

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN081518\
 Data File : VN050671.D
 Acq On : 15 Aug 2018 22:39
 Operator : MD\SY
 Sample : J4458-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 36 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MH-92A

Quant Time: Aug 16 04:24:36 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N072518W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu Jul 26 15:21:50 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	114017	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	569717	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	469348	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	232506	30.00	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	100.00%
60) 4-Bromofluorobenzene	12.40	95	165899	23.01	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	76.70%
63) Toluene-d8	10.09	98	658697	29.38	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	97.93%

Target Compounds

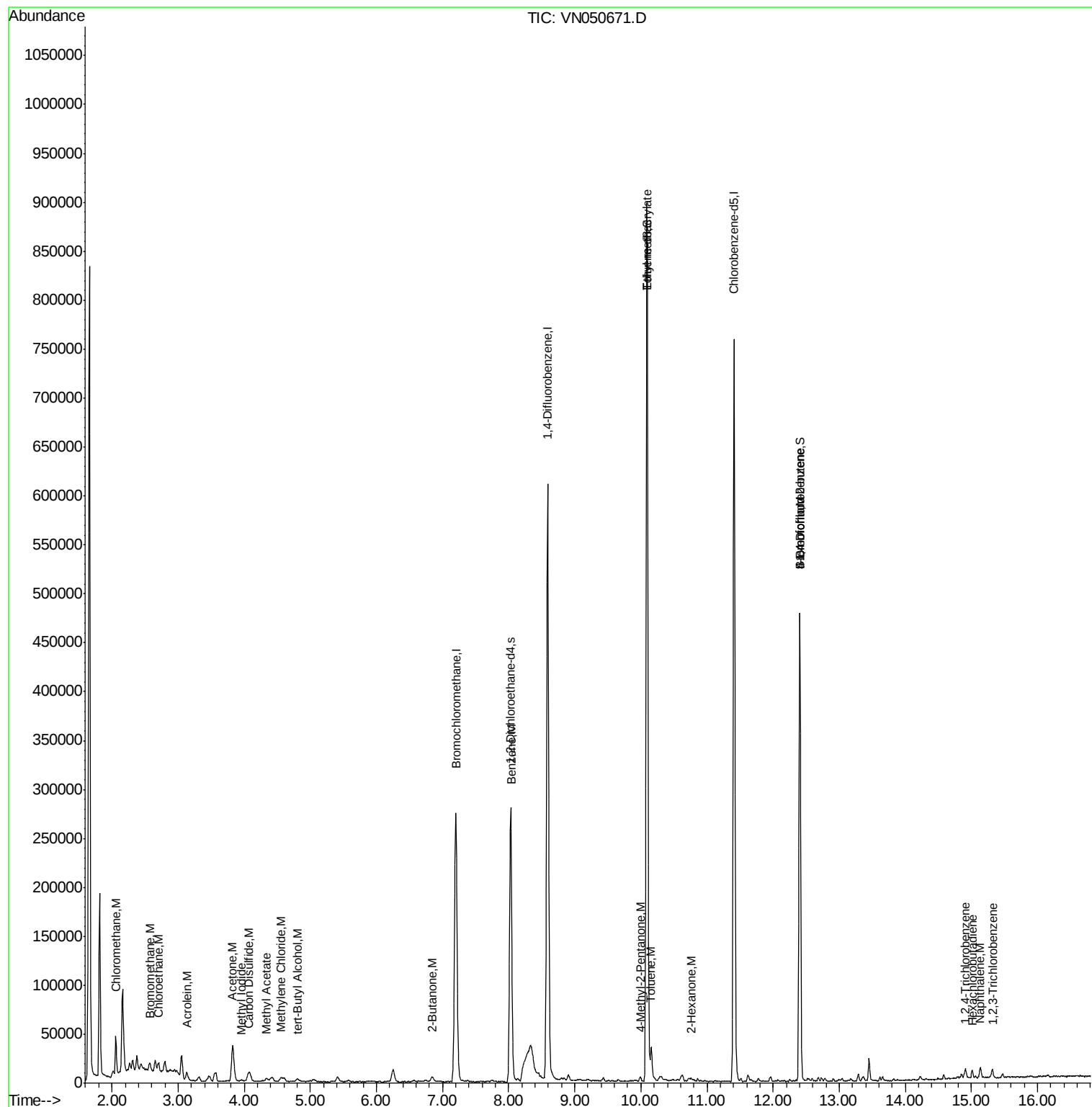
						Ovalue
3) Chloromethane	2.06	50	31356	3.87	ug/l	98
5) Bromomethane	2.57	94	5329	1.01	ug/l	99
6) Chloroethane	2.70	64	8277	1.62	ug/l	99
11) Methyl Iodide	3.95	142	1912	0.21	ug/l #	58
12) Methyl Acetate	4.34	43	2919	0.42	ug/l	91
13) Acrolein	3.13	56	131	0.30	ug/l	91
15) Acetone	3.82	58	20788	33.66	ug/l	88
16) Carbon Disulfide	4.05	76	8201	0.44	ug/l	99
18) Methylene Chloride	4.56	84	2302	0.33	ug/l #	84
23) tert-Butyl Alcohol	4.81	59	5126	9.87	ug/l #	98
30) 2-Butanone	6.85	43	5898	2.13	ug/l #	66
34) Benzene	8.05	78	8350	0.31	ug/l #	1
51) Ethyl methacrylate	10.09	69	1551	0.20	ug/l	87
56) Bromoform	12.40	173	1923	0.38	ug/l #	1
58) 4-Methyl-2-Pentanone	9.99	43	2521	0.46	ug/l #	88
59) 2-Hexanone	10.76	43	928	0.25	ug/l #	19
62) Toluene	10.16	91	21767	0.81	ug/l	98
77) t-1,4-Dichloro-2-butene	12.40	75	77541	37.90	ug/l #	14
89) 1,2,4-Trichlorobenzene	14.91	180	2769	0.48	ug/l	97
90) Hexachlorobutadiene	15.01	225	1783	0.47	ug/l	72
91) Naphthalene	15.13	128	9791	8.18	ug/l #	92
92) 1,2,3-Trichlorobenzene	15.32	180	3402	0.58	ug/l	94

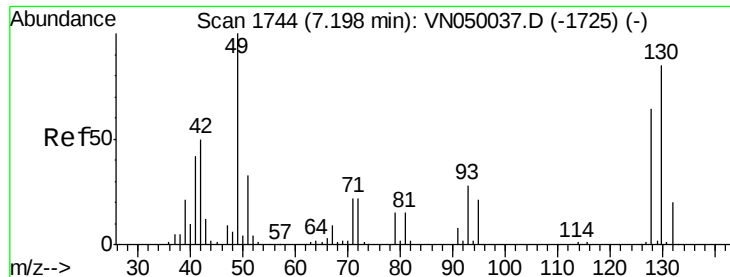
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.00 ug/l

RT: 7.20 min Scan# 1745

Delta R.T. 0.00 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampleId :

MH-92A

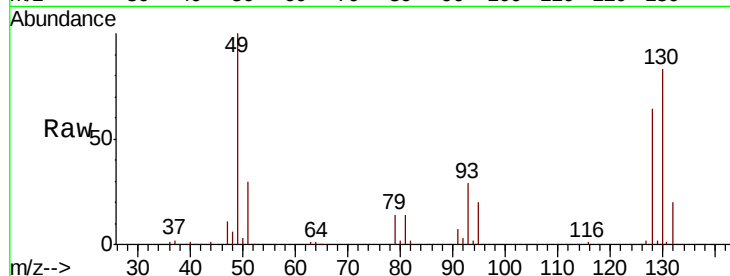
Tot Ion:128 Resp: 114017

Ion Ratio Lower Upper

128 100

49 153.6 0.0 378.3

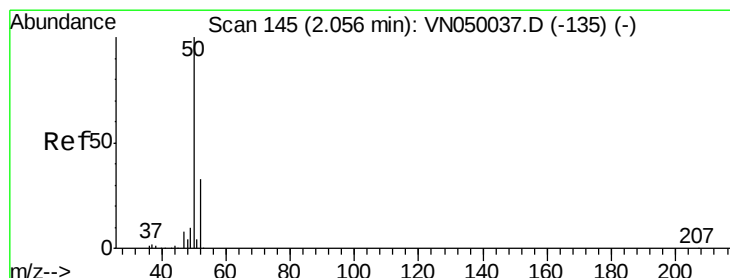
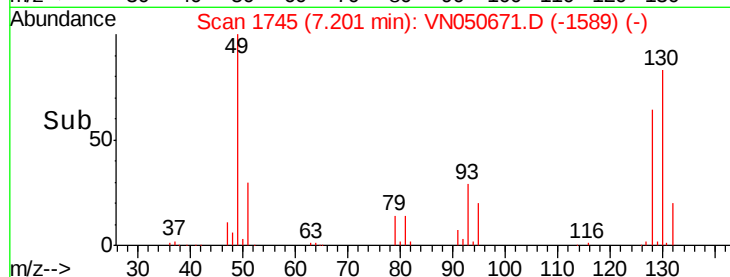
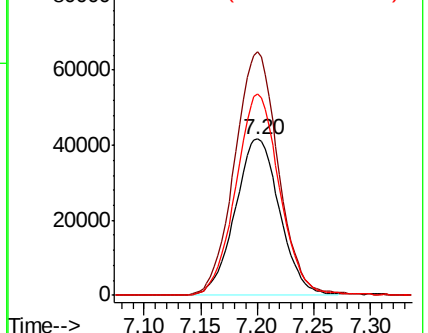
130 126.8 0.0 320.7



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN0

Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 3.87 ug/l

RT: 2.06 min Scan# 146

Delta R.T. 0.00 min

Lab File: VN050671.D

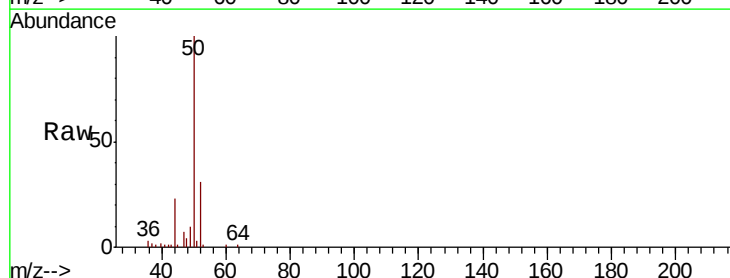
Acq: 15 Aug 2018 22:39

Tgt Ion: 50 Resp: 31356

Ion Ratio Lower Upper

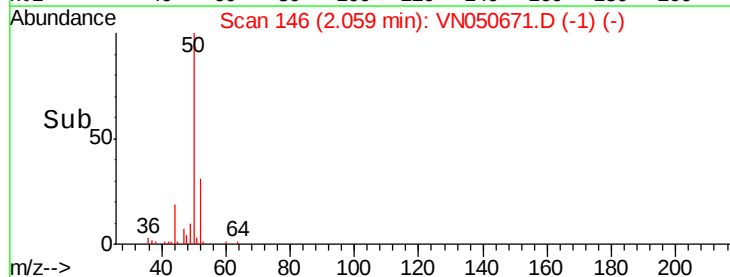
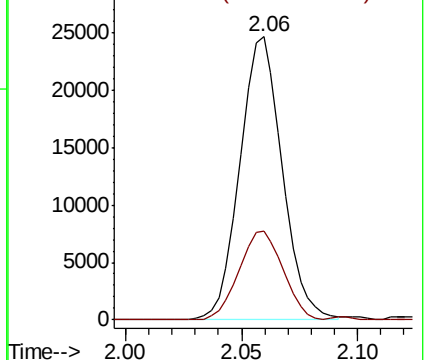
50 100

