

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD052319\
 Data File : VD062520.D
 Acq On : 23 May 2019 14:20
 Operator : VA/AP
 Sample : K2996-02RE
 Misc : 6.20g/5ml/MSVOA D/SOIL
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 P-2(0.5-1.0)RE

Quant Time: May 24 01:20:34 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D052019S.M
 Quant Title : SW846 8260
 QLast Update : Tue May 21 03:32:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.04	168	508849	50.00	ug/l	-0.02
34) 1,4-Difluorobenzene	8.21	114	690828	50.00	ug/l	-0.02
63) Chlorobenzene-d5	12.37	117	468490	50.00	ug/l	-0.01
72) 1,4-Dichlorobenzene-d4	14.52	152	174858	50.00	ug/l	-0.01

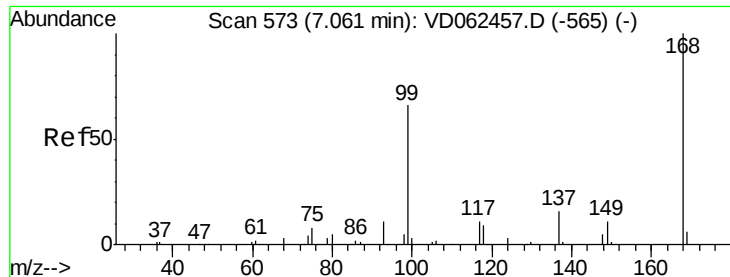
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	7.44	65	198595	36.46	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	72.92%	
35) Dibromofluoromethane	6.92	113	244881	39.29	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	78.58%	
50) Toluene-d8	10.41	98	469238	34.41	ug/l	-0.02
Spiked Amount	50.000		Recovery	=	68.82%	
62) 4-Bromofluorobenzene	13.56	95	191259	32.06	ug/l	-0.01
Spiked Amount	50.000		Recovery	=	64.12%	

Target Compounds

						Qvalue
13) Acrolein	3.17	56	5962	28.555	ug/l	91
15) Acrylonitrile	4.22	53	4344	7.540	ug/l #	50
16) Acetone	3.17	43	20942	21.455	ug/l #	50
18) Methyl Acetate	3.77	43	54610	32.423	ug/l #	53
20) Methylene Chloride	3.81	84	3544	Below Cal	#	65
31) Cyclohexane	6.94	56	14415	2.803	ug/l	93
36) 1,1-Dichloropropene	7.04	75	36660	5.551	ug/l #	48
38) Carbon Tetrachloride	7.04	117	50566	5.151	ug/l #	15
39) Methylcyclohexane	8.85	83	30114	5.528	ug/l #	89
40) Benzene	7.44	78	18198	1.405	ug/l	98
43) Isopropyl Acetate	9.28	43	9104	2.675	ug/l #	43
47) Bromodichloromethane	9.39	83	20001	2.747	ug/l #	26
48) Methyl methacrylate	9.10	41	5701	2.489	ug/l #	30
51) 4-Methyl-2-Pentanone	10.36	43	33506	14.900	ug/l #	74
56) Ethyl methacrylate	11.09	69	19798	6.161	ug/l #	1
59) 2-Hexanone	11.48	43	32306	19.768	ug/l #	33
68) m/p-Xylenes	12.67	106	10017	1.798	ug/l #	72
73) Isopropylbenzene	13.40	105	11371	1.032	ug/l	93
74) N-amyl acetate	13.29	43	14173	5.206	ug/l #	2
75) 1,1,2,2-Tetrachloroethane	13.70	83	3941	1.982	ug/l #	54
78) n-propylbenzene	13.77	91	18471	1.447	ug/l	96
81) trans-1,4-Dichloro-2-buten	13.56	75	82018	141.199	ug/l #	21
84) 1,2,4-Trimethylbenzene	14.23	105	23636	2.417	ug/l	91
95) Naphthalene	16.12	128	15060	2.981	ug/l #	78

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.02 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

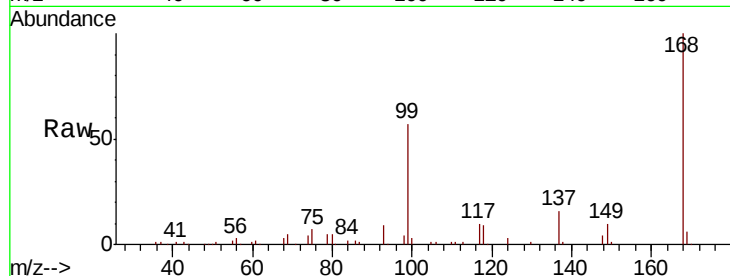
P-2(0.5-1.0)RE

Tot Ion:168 Resp: 508849

Ion Ratio Lower Upper

168 100

99 57.0 46.5 69.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.95 (98.65 to 99.65): VDC

7.04

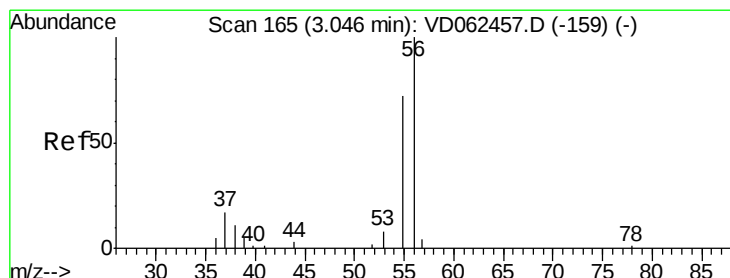
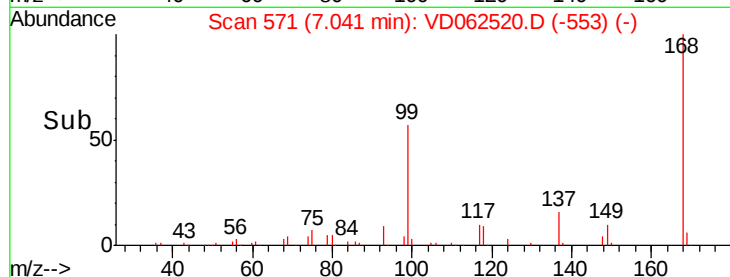
150000

100000

50000

0

Time-->



#13

Acrolein

Concen: 28.555 ug/l

RT: 3.17 min Scan# 178

Delta R.T. 0.13 min

Lab File: VD062520.D

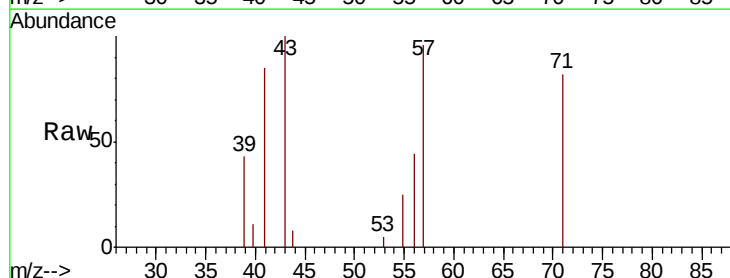
Acq: 23 May 2019 14:20

Tgt Ion: 56 Resp: 5962

Ion Ratio Lower Upper

56 100

55 57.3 51.4 77.2



Abundance Ion 55.95 (55.65 to 56.65): VDC

Ion 55.00 (54.70 to 55.70): VDC

3.17

3000

2500

2000

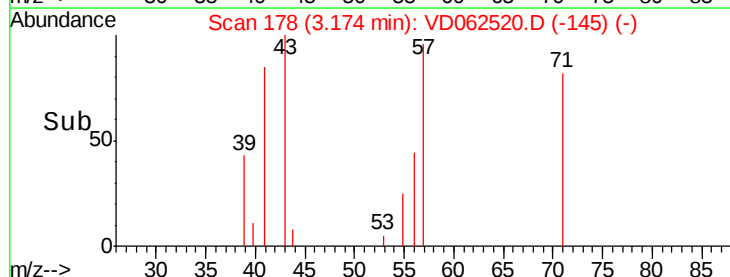
1500

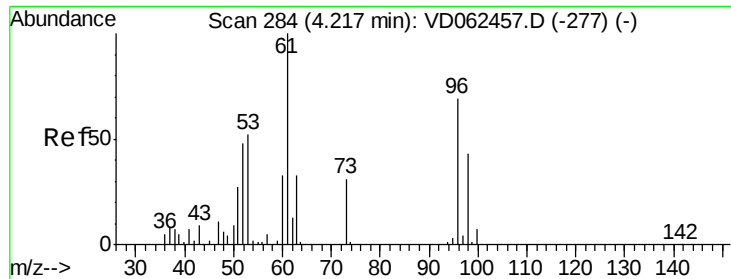
1000

500

0

Time-->





#15

Acrylonitrile

Concen: 7.540 ug/l

RT: 4.22 min Scan# 284

Delta R.T. -0.00 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

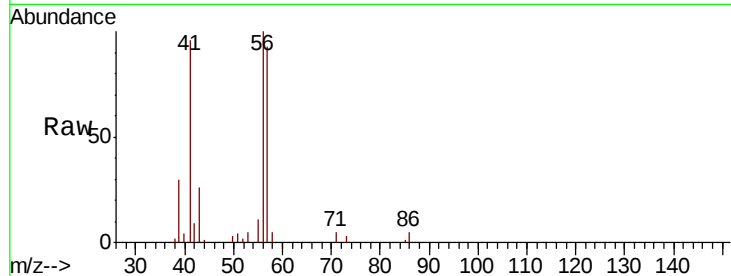
Tot Ion: 53 Resp: 4344

Ion Ratio Lower Upper

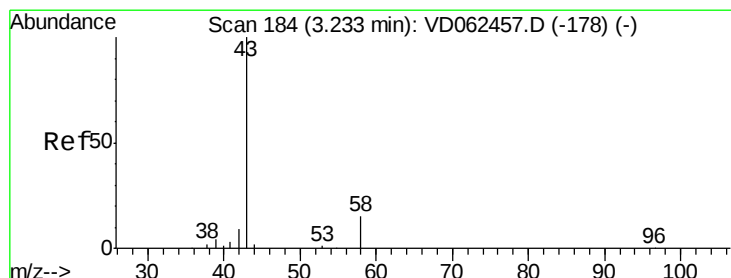
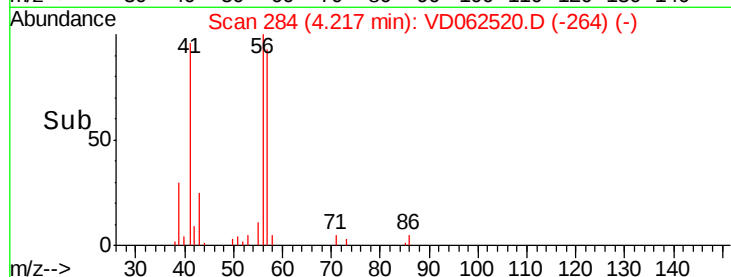
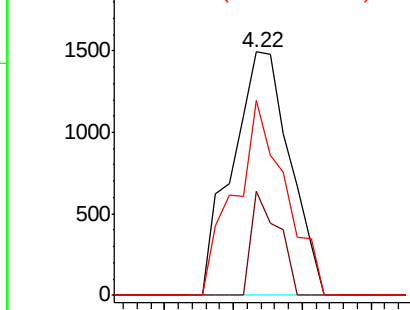
53 100

52 42.9 65.0 97.4#

51 80.2 32.6 48.8#



Abundance Ion 53.00 (52.70 to 53.70): VDC
Ion 52.00 (51.70 to 52.70): VDC
Ion 51.00 (50.70 to 51.70): VDC



