

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_D\DATA\VD041019\
 Data File : VD061720.D
 Acq On : 10 Apr 2019 18:33
 Operator : VA/AP
 Sample : K2316-08RE
 Misc : 5.03g/5ml/MSVOA_D/SOIL
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

Quant Time: Apr 11 04:59:04 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D040619S.M
 Quant Title : SW846 8260
 QLast Update : Mon Apr 08 10:04:03 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.06	168	460384	50.00	ug/l	0.02
34) 1,4-Difluorobenzene	8.23	114	745907	50.00	ug/l	0.02
63) Chlorobenzene-d5	12.37	117	526279	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	14.52	152	177341	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.47	65	196730	56.37	ug/l	0.01
Spiked Amount			Recovery	=	112.74%	
35) Dibromofluoromethane	6.93	113	4013	0.78	ug/l	0.01
Spiked Amount			Recovery	=	1.56%	
50) Toluene-d8	10.42	98	627836	48.36	ug/l	0.01
Spiked Amount			Recovery	=	96.72%	
62) 4-Bromofluorobenzene	13.56	95	222081	48.32	ug/l	0.00
Spiked Amount			Recovery	=	96.64%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
16) Acetone	3.22	43	101456	97.256	ug/l	96
17) Carbon Disulfide	3.40	76	338409	21.700	ug/l	98
20) Methylene Chloride	3.83	84	36470	6.161	ug/l	98
25) 2-Butanone	6.09	43	24895	20.701	ug/l	94
31) Cyclohexane	6.96	56	7821	1.190	ug/l	93
40) Benzene	7.47	78	1300588	82.583	ug/l	97
52) Toluene	10.52	92	139921	14.228	ug/l	95
65) Chlorobenzene	12.41	112	209041	20.029	ug/l	100
67) Ethyl Benzene	12.53	91	209824	13.202	ug/l	99
68) m/p-Xylenes	12.66	106	152369	24.868	ug/l	95
69) o-Xylene	13.06	106	75759	12.809	ug/l	95
73) Isopropylbenzene	13.41	105	491610	41.604	ug/l	97
78) n-propylbenzene	13.78	91	40730	2.882	ug/l	92
79) 2-Chlorotoluene	13.84	91	156112	19.313	ug/l	95
80) 1,3,5-Trimethylbenzene	13.93	105	47200	5.033	ug/l	95
83) tert-Butylbenzene	14.19	119	58601	5.182	ug/l	99
84) 1,2,4-Trimethylbenzene	14.24	105	116722	12.331	ug/l	94
85) sec-Butylbenzene	14.37	105	15939	1.305	ug/l	97
86) p-Isopropyltoluene	14.49	119	58007	5.473	ug/l	98
87) 1,3-Dichlorobenzene	14.54	146	12599	2.134	ug/l	89
88) 1,4-Dichlorobenzene	14.54	146	12599	2.115	ug/l #	87
89) n-Butylbenzene	14.80	91	18931	2.055	ug/l #	90
95) Naphthalene	16.13	128	40095	10.224	ug/l	98

(#) = 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. 0.02 min

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ClientSampleId :

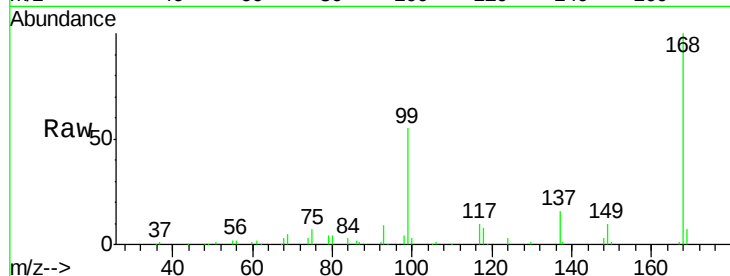
20190176-AMND-COMP-CS-3RE

Tgt Ion:168 Resp: 460384

Ion Ratio Lower Upper

168 100

99 55.1 46.8 70.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.06

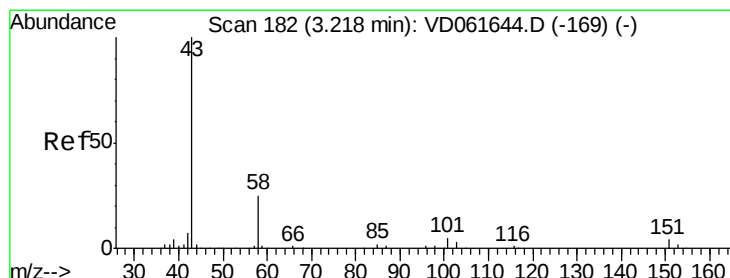
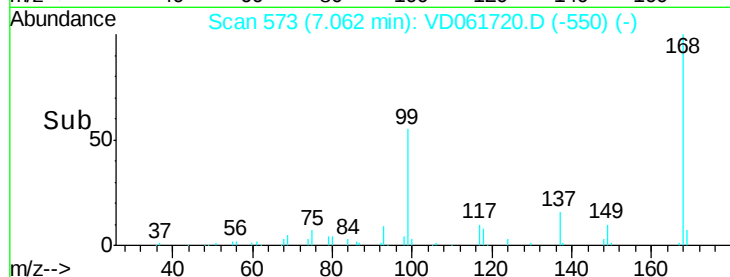
150000

100000

50000

0

Time--> 6.90 7.00 7.10 7.20



#16

Acetone

Concen: 97.256 ug/l

RT: 3.22 min Scan# 183

Delta R.T. 0.00 min

Lab File: VD061720.D

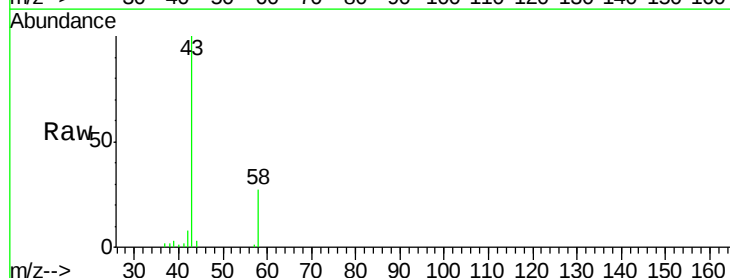
Acq: 10 Apr 2019 18:33

Tgt Ion: 43 Resp: 101456

Ion Ratio Lower Upper

43 100

58 26.6 19.7 29.5



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 57.95 (57.65 to 58.65): VDC

3.22

40000

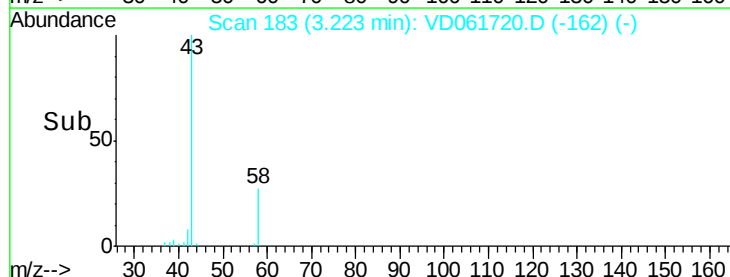
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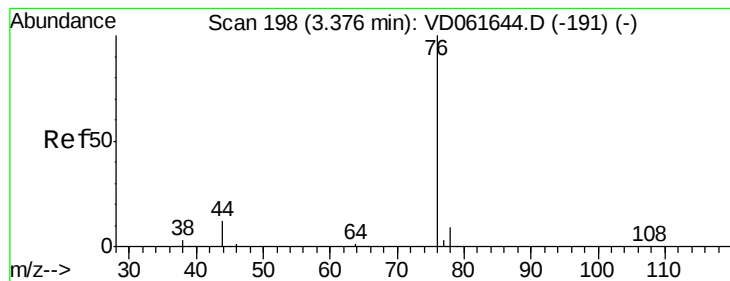
20000

10000

0

Time--> 3.10 3.20 3.30 3.40





#17

Carbon Disulfide

Concen: 21.700 ug/l

RT: 3.40 min Scan# 201

Delta R.T. 0.02 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

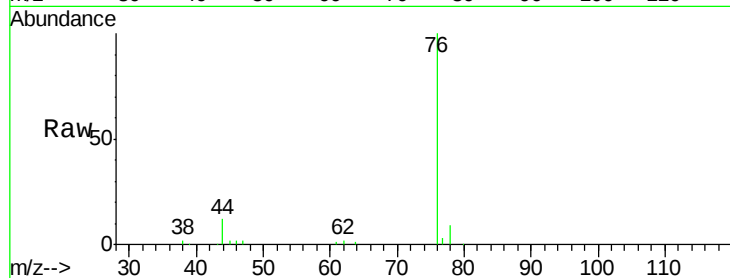
20190176-AMND-COMP-CS-3RE

Tgt Ion: 76 Resp: 338409

Ion Ratio Lower Upper

76 100

78 8.7 7.4 11.2



Abundance Ion 75.85 (75.55 to 76.55): VDC

Ion 77.85 (77.55 to 78.55): VDC

3.40

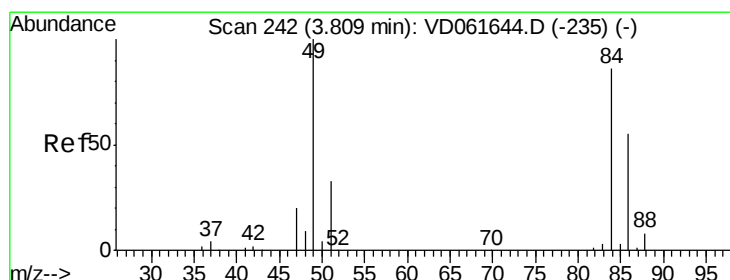
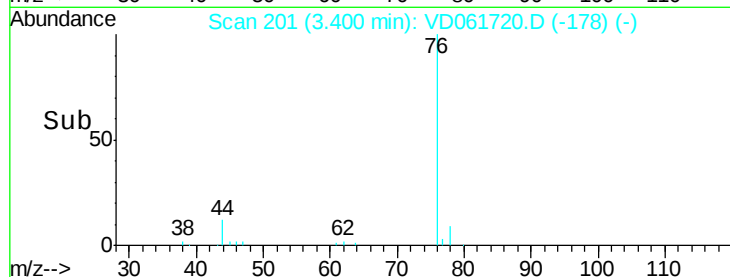
150000

100000

50000

0

Time-->



#20

Methylene Chloride

Concen: 6.161 ug/l

RT: 3.83 min Scan# 245

Delta R.T. 0.03 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Tgt Ion: 84 Resp: 36470

