

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU082919\
 Data File : VU034038.D
 Acq On : 28 Aug 2019 21:11
 Operator : JC/SP
 Sample : K4525-27
 Misc : 5.0mL/MSVOA_U/WATER
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 T9-12-13-A2-(1.9)

Quant Time: Aug 29 04:20:07 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	475636	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	5.87	114	768683	50.00	ug/l	0.00
63) Chlorobenzene-d5	9.07	117	738890	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	11.47	152	367544	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	5.29	65	299536	49.15	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.30%	
35) Dibromofluoromethane	4.86	113	245449	46.04	ug/l	0.00
Spiked Amount	50.000		Recovery	=	92.08%	
50) Toluene-d8	7.55	98	973533	48.77	ug/l	0.00
Spiked Amount	50.000		Recovery	=	97.54%	
62) 4-Bromofluorobenzene	10.29	95	341462	43.97	ug/l	0.00
Spiked Amount	50.000		Recovery	=	87.94%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.33	50	621	Below Cal	#	81
5) Bromomethane	1.64	94	424	Below Cal	#	61
8) Diethyl Ether	2.09	74	993	0.315	ug/l	85
11) Tert butyl alcohol	2.83	59	4254	3.027	ug/l #	73
13) Acrolein	2.18	56	270	0.457	ug/l #	30
16) Acetone	2.31	43	11687	3.758	ug/l	95
18) Methyl Acetate	2.61	43	3710	0.462	ug/l	93
20) Methylene Chloride	2.69	84	15966	2.712	ug/l	98
31) Cyclohexane	4.96	56	8680	0.954	ug/l #	1
36) 1,1-Dichloropropene	4.96	75	33909	4.664	ug/l #	49
38) Carbon Tetrachloride	4.96	117	43479	6.195	ug/l #	16
43) Isopropyl Acetate	5.53	43	93511	7.549	ug/l	98
48) Methyl methacrylate	6.69	41	157200	26.300	ug/l #	40
49) 1,4-Dioxane	6.69	88	250	1.669	ug/l #	1
51) 4-Methyl-2-Pentanone	7.40	43	79476	9.291	ug/l #	46
54) cis-1,3-Dichloropropene	7.40	75	42915	4.638	ug/l #	64
56) Ethyl methacrylate	7.95	69	267	0.999	ug/l #	27
57) 1,3-Dichloropropane	8.40	76	7119	0.731	ug/l #	42
59) 2-Hexanone	8.40	43	100557	15.571	ug/l #	52
74) N-amyl acetate	9.92	43	3106	0.299	ug/l #	43
76) 1,2,3-Trichloropropane	10.29	75	166320	20.078	ug/l #	37
81) trans-1,4-Dichloro-2-buten	10.29	75	166320	67.607	ug/l #	100
93) 1,2,4-Trichlorobenzene	13.55	180	116	1.128	ug/l #	28
95) Naphthalene	13.79	128	334	1.804	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: VU034038.D

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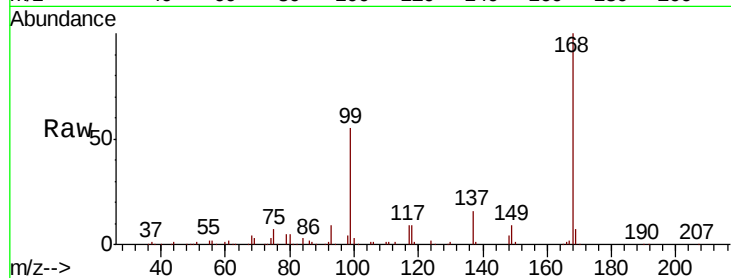
T9-12-13-A2-(1.9)

Tgt Ion:168 Resp: 475636

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

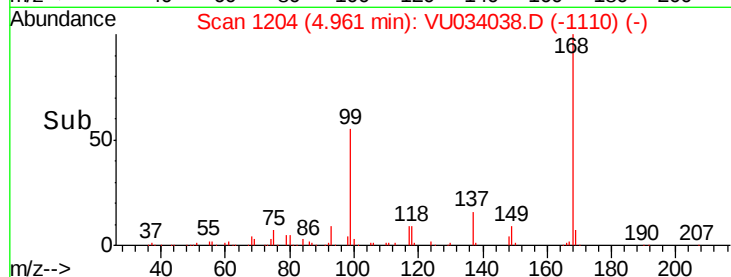
100000

50000

0

4.90 5.00 5.10

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 1.33 min Scan# 74

Delta R.T. 0.01 min

Lab File: VU034038.D

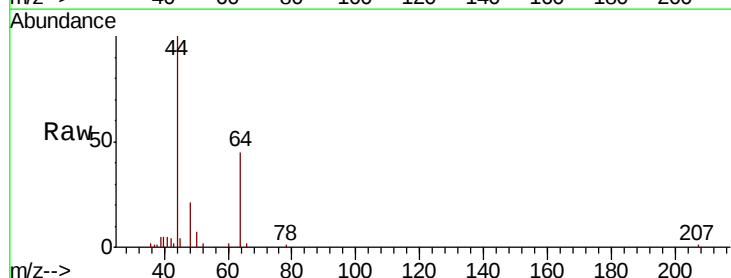
Acq: 28 Aug 2019 21:11

Tgt Ion: 50 Resp: 621

Ion Ratio Lower Upper

50 100

52 43.6 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) (-)

1.33

600

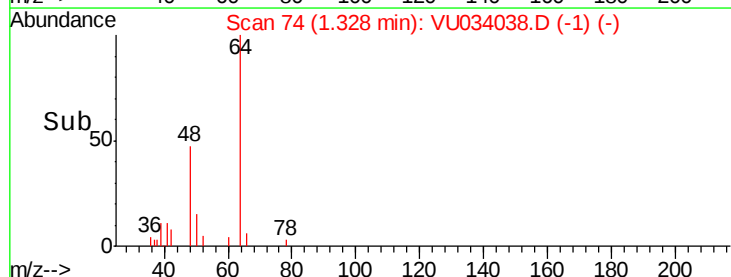
400

200

0

1.30 1.32 1.34

Time-->





#5

Bromomethane

Concen: Below Cal

RT: 1.64 min Scan# 171

Delta R.T. 0.04 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

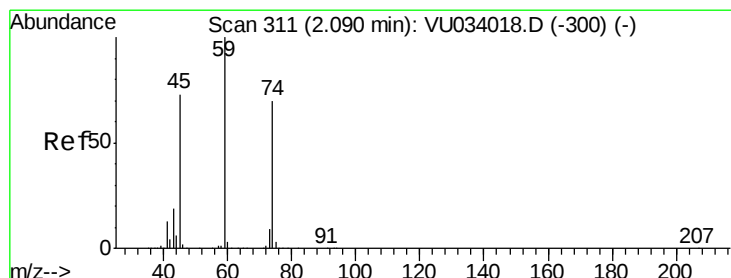
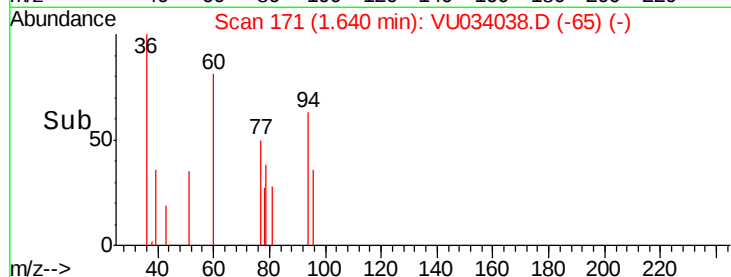
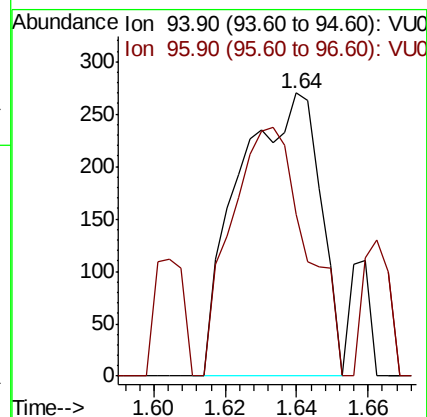
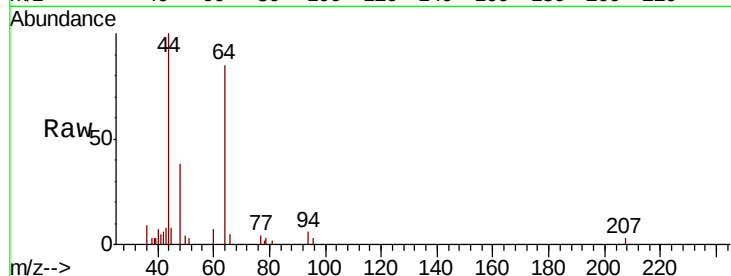
T9-12-13-A2-(1.9)

Tgt Ion: 94 Resp: 424

Ion Ratio Lower Upper

94 100

96 57.0 76.3 114.5#



#8

Diethyl Ether

Concen: 0.315 ug/l

RT: 2.09 min Scan# 312

Delta R.T. 0.00 min

Lab File: VU034038.D

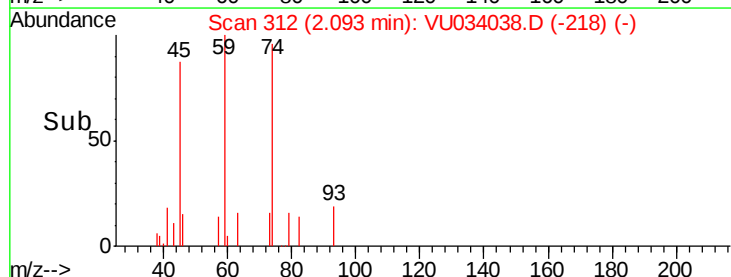
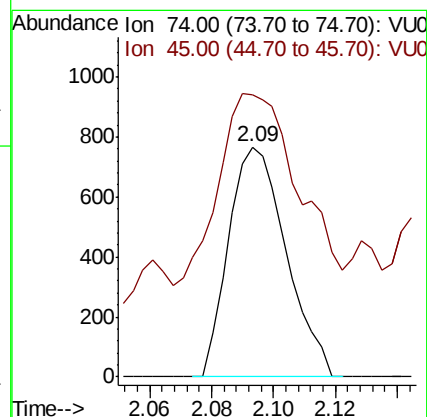
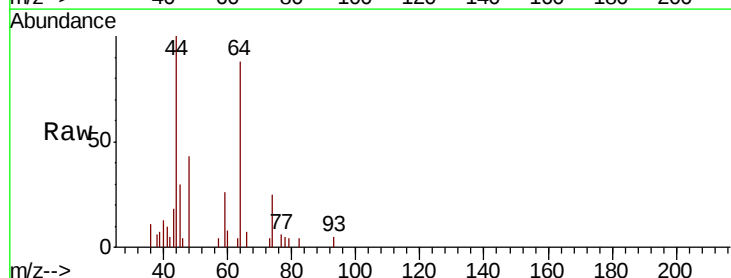
Acq: 28 Aug 2019 21:11

