

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD101619\
 Data File : VD063991.D
 Acq On : 16 Oct 2019 17:11
 Operator : VA/SY
 Sample : K5401-01
 Misc : 4.41G/5.00ml/MSVOA D/SOIL
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_D
 ClientSampleId :
 RBR200031-RT4221

Quant Time: Oct 16 18:09:39 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_D\METHOD\82D100219S.M
 Quant Title : SW846 8260
 QLast Update : Sat Oct 05 03:51:17 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.98	168	17729	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.87	114	33971	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.65	117	32965	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.58	152	17244	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.33	65	14947	86.60	ug/l	0.00
Spiked Amount			Recovery	=	173.20%	
35) Dibromofluoromethane	7.93	113	10619	51.15	ug/l	0.01
Spiked Amount			Recovery	=	102.30%	
50) Toluene-d8	10.34	98	39708	47.12	ug/l	0.00
Spiked Amount			Recovery	=	94.24%	
62) 4-Bromofluorobenzene	12.64	95	14152	48.33	ug/l	0.00
Spiked Amount			Recovery	=	96.66%	

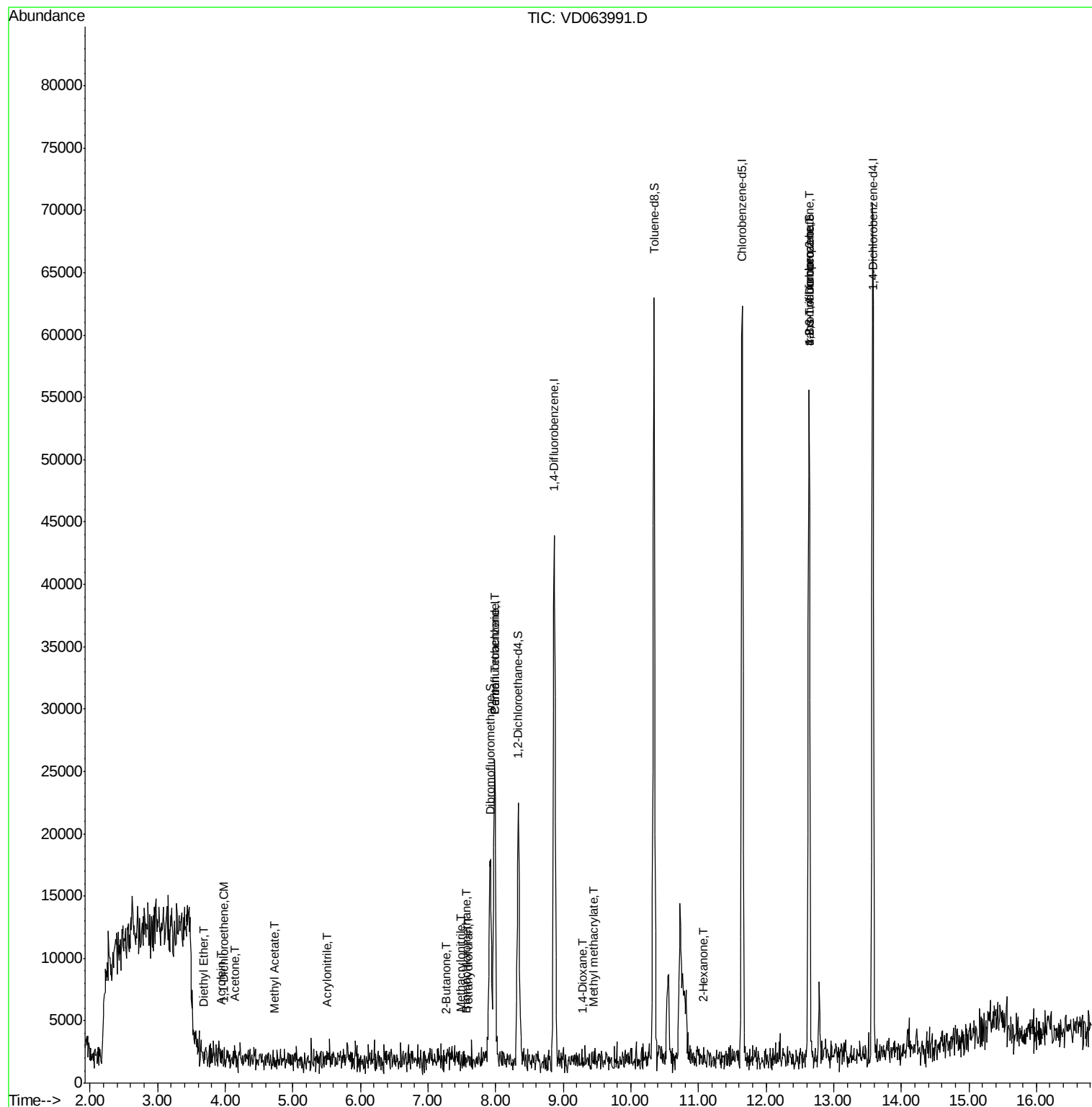
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	2.21	50	298	Below Cal	#	40
8) Diethyl Ether	3.68	74	122	1.415	ug/l	72
11) Tert butyl alcohol	5.39	59	54	Below Cal	#	71
12) 1,1-Dichloroethene	3.99	96	187	1.259	ug/l #	1
13) Acrolein	3.94	56	77	4.995	ug/l #	1
15) Acrylonitrile	5.50	53	59	1.552	ug/l #	17
16) Acetone	4.14	43	57	1.268	ug/l #	42
18) Methyl Acetate	4.73	43	274	3.117	ug/l #	49
20) Methylene Chloride	4.98	84	98	Below Cal	#	7
25) 2-Butanone	7.26	43	164	3.079	ug/l #	51
28) Bromochloromethane	7.56	49	68	2.418	ug/l #	10
29) Tetrahydrofuran	7.58	42	76	2.445	ug/l #	31
31) Cyclohexane	7.99	56	598	Below Cal	#	16
37) Ethyl Acetate	7.26	43	164	Below Cal	#	60
38) Carbon Tetrachloride	7.99	117	1895	6.037	ug/l #	15
41) Methacrylonitrile	7.48	41	133	1.847	ug/l #	31
48) Methyl methacrylate	9.45	41	265	2.123	ug/l #	29
49) 1,4-Dioxane	9.30	88	99	58.454	ug/l #	24
59) 2-Hexanone	11.08	43	156	1.596	ug/l	97
76) 1,2,3-Trichloropropane	12.64	75	8185	70.869	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.64	75	8185	125.409	ug/l #	12
92) 1,2-Dibromo-3-Chloropropan	14.54	75	59	Below Cal	#	11

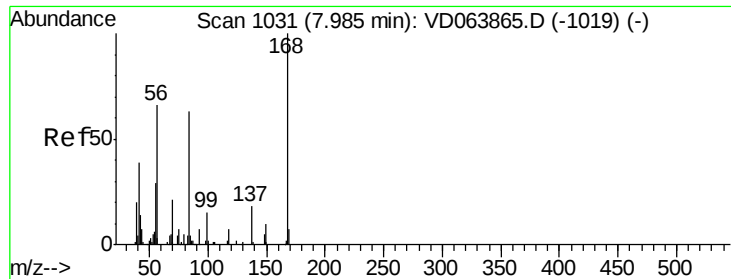
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Sat Oct 05 03:51:17 2019
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#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

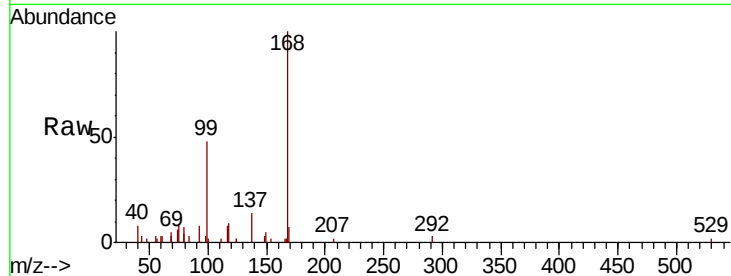
RBR200031-RT4221

Tot Ion:168 Resp: 17729

Ion Ratio Lower Upper

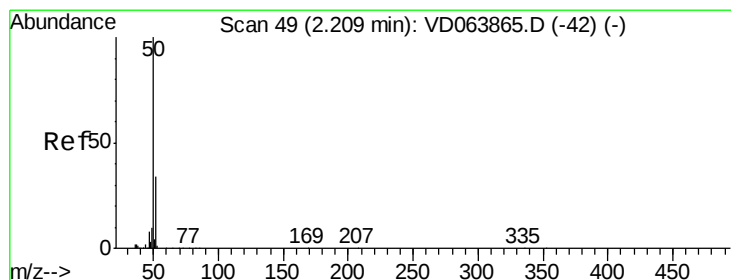
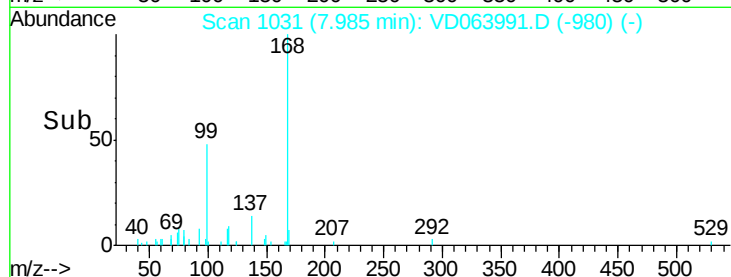
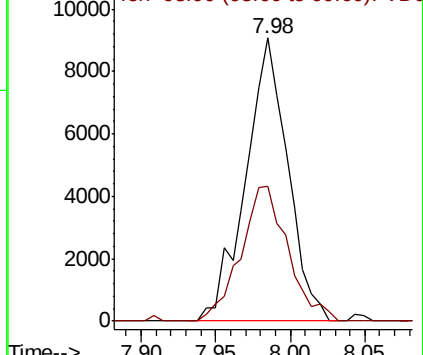
168 100

99 47.8 43.0 64.4



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC



#3

Chloromethane

Concen: Below Cal

RT: 2.21 min Scan# 49

Delta R.T. 0.00 min

Lab File: VD063991.D

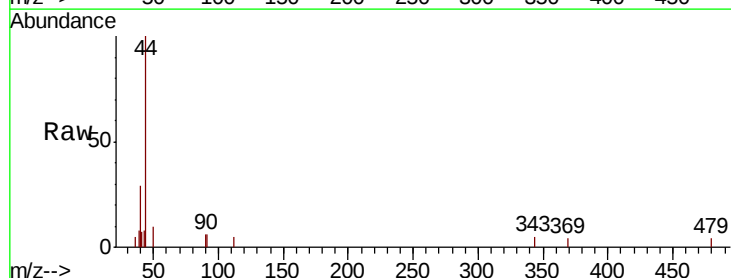
Acq: 16 Oct 2019 17:11

Tgt Ion: 50 Resp: 298

Ion Ratio Lower Upper

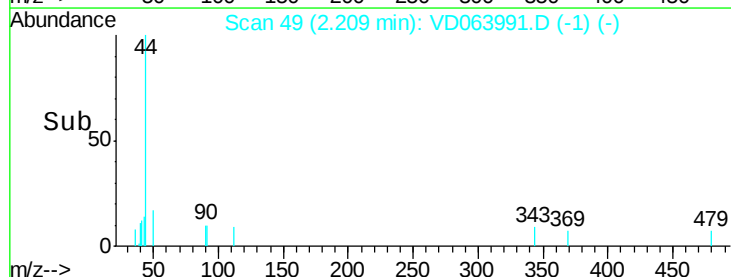
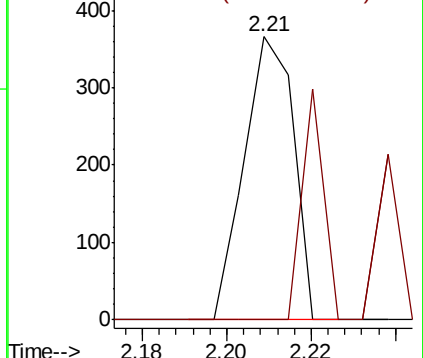
50 100

