 114
Ion Ratio Lower Upper
88 100
43 1725816.7 24.8 37.2#
58 8752.6 59.3 88.9#





#50

Toluene-d8

Concen: 48.981 ug/l

RT: 7.55 min Scan# 2008

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

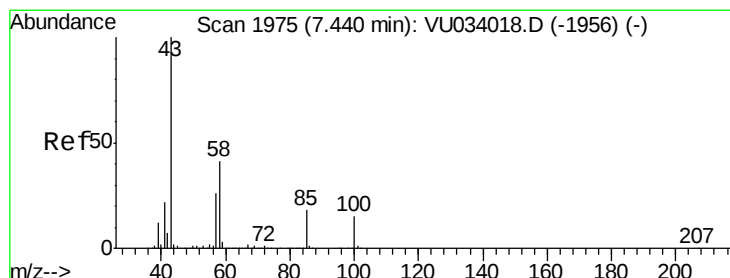
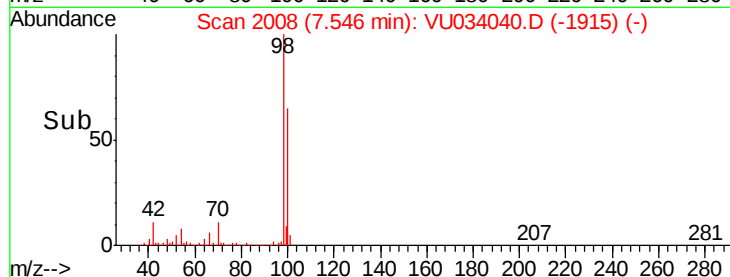
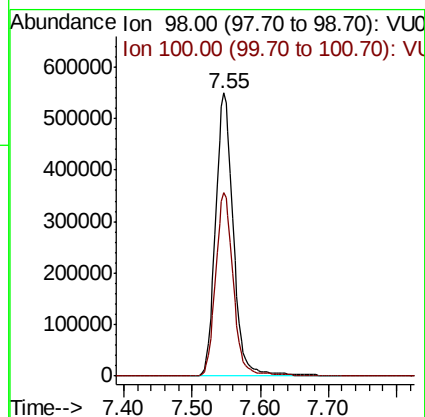
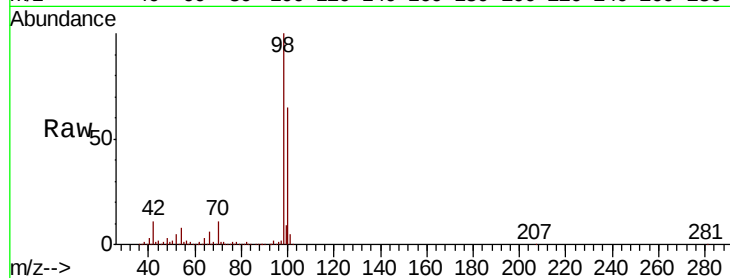
T9-12-13-A4-(1.9)

Tgt Ion: 98 Resp: 997167

Ion Ratio Lower Upper

98 100

100 64.3 50.3 75.5



#51

4-Methyl-2-Pentanone

Concen: 10.480 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. -0.04 min

Lab File: VU034040.D

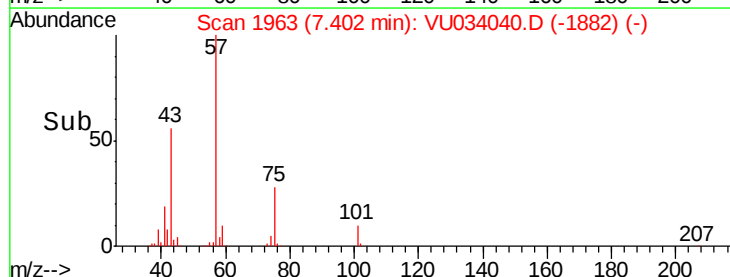
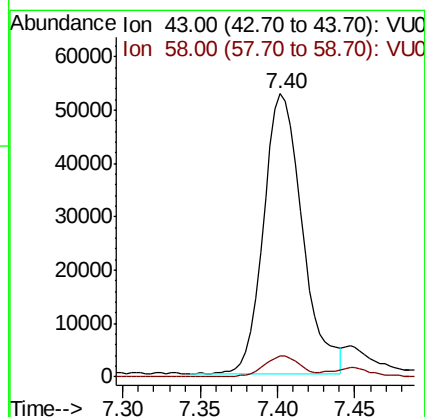
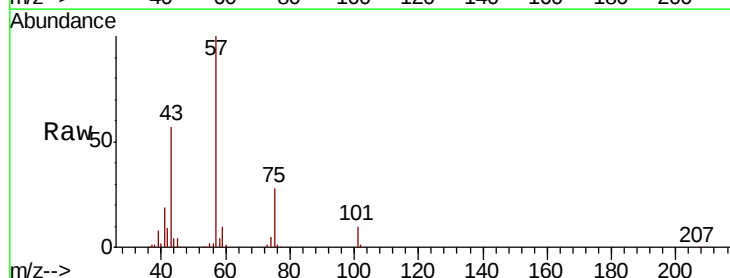
Acq: 28 Aug 2019 21:57

