

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD041619\
 Data File : VD061808.D
 Acq On : 16 Apr 2019 13:47
 Operator : VA/AP
 Sample : K2347-03
 Misc : 5.06g/5ml/MSVOA D/SOIL
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 BCOG03

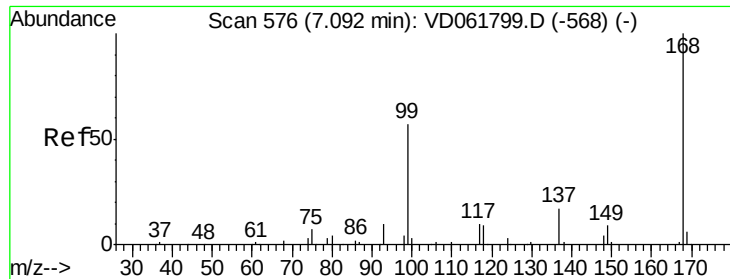
Quant Time: Apr 16 15:03:04 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D041519S.M
 Quant Title : SW846 8260
 QLast Update : Tue Apr 16 08:53:01 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.05	168	1265	50.00	ug/l	-0.04
34) 1,4-Difluorobenzene	8.22	114	3191	50.00	ug/l	-0.04
63) Chlorobenzene-d5	12.37	117	2157	50.00	ug/l	-0.03
72) 1,4-Dichlorobenzene-d4	14.52	152	1705	50.00	ug/l	-0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.46	65	2175	205.15	ug/l	-0.04
Spiked Amount			Recovery	=	410.30%	
35) Dibromofluoromethane	6.94	113	1411	58.53	ug/l	-0.03
Spiked Amount			Recovery	=	117.06%	
50) Toluene-d8	10.43	98	568	9.94	ug/l	-0.02
Spiked Amount			Recovery	=	19.88%	
62) 4-Bromofluorobenzene	13.56	95	1552	67.03	ug/l	-0.02
Spiked Amount			Recovery	=	134.06%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.21	94	1164	570.989	ug/l #	76
10) Methyl Iodide	3.35	142	827	37.618	ug/l #	37
16) Acetone	3.22	43	6523	2496.393	ug/l	99
18) Methyl Acetate	3.65	43	830	158.481	ug/l #	53
20) Methylene Chloride	3.80	84	284	19.024	ug/l #	43
25) 2-Butanone	6.10	43	216	72.610	ug/l #	56
37) Ethyl Acetate	6.10	43	216	19.355	ug/l #	64
67) Ethyl Benzene	12.67	91	395	6.140	ug/l #	44
70) Styrene	13.08	104	369	9.441	ug/l #	31
78) n-propylbenzene	13.78	91	309	2.419	ug/l #	54
79) 2-Chlorotoluene	13.94	91	766	10.264	ug/l #	38
80) 1,3,5-Trimethylbenzene	13.93	105	652	7.431	ug/l #	29
81) trans-1,4-Dichloro-2-buten	13.56	75	191	27.891	ug/l #	16
82) 4-Chlorotoluene	13.94	91	766	8.967	ug/l #	37
84) 1,2,4-Trimethylbenzene	14.24	105	260	2.948	ug/l #	30
85) sec-Butylbenzene	14.37	105	451	4.235	ug/l #	60
86) p-Isopropyltoluene	14.49	119	273	2.740	ug/l #	52
87) 1,3-Dichlorobenzene	14.46	146	575	10.486	ug/l #	33
88) 1,4-Dichlorobenzene	14.53	146	509	9.390	ug/l #	71
89) n-Butylbenzene	14.80	91	923	10.464	ug/l	82
90) Hexachloroethane	15.06	117	192	7.069	ug/l #	20
91) 1,2-Dichlorobenzene	14.81	146	255	5.552	ug/l #	25
93) 1,2,4-Trichlorobenzene	15.95	180	264	10.465	ug/l #	58
95) Naphthalene	16.13	128	1076	27.827	ug/l #	70

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 572

Delta R.T. -0.04 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

Instrument :

MSVOA_D

ClientSampleId :

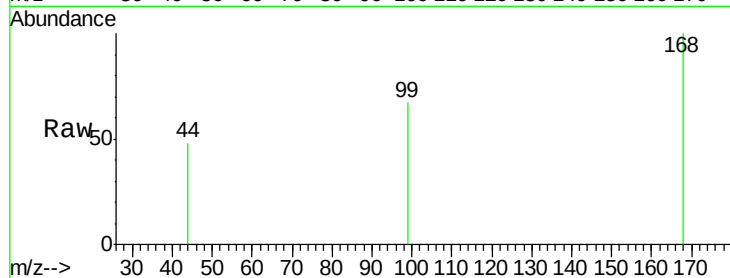
BCOG03

Tot Ion:168 Resp: 1265

Ion Ratio Lower Upper

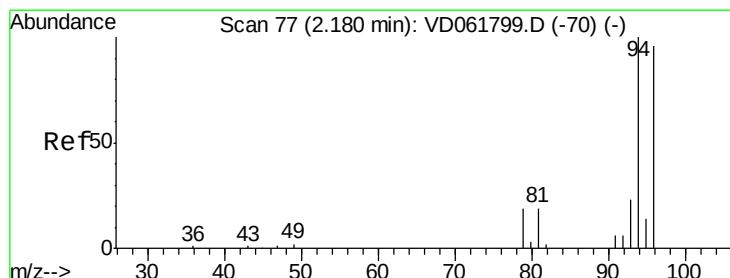
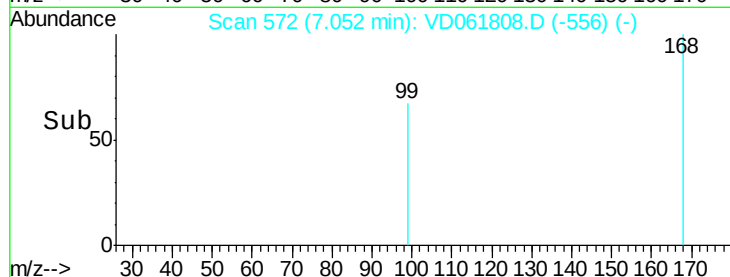
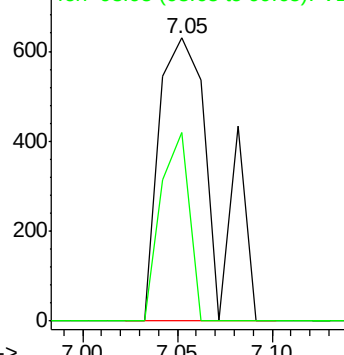
168 100

99 66.8 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC



#5

Bromomethane

Concen: 570.989 ug/l

RT: 2.21 min Scan# 80

Delta R.T. 0.03 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

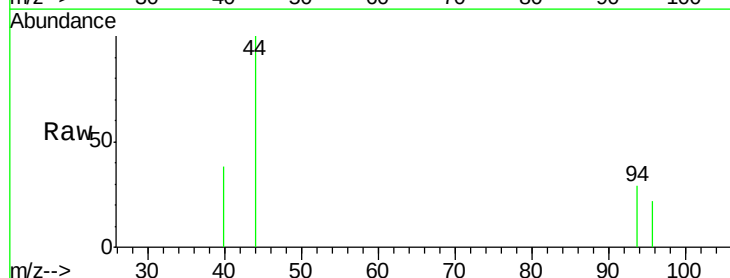
Tgt Ion: 94 Resp: 1164

Ion Ratio Lower Upper

94 100

96 77.8 76.6 115.0

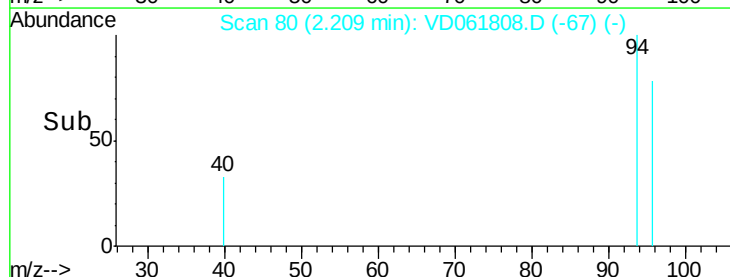
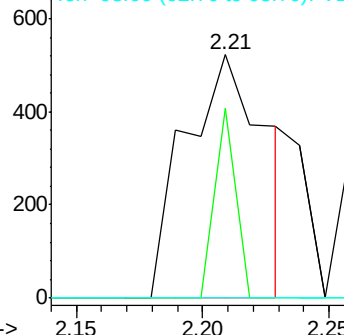
93 0.0 18.5 27.7#

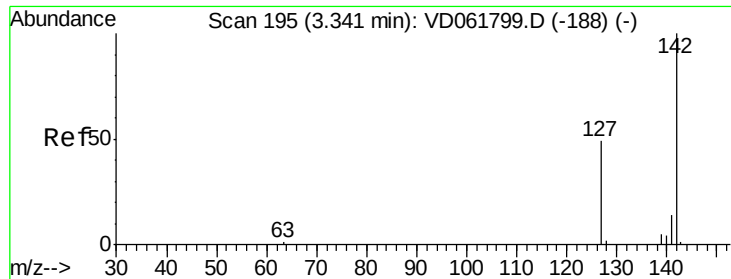


Abundance Ion 94.00 (93.70 to 94.70): VDC

Ion 96.00 (95.70 to 96.70): VDC

Ion 93.00 (92.70 to 93.70): VDC

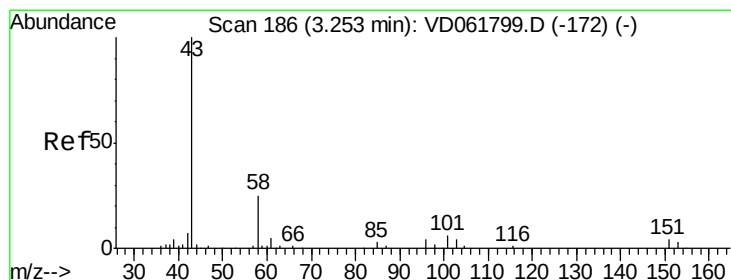
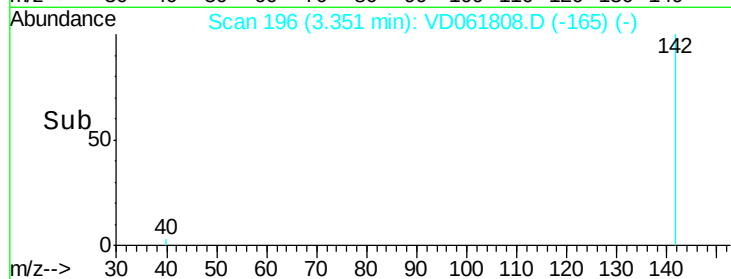
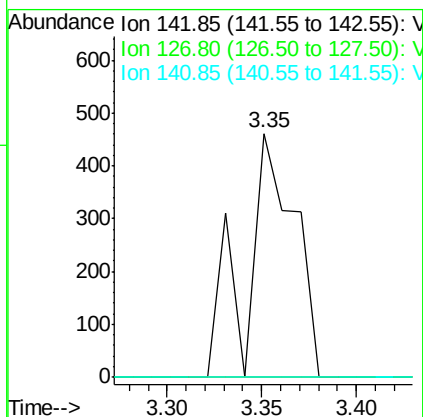
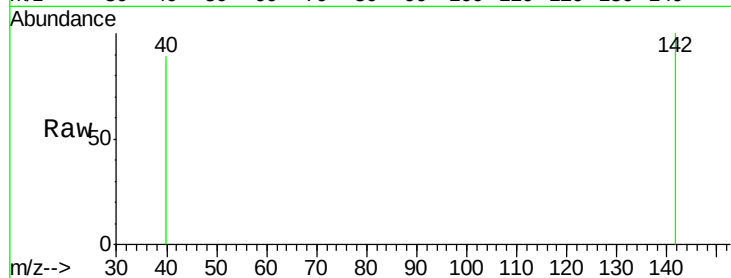




