

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_U\DATA\VU031419\
 Data File : VU030007.D
 Acq On : 12 Mar 2019 14:37
 Operator : JC/SP
 Sample : K1850-01
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122017

Quant Time: Mar 13 12:34:20 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_U\METHOD\524U031419DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Wed Mar 13 04:21:52 2019
 Response via : Initial Calibration

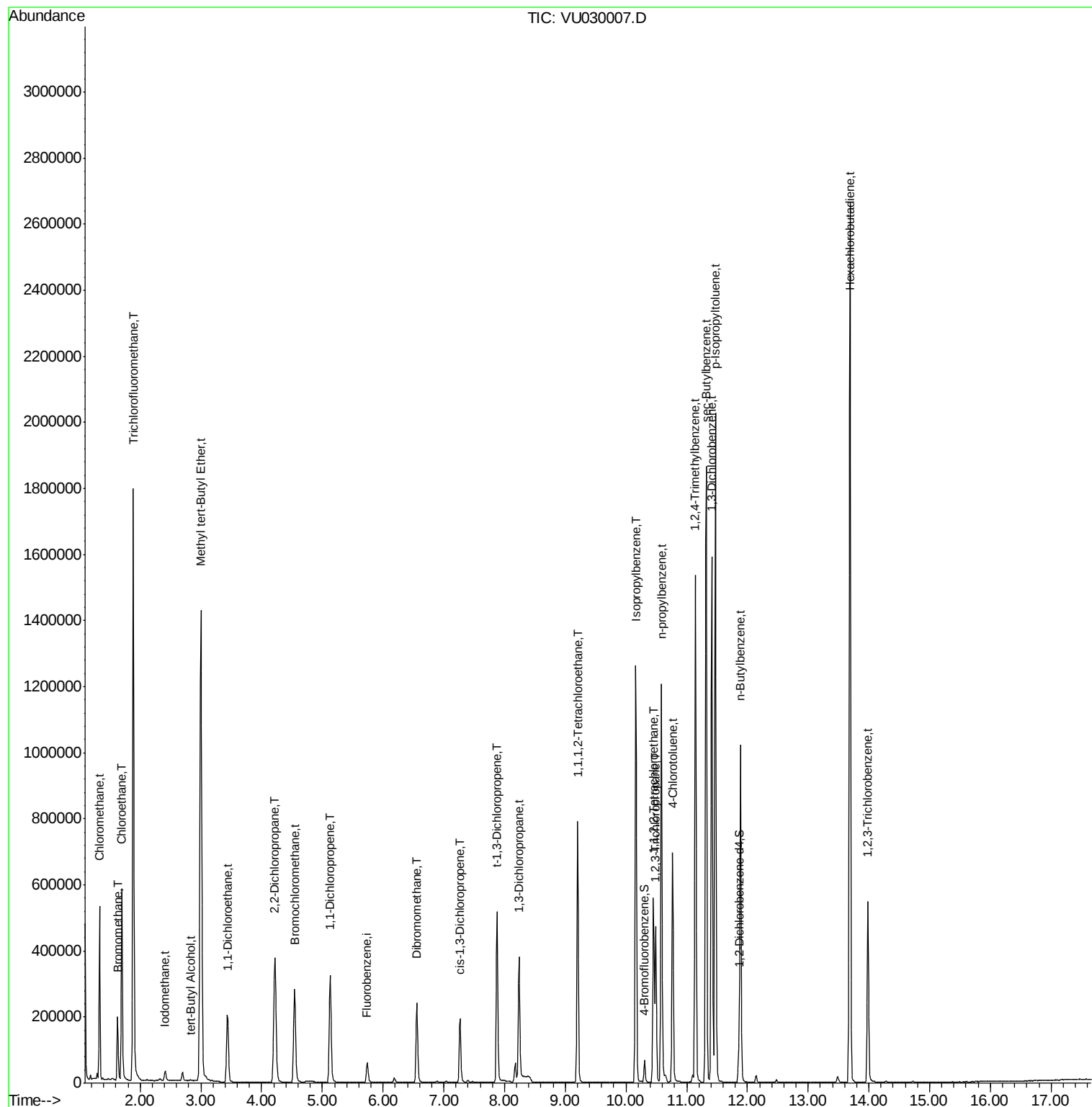
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Fluorobenzene	5.74	96	64260	1.00	ug/l	0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.31	95	23395	1.00	ug/l	0.00
Spiked Amount 1.000			Recovery	=	100.00%	
68) 1,2-Dichlorobenzene-d4	11.86	152	26407	0.99	ug/l	0.00
Spiked Amount 1.000			Recovery	=	99.00%	
Target Compounds						
						Qvalue
3) Chloromethane	1.33	50	350483	13.109	ug/l	98
5) Bromomethane	1.63	94	95561	7.296	ug/l	99
6) Chloroethane	1.70	64	388666	29.378	ug/l	99
7) Trichlorofluoromethane	1.89	101	1214072	40.841	ug/l	98
10) Iodomethane	2.41	142	32206	2.318	ug/l	97
17) 1,1-Dichloroethane	3.44	63	222470	7.107	ug/l	99
21) 2,2-Dichloropropane	4.22	77	342085	12.997	ug/l	93
24) tert-Butyl Alcohol	2.84	59	3209	2.503	ug/l #	74
25) Methyl tert-Butyl Ether	3.00	73	1663881	41.092	ug/l	100
26) Bromochloromethane	4.54	128	107911	11.984	ug/l	99
29) 1,1-Dichloropropene	5.13	75	194890	7.900	ug/l	100
43) Dibromomethane	6.56	93	93421	9.841	ug/l	98
50) t-1,3-Dichloropropene	7.88	75	304031	14.993	ug/l	99
51) cis-1,3-Dichloropropene	7.27	75	123948	4.862	ug/l	97
53) 1,3-Dichloropropane	8.24	76	239905	10.689	ug/l	99
60) 1,1,1,2-Tetrachloroethane	9.21	131	226964	12.930	ug/l	99
69) Isopropylbenzene	10.16	105	836966	10.193	ug/l	100
70) 1,1,2,2-Tetrachloroethane	10.45	83	295700	17.879	ug/l	98
71) 1,2,3-Trichloropropane	10.49	75	203522	16.369	ug/l #	91
73) n-propylbenzene	10.58	120	221940	9.528	ug/l	99
76) 4-Chlorotoluene	10.77	126	143883	6.910	ug/l	83
78) 1,2,4-Trimethylbenzene	11.14	105	863744	12.141	ug/l	99
79) sec-Butylbenzene	11.32	105	1313138	14.315	ug/l	100
81) p-Isopropyltoluene	11.47	119	1169597	15.201	ug/l	99
82) 1,3-Dichlorobenzene	11.41	146	708126	16.282	ug/l	100
84) n-Butylbenzene	11.89	91	565820	7.873	ug/l	100
88) Hexachlorobutadiene	13.69	225	532689	33.642	ug/l	98
90) 1,2,3-Trichlorobenzene	13.98	180	189976	7.178	ug/l	98
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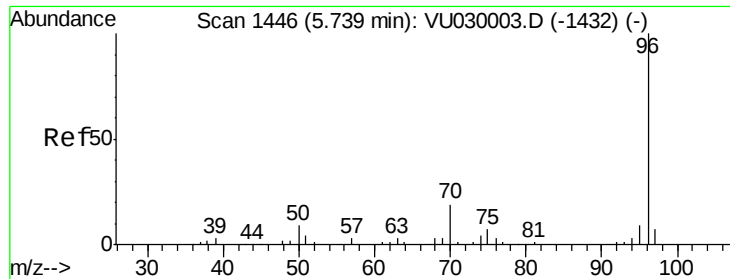
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_U\DATA\VU031419\
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Instrument :
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ClientSampleId :
38023-122017

Quant Time: Mar 13 12:34:20 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_U\METHOD\524U031419DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Wed Mar 13 04:21:52 2019
Response via : Initial Calibration





#1

Fluorobenzene

Concen: 1.000 ug/l

RT: 5.74 min Scan# 1446

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

Tgt Ion: 96 Resp: 64260

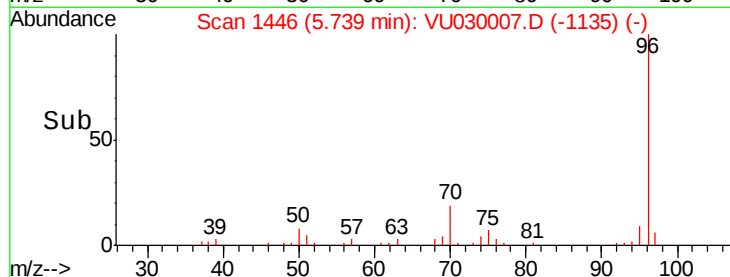
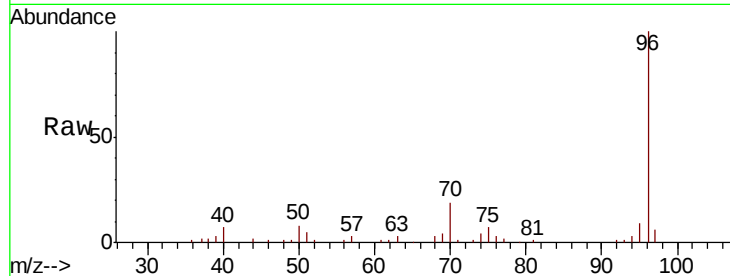
Ion Ratio Lower Upper

96 100

70 18.3 15.5 23.3

95 9.0 6.6 9.8

97 6.2 0.0 0.0#

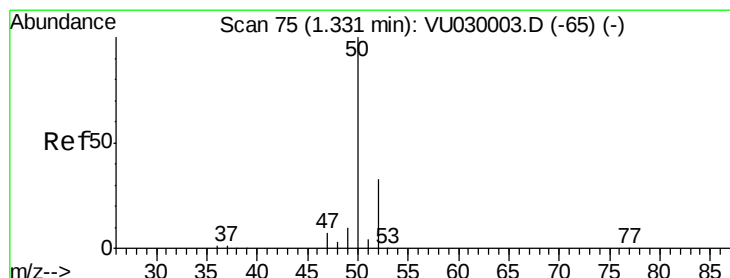
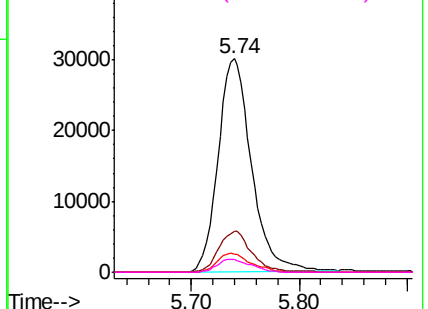


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 70.00 (69.70 to 70.70): VU0

Ion 95.00 (94.70 to 95.70): VU0

Ion 97.00 (96.70 to 97.70): VU0



#3

Chloromethane

Concen: 13.109 ug/l

RT: 1.33 min Scan# 75

Delta R.T. -0.00 min

Lab File: VU030007.D

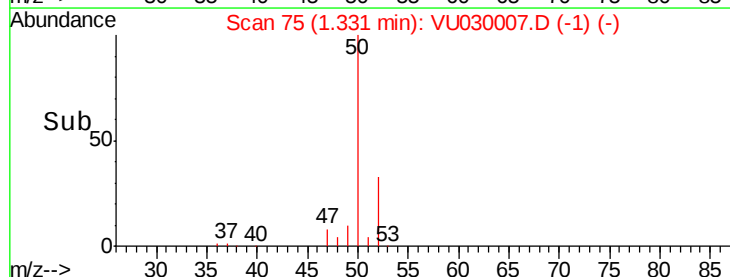
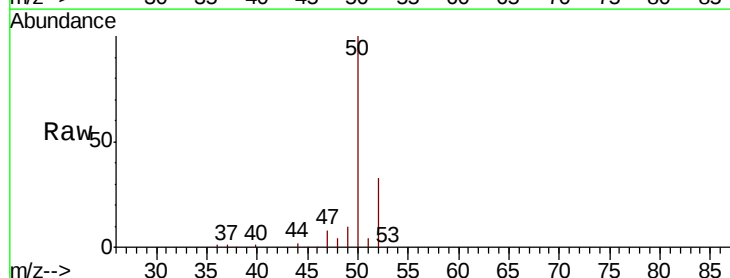
Acq: 12 Mar 2019 14:37

