

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD041119\
 Data File : VD061749.D
 Acq On : 11 Apr 2019 19:01
 Operator : VA/AP
 Sample : K2347-01
 Misc : 5.08g/5ml/MSVOA D/SOIL
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :

Quant Time: Apr 12 01:02:21 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D040619S.M
 Quant Title : SW846 8260
 QLast Update : Mon Apr 08 10:04:03 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.04	168	14813	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.21	114	38570	50.00	ug/l	0.00
63) Chlorobenzene-d5	12.36	117	18098	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.51	152	11699	50.00	ug/l	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.45	65	26156	232.95	ug/l	0.00
Spiked Amount			Recovery	=	465.90%	
35) Dibromofluoromethane	6.92	113	24605	92.08	ug/l	0.00
Spiked Amount			Recovery	=	184.16%	
50) Toluene-d8	10.40	98	15782	23.51	ug/l	0.00
Spiked Amount			Recovery	=	47.02%	
62) 4-Bromofluorobenzene	13.54	95	11446	48.12	ug/l	0.00
Spiked Amount			Recovery	=	96.24%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.18	94	233	8.342	ug/l #	12
16) Acetone	3.22	43	15363	457.712	ug/l	99
18) Methyl Acetate	3.64	43	3672	58.147	ug/l	98
20) Methylene Chloride	3.83	84	6373	33.460	ug/l #	95
25) 2-Butanone	6.05	43	2096	54.168	ug/l #	54
36) 1,1-Dichloropropene	7.05	75	476	1.410	ug/l #	39
37) Ethyl Acetate	6.05	43	2096	15.245	ug/l #	68
38) Carbon Tetrachloride	7.04	117	1232	3.114	ug/l #	11
43) Isopropyl Acetate	8.87	43	1163	5.828	ug/l #	43
59) 2-Hexanone	11.53	43	430	4.695	ug/l #	27
74) N-amyl acetate	13.29	43	5693	26.879	ug/l #	35
75) 1,1,2,2-Tetrachloroethane	13.70	83	4219	26.176	ug/l #	66
79) 2-Chlorotoluene	13.93	91	940	1.763	ug/l #	35
80) 1,3,5-Trimethylbenzene	13.93	105	7859	12.702	ug/l	90
81) trans-1,4-Dichloro-2-buten	13.54	75	3543	73.355	ug/l #	20
82) 4-Chlorotoluene	13.93	91	940	1.609	ug/l #	37
84) 1,2,4-Trimethylbenzene	14.08	105	12415	19.882	ug/l	76
85) sec-Butylbenzene	14.36	105	4583	5.686	ug/l	94
86) p-Isopropyltoluene	14.48	119	7296	10.435	ug/l	95
89) n-Butylbenzene	14.76	91	13146	21.631	ug/l #	1
90) Hexachloroethane	15.05	117	6389	33.677	ug/l #	26
92) 1,2-Dibromo-3-Chloropropan	15.37	75	260	13.368	ug/l #	37
93) 1,2,4-Trichlorobenzene	15.98	180	1336	8.171	ug/l #	1
95) Naphthalene	16.11	128	2273	8.786	ug/l #	1
96) 1,2,3-Trichlorobenzene	16.30	180	1565	19.178	ug/l #	1

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 570

Delta R.T. -0.00 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

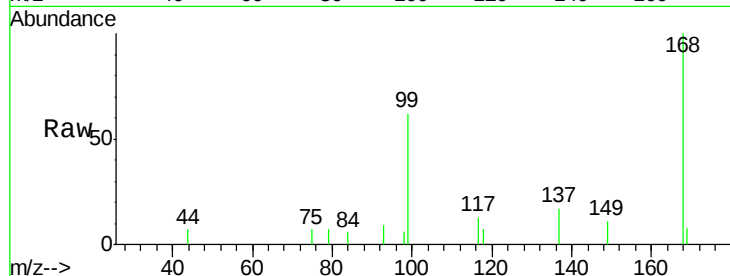
ClientSampleId :

Tot Ion:168 Resp: 14813

Ion Ratio Lower Upper

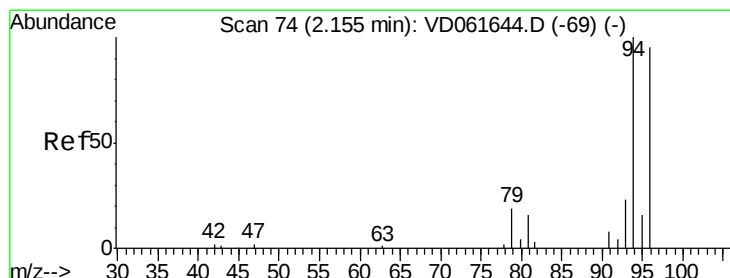
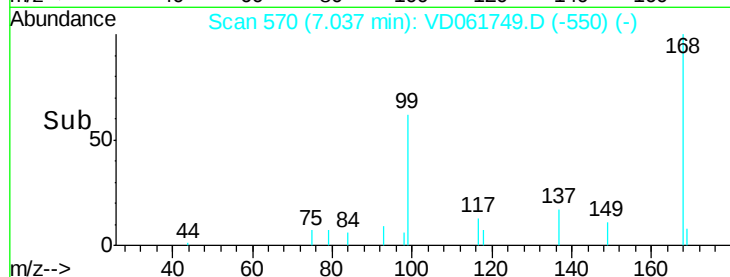
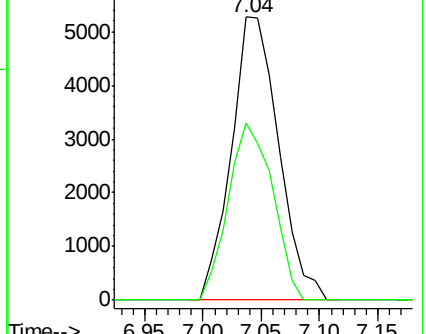
168 100

99 62.4 46.8 70.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: 8.342 ug/l

RT: 2.18 min Scan# 77

Delta R.T. 0.03 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

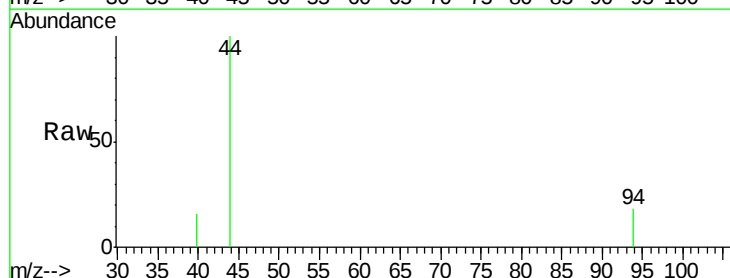
Tgt Ion: 94 Resp: 233

Ion Ratio Lower Upper

94 100

96 0.0 75.8 113.8#

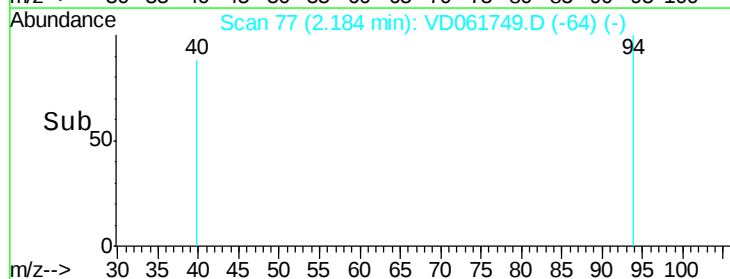
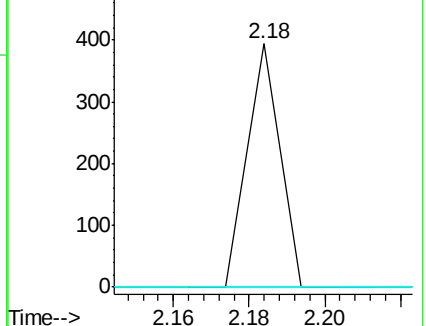
93 0.0 18.6 28.0#



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

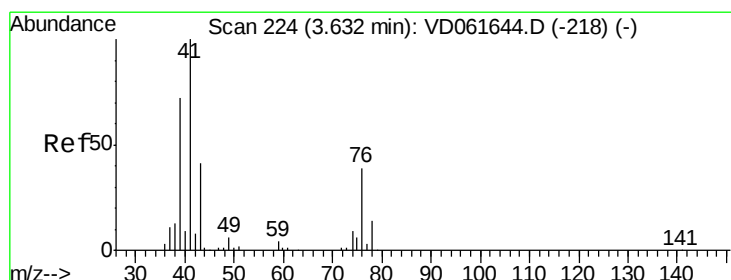
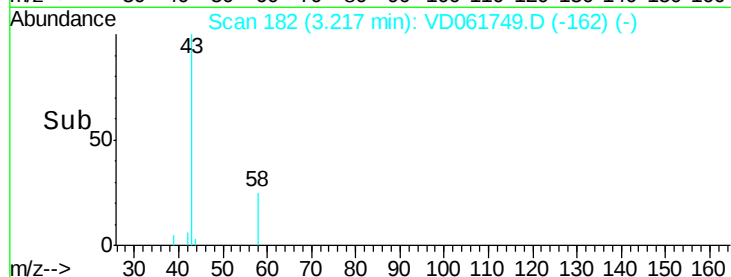
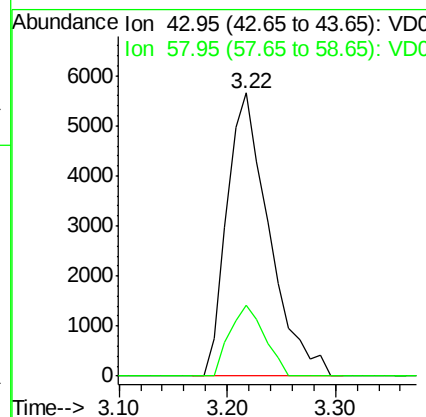
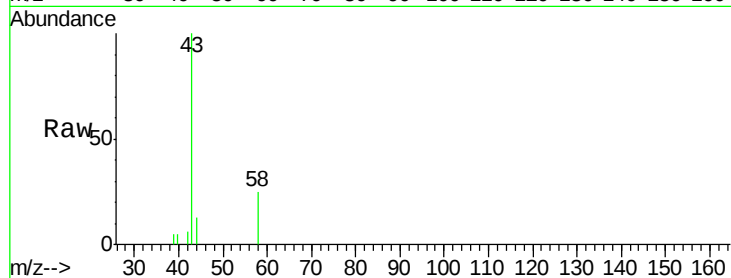




#16
Acetone
Concen: 457.712 ug/l
RT: 3.22 min Scan# 182
Delta R.T. -0.00 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

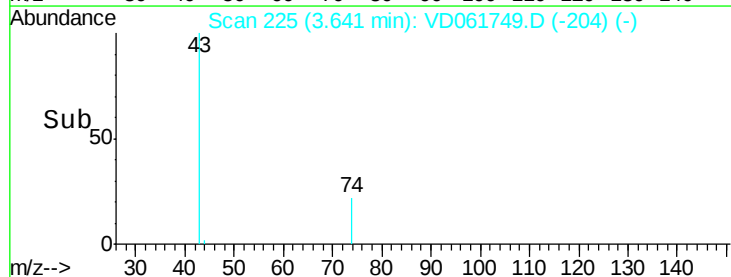
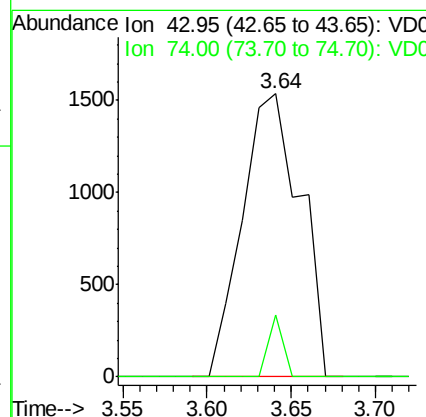
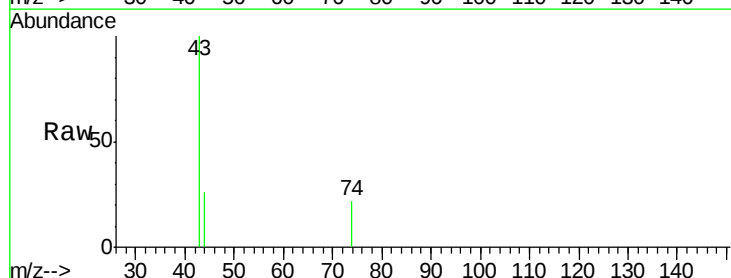
Instrument :
MSVOA_D
ClientSampleId :