#10
Methvl Iodide
Concen: 37.618 ug/l
RT: 3.35 min Scan# 196
Delta R.T. 0.01 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

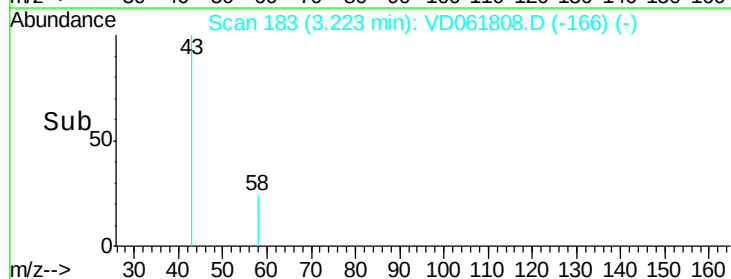
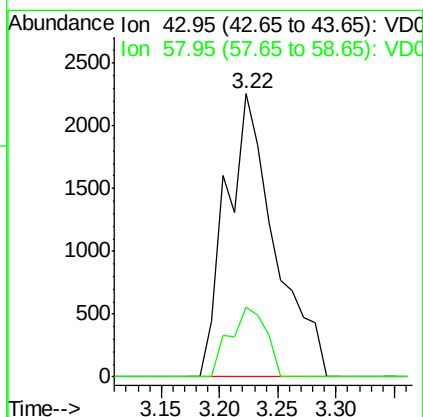
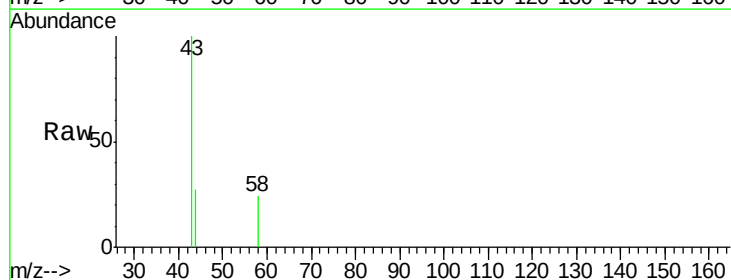
Instrument :
MSVOA_D
ClientSampleId :
BCOG03

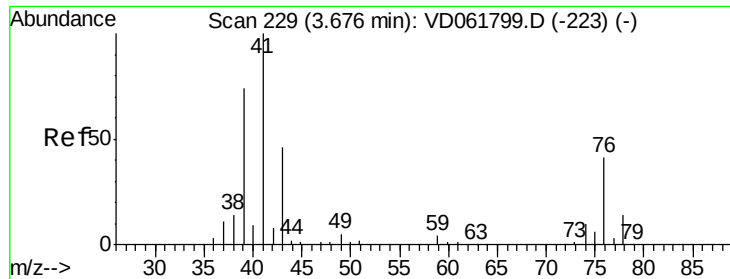
Tot Ion:142 Resp: 827
Ion Ratio Lower Upper
142 100
127 0.0 38.8 58.2#
141 0.0 11.4 17.0#



#16
Acetone
Concen: 2496.393 ug/l
RT: 3.22 min Scan# 183
Delta R.T. -0.03 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 43 Resp: 6523
Ion Ratio Lower Upper
43 100
58 24.5 19.9 29.9

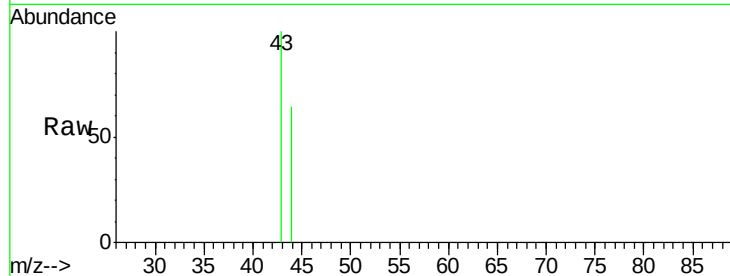




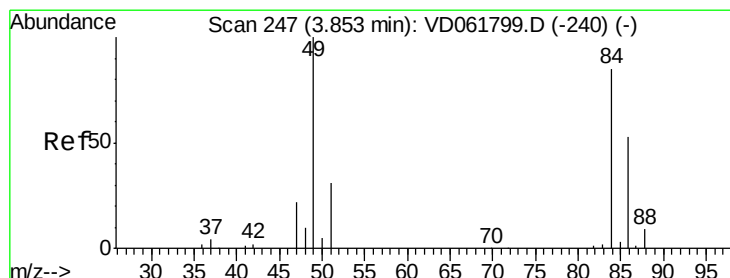
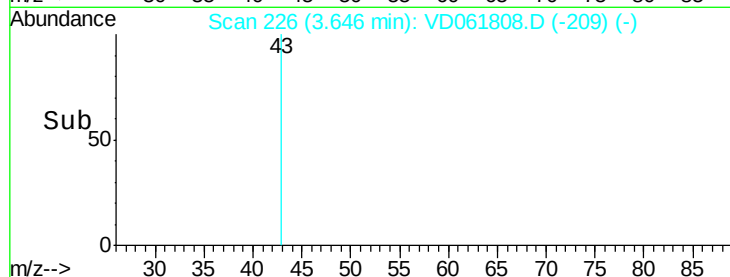
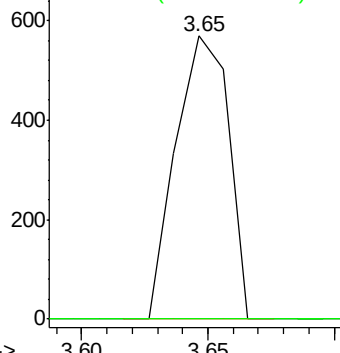
#18
Methvl Acetate
Concen: 158.481 ug/l
RT: 3.65 min Scan# 226
Delta R.T. -0.03 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Instrument :
MSVOA_D
ClientSampleId :
BCOG03

Tot Ion: 43 Resp: 830
Ion Ratio Lower Upper
43 100
74 0.0 18.0 27.0#

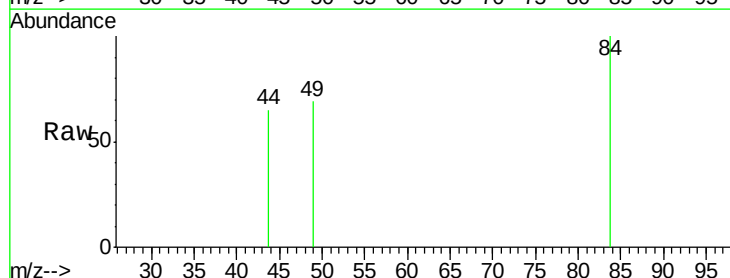


Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 74.00 (73.70 to 74.70): VDC

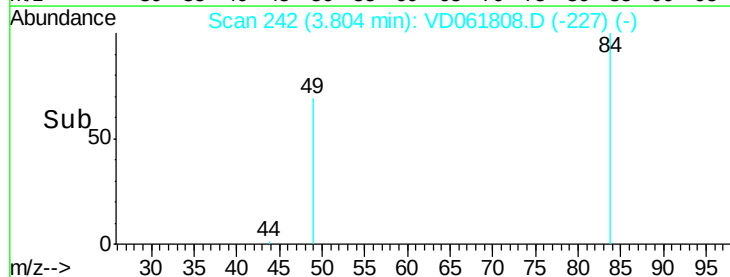
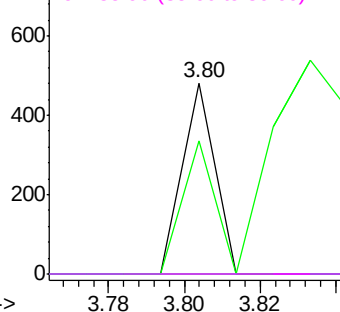


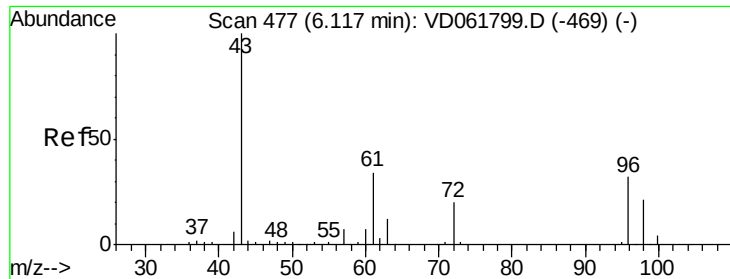
#20
Methylene Chloride
Concen: 19.024 ug/l
RT: 3.80 min Scan# 242
Delta R.T. -0.05 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 84 Resp: 284
Ion Ratio Lower Upper
84 100
49 69.4 94.0 141.0#
51 0.0 29.0 43.4#
86 0.0 49.8 74.6#



Abundance Ion 83.95 (83.65 to 84.65): VDC
Ion 48.90 (48.60 to 49.60): VDC
Ion 50.90 (50.60 to 51.60): VDC
Ion 85.90 (85.60 to 86.60): VDC





#25

2-Butanone

Concen: 72.610 ug/l

RT: 6.10 min Scan# 475

Delta R.T. -0.02 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

Instrument :

MSVOA_D

ClientSampleId :

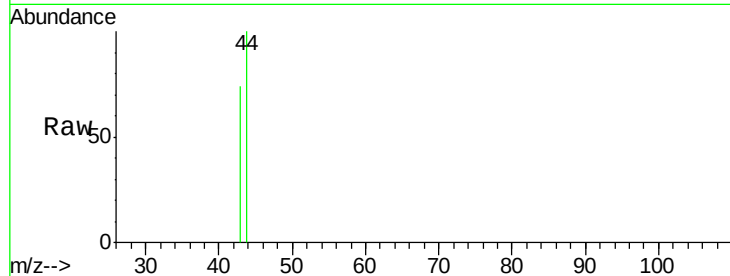
BCOG03

Tot Ion: 43 Resp: 216

Ion Ratio Lower Upper

43 100

72 0.0 16.2 24.4#



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC

6.10

400

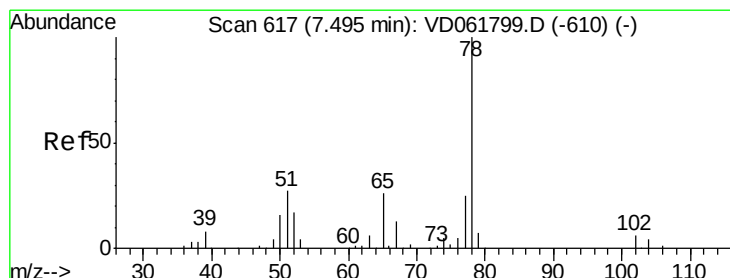
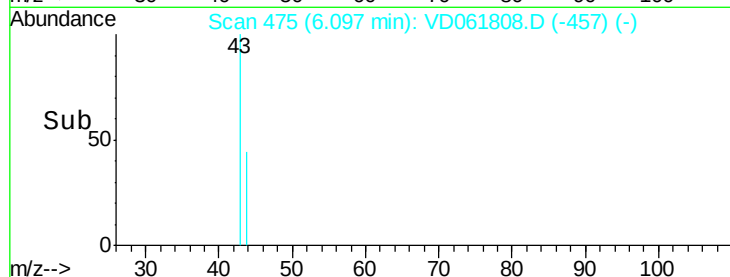
300

