

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU041619\
 Data File : VU031209.D
 Acq On : 16 Apr 2019 12:38
 Operator : JC/SP
 Sample : K2136-01DL 4X
 Misc : 25.0mL/MSVOA U/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122917DL

Quant Time: Apr 17 03:53:25 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\524U041519DW.M
 Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
 QLast Update : Tue Apr 16 04:55:56 2019
 Response via : Initial Calibration

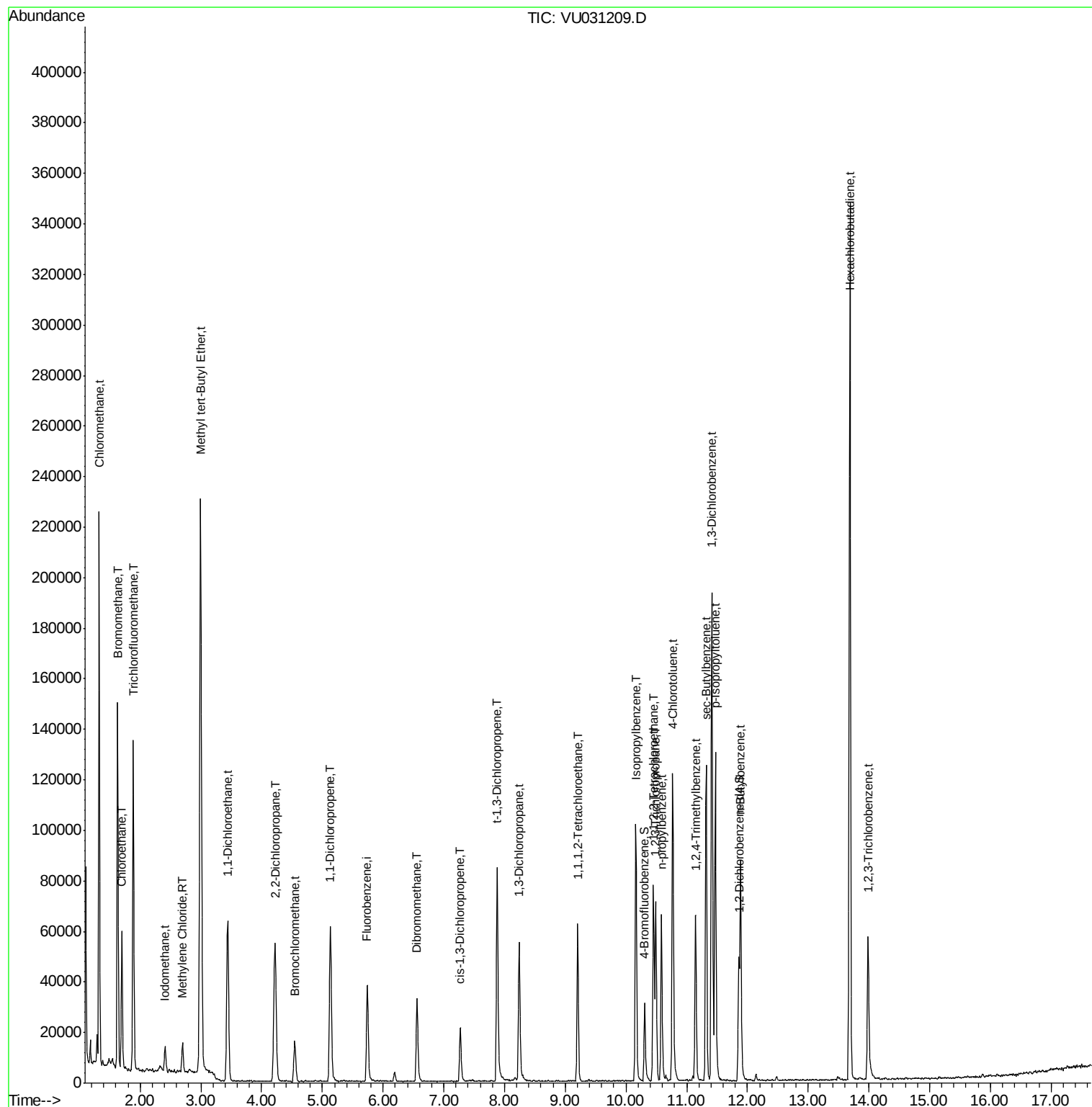
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----
1) Fluorobenzene	5.74	96	38405	1.00	ug/l	0.00
System Monitoring Compounds						
57) 4-Bromofluorobenzene	10.31	95	12524	0.89	ug/l	0.00
Spiked Amount 1.000			Recovery	=	89.00%	
68) 1,2-Dichlorobenzene-d4	11.86	152	14359	1.02	ug/l	0.00
Spiked Amount 1.000			Recovery	=	102.00%	
Target Compounds						
					Ovalue	
3) Chloromethane	1.32	50	136108	7.766	ug/l	100
5) Bromomethane	1.63	94	64409	6.421	ug/l	99
6) Chloroethane	1.70	64	32666	2.763	ug/l	95
7) Trichlorofluoromethane	1.89	101	81791	3.276	ug/l	99
10) Iodomethane	2.41	142	9350	0.558	ug/l	98
15) Methylene Chloride	2.70	84	4670	0.292	ug/l	93
17) 1,1-Dichloroethane	3.44	63	71994	3.317	ug/l	99
21) 2,2-Dichloropropane	4.22	77	48568	2.887	ug/l	93
25) Methyl tert-Butyl Ether	3.00	73	238933	6.600	ug/l	100
26) Bromochloromethane	4.55	128	5513	1.012	ug/l	99
29) 1,1-Dichloropropene	5.13	75	36936	2.413	ug/l	99
43) Dibromomethane	6.56	93	14035	2.150	ug/l	97
50) t-1,3-Dichloropropene	7.88	75	50653	3.777	ug/l	99
51) cis-1,3-Dichloropropene	7.27	75	14252	0.899	ug/l #	93
53) 1,3-Dichloropropane	8.24	76	34988	2.340	ug/l	97
60) 1,1,1,2-Tetrachloroethane	9.21	131	17721	1.703	ug/l	95
69) Isopropylbenzene	10.16	105	65315	1.509	ug/l	99
70) 1,1,1,2,2-Tetrachloroethane	10.45	83	41558	3.638	ug/l	99
71) 1,2,3-Trichloropropane	10.49	75	30482	3.691	ug/l #	96
73) n-propylbenzene	10.58	120	11683	1.011	ug/l	95
76) 4-Chlorotoluene	10.77	126	24908	2.319	ug/l	80
78) 1,2,4-Trimethylbenzene	11.15	105	34930	0.946	ug/l	98
79) sec-Butylbenzene	11.32	105	81755	1.695	ug/l	99
81) p-Isopropyltoluene	11.47	119	70360	1.816	ug/l	98
82) 1,3-Dichlorobenzene	11.41	146	86651	3.831	ug/l	98
84) n-Butylbenzene	11.89	91	47197	1.261	ug/l	96
88) Hexachlorobutadiene	13.69	225	68534	7.914	ug/l	98
90) 1,2,3-Trichlorobenzene	13.99	180	23642	1.821	ug/l	97
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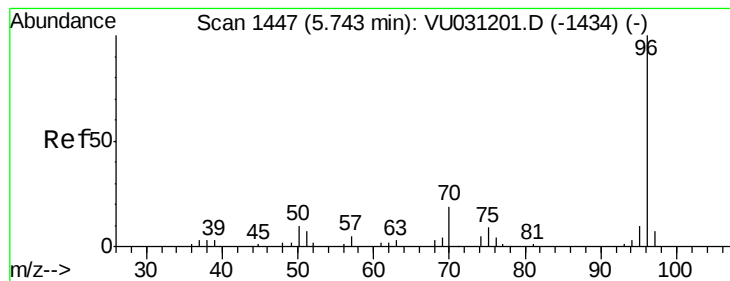
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA U\DATA\VU041619\
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Quant Time: Apr 17 03:53:25 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA U\METHOD\524U041519DW.M
Quant Title : METHOD 524.2 VOLATILES DRINKING WATER
QLast Update : Tue Apr 16 04:55:56 2019
Response via : Initial Calibration





#1

Fluorobenzene

Concen: 1.000 ug/l

RT: 5.74 min Scan# 1447

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

38023-122917DL

Tot Ion: 96 Resp: 38405

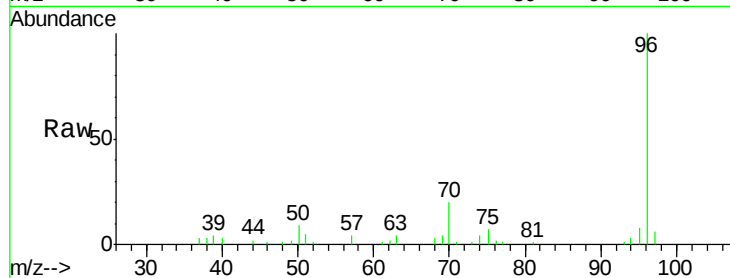
Ion Ratio Lower Upper

96 100

70 19.0 18.4 27.6

95 8.7 7.6 11.4

97 6.8 0.0 0.0#

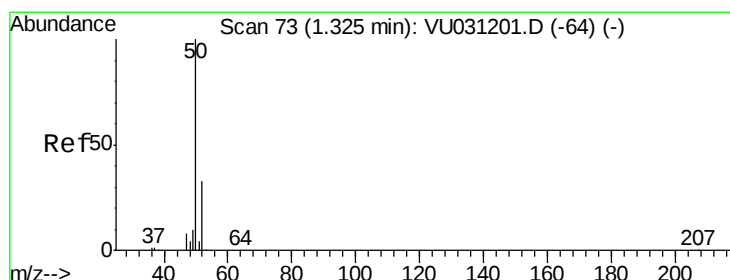
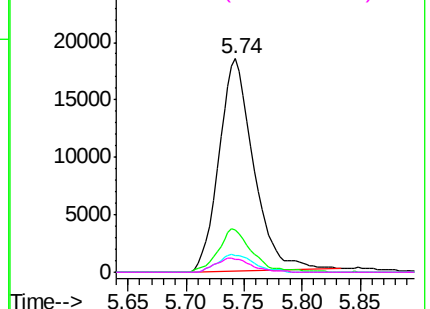
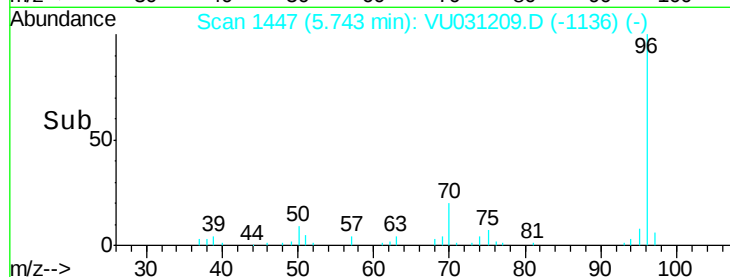


Abundance Ion 96.00 (95.70 to 96.70): VU031201.D (-1434) (-)

Ion 70.00 (69.70 to 70.70): VU031201.D (-1434) (-)

Ion 95.00 (94.70 to 95.70): VU031201.D (-1434) (-)

Ion 97.00 (96.70 to 97.70): VU031201.D (-1434) (-)