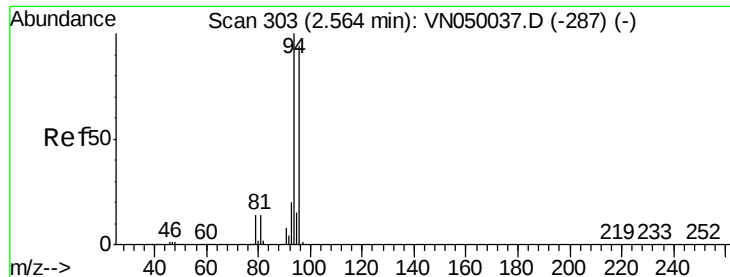
52 31.3 26.1 39.1



Abundance Ion 50.00 (49.70 to 50.70): VN0

Ion 52.00 (51.70 to 52.70): VN0





#5

Bromomethane

Concen: 1.01 ug/l

RT: 2.57 min Scan# 305

Delta R.T. 0.01 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampled :

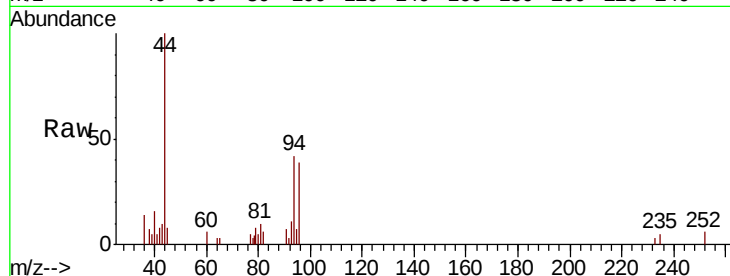
MH-92A

Tot Ion: 94 Resp: 5329

Ion Ratio Lower Upper

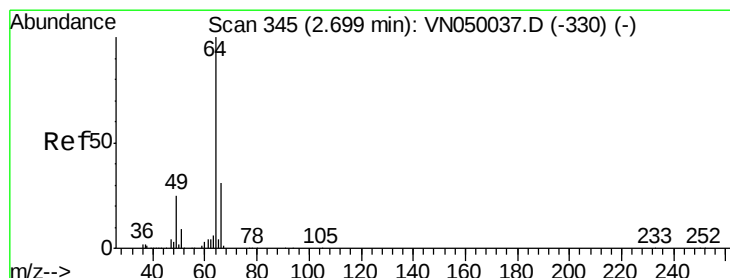
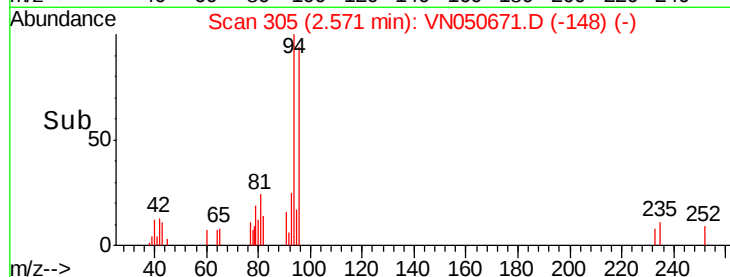
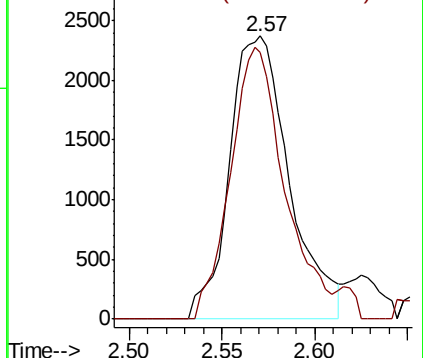
94 100

96 94.1 75.9 113.9



Abundance Ion 94.00 (93.70 to 94.70): VN0

Ion 96.00 (95.70 to 96.70): VN0



#6

Chloroethane

Concen: 1.62 ug/l

RT: 2.70 min Scan# 345

Delta R.T. -0.00 min

Lab File: VN050671.D

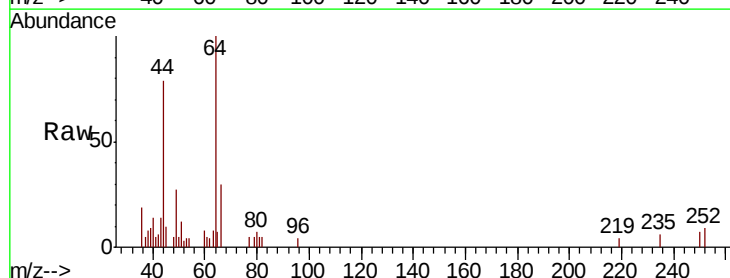
Acq: 15 Aug 2018 22:39

Tgt Ion: 64 Resp: 8277

Ion Ratio Lower Upper

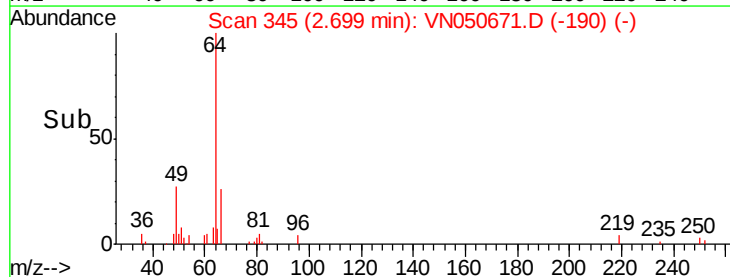
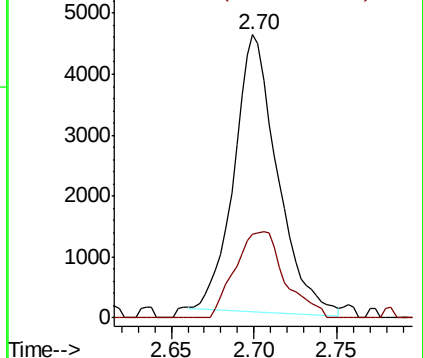
64 100

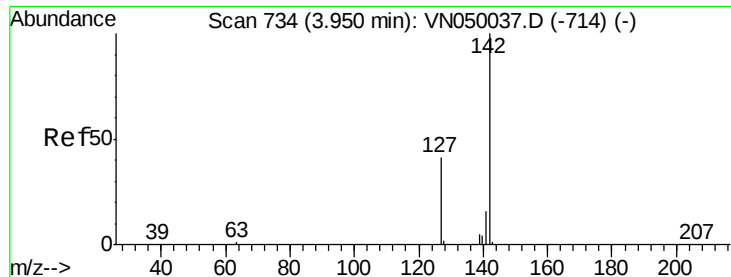
66 30.7 25.0 37.4



Abundance Ion 64.00 (63.70 to 64.70): VN0

Ion 66.00 (65.70 to 66.70): VN0

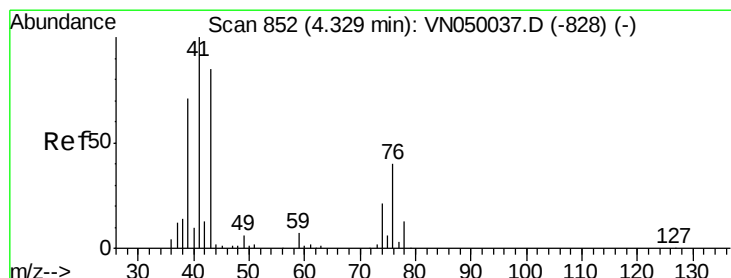
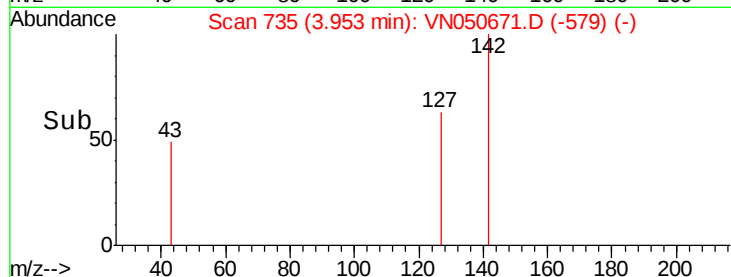
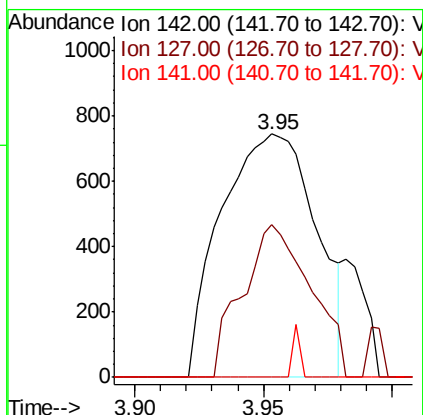
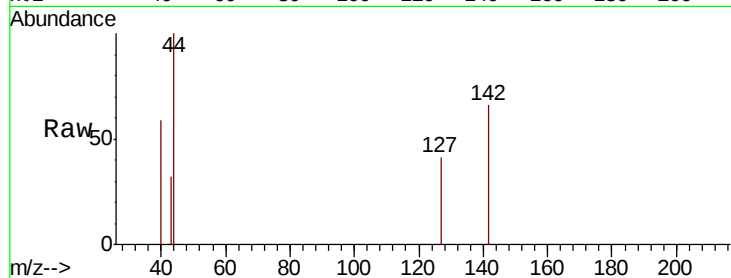




#11
Methyl Iodide
Concen: 0.21 ug/l
RT: 3.95 min Scan# 735
Delta R.T. 0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

