

Data Path : W:\HPCHEM1\MSVOA U\DATA\VU043018\
 Data File : VU023540.D
 Acq On : 30 Apr 2018 21:27
 Operator : MD/SY
 Sample : J2241-06DL 4X
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 1221DL

Quant Time: May 01 05:48:09 2018
 Quant Method : W:\HPCHEM1\MSVOA U\METHOD\524U043018DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Tue May 01 05:06:52 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.74	96	47776	1.00	ug/l	0.00

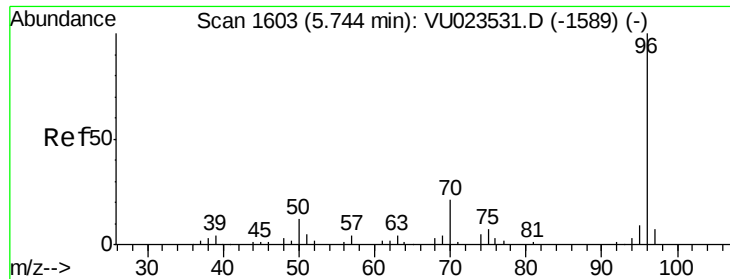
System Monitoring Compounds

57) 4-Bromofluorobenzene	10.31	95	15148	0.97	ug/l	0.00
Spiked Amount	1.000		Recovery	=	97.00%	
68) 1,2-Dichlorobenzene-d4	11.86	152	15810	1.04	ug/l	0.00
Spiked Amount	1.000		Recovery	=	104.00%	

Target Compounds

						Ovalue
35) Benzene	5.39	78	164313	3.06	ug/l	99
49) Toluene	7.64	92	28405	0.92	ug/l	99
59) Chlorobenzene	9.12	112	129955	3.92	ug/l	98
63) Ethyl Benzene	9.25	91	37172	0.67	ug/l	98
64) m/p-Xylenes	9.38	106	65587	3.08	ug/l	100
65) o-Xylene	9.78	106	26228	1.28	ug/l	96
66) Styrene	9.80	104	117696	3.48	ug/l	94
72) Bromobenzene	10.46	156	32300	2.46	ug/l	94
73) n-propylbenzene	10.59	120	69895	4.79	ug/l	98
74) 2-Chlorotoluene	10.66	126	25412	1.97	ug/l	97
76) 4-Chlorotoluene	10.78	126	49501	3.70	ug/l	82
77) tert-Butylbenzene	11.10	119	126754	3.04	ug/l	92
78) 1,2,4-Trimethylbenzene	11.15	105	121143	2.70	ug/l	100
79) sec-Butylbenzene	11.33	105	173890	2.98	ug/l	99
82) 1,3-Dichlorobenzene	11.42	146	43295	1.65	ug/l	99
83) 1,4-Dichlorobenzene	11.51	146	124333	4.75	ug/l	99
84) n-Butylbenzene	11.90	91	199907	4.27	ug/l	98
85) 1,2-Dichlorobenzene	11.88	146	34235	1.45	ug/l	98
87) 1,2,4-Trichlorobenzene	13.51	180	74461	4.35	ug/l	100
88) Hexachlorobutadiene	13.70	225	106835	10.29	ug/l	99
89) Naphthalene	13.75	128	176042	6.83	ug/l	100
90) 1,2,3-Trichlorobenzene	13.99	180	117067	7.28	ug/l	100

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



#1

Fluorobenzene

Concen: 1.00 ug/l

RT: 5.74 min Scan# 1603

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampleId :

1221DL

Tot Ion: 96 Resp: 47776

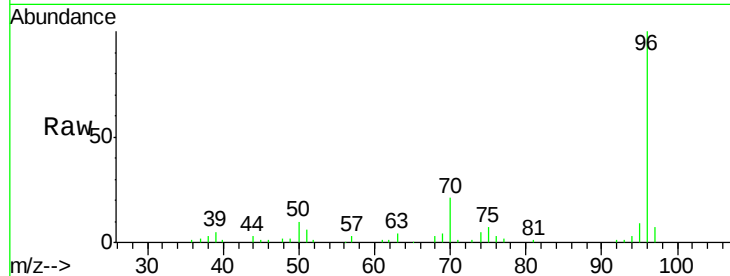
Ion Ratio Lower Upper

96 100

70 20.4 16.2 24.4

95 8.6 6.9 10.3

97 6.8 0.0 0.0#

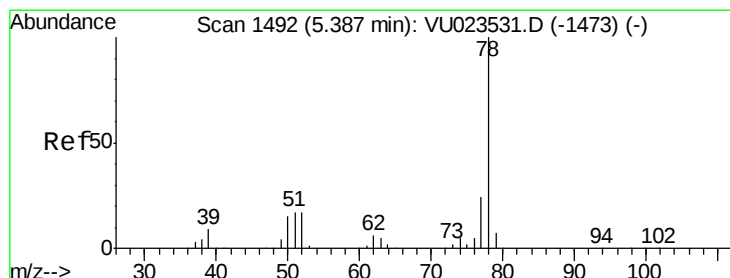
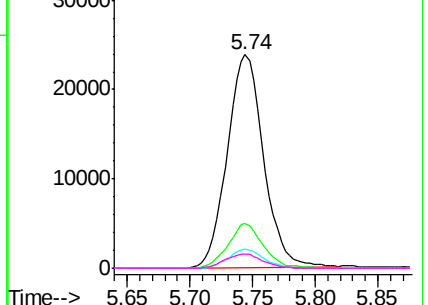
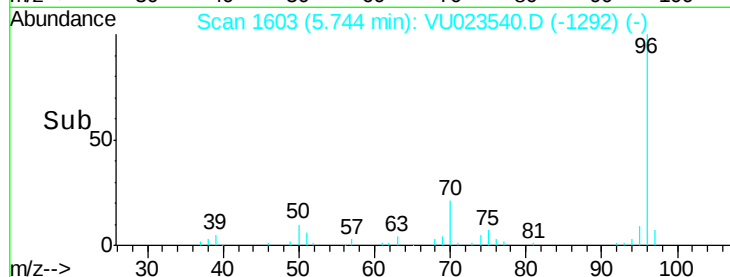


Abundance Ion 96.00 (95.70 to 96.70): VU0

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



#35

Benzene

Concen: 3.06 ug/l

RT: 5.39 min Scan# 1492

Delta R.T. 0.00 min

Lab File: VU023540.D

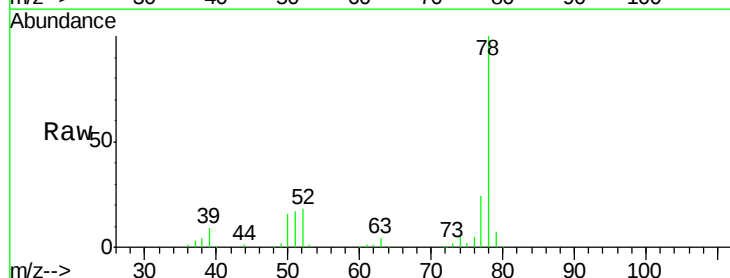
Acq: 30 Apr 2018 21:27

Tgt Ion: 78 Resp: 164313

Ion Ratio Lower Upper

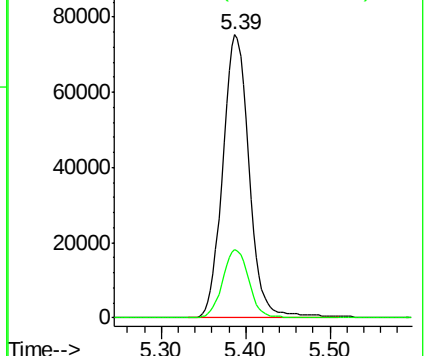
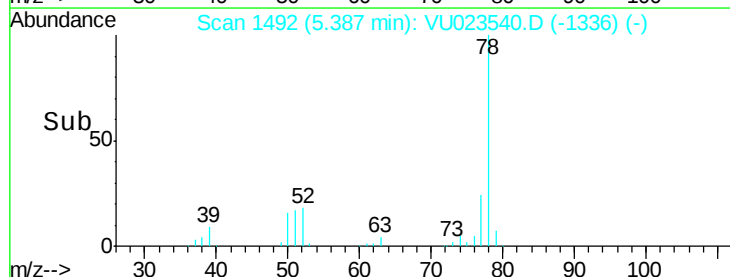
78 100

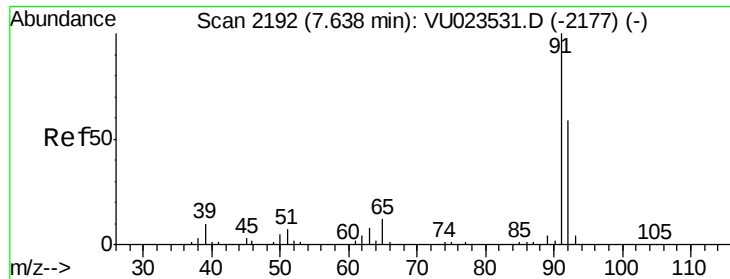
77 24.2 19.1 28.7



Abundance Ion 78.10 (77.80 to 78.80): VU0

Ion 77.00 (76.70 to 77.70): VU0





#49

Toluene

Concen: 0.92 ug/l

RT: 7.64 min Scan# 2193

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampled :

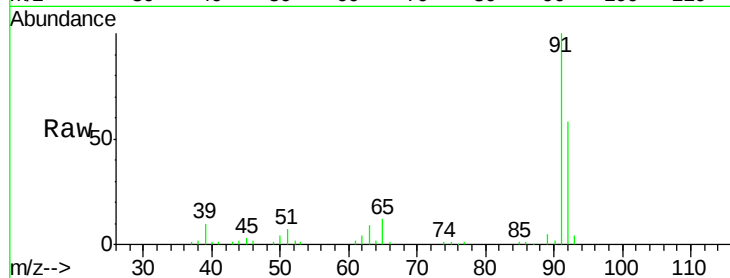
1221DL

Tot Ion: 92 Resp: 28405

Ion Ratio Lower Upper

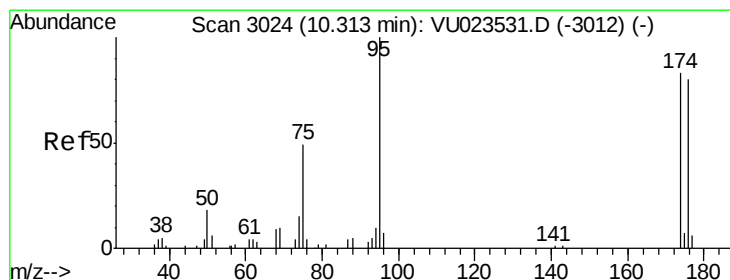
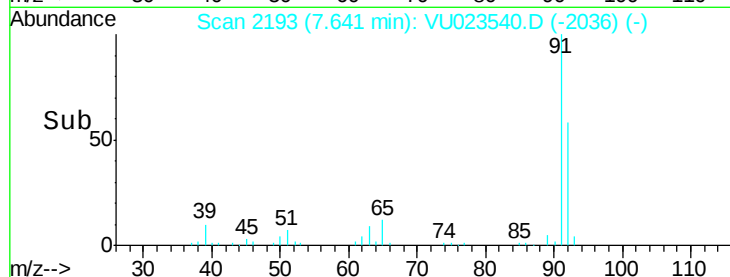
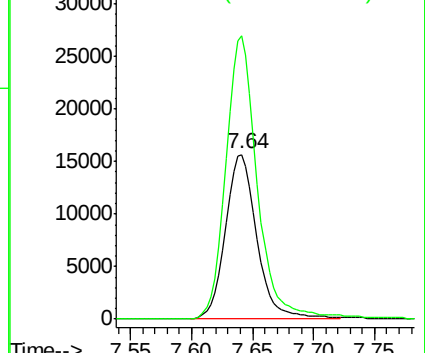
92 100

91 172.7 137.1 205.7



Abundance Ion 92.00 (91.70 to 92.70): VU0

Ion 91.00 (90.70 to 91.70): VU0



#57

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 10.31 min Scan# 3024

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

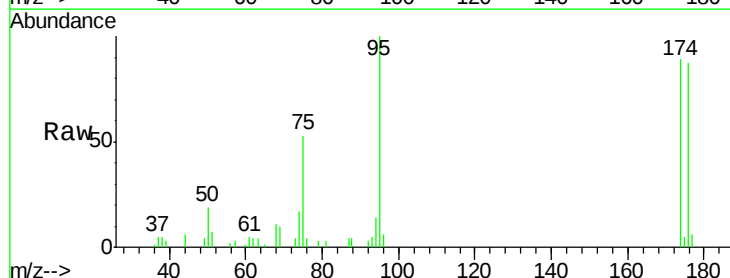
Tgt Ion: 95 Resp: 15148

Ion Ratio Lower Upper

95 100

174 83.9 65.6 98.4

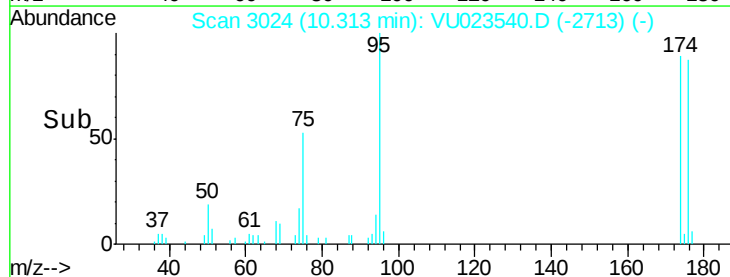
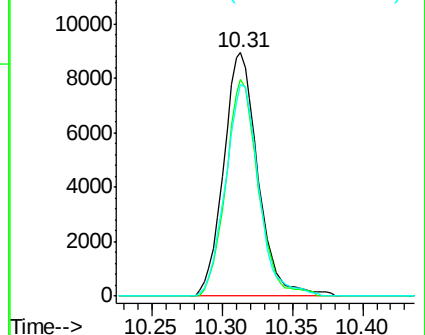
176 84.6 62.0 93.0

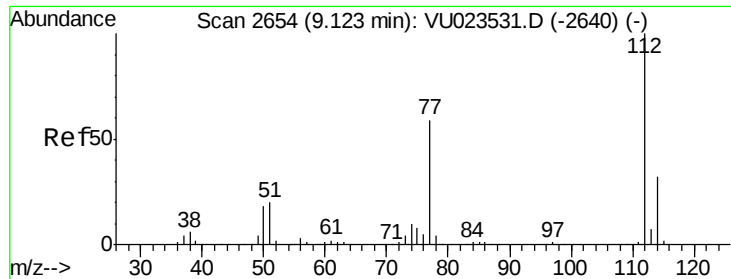


Abundance Ion 95.00 (94.70 to 95.70): VU0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V

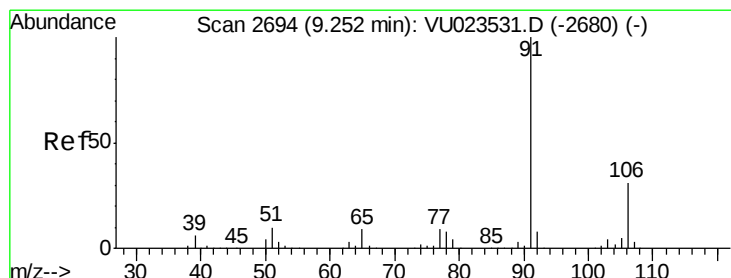
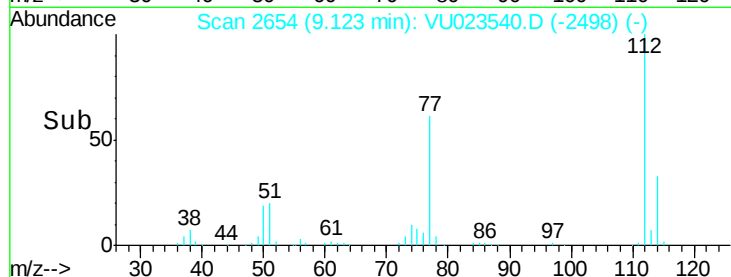
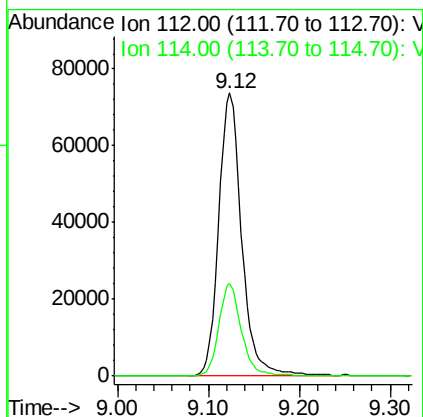
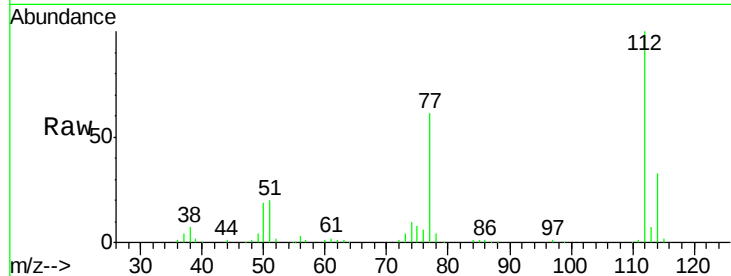




#59
Chlorobenzene
Concen: 3.92 ug/l
RT: 9.12 min Scan# 2654
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

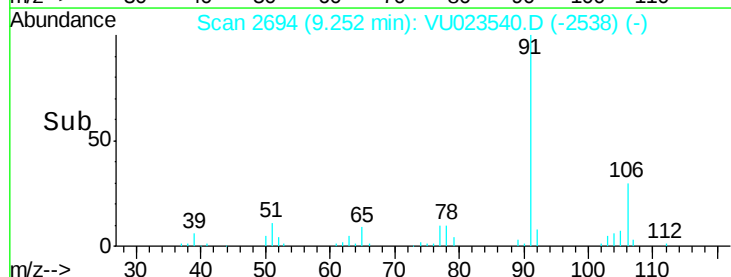
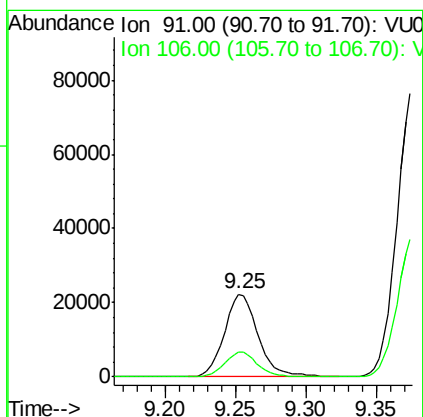
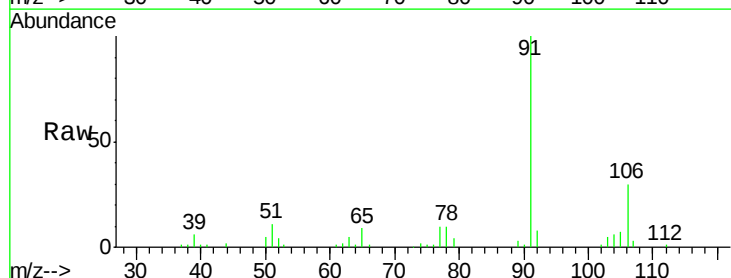
Instrument :
MSVOA_U
ClientSampleId :
1221DL