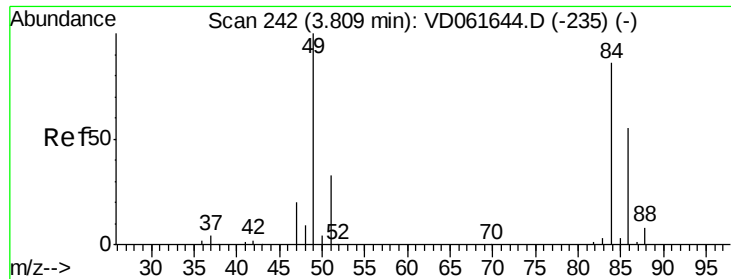
Tot Ion: 43 Resp: 15363
Ion Ratio Lower Upper
43 100
58 25.1 19.7 29.5



#18
Methyl Acetate
Concen: 58.147 ug/l
RT: 3.64 min Scan# 225
Delta R.T. 0.01 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion: 43 Resp: 3672
Ion Ratio Lower Upper
43 100
74 21.8 18.2 27.2

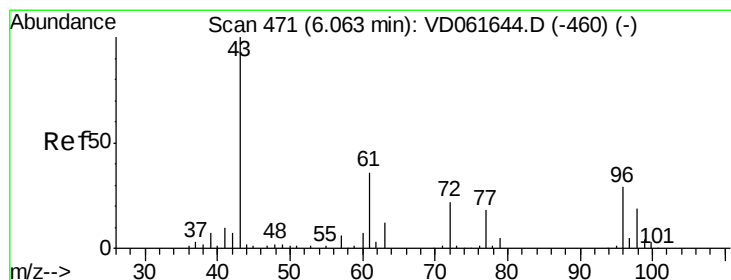
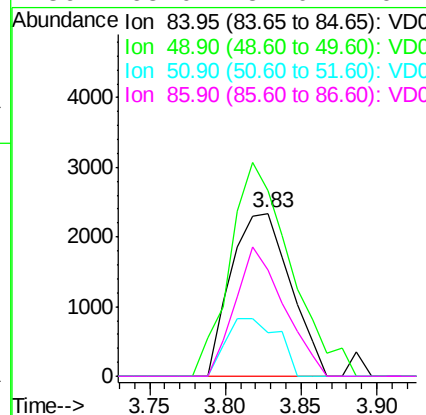
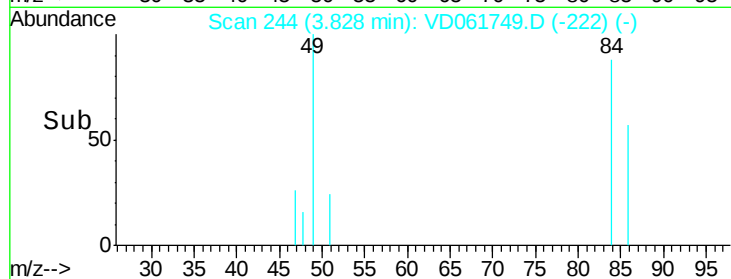
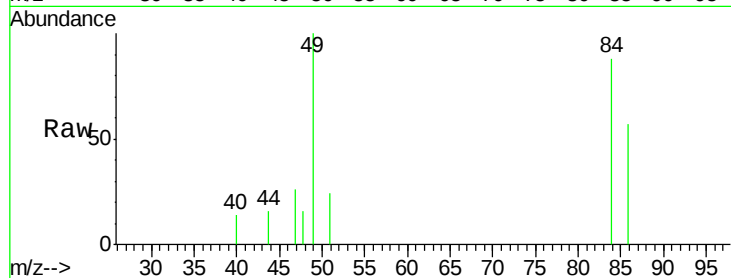




#20
Methvlene Chloride
Concen: 33.460 ug/l
RT: 3.83 min Scan# 244
Delta R.T. 0.02 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

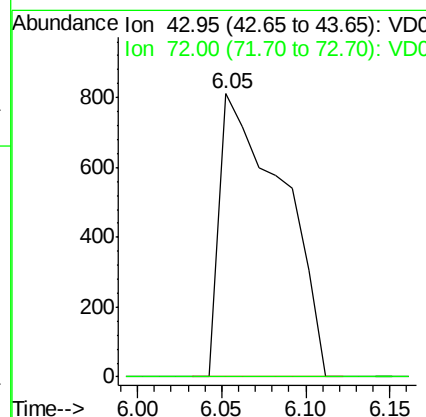
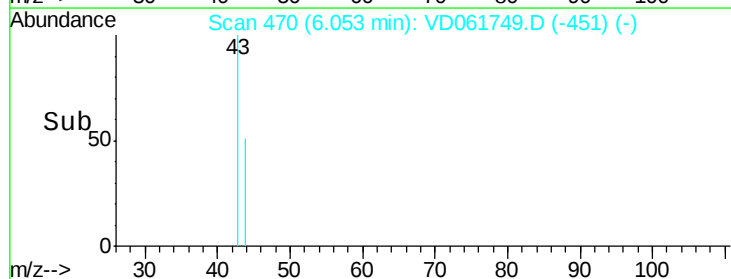
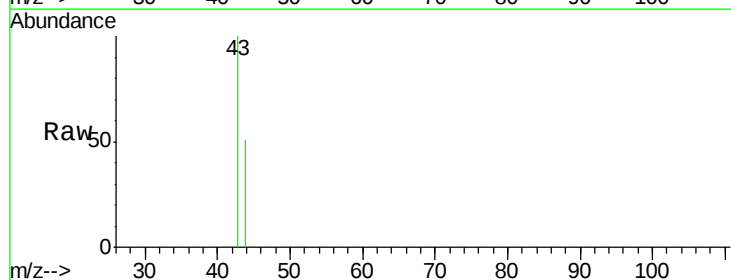
Instrument :
MSVOA_D
ClientSampleId :

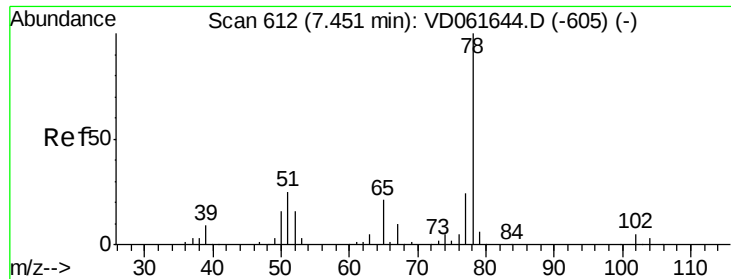
Tot Ion: 84 Resp: 6373
Ion Ratio Lower Upper
84 100
49 114.2 93.0 139.4
51 27.1 30.4 45.6#
86 65.0 51.0 76.4



#25
2-Butanone
Concen: 54.168 ug/l
RT: 6.05 min Scan# 470
Delta R.T. -0.01 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion: 43 Resp: 2096
Ion Ratio Lower Upper
43 100
72 0.0 17.4 26.2#

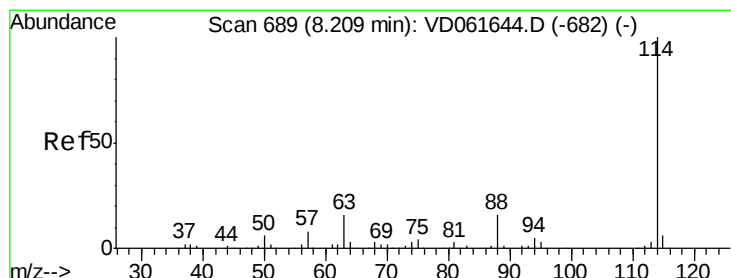
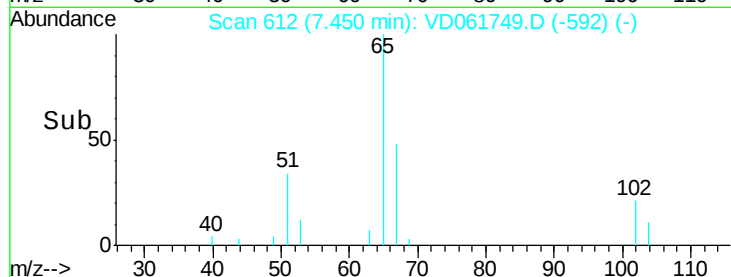
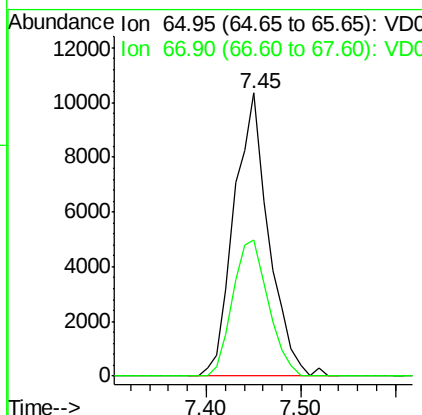
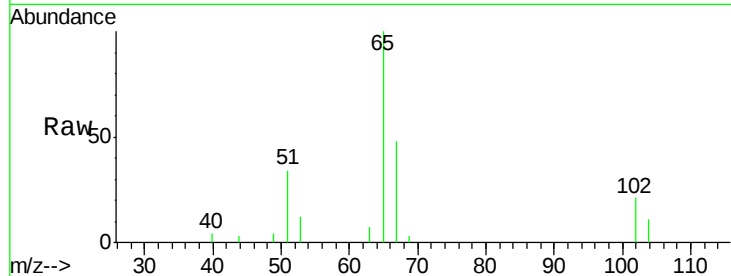




#33
 1,2-Dichloroethane-d4
 Concen: N.D. ug/l
 RT: 7.45 min Scan# 612
 Delta R.T. -0.00 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

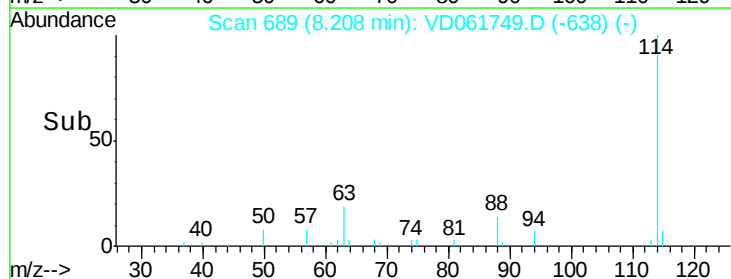
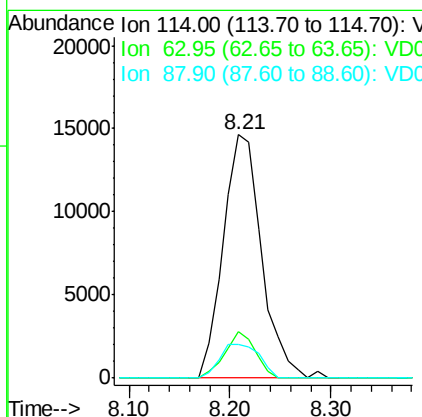
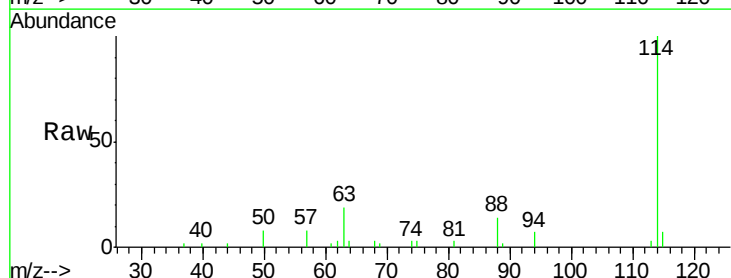
Instrument :
 MSVOA_D
 ClientSampled :

