

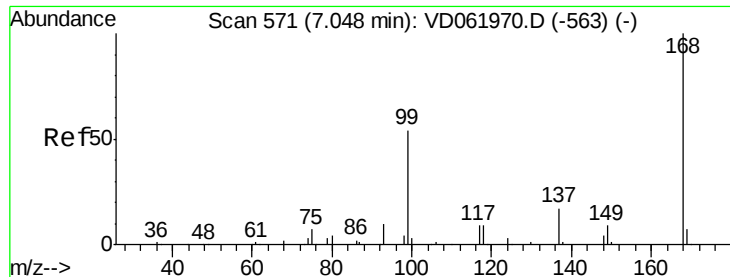
Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD042419\
 Data File : VD062023.D
 Acq On : 25 Apr 2019 6:20
 Operator : VA/AP
 Sample : K2200-09
 Misc : 6.56g/5ml/MSVOA D/SOIL
 ALS Vial : 43 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :

Quant Time: Apr 25 07:21:50 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	7.06	168	473591	50.00	ug/l	0.01
34) 1,4-Difluorobenzene	8.23	114	739135	50.00	ug/l	0.01
63) Chlorobenzene-d5	12.37	117	397227	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.52	152	224413	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	7.47	65	198180	53.47	ug/l	0.01
Spiked Amount 50.000			Recovery	=	106.94%	
35) Dibromofluoromethane	6.93	113	274498	53.70	ug/l	0.00
Spiked Amount 50.000			Recovery	=	107.40%	
50) Toluene-d8	10.42	98	281368	23.13	ug/l	0.00
Spiked Amount 50.000			Recovery	=	46.26%	
62) 4-Bromofluorobenzene	13.56	95	236856	48.55	ug/l	0.00
Spiked Amount 50.000			Recovery	=	97.10%	
Target Compounds						
					Qvalue	
16) Acetone	3.22	43	12929	14.609	ug/l	95
18) Methyl Acetate	3.66	43	3110	Below Cal	#	53
20) Methylene Chloride	3.83	84	38603	6.164	ug/l	96
25) 2-Butanone	6.10	43	1793	1.671	ug/l #	56
36) 1,1-Dichloropropene	7.06	75	34287	5.954	ug/l #	48
38) Carbon Tetrachloride	7.06	117	44659	6.120	ug/l #	19
55) 1,1,2-Trichloroethane	11.11	97	3122	1.023	ug/l #	16
67) Ethyl Benzene	12.53	91	13553	1.106	ug/l	100
69) o-Xylene	13.06	106	50863	12.554	ug/l	95
74) N-amyl acetate	13.23	43	21945	5.692	ug/l #	59
75) 1,1,2,2-Tetrachloroethane	13.72	83	14672	5.001	ug/l #	57
79) 2-Chlorotoluene	13.88	91	17997	1.734	ug/l #	38
80) 1,3,5-Trimethylbenzene	13.93	105	250564	20.991	ug/l	96
81) trans-1,4-Dichloro-2-buten	13.56	75	87442	101.256	ug/l #	17
82) 4-Chlorotoluene	13.93	91	26720	2.337	ug/l #	37
84) 1,2,4-Trimethylbenzene	14.24	105	15130	1.327	ug/l	91
85) sec-Butylbenzene	14.24	105	15130	1.013	ug/l #	60
86) p-Isopropyltoluene	14.50	119	47823	3.576	ug/l	98
89) n-Butylbenzene	14.78	91	78437	6.534	ug/l #	1
90) Hexachloroethane	15.10	117	92627	25.617	ug/l #	20
92) 1,2-Dibromo-3-Chloropropan	15.38	75	1530	5.981	ug/l #	1

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.06 min Scan# 573

Delta R.T. 0.01 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

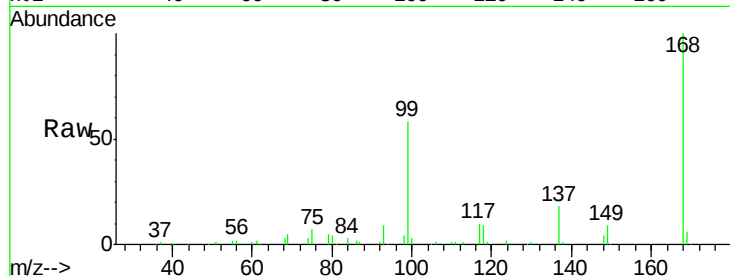
Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:168 Resp: 473591

Ion Ratio Lower Upper

168 100

99 58.5 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.06

150000

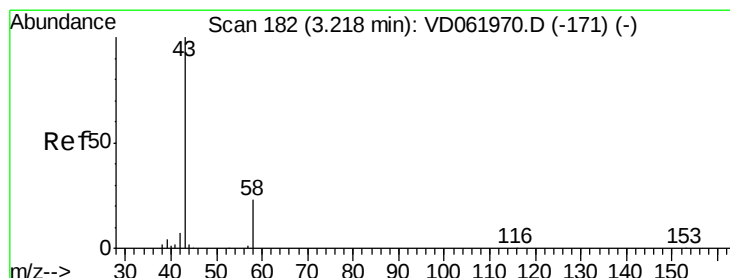
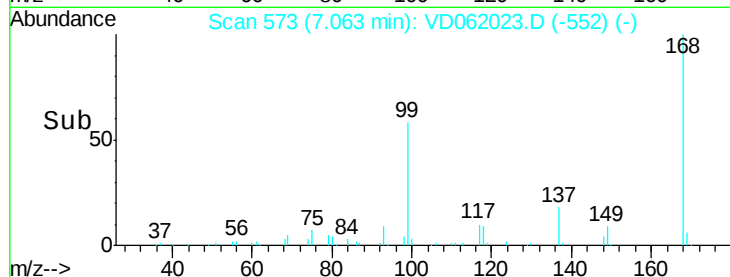
100000

50000

0

Time-->

6.90 7.00 7.10 7.20



#16

Acetone

Concen: 14.609 ug/l

RT: 3.22 min Scan# 183

Delta R.T. 0.00 min

Lab File: VD062023.D

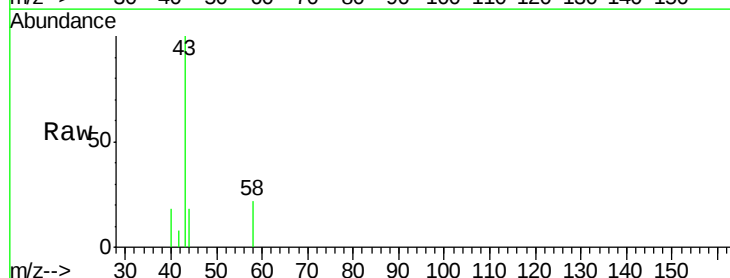
Acq: 25 Apr 2019 6:20

Tgt Ion: 43 Resp: 12929

Ion Ratio Lower Upper

43 100

58 22.4 19.9 29.9



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

3.22

5000

4000

3000

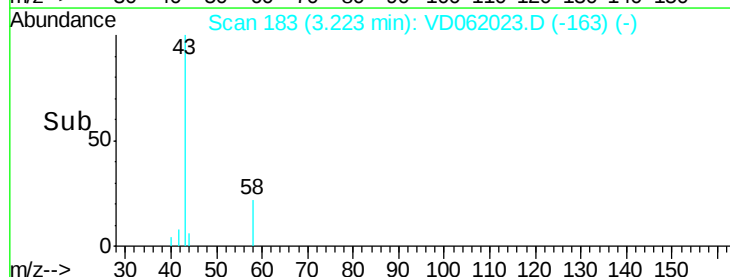
2000

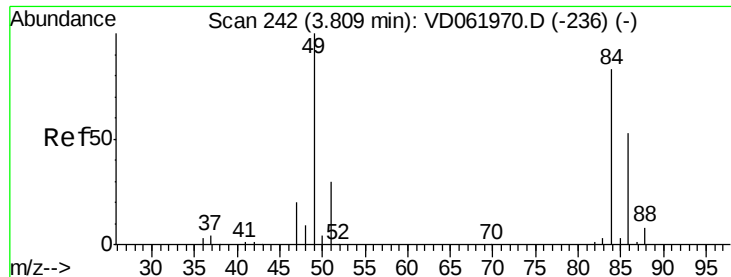
1000

0

Time-->

3.20 3.30

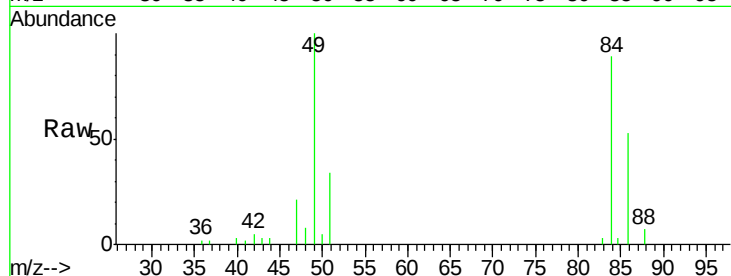




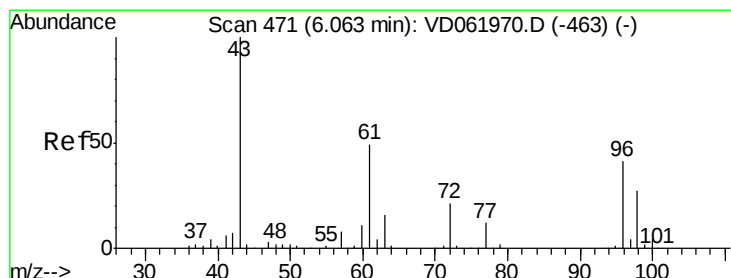
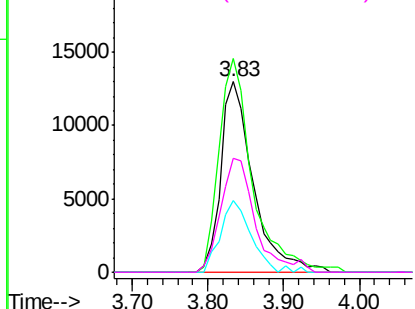
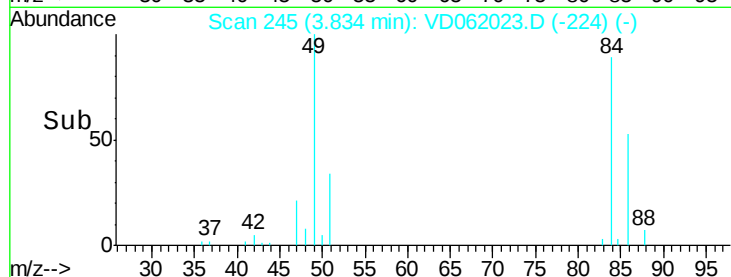
#20
Methvlene Chloride
Concen: 6.164 ug/l
RT: 3.83 min Scan# 245
Delta R.T. 0.01 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion: 84 Resp: 38603
Ion Ratio Lower Upper
84 100
49 112.1 94.0 141.0
51 37.6 29.0 43.4
86 59.8 49.8 74.6

