

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD053119\
 Data File : VD062568.D
 Acq On : 31 May 2019 17:14
 Operator : VA/AP
 Sample : K3097-08
 Misc : 5.03g/5ml/MSVOA D/SOIL
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 20190428-HR-8

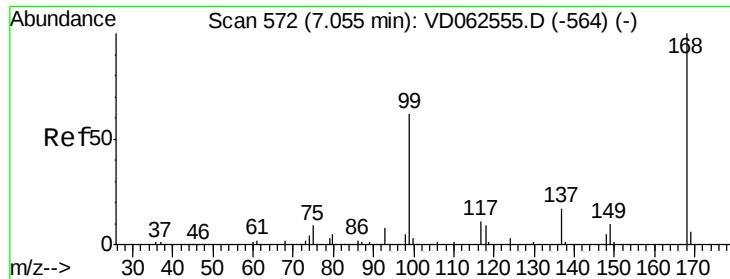
Quant Time: May 31 23:27:42 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D053019S.M
 Quant Title : SW846 8260
 QLast Update : Fri May 31 02:08:29 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.06	168	3984	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.23	114	6622	50.00	ug/l	0.00
63) Chlorobenzene-d5	12.38	117	6513	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.53	152	2470	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	7.46	65	3019	64.63	ug/l	-0.01
Spiked Amount	50.000		Recovery	=	129.26%	
35) Dibromofluoromethane	6.93	113	2106	34.90	ug/l	-0.01
Spiked Amount	50.000		Recovery	=	69.80%	
50) Toluene-d8	10.42	98	4159	31.46	ug/l	0.00
Spiked Amount	50.000		Recovery	=	62.92%	
62) 4-Bromofluorobenzene	13.56	95	1905	31.95	ug/l	0.00
Spiked Amount	50.000		Recovery	=	63.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.15	94	682	59.500	ug/l #	12
6) Chloroethane	2.10	64	214	12.929	ug/l #	45
10) Methyl Iodide	3.34	142	441	8.823	ug/l #	27
16) Acetone	3.21	43	767	83.567	ug/l #	60
18) Methyl Acetate	3.56	43	206	13.751	ug/l #	63
41) Methacrylonitrile	6.45	41	183	5.596	ug/l #	34
43) Isopropyl Acetate	9.27	43	182	5.262	ug/l #	50
46) Dibromomethane	9.07	93	194	7.281	ug/l #	2
51) 4-Methyl-2-Pentanone	10.27	43	207	8.578	ug/l #	42
55) 1,1,2-Trichloroethane	11.23	97	411	14.185	ug/l #	16
59) 2-Hexanone	11.49	43	215	12.702	ug/l #	32
67) Ethyl Benzene	12.53	91	591	2.542	ug/l #	47
68) m/p-Xylenes	12.67	106	195	2.425	ug/l #	31
74) N-amyl acetate	13.15	43	252	6.069	ug/l #	51
77) Bromobenzene	13.82	156	232	5.196	ug/l #	1
78) n-propylbenzene	13.79	91	495	2.637	ug/l #	57
79) 2-Chlorotoluene	13.90	91	254	2.334	ug/l #	41
80) 1,3,5-Trimethylbenzene	13.90	105	248	1.782	ug/l #	34
81) trans-1,4-Dichloro-2-buten	13.56	75	958	112.825	ug/l #	5
82) 4-Chlorotoluene	13.90	91	254	1.949	ug/l #	41
84) 1,2,4-Trimethylbenzene	14.25	105	1272	8.971	ug/l	95
85) sec-Butylbenzene	14.25	105	1272	7.734	ug/l #	60

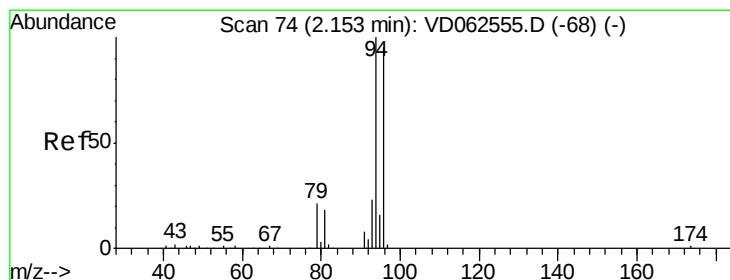
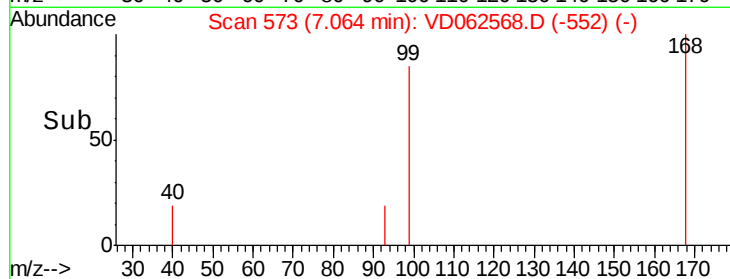
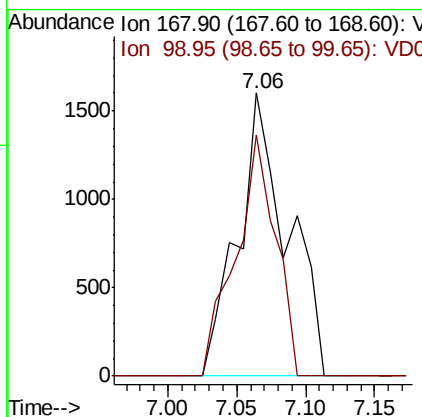
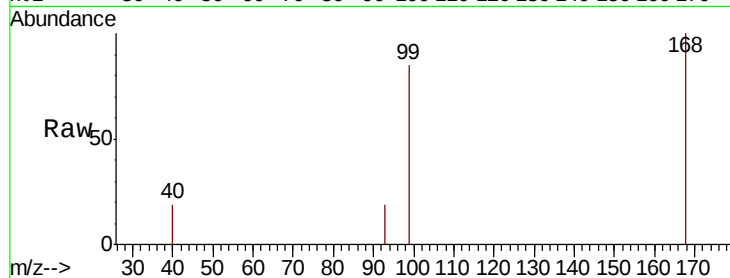
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Pentafluorobenzene
Concen: 50.000 ug/l
RT: 7.06 min Scan# 573
Delta R.T. 0.01 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

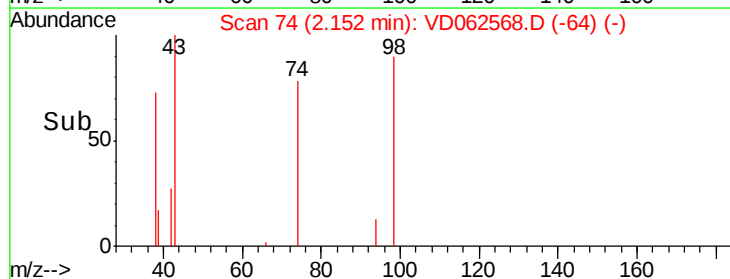
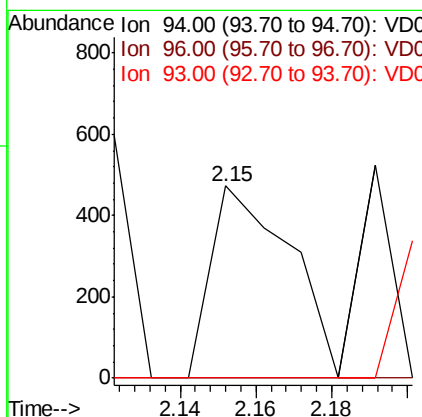
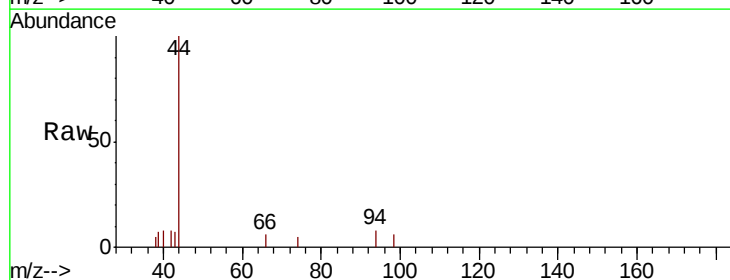
Instrument :
MSVOA_D
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20190428-HR-8

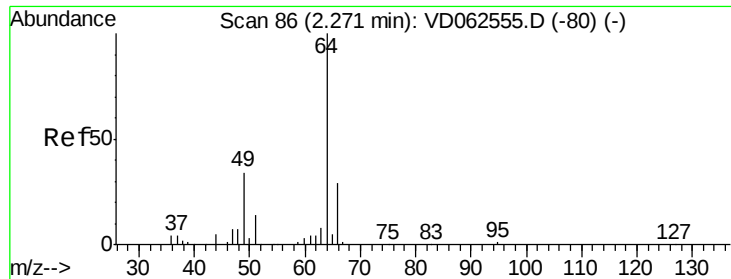
Tot Ion:168 Resp: 3984
Ion Ratio Lower Upper
168 100
99 85.3 50.8 76.2#



#5
Bromomethane
Concen: 59.500 ug/l
RT: 2.15 min Scan# 74
Delta R.T. -0.00 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

Tgt Ion: 94 Resp: 682
Ion Ratio Lower Upper
94 100
96 0.0 76.2 114.4#
93 0.0 18.4 27.6#





#6

Chloroethane

Concen: 12.929 ug/l

RT: 2.10 min Scan# 69

Delta R.T. -0.17 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

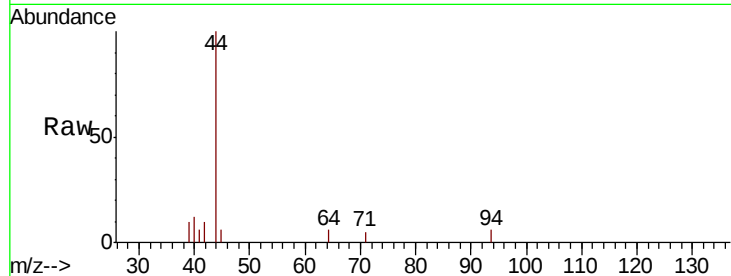
20190428-HR-8

Tot Ion: 64 Resp: 214

Ion Ratio Lower Upper

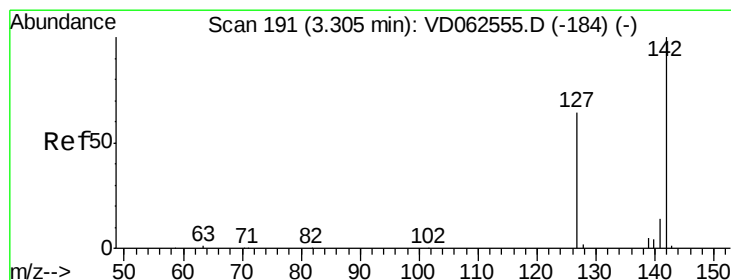
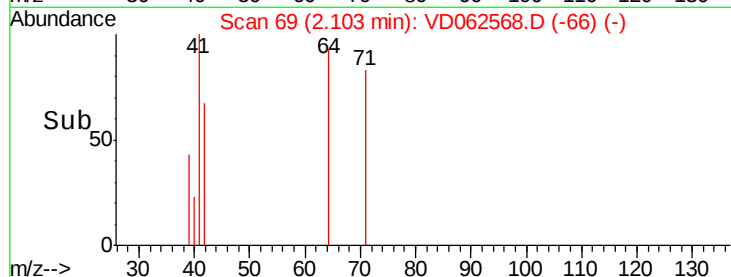
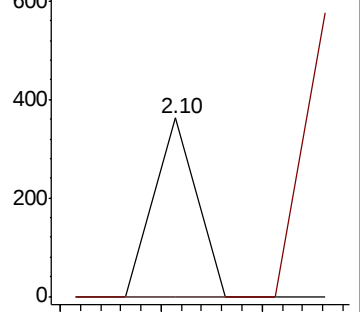
64 100