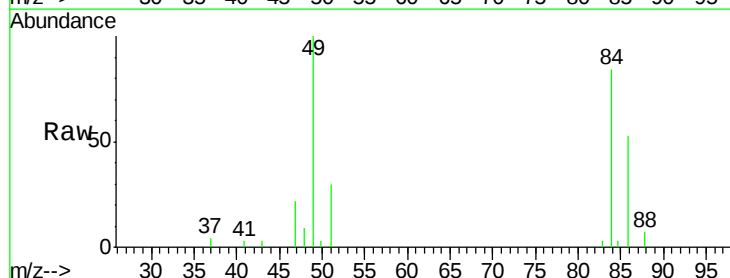
Ion Ratio Lower Upper

84 100

49 118.5 93.0 139.4

51 35.6 30.4 45.6

86 62.5 51.0 76.4



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

20000

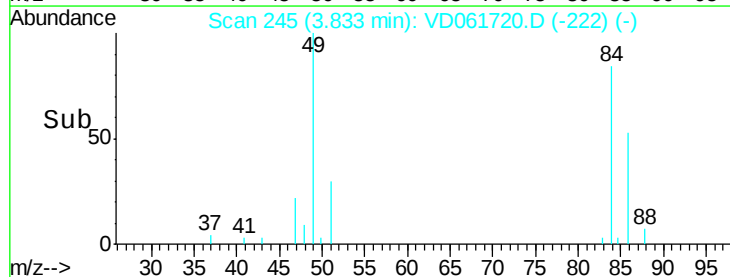
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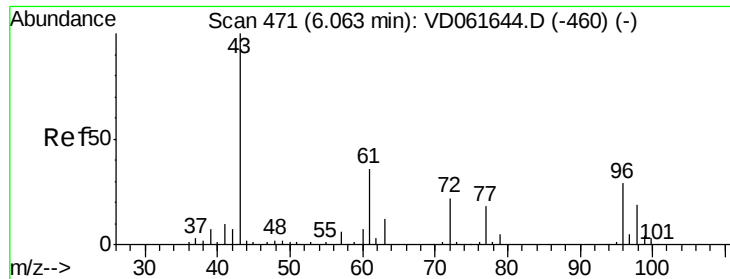
10000

5000

0

Time-->





#25

2-Butanone

Concen: 20.701 ug/l

RT: 6.09 min Scan# 474

Delta R.T. 0.02 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

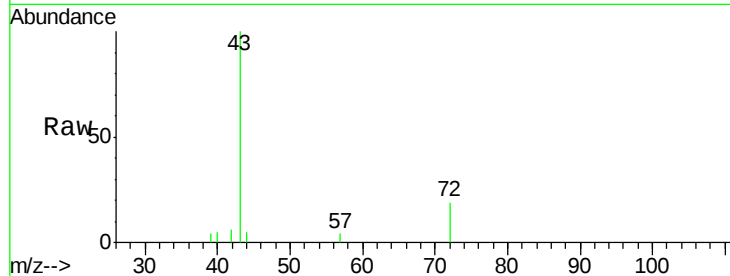
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Tgt Ion: 43 Resp: 24895

Ion Ratio Lower Upper

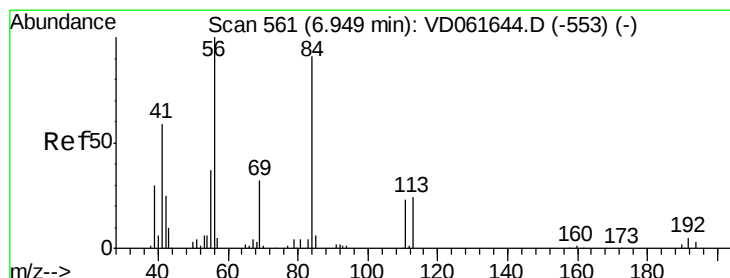
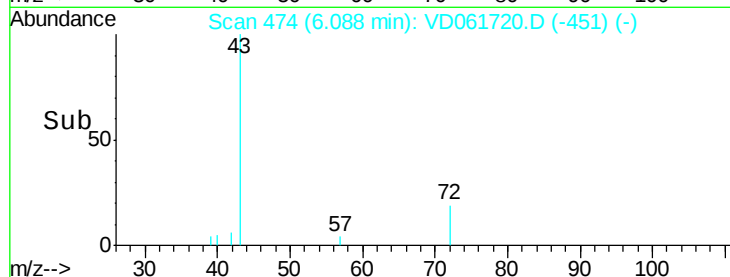
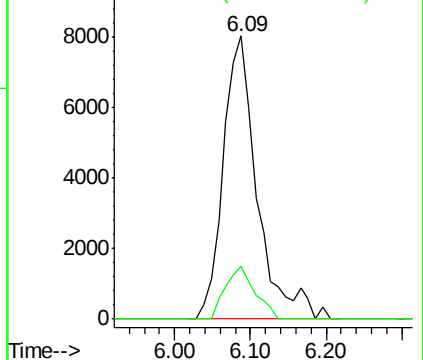
43 100

72 18.8 17.4 26.2



Abundance Ion 42.95 (42.65 to 43.65): VDC

Ion 72.00 (71.70 to 72.70): VDC



#31

Cyclohexane

Concen: 1.190 ug/l

RT: 6.96 min Scan# 563

Delta R.T. 0.01 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

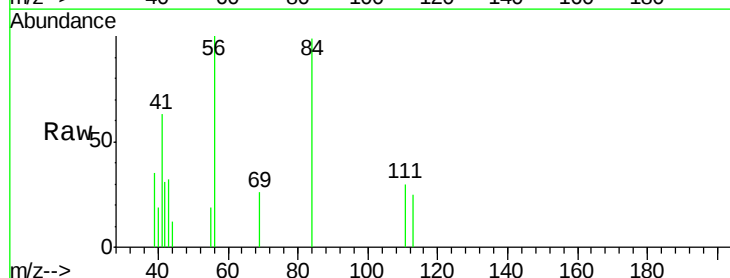
Tgt Ion: 56 Resp: 7821

Ion Ratio Lower Upper

56 100

69 25.9 25.8 38.6

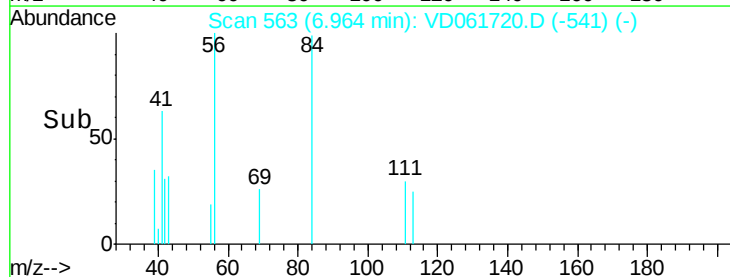
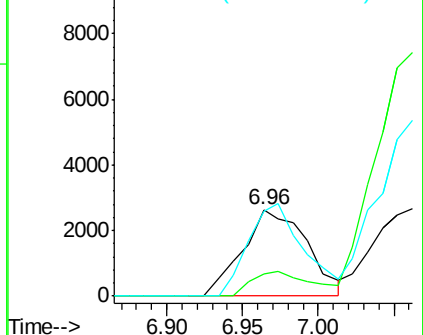
84 98.6 74.2 111.2

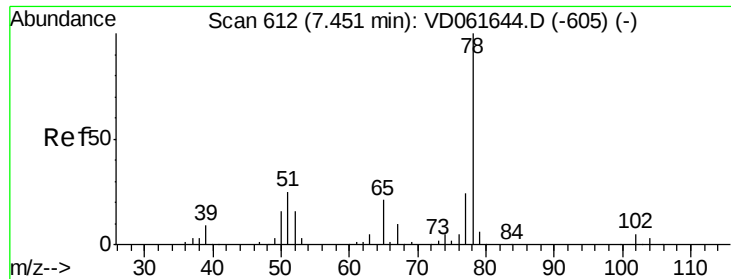


Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 84.05 (83.75 to 84.75): VDC

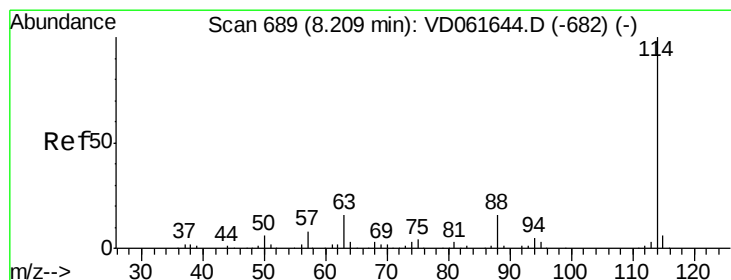
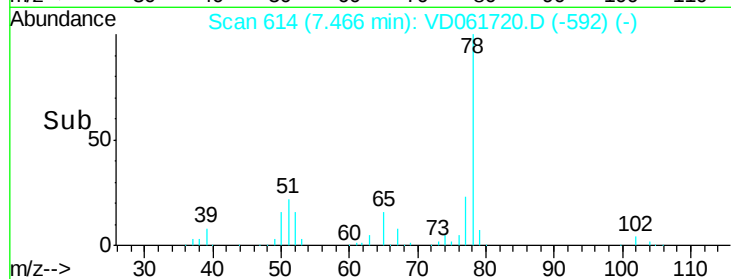
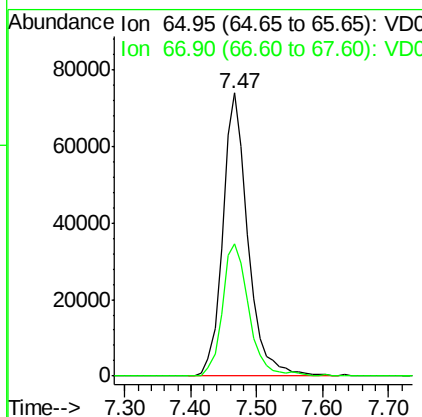
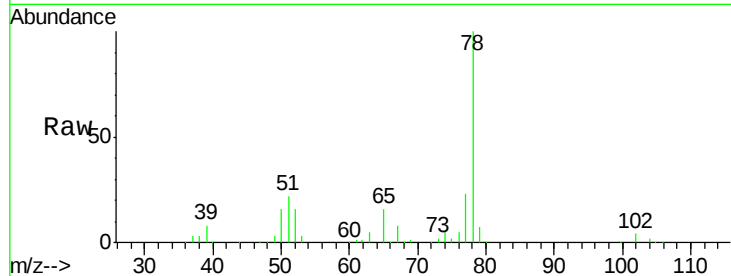




#33
 1,2-Dichloroethane-d4
 Concen: 56.375 ug/l
 RT: 7.47 min Scan# 614
 Delta R.T. 0.01 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