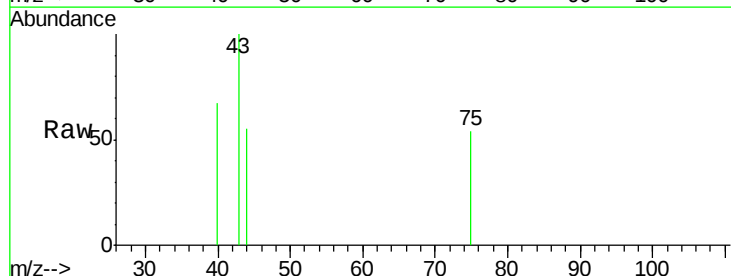


Abundance Ion 83.95 (83.65 to 84.65): VDC
Ion 48.90 (48.60 to 49.60): VDC
Ion 50.90 (50.60 to 51.60): VDC
Ion 85.90 (85.60 to 86.60): VDC

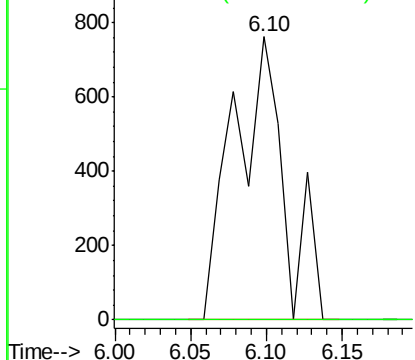
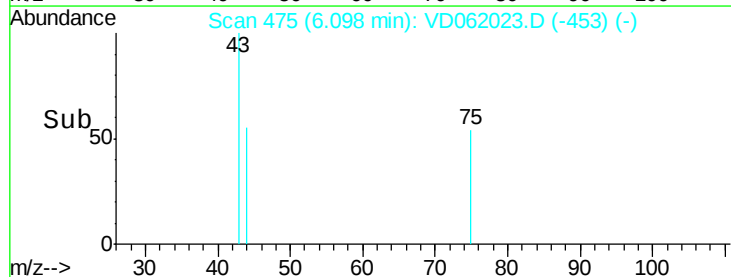


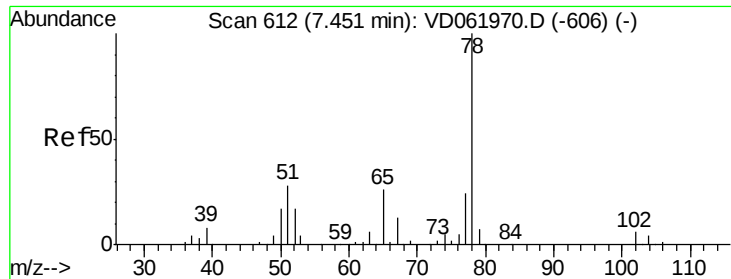
#25
2-Butanone
Concen: 1.671 ug/l
RT: 6.10 min Scan# 475
Delta R.T. 0.02 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Tgt Ion: 43 Resp: 1793
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





#33

1,2-Dichloroethane-d4

Concen: N.D. ug/l

RT: 7.47 min Scan# 614

Delta R.T. 0.01 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

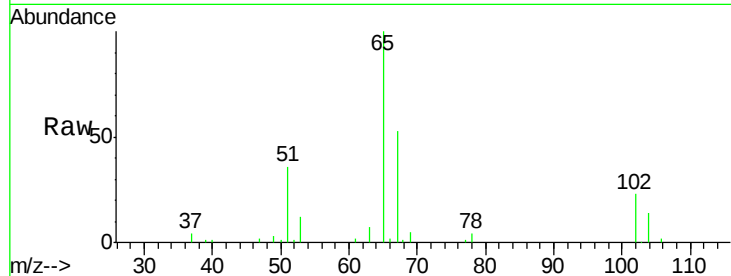
ClientSampleId :

Tot Ion: 65 Resp: 198180

Ion Ratio Lower Upper

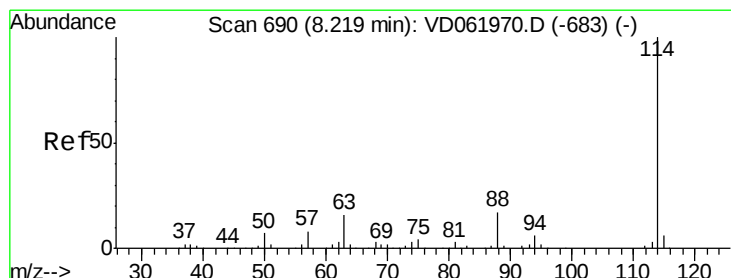
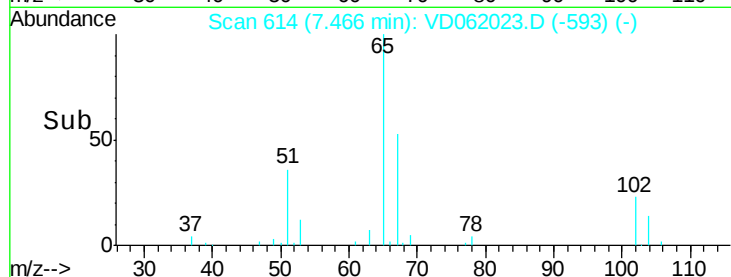
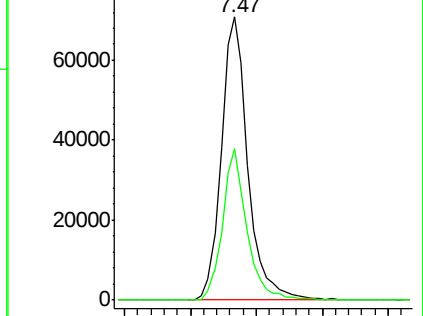
65 100

67 53.4 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: 8.23 min Scan# 692

Delta R.T. 0.01 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

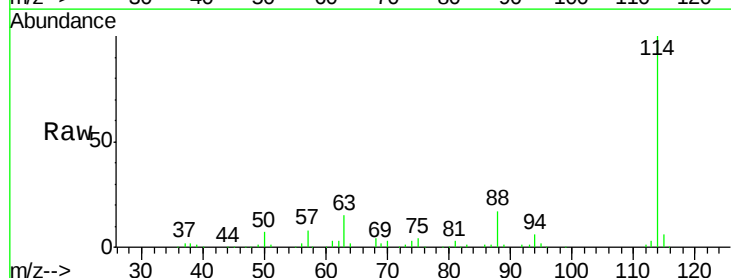
Tgt Ion: 114 Resp: 739135

Ion Ratio Lower Upper

114 100

63 15.2 0.0 32.4

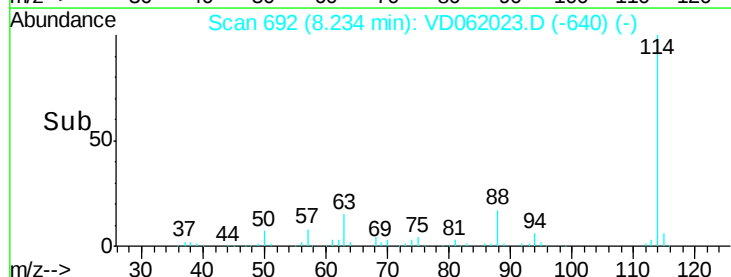
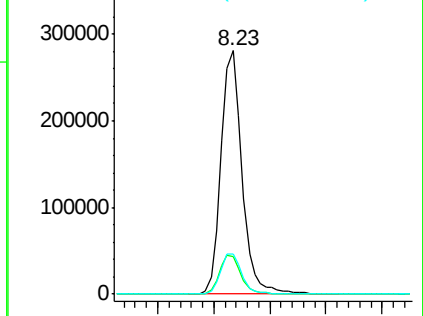
88 16.6 0.0 33.6

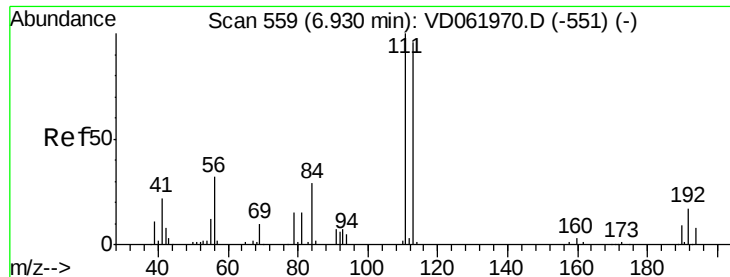


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 62.95 (62.65 to 63.65): VDC

Ion 87.90 (87.60 to 88.60): VDC





#35

Dibromofluoromethane

Concen: 50.000 ug/l

RT: 6.93 min Scan# 560

Delta R.T. 0.00 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

ClientSampleId :

