

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX012919\
 Data File : VX007290.D
 Acq On : 29 Jan 2019 16:09
 Operator : JC/SP
 Sample : PB116677ZHE#01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 16 Sample Multiplier: 1

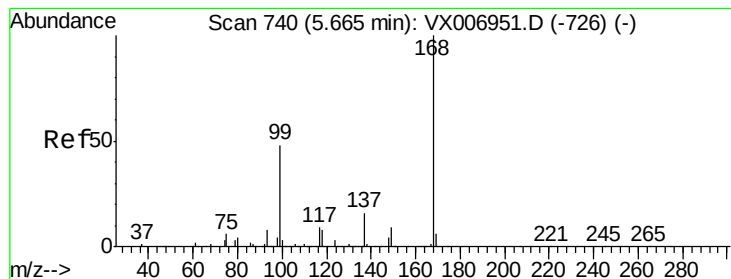
Quant Time: Jan 30 00:44:58 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X010819W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jan 08 14:06:59 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	531609	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	823318	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.12	117	791889	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	378013	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.07	65	284714	51.25	ug/l	0.00
Spiked Amount			Recovery	=	102.50%	
35) Dibromofluoromethane	5.50	113	259696	49.26	ug/l	0.00
Spiked Amount			Recovery	=	98.52%	
50) Toluene-d8	8.71	98	1000164	51.82	ug/l	0.00
Spiked Amount			Recovery	=	103.64%	
62) 4-Bromofluorobenzene	11.14	95	352434	52.38	ug/l	0.00
Spiked Amount			Recovery	=	104.76%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.64	94	1391	0.238	ug/l #	34
10) Methyl Iodide	2.52	142	1629	0.228	ug/l	96
11) Tert butyl alcohol	3.03	59	2099	1.602	ug/l #	83
13) Acrolein	2.29	56	372	3.734	ug/l #	72
15) Acrylonitrile	3.14	53	1290	0.429	ug/l #	22
16) Acetone	2.45	43	28218	10.274	ug/l	99
17) Carbon Disulfide	2.57	76	2576	0.205	ug/l #	78
18) Methyl Acetate	2.78	43	11111	1.397	ug/l	97
20) Methylene Chloride	2.86	84	11874	1.727	ug/l	97
25) 2-Butanone	4.70	43	6248	1.590	ug/l #	80
29) Tetrahydrofuran	5.17	42	1685	0.660	ug/l #	46
36) 1,1-Dichloropropene	5.67	75	33918	4.738	ug/l #	48
38) Carbon Tetrachloride	5.67	117	48564	6.743	ug/l #	15
43) Isopropyl Acetate	6.47	43	27047	2.234	ug/l	99
48) Methyl methacrylate	7.68	41	13561	2.182	ug/l #	13
49) 1,4-Dioxane	7.75	88	57	Below Cal	#	27
51) 4-Methyl-2-Pentanone	8.62	43	148543	19.095	ug/l #	49
54) cis-1,3-Dichloropropene	8.62	75	71836	8.930	ug/l #	64
57) 1,3-Dichloropropane	9.54	76	16993	1.846	ug/l #	47
59) 2-Hexanone	9.54	43	224600	37.886	ug/l #	51
74) N-amyl acetate	10.69	43	24178	2.253	ug/l #	52
76) 1,2,3-Trichloropropane	11.13	75	166767	21.770	ug/l #	40
80) 1,3,5-Trimethylbenzene	11.51	105	5467	0.245	ug/l	95
81) trans-1,4-Dichloro-2-buten	11.13	75	166767	64.512	ug/l #	10
88) 1,4-Dichlorobenzene	12.10	146	1872	0.293	ug/l #	1
90) Hexachloroethane	12.59	117	113	2.936	ug/l #	6

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.00 min

Lab File: VX007290.D

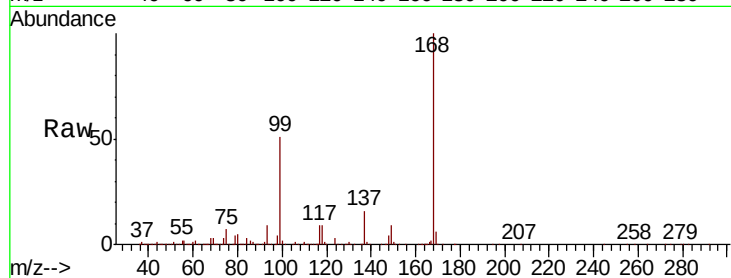
Acq: 29 Jan 2019 16:09

Tot Ion:168 Resp: 531609

Ion Ratio Lower Upper

168 100

99 50.6 41.8 62.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

200000

150000

100000

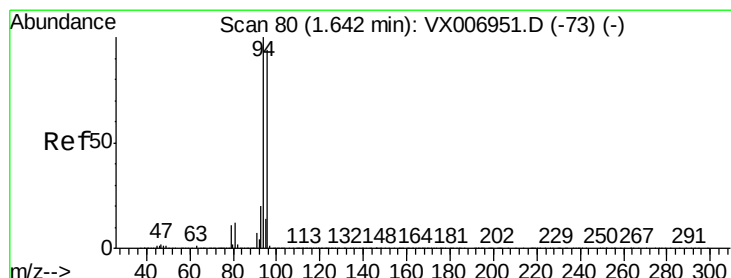
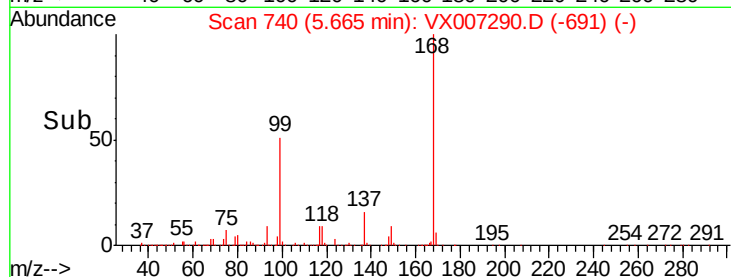
50000

0

5.67

5.50 5.60 5.70 5.80

Time-->



#5

Bromomethane

Concen: 0.238 ug/l

RT: 1.64 min Scan# 79

Delta R.T. -0.01 min

Lab File: VX007290.D

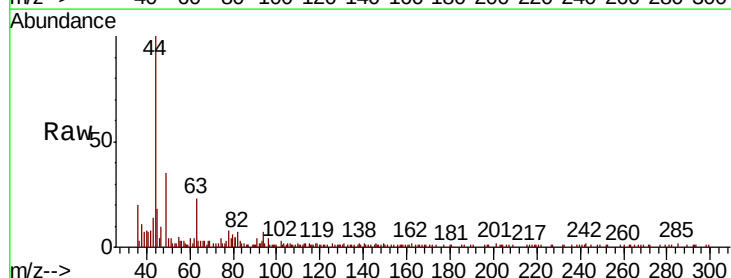
Acq: 29 Jan 2019 16:09

Tgt Ion: 94 Resp: 1391

Ion Ratio Lower Upper

94 100

96 28.8 73.4 110.2#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

600

400

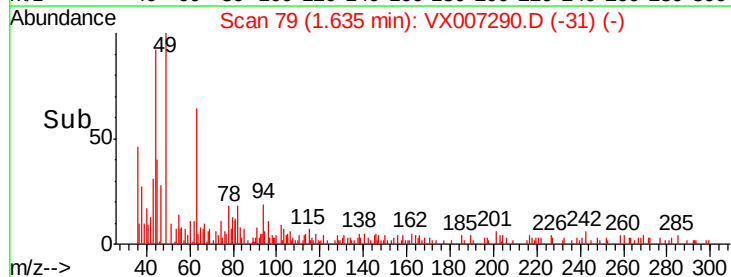
200

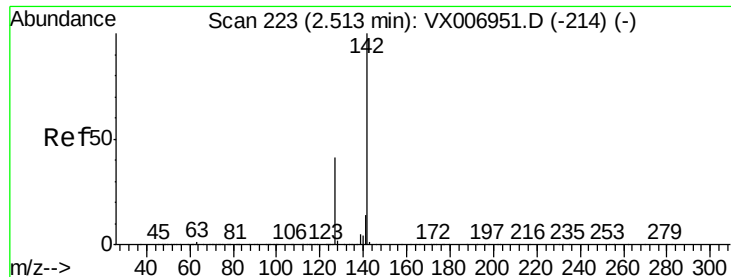
0

1.64

1.60 1.65 1.70

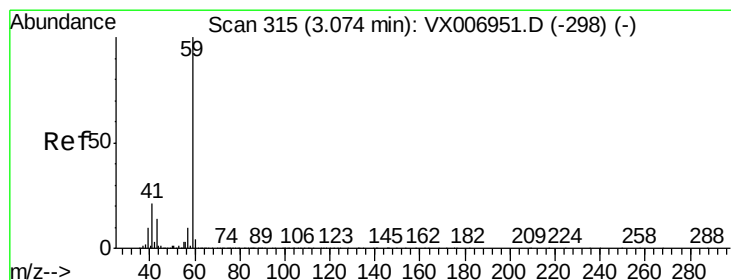
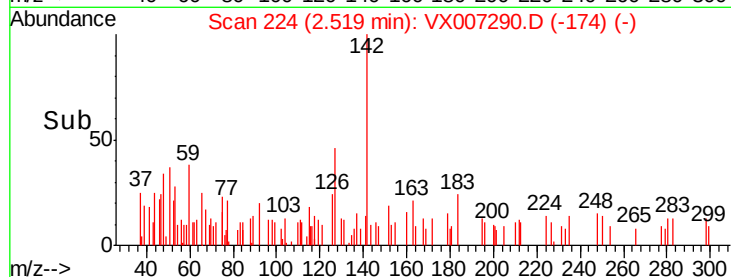
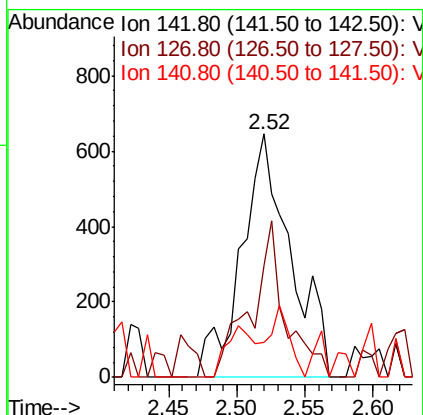
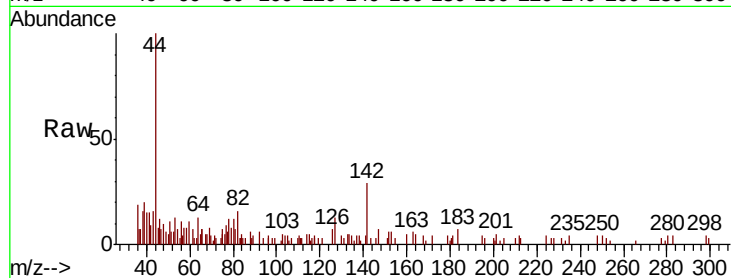
Time-->