Tgt Ion: 50 Resp: 350483

Ion Ratio Lower Upper

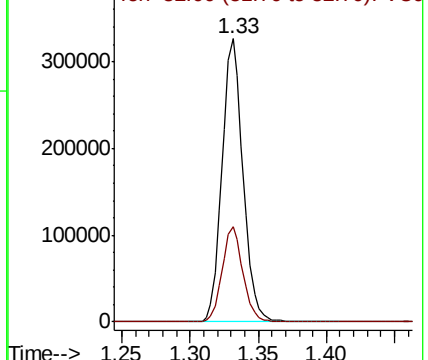
50 100

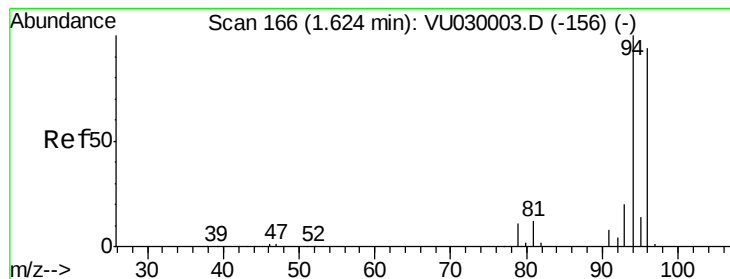
52 33.5 26.1 39.1



Abundance Ion 50.00 (49.70 to 50.70): VU0

Ion 52.00 (51.70 to 52.70): VU0





#5

Bromomethane

Concen: 7.296 ug/l

RT: 1.63 min Scan# 167

Delta R.T. 0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

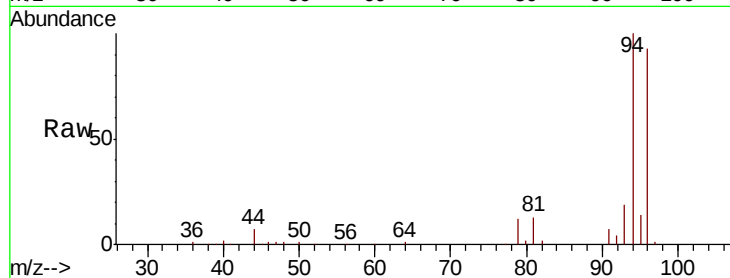
38023-122017

Tgt Ion: 94 Resp: 95561

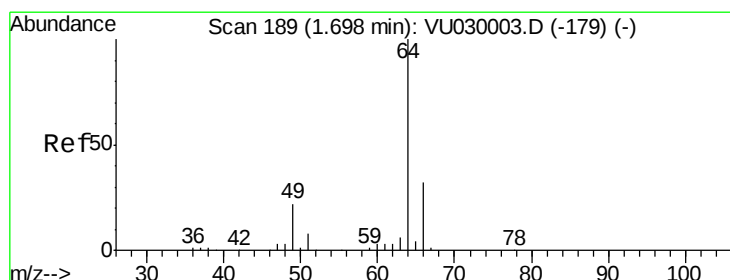
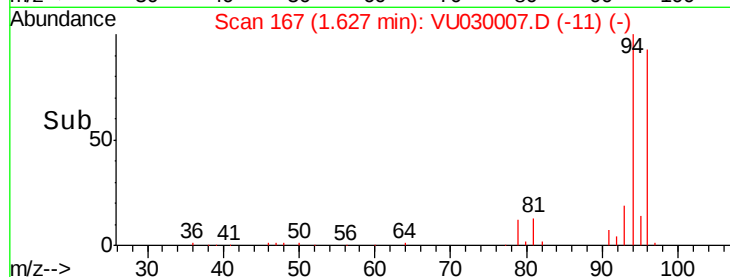
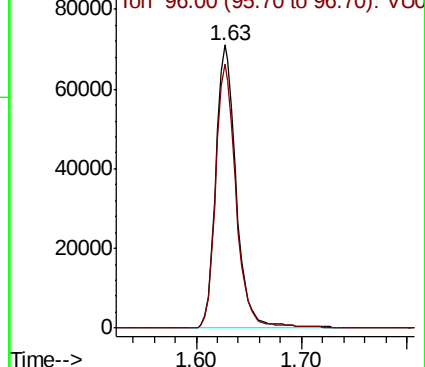
Ion Ratio Lower Upper

94 100

96 93.4 75.2 112.8



Abundance Ion 94.00 (93.70 to 94.70): VU030007.D (-156) (-)



#6

Chloroethane

Concen: 29.378 ug/l

RT: 1.70 min Scan# 189

Delta R.T. -0.00 min

Lab File: VU030007.D

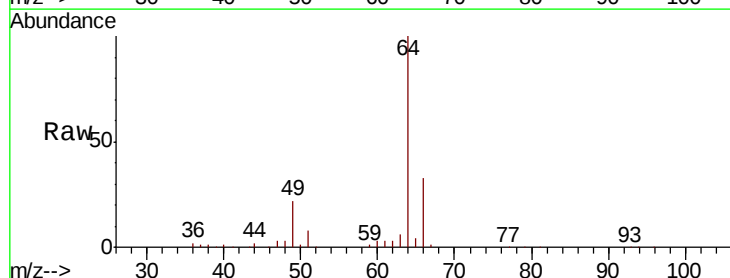
Acq: 12 Mar 2019 14:37

Tgt Ion: 64 Resp: 388666

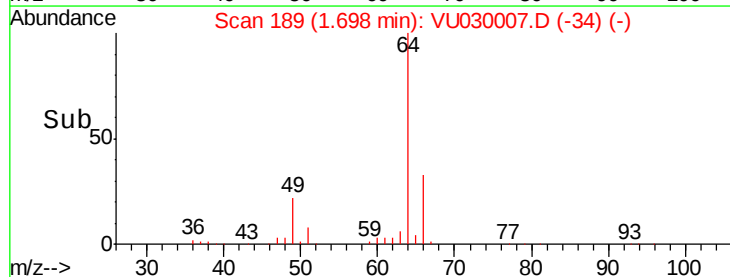
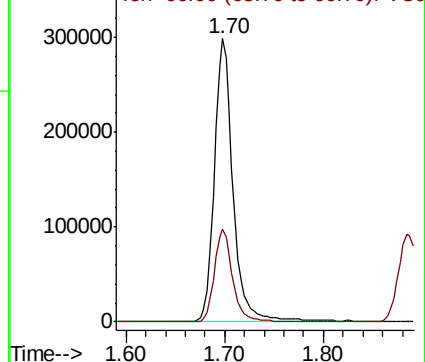
Ion Ratio Lower Upper

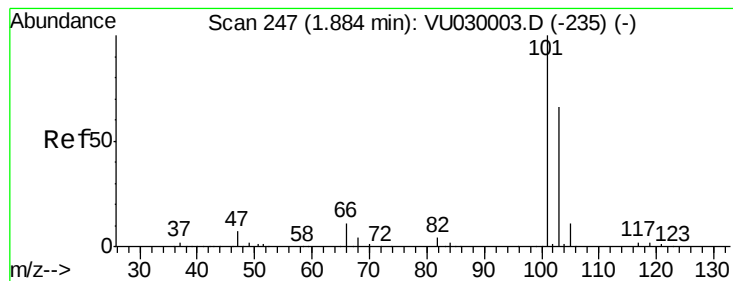
64 100

66 32.9 25.8 38.6



Abundance Ion 64.00 (63.70 to 64.70): VU030007.D (-179) (-)



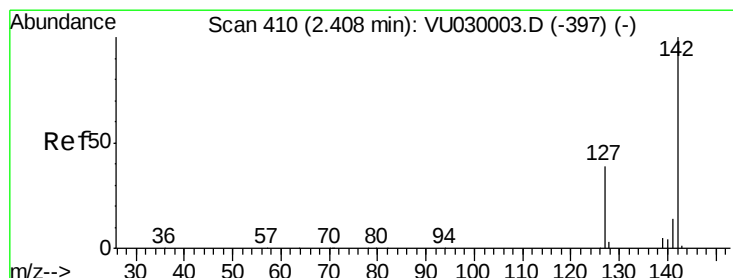
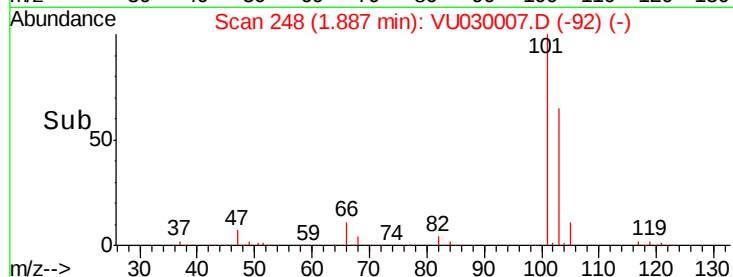
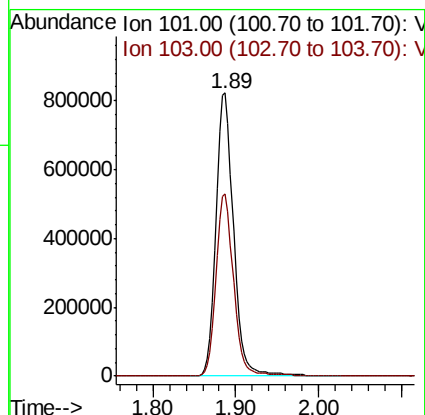
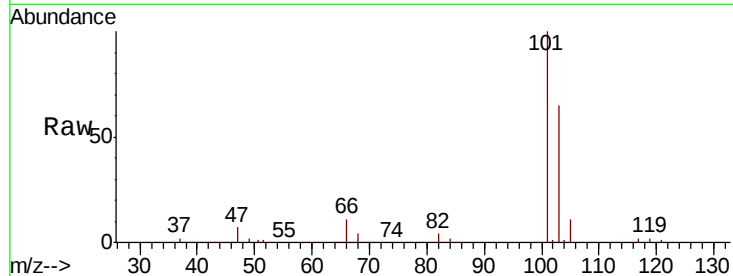


#7

Trichlorofluoromethane
 Concen: 40.841 ug/l
 RT: 1.89 min Scan# 248
 Delta R.T. 0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122017

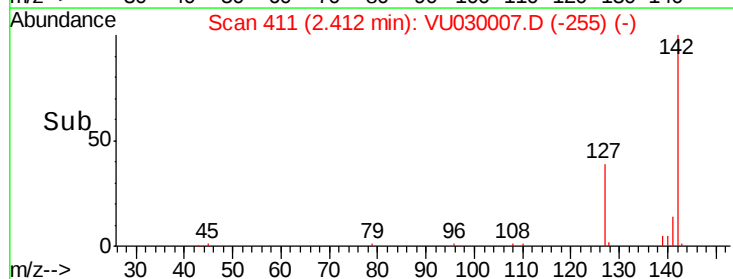
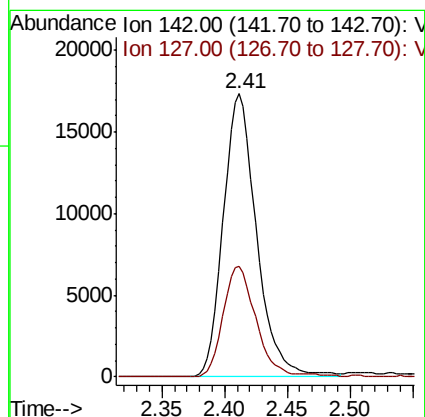
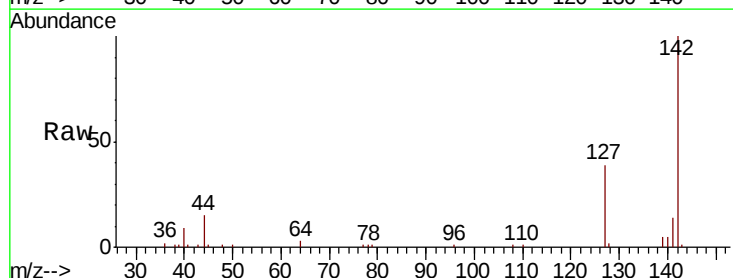
Tgt Ion:101 Resp: 1214072
 Ion Ratio Lower Upper
 101 100
 103 64.6 52.6 79.0