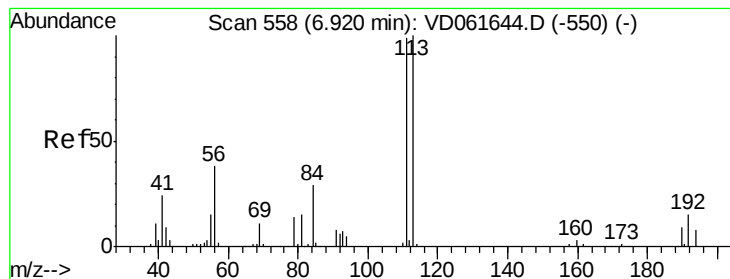
Tot Ion: 65 Resp: 26156
 Ion Ratio Lower Upper
 65 100
 67 48.2 0.0 99.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.21 min Scan# 689
 Delta R.T. -0.00 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

Tgt Ion: 114 Resp: 38570
 Ion Ratio Lower Upper
 114 100
 63 19.0 0.0 31.2
 88 13.6 0.0 31.8





#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 6.92 min Scan# 558

Delta R.T. -0.00 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

ClientSampleId :

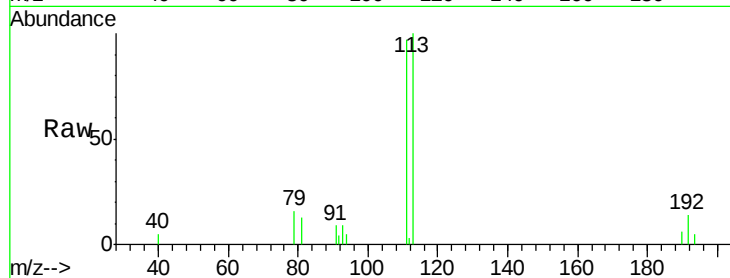
Tot Ion:113 Resp: 24605

Ion Ratio Lower Upper

113 100

111 97.0 79.3 118.9

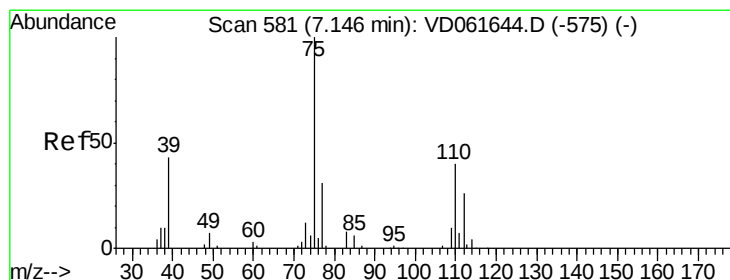
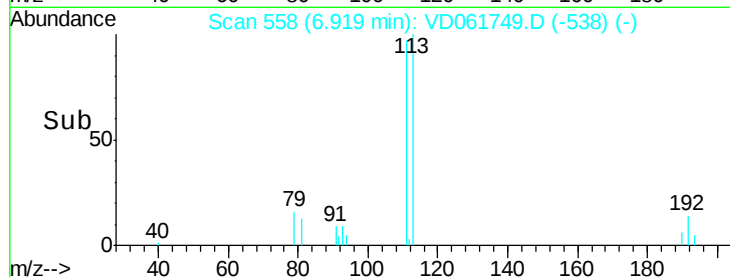
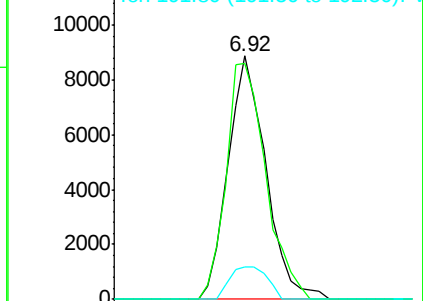
192 13.5 12.3 18.5



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: 1.410 ug/l

RT: 7.05 min Scan# 571

Delta R.T. -0.10 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

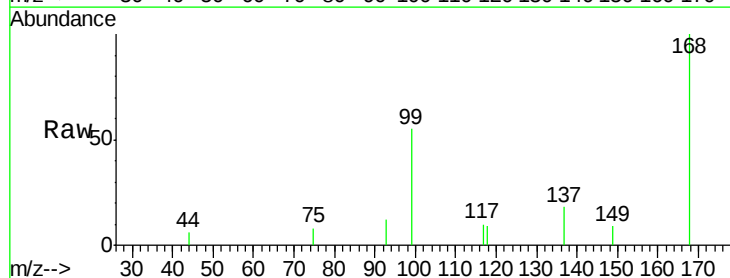
Tgt Ion: 75 Resp: 476

Ion Ratio Lower Upper

75 100

110 0.0 19.7 59.0#

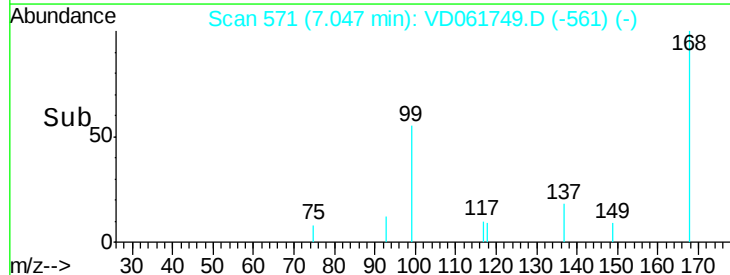
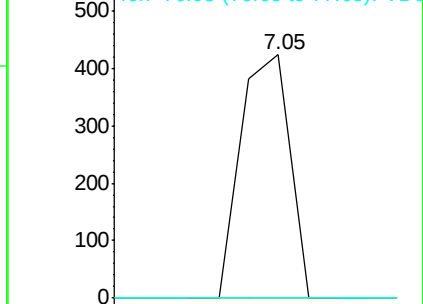
77 0.0 24.8 37.2#

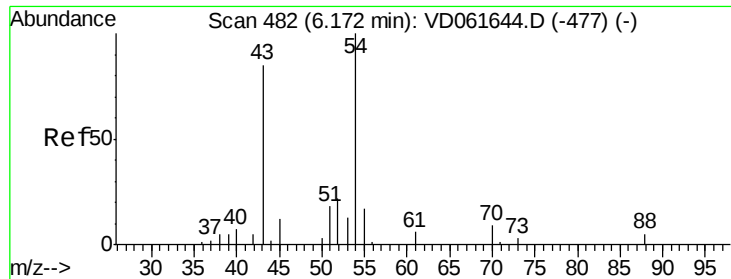


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V

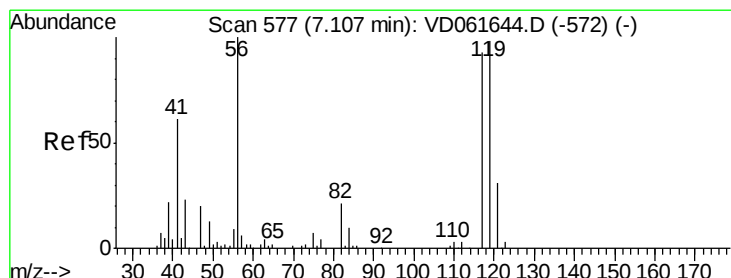
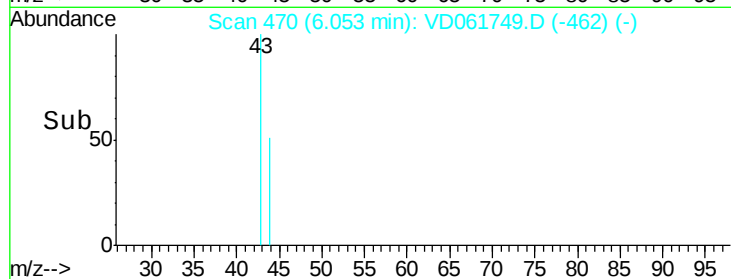
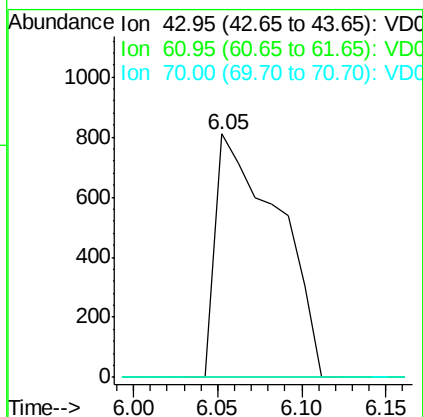
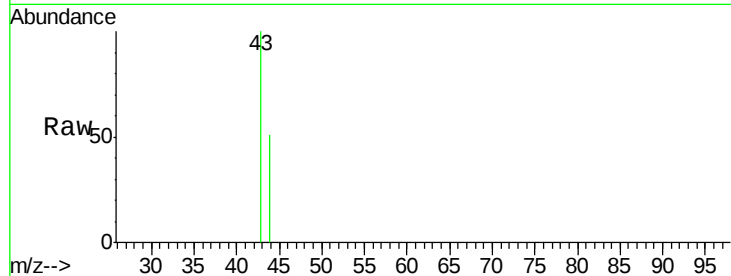




#37
Ethyl Acetate
Concen: 15.245 ug/l
RT: 6.05 min Scan# 470
Delta R.T. -0.12 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

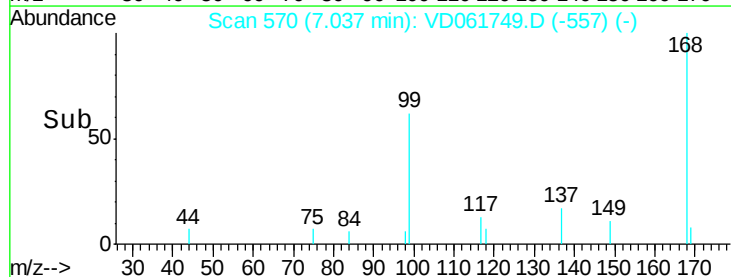
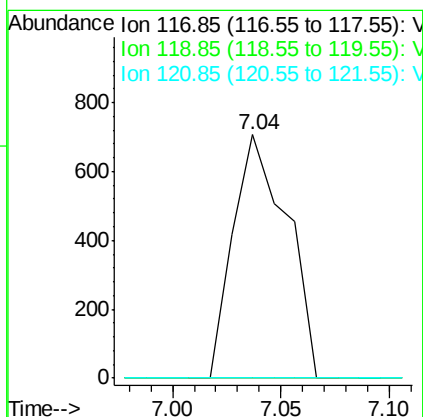
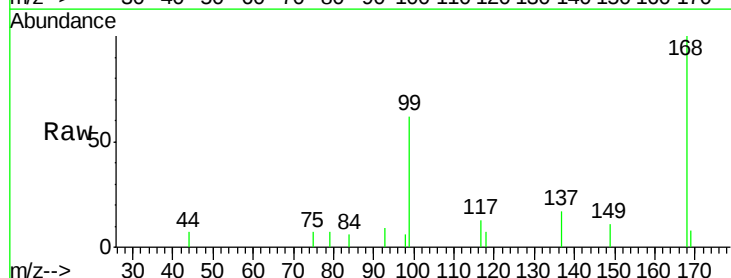
Instrument :
MSVOA_D
ClientSampled :