#3

Chloromethane

Concen: 7.766 ug/l

RT: 1.32 min Scan# 73

Delta R.T. 0.00 min

Lab File: VU031209.D

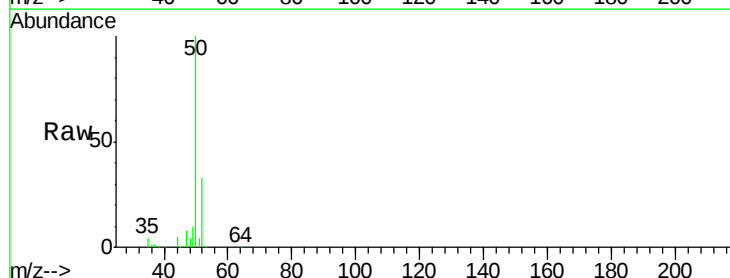
Acq: 16 Apr 2019 12:38

Tgt Ion: 50 Resp: 136108

Ion Ratio Lower Upper

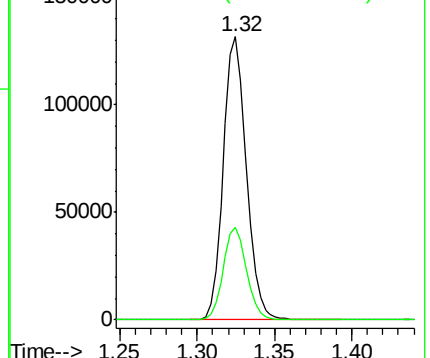
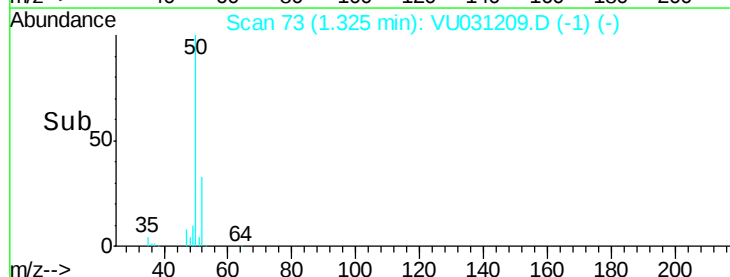
50 100

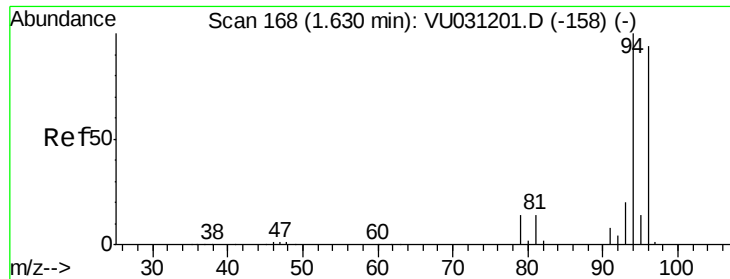
52 32.6 26.2 39.2



Abundance Ion 50.00 (49.70 to 50.70): VU031201.D (-64) (-)

Ion 52.00 (51.70 to 52.70): VU031201.D (-64) (-)





#5

Bromomethane

Concen: 6.421 ug/l

RT: 1.63 min Scan# 167

Delta R.T. -0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

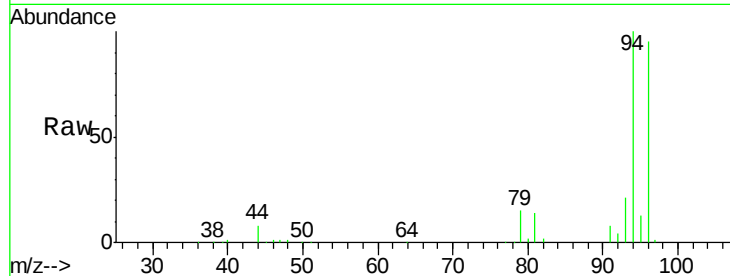
38023-122917DL

Tot Ion: 94 Resp: 64409

Ion Ratio Lower Upper

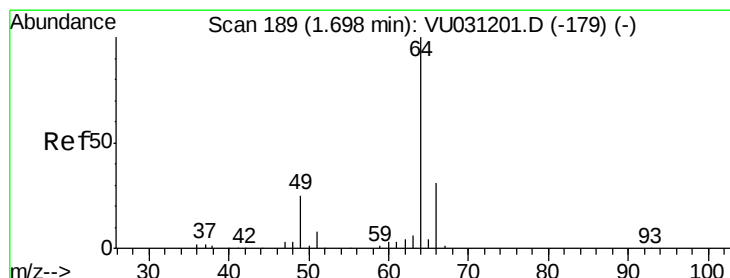
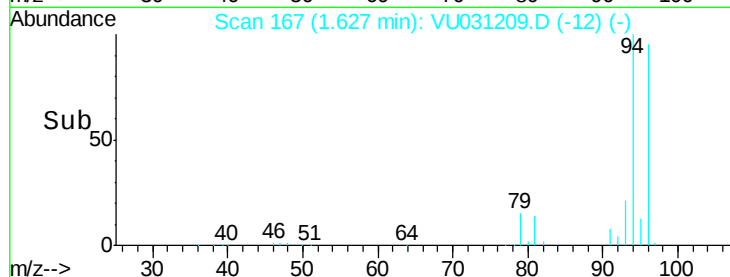
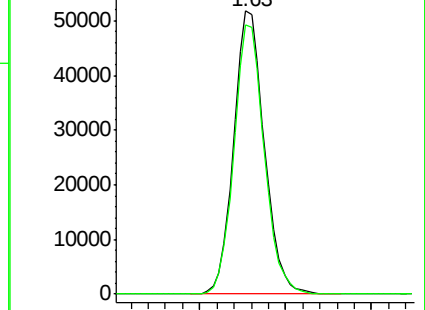
94 100

96 94.9 75.0 112.6



Abundance Ion 94.00 (93.70 to 94.70): VU031209.D (-167) (-)

Ion 96.00 (95.70 to 96.70): VU031209.D (-167) (-)



#6

Chloroethane

Concen: 2.763 ug/l

RT: 1.70 min Scan# 189

Delta R.T. 0.00 min

Lab File: VU031209.D

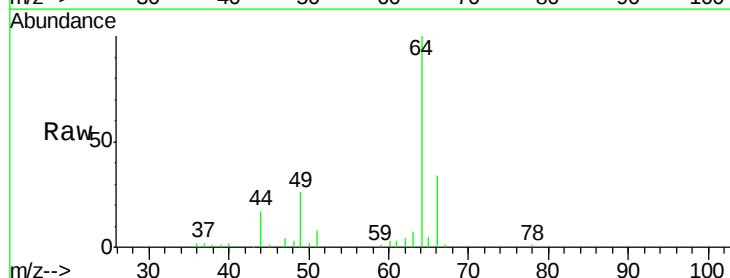
Acq: 16 Apr 2019 12:38

Tgt Ion: 64 Resp: 32666

Ion Ratio Lower Upper

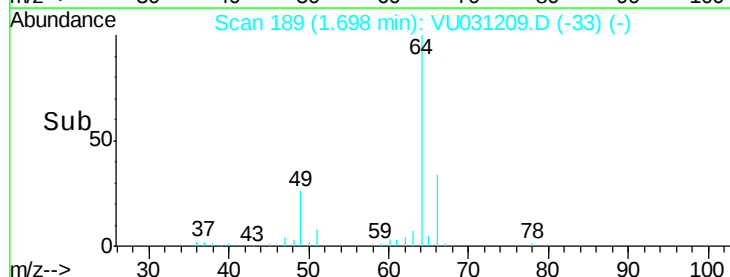
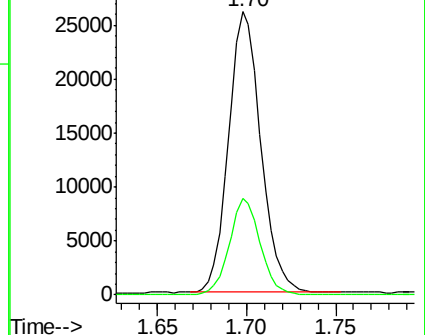
64 100

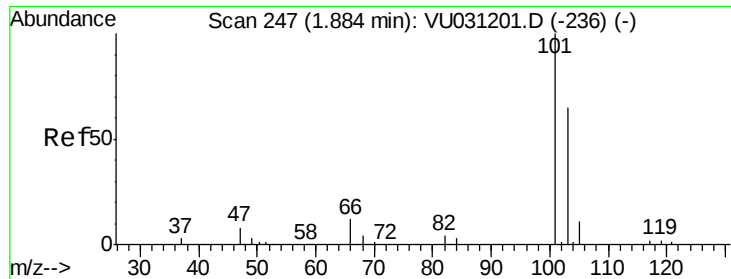
66 34.2 25.1 37.7



Abundance Ion 64.00 (63.70 to 64.70): VU031209.D (-189) (-)

Ion 66.00 (65.70 to 66.70): VU031209.D (-189) (-)





#7

Trichlorofluoromethane

Concen: 3.276 ug/l

RT: 1.89 min Scan# 248

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

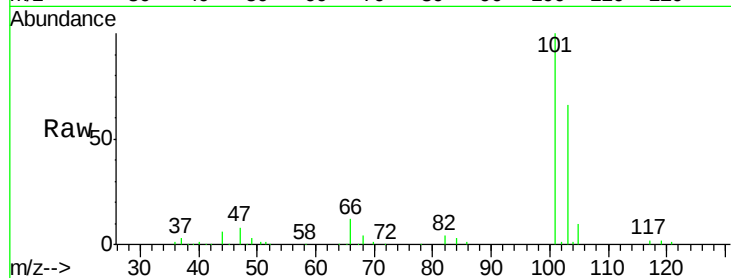
38023-122917DL

Tot Ion:101 Resp: 81791

Ion Ratio Lower Upper

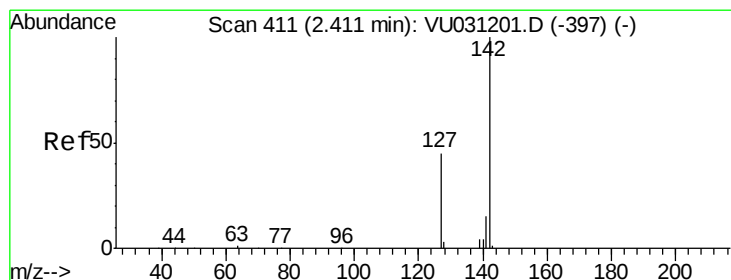
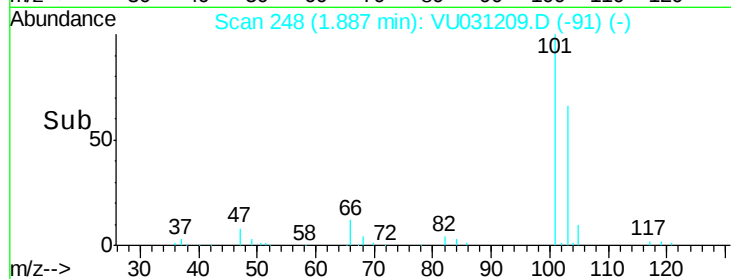
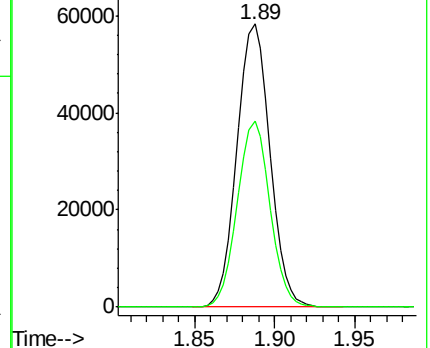
101 100

103 65.6 51.8 77.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#10

Iodomethane

Concen: 0.558 ug/l

RT: 2.41 min Scan# 411

Delta R.T. 0.00 min

Lab File: VU031209.D

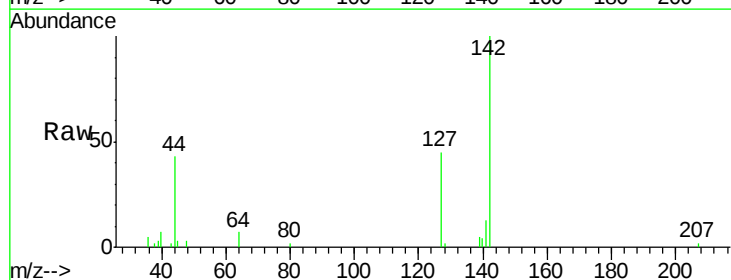
Acq: 16 Apr 2019 12:38

Tgt Ion:142 Resp: 9350

Ion Ratio Lower Upper

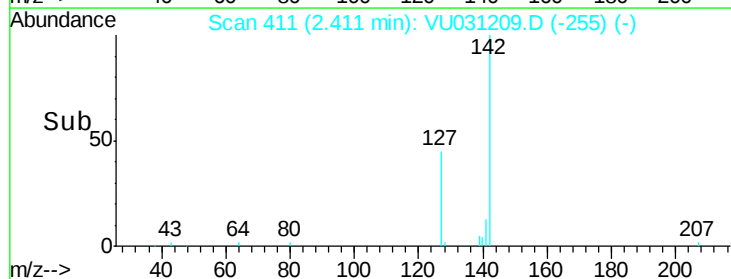
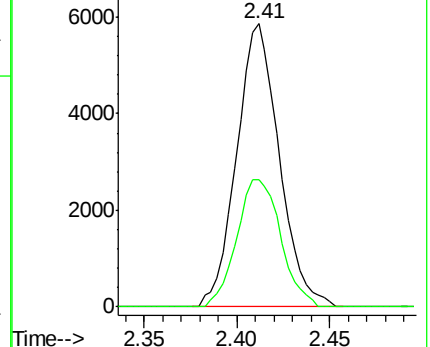
142 100