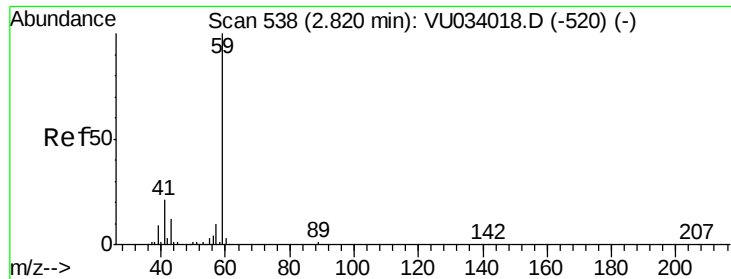
Tgt Ion: 74 Resp: 993

Ion Ratio Lower Upper

74 100

45 118.6 51.8 155.5

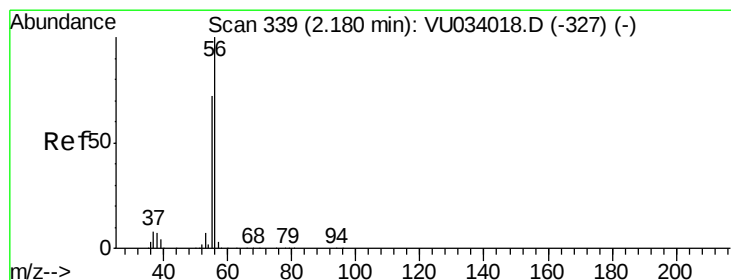
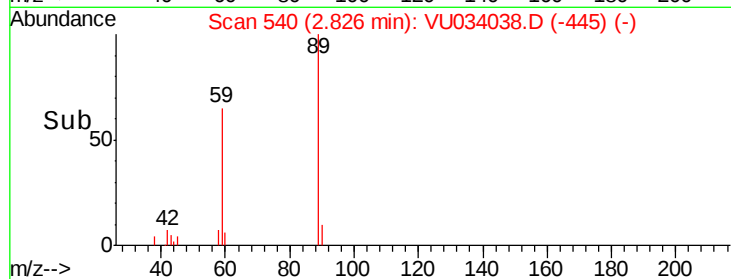
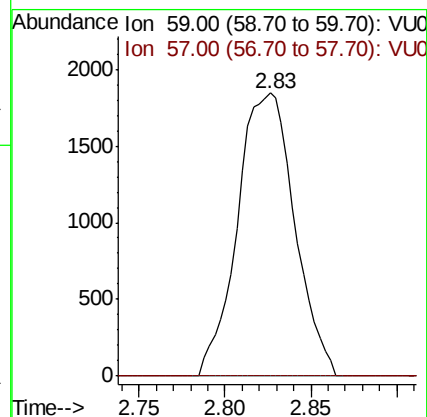
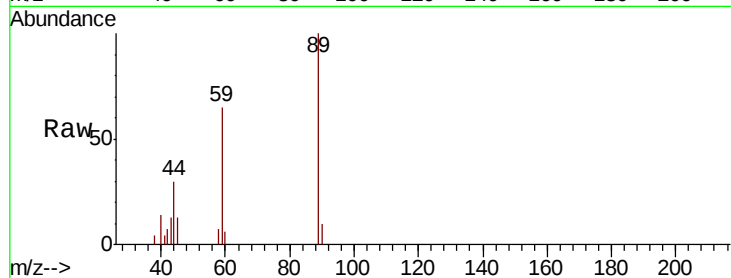




#11
Tert butyl alcohol
Concen: 3.027 ug/l
RT: 2.83 min Scan# 540
Delta R.T. 0.01 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

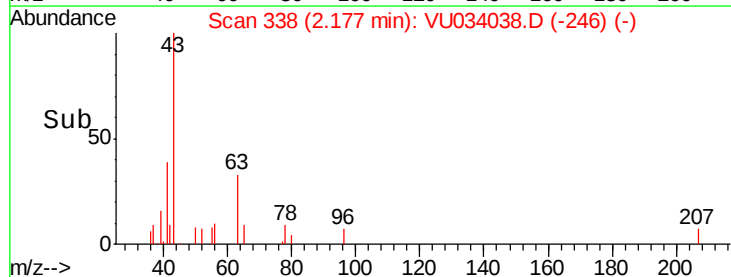
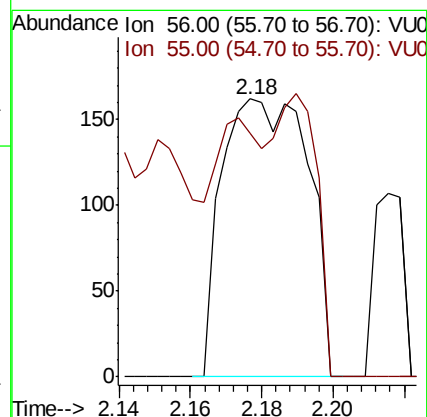
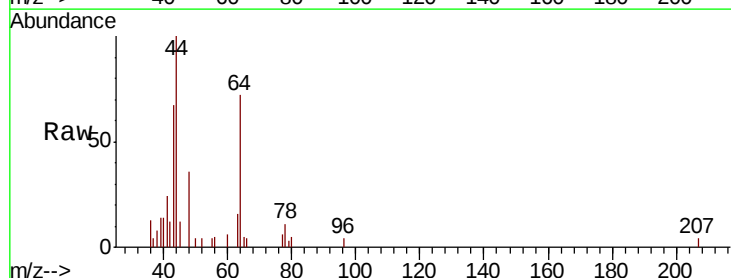
Instrument :
MSVOA_U
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T9-12-13-A2-(1.9)

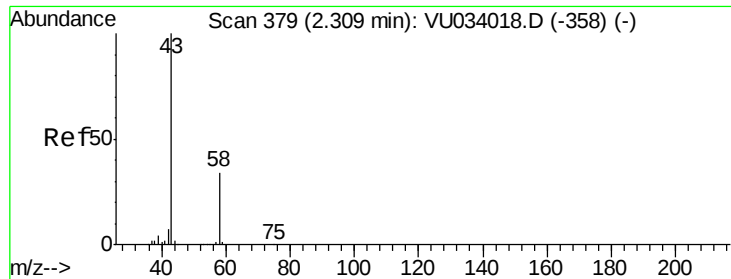
Tgt Ion: 59 Resp: 4254
Ion Ratio Lower Upper
59 100
57 0.0 8.0 12.0#



#13
Acrolein
Concen: 0.457 ug/l
RT: 2.18 min Scan# 338
Delta R.T. -0.00 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

Tgt Ion: 56 Resp: 270
Ion Ratio Lower Upper
56 100
55 13.3 57.1 85.7#





#16

Acetone

Concen: 3.758 ug/l

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

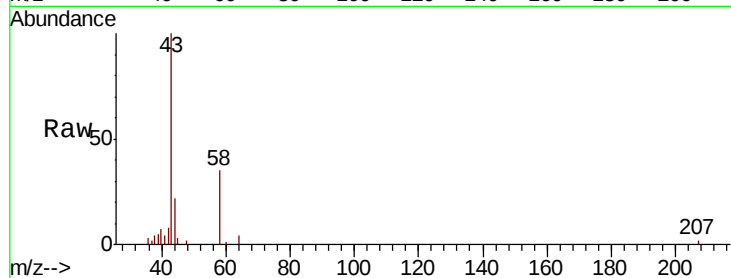
T9-12-13-A2-(1.9)

Tgt Ion: 43 Resp: 11687

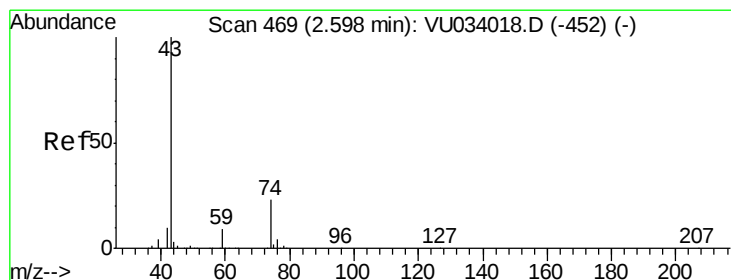
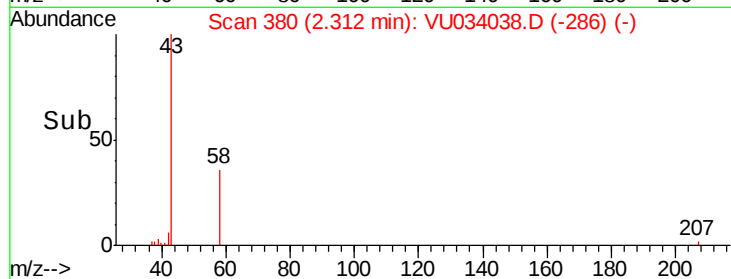
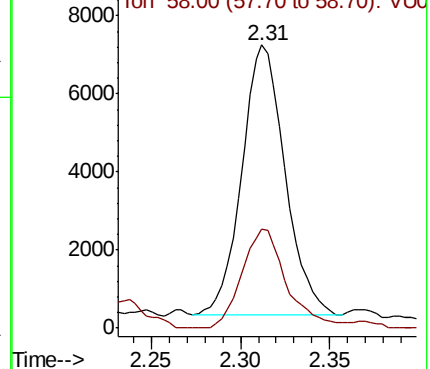
Ion Ratio Lower Upper

43 100

58 36.5 26.8 40.2



Abundance Ion 43.00 (42.70 to 43.70): VU034038.D (-380) (-)



#18

Methyl Acetate

Concen: 0.462 ug/l

RT: 2.61 min Scan# 473

Delta R.T. 0.01 min

Lab File: VU034038.D

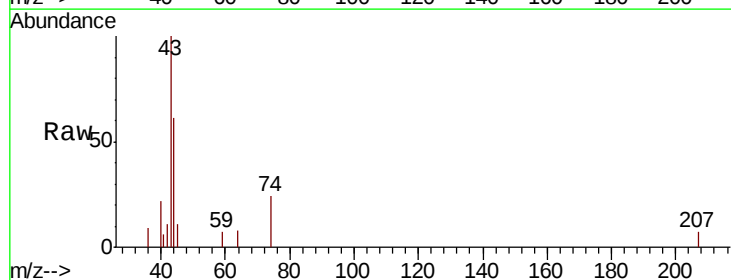
Acq: 28 Aug 2019 21:11

Tgt Ion: 43 Resp: 3710

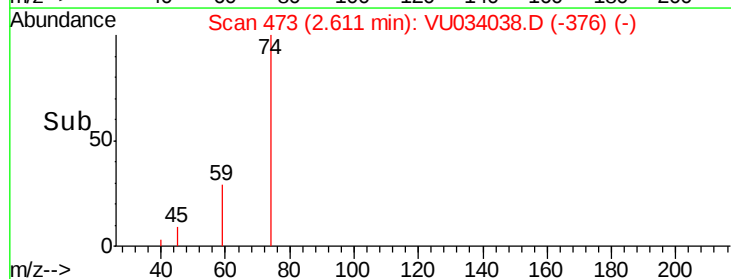
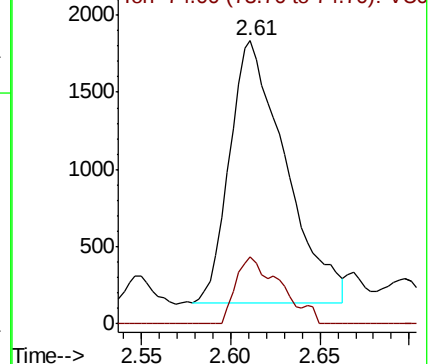
Ion Ratio Lower Upper