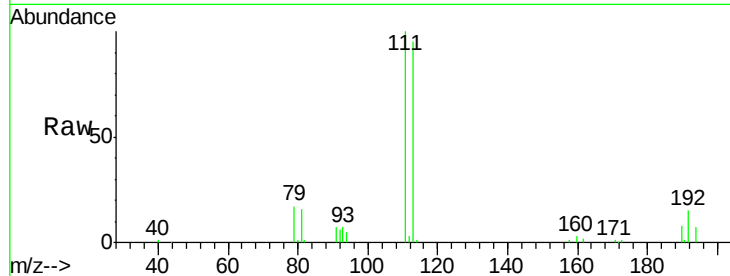
Tot Ion:113 Resp: 274498

Ion Ratio Lower Upper

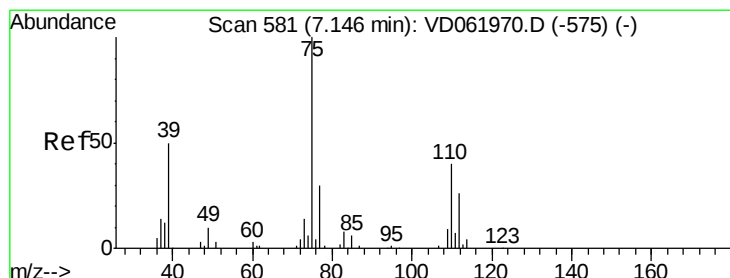
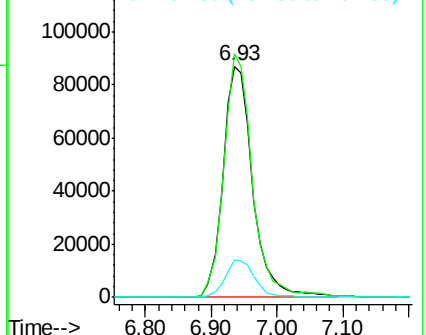
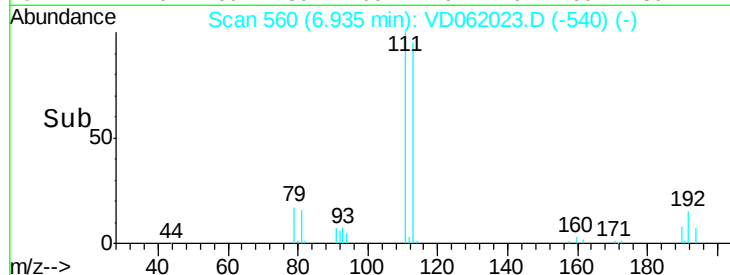
113 100

111 105.5 78.5 117.7

192 16.3 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: 5.954 ug/l

RT: 7.06 min Scan# 573

Delta R.T. -0.09 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

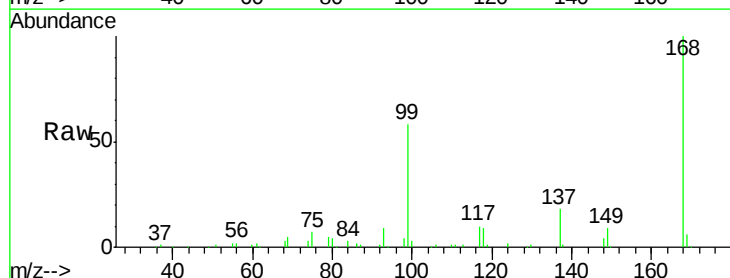
Tgt Ion: 75 Resp: 34287

Ion Ratio Lower Upper

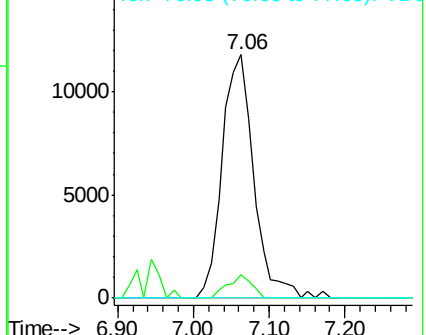
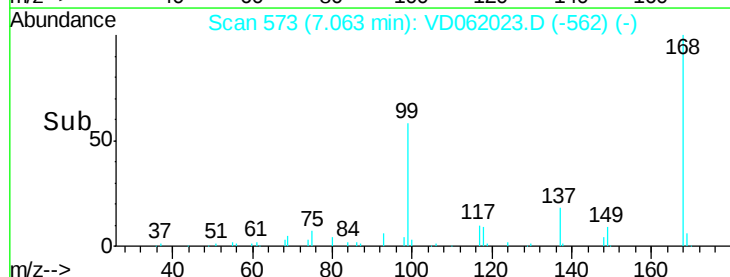
75 100

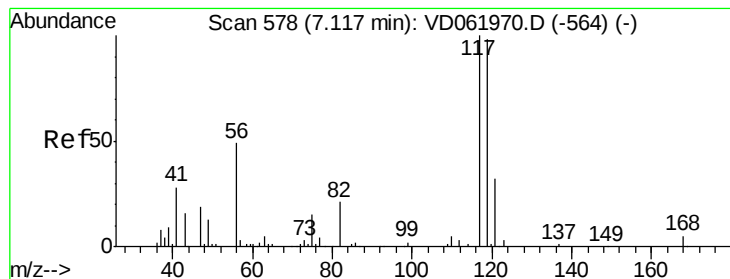
110 9.6 19.1 57.1#

77 0.0 25.6 38.4#



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





#38

Carbon Tetrachloride

Concen: 6.120 ug/l

RT: 7.06 min Scan# 573

Delta R.T. -0.06 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

ClientSampleId :

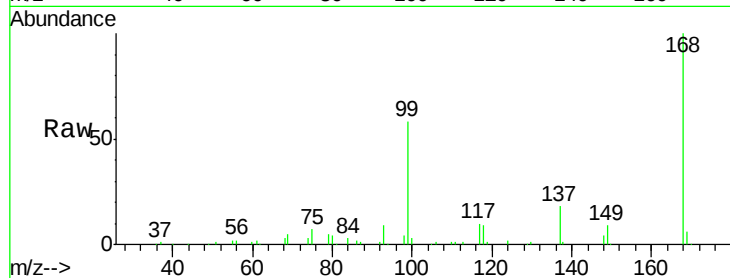
Tot Ion:117 Resp: 44659

Ion Ratio Lower Upper

117 100

119 8.1 75.8 113.8#

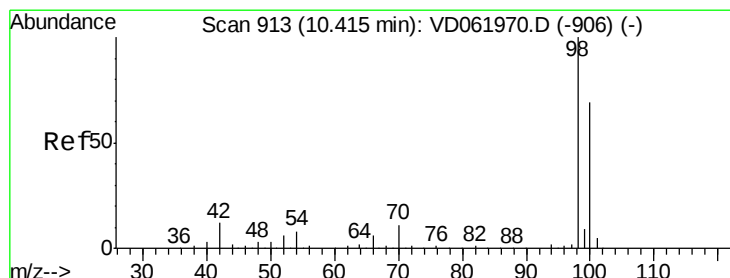
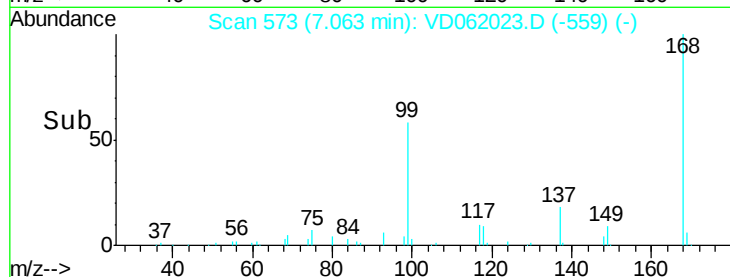
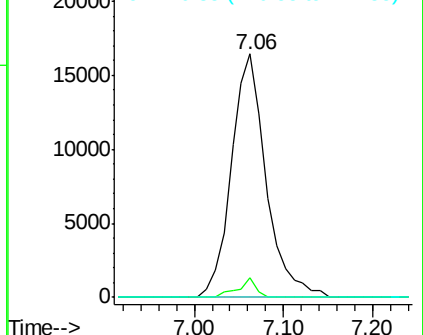
121 0.0 25.9 38.9#



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: N.D. ug/l

RT: 10.42 min Scan# 914

Delta R.T. 0.00 min

Lab File: VD062023.D

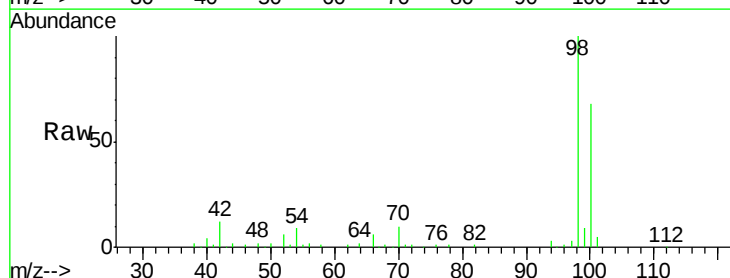
Acq: 25 Apr 2019 6:20

Tgt Ion: 98 Resp: 281368

Ion Ratio Lower Upper

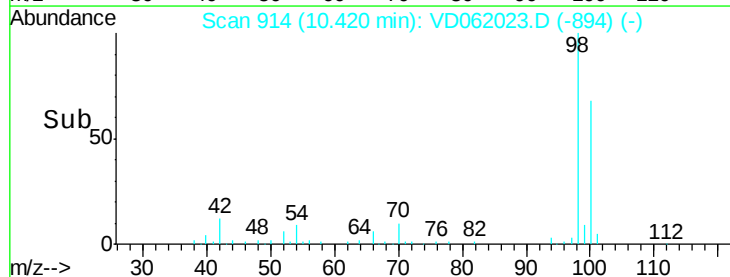
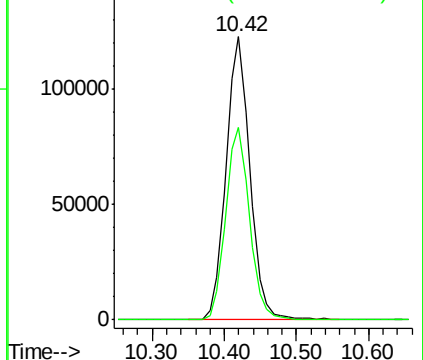
98 100

