

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN041819\
 Data File : VN055121.D
 Acq On : 18 Apr 2019 15:20
 Operator : JC/SP
 Sample : K2453-03
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

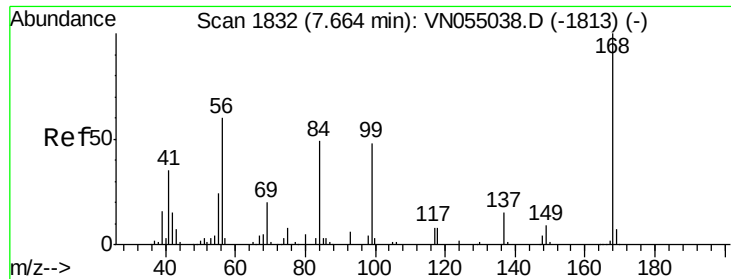
Quant Time: Apr 19 01:29:23 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N041519W.M
 Quant Title : SW846 8260
 QLast Update : Mon Apr 15 12:28:28 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	572160	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	901152	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	737517	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	225817	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.03	65	361428	47.52	ug/l	0.00
Spiked Amount			Recovery	=	95.04%	
35) Dibromofluoromethane	7.59	113	288447	47.90	ug/l	0.00
Spiked Amount			Recovery	=	95.80%	
50) Toluene-d8	10.09	98	1062829	49.31	ug/l	0.00
Spiked Amount			Recovery	=	98.62%	
62) 4-Bromofluorobenzene	12.40	95	300774	42.92	ug/l	0.00
Spiked Amount			Recovery	=	85.84%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.80	59	135	0.324	ug/l #	72
16) Acetone	3.83	43	8753	4.240	ug/l	100
18) Methyl Acetate	4.34	43	4553	0.331	ug/l #	65
20) Methylene Chloride	4.55	84	67366	9.283	ug/l	94
25) 2-Butanone	6.86	43	750	0.243	ug/l #	53
30) Chloroform	7.37	83	5805	0.491	ug/l	98
31) Cyclohexane	7.66	56	11581	Below Cal	#	1
36) 1,1-Dichloropropene	7.66	75	41688	4.907	ug/l #	49
38) Carbon Tetrachloride	7.67	117	51954	6.428	ug/l #	16
43) Isopropyl Acetate	8.17	43	13090	1.228	ug/l	100
48) Methyl methacrylate	9.18	41	7321	1.386	ug/l #	17
49) 1,4-Dioxane	9.26	88	116	2.344	ug/l #	1
51) 4-Methyl-2-Pentanone	10.02	43	7133	1.159	ug/l #	39
54) cis-1,3-Dichloropropene	9.90	75	47464	5.222	ug/l #	67
57) 1,3-Dichloropropane	10.76	76	8674	0.902	ug/l #	43
58) 2-Chloroethyl Vinyl ether	9.90	63	103	10.770	ug/l #	50
59) 2-Hexanone	10.76	43	144616	37.399	ug/l #	53
71) Bromoform	12.40	173	3439	1.099	ug/l #	1
74) N-amyl acetate	11.88	43	12986	2.302	ug/l #	55
76) 1,2,3-Trichloropropane	12.40	75	153756	37.864	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.73	105	5663	0.350	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.40	75	153756	151.413	ug/l #	2
84) 1,2,4-Trimethylbenzene	13.04	105	6433	0.420	ug/l	98
95) Naphthalene	15.14	128	5300	3.694	ug/l #	94

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

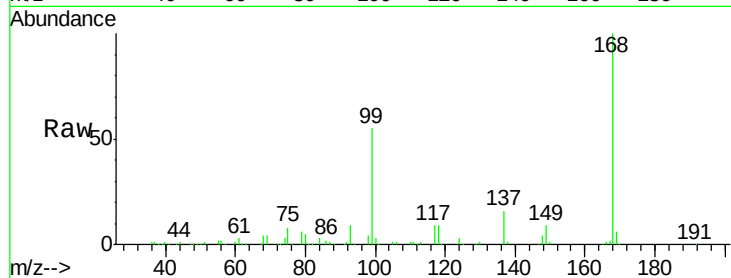
ClientSampleId :

Tot Ion:168 Resp: 572160

Ion Ratio Lower Upper

168 100

99 54.8 41.9 62.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.67

250000

200000

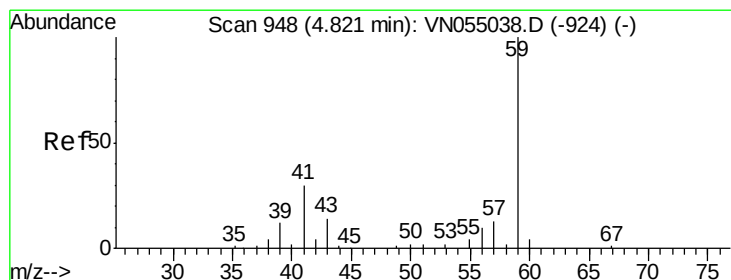
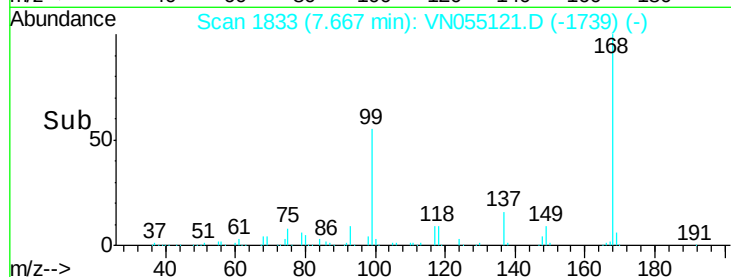
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 0.324 ug/l

RT: 4.80 min Scan# 940

Delta R.T. -0.03 min

Lab File: VN055121.D

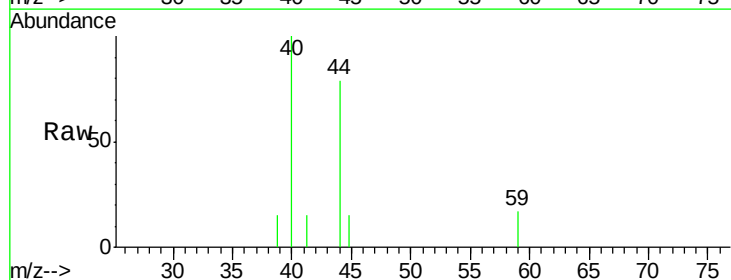
Acq: 18 Apr 2019 15:20

Tgt Ion: 59 Resp: 135

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

4.80

200

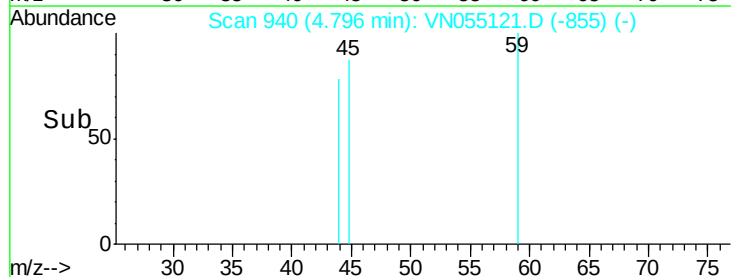
150

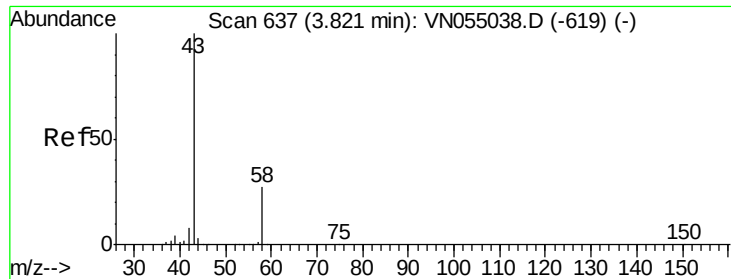
100

50

0

Time-->





#16

Acetone

Concen: 4.240 ug/l

RT: 3.83 min Scan# 640

Delta R.T. 0.01 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

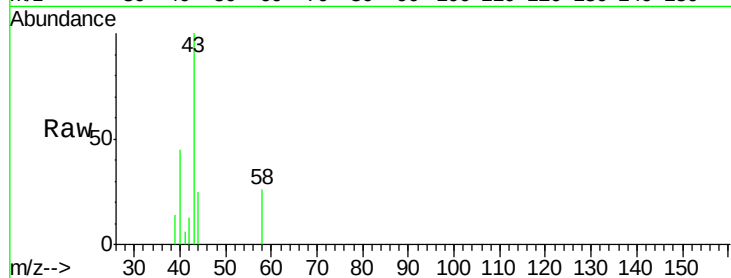
ClientSampled :

Tot Ion: 43 Resp: 8753

Ion Ratio Lower Upper

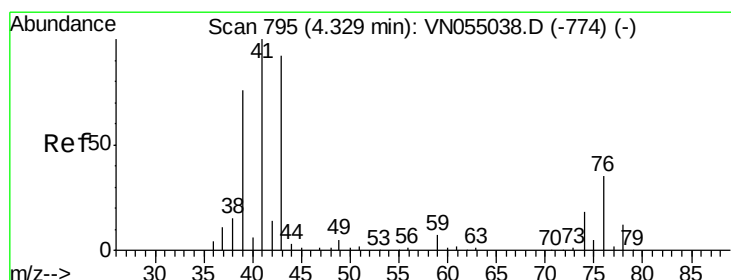
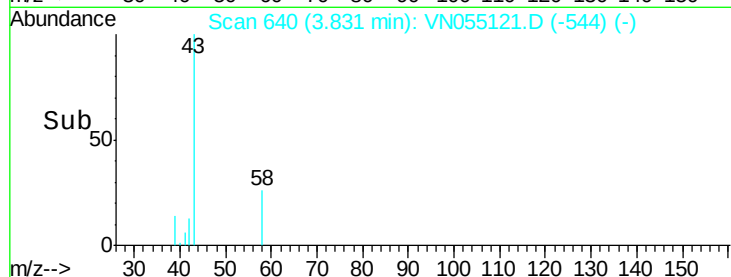
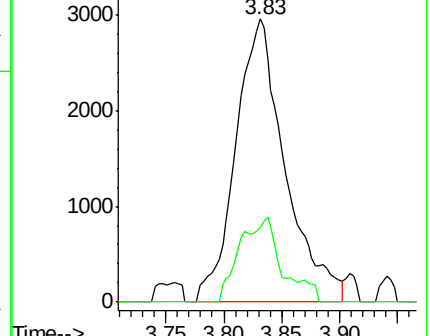
43 100