#16

Acetone

Concen: 21.455 ug/l

RT: 3.17 min Scan# 178

Delta R.T. -0.06 min

Lab File: VD062520.D

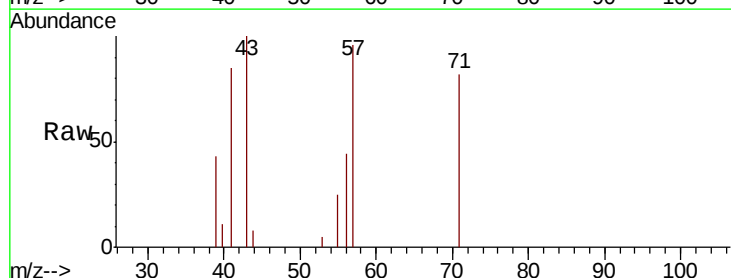
Acq: 23 May 2019 14:20

Tgt Ion: 43 Resp: 20942

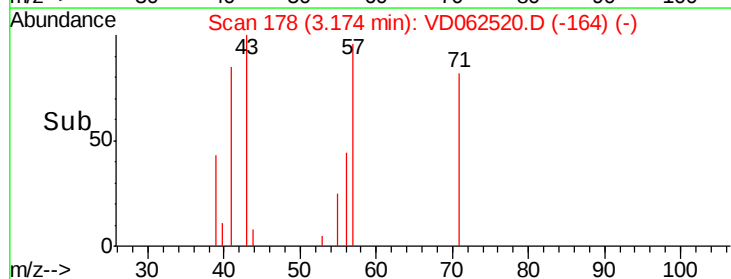
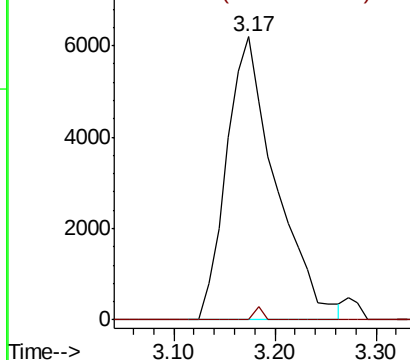
Ion Ratio Lower Upper

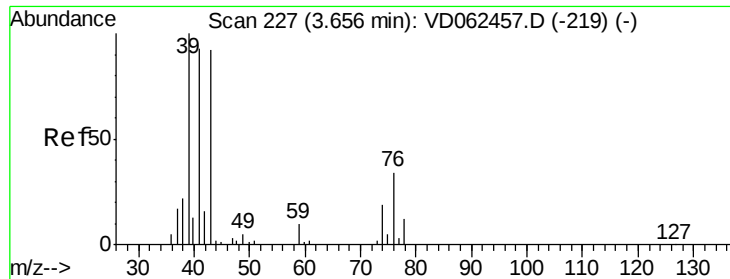
43 100

58 0.0 19.9 29.9#



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

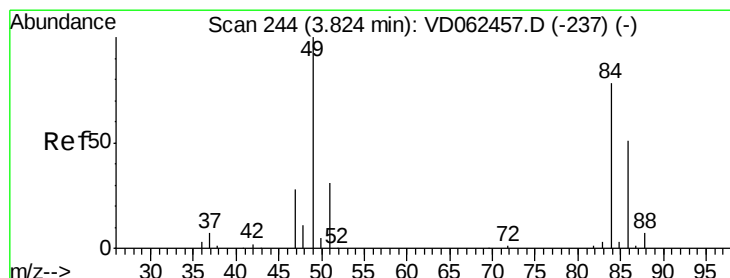
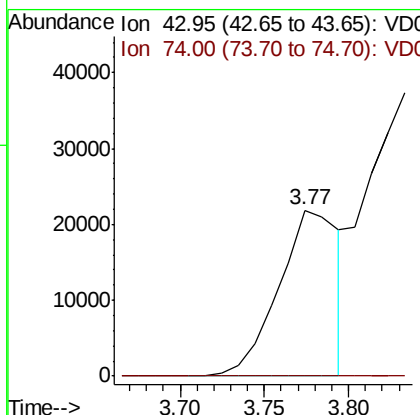
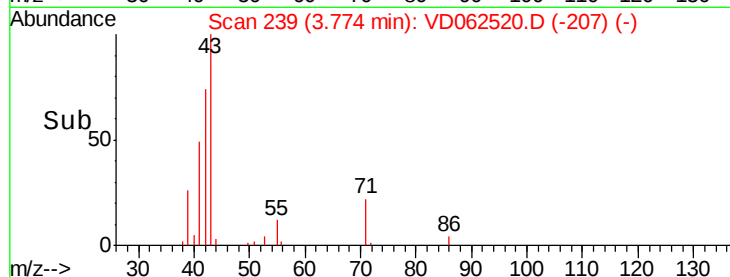
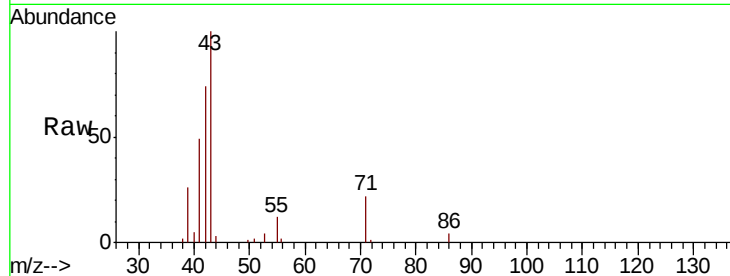




#18
Methyl Acetate
Concen: 32.423 ug/l
RT: 3.77 min Scan# 239
Delta R.T. 0.12 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

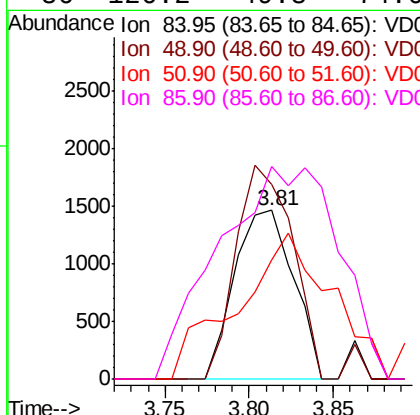
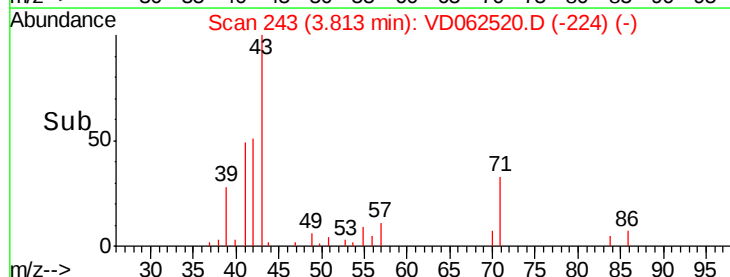
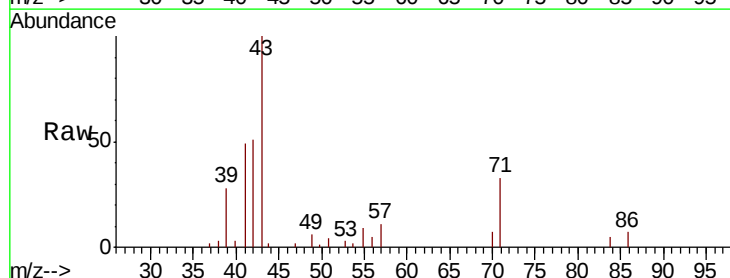
Instrument :
MSVOA_D
ClientSampleId :
P-2(0.5-1.0)RE

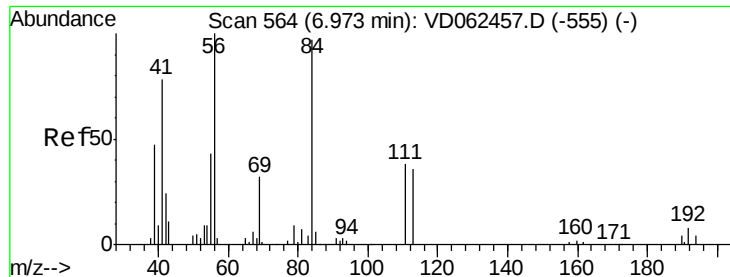
Tot Ion: 43 Resp: 54610
Ion Ratio Lower Upper
43 100
74 0.0 18.0 27.0#



#20
Methylene Chloride
Concen: Below Cal
RT: 3.81 min Scan# 243
Delta R.T. -0.01 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Tgt Ion: 84 Resp: 3544
Ion Ratio Lower Upper
84 100
49 115.8 94.0 141.0
51 70.9 29.0 43.4#
86 126.2 49.8 74.6#





#31

Cyclohexane

Concen: 2.803 ug/l

RT: 6.94 min Scan# 561

Delta R.T. -0.03 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

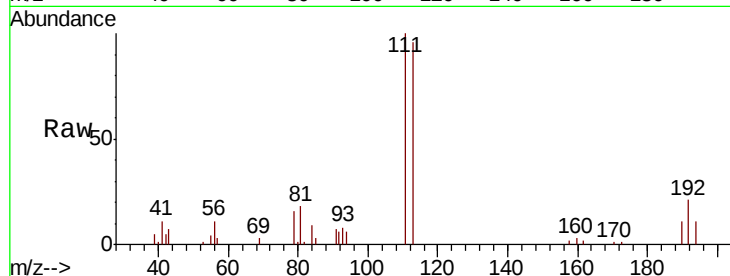
Tot Ion: 56 Resp: 14415

Ion Ratio Lower Upper

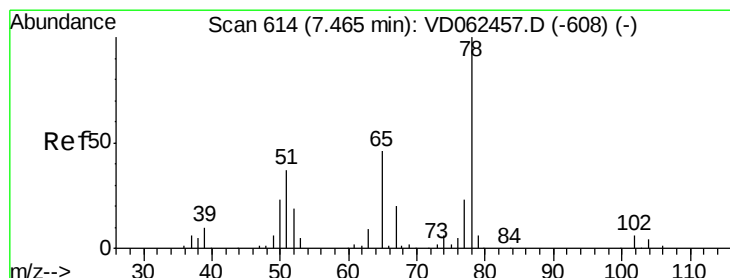
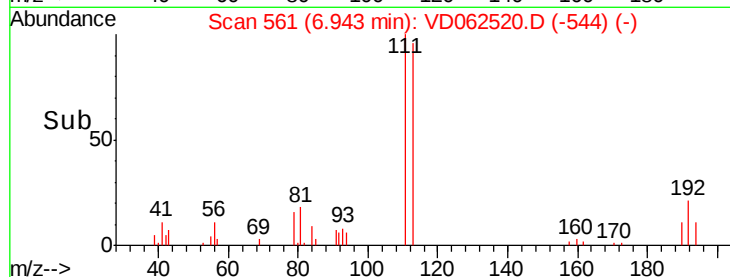
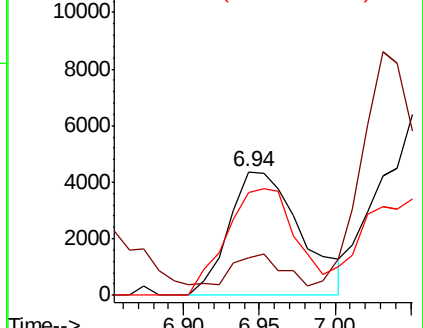
56 100