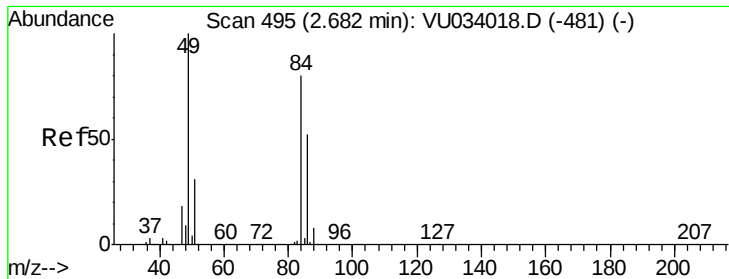
43 100

74 20.5 19.2 28.8



Abundance Ion 43.00 (42.70 to 43.70): VU034038.D (-473) (-)





#20

Methylene Chloride

Concen: 2.712 ug/l

RT: 2.69 min Scan# 497

Delta R.T. 0.01 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A2-(1.9)

Tgt Ion: 84 Resp: 15966

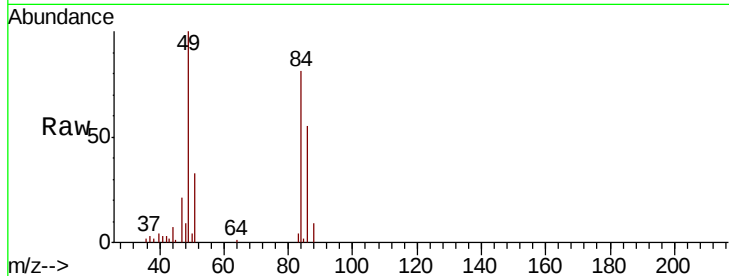
Ion Ratio Lower Upper

84 100

49 124.0 100.2 150.4

51 41.0 30.8 46.2

86 67.9 52.5 78.7

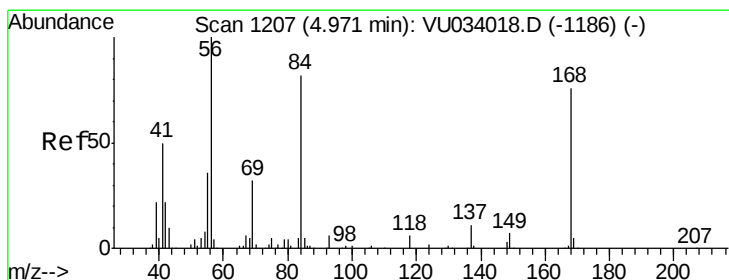
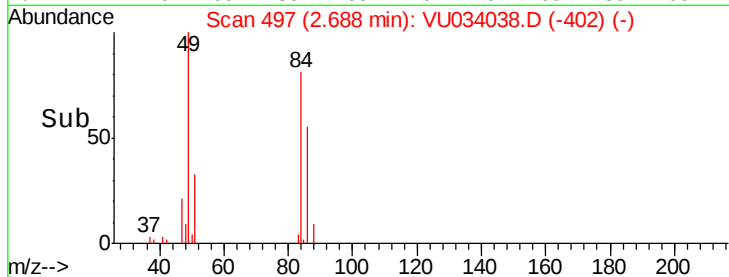
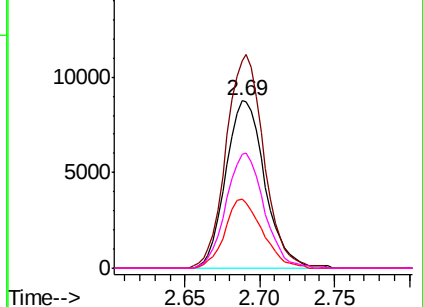


Abundance Ion 83.90 (83.60 to 84.60): VU0

Ion 48.90 (48.60 to 49.60): VU0

Ion 50.90 (50.60 to 51.60): VU0

Ion 85.90 (85.60 to 86.60): VU0



#31

Cyclohexane

Concen: 0.954 ug/l

RT: 4.96 min Scan# 1205

Delta R.T. -0.01 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

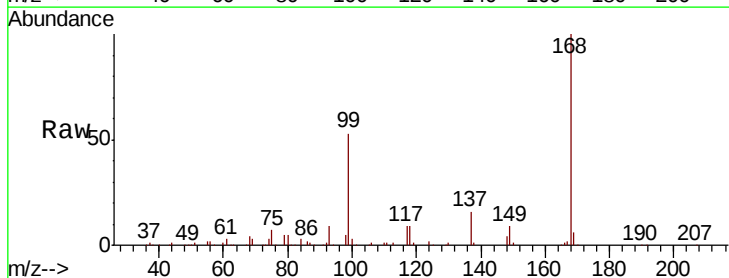
Tgt Ion: 56 Resp: 8680

Ion Ratio Lower Upper

56 100

69 181.1 25.4 38.0#

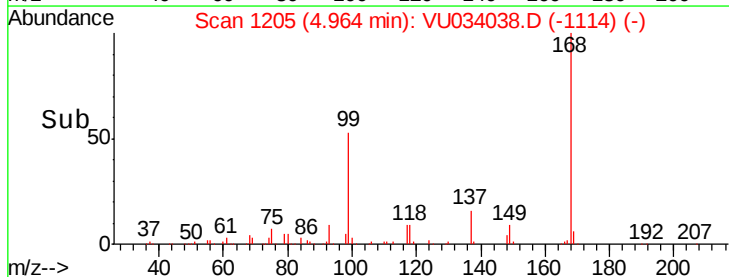
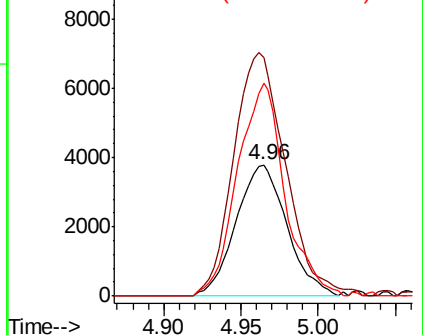
84 162.1 65.8 98.8#

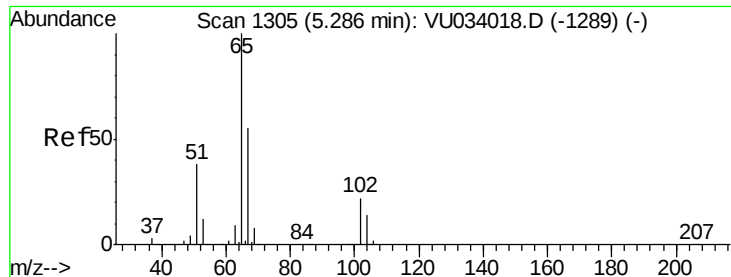


Abundance Ion 56.00 (55.70 to 56.70): VU0

Ion 69.00 (68.70 to 69.70): VU0

Ion 84.00 (83.70 to 84.70): VU0

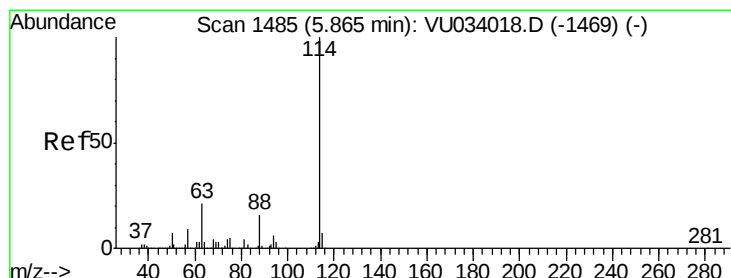
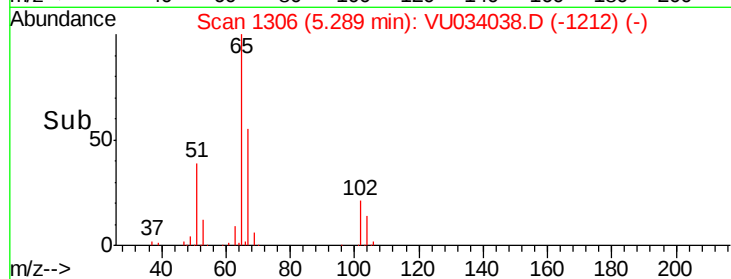
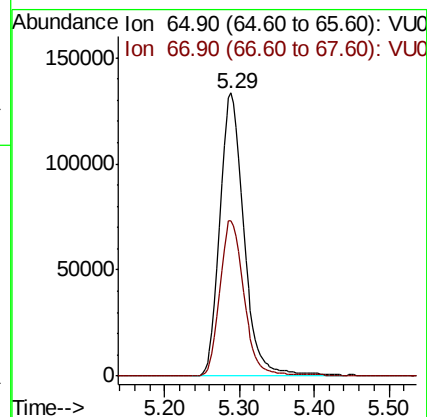
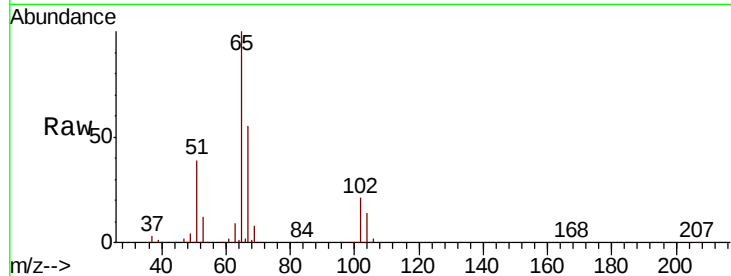




#33
 1,2-Dichloroethane-d4
 Concen: 49.148 ug/l
 RT: 5.29 min Scan# 1306
 Delta R.T. 0.00 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

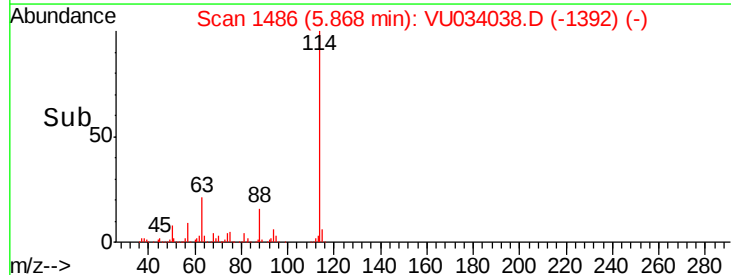
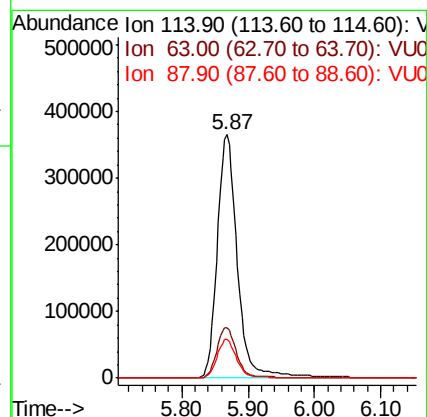
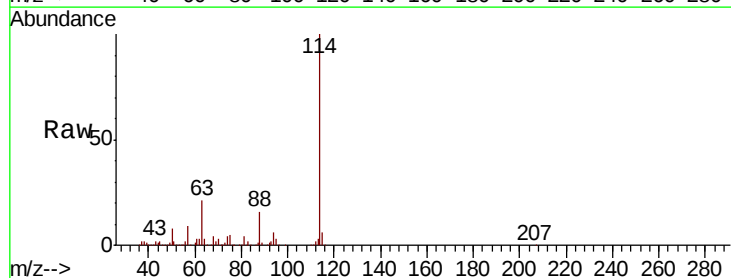
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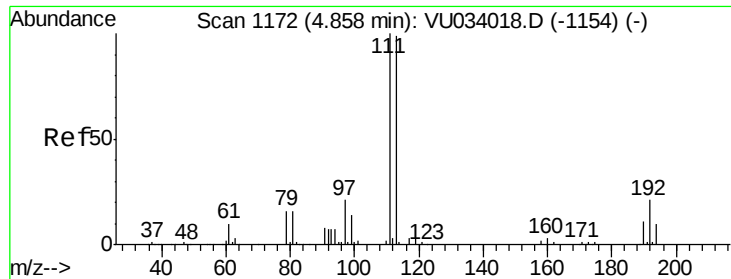
Tgt Ion: 65 Resp: 299536
 Ion Ratio Lower Upper
 65 100
 67 54.8 0.0 110.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 5.87 min Scan# 1486
 Delta R.T. 0.00 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