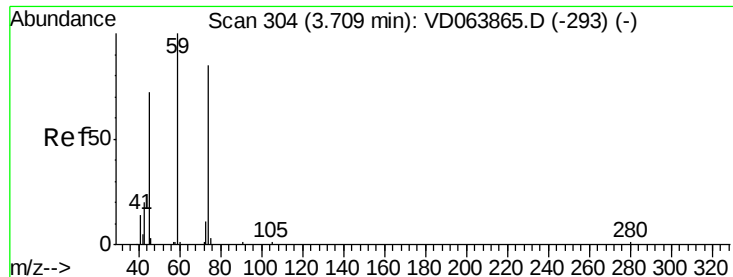
52 0.0 27.5 41.3#



Abundance Ion 49.90 (49.60 to 50.60): VDC

Ion 51.90 (51.60 to 52.60): VDC





#8

Diethyl Ether

Concen: 1.415 ug/l

RT: 3.68 min Scan# 299

Delta R.T. -0.03 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

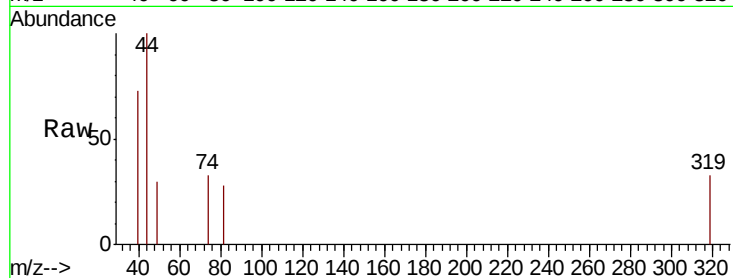
RBR200031-RT4221

Tot Ion: 74 Resp: 122

Ion Ratio Lower Upper

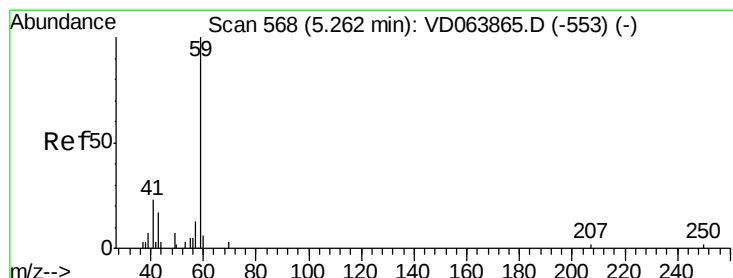
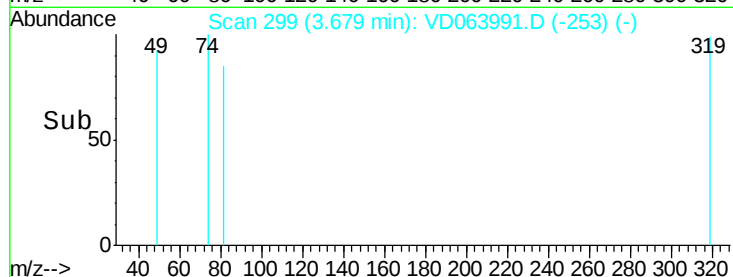
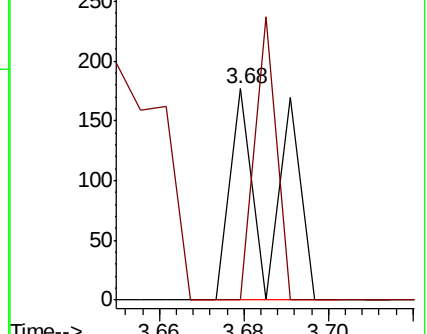
74 100

45 68.9 48.1 144.4



Abundance Ion 74.00 (73.70 to 74.70): VDC

Ion 45.00 (44.70 to 45.70): VDC



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.39 min Scan# 590

Delta R.T. 0.13 min

Lab File: VD063991.D

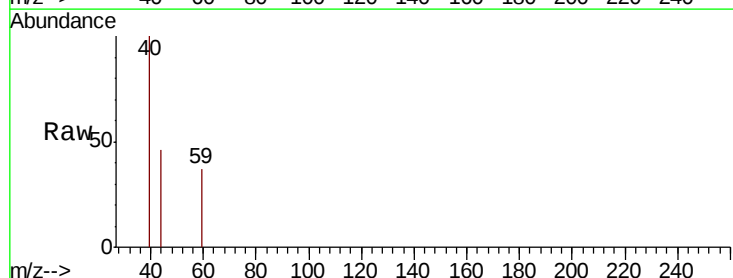
Acq: 16 Oct 2019 17:11

Tgt Ion: 59 Resp: 54

Ion Ratio Lower Upper

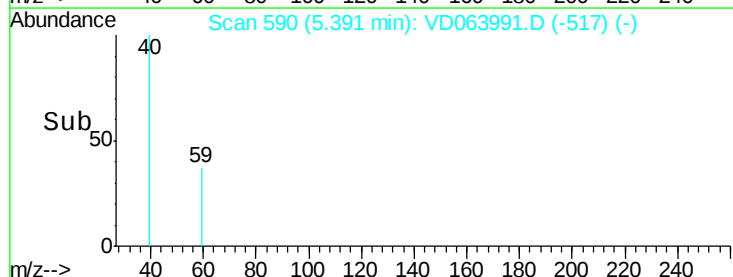
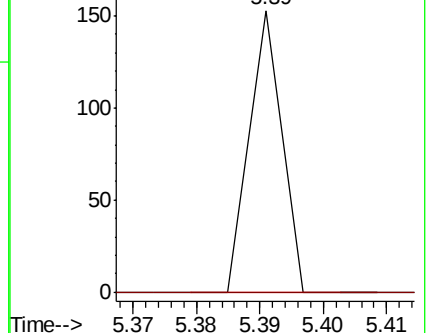
59 100

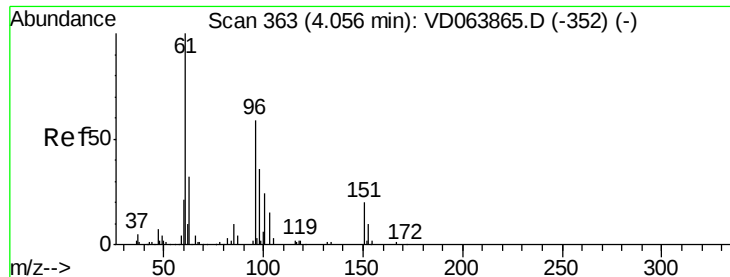
57 0.0 8.8 13.2#



Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC





#12

1,1-Dichloroethene

Concen: 1.259 ug/l

RT: 3.99 min Scan# 351

Delta R.T. -0.07 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

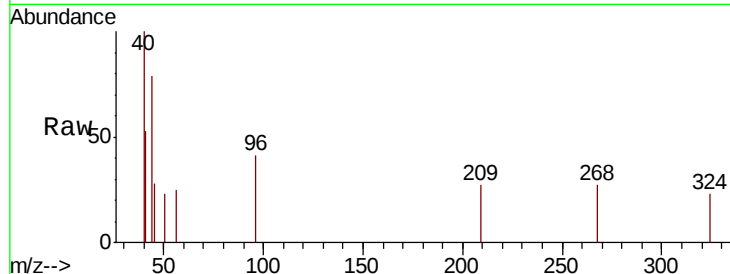
Tot Ion: 96 Resp: 187

Ion Ratio Lower Upper

96 100

61 0.0 135.6 203.4#

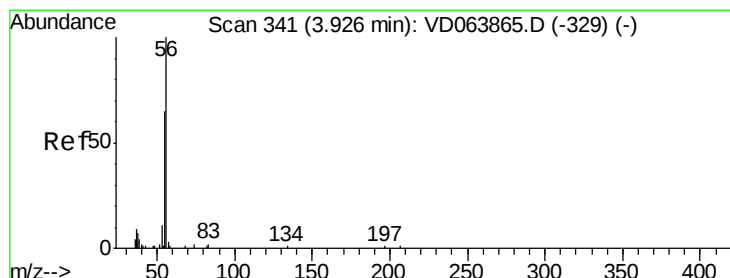
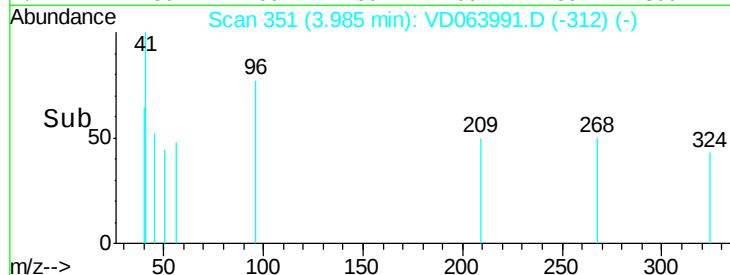
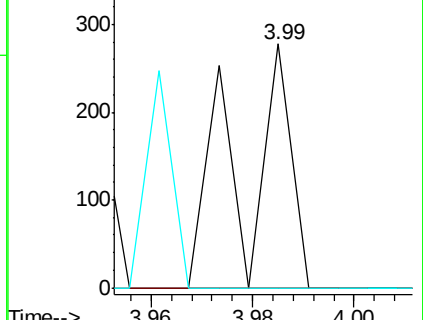
98 0.0 49.2 73.8#