58 26.3 20.9 31.3



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#18

Methyl Acetate

Concen: 0.331 ug/l

RT: 4.34 min Scan# 798

Delta R.T. 0.01 min

Lab File: VN055121.D

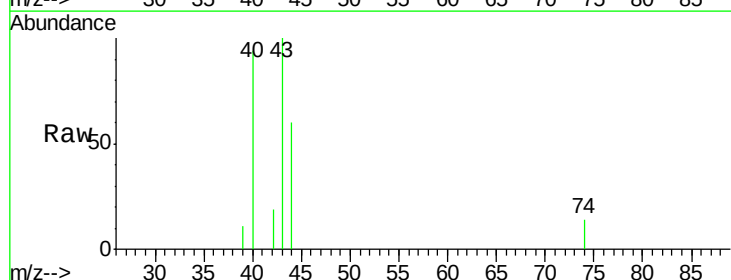
Acq: 18 Apr 2019 15:20

Tgt Ion: 43 Resp: 4553

Ion Ratio Lower Upper

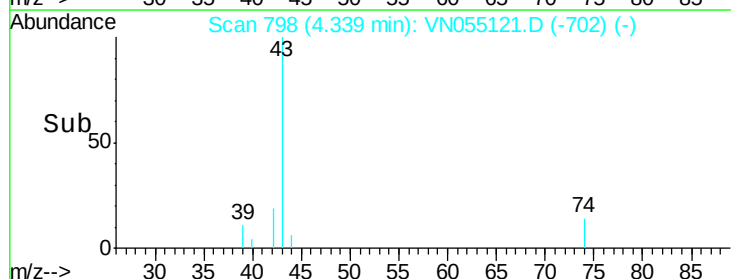
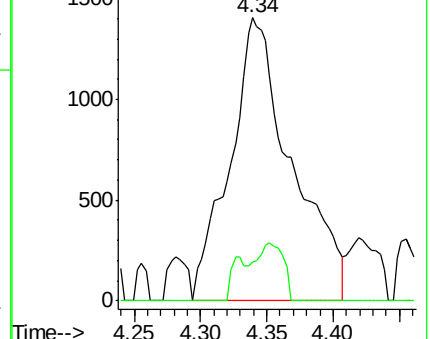
43 100

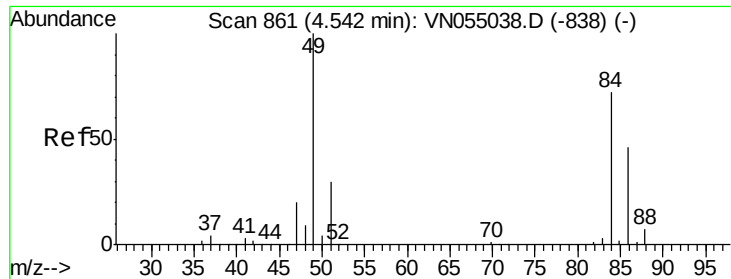
74 4.0 16.1 24.1#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

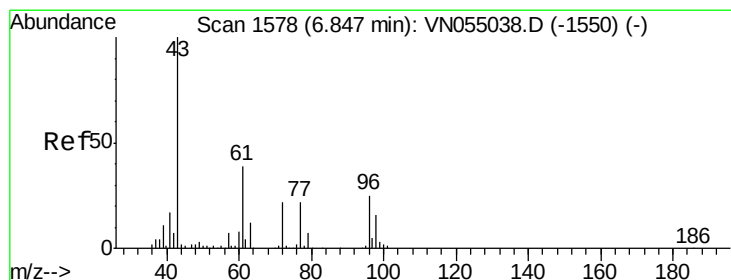
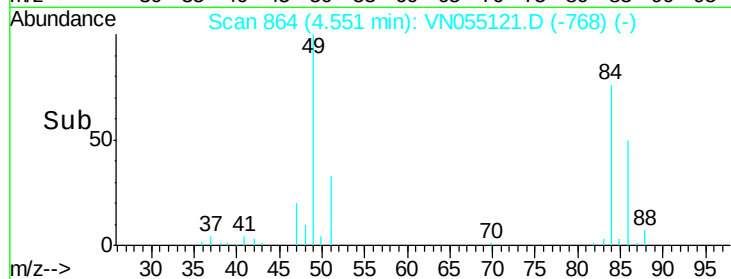
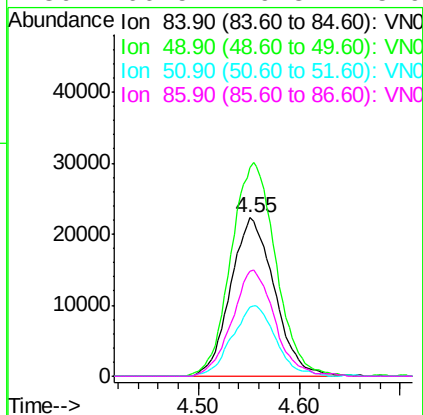
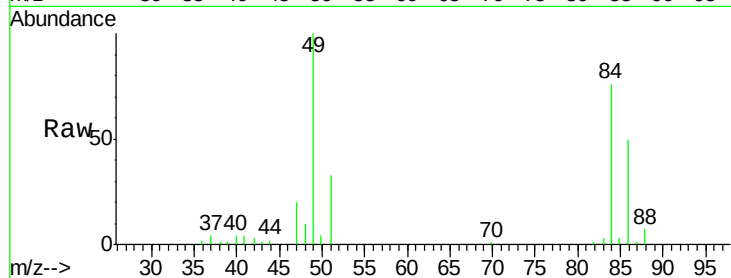




#20
Methvlene Chloride
Concen: 9.283 ug/l
RT: 4.55 min Scan# 864
Delta R.T. 0.01 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

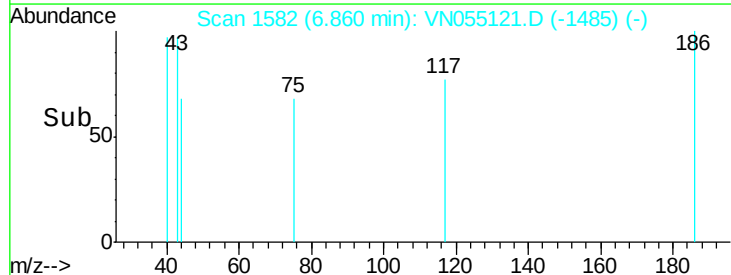
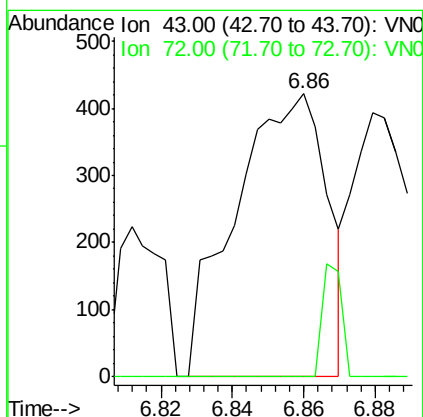
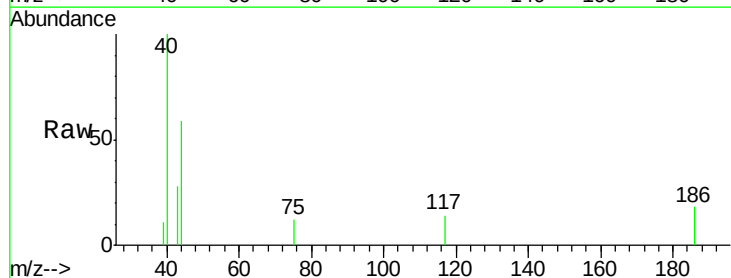
Instrument :
MSVOA_N
ClientSampled :

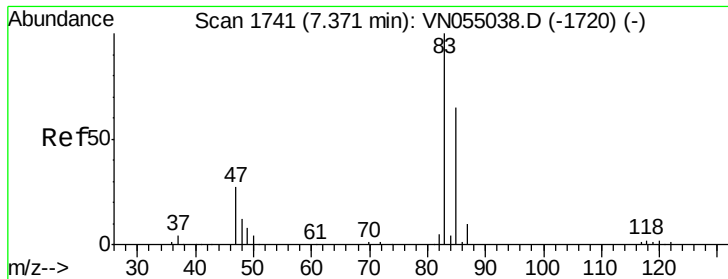
Tot Ion: 84 Resp: 67366
Ion Ratio Lower Upper
84 100
49 130.8 109.4 164.2
51 44.0 32.2 48.4
86 66.5 49.3 73.9



#25
2-Butanone
Concen: 0.243 ug/l
RT: 6.86 min Scan# 1582
Delta R.T. 0.01 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Tgt Ion: 43 Resp: 750
Ion Ratio Lower Upper
43 100
72 0.0 18.1 27.1#

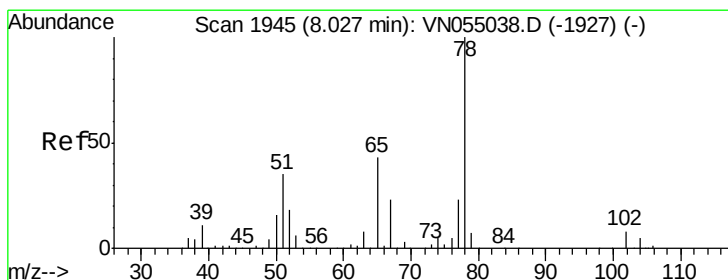
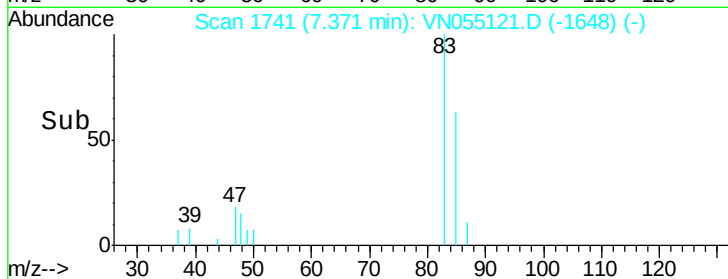
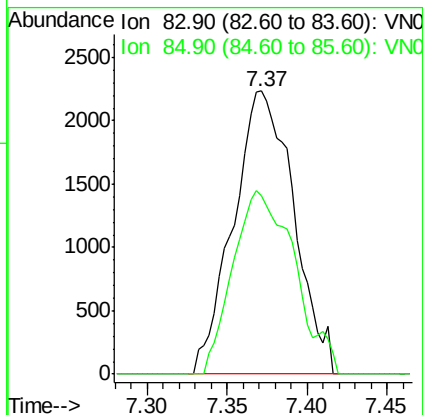
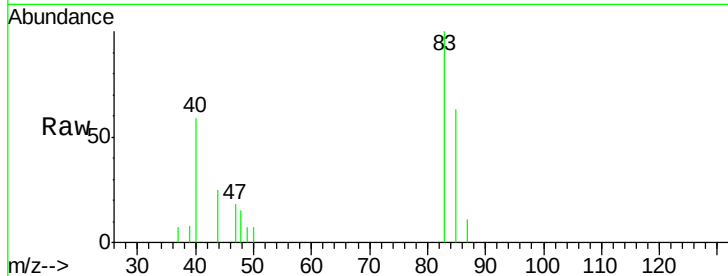




#30
Chloroform
Concen: 0.491 ug/l
RT: 7.37 min Scan# 1741
Delta R.T. 0.00 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