200

100

0

Time--> 6.06 6.08 6.10 6.12



#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 7.46 min Scan# 613

Delta R.T. -0.04 min

Lab File: VD061808.D

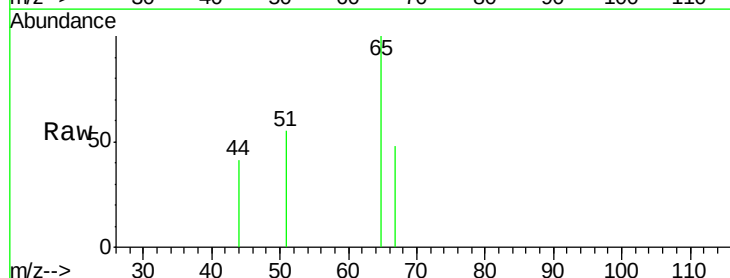
Acq: 16 Apr 2019 13:47

Tgt Ion: 65 Resp: 2175

Ion Ratio Lower Upper

65 100

67 47.7 0.0 98.0



Abundance Ion 64.95 (64.65 to 65.65): VDC

Ion 66.90 (66.60 to 67.60): VDC

1200

1000

800

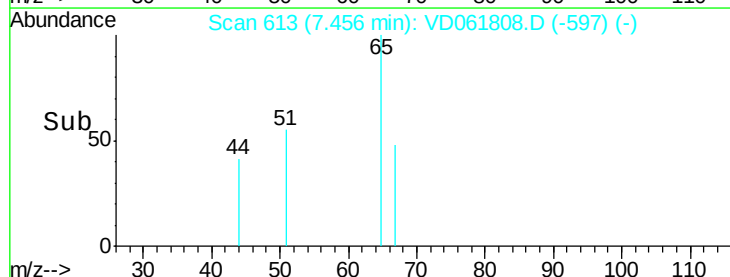
600

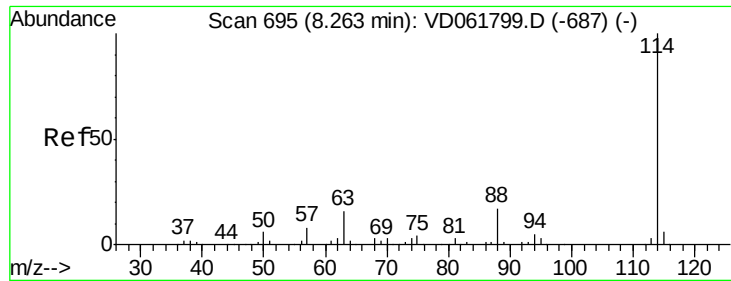
400

200

0

Time--> 7.40 7.45 7.50

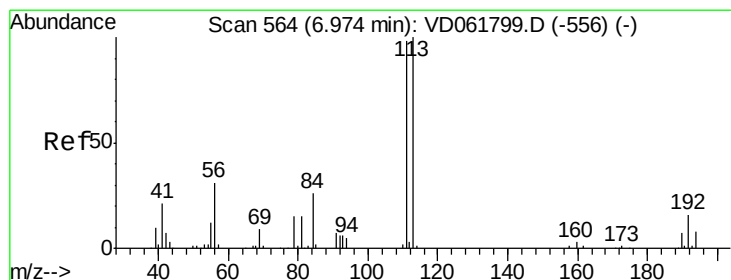
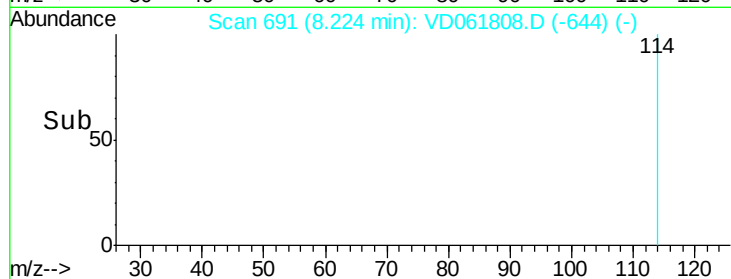
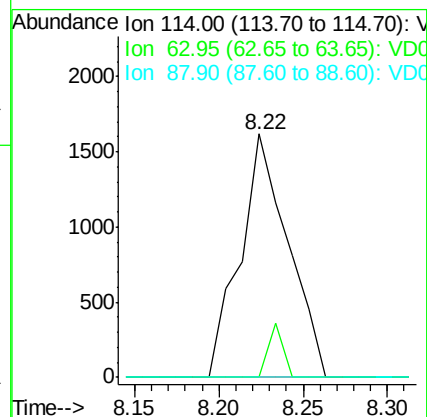
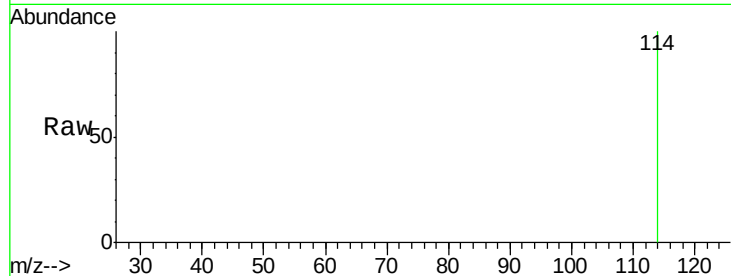




#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.22 min Scan# 691
 Delta R.T. -0.04 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

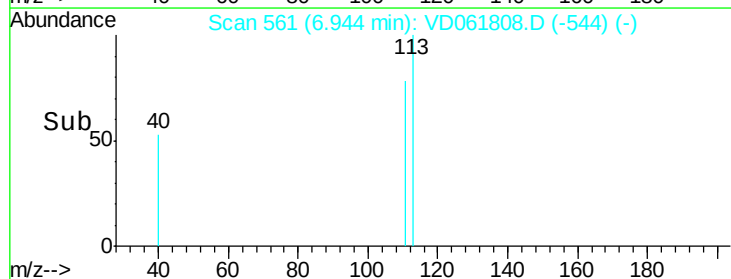
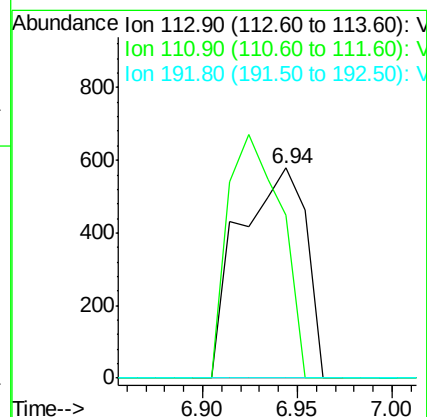
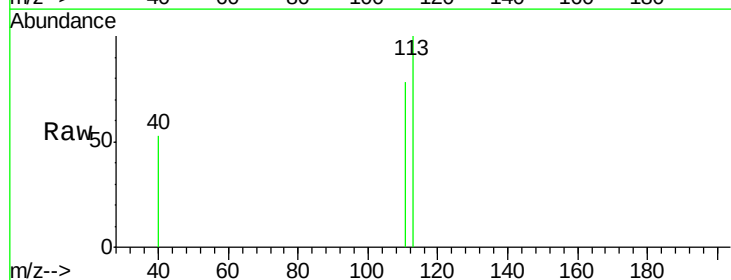
Instrument :
 MSVOA_D
 ClientSampleId :
 BCOG03

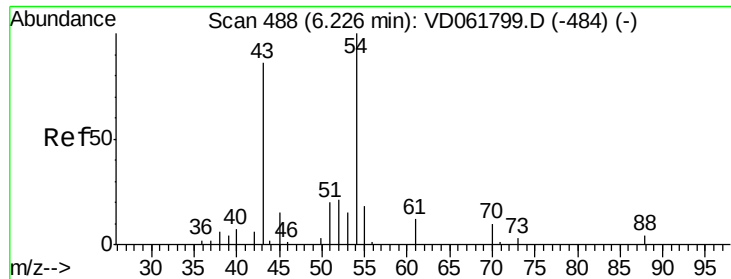
Tot Ion:114 Resp: 3191
 Ion Ratio Lower Upper
 114 100
 63 0.0 0.0 32.4
 88 0.0 0.0 33.6



#35
 Dibromofluoromethane
 Concen: 50.000 ug/l
 RT: 6.94 min Scan# 561
 Delta R.T. -0.03 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Tgt Ion:113 Resp: 1411
 Ion Ratio Lower Upper
 113 100
 111 77.7 78.5 117.7#
 192 0.0 13.0 19.4#

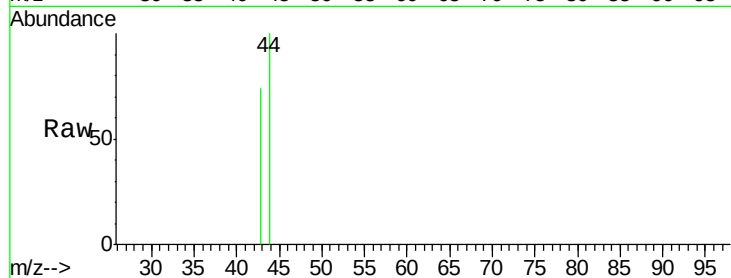




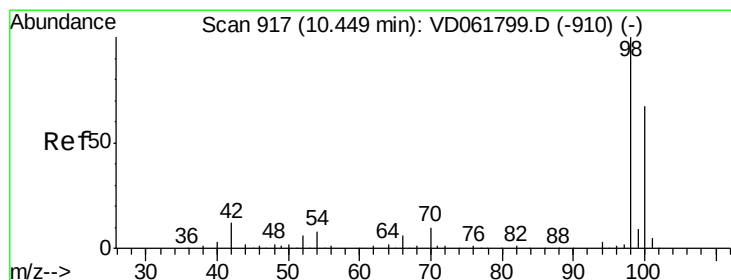
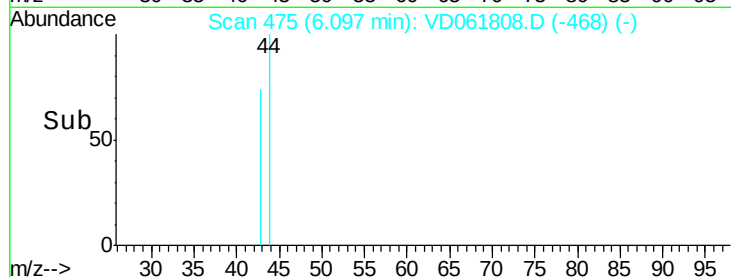
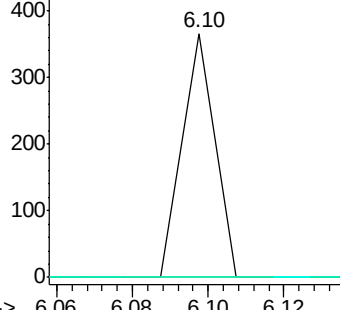
#37
Ethyl Acetate
Concen: 19.355 ug/l
RT: 6.10 min Scan# 475
Delta R.T. -0.13 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Instrument :
MSVOA_D
ClientSampleId :
BCOG03

Tot Ion: 43 Resp: 216
Ion Ratio Lower Upper
43 100
61 0.0 14.7 22.1#
70 0.0 7.8 11.6#