Abundance Ion 95.90 (95.60 to 96.60): VDC

Ion 60.90 (60.60 to 61.60): VDC

Ion 97.90 (97.60 to 98.60): VDC



#13

Acrolein

Concen: 4.995 ug/l

RT: 3.94 min Scan# 343

Delta R.T. 0.01 min

Lab File: VD063991.D

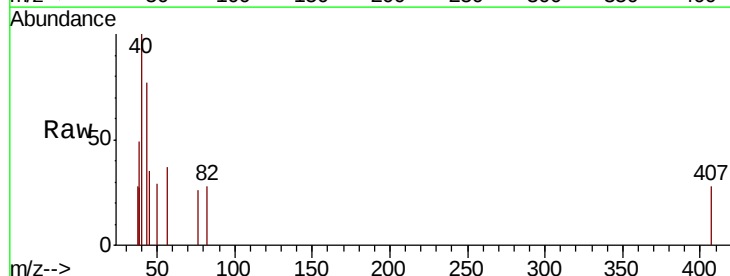
Acq: 16 Oct 2019 17:11

Tgt Ion: 56 Resp: 77

Ion Ratio Lower Upper

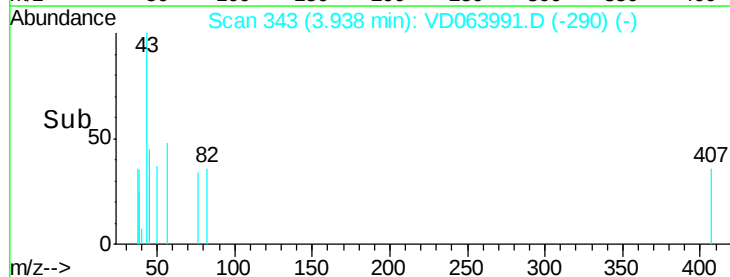
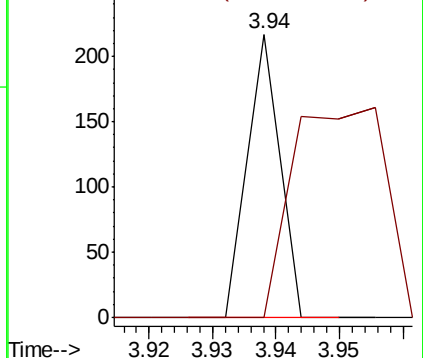
56 100

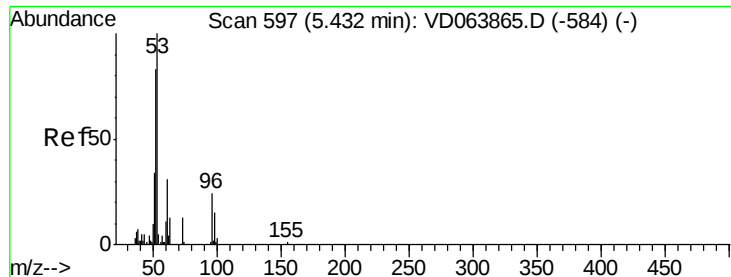
55 214.3 53.0 79.6#



Abundance Ion 56.00 (55.70 to 56.70): VDC

Ion 55.00 (54.70 to 55.70): VDC





#15

Acrylonitrile

Concen: 1.552 ug/l

RT: 5.50 min Scan# 609

Delta R.T. 0.07 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

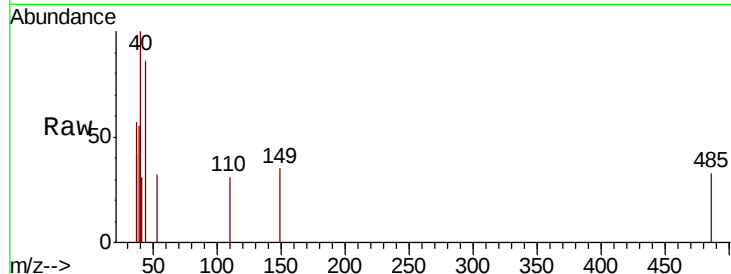
Tot Ion: 53 Resp: 59

Ion Ratio Lower Upper

53 100

52 0.0 67.3 100.9#

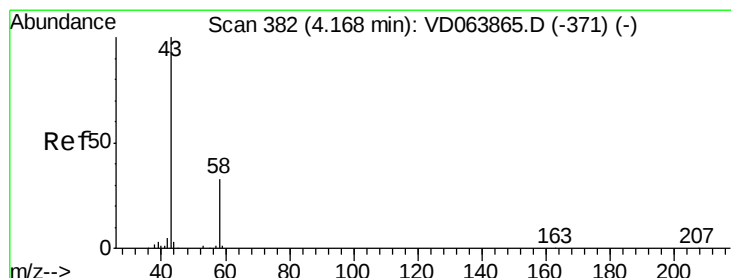
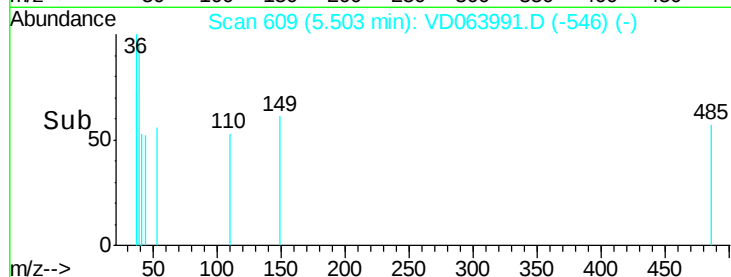
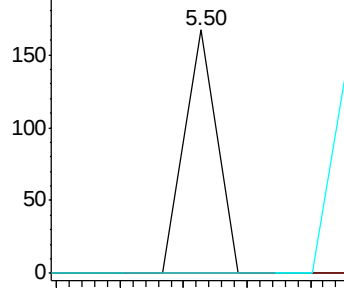
51 0.0 30.5 45.7#



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: 1.268 ug/l

RT: 4.14 min Scan# 378

Delta R.T. -0.02 min

Lab File: VD063991.D

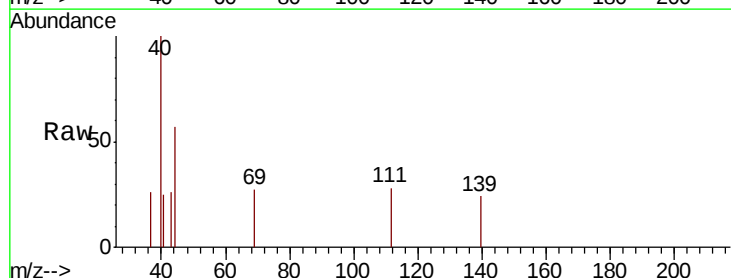
Acq: 16 Oct 2019 17:11

Tgt Ion: 43 Resp: 57

Ion Ratio Lower Upper

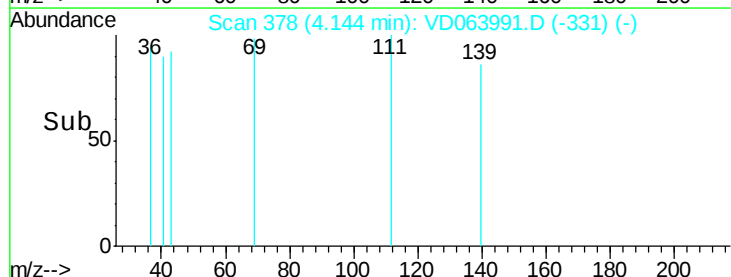
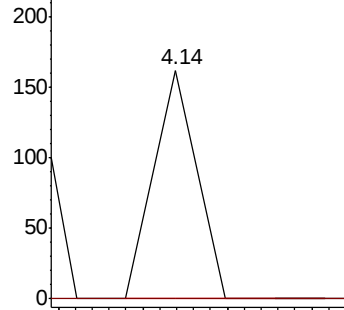
43 100

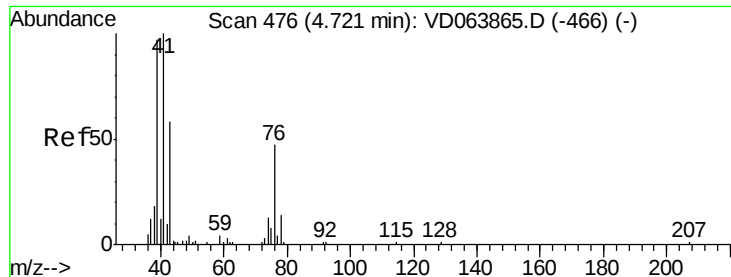
58 0.0 26.2 39.4#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

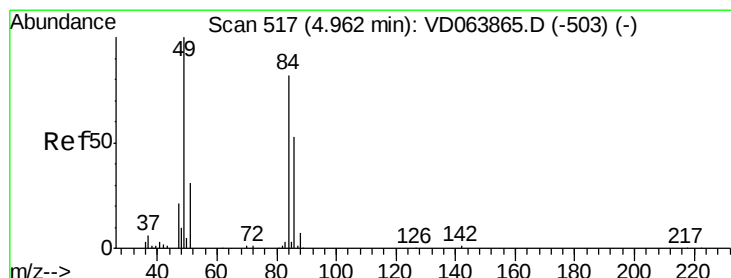
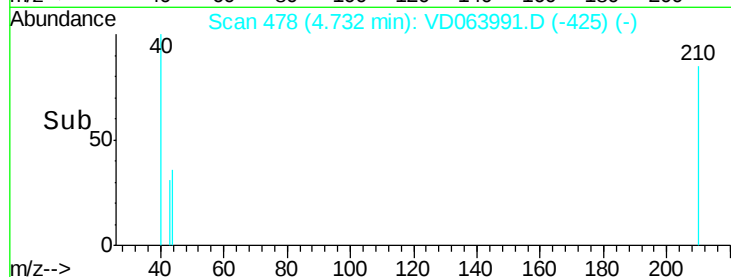
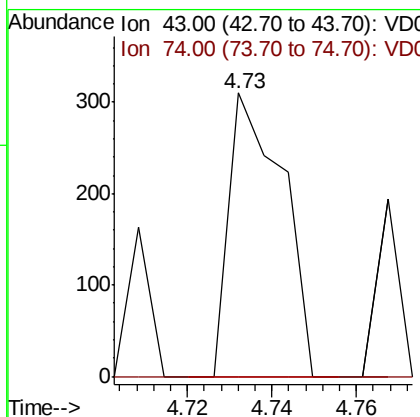
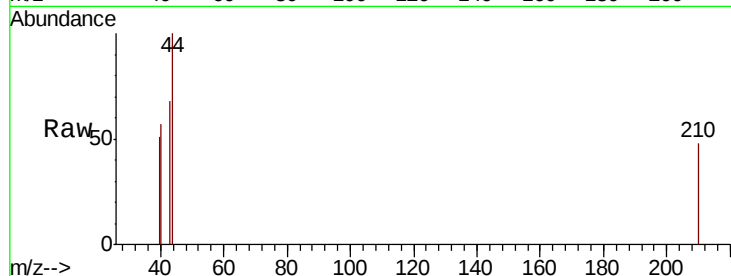




#18
Methyl Acetate
Concen: 3.117 ug/l
RT: 4.73 min Scan# 478
Delta R.T. 0.01 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