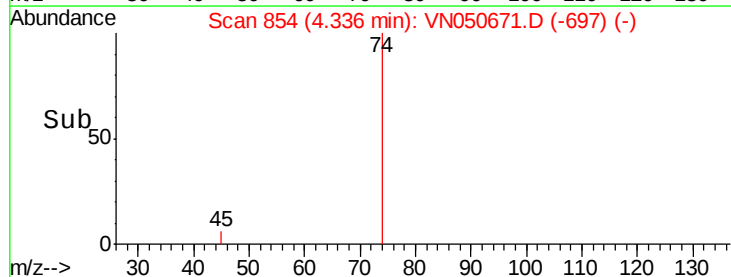
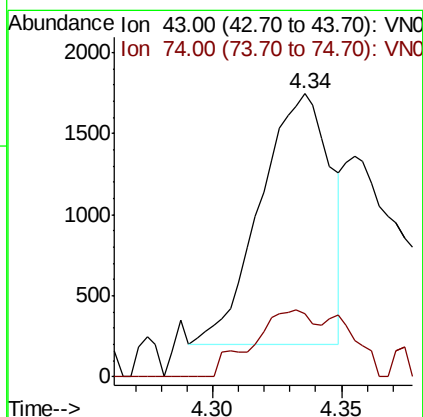
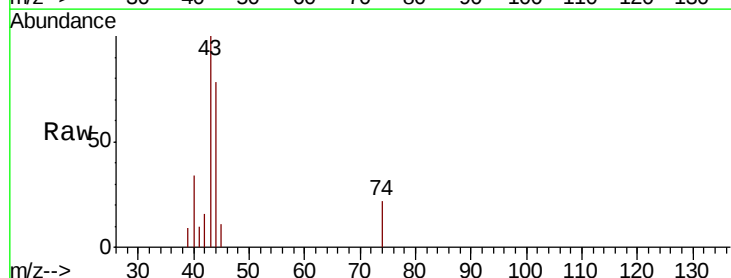
Instrument :
MSVOA_N
ClientSampleId :
MH-92A

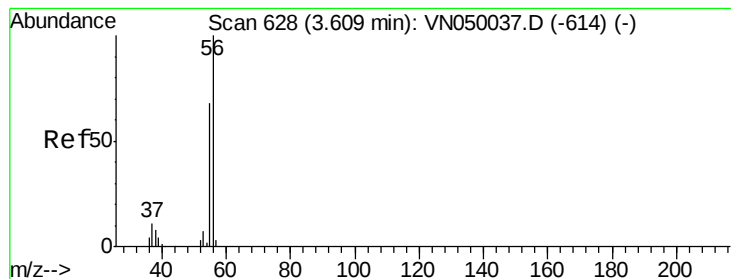
Tot Ion:142 Resp: 1912
Ion Ratio Lower Upper
142 100
127 68.3 20.2 60.5#
141 0.0 6.9 20.6#



#12
Methyl Acetate
Concen: 0.42 ug/l
RT: 4.34 min Scan# 854
Delta R.T. 0.01 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

Tgt Ion: 43 Resp: 2919
Ion Ratio Lower Upper
43 100
74 19.8 19.3 28.9





#13

Acrolein

Concen: 0.30 ug/l

RT: 3.13 min Scan# 478

Delta R.T. -0.48 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampled :

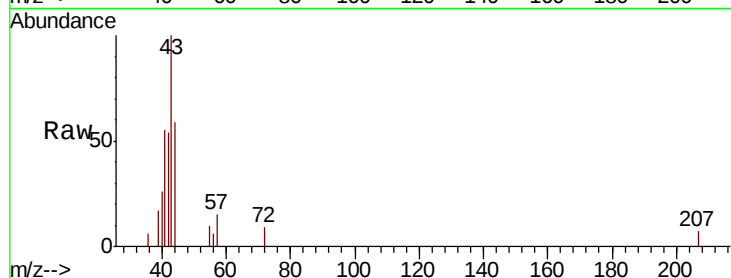
MH-92A

Tot Ion: 56 Resp: 131

Ion Ratio Lower Upper

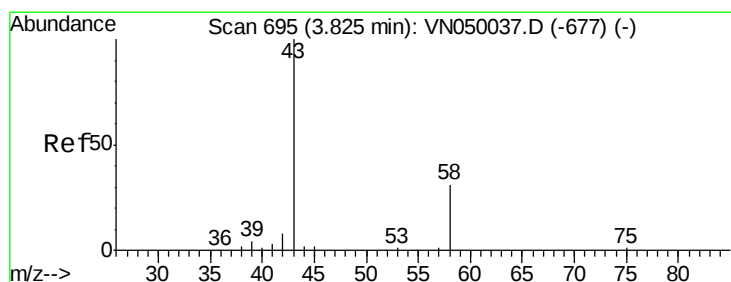
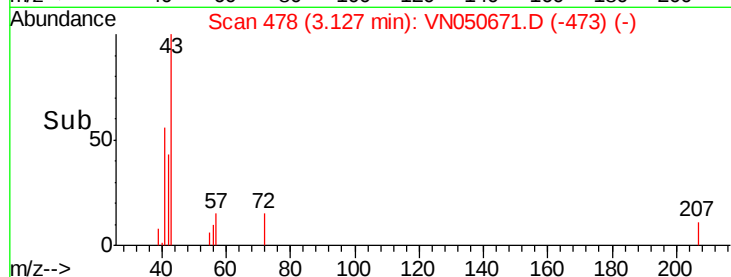
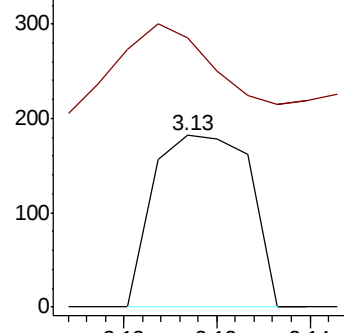
56 100

55 65.6 58.6 88.0



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#15

Acetone

Concen: 33.66 ug/l

RT: 3.82 min Scan# 695

Delta R.T. -0.00 min

Lab File: VN050671.D

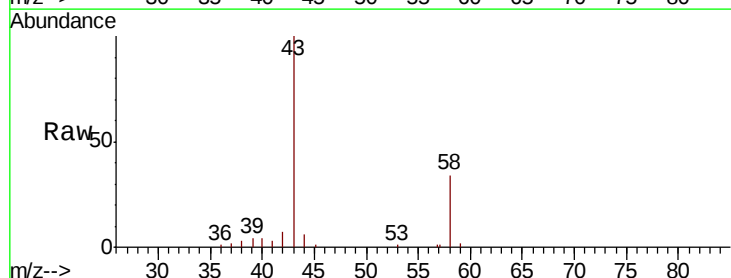
Acq: 15 Aug 2018 22:39

Tgt Ion: 58 Resp: 20788

Ion Ratio Lower Upper

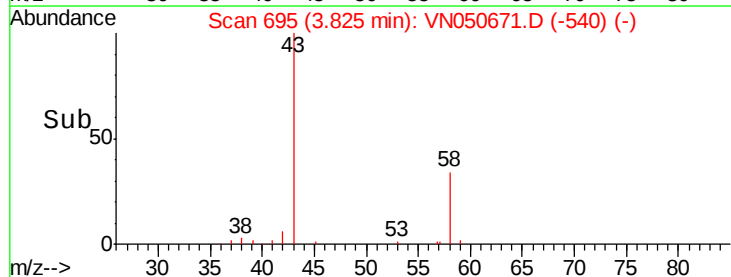
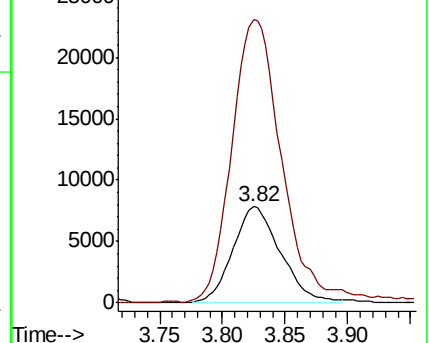
58 100

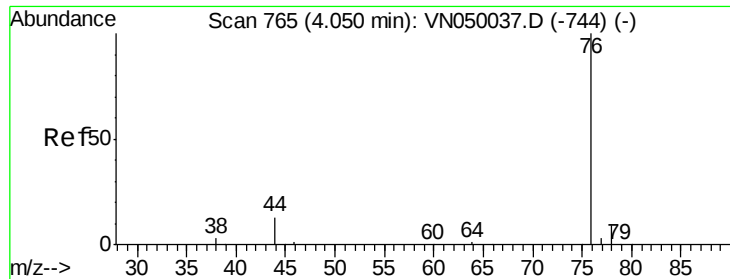
43 290.6 252.0 378.0



Abundance Ion 58.00 (57.70 to 58.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

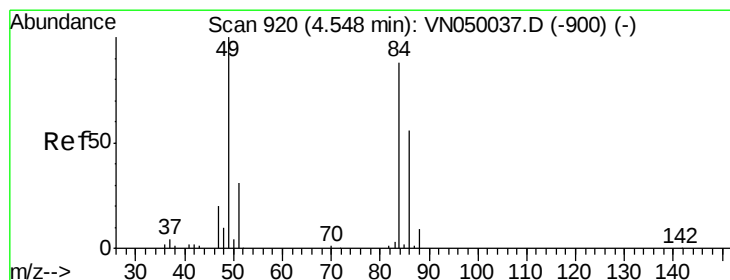
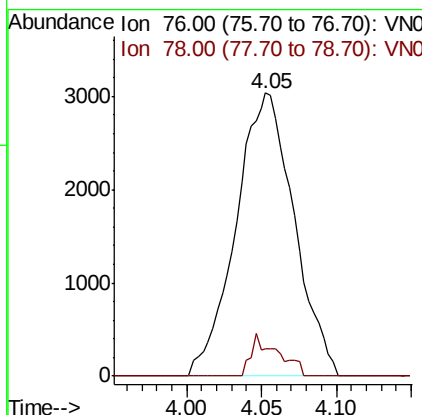
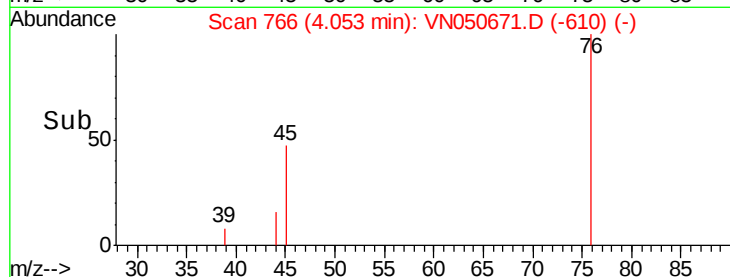
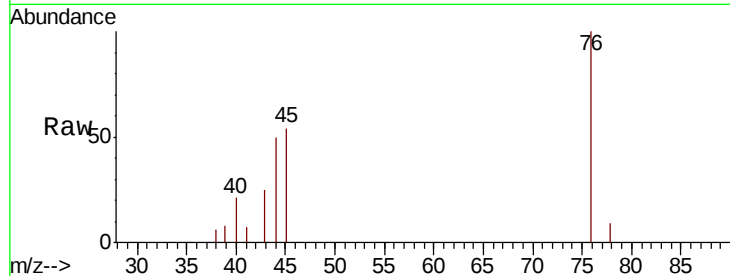