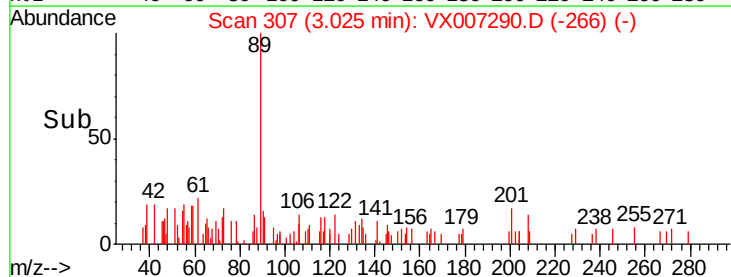
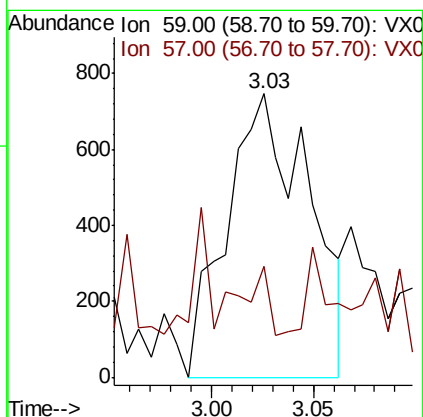
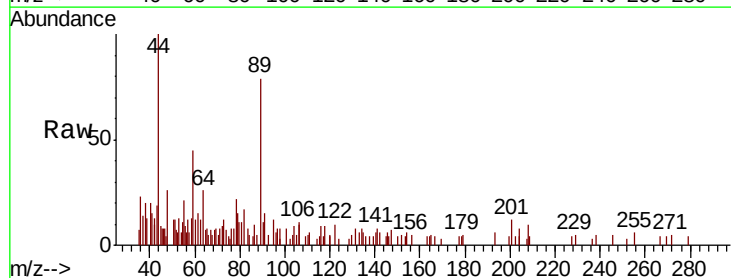
#10
Methvl Iodide
Concen: 0.228 ug/l
RT: 2.52 min Scan# 224
Delta R.T. 0.01 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

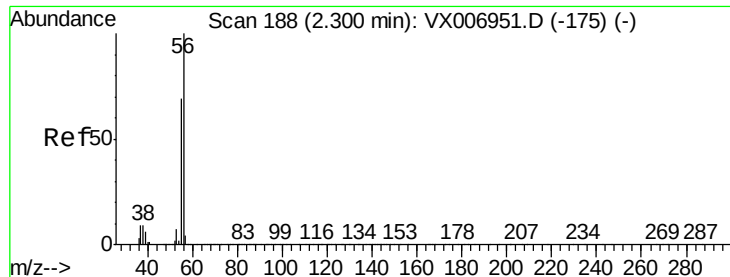
Tot Ion	Ratio	Lower	Upper
142	100		
127	45.0	33.9	50.9
141	12.9	11.4	17.0



#11
Tert butyl alcohol
Concen: 1.602 ug/l
RT: 3.03 min Scan# 307
Delta R.T. -0.05 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

Tgt Ion	Ratio	Lower	Upper
59	100		
57	4.1	8.5	12.7#





#13

Acrolein

Concen: 3.734 ug/l

RT: 2.29 min Scan# 187

Delta R.T. -0.01 min

Lab File: VX007290.D

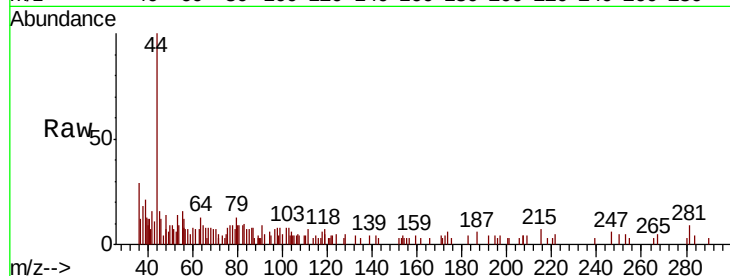
Acq: 29 Jan 2019 16:09

Tot Ion: 56 Resp: 372

Ion Ratio Lower Upper

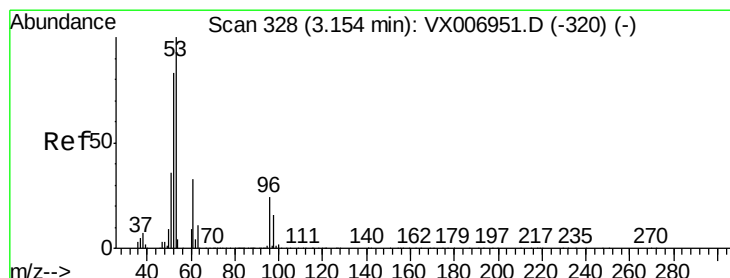
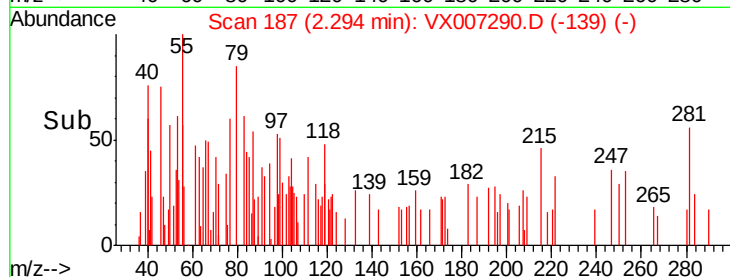
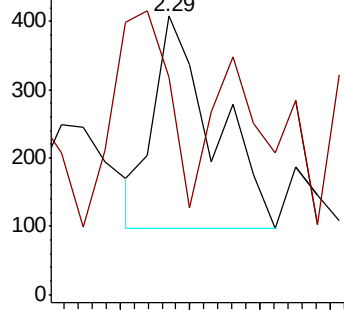
56 100

55 96.2 58.2 87.4#



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0



#15

Acrylonitrile

Concen: 0.429 ug/l

RT: 3.14 min Scan# 326

Delta R.T. -0.01 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

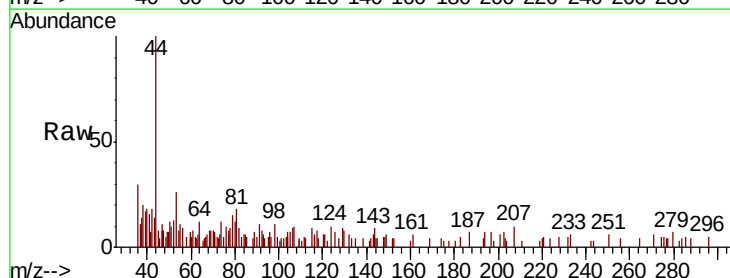
Tgt Ion: 53 Resp: 1290

Ion Ratio Lower Upper

53 100

52 5.7 66.0 99.0#

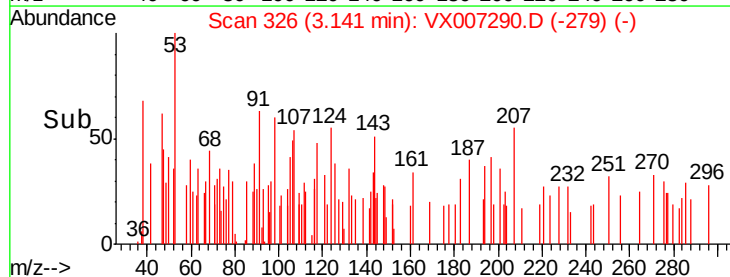
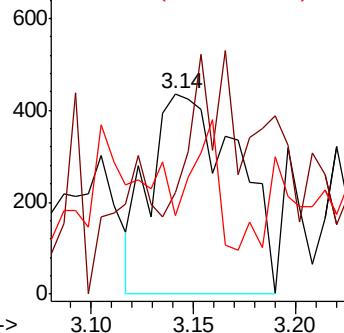
51 0.0 28.6 42.8#

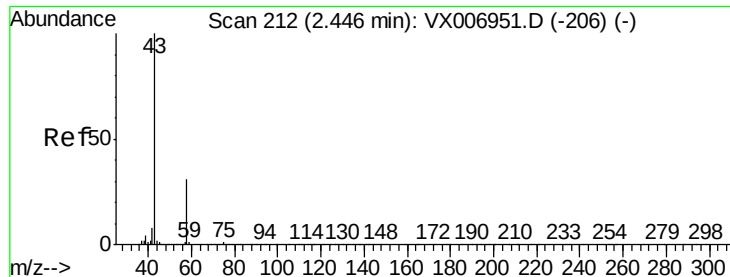


Abundance Ion 53.00 (52.70 to 53.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

Ion 51.00 (50.70 to 51.70): VX0





#16

Acetone

Concen: 10.274 ug/l

RT: 2.45 min Scan# 212

Delta R.T. -0.00 min

Lab File: VX007290.D

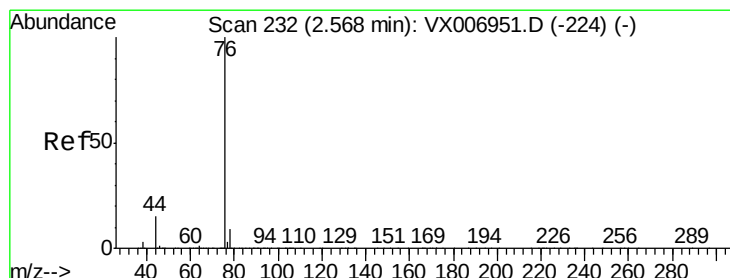
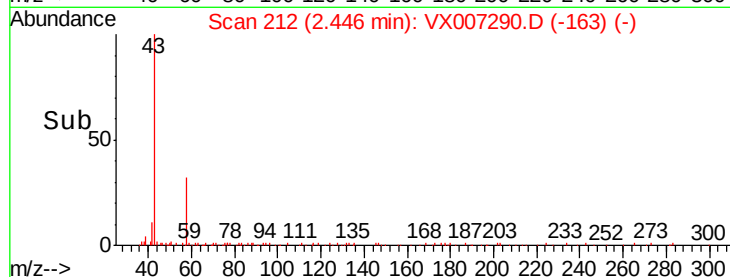
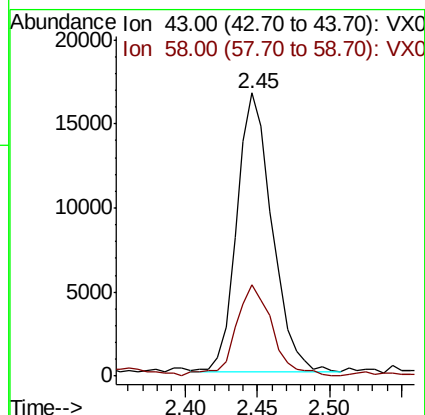
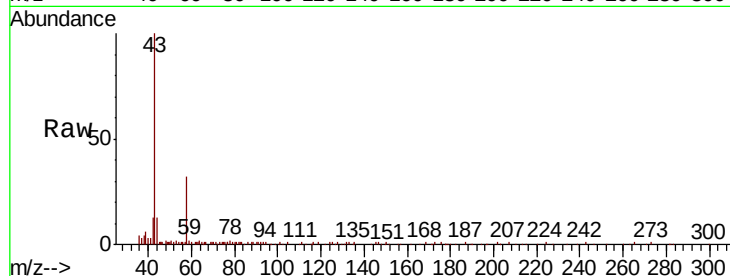
Acq: 29 Jan 2019 16:09