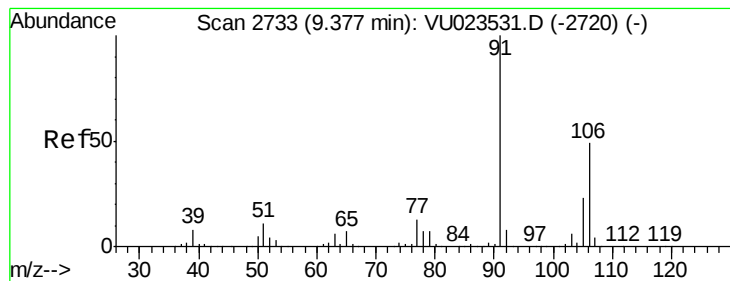
Tot Ion:112 Resp: 129955
Ion Ratio Lower Upper
112 100
114 32.8 25.4 38.2



#63
Ethyl Benzene
Concen: 0.67 ug/l
RT: 9.25 min Scan# 2694
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

Tgt Ion: 91 Resp: 37172
Ion Ratio Lower Upper
91 100
106 30.0 24.7 37.1





#64

m/p-Xylenes

Concen: 3.08 ug/l

RT: 9.38 min Scan# 2733

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampled :

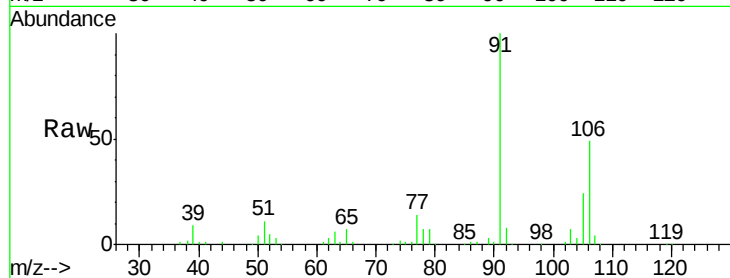
1221DL

Tot Ion:106 Resp: 65587

Ion Ratio Lower Upper

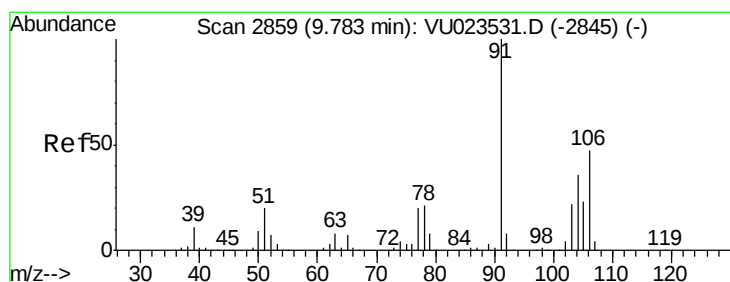
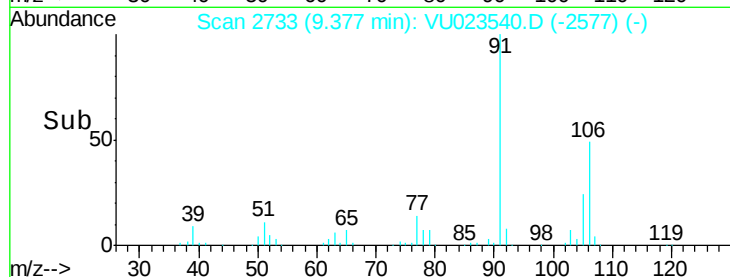
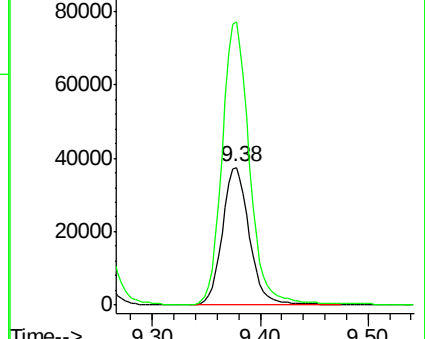
106 100

91 204.4 164.1 246.1



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#65

o-Xylene

Concen: 1.28 ug/l

RT: 9.78 min Scan# 2859

Delta R.T. 0.00 min

Lab File: VU023540.D

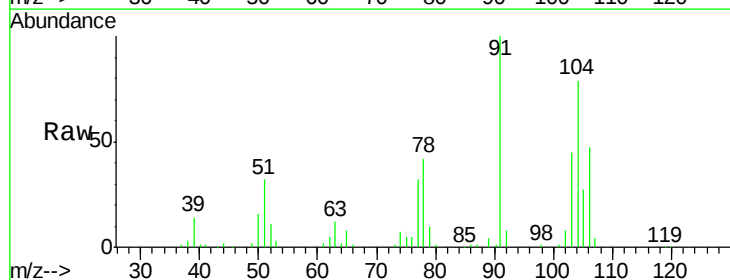
Acq: 30 Apr 2018 21:27

Tgt Ion:106 Resp: 26228

Ion Ratio Lower Upper

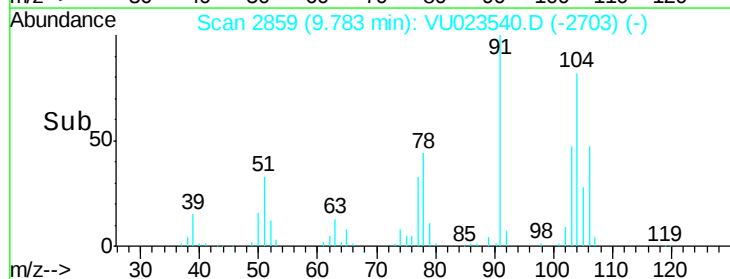
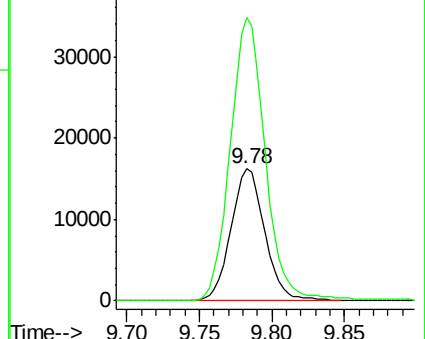
106 100

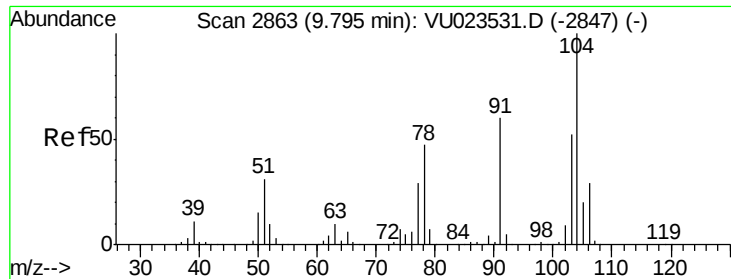
91 222.4 107.9 323.7



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0

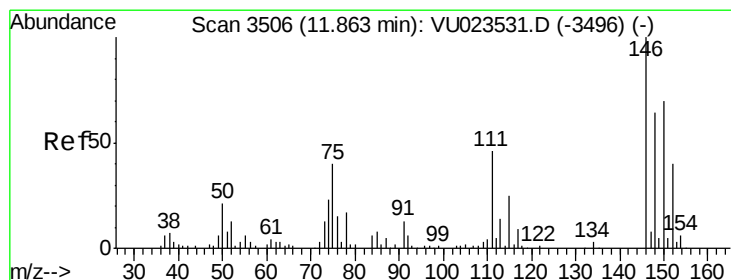
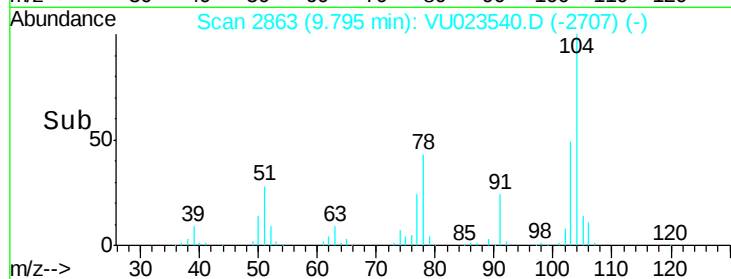
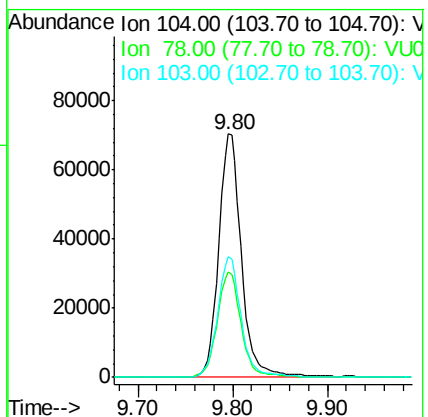
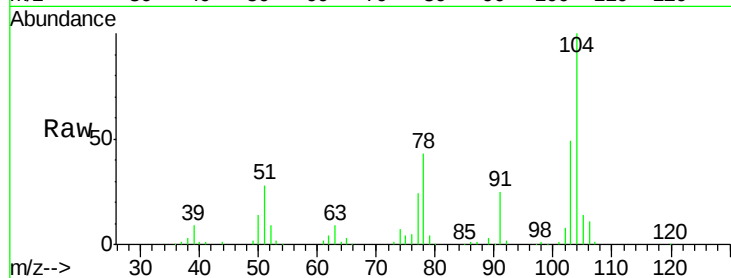