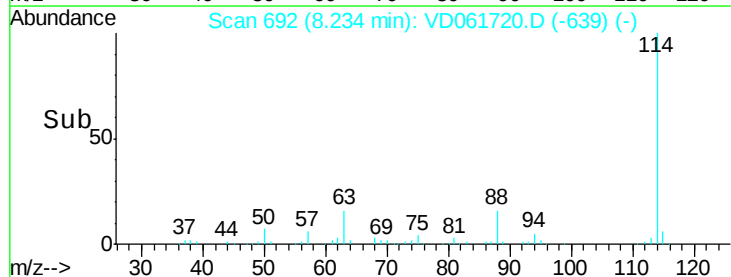
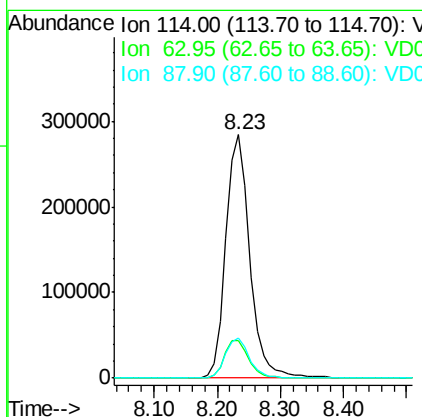
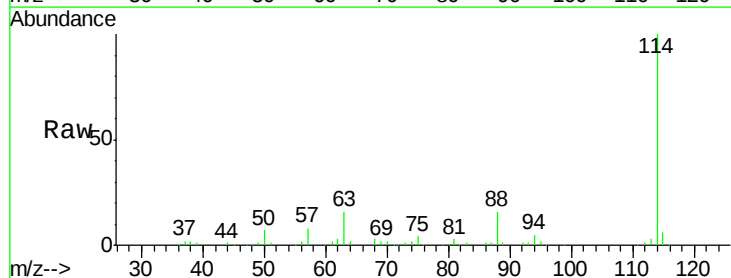
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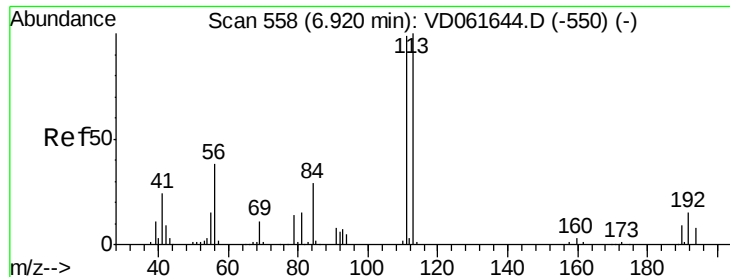
Tgt Ion: 65 Resp: 196730
 Ion Ratio Lower Upper
 65 100
 67 46.8 0.0 99.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.23 min Scan# 692
 Delta R.T. 0.02 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Tgt Ion: 114 Resp: 745907
 Ion Ratio Lower Upper
 114 100
 63 15.6 0.0 31.2
 88 16.2 0.0 31.8

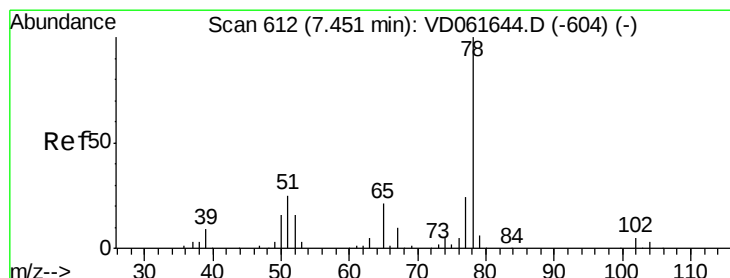
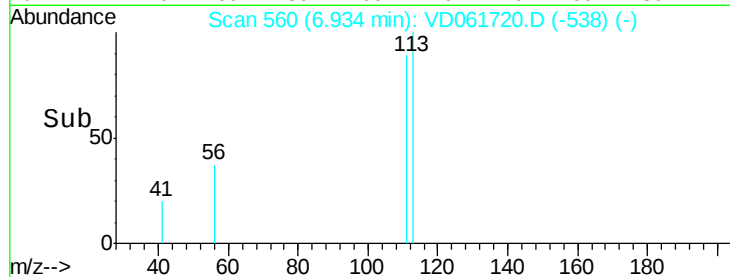
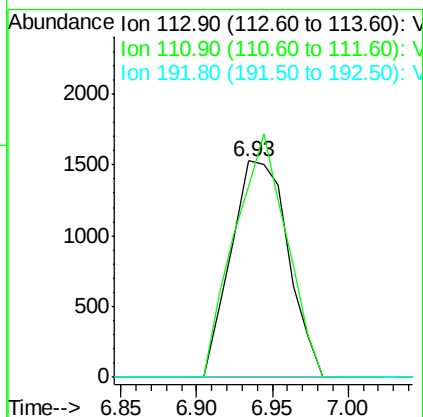
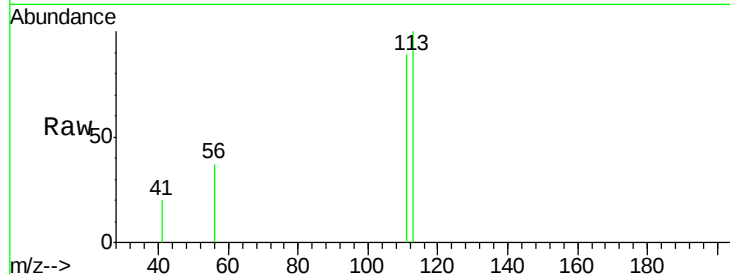




#35
 Dibromofluoromethane
 Concen: 0.777 ug/l
 RT: 6.93 min Scan# 560
 Delta R.T. 0.01 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

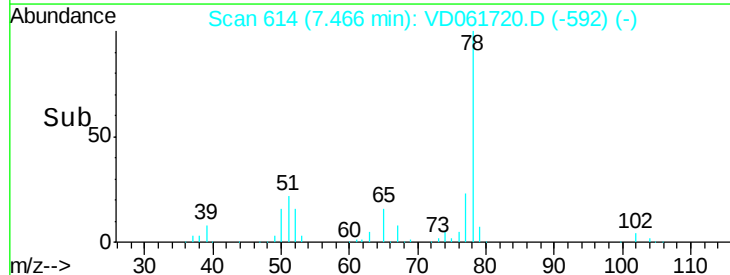
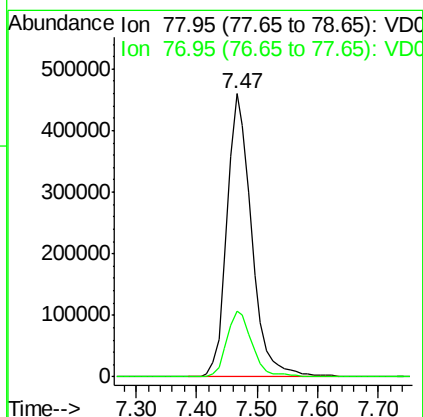
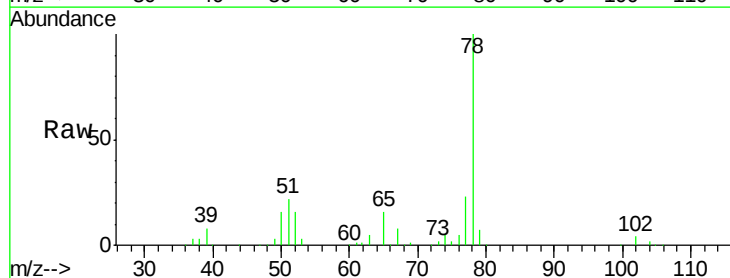
Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

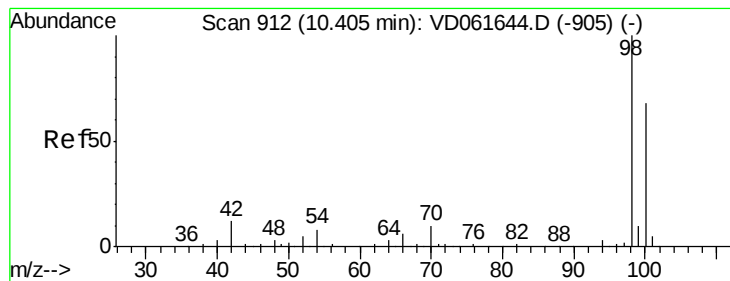
Tgt Ion:113 Resp: 4013
 Ion Ratio Lower Upper
 113 100
 111 88.6 79.3 118.9
 192 0.0 12.3 18.5#



#40
 Benzene
 Concen: 82.583 ug/l
 RT: 7.47 min Scan# 614
 Delta R.T. 0.01 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Tgt Ion: 78 Resp: 1300588
 Ion Ratio Lower Upper
 78 100
 77 23.0 19.5 29.3





#50

Toluene-d8

Concen: 48.359 ug/l

RT: 10.42 min Scan# 914

Delta R.T. 0.01 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

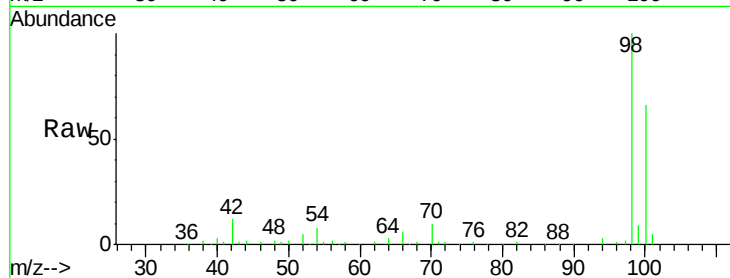
20190176-AMND-COMP-CS-3RE

Tgt Ion: 98 Resp: 627836

Ion Ratio Lower Upper

98 100

100 65.8 55.4 83.0



Abundance Ion 98.05 (97.75 to 98.75): VD061644.D (-905) (-)

Ion 100.05 (99.75 to 100.75): VD061644.D (-905) (-)

10.42

250000

200000

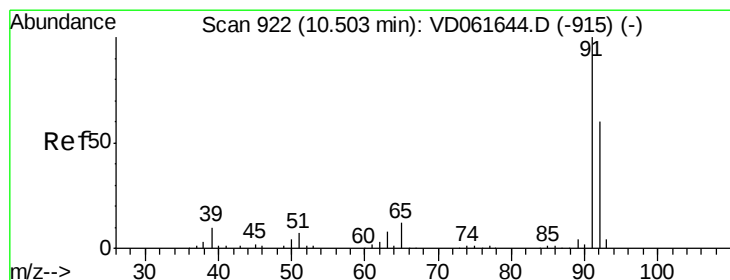
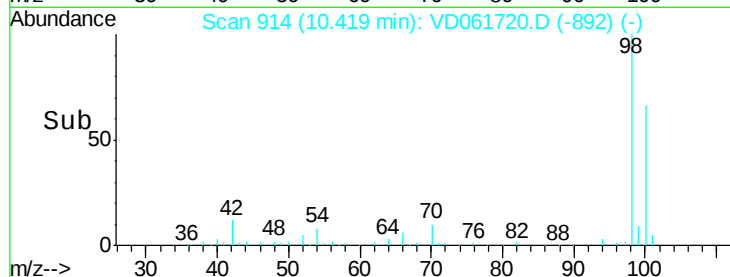
150000

100000

50000

0

Time-->



#52

Toluene

Concen: 14.228 ug/l

RT: 10.52 min Scan# 924

Delta R.T. 0.01 min

Lab File: VD061720.D

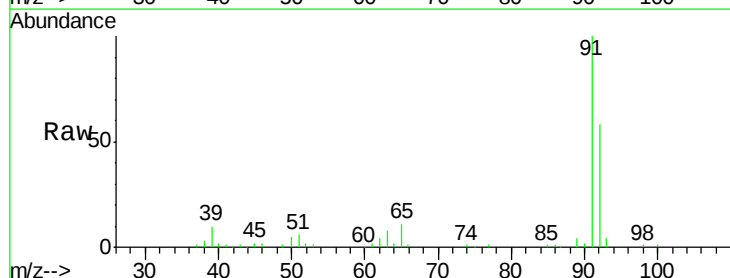
Acq: 10 Apr 2019 18:33

Tgt Ion: 92 Resp: 139921

Ion Ratio Lower Upper

92 100

91 173.5 133.0 199.4



Abundance Ion 92.00 (91.70 to 92.70): VD061644.D (-915) (-)