69 30.5 25.8 38.6

84 82.7 72.2 108.4



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: 36.460 ug/l

RT: 7.44 min Scan# 612

Delta R.T. -0.02 min

Lab File: VD062520.D

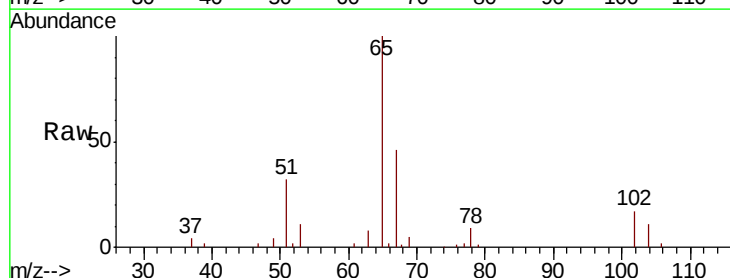
Acq: 23 May 2019 14:20

Tgt Ion: 65 Resp: 198595

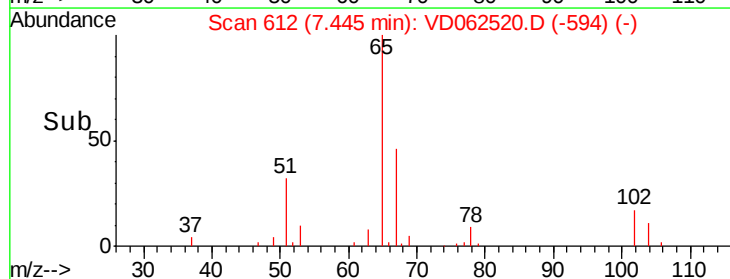
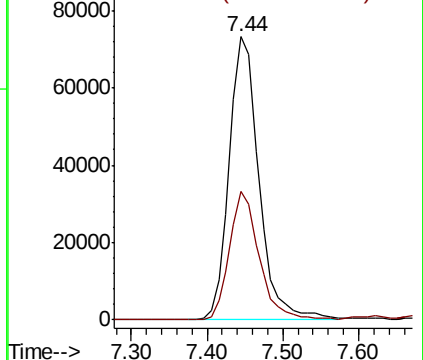
Ion Ratio Lower Upper

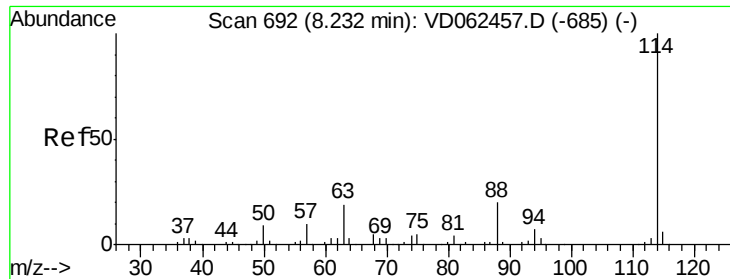
65 100

67 45.6 0.0 98.0



Abundance Ion 64.95 (64.65 to 65.65): VDC
Ion 66.90 (66.60 to 67.60): VDC

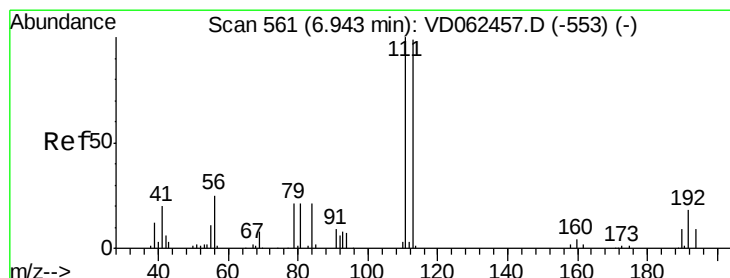
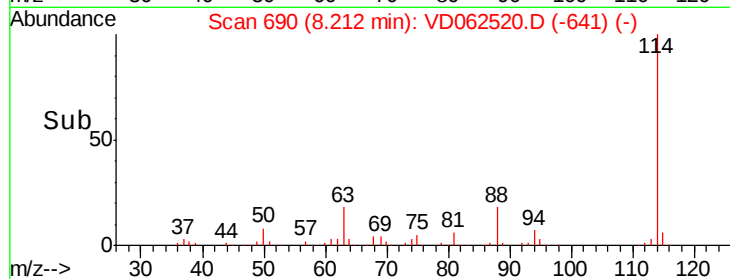
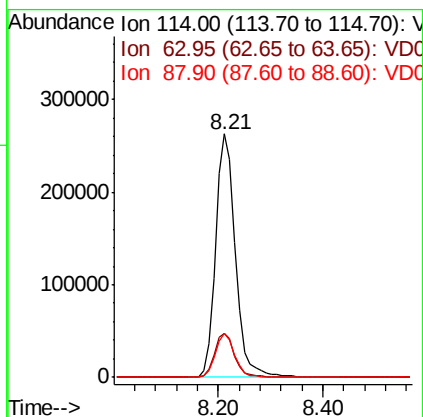
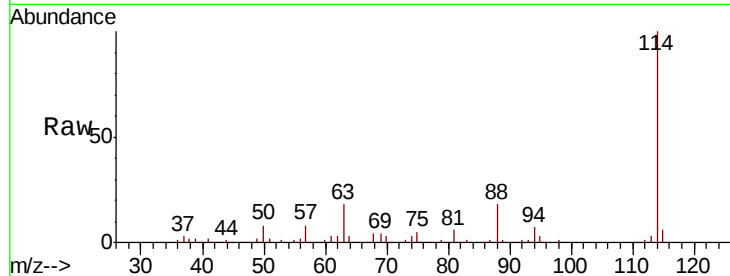




#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.21 min Scan# 690
 Delta R.T. -0.02 min
 Lab File: VD062520.D
 Acq: 23 May 2019 14:20

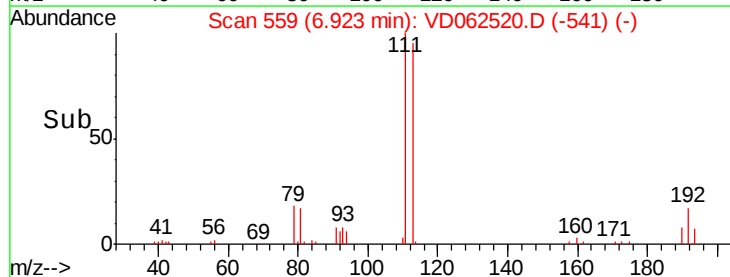
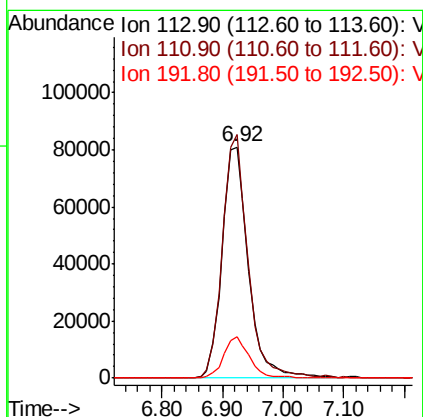
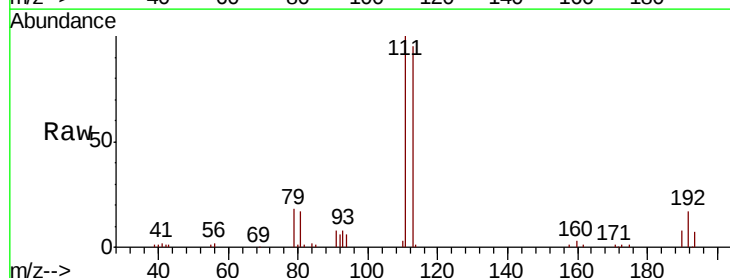
Instrument :
 MSVOA_D
 ClientSampleId :
 P-2(0.5-1.0)RE

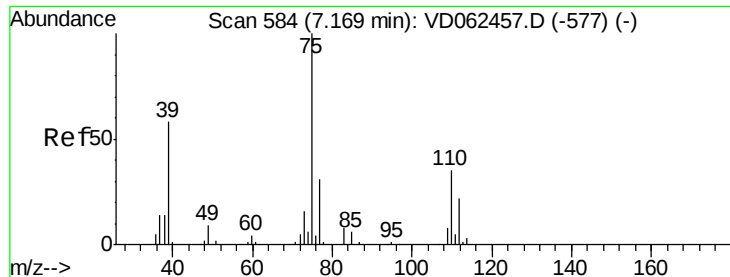
Tot Ion:114 Resp: 690828
 Ion Ratio Lower Upper
 114 100
 63 18.2 0.0 32.4
 88 17.9 0.0 33.6



#35
 Dibromofluoromethane
 Concen: 39.293 ug/l
 RT: 6.92 min Scan# 559
 Delta R.T. -0.02 min
 Lab File: VD062520.D
 Acq: 23 May 2019 14:20

Tgt Ion:113 Resp: 244881
 Ion Ratio Lower Upper
 113 100
 111 105.3 78.5 117.7
 192 17.9 13.0 19.4





#36

1,1-Dichloropropene

Concen: 5.551 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.13 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

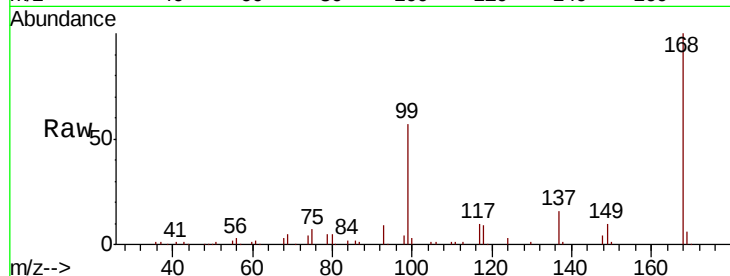
Tot Ion: 75 Resp: 36660

Ion Ratio Lower Upper

75 100

110 9.7 19.1 57.1#

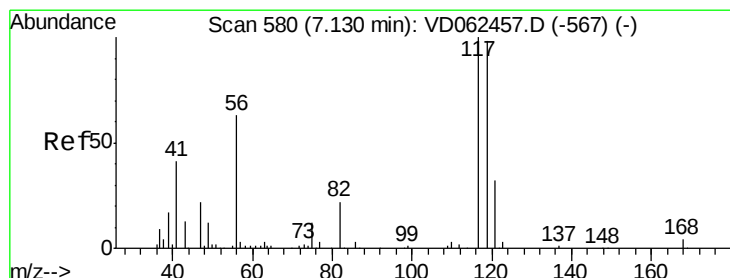
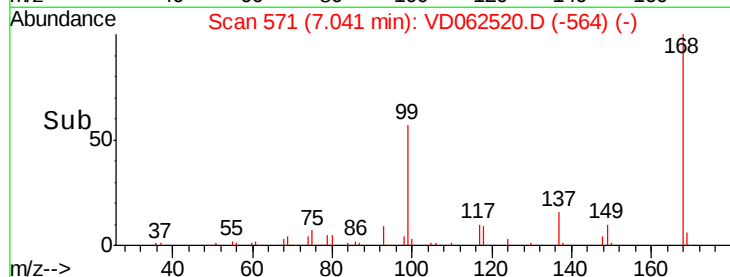
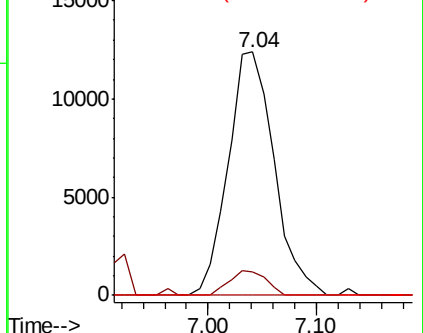
77 0.0 25.6 38.4#



Abundance Ion 75.00 (74.70 to 75.70): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.95 (76.65 to 77.65): V