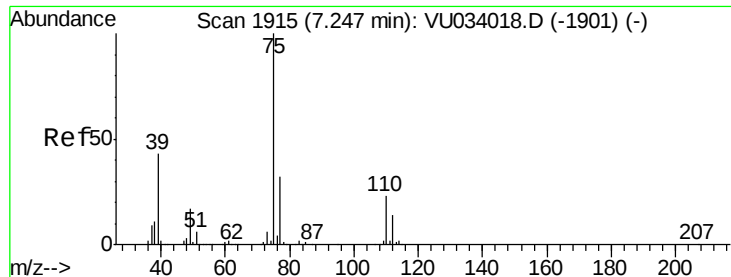
Tgt Ion: 43 Resp: 91420

Ion Ratio Lower Upper

43 100

58 6.9 32.2 48.4#





#54

cis-1,3-Dichloropropene

Concen: 4.895 ug/l

RT: 7.40 min Scan# 1964

Delta R.T. 0.16 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A4-(1.9)

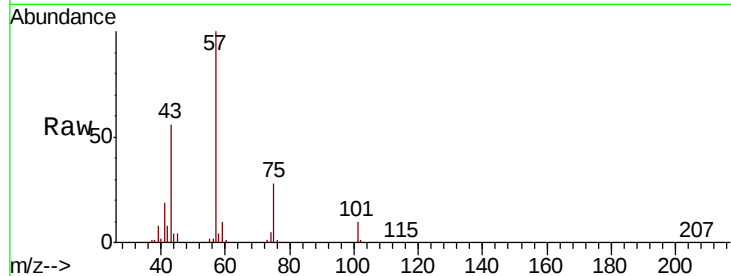
Tgt Ion: 75 Resp: 46192

Ion Ratio Lower Upper

75 100

77 0.4 25.2 37.8#

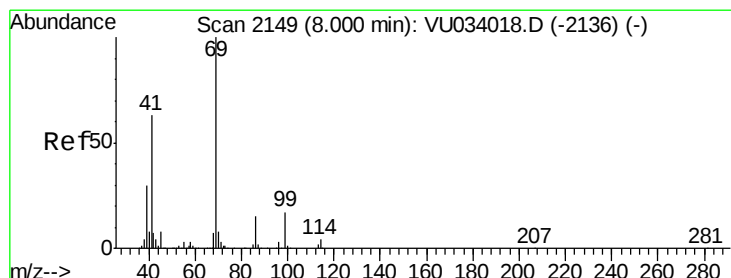
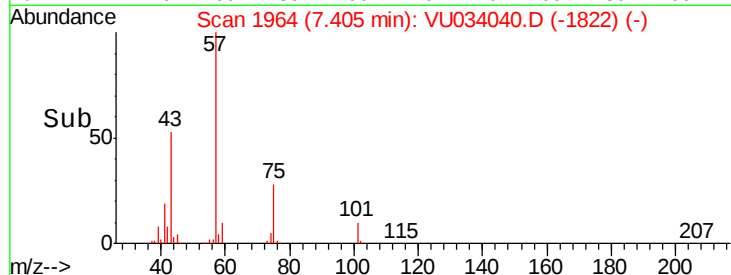
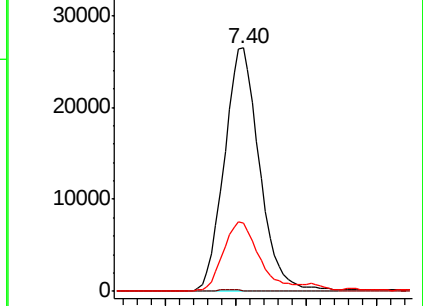
39 27.8 34.6 51.8#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 76.90 (76.60 to 77.60): VU0