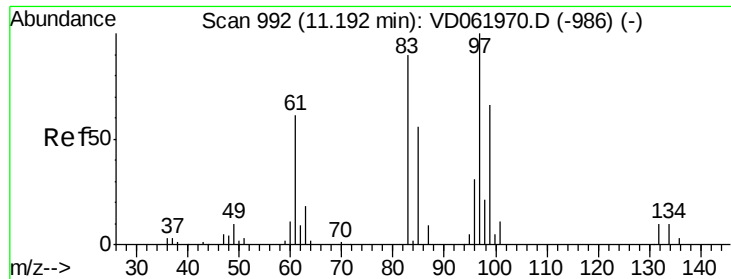
100 67.9 53.8 80.8



Abundance Ion 98.05 (97.75 to 98.75): V

Ion 100.05 (99.75 to 100.75): V

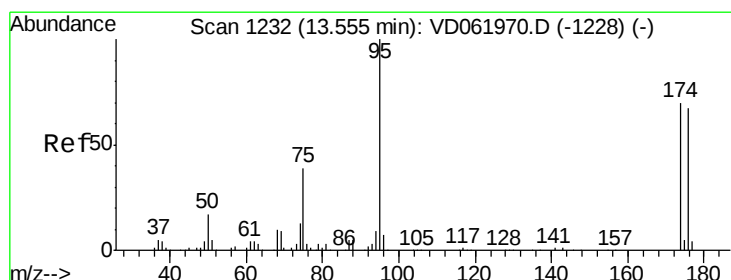
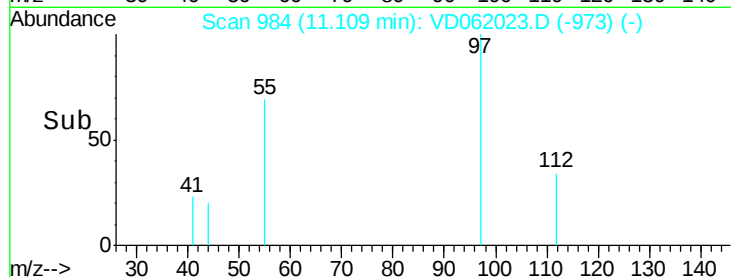
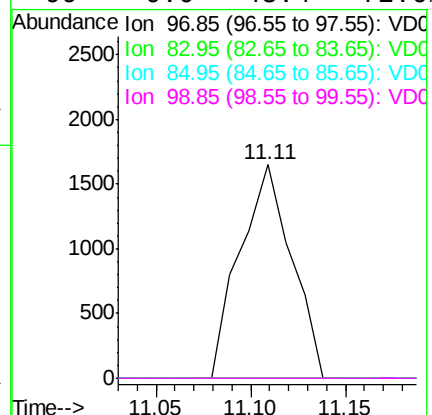
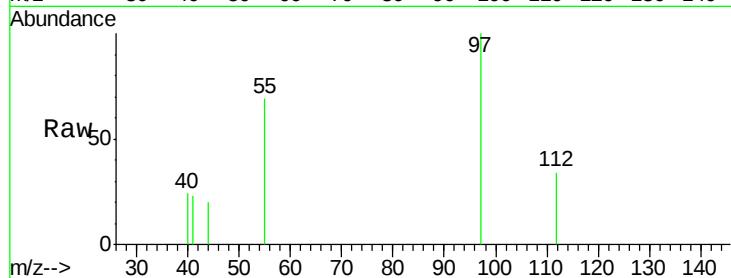




#55
 1,1,2-Trichloroethane
 Concen: 1.023 ug/l
 RT: 11.11 min Scan# 984
 Delta R.T. -0.09 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

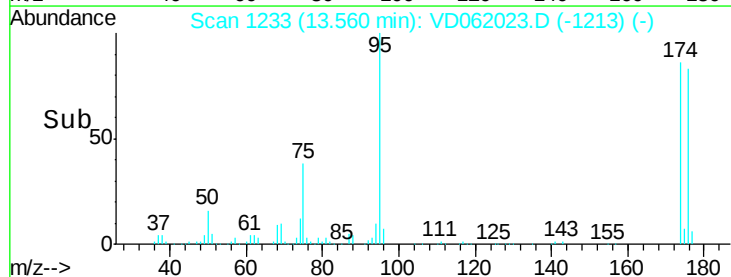
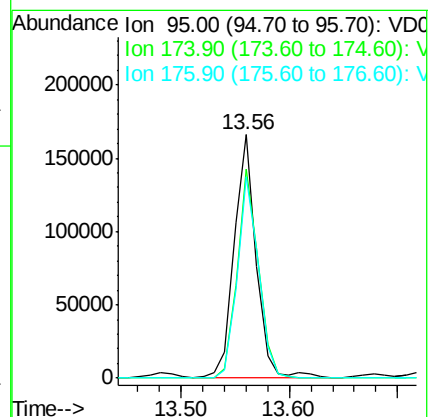
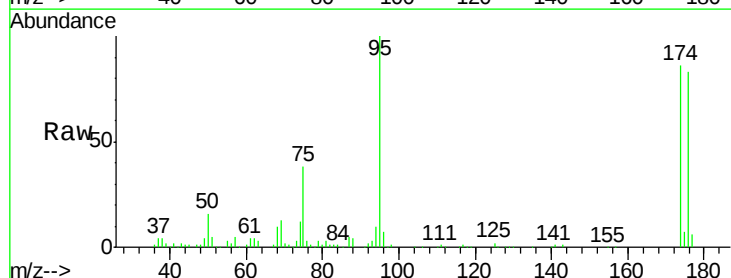
Instrument :
 MSVOA_D
 ClientSampleId :

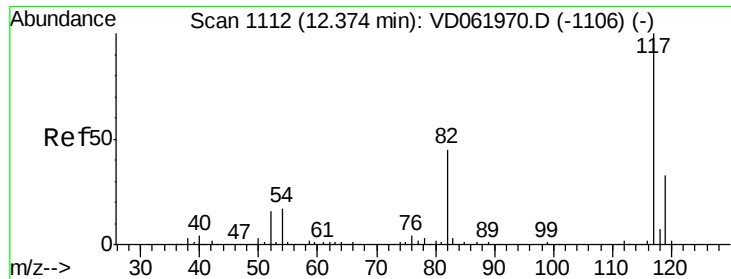
Tot Ion: 97 Resp: 3122
 Ion Ratio Lower Upper
 97 100
 83 0.0 65.7 98.5#
 85 0.0 45.6 68.4#
 99 0.0 48.4 72.6#



#62
 4-Bromofluorobenzene
 Concen: N.D. ug/l
 RT: 13.56 min Scan# 1233
 Delta R.T. 0.00 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

Tgt Ion: 95 Resp: 236856
 Ion Ratio Lower Upper
 95 100
 174 85.7 0.0 181.8
 176 82.6 0.0 174.4

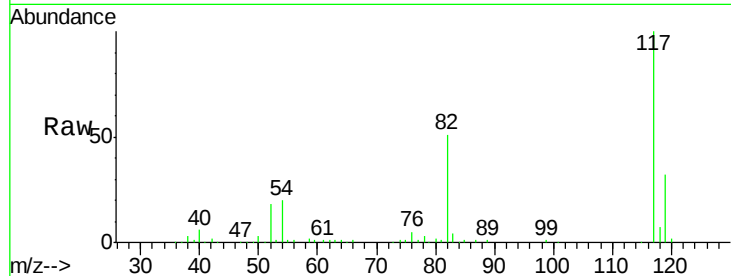




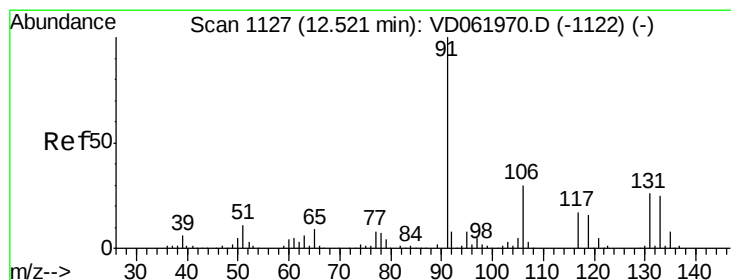
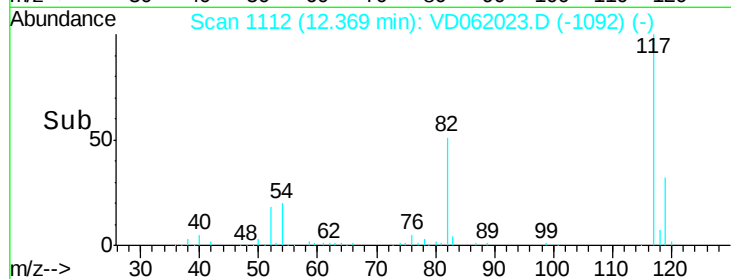
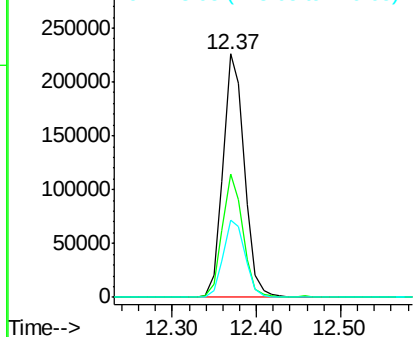
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.37 min Scan# 1112
Delta R.T. 0.00 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:117 Resp: 397227
Ion Ratio Lower Upper
117 100
82 50.6 36.2 54.2
119 31.9 26.2 39.4

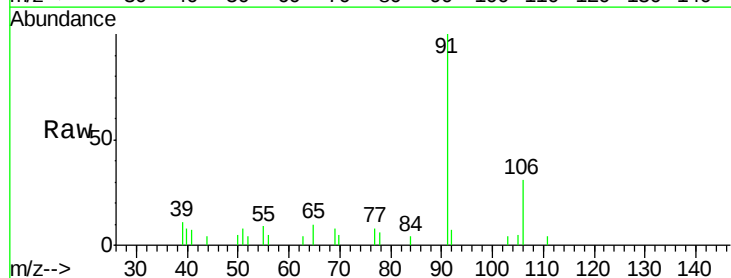


Abundance Ion 116.95 (116.65 to 117.65): V
Ion 82.05 (81.75 to 82.75): VDC
Ion 118.95 (118.65 to 119.65): V