#66
Stvrene
Concen: 3.48 ug/l
RT: 9.80 min Scan# 2863
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

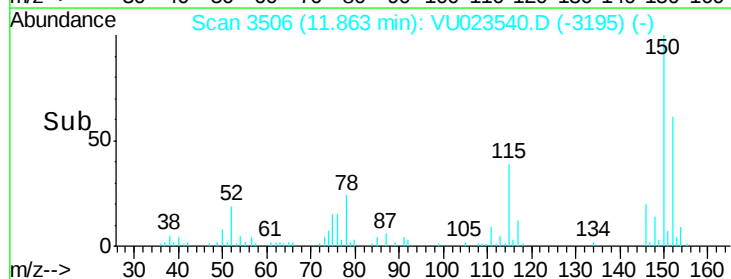
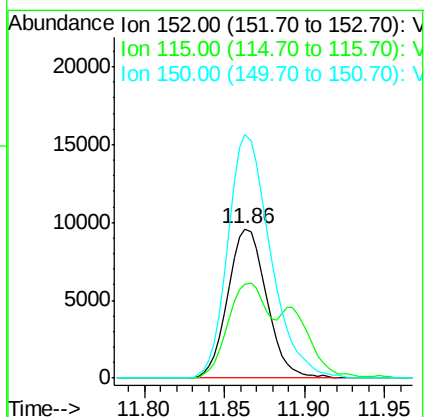
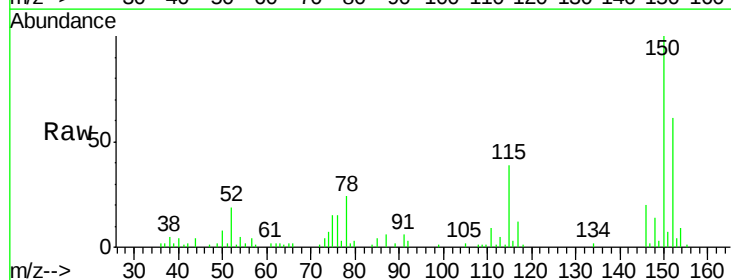
Instrument :
MSVOA_U
ClientSampleId :
1221DL

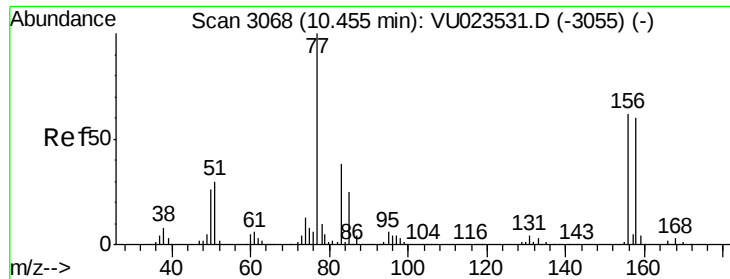
Tot Ion:104 Resp: 117696
Ion Ratio Lower Upper
104 100
78 45.5 40.2 60.2
103 51.3 44.2 66.4



#68
1,2-Dichlorobenzene-d4
Concen: N.D. ug/l
RT: 11.86 min Scan# 3506
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

Tgt Ion:152 Resp: 15810
Ion Ratio Lower Upper
152 100
115 67.6 0.0 118.8
150 180.1 0.0 0.0#





#72

Bromobenzene

Concen: 2.46 ug/l

RT: 10.46 min Scan# 3069

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampled :

1221DL

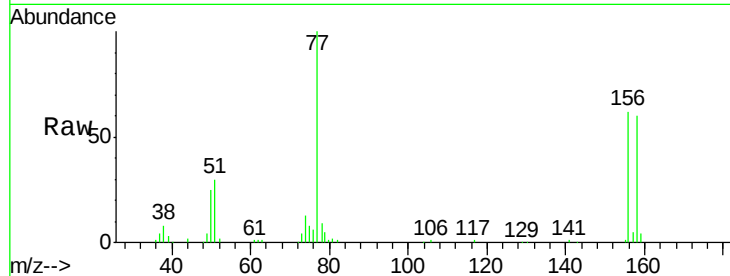
Tot Ion:156 Resp: 32300

Ion Ratio Lower Upper

156 100

77 165.5 0.0 309.8

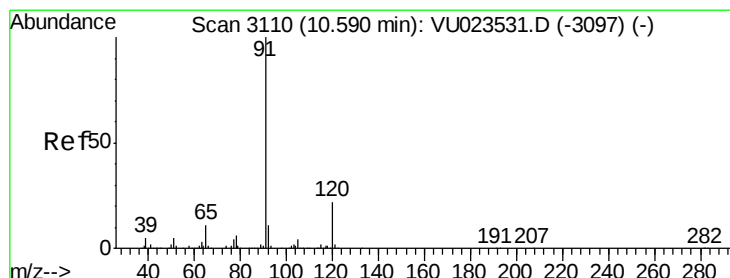
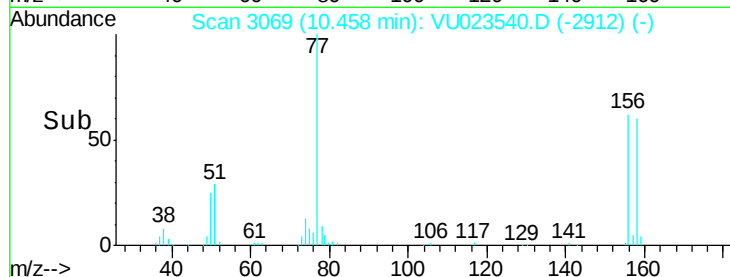
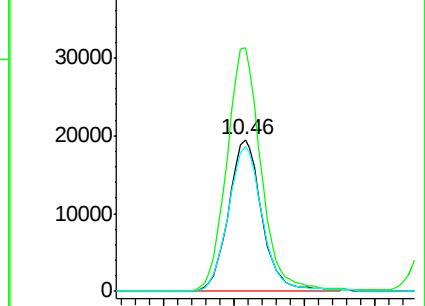
158 98.3 0.0 193.0



Abundance Ion 156.00 (155.70 to 156.70): V

Ion 77.00 (76.70 to 77.70): VU0

Ion 158.00 (157.70 to 158.70): V



#73

n-propylbenzene

Concen: 4.79 ug/l

RT: 10.59 min Scan# 3111

Delta R.T. 0.00 min

Lab File: VU023540.D

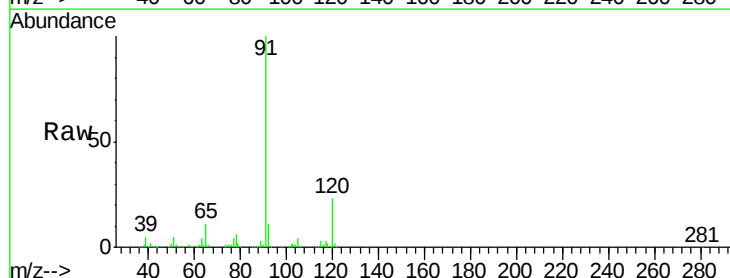
Acq: 30 Apr 2018 21:27

Tgt Ion:120 Resp: 69895

Ion Ratio Lower Upper

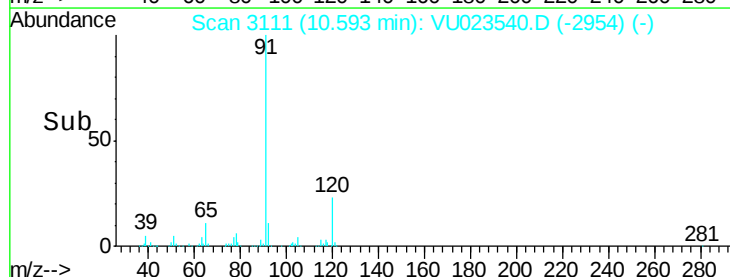
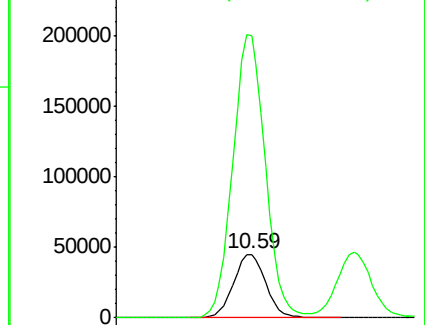
120 100