Ion 39.00 (38.70 to 39.70): VU0



#56

Ethyl methacrylate

Concen: 0.989 ug/l

RT: 7.90 min Scan# 2119

Delta R.T. -0.10 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

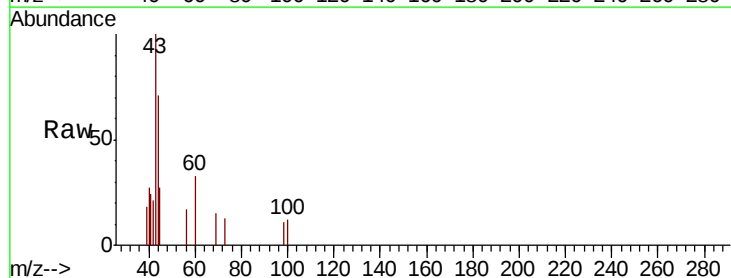
Tgt Ion: 69 Resp: 169

Ion Ratio Lower Upper

69 100

41 0.0 50.7 76.1#

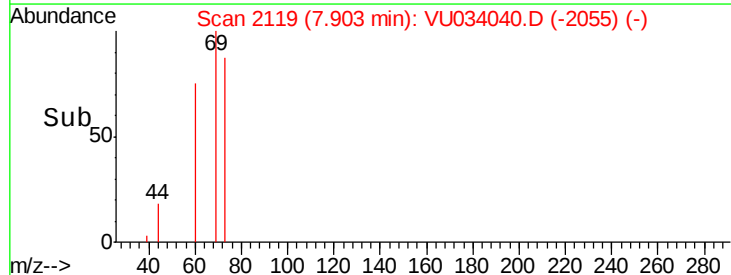
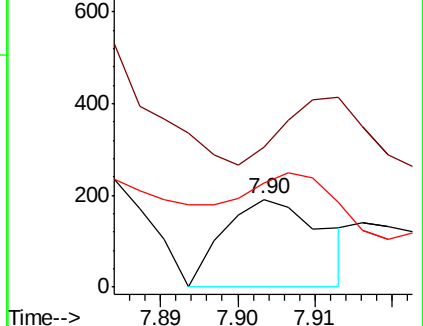
39 0.0 24.2 36.2#

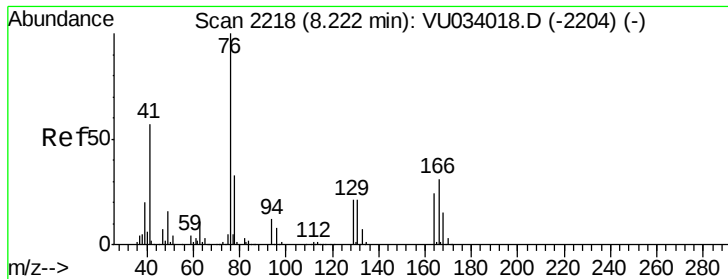


Abundance Ion 69.00 (68.70 to 69.70): VU0

Ion 41.00 (40.70 to 41.70): VU0

Ion 39.00 (38.70 to 39.70): VU0





#57

1,3-Dichloropropane

Concen: 0.826 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.18 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

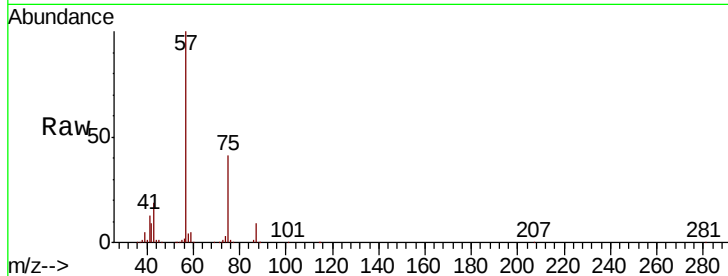
T9-12-13-A4-(1.9)

Tgt Ion: 76 Resp: 8194

Ion Ratio Lower Upper

76 100

78 0.0 26.2 39.4#



Abundance Ion 75.90 (75.60 to 76.60): VU034040.D (-2125) (-)

Ion 77.90 (77.60 to 78.60): VU034040.D (-2125) (-)