66 0.0 23.4 35.2#



Abundance Ion 63.95 (63.65 to 64.65): VDC

Ion 65.90 (65.60 to 66.60): VDC



#10

Methyl Iodide

Concen: 8.823 ug/l

RT: 3.34 min Scan# 195

Delta R.T. 0.04 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

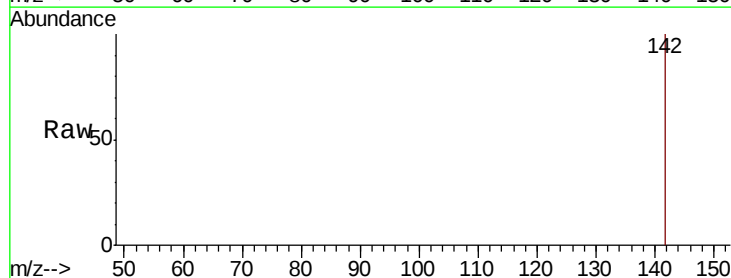
Tgt Ion: 142 Resp: 441

Ion Ratio Lower Upper

142 100

127 0.0 51.2 76.8#

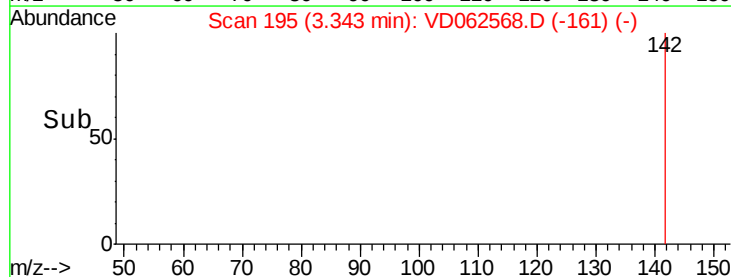
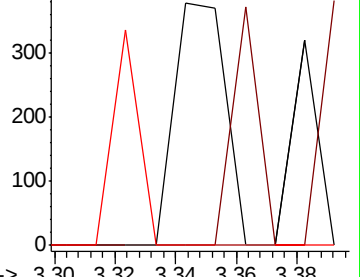
141 0.0 11.0 16.4#

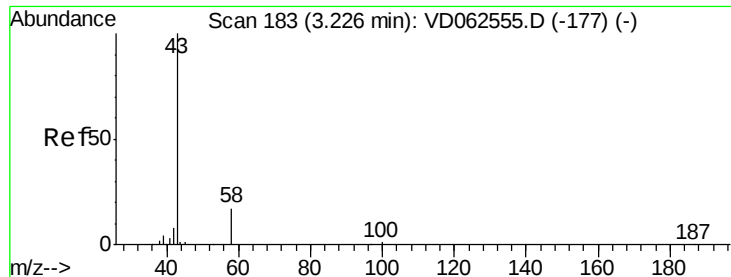


Abundance Ion 141.85 (141.55 to 142.55): V

Ion 126.80 (126.50 to 127.50): V

Ion 140.85 (140.55 to 141.55): V

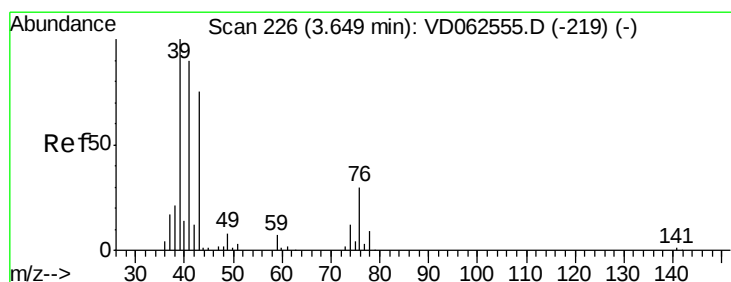
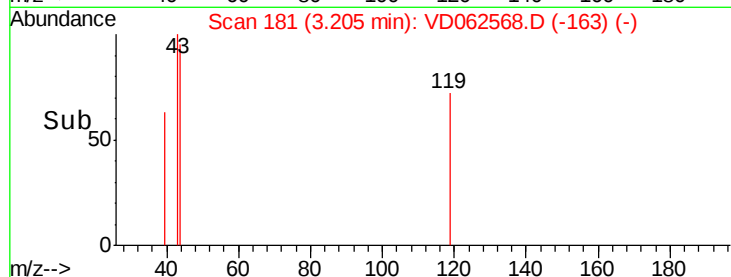
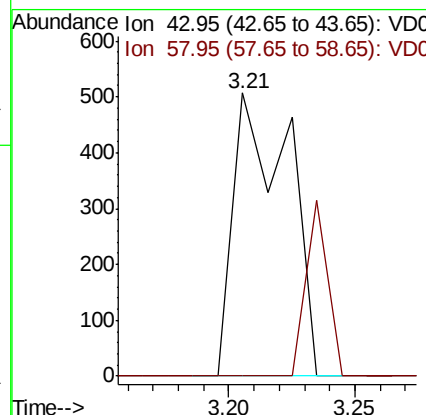
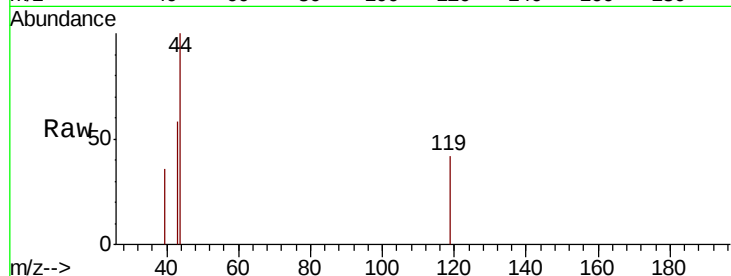




#16
Acetone
Concen: 83.567 ug/l
RT: 3.21 min Scan# 181
Delta R.T. -0.02 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

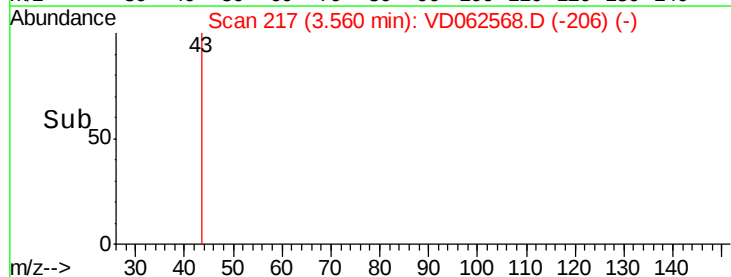
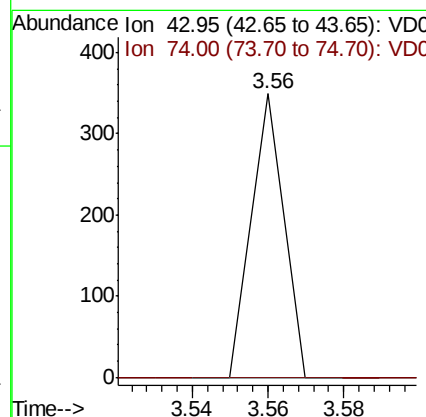
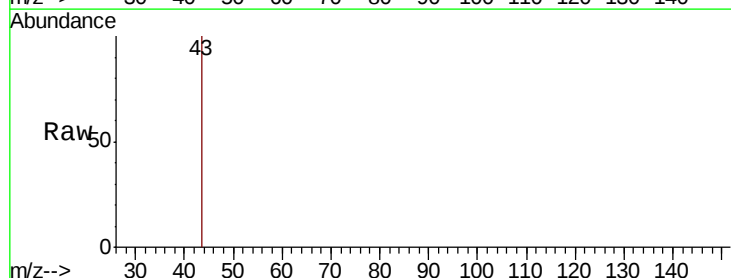
Instrument :
MSVOA_D
ClientSampleId :
20190428-HR-8

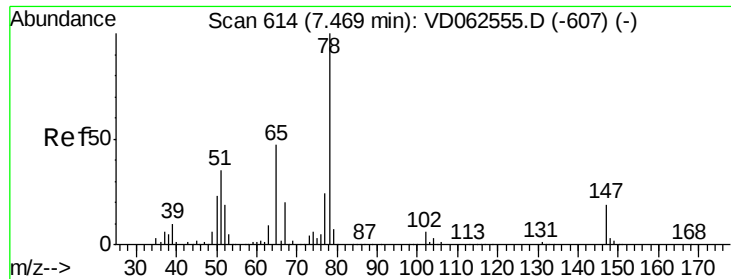
Tot Ion: 43 Resp: 767
Ion Ratio Lower Upper
43 100
58 0.0 13.8 20.8#



#18
Methyl Acetate
Concen: 13.751 ug/l
RT: 3.56 min Scan# 217
Delta R.T. -0.09 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