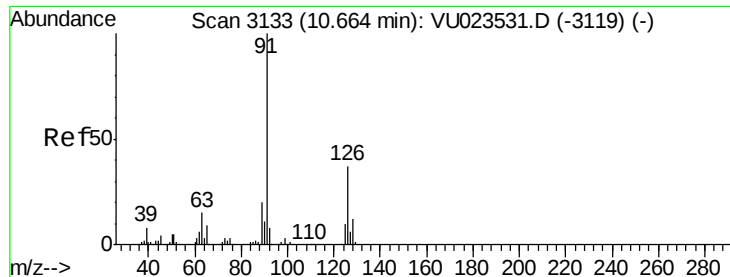
91 445.2 352.2 528.4



Abundance Ion 120.00 (119.70 to 120.70): V

Ion 91.00 (90.70 to 91.70): VU0

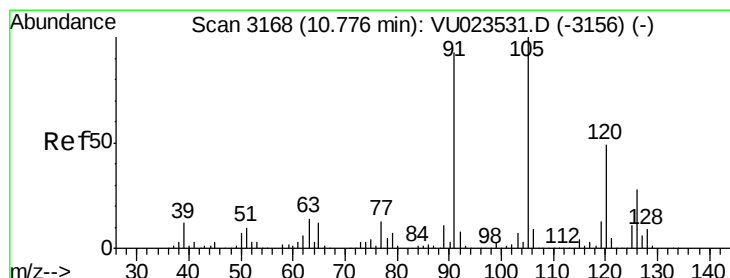
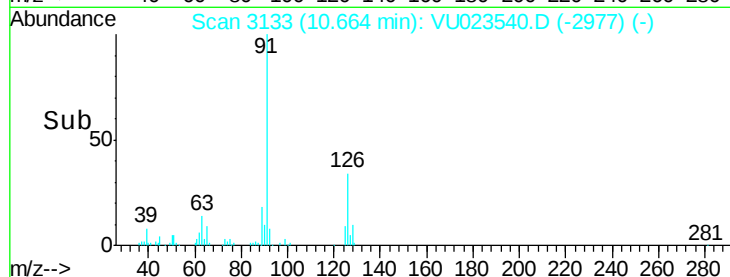
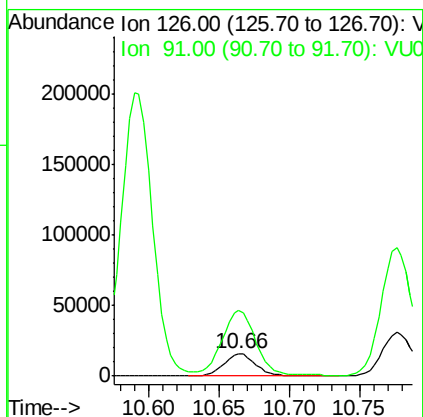
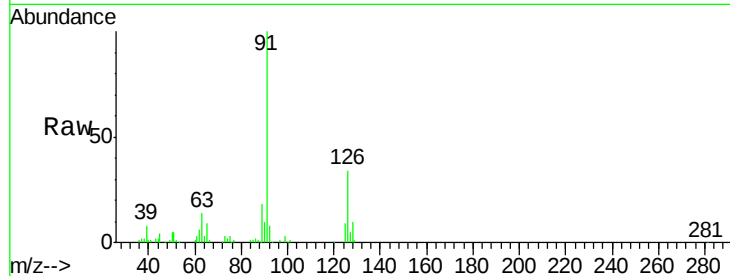




#74
2-Chlorotoluene
Concen: 1.97 ug/l
RT: 10.66 min Scan# 3133
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

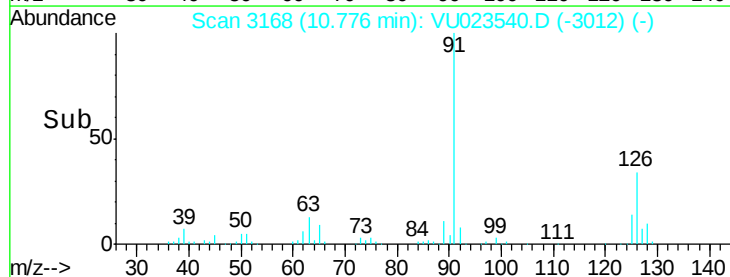
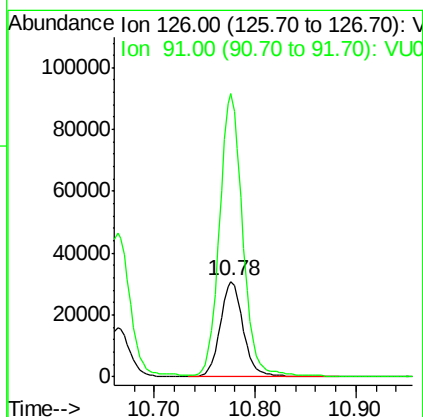
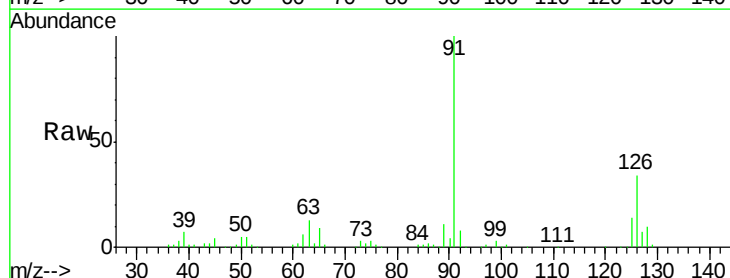
Instrument :
MSVOA_U
ClientSampleId :
1221DL

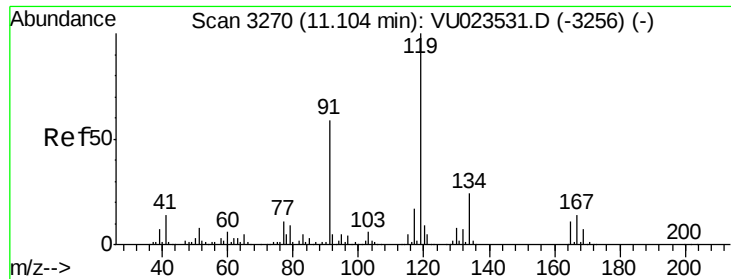
Tot Ion:126 Resp: 25412
Ion Ratio Lower Upper
126 100
91 312.4 0.0 613.0



#76
4-Chlorotoluene
Concen: 3.70 ug/l
RT: 10.78 min Scan# 3168
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

Tgt Ion:126 Resp: 49501
Ion Ratio Lower Upper
126 100
91 296.2 0.0 667.2

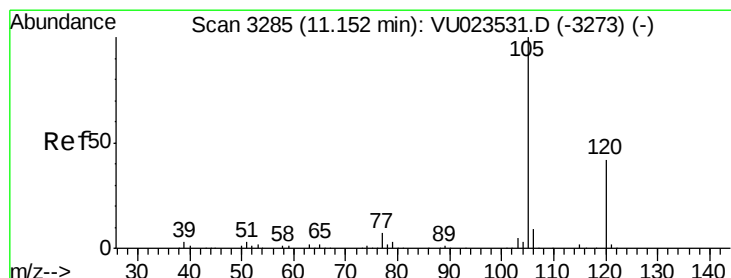
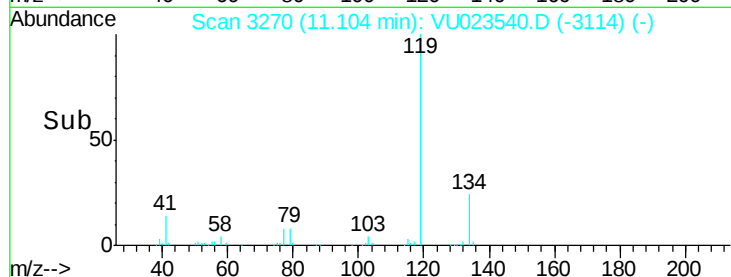
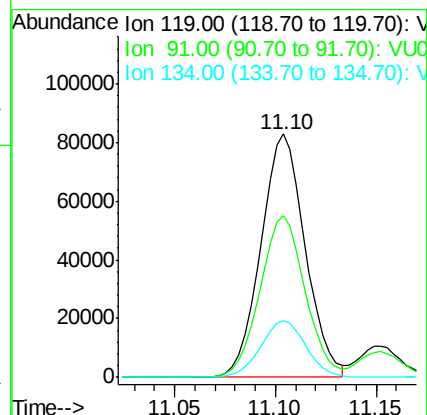
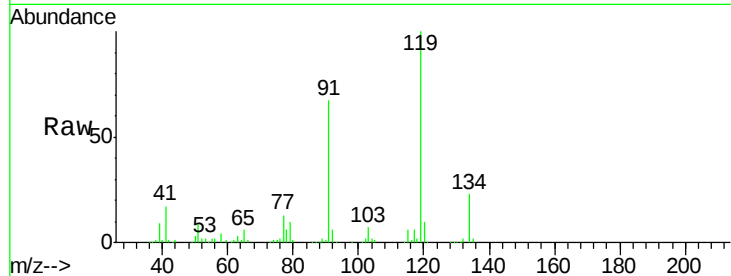