8.40

5000

4000

3000

2000

1000

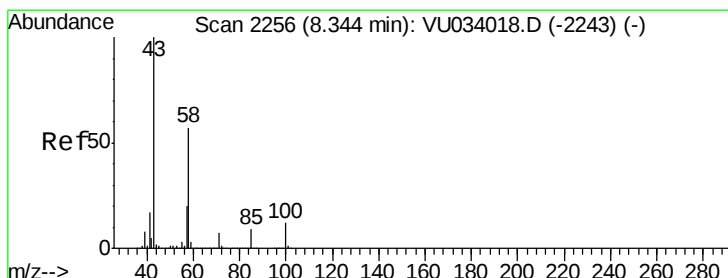
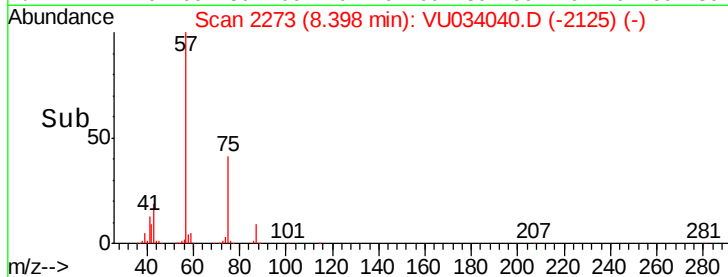
0

8.35

8.40

8.45

Time-->



#59

2-Hexanone

Concen: 17.898 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.05 min

Lab File: VU034040.D

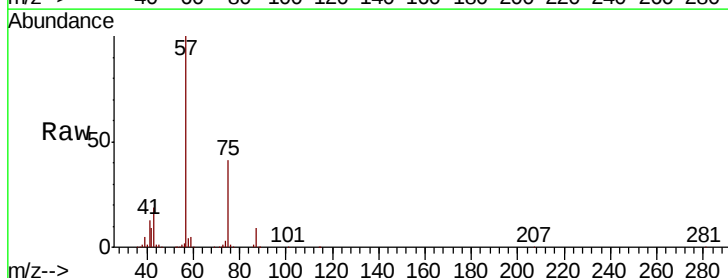
Acq: 28 Aug 2019 21:57

Tgt Ion: 43 Resp: 117868

Ion Ratio Lower Upper

43 100

58 20.3 28.4 85.3#



Abundance Ion 43.00 (42.70 to 43.70): VU034040.D (-2163) (-)

Ion 58.00 (57.70 to 58.70): VU034040.D (-2163) (-)

8.40

80000

60000

40000

20000

0

8.30

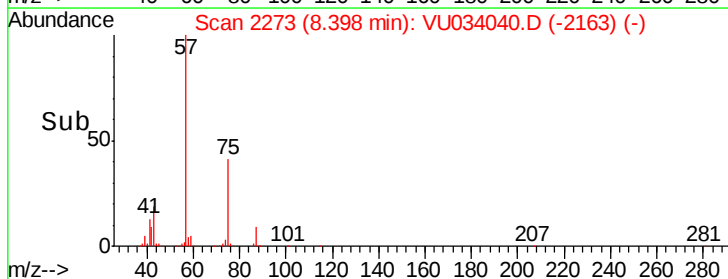
8.35

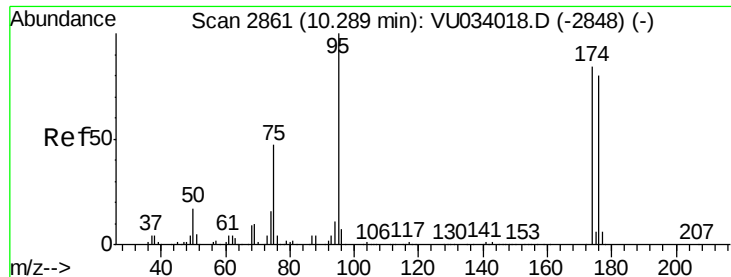
8.40

8.45

8.50

Time-->





#62

4-Bromofluorobenzene

Concen: 44.716 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A4-(1.9)

