

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD043019\
 Data File : VD062088.D
 Acq On : 30 Apr 2019 15:36
 Operator : FY/SY
 Sample : K2579-01
 Misc : 5.01gm/5mL/MSVOA D/SOIL
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 01 01:15:17 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D042319S.M
 Quant Title : SW846 8260
 QLast Update : Tue Apr 23 14:52:55 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.02	168	417075	50.00	ug/l	-0.03
34) 1,4-Difluorobenzene	8.20	114	744697	50.00	ug/l	-0.02
63) Chlorobenzene-d5	12.36	117	467340	50.00	ug/l	-0.01
72) 1,4-Dichlorobenzene-d4	14.51	152	114244	50.00	ug/l	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.43	65	216337	66.27	ug/l	-0.03
Spiked Amount			Recovery	=	132.54%	
35) Dibromofluoromethane	6.90	113	309223	60.04	ug/l	-0.03
Spiked Amount			Recovery	=	120.08%	
50) Toluene-d8	10.39	98	506850	41.36	ug/l	-0.03
Spiked Amount			Recovery	=	82.72%	
62) 4-Bromofluorobenzene	13.55	95	155835	31.70	ug/l	-0.01
Spiked Amount			Recovery	=	63.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.17	94	1476	1.178	ug/l #	12
10) Methyl Iodide	3.32	142	184	5.455	ug/l #	37
16) Acetone	3.20	43	7859	10.083	ug/l #	84
18) Methyl Acetate	3.64	43	1139	Below Cal	#	53
20) Methylene Chloride	3.80	84	11666	Below Cal	#	81
31) Cyclohexane	7.02	56	7736	1.591	ug/l #	1
36) 1,1-Dichloropropene	7.02	75	29046	5.006	ug/l #	47
38) Carbon Tetrachloride	7.02	117	40212	5.469	ug/l #	16
55) 1,1,2-Trichloroethane	11.08	97	3686	1.199	ug/l #	24
59) 2-Hexanone	11.47	43	21400	12.913	ug/l #	32
74) N-amyl acetate	13.21	43	141329	72.009	ug/l #	60
75) 1,1,2,2-Tetrachloroethane	13.71	83	69411	46.478	ug/l #	62
80) 1,3,5-Trimethylbenzene	13.92	105	131440	21.630	ug/l	96
81) trans-1,4-Dichloro-2-buten	13.55	75	56416	128.327	ug/l #	29
82) 4-Chlorotoluene	13.92	91	18520	3.182	ug/l #	52
85) sec-Butylbenzene	14.36	105	14051	1.847	ug/l	96
86) p-Isopropyltoluene	14.48	119	161240	23.686	ug/l	94
89) n-Butylbenzene	14.77	91	122100	19.979	ug/l #	1
90) Hexachloroethane	15.00	117	27858	15.134	ug/l #	20
92) 1,2-Dibromo-3-Chloropropan	15.37	75	3812	19.003	ug/l #	1
93) 1,2,4-Trichlorobenzene	15.94	180	2745	1.611	ug/l #	1
95) Naphthalene	16.12	128	7470	2.715	ug/l #	60
96) 1,2,3-Trichlorobenzene	16.24	180	2210	2.286	ug/l #	1

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.02 min Scan# 569

Delta R.T. -0.03 min

Lab File: VD062088.D

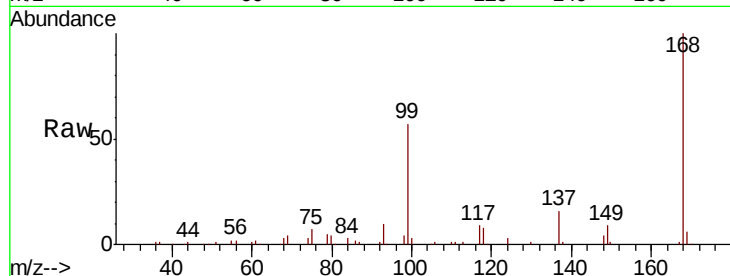
Acq: 30 Apr 2019 15:36

Tot Ion:168 Resp: 417075

Ion Ratio Lower Upper

168 100

99 57.1 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.02

150000

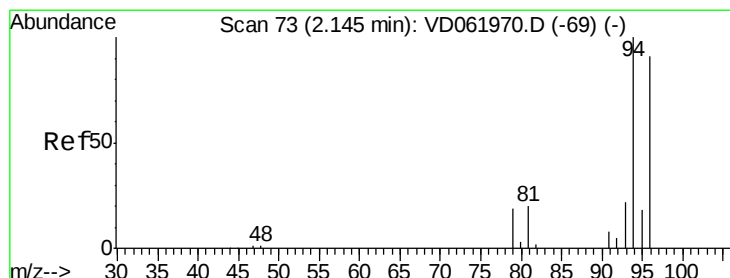
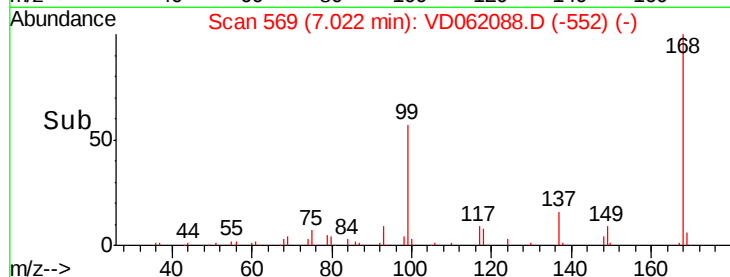
100000

50000

0

Time-->

6.90 7.00 7.10 7.20 7.30



#5

Bromomethane

Concen: 1.178 ug/l

RT: 2.17 min Scan# 76

Delta R.T. 0.01 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

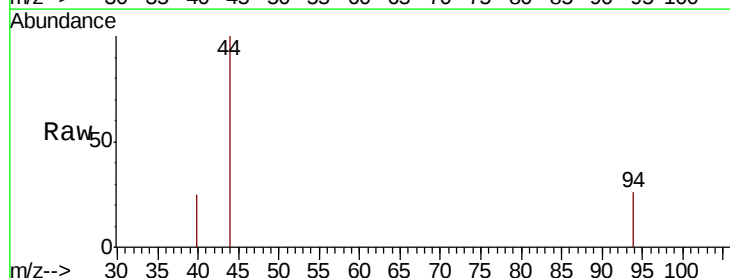
Tgt Ion: 94 Resp: 1476

Ion Ratio Lower Upper

94 100

96 0.0 76.6 115.0#

93 0.0 18.5 27.7#



Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC

800

600

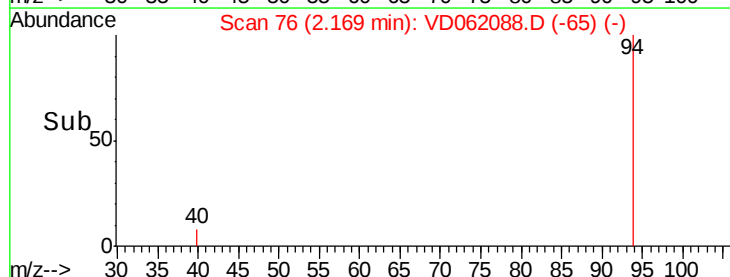
400

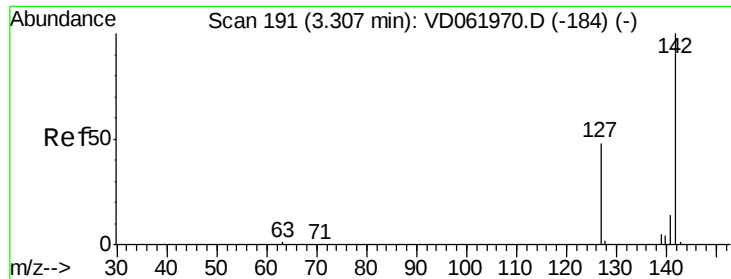
200

0

Time-->

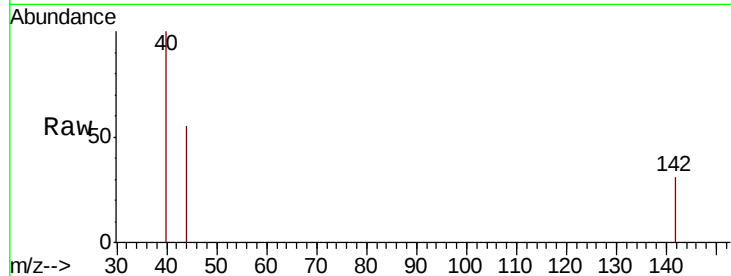
2.10 2.15 2.20



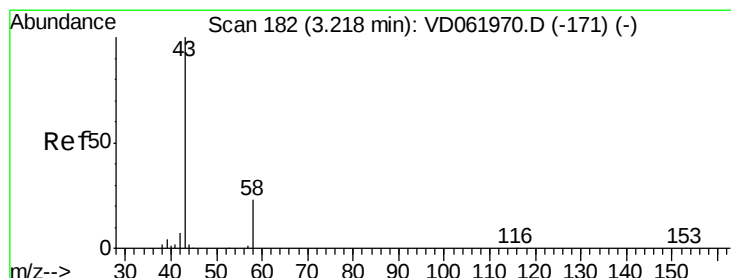
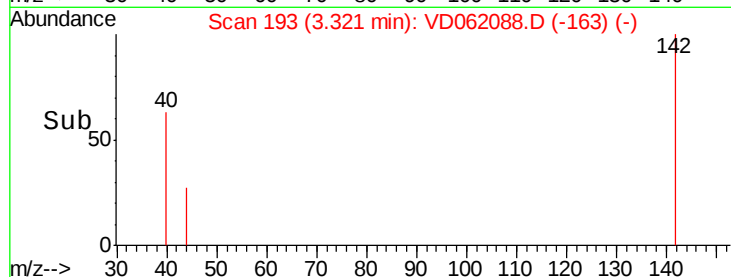
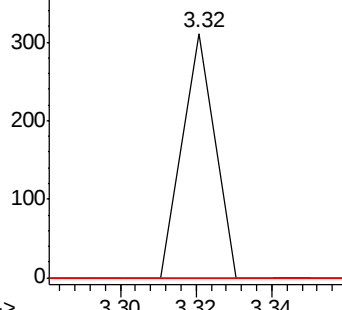


#10
Methvl Iodide
Concen: 5.455 ug/l
RT: 3.32 min Scan# 193
Delta R.T. -0.00 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

Tot Ion:142 Resp: 184
Ion Ratio Lower Upper
142 100
127 0.0 38.8 58.2#
141 0.0 11.4 17.0#