Ion 91.00 (90.70 to 91.70): VD061644.D (-915) (-)

10.52

120000

100000

80000

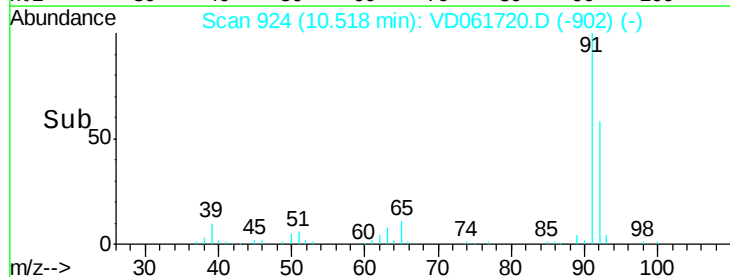
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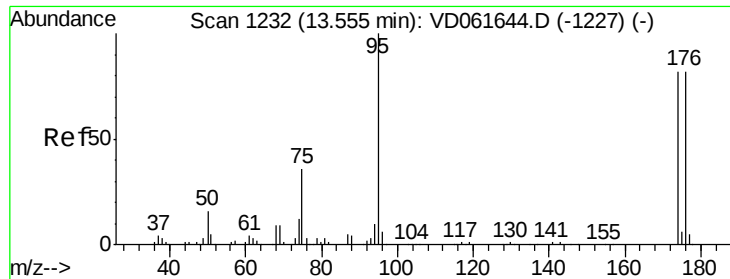
40000

20000

0

Time-->





#62

4-Bromofluorobenzene

Concen: 48.321 ug/l

RT: 13.56 min Scan# 1233

Delta R.T. 0.01 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

20190176-AMND-COMP-CS-3RE

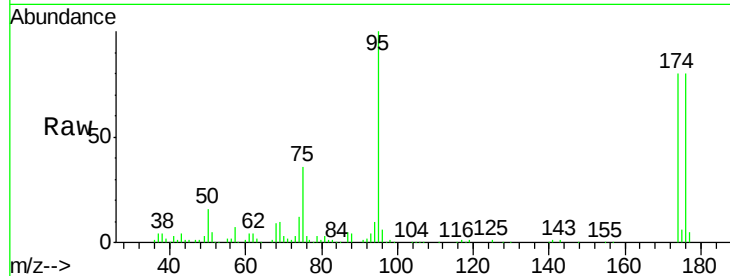
Tgt Ion: 95 Resp: 222081

Ion Ratio Lower Upper

95 100

174 80.3 0.0 164.6

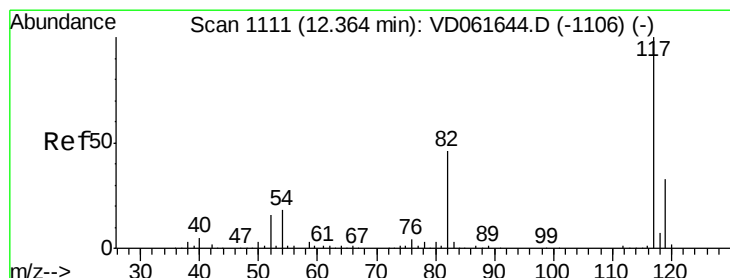
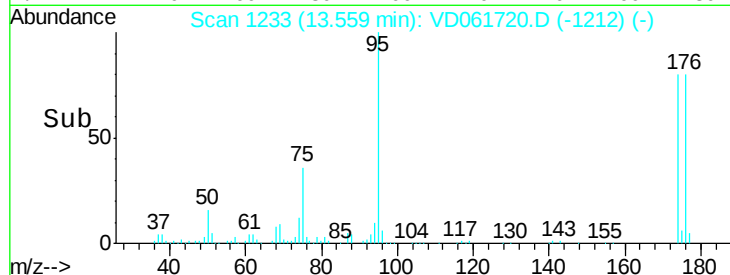
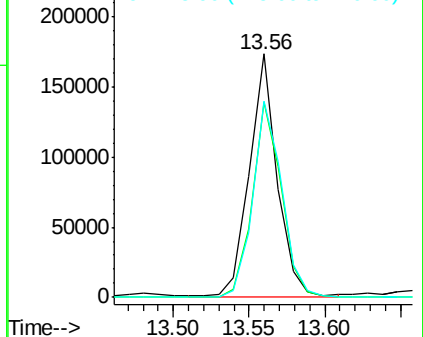
176 80.4 0.0 165.0



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: 12.37 min Scan# 1112

Delta R.T. 0.00 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

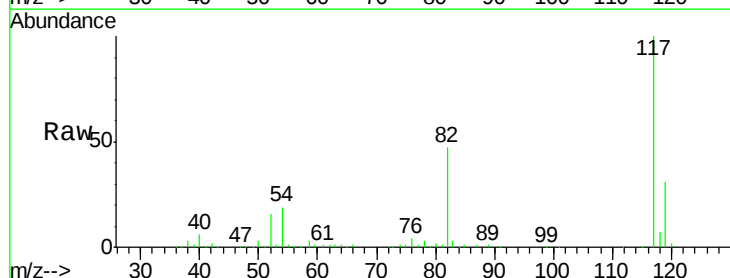
Tgt Ion: 117 Resp: 526279

Ion Ratio Lower Upper

117 100

82 47.0 36.8 55.2

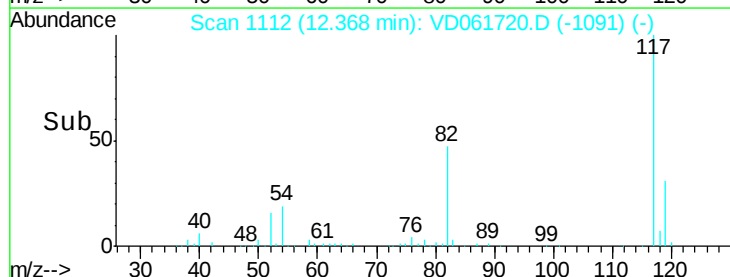
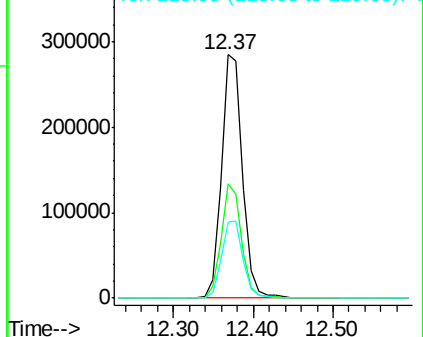
119 31.3 26.1 39.1

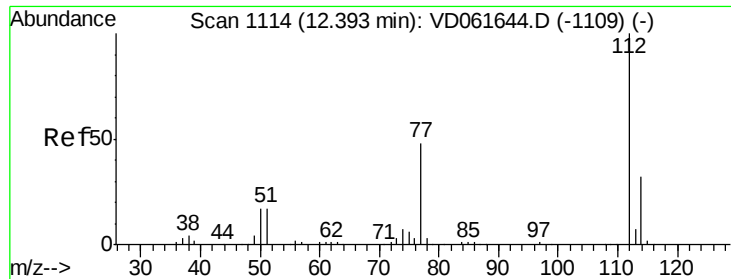


Abundance Ion 116.95 (116.65 to 117.65): V

Ion 82.05 (81.75 to 82.75): V

Ion 118.95 (118.65 to 119.65): V

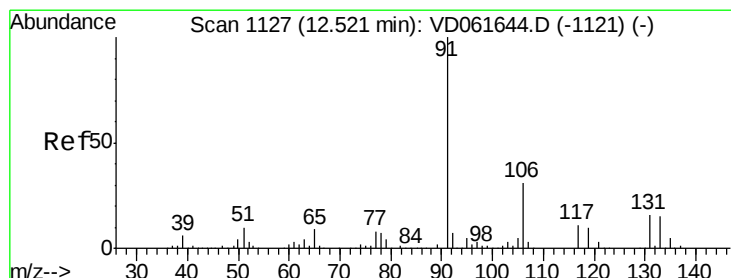
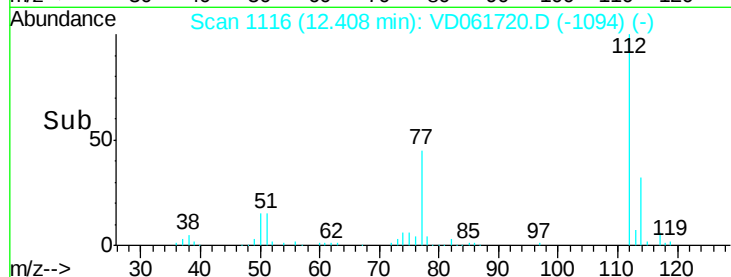
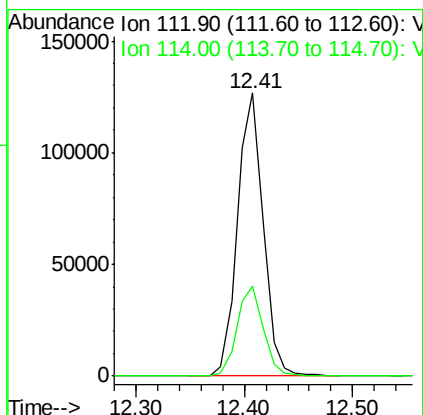
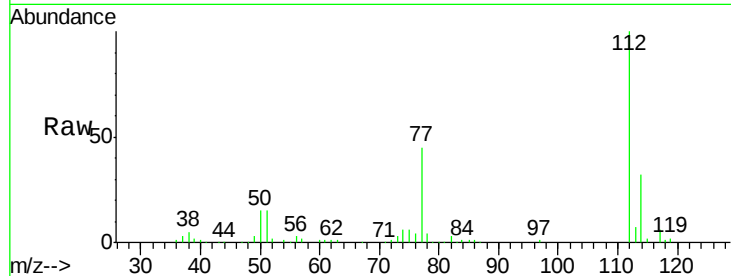




#65
Chlorobenzene
Concen: 20.029 ug/l
RT: 12.41 min Scan# 1116
Delta R.T. 0.01 min
Lab File: VD061720.D
Acq: 10 Apr 2019 18:33