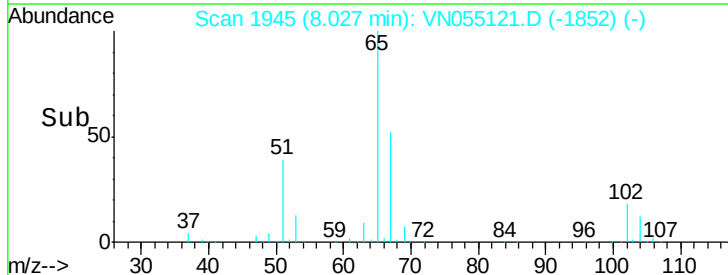
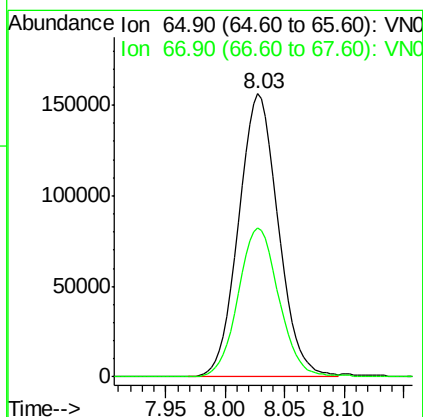
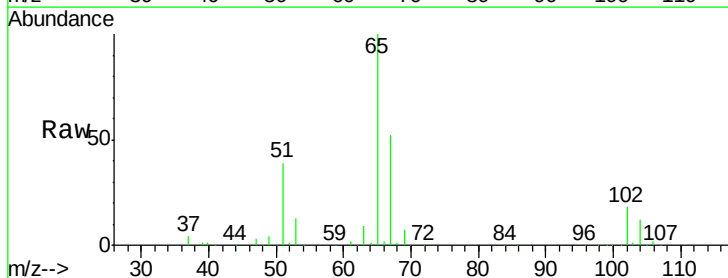
Instrument :
MSVOA_N
ClientSampleId :

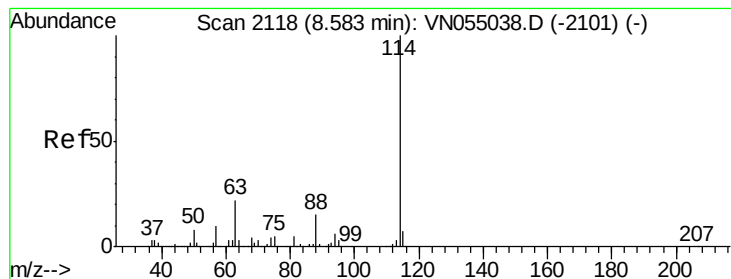
Tot Ion: 83 Resp: 5805
Ion Ratio Lower Upper
83 100
85 62.9 51.8 77.6



#33
1,2-Dichloroethane-d4
Concen: 47.522 ug/l
RT: 8.03 min Scan# 1945
Delta R.T. 0.00 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Tgt Ion: 65 Resp: 361428
Ion Ratio Lower Upper
65 100
67 53.9 0.0 106.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. 0.00 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

ClientSampleId :

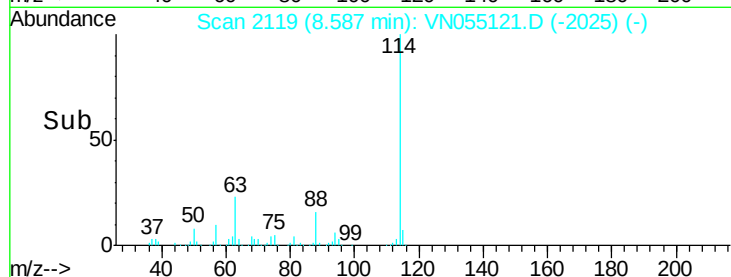
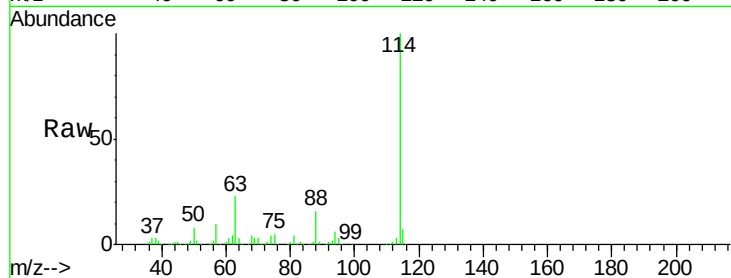
Tot Ion:114 Resp: 901152

Ion Ratio Lower Upper

114 100

63 22.7 0.0 45.2

88 15.7 0.0 31.8



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0

8.59

400000

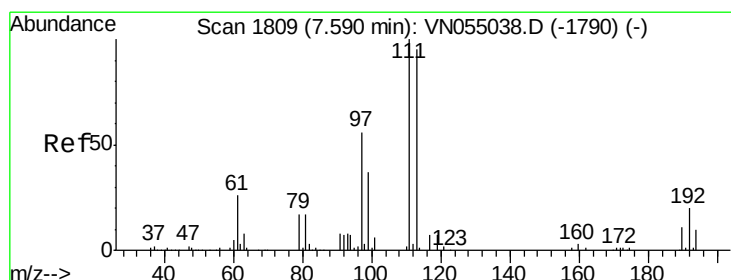
300000

200000

100000

0

Time-->



#35

Dibromofluoromethane

Concen: 47.895 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

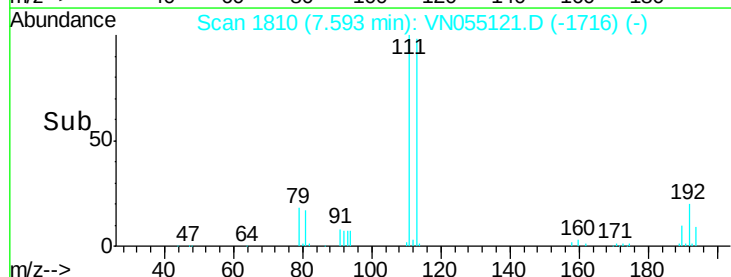
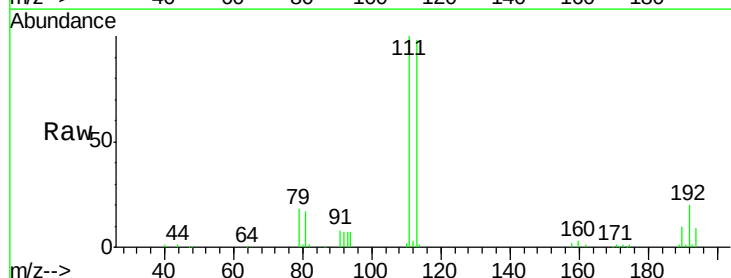
Tgt Ion:113 Resp: 288447

Ion Ratio Lower Upper

113 100

111 101.9 82.1 123.1

192 20.6 16.5 24.7



Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

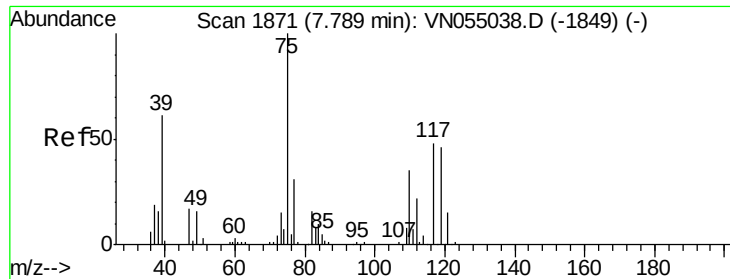
150000

100000

50000

0

Time-->



#36

1,1-Dichloropropene

Concen: 4.907 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

ClientSampled :

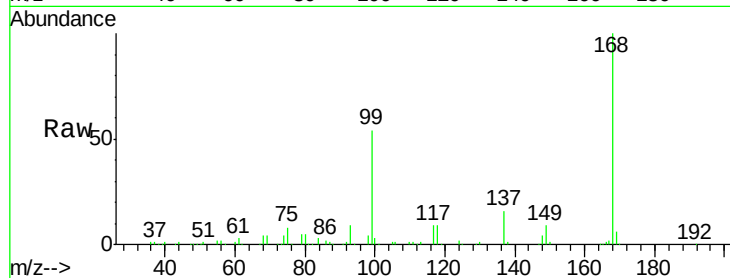
Tot Ion: 75 Resp: 41688

Ion Ratio Lower Upper

75 100

110 8.6 17.5 52.5#

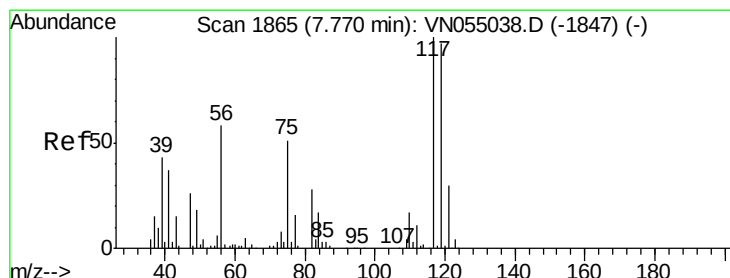
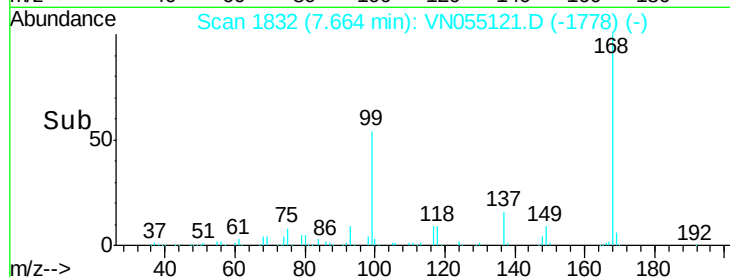
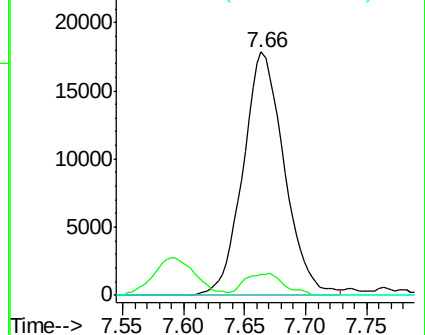
77 0.0 24.9 37.3#



Abundance Ion 74.90 (74.60 to 75.60): VN055121.D (-1778) (-)

Ion 109.90 (109.60 to 110.60): VN055121.D (-1778) (-)

Ion 76.90 (76.60 to 77.60): VN055121.D (-1778) (-)



#38

Carbon Tetrachloride

Concen: 6.428 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. -0.10 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

