

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN041819\
 Data File : VN055118.D
 Acq On : 18 Apr 2019 11:39
 Operator : JC/SP
 Sample : K2461-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Apr 19 01:28:36 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	7.66	168	340999	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	533112	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	435650	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	122673	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	217988	48.09	ug/l	0.00
Spiked Amount			Recovery	=	96.18%	
35) Dibromofluoromethane	7.59	113	173480	48.69	ug/l	0.00
Spiked Amount			Recovery	=	97.38%	
50) Toluene-d8	10.09	98	639257	50.13	ug/l	0.00
Spiked Amount			Recovery	=	100.26%	
62) 4-Bromofluorobenzene	12.40	95	168922	40.75	ug/l	0.00
Spiked Amount			Recovery	=	81.50%	

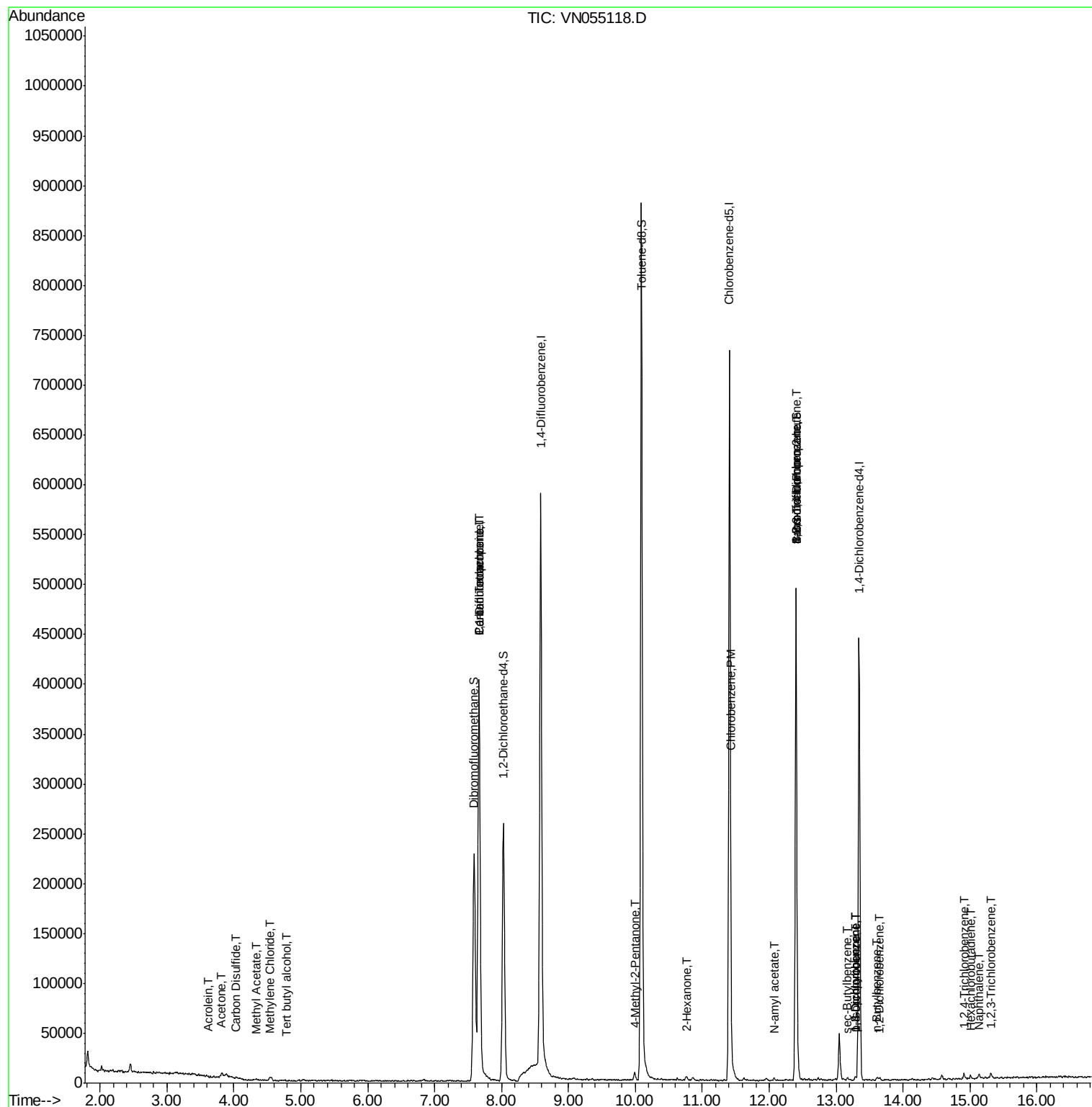
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.79	59	66	0.266	ug/l #	72
13) Acrolein	3.61	56	217	0.707	ug/l #	74
16) Acetone	3.82	43	6010	4.885	ug/l	95
17) Carbon Disulfide	4.04	76	2374	0.272	ug/l #	75
18) Methyl Acetate	4.34	43	2728	0.335	ug/l #	72
20) Methylene Chloride	4.54	84	1244	0.288	ug/l #	73
31) Cyclohexane	7.66	56	7288	Below Cal	#	16
36) 1,1-Dichloropropene	7.66	75	26212	5.216	ug/l #	49
38) Carbon Tetrachloride	7.66	117	32014	6.696	ug/l #	17
51) 4-Methyl-2-Pentanone	9.99	43	5232	1.437	ug/l	90
59) 2-Hexanone	10.76	43	2526	1.104	ug/l	85
65) Chlorobenzene	11.43	112	1801	0.205	ug/l	96
71) Bromoform	12.40	173	1162	0.629	ug/l #	1
74) N-amyl acetate	12.08	43	2341	0.764	ug/l #	66
76) 1,2,3-Trichloropropane	12.40	75	87639	39.728	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	87639	158.868	ug/l #	2
85) sec-Butylbenzene	13.17	105	1891	0.200	ug/l	87
86) p-Isopropyltoluene	13.29	119	1734	0.214	ug/l #	82
87) 1,3-Dichlorobenzene	13.28	146	1018	0.247	ug/l	80
88) 1,4-Dichlorobenzene	13.28	146	1018	0.259	ug/l	82
89) n-Butylbenzene	13.61	91	2208	0.367	ug/l	87
91) 1,2-Dichlorobenzene	13.65	146	1237	0.298	ug/l	81
93) 1,2,4-Trichlorobenzene	14.91	180	1516	3.440	ug/l	98
94) Hexachlorobutadiene	15.01	225	936	0.730	ug/l	88
95) Naphthalene	15.13	128	4094	3.953	ug/l	97
96) 1,2,3-Trichlorobenzene	15.31	180	1953	1.220	ug/l	92