#16
Carbon Disulfide
Concen: 0.44 ug/l
RT: 4.05 min Scan# 766
Delta R.T. 0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

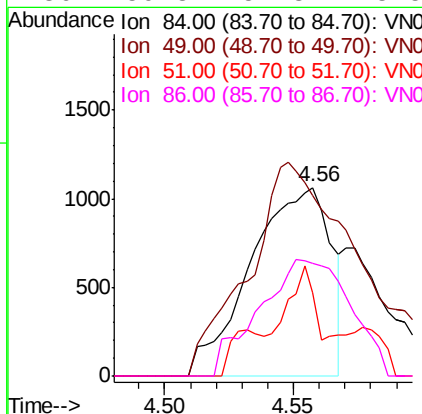
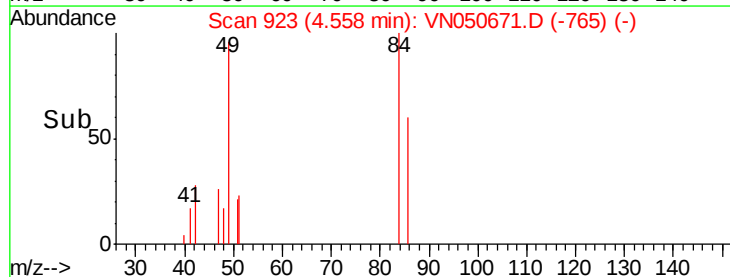
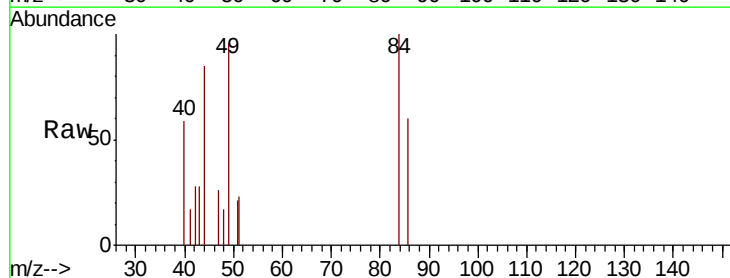
Instrument :
MSVOA_N
ClientSampled :
MH-92A

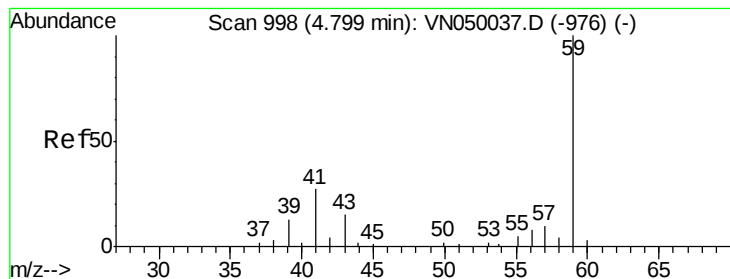
Tot Ion: 76 Resp: 8201
Ion Ratio Lower Upper
76 100
78 9.5 7.3 10.9



#18
Methylene Chloride
Concen: 0.33 ug/l
RT: 4.56 min Scan# 923
Delta R.T. 0.01 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

Tgt Ion: 84 Resp: 2302
Ion Ratio Lower Upper
84 100
49 95.9 95.1 142.7
51 44.3 28.8 43.2#
86 59.8 52.3 78.5





#23

tert-Butyl Alcohol

Concen: 9.87 ug/l

RT: 4.81 min Scan# 1000

Delta R.T. 0.01 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampleId :

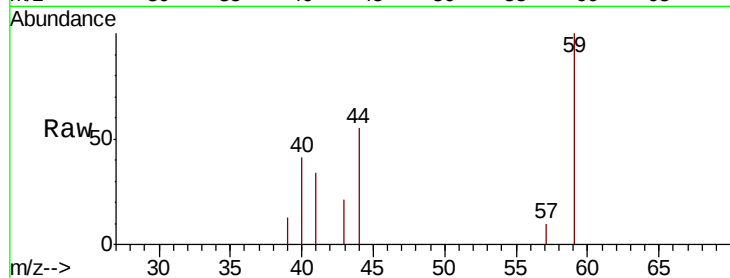
MH-92A

Tot Ion: 59 Resp: 5126

Ion Ratio Lower Upper

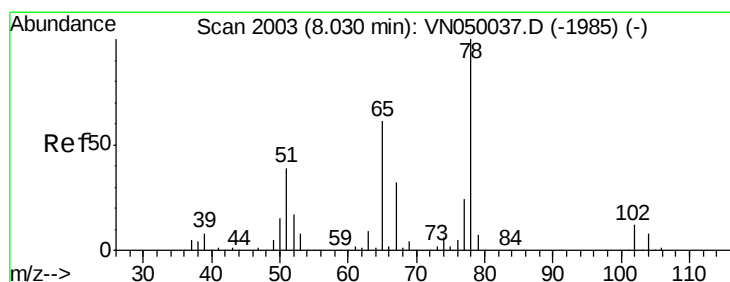
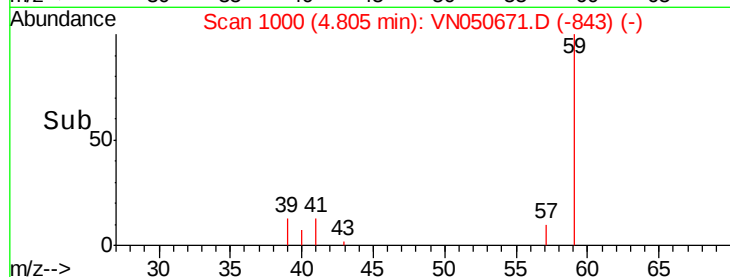
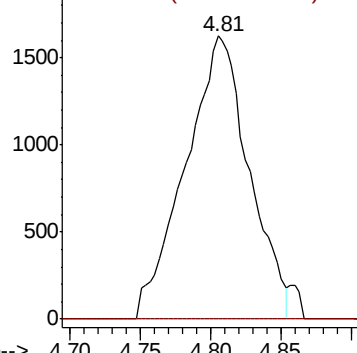
59 100

52 4.6 0.1 0.1#



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 52.00 (51.70 to 52.70): VN0



#27

1,2-Dichloroethane-d4

Concen: 30.00 ug/l

RT: 8.03 min Scan# 2003

Delta R.T. -0.00 min

Lab File: VN050671.D

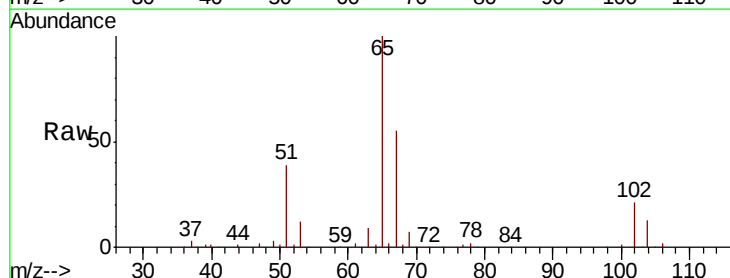
Acq: 15 Aug 2018 22:39

Tgt Ion: 65 Resp: 232506

Ion Ratio Lower Upper

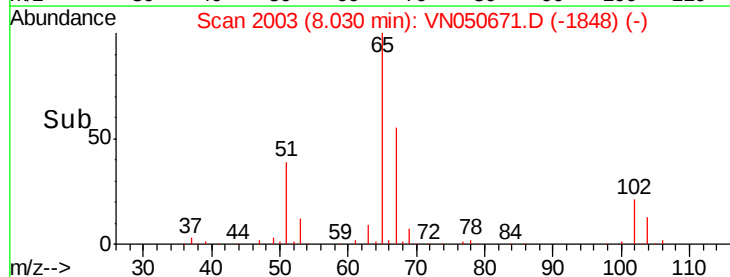
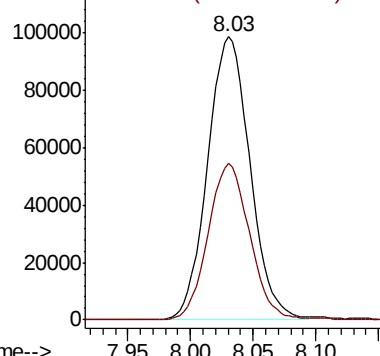
65 100

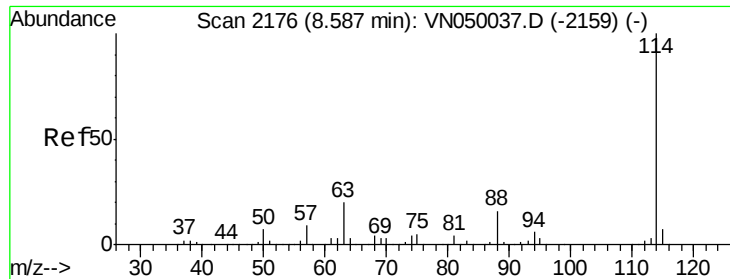
67 53.9 42.7 64.1



Abundance Ion 65.00 (64.70 to 65.70): VN0

Ion 67.00 (66.70 to 67.70): VN0

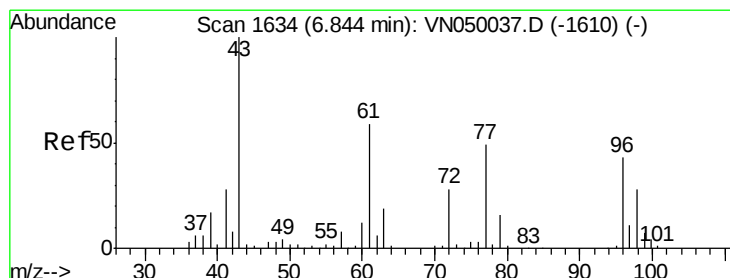
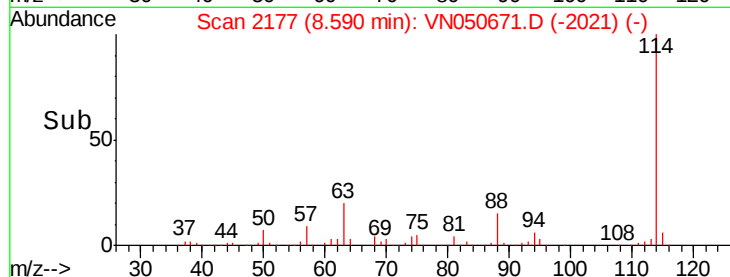
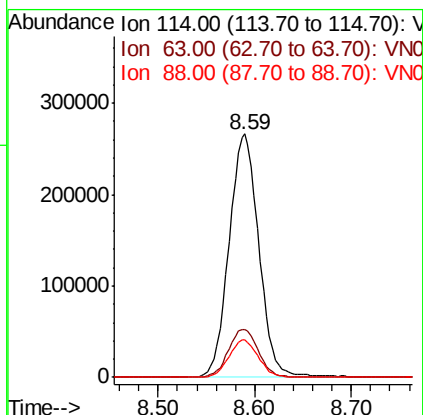
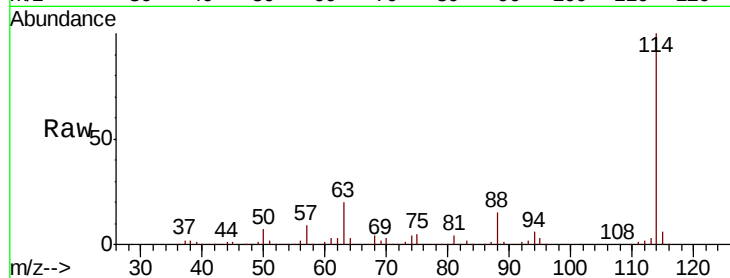