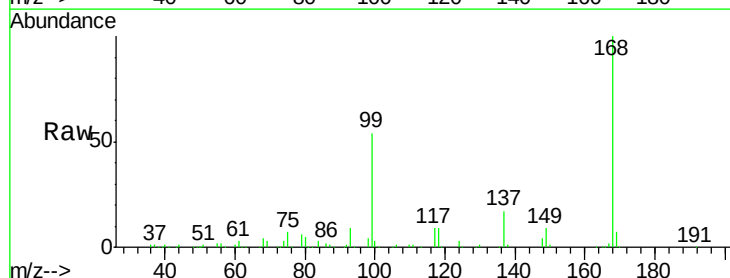
Tgt Ion: 117 Resp: 51954

Ion Ratio Lower Upper

117 100

119 5.2 76.3 114.5#

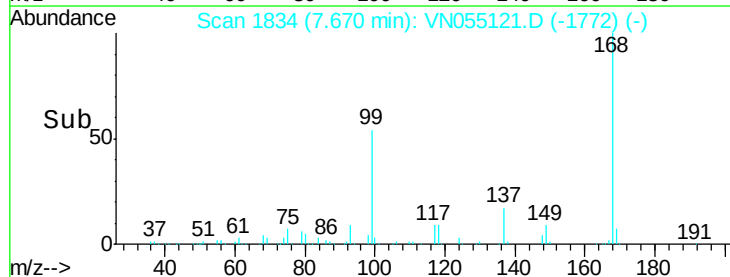
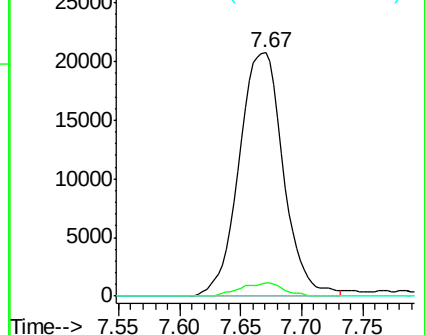
121 0.0 23.9 35.9#

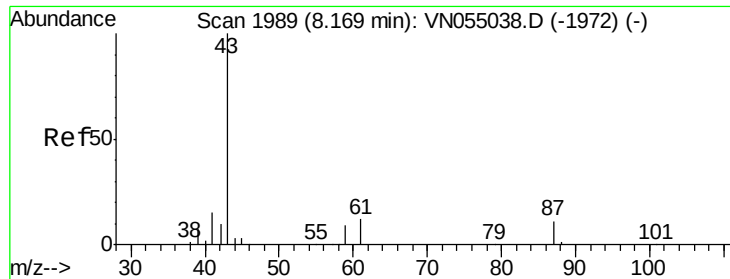


Abundance Ion 116.80 (116.50 to 117.50): VN055121.D (-1772) (-)

Ion 118.80 (118.50 to 119.50): VN055121.D (-1772) (-)

Ion 120.80 (120.50 to 121.50): VN055121.D (-1772) (-)





#43

Isopropyl Acetate

Concen: 1.228 ug/l

RT: 8.17 min Scan# 1989

Delta R.T. 0.00 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

ClientSampleId :

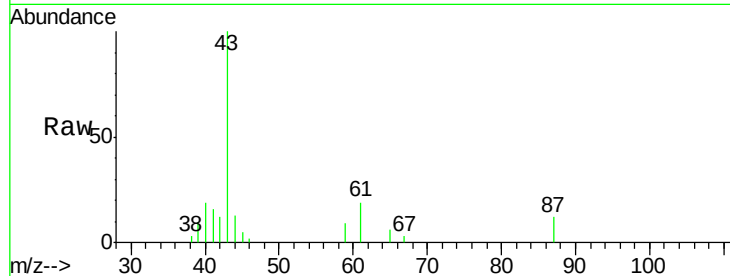
Tot Ion: 43 Resp: 13090

Ion Ratio Lower Upper

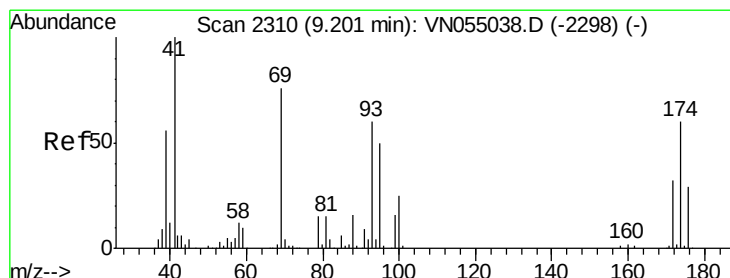
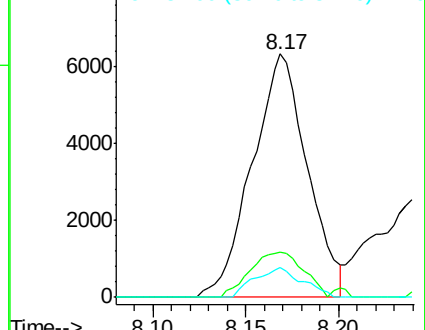
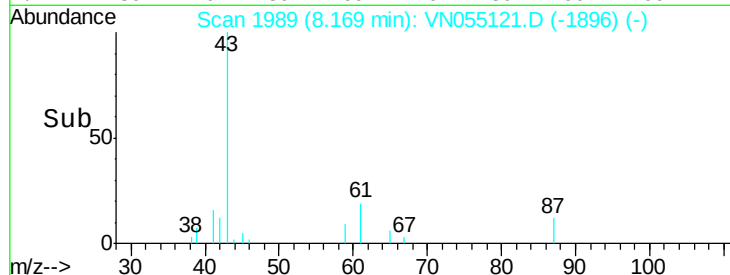
43 100

61 18.0 14.3 21.5

87 10.7 8.6 13.0



Abundance Ion 43.00 (42.70 to 43.70): VN055121.D (-1896) (-)



#48

Methyl methacrylate

Concen: 1.386 ug/l

RT: 9.18 min Scan# 2303

Delta R.T. -0.02 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

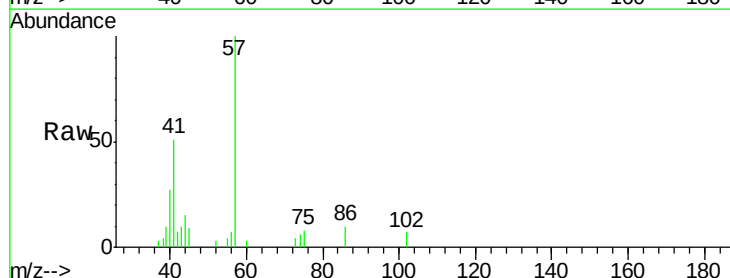
Tgt Ion: 41 Resp: 7321

Ion Ratio Lower Upper

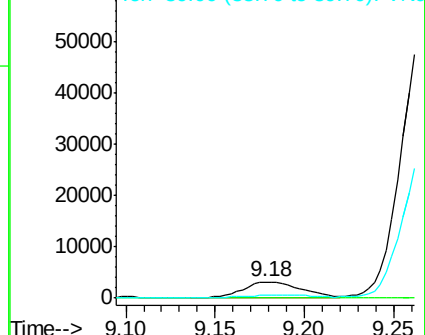
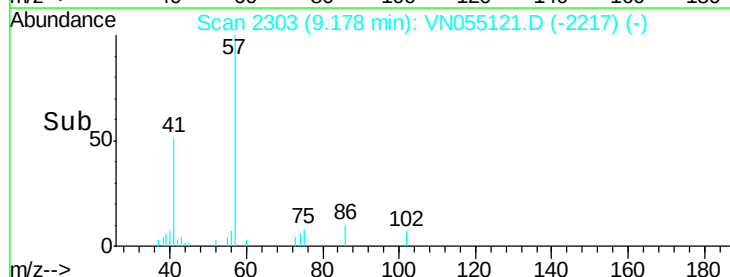
41 100

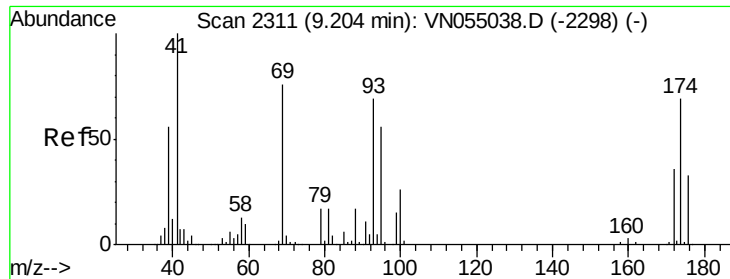
69 0.0 60.5 90.7#

39 0.0 43.9 65.9#



Abundance Ion 41.00 (40.70 to 41.70): VN055121.D (-2217) (-)





#49

1,4-Dioxane

Concen: 2.344 ug/l

RT: 9.26 min Scan# 2328

Delta R.T. 0.05 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :
MSVOA_N
ClientSampleId :

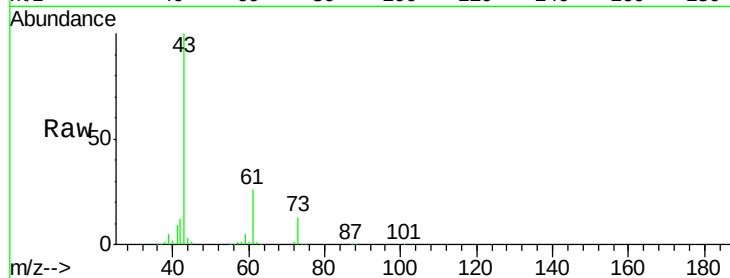
Tot Ion: 88 Resp: 116

Ion Ratio Lower Upper

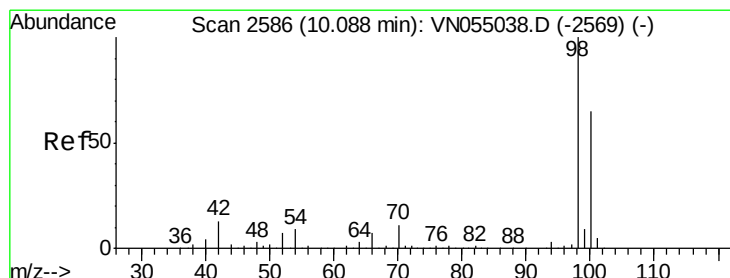
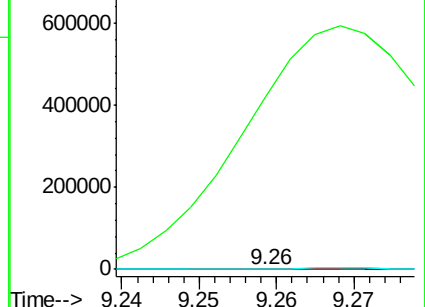
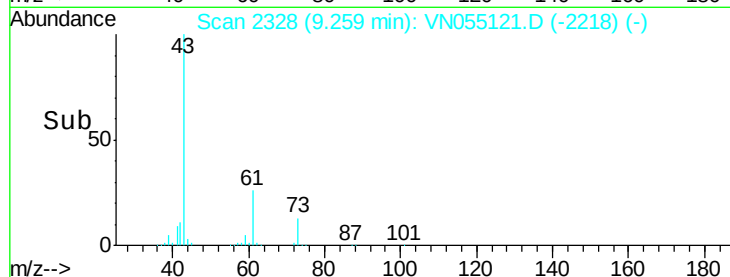
88 100

43 962389.7 31.8 47.8#

58 4627.6 61.6 92.4#



Abundance Ion 88.00 (87.70 to 88.70): VN0
Ion 43.00 (42.70 to 43.70): VN0
Ion 58.00 (57.70 to 58.70): VN0