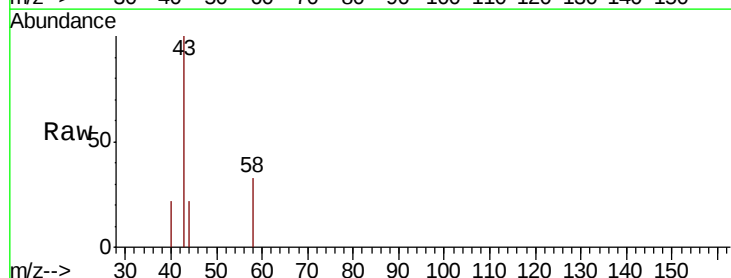


Abundance Ion 141.85 (141.55 to 142.55): V
Ion 126.80 (126.50 to 127.50): V
Ion 140.85 (140.55 to 141.55): V

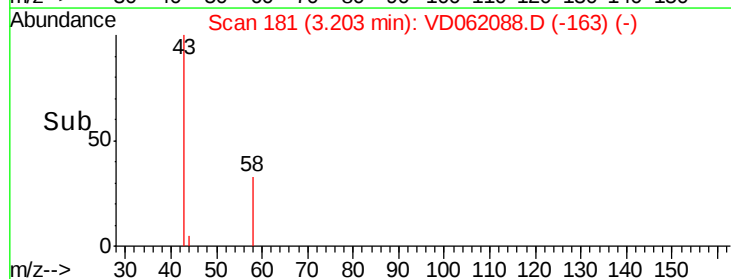
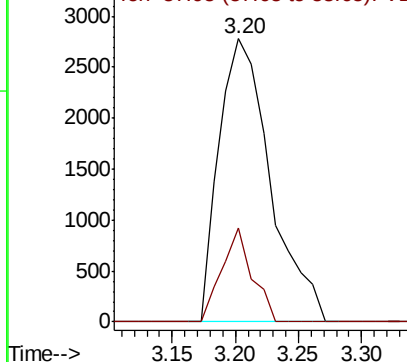


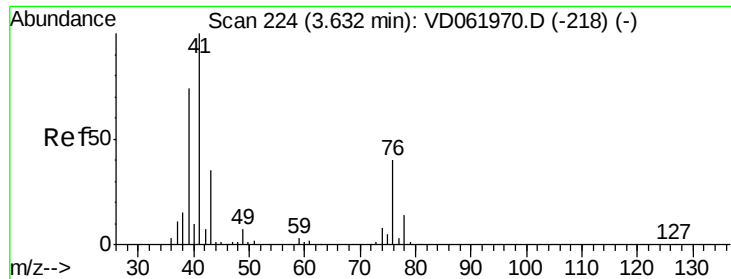
#16
Acetone
Concen: 10.083 ug/l
RT: 3.20 min Scan# 181
Delta R.T. -0.02 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

Tgt Ion: 43 Resp: 7859
Ion Ratio Lower Upper
43 100
58 33.1 19.9 29.9#



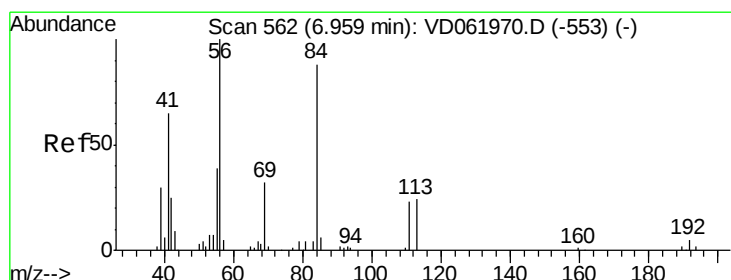
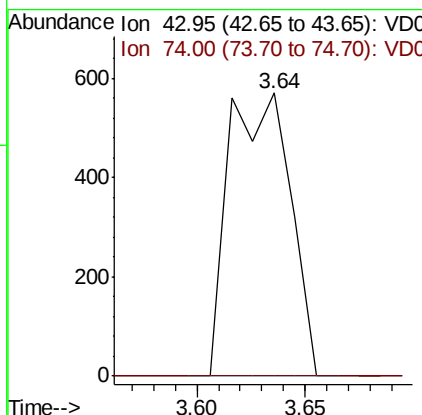
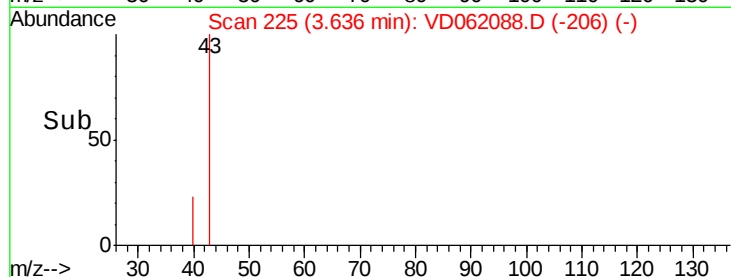
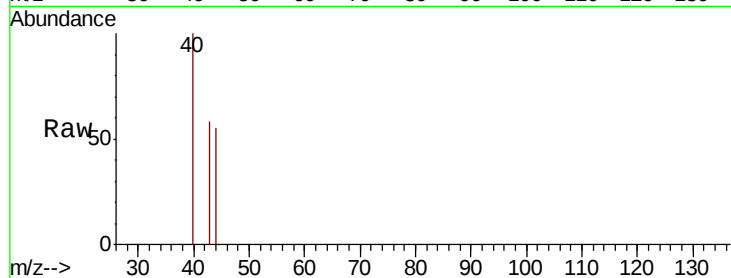
Abundance Ion 42.95 (42.65 to 43.65): V
Ion 57.95 (57.65 to 58.65): V





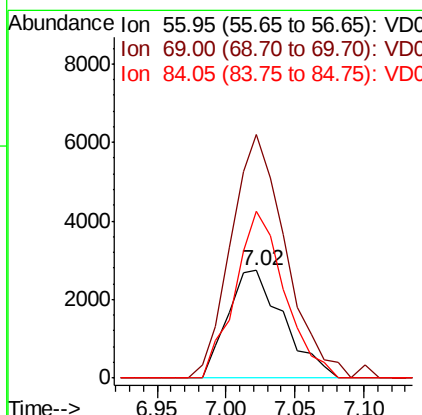
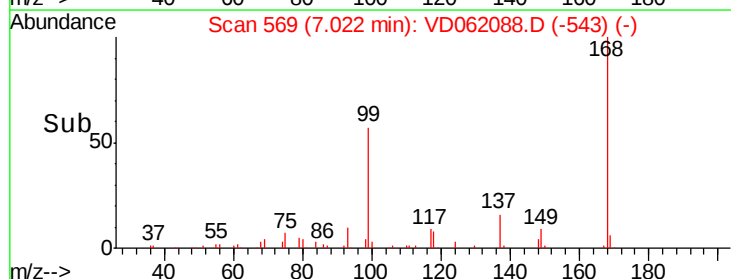
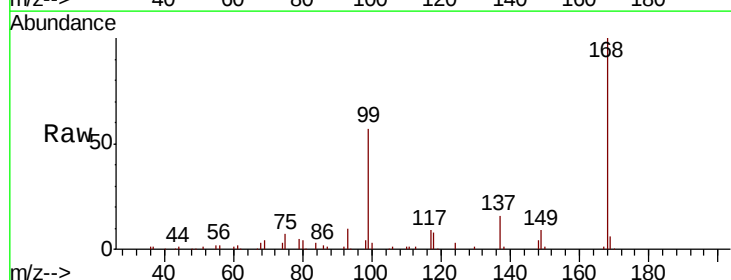
#18
Methvl Acetate
Concen: Below Cal
RT: 3.64 min Scan# 225
Delta R.T. -0.01 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

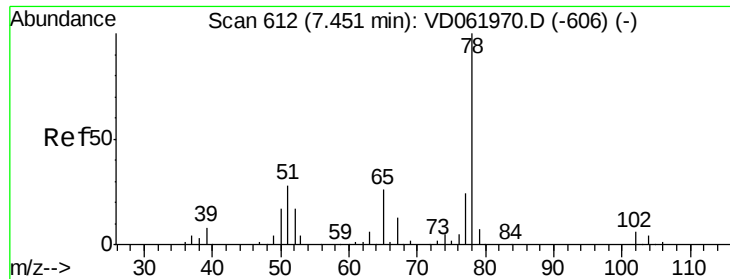
Tot Ion: 43 Resp: 1139
Ion Ratio Lower Upper
43 100
74 0.0 18.0 27.0#



#31
Cyclohexane
Concen: 1.591 ug/l
RT: 7.02 min Scan# 569
Delta R.T. 0.06 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

Tgt Ion: 56 Resp: 7736
Ion Ratio Lower Upper
56 100
69 226.4 25.8 38.6#
84 155.6 72.2 108.4#





#33

1,2-Dichloroethane-d4

Concen: 66.274 ug/l

RT: 7.43 min Scan# 610

Delta R.T. -0.03 min

Lab File: VD062088.D

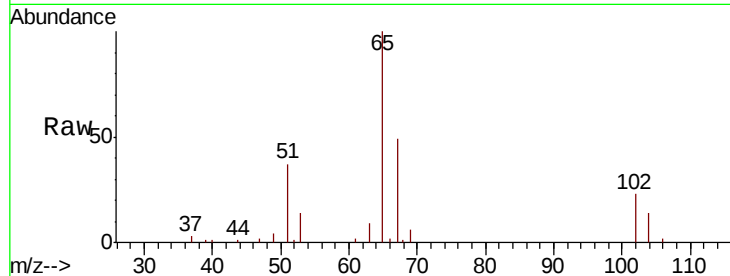
Acq: 30 Apr 2019 15:36

Tot Ion: 65 Resp: 216337

Ion Ratio Lower Upper

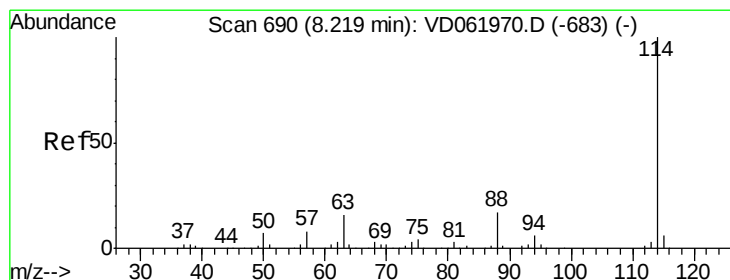
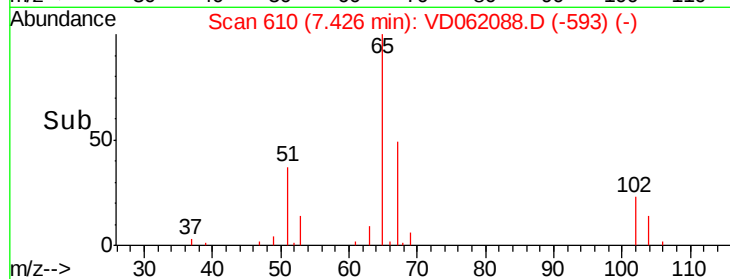
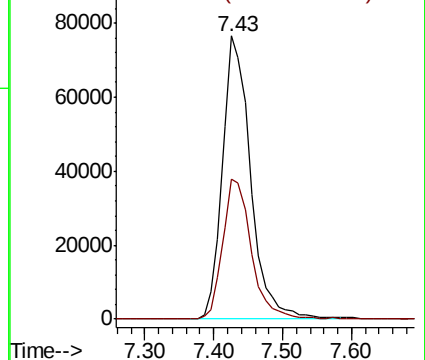
65 100