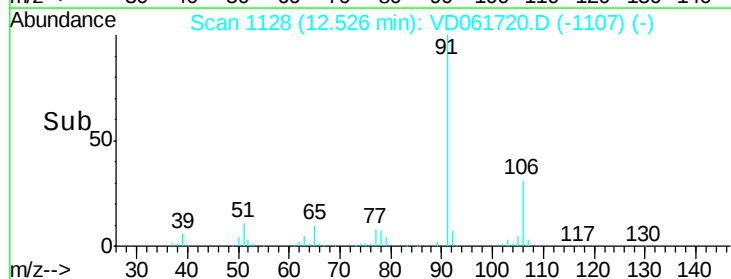
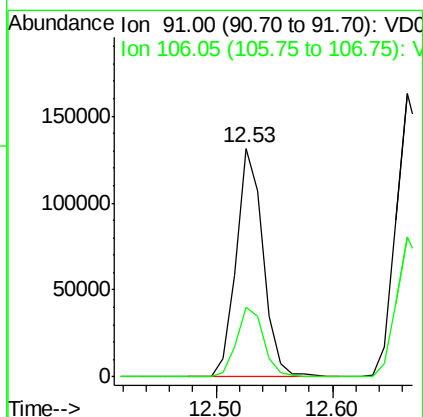
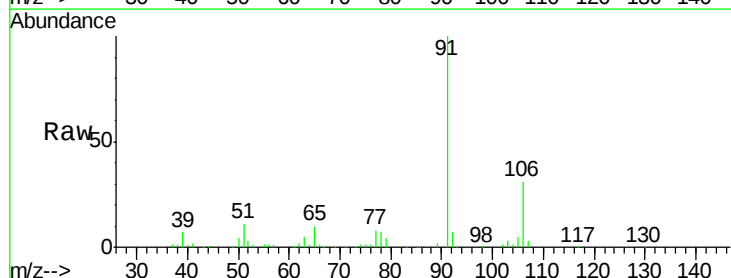
Instrument :
MSVOA_D
ClientSampleId :
20190176-AMND-COMP-CS-3RE

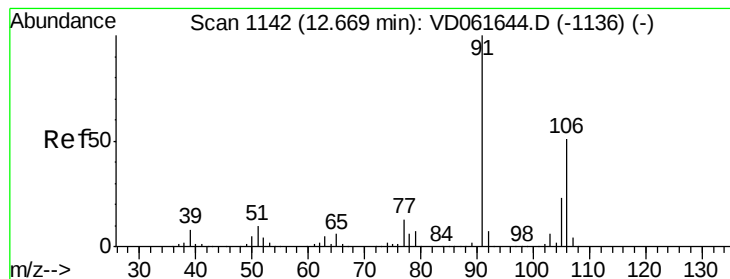
Tgt Ion: 112 Resp: 209041
Ion Ratio Lower Upper
112 100
114 32.1 25.6 38.4



#67
Ethyl Benzene
Concen: 13.202 ug/l
RT: 12.53 min Scan# 1128
Delta R.T. 0.00 min
Lab File: VD061720.D
Acq: 10 Apr 2019 18:33

Tgt Ion: 91 Resp: 209824
Ion Ratio Lower Upper
91 100
106 30.5 24.6 37.0





#68

m/p-Xylenes

Concen: 24.868 ug/l

RT: 12.66 min Scan# 1142

Delta R.T. -0.01 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

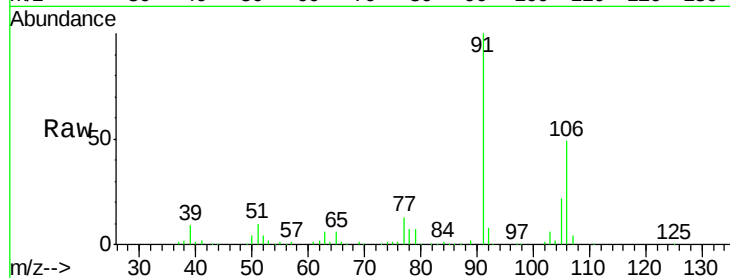
20190176-AMND-COMP-CS-3RE

Tgt Ion:106 Resp: 152369

Ion Ratio Lower Upper

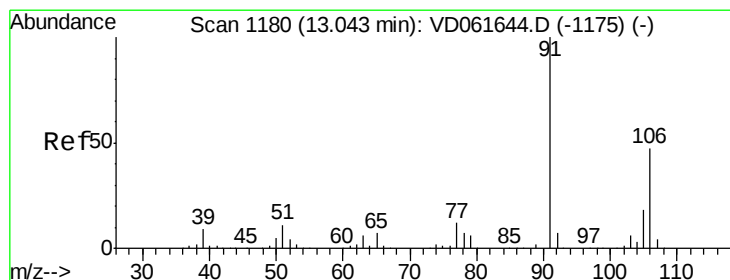
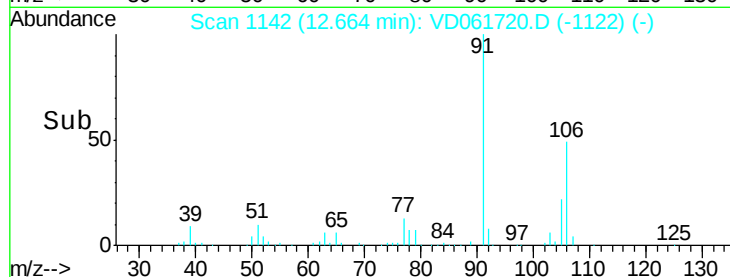
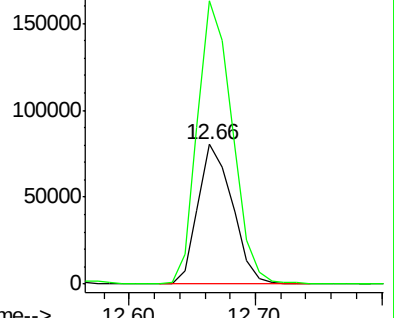
106 100

91 203.0 156.7 235.1



Abundance Ion 106.05 (105.75 to 106.75): V

Ion 91.00 (90.70 to 91.70): VDC



#69

o-Xylene

Concen: 12.809 ug/l

RT: 13.06 min Scan# 1182

Delta R.T. 0.01 min

Lab File: VD061720.D

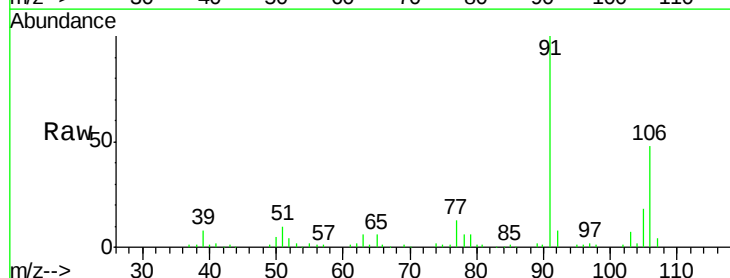
Acq: 10 Apr 2019 18:33

Tgt Ion:106 Resp: 75759

Ion Ratio Lower Upper

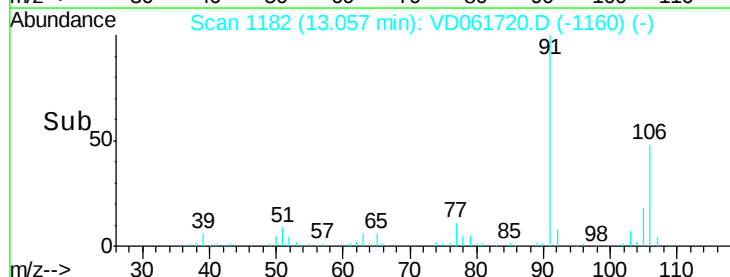
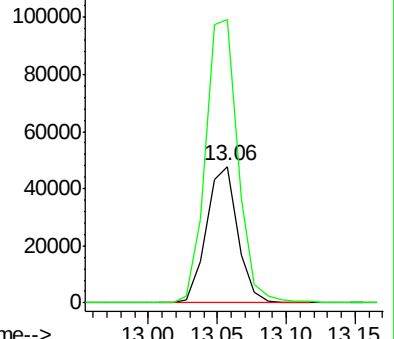
106 100

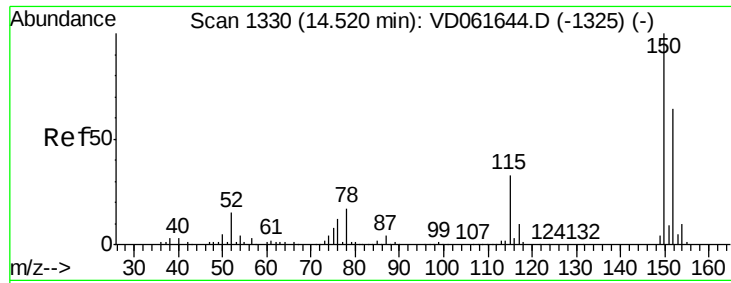
91 207.3 107.3 321.9



Abundance Ion 106.05 (105.75 to 106.75): V

Ion 91.00 (90.70 to 91.70): VDC





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 14.52 min Scan# 1331

Delta R.T. 0.00 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

20190176-AMND-COMP-CS-3RE

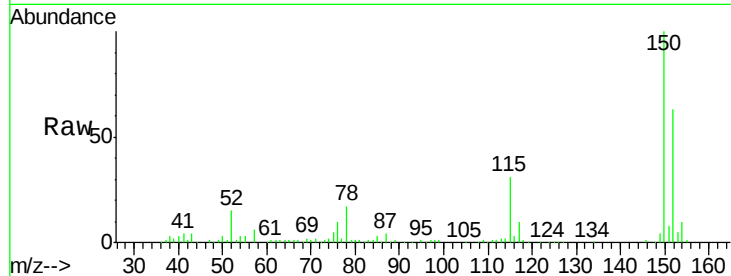
Tgt Ion:152 Resp: 177341

Ion Ratio Lower Upper

152 100

115 49.1 26.4 79.2

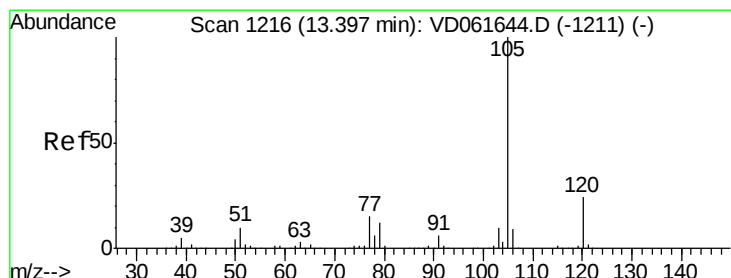
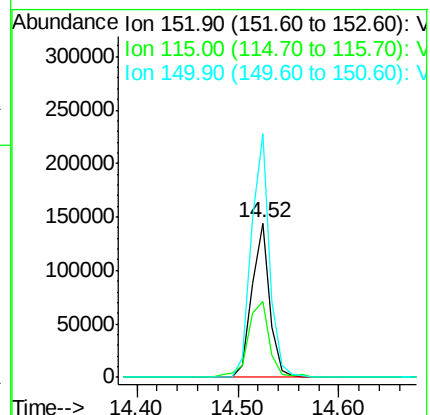
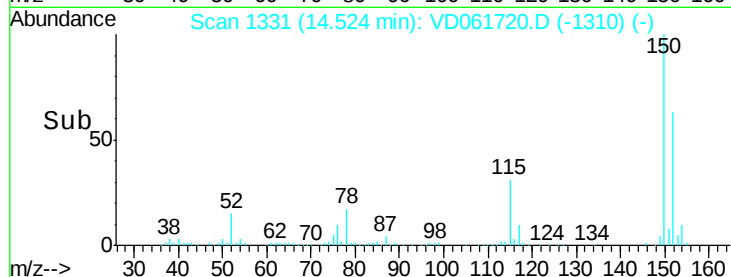
150 157.6 0.0 320.6