#50

Toluene-d8

Concen: 49.308 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN055121.D

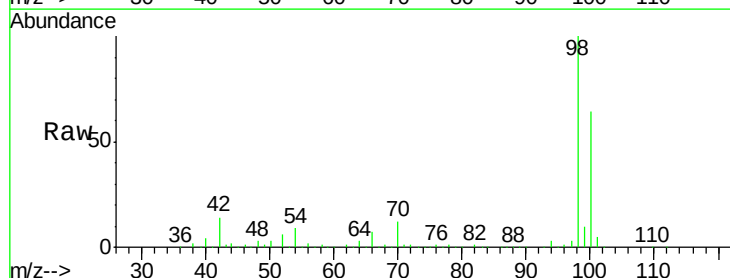
Acq: 18 Apr 2019 15:20

Tgt Ion: 98 Resp: 1062829

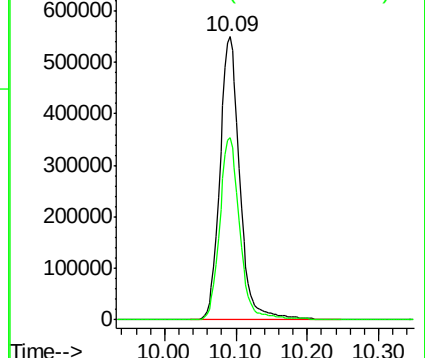
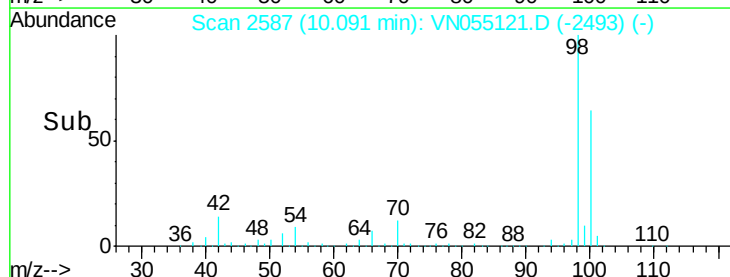
Ion Ratio Lower Upper

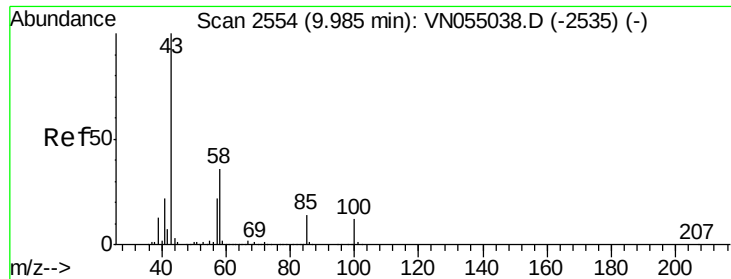
98 100

100 65.1 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN0
Ion 100.00 (99.70 to 100.70): VN0

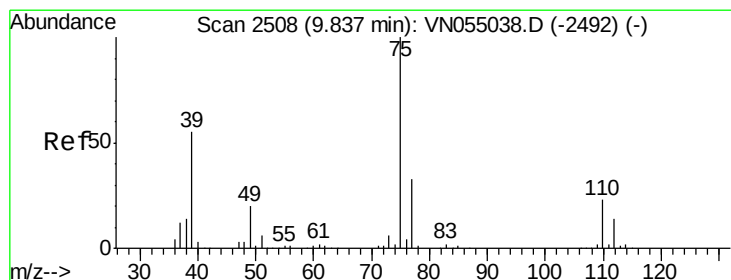
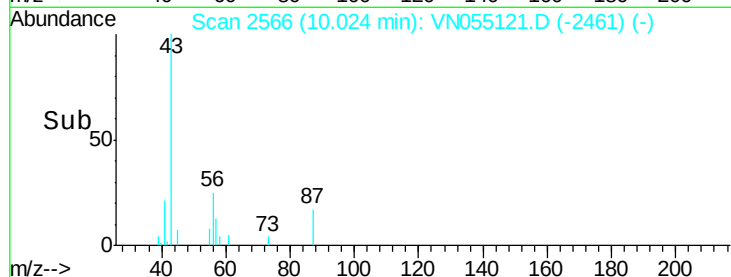
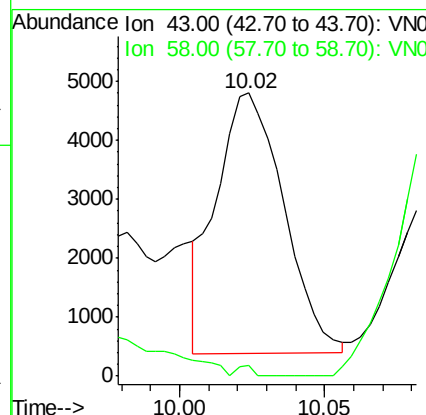
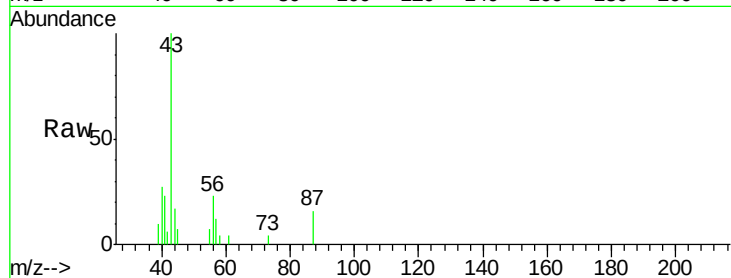




#51
 4-Methyl-2-Pentanone
 Concen: 1.159 ug/l
 RT: 10.02 min Scan# 2566
 Delta R.T. 0.04 min
 Lab File: VN055121.D
 Acq: 18 Apr 2019 15:20

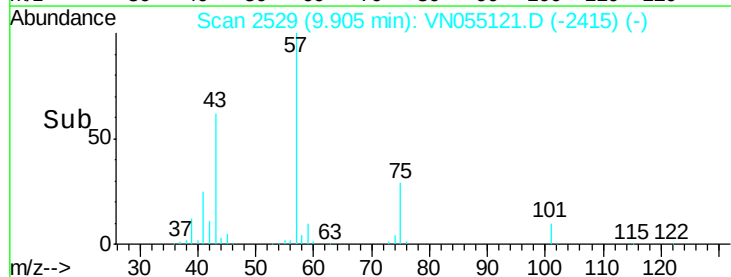
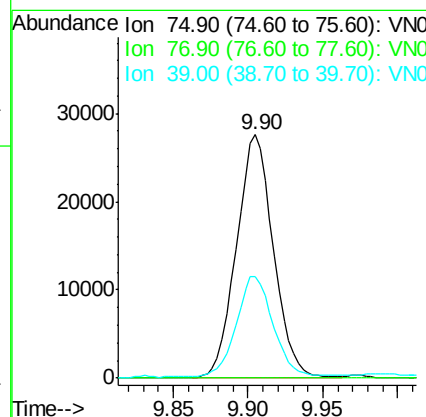
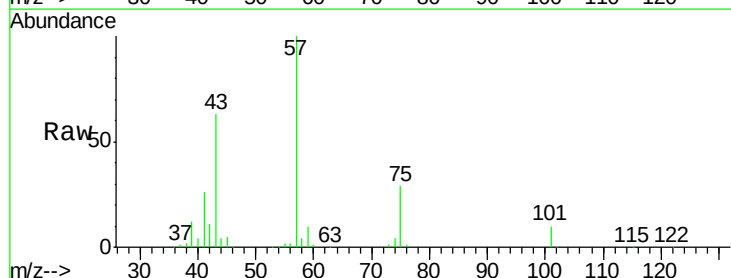
Instrument :
 MSVOA_N
 ClientSampled :

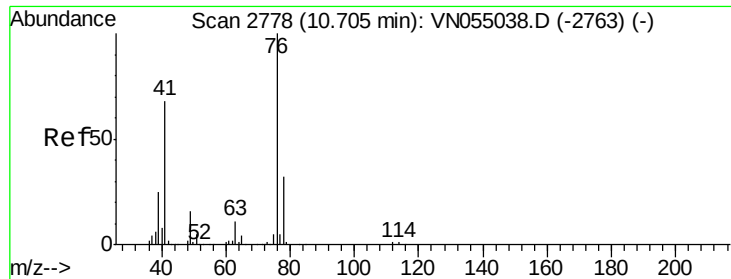
Tot Ion: 43 Resp: 7133
 Ion Ratio Lower Upper
 43 100
 58 0.0 29.0 43.4#



#54
 cis-1,3-Dichloropropene
 Concen: 5.222 ug/l
 RT: 9.90 min Scan# 2529
 Delta R.T. 0.07 min
 Lab File: VN055121.D
 Acq: 18 Apr 2019 15:20

Tgt Ion: 75 Resp: 47464
 Ion Ratio Lower Upper
 75 100
 77 0.0 25.8 38.6#
 39 41.3 43.8 65.8#





#57

1,3-Dichloropropane

Concen: 0.902 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

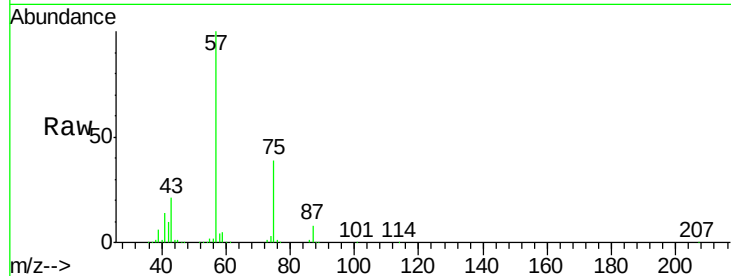
ClientSampleId :

Tot Ion: 76 Resp: 8674

Ion Ratio Lower Upper

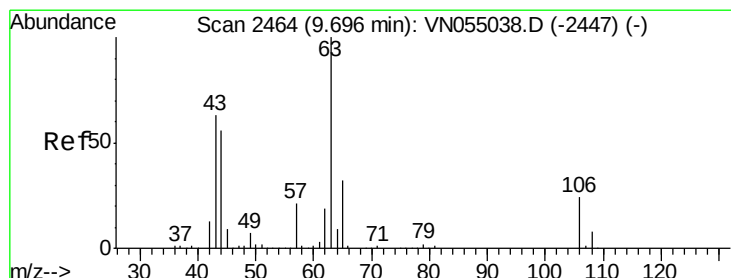
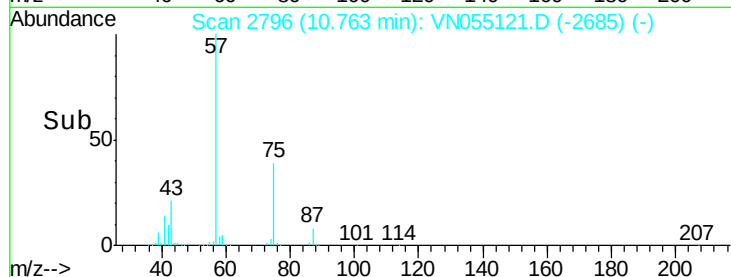
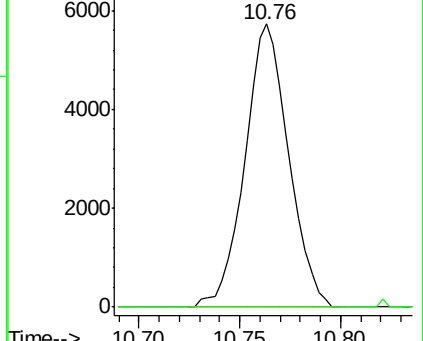
76 100