67 49.4 0.0 98.0



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.20 min Scan# 689

Delta R.T. -0.02 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

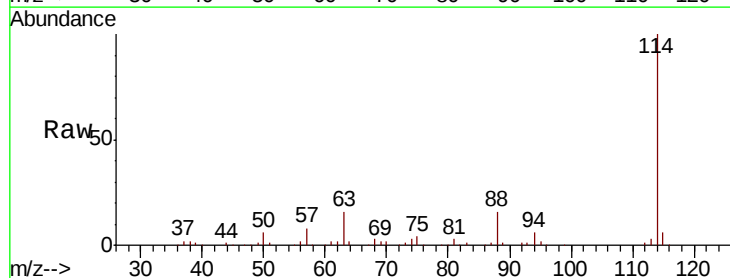
Tgt Ion: 114 Resp: 744697

Ion Ratio Lower Upper

114 100

63 16.2 0.0 32.4

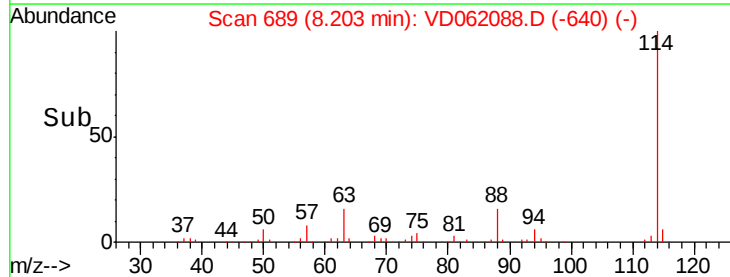
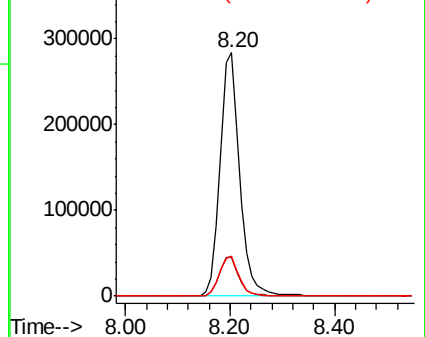
88 16.4 0.0 33.6

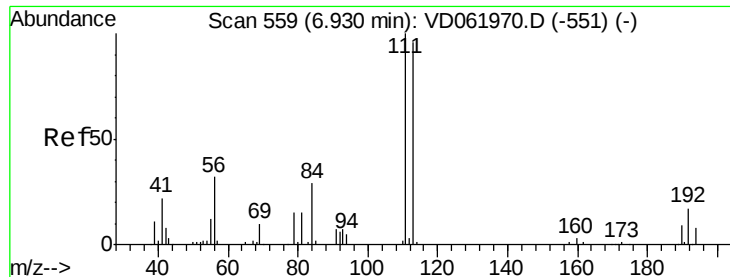


Abundance Ion 114.00 (113.70 to 114.70): VDC

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC





#35

Dibromofluoromethane

Concen: 60.040 ug/l

RT: 6.90 min Scan# 557

Delta R.T. -0.03 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

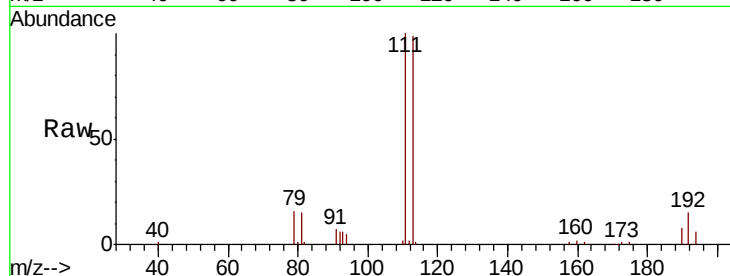
Tot Ion:113 Resp: 309223

Ion Ratio Lower Upper

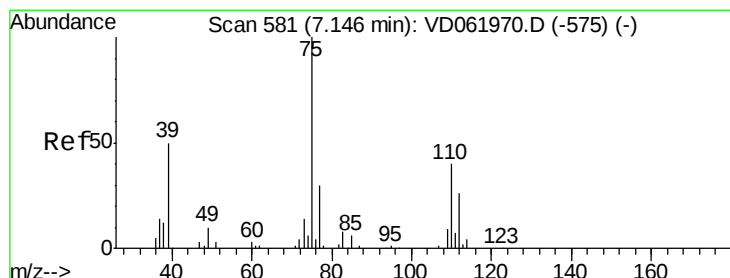
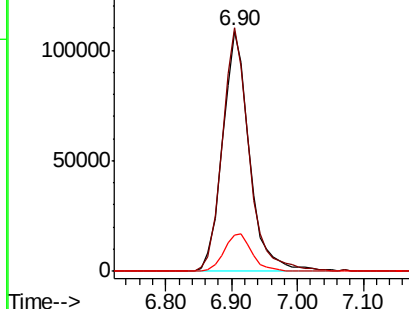
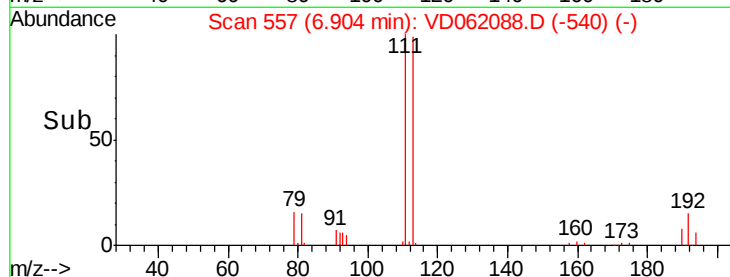
113 100

111 101.5 78.5 117.7

192 15.4 13.0 19.4



Abundance Ion 112.90 (112.60 to 113.60): V
Ion 110.90 (110.60 to 111.60): V
Ion 191.80 (191.50 to 192.50): V



#36

1,1-Dichloropropene

Concen: 5.006 ug/l

RT: 7.02 min Scan# 569

Delta R.T. -0.13 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

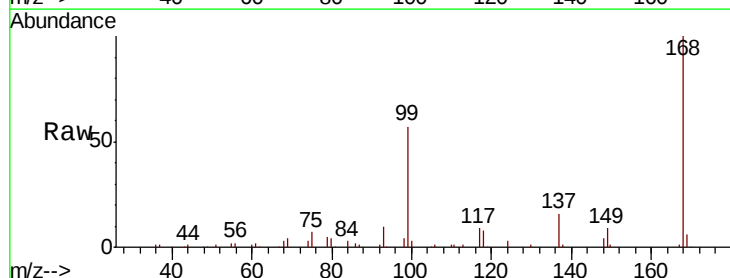
Tgt Ion: 75 Resp: 29046

Ion Ratio Lower Upper

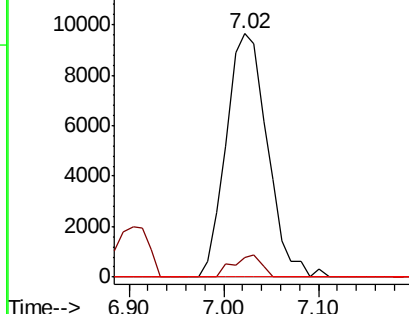
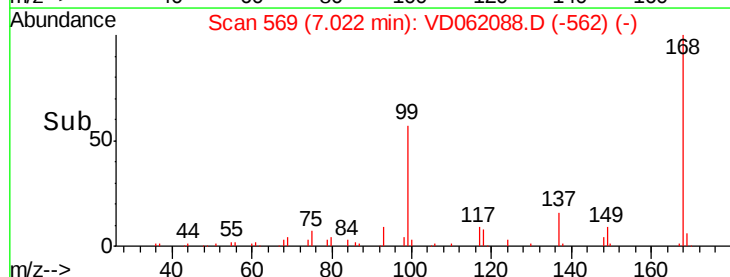
75 100

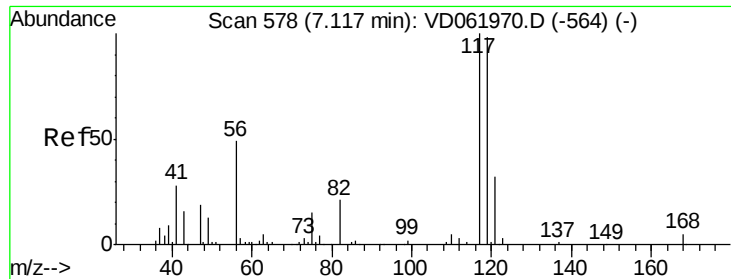
110 7.9 19.1 57.1#

77 0.0 25.6 38.4#



Abundance Ion 75.00 (74.70 to 75.70): V
Ion 109.90 (109.60 to 110.60): V
Ion 76.95 (76.65 to 77.65): V





#38

Carbon Tetrachloride

Concen: 5.469 ug/l

RT: 7.02 min Scan# 569

Delta R.T. -0.10 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

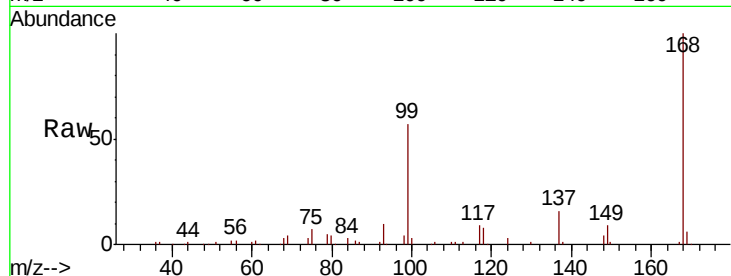
Tot Ion: 117 Resp: 40212

Ion Ratio Lower Upper

117 100

119 4.7 75.8 113.8#

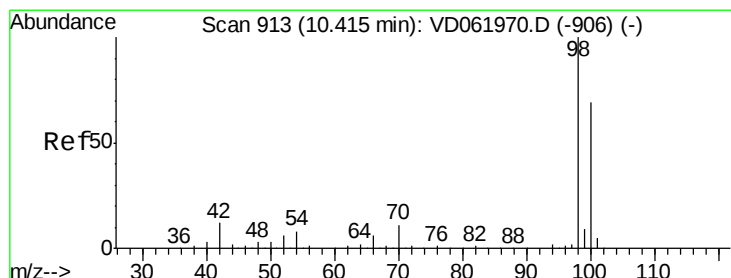
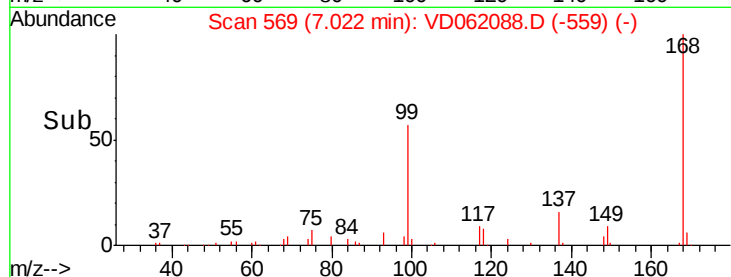
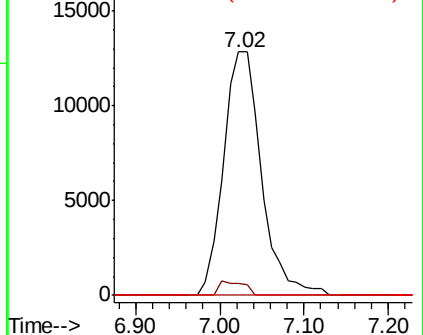
121 0.0 25.9 38.9#



Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V



#50

Toluene-d8

Concen: 41.358 ug/l

RT: 10.39 min Scan# 911

Delta R.T. -0.03 min

Lab File: VD062088.D

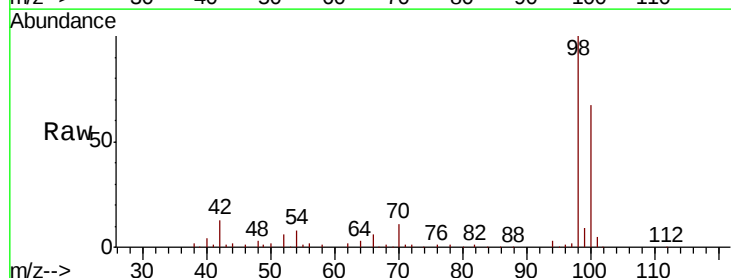
Acq: 30 Apr 2019 15:36

Tgt Ion: 98 Resp: 506850

Ion Ratio Lower Upper

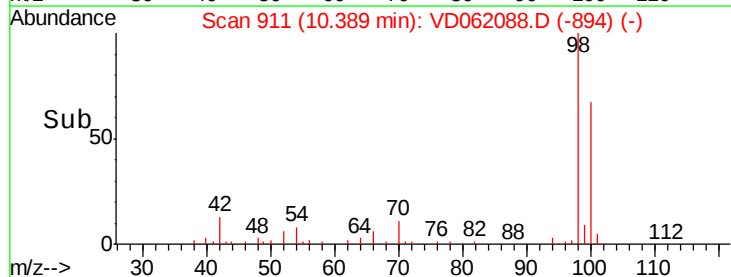
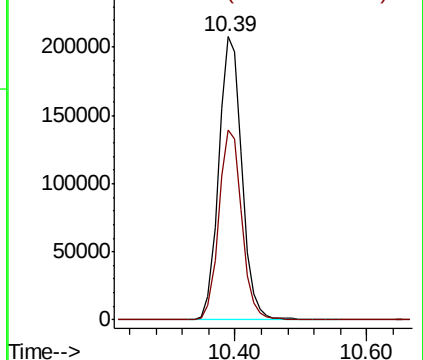
98 100

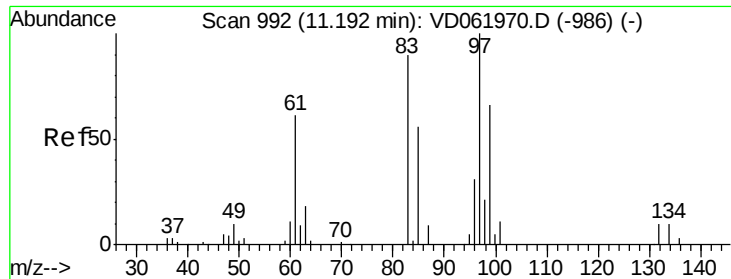
100 67.1 53.8 80.8



Abundance Ion 98.05 (97.75 to 98.75): V

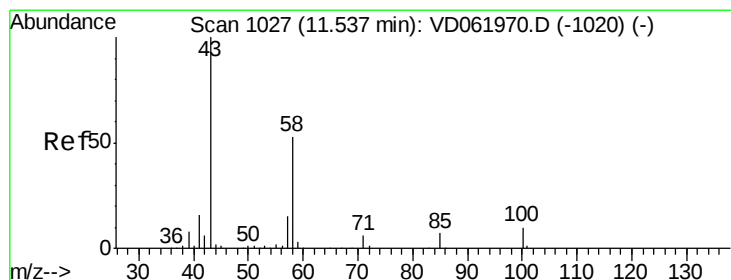
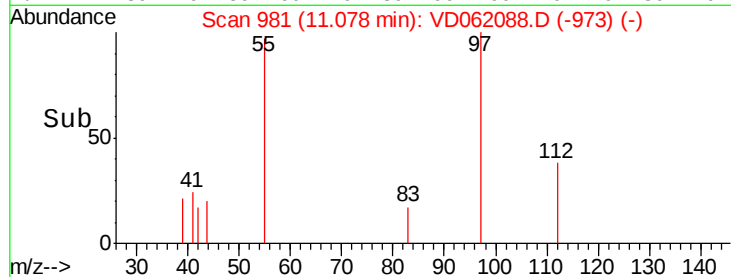
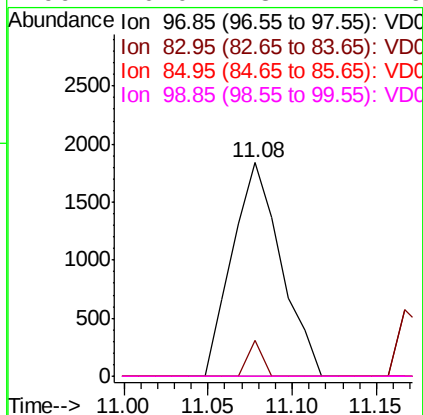
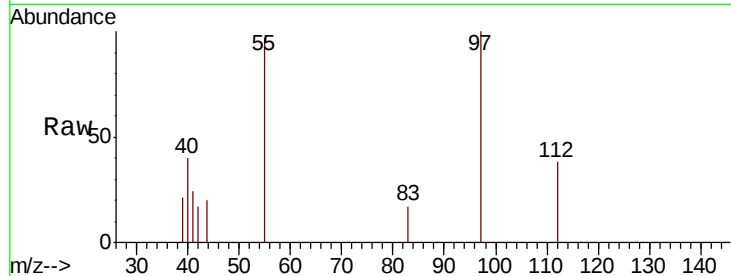
Ion 100.05 (99.75 to 100.75): V





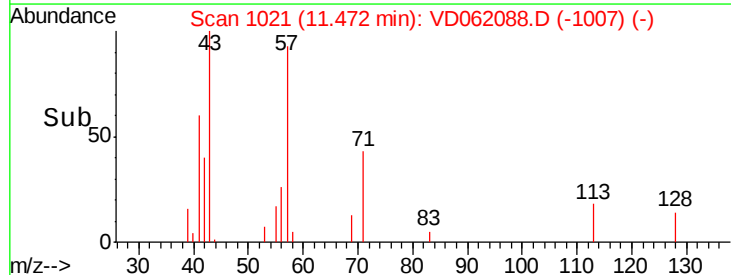
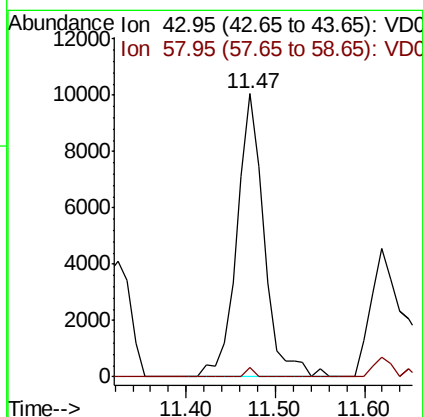
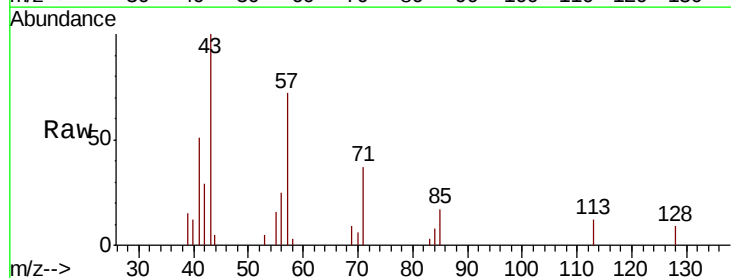
#55
 1,1,2-Trichloroethane
 Concen: 1.199 ug/l
 RT: 11.08 min Scan# 981
 Delta R.T. -0.12 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

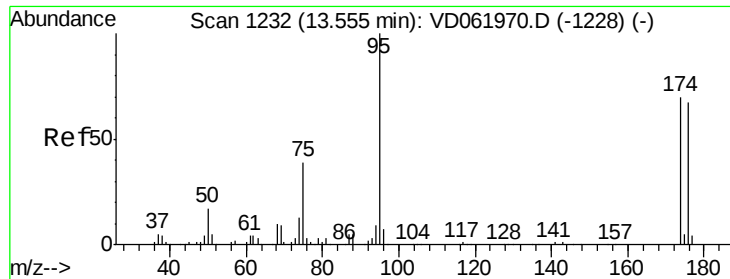
Tot Ion: 97 Resp: 3686
 Ion Ratio Lower Upper
 97 100
 83 16.8 65.7 98.5#
 85 0.0 45.6 68.4#
 99 0.0 48.4 72.6#



#59
 2-Hexanone
 Concen: 12.913 ug/l
 RT: 11.47 min Scan# 1021
 Delta R.T. -0.06 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