#38

Carbon Tetrachloride

Concen: 5.151 ug/l

RT: 7.04 min Scan# 571

Delta R.T. -0.09 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

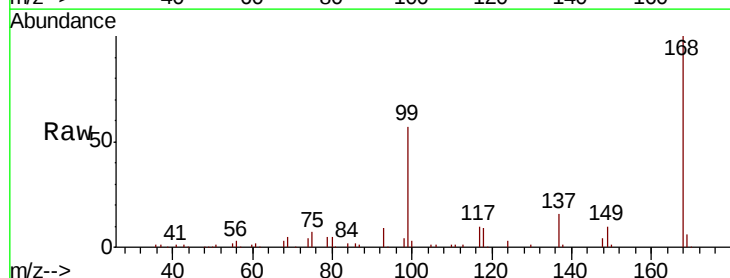
Tgt Ion: 117 Resp: 50566

Ion Ratio Lower Upper

117 100

119 3.3 75.8 113.8#

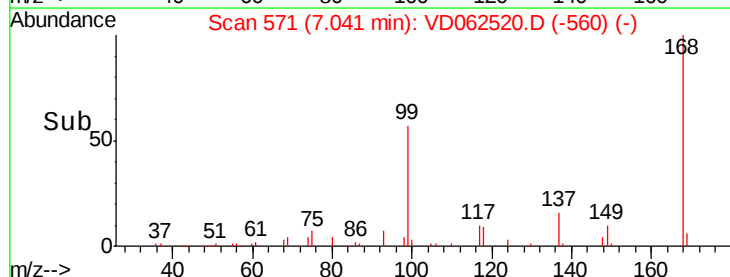
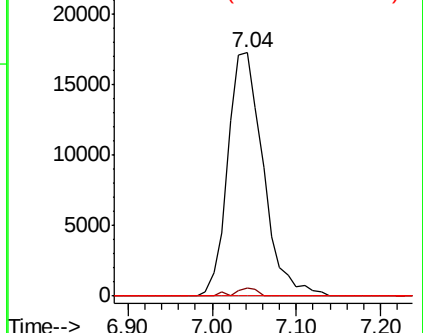
121 0.0 25.9 38.9#

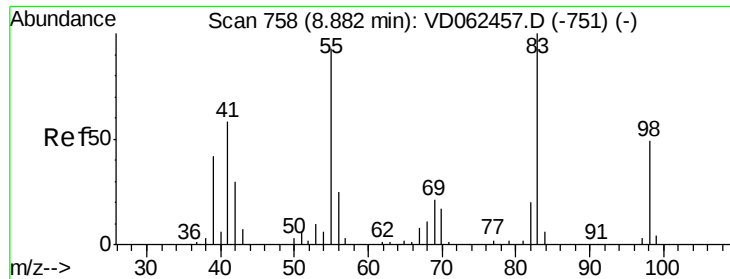


Abundance Ion 116.85 (116.55 to 117.55): V

Ion 118.85 (118.55 to 119.55): V

Ion 120.85 (120.55 to 121.55): V

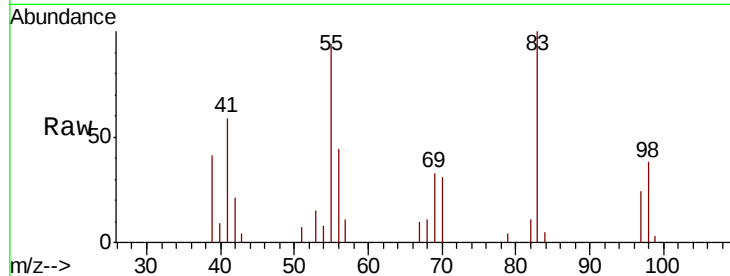




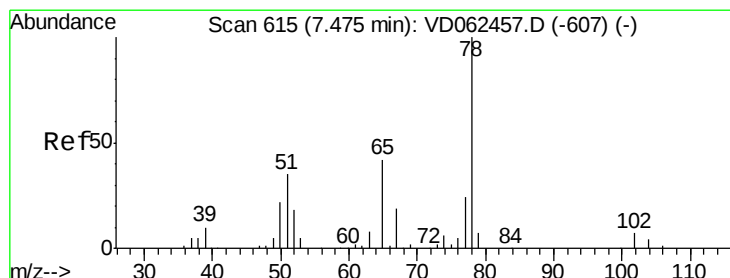
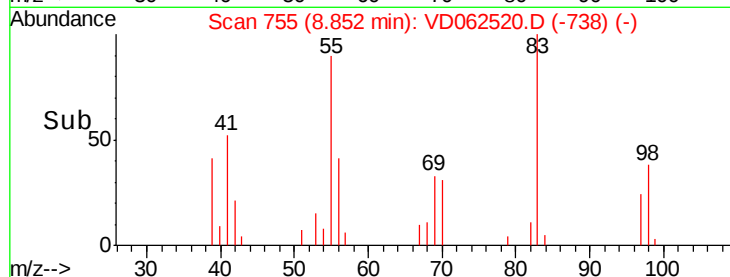
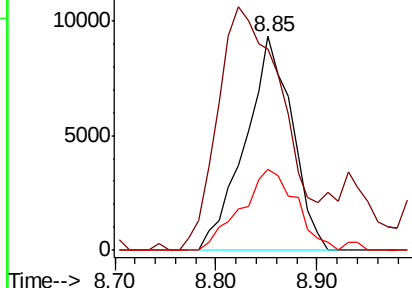
#39
Methvlcvclohexane
Concen: 5.528 ug/l
RT: 8.85 min Scan# 755
Delta R.T. -0.03 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Instrument :
MSVOA_D
ClientSampleId :
P-2(0.5-1.0)RE

Tot Ion: 83 Resp: 30114
Ion Ratio Lower Upper
83 100
55 93.9 68.2 102.4
98 37.7 38.2 57.4#

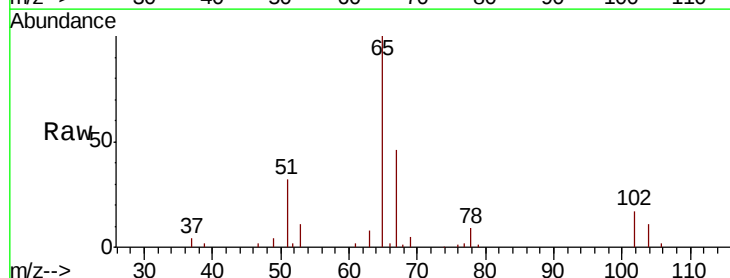


Abundance Ion 83.05 (82.75 to 83.75): VDC
Ion 55.00 (54.70 to 55.70): VDC
Ion 98.05 (97.75 to 98.75): VDC

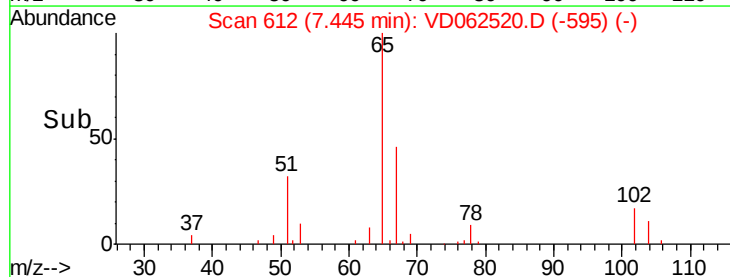
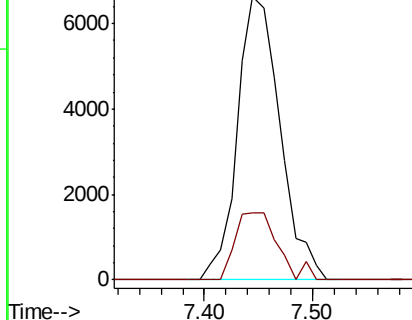


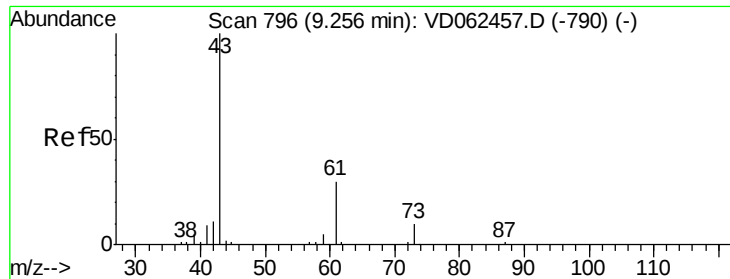
#40
Benzene
Concen: 1.405 ug/l
RT: 7.44 min Scan# 612
Delta R.T. -0.03 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Tgt Ion: 78 Resp: 18198
Ion Ratio Lower Upper
78 100
77 23.5 19.7 29.5



Abundance Ion 77.95 (77.65 to 78.65): VDC
Ion 76.95 (76.65 to 77.65): VDC





#43

Isopropyl Acetate

Concen: 2.675 ug/l

RT: 9.28 min Scan# 799

Delta R.T. 0.03 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

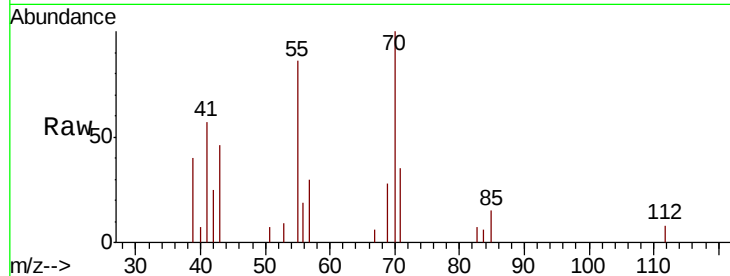
Tot Ion: 43 Resp: 9104

Ion Ratio Lower Upper

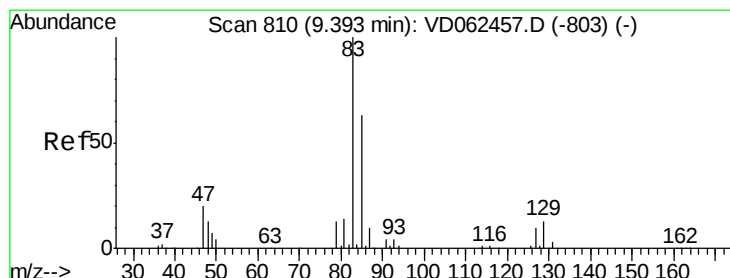
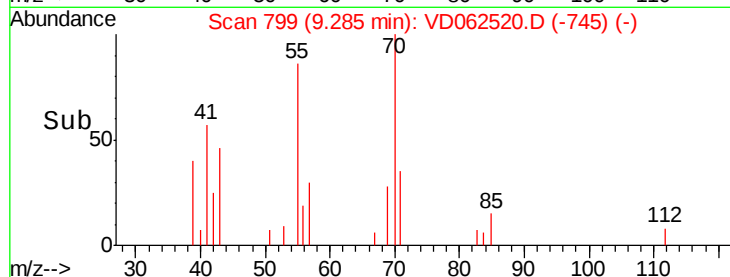
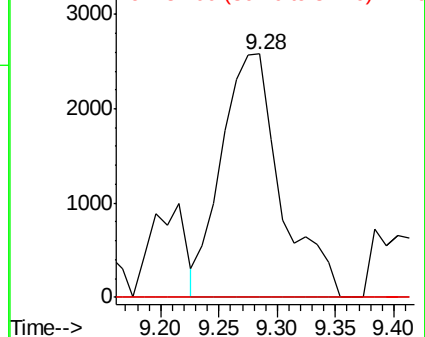
43 100