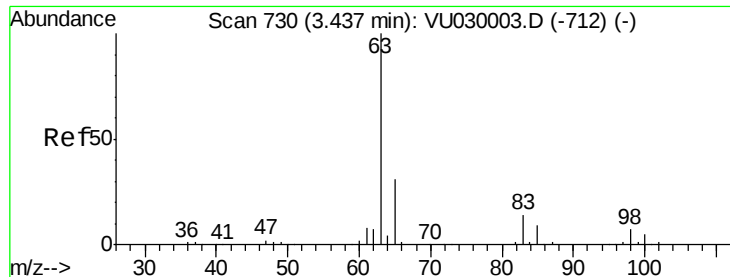


#10

Iodomethane
 Concen: 2.318 ug/l
 RT: 2.41 min Scan# 411
 Delta R.T. 0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

Tgt Ion:142 Resp: 32206
 Ion Ratio Lower Upper
 142 100
 127 38.6 32.2 48.4

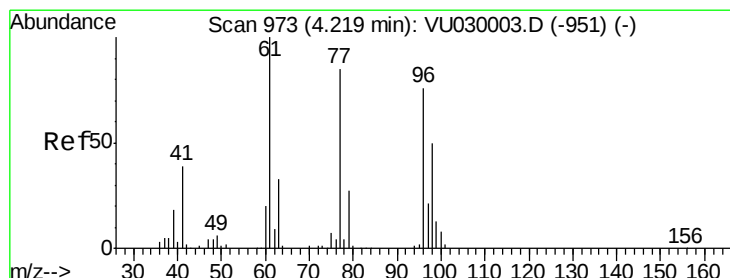
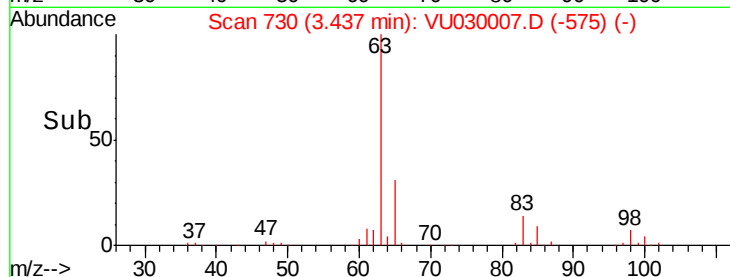
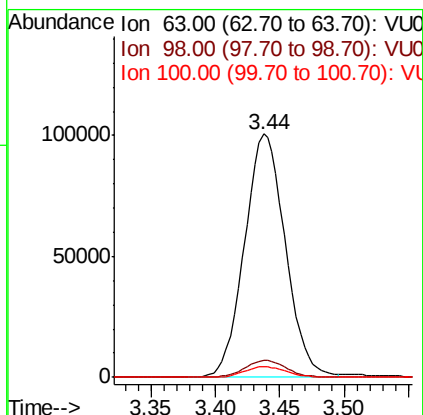
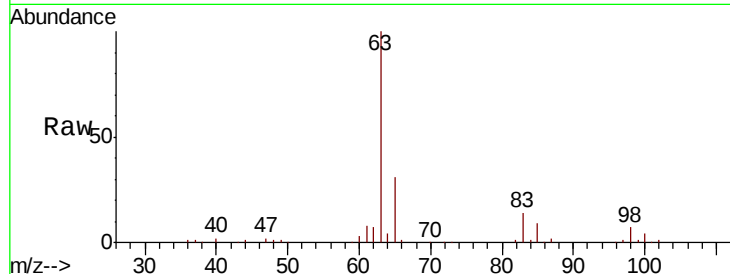




#17
 1,1-Dichloroethane
 Concen: 7.107 ug/l
 RT: 3.44 min Scan# 730
 Delta R.T. -0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

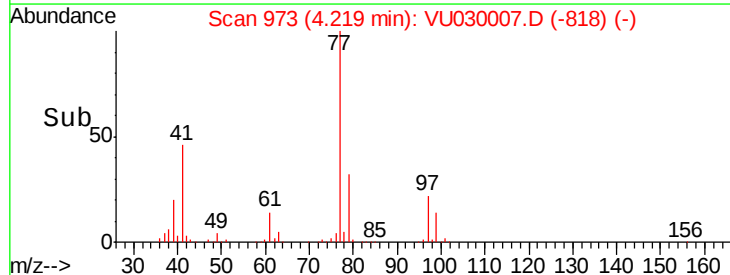
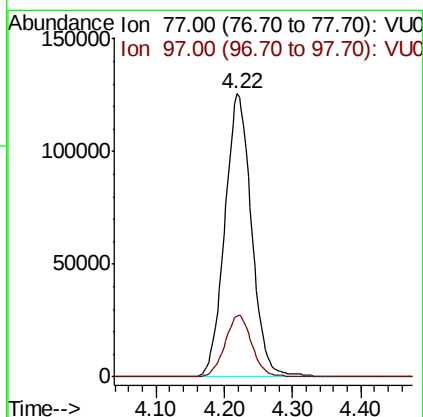
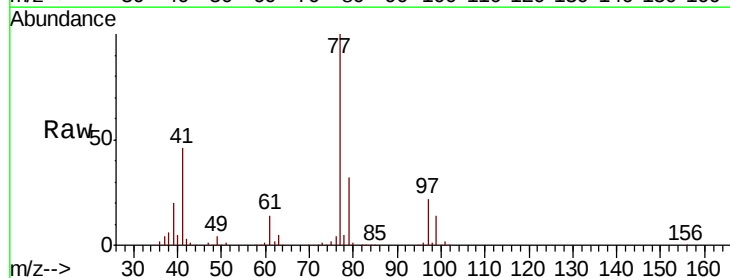
Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122017

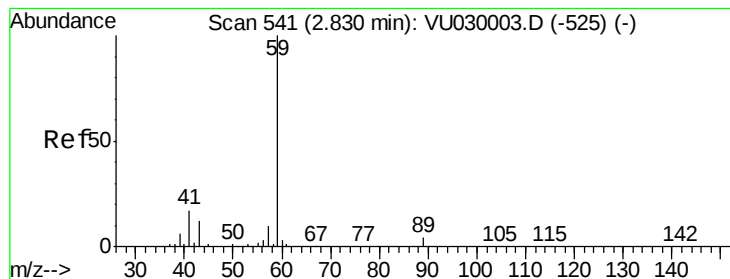
Tgt Ion:	63	Resp:	222470
Ion	Ratio	Lower	Upper
63	100		
98	7.1	3.4	10.2
100	4.4	2.3	6.8



#21
 2,2-Dichloropropane
 Concen: 12.997 ug/l
 RT: 4.22 min Scan# 973
 Delta R.T. -0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

Tgt Ion:	77	Resp:	342085
Ion	Ratio	Lower	Upper
77	100		
97	21.8	20.2	30.4





#24

tert-Butyl Alcohol

Concen: 2.503 ug/l

RT: 2.84 min Scan# 543

Delta R.T. 0.01 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

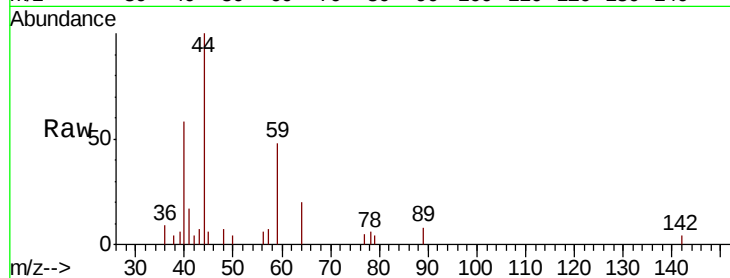
38023-122017

Tgt Ion: 59 Resp: 3209

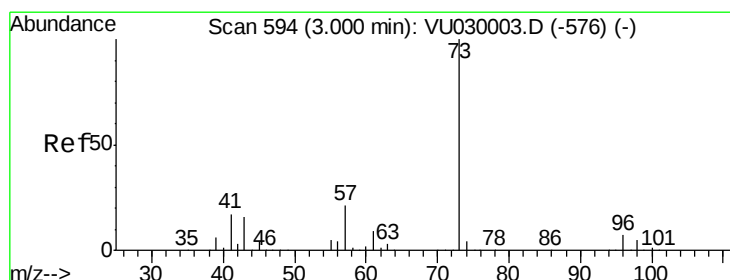
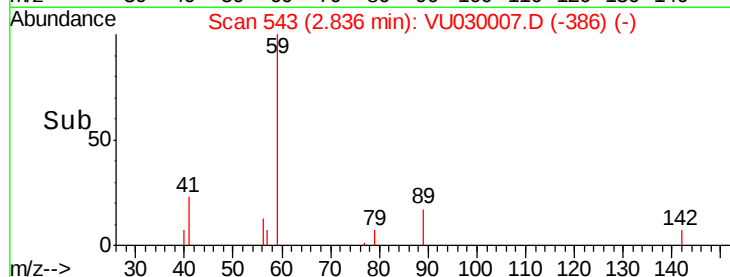
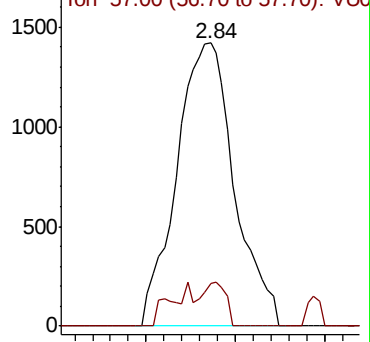
Ion Ratio Lower Upper

59 100

57 0.0 7.7 11.5#



Abundance Ion 59.00 (58.70 to 59.70): VU030003.D (-525) (-)



#25

Methyl tert-Butyl Ether

Concen: 41.092 ug/l

RT: 3.00 min Scan# 594

Delta R.T. -0.00 min

Lab File: VU030007.D

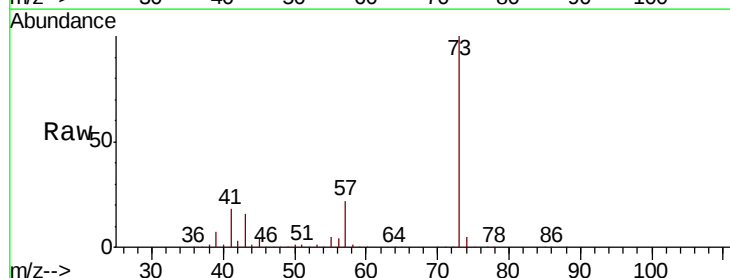
Acq: 12 Mar 2019 14:37

Tgt Ion: 73 Resp: 1663881

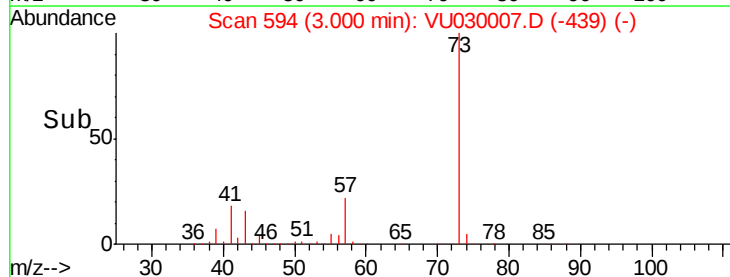
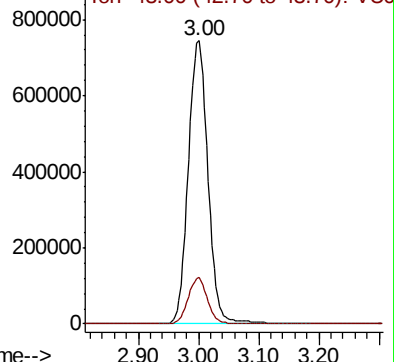
Ion Ratio Lower Upper