Tot Ion: 43 Resp: 28218

Ion Ratio Lower Upper

43 100

58 31.7 25.0 37.6



#17

Carbon Disulfide

Concen: 0.205 ug/l

RT: 2.57 min Scan# 233

Delta R.T. 0.01 min

Lab File: VX007290.D

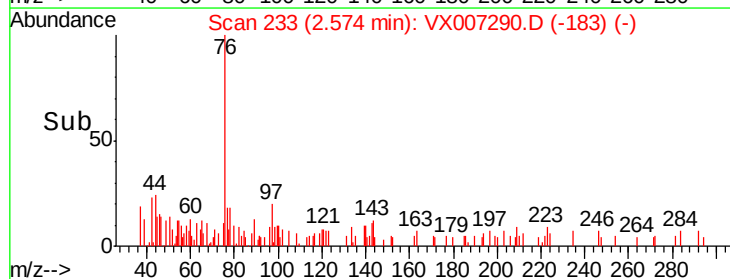
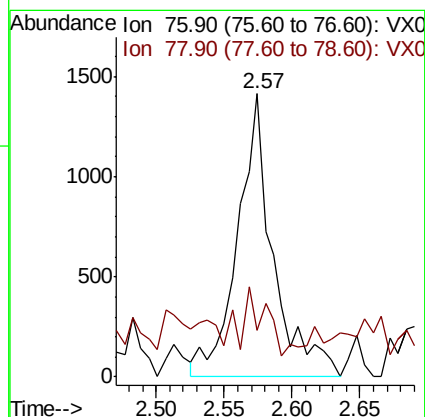
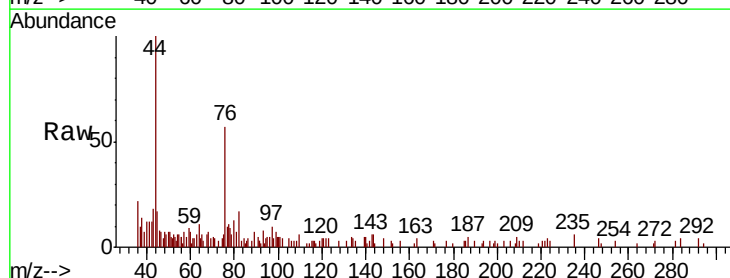
Acq: 29 Jan 2019 16:09

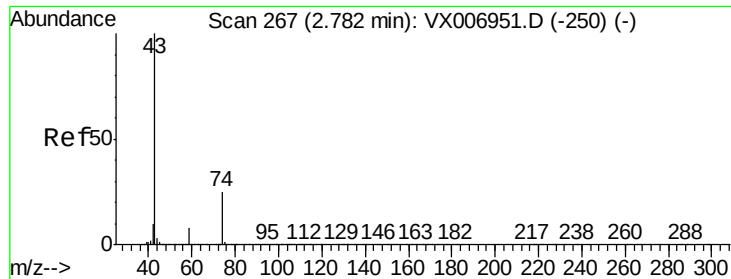
Tgt Ion: 76 Resp: 2576

Ion Ratio Lower Upper

76 100

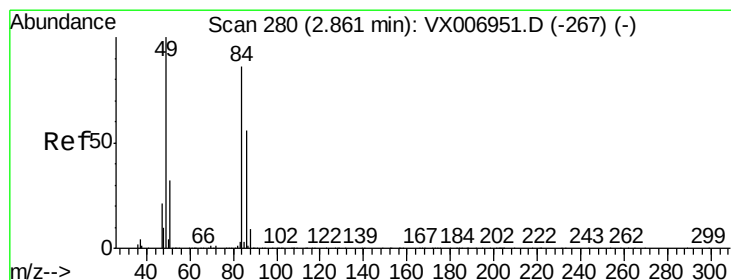
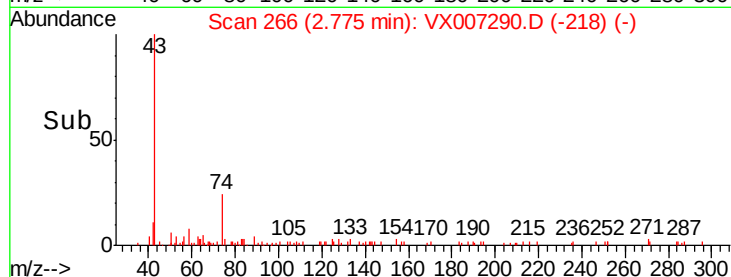
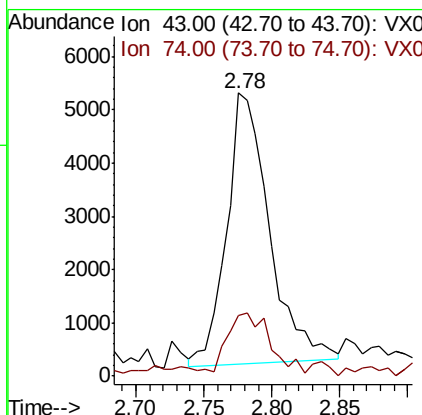
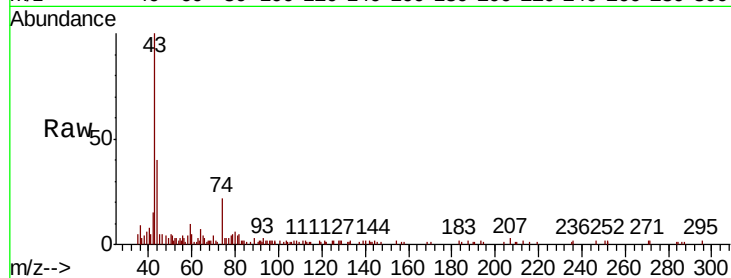
78 1.0 7.0 10.6#





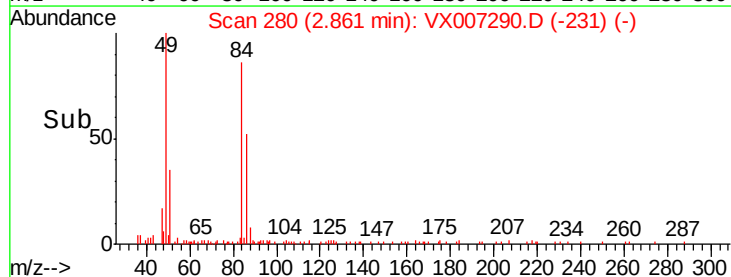
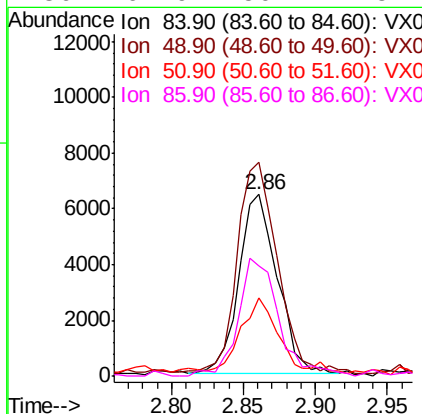
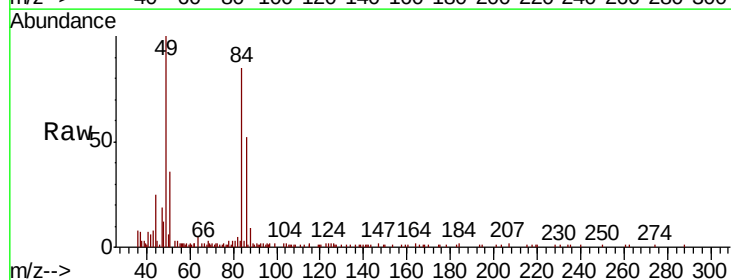
#18
Methyl Acetate
Concen: 1.397 ug/l
RT: 2.78 min Scan# 266
Delta R.T. -0.01 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

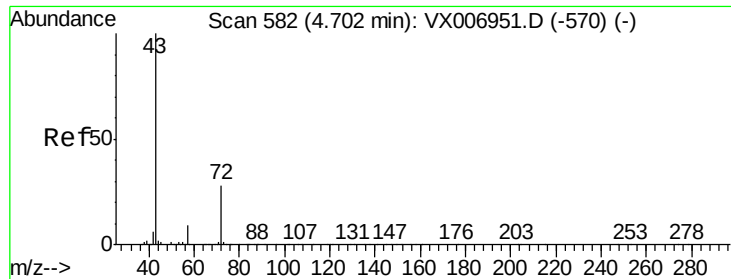
Tot Ion: 43 Resp: 11111
Ion Ratio Lower Upper
43 100
74 21.8 18.6 28.0



#20
Methylene Chloride
Concen: 1.727 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.00 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

Tgt Ion: 84 Resp: 11874
Ion Ratio Lower Upper
84 100
49 116.5 91.8 137.6
51 40.9 28.5 42.7
86 61.9 50.2 75.2





#25

2-Butanone

Concen: 1.590 ug/l

RT: 4.70 min Scan# 582

Delta R.T. -0.00 min

Lab File: VX007290.D

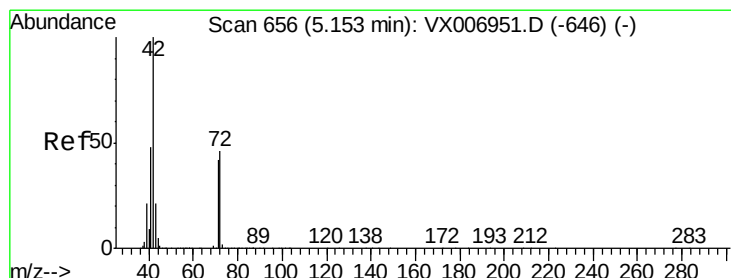
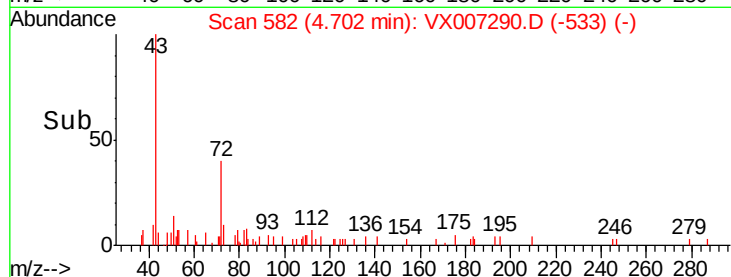
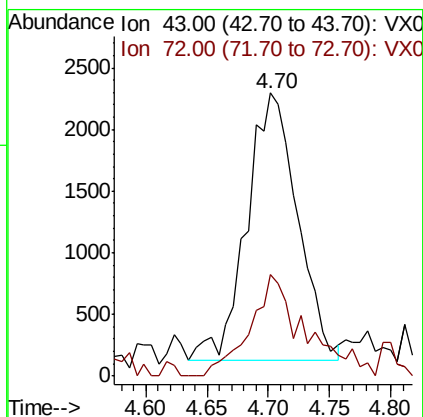
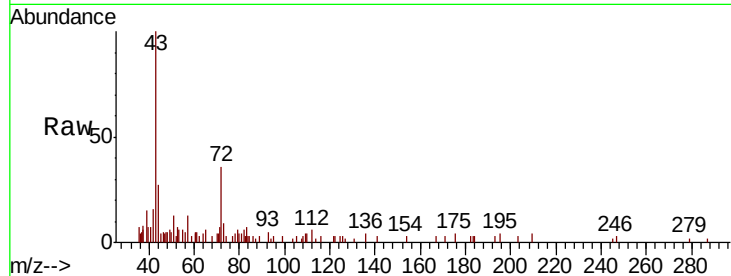
Acq: 29 Jan 2019 16:09

Tot Ion: 43 Resp: 6248

Ion Ratio Lower Upper

43 100

72 38.3 22.4 33.6#



#29

Tetrahydrofuran

Concen: 0.660 ug/l

RT: 5.17 min Scan# 658

Delta R.T. 0.01 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

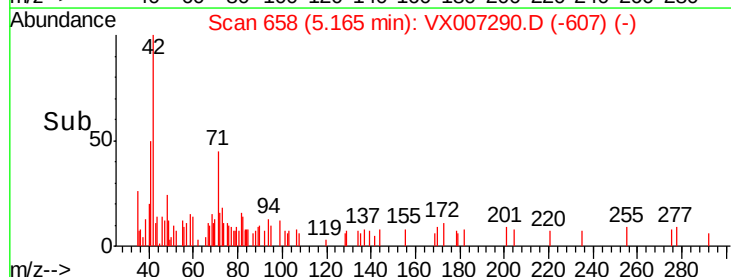
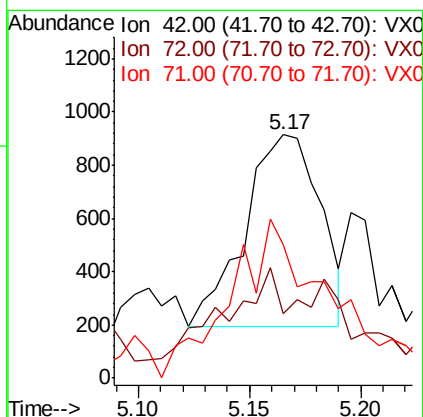
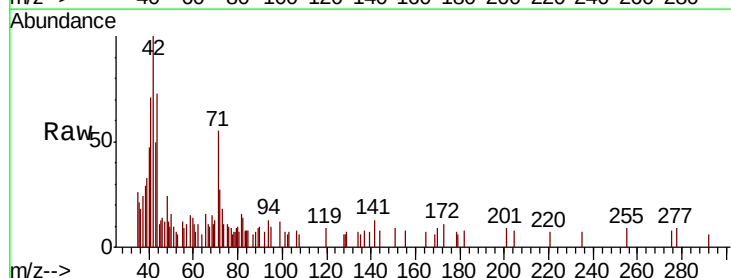
Tgt Ion: 42 Resp: 1685