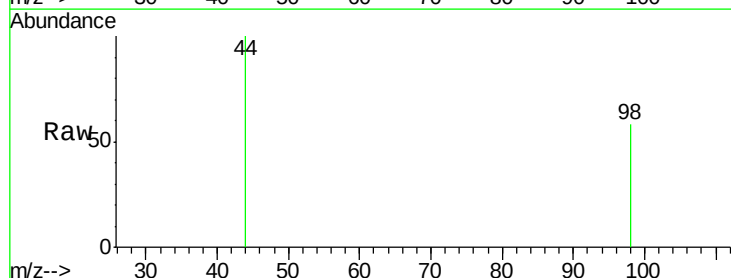


Abundance Ion 42.95 (42.65 to 43.65): VDC
Ion 60.95 (60.65 to 61.65): VDC
Ion 70.00 (69.70 to 70.70): VDC

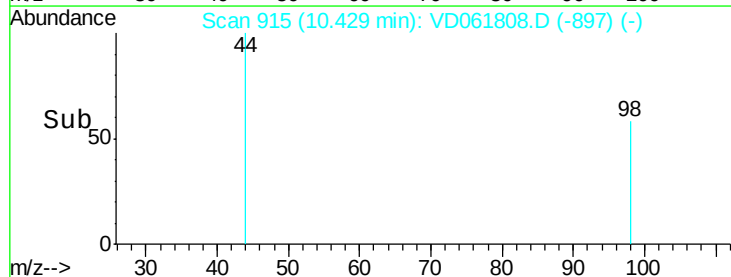
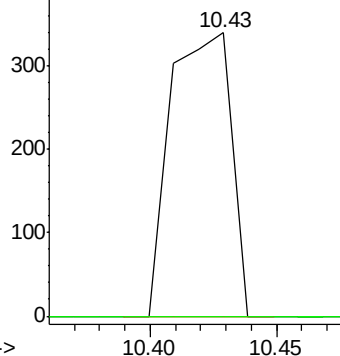


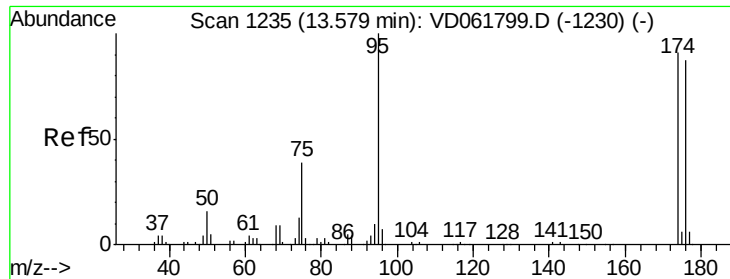
#50
Toluene-d8
Concen: N.D. ug/l
RT: 10.43 min Scan# 915
Delta R.T. -0.02 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 98 Resp: 568
Ion Ratio Lower Upper
98 100
100 0.0 53.8 80.8#



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

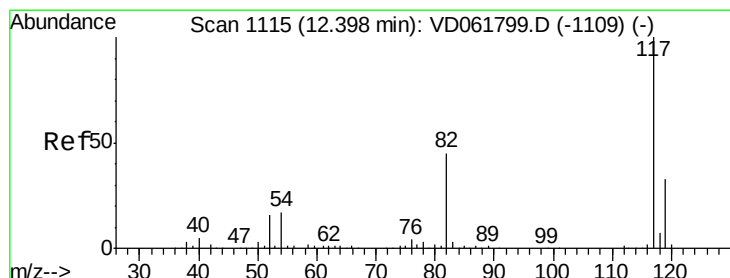
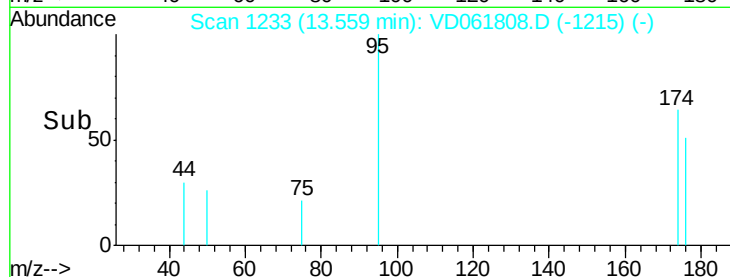
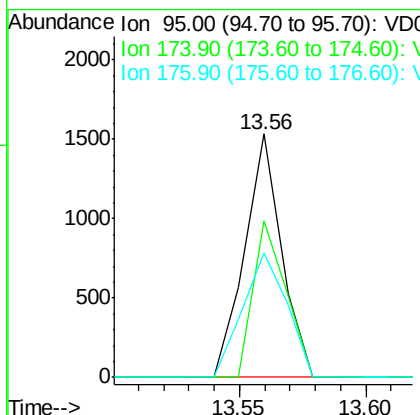
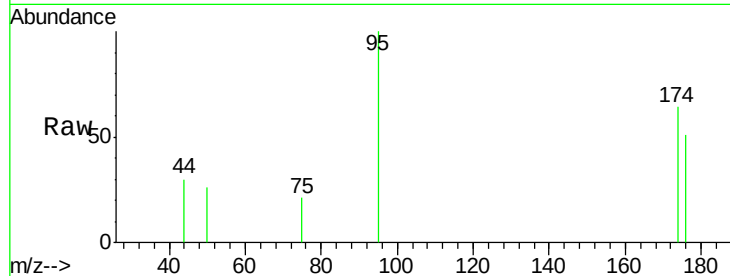




#62
4-Bromofluorobenzene
Concen: N.D. ug/l
RT: 13.56 min Scan# 1233
Delta R.T. -0.02 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

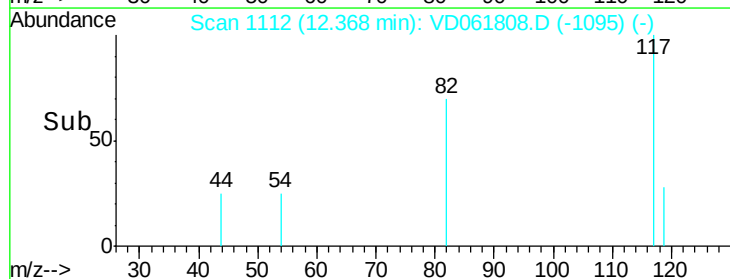
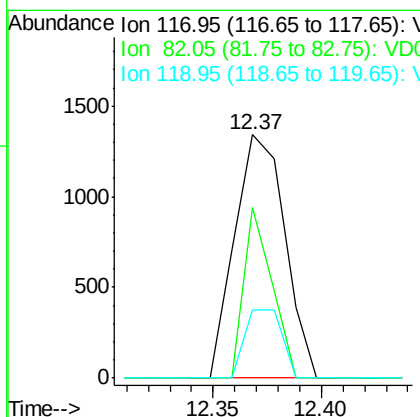
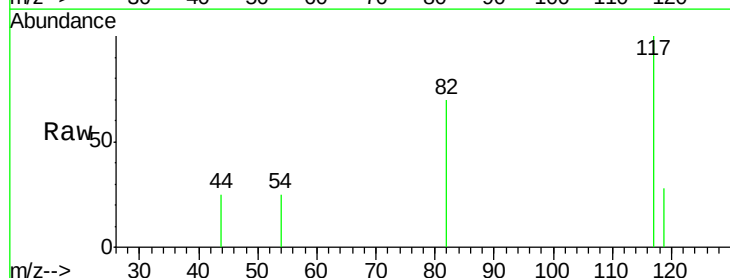
Instrument :
MSVOA_D
ClientSampled :
BCOG03

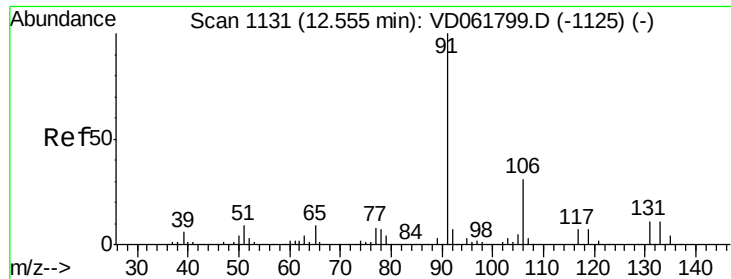
Tot Ion: 95 Resp: 1552
Ion Ratio Lower Upper
95 100
174 64.2 0.0 181.8
176 50.9 0.0 174.4



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.37 min Scan# 1112
Delta R.T. -0.03 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 117 Resp: 2157
Ion Ratio Lower Upper
117 100
82 70.3 36.2 54.2#
119 27.9 26.2 39.4

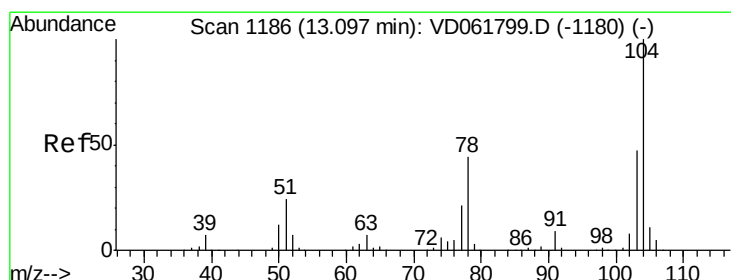
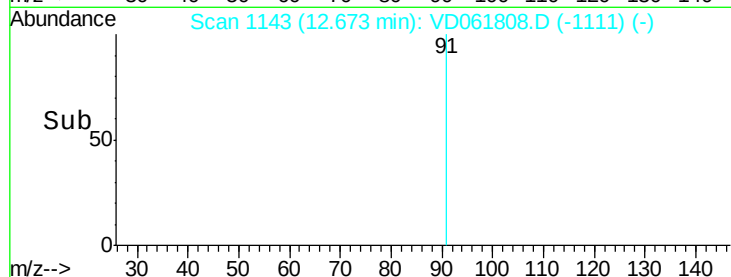
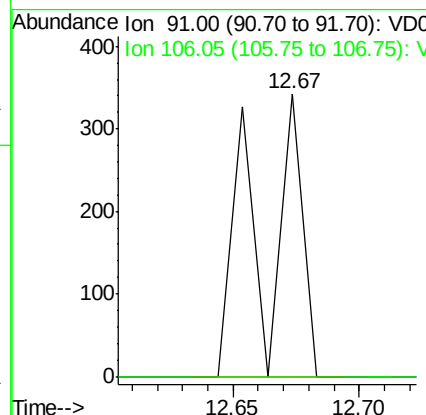
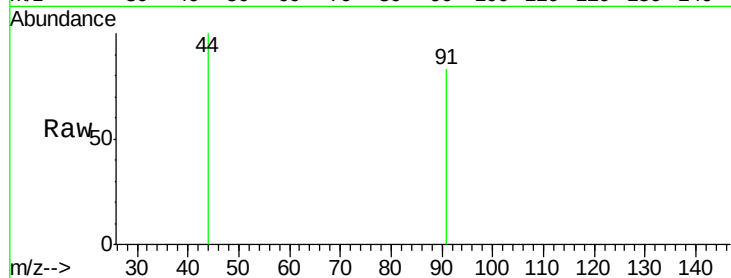




#67
Ethyl Benzene
Concen: 6.140 ug/l
RT: 12.67 min Scan# 1143
Delta R.T. 0.12 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