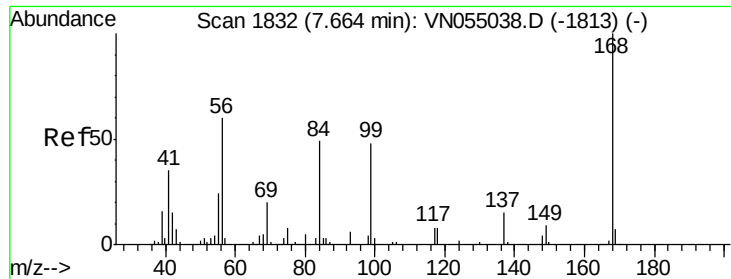
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

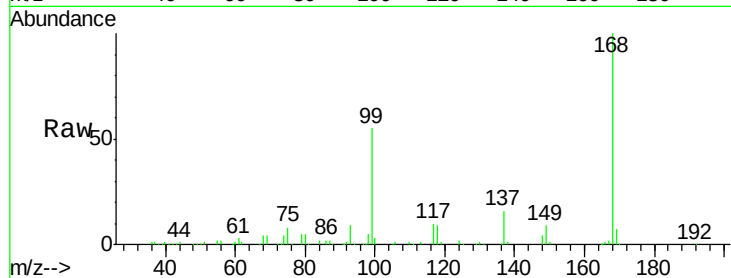
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 340999