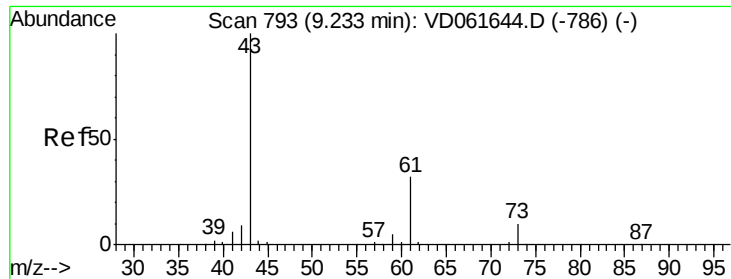
Tot Ion: 43 Resp: 2096
Ion Ratio Lower Upper
43 100
61 0.0 11.9 17.9#
70 0.0 6.9 10.3#



#38
Carbon Tetrachloride
Concen: 3.114 ug/l
RT: 7.04 min Scan# 570
Delta R.T. -0.07 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion: 117 Resp: 1232
Ion Ratio Lower Upper
117 100
119 0.0 77.9 116.9#
121 0.0 24.7 37.1#





#43

Isopropyl Acetate

Concen: 5.828 ug/l

RT: 8.87 min Scan# 756

Delta R.T. -0.37 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

ClientSampleId :

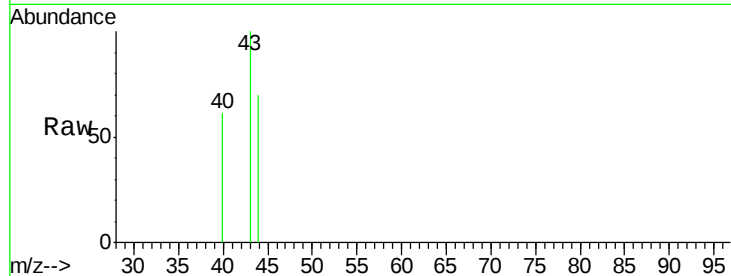
Tot Ion: 43 Resp: 1163

Ion Ratio Lower Upper

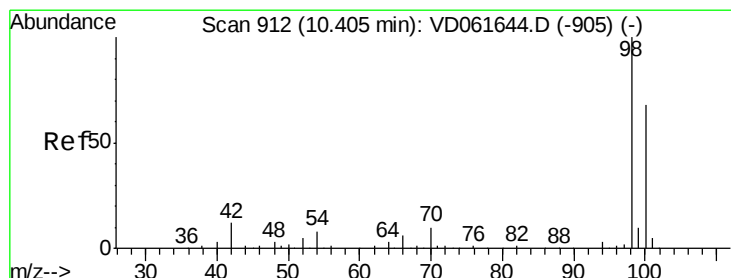
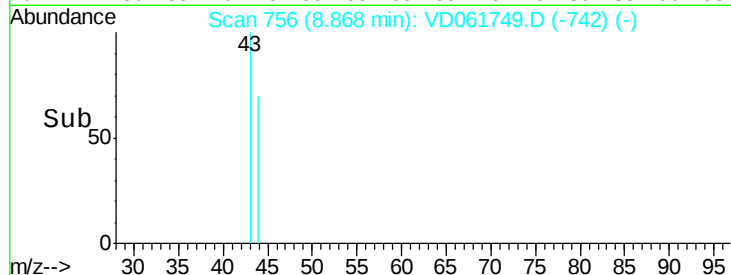
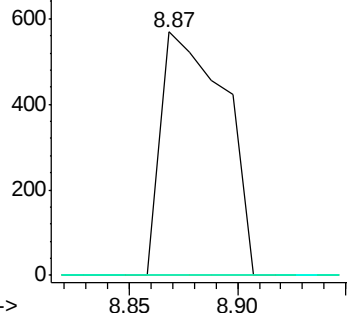
43 100

61 0.0 25.9 38.9#

87 0.0 0.2 0.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 60.95 (60.65 to 61.65): VDC
Ion 87.00 (86.70 to 87.70): VDC



#50

Toluene-d8

Concen: N.D. ug/l

RT: 10.40 min Scan# 912

Delta R.T. -0.00 min

Lab File: VD061749.D

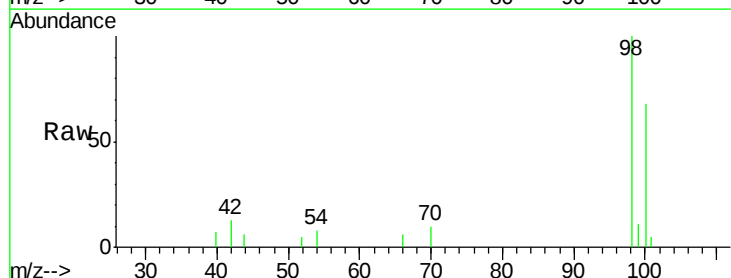
Acq: 11 Apr 2019 19:01

Tgt Ion: 98 Resp: 15782

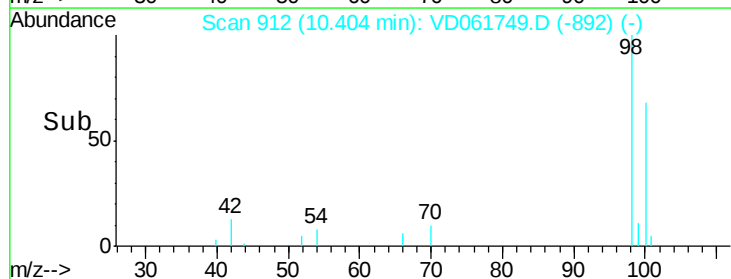
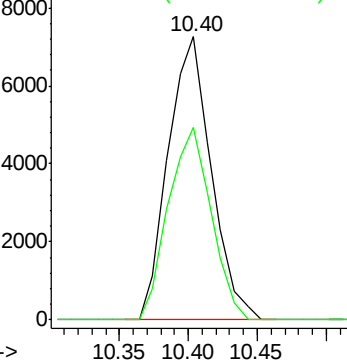
Ion Ratio Lower Upper

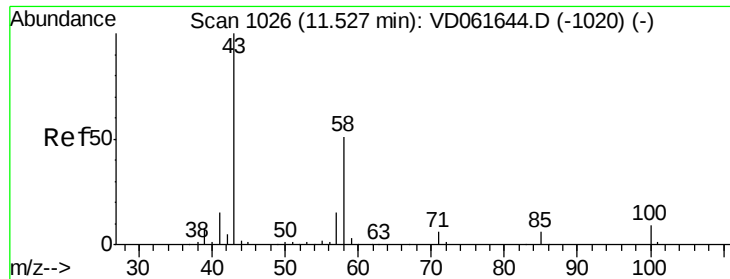
98 100

100 68.2 55.4 83.0



Abundance Ion 98.05 (97.75 to 98.75): VDC
Ion 100.05 (99.75 to 100.75): VDC

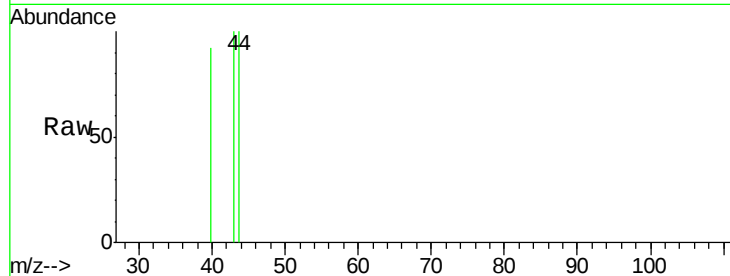




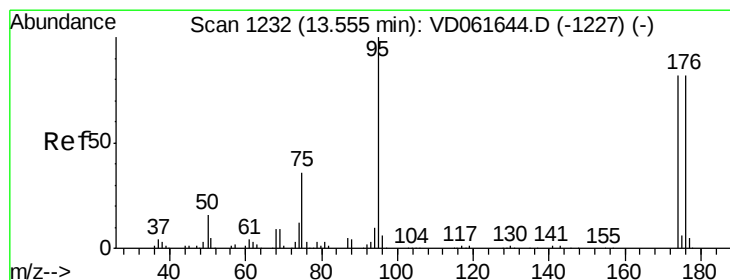
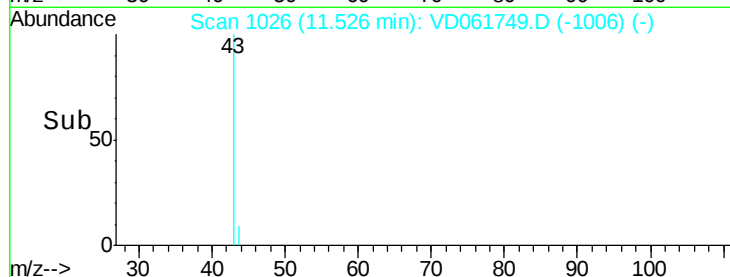
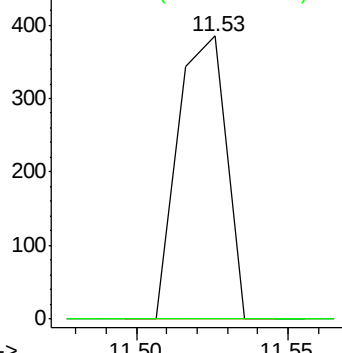
#59
2-Hexanone
Concen: 4.695 ug/l
RT: 11.53 min Scan# 1026
Delta R.T. -0.00 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion: 43 Resp: 430
Ion Ratio Lower Upper
43 100
58 0.0 25.6 76.8#

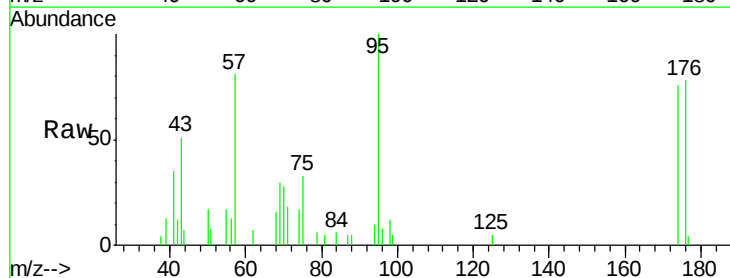


Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 57.95 (57.65 to 58.65): VDC

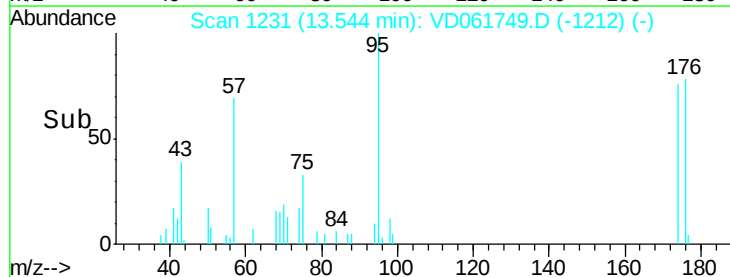
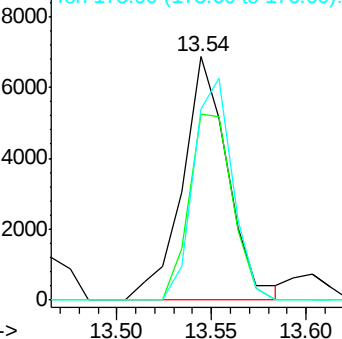