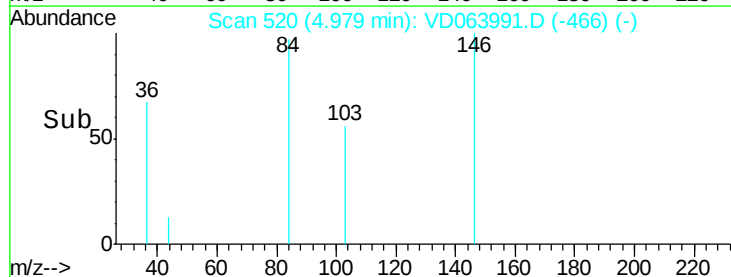
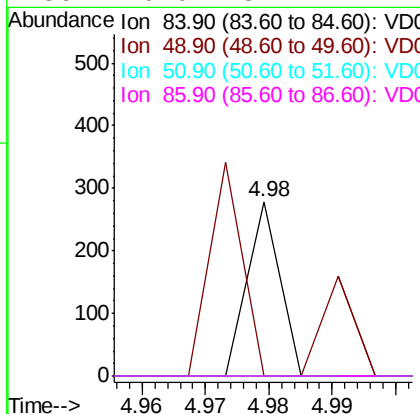
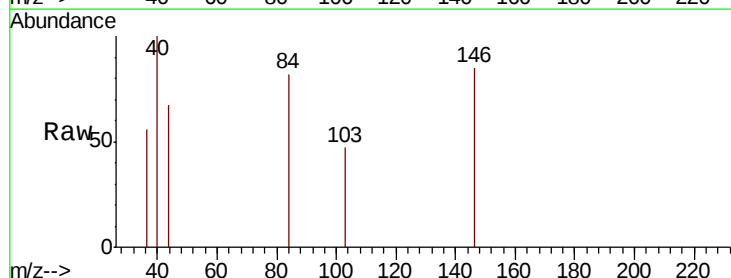
Instrument :
MSVOA_D
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RBR200031-RT4221

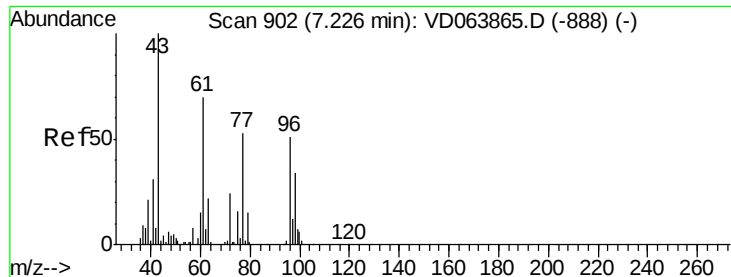
Tot Ion: 43 Resp: 274
Ion Ratio Lower Upper
43 100
74 0.0 20.8 31.2#



#20
Methylene Chloride
Concen: Below Cal
RT: 4.98 min Scan# 520
Delta R.T. 0.02 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

Tgt Ion: 84 Resp: 98
Ion Ratio Lower Upper
84 100
49 0.0 97.3 145.9#
51 0.0 30.1 45.1#
86 0.0 51.4 77.2#

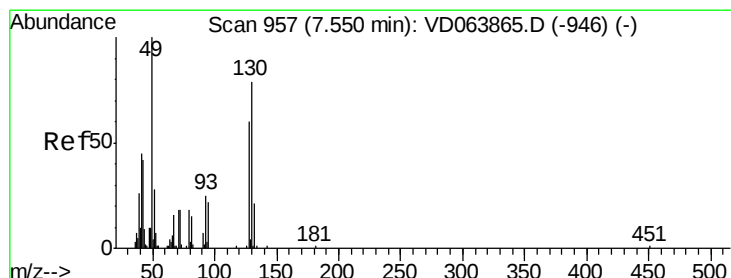
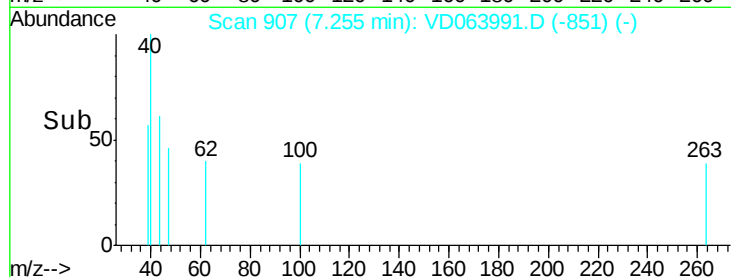
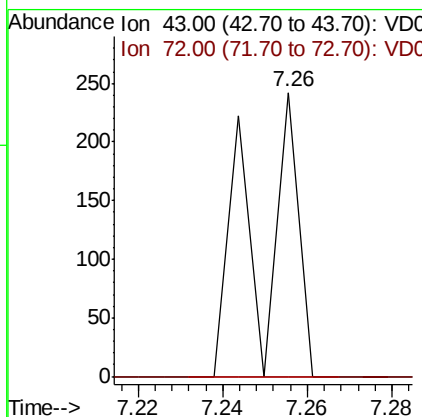
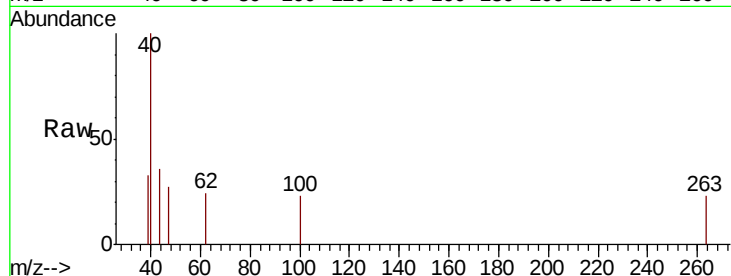




#25
2-Butanone
Concen: 3.079 ug/l
RT: 7.26 min Scan# 907
Delta R.T. 0.03 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

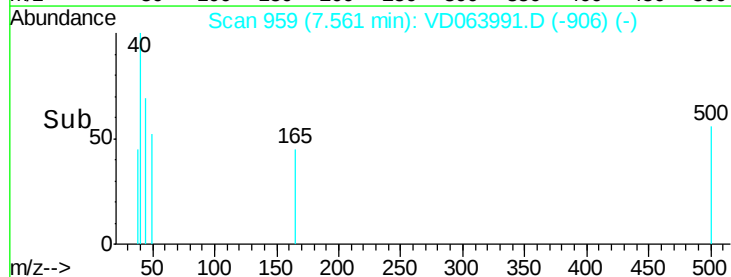
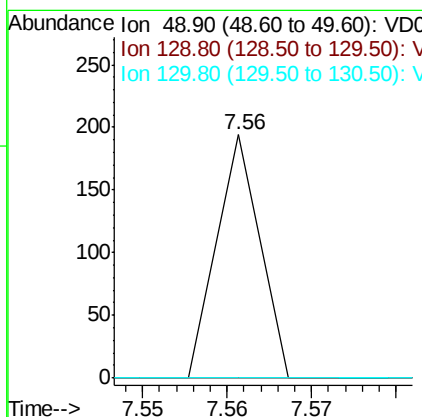
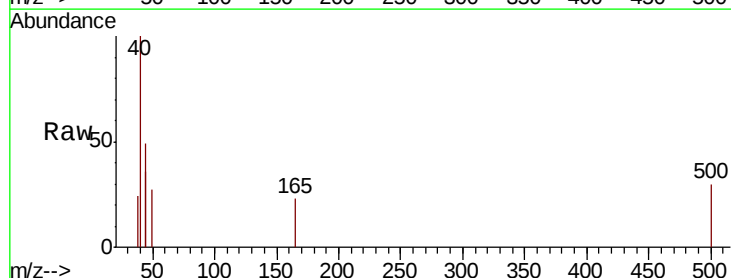
Instrument :
MSVOA_D
ClientSampleId :
RBR200031-RT4221

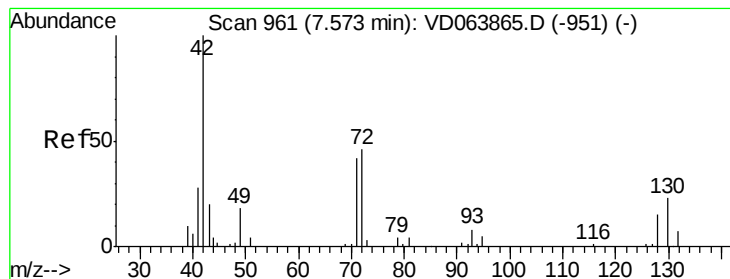
Tot Ion: 43 Resp: 164
Ion Ratio Lower Upper
43 100
72 0.0 19.2 28.8#



#28
Bromochloromethane
Concen: 2.418 ug/l
RT: 7.56 min Scan# 959
Delta R.T. 0.01 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

Tgt Ion: 49 Resp: 68
Ion Ratio Lower Upper
49 100
129 0.0 0.0 5.6
130 0.0 66.8 100.2#





#29

Tetrahydrofuran

Concen: 2.445 ug/l

RT: 7.58 min Scan# 963

Delta R.T. 0.01 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

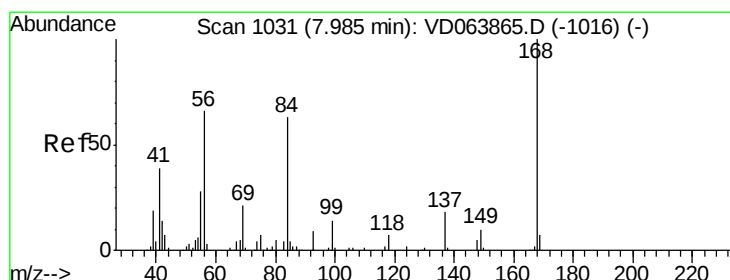
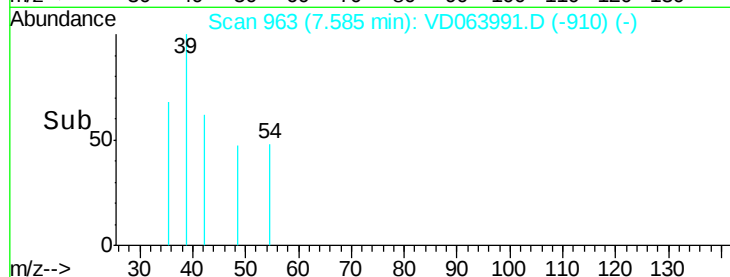
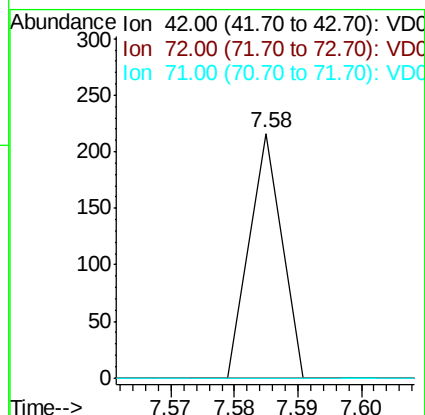
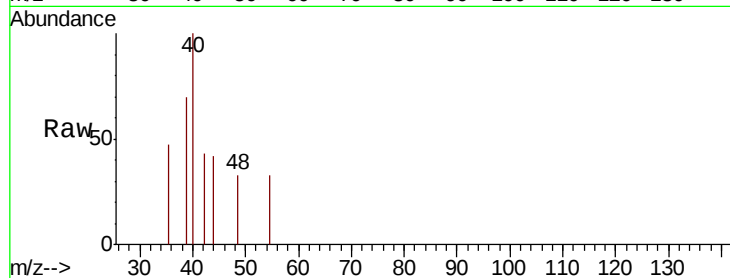
Tot Ion: 42 Resp: 76