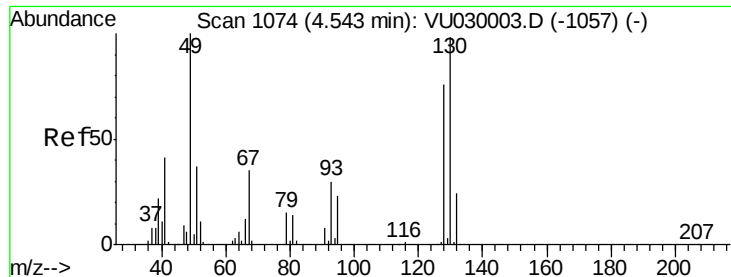
73 100

43 16.3 13.1 19.7



Abundance Ion 73.00 (72.70 to 73.70): VU030003.D (-576) (-)





#26

Bromochloromethane

Concen: 11.984 ug/l

RT: 4.54 min Scan# 1074

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

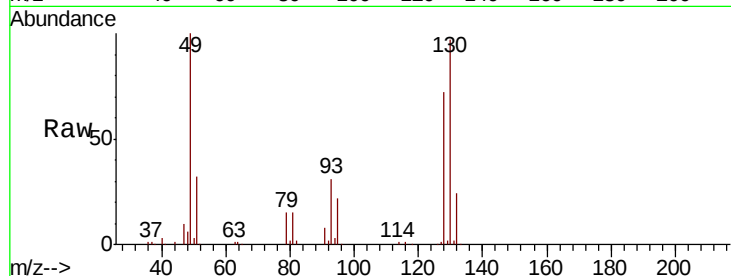
Tgt Ion:128 Resp: 107911

Ion Ratio Lower Upper

128 100

49 134.8 0.0 270.4

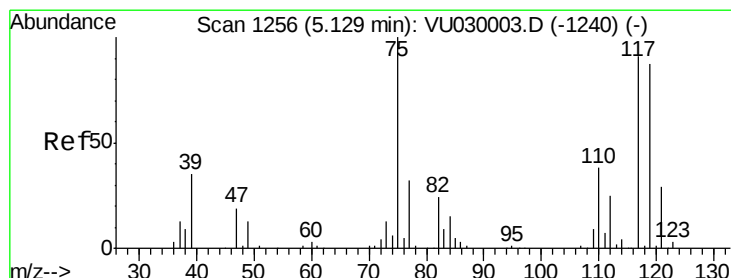
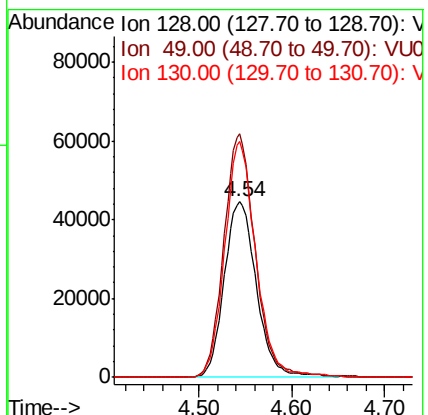
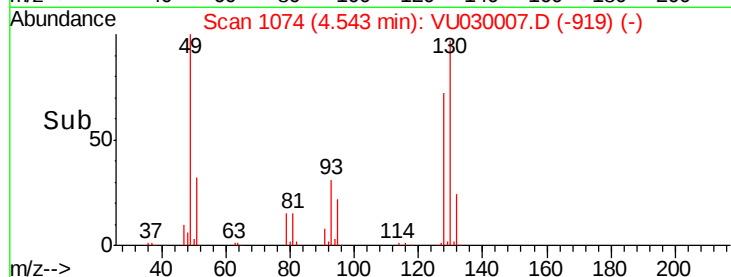
130 129.6 102.6 153.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VU0

Ion 130.00 (129.70 to 130.70): V



#29

1,1-Dichloropropene

Concen: 7.900 ug/l

RT: 5.13 min Scan# 1256

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

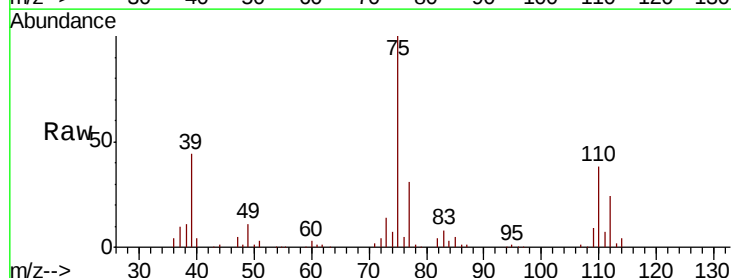
Tgt Ion: 75 Resp: 194890

Ion Ratio Lower Upper

75 100

110 38.3 19.1 57.3

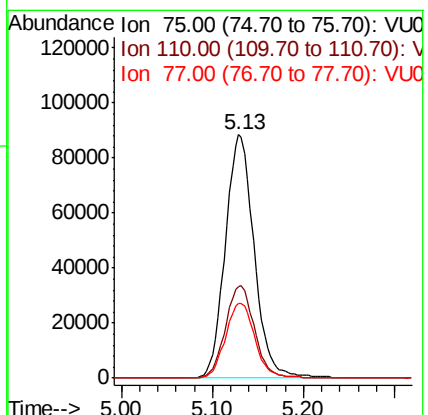
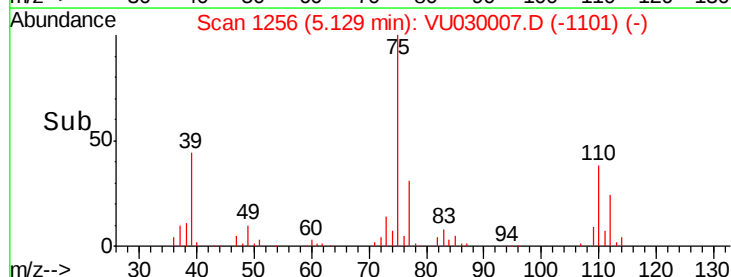
77 31.4 25.2 37.8

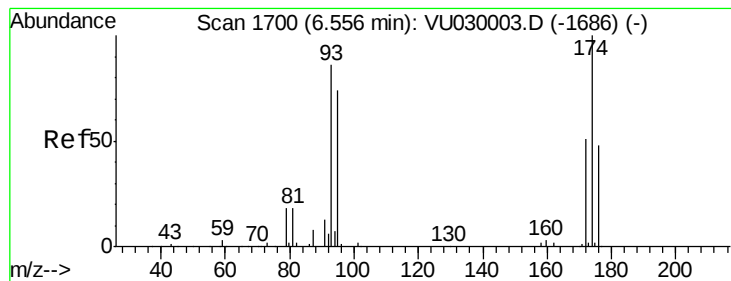


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 110.00 (109.70 to 110.70): V

Ion 77.00 (76.70 to 77.70): VU0





#43

Dibromomethane

Concen: 9.841 ug/l

RT: 6.56 min Scan# 1700

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

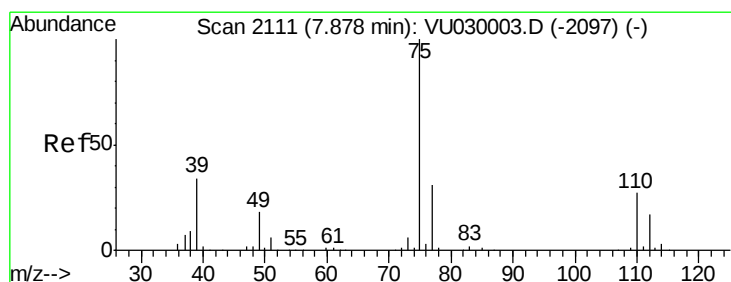
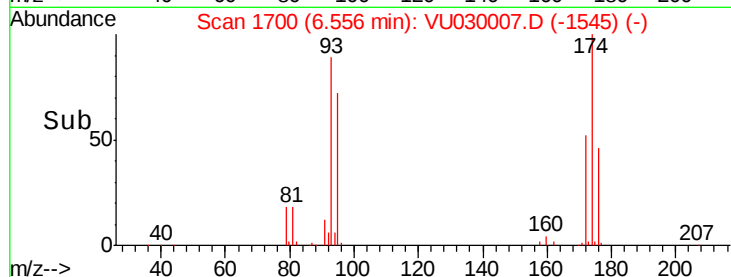
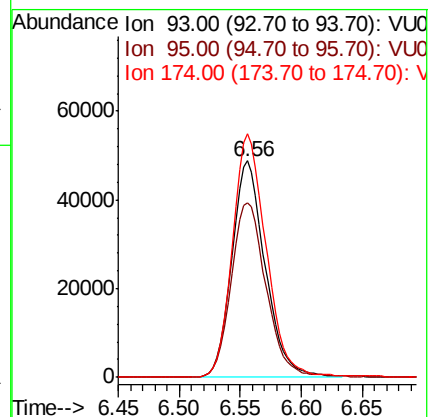
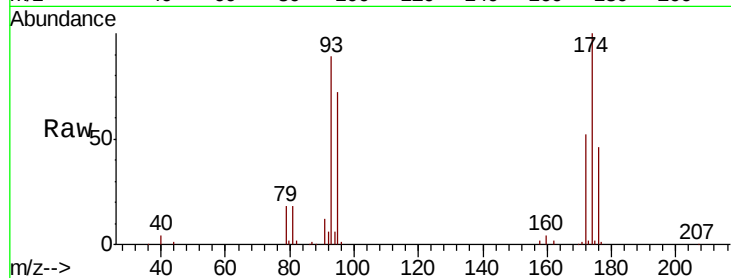
Tgt Ion: 93 Resp: 93421

Ion Ratio Lower Upper

93 100

95 84.2 68.6 102.8

174 113.1 91.8 137.8



#50

t-1,3-Dichloropropene

Concen: 14.993 ug/l

RT: 7.88 min Scan# 2111

Delta R.T. -0.00 min

Lab File: VU030007.D

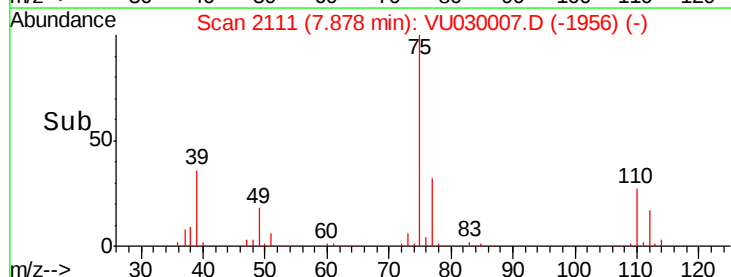
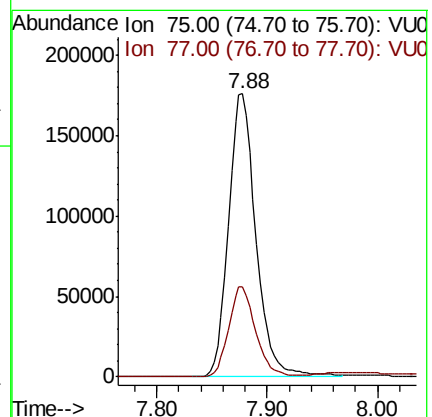
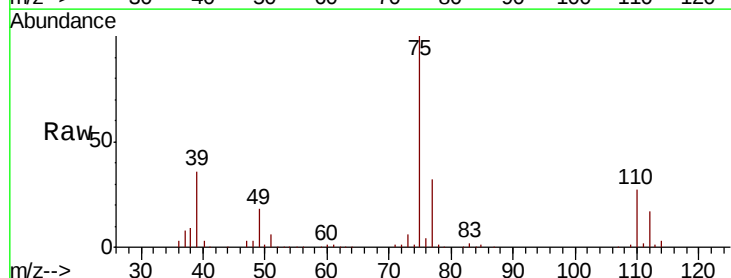
Acq: 12 Mar 2019 14:37