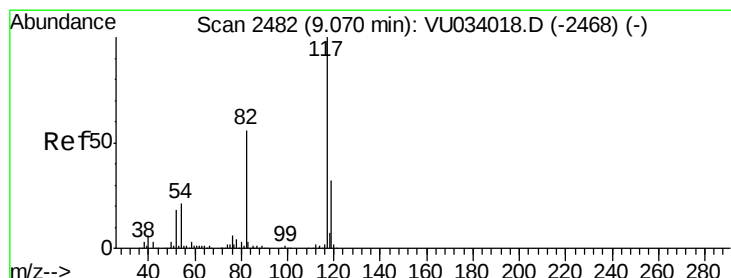
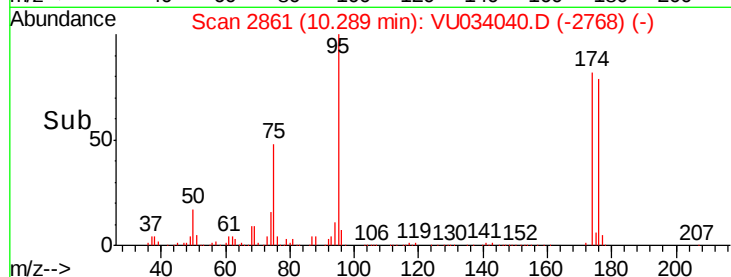
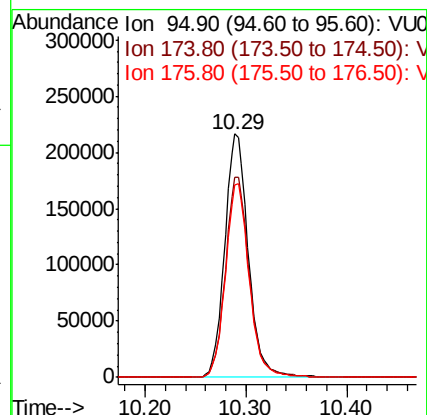
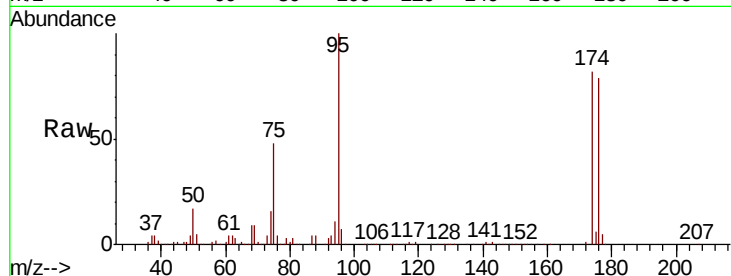
Tgt Ion: 95 Resp: 354113

Ion Ratio Lower Upper

95 100

174 83.7 0.0 168.8

176 80.1 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: VU034040.D

Acq: 28 Aug 2019 21:57

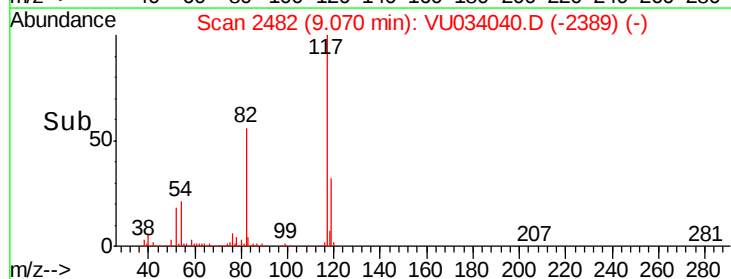
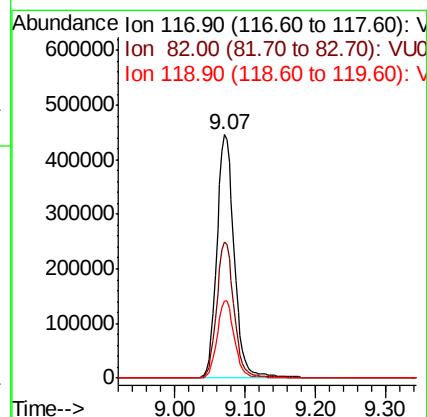
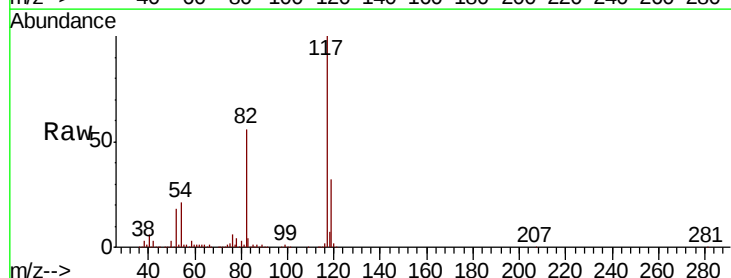
Tgt Ion: 117 Resp: 763914