78 0.0 25.6 38.4#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#58

2-Chloroethyl Vinyl ether

Concen: 10.770 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.21 min

Lab File: VN055121.D

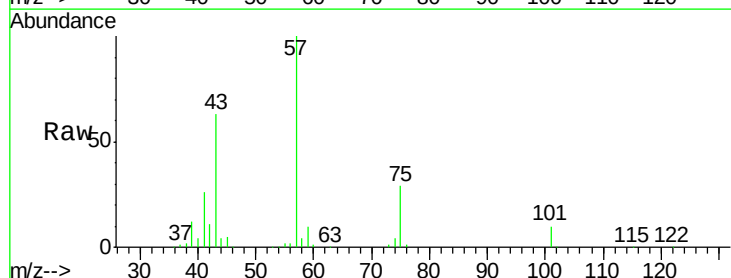
Acq: 18 Apr 2019 15:20

Tgt Ion: 63 Resp: 103

Ion Ratio Lower Upper

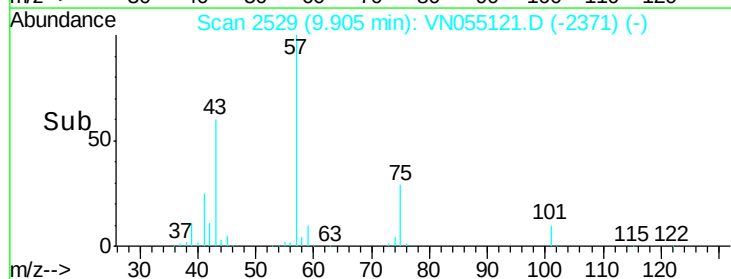
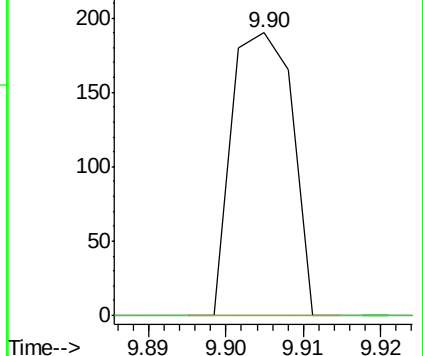
63 100

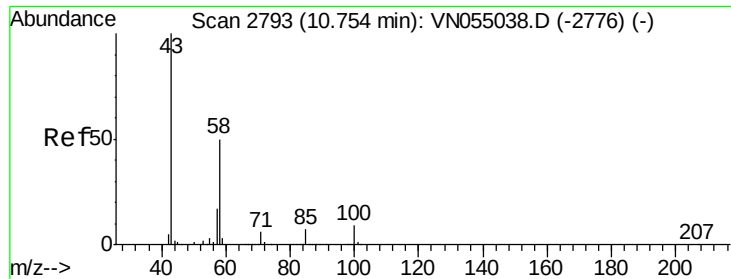
106 0.0 20.0 30.0#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 105.90 (105.60 to 106.60): V

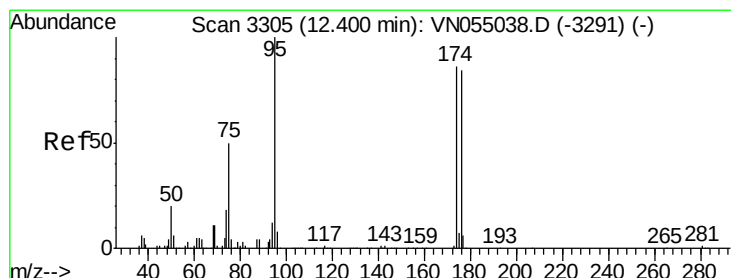
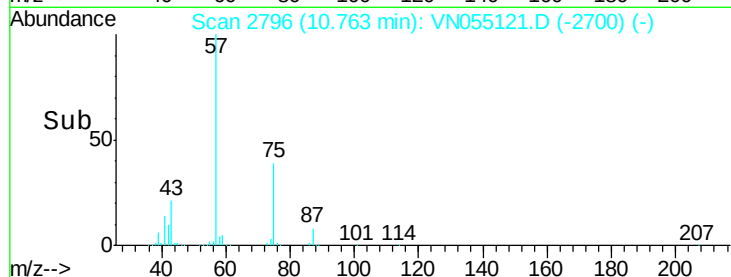
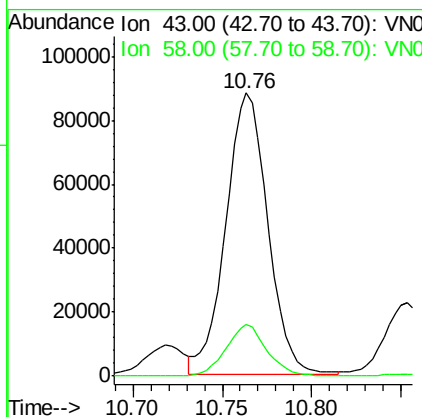
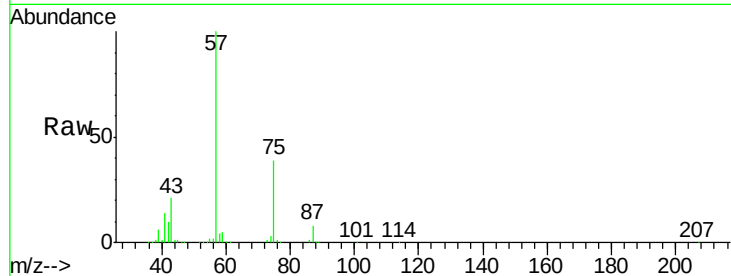




#59
2-Hexanone
Concen: 37.399 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

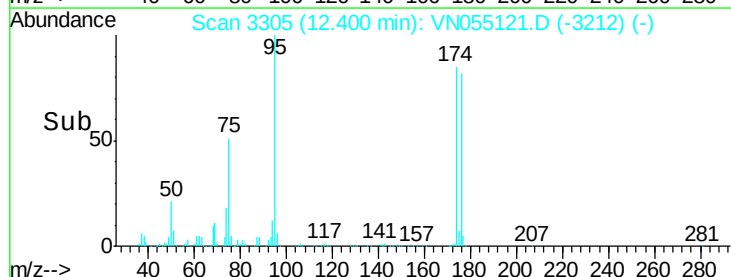
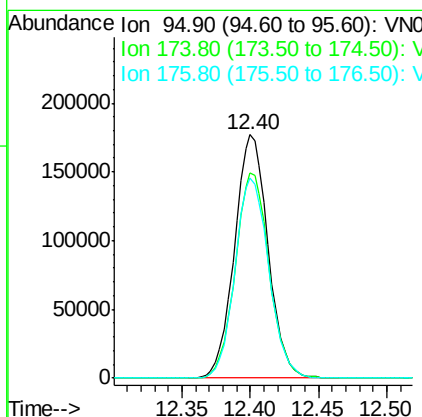
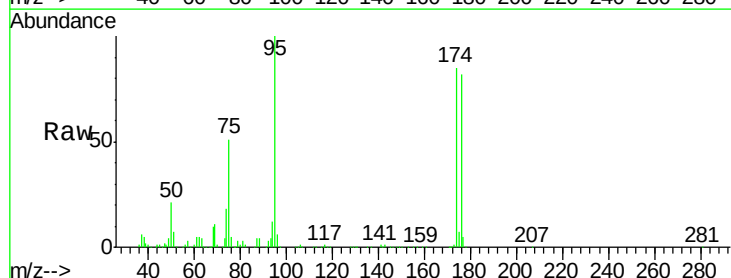
Instrument :
MSVOA_N
ClientSampled :

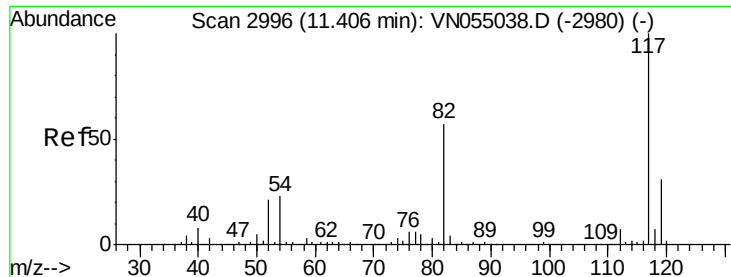
Tot Ion: 43 Resp: 144616
Ion Ratio Lower Upper
43 100
58 17.7 25.1 75.2#



#62
4-Bromofluorobenzene
Concen: 42.922 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Tgt Ion: 95 Resp: 300774
Ion Ratio Lower Upper
95 100
174 85.1 0.0 174.4
176 83.2 0.0 166.8

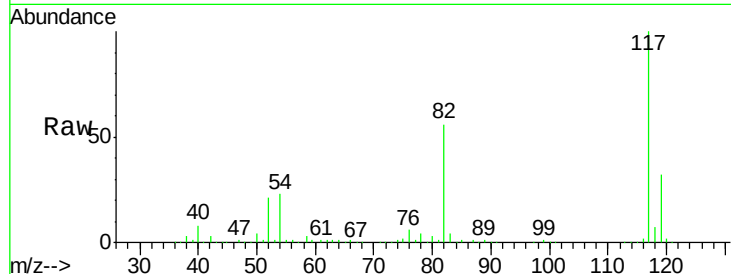




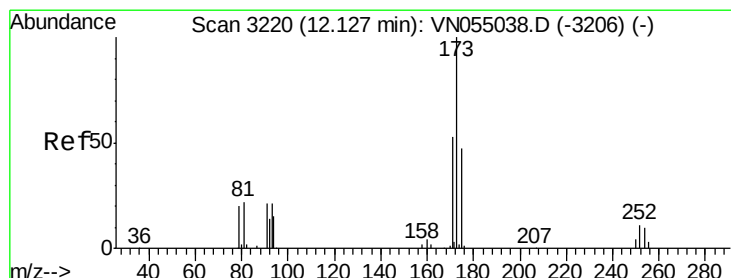
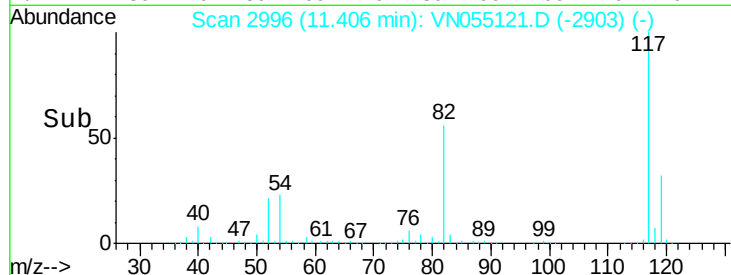
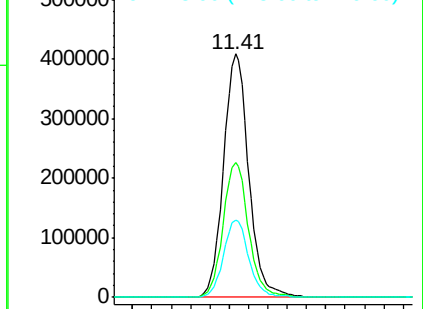
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Instrument :
MSVOA_N
ClientSampled :