Ion Ratio Lower Upper

168 100

99 54.5 41.9 62.9



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.66

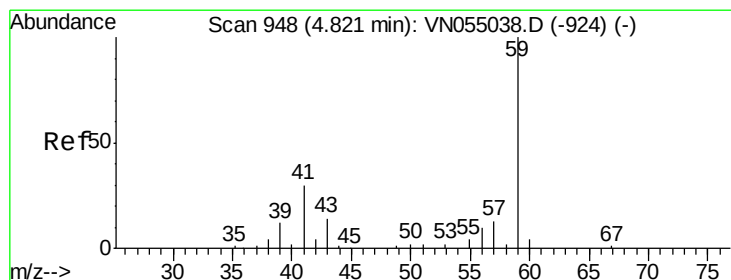
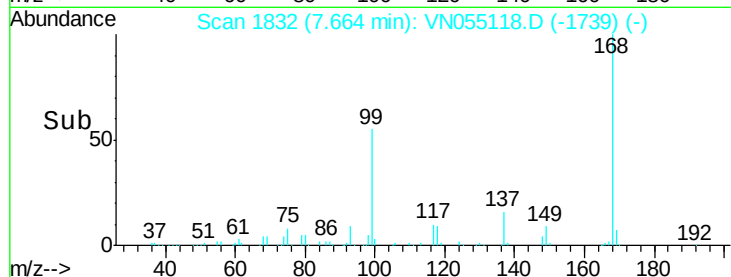
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 0.266 ug/l

RT: 4.79 min Scan# 939

Delta R.T. -0.03 min

Lab File: VN055118.D

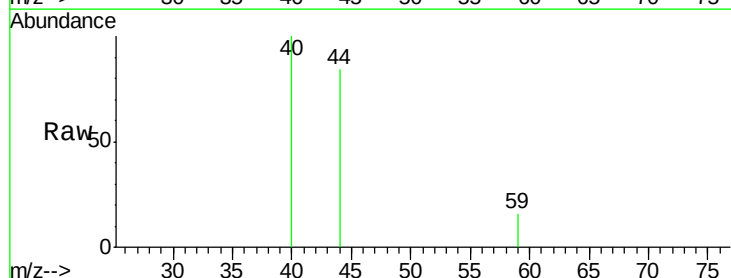
Acq: 18 Apr 2019 11:39

Tgt Ion: 59 Resp: 66

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

4.79

200

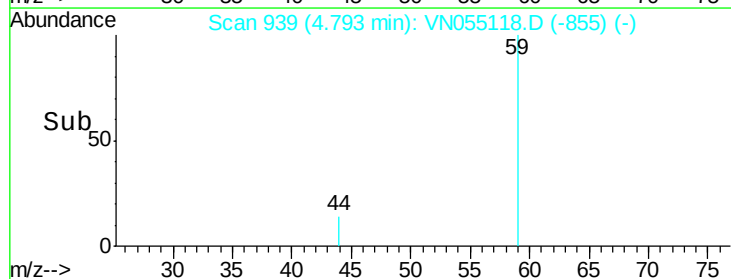
150

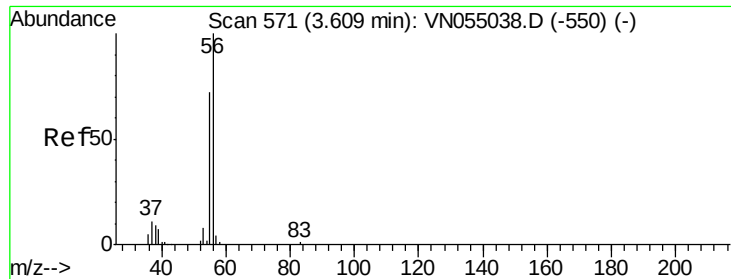
100

50

0

Time-->





#13

Acrolein

Concen: 0.707 ug/l

RT: 3.61 min Scan# 572

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

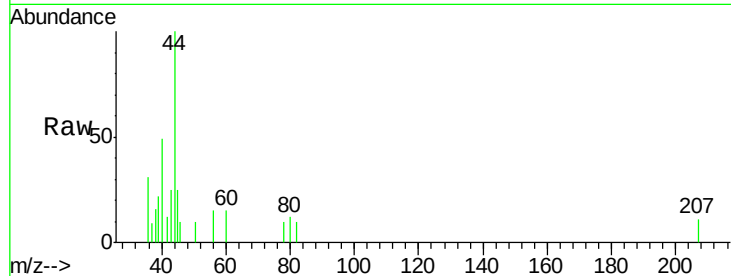
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 56 Resp: 217