Tgt Ion: 114 Resp: 768683
 Ion Ratio Lower Upper
 114 100
 63 20.8 0.0 42.0
 88 16.1 0.0 32.0

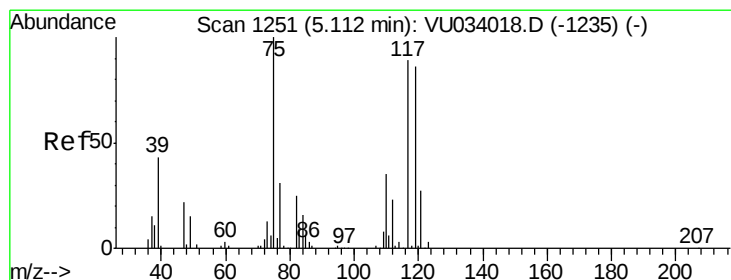
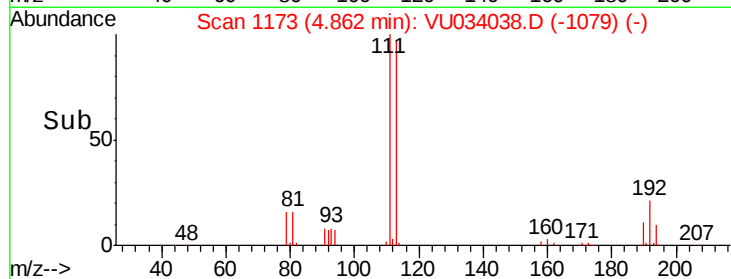
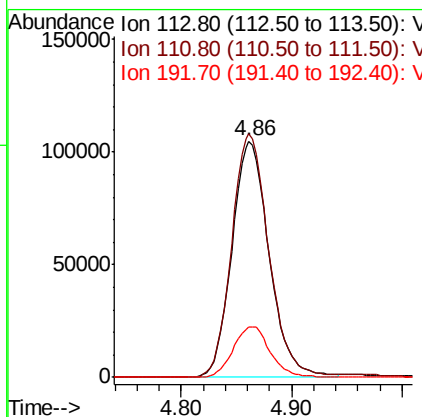
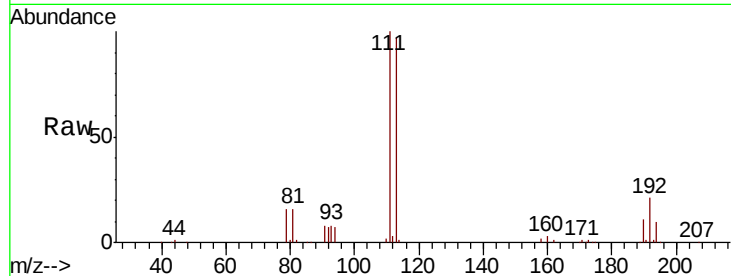




#35
 Dibromofluoromethane
 Concen: 46.037 ug/l
 RT: 4.86 min Scan# 1173
 Delta R.T. 0.00 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

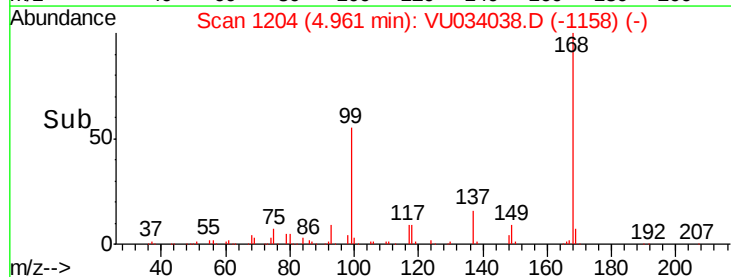
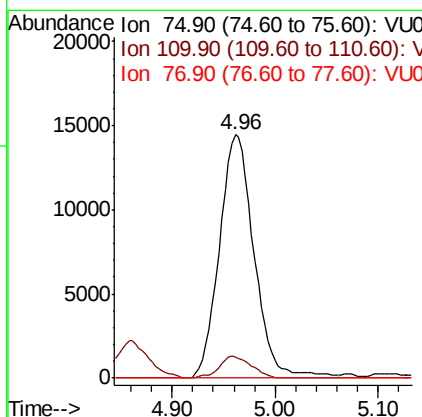
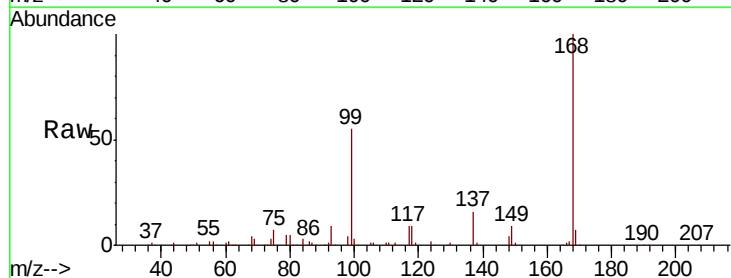
Instrument :
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 T9-12-13-A2-(1.9)

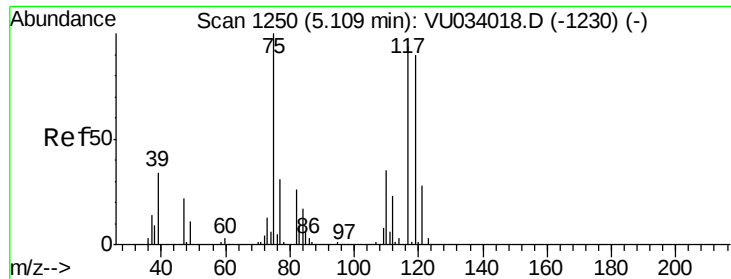
Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.5	81.7	122.5
192	21.5	17.1	25.7



#36
 1,1-Dichloropropene
 Concen: 4.664 ug/l
 RT: 4.96 min Scan# 1204
 Delta R.T. -0.15 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

Tgt Ion	Ratio	Lower	Upper
75	100		
110	8.3	17.8	53.5#
77	0.0	25.0	37.4#





#38

Carbon Tetrachloride

Concen: 6.195 ug/l

RT: 4.96 min Scan# 1205

Delta R.T. -0.14 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A2-(1.9)

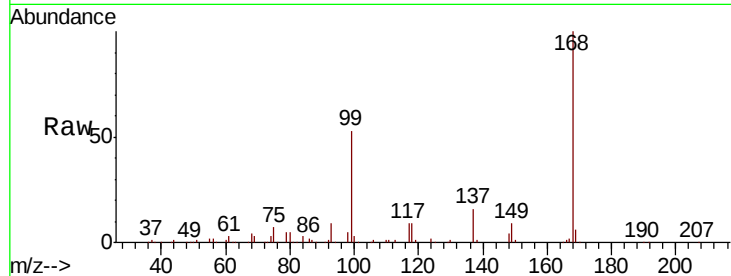
Tgt Ion:117 Resp: 43479

Ion Ratio Lower Upper

117 100

119 5.8 77.0 115.4#

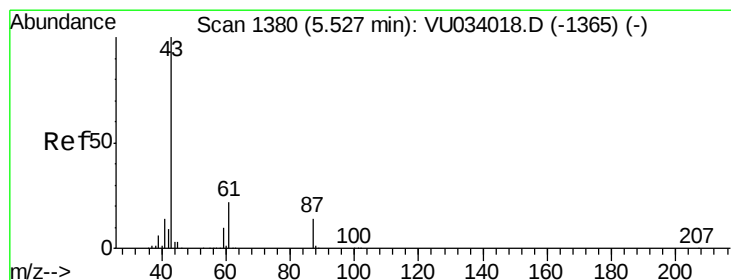
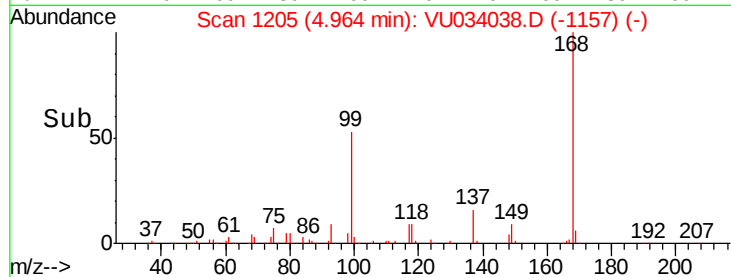
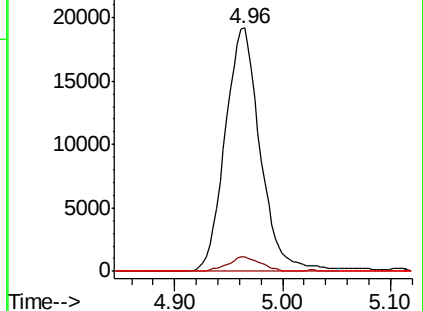
121 0.0 23.9 35.9#



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: 7.549 ug/l

RT: 5.53 min Scan# 1382

Delta R.T. 0.01 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

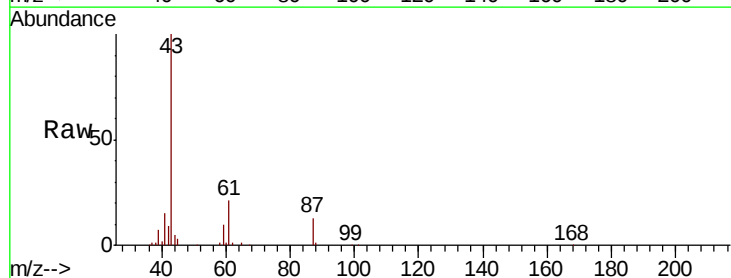
Tgt Ion: 43 Resp: 93511

Ion Ratio Lower Upper

43 100

61 20.7 17.2 25.8

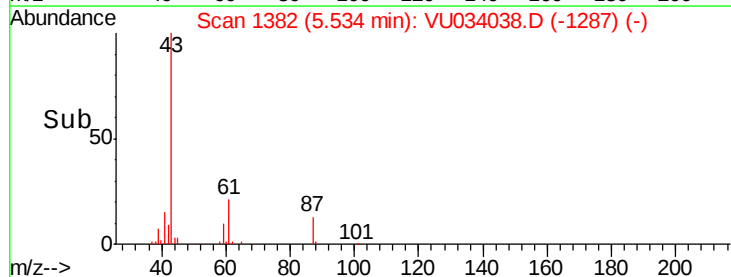
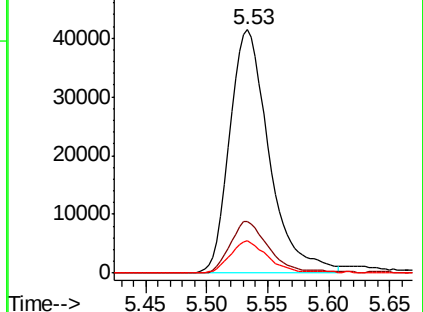
87 12.4 10.8 16.2