Ion Ratio Lower Upper

42 100

72 0.0 37.6 56.4#

71 0.0 35.0 52.6#



#31

Cyclohexane

Concen: Below Cal

RT: 7.99 min Scan# 1032

Delta R.T. 0.01 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

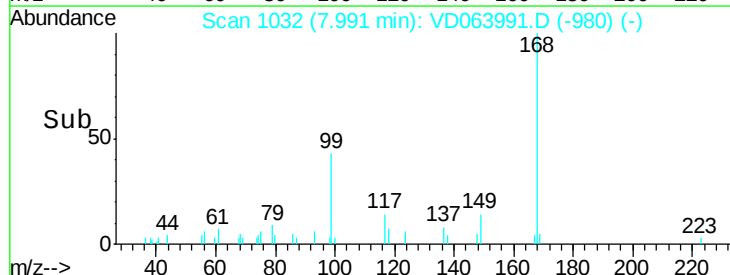
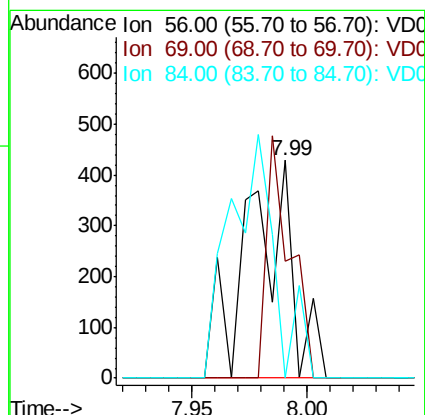
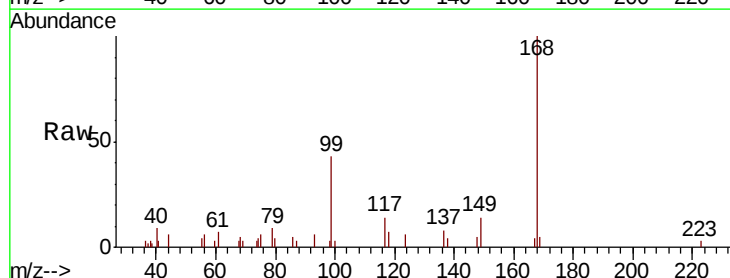
Tgt Ion: 56 Resp: 598

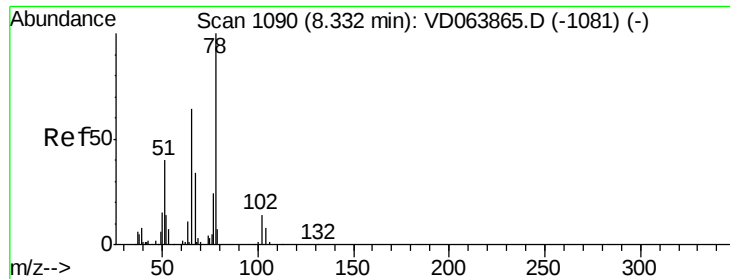
Ion Ratio Lower Upper

56 100

69 53.8 25.0 37.4#

84 0.0 76.3 114.5#

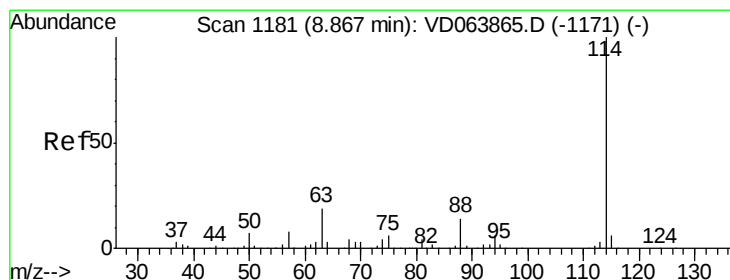
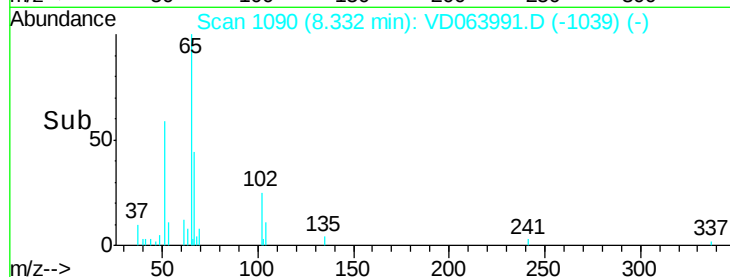
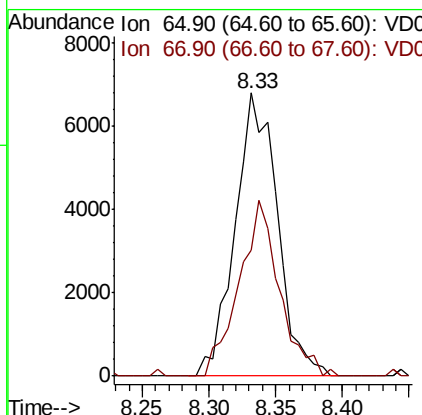
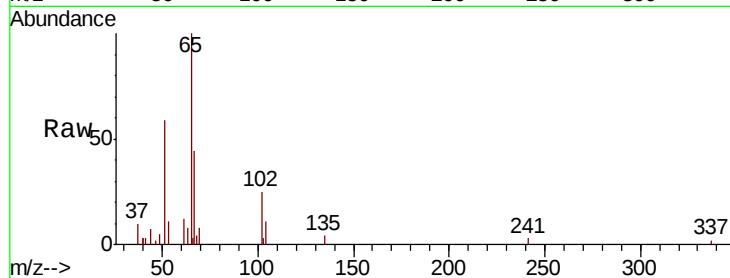




#33
 1,2-Dichloroethane-d4
 Concen: 86.596 ug/l
 RT: 8.33 min Scan# 1090
 Delta R.T. -0.00 min
 Lab File: VD063991.D
 Acq: 16 Oct 2019 17:11

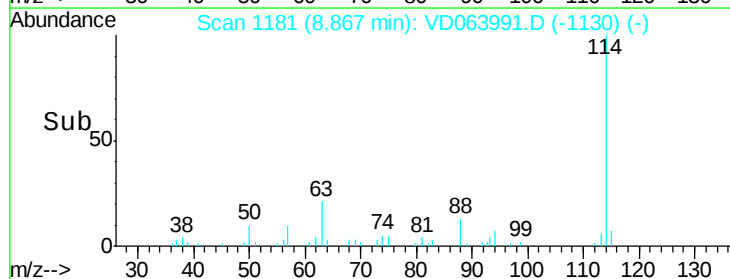
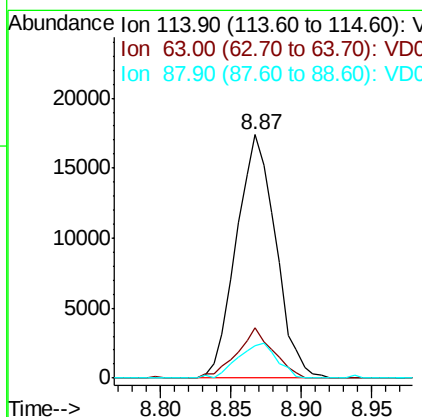
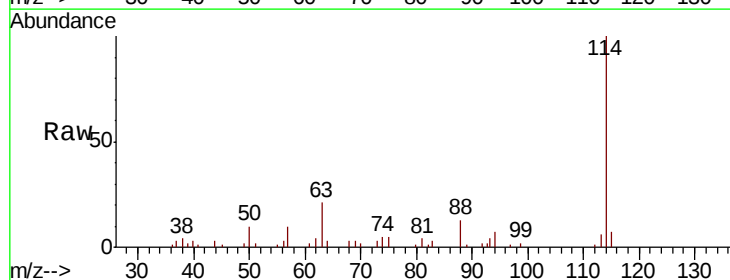
Instrument :
 MSVOA_D
 ClientSampleId :
 RBR200031-RT4221

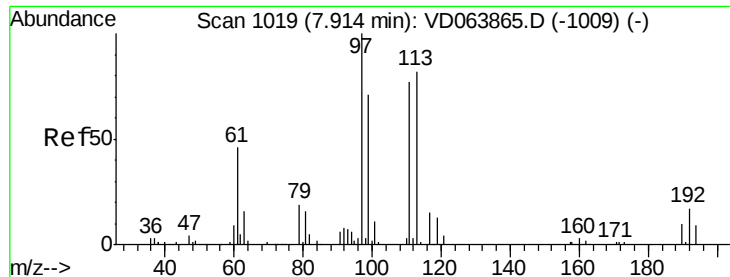
Tot Ion: 65 Resp: 14947
 Ion Ratio Lower Upper
 65 100
 67 59.0 0.0 106.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.87 min Scan# 1181
 Delta R.T. -0.00 min
 Lab File: VD063991.D
 Acq: 16 Oct 2019 17:11

Tgt Ion: 114 Resp: 33971
 Ion Ratio Lower Upper
 114 100
 63 20.9 0.0 38.4
 88 13.5 0.0 27.4

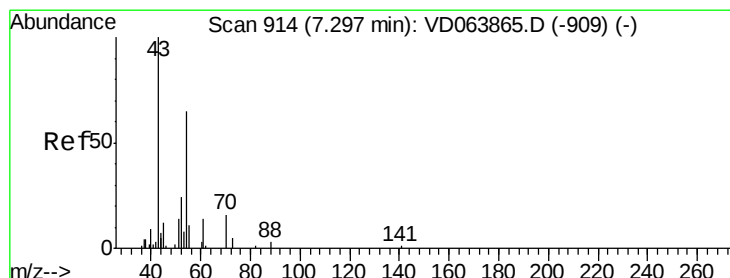
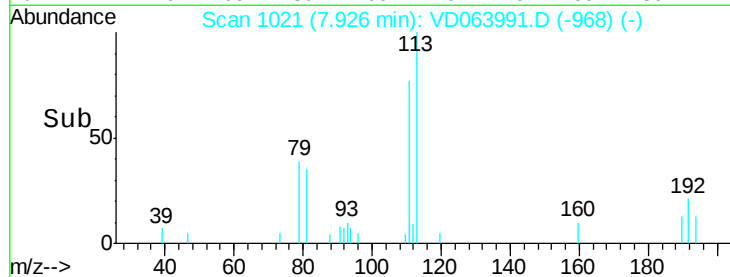
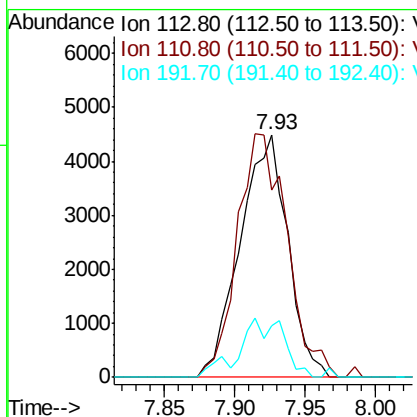
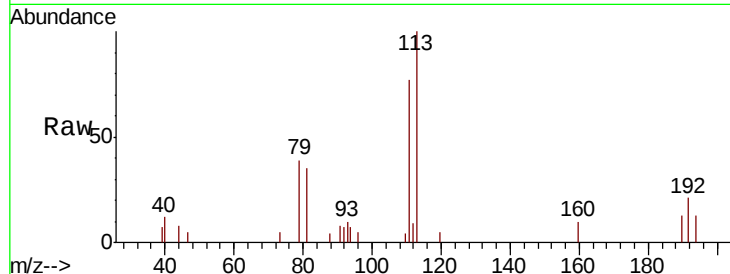