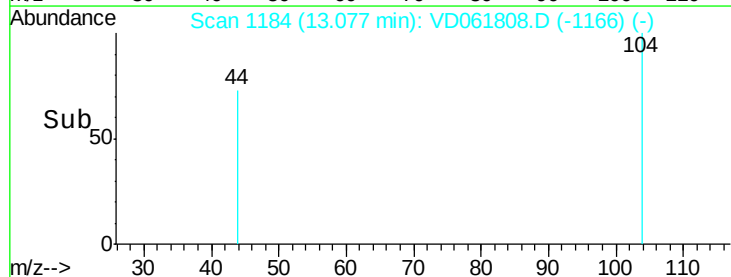
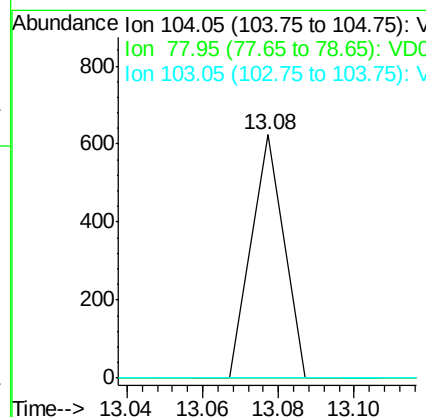
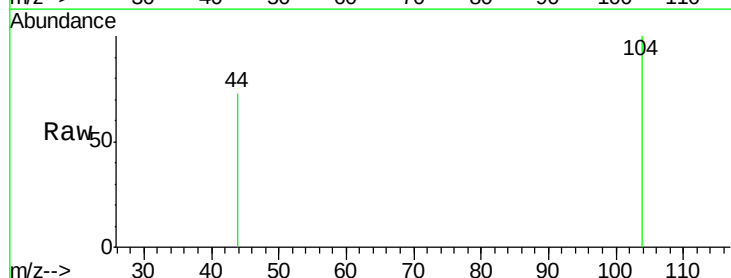
Instrument :
MSVOA_D
ClientSampleId :
BCOG03

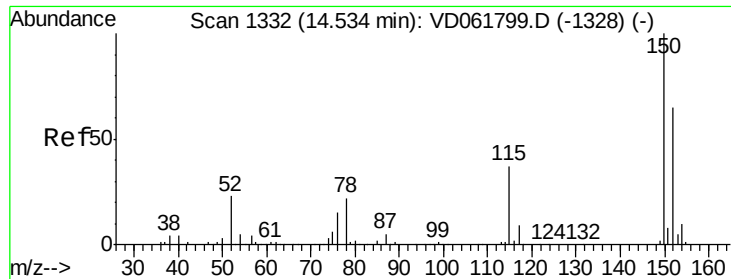
Tot Ion: 91 Resp: 395
Ion Ratio Lower Upper
91 100
106 0.0 24.7 37.1#



#70
Styrene
Concen: 9.441 ug/l
RT: 13.08 min Scan# 1184
Delta R.T. -0.02 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 104 Resp: 369
Ion Ratio Lower Upper
104 100
78 0.0 35.4 53.2#
103 0.0 37.5 56.3#



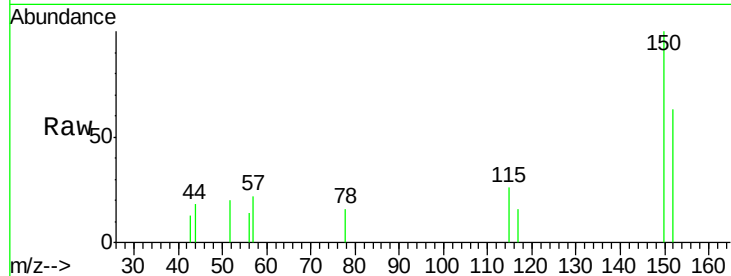


#72

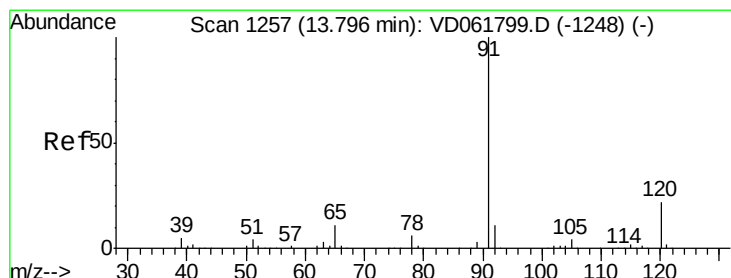
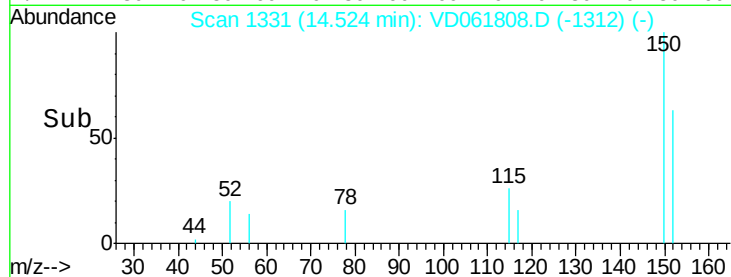
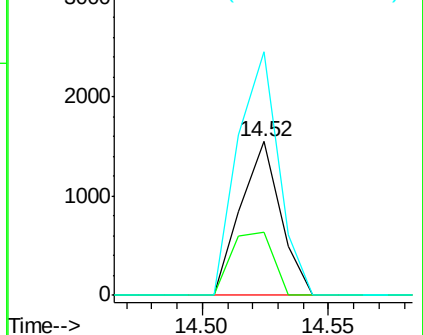
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.52 min Scan# 1331
Delta R.T. -0.01 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Instrument :
MSVOA_D
ClientSampleId :
BCOG03

Tot Ion:152 Resp: 1705
Ion Ratio Lower Upper
152 100
115 40.7 30.9 92.7
150 158.4 0.0 314.8



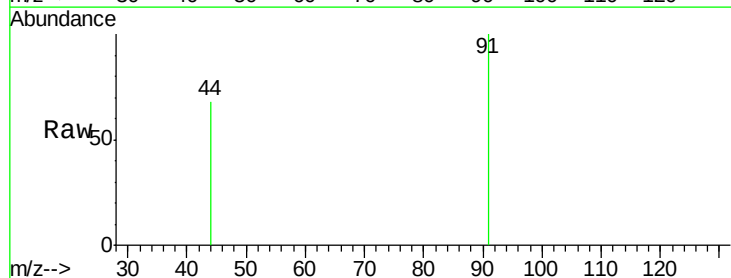
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 115.00 (114.70 to 115.70): V
Ion 149.90 (149.60 to 150.60): V



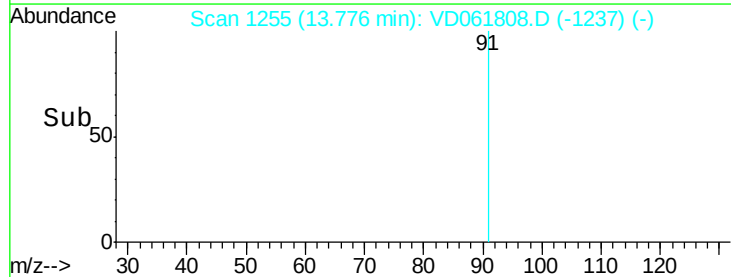
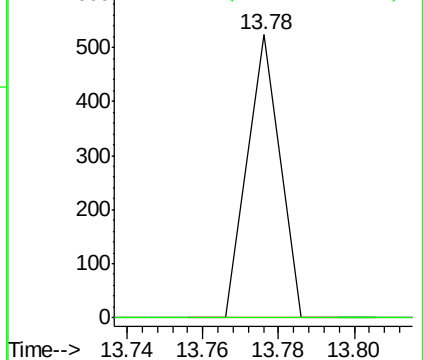
#78

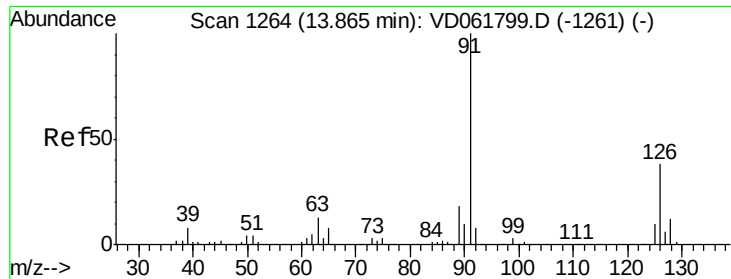
n-propylbenzene
Concen: 2.419 ug/l
RT: 13.78 min Scan# 1255
Delta R.T. -0.02 min
Lab File: VD061808.D
Acq: 16 Apr 2019 13:47

Tgt Ion: 91 Resp: 309
Ion Ratio Lower Upper
91 100
120 0.0 11.1 33.1#



Abundance Ion 91.00 (90.70 to 91.70): V
Ion 120.05 (119.75 to 120.75): V





#79

2-Chlorotoluene

Concen: 10.264 ug/l

RT: 13.94 min Scan# 1272

Delta R.T. 0.08 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

Instrument :

MSVOA_D

ClientSampleId :

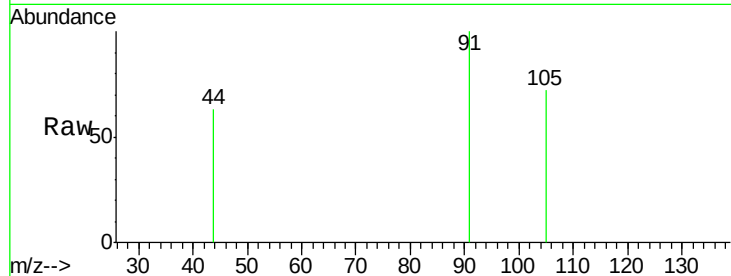
BCOG03

Tot Ion: 91 Resp: 766

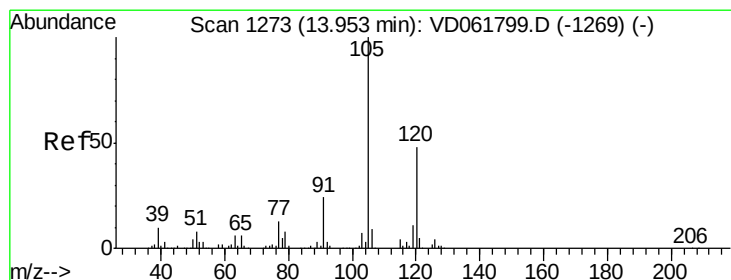
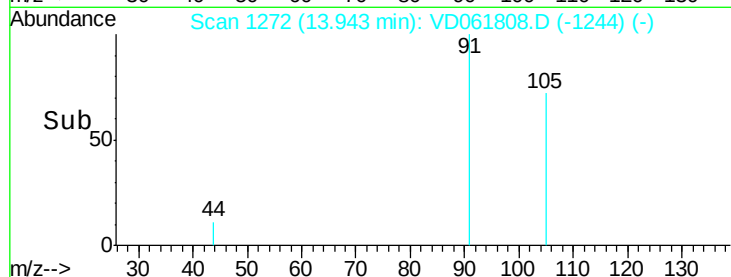
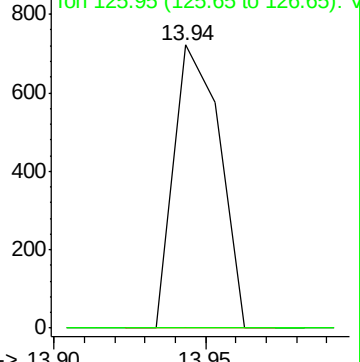
Ion Ratio Lower Upper

91 100

126 0.0 18.6 55.8#



Abundance Ion 91.00 (90.70 to 91.70): VD061799.D (-1261) (-)