Tgt Ion: 43 Resp: 206
Ion Ratio Lower Upper
43 100
74 0.0 12.5 18.7#

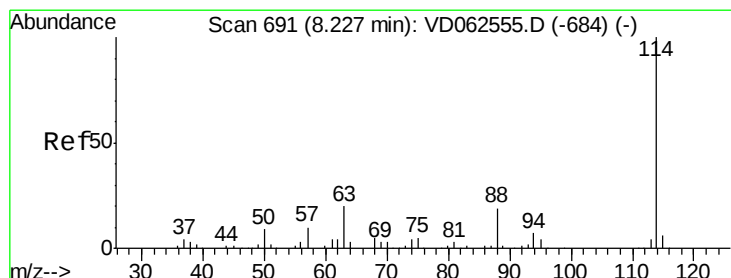
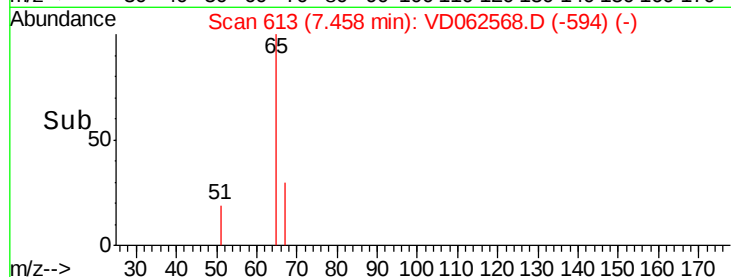
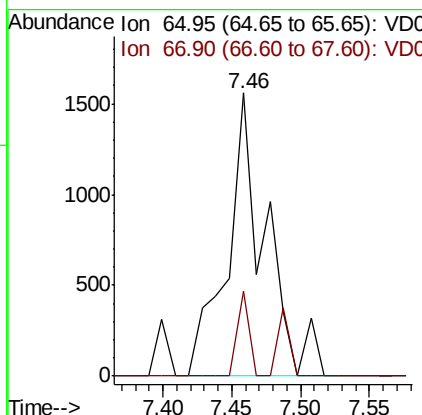
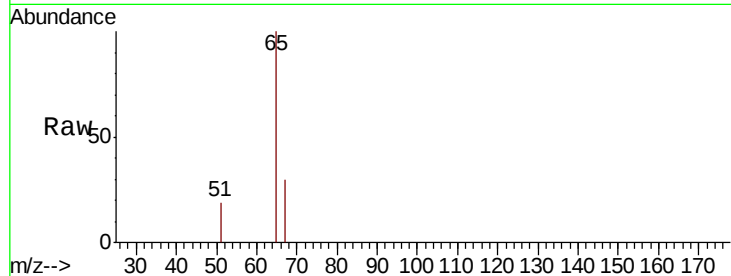




#33
 1,2-Dichloroethane-d4
 Concen: 64.628 ug/l
 RT: 7.46 min Scan# 613
 Delta R.T. -0.01 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

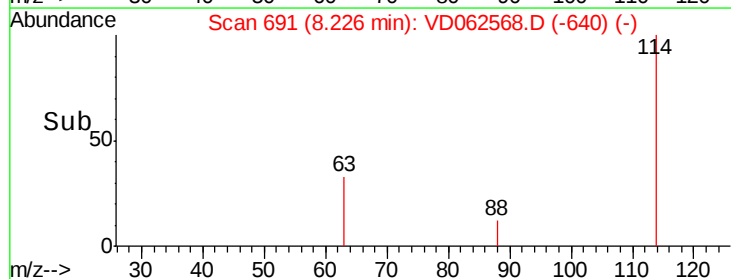
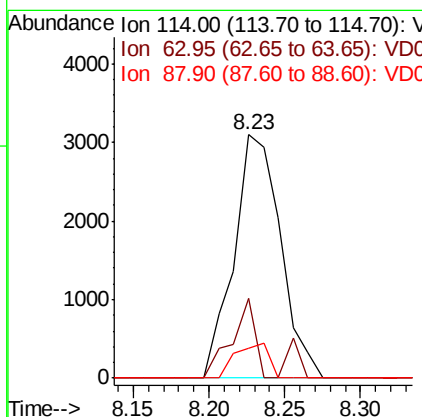
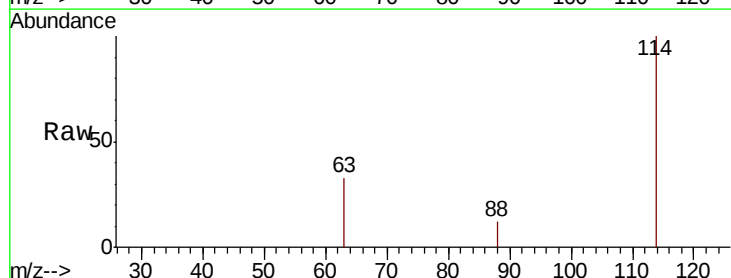
Instrument :
 MSVOA_D
 ClientSampleId :
 20190428-HR-8

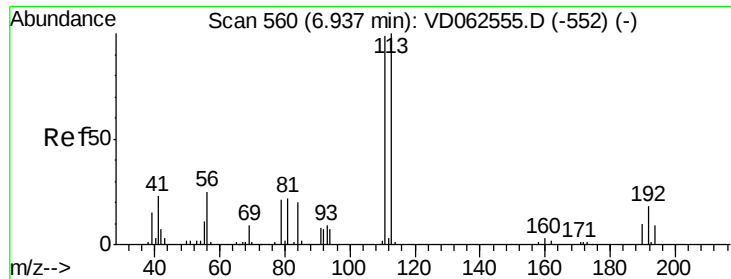
Tot Ion: 65 Resp: 3019
 Ion Ratio Lower Upper
 65 100
 67 29.8 0.0 83.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.23 min Scan# 691
 Delta R.T. -0.00 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Tgt Ion: 114 Resp: 6622
 Ion Ratio Lower Upper
 114 100
 63 33.0 0.0 40.6
 88 12.1 0.0 37.6





#35

Dibromofluoromethane

Concen: 34.900 ug/l

RT: 6.93 min Scan# 559

Delta R.T. -0.01 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

20190428-HR-8

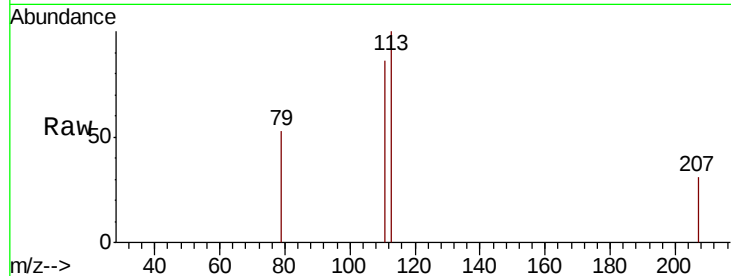
Tot Ion:113 Resp: 2106

Ion Ratio Lower Upper

113 100

111 86.4 78.8 118.2

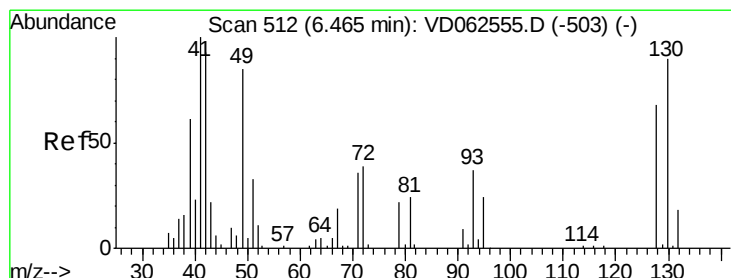
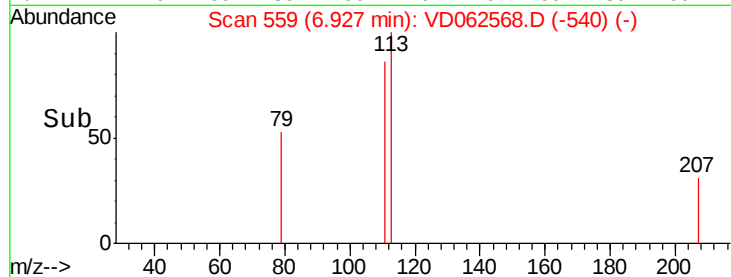
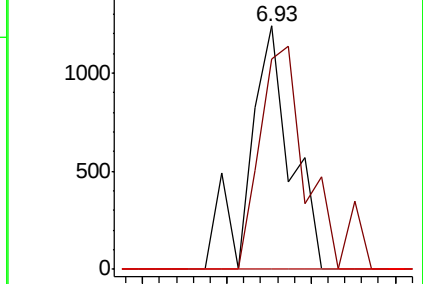
192 0.0 14.6 22.0#



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



#41

Methacrylonitrile

Concen: 5.596 ug/l

RT: 6.45 min Scan# 511

Delta R.T. -0.01 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Tgt Ion: 41 Resp: 183

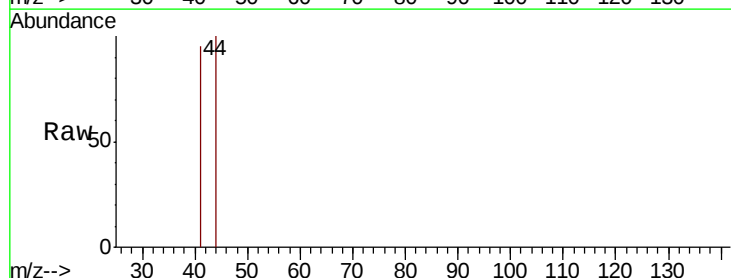
Ion Ratio Lower Upper

41 100

39 0.0 49.0 73.6#

67 0.0 15.5 23.3#

52 0.0 8.9 13.3#

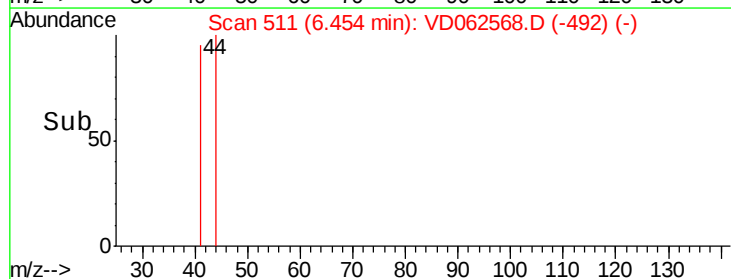
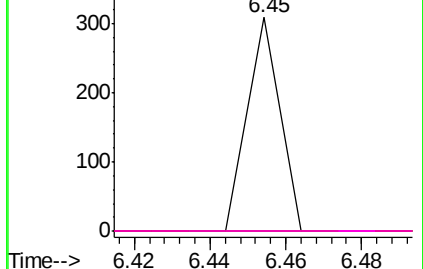


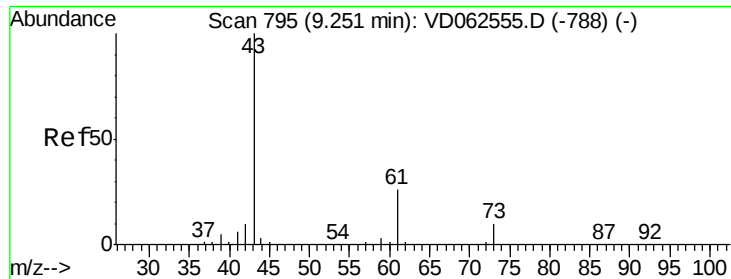
Abundance Ion 40.95 (40.65 to 41.65): VDC

Ion 38.95 (38.65 to 39.65): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC





#43

Isopropyl Acetate

Concen: 5.262 ug/l

RT: 9.27 min Scan# 797

Delta R.T. 0.02 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

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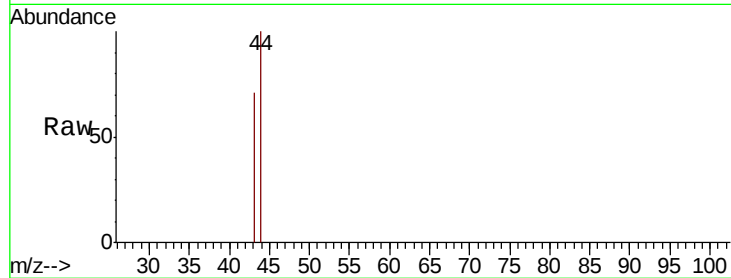
Tot Ion: 43 Resp: 182

Ion Ratio Lower Upper

43 100

61 0.0 20.5 30.7#

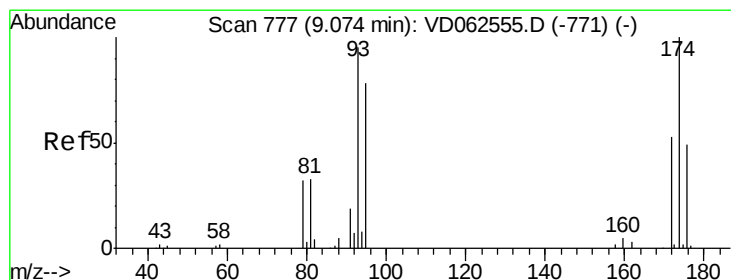
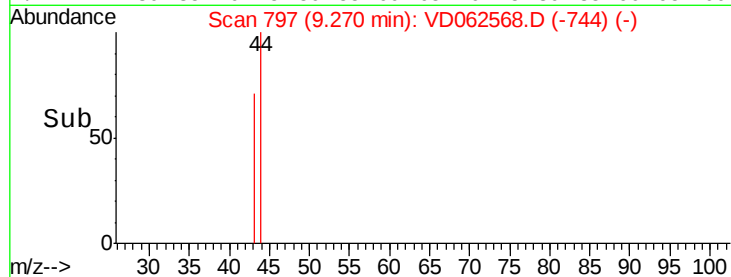
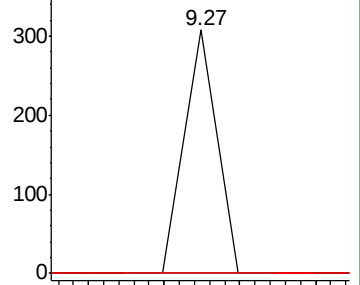
87 0.0 0.2 0.2#



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



#46

Dibromomethane

Concen: 7.281 ug/l

RT: 9.07 min Scan# 777

Delta R.T. -0.00 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

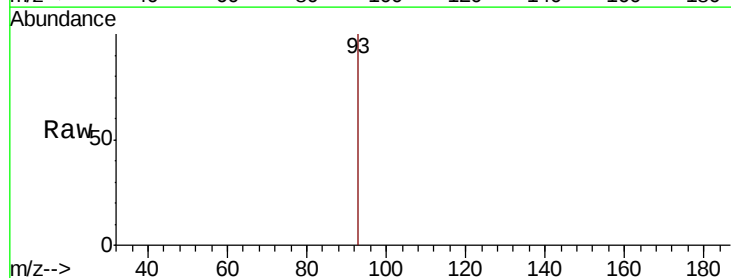
Tgt Ion: 93 Resp: 194

Ion Ratio Lower Upper

93 100

95 0.0 66.1 99.1#

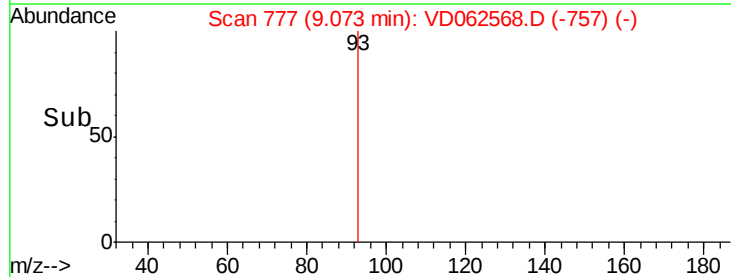
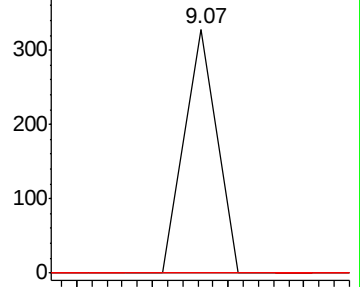
174 0.0 84.2 126.4#

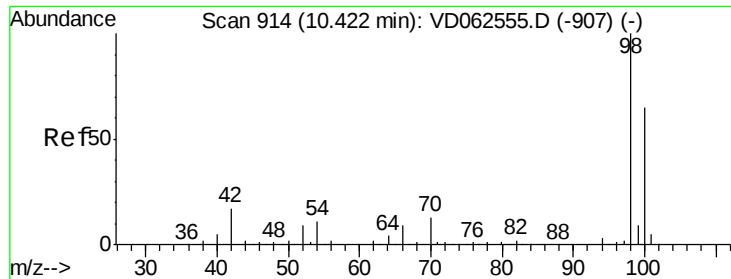


Abundance Ion 92.90 (92.60 to 93.60): VDC

Ion 94.90 (94.60 to 95.60): VDC

Ion 173.80 (173.50 to 174.50): V

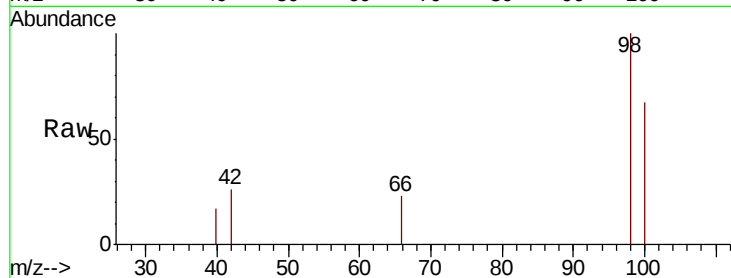




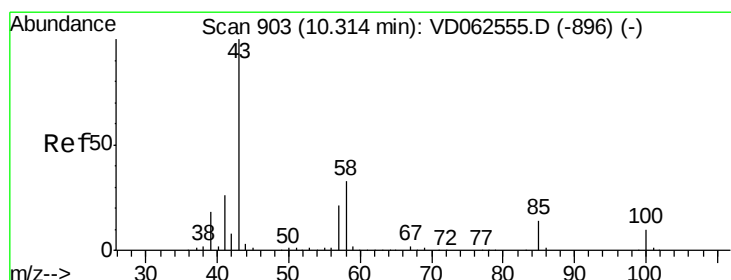
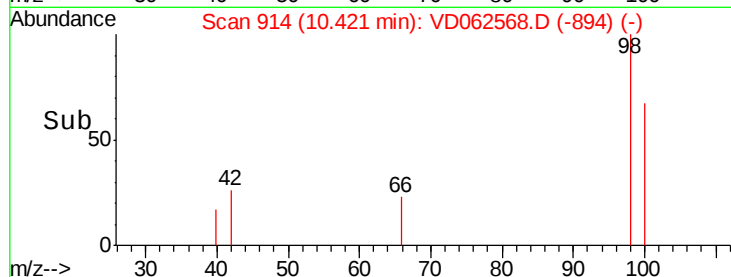
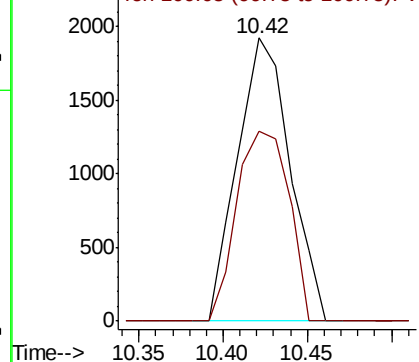
#50
Toluene-d8
Concen: 31.456 ug/l
RT: 10.42 min Scan# 914
Delta R.T. -0.00 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

Instrument :
MSVOA_D
ClientSampleId :
20190428-HR-8

Tot Ion: 98 Resp: 4159
Ion Ratio Lower Upper
98 100
100 67.0 52.3 78.5

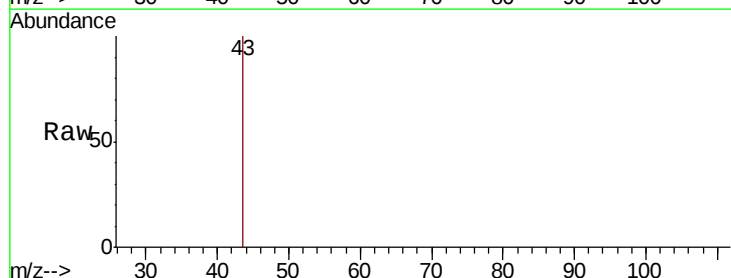


Abundance Ion 98.05 (97.75 to 98.75): VDC
Ion 100.05 (99.75 to 100.75): VDC

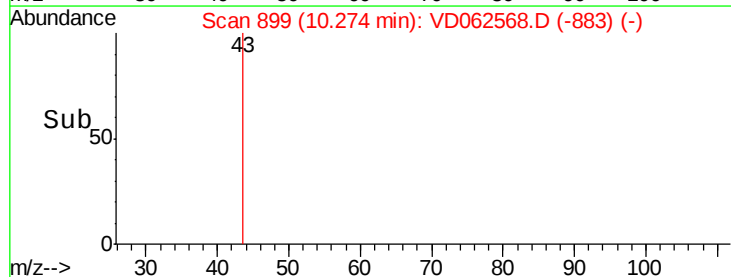
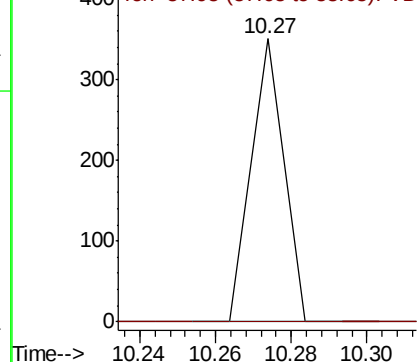


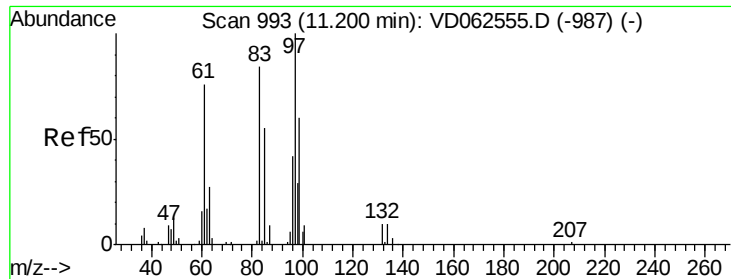
#51
4-Methyl-2-Pentanone
Concen: 8.578 ug/l
RT: 10.27 min Scan# 899
Delta R.T. -0.04 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