Ion Ratio Lower Upper

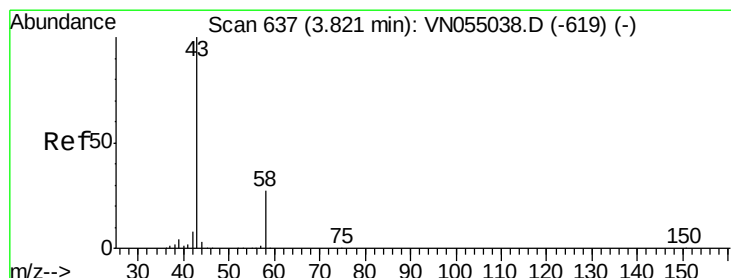
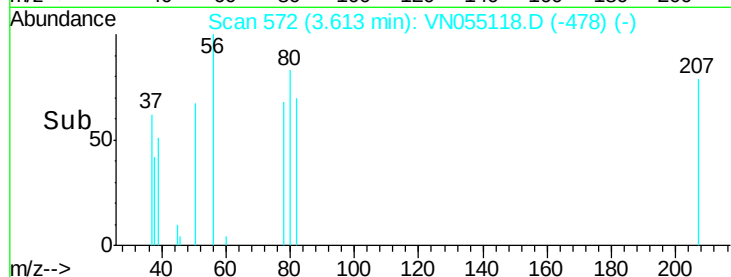
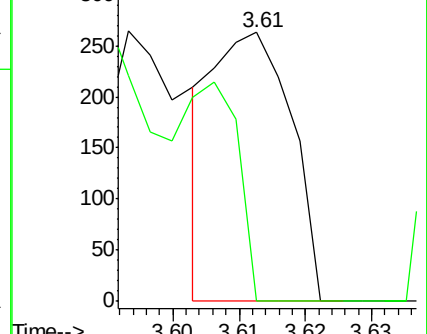
56 100

55 52.5 59.5 89.3#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#16

Acetone

Concen: 4.885 ug/l

RT: 3.82 min Scan# 636

Delta R.T. -0.00 min

Lab File: VN055118.D

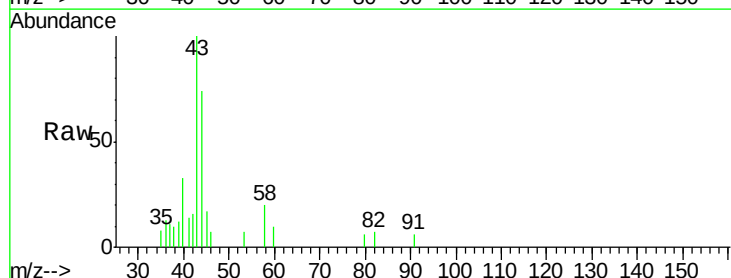
Acq: 18 Apr 2019 11:39

Tgt Ion: 43 Resp: 6010

Ion Ratio Lower Upper

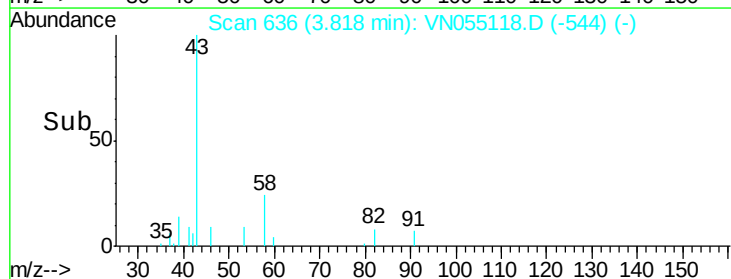
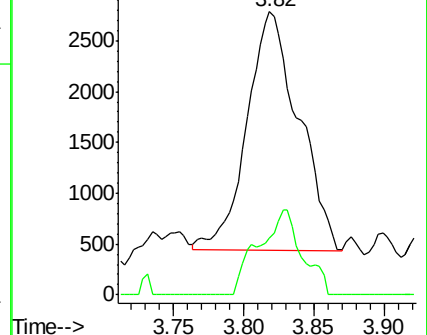
43 100