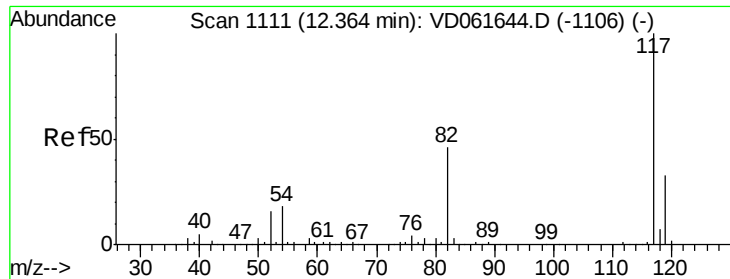
#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 13.54 min Scan# 1231
Delta R.T. -0.01 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion: 95 Resp: 11446
Ion Ratio Lower Upper
95 100
174 76.3 0.0 164.6
176 78.3 0.0 165.0



Abundance Ion 95.00 (94.70 to 95.70): VDC
Ion 173.90 (173.60 to 174.60): V
Ion 175.90 (175.60 to 176.60): V

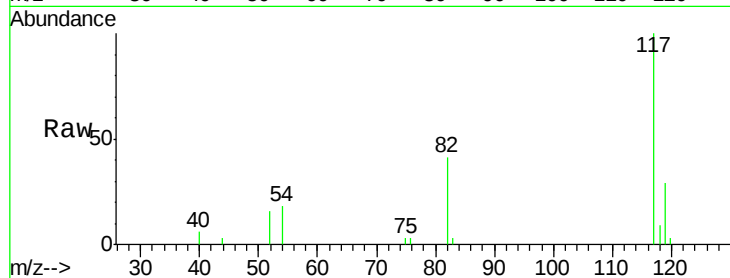




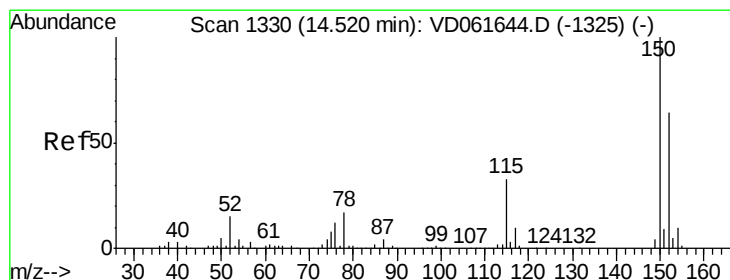
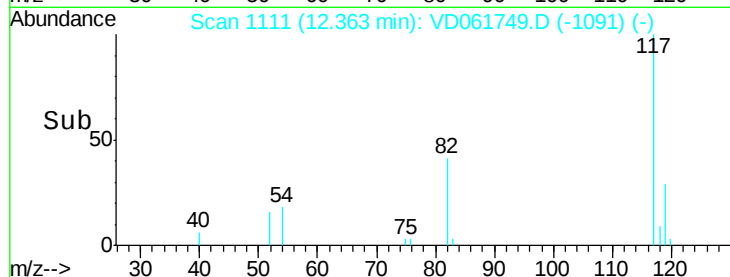
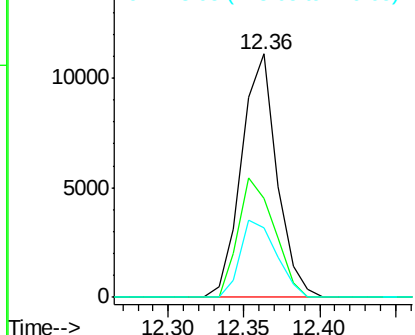
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.36 min Scan# 1111
Delta R.T. -0.00 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:117 Resp: 18098
Ion Ratio Lower Upper
117 100
82 40.6 36.8 55.2
119 28.6 26.1 39.1

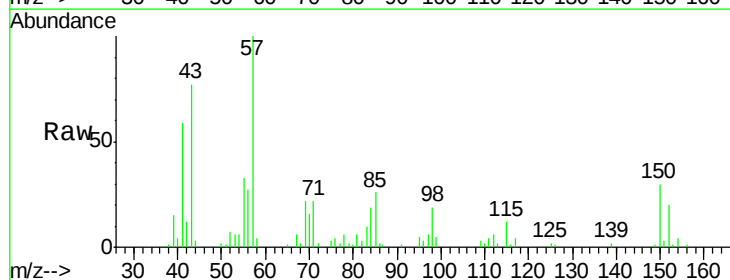


Abundance Ion 116.95 (116.65 to 117.65): V
Ion 82.05 (81.75 to 82.75): V
Ion 118.95 (118.65 to 119.65): V

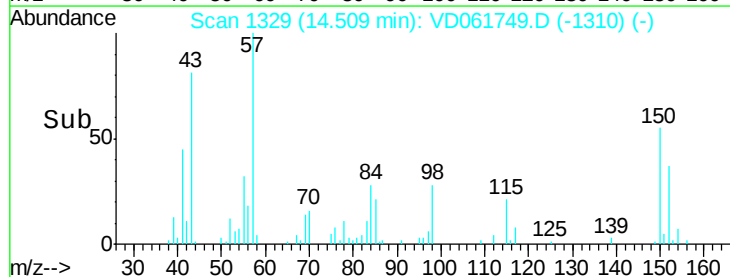
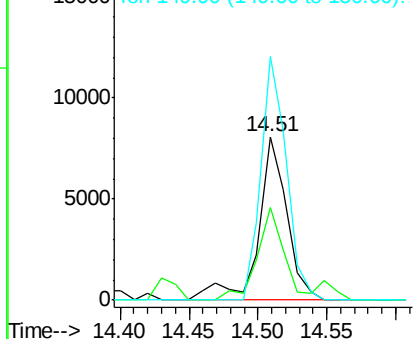


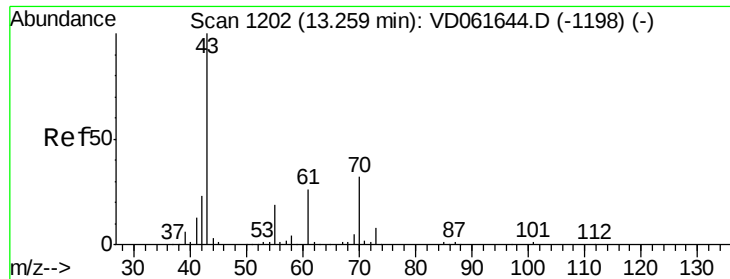
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.51 min Scan# 1329
Delta R.T. -0.01 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion:152 Resp: 11699
Ion Ratio Lower Upper
152 100
115 56.7 26.4 79.2
150 149.1 0.0 320.6



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-amvl acetate

Concen: 26.879 ug/l

RT: 13.29 min Scan# 1205

Delta R.T. 0.03 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

ClientSampleId :

Tot Ion: 43 Resp: 5693

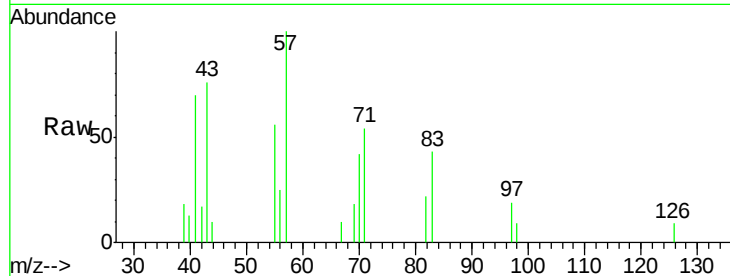
Ion Ratio Lower Upper

43 100

70 55.1 25.4 38.2#

55 74.2 15.0 22.4#

61 0.0 20.9 31.3#

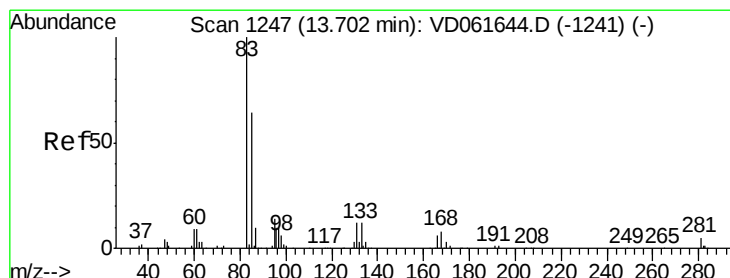
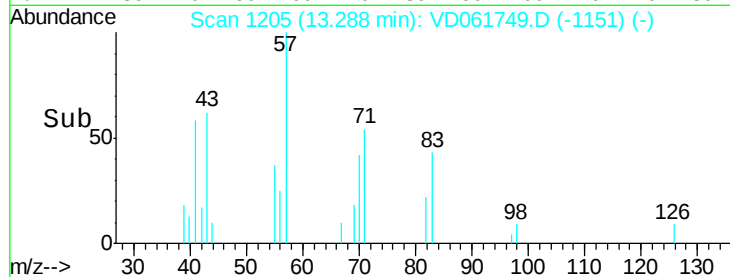
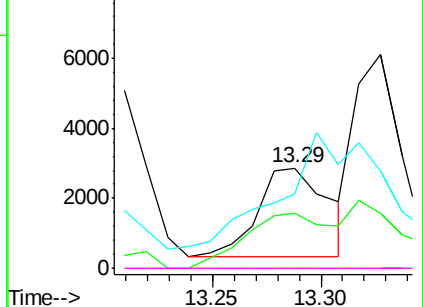


Abundance Ion 42.95 (42.65 to 43.65): VDC

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: 26.176 ug/l

RT: 13.70 min Scan# 1247

Delta R.T. -0.00 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

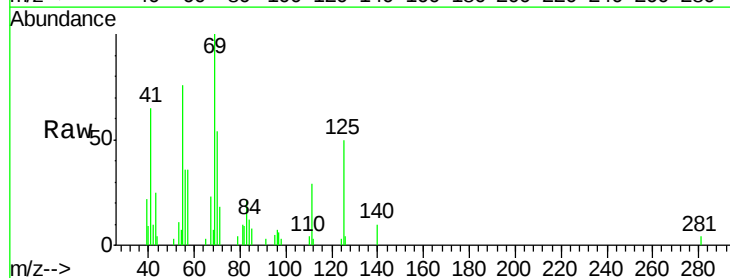
Tgt Ion: 83 Resp: 4219

Ion Ratio Lower Upper

83 100

131 0.0 5.9 17.6#

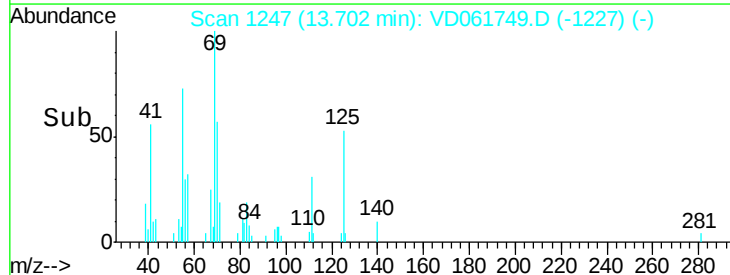
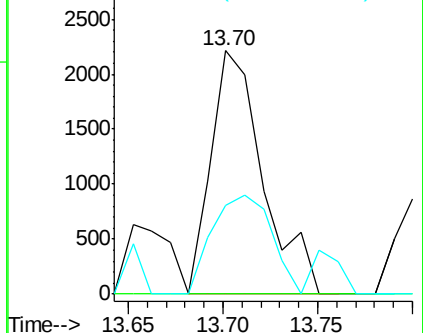
85 36.7 32.0 96.2