#28
 1,4-Difluorobenzene
 Concen: 30.00 ug/l
 RT: 8.59 min Scan# 2177
 Delta R.T. 0.00 min
 Lab File: VN050671.D
 Acq: 15 Aug 2018 22:39

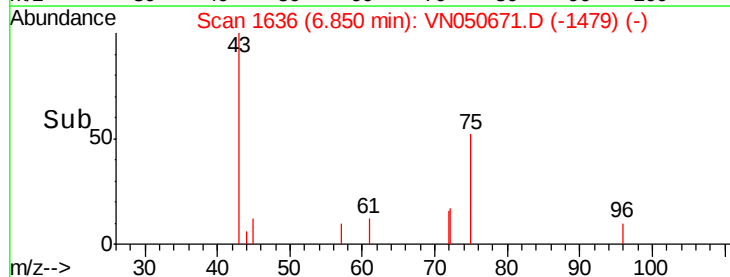
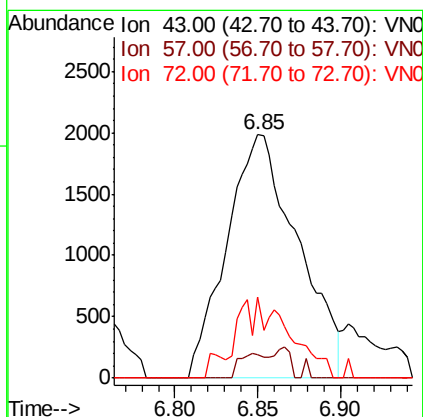
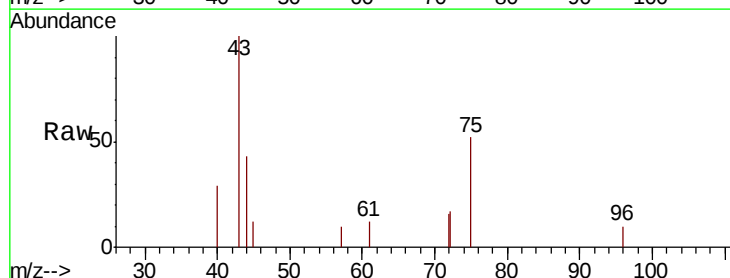
Instrument :
 MSVOA_N
 ClientSampleId :
 MH-92A

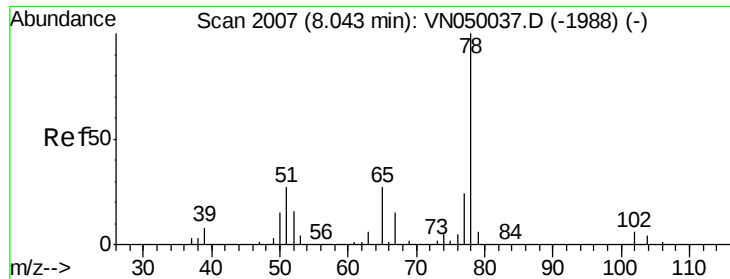
Tot Ion:114 Resp: 569717
 Ion Ratio Lower Upper
 114 100
 63 19.8 16.2 24.2
 88 15.1 12.3 18.5



#30
 2-Butanone
 Concen: 2.13 ug/l
 RT: 6.85 min Scan# 1636
 Delta R.T. 0.01 min
 Lab File: VN050671.D
 Acq: 15 Aug 2018 22:39

Tgt Ion: 43 Resp: 5898
 Ion Ratio Lower Upper
 43 100
 57 1.0 6.8 10.2#
 72 7.3 21.4 32.0#





#34

Benzene

Concen: 0.31 ug/l

RT: 8.05 min Scan# 2008

Delta R.T. 0.00 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampled :

MH-92A

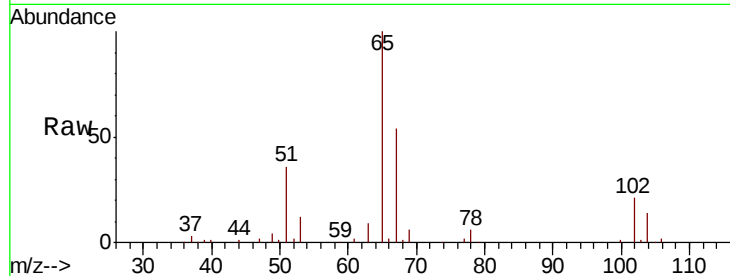
Tot Ion: 78 Resp: 8350

Ion Ratio Lower Upper

78 100

77 27.7 19.1 28.7

51 549.6 21.0 31.4#

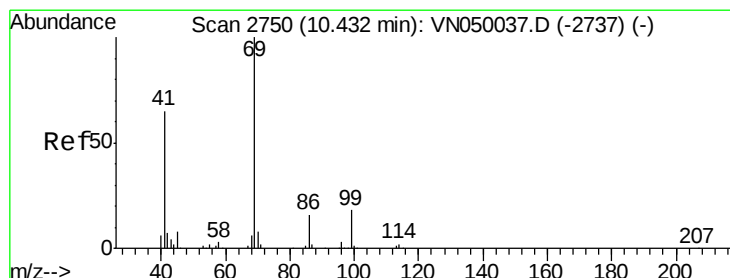
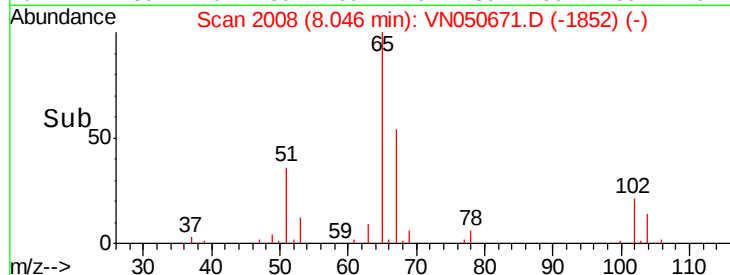
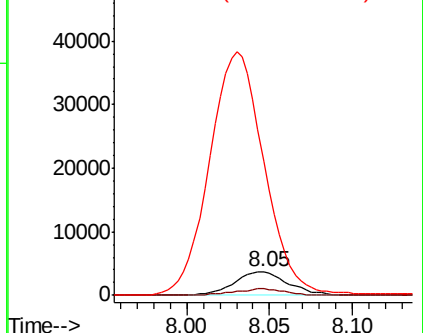


Abundance

Ion 78.10 (77.80 to 78.80): VN0

Ion 77.00 (76.70 to 77.70): VN0

Ion 51.00 (50.70 to 51.70): VN0



#51

Ethyl methacrylate

Concen: 0.20 ug/l

RT: 10.09 min Scan# 2645

Delta R.T. -0.34 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

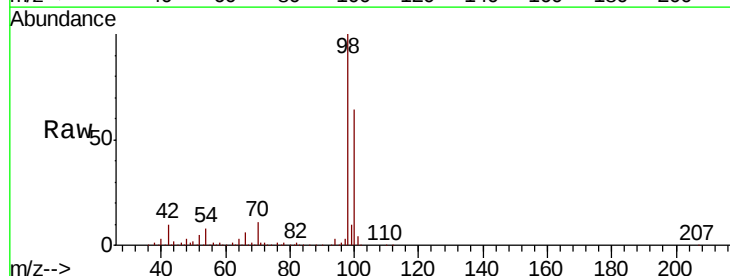
Tgt Ion: 69 Resp: 1551

Ion Ratio Lower Upper

69 100

41 49.8 31.9 95.9

39 35.7 16.7 50.1

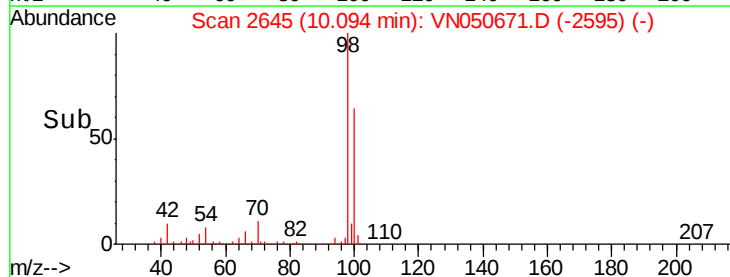
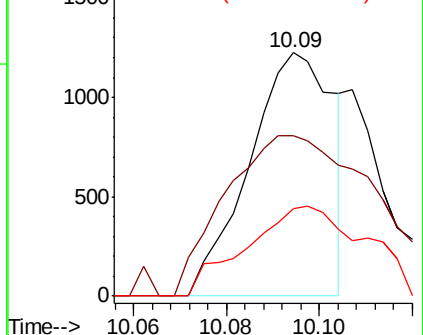


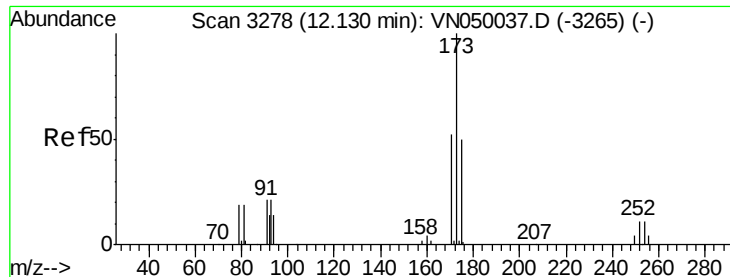
Abundance

Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0





#56

Bromoform

Concen: 0.38 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. 0.27 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampled :

MH-92A

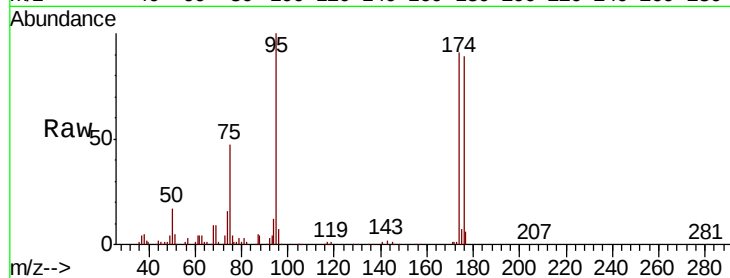
Tot Ion:173 Resp: 1923

Ion Ratio Lower Upper

173 100

175 600.7 38.6 57.8#

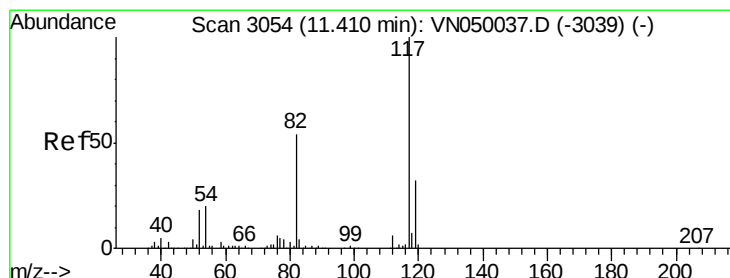
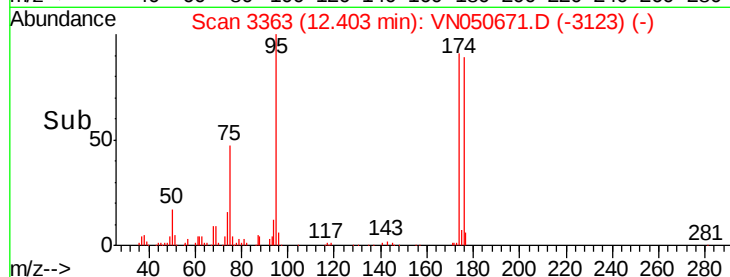
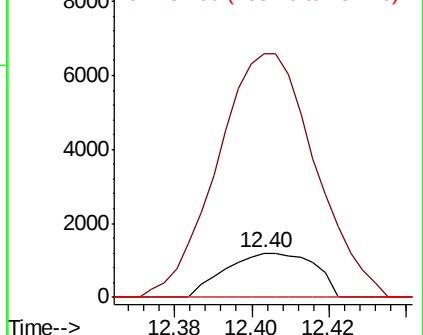
254 0.0 8.8 13.2#



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V



#57

Chlorobenzene-d5

Concen: 30.00 ug/l

RT: 11.41 min Scan# 3054

Delta R.T. -0.00 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

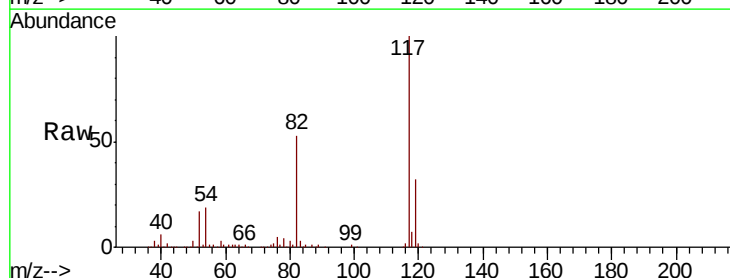
Tgt Ion:117 Resp: 469348

Ion Ratio Lower Upper

117 100

82 53.3 42.4 63.6

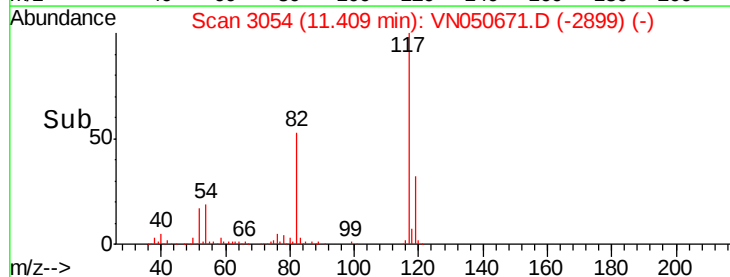
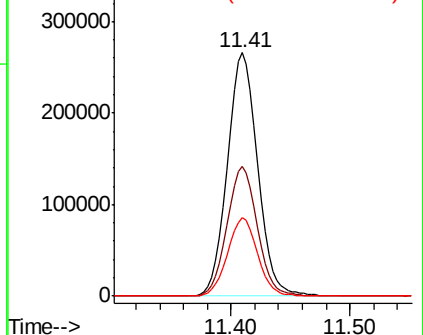
119 32.1 25.4 38.0

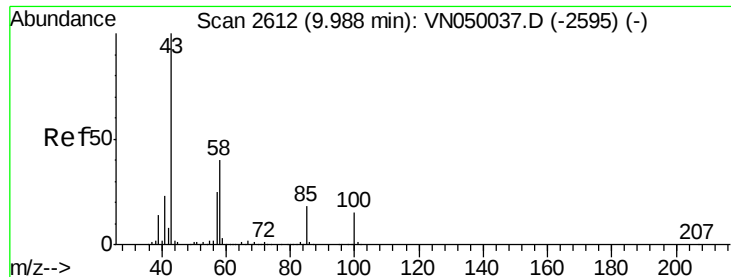


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 82.00 (81.70 to 82.70): V

Ion 119.00 (118.70 to 119.70): V

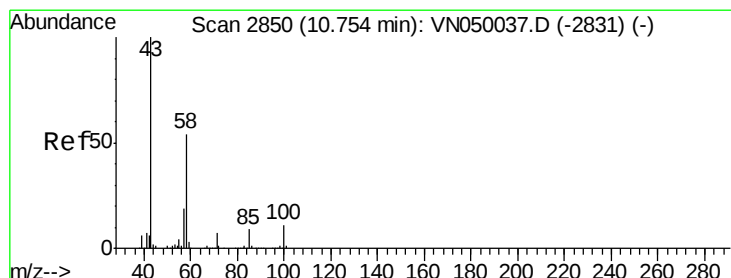
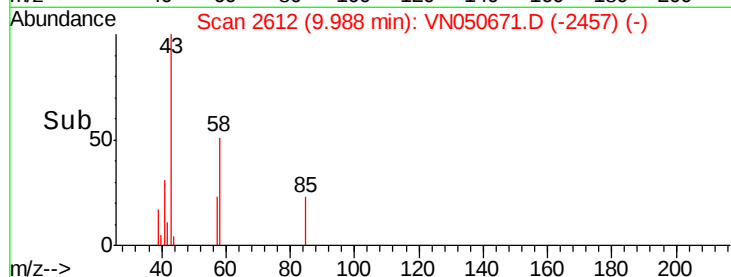
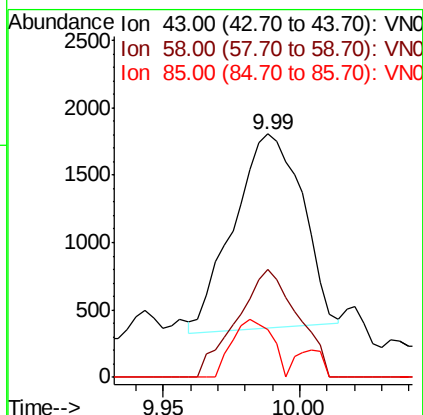
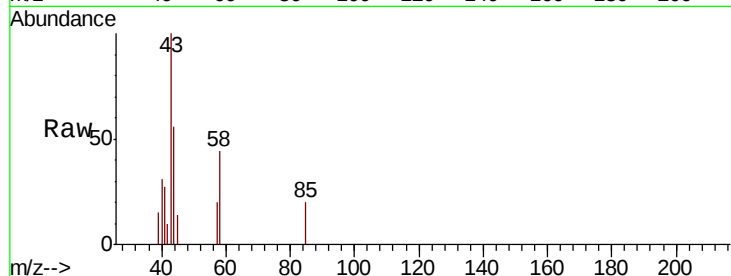




#58
4-Methyl-2-Pentanone
Concen: 0.46 ug/l
RT: 9.99 min Scan# 2612
Delta R.T. -0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

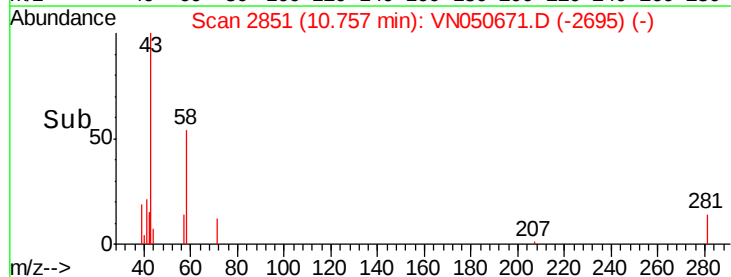
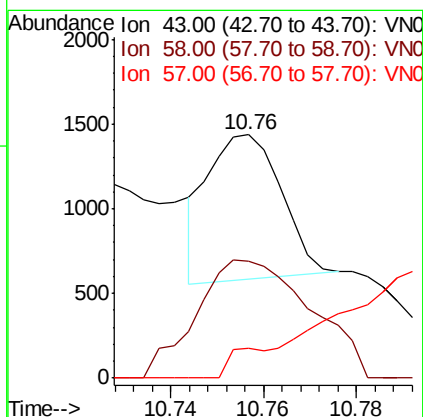
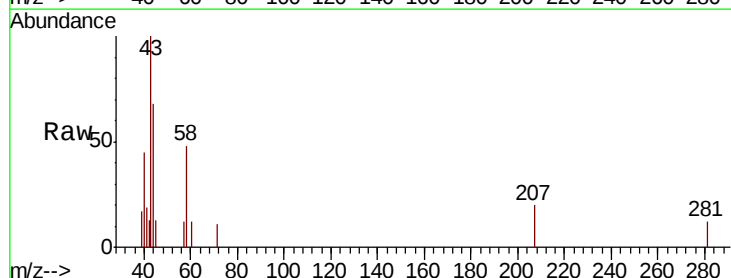
Instrument :
MSVOA_N
ClientSampleID :
MH-92A

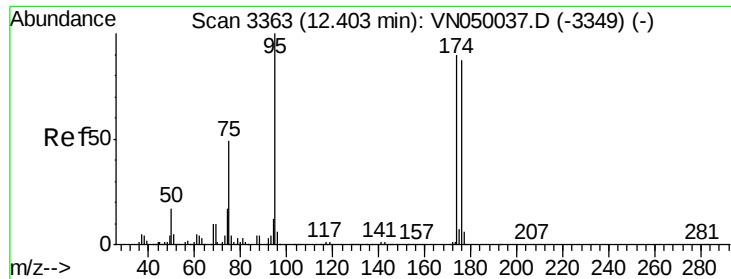
Tot Ion: 43 Resp: 2521
Ion Ratio Lower Upper
43 100
58 49.2 31.2 46.8#
85 17.3 14.4 21.6



#59
2-Hexanone
Concen: 0.25 ug/l
RT: 10.76 min Scan# 2851
Delta R.T. 0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

Tgt Ion: 43 Resp: 928
Ion Ratio Lower Upper
43 100
58 128.6 43.8 65.8#
57 10.6 15.1 22.7#





#60

4-Bromofluorobenzene

Concen: 23.01 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. -0.00 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampled :

MH-92A

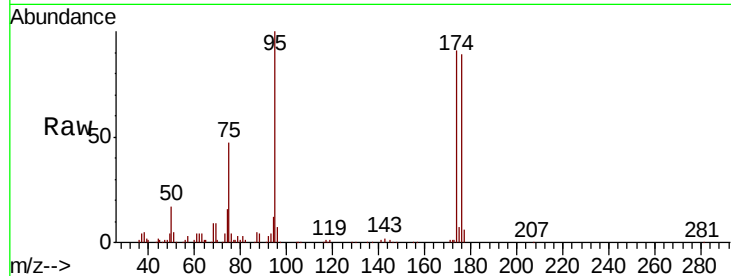
Tot Ion: 95 Resp: 165899

Ion Ratio Lower Upper

95 100

174 92.3 72.3 108.5

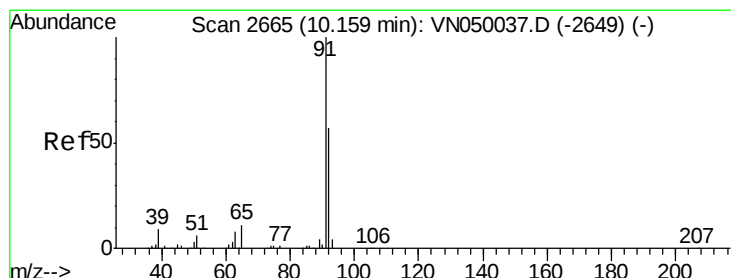
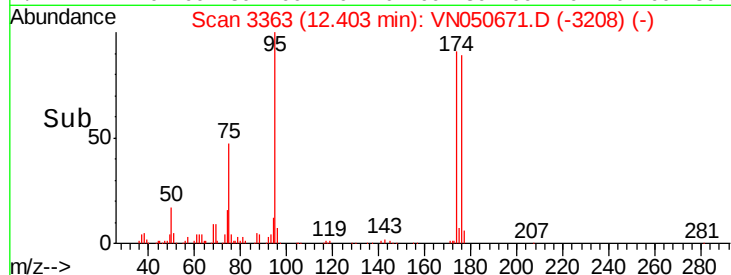
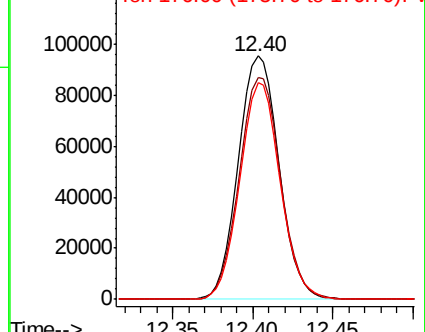
176 87.8 70.0 105.0



Abundance Ion 95.00 (94.70 to 95.70): VN0

Ion 174.00 (173.70 to 174.70): VN0

Ion 176.00 (175.70 to 176.70): VN0



#62

Toluene

Concen: 0.81 ug/l

RT: 10.16 min Scan# 2664

Delta R.T. -0.00 min

Lab File: VN050671.D

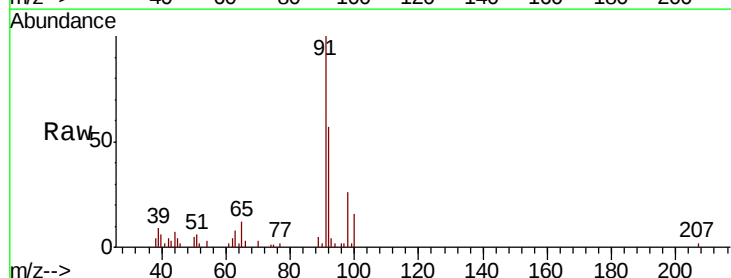
Acq: 15 Aug 2018 22:39

Tgt Ion: 91 Resp: 21767

Ion Ratio Lower Upper

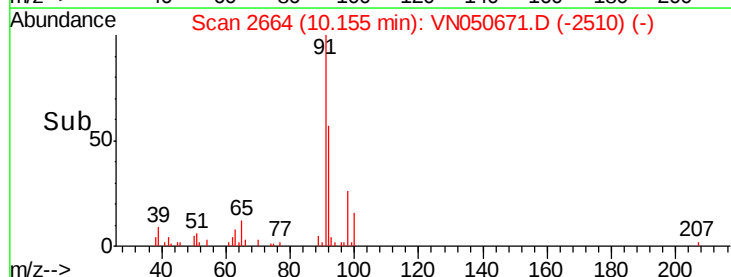
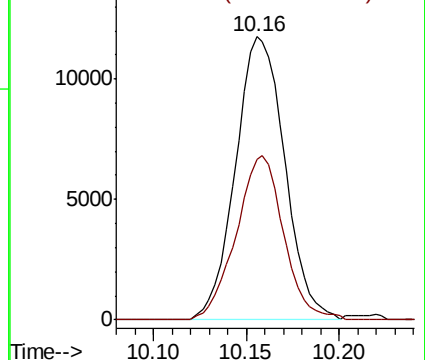
91 100

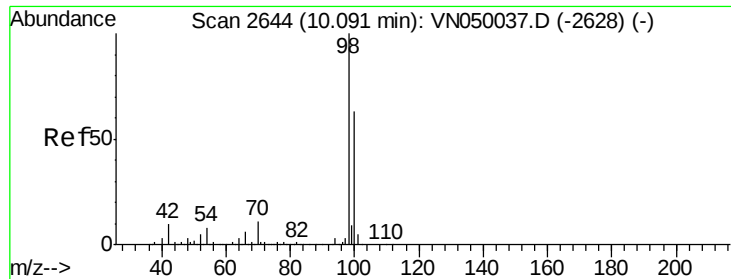
92 55.7 45.7 68.5



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 92.00 (91.70 to 92.70): VN0





#63

Toluene-d8

Concen: 29.38 ug/l

RT: 10.09 min Scan# 2644

Delta R.T. -0.00 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

Instrument :

MSVOA_N

ClientSampleId :

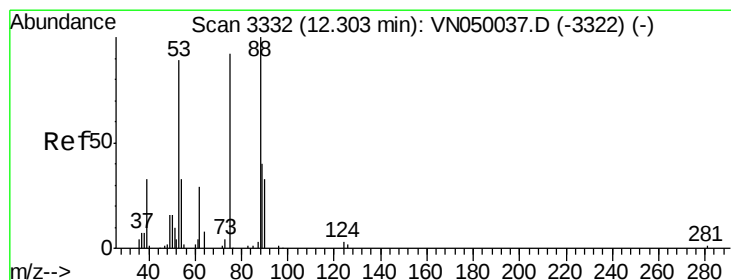
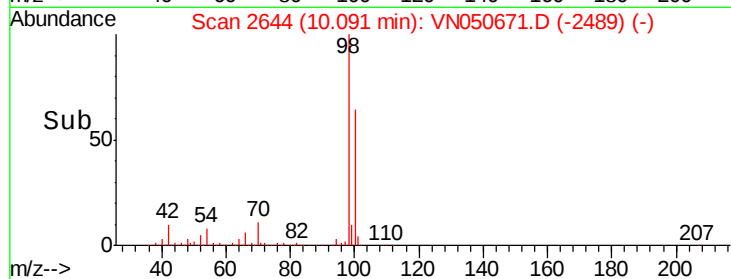
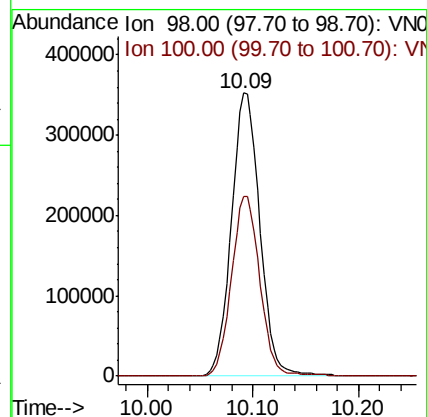
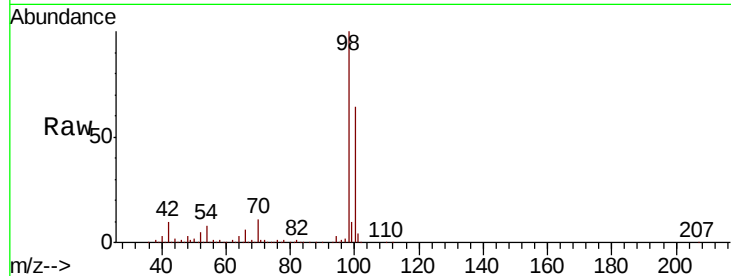
MH-92A

Tot Ion: 98 Resp: 658697

Ion Ratio Lower Upper

98 100

100 63.4 51.2 76.8



#77

t-1,4-Dichloro-2-butene

Concen: 37.90 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. 0.10 min

Lab File: VN050671.D

Acq: 15 Aug 2018 22:39

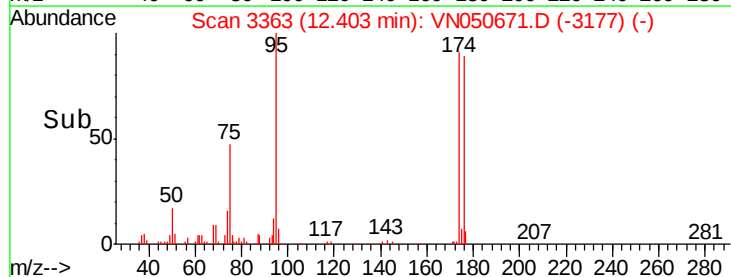
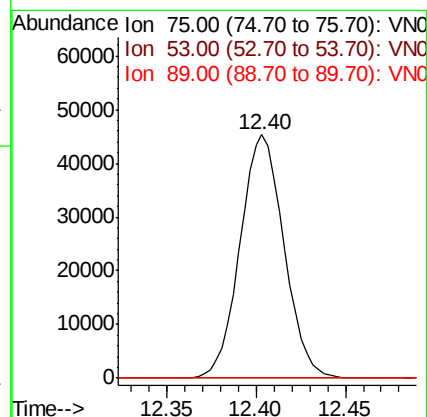
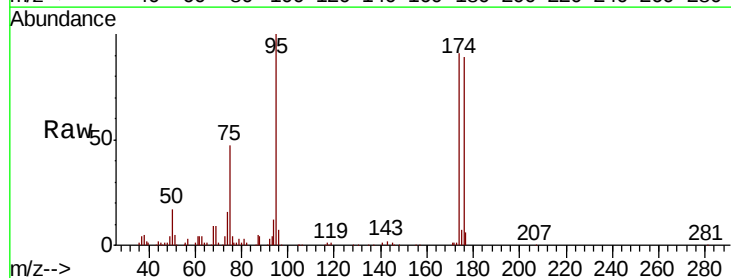
Tgt Ion: 75 Resp: 77541