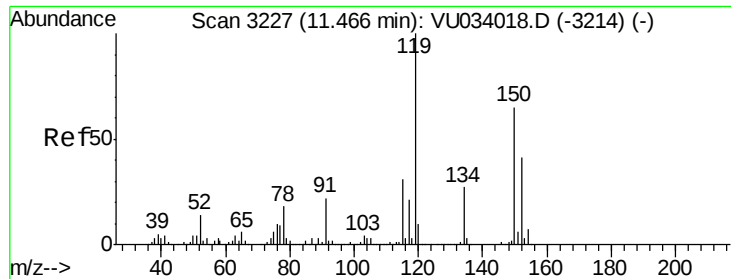
Ion Ratio Lower Upper

117 100

82 56.0 45.1 67.7

119 31.8 25.4 38.0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 11.47 min Scan# 3227

Delta R.T. 0.00 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A4-(1.9)

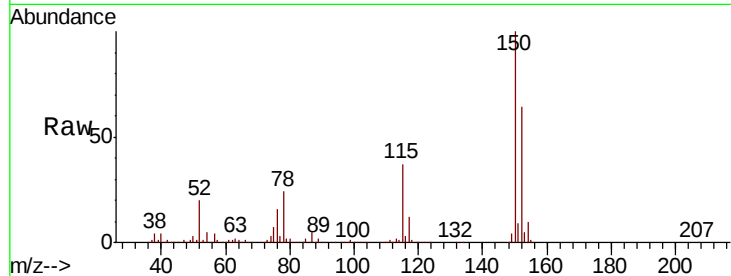
Tgt Ion:152 Resp: 375744

Ion Ratio Lower Upper

152 100

115 56.6 41.1 123.3

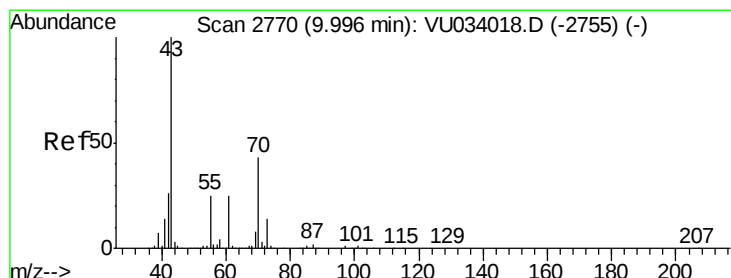
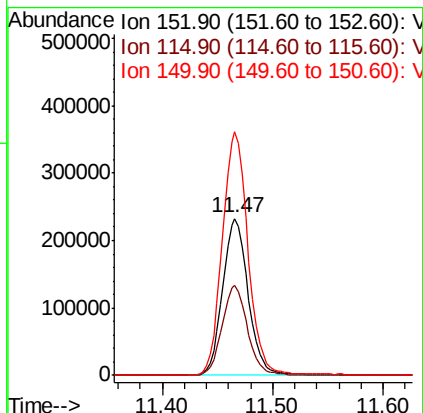
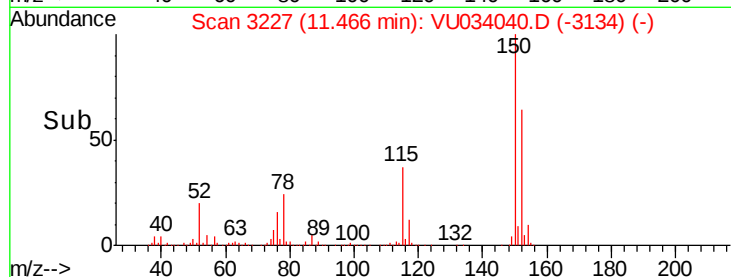
150 156.1 0.0 348.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 0.352 ug/l