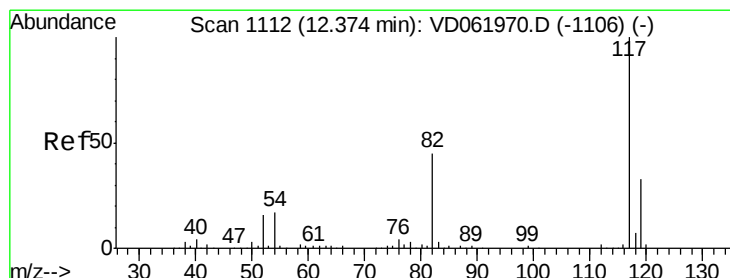
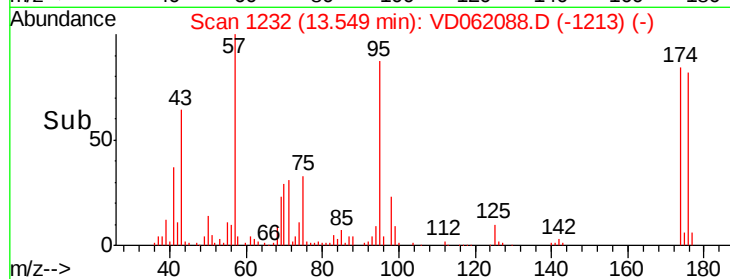
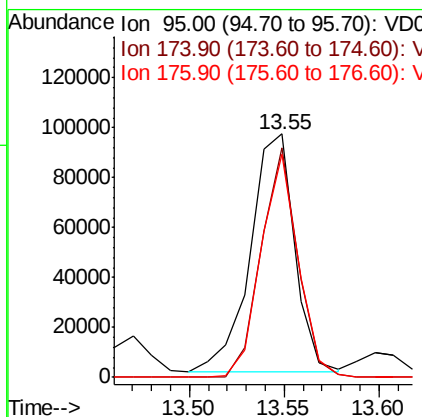
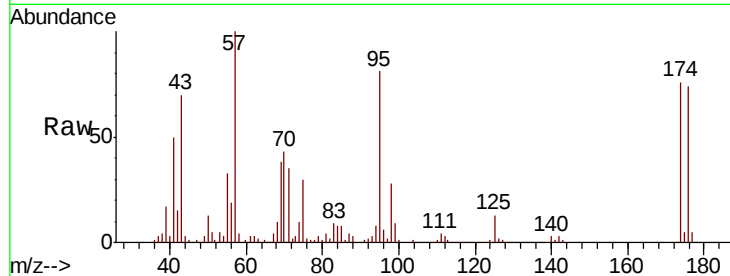
Tgt Ion: 43 Resp: 21400
 Ion Ratio Lower Upper
 43 100
 58 3.4 25.4 76.4#





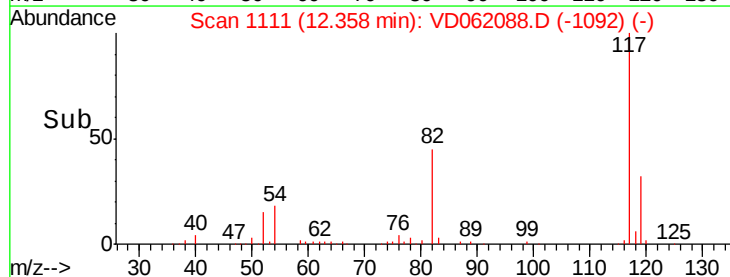
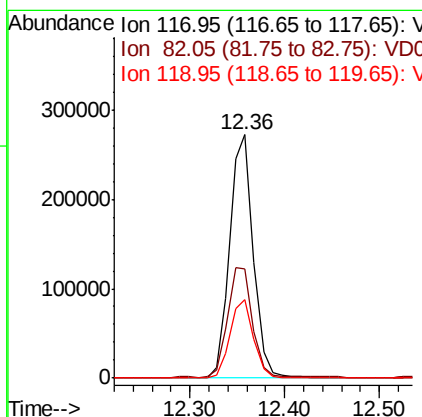
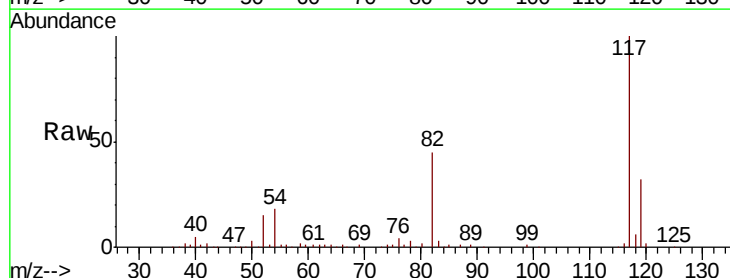
#62
4-Bromofluorobenzene
Concen: 31.703 ug/l
RT: 13.55 min Scan# 1232
Delta R.T. -0.01 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

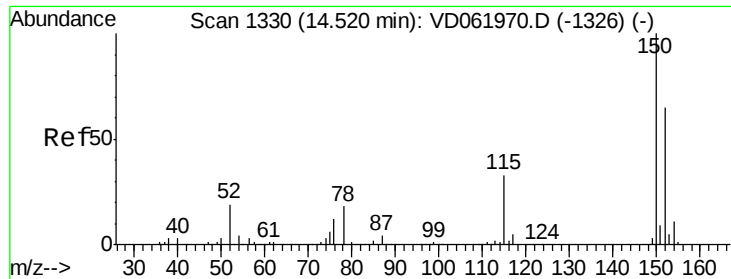
Tot Ion	95	Resp	155835
Ion Ratio	100		
Lower		0.0	181.8
Upper		0.0	174.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.36 min Scan# 1111
Delta R.T. -0.01 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

Tgt Ion	117	Resp	467340
Ion Ratio <td>100</td> <td></td> <td></td>	100		
Lower		36.2	54.2
Upper		26.2	39.4





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.51 min Scan# 1330

Delta R.T. -0.01 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

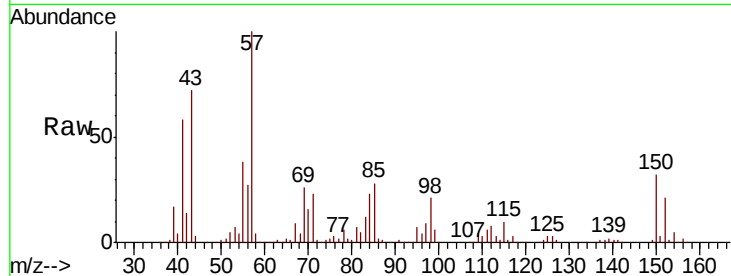
Tot Ion:152 Resp: 114244

Ion Ratio Lower Upper

152 100

115 49.8 30.9 92.7

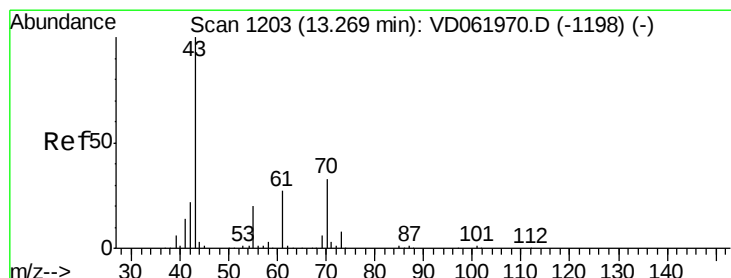
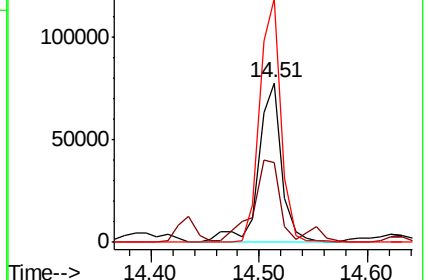
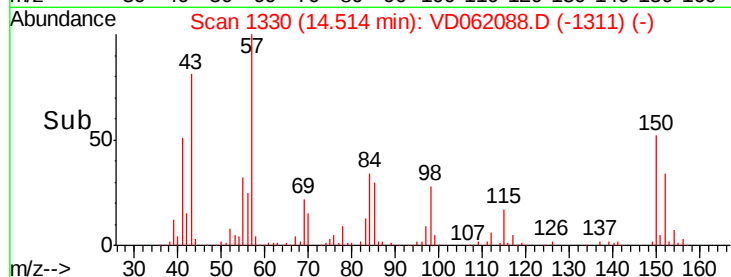
150 152.4 0.0 314.8



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 72.009 ug/l

RT: 13.21 min Scan# 1198

Delta R.T. -0.05 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

Tgt Ion: 43 Resp: 141329

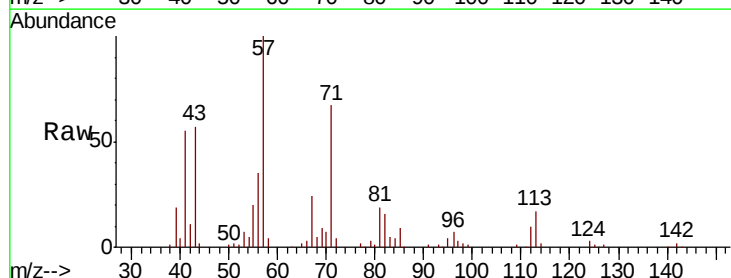
Ion Ratio Lower Upper

43 100

70 11.5 24.2 36.4#

55 34.0 16.0 24.0#

61 0.0 21.6 32.4#

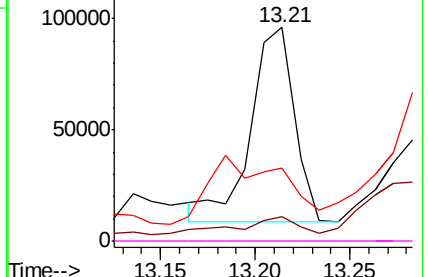
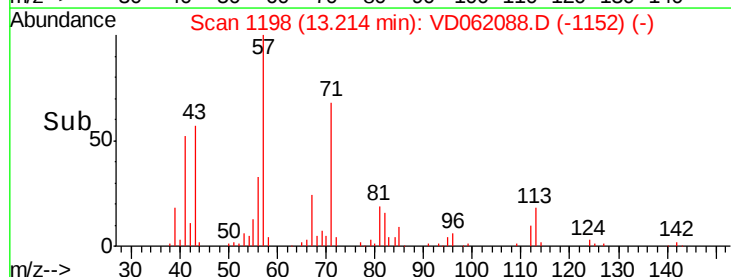


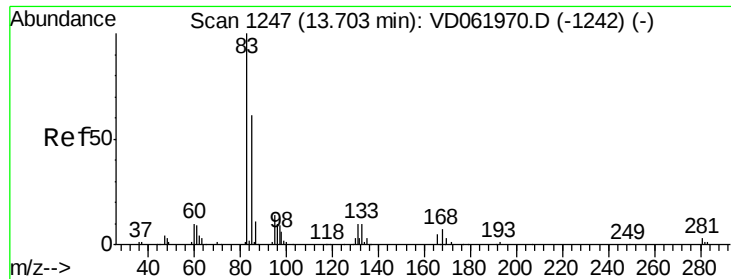
Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 70.00 (69.70 to 70.70): VDC