Tot Ion:117 Resp: 737517
Ion Ratio Lower Upper
117 100
82 55.6 44.6 66.8
119 31.9 25.5 38.3

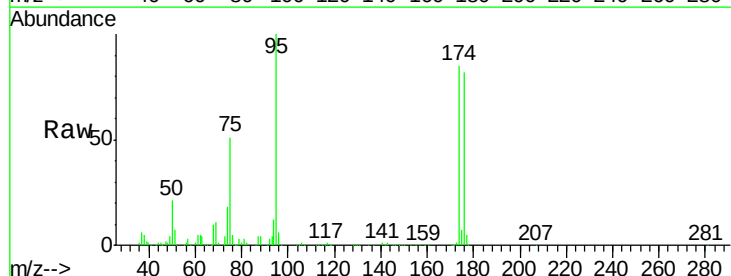


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

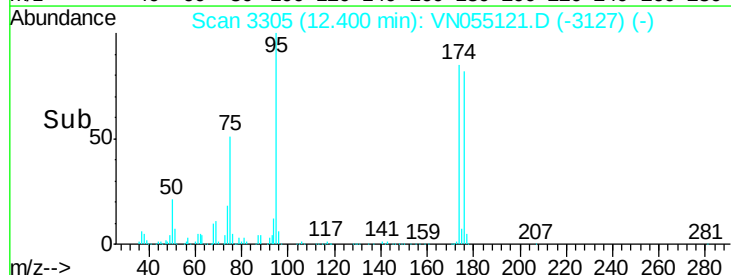
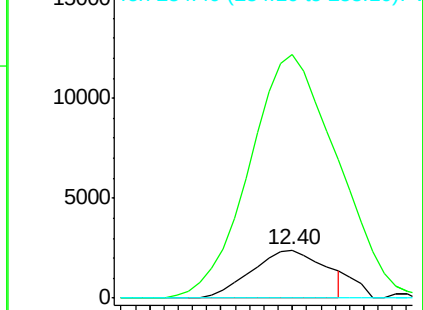


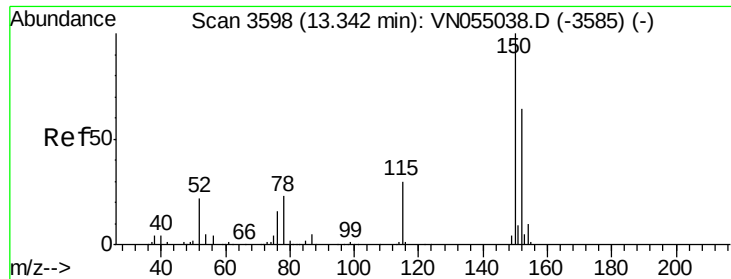
#71
Bromoform
Concen: 1.099 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.27 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Tgt Ion:173 Resp: 3439
Ion Ratio Lower Upper
173 100
175 528.9 24.3 73.0#
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V



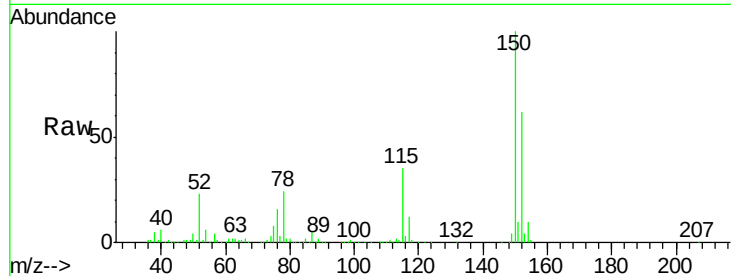


#72

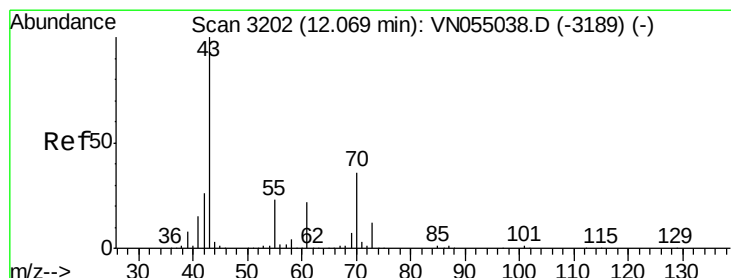
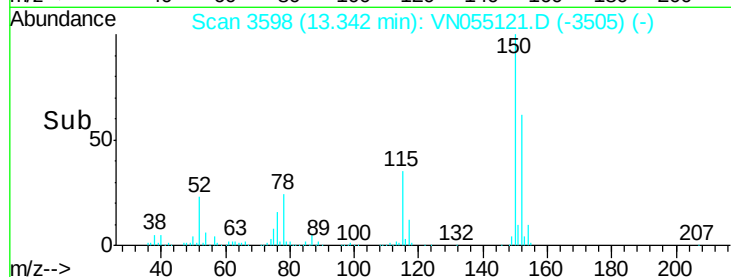
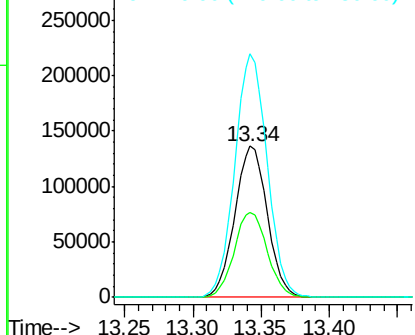
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.34 min Scan# 3598
Delta R.T. 0.00 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Instrument :
MSVOA_N
ClientSampled :

Tot Ion	Ratio	Lower	Upper
152	100		
115	57.2	28.5	85.6
150	160.2	0.0	347.2



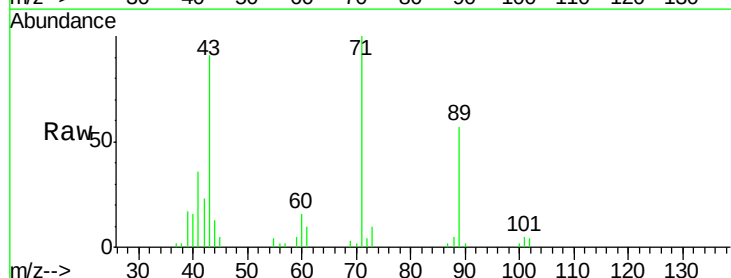
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V



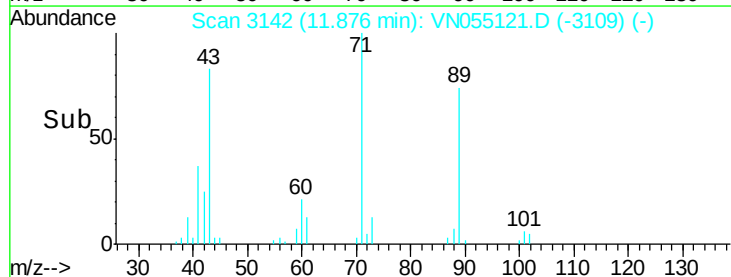
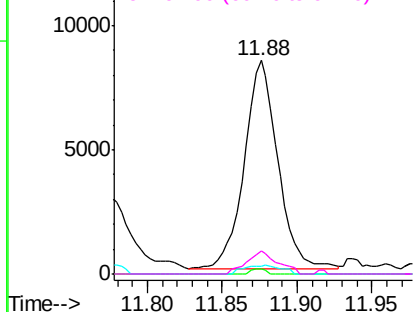
#74

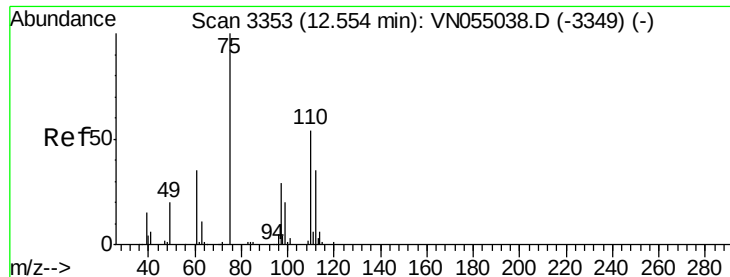
N-ethyl acetate
Concen: 2.302 ug/l
RT: 11.88 min Scan# 3142
Delta R.T. -0.19 min
Lab File: VN055121.D
Acq: 18 Apr 2019 15:20

Tgt Ion	Ratio	Lower	Upper
43	100		
70	1.0	29.4	44.0#
55	4.7	19.0	28.4#
61	10.0	17.7	26.5#



Abundance Ion 43.00 (42.70 to 43.70): V
Ion 70.00 (69.70 to 70.70): V
Ion 55.00 (54.70 to 55.70): V
Ion 61.00 (60.70 to 61.70): V





#76

1,2,3-Trichloropropane

Concen: 37.864 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

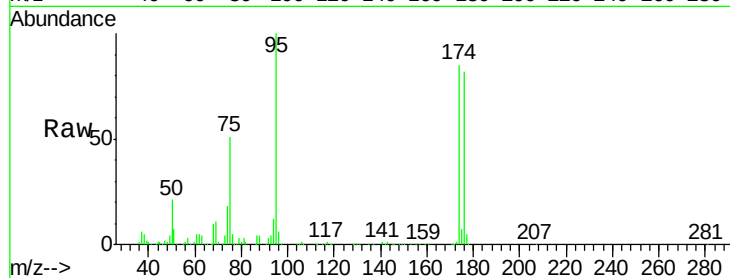
ClientSampled :

Tot Ion: 75 Resp: 153756

Ion Ratio Lower Upper

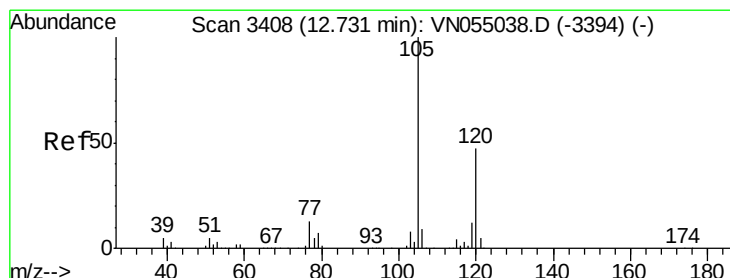
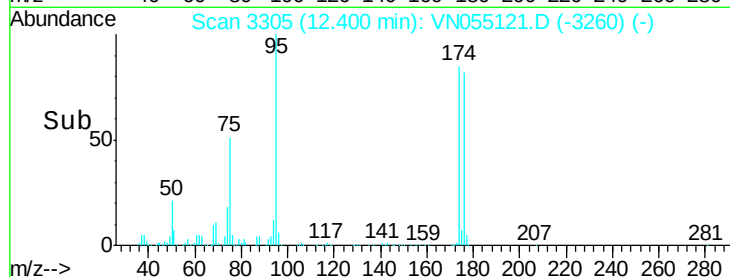
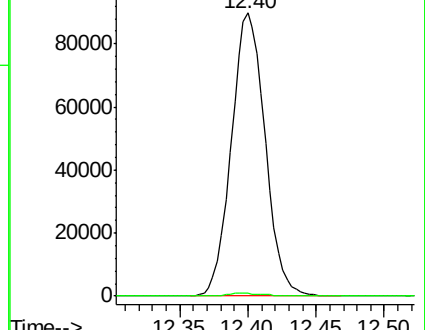
75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN055121.D (-3260) (-)