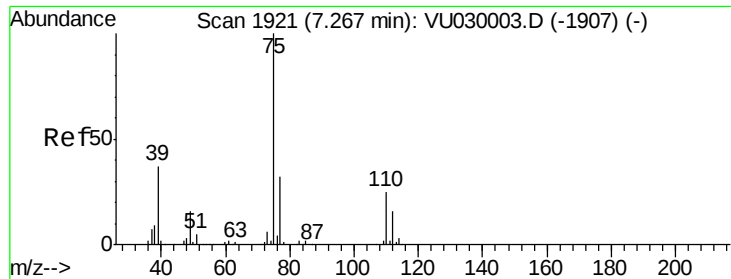
Tgt Ion: 75 Resp: 304031

Ion Ratio Lower Upper

75 100

77 31.7 25.1 37.7

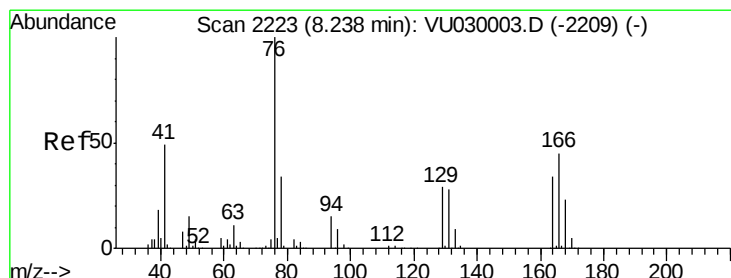
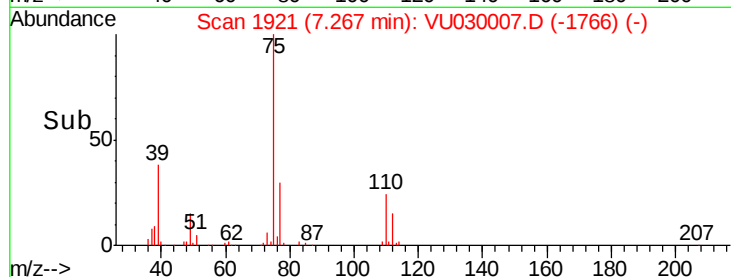
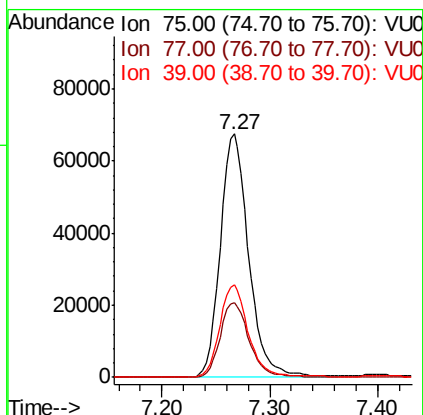
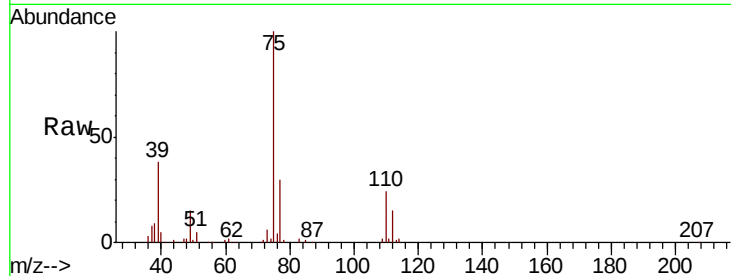




#51
 cis-1,3-Dichloropropene
 Concen: 4.862 ug/l
 RT: 7.27 min Scan# 1921
 Delta R.T. -0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

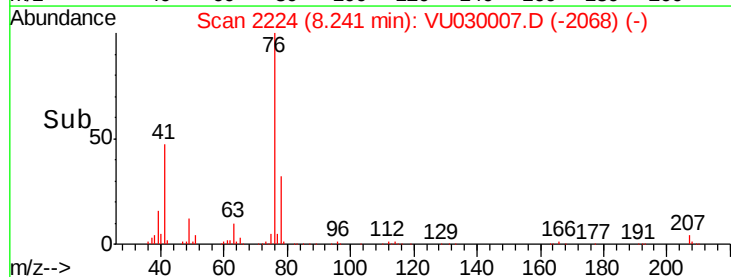
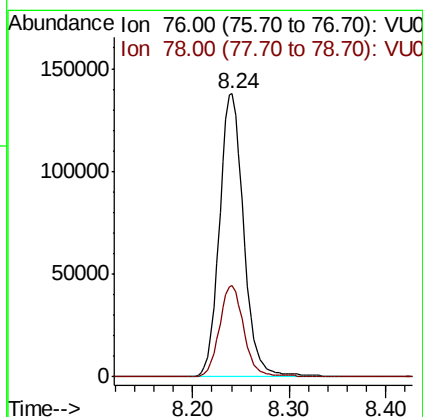
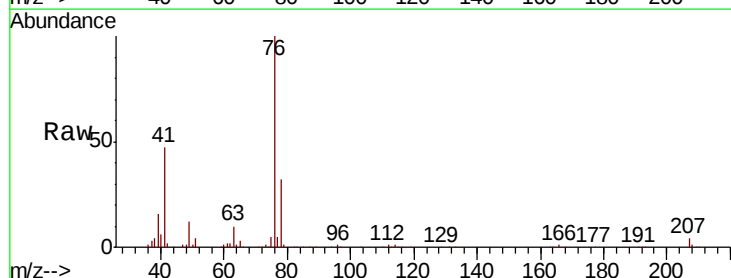
Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122017

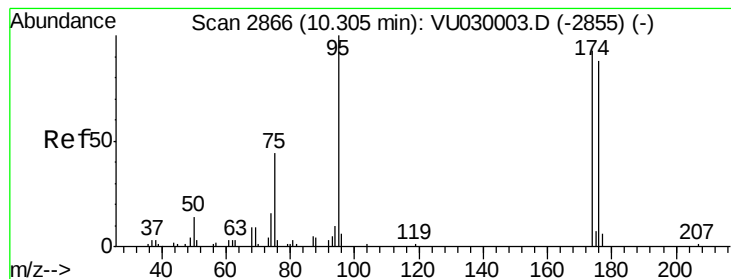
Tgt Ion: 75 Resp: 123948
 Ion Ratio Lower Upper
 75 100
 77 30.5 26.0 39.0
 39 37.9 29.5 44.3



#53
 1,3-Dichloropropane
 Concen: 10.689 ug/l
 RT: 8.24 min Scan# 2224
 Delta R.T. 0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

Tgt Ion: 76 Resp: 239905
 Ion Ratio Lower Upper
 76 100
 78 32.5 26.4 39.6





#57

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 10.31 min Scan# 2866

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

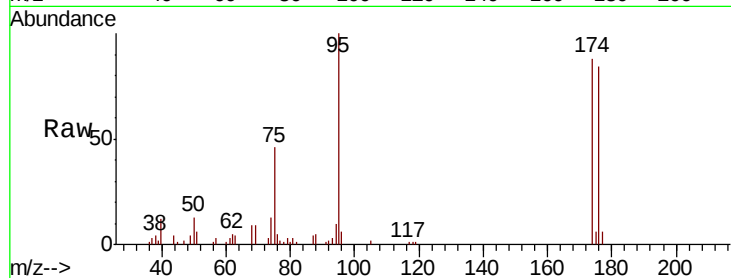
Tgt Ion: 95 Resp: 23395

Ion Ratio Lower Upper

95 100

174 91.3 78.1 117.1

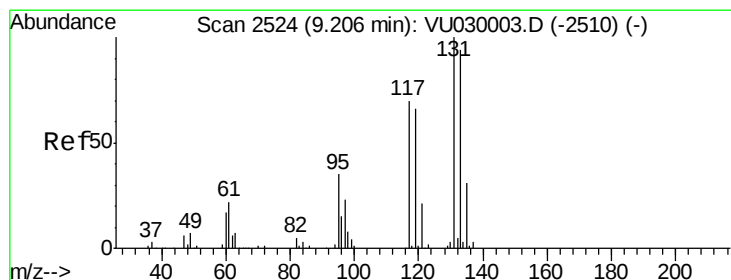
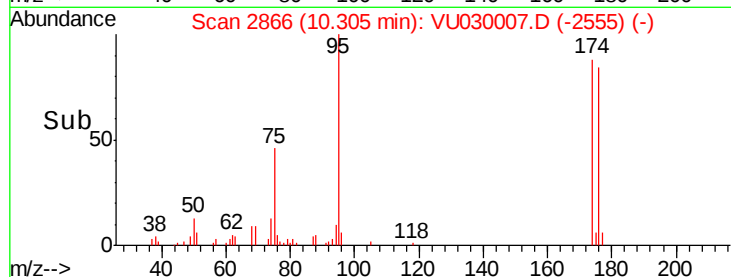
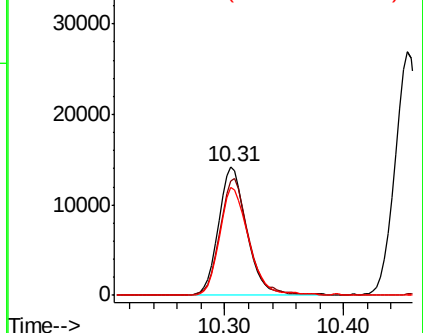
176 86.4 70.8 106.2



Abundance Ion 95.00 (94.70 to 95.70): VU030007.D (-2855) (-)

Ion 174.00 (173.70 to 174.70): VU030007.D (-2855) (-)

Ion 176.00 (175.70 to 176.70): VU030007.D (-2855) (-)



#60

1,1,1,2-Tetrachloroethane

Concen: 12.930 ug/l

RT: 9.21 min Scan# 2524

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

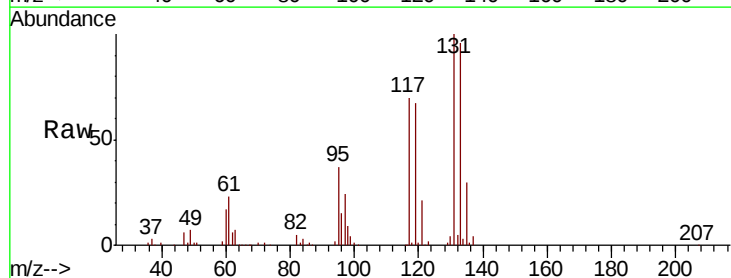
Tgt Ion: 131 Resp: 226964

Ion Ratio Lower Upper

131 100

133 95.7 75.6 113.4

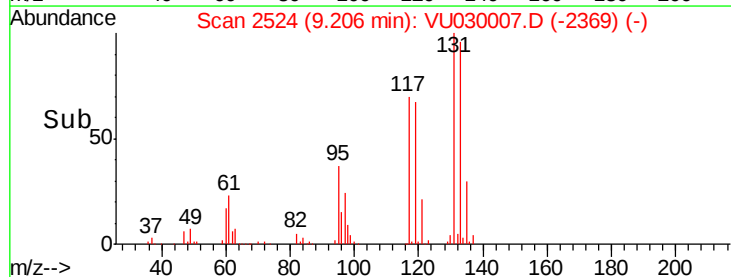
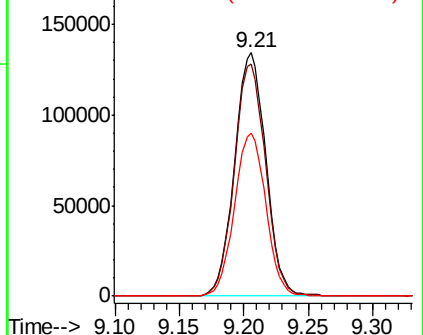
119 67.1 53.3 79.9

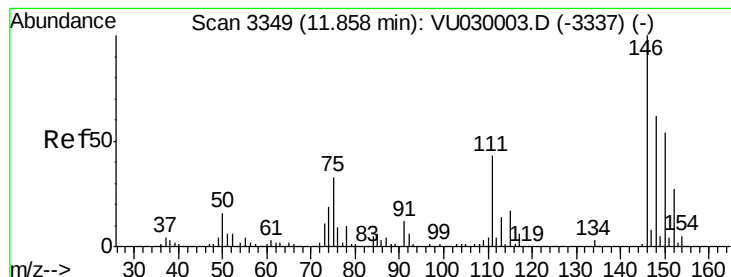


Abundance Ion 131.00 (130.70 to 131.70): VU030007.D (-2510) (-)