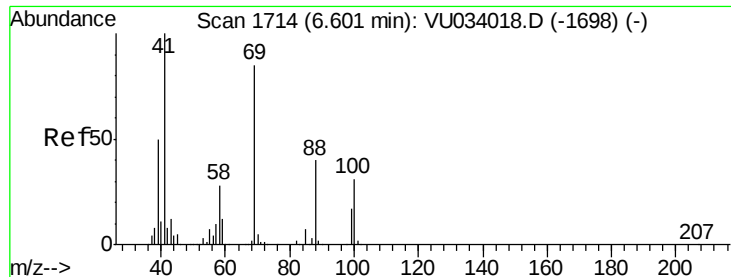


Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 61.00 (60.70 to 61.70): VU0

Ion 87.00 (86.70 to 87.70): VU0

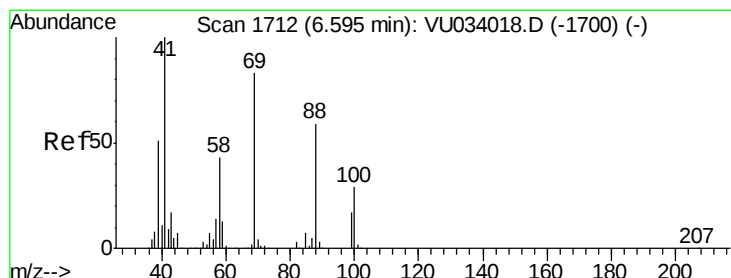
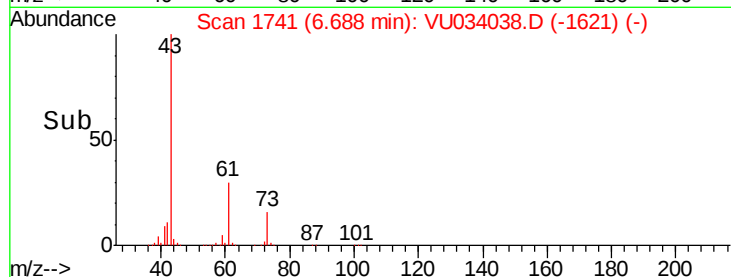
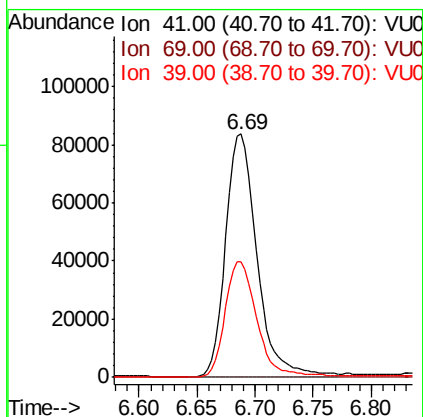
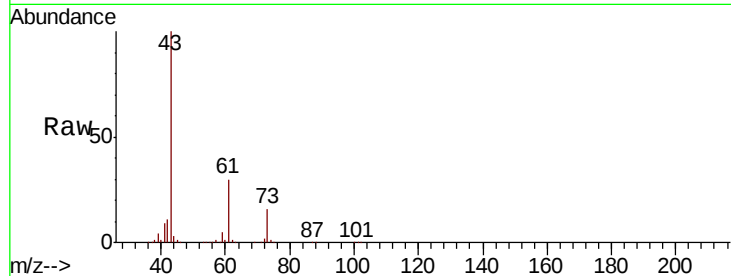




#48
Methyl methacrylate
Concen: 26.300 ug/l
RT: 6.69 min Scan# 1741
Delta R.T. 0.09 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

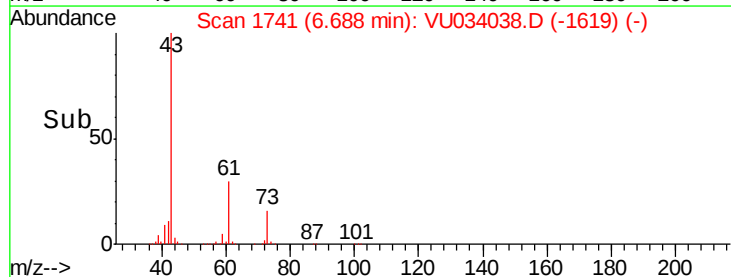
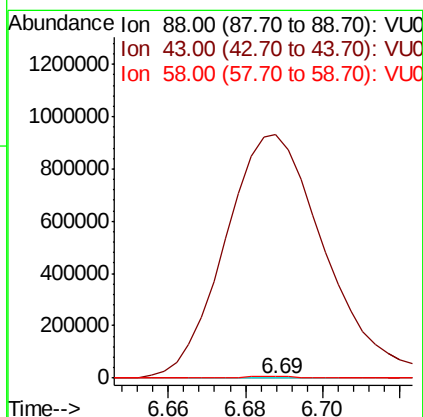
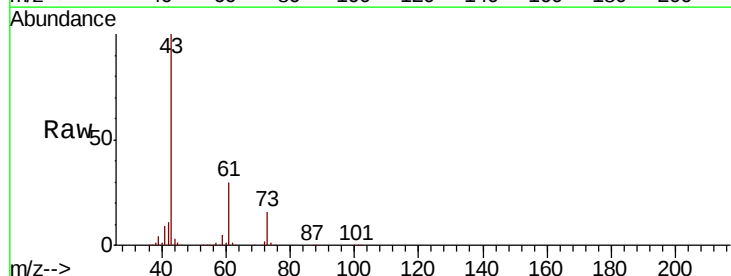
Instrument :
MSVOA_U
ClientSampled :
T9-12-13-A2-(1.9)

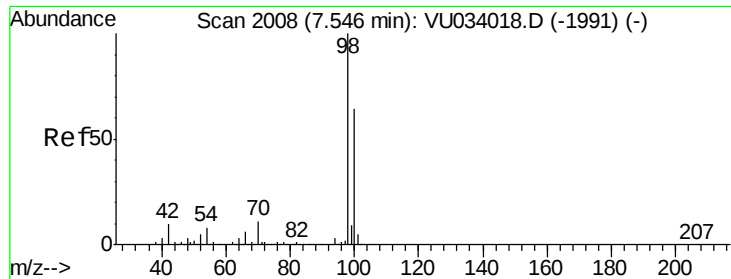
Tgt Ion: 41 Resp: 157200
Ion Ratio Lower Upper
41 100
69 0.1 69.5 104.3#
39 48.9 40.3 60.5



#49
1,4-Dioxane
Concen: 1.669 ug/l
RT: 6.69 min Scan# 1741
Delta R.T. 0.09 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

Tgt Ion: 88 Resp: 250
Ion Ratio Lower Upper
88 100
43 697894.0 24.8 37.2#
58 3559.2 59.3 88.9#





#50

Toluene-d8

Concen: 48.766 ug/l

RT: 7.55 min Scan# 2008

Delta R.T. 0.00 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

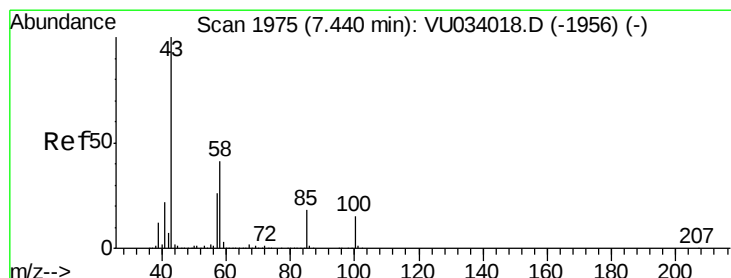
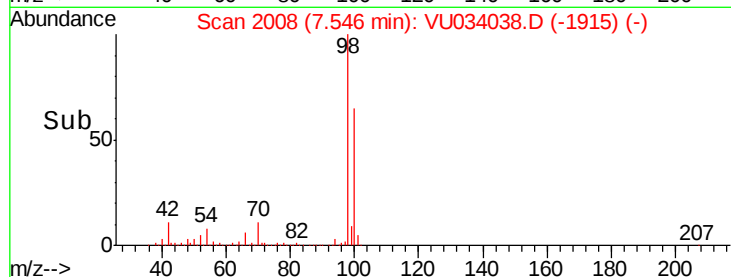
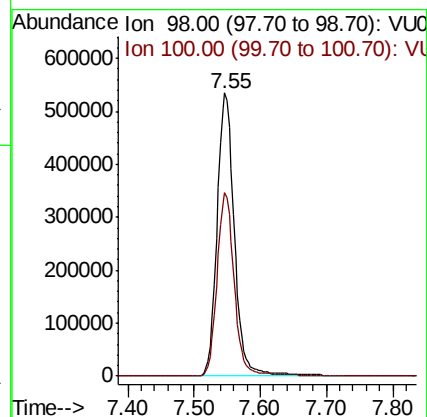
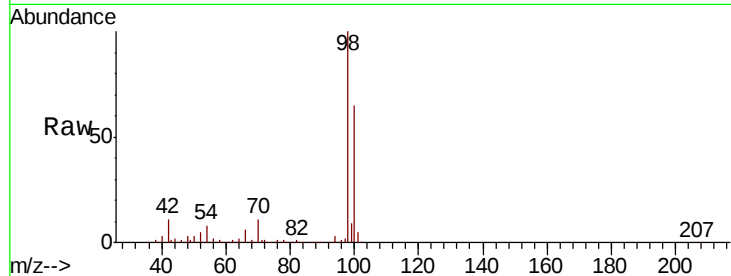
T9-12-13-A2-(1.9)