Ion 77.00 (76.70 to 77.70): VN055121.D (-3260) (-)



#80

1,3,5-Trimethylbenzene

Concen: 0.350 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. 0.00 min

Lab File: VN055121.D

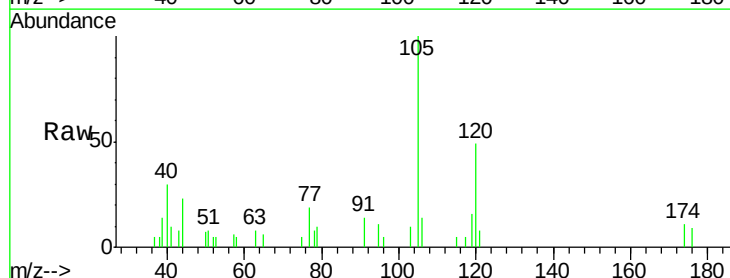
Acq: 18 Apr 2019 15:20

Tgt Ion: 105 Resp: 5663

Ion Ratio Lower Upper

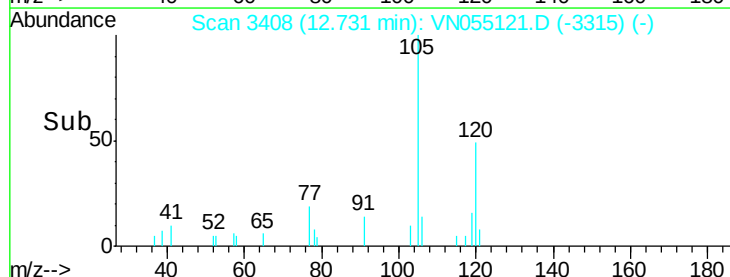
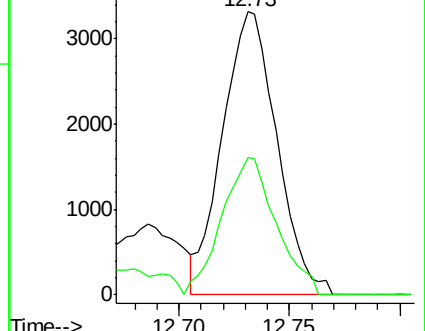
105 100

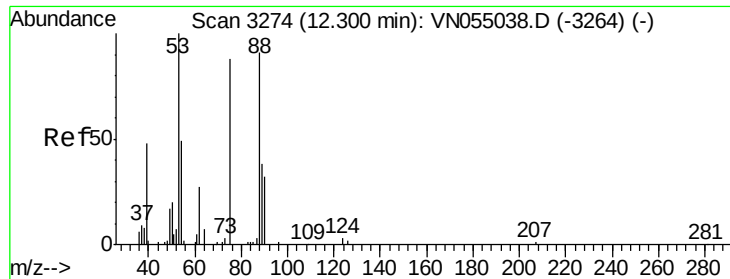
120 48.4 24.3 72.8



Abundance Ion 105.00 (104.70 to 105.70): VN055121.D (-3315) (-)

Ion 120.00 (119.70 to 120.70): VN055121.D (-3315) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 151.413 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

ClientSampleId :

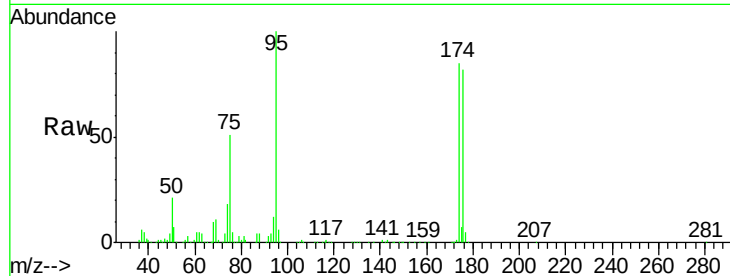
Tot Ion: 75 Resp: 153756

Ion Ratio Lower Upper

75 100

53 0.0 96.3 144.5#

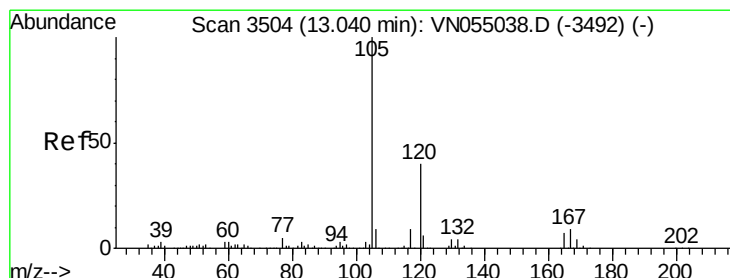
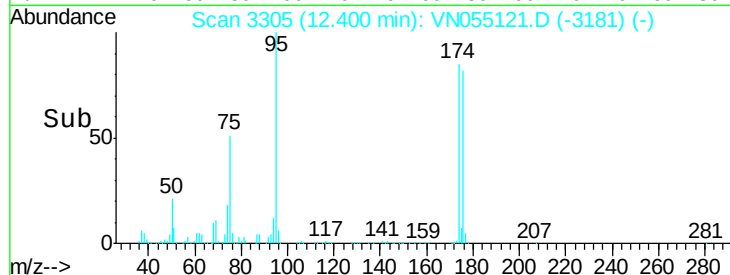
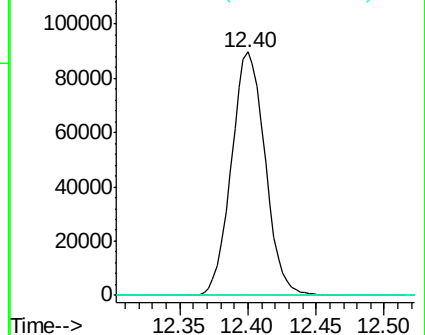
89 0.0 38.6 57.8#



Abundance Ion 74.90 (74.60 to 75.60): VN055121.D (-3181) (-)

Ion 53.00 (52.70 to 53.70): VN055121.D (-3181) (-)

Ion 88.90 (88.60 to 89.60): VN055121.D (-3181) (-)



#84

1,2,4-Trimethylbenzene

Concen: 0.420 ug/l

RT: 13.04 min Scan# 3504

Delta R.T. 0.00 min

Lab File: VN055121.D

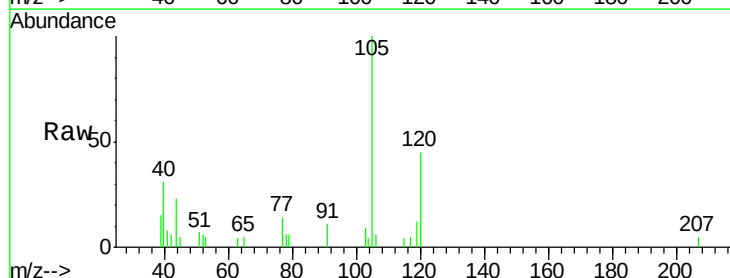
Acq: 18 Apr 2019 15:20

Tgt Ion: 105 Resp: 6433

Ion Ratio Lower Upper

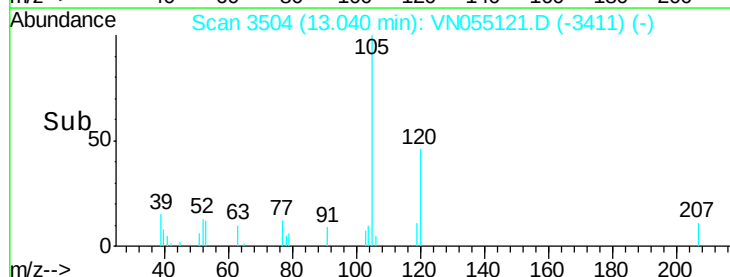
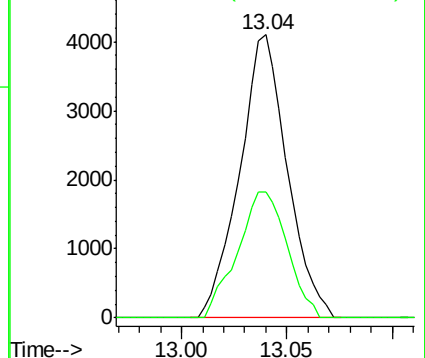
105 100

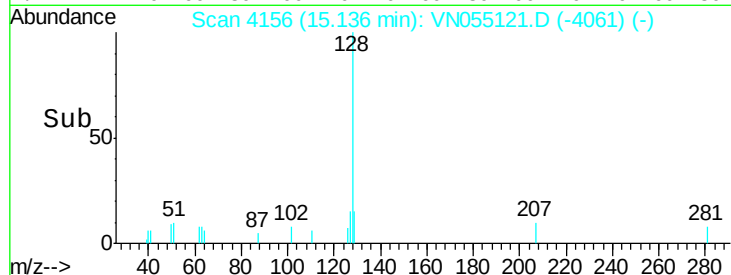
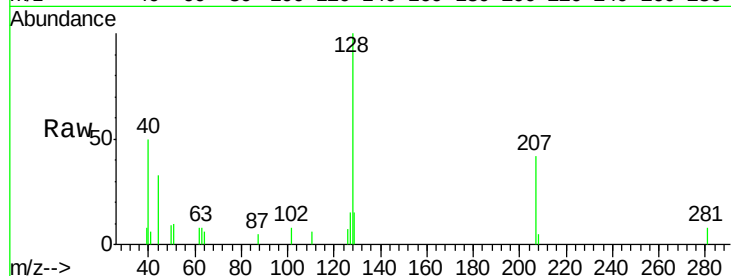
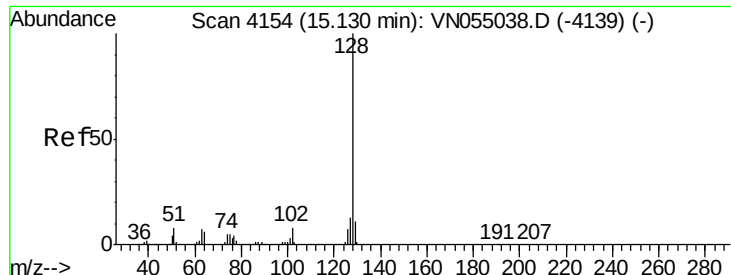
120 46.3 22.4 67.3



Abundance Ion 105.00 (104.70 to 105.70): VN055121.D (-3411) (-)

Ion 120.00 (119.70 to 120.70): VN055121.D (-3411) (-)





#95

Naphthalene

Concen: 3.694 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN055121.D

Acq: 18 Apr 2019 15:20

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion:128 Resp: 5300

Ion Ratio Lower Upper

128 100

127 15.8 10.1 15.1#

129 12.3 8.8 13.2