#35
 Dibromofluoromethane
 Concen: 51.149 ug/l
 RT: 7.93 min Scan# 1021
 Delta R.T. 0.01 min
 Lab File: VD063991.D
 Acq: 16 Oct 2019 17:11

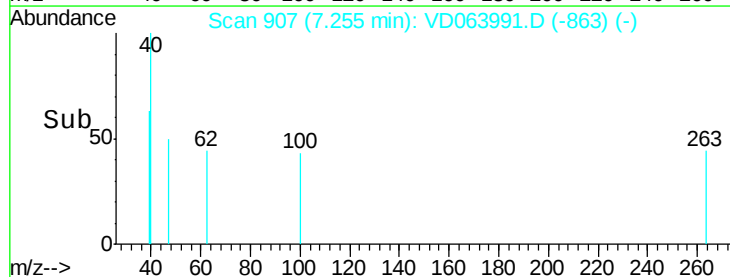
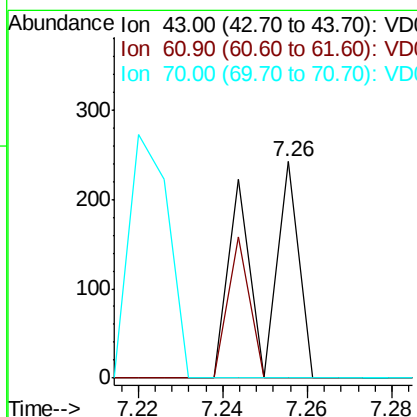
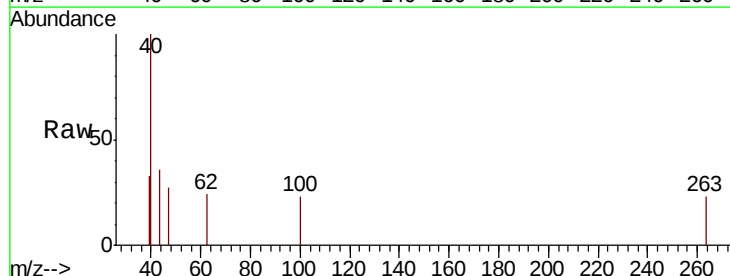
Instrument :
 MSVOA_D
 ClientSampleId :
 RBR200031-RT4221

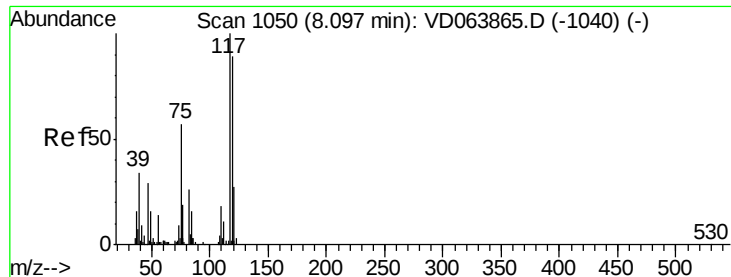
Tot Ion:113 Resp: 10619
 Ion Ratio Lower Upper
 113 100
 111 104.3 82.6 123.8
 192 13.2 17.1 25.7#



#37
 Ethyl Acetate
 Concen: Below Cal
 RT: 7.26 min Scan# 907
 Delta R.T. -0.04 min
 Lab File: VD063991.D
 Acq: 16 Oct 2019 17:11

Tgt Ion: 43 Resp: 164
 Ion Ratio Lower Upper
 43 100
 61 34.1 11.5 17.3#
 70 0.0 8.2 12.4#





#38

Carbon Tetrachloride

Concen: 6.037 ug/l

RT: 7.99 min Scan# 1032

Delta R.T. -0.11 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

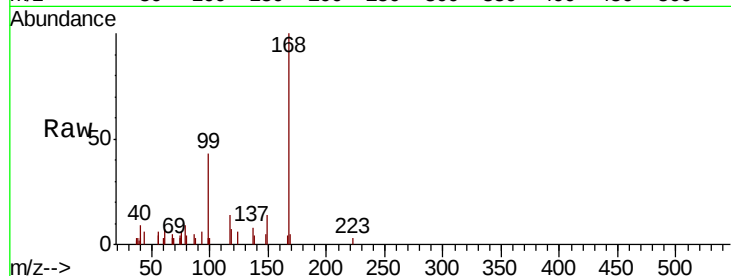
Tot Ion:117 Resp: 1895

Ion Ratio Lower Upper

117 100

119 0.0 70.8 106.2#

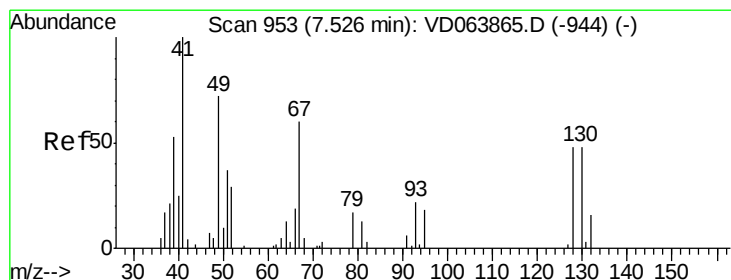
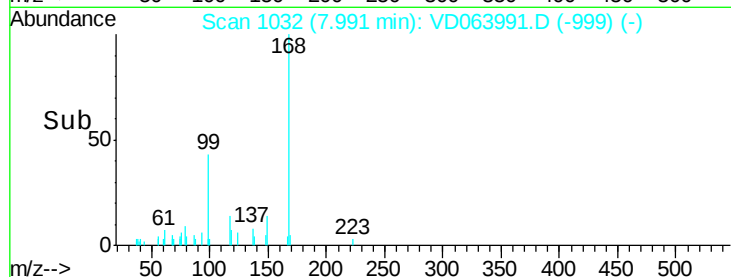
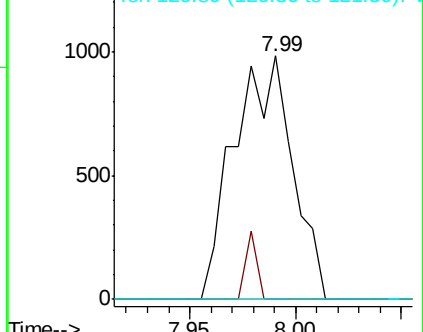
121 0.0 21.4 32.0#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 1.847 ug/l

RT: 7.48 min Scan# 946

Delta R.T. -0.04 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Tgt Ion: 41 Resp: 133

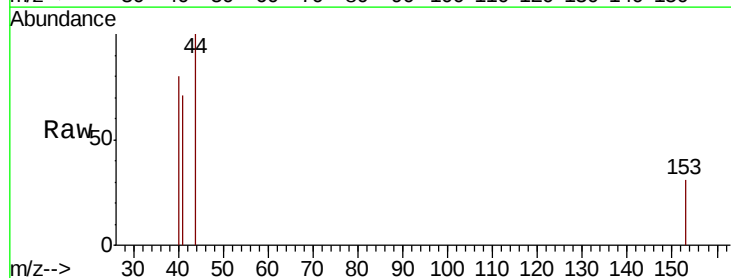
Ion Ratio Lower Upper

41 100

39 40.6 52.6 78.8#

67 0.0 74.2 111.2#

52 0.0 34.0 51.0#

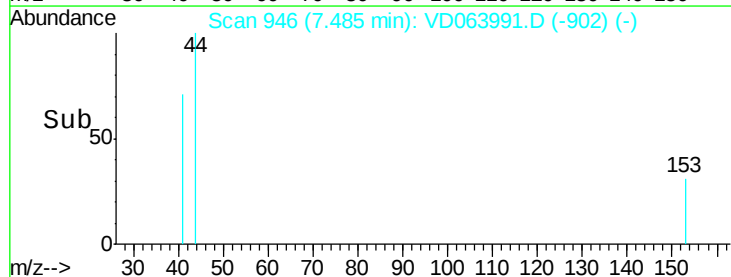
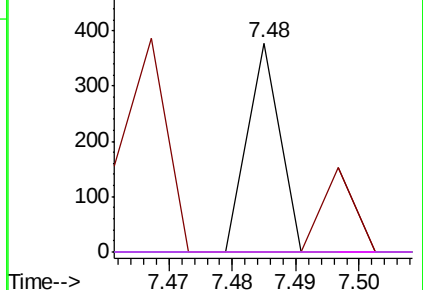


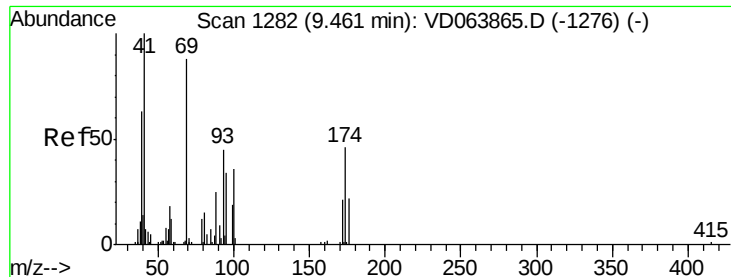
Abundance Ion 41.00 (40.70 to 41.70): VDC