Tgt Ion: 43 Resp: 207
Ion Ratio Lower Upper
43 100
58 0.0 26.1 39.1#



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

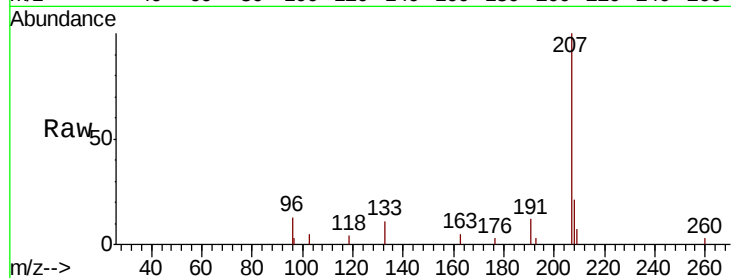




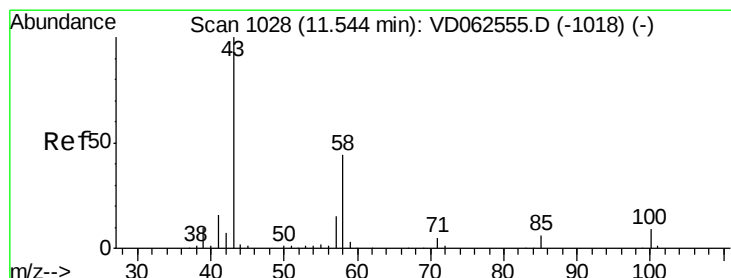
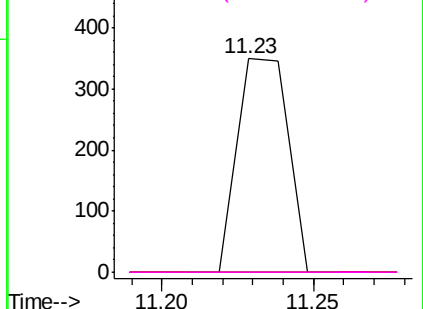
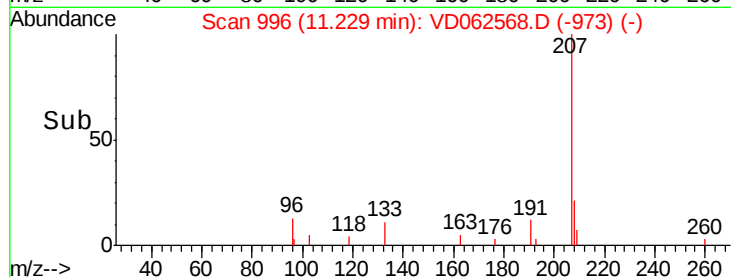
#55
 1,1,2-Trichloroethane
 Concen: 14.185 ug/l
 RT: 11.23 min Scan# 996
 Delta R.T. 0.03 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Instrument :
 MSVOA_D
 ClientSampleId :
 20190428-HR-8

Tot Ion: 97 Resp: 411
 Ion Ratio Lower Upper
 97 100
 83 0.0 67.3 100.9#
 85 0.0 43.8 65.8#
 99 0.0 48.2 72.2#

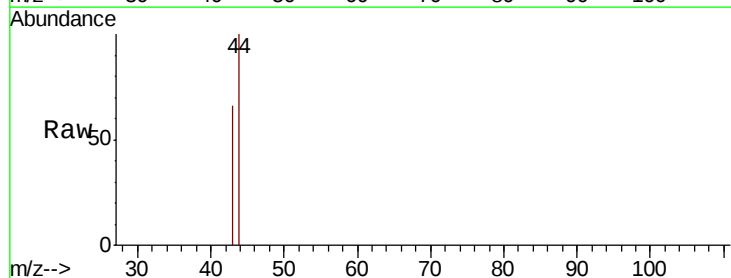


Abundance Ion 96.85 (96.55 to 97.55): VDC
 Ion 82.95 (82.65 to 83.65): VDC
 Ion 84.95 (84.65 to 85.65): VDC
 Ion 98.85 (98.55 to 99.55): VDC

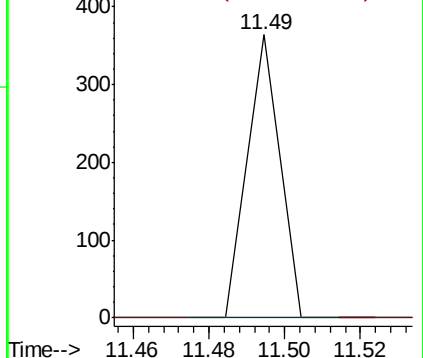
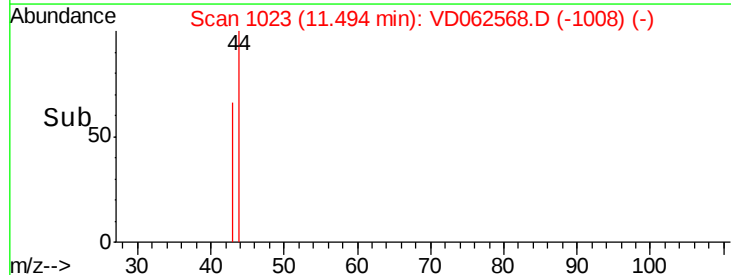


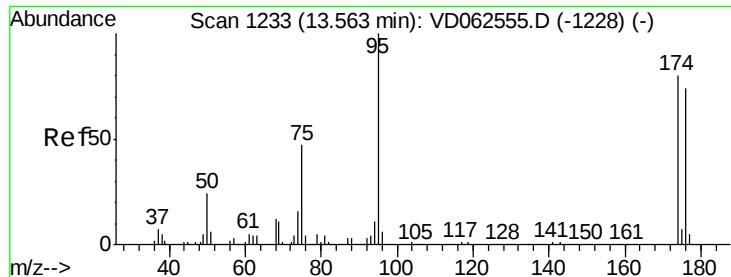
#59
 2-Hexanone
 Concen: 12.702 ug/l
 RT: 11.49 min Scan# 1023
 Delta R.T. -0.05 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Tgt Ion: 43 Resp: 215
 Ion Ratio Lower Upper
 43 100
 58 0.0 22.0 66.0#



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





#62

4-Bromofluorobenzene

Concen: 31.950 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. -0.00 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

20190428-HR-8

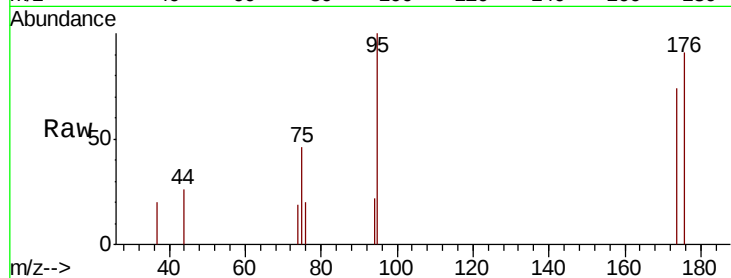
Tot Ion: 95 Resp: 1905

Ion Ratio Lower Upper

95 100

174 74.0 0.0 160.2

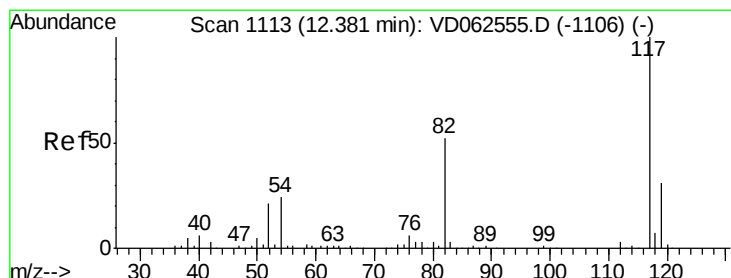
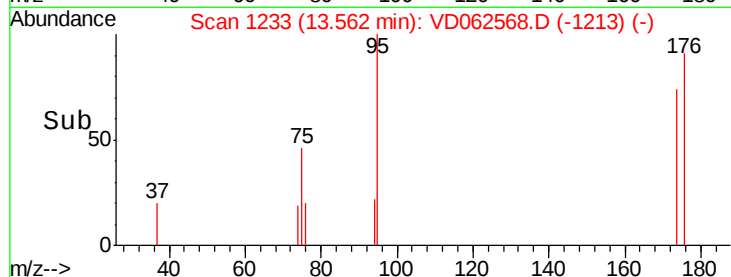
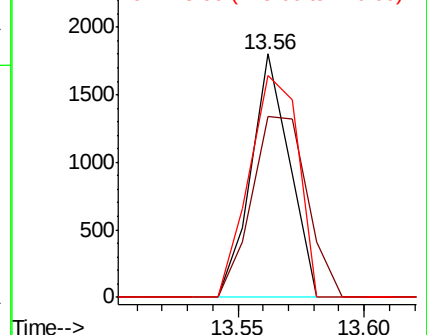
176 91.2 0.0 148.0



Abundance Ion 95.00 (94.70 to 95.70): V

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: 12.38 min Scan# 1113

Delta R.T. -0.00 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

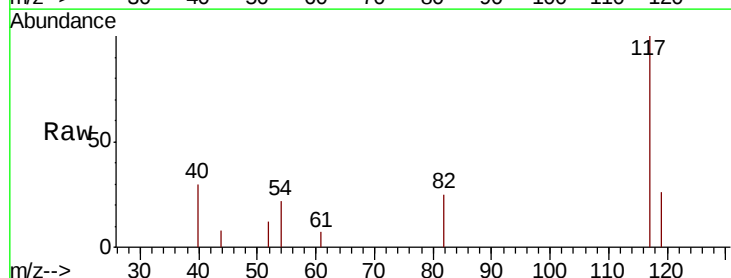
Tgt Ion: 117 Resp: 6513

Ion Ratio Lower Upper

117 100

82 25.3 41.4 62.2#

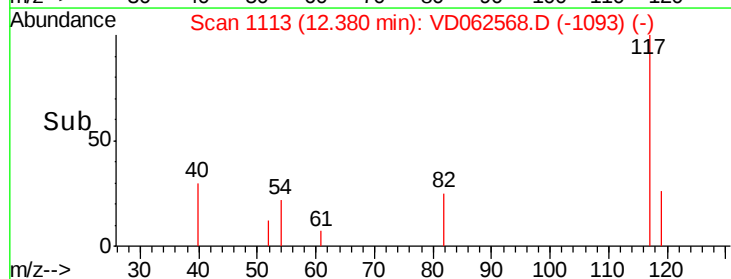
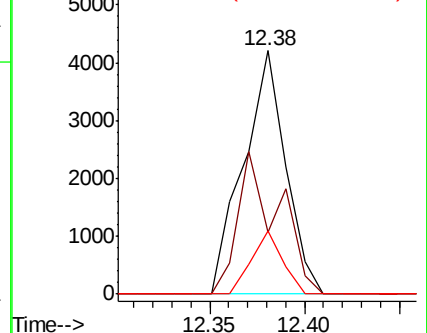
119 25.8 24.9 37.3