RT: 9.92 min Scan# 2747

Delta R.T. -0.07 min

Lab File: VU034040.D

Acq: 28 Aug 2019 21:57

Tgt Ion: 43 Resp: 3739

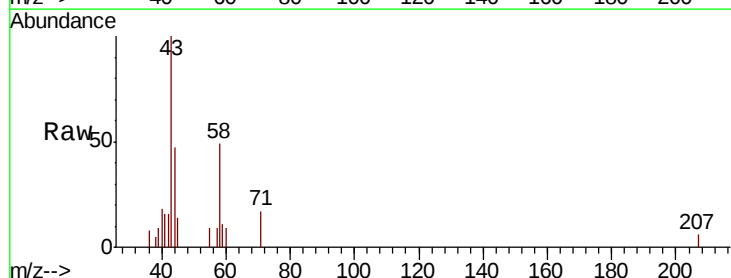
Ion Ratio Lower Upper

43 100

70 0.0 35.2 52.8#

55 9.7 20.5 30.7#

61 0.0 20.0 30.0#

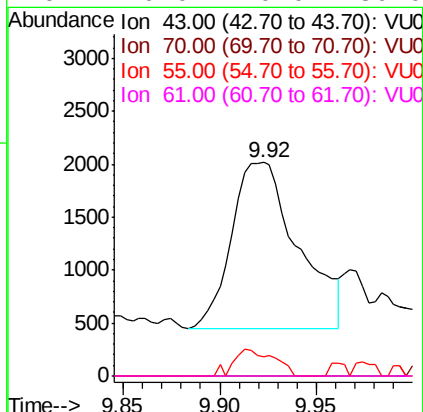
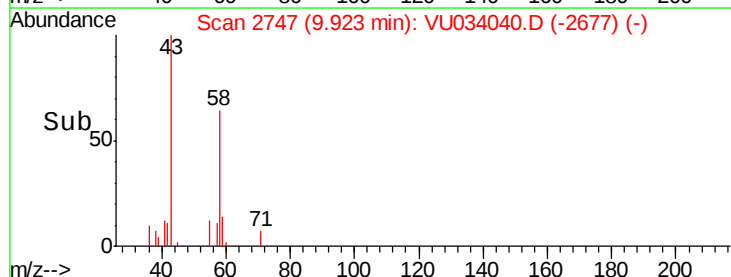


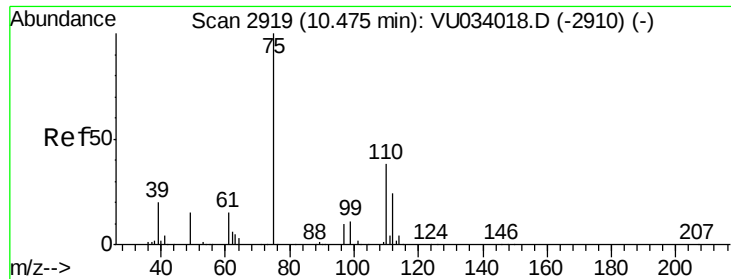
Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 70.00 (69.70 to 70.70): VU0

Ion 55.00 (54.70 to 55.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

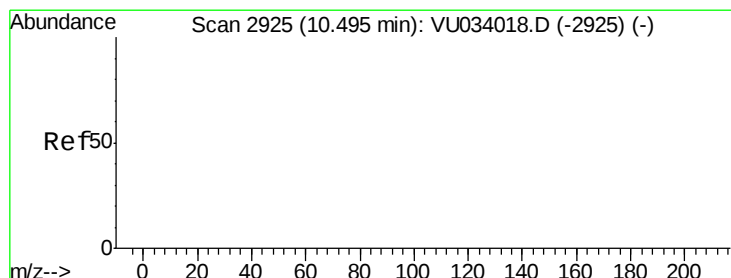
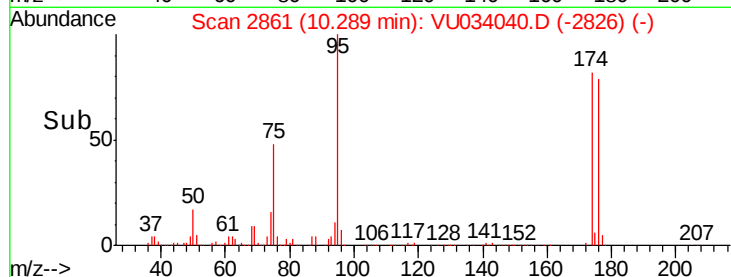
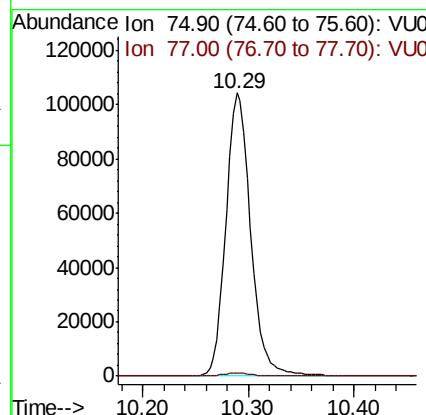
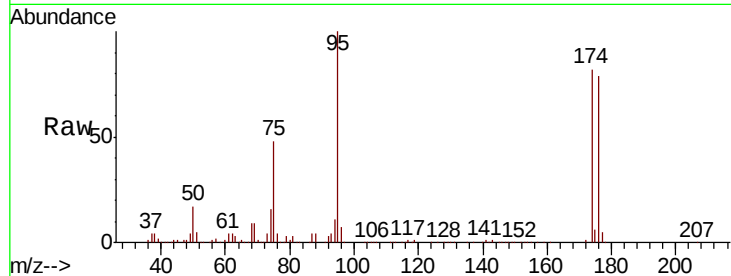