Ion 133.00 (132.70 to 133.70): VU030007.D (-2510) (-)

Ion 119.00 (118.70 to 119.70): VU030007.D (-2510) (-)





#68

1,2-Dichlorobenzene-d4

Concen: N.D. ug/l

RT: 11.86 min Scan# 3349

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

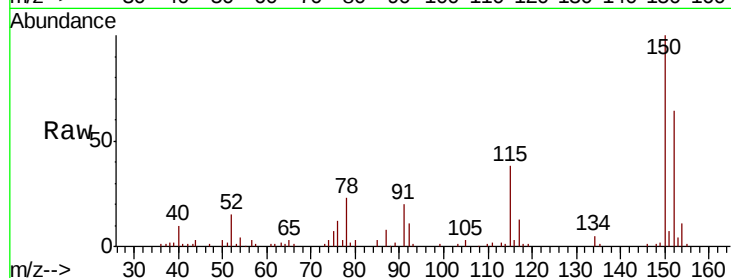
Tgt Ion:152 Resp: 26407

Ion Ratio Lower Upper

152 100

115 55.3 0.0 126.8

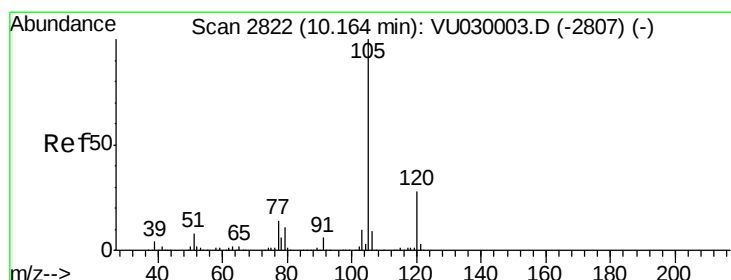
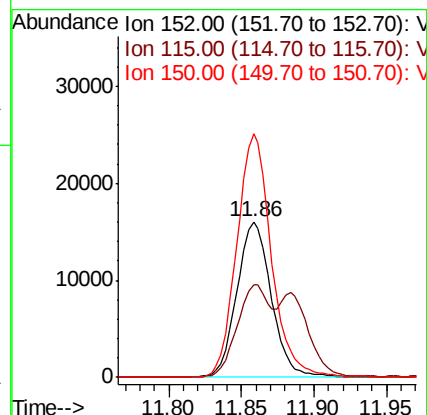
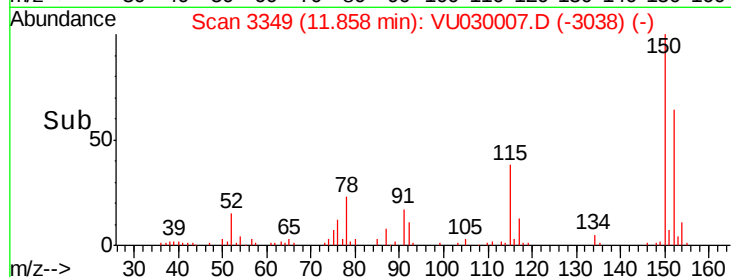
150 156.5 0.0 634.2



Abundance Ion 152.00 (151.70 to 152.70): V

Ion 115.00 (114.70 to 115.70): V

Ion 150.00 (149.70 to 150.70): V



#69

Isopropylbenzene

Concen: 10.193 ug/l

RT: 10.16 min Scan# 2822

Delta R.T. -0.00 min

Lab File: VU030007.D

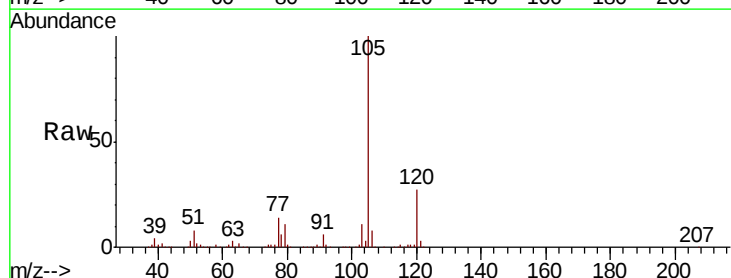
Acq: 12 Mar 2019 14:37

Tgt Ion:105 Resp: 836966

Ion Ratio Lower Upper

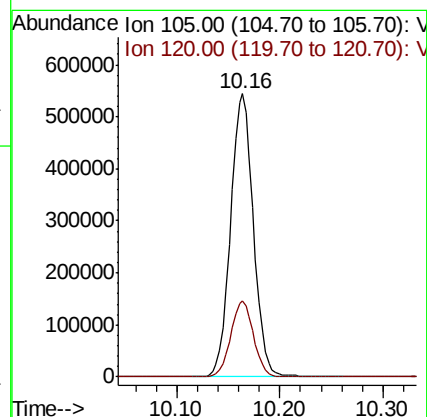
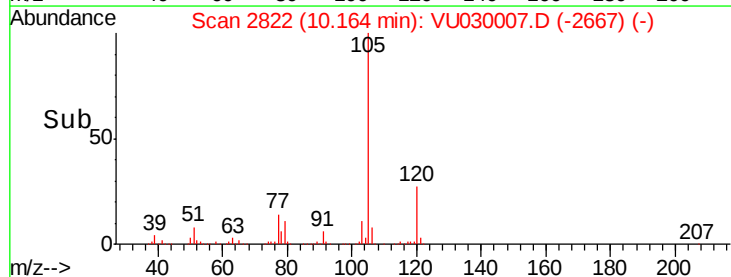
105 100

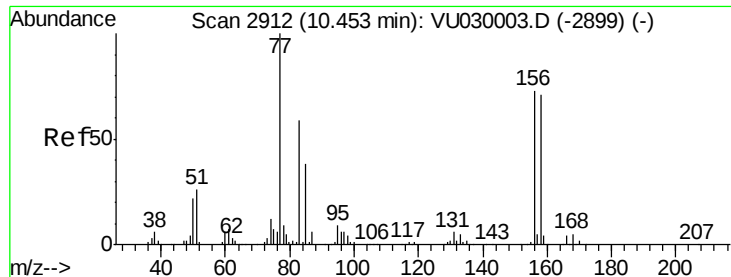
120 26.8 13.5 40.5



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#70

1,1,2,2-Tetrachloroethane

Concen: 17.879 ug/l

RT: 10.45 min Scan# 2912

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

38023-122017

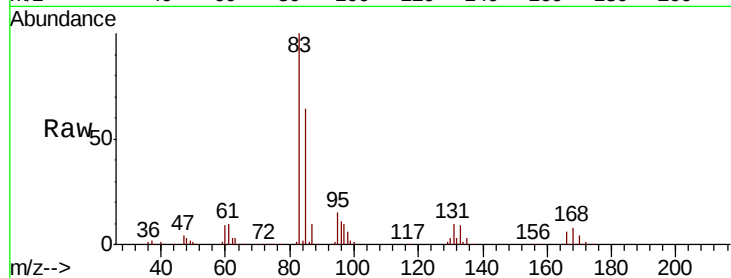
Tgt Ion: 83 Resp: 295700

Ion Ratio Lower Upper

83 100

131 9.5 8.4 12.6

85 64.1 52.6 78.8



Abundance Ion 83.00 (82.70 to 83.70): VU030007.D (-2757) (-)

Ion 131.00 (130.70 to 131.70): VU030007.D (-2757) (-)

Ion 85.00 (84.70 to 85.70): VU030007.D (-2757) (-)

200000

150000

100000

50000

0

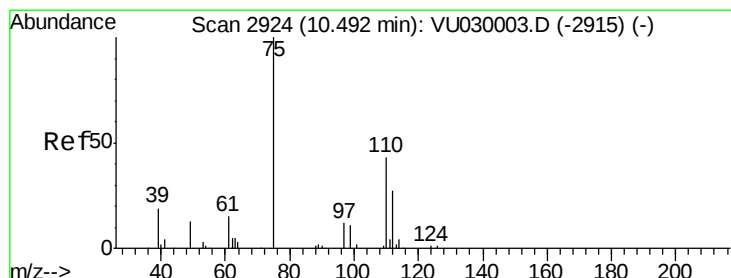
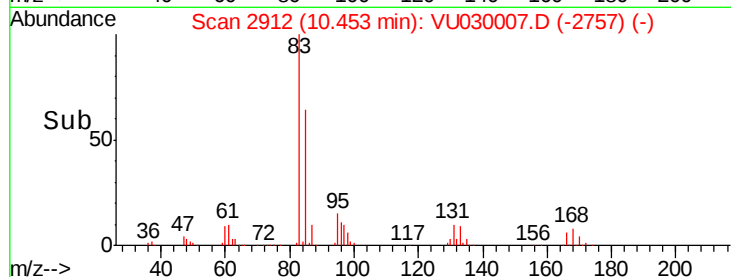
10.45

10.40

10.50

10.60

Time-->



#71

1,2,3-Trichloropropane

Concen: 16.369 ug/l

RT: 10.49 min Scan# 2924

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Tgt Ion: 75 Resp: 203522

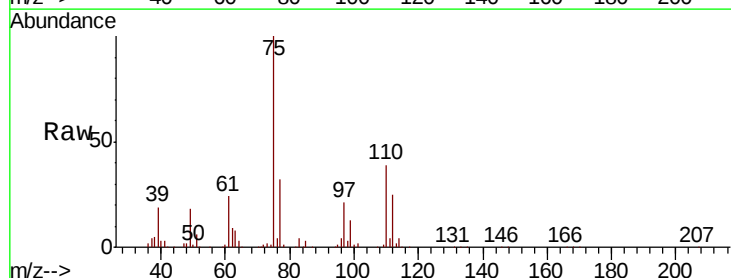
Ion Ratio Lower Upper

75 100

77 31.6 0.0 16.8#

110 38.7 0.0 76.8

97 21.8 0.0 40.8



Abundance Ion 75.00 (74.70 to 75.70): VU030007.D (-2769) (-)

Ion 77.00 (76.70 to 77.70): VU030007.D (-2769) (-)

Ion 110.00 (109.70 to 110.70): VU030007.D (-2769) (-)

Ion 97.00 (96.70 to 97.70): VU030007.D (-2769) (-)