61 0.0 25.1 37.7#

87 0.0 0.0 0.0



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



#47

Bromodichloromethane

Concen: 2.747 ug/l

RT: 9.39 min Scan# 810

Delta R.T. -0.00 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

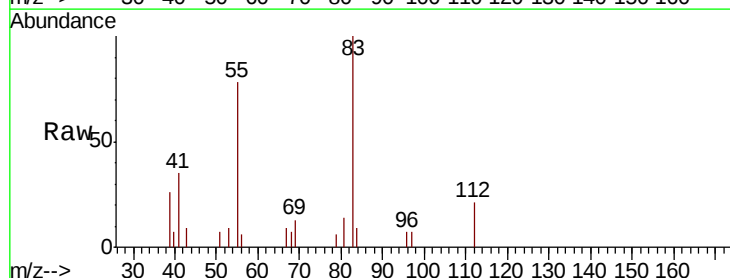
Tgt Ion: 83 Resp: 20001

Ion Ratio Lower Upper

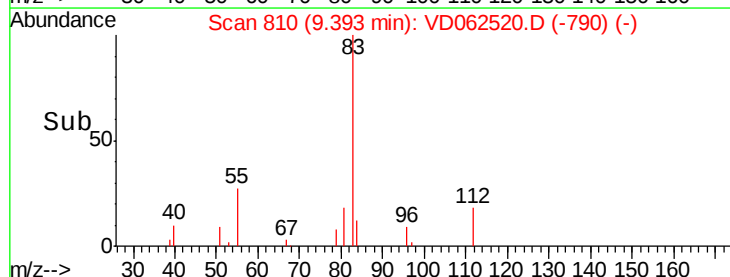
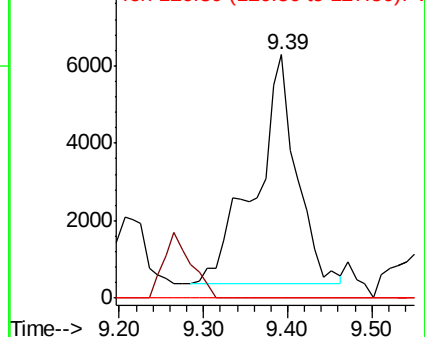
83 100

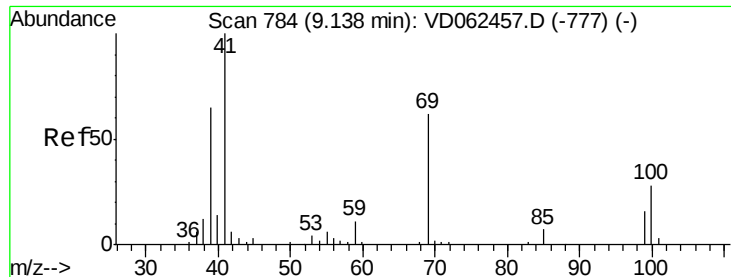
85 0.0 50.9 76.3#

127 0.0 8.1 12.1#



Abundance Ion 82.85 (82.55 to 83.55): VDC
Ion 84.95 (84.65 to 85.65): VDC
Ion 126.80 (126.50 to 127.50): V





#48

Methyl methacrylate

Concen: 2.489 ug/l

RT: 9.10 min Scan# 780

Delta R.T. -0.04 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

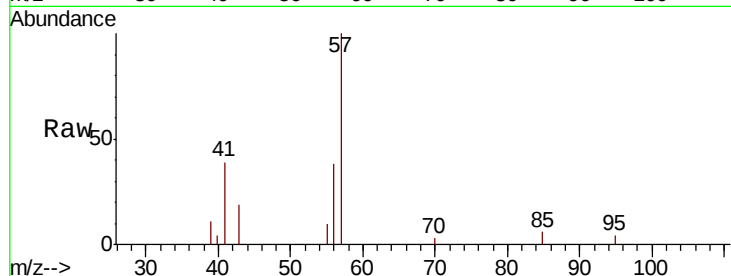
Tot Ion: 41 Resp: 5701

Ion Ratio Lower Upper

41 100

69 0.0 64.2 96.2#

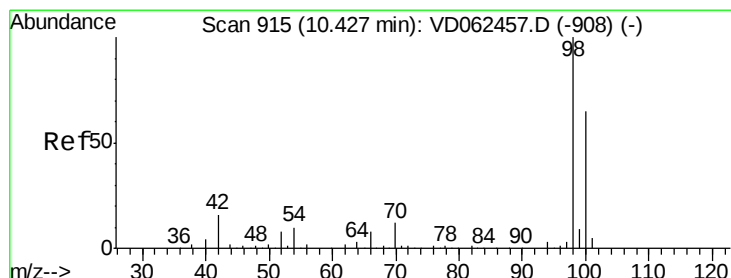
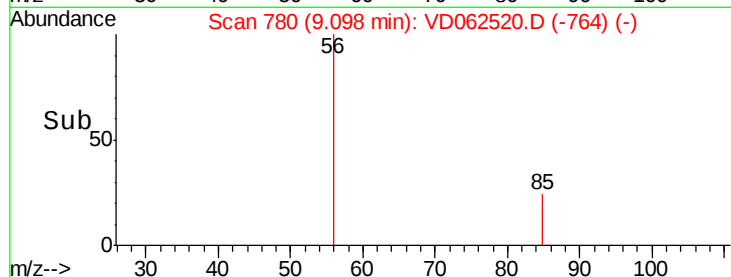
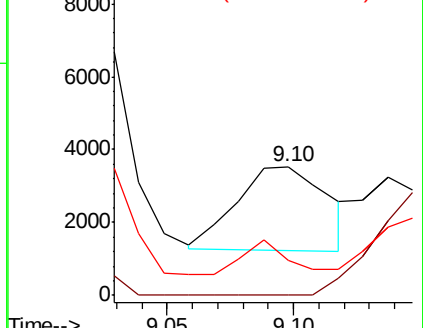
39 27.4 46.8 70.2#



Abundance Ion 40.95 (40.65 to 41.65): VDC

Ion 69.00 (68.70 to 69.70): VDC

Ion 38.95 (38.65 to 39.65): VDC



#50

Toluene-d8

Concen: 34.406 ug/l

RT: 10.41 min Scan# 913

Delta R.T. -0.02 min

Lab File: VD062520.D

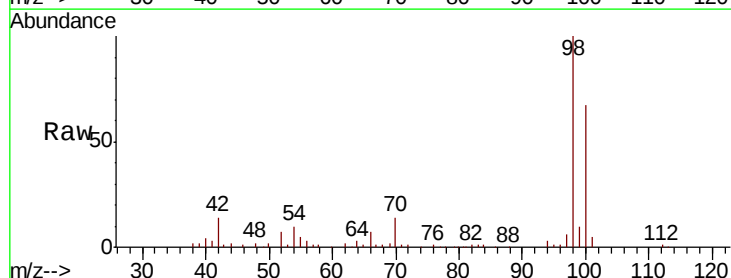
Acq: 23 May 2019 14:20

Tgt Ion: 98 Resp: 469238

Ion Ratio Lower Upper

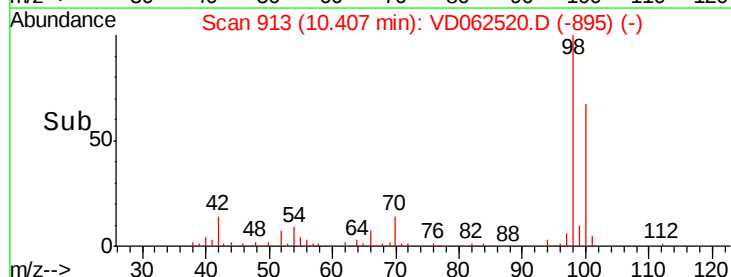
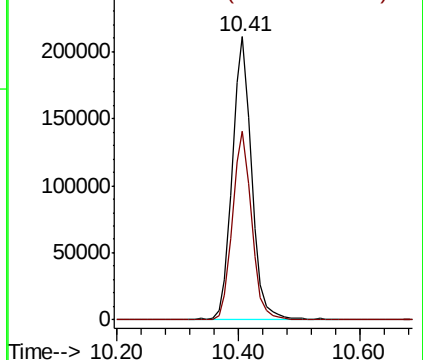
98 100

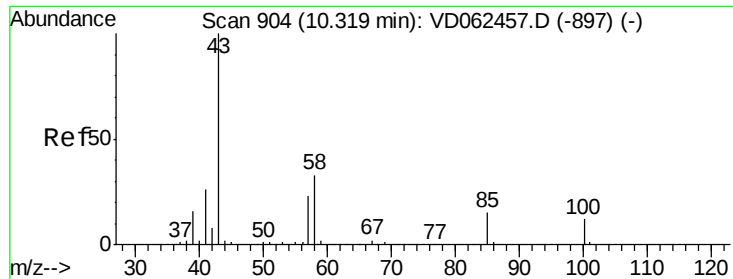
100 66.6 53.8 80.8



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: 14.900 ug/l

RT: 10.36 min Scan# 908

Delta R.T. 0.04 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

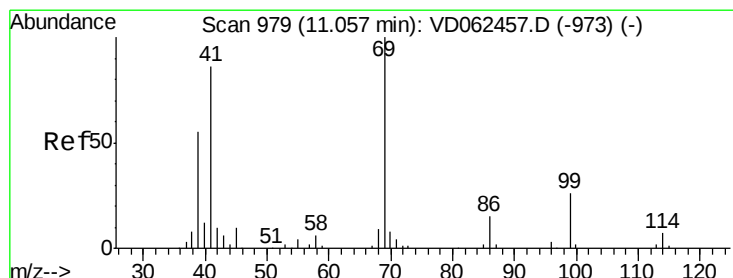
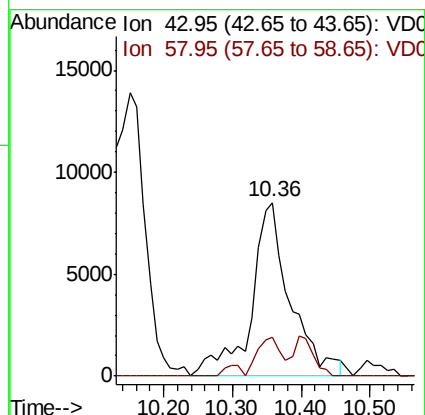
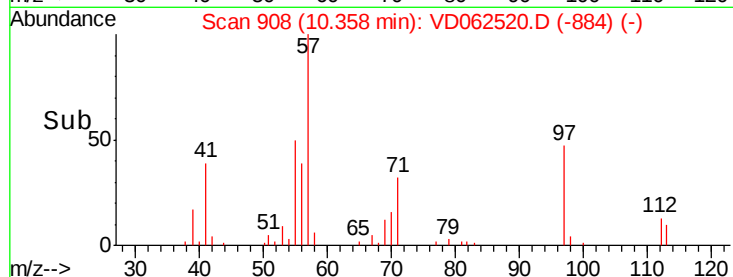
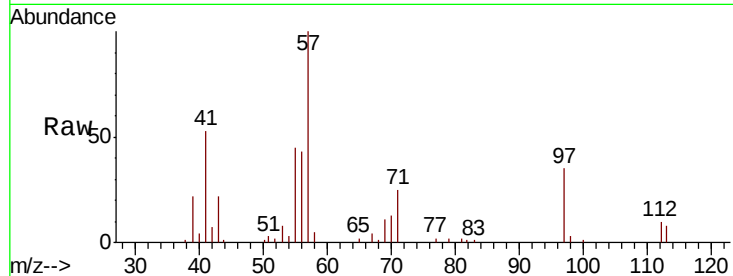
P-2(0.5-1.0)RE