#76
 1,2,3-Trichloropropane
 Concen: 20.016 ug/l
 RT: 10.29 min Scan# 2861
 Delta R.T. -0.19 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

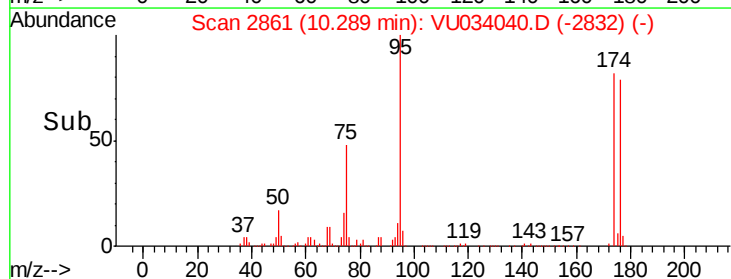
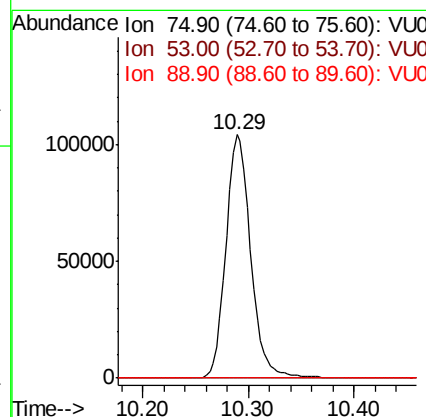
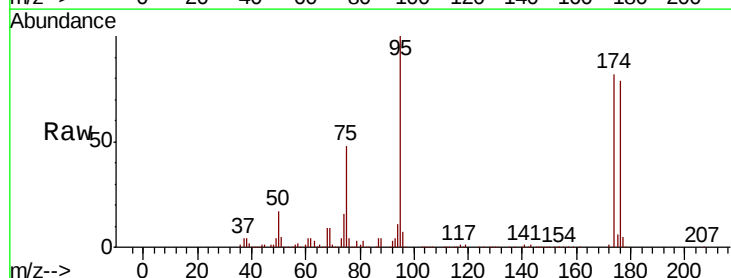
Instrument :
 MSVOA_U
 ClientSampleId :
 T9-12-13-A4-(1.9)

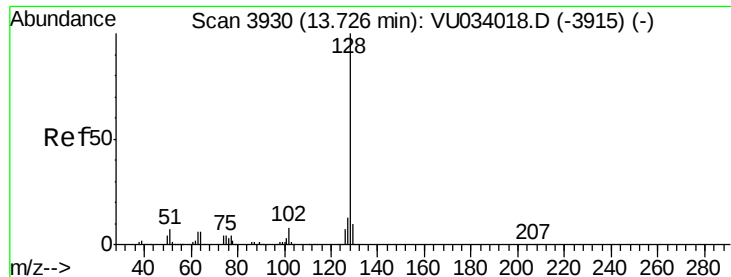
Tgt Ion: 75 Resp: 169511
 Ion Ratio Lower Upper
 75 100
 77 1.1 20.1 60.2#



#81
 trans-1,4-Dichloro-2-butene
 Concen: 67.400 ug/l
 RT: 10.29 min Scan# 2861
 Delta R.T. -0.21 min
 Lab File: VU034040.D
 Acq: 28 Aug 2019 21:57

Tgt Ion: 75 Resp: 169511
 Ion Ratio Lower Upper
 75 100
 53 0.1 0.0 0.0#
 89 0.0 0.0 0.0





#95
Naphthalene
Concen: 1.800 ug/l
RT: 13.80 min Scan# 3954
Delta R.T. 0.08 min
Lab File: VU034040.D
Acq: 28 Aug 2019 21:57

Instrument :
MSVOA_U
ClientSampleId :
T9-12-13-A4-(1.9)

Tgt Ion:128 Resp: 235
Ion Ratio Lower Upper
128 100
127 0.0 10.2 15.4#
129 0.0 8.4 12.6#