200000

150000

100000

50000

0

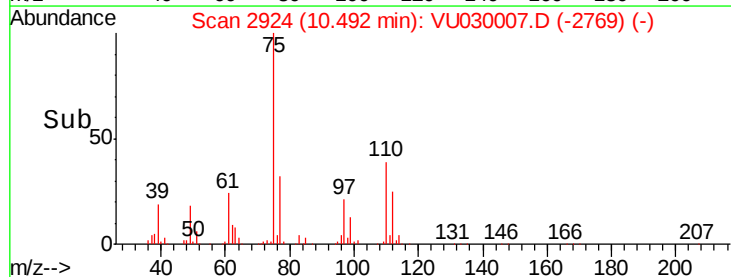
10.49

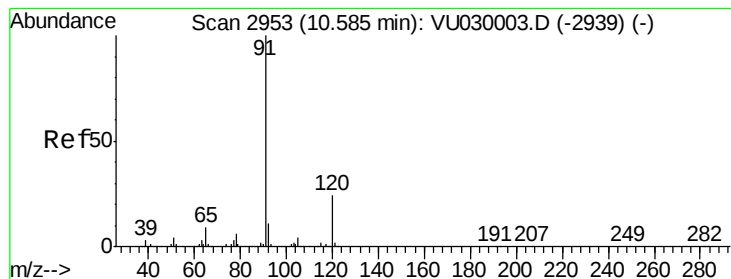
10.40

10.50

10.55

Time-->





#73

n-propylbenzene

Concen: 9.528 ug/l

RT: 10.58 min Scan# 2953

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

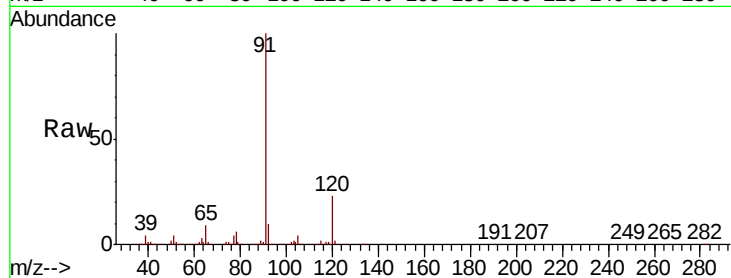
38023-122017

Tgt Ion:120 Resp: 221940

Ion Ratio Lower Upper

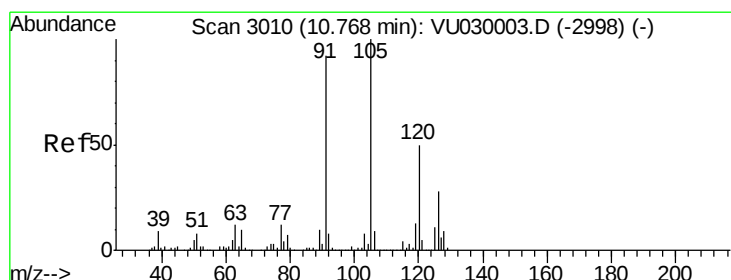
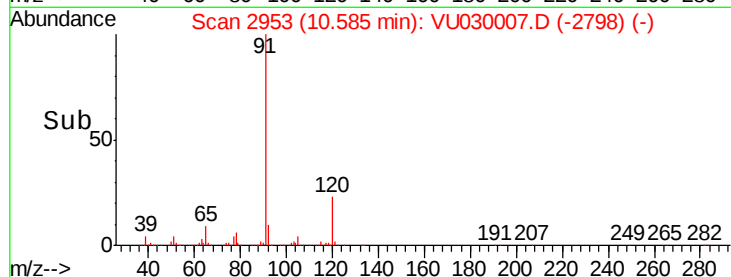
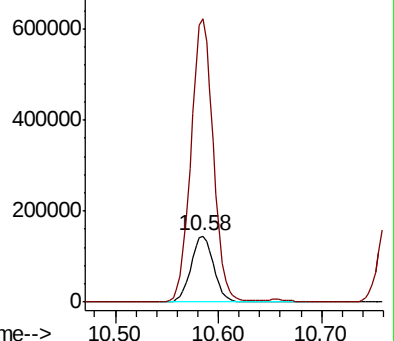
120 100

91 420.8 335.4 503.0



Abundance Ion 120.00 (119.70 to 120.70): V

Ion 91.00 (90.70 to 91.70): VU0



#76

4-Chlorotoluene

Concen: 6.910 ug/l

RT: 10.77 min Scan# 3010

Delta R.T. -0.00 min

Lab File: VU030007.D

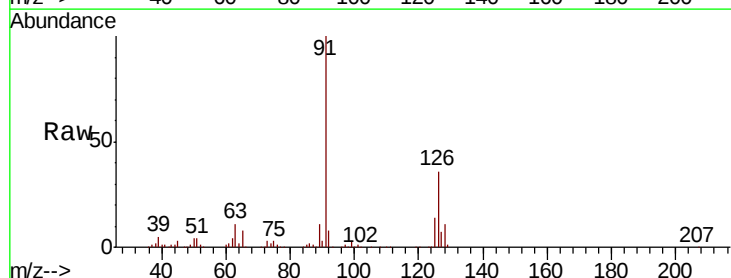
Acq: 12 Mar 2019 14:37

Tgt Ion:126 Resp: 143883

Ion Ratio Lower Upper

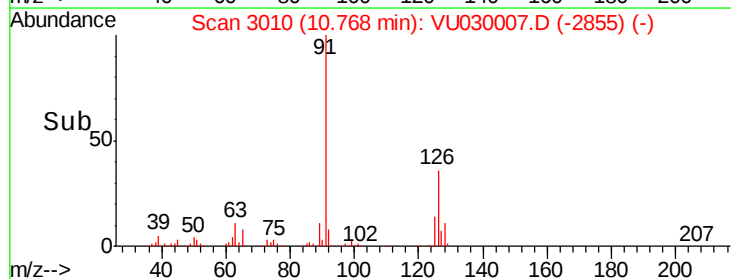
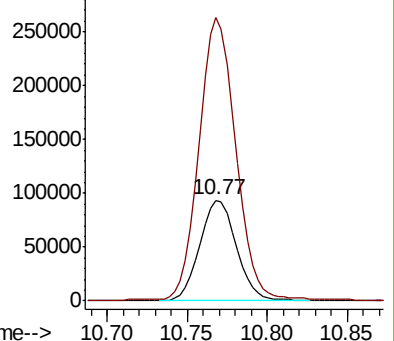
126 100

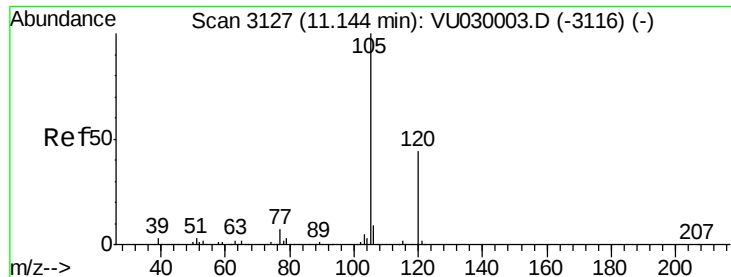
91 286.5 0.0 641.8



Abundance Ion 126.00 (125.70 to 126.70): V

Ion 91.00 (90.70 to 91.70): VU0





#78

1,2,4-Trimethylbenzene

Concen: 12.141 ug/l

RT: 11.14 min Scan# 3127

Delta R.T. -0.00 min

Lab File: VU030007.D

Acq: 12 Mar 2019 14:37

Instrument :

MSVOA_U

ClientSampleId :

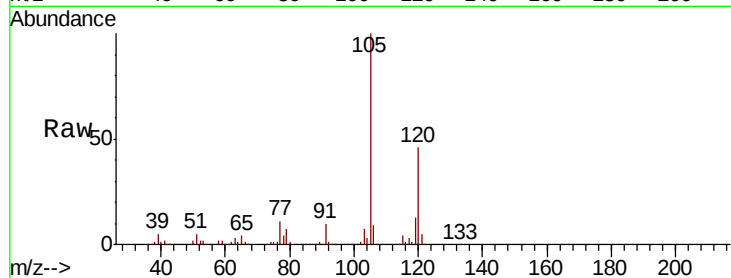
38023-122017

Tgt Ion:105 Resp: 863744

Ion Ratio Lower Upper

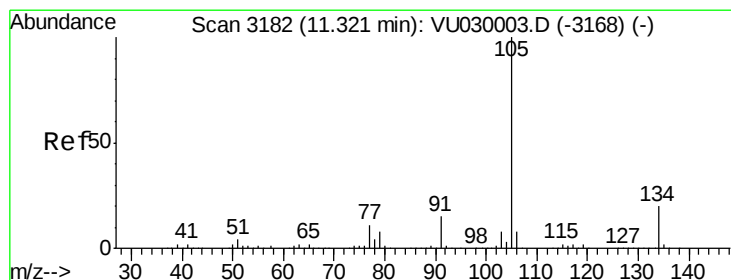
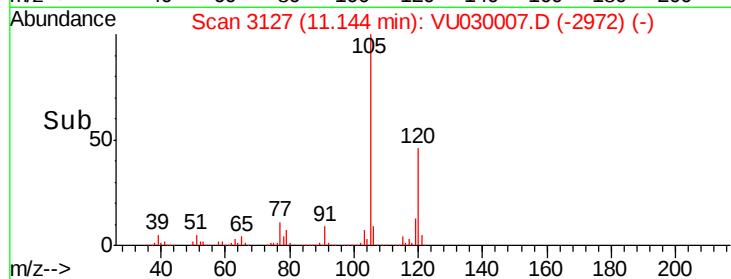
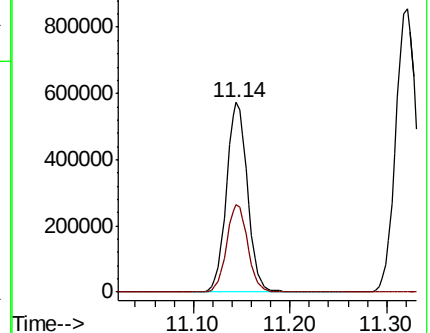
105 100

120 46.3 23.5 70.6



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#79

sec-Butylbenzene

Concen: 14.315 ug/l

RT: 11.32 min Scan# 3182

Delta R.T. -0.00 min

Lab File: VU030007.D

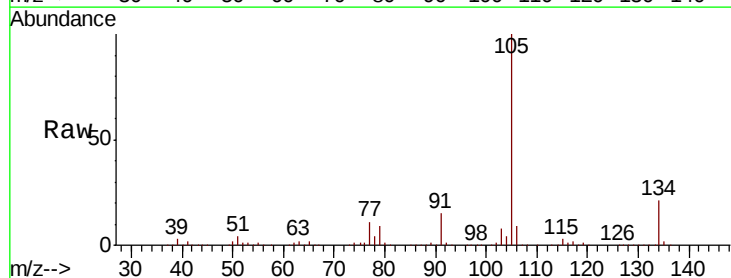
Acq: 12 Mar 2019 14:37

Tgt Ion:105 Resp: 1313138

Ion Ratio Lower Upper

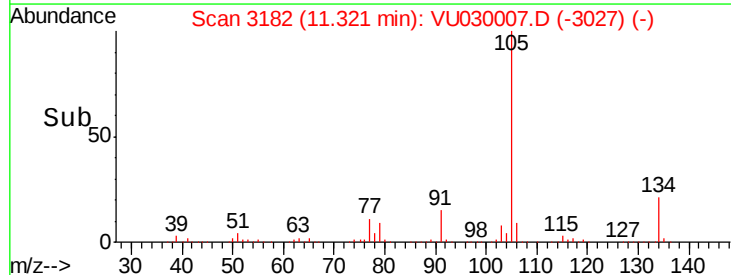
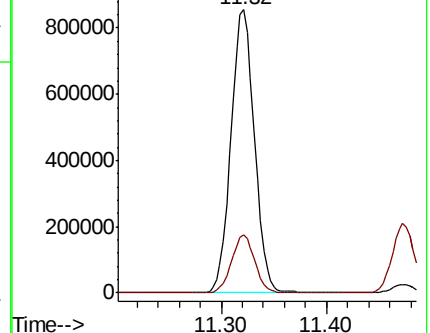
105 100

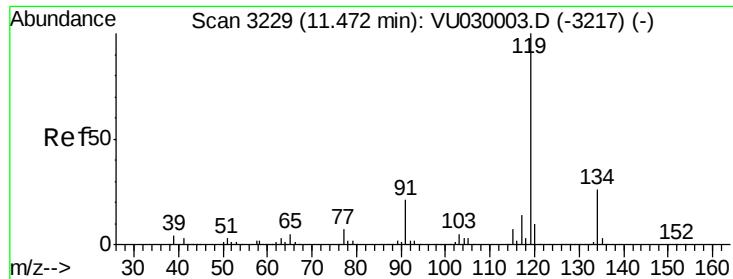
134 20.3 16.1 24.1



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V

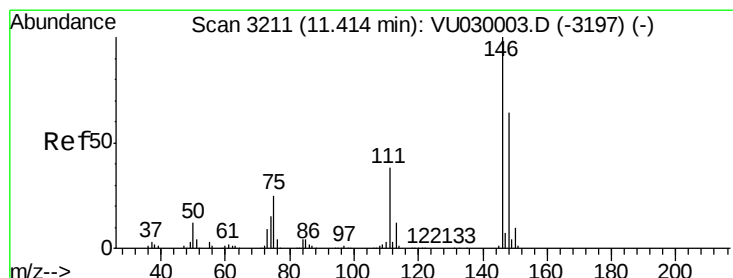
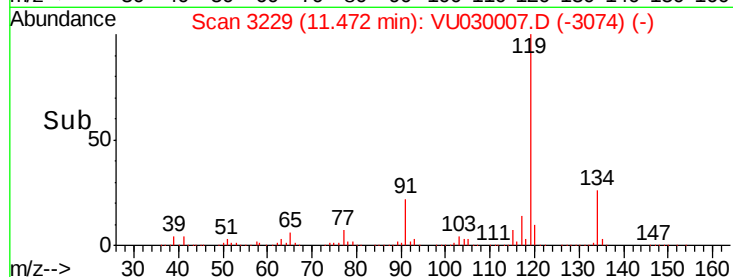
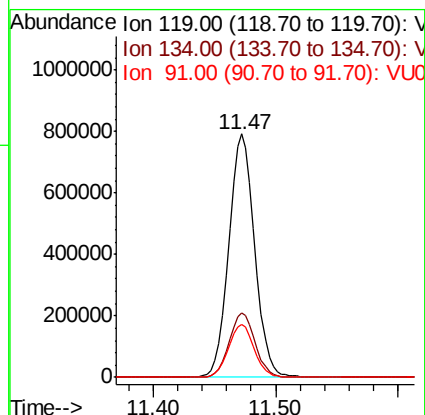
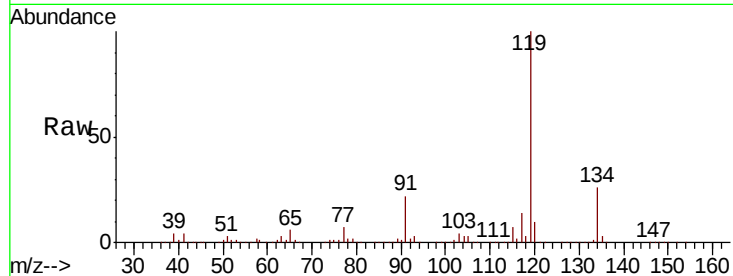