#80

1,3,5-Trimethylbenzene

Concen: 7.431 ug/l

RT: 13.93 min Scan# 1271

Delta R.T. -0.02 min

Lab File: VD061808.D

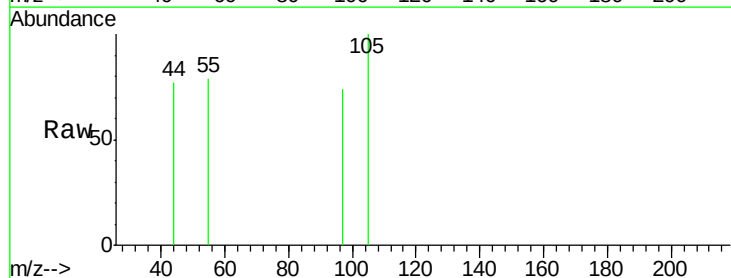
Acq: 16 Apr 2019 13:47

Tgt Ion: 105 Resp: 652

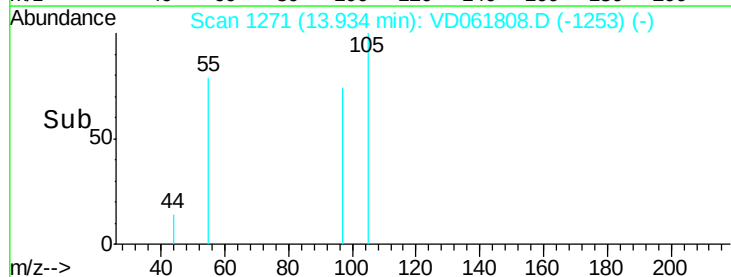
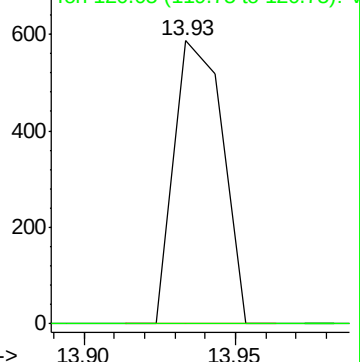
Ion Ratio Lower Upper

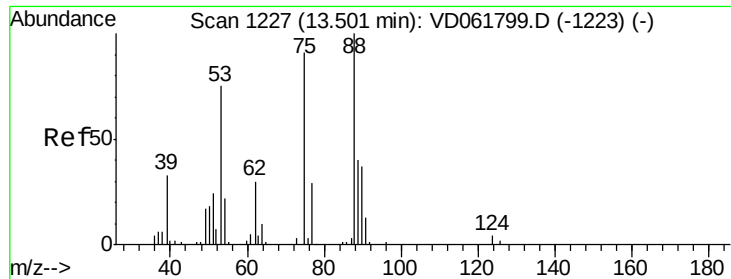
105 100

120 0.0 24.0 72.0#



Abundance Ion 105.05 (104.75 to 105.75): VD061799.D (-1269) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 27.891 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.06 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

Instrument :

MSVOA_D

ClientSampleId :

BCOG03

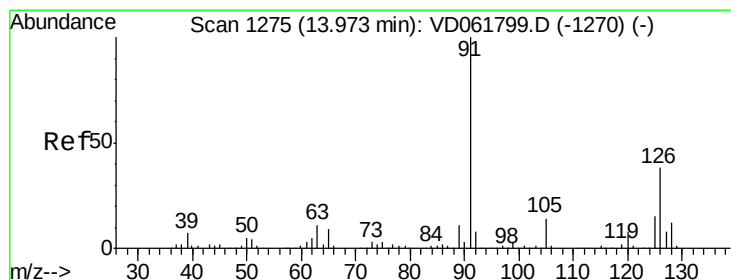
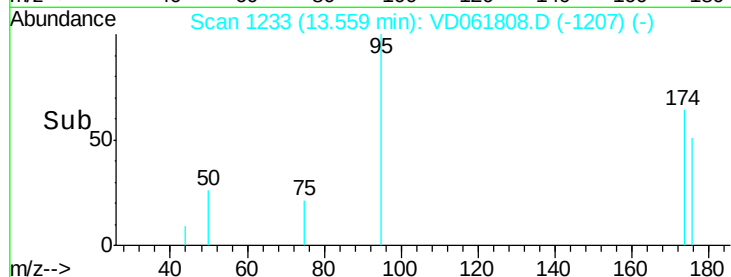
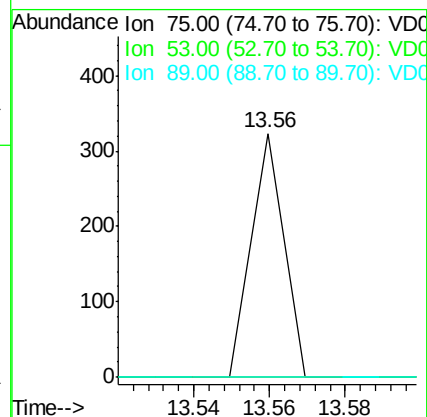
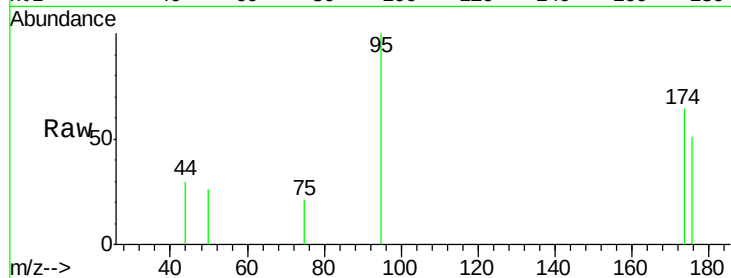
Tot Ion: 75 Resp: 191

Ion Ratio Lower Upper

75 100

53 0.0 65.8 98.8#

89 0.0 35.0 52.6#



#82

4-Chlorotoluene

Concen: 8.967 ug/l

RT: 13.94 min Scan# 1272

Delta R.T. -0.03 min

Lab File: VD061808.D

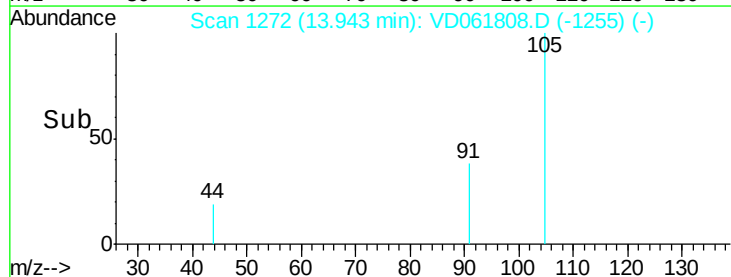
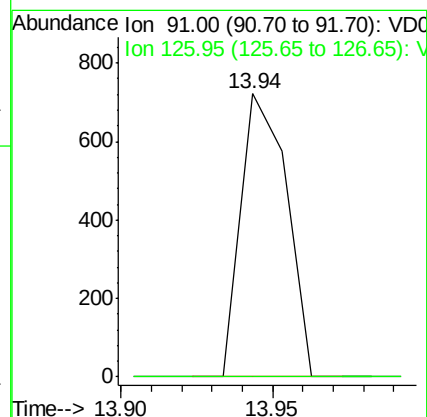
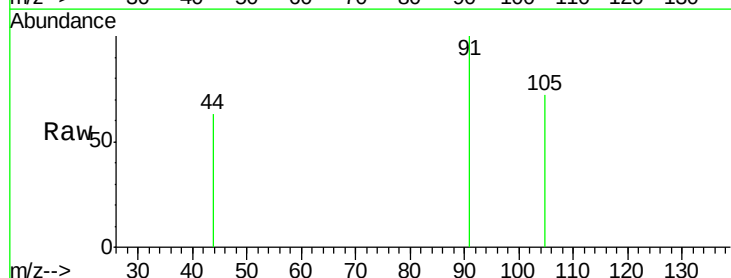
Acq: 16 Apr 2019 13:47

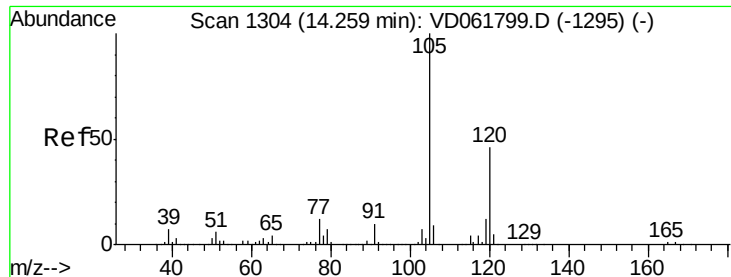
Tgt Ion: 91 Resp: 766

Ion Ratio Lower Upper

91 100

126 0.0 19.1 57.5#

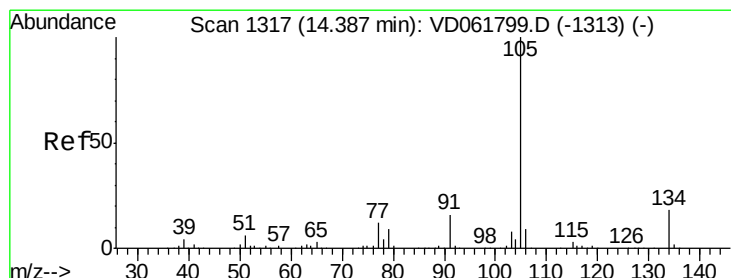
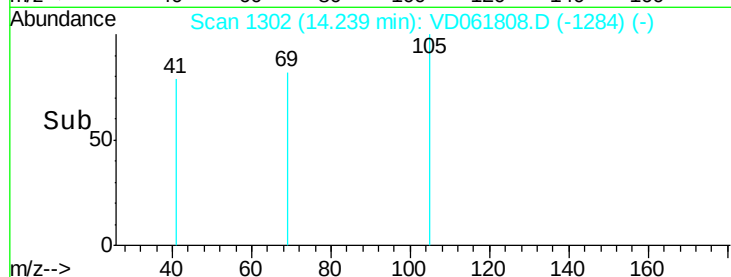
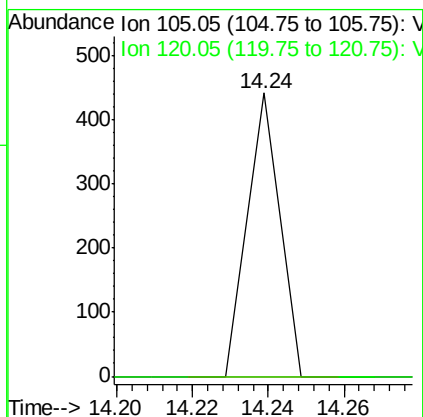
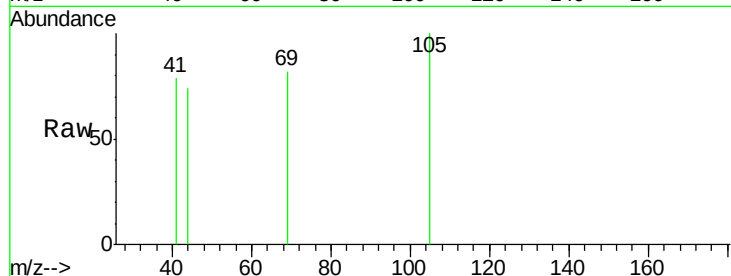




#84
 1,2,4-Trimethylbenzene
 Concen: 2.948 ug/l
 RT: 14.24 min Scan# 1302
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