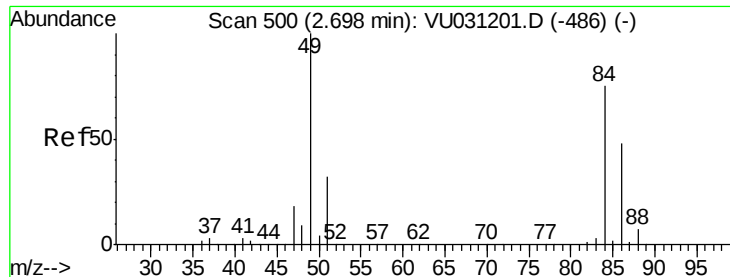
127 46.3 35.9 53.9



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 127.00 (126.70 to 127.70): V

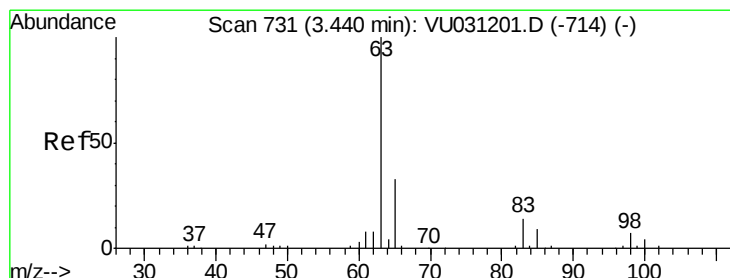
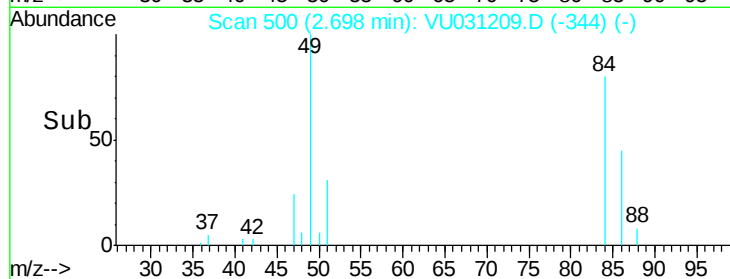
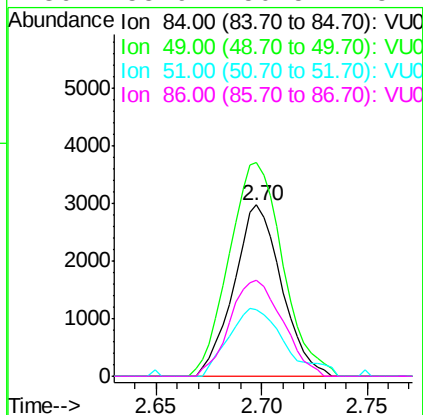
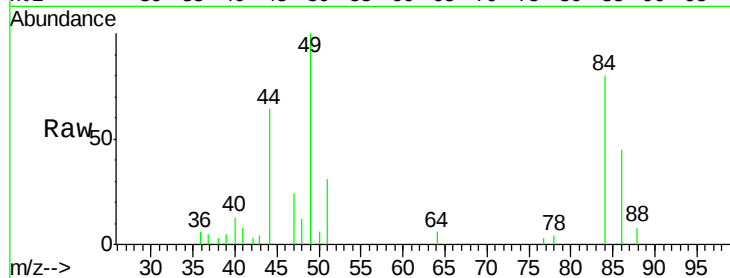




#15
Methvlene Chloride
Concen: 0.292 ug/l
RT: 2.70 min Scan# 500
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

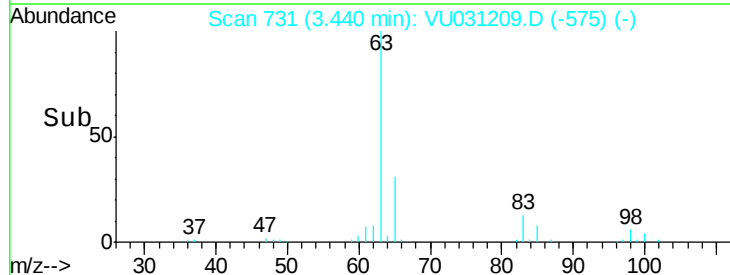
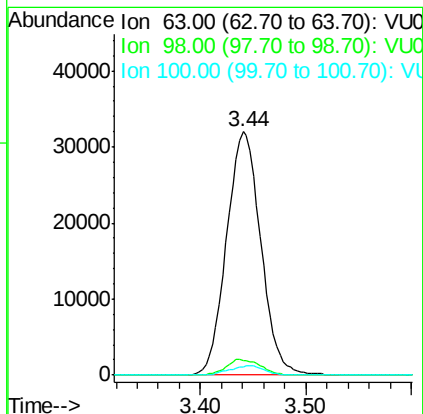
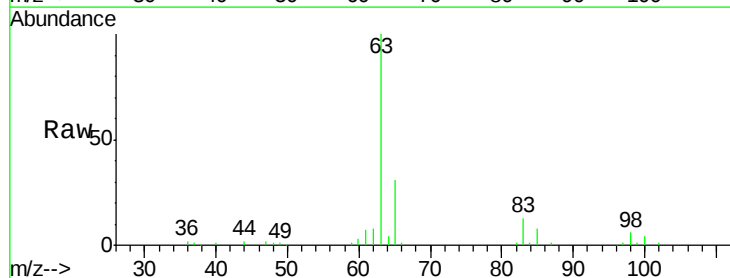
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ClientSampleId :
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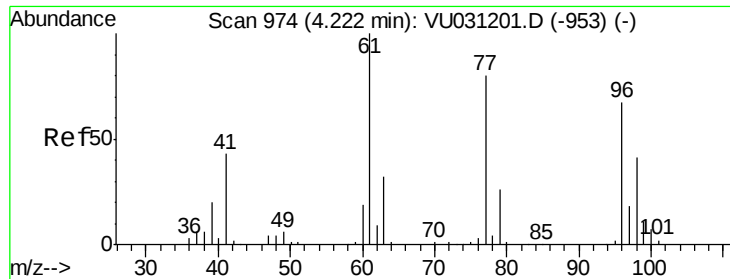
Tot Ion: 84 Resp: 4670
Ion Ratio Lower Upper
84 100
49 124.8 106.1 159.1
51 39.0 0.0 84.2
86 55.9 50.5 75.7



#17
1,1-Dichloroethane
Concen: 3.317 ug/l
RT: 3.44 min Scan# 731
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

Tgt Ion: 63 Resp: 71994
Ion Ratio Lower Upper
63 100
98 6.1 3.3 9.8
100 3.5 2.0 5.8

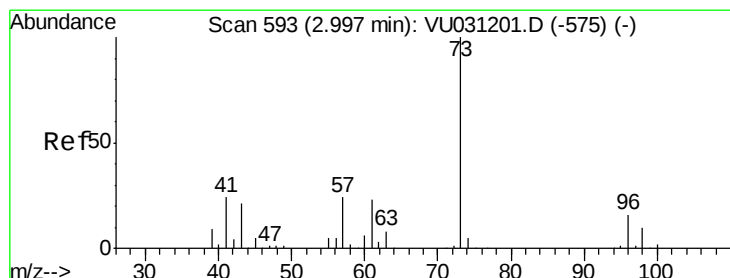
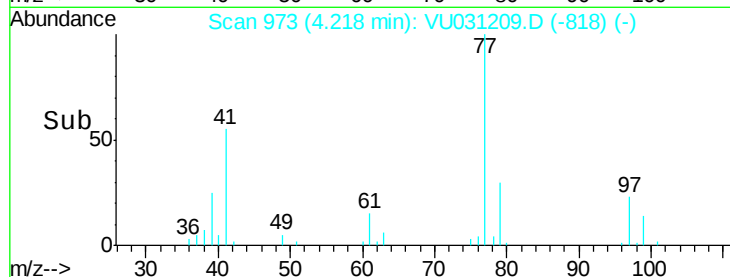
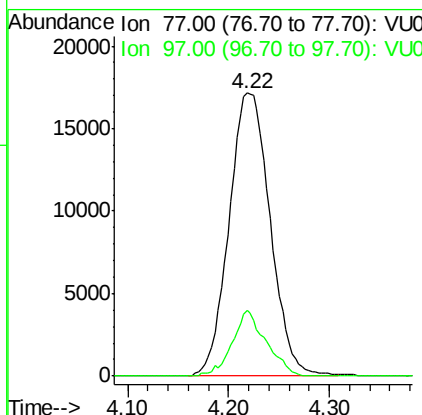
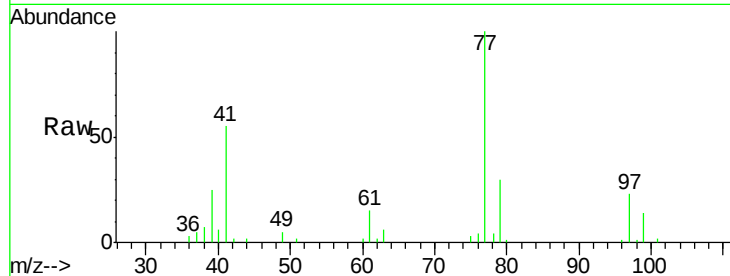




#21
 2,2-Dichloropropane
 Concen: 2.887 ug/l
 RT: 4.22 min Scan# 973
 Delta R.T. -0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

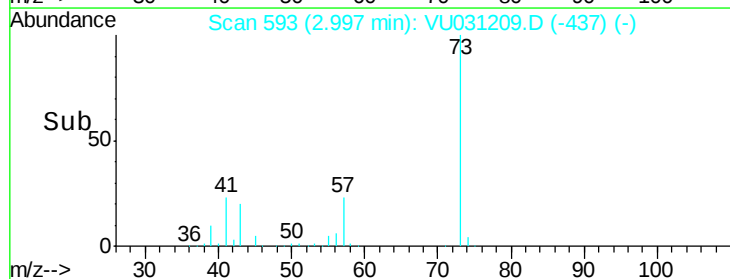
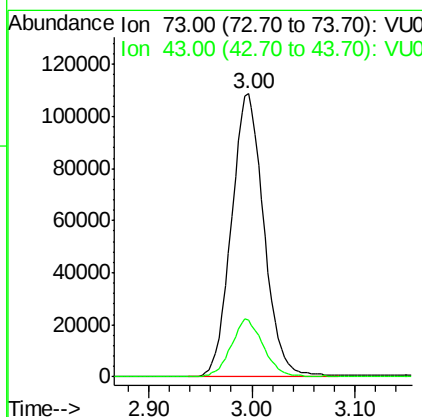
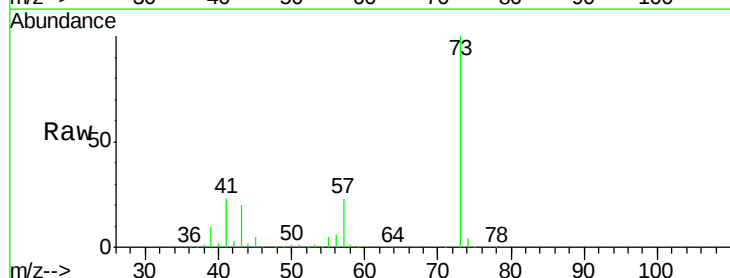
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 38023-122917DL