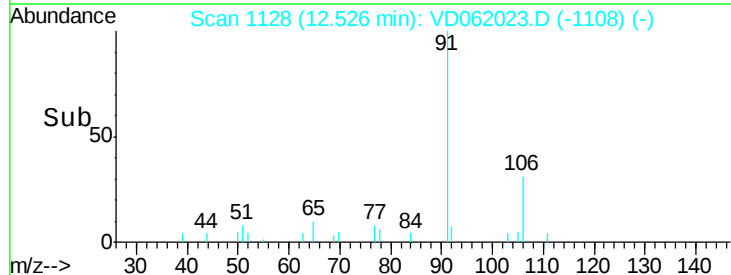
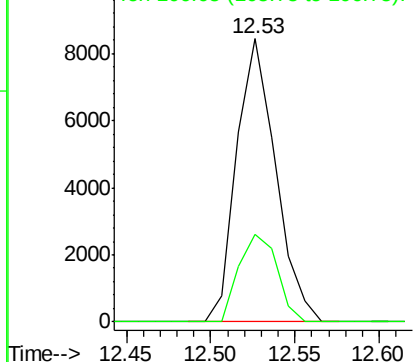


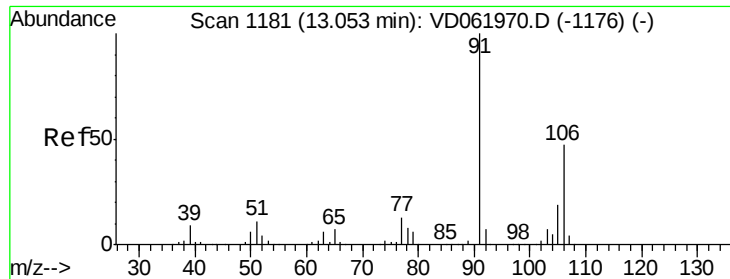
#67
Ethyl Benzene
Concen: 1.106 ug/l
RT: 12.53 min Scan# 1128
Delta R.T. 0.00 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Tgt Ion: 91 Resp: 13553
Ion Ratio Lower Upper
91 100
106 31.0 24.7 37.1



Abundance Ion 91.00 (90.70 to 91.70): VDC
Ion 106.05 (105.75 to 106.75): V

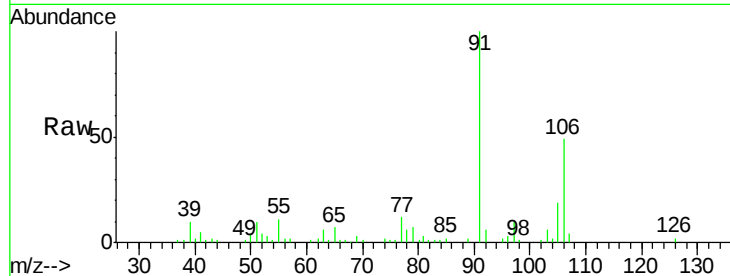




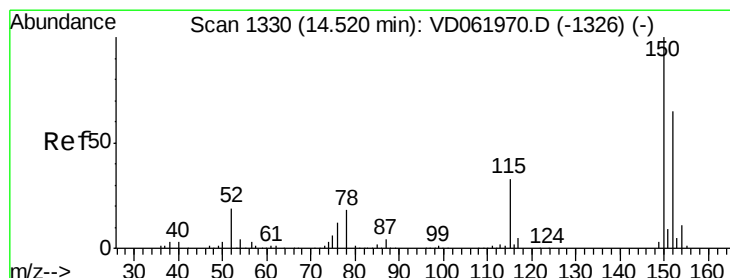
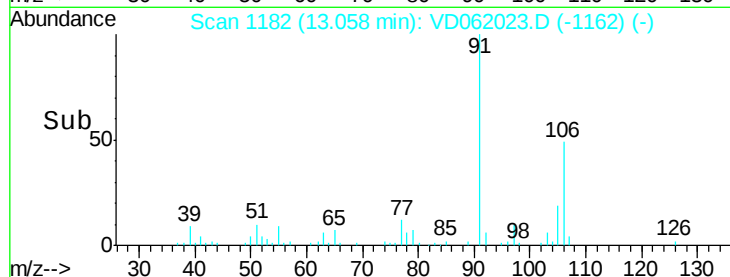
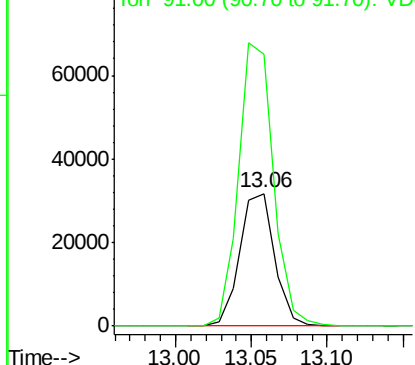
#69
o-Xylene
Concen: 12.554 ug/l
RT: 13.06 min Scan# 1182
Delta R.T. 0.00 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Instrument :
MSVOA_D
ClientSampleId :

Tot Ion:106 Resp: 50863
Ion Ratio Lower Upper
106 100
91 205.7 106.7 319.9

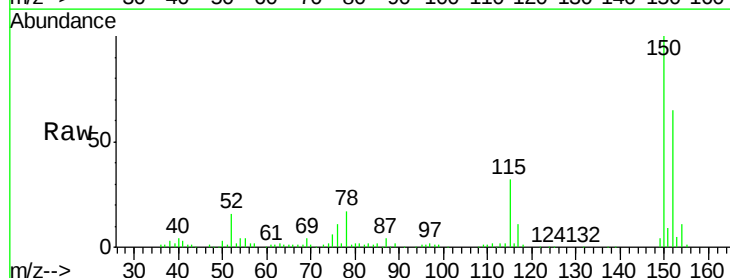


Abundance Ion 106.05 (105.75 to 106.75): V
Ion 91.00 (90.70 to 91.70): V

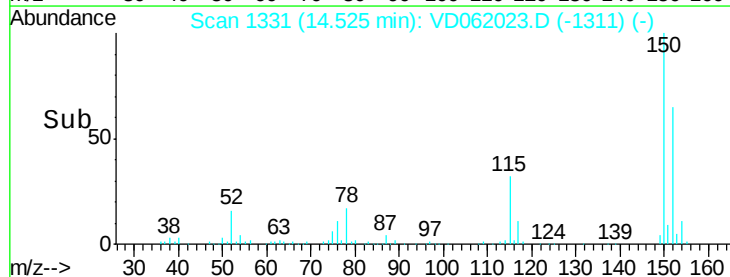
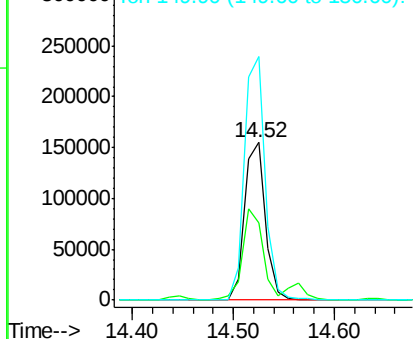


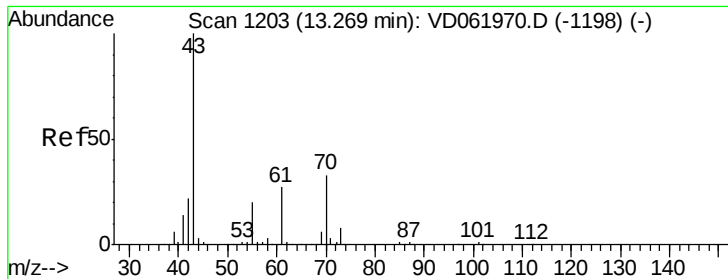
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 14.52 min Scan# 1331
Delta R.T. 0.00 min
Lab File: VD062023.D
Acq: 25 Apr 2019 6:20

Tgt Ion:152 Resp: 224413
Ion Ratio Lower Upper
152 100
115 49.0 30.9 92.7
150 154.7 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-amvl acetate

Concen: 5.692 ug/l

RT: 13.23 min Scan# 1199

Delta R.T. -0.04 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

ClientSampleId :

Tot Ion: 43 Resp: 21945

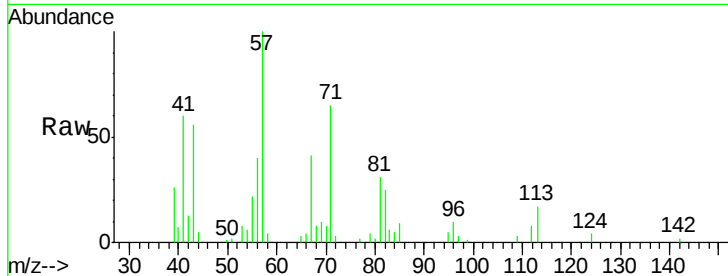
Ion Ratio Lower Upper

43 100

70 14.4 24.2 36.4#

55 39.6 16.0 24.0#

61 0.0 21.6 32.4#

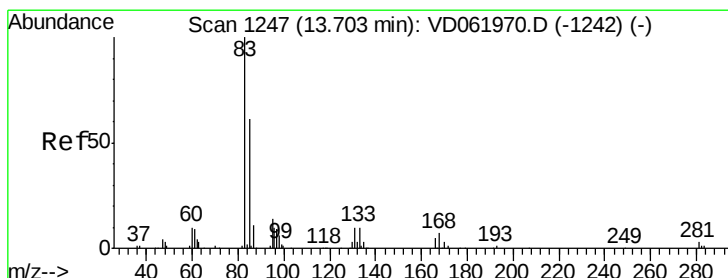
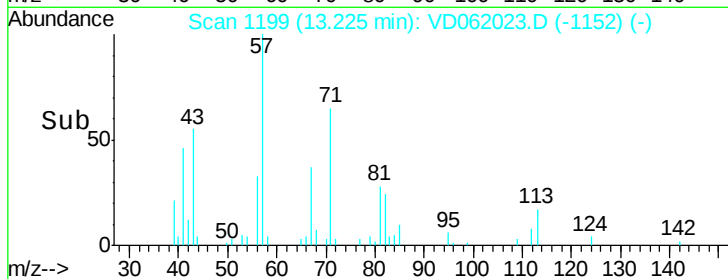
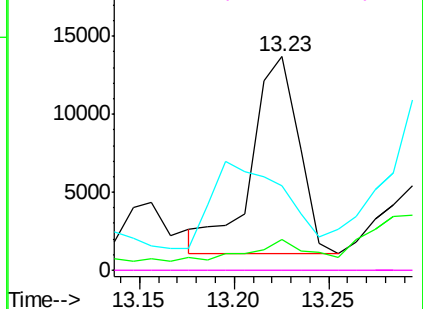