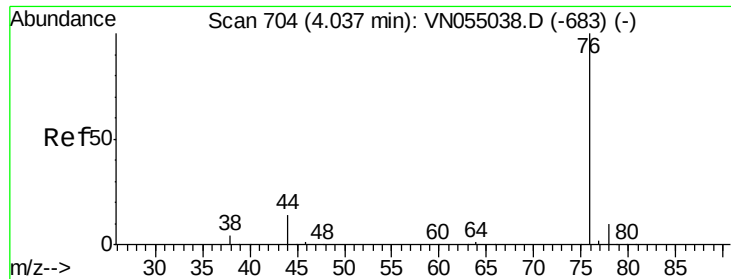
58 23.7 20.9 31.3



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#17

Carbon Disulfide

Concen: 0.272 ug/l

RT: 4.04 min Scan# 704

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

Instrument :

MSVOA_N

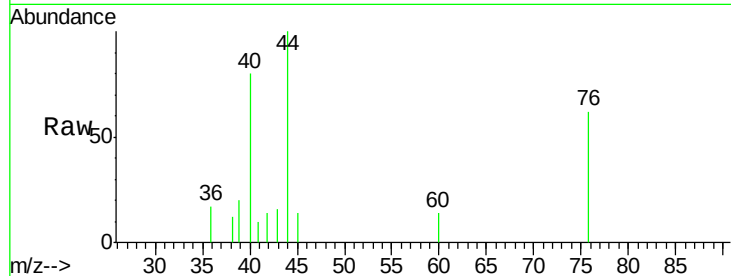
ClientSampled :

Tot Ion: 76 Resp: 2374

Ion Ratio Lower Upper

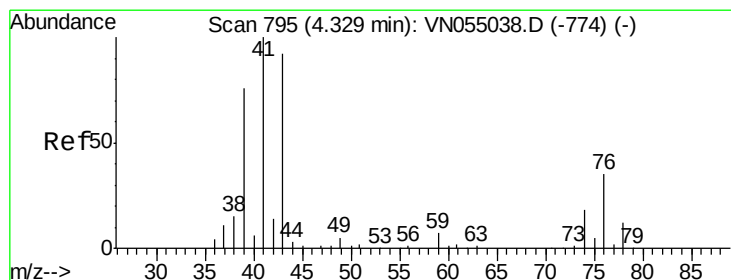
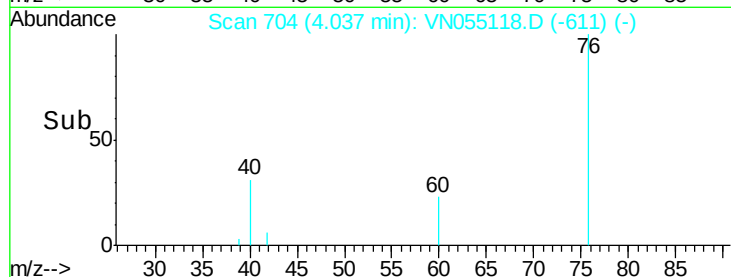
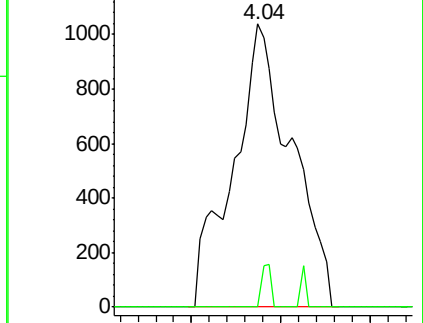
76 100