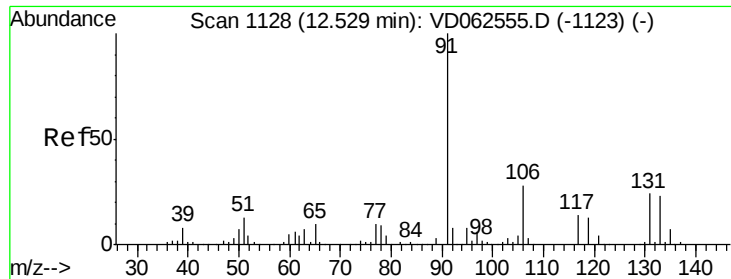


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V

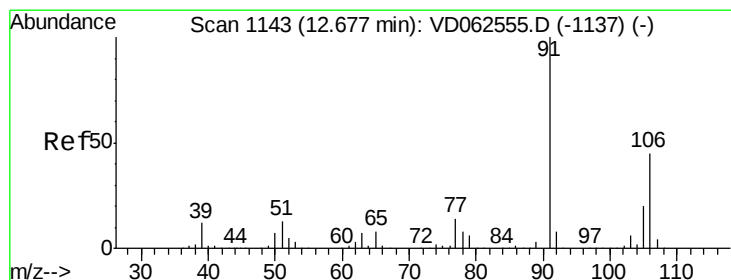
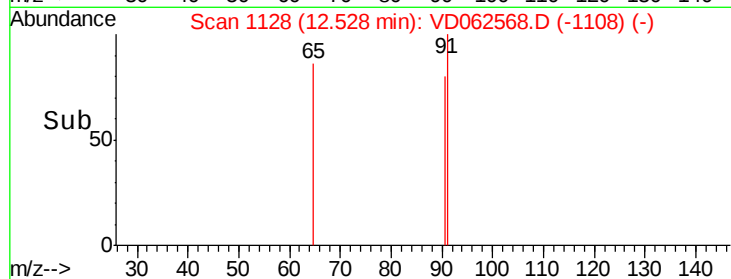
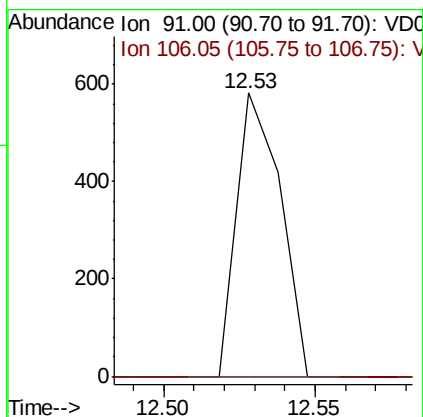
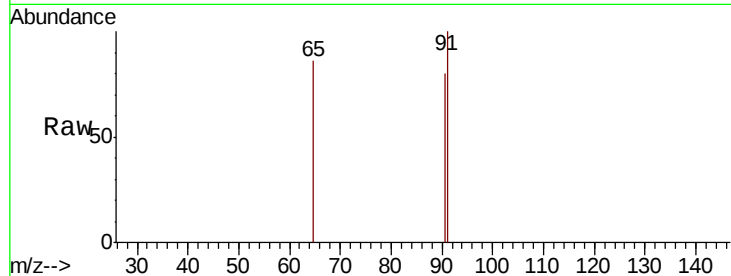




#67
Ethyl Benzene
Concen: 2.542 ug/l
RT: 12.53 min Scan# 1128
Delta R.T. -0.00 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

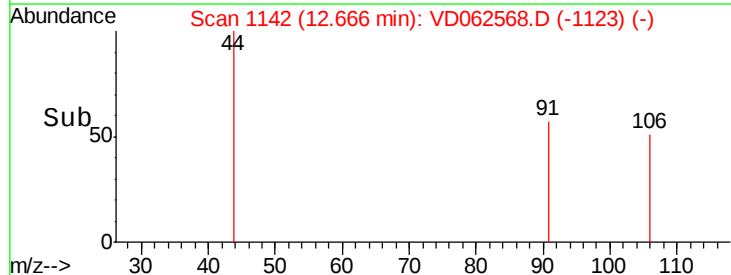
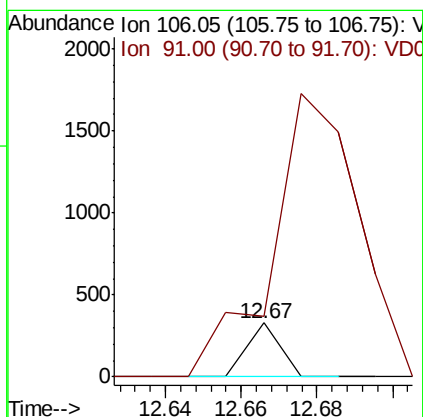
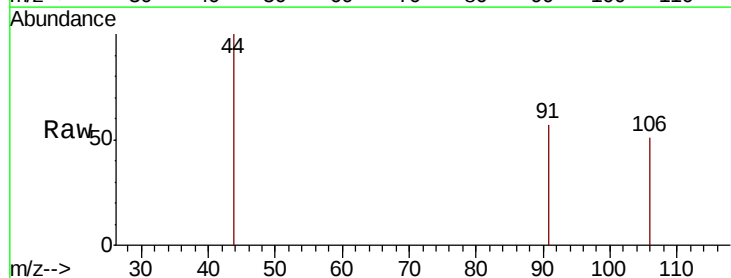
Instrument :
MSVOA_D
ClientSampleId :
20190428-HR-8

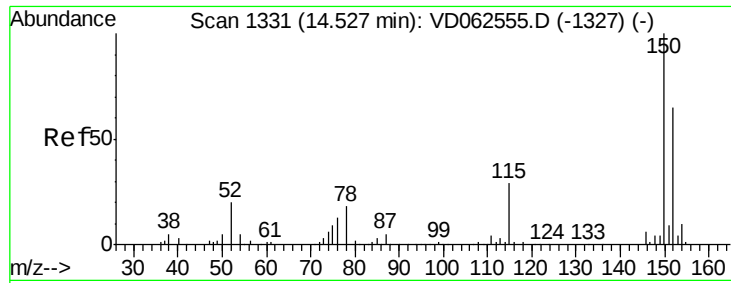
Tot Ion: 91 Resp: 591
Ion Ratio Lower Upper
91 100
106 0.0 22.2 33.2#



#68
m/p-Xylenes
Concen: 2.425 ug/l
RT: 12.67 min Scan# 1142
Delta R.T. -0.01 min
Lab File: VD062568.D
Acq: 31 May 2019 17:14

Tgt Ion:106 Resp: 195
Ion Ratio Lower Upper
106 100
91 112.1 178.9 268.3#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.53 min Scan# 1331

Delta R.T. -0.00 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

20190428-HR-8

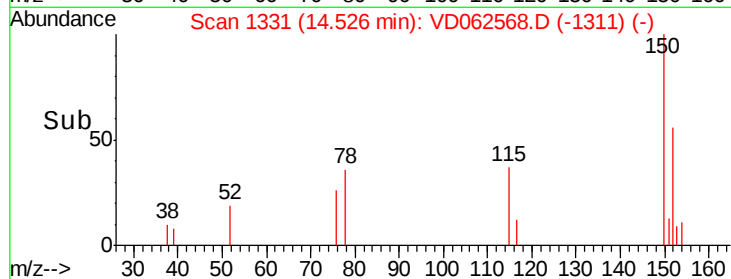
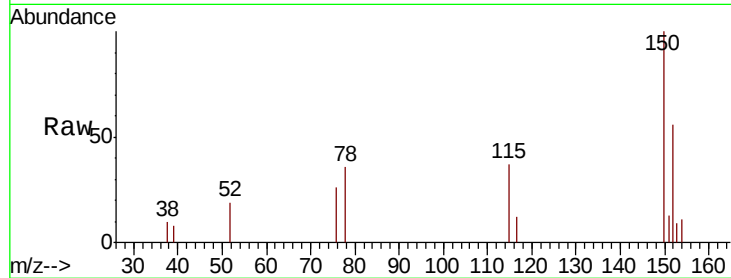
Tot Ion:152 Resp: 2470

Ion Ratio Lower Upper

152 100

115 66.5 28.4 85.3

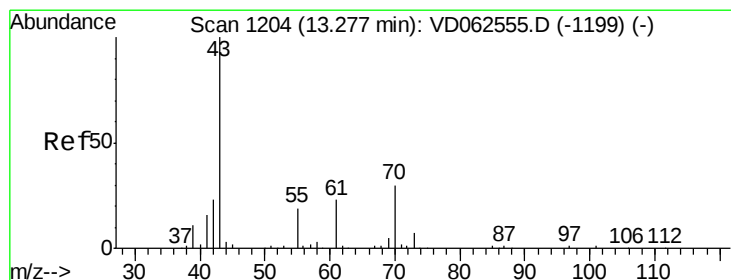
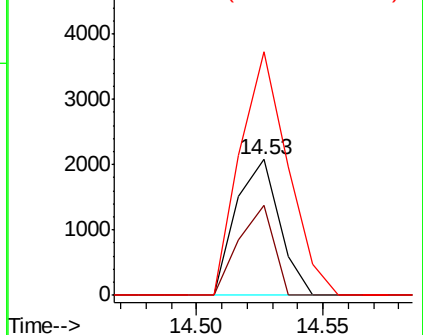
150 179.7 0.0 310.4



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#74

N-ethyl acetate

Concen: 6.069 ug/l

RT: 13.15 min Scan# 1191

Delta R.T. -0.13 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Tgt Ion: 43 Resp: 252

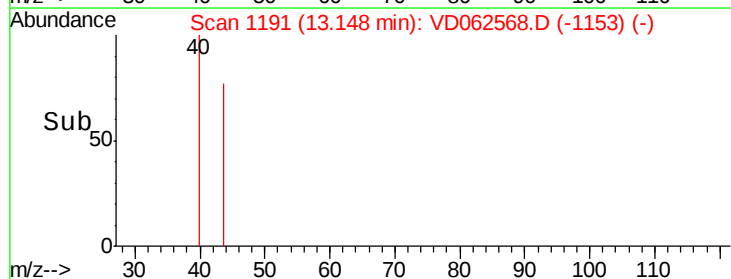
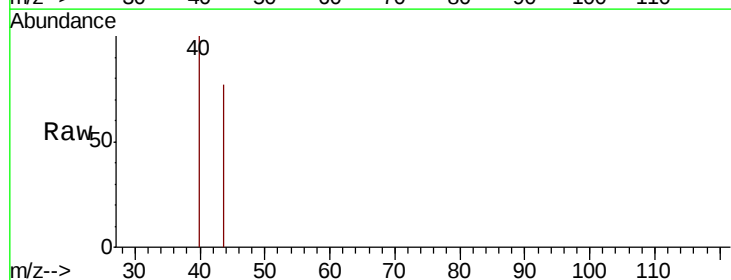
Ion Ratio Lower Upper