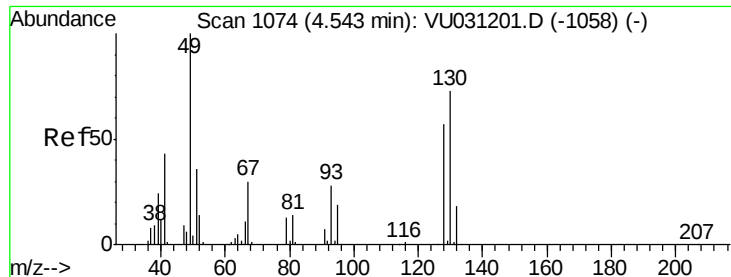
Tot Ion: 77 Resp: 48568
 Ion Ratio Lower Upper
 77 100
 97 19.2 18.2 27.2



#25
 Methyl tert-Butyl Ether
 Concen: 6.600 ug/l
 RT: 3.00 min Scan# 593
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Tgt Ion: 73 Resp: 238933
 Ion Ratio Lower Upper
 73 100
 43 20.3 16.2 24.4





#26

Bromochloromethane

Concen: 1.012 ug/l

RT: 4.55 min Scan# 1075

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

38023-122917DL

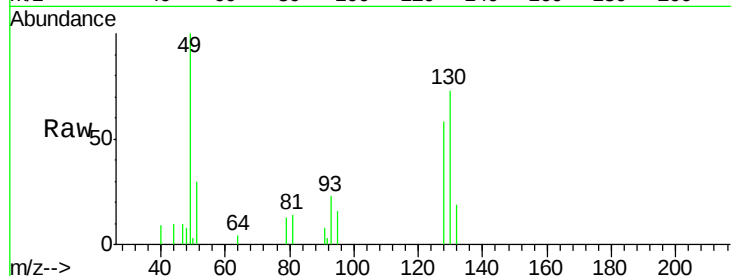
Tot Ion:128 Resp: 5513

Ion Ratio Lower Upper

128 100

49 174.9 0.0 345.8

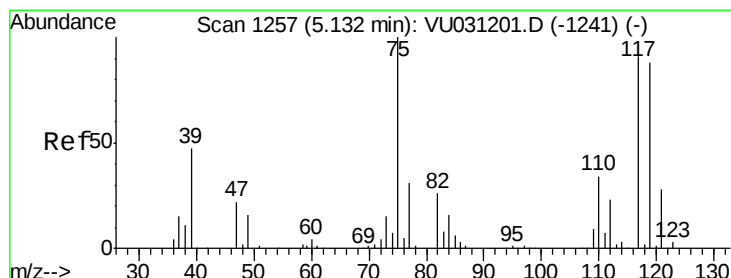
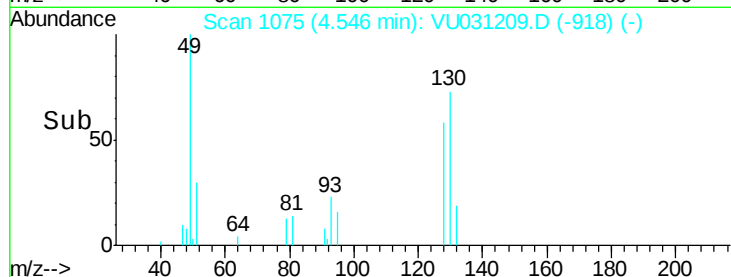
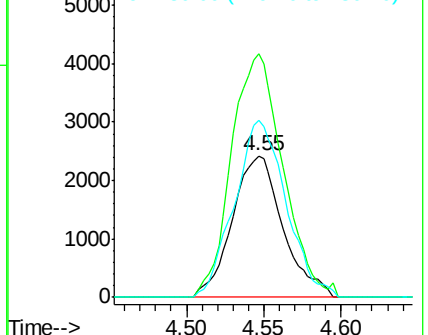
130 127.6 103.4 155.2



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: 2.413 ug/l

RT: 5.13 min Scan# 1258

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

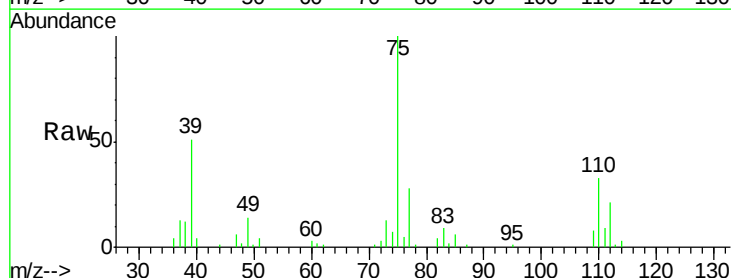
Tgt Ion: 75 Resp: 36936

Ion Ratio Lower Upper

75 100

110 34.2 17.2 51.5

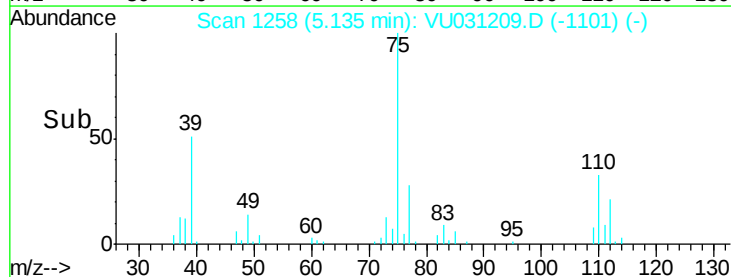
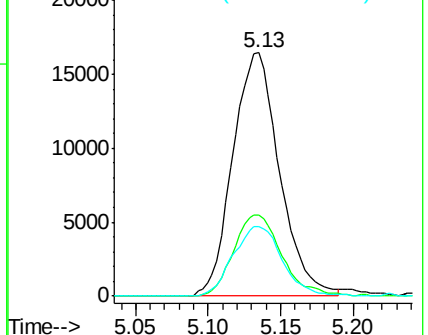
77 30.0 24.9 37.3

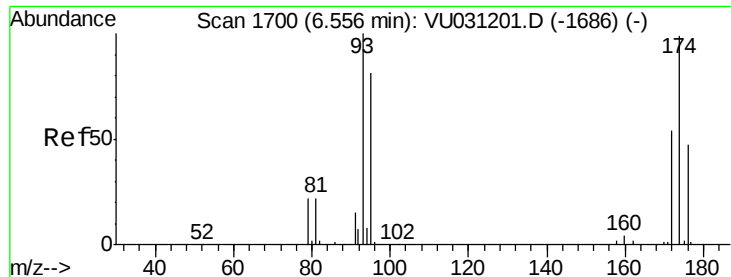


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 110.00 (109.70 to 110.70): V

Ion 77.00 (76.70 to 77.70): VU0

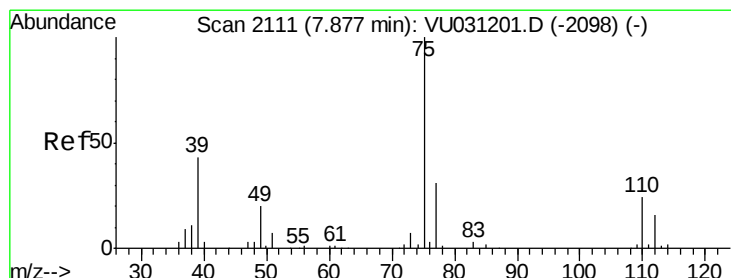
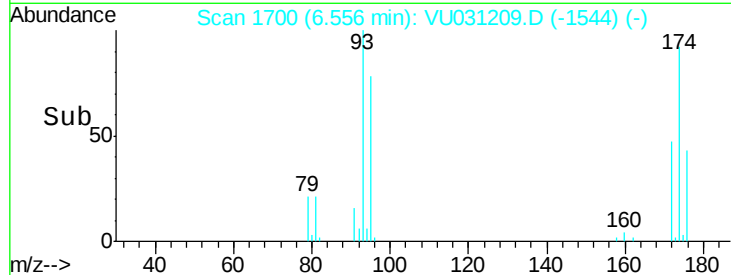
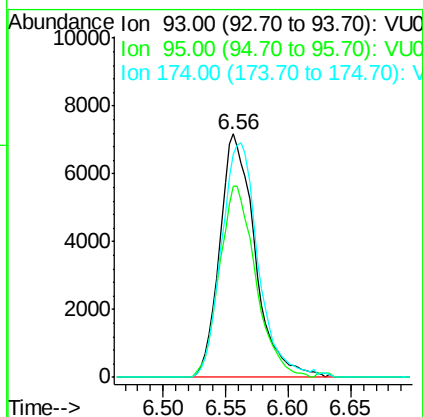
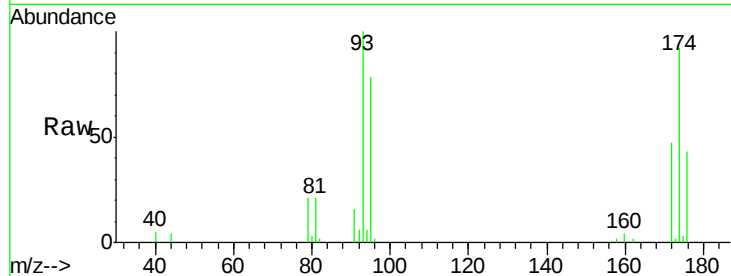




#43
Dibromomethane
Concen: 2.150 ug/l
RT: 6.56 min Scan# 1700
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

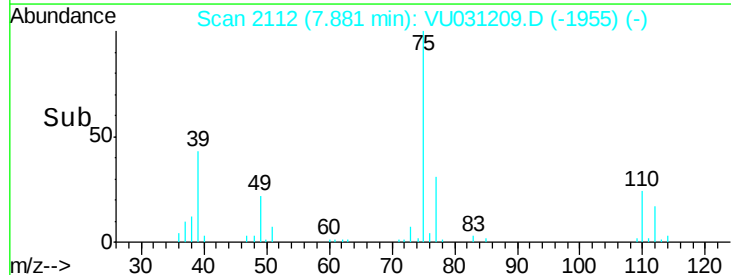
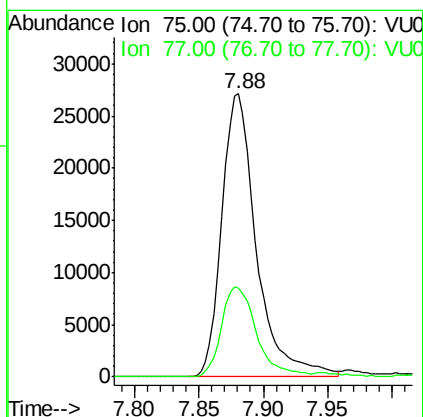
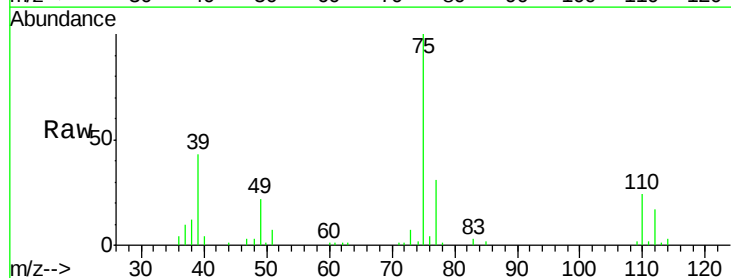
Instrument :
MSVOA_U
ClientSampleId :
38023-122917DL

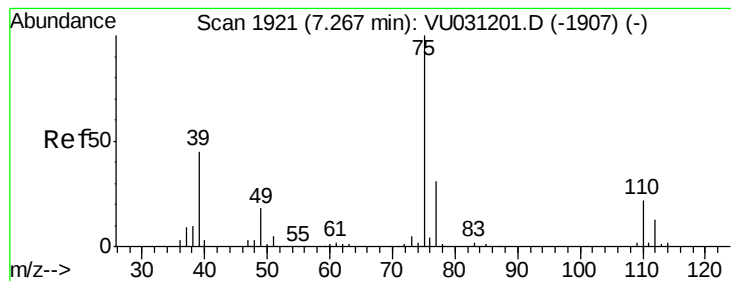
Tot Ion: 93 Resp: 14035
Ion Ratio Lower Upper
93 100
95 80.4 67.4 101.0
174 100.5 79.1 118.7