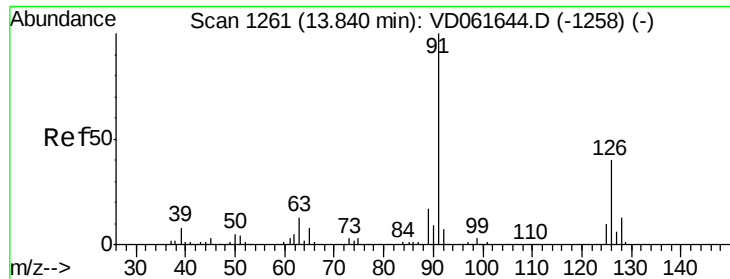


Abundance Ion 82.95 (82.65 to 83.65): VDC

Ion 130.90 (130.60 to 131.60): V

Ion 84.95 (84.65 to 85.65): VDC





#79

2-Chlorotoluene

Concen: 1.763 ug/l

RT: 13.93 min Scan# 1270

Delta R.T. 0.09 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

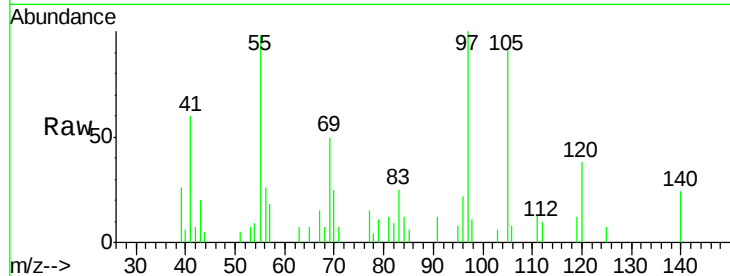
ClientSampled :

Tot Ion: 91 Resp: 940

Ion Ratio Lower Upper

91 100

126 0.0 20.0 59.9#



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 125.95 (125.65 to 126.65): V

13.93

800

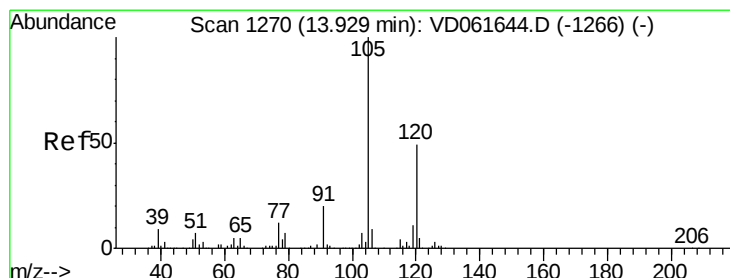
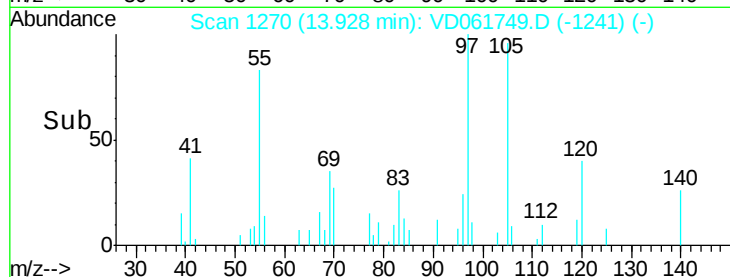
600

400

200

0

Time-->



#80

1,3,5-Trimethylbenzene

Concen: 12.702 ug/l

RT: 13.93 min Scan# 1270

Delta R.T. -0.00 min

Lab File: VD061749.D

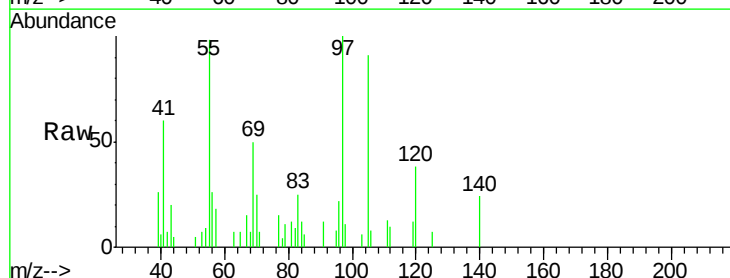
Acq: 11 Apr 2019 19:01

Tgt Ion:105 Resp: 7859

Ion Ratio Lower Upper

105 100

120 41.8 24.4 73.2



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V

13.93

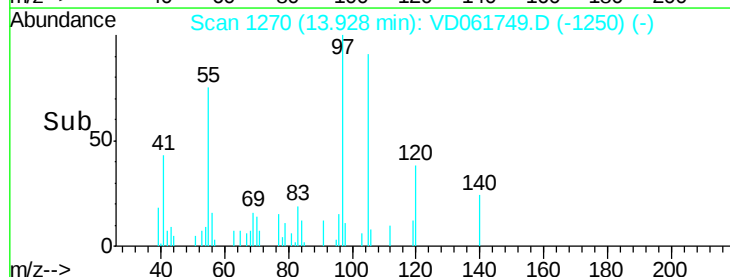
6000

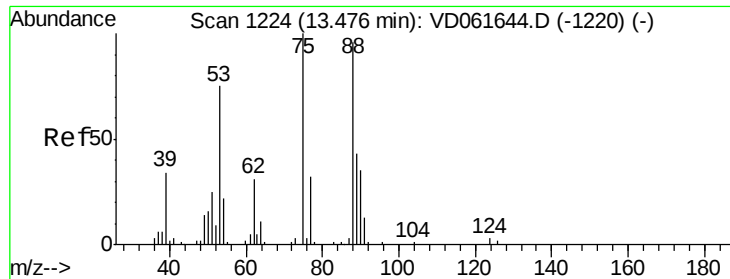
4000

2000

0

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 73.355 ug/l

RT: 13.54 min Scan# 1231

Delta R.T. 0.07 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

ClientSampleId :

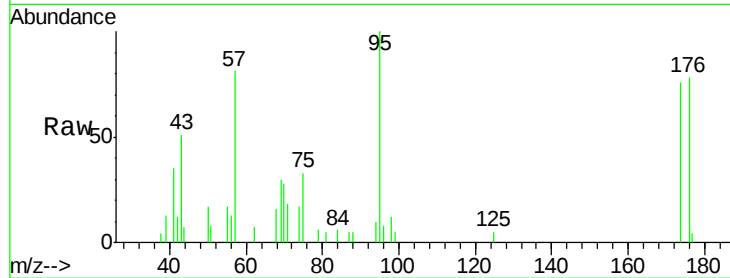
Tot Ion: 75 Resp: 3543

Ion Ratio Lower Upper

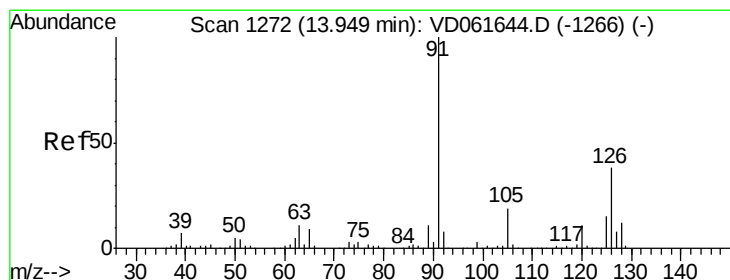
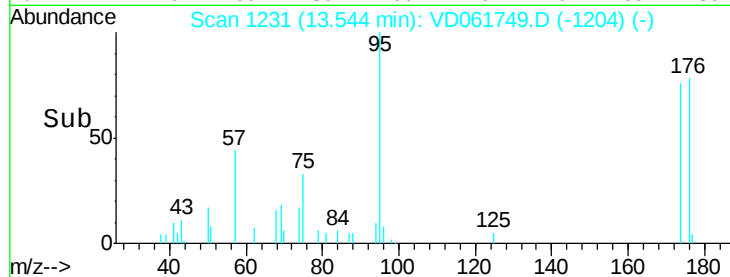
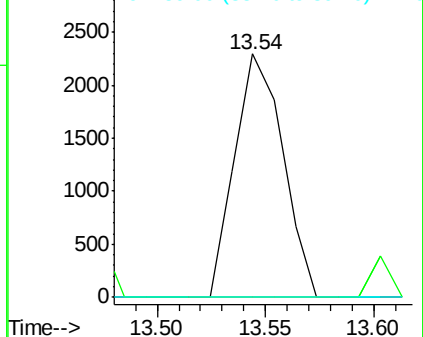
75 100

53 0.0 60.2 90.2#

89 0.0 34.2 51.2#



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: 1.609 ug/l

RT: 13.93 min Scan# 1270

Delta R.T. -0.02 min

Lab File: VD061749.D

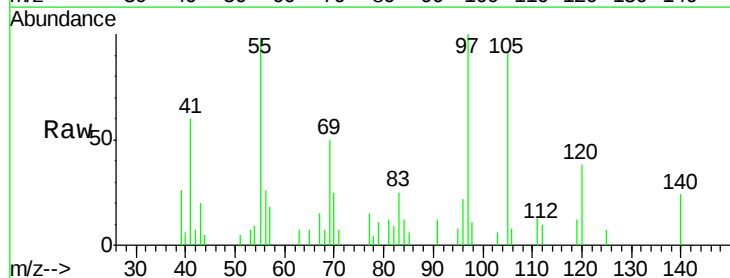
Acq: 11 Apr 2019 19:01

Tgt Ion: 91 Resp: 940

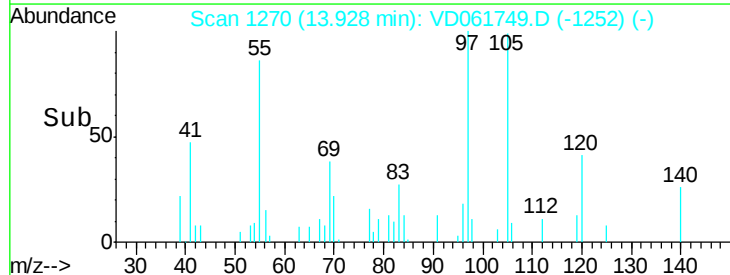
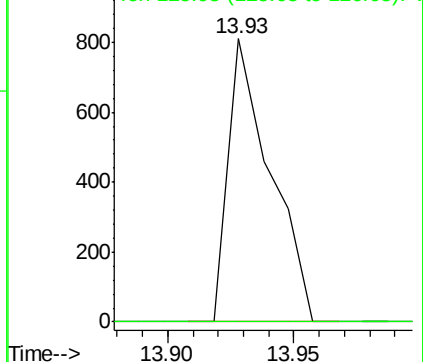
Ion Ratio Lower Upper