43 100

70 0.0 23.7 35.5#

55 0.0 15.0 22.4#

61 0.0 18.4 27.6#

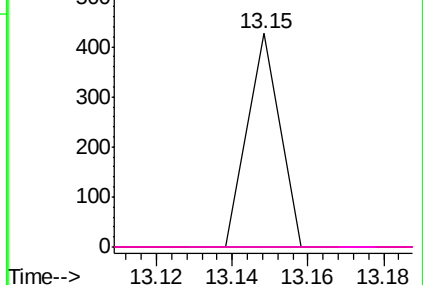


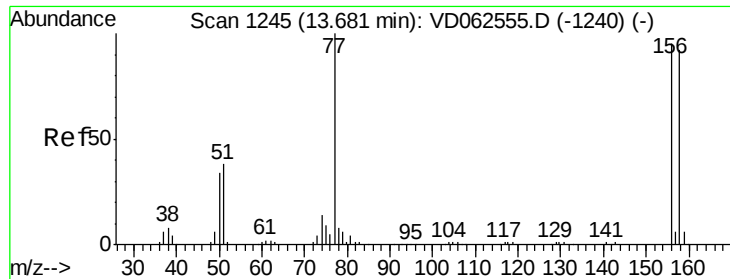
Abundance Ion 42.95 (42.65 to 43.65): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 60.95 (60.65 to 61.65): V





#77

Bromobenzene

Concen: 5.196 ug/l

RT: 13.82 min Scan# 1259

Delta R.T. 0.14 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

20190428-HR-8

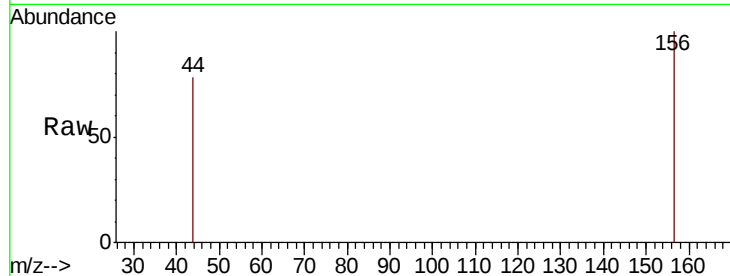
Tot Ion:156 Resp: 232

Ion Ratio Lower Upper

156 100

77 0.0 52.9 158.7#

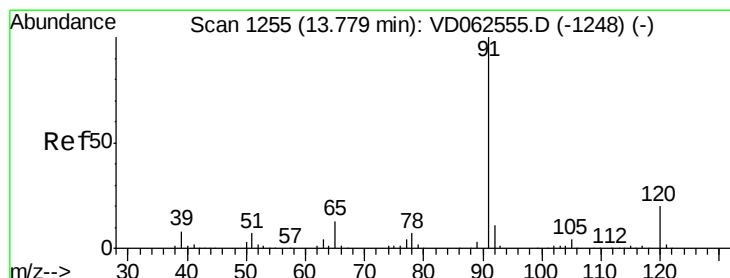
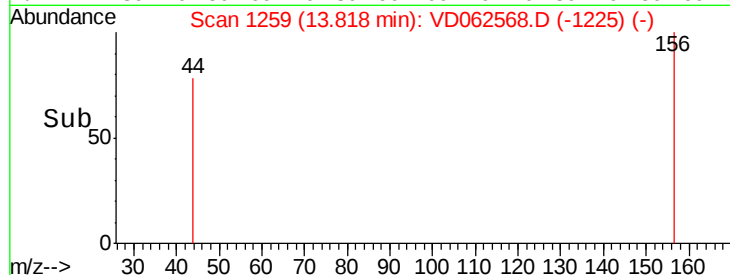
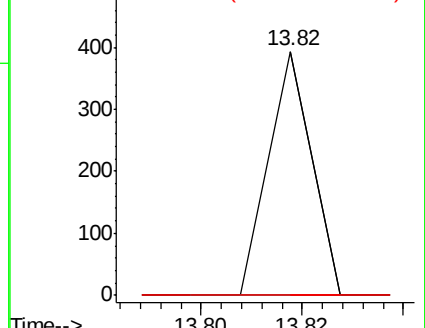
158 0.0 48.5 145.5#



Abundance Ion 155.90 (155.60 to 156.60): V

Ion 76.95 (76.65 to 77.65): V

Ion 157.85 (157.55 to 158.55): V



#78

n-propylbenzene

Concen: 2.637 ug/l

RT: 13.79 min Scan# 1256

Delta R.T. 0.01 min

Lab File: VD062568.D

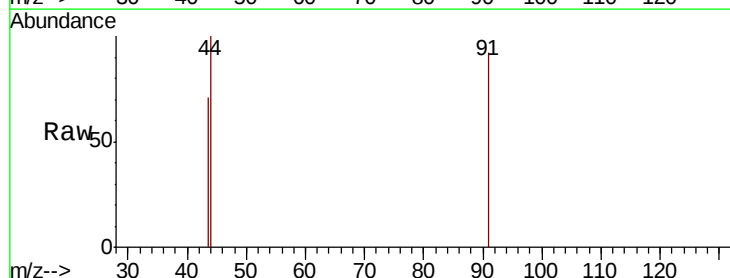
Acq: 31 May 2019 17:14

Tgt Ion: 91 Resp: 495

Ion Ratio Lower Upper

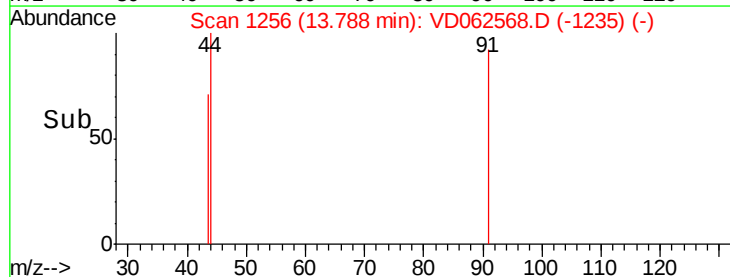
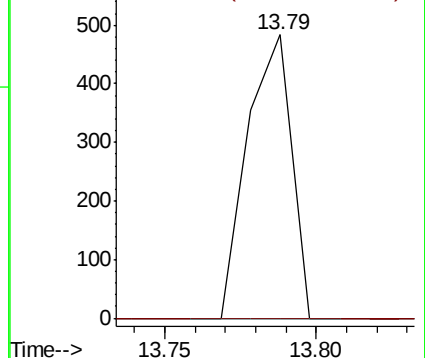
91 100

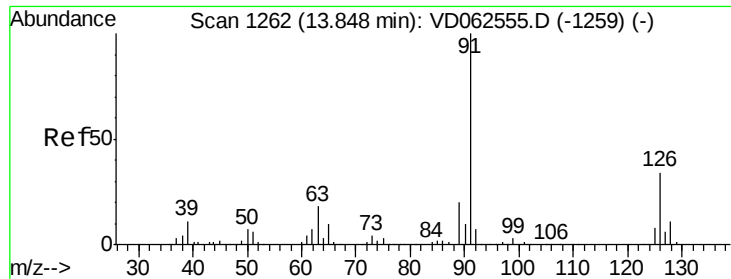
120 0.0 10.0 29.8#



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 120.05 (119.75 to 120.75): V

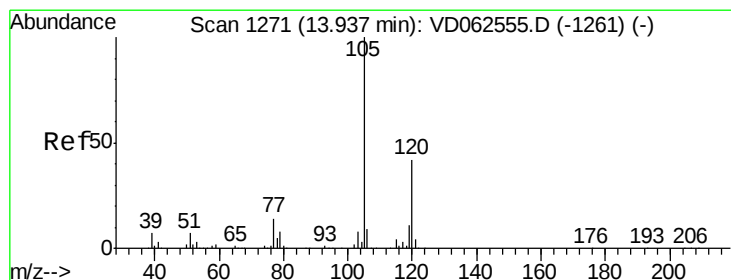
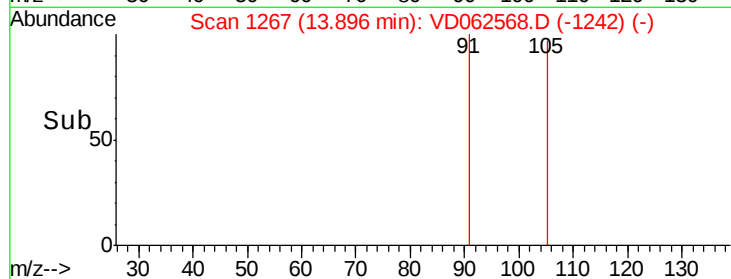
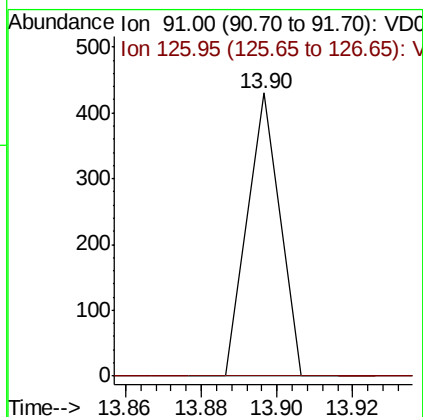
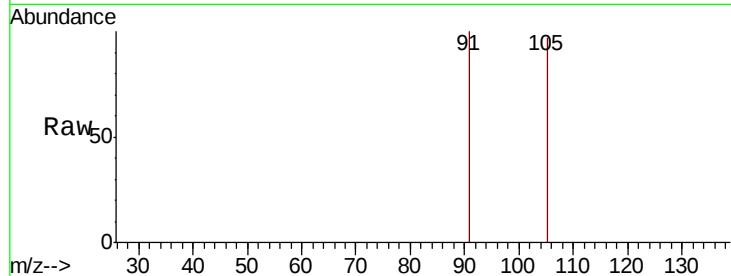




#79
 2-Chlorotoluene
 Concen: 2.334 ug/l
 RT: 13.90 min Scan# 1267
 Delta R.T. 0.05 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