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 115.00 (114.70 to 115.70): V

Ion 149.90 (149.60 to 150.60): V



#73

Isopropylbenzene

Concen: 41.604 ug/l

RT: 13.41 min Scan# 1218

Delta R.T. 0.01 min

Lab File: VD061720.D

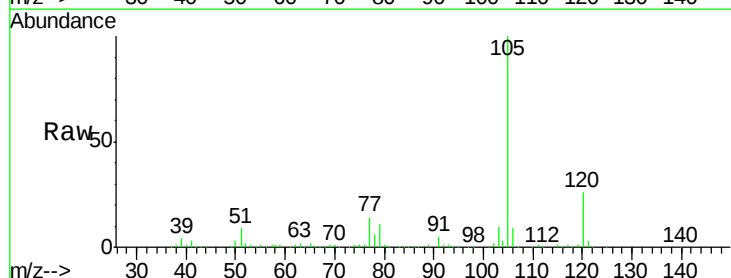
Acq: 10 Apr 2019 18:33

Tgt Ion:105 Resp: 491610

Ion Ratio Lower Upper

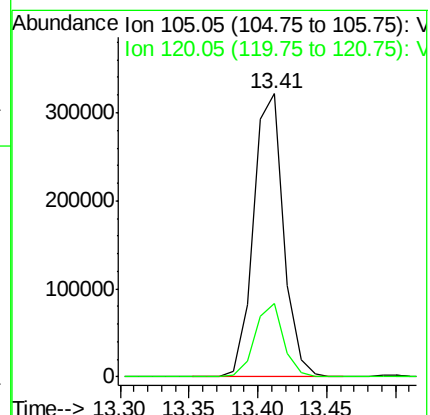
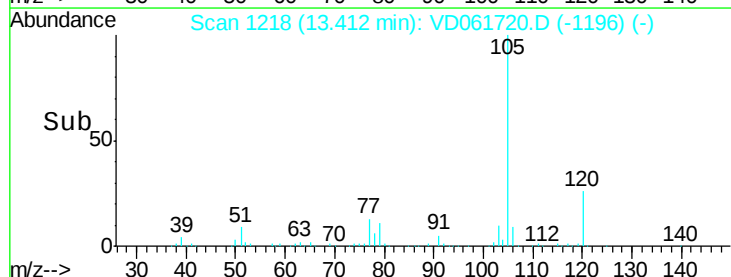
105 100

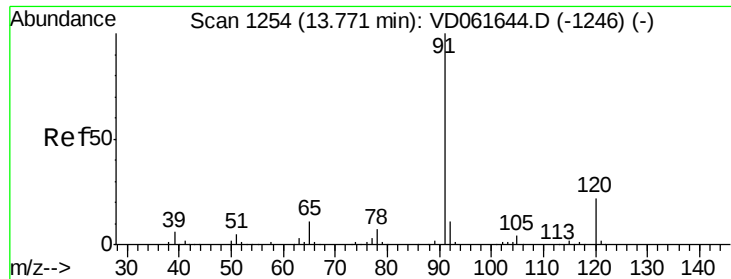
120 25.9 12.2 36.4



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V





#78

n-propylbenzene

Concen: 2.882 ug/l

RT: 13.78 min Scan# 1255

Delta R.T. 0.00 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

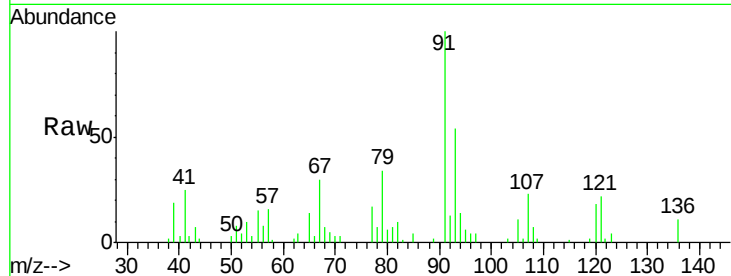
20190176-AMND-COMP-CS-3RE

Tgt Ion: 91 Resp: 40730

Ion Ratio Lower Upper

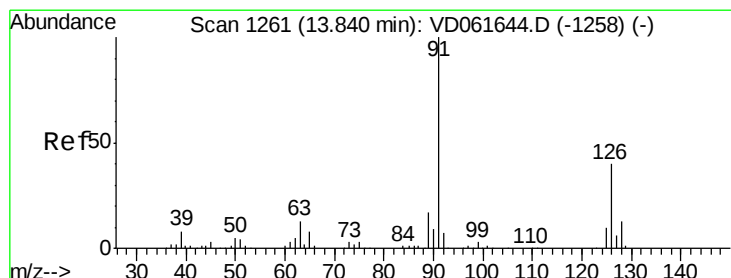
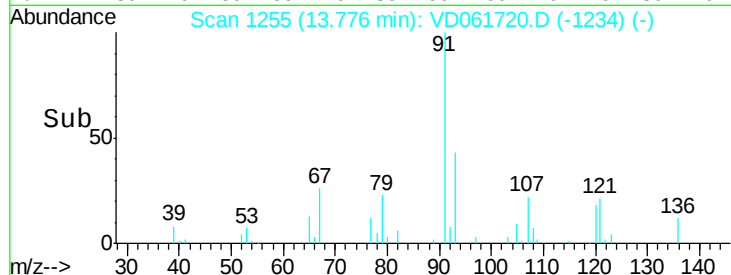
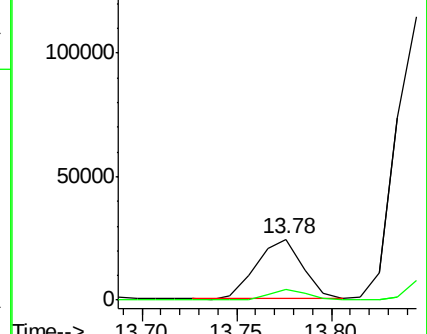
91 100

120 17.7 10.8 32.4



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 120.05 (119.75 to 120.75): VDC



#79

2-Chlorotoluene

Concen: 19.313 ug/l

RT: 13.84 min Scan# 1262

Delta R.T. 0.00 min

Lab File: VD061720.D

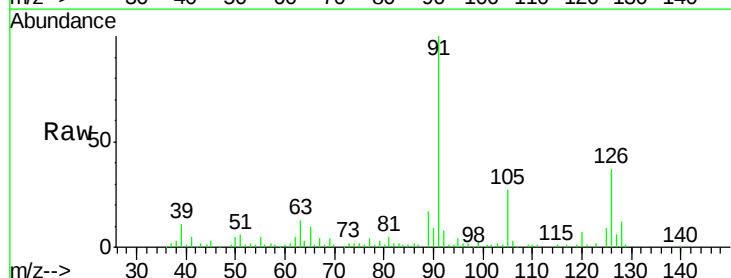
Acq: 10 Apr 2019 18:33

Tgt Ion: 91 Resp: 156112

Ion Ratio Lower Upper

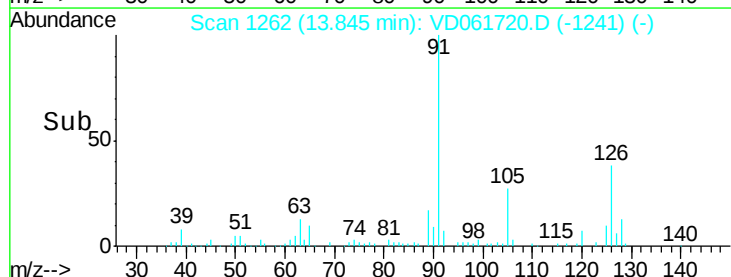
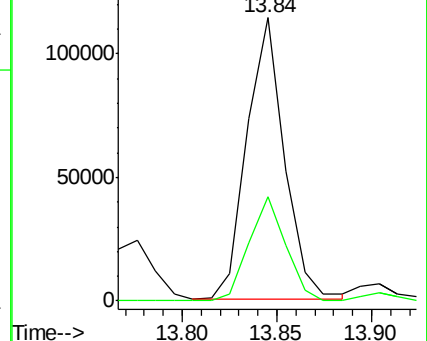
91 100

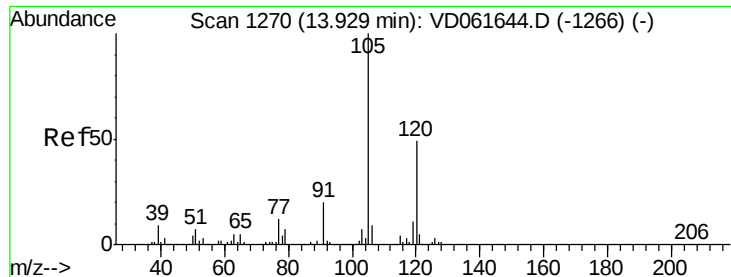
126 36.6 20.0 59.9



Abundance Ion 91.00 (90.70 to 91.70): VDC

Ion 125.95 (125.65 to 126.65): VDC

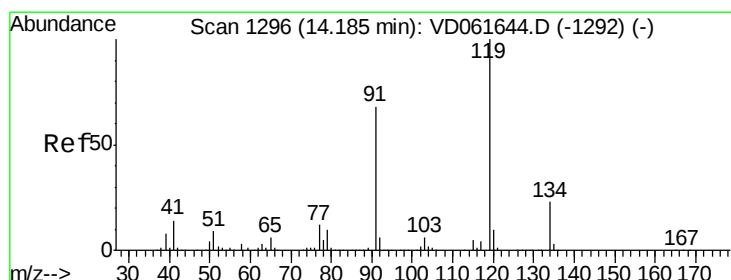
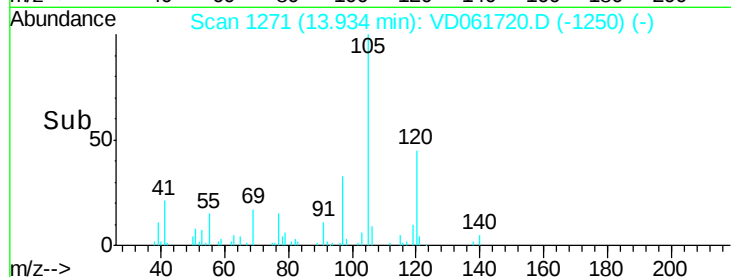
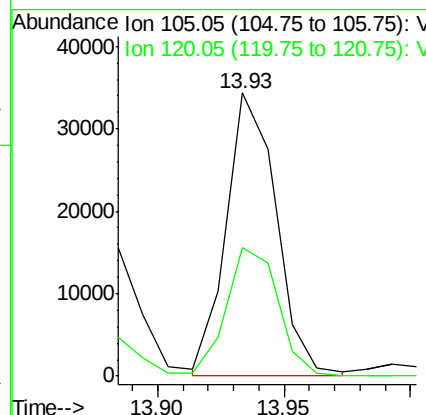
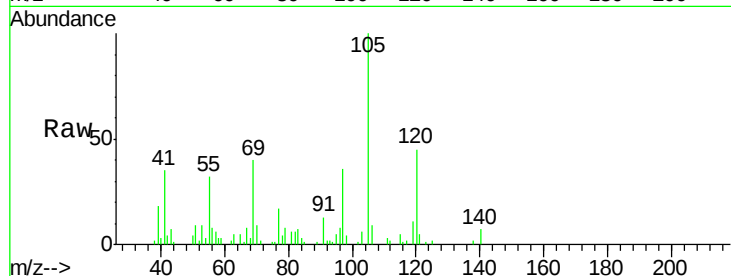