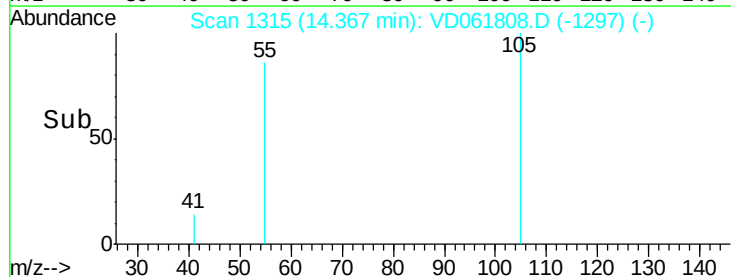
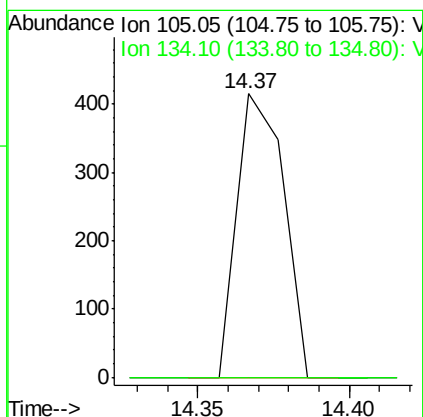
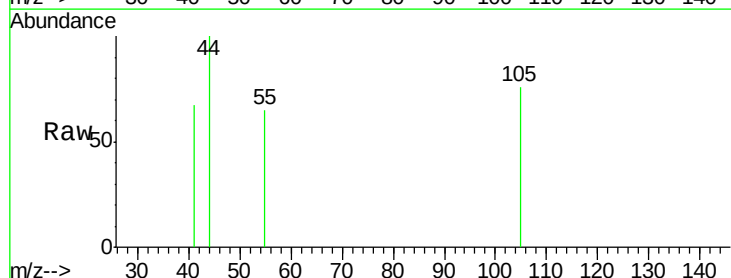
Instrument :
 MSVOA_D
 ClientSampleId :
 BCOG03

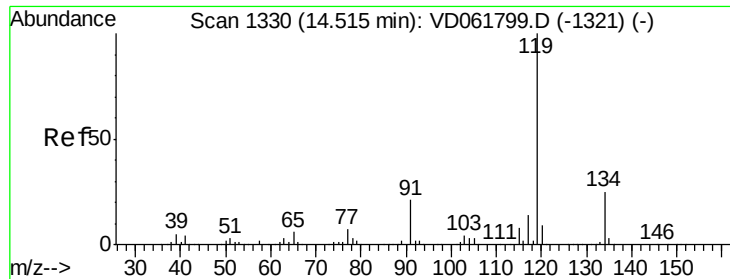
Tot Ion:105 Resp: 260
 Ion Ratio Lower Upper
 105 100
 120 0.0 23.1 69.2#



#85
 sec-Butylbenzene
 Concen: 4.235 ug/l
 RT: 14.37 min Scan# 1315
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Tgt Ion:105 Resp: 451
 Ion Ratio Lower Upper
 105 100
 134 0.0 8.9 26.7#

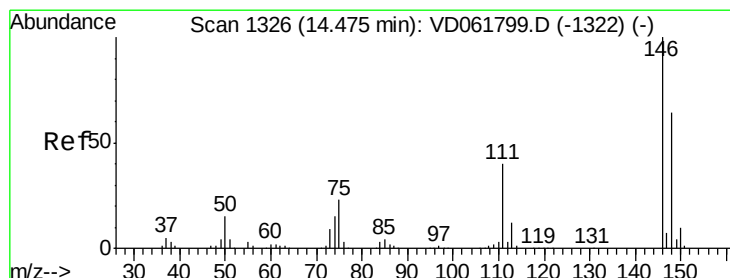
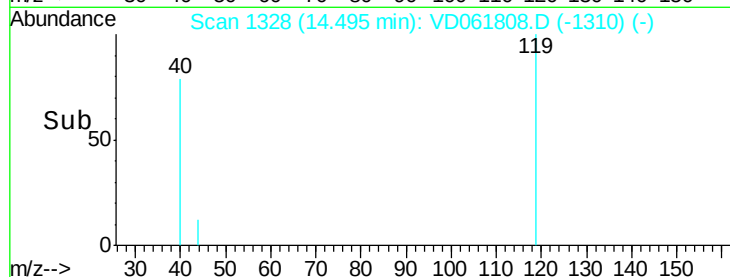
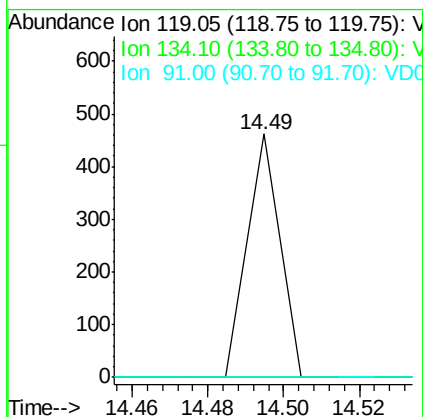
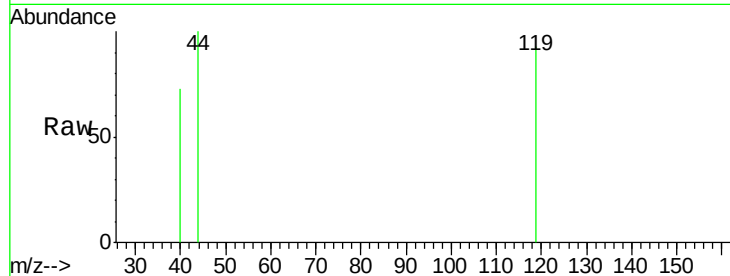




#86
 p-Isopropyltoluene
 Concen: 2.740 ug/l
 RT: 14.49 min Scan# 1328
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

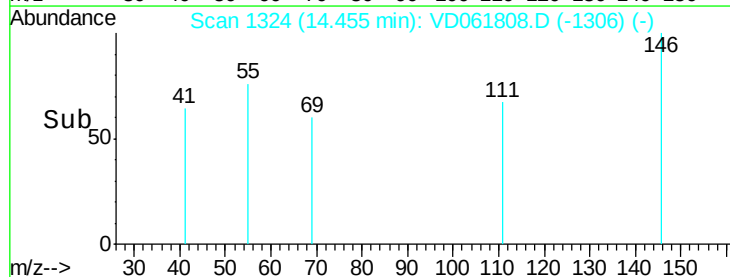
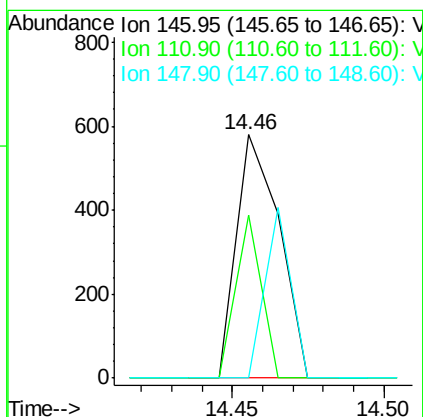
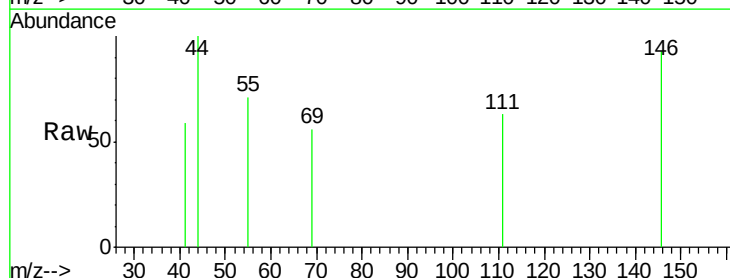
Instrument :
 MSVOA_D
 ClientSampleID :
 BCOG03

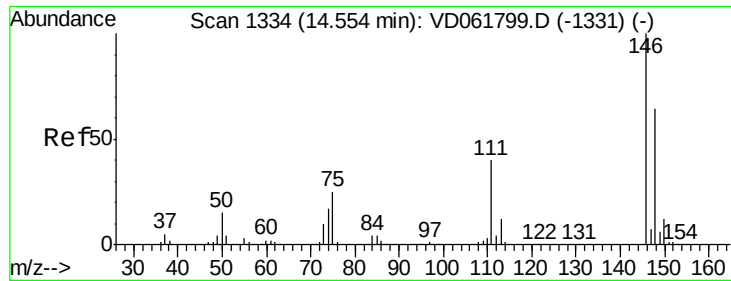
Tot Ion:119 Resp: 273
 Ion Ratio Lower Upper
 119 100
 134 0.0 12.8 38.3#
 91 0.0 10.7 32.1#



#87
 1,3-Dichlorobenzene
 Concen: 10.486 ug/l
 RT: 14.46 min Scan# 1324
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Tgt Ion:146 Resp: 575
 Ion Ratio Lower Upper
 146 100
 111 67.1 20.0 60.0#
 148 0.0 31.8 95.4#

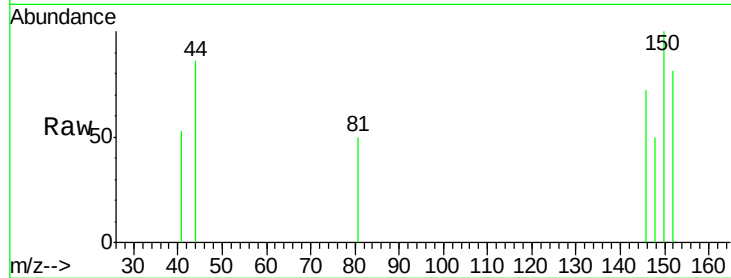




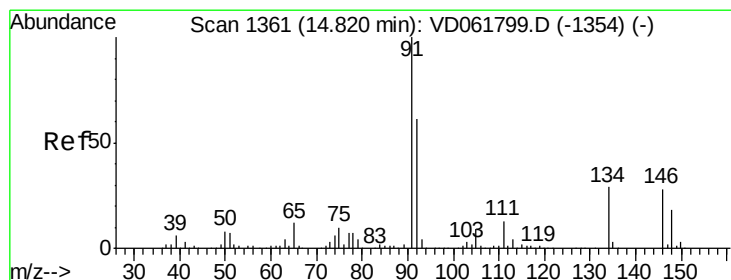
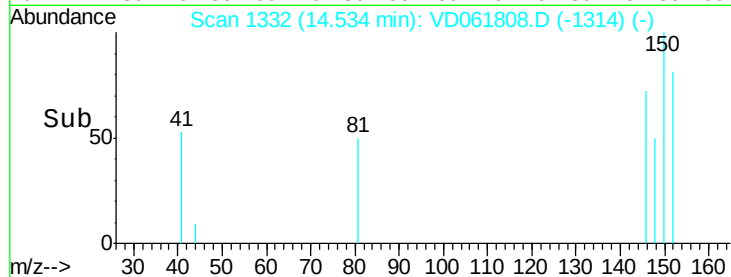
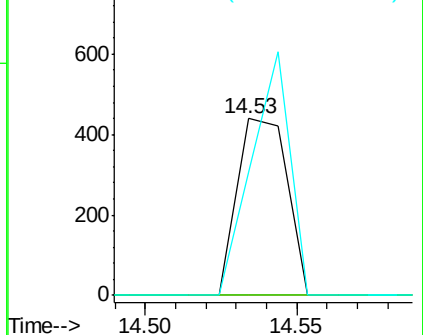
#88
 1,4-Dichlorobenzene
 Concen: 9.390 ug/l
 RT: 14.53 min Scan# 1332
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Instrument :
 MSVOA_D
 ClientSampleId :
 BCOG03

Tot Ion:146 Resp: 509
 Ion Ratio Lower Upper
 146 100
 111 0.0 20.2 60.5#
 148 69.5 32.0 96.2

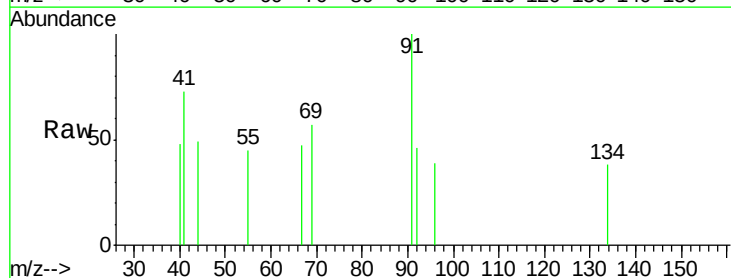


Abundance Ion 145.95 (145.65 to 146.65): V
 Ion 110.90 (110.60 to 111.60): V
 Ion 147.90 (147.60 to 148.60): V