Tot Ion: 43 Resp: 33506

Ion Ratio Lower Upper

43 100

58 22.4 30.4 45.6#



#56

Ethyl methacrylate

Concen: 6.161 ug/l

RT: 11.09 min Scan# 982

Delta R.T. 0.03 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

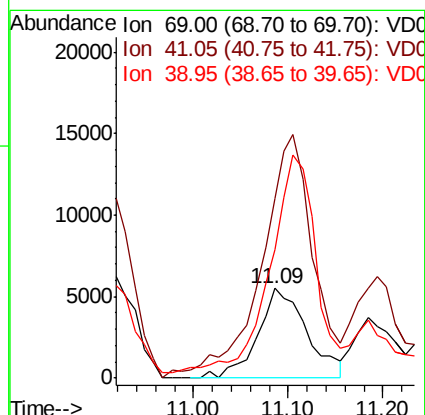
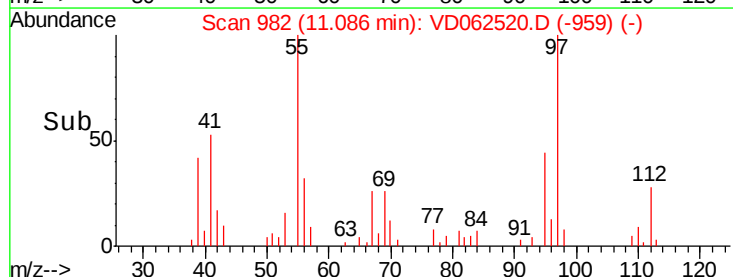
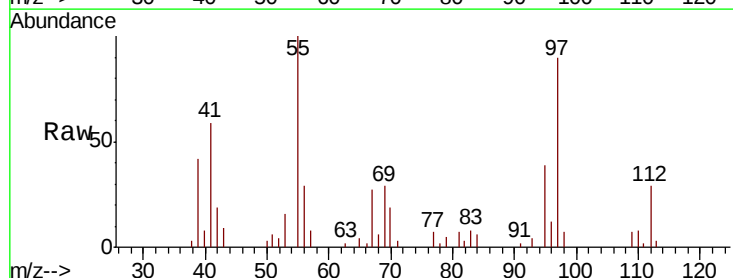
Tgt Ion: 69 Resp: 19798

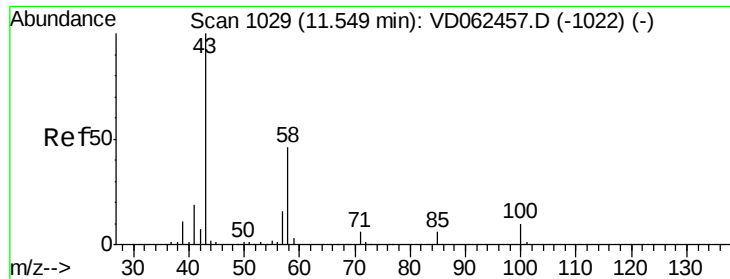
Ion Ratio Lower Upper

69 100

41 200.8 56.3 84.5#

39 143.3 29.4 44.2#

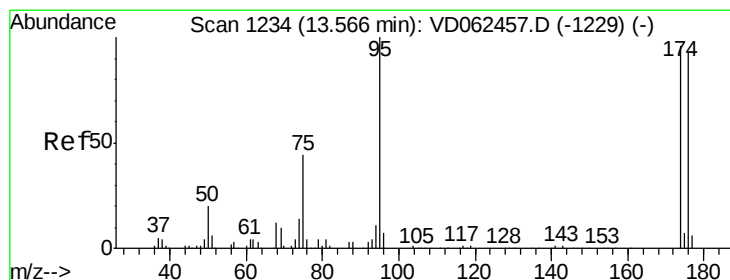
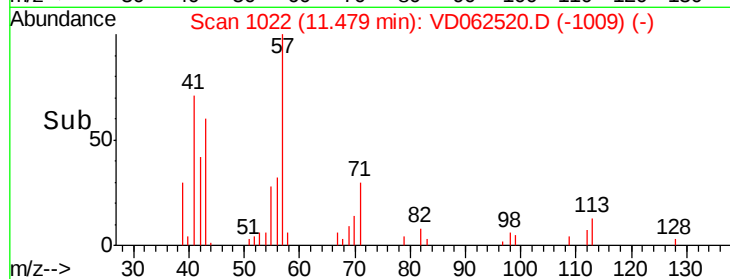
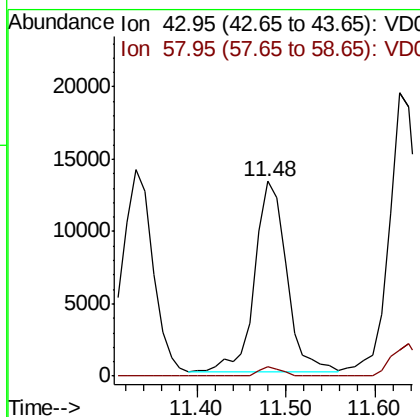
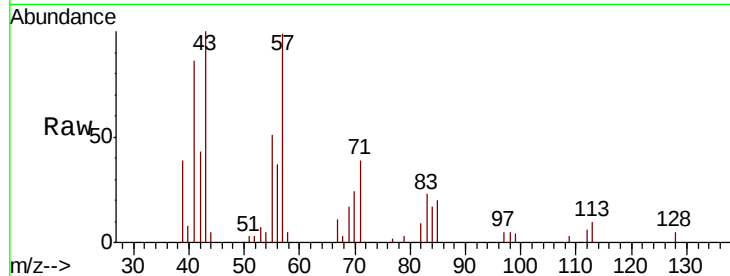




#59
2-Hexanone
Concen: 19.768 ug/l
RT: 11.48 min Scan# 1022
Delta R.T. -0.07 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

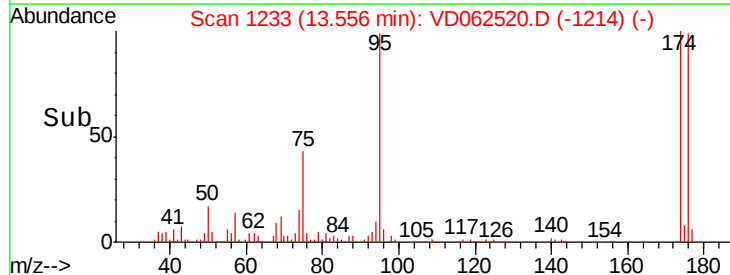
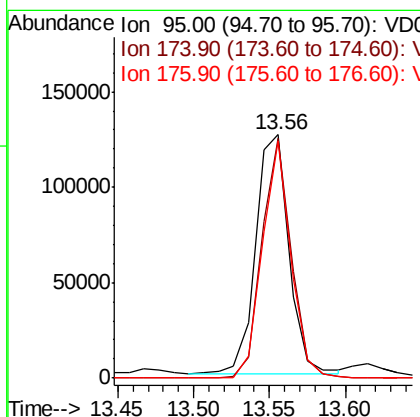
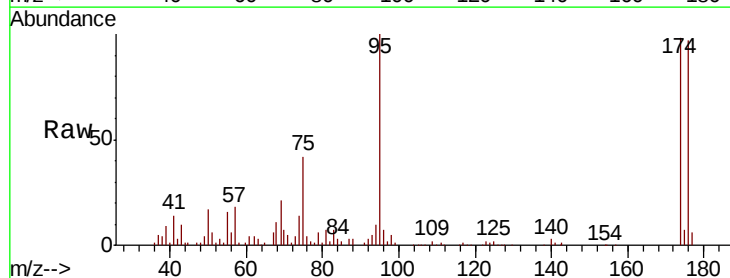
Instrument :
MSVOA_D
ClientSampleId :
P-2(0.5-1.0)RE

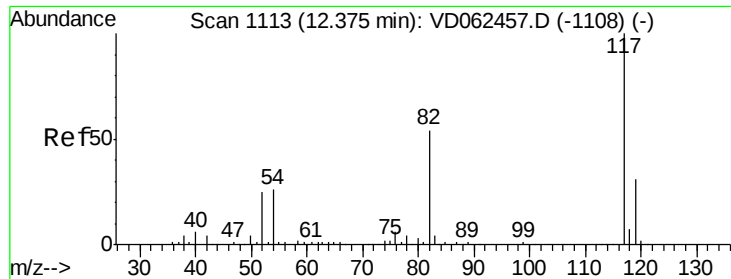
Tot Ion: 43 Resp: 32306
Ion Ratio Lower Upper
43 100
58 4.5 25.4 76.4#



#62
4-Bromofluorobenzene
Concen: 32.059 ug/l
RT: 13.56 min Scan# 1233
Delta R.T. -0.01 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Tgt Ion: 95 Resp: 191259
Ion Ratio Lower Upper
95 100
174 98.4 0.0 181.8
176 97.4 0.0 174.4

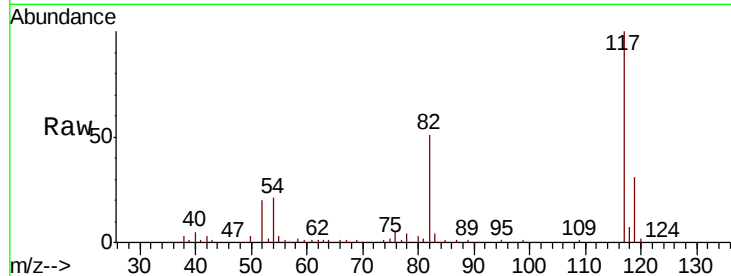




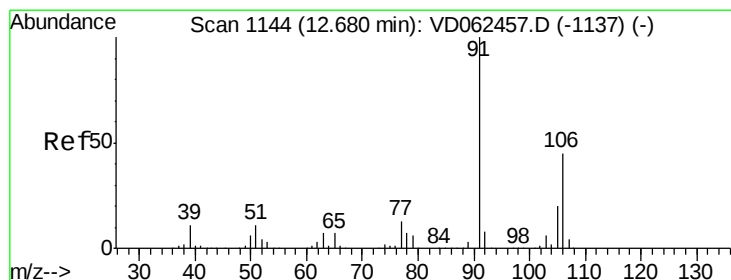
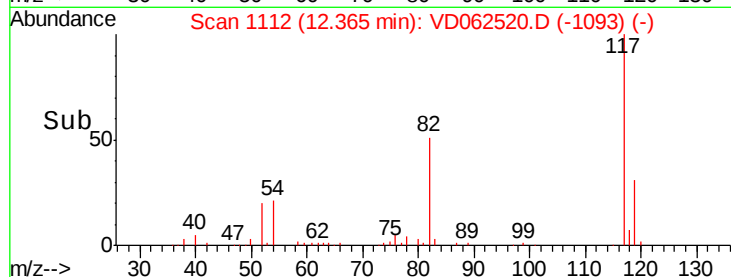
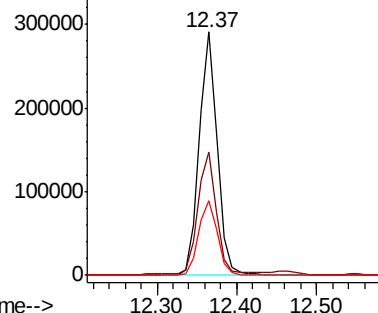
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 12.37 min Scan# 1112
Delta R.T. -0.01 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Instrument :
MSVOA_D
ClientSampleId :
P-2(0.5-1.0)RE

Tot Ion:117 Resp: 468490
Ion Ratio Lower Upper
117 100
82 50.8 36.2 54.2
119 30.7 26.2 39.4

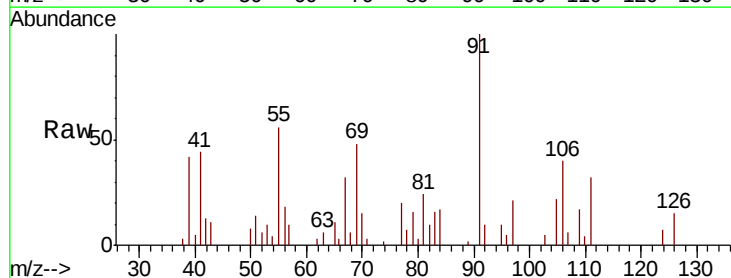


Abundance Ion 116.95 (116.65 to 117.65): V
Ion 82.05 (81.75 to 82.75): V
Ion 118.95 (118.65 to 119.65): V