#80
 1,3,5-Trimethylbenzene
 Concen: 5.033 ug/l
 RT: 13.93 min Scan# 1271
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

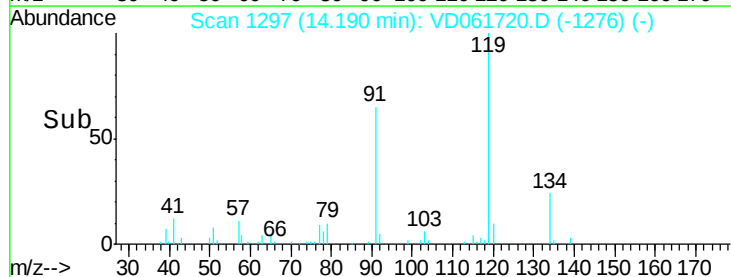
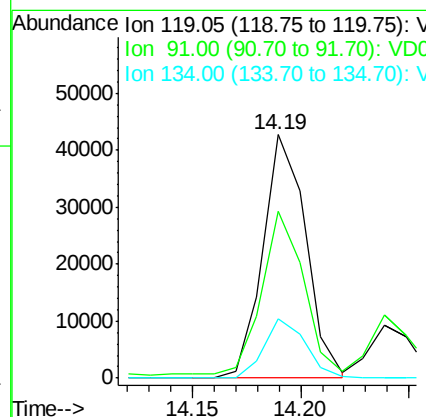
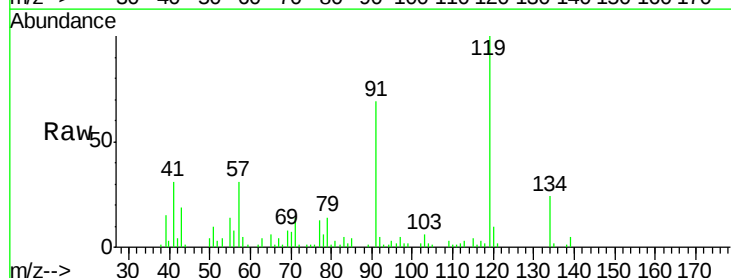
Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

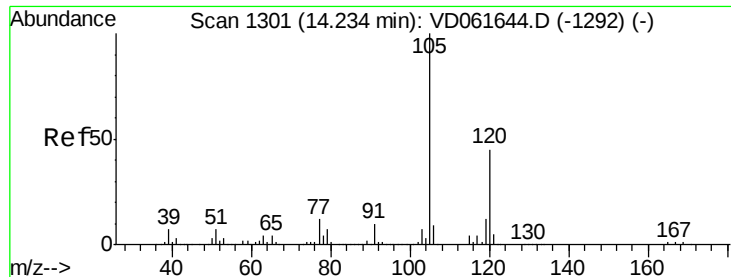
Tgt Ion:105 Resp: 47200
 Ion Ratio Lower Upper
 105 100
 120 45.4 24.4 73.2



#83
 tert-Butylbenzene
 Concen: 5.182 ug/l
 RT: 14.19 min Scan# 1297
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Tgt Ion:119 Resp: 58601
 Ion Ratio Lower Upper
 119 100
 91 68.7 33.9 101.6
 134 24.1 11.6 34.8





#84

1,2,4-Trimethylbenzene

Concen: 12.331 ug/l

RT: 14.24 min Scan# 1302

Delta R.T. 0.00 min

Lab File: VD061720.D

Acq: 10 Apr 2019 18:33

Instrument :

MSVOA_D

ClientSampleId :

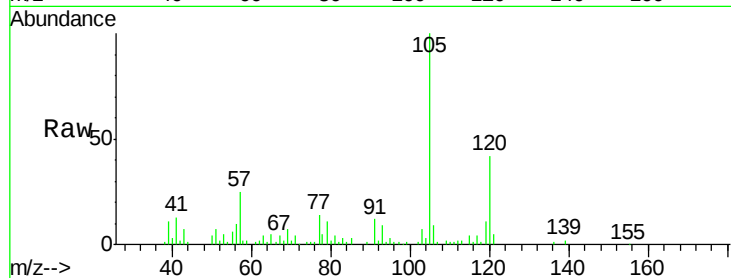
20190176-AMND-COMP-CS-3RE

Tgt Ion:105 Resp: 116722

Ion Ratio Lower Upper

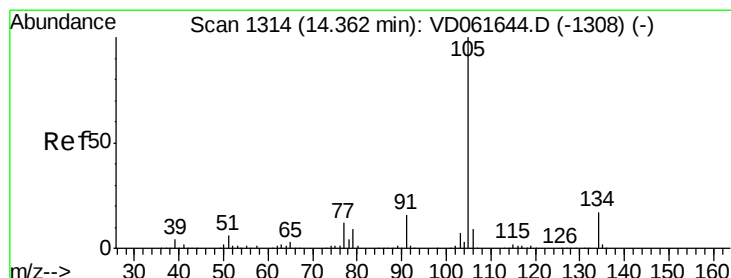
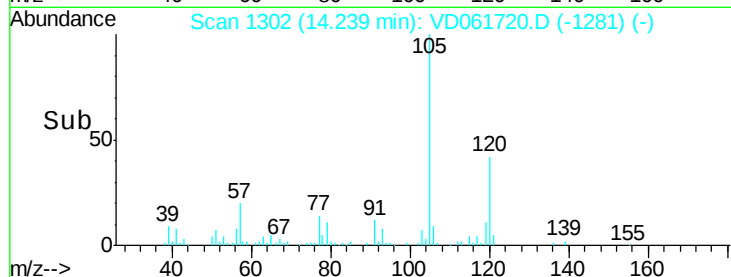
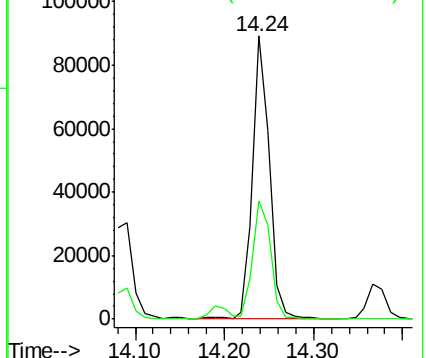
105 100

120 41.6 22.6 67.8



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V



#85

sec-Butylbenzene

Concen: 1.305 ug/l

RT: 14.37 min Scan# 1315

Delta R.T. 0.00 min

Lab File: VD061720.D

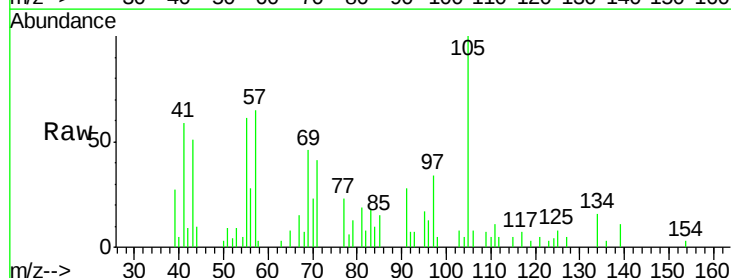
Acq: 10 Apr 2019 18:33

Tgt Ion:105 Resp: 15939

Ion Ratio Lower Upper

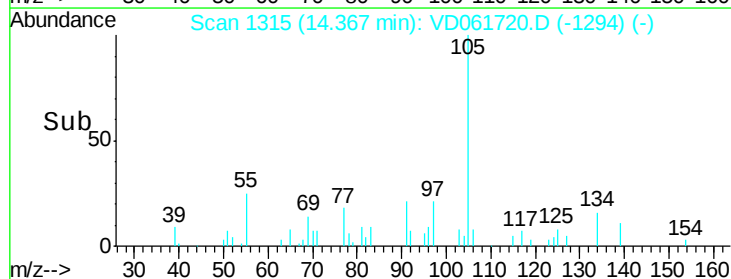
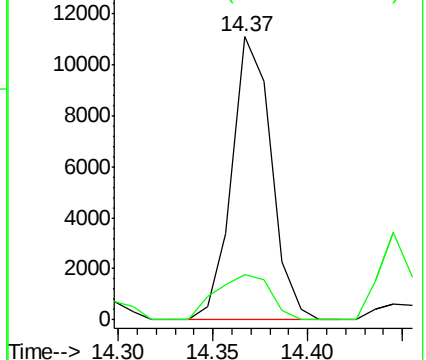
105 100

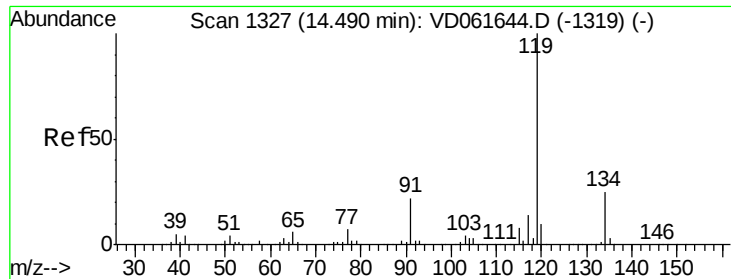
134 15.9 8.6 25.7



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 134.10 (133.80 to 134.80): V