Ion 39.00 (38.70 to 39.70): VDC

Ion 67.00 (66.70 to 67.70): VDC

Ion 52.00 (51.70 to 52.70): VDC

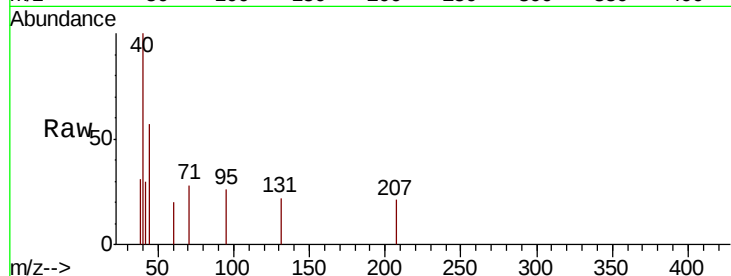




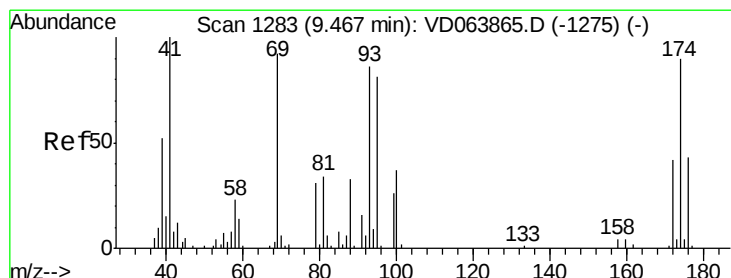
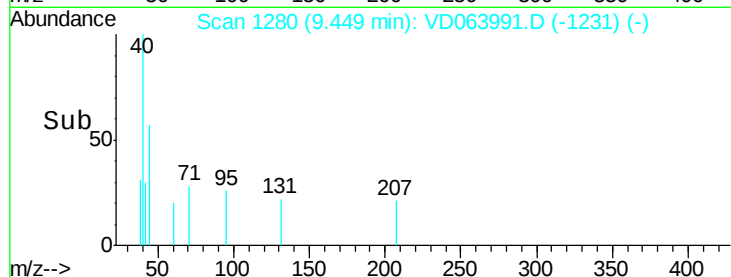
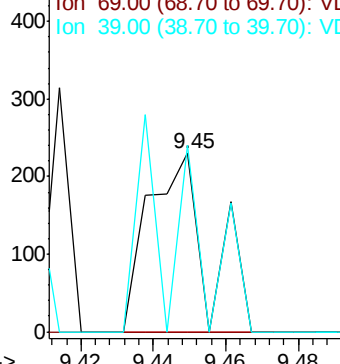
#48
Methvl methacrylate
Concen: 2.123 ug/l
RT: 9.45 min Scan# 1280
Delta R.T. -0.01 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

Instrument :
MSVOA_D
ClientSampleId :
RBR200031-RT4221

Tot Ion: 41 Resp: 265
Ion Ratio Lower Upper
41 100
69 0.0 75.1 112.7#
39 37.4 50.2 75.2#

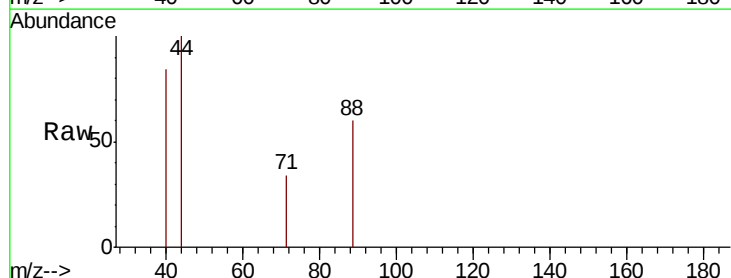


Abundance Ion 41.00 (40.70 to 41.70): VDC
Ion 69.00 (68.70 to 69.70): VDC
Ion 39.00 (38.70 to 39.70): VDC

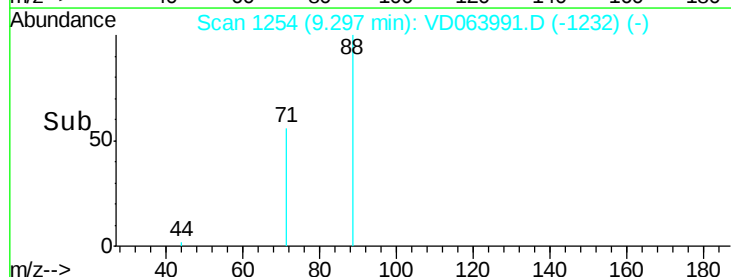
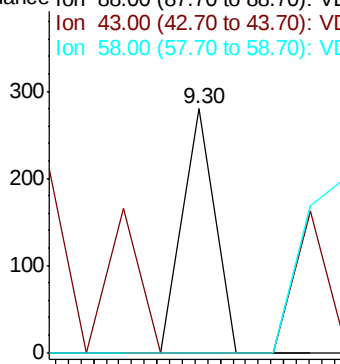


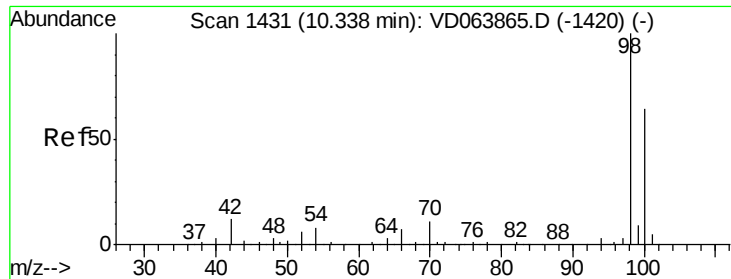
#49
1,4-Dioxane
Concen: 58.454 ug/l
RT: 9.30 min Scan# 1254
Delta R.T. -0.17 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

Tgt Ion: 88 Resp: 99
Ion Ratio Lower Upper
88 100
43 0.0 27.6 41.4#
58 0.0 54.1 81.1#



Abundance Ion 88.00 (87.70 to 88.70): VDC
Ion 43.00 (42.70 to 43.70): VDC
Ion 58.00 (57.70 to 58.70): VDC





#50

Toluene-d8

Concen: 47.123 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. 0.01 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

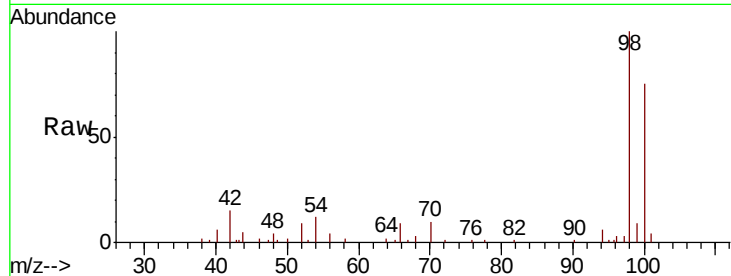
RBR200031-RT4221

Tot Ion: 98 Resp: 39708

Ion Ratio Lower Upper

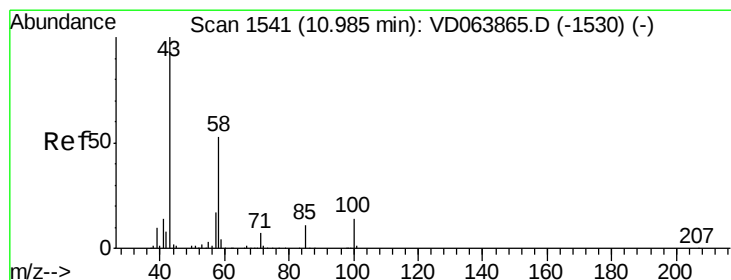
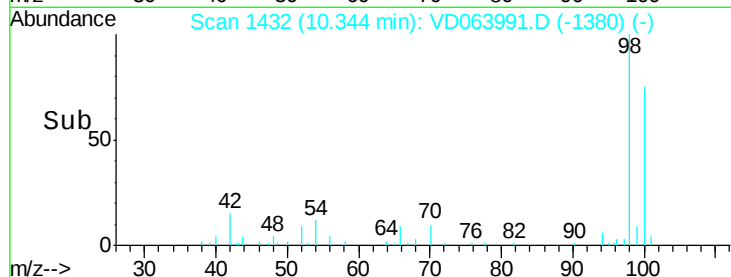
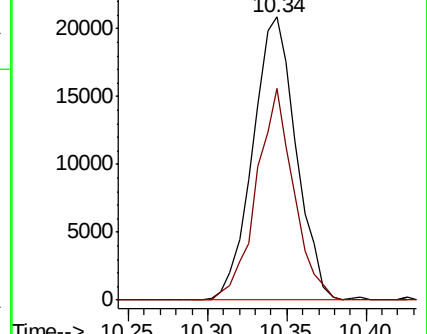
98 100

100 64.6 52.1 78.1



Abundance Ion 98.00 (97.70 to 98.70): VDC

Ion 100.00 (99.70 to 100.70): VDC



#59

2-Hexanone

Concen: 1.596 ug/l

RT: 11.08 min Scan# 1557

Delta R.T. 0.09 min

Lab File: VD063991.D

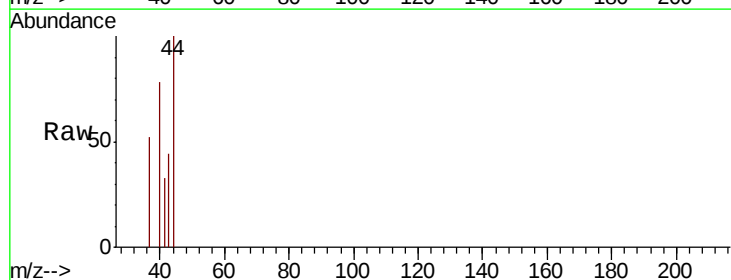
Acq: 16 Oct 2019 17:11

Tgt Ion: 43 Resp: 156

Ion Ratio Lower Upper

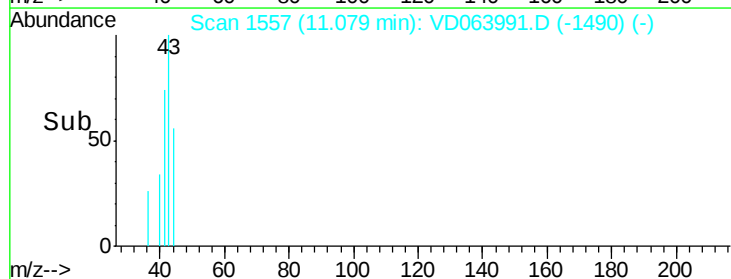
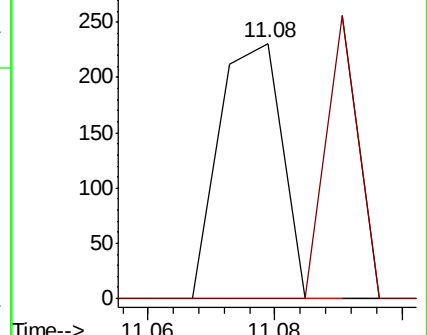
43 100