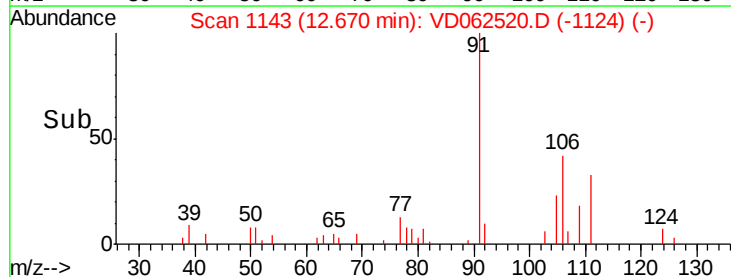
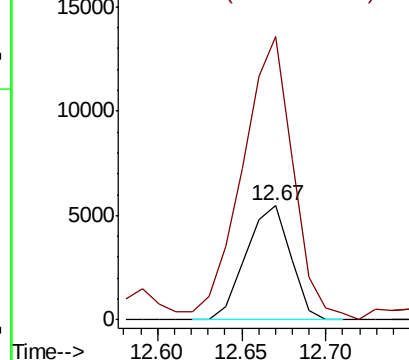


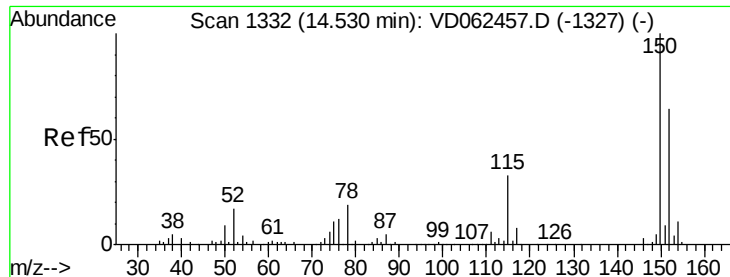
#68
m/p-Xylenes
Concen: 1.798 ug/l
RT: 12.67 min Scan# 1143
Delta R.T. -0.01 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Tgt Ion:106 Resp: 10017
Ion Ratio Lower Upper
106 100
91 248.4 164.0 246.0#



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. -0.01 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

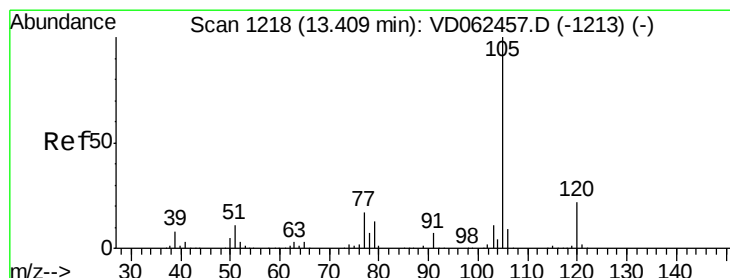
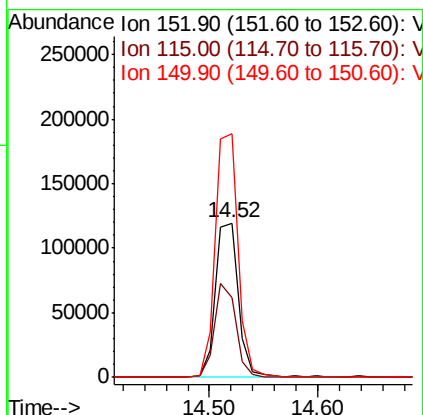
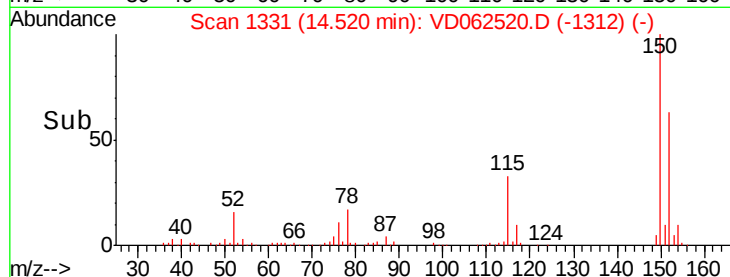
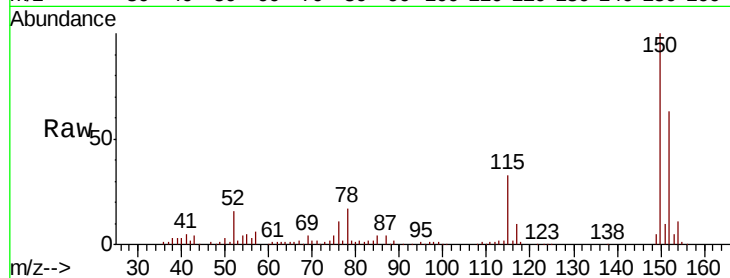
Tot Ion:152 Resp: 174858

Ion Ratio Lower Upper

152 100

115 52.0 30.9 92.7

150 158.0 0.0 314.8



#73

Isopropylbenzene

Concen: 1.032 ug/l

RT: 13.40 min Scan# 1217

Delta R.T. -0.01 min

Lab File: VD062520.D

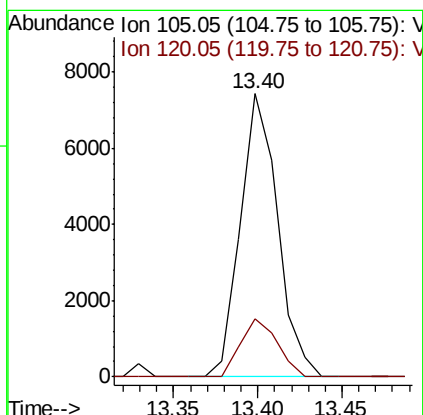
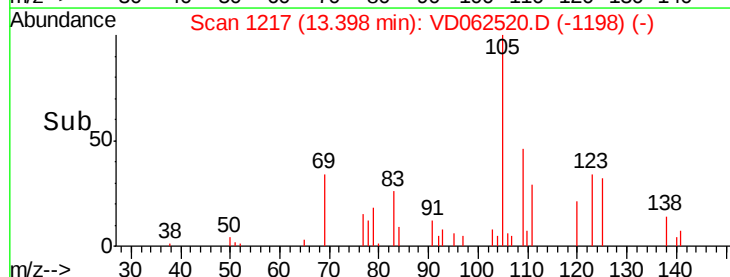
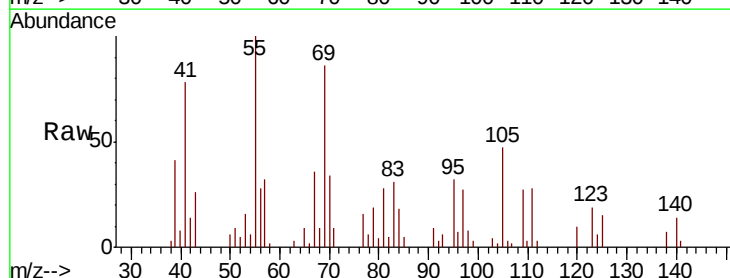
Acq: 23 May 2019 14:20

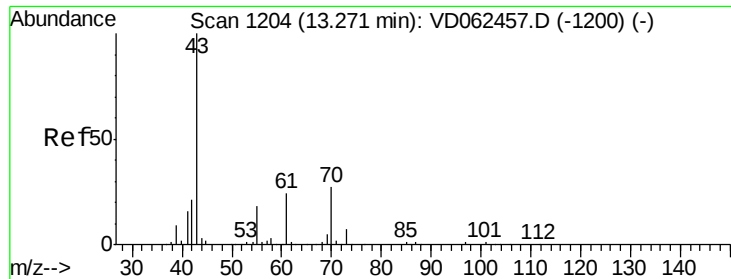
Tgt Ion:105 Resp: 11371

Ion Ratio Lower Upper

105 100

120 20.7 12.0 36.1





#74

N-amvl acetate

Concen: 5.206 ug/l

RT: 13.29 min Scan# 1206

Delta R.T. 0.02 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

P-2(0.5-1.0)RE

Tot Ion: 43 Resp: 14173

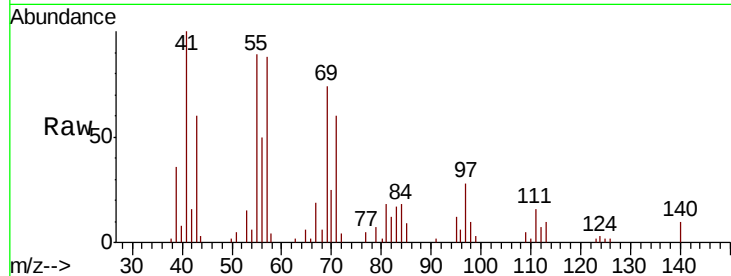
Ion Ratio Lower Upper

43 100

70 42.1 24.2 36.4#

55 147.3 16.0 24.0#

61 0.0 21.6 32.4#

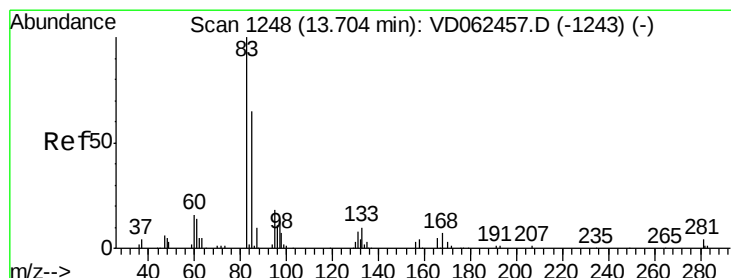
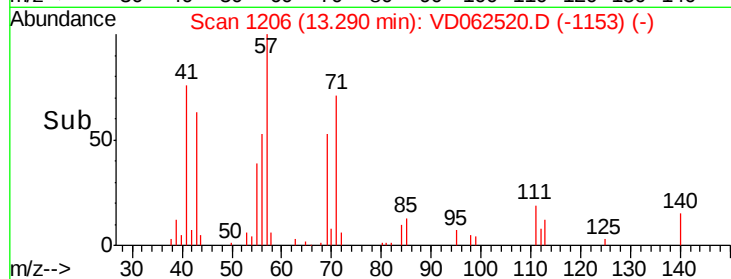
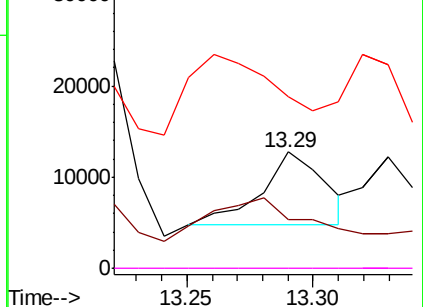