Abundance Ion 42.95 (42.65 to 43.65): VDC

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: 5.001 ug/l

RT: 13.72 min Scan# 1249

Delta R.T. 0.02 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

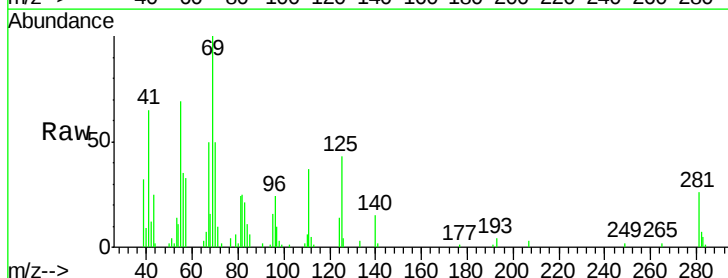
Tgt Ion: 83 Resp: 14672

Ion Ratio Lower Upper

83 100

131 0.0 5.0 14.9#

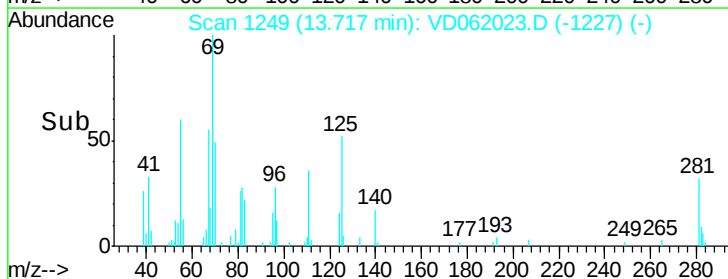
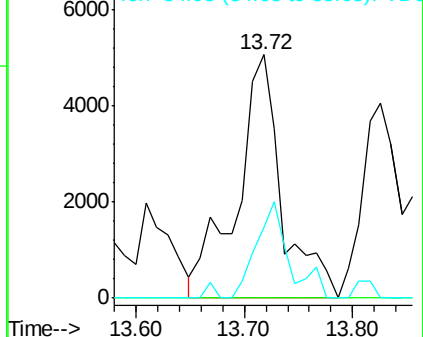
85 28.9 32.6 97.7#

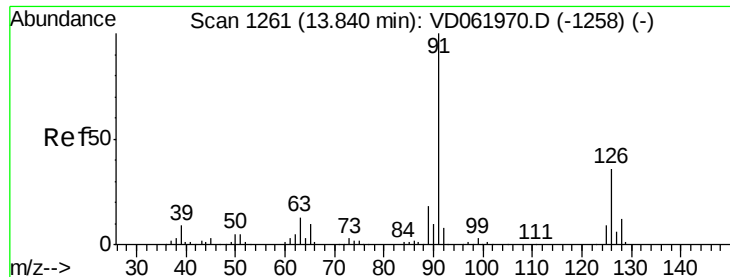


Abundance Ion 82.95 (82.65 to 83.65): VDC

Ion 130.90 (130.60 to 131.60): V

Ion 84.95 (84.65 to 85.65): VDC

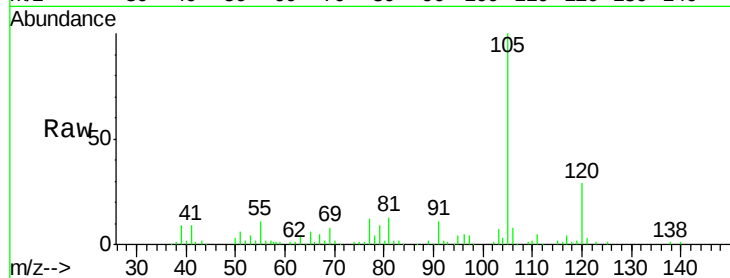




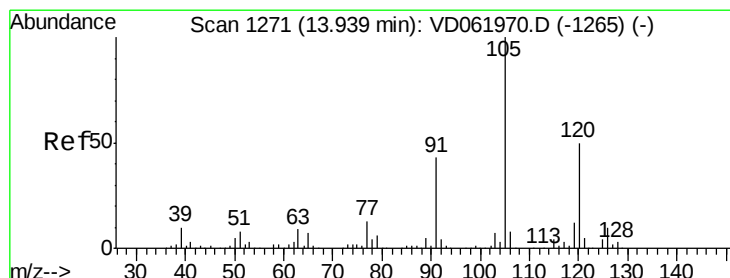
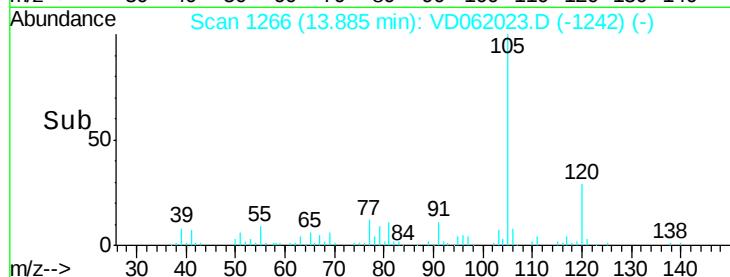
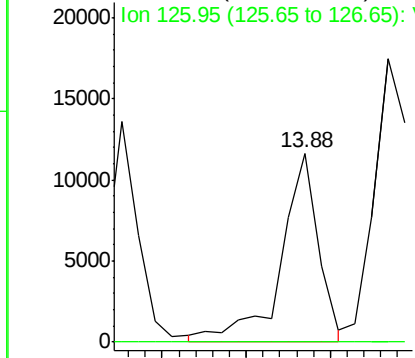
#79
 2-Chlorotoluene
 Concen: 1.734 ug/l
 RT: 13.88 min Scan# 1266
 Delta R.T. 0.04 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

Instrument :
 MSVOA_D
 ClientSampleId :

Tot Ion: 91 Resp: 17997
 Ion Ratio Lower Upper
 91 100
 126 0.0 18.6 55.8#

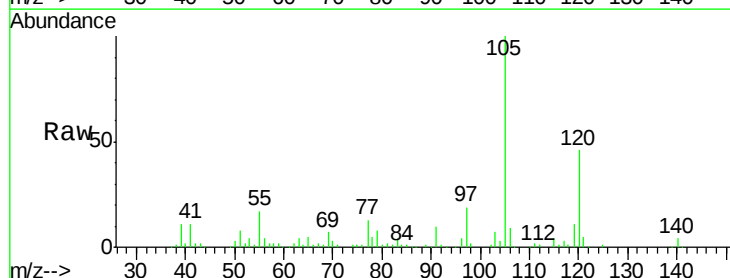


Abundance Ion 91.00 (90.70 to 91.70): VD061970.D (-1258) (-)
 Ion 125.95 (125.65 to 126.65): VD061970.D (-1258) (-)

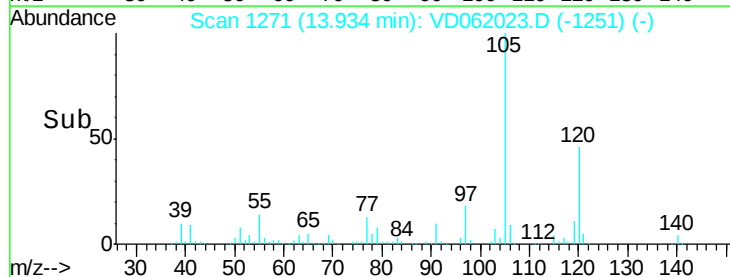
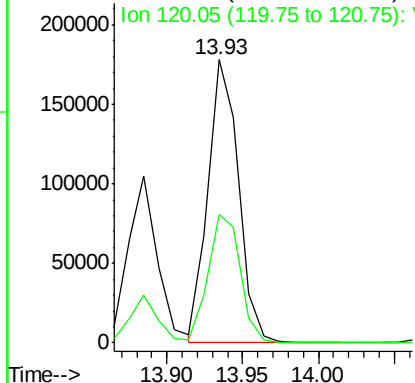


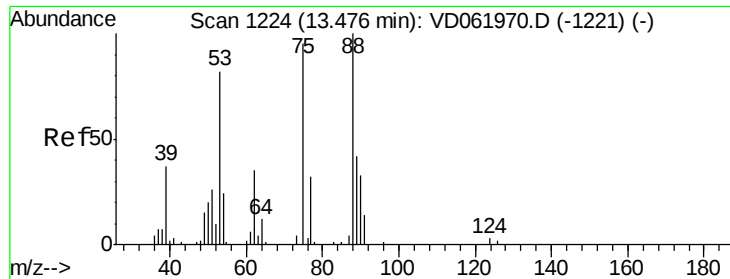
#80
 1,3,5-Trimethylbenzene
 Concen: 20.991 ug/l
 RT: 13.93 min Scan# 1271
 Delta R.T. 0.00 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

Tgt Ion:105 Resp: 250564
 Ion Ratio Lower Upper
 105 100
 120 45.6 24.0 72.0



Abundance Ion 105.05 (104.75 to 105.75): VD061970.D (-1265) (-)
 Ion 120.05 (119.75 to 120.75): VD061970.D (-1265) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 101.256 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.08 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

ClientSampleId :