Ion 55.00 (54.70 to 55.70): VDC

Ion 60.95 (60.65 to 61.65): VDC





#75

1,1,2,2-Tetrachloroethane

Concen: 46.478 ug/l

RT: 13.71 min Scan# 1248

Delta R.T. 0.01 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

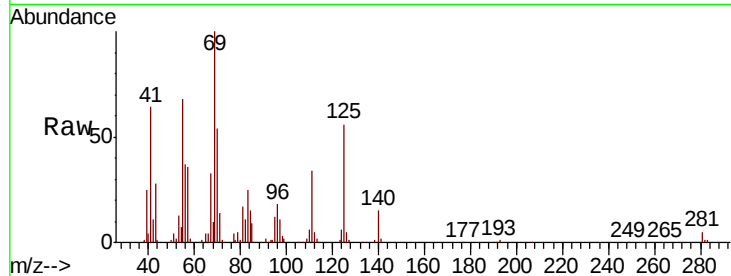
Tot Ion: 83 Resp: 69411

Ion Ratio Lower Upper

83 100

131 0.0 5.0 14.9#

85 34.0 32.6 97.7

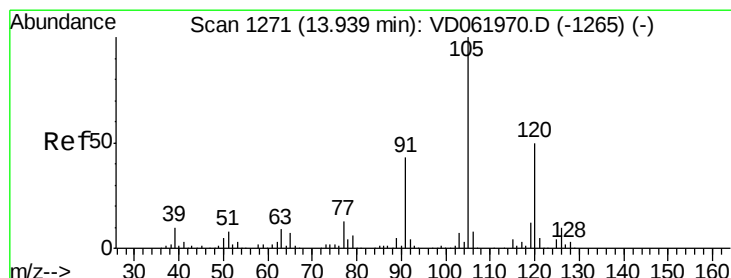
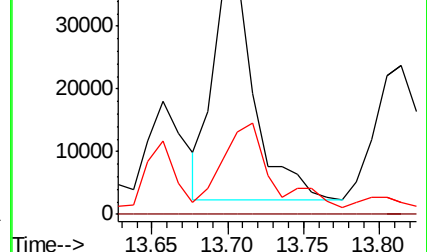
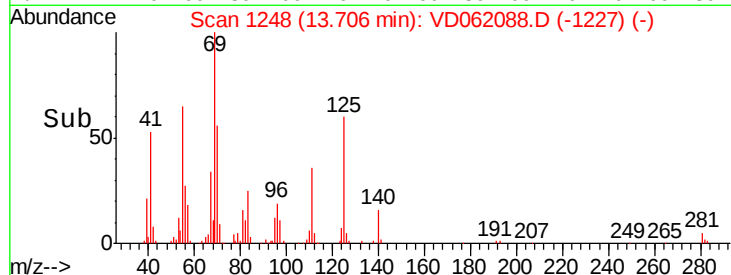


Abundance Ion 82.95 (82.65 to 83.65): V

Ion 130.90 (130.60 to 131.60): V

Ion 84.95 (84.65 to 85.65): V

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 21.630 ug/l

RT: 13.92 min Scan# 1270

Delta R.T. -0.01 min

Lab File: VD062088.D

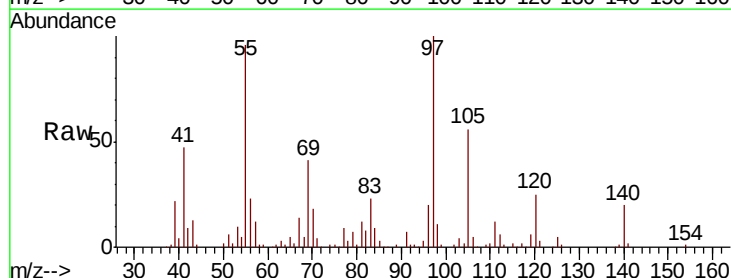
Acq: 30 Apr 2019 15:36

Tgt Ion:105 Resp: 131440

Ion Ratio Lower Upper

105 100

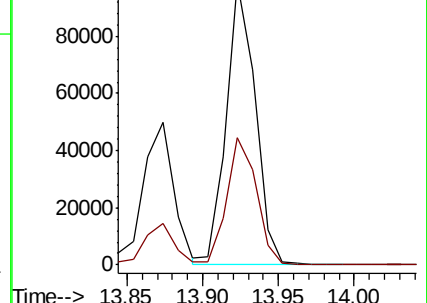
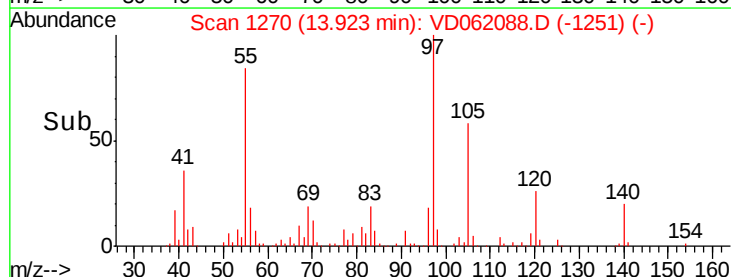
120 45.1 24.0 72.0

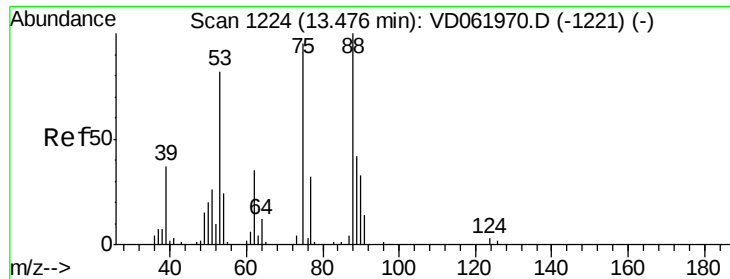


Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 128.327 ug/l

RT: 13.55 min Scan# 1232

Delta R.T. 0.07 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

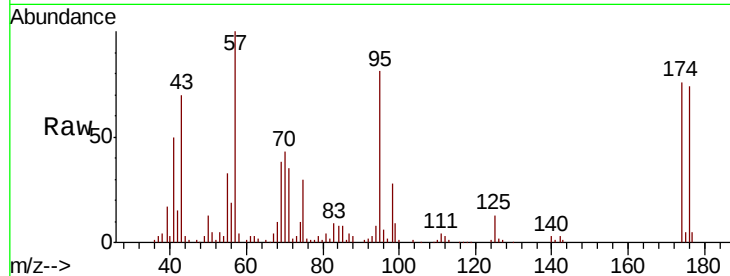
Tot Ion: 75 Resp: 56416

Ion Ratio Lower Upper

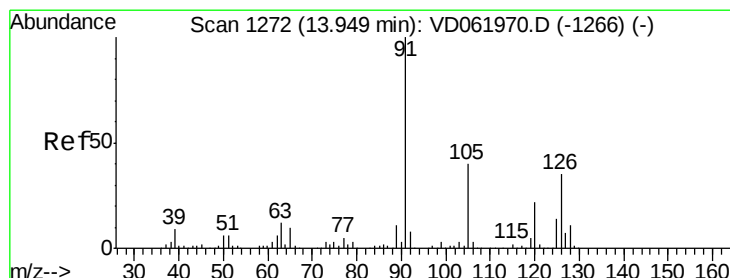
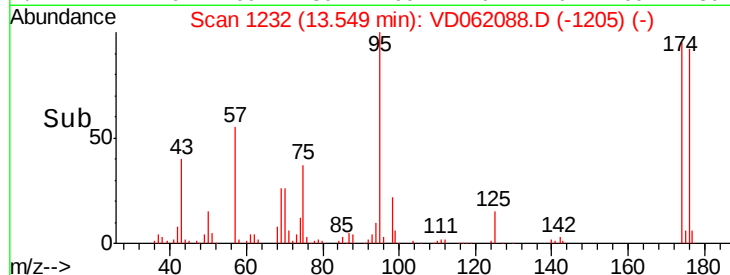
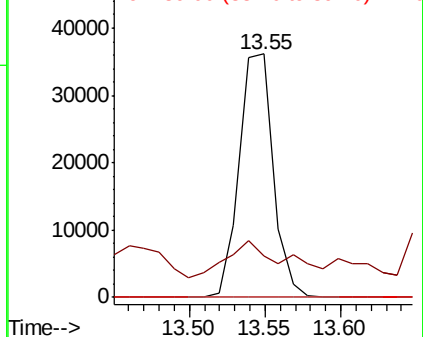
75 100

53 17.1 65.8 98.8#

89 0.0 35.0 52.6#



Abundance Ion 75.00 (74.70 to 75.70): VDC
Ion 53.00 (52.70 to 53.70): VDC
Ion 89.00 (88.70 to 89.70): VDC



#82

4-Chlorotoluene

Concen: 3.182 ug/l

RT: 13.92 min Scan# 1270

Delta R.T. -0.03 min

Lab File: VD062088.D

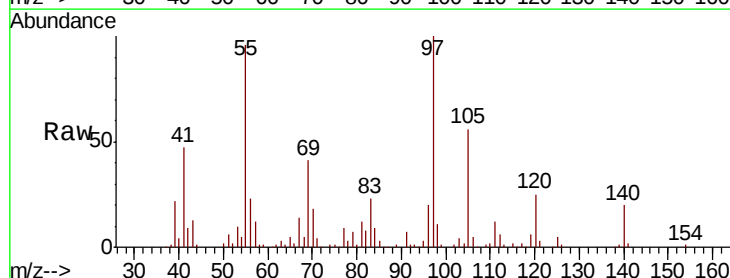
Acq: 30 Apr 2019 15:36

Tgt Ion: 91 Resp: 18520

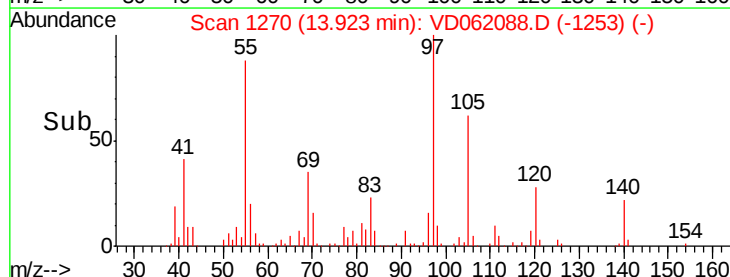
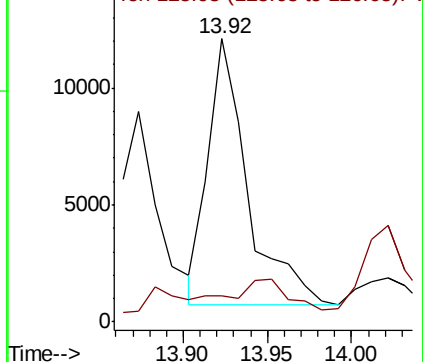
Ion Ratio Lower Upper