#50
t-1,3-Dichloropropene
Concen: 3.777 ug/l
RT: 7.88 min Scan# 2112
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

Tgt Ion: 75 Resp: 50653
Ion Ratio Lower Upper
75 100
77 31.3 24.6 37.0



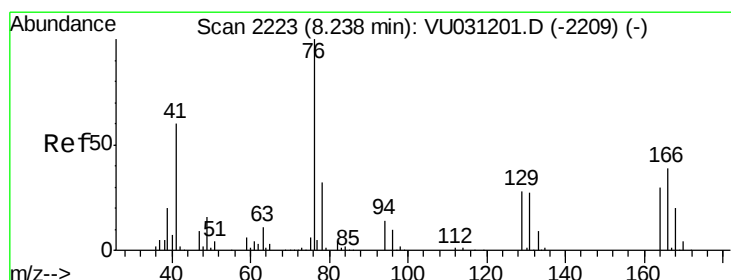
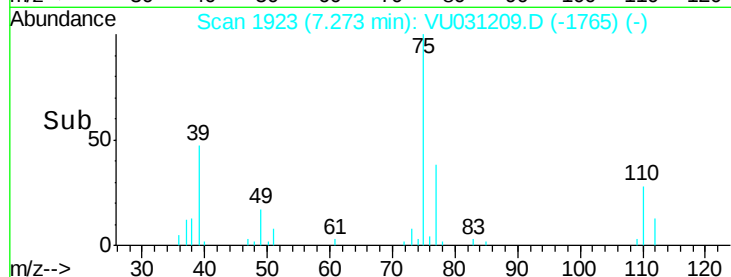
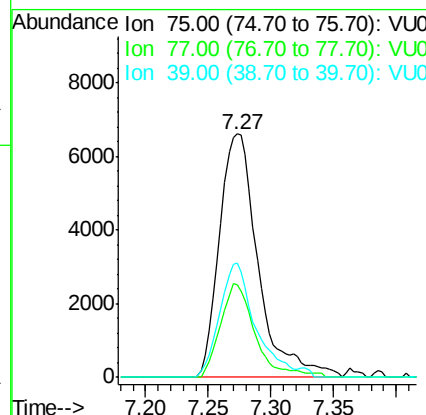
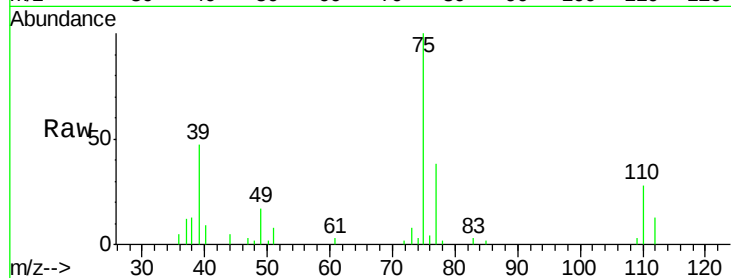


#51

cis-1,3-Dichloropropene
 Concen: 0.899 ug/l
 RT: 7.27 min Scan# 1923
 Delta R.T. 0.01 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122917DL

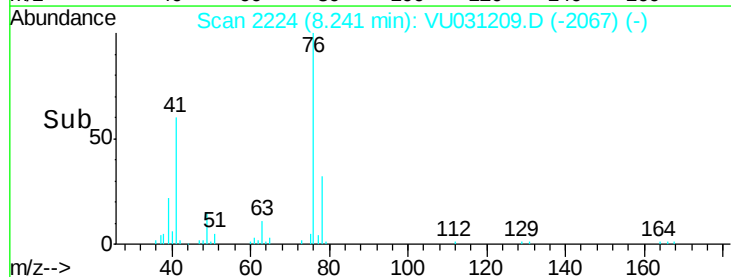
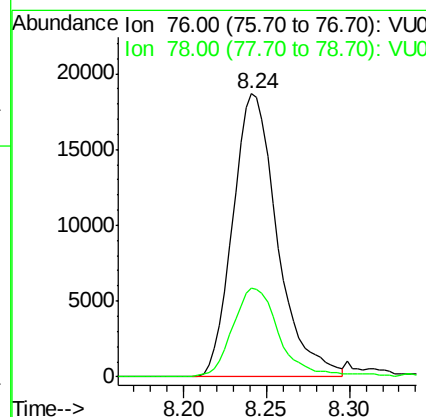
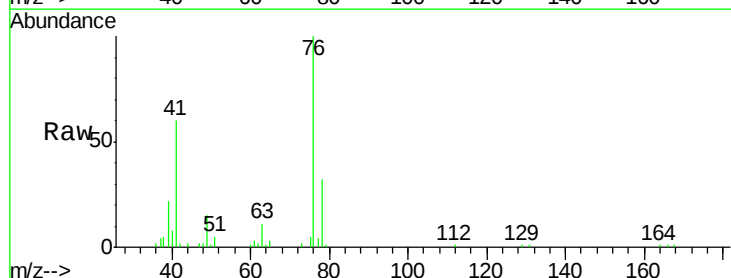
Tot Ion	Ratio	Lower	Upper
75	100		
77	38.2	24.6	37.0#
39	47.2	36.1	54.1

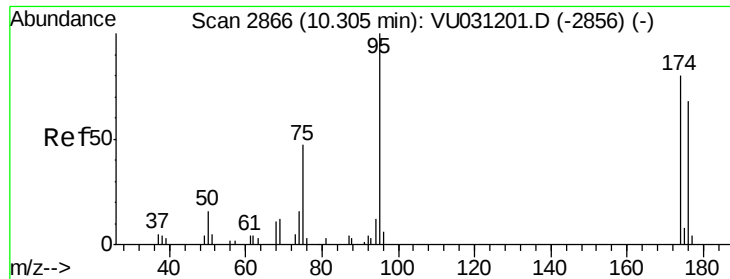


#53

1,3-Dichloropropane
 Concen: 2.340 ug/l
 RT: 8.24 min Scan# 2224
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Tgt Ion	Ratio	Lower	Upper
76	100		
78	33.3	25.3	37.9





#57

4-Bromofluorobenzene

Concen: N.D. ug/l

RT: 10.31 min Scan# 2866

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

38023-122917DL

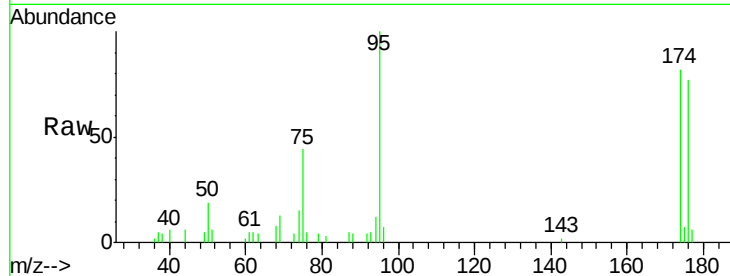
Tot Ion: 95 Resp: 12524

Ion Ratio Lower Upper

95 100

174 81.1 64.2 96.2

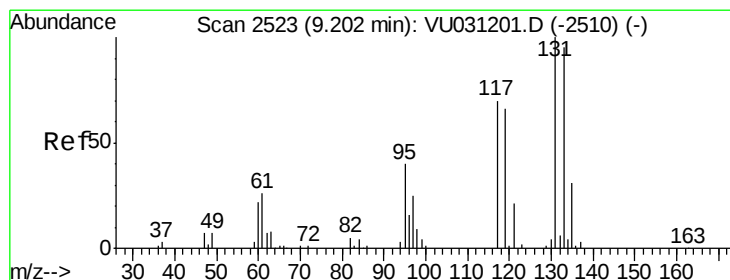
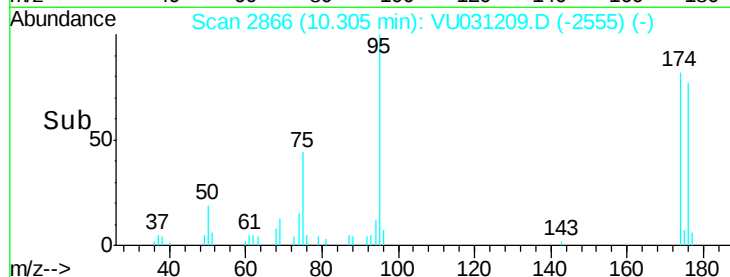
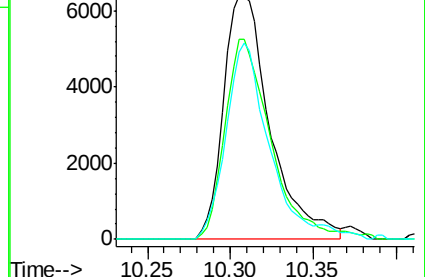
176 72.4 58.0 87.0



Abundance Ion 95.00 (94.70 to 95.70): VU031201.D (-2856) (-)

Ion 174.00 (173.70 to 174.70): VU031201.D (-2856) (-)

Ion 176.00 (175.70 to 176.70): VU031201.D (-2856) (-)



#60

1,1,1,2-Tetrachloroethane

Concen: 1.703 ug/l

RT: 9.21 min Scan# 2524

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

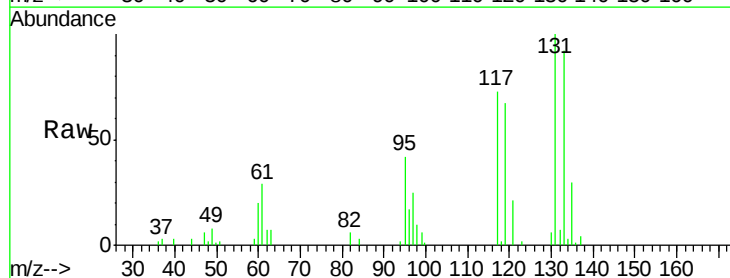
Tgt Ion: 131 Resp: 17721

Ion Ratio Lower Upper

131 100

133 88.9 77.2 115.8

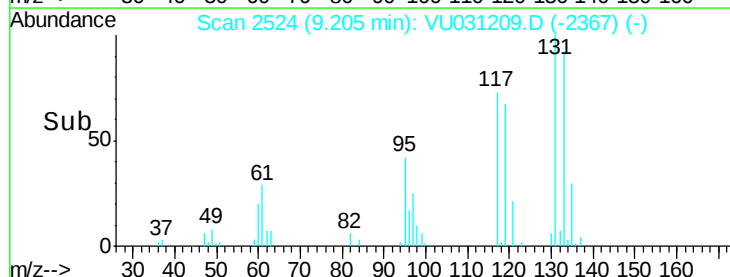
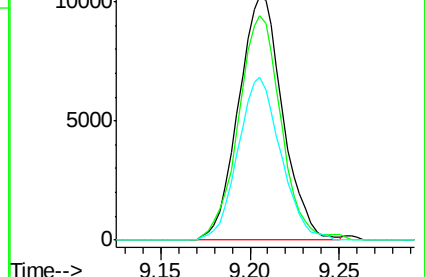
119 64.5 51.4 77.2

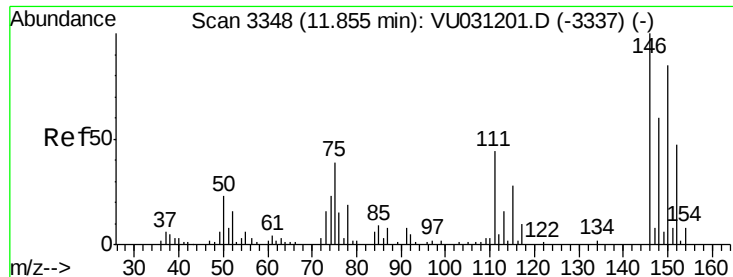


Abundance Ion 131.00 (130.70 to 131.70): VU031201.D (-2510) (-)

Ion 133.00 (132.70 to 133.70): VU031201.D (-2510) (-)