Tgt Ion: 98 Resp: 973533

Ion Ratio Lower Upper

98 100

100 64.7 50.3 75.5



#51

4-Methyl-2-Pentanone

Concen: 9.291 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. -0.04 min

Lab File: VU034038.D

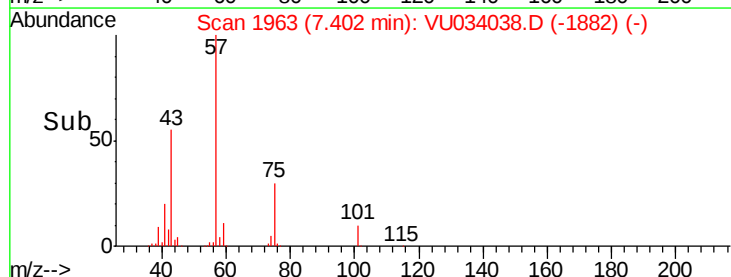
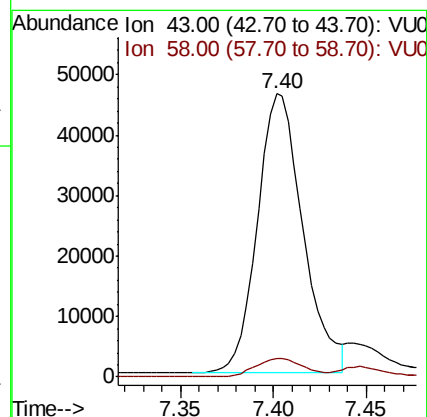
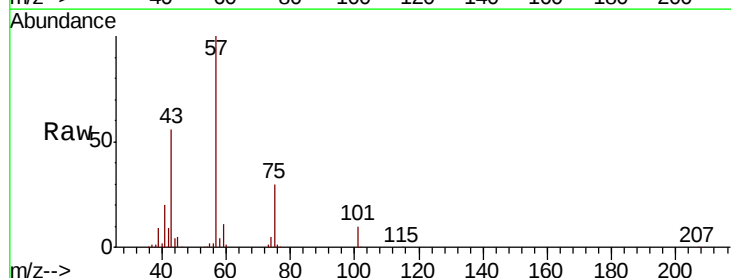
Acq: 28 Aug 2019 21:11

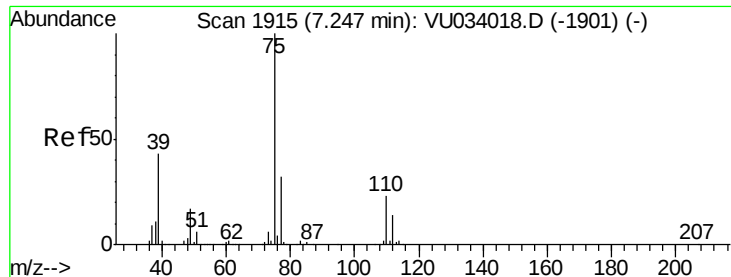
Tgt Ion: 43 Resp: 79476

Ion Ratio Lower Upper

43 100

58 7.0 32.2 48.4#





#54

cis-1,3-Dichloropropene

Concen: 4.638 ug/l

RT: 7.40 min Scan# 1963

Delta R.T. 0.15 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A2-(1.9)

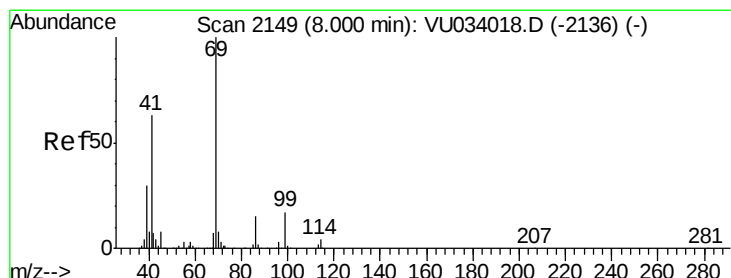
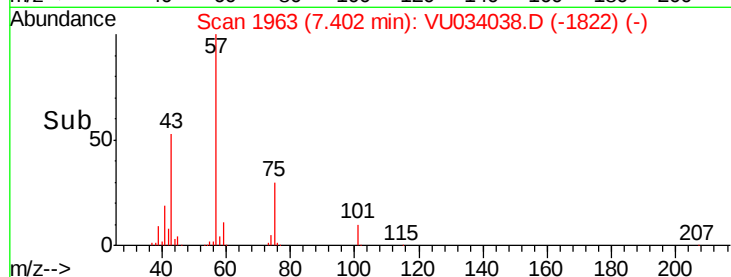
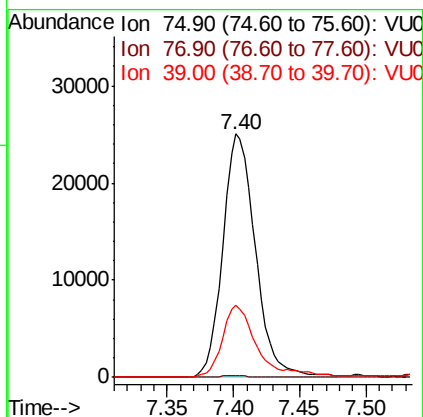
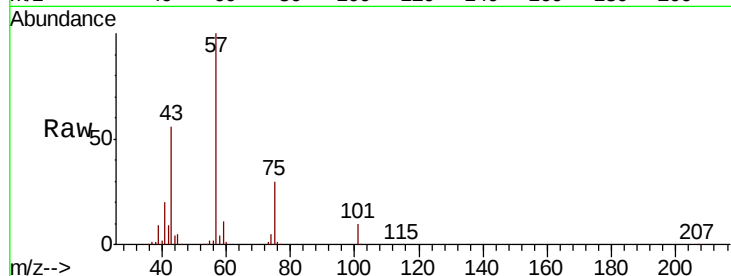
Tgt Ion: 75 Resp: 42915

Ion Ratio Lower Upper

75 100

77 0.9 25.2 37.8#

39 29.4 34.6 51.8#



#56

Ethyl methacrylate

Concen: 0.999 ug/l

RT: 7.95 min Scan# 2134

Delta R.T. -0.05 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

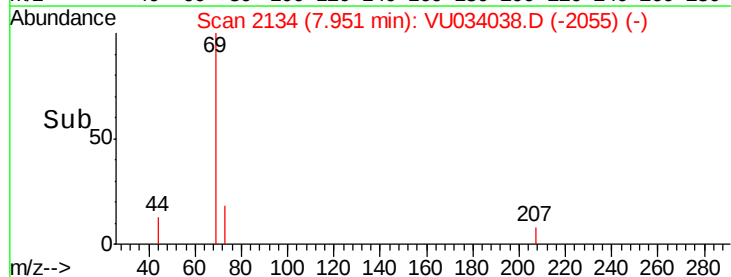
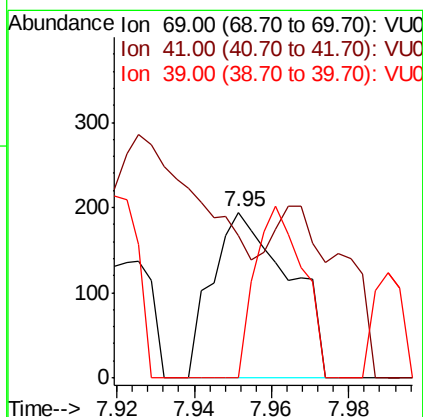
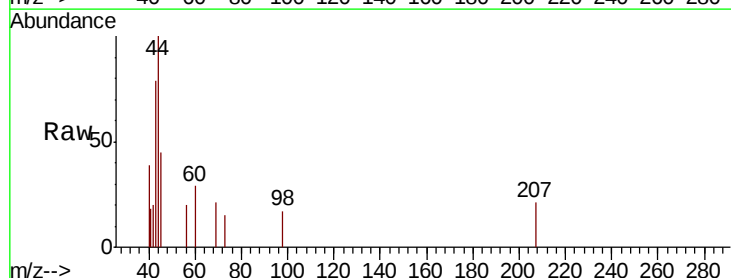
Tgt Ion: 69 Resp: 267

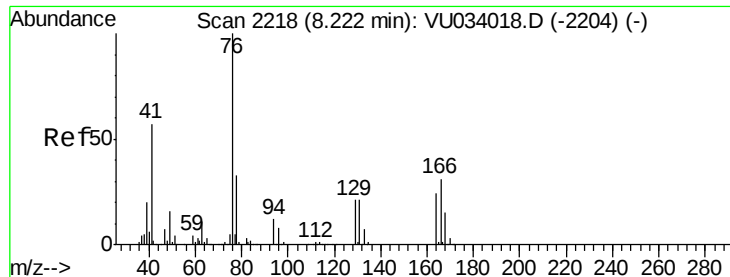
Ion Ratio Lower Upper

69 100

41 0.0 50.7 76.1#

39 0.0 24.2 36.2#





#57

1,3-Dichloropropane

Concen: 0.731 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.18 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

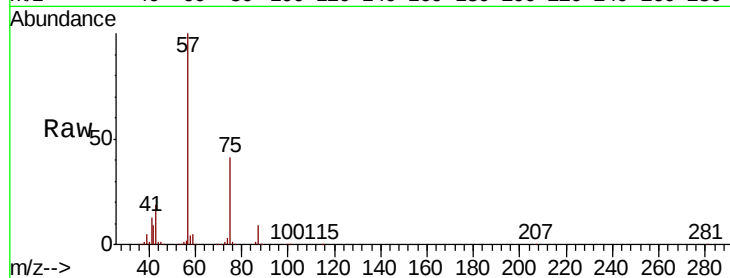
T9-12-13-A2-(1.9)

Tgt Ion: 76 Resp: 7119

Ion Ratio Lower Upper

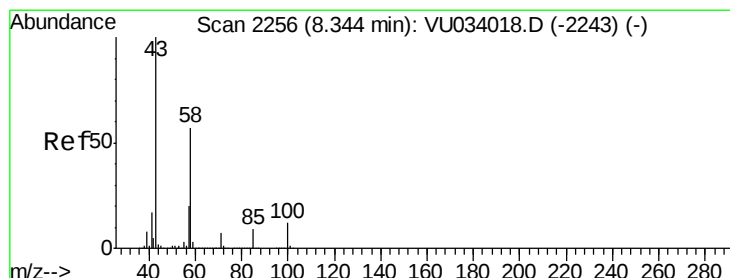
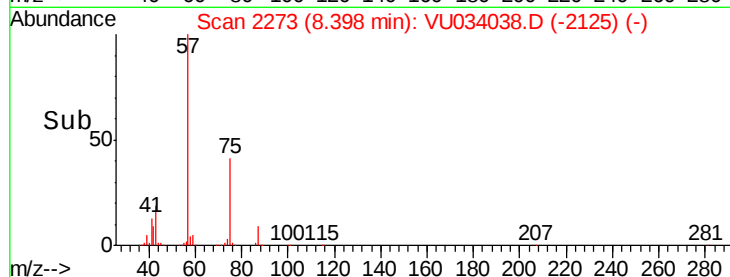
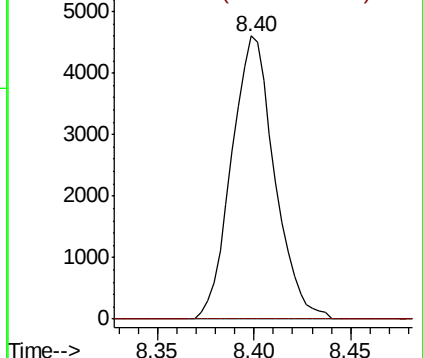
76 100