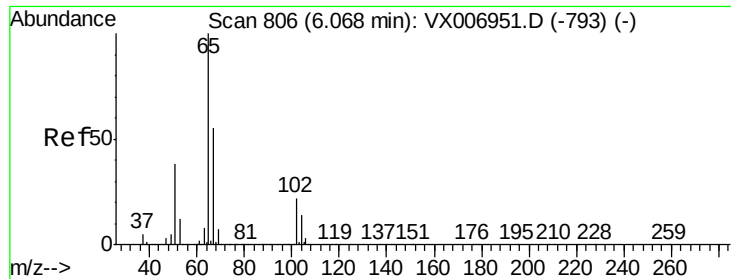
Ion Ratio Lower Upper

42 100

72 43.4 38.9 58.3

71 114.1 36.2 54.4#





#33

1,2-Dichloroethane-d4

Concen: 51.247 ug/l

RT: 6.07 min Scan# 806

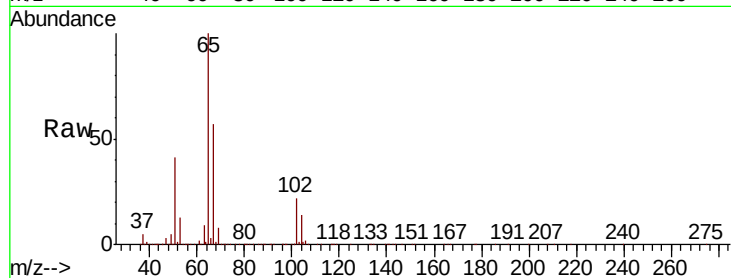
Delta R.T. -0.00 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

Tot Ion: 65 Resp: 284714

Ion	Ratio	Lower	Upper
65	100		
67	54.0	0.0	105.0



Abundance Ion 64.90 (64.60 to 65.60): VX0

Ion 66.90 (66.60 to 67.60): VX0

6.07

120000

100000

80000

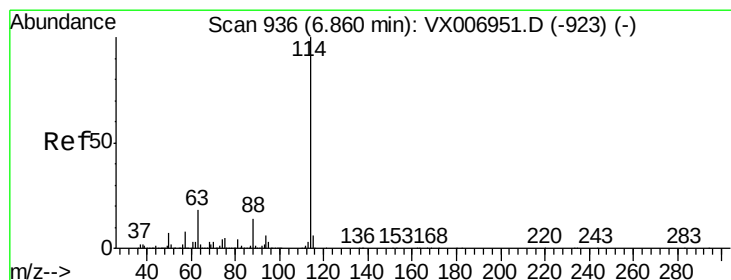
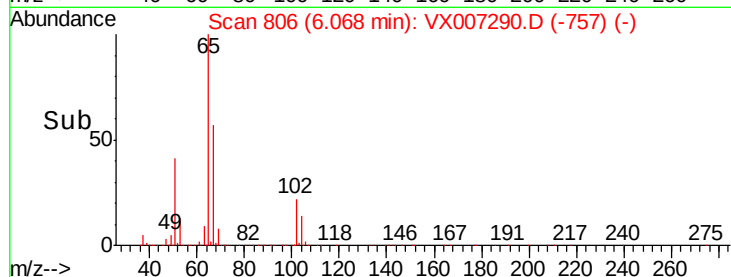
60000

40000

20000

0

Time--> 5.90 6.00 6.10 6.20 6.30



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.86 min Scan# 936

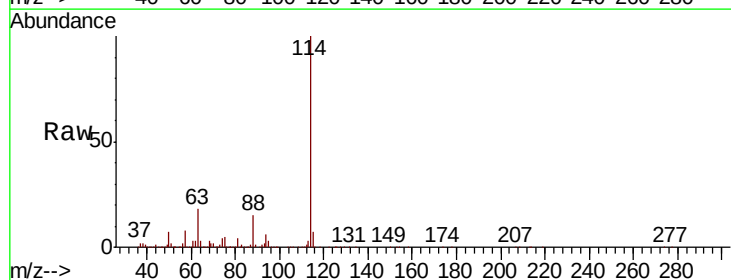
Delta R.T. -0.00 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

Tgt Ion: 114 Resp: 823318

Ion	Ratio	Lower	Upper
114	100		
63	18.1	0.0	34.8
88	14.5	0.0	28.8



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0

6.86

400000

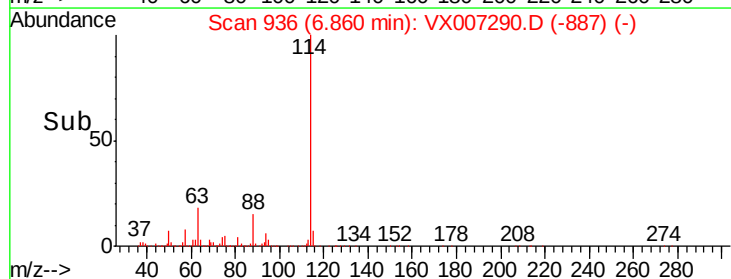
300000

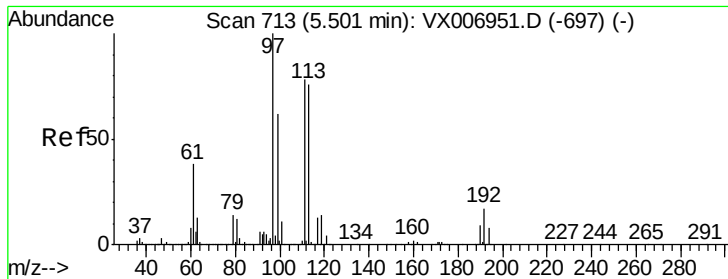
200000

100000

0

Time--> 6.70 6.80 6.90 7.00





#35

Dibromofluoromethane

Concen: 49.255 ug/l

RT: 5.50 min Scan# 713

Delta R.T. -0.00 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

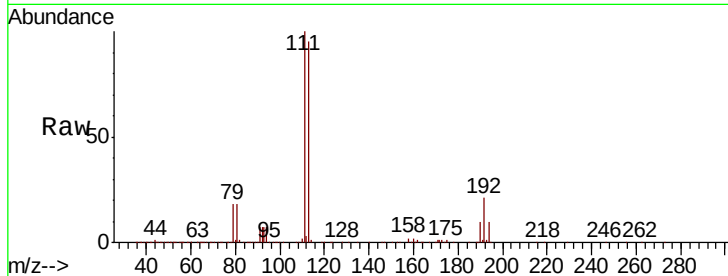
Tot Ion:113 Resp: 259696

Ion Ratio Lower Upper

113 100

111 102.2 81.6 122.4

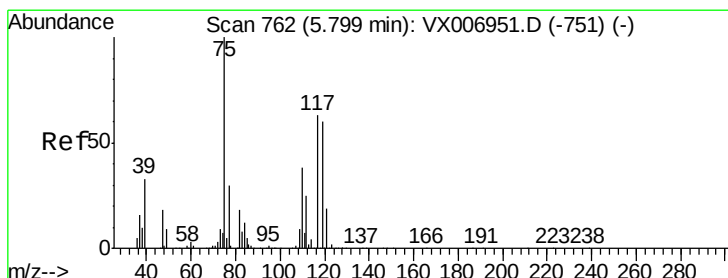
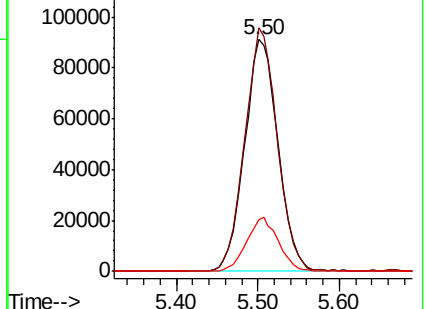
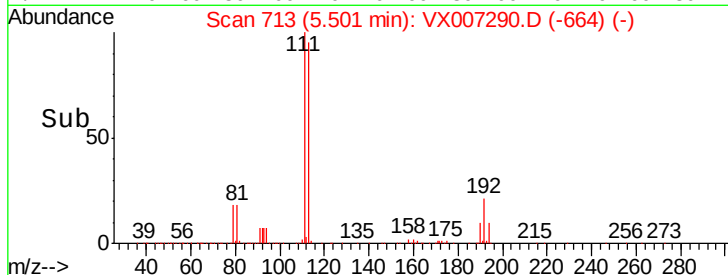
192 22.2 16.7 25.1



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



#36

1,1-Dichloropropene

Concen: 4.738 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.13 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

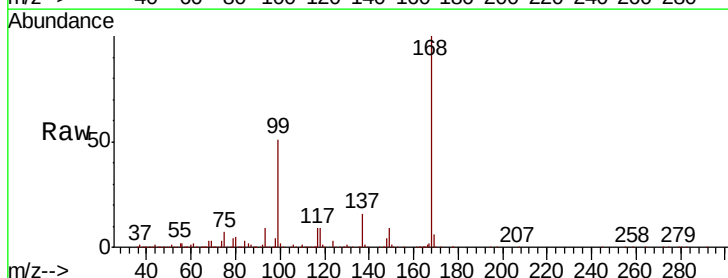
Tgt Ion: 75 Resp: 33918

Ion Ratio Lower Upper

75 100

110 10.2 20.2 60.5#

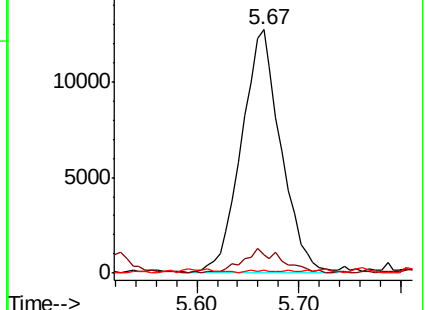
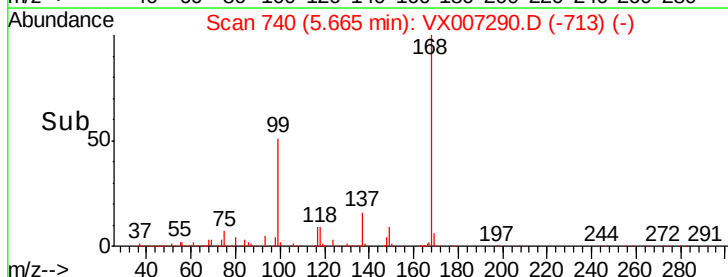
77 0.3 24.8 37.2#