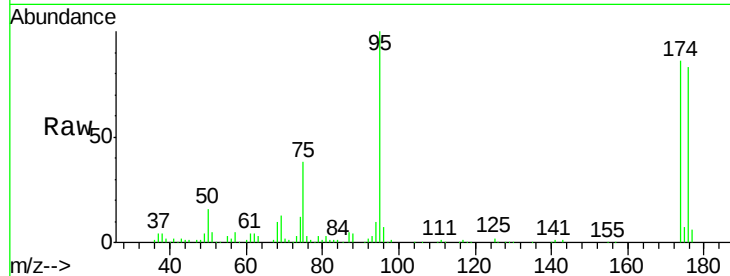
Tot Ion: 75 Resp: 87442

Ion Ratio Lower Upper

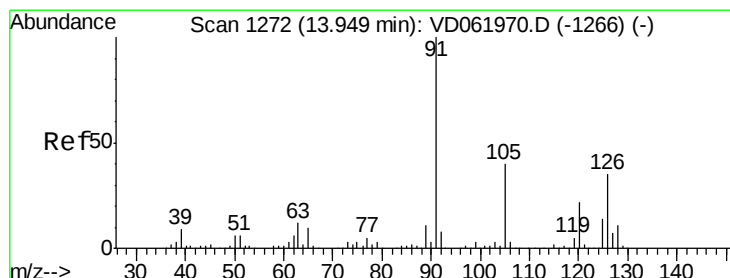
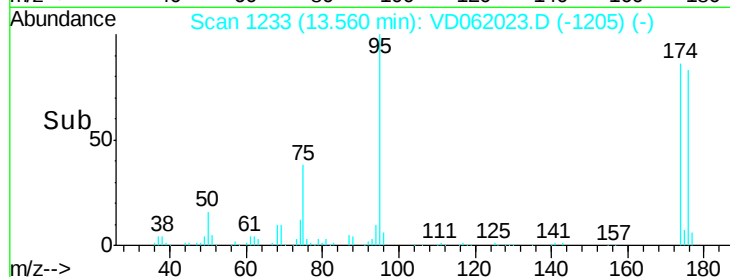
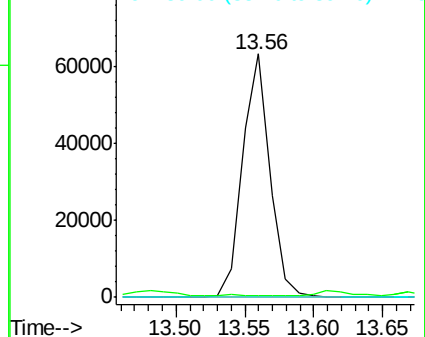
75 100

53 0.9 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: 2.337 ug/l

RT: 13.93 min Scan# 1271

Delta R.T. -0.02 min

Lab File: VD062023.D

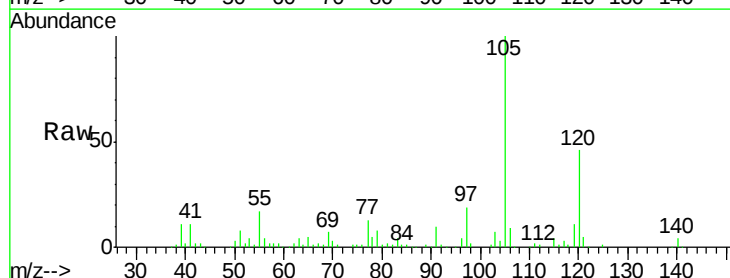
Acq: 25 Apr 2019 6:20

Tgt Ion: 91 Resp: 26720

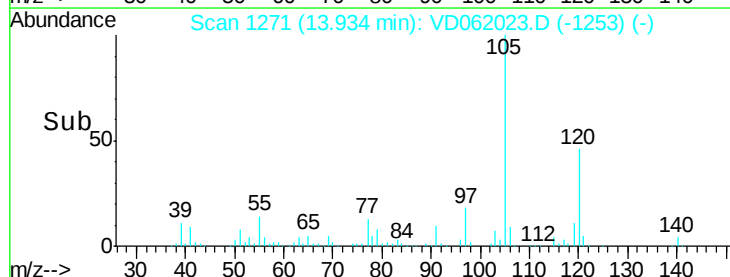
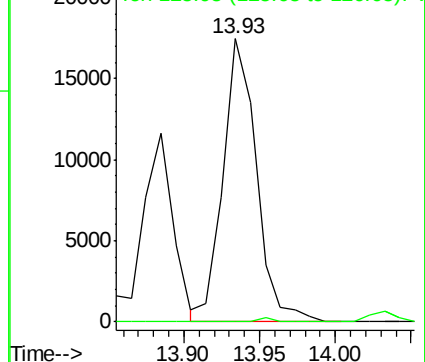
Ion Ratio Lower Upper

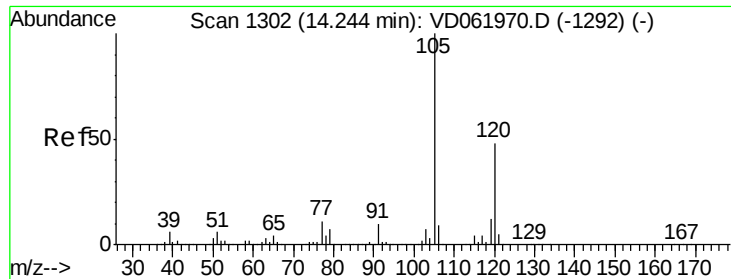
91 100

126 0.0 19.1 57.5#



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

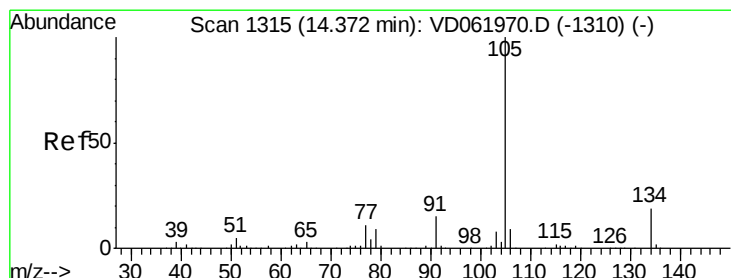
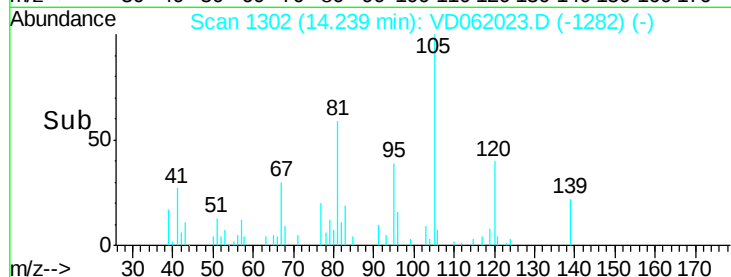
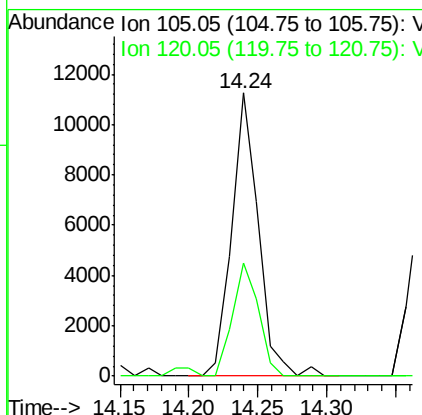
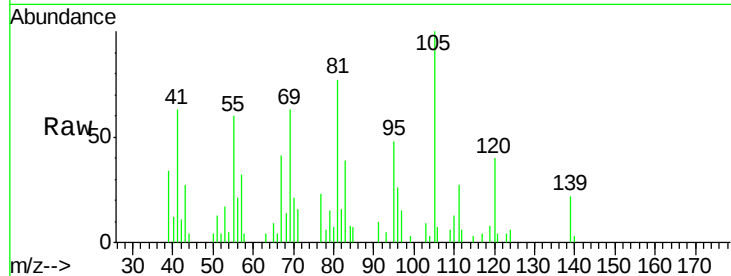




#84
 1,2,4-Trimethylbenzene
 Concen: 1.327 ug/l
 RT: 14.24 min Scan# 1302
 Delta R.T. 0.00 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

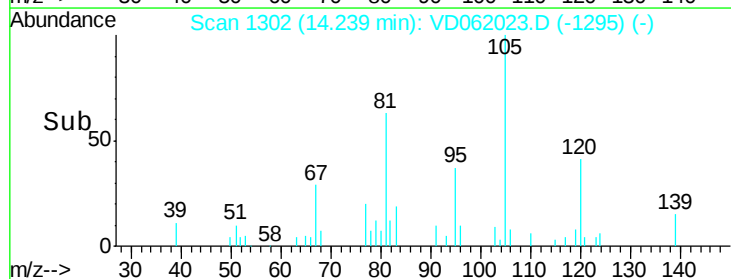
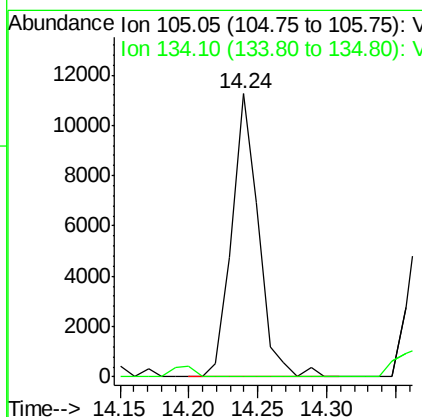
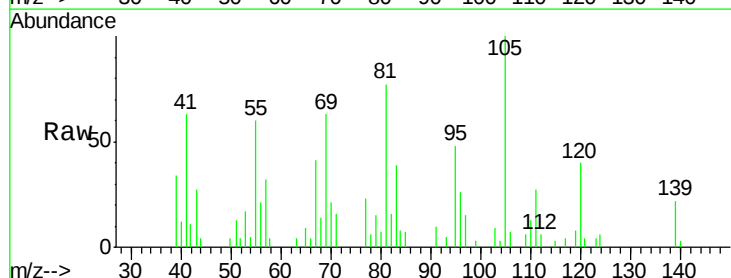
Instrument :
 MSVOA_D
 ClientSampled :