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: 15.571 ug/l

RT: 8.40 min Scan# 2273

Delta R.T. 0.05 min

Lab File: VU034038.D

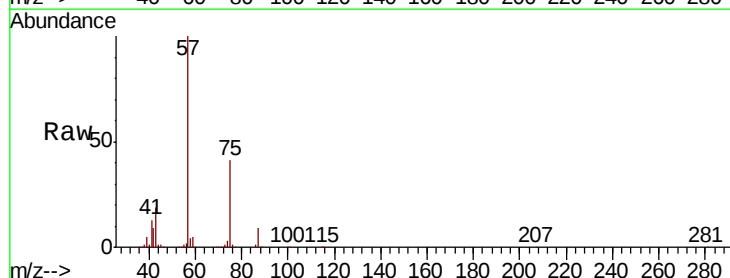
Acq: 28 Aug 2019 21:11

Tgt Ion: 43 Resp: 100557

Ion Ratio Lower Upper

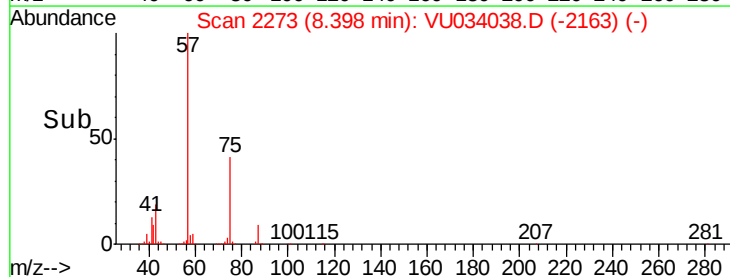
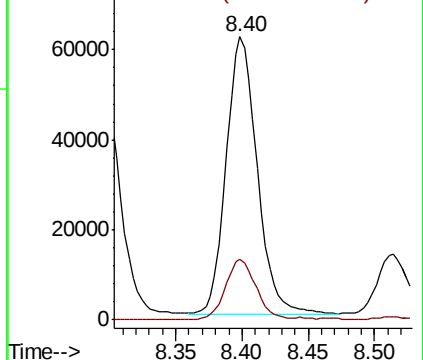
43 100

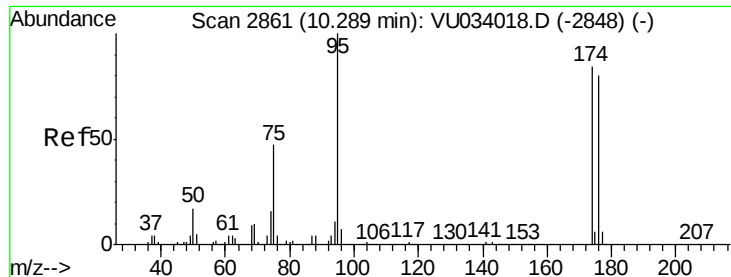
58 21.6 28.4 85.3#



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0

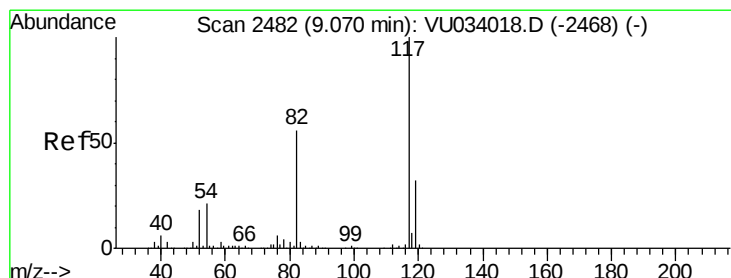
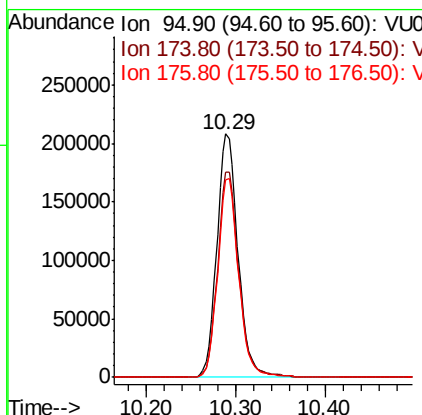
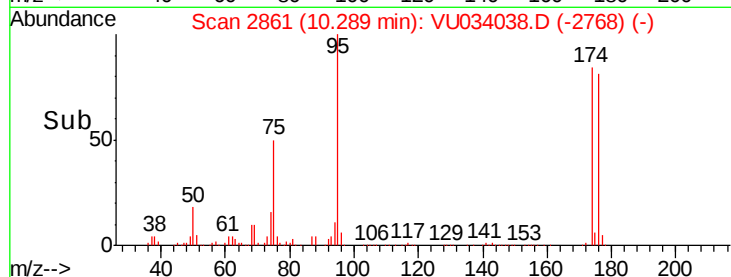
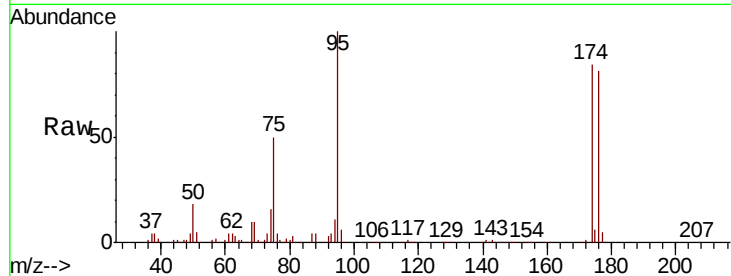




#62
4-Bromofluorobenzene
Concen: 43.972 ug/l
RT: 10.29 min Scan# 2861
Delta R.T. 0.00 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

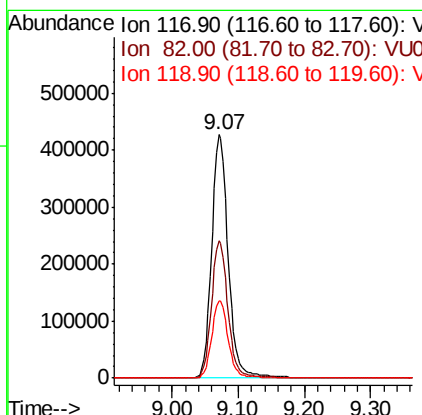
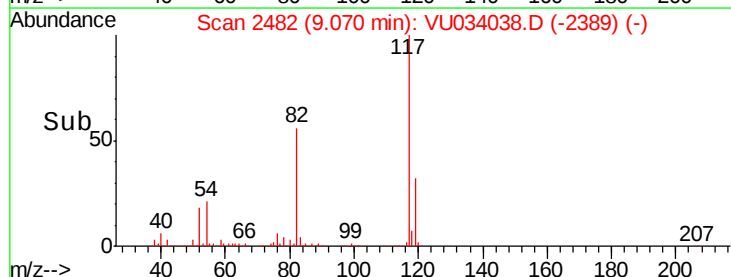
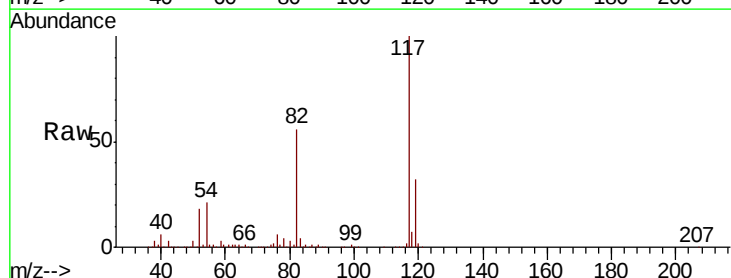
Instrument :
MSVOA_U
ClientSampleId :
T9-12-13-A2-(1.9)

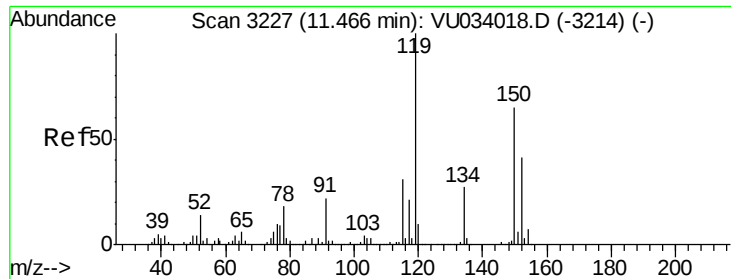
Tgt Ion: 95 Resp: 341462
Ion Ratio Lower Upper
95 100
174 84.5 0.0 168.8
176 81.1 0.0 161.8



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 9.07 min Scan# 2482
Delta R.T. 0.00 min
Lab File: VU034038.D
Acq: 28 Aug 2019 21:11

Tgt Ion: 117 Resp: 738890
Ion Ratio Lower Upper
117 100
82 56.3 45.1 67.7
119 31.9 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: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

T9-12-13-A2-(1.9)

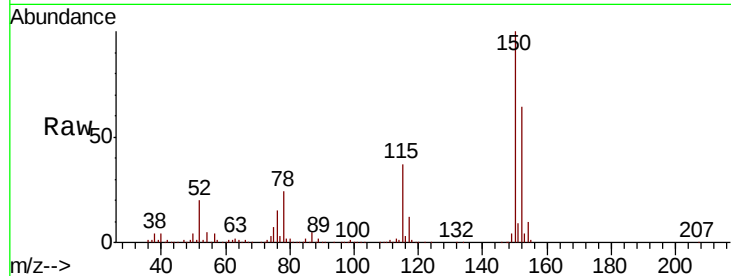
Tgt Ion:152 Resp: 367544

Ion Ratio Lower Upper

152 100

115 57.3 41.1 123.3

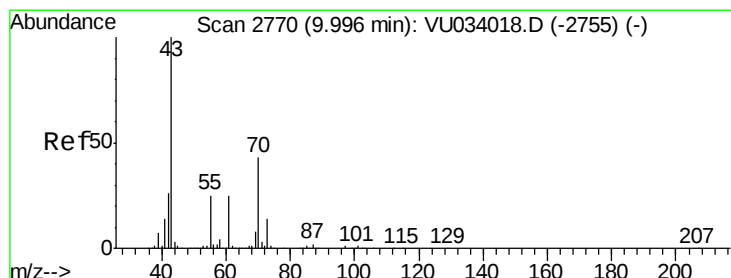
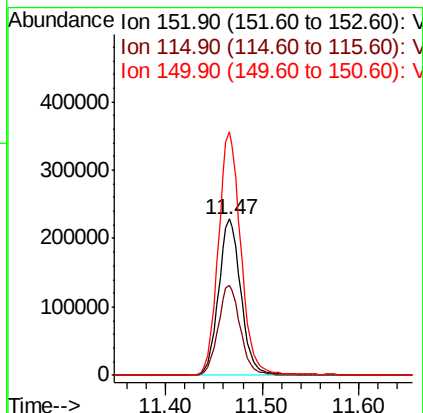
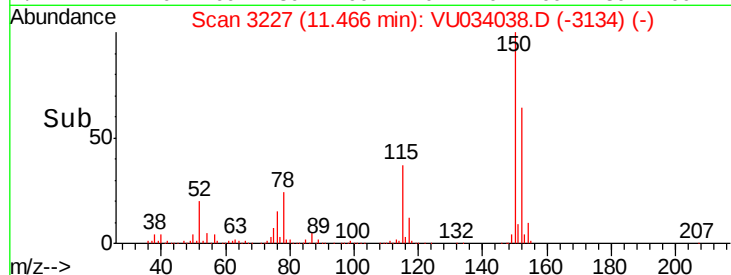
150 155.6 0.0 348.8



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: 0.299 ug/l

RT: 9.92 min Scan# 2746

Delta R.T. -0.08 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Tgt Ion: 43 Resp: 3106