Ion 119.00 (118.70 to 119.70): VU031201.D (-2510) (-)





#68

1,2-Dichlorobenzene-d4

Concen: N.D. ug/l

RT: 11.86 min Scan# 3350

Delta R.T. 0.01 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

38023-122917DL

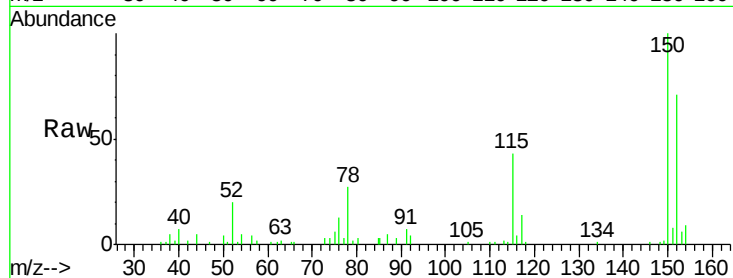
Tot Ion:152 Resp: 14359

Ion Ratio Lower Upper

152 100

115 72.5 0.0 130.0

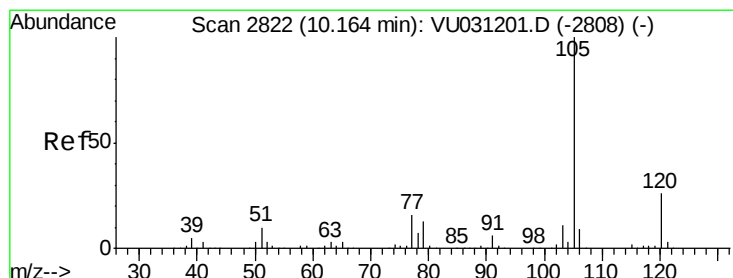
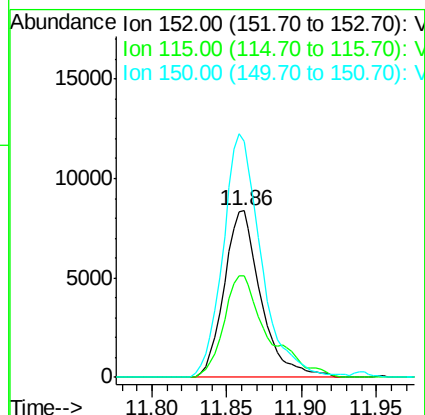
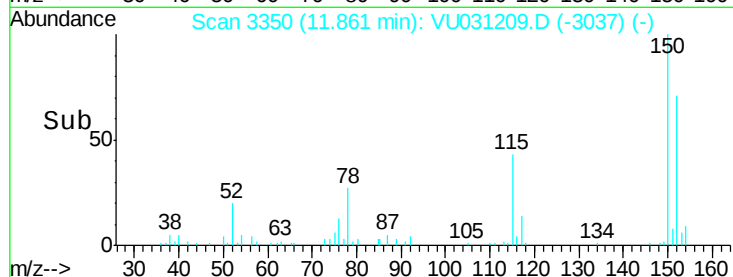
150 151.5 0.0 639.0



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: 1.509 ug/l

RT: 10.16 min Scan# 2822

Delta R.T. 0.00 min

Lab File: VU031209.D

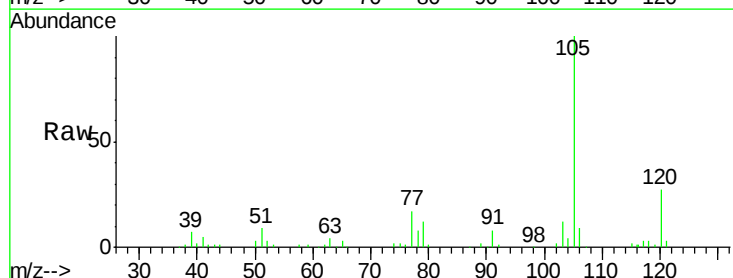
Acq: 16 Apr 2019 12:38

Tgt Ion:105 Resp: 65315

Ion Ratio Lower Upper

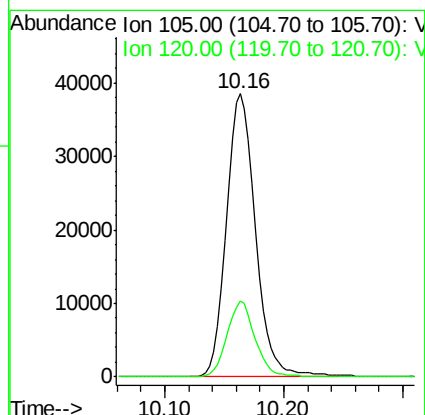
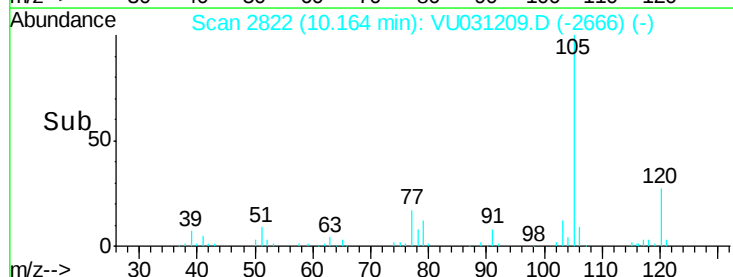
105 100

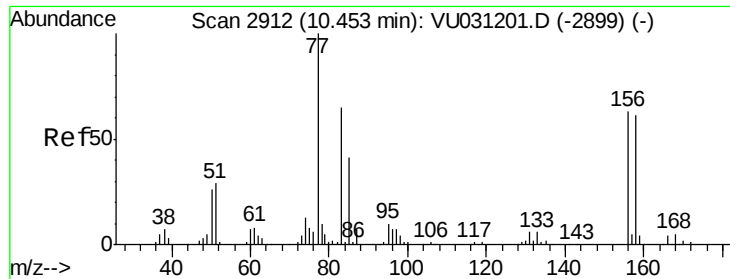
120 26.0 12.8 38.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

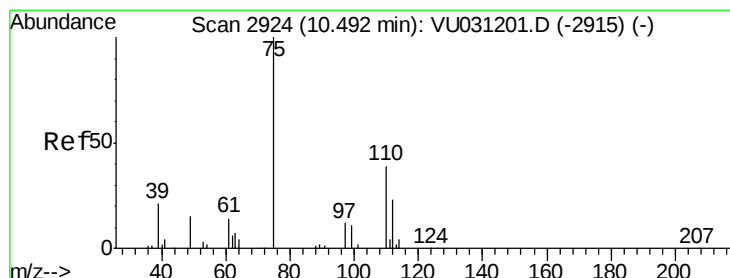
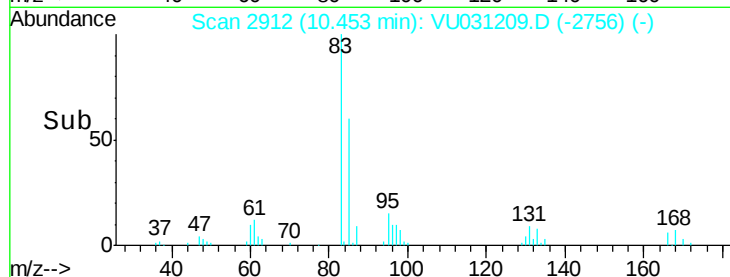
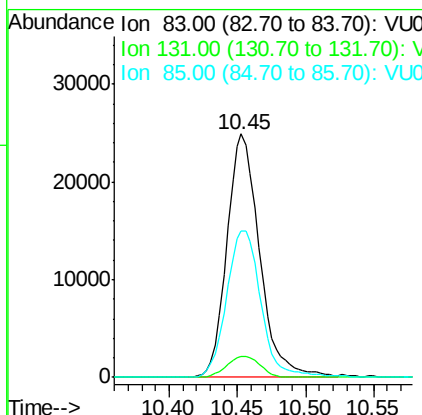
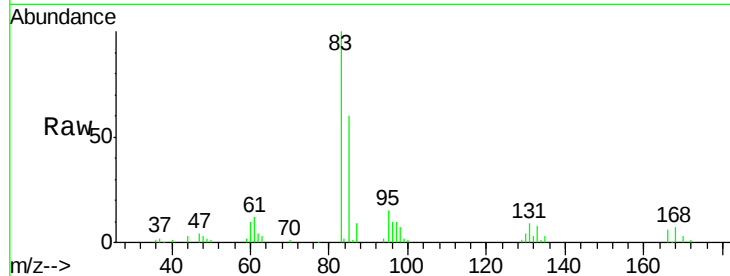




#70
 1,1,2,2-Tetrachloroethane
 Concen: 3.638 ug/l
 RT: 10.45 min Scan# 2912
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

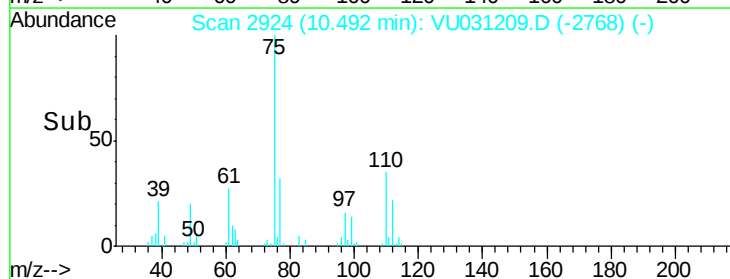
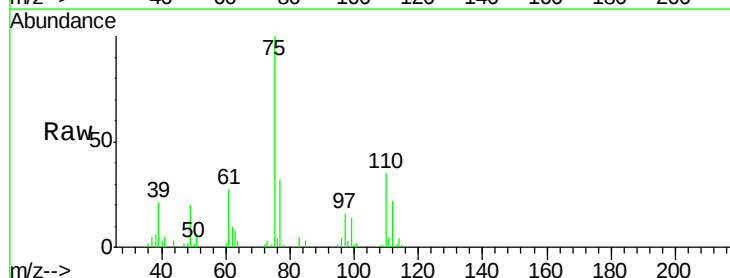
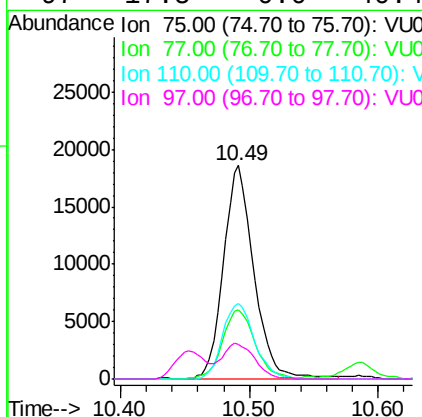
Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122917DL

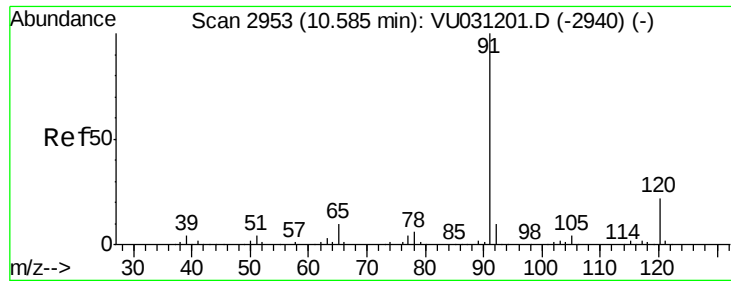
Tot Ion	83	Resp	41558
Ion	Ratio	Lower	Upper
83	100		
131	8.8	8.0	12.0
85	63.3	51.3	76.9



#71
 1,2,3-Trichloropropane
 Concen: 3.691 ug/l
 RT: 10.49 min Scan# 2924
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Tgt Ion	75	Resp	30482
Ion	Ratio	Lower	Upper
75	100		
77	34.8	0.0	0.0#
110	37.0	0.0	71.0
97	17.5	0.0	40.4