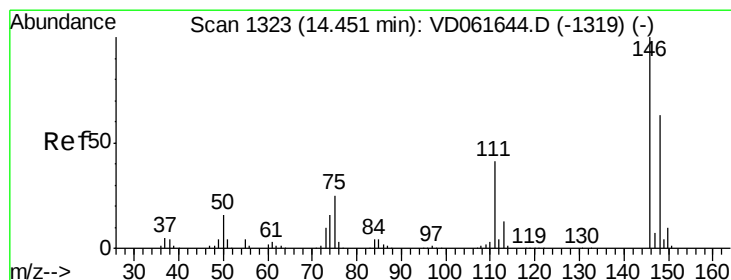
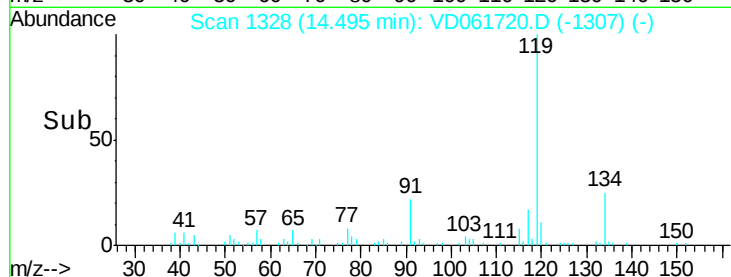
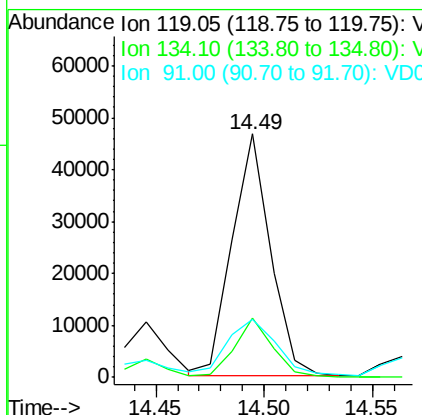
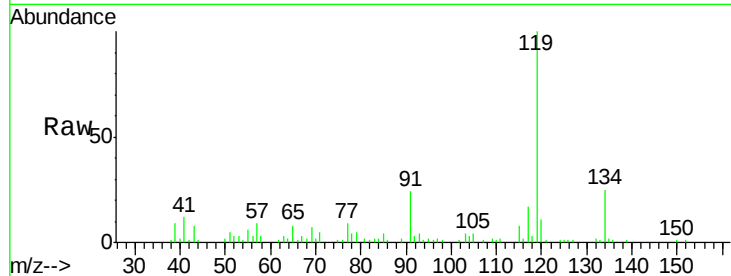




#86
 p-Isopropyltoluene
 Concen: 5.473 ug/l
 RT: 14.49 min Scan# 1328
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

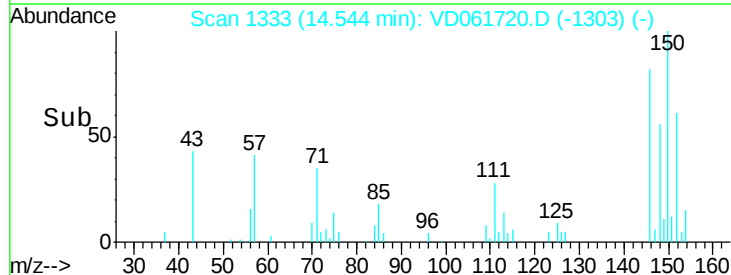
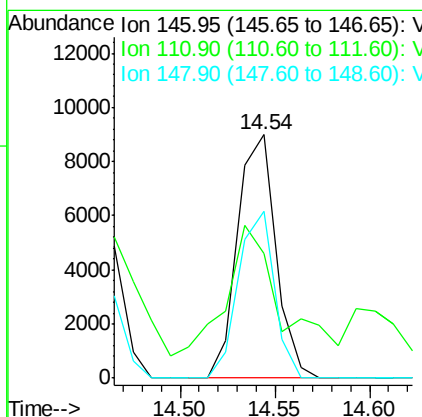
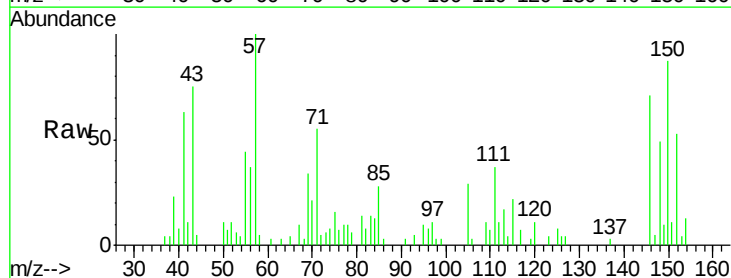
Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

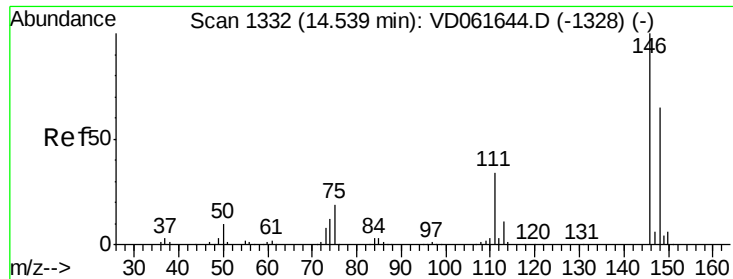
Tgt Ion:119 Resp: 58007
 Ion Ratio Lower Upper
 119 100
 134 24.5 12.5 37.5
 91 24.0 11.0 33.0



#87
 1,3-Dichlorobenzene
 Concen: 2.134 ug/l
 RT: 14.54 min Scan# 1333
 Delta R.T. 0.09 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Tgt Ion:146 Resp: 12599
 Ion Ratio Lower Upper
 146 100
 111 51.4 20.3 61.0
 148 68.3 31.7 95.1

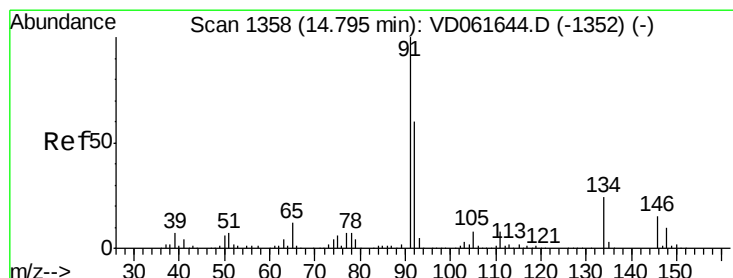
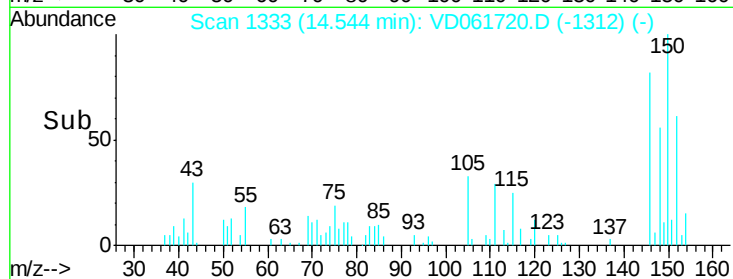
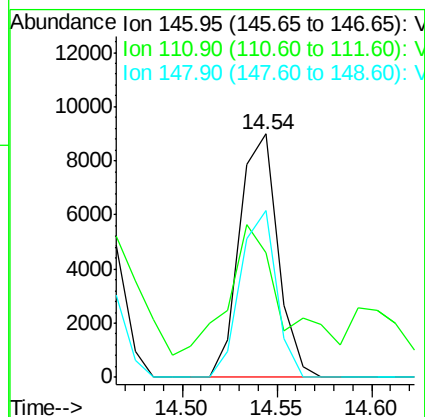
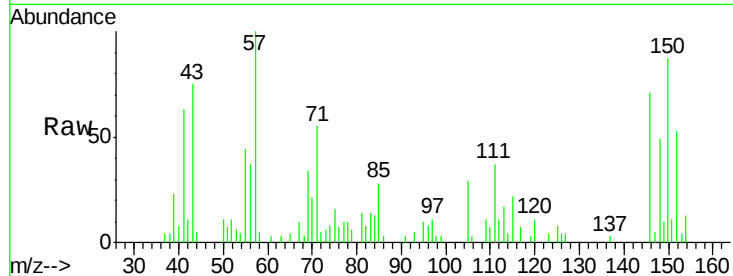




#88
 1,4-Dichlorobenzene
 Concen: 2.115 ug/l
 RT: 14.54 min Scan# 1333
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

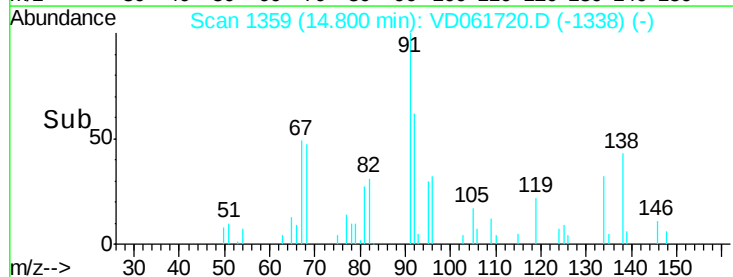
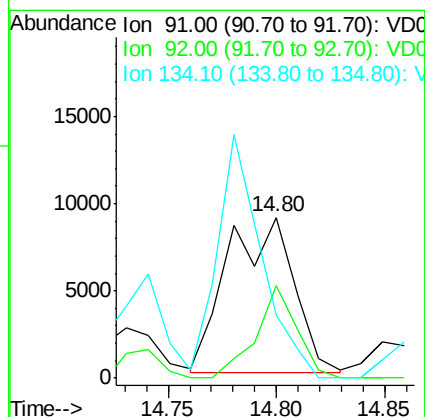
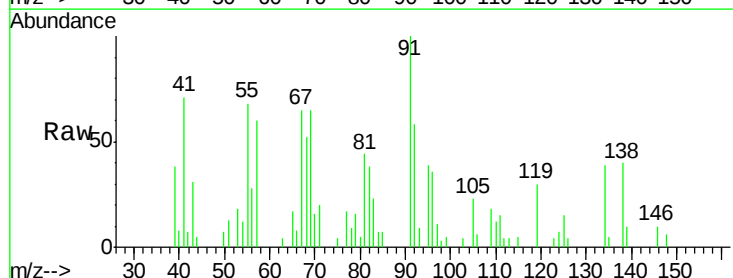
Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

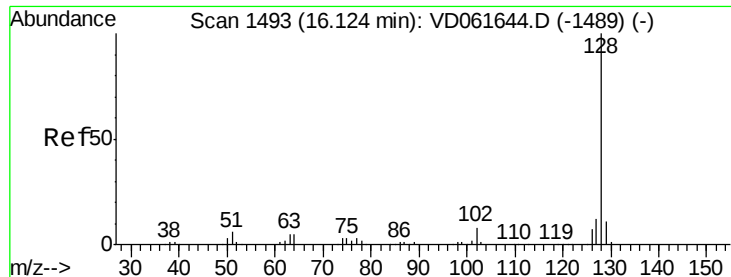
Tgt Ion: 146 Resp: 12599
 Ion Ratio Lower Upper
 146 100
 111 51.4 17.1 51.2#
 148 68.3 32.6 97.7



#89
 n-Butylbenzene
 Concen: 2.055 ug/l
 RT: 14.80 min Scan# 1359
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Tgt Ion: 91 Resp: 18931
 Ion Ratio Lower Upper
 91 100
 92 57.9 29.8 89.4
 134 39.0 12.2 36.4#





#95
 Naphthalene
 Concen: 10.224 ug/l
 RT: 16.13 min Scan# 1494
 Delta R.T. 0.00 min
 Lab File: VD061720.D
 Acq: 10 Apr 2019 18:33

Instrument :
 MSVOA_D
 ClientSampleId :
 20190176-AMND-COMP-CS-3RE

Tgt Ion	Ratio	Lower	Upper
128	100		
127	13.0	9.4	14.2
129	11.1	8.8	13.2