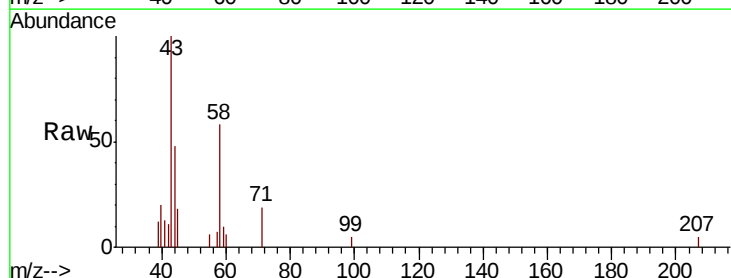
Ion Ratio Lower Upper

43 100

70 0.0 35.2 52.8#

55 2.4 20.5 30.7#

61 0.0 20.0 30.0#

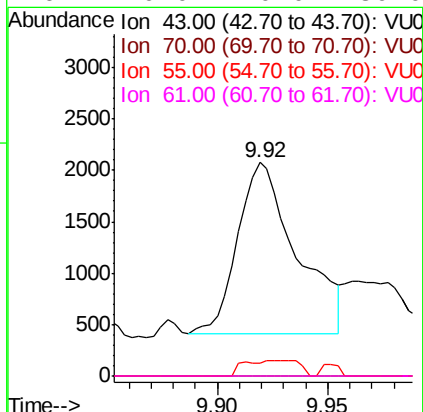
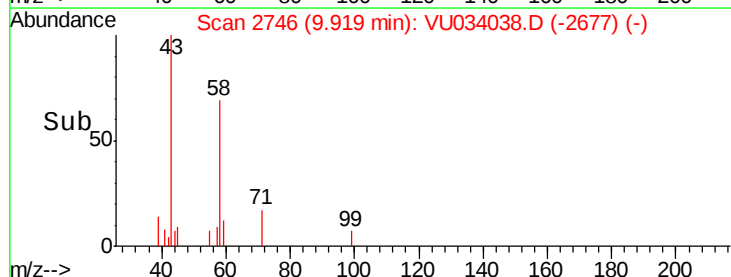


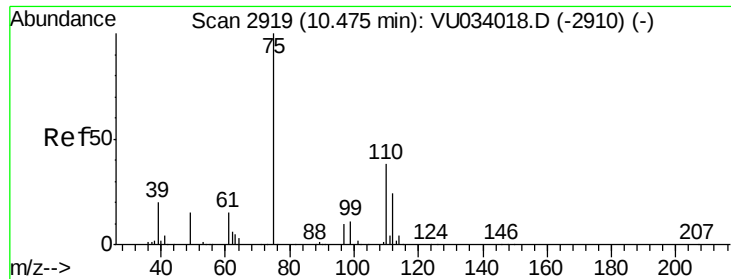
Abundance Ion 43.00 (42.70 to 43.70): VU0

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: 20.078 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.19 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

Instrument :

MSVOA_U

ClientSampleId :

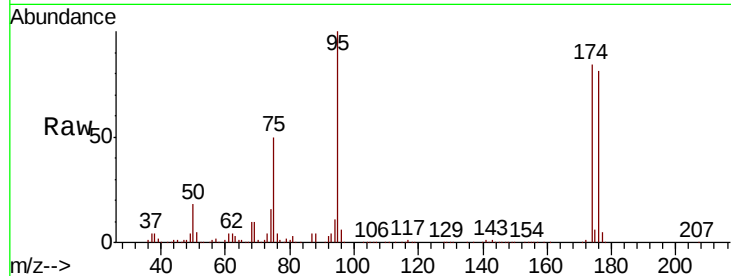
T9-12-13-A2-(1.9)

Tgt Ion: 75 Resp: 166320

Ion Ratio Lower Upper

75 100

77 1.2 20.1 60.2#



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 77.00 (76.70 to 77.70): VU0

10.29

120000

100000

80000

60000

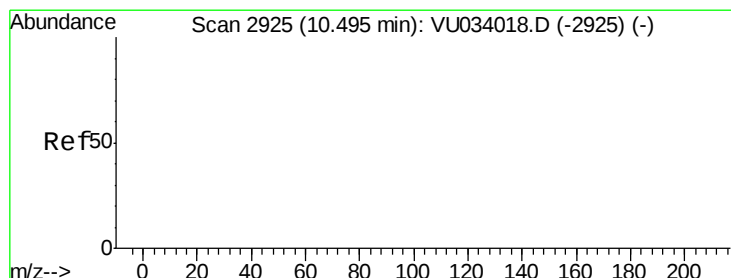
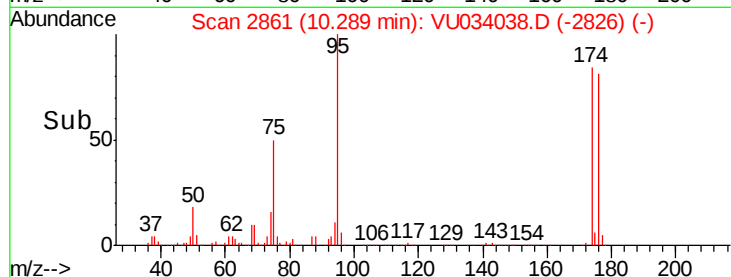
40000

20000

0

Time-->

10.20 10.30 10.40



#81

trans-1,4-Dichloro-2-butene

Concen: 67.607 ug/l

RT: 10.29 min Scan# 2861

Delta R.T. -0.21 min

Lab File: VU034038.D

Acq: 28 Aug 2019 21:11

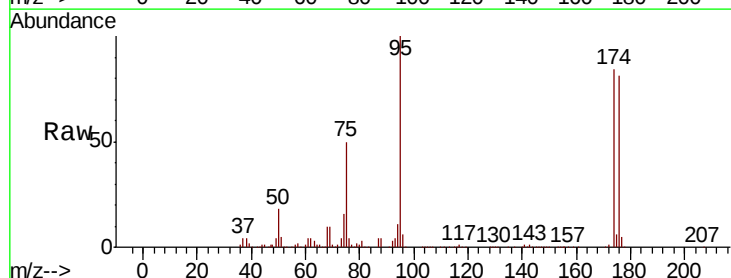
Tgt Ion: 75 Resp: 166320

Ion Ratio Lower Upper

75 100

53 0.2 0.0 0.0#

89 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): VU0

Ion 53.00 (52.70 to 53.70): VU0

Ion 88.90 (88.60 to 89.60): VU0

10.29

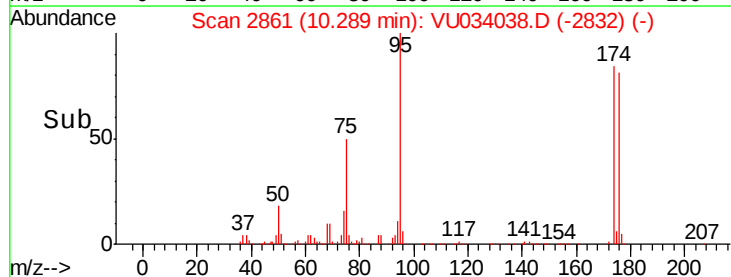
100000

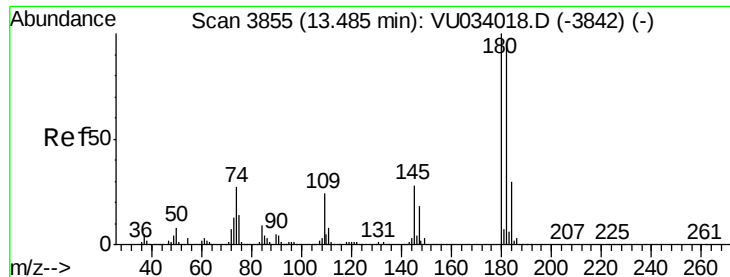
50000

0

Time-->

10.20 10.30 10.40

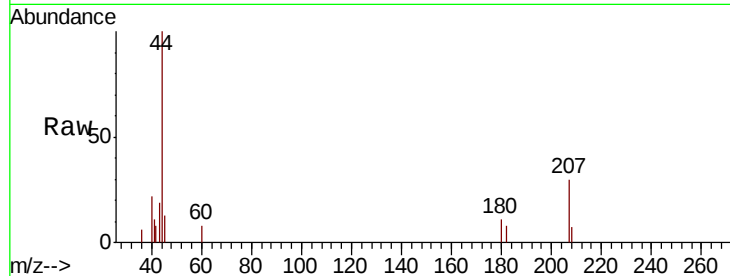




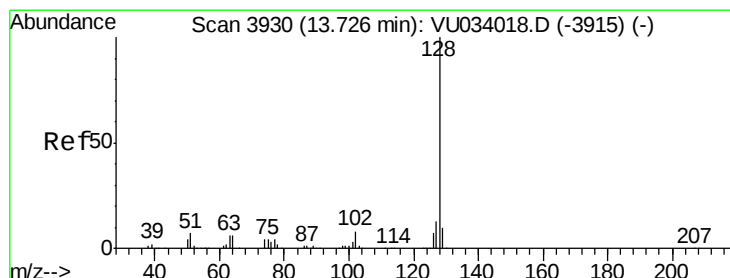
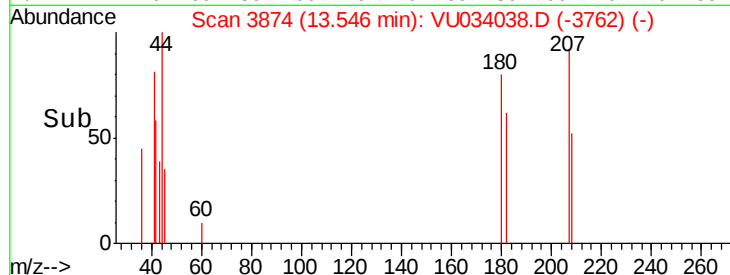
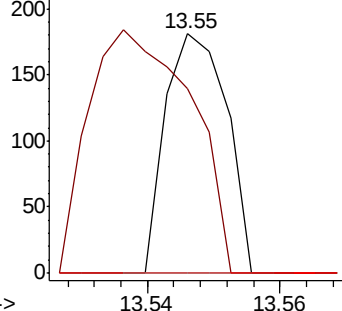
#93
 1,2,4-Trichlorobenzene
 Concen: 1.128 ug/l
 RT: 13.55 min Scan# 3874
 Delta R.T. 0.06 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

Instrument :
 MSVOA_U
 ClientSampleId :
 T9-12-13-A2-(1.9)

Tgt Ion:180 Resp: 116
 Ion Ratio Lower Upper
 180 100
 182 169.8 47.4 142.2#
 145 0.0 14.1 42.3#

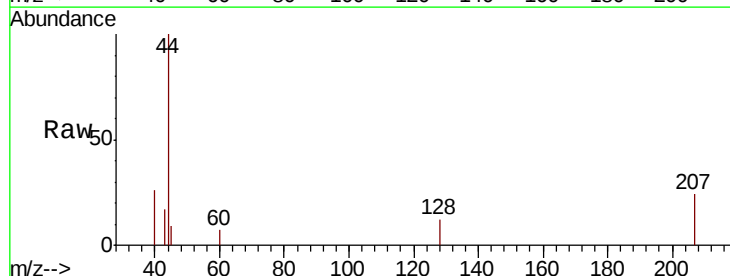


Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.80 (144.50 to 145.50): V



#95
 Naphthalene
 Concen: 1.804 ug/l
 RT: 13.79 min Scan# 3950
 Delta R.T. 0.06 min
 Lab File: VU034038.D
 Acq: 28 Aug 2019 21:11

Tgt Ion:128 Resp: 334
 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