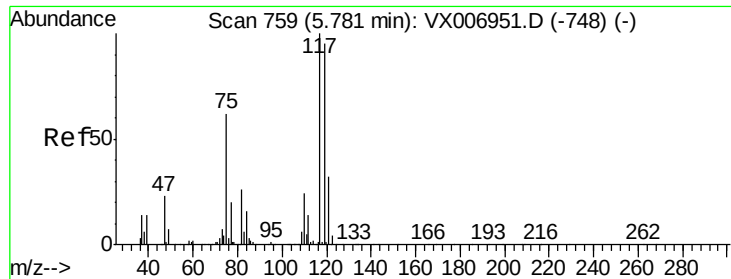


Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0





#38

Carbon Tetrachloride

Concen: 6.743 ug/l

RT: 5.67 min Scan# 740

Delta R.T. -0.12 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

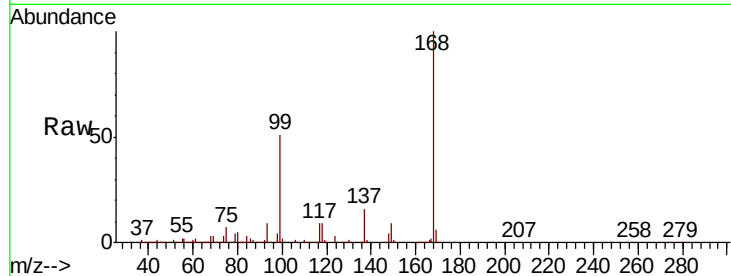
Tot Ion:117 Resp: 48564

Ion Ratio Lower Upper

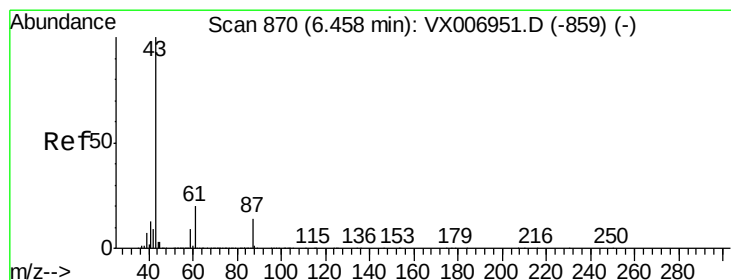
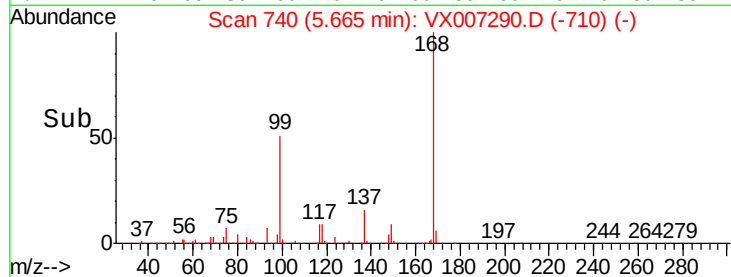
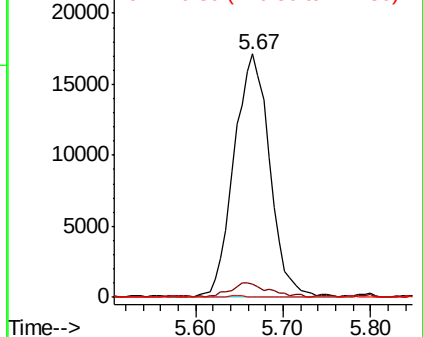
117 100

119 5.6 79.4 119.2#

121 0.0 24.0 36.0#



Abundance Ion 116.80 (116.50 to 117.50): V
Ion 118.80 (118.50 to 119.50): V
Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 2.234 ug/l

RT: 6.47 min Scan# 872

Delta R.T. 0.01 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

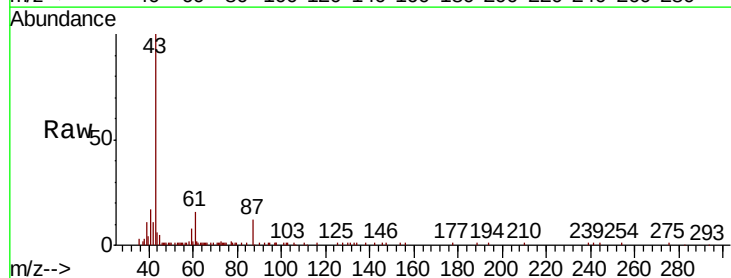
Tgt Ion: 43 Resp: 27047

Ion Ratio Lower Upper

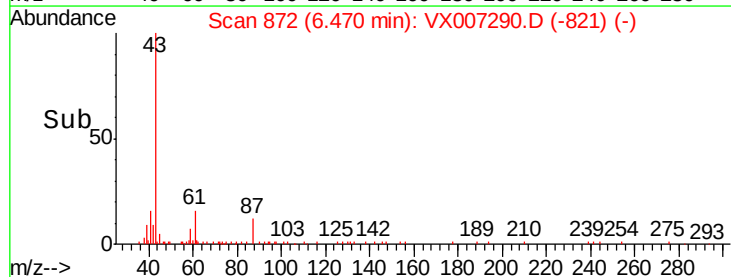
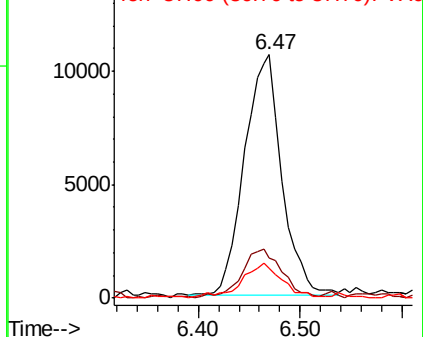
43 100

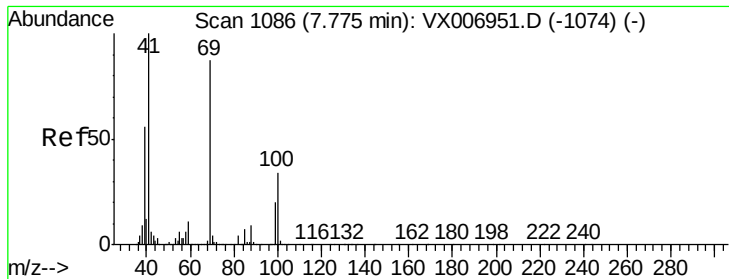
61 21.9 16.8 25.2

87 15.7 12.4 18.6



Abundance Ion 43.00 (42.70 to 43.70): VX0
Ion 61.00 (60.70 to 61.70): VX0
Ion 87.00 (86.70 to 87.70): VX0





#48

Methyl methacrylate

Concen: 2.182 ug/l

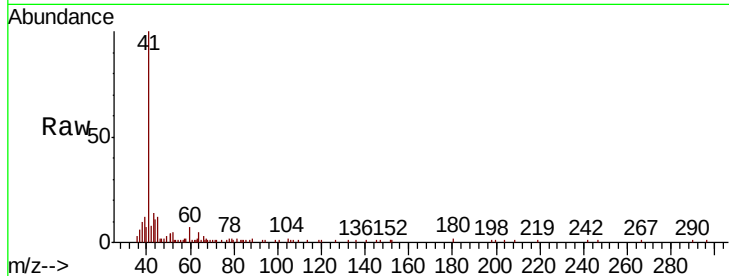
RT: 7.68 min Scan# 1071

Delta R.T. -0.09 min

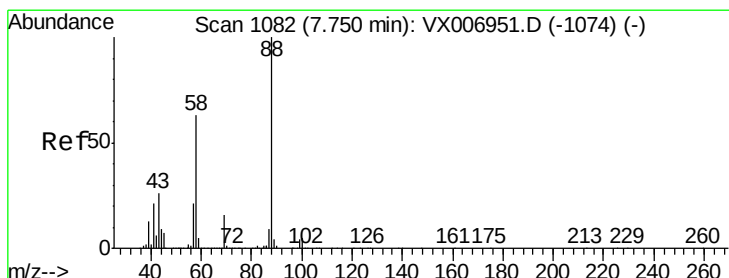
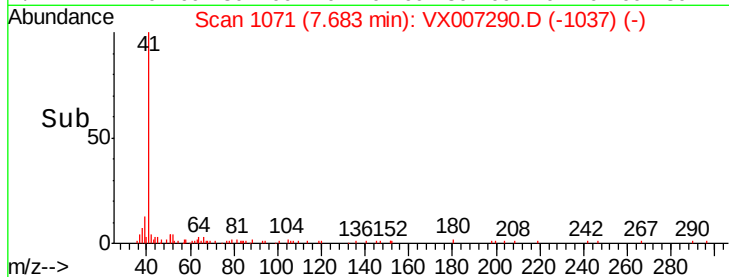
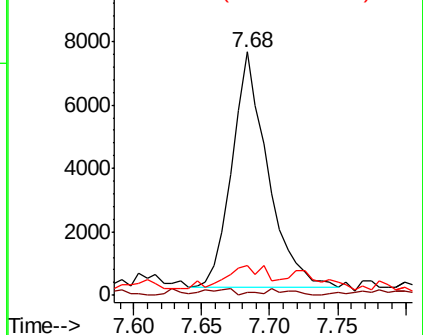
Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

Tot Ion:	41	Resp:	13561
Ion	Ratio	Lower	Upper
41	100		
69	2.0	72.4	108.6#
39	0.0	45.8	68.8#



Abundance Ion 41.00 (40.70 to 41.70): VX0
Ion 69.00 (68.70 to 69.70): VX0
Ion 39.00 (38.70 to 39.70): VX0



#49

1,4-Dioxane

Concen: Below Cal

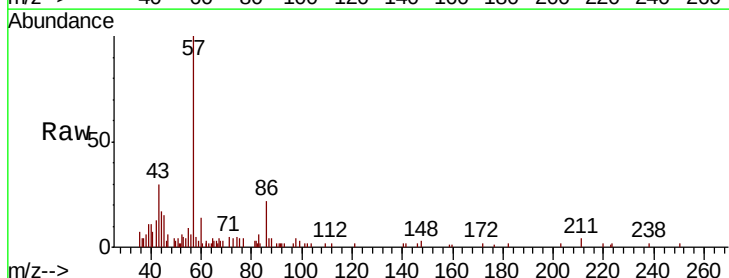
RT: 7.75 min Scan# 1082

Delta R.T. 0.00 min

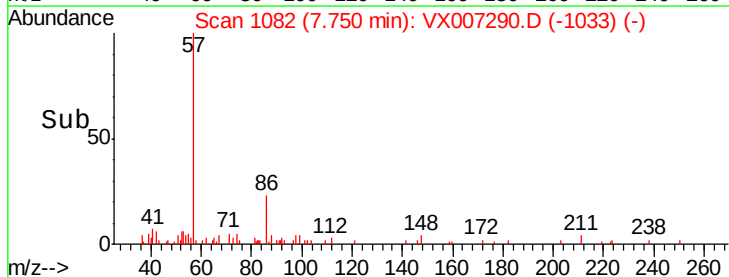
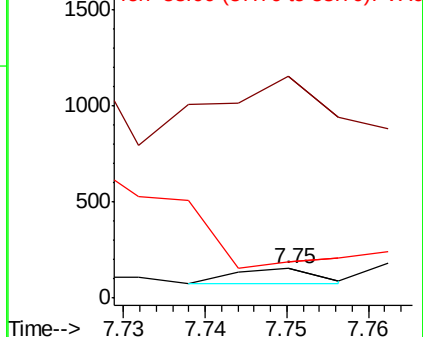
Lab File: VX007290.D

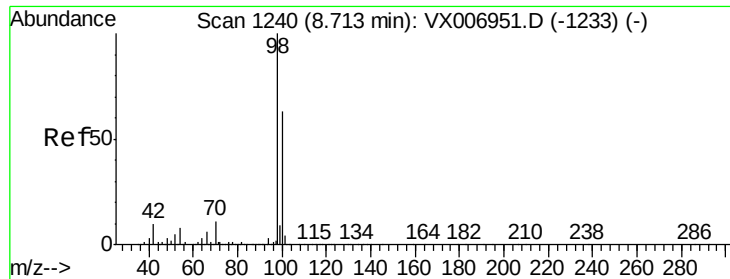
Acq: 29 Jan 2019 16:09

Tgt Ion:	88	Resp:	57
Ion	Ratio	Lower	Upper
88	100		
43	0.0	22.2	33.4#
58	0.0	51.0	76.4#