#77
tert-Butylbenzene
Concen: 3.04 ug/l
RT: 11.10 min Scan# 3270
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

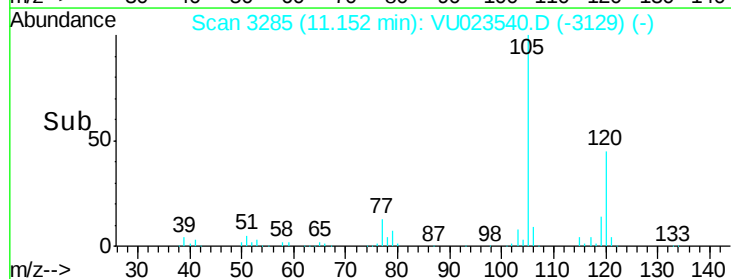
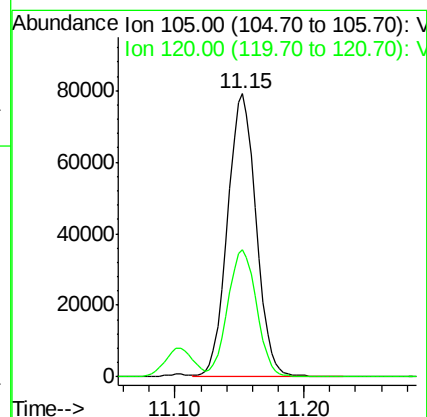
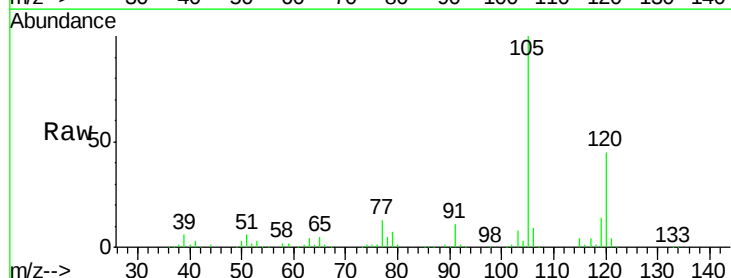
Instrument :
MSVOA_U
ClientSampleId :
1221DL

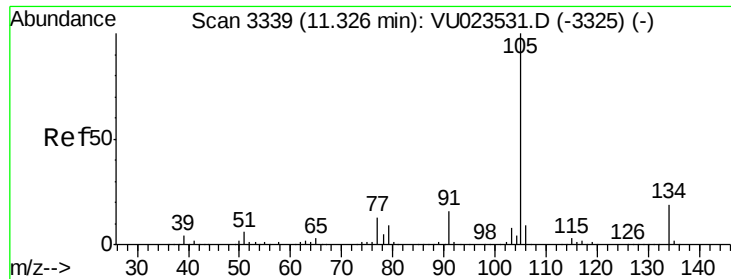
Tot Ion	Ratio	Lower	Upper
119	100		
91	67.6	29.6	88.8
134	23.8	19.1	28.7



#78
1,2,4-Trimethylbenzene
Concen: 2.70 ug/l
RT: 11.15 min Scan# 3285
Delta R.T. 0.00 min
Lab File: VU023540.D
Acq: 30 Apr 2018 21:27

Tgt Ion	Ratio	Lower	Upper
105	100		
120	46.1	23.1	69.3

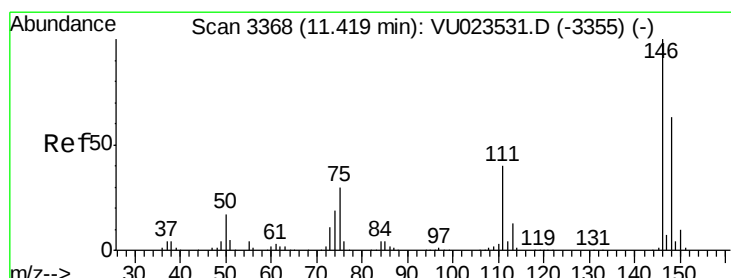
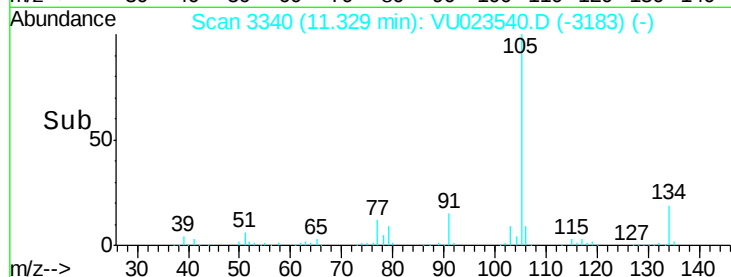
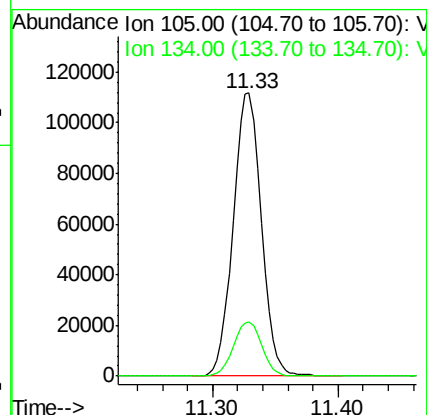
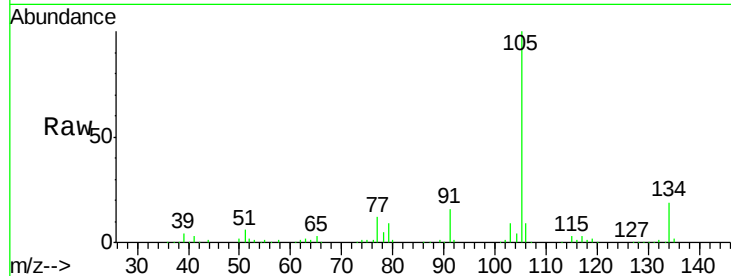




#79
 sec-Butylbenzene
 Concen: 2.98 ug/l
 RT: 11.33 min Scan# 3340
 Delta R.T. 0.00 min
 Lab File: VU023540.D
 Acq: 30 Apr 2018 21:27

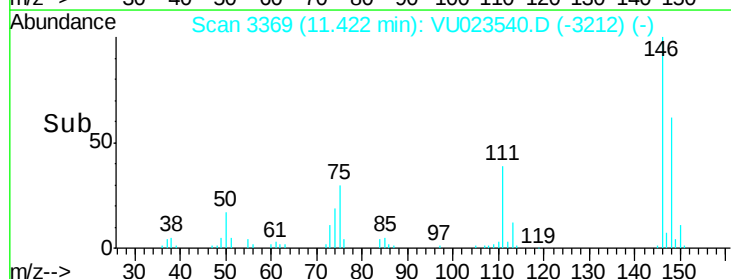
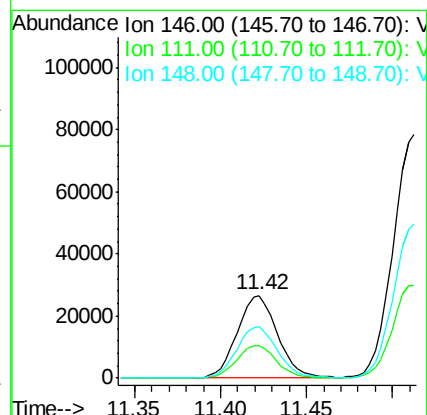
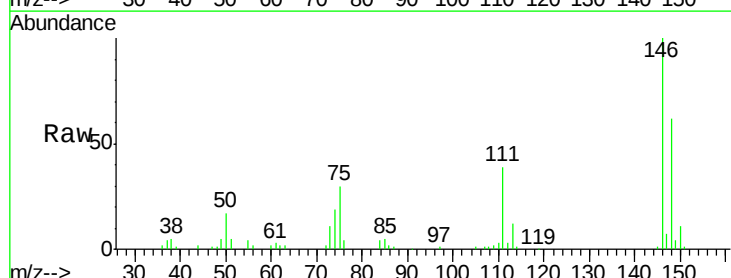
Instrument :
 MSVOA_U
 ClientSampleID :
 1221DL

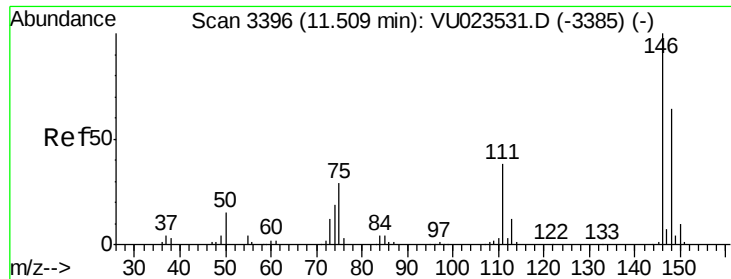
Tot Ion:105 Resp: 173890
 Ion Ratio Lower Upper
 105 100
 134 19.3 15.6 23.4



#82
 1,3-Dichlorobenzene
 Concen: 1.65 ug/l
 RT: 11.42 min Scan# 3369
 Delta R.T. 0.00 min
 Lab File: VU023540.D
 Acq: 30 Apr 2018 21:27

Tgt Ion:146 Resp: 43295
 Ion Ratio Lower Upper
 146 100
 111 39.5 31.8 47.6
 148 63.1 51.0 76.4