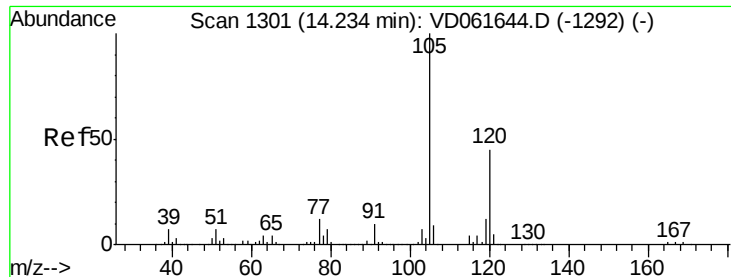
91 100

126 0.0 19.0 57.0#



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

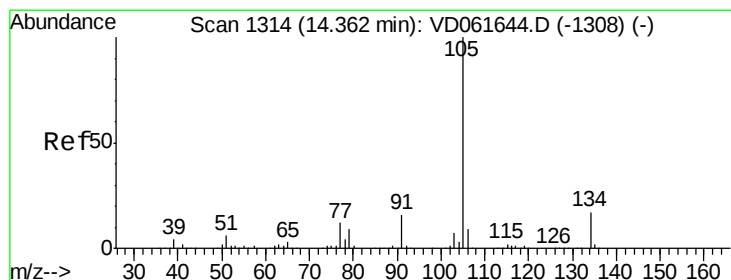
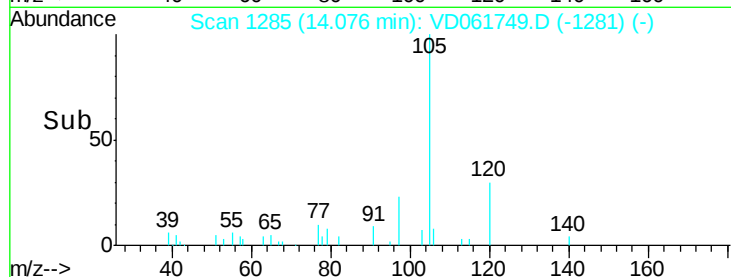
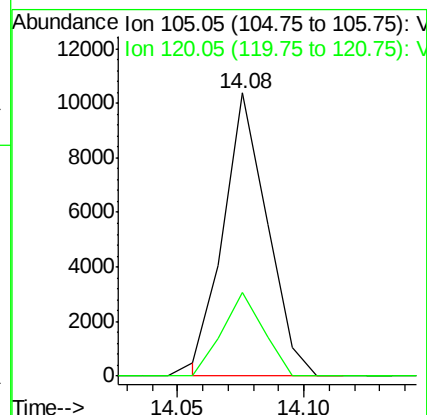
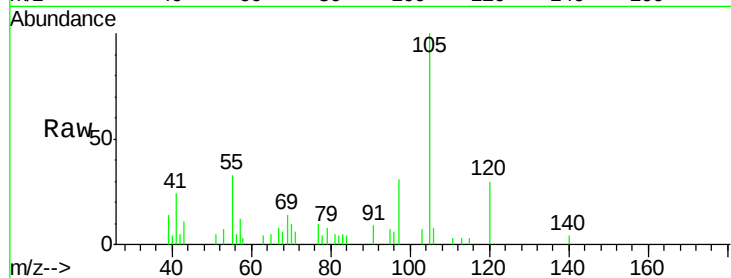




#84
 1,2,4-Trimethylbenzene
 Concen: 19.882 ug/l
 RT: 14.08 min Scan# 1285
 Delta R.T. -0.16 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

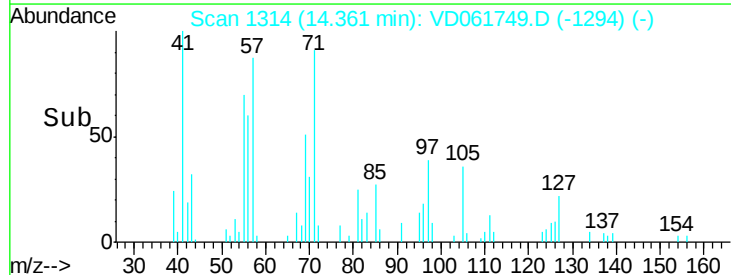
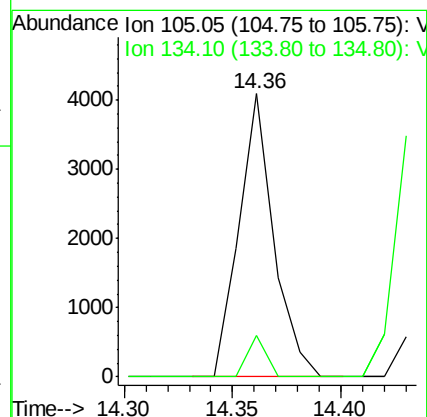
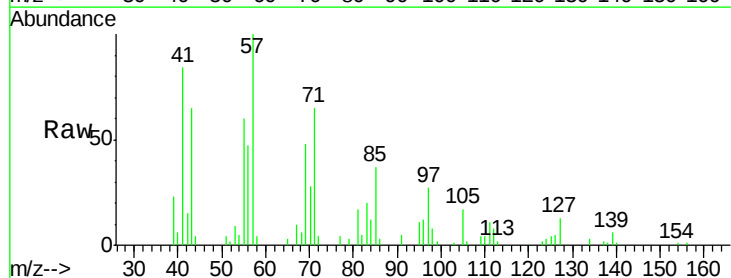
Instrument :
 MSVOA_D
 ClientSampled :

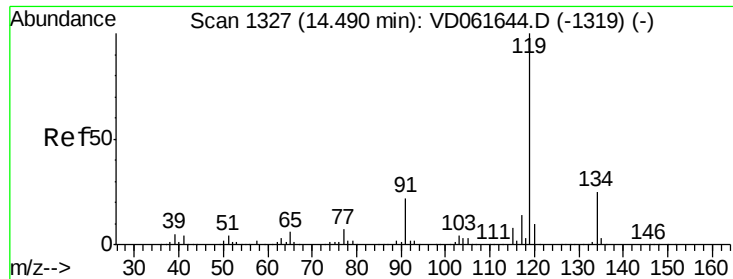
Tot Ion:105 Resp: 12415
 Ion Ratio Lower Upper
 105 100
 120 29.7 22.6 67.8



#85
 sec-Butylbenzene
 Concen: 5.686 ug/l
 RT: 14.36 min Scan# 1314
 Delta R.T. -0.00 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

Tgt Ion:105 Resp: 4583
 Ion Ratio Lower Upper
 105 100
 134 14.6 8.6 25.7

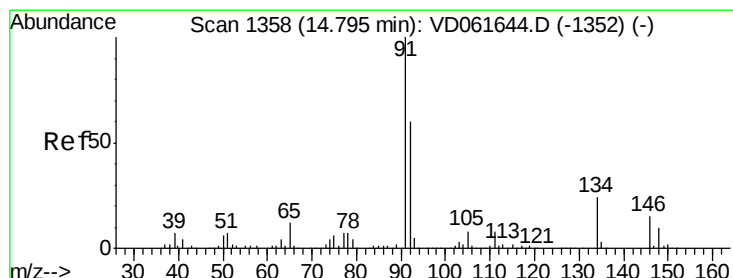
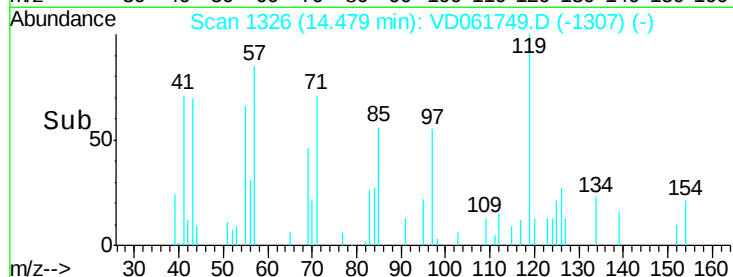
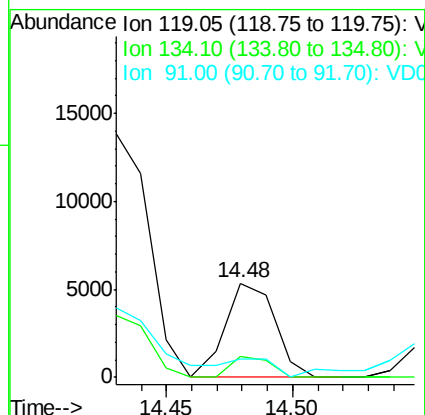
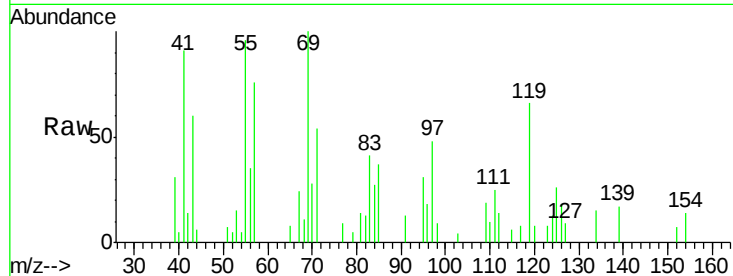




#86
p-Isopropyltoluene
Concen: 10.435 ug/l
RT: 14.48 min Scan# 1326
Delta R.T. -0.01 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

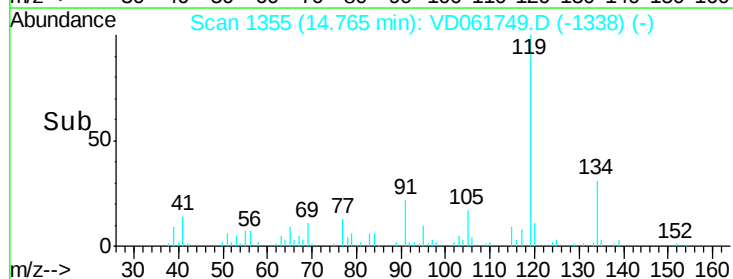
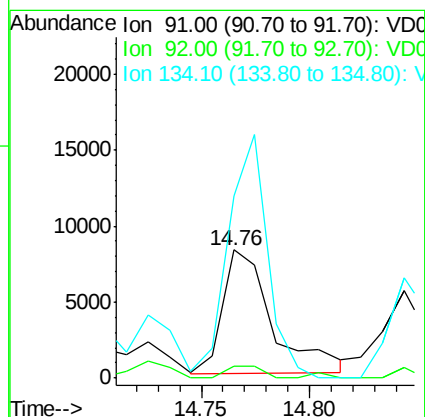
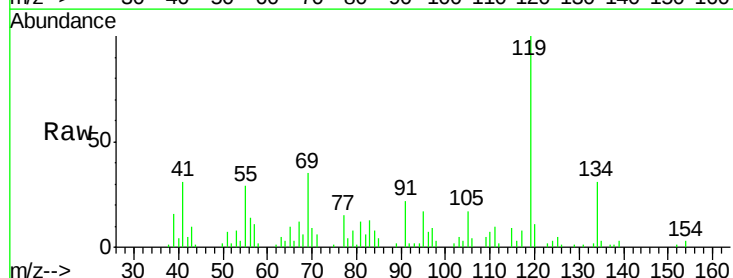
Instrument :
MSVOA_D
ClientSampleID :

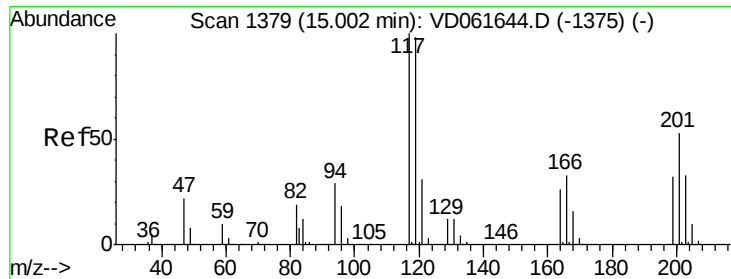
Tot Ion:119 Resp: 7296
Ion Ratio Lower Upper
119 100
134 22.8 12.5 37.5
91 19.3 11.0 33.0



#89
n-Butylbenzene
Concen: 21.631 ug/l
RT: 14.76 min Scan# 1355
Delta R.T. -0.03 min
Lab File: VD061749.D
Acq: 11 Apr 2019 19:01

Tgt Ion: 91 Resp: 13146
Ion Ratio Lower Upper
91 100
92 9.4 29.8 89.4#
134 142.2 12.2 36.4#





#90

Hexachloroethane

Concen: 33.677 ug/l

RT: 15.05 min Scan# 1384

Delta R.T. 0.05 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

Instrument :

MSVOA_D

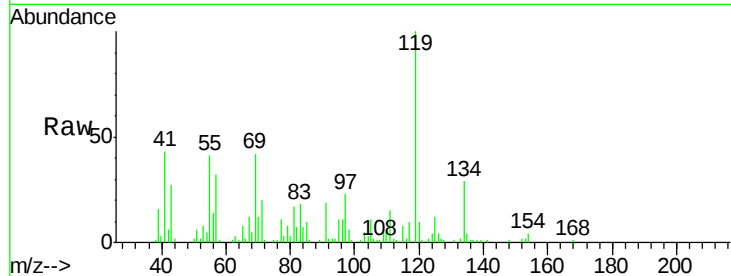
ClientSampleId :