Abundance Ion 42.95 (42.65 to 43.65): VDC

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: 1.982 ug/l

RT: 13.70 min Scan# 1248

Delta R.T. -0.00 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

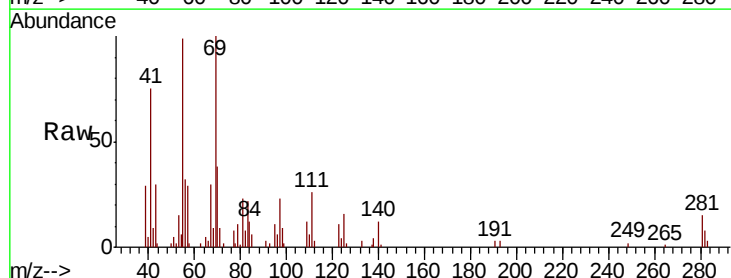
Tgt Ion: 83 Resp: 3941

Ion Ratio Lower Upper

83 100

131 0.0 5.0 14.9#

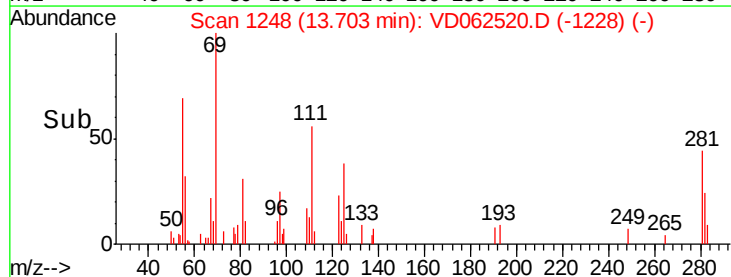
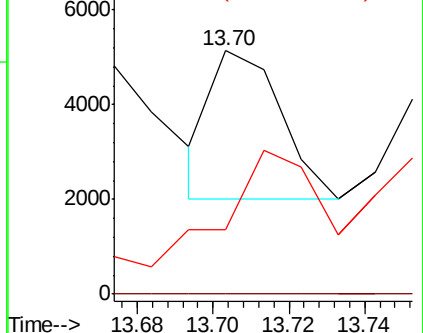
85 26.4 32.6 97.7#

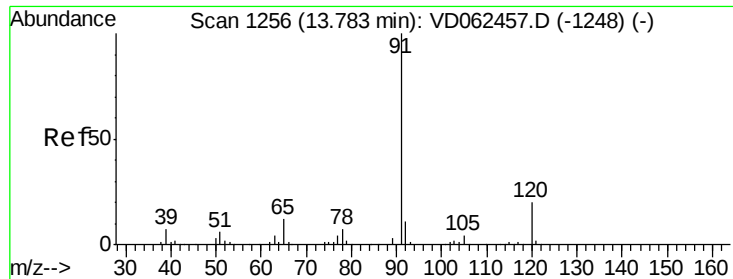


Abundance Ion 82.95 (82.65 to 83.65): VDC

Ion 130.90 (130.60 to 131.60): VDC

Ion 84.95 (84.65 to 85.65): VDC

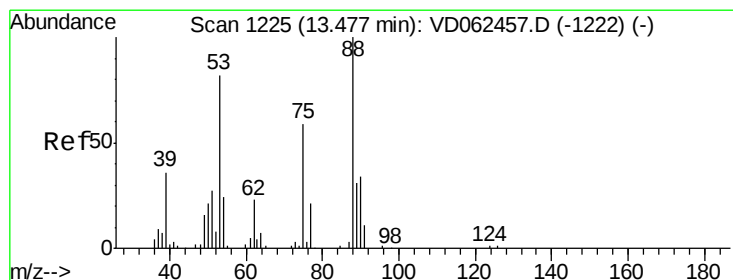
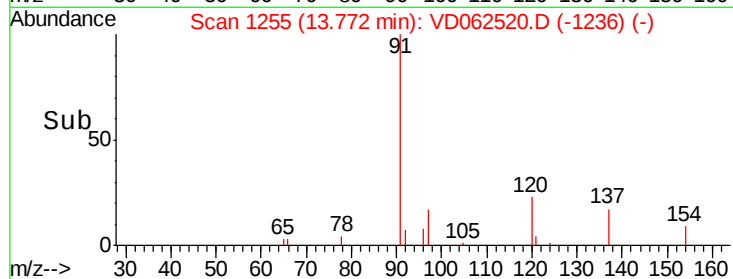
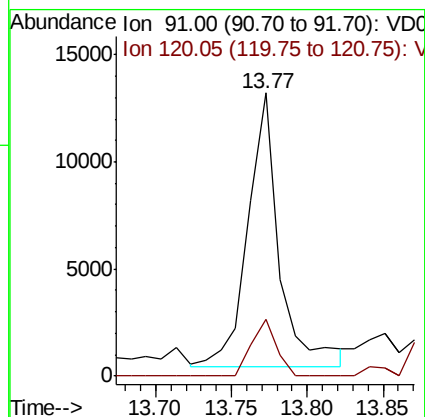
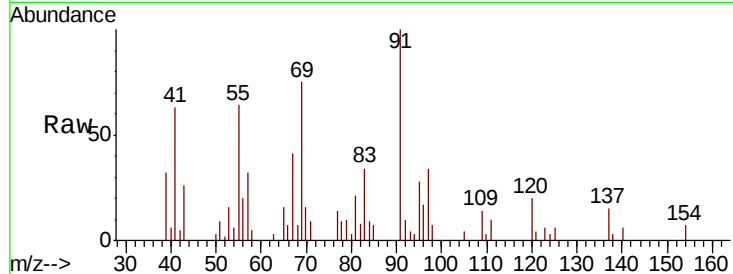




#78
n-propylbenzene
Concen: 1.447 ug/l
RT: 13.77 min Scan# 1255
Delta R.T. -0.01 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

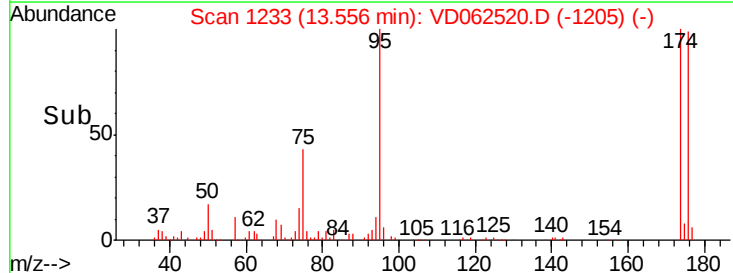
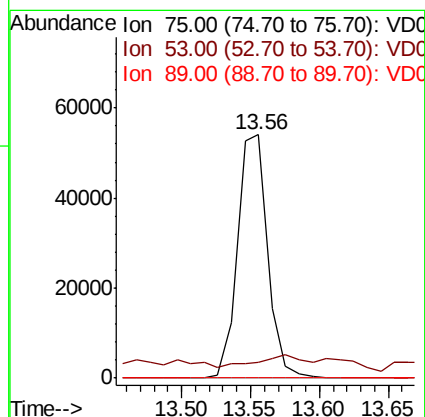
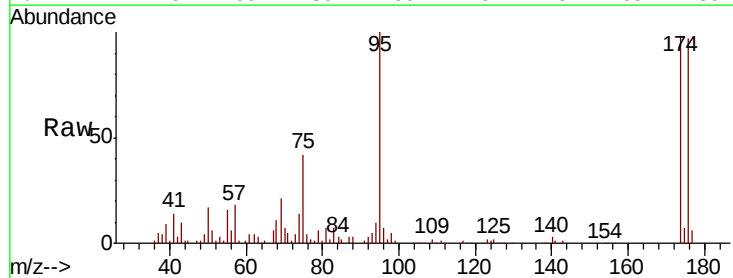
Instrument :
MSVOA_D
ClientSampleId :
P-2(0.5-1.0)RE

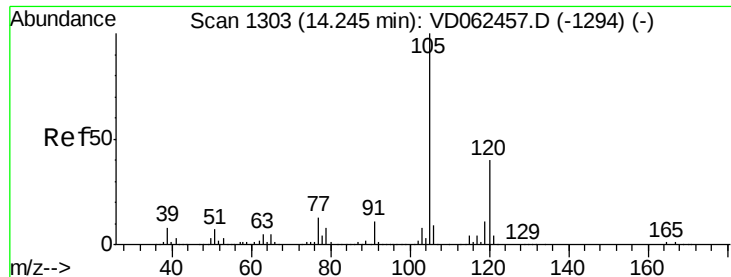
Tot Ion: 91 Resp: 18471
Ion Ratio Lower Upper
91 100
120 20.2 11.1 33.1



#81
trans-1,4-Dichloro-2-butene
Concen: 141.199 ug/l
RT: 13.56 min Scan# 1233
Delta R.T. 0.08 min
Lab File: VD062520.D
Acq: 23 May 2019 14:20

Tgt Ion: 75 Resp: 82018
Ion Ratio Lower Upper
75 100
53 6.3 65.8 98.8#
89 0.0 35.0 52.6#





#84

1,2,4-Trimethylbenzene

Concen: 2.417 ug/l

RT: 14.23 min Scan# 1302

Delta R.T. -0.01 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

Instrument :

MSVOA_D

ClientSampleId :

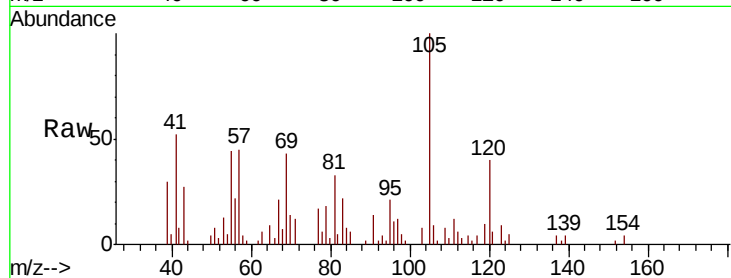
P-2(0.5-1.0)RE

Tot Ion:105 Resp: 23636

Ion Ratio Lower Upper

105 100

120 40.1 23.1 69.2



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.05 (119.75 to 120.75): V

14.23

20000

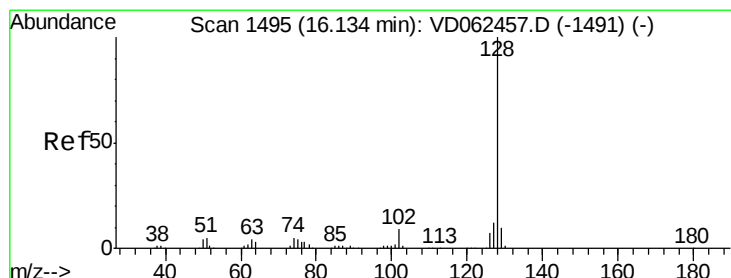
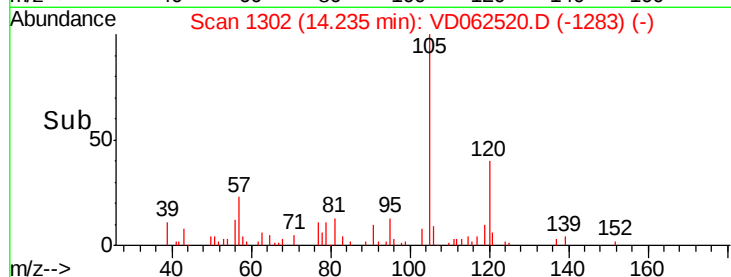
15000

10000

5000

0

Time--> 14.15 14.20 14.25 14.30



#95

Naphthalene

Concen: 2.981 ug/l

RT: 16.12 min Scan# 1494

Delta R.T. -0.01 min

Lab File: VD062520.D

Acq: 23 May 2019 14:20

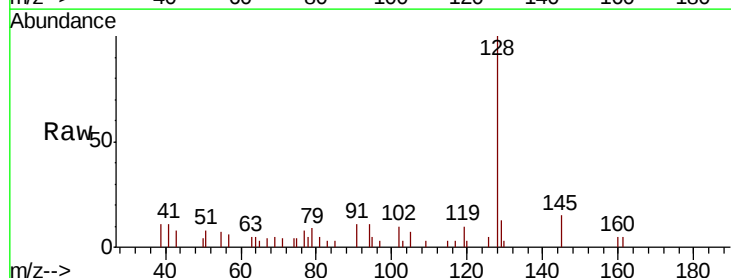
Tgt Ion:128 Resp: 15060

Ion Ratio Lower Upper

128 100

127 0.0 9.8 14.8#

129 15.7 8.8 13.2#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

15000

10000

5000

0

Time--> 16.05 16.10 16.15 16.20