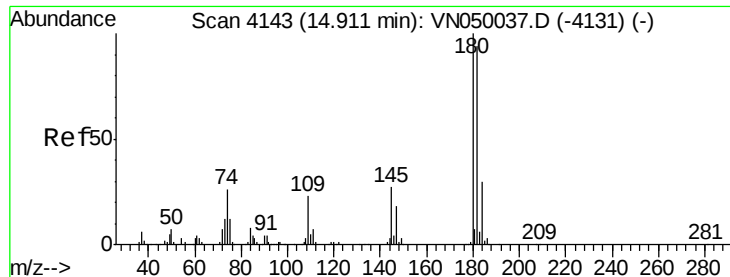
Ion Ratio Lower Upper

75 100

53 0.0 44.6 134.0#

89 0.0 20.7 62.1#

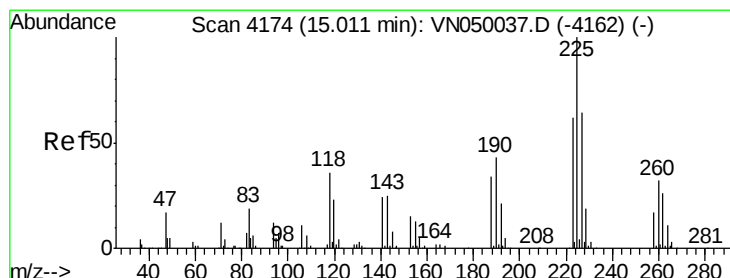
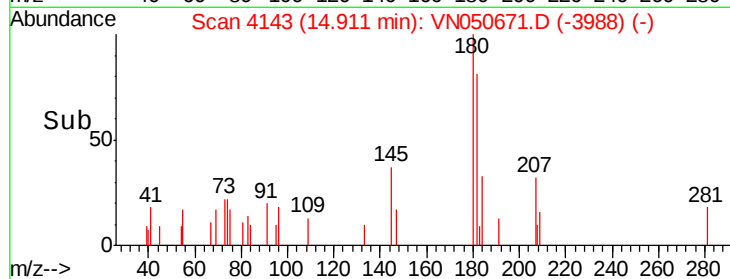
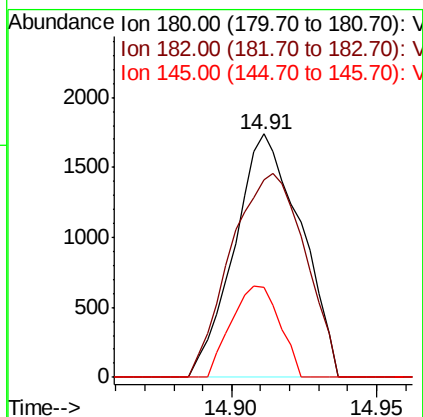
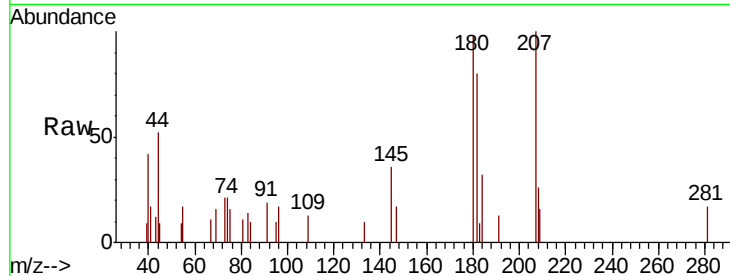




#89
 1,2,4-Trichlorobenzene
 Concen: 0.48 ug/l
 RT: 14.91 min Scan# 4143
 Delta R.T. -0.00 min
 Lab File: VN050671.D
 Acq: 15 Aug 2018 22:39

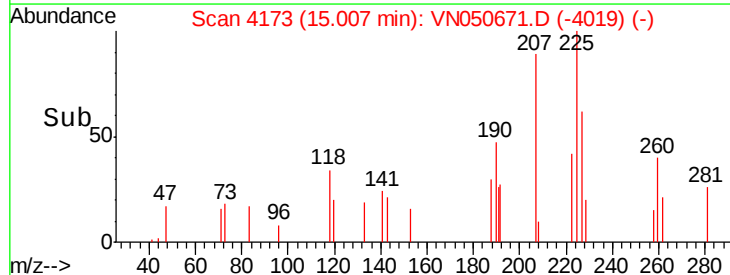
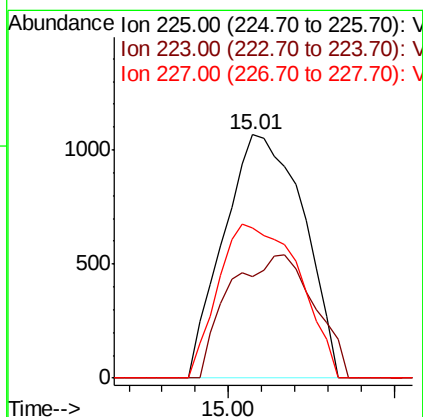
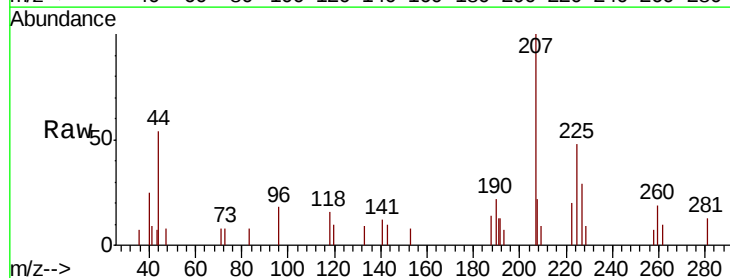
Instrument :
 MSVOA_N
 ClientSampleId :
 MH-92A

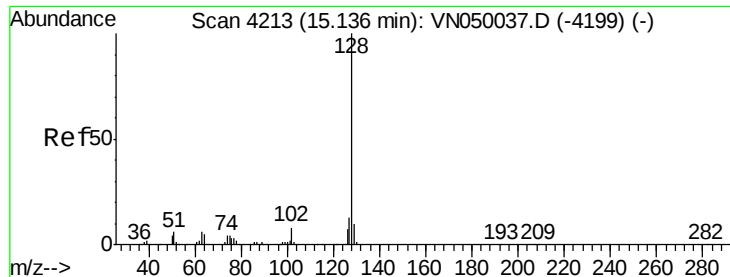
Tot Ion:180 Resp: 2769
 Ion Ratio Lower Upper
 180 100
 182 93.6 76.7 115.1
 145 27.3 23.4 35.0



#90
 Hexachlorobutadiene
 Concen: 0.47 ug/l
 RT: 15.01 min Scan# 4173
 Delta R.T. -0.00 min
 Lab File: VN050671.D
 Acq: 15 Aug 2018 22:39

Tgt Ion:225 Resp: 1783
 Ion Ratio Lower Upper
 225 100
 223 20.2 0.0 124.4
 227 64.3 0.0 133.0

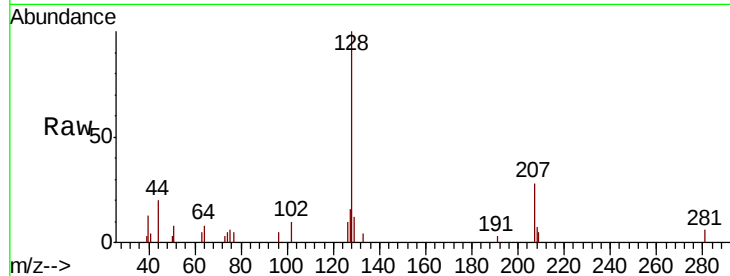




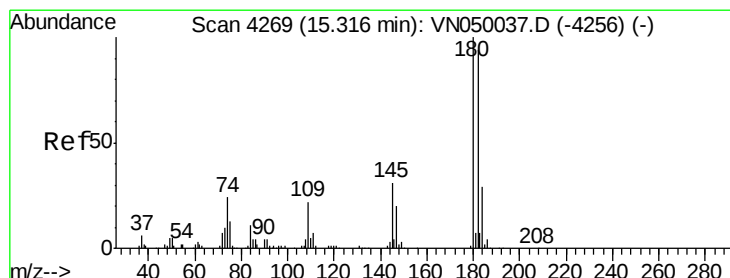
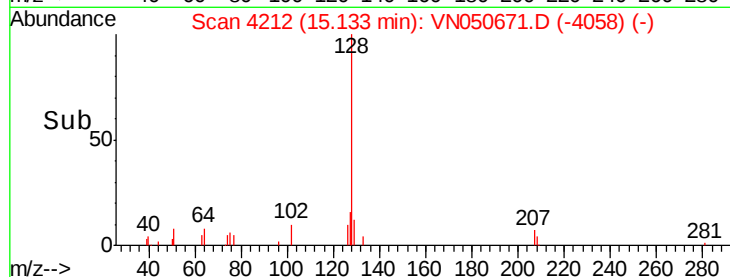
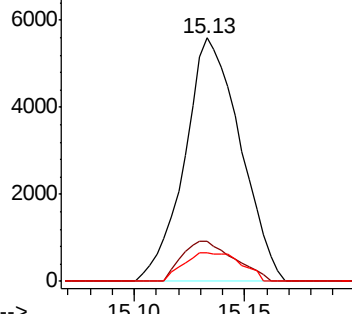
#91
Naphthalene
Concen: 8.18 ug/l
RT: 15.13 min Scan# 4212
Delta R.T. -0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

Instrument :
MSVOA_N
ClientSampleId :
MH-92A

Tot Ion:128 Resp: 9791
Ion Ratio Lower Upper
128 100
127 15.6 10.2 15.4#
129 8.0 9.0 13.4#

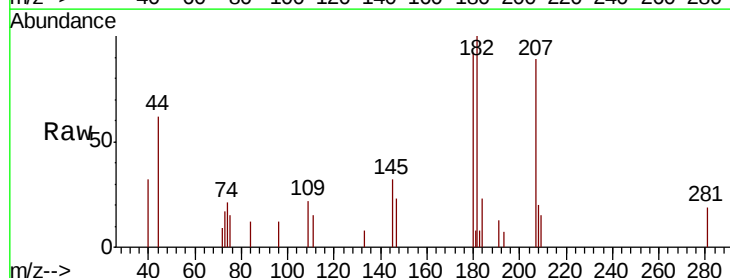


Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V



#92
1,2,3-Trichlorobenzene
Concen: 0.58 ug/l
RT: 15.32 min Scan# 4270
Delta R.T. 0.00 min
Lab File: VN050671.D
Acq: 15 Aug 2018 22:39

Tgt Ion:180 Resp: 3402
Ion Ratio Lower Upper
180 100
182 100.1 0.0 188.8
145 27.3 0.0 60.8



Abundance Ion 180.00 (179.70 to 180.70): V
Ion 182.00 (181.70 to 182.70): V
Ion 145.00 (144.70 to 145.70): V