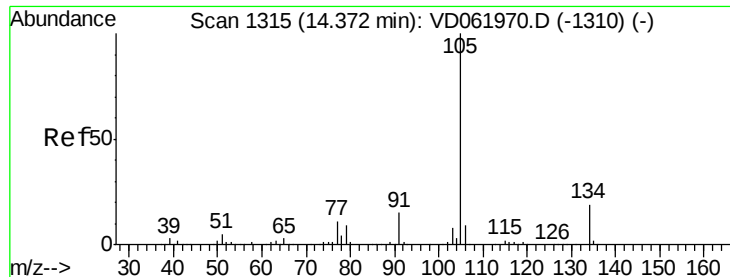
91 100

126 9.1 19.1 57.5#



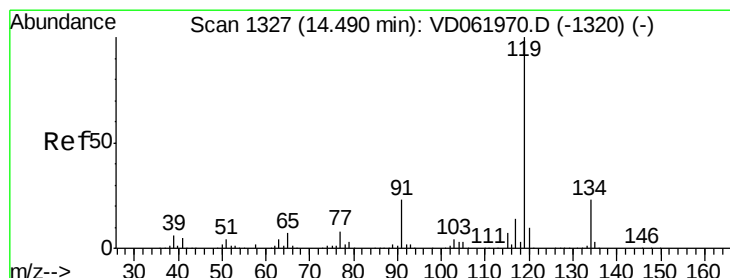
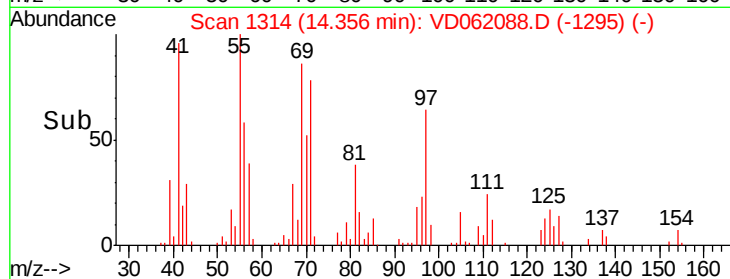
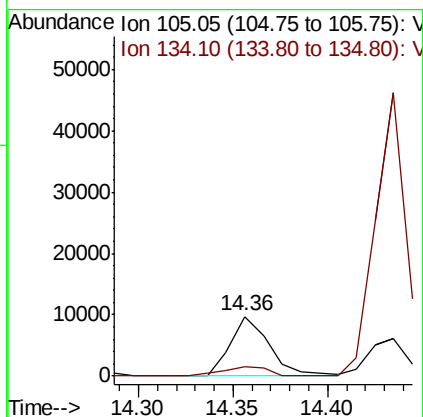
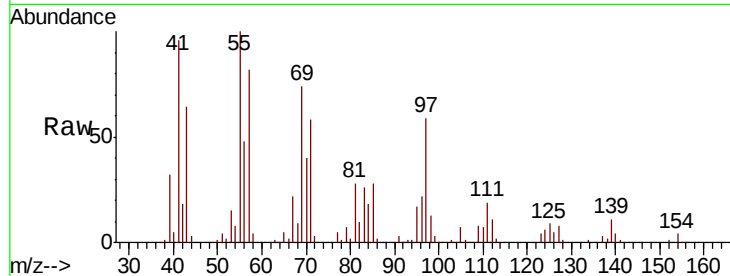
Abundance Ion 91.00 (90.70 to 91.70): VDC
Ion 125.95 (125.65 to 126.65): V





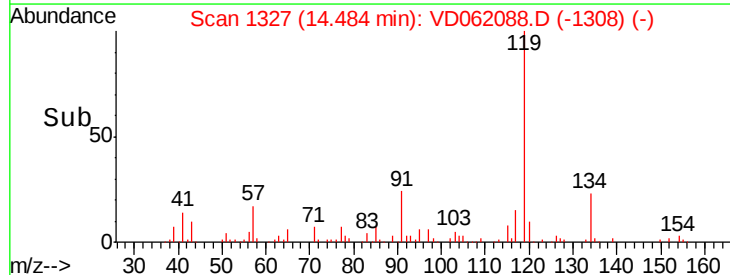
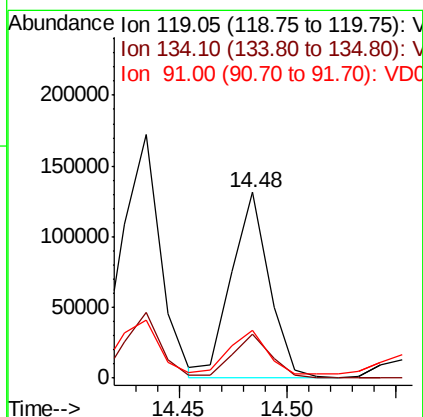
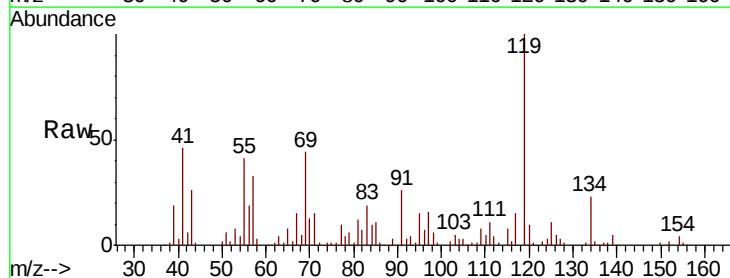
#85
 sec-Butylbenzene
 Concen: 1.847 ug/l
 RT: 14.36 min Scan# 1314
 Delta R.T. -0.01 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

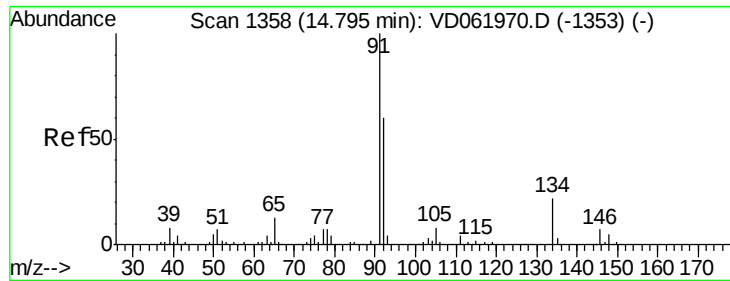
Tot Ion:105 Resp: 14051
 Ion Ratio Lower Upper
 105 100
 134 15.9 8.9 26.7



#86
 p-Isopropyltoluene
 Concen: 23.686 ug/l
 RT: 14.48 min Scan# 1327
 Delta R.T. -0.01 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

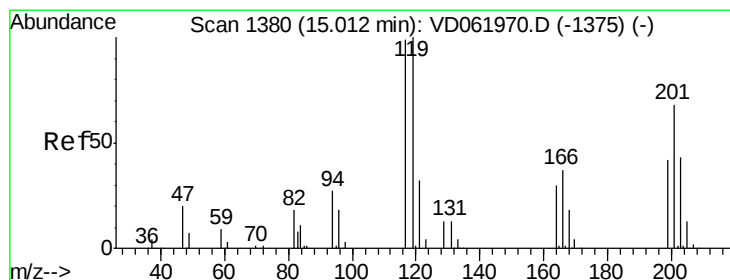
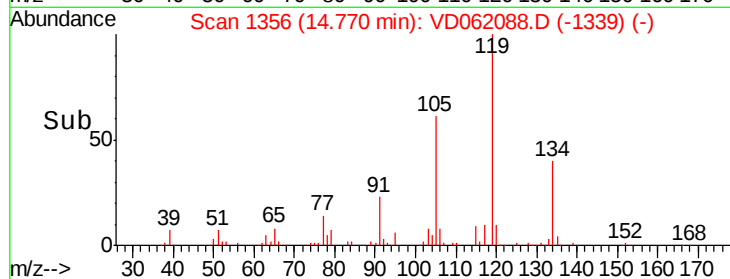
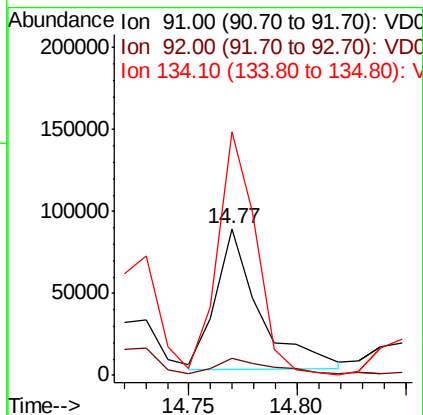
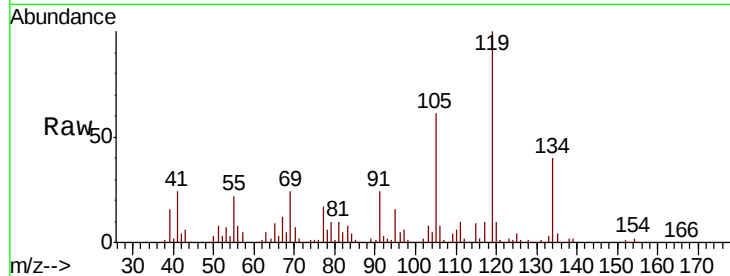
Tgt Ion:119 Resp: 161240
 Ion Ratio Lower Upper
 119 100
 134 23.5 12.8 38.3
 91 25.6 10.7 32.1





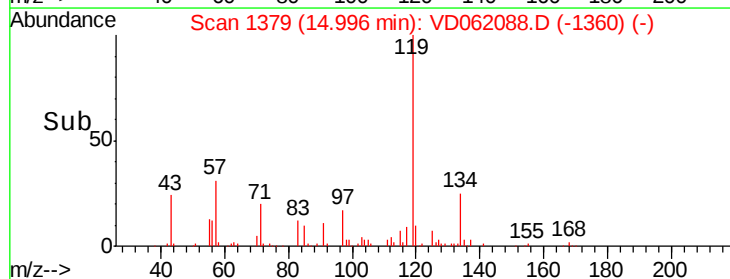
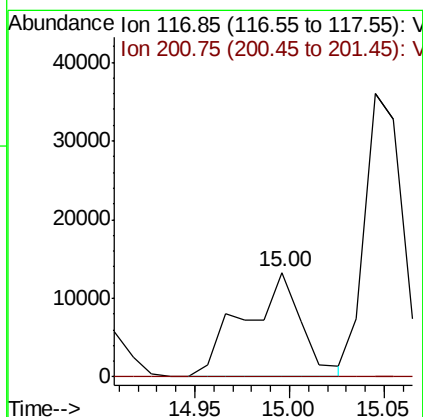
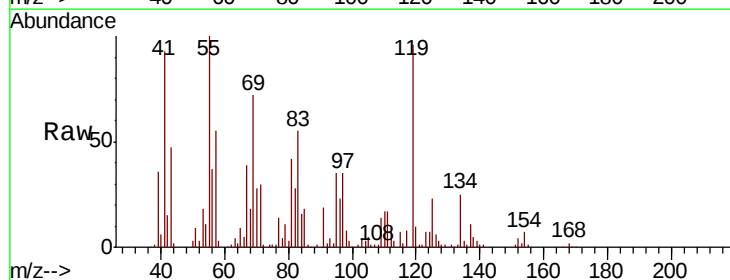
#89
n-Butylbenzene
Concen: 19.979 ug/l
RT: 14.77 min Scan# 1356
Delta R.T. -0.03 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