78 0.0 7.2 10.8#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#18

Methyl Acetate

Concen: 0.335 ug/l

RT: 4.34 min Scan# 797

Delta R.T. 0.01 min

Lab File: VN055118.D

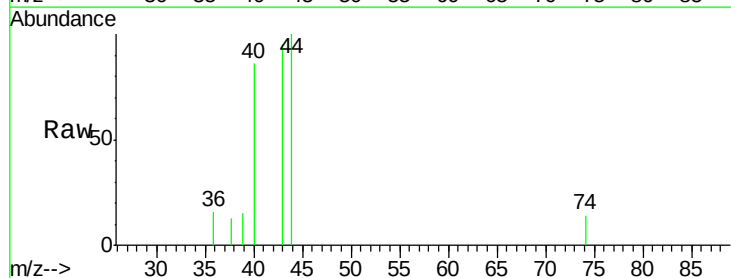
Acq: 18 Apr 2019 11:39

Tgt Ion: 43 Resp: 2728

Ion Ratio Lower Upper

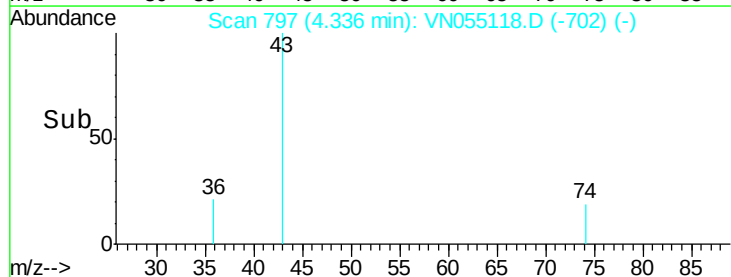
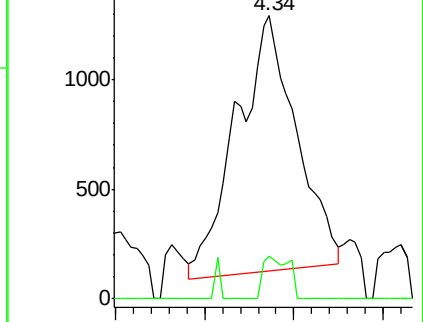
43 100

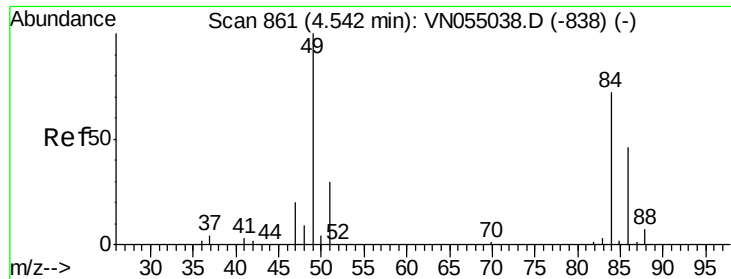
74 7.3 16.1 24.1#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

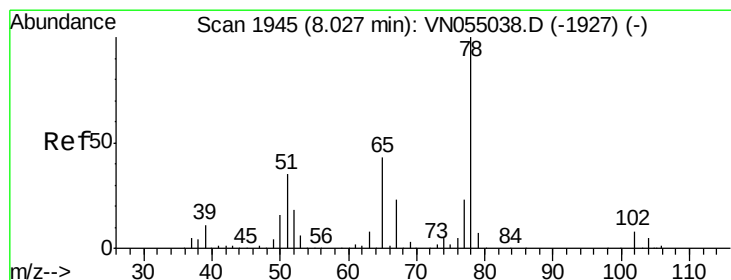
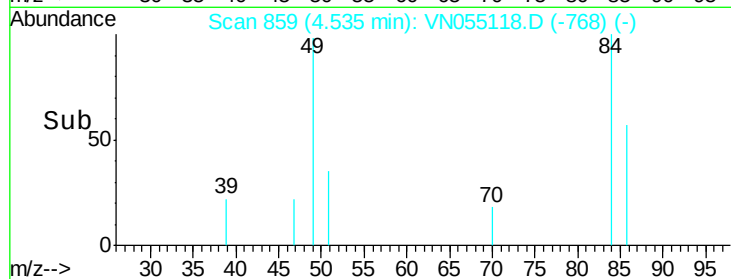
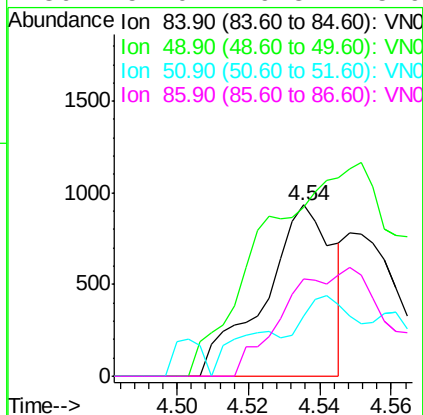
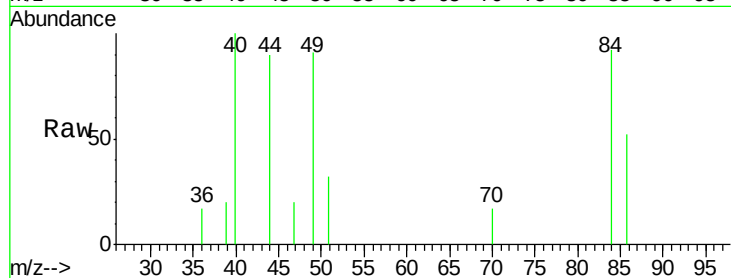