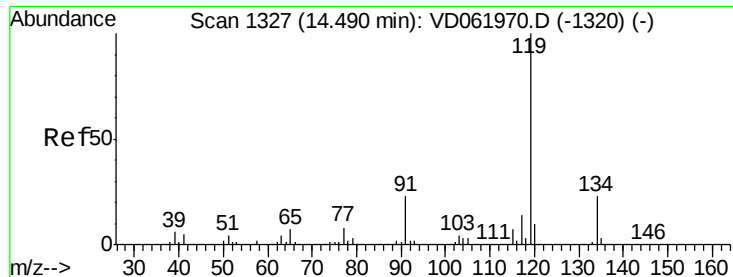
Tot Ion:105 Resp: 15130
 Ion Ratio Lower Upper
 105 100
 120 40.1 23.1 69.2



#85
 sec-Butylbenzene
 Concen: 1.013 ug/l
 RT: 14.24 min Scan# 1302
 Delta R.T. -0.13 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

Tgt Ion:105 Resp: 15130
 Ion Ratio Lower Upper
 105 100
 134 0.0 8.9 26.7#

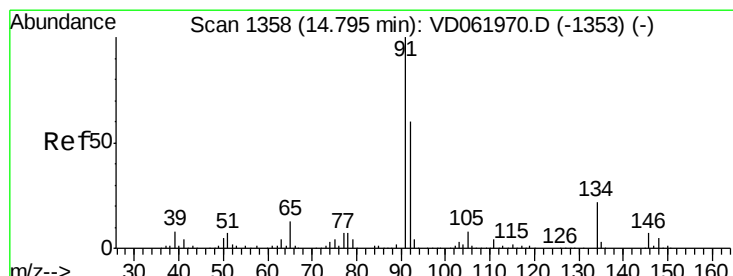
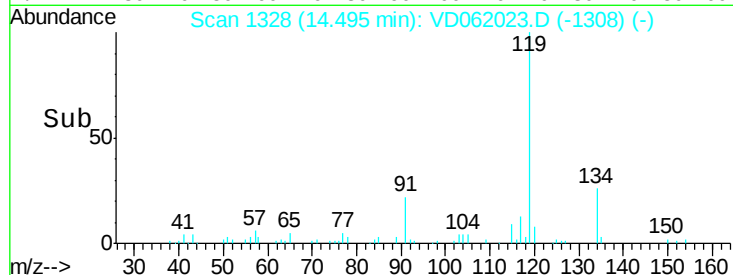
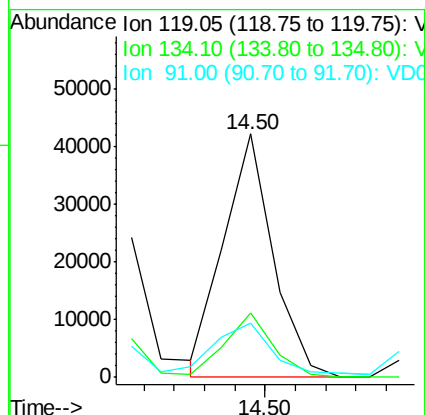
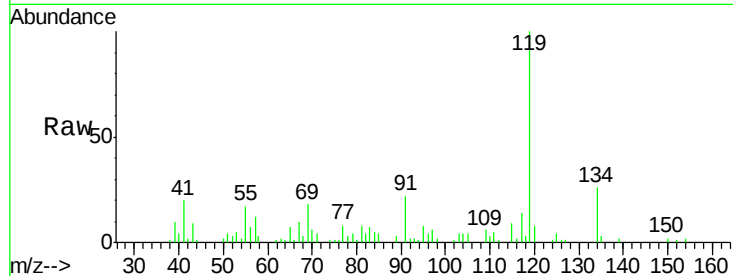




#86
 p-Isopropyltoluene
 Concen: 3.576 ug/l
 RT: 14.50 min Scan# 1328
 Delta R.T. 0.00 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

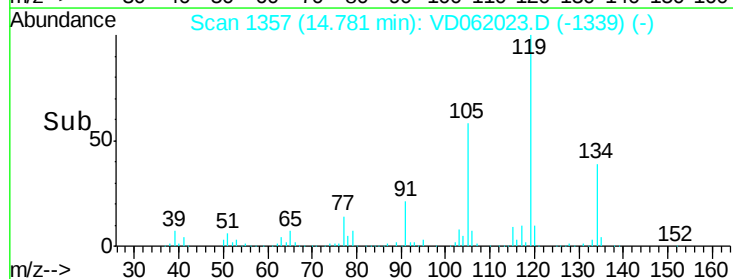
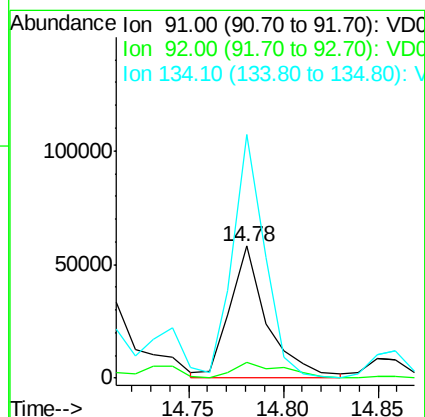
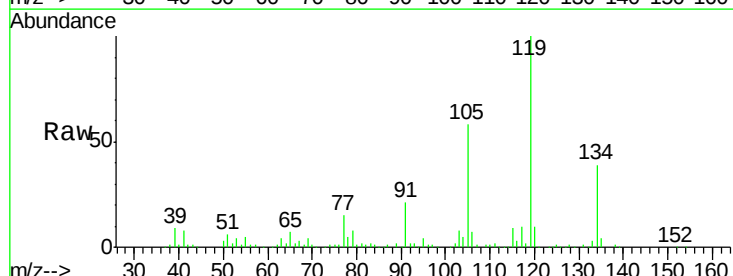
Instrument :
 MSVOA_D
 ClientSampleID :

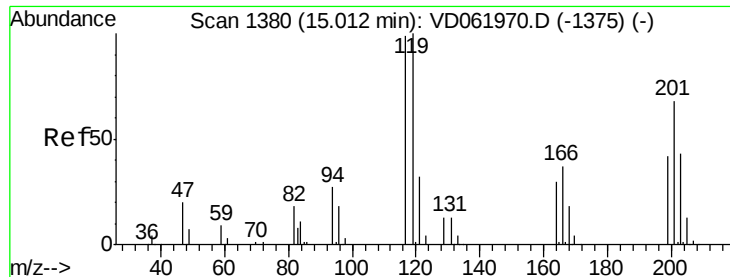
Tot Ion: 119 Resp: 47823
 Ion Ratio Lower Upper
 119 100
 134 26.4 12.8 38.3
 91 22.4 10.7 32.1



#89
 n-Butylbenzene
 Concen: 6.534 ug/l
 RT: 14.78 min Scan# 1357
 Delta R.T. -0.02 min
 Lab File: VD062023.D
 Acq: 25 Apr 2019 6:20

Tgt Ion: 91 Resp: 78437
 Ion Ratio Lower Upper
 91 100
 92 11.6 30.3 91.0#
 134 184.5 14.5 43.6#





#90

Hexachloroethane

Concen: 25.617 ug/l

RT: 15.10 min Scan# 1389

Delta R.T. 0.09 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

Instrument :

MSVOA_D

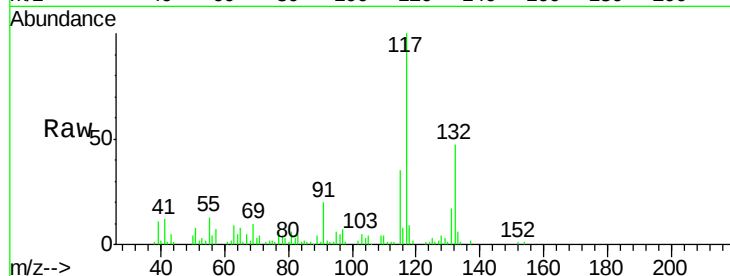
ClientSampleId :

Tot Ion:117 Resp: 92627

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

150000

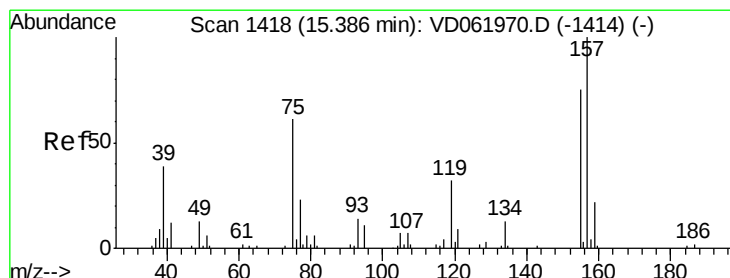
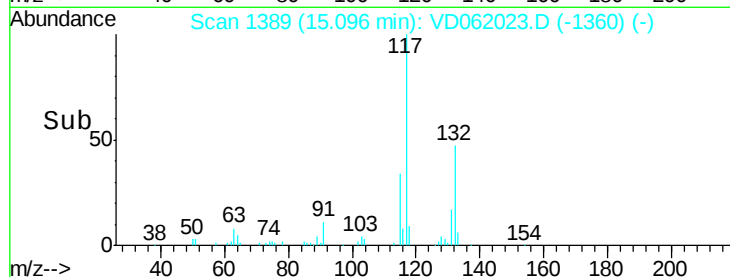
100000

50000

0

15.00 15.05 15.10

Time-->



#92

1,2-Dibromo-3-Chloropropane

Concen: 5.981 ug/l

RT: 15.38 min Scan# 1418

Delta R.T. 0.00 min

Lab File: VD062023.D

Acq: 25 Apr 2019 6:20

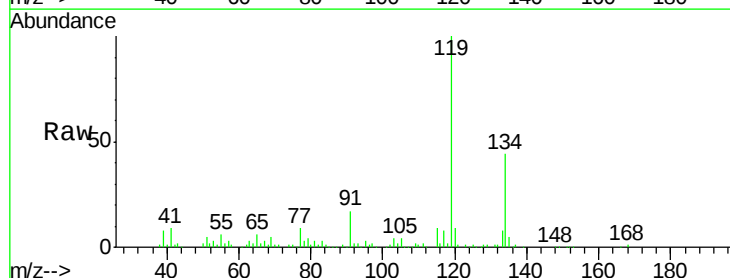
Tgt Ion: 75 Resp: 1530

Ion Ratio Lower Upper

75 100

155 0.0 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

2000

1500

1000

500

0

15.36 15.38 15.40

Time-->