#81
p-Isopropyltoluene
Concen: 15.201 ug/l
RT: 11.47 min Scan# 3229
Delta R.T. -0.00 min
Lab File: VU030007.D
Acq: 12 Mar 2019 14:37

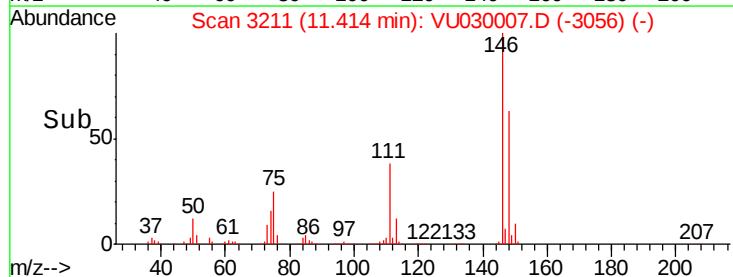
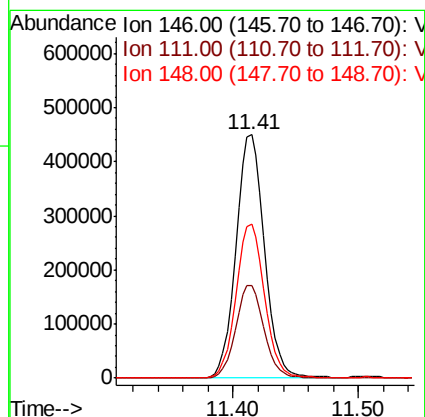
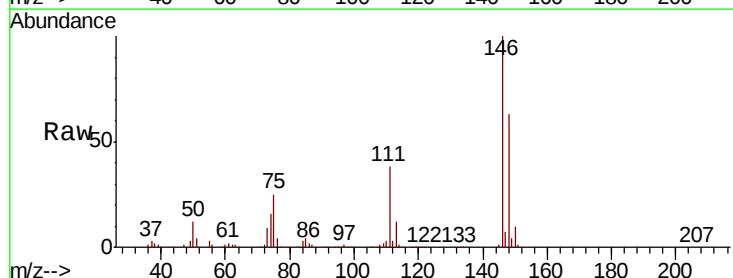
Instrument :
MSVOA_U
ClientSampleId :
38023-122017

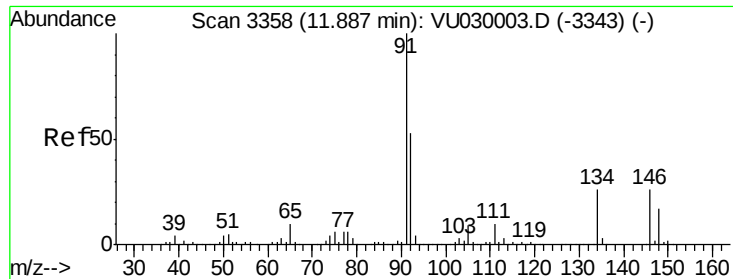
Tgt Ion:119 Resp: 1169597
Ion Ratio Lower Upper
119 100
134 26.6 21.2 31.8
91 21.8 17.0 25.6



#82
1,3-Dichlorobenzene
Concen: 16.282 ug/l
RT: 11.41 min Scan# 3211
Delta R.T. -0.00 min
Lab File: VU030007.D
Acq: 12 Mar 2019 14:37

Tgt Ion:146 Resp: 708126
Ion Ratio Lower Upper
146 100
111 38.1 30.3 45.5
148 63.5 51.1 76.7

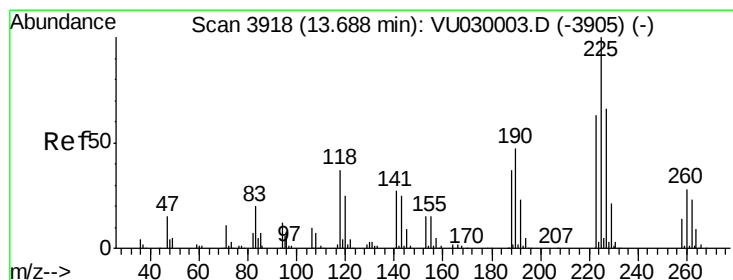
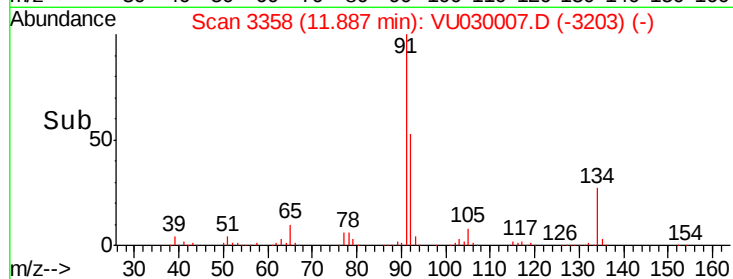
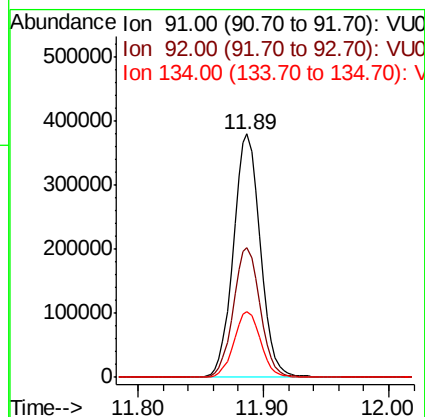
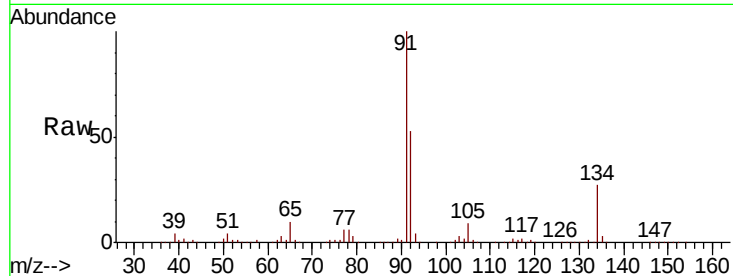




#84
n-Butylbenzene
Concen: 7.873 ug/l
RT: 11.89 min Scan# 3358
Delta R.T. -0.00 min
Lab File: VU030007.D
Acq: 12 Mar 2019 14:37

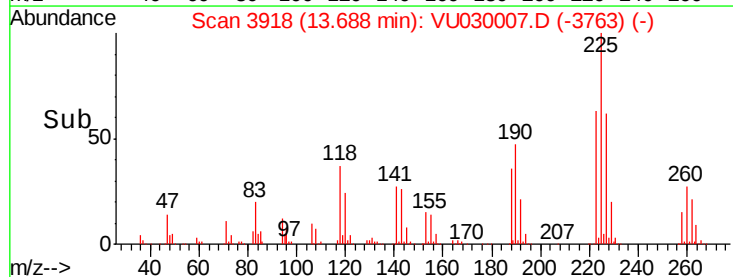
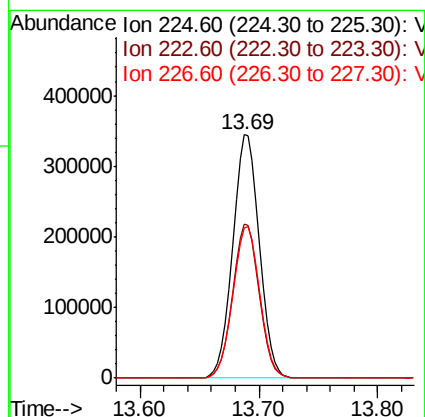
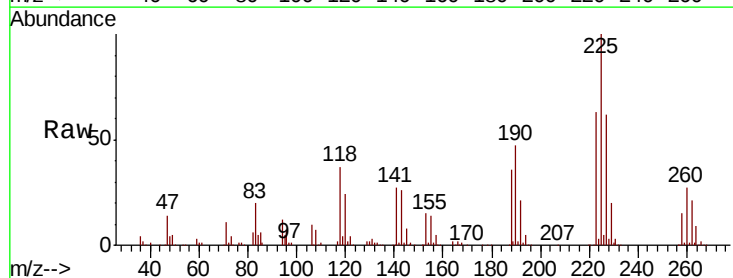
Instrument :
MSVOA_U
ClientSampleId :
38023-122017

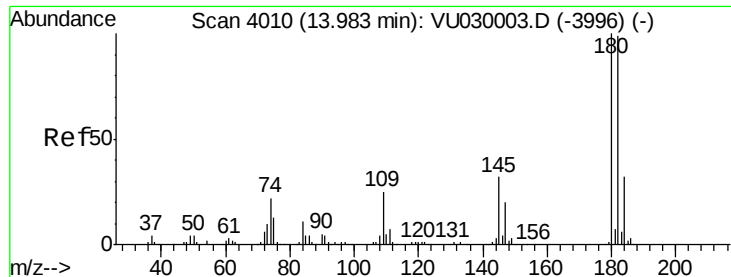
Tgt Ion: 91 Resp: 565820
Ion Ratio Lower Upper
91 100
92 53.3 42.4 63.6
134 27.0 21.4 32.0



#88
Hexachlorobutadiene
Concen: 33.642 ug/l
RT: 13.69 min Scan# 3918
Delta R.T. -0.00 min
Lab File: VU030007.D
Acq: 12 Mar 2019 14:37

Tgt Ion: 225 Resp: 532689
Ion Ratio Lower Upper
225 100
223 63.1 50.7 76.1
227 63.0 52.6 78.8

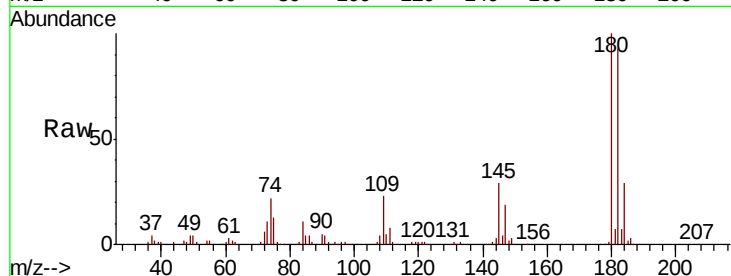




#90
 1,2,3-Trichlorobenzene
 Concen: 7.178 ug/l
 RT: 13.98 min Scan# 4010
 Delta R.T. -0.00 min
 Lab File: VU030007.D
 Acq: 12 Mar 2019 14:37

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122017

Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.9	77.6	116.4
145	30.2	24.7	37.1



Abundance

Ion 179.70 (179.40 to 180.40): V

Ion 181.70 (181.40 to 182.40): V

Ion 144.80 (144.50 to 145.50): V