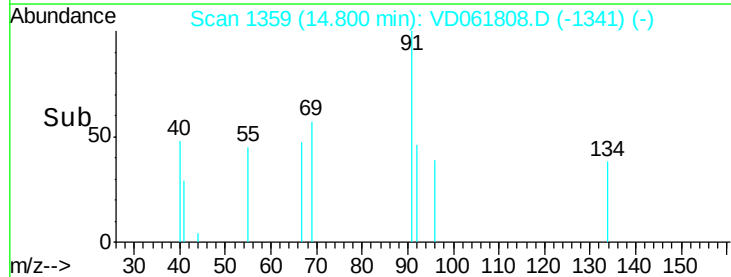
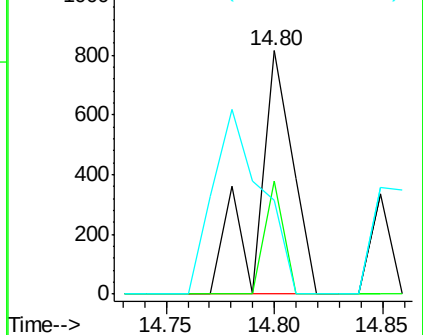


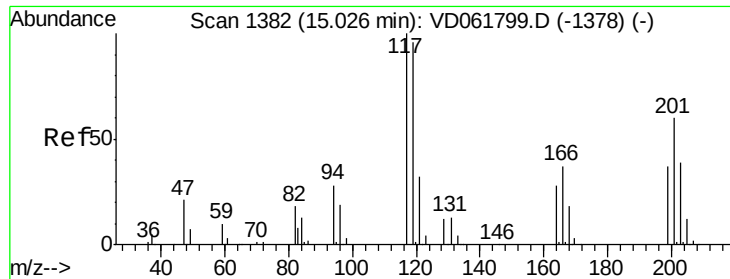
#89
 n-Butylbenzene
 Concen: 10.464 ug/l
 RT: 14.80 min Scan# 1359
 Delta R.T. -0.02 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Tgt Ion: 91 Resp: 923
 Ion Ratio Lower Upper
 91 100
 92 46.4 30.3 91.0
 134 38.4 14.5 43.6



Abundance Ion 91.00 (90.70 to 91.70): V
 Ion 92.00 (91.70 to 92.70): V
 Ion 134.10 (133.80 to 134.80): V





#90

Hexachloroethane

Concen: 7.069 ug/l

RT: 15.06 min Scan# 1385

Delta R.T. 0.03 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

Instrument :

MSVOA_D

ClientSampled :

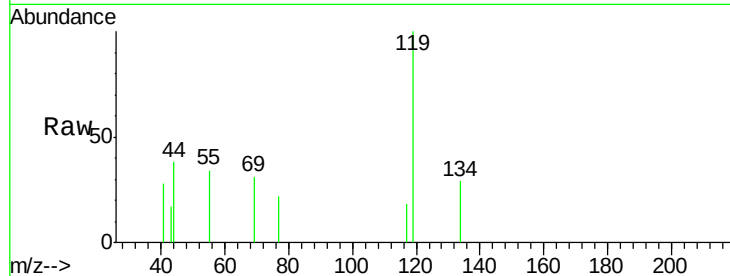
BCOG03

Tot Ion:117 Resp: 192

Ion Ratio Lower Upper

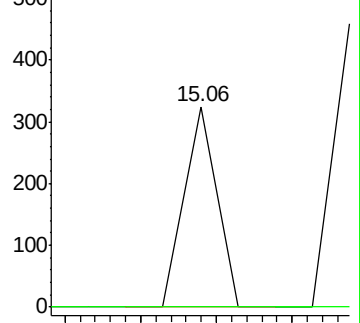
117 100

201 0.0 30.2 90.6#

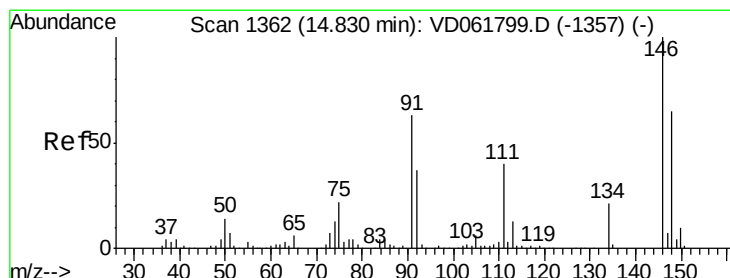
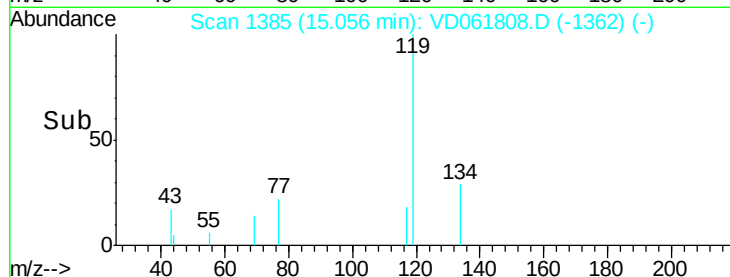


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 200.75 (200.45 to 201.45): V



Time-->



#91

1,2-Dichlorobenzene

Concen: 5.552 ug/l

RT: 14.81 min Scan# 1360

Delta R.T. -0.02 min

Lab File: VD061808.D

Acq: 16 Apr 2019 13:47

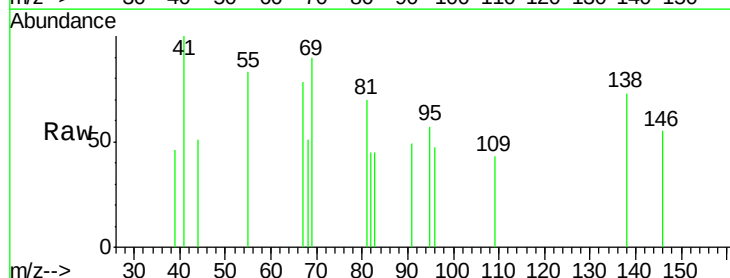
Tgt Ion:146 Resp: 255

Ion Ratio Lower Upper

146 100

111 0.0 20.0 59.9#

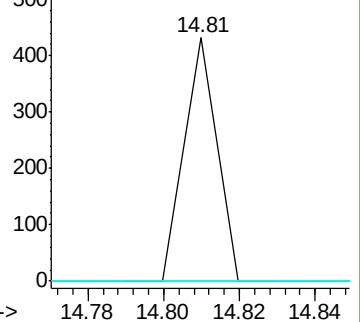
148 0.0 32.3 96.8#



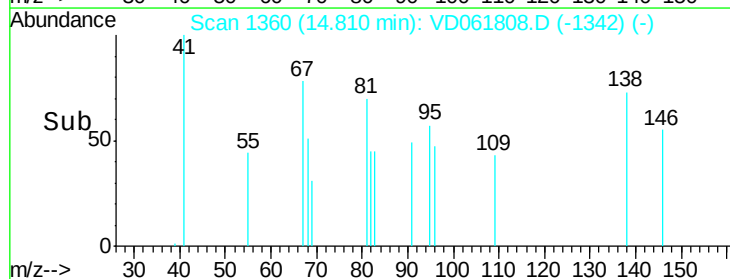
Abundance Ion 145.95 (145.65 to 146.65): V

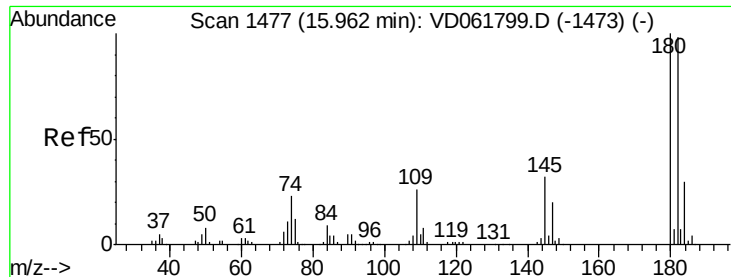
Ion 110.90 (110.60 to 111.60): V

Ion 147.90 (147.60 to 148.60): V



Time-->

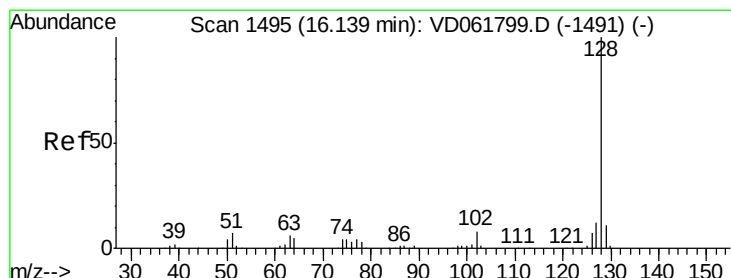
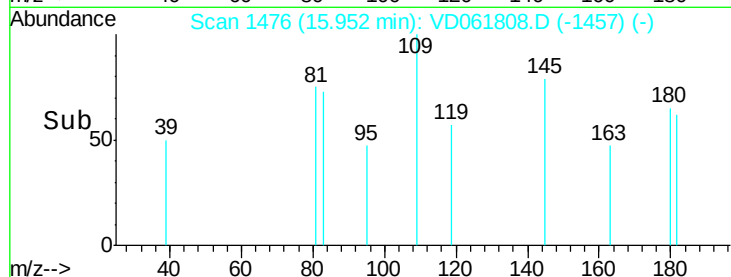
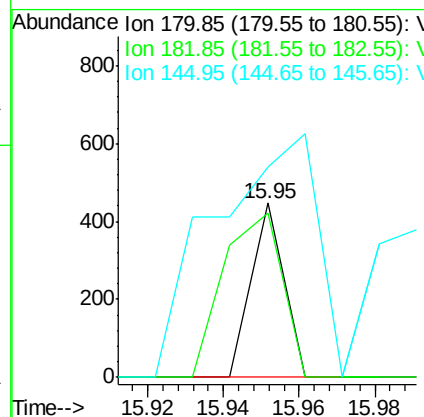
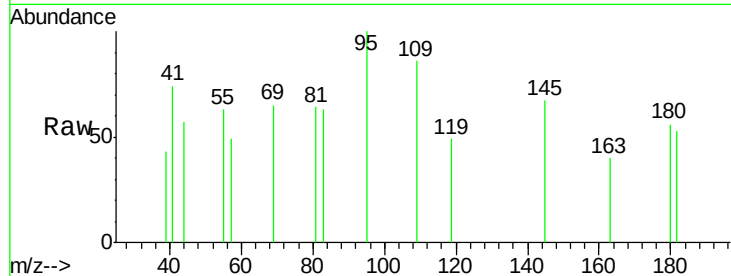




#93
 1,2,4-Trichlorobenzene
 Concen: 10.465 ug/l
 RT: 15.95 min Scan# 1476
 Delta R.T. -0.01 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Instrument :
 MSVOA_D
 ClientSampleId :
 BCOG03

Tot Ion:180 Resp: 264
 Ion Ratio Lower Upper
 180 100
 182 94.6 49.3 147.8
 145 120.6 16.2 48.6#



#95
 Naphthalene
 Concen: 27.827 ug/l
 RT: 16.13 min Scan# 1494
 Delta R.T. -0.01 min
 Lab File: VD061808.D
 Acq: 16 Apr 2019 13:47

Tgt Ion:128 Resp: 1076
 Ion Ratio Lower Upper
 128 100
 127 0.0 9.8 14.8#
 129 0.0 8.8 13.2#