Abundance Ion 88.00 (87.70 to 88.70): VX0
Ion 43.00 (42.70 to 43.70): VX0
Ion 58.00 (57.70 to 58.70): VX0





#50

Toluene-d8

Concen: 51.825 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX007290.D

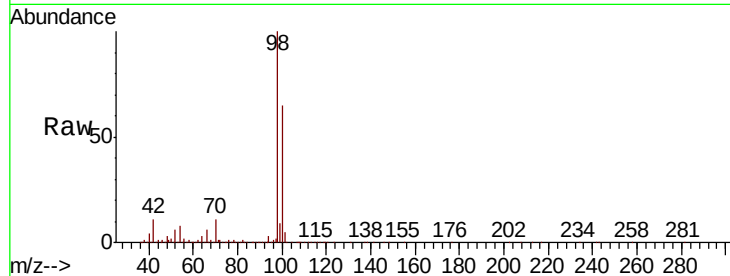
Acq: 29 Jan 2019 16:09

Tot Ion: 98 Resp: 1000164

Ion Ratio Lower Upper

98 100

100 64.2 52.0 78.0



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.71

600000

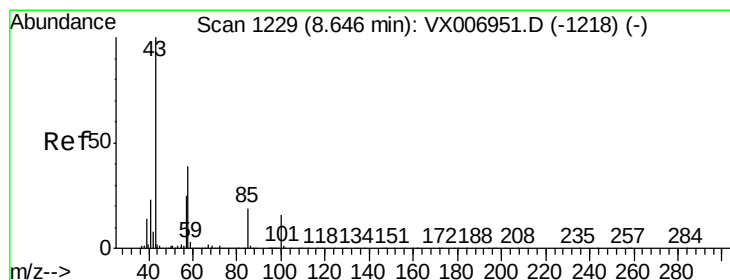
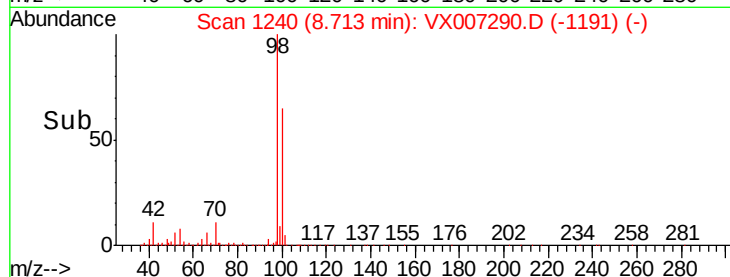
400000

200000

0

8.60 8.70 8.80

Time-->



#51

4-Methyl-2-Pentanone

Concen: 19.095 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. -0.03 min

Lab File: VX007290.D

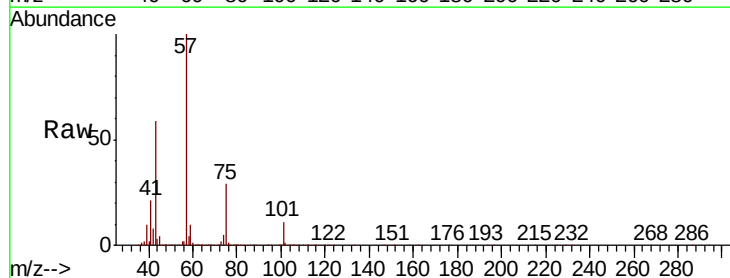
Acq: 29 Jan 2019 16:09

Tgt Ion: 43 Resp: 148543

Ion Ratio Lower Upper

43 100

58 8.3 31.8 47.6#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8.62

100000

80000

60000

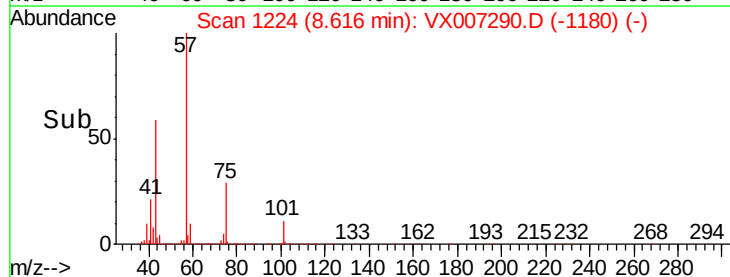
40000

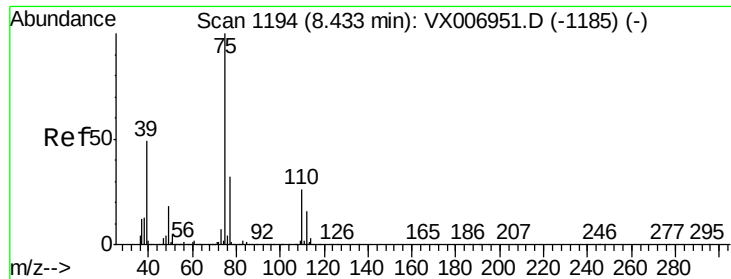
20000

0

8.55 8.60 8.65 8.70

Time-->





#54

cis-1,3-Dichloropropene

Concen: 8.930 ug/l

RT: 8.62 min Scan# 1224

Delta R.T. 0.18 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

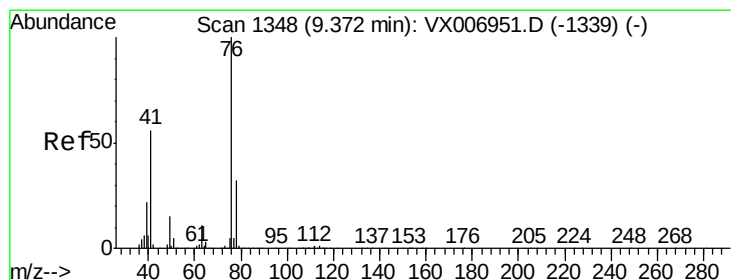
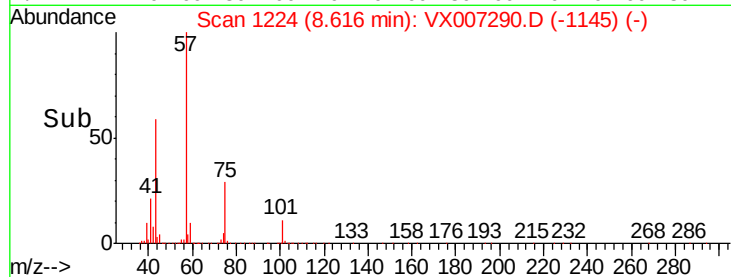
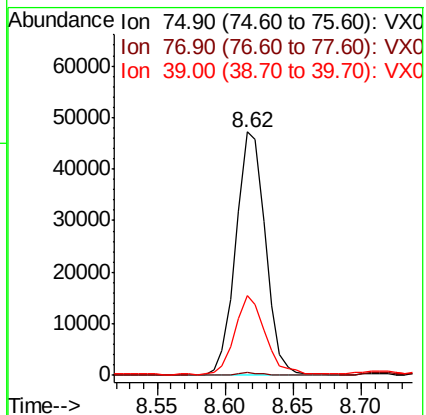
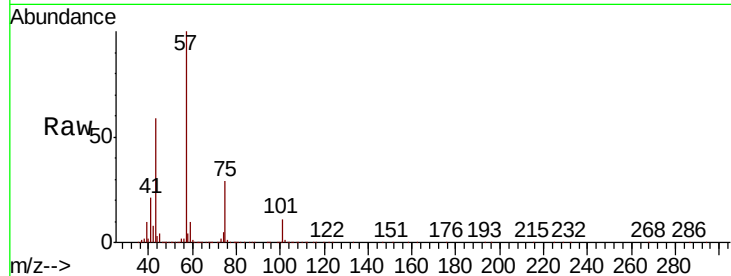
Tot Ion: 75 Resp: 71836

Ion Ratio Lower Upper

75 100

77 1.1 26.2 39.2#

39 32.0 36.7 55.1#



#57

1,3-Dichloropropene

Concen: 1.846 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.17 min

Lab File: VX007290.D

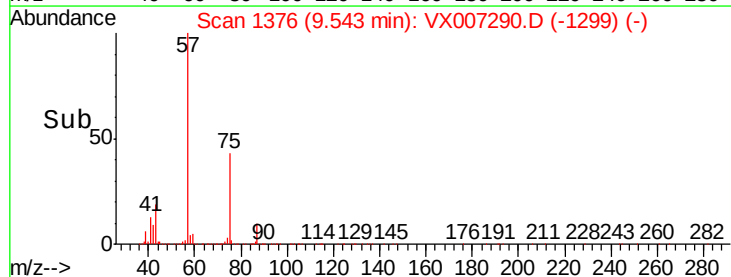
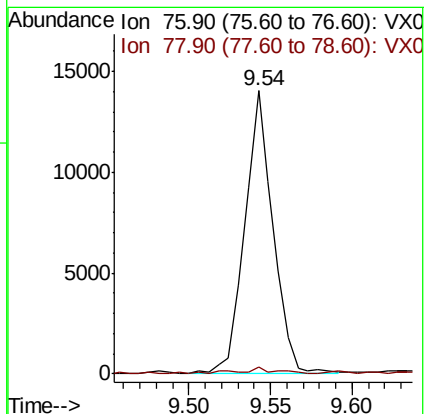
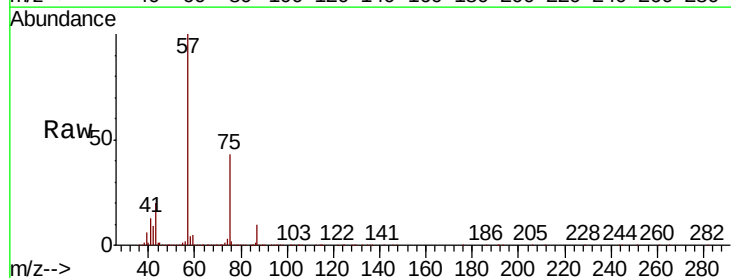
Acq: 29 Jan 2019 16:09