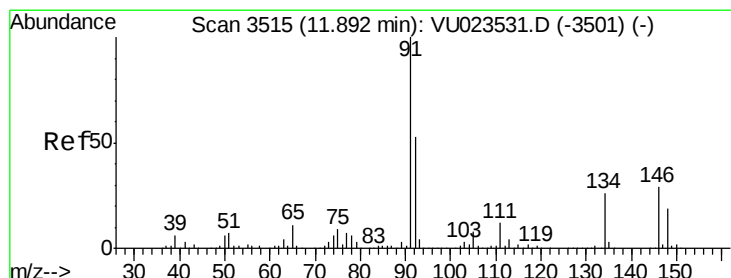
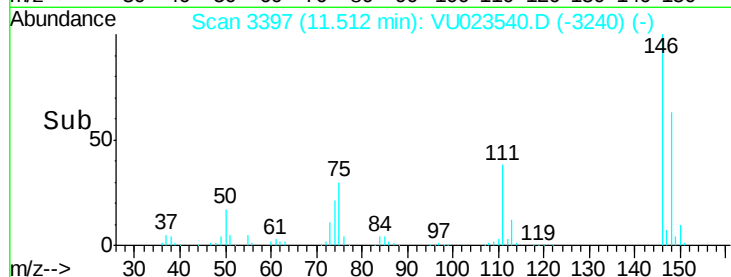
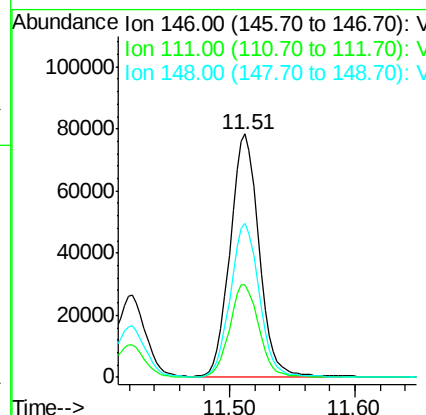
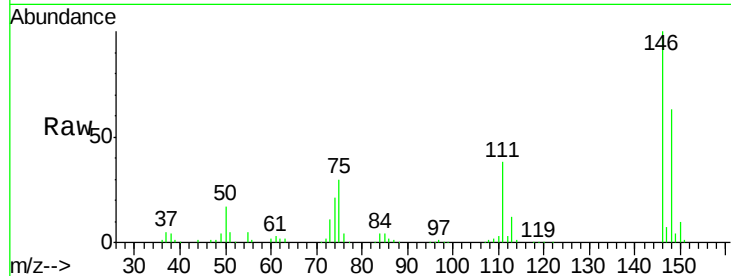




#83
 1,4-Dichlorobenzene
 Concen: 4.75 ug/l
 RT: 11.51 min Scan# 3397
 Delta R.T. 0.00 min
 Lab File: VU023540.D
 Acq: 30 Apr 2018 21:27

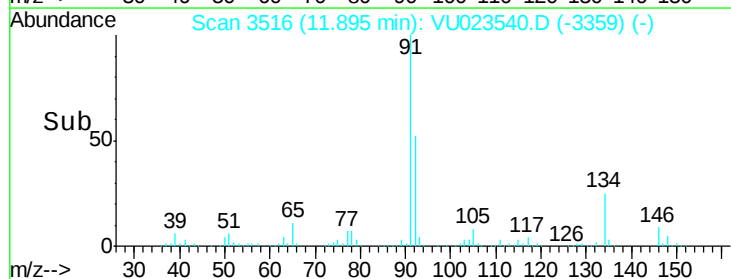
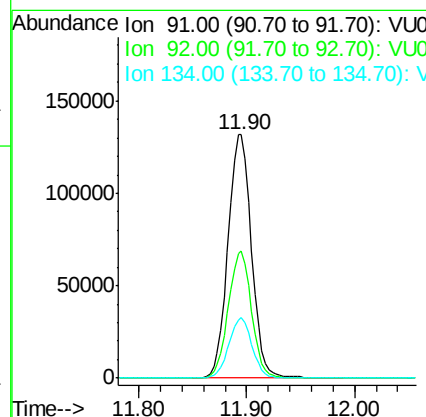
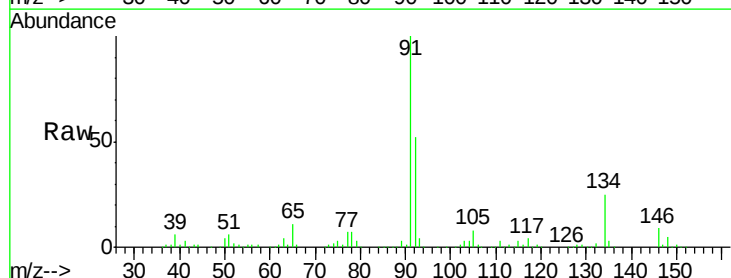
Instrument :
 MSVOA_U
 ClientSampled :
 1221DL

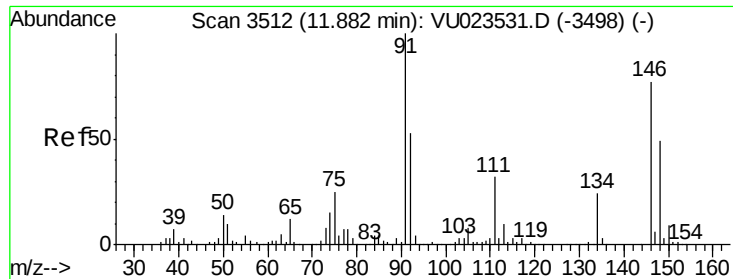
Tot Ion:146 Resp: 124333
 Ion Ratio Lower Upper
 146 100
 111 38.7 30.1 45.1
 148 63.5 50.6 76.0



#84
 n-Butylbenzene
 Concen: 4.27 ug/l
 RT: 11.90 min Scan# 3516
 Delta R.T. 0.00 min
 Lab File: VU023540.D
 Acq: 30 Apr 2018 21:27

Tgt Ion: 91 Resp: 199907
 Ion Ratio Lower Upper
 91 100
 92 51.5 42.2 63.2
 134 24.4 20.3 30.5





#85

1,2-Dichlorobenzene

Concen: 1.45 ug/l

RT: 11.88 min Scan# 3512

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampled :

1221DL

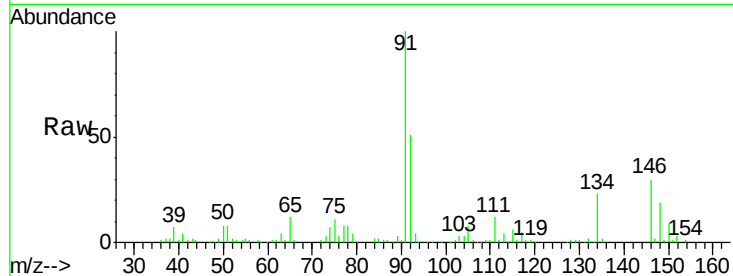
Tot Ion:146 Resp: 34235

Ion Ratio Lower Upper

146 100

111 40.5 20.7 62.1

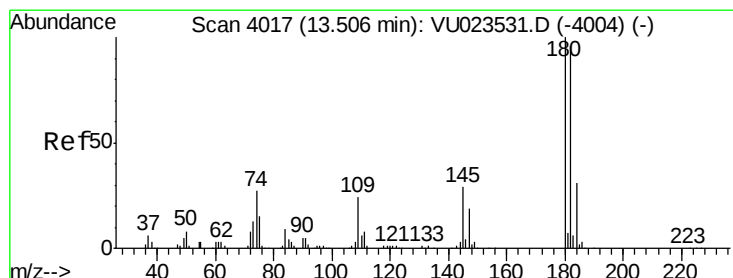
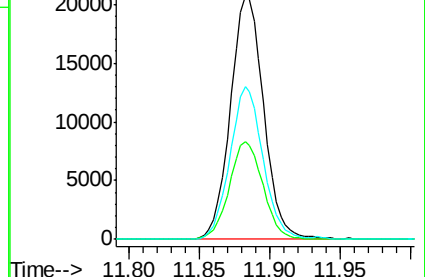
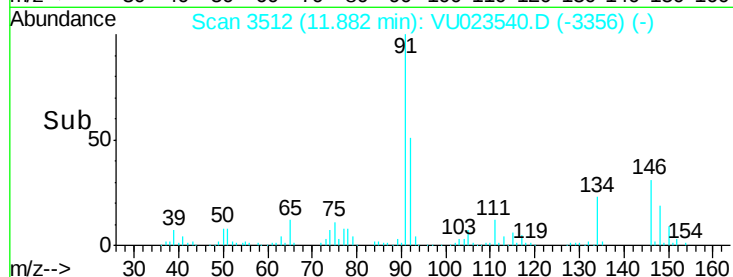
148 62.1 31.9 95.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#87