Tot Ion:117 Resp: 6389

Ion Ratio Lower Upper

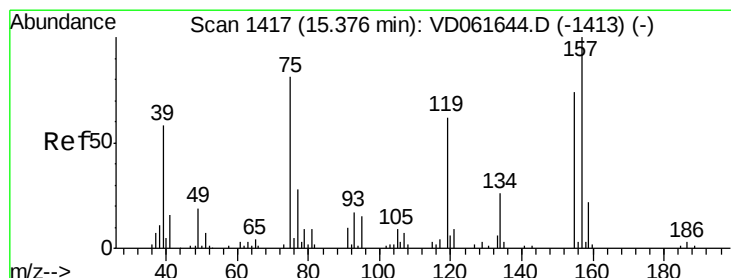
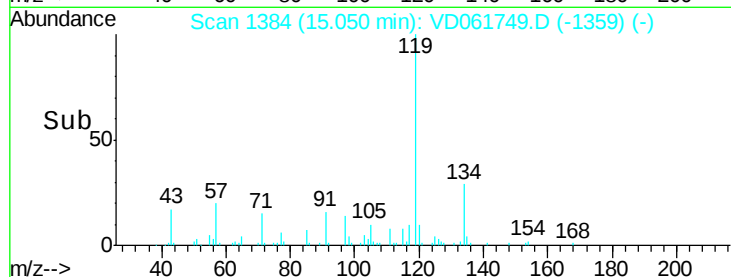
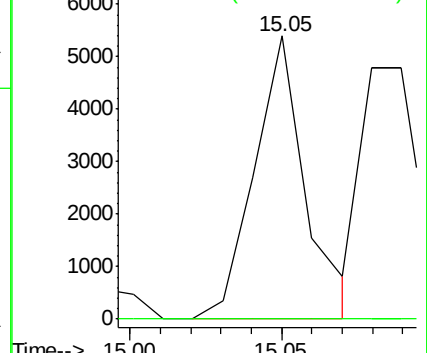
117 100

201 0.0 26.3 78.8#



Abundance Ion 116.85 (116.55 to 117.55): V

Ion 200.75 (200.45 to 201.45): V



#92

1,2-Dibromo-3-Chloropropane

Concen: 13.368 ug/l

RT: 15.37 min Scan# 1416

Delta R.T. -0.01 min

Lab File: VD061749.D

Acq: 11 Apr 2019 19:01

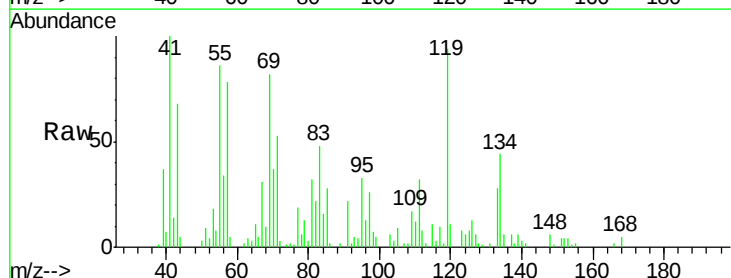
Tgt Ion: 75 Resp: 260

Ion Ratio Lower Upper

75 100

155 91.4 45.6 136.7

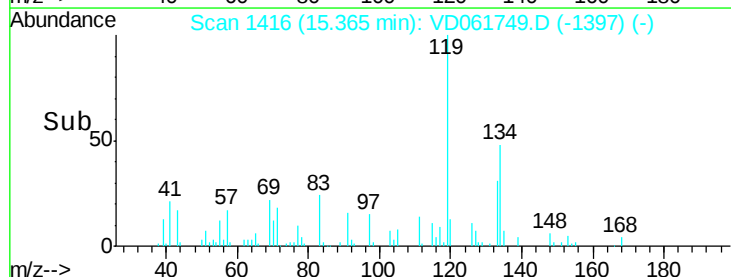
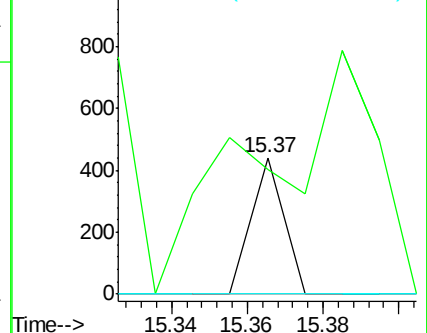
157 0.0 61.4 184.2#

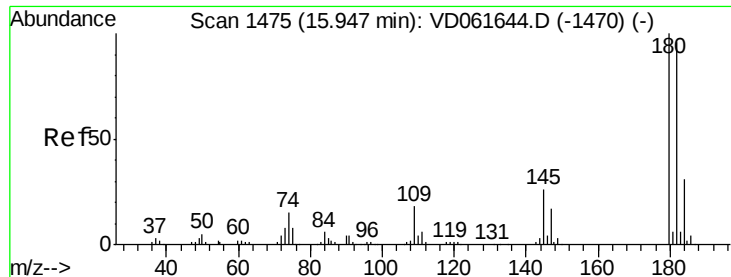


Abundance Ion 75.00 (74.70 to 75.70): V

Ion 154.90 (154.60 to 155.60): V

Ion 156.85 (156.55 to 157.55): V

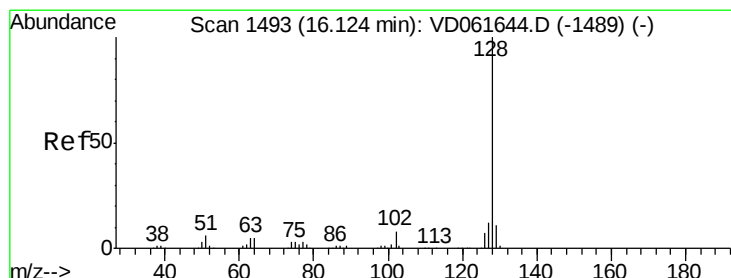
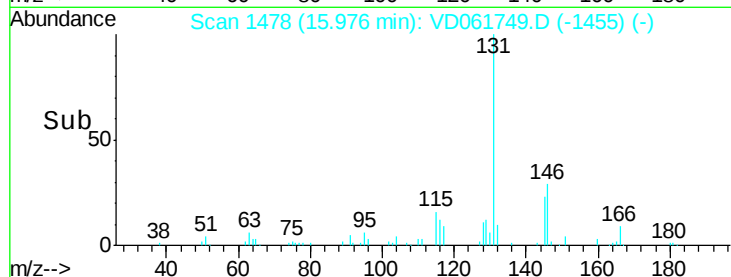
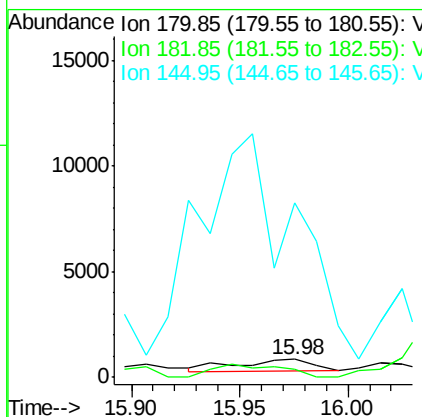
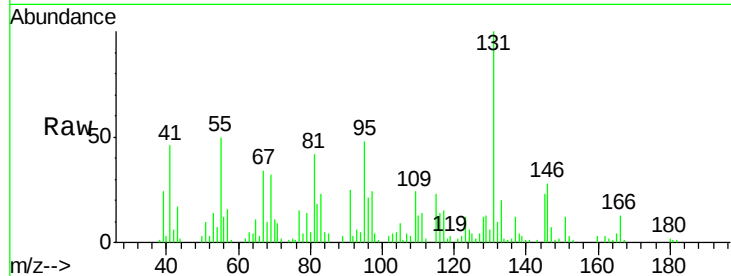




#93
 1,2,4-Trichlorobenzene
 Concen: 8.171 ug/l
 RT: 15.98 min Scan# 1478
 Delta R.T. 0.03 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

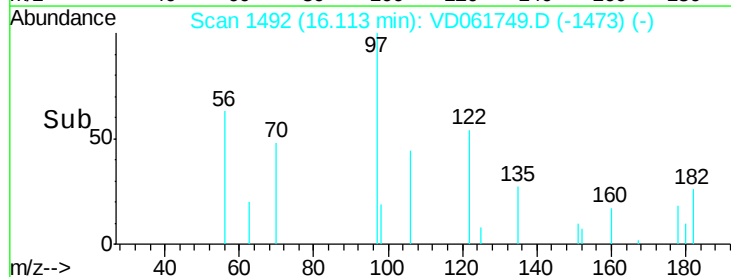
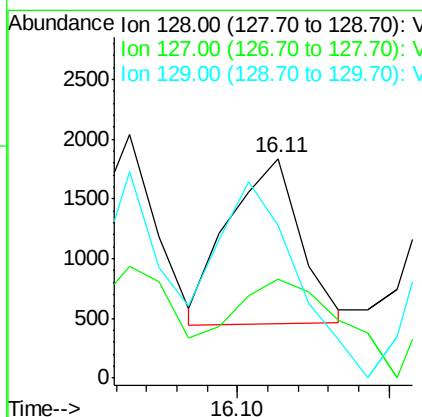
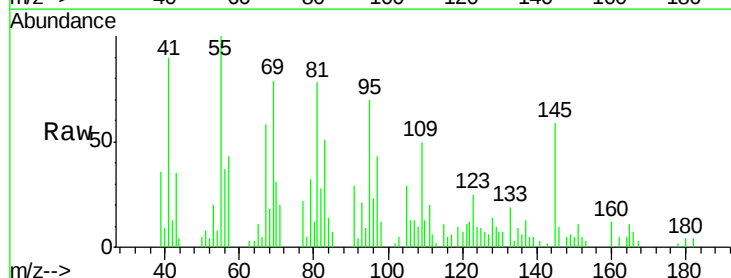
Instrument :
 MSVOA_D
 ClientSampleId :

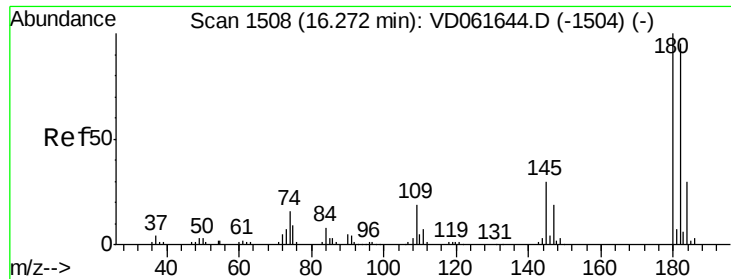
Tot Ion:180 Resp: 1336
 Ion Ratio Lower Upper
 180 100
 182 47.4 47.8 143.3#
 145 956.5 13.3 39.8#



#95
 Naphthalene
 Concen: 8.786 ug/l
 RT: 16.11 min Scan# 1492
 Delta R.T. -0.01 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

Tgt Ion:128 Resp: 2273
 Ion Ratio Lower Upper
 128 100
 127 44.9 9.4 14.2#
 129 69.3 8.8 13.2#





#96
 1,2,3-Trichlorobenzene
 Concen: 19.178 ug/l
 RT: 16.30 min Scan# 1511
 Delta R.T. 0.03 min
 Lab File: VD061749.D
 Acq: 11 Apr 2019 19:01

Instrument :
 MSVOA_D
 ClientSampleId :

Tot Ion:180 Resp: 1565
 Ion Ratio Lower Upper
 180 100
 182 0.0 47.3 142.0#
 145 196.3 15.1 45.3#