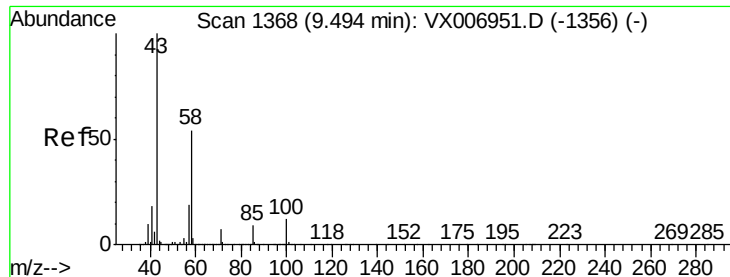
Tgt Ion: 76 Resp: 16993

Ion Ratio Lower Upper

76 100

78 2.9 26.0 39.0#





#59

2-Hexanone

Concen: 37.886 ug/l

RT: 9.54 min Scan# 1376

Delta R.T. 0.05 min

Lab File: VX007290.D

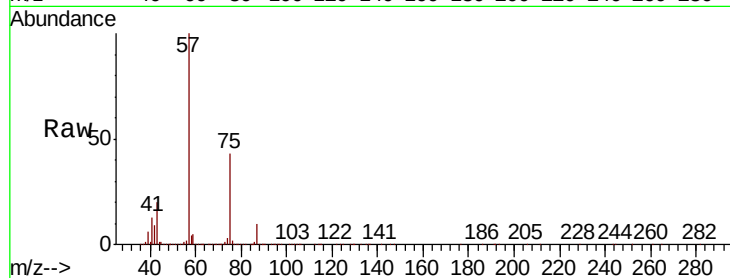
Acq: 29 Jan 2019 16:09

Tot Ion: 43 Resp: 224600

Ion Ratio Lower Upper

43 100

58 20.0 27.7 83.1#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

9.54

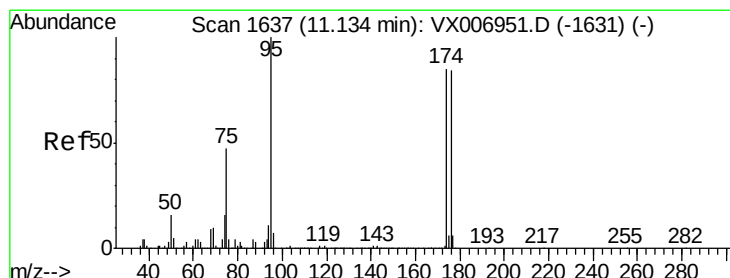
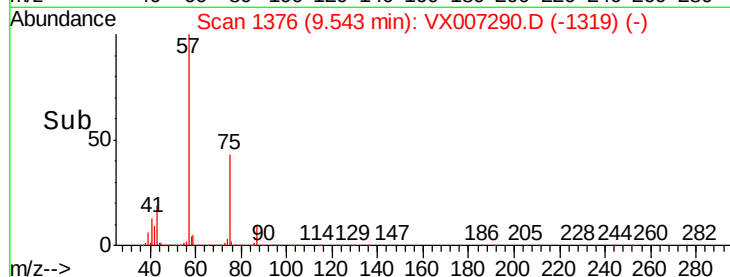
150000

100000

50000

0

Time-->



#62

4-Bromofluorobenzene

Concen: 52.383 ug/l

RT: 11.14 min Scan# 1638

Delta R.T. 0.01 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

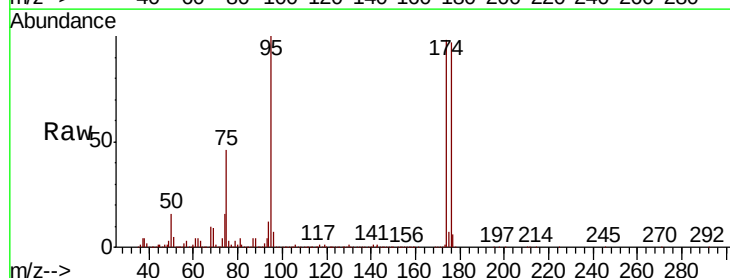
Tgt Ion: 95 Resp: 352434

Ion Ratio Lower Upper

95 100

174 93.8 0.0 182.2

176 91.2 0.0 178.8



Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

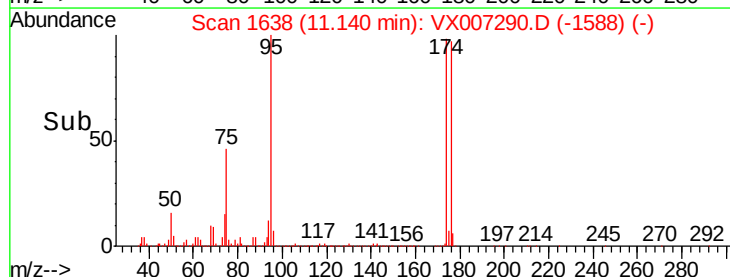
300000

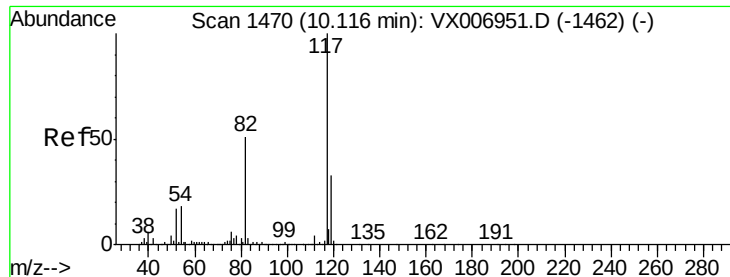
200000

100000

0

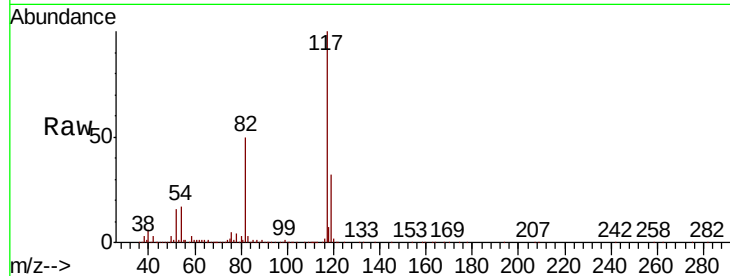
Time-->



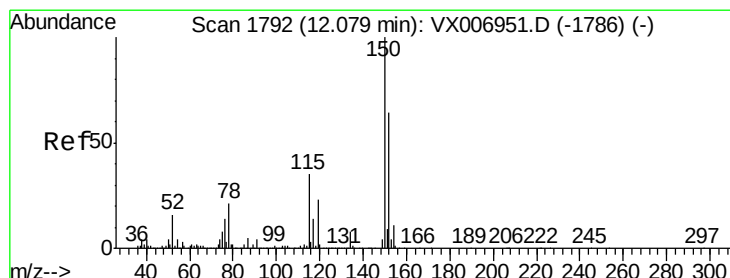
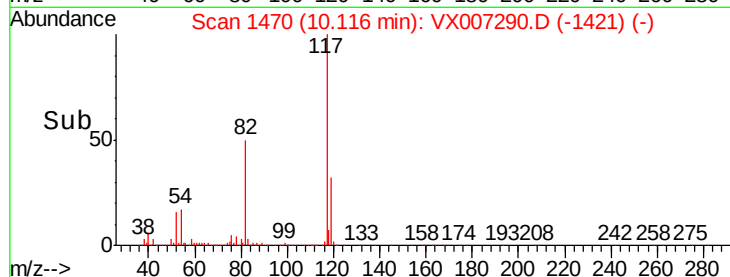
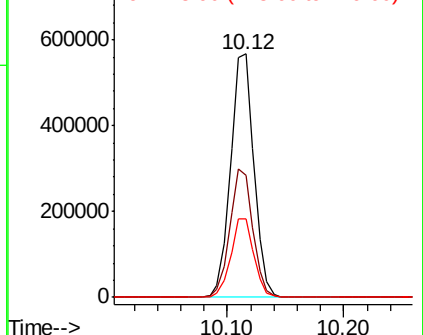


#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.12 min Scan# 1470
Delta R.T. -0.00 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

Tot Ion	Ratio	Lower	Upper
117	100		
82	49.9	41.0	61.6
119	32.0	25.4	38.0

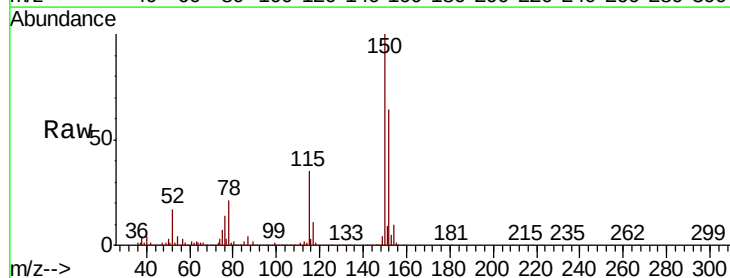


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 118.90 (118.60 to 119.60): V

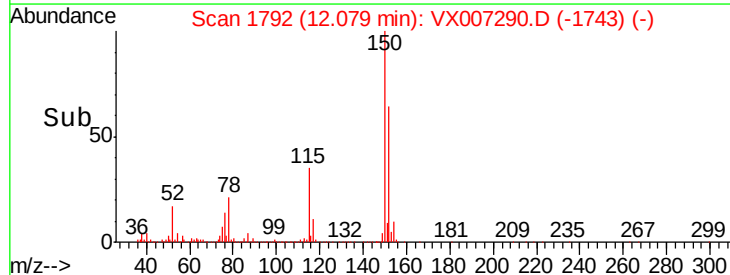
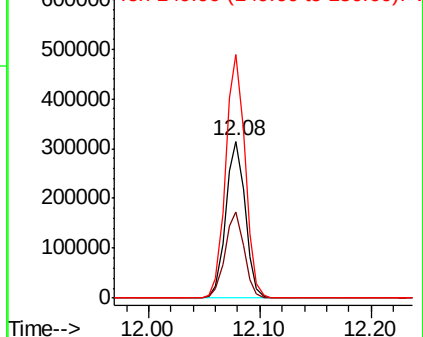


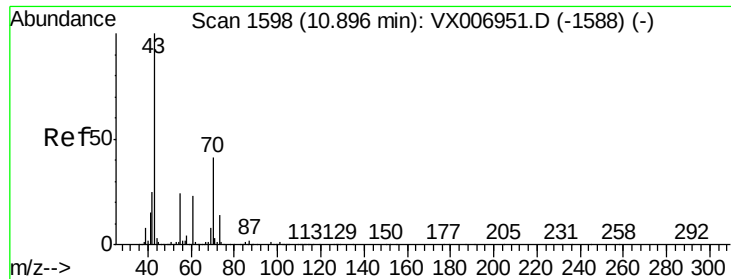
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. -0.00 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

Tgt Ion	Ratio	Lower	Upper
152	100		
115	54.5	39.1	117.2
150	155.6	0.0	344.8



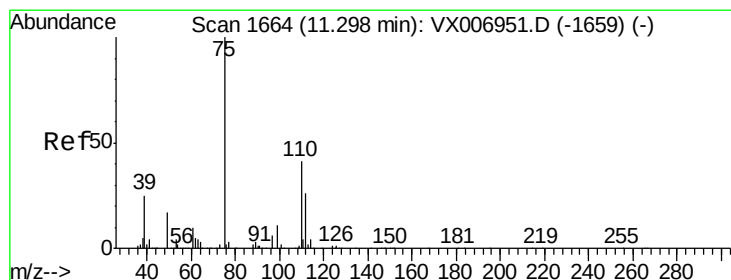
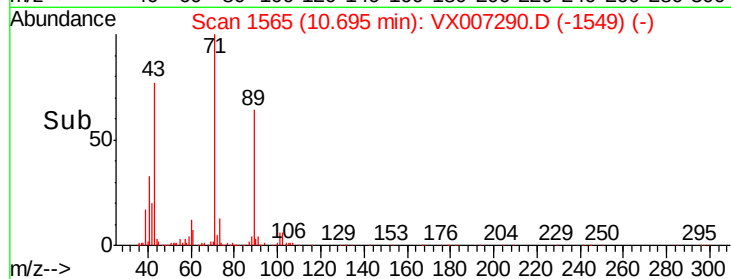
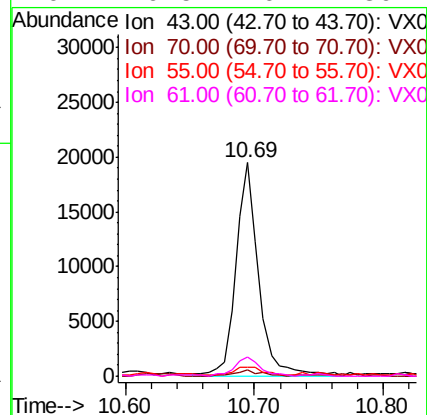
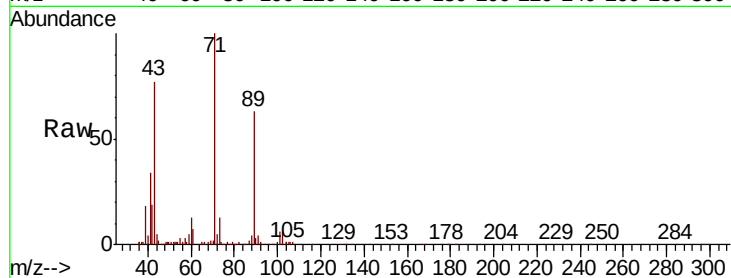
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V