1,2,4-Trichlorobenzene

Concen: 4.35 ug/l

RT: 13.51 min Scan# 4017

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

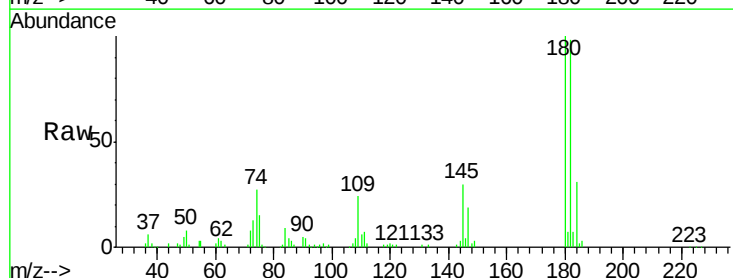
Tgt Ion:180 Resp: 74461

Ion Ratio Lower Upper

180 100

182 96.7 77.1 115.7

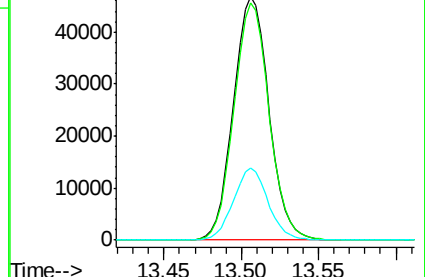
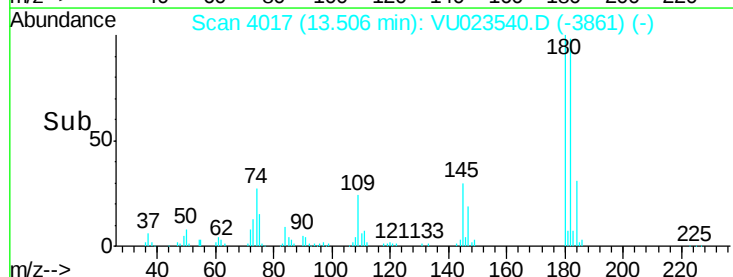
145 28.7 23.3 34.9

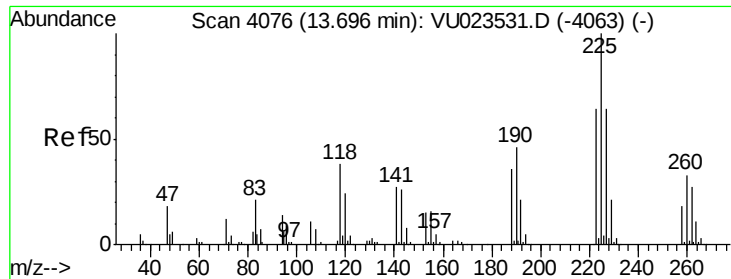


Abundance Ion 179.70 (179.40 to 180.40): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V





#88

Hexachlorobutadiene

Concen: 10.29 ug/l

RT: 13.70 min Scan# 4076

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

Instrument :

MSVOA_U

ClientSampleId :

1221DL

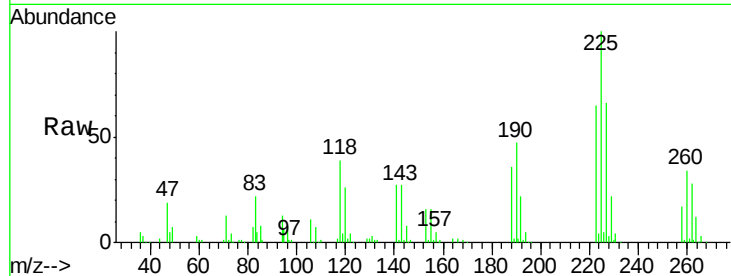
Tot Ion:225 Resp: 106835

Ion Ratio Lower Upper

225 100

223 63.5 50.6 75.8

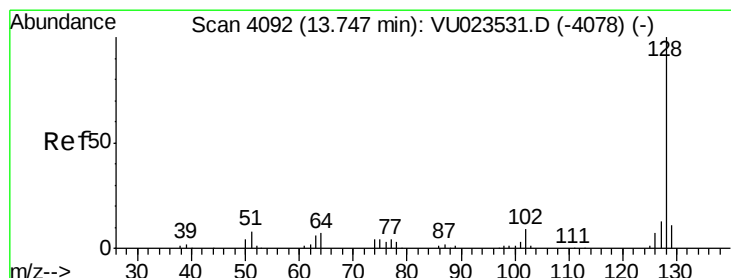
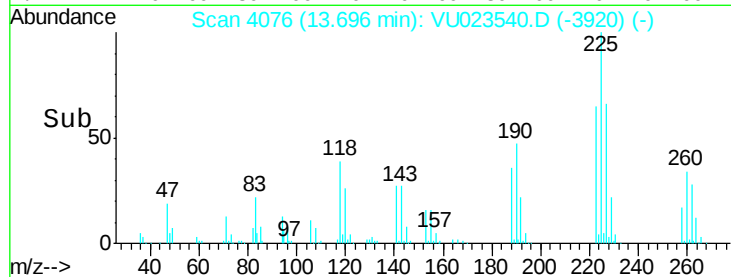
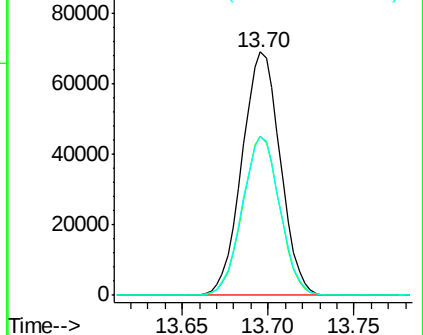
227 64.2 51.8 77.6



Abundance Ion 224.60 (224.30 to 225.30): V

Ion 222.60 (222.30 to 223.30): V

Ion 226.60 (226.30 to 227.30): V



#89

Naphthalene

Concen: 6.83 ug/l

RT: 13.75 min Scan# 4092

Delta R.T. 0.00 min

Lab File: VU023540.D

Acq: 30 Apr 2018 21:27

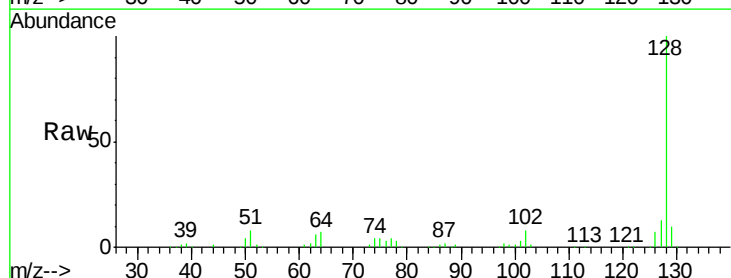
Tgt Ion:128 Resp: 176042

Ion Ratio Lower Upper

128 100

127 13.0 10.5 15.7

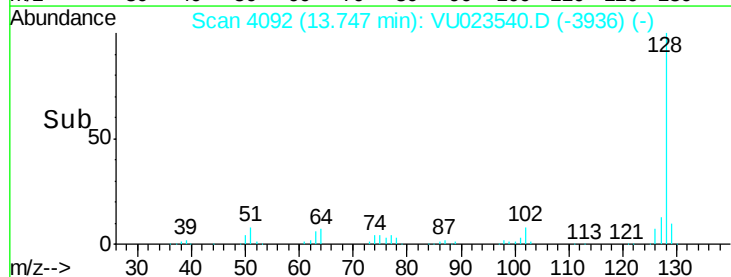
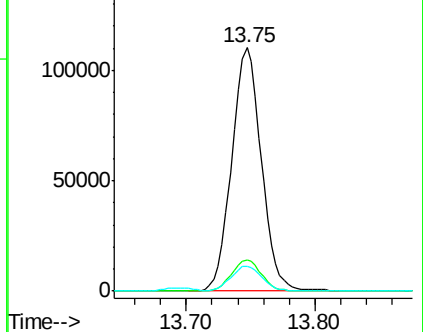
129 10.7 8.7 13.1

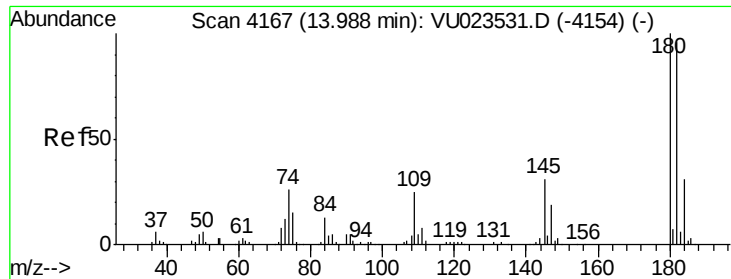


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

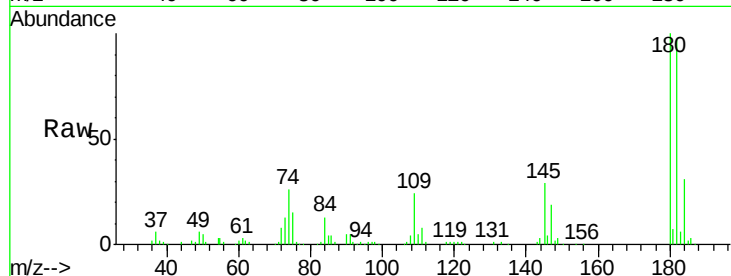




#90
 1,2,3-Trichlorobenzene
 Concen: 7.28 ug/l
 RT: 13.99 min Scan# 4168
 Delta R.T. 0.00 min
 Lab File: VU023540.D
 Acq: 30 Apr 2018 21:27

Instrument :
 MSVOA_U
 ClientSampleId :
 1221DL

Tot Ion	Ratio	Lower	Upper
180	100		
182	95.7	76.8	115.2
145	30.3	24.6	36.8



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