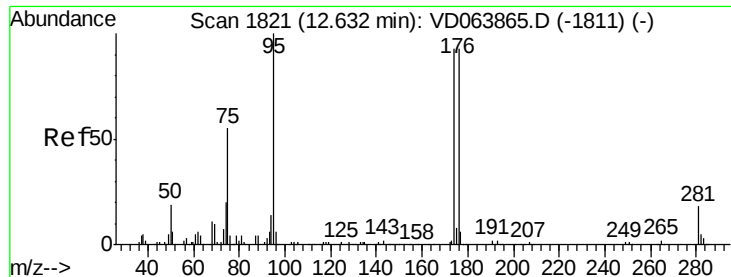
58 57.7 27.7 83.0



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

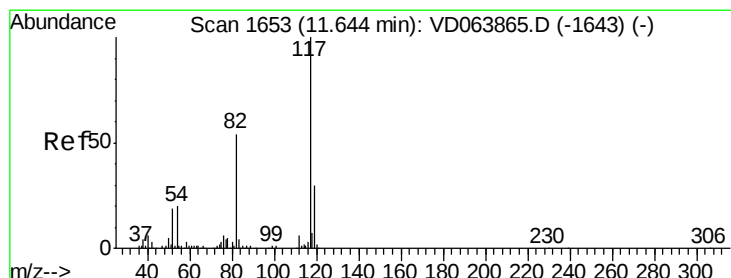
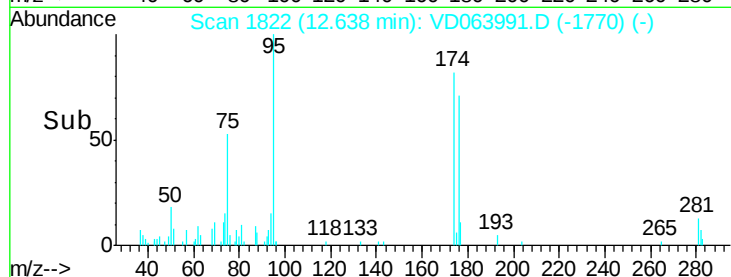
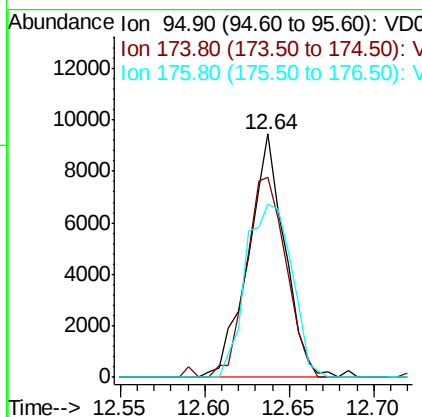
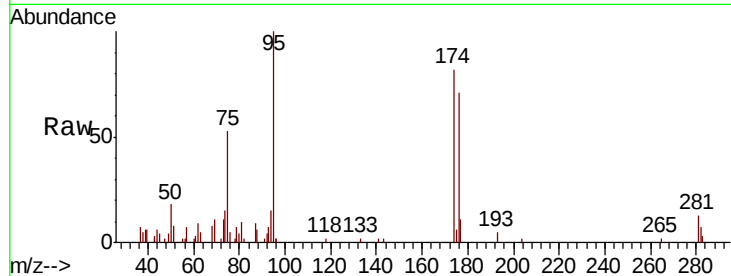




#62
4-Bromofluorobenzene
Concen: 48.330 ug/l
RT: 12.64 min Scan# 1822
Delta R.T. 0.01 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

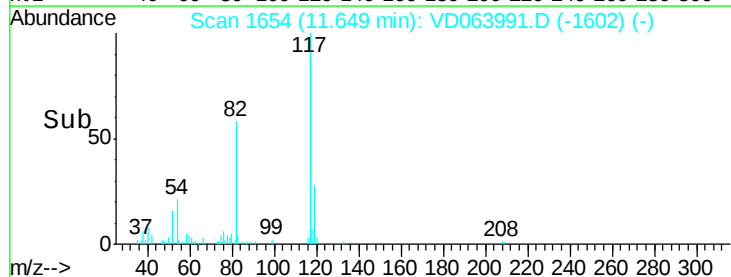
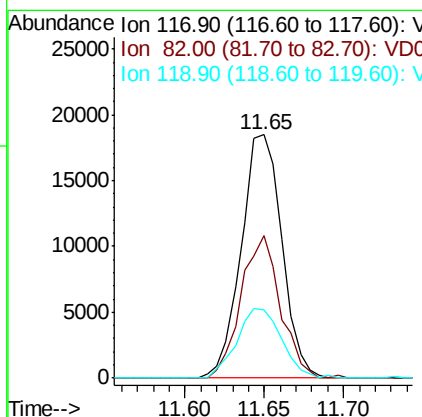
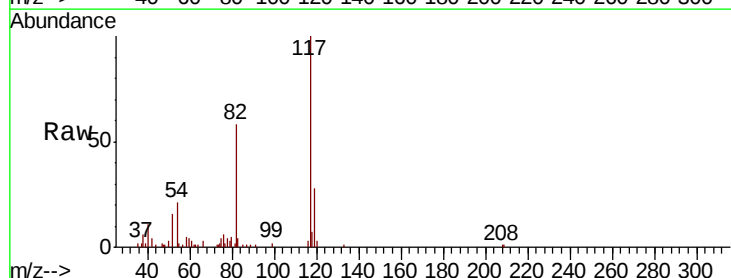
Instrument :
MSVOA_D
ClientSampleId :
RBR200031-RT4221

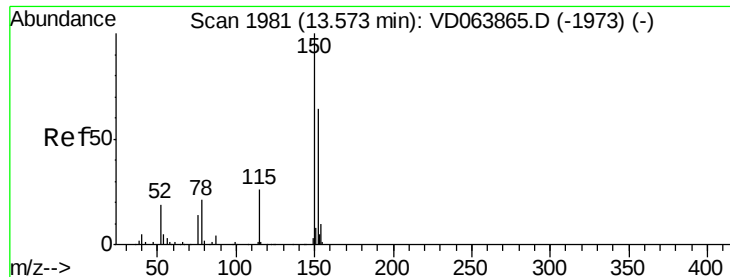
Tot Ion: 95 Resp: 14152
Ion Ratio Lower Upper
95 100
174 90.6 0.0 186.4
176 89.7 0.0 184.2



#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.65 min Scan# 1654
Delta R.T. 0.01 min
Lab File: VD063991.D
Acq: 16 Oct 2019 17:11

Tgt Ion: 117 Resp: 32965
Ion Ratio Lower Upper
117 100
82 58.3 42.8 64.2
119 28.2 24.4 36.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. 0.01 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

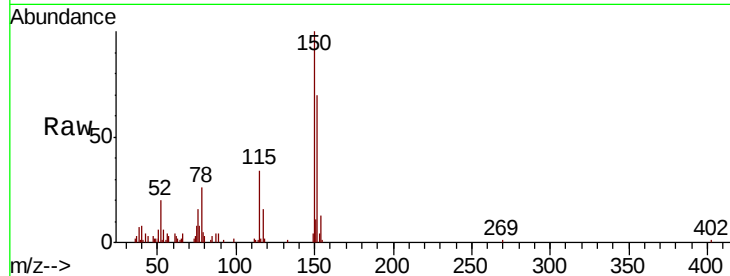
Tot Ion:152 Resp: 17244

Ion Ratio Lower Upper

152 100

115 55.5 25.9 77.7

150 152.0 0.0 344.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V

20000

15000

10000

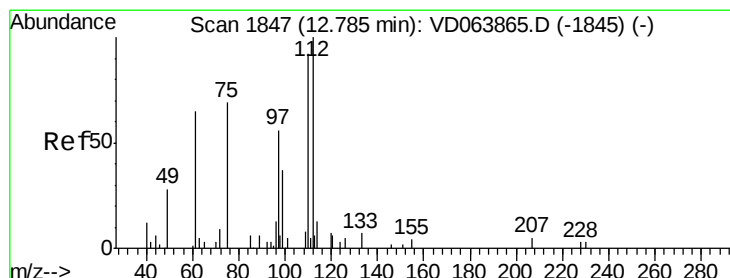
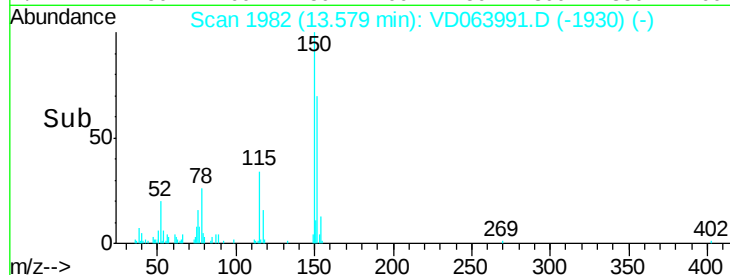
5000

0

13.58

13.55 13.58 13.60

Time-->



#76

1,2,3-Trichloropropane

Concen: 70.869 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD063991.D

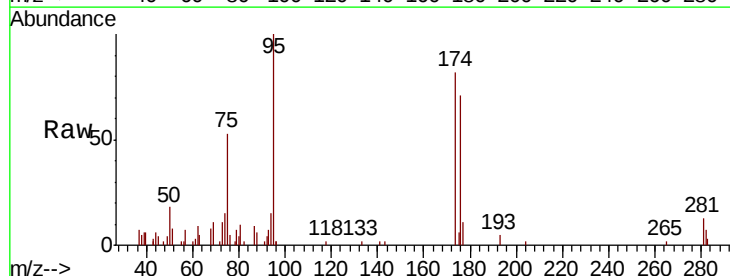
Acq: 16 Oct 2019 17:11

Tgt Ion: 75 Resp: 8185

Ion Ratio Lower Upper

75 100

77 0.0 0.0 0.0



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

6000

5000

4000

3000

2000

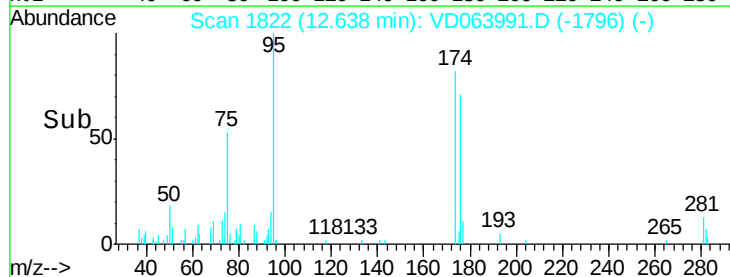
1000

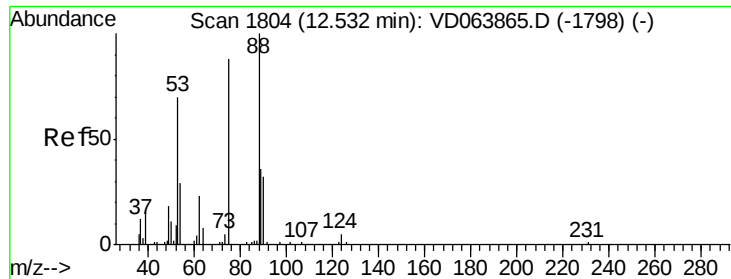
0

12.64

12.60 12.65

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 125.409 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD063991.D

Acq: 16 Oct 2019 17:11

Instrument :

MSVOA_D

ClientSampleId :

RBR200031-RT4221

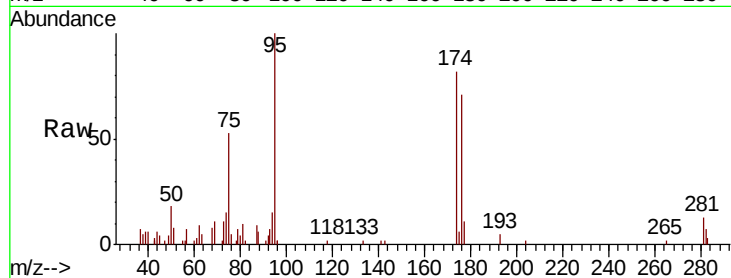
Tot Ion: 75 Resp: 8185

Ion Ratio Lower Upper

75 100

53 0.0 75.0 112.6#

89 0.0 38.2 57.4#



Abundance Ion 74.90 (74.60 to 75.60): VDC

Ion 53.00 (52.70 to 53.70): VDC

Ion 88.90 (88.60 to 89.60): VDC