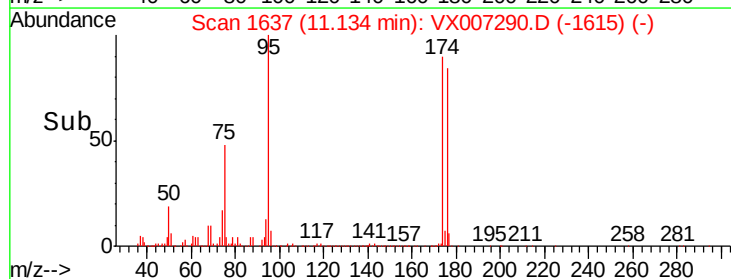
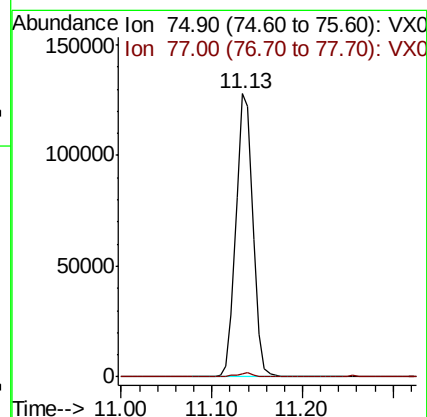
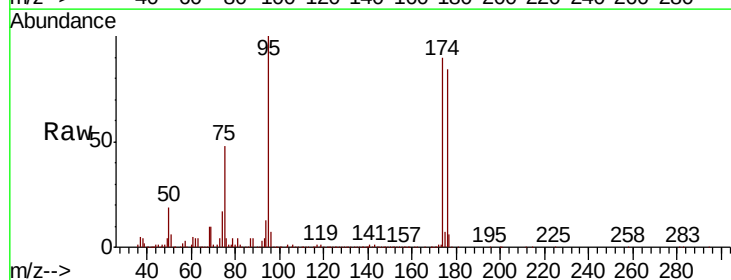
#74
N-amvl acetate
Concen: 2.253 ug/l
RT: 10.69 min Scan# 1565
Delta R.T. -0.20 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

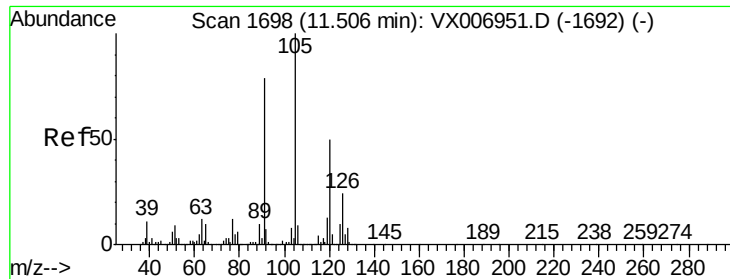
Tot Ion:	43	Resp:	24178
Ion	Ratio	Lower	Upper
43	100		
70	3.3	35.8	53.8#
55	5.1	19.4	29.0#
61	10.5	20.1	30.1#



#76
1,2,3-Trichloropropane
Concen: 21.770 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. -0.16 min
Lab File: VX007290.D
Acq: 29 Jan 2019 16:09

Tgt Ion:	75	Resp:	166767
Ion	Ratio	Lower	Upper
75	100		
77	1.5	18.5	55.5#





#80

1,3,5-Trimethylbenzene

Concen: 0.245 ug/l

RT: 11.51 min Scan# 1698

Delta R.T. -0.00 min

Lab File: VX007290.D

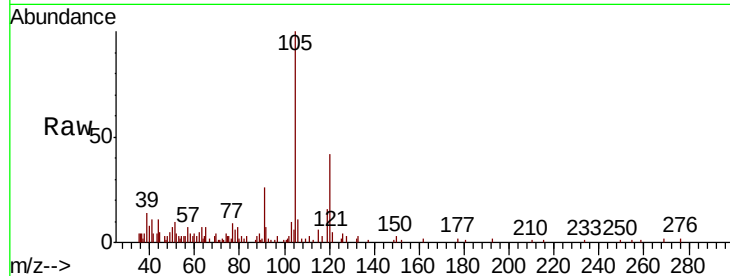
Acq: 29 Jan 2019 16:09

Tot Ion:105 Resp: 5467

Ion Ratio Lower Upper

105 100

120 53.7 25.1 75.3



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

11.51

4000

3000

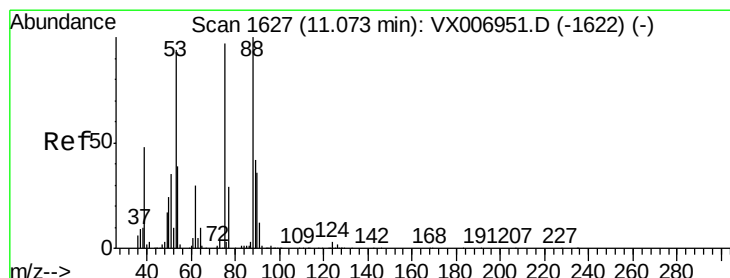
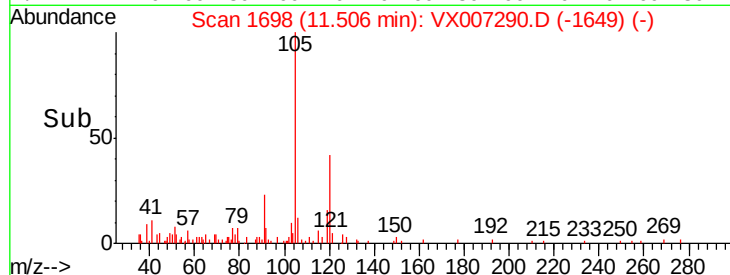
2000

1000

0

11.45 11.50 11.55

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 64.512 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX007290.D

Acq: 29 Jan 2019 16:09

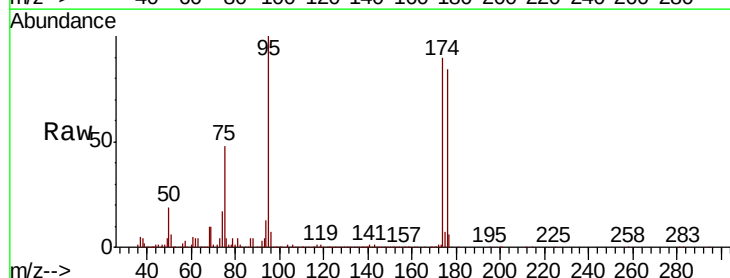
Tgt Ion: 75 Resp: 166767

Ion Ratio Lower Upper

75 100

53 0.2 79.7 119.5#

89 0.1 38.0 57.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

150000

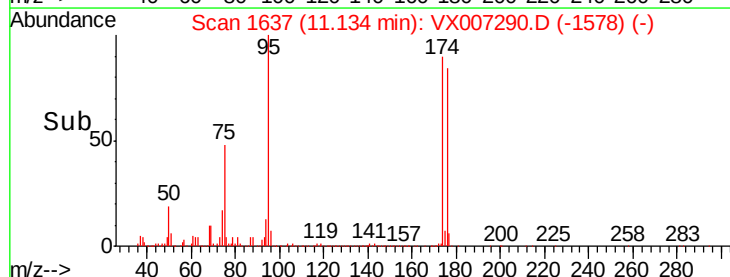
100000

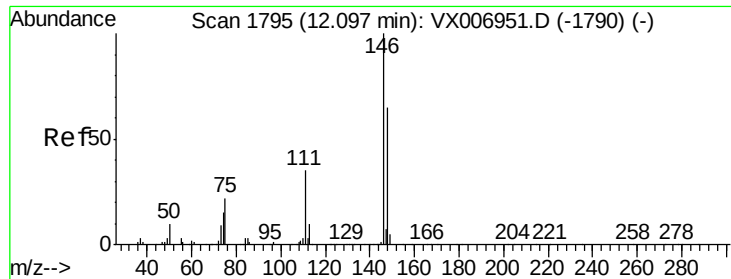
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0

11.00 11.10 11.20

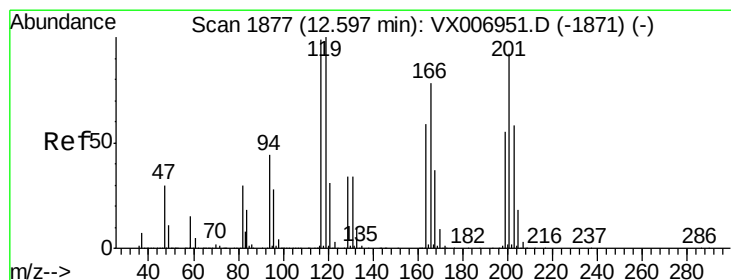
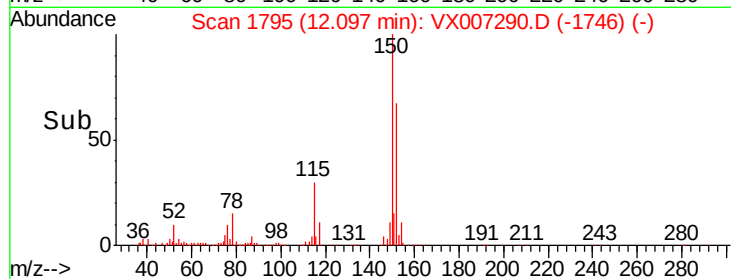
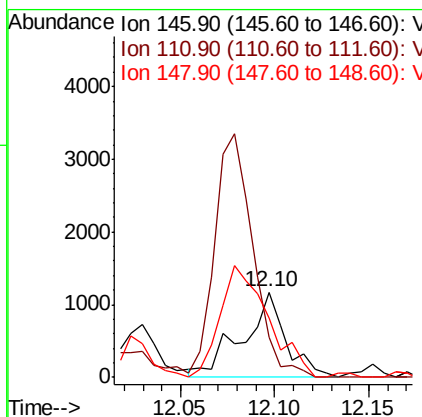
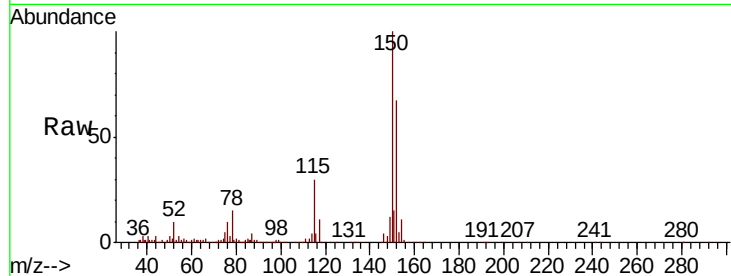
Time-->





#88
 1,4-Dichlorobenzene
 Concen: 0.293 ug/l
 RT: 12.10 min Scan# 1795
 Delta R.T. -0.00 min
 Lab File: VX007290.D
 Acq: 29 Jan 2019 16:09

Tot Ion	Ratio	Lower	Upper
146	100		
111	253.1	18.1	54.1#
148	145.5	31.9	95.9#



#90
 Hexachloroethane
 Concen: 2.936 ug/l
 RT: 12.59 min Scan# 1876
 Delta R.T. -0.01 min
 Lab File: VX007290.D
 Acq: 29 Jan 2019 16:09

Tgt Ion	Ratio	Lower	Upper
117	100		
201	0.0	42.9	128.7#