#73

n-propylbenzene

Concen: 1.011 ug/l

RT: 10.58 min Scan# 2953

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

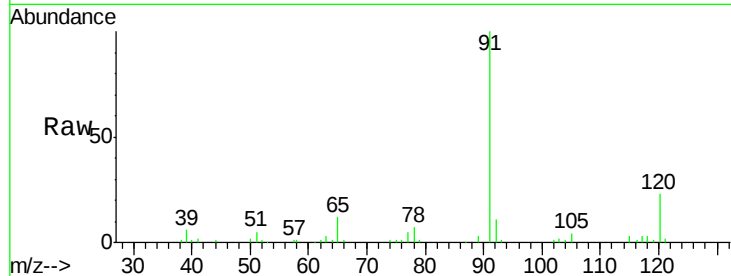
38023-122917DL

Tot Ion:120 Resp: 11683

Ion Ratio Lower Upper

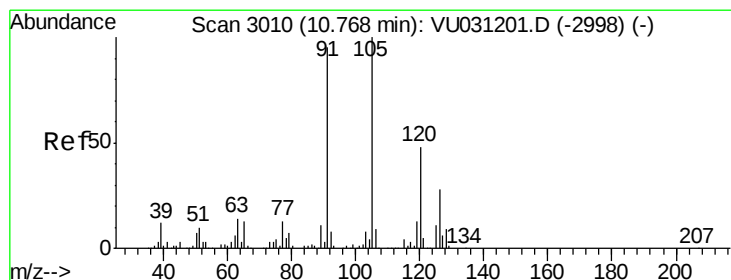
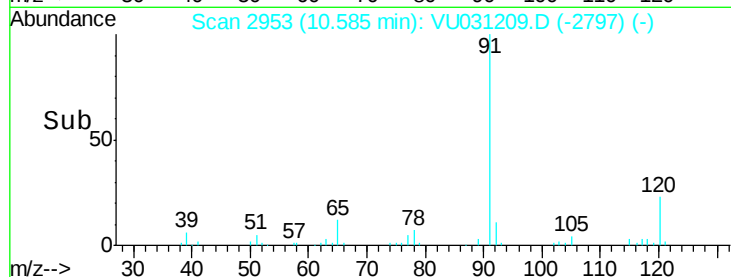
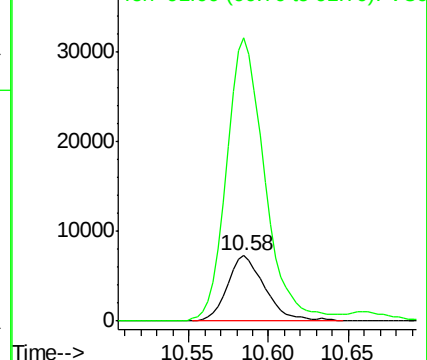
120 100

91 442.1 364.9 547.3



Abundance Ion 120.00 (119.70 to 120.70): V

Ion 91.00 (90.70 to 91.70): VU0



#76

4-Chlorotoluene

Concen: 2.319 ug/l

RT: 10.77 min Scan# 3011

Delta R.T. 0.00 min

Lab File: VU031209.D

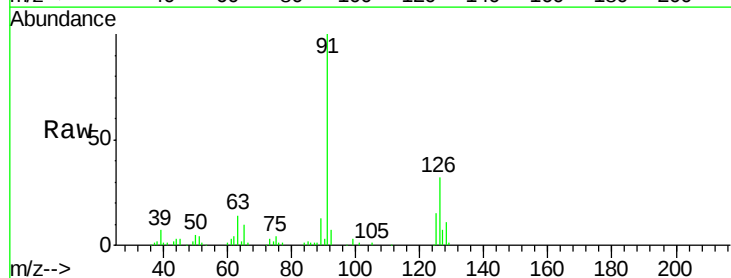
Acq: 16 Apr 2019 12:38

Tgt Ion:126 Resp: 24908

Ion Ratio Lower Upper

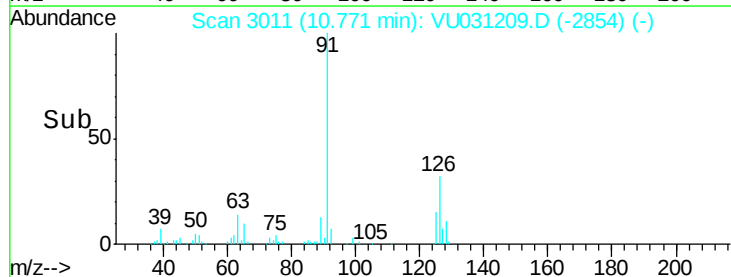
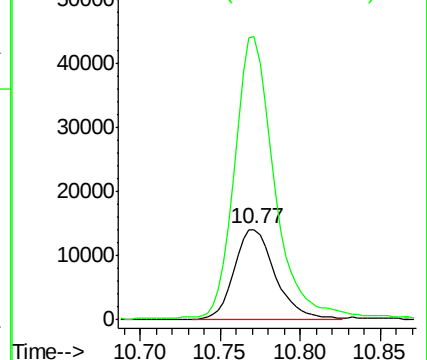
126 100

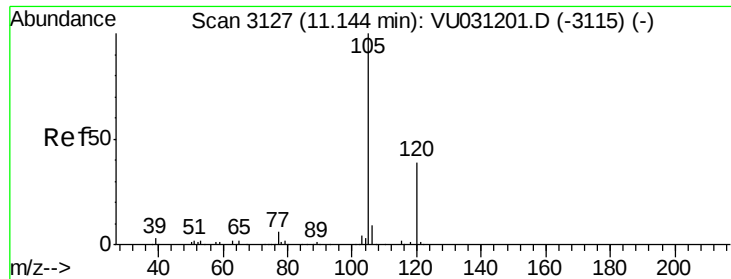
91 299.6 0.0 683.8



Abundance Ion 126.00 (125.70 to 126.70): V

Ion 91.00 (90.70 to 91.70): VU0

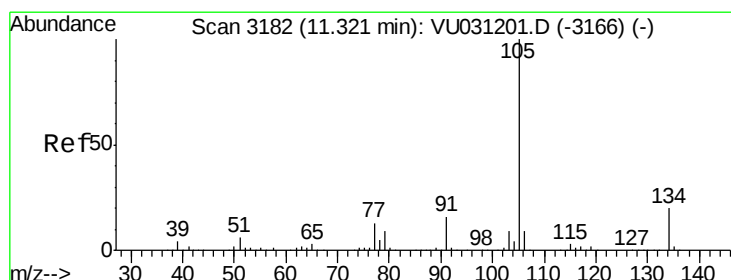
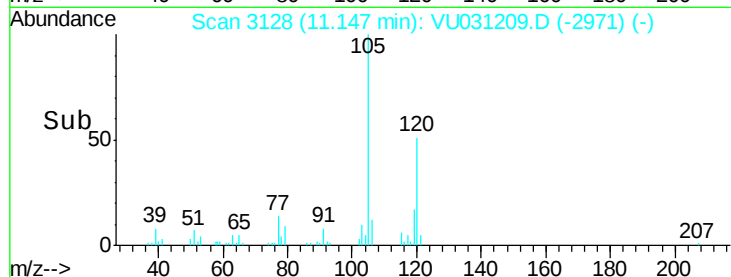
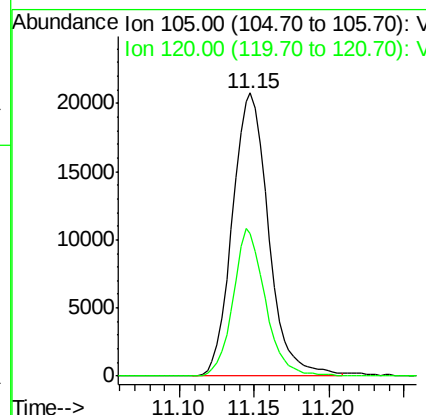
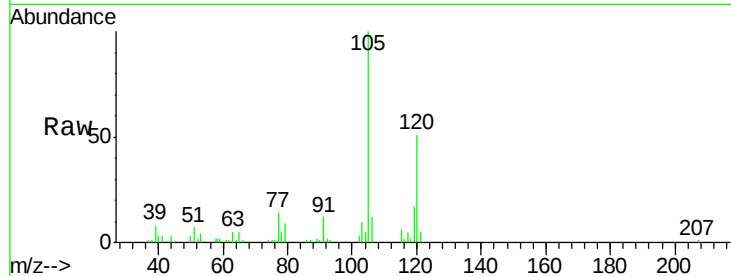




#78
 1,2,4-Trimethylbenzene
 Concen: 0.946 ug/l
 RT: 11.15 min Scan# 3128
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

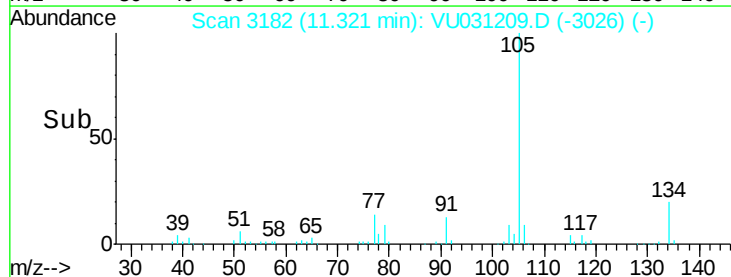
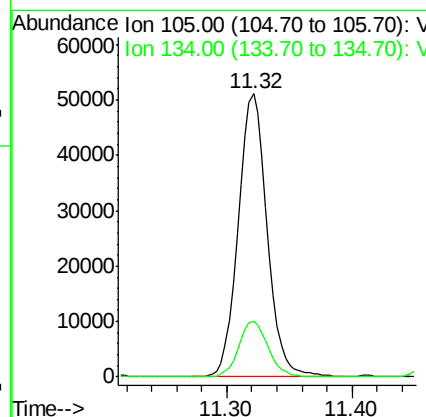
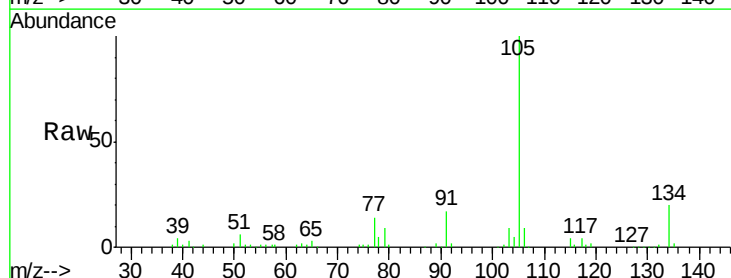
Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122917DL

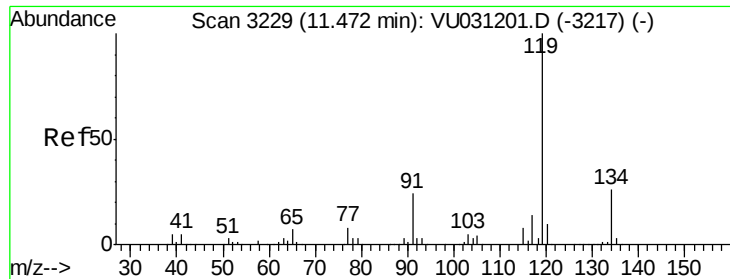
Tot Ion:105 Resp: 34930
 Ion Ratio Lower Upper
 105 100
 120 46.3 22.4 67.0



#79
 sec-Butylbenzene
 Concen: 1.695 ug/l
 RT: 11.32 min Scan# 3182
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Tgt Ion:105 Resp: 81755
 Ion Ratio Lower Upper
 105 100
 134 20.0 15.5 23.3





#81

p-Isopropyltoluene

Concen: 1.816 ug/l

RT: 11.47 min Scan# 3229

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

Instrument :

MSVOA_U

ClientSampleId :