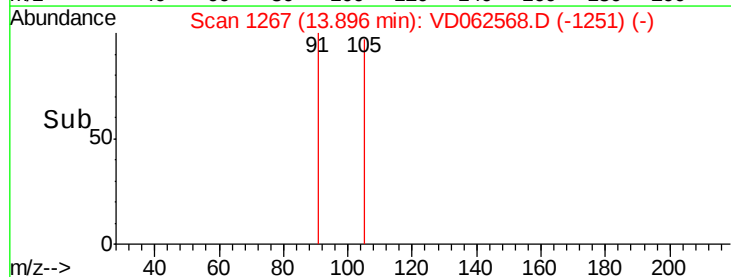
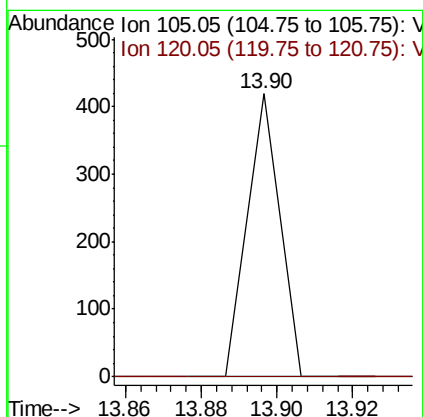
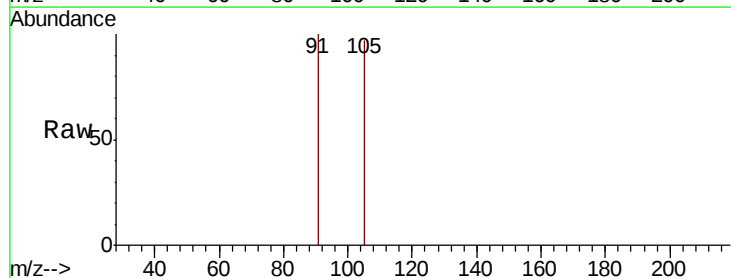
Instrument :
 MSVOA_D
 ClientSampleId :
 20190428-HR-8

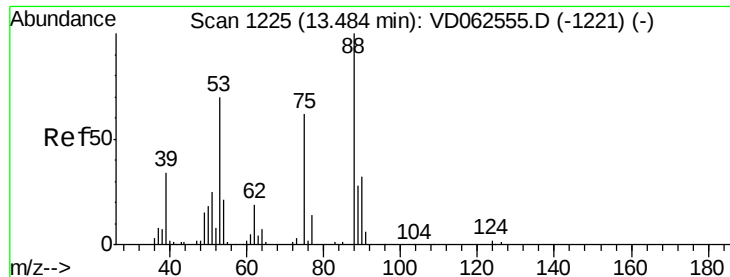
Tot Ion: 91 Resp: 254
 Ion Ratio Lower Upper
 91 100
 126 0.0 16.7 50.1#



#80
 1,3,5-Trimethylbenzene
 Concen: 1.782 ug/l
 RT: 13.90 min Scan# 1267
 Delta R.T. -0.04 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Tgt Ion: 105 Resp: 248
 Ion Ratio Lower Upper
 105 100
 120 0.0 20.8 62.5#





#81

trans-1,4-Dichloro-2-butene

Concen: 112.825 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.08 min

Lab File: VD062568.D

Acq: 31 May 2019 17:14

Instrument :

MSVOA_D

ClientSampleId :

20190428-HR-8

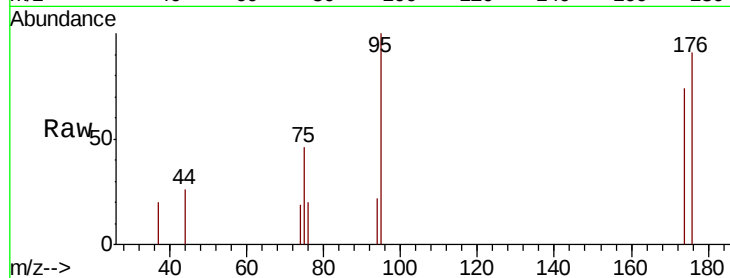
Tot Ion: 75 Resp: 958

Ion Ratio Lower Upper

75 100

53 0.0 91.0 136.4#

89 0.0 36.9 55.3#



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

13.56

800

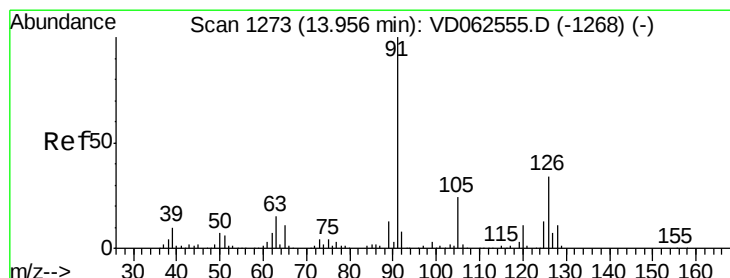
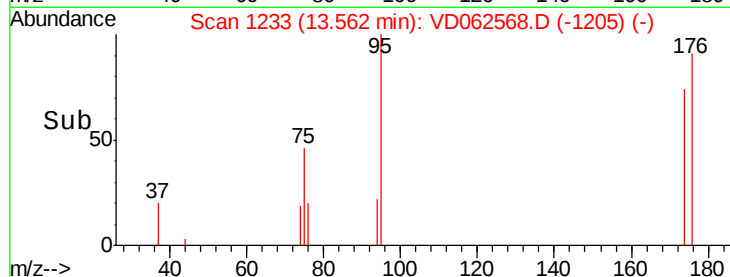
600

400

200

0

Time-->



#82

4-Chlorotoluene

Concen: 1.949 ug/l

RT: 13.90 min Scan# 1267

Delta R.T. -0.06 min

Lab File: VD062568.D

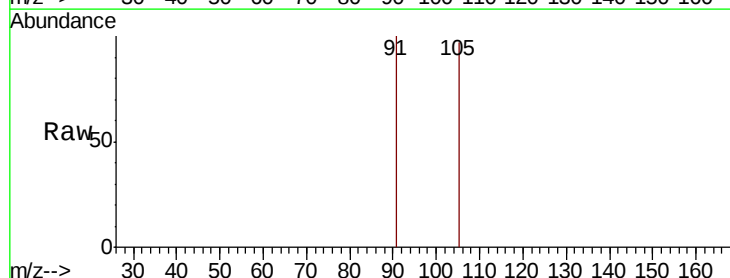
Acq: 31 May 2019 17:14

Tgt Ion: 91 Resp: 254

Ion Ratio Lower Upper

91 100

126 0.0 16.9 50.7#



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

13.90

500

400

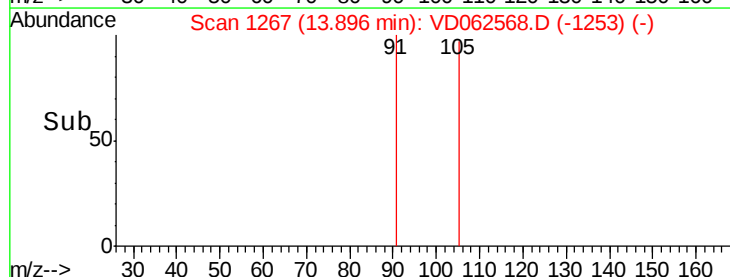
300

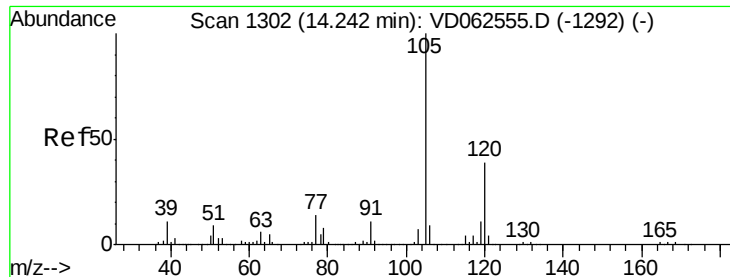
200

100

0

Time-->

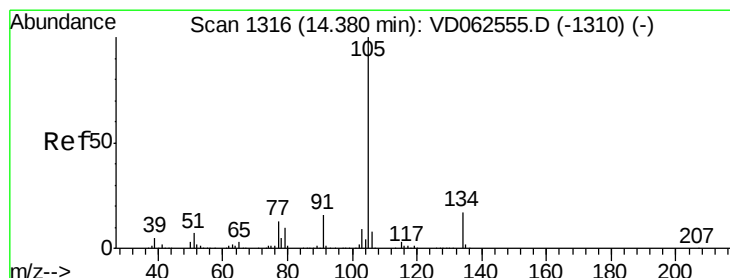
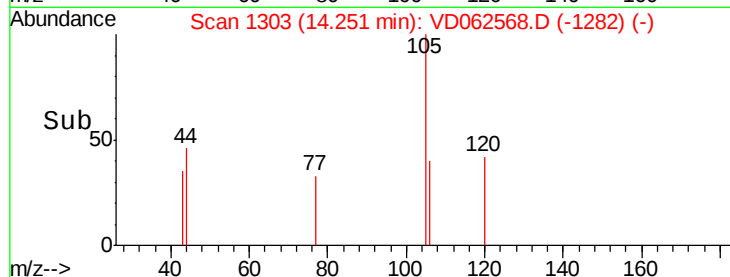
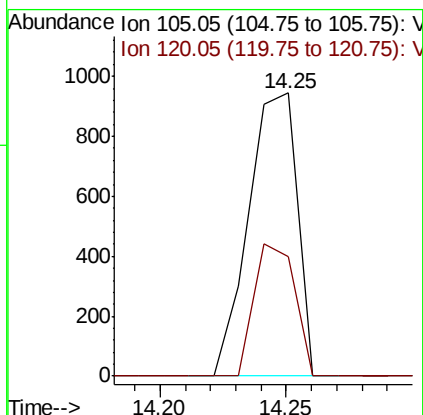
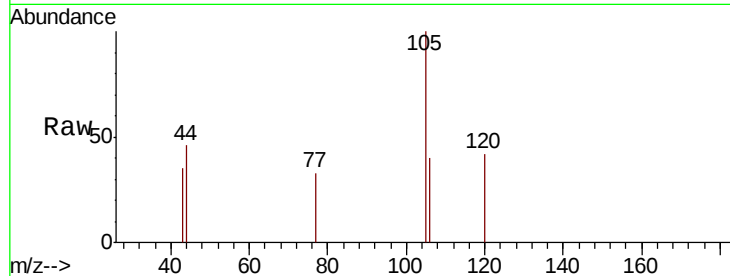




#84
 1,2,4-Trimethylbenzene
 Concen: 8.971 ug/l
 RT: 14.25 min Scan# 1303
 Delta R.T. 0.01 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Instrument :
 MSVOA_D
 ClientSampleId :
 20190428-HR-8

Tot Ion:105 Resp: 1272
 Ion Ratio Lower Upper
 105 100
 120 42.5 19.6 58.8



#85
 sec-Butylbenzene
 Concen: 7.734 ug/l
 RT: 14.25 min Scan# 1303
 Delta R.T. -0.13 min
 Lab File: VD062568.D
 Acq: 31 May 2019 17:14

Tgt Ion:105 Resp: 1272
 Ion Ratio Lower Upper
 105 100
 134 0.0 8.7 26.1#