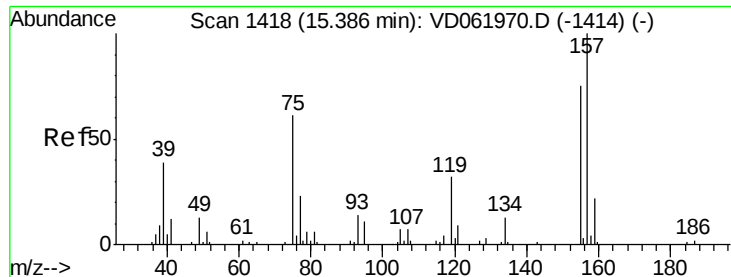
Tot Ion: 91 Resp: 122100
Ion Ratio Lower Upper
91 100
92 11.3 30.3 91.0#
134 165.9 14.5 43.6#



#90
Hexachloroethane
Concen: 15.134 ug/l
RT: 15.00 min Scan# 1379
Delta R.T. -0.01 min
Lab File: VD062088.D
Acq: 30 Apr 2019 15:36

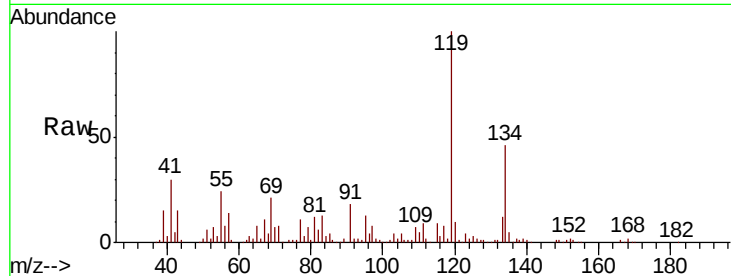
Tgt Ion: 117 Resp: 27858
Ion Ratio Lower Upper
117 100
201 0.0 30.2 90.6#



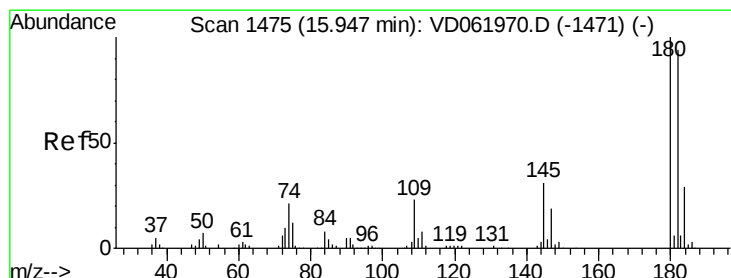
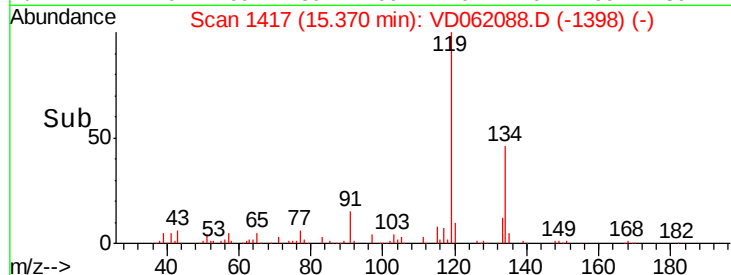
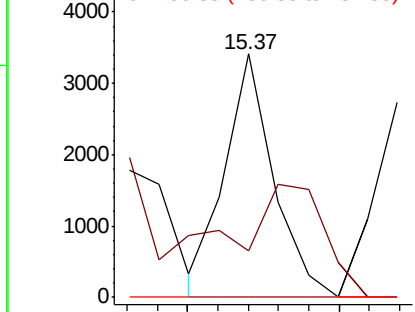


#92
 1,2-Dibromo-3-Chloropropane
 Concen: 19.003 ug/l
 RT: 15.37 min Scan# 1417
 Delta R.T. -0.01 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

Tot Ion: 75 Resp: 3812
 Ion Ratio Lower Upper
 75 100
 155 19.0 55.3 165.8#
 157 0.0 67.8 203.2#

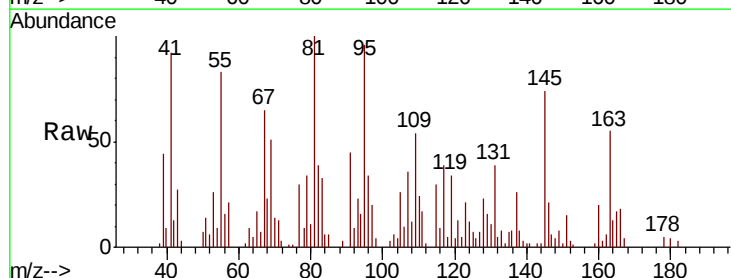


Abundance Ion 75.00 (74.70 to 75.70): V
 Ion 154.90 (154.60 to 155.60): V
 Ion 156.85 (156.55 to 157.55): V

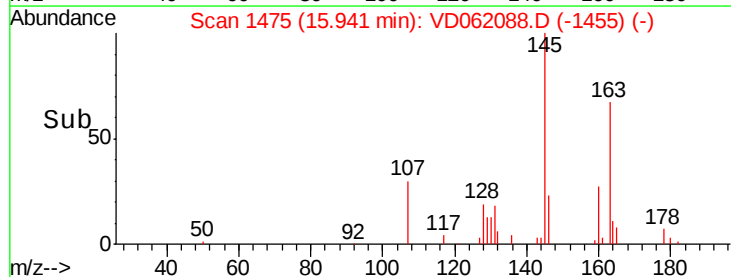
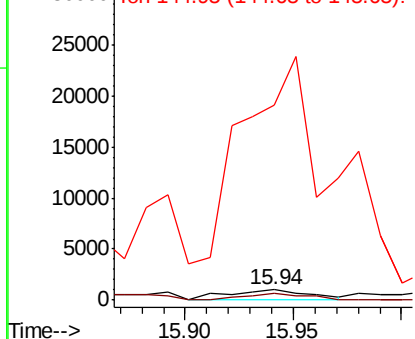


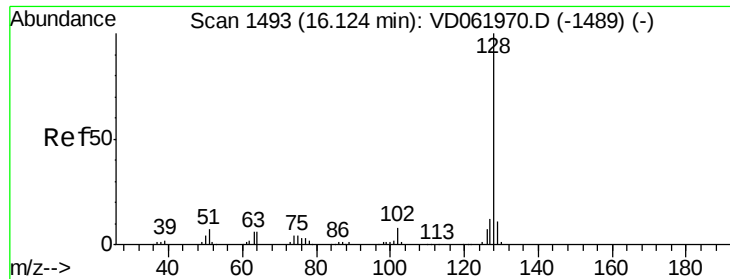
#93
 1,2,4-Trichlorobenzene
 Concen: 1.611 ug/l
 RT: 15.94 min Scan# 1475
 Delta R.T. -0.00 min
 Lab File: VD062088.D
 Acq: 30 Apr 2019 15:36

Tgt Ion:180 Resp: 2745
 Ion Ratio Lower Upper
 180 100
 182 65.7 49.3 147.8
 145 1884.3 16.2 48.6#



Abundance Ion 179.85 (179.55 to 180.55): V
 Ion 181.85 (181.55 to 182.55): V
 Ion 144.95 (144.65 to 145.65): V





#95

Naphthalene

Concen: 2.715 ug/l

RT: 16.12 min Scan# 1493

Delta R.T. -0.01 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

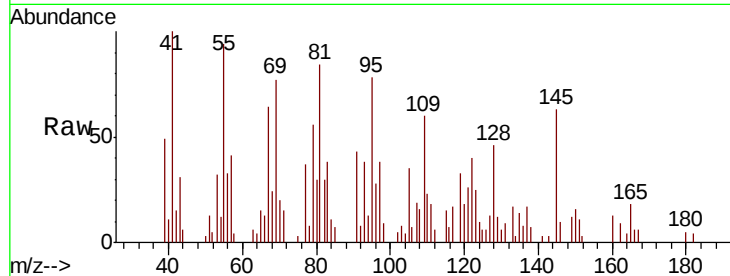
Tot Ion:128 Resp: 7470

Ion Ratio Lower Upper

128 100

127 28.3 9.8 14.8#

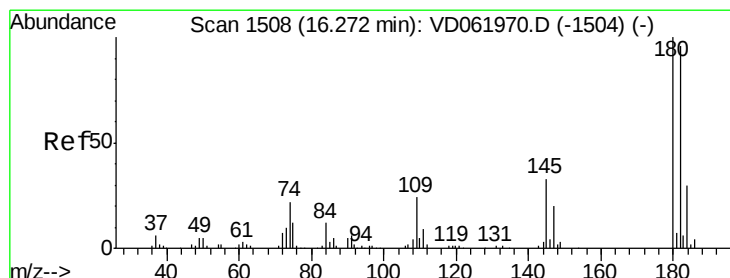
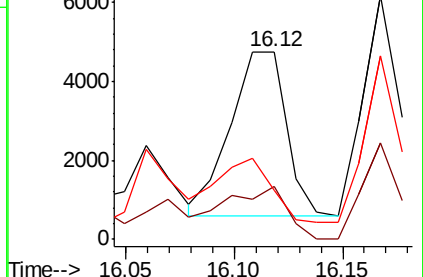
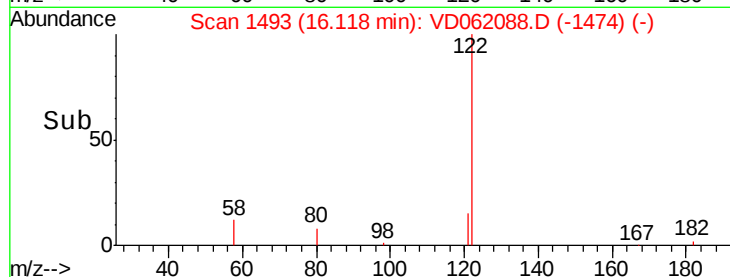
129 26.1 8.8 13.2#



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



#96

1,2,3-Trichlorobenzene

Concen: 2.286 ug/l

RT: 16.24 min Scan# 1505

Delta R.T. -0.03 min

Lab File: VD062088.D

Acq: 30 Apr 2019 15:36

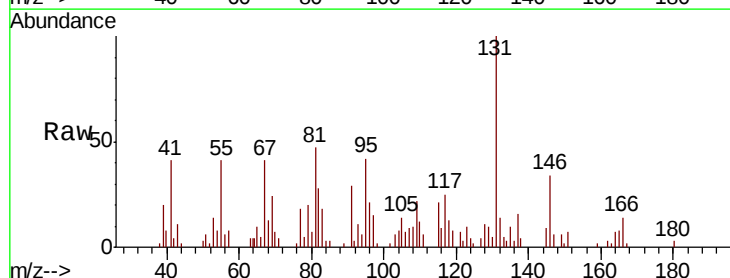
Tgt Ion:180 Resp: 2210

Ion Ratio Lower Upper

180 100

182 0.0 47.0 141.0#

145 301.3 17.0 51.0#



Abundance Ion 179.85 (179.55 to 180.55): V

Ion 181.85 (181.55 to 182.55): V

Ion 144.95 (144.65 to 145.65): V