38023-122917DL

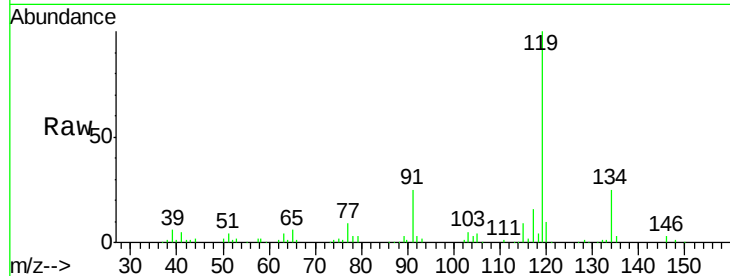
Tot Ion:119 Resp: 70360

Ion Ratio Lower Upper

119 100

134 25.0 21.0 31.4

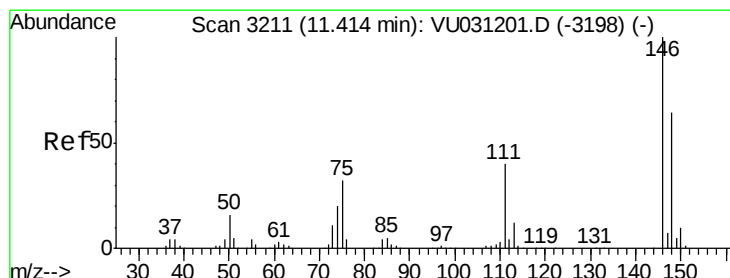
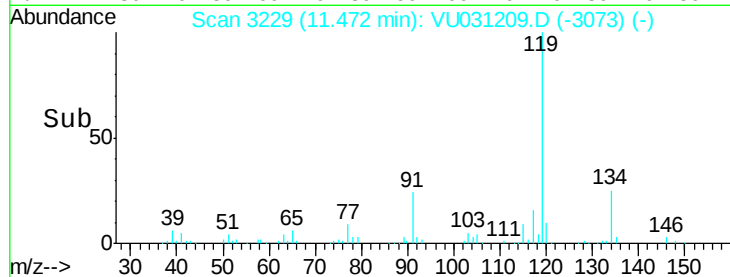
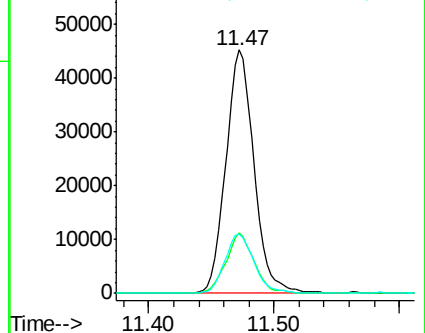
91 25.3 19.4 29.2



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): VU



#82

1,3-Dichlorobenzene

Concen: 3.831 ug/l

RT: 11.41 min Scan# 3211

Delta R.T. 0.00 min

Lab File: VU031209.D

Acq: 16 Apr 2019 12:38

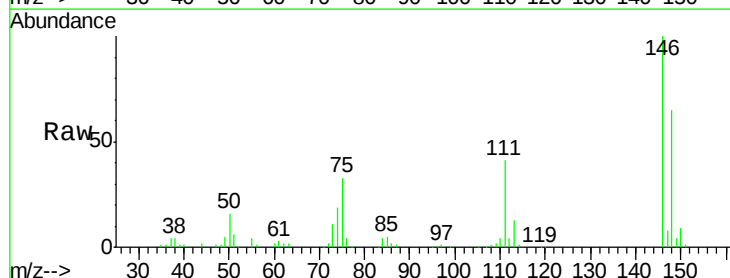
Tgt Ion:146 Resp: 86651

Ion Ratio Lower Upper

146 100

111 41.2 32.4 48.6

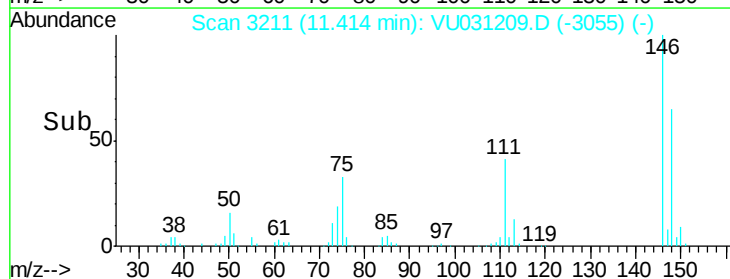
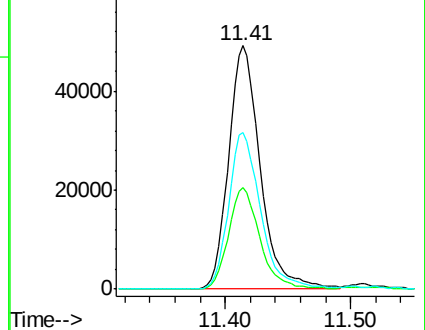
148 64.8 50.8 76.2

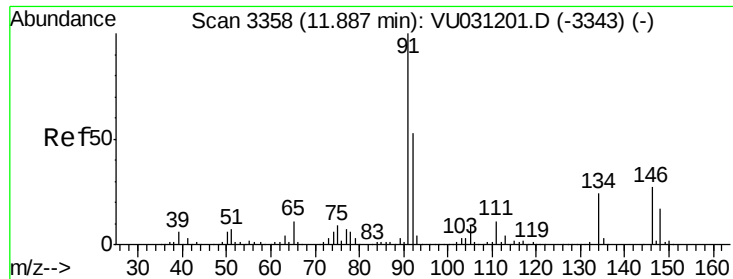


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

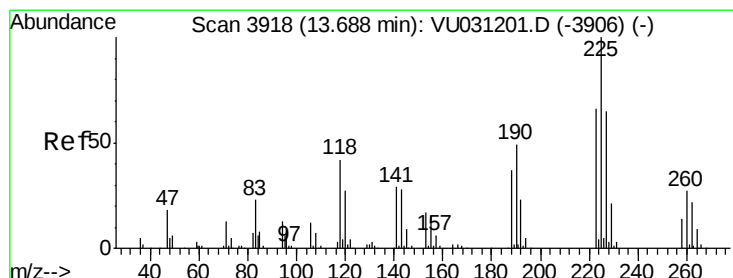
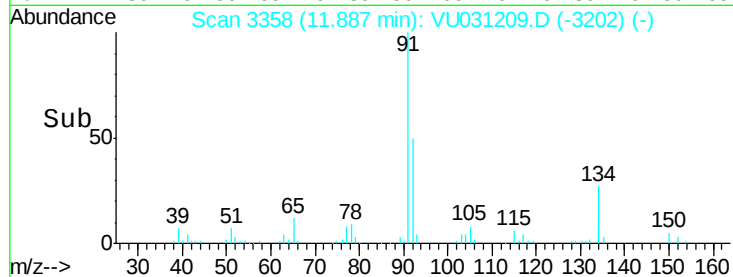
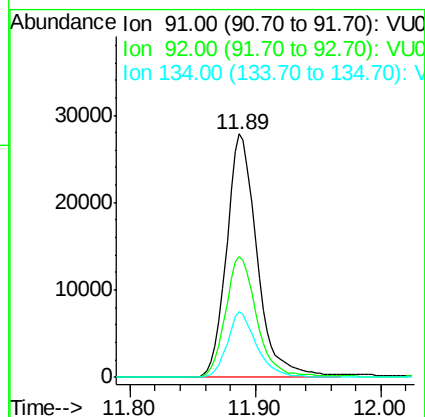
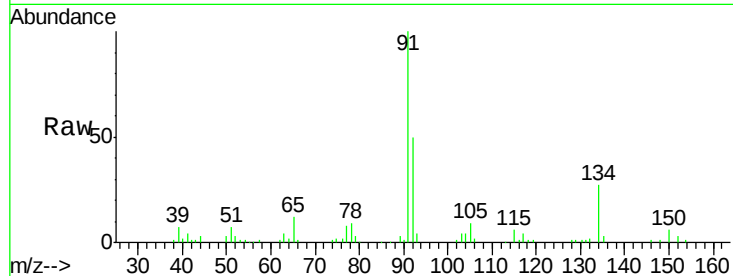




#84
n-Butylbenzene
Concen: 1.261 ug/l
RT: 11.89 min Scan# 3358
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

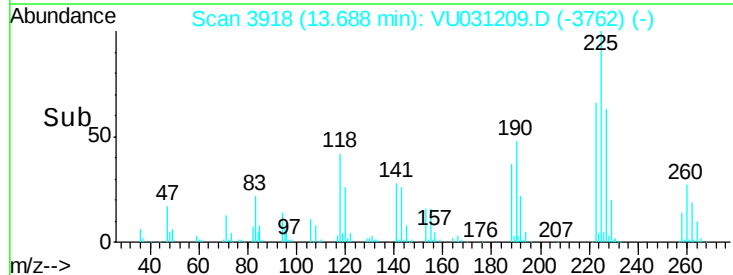
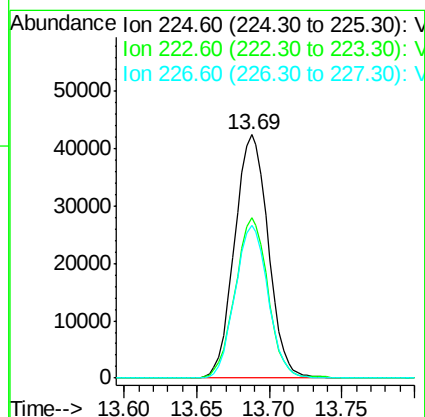
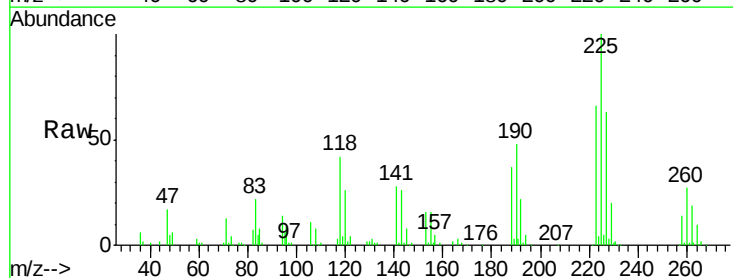
Instrument :
MSVOA_U
ClientSampleId :
38023-122917DL

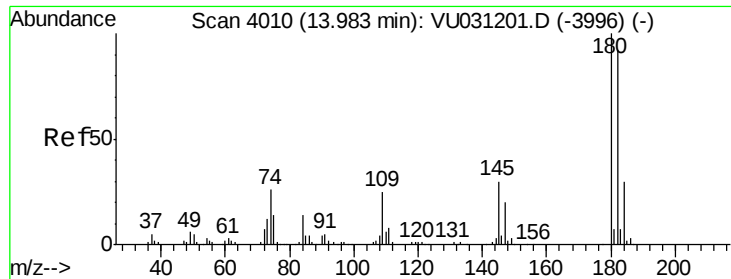
Tot Ion: 91 Resp: 47197
Ion Ratio Lower Upper
91 100
92 50.4 42.6 63.8
134 25.5 19.1 28.7



#88
Hexachlorobutadiene
Concen: 7.914 ug/l
RT: 13.69 min Scan# 3918
Delta R.T. 0.00 min
Lab File: VU031209.D
Acq: 16 Apr 2019 12:38

Tgt Ion: 225 Resp: 68534
Ion Ratio Lower Upper
225 100
223 63.7 51.4 77.2
227 61.4 51.2 76.8

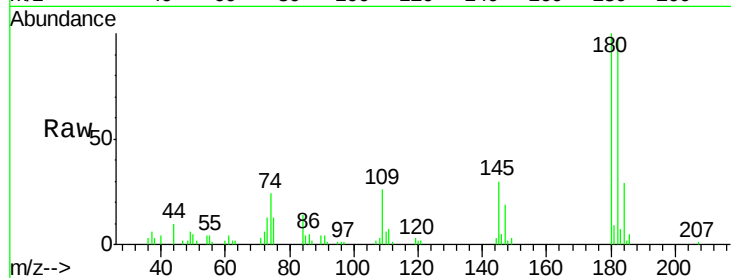




#90
 1,2,3-Trichlorobenzene
 Concen: 1.821 ug/l
 RT: 13.99 min Scan# 4011
 Delta R.T. 0.00 min
 Lab File: VU031209.D
 Acq: 16 Apr 2019 12:38

Instrument :
 MSVOA_U
 ClientSampleId :
 38023-122917DL

Tot Ion	Ratio	Lower	Upper
180	100		
182	92.4	76.4	114.6
145	30.2	25.3	37.9



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