#20
Methylene Chloride
Concen: 0.288 ug/l
RT: 4.54 min Scan# 859
Delta R.T. -0.01 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

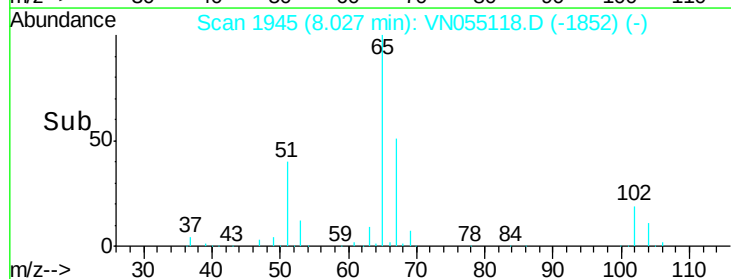
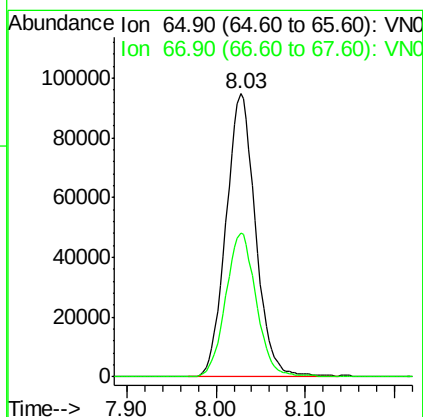
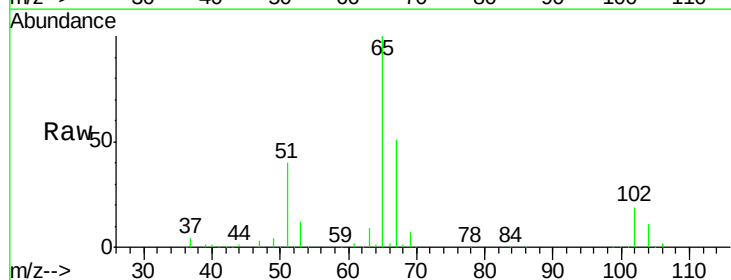
Instrument :
MSVOA_N
ClientSampleId :

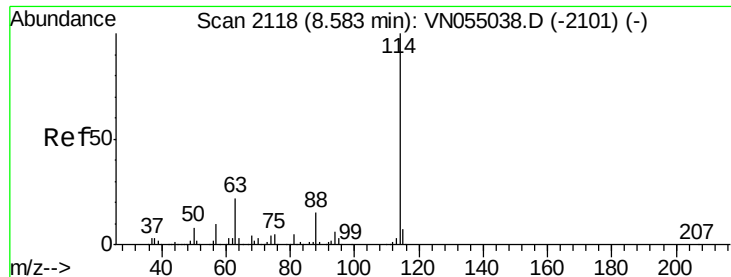
Tot Ion: 84 Resp: 1244
Ion Ratio Lower Upper
84 100
49 98.4 109.4 164.2#
51 13.7 32.2 48.4#
86 57.0 49.3 73.9



#33
1,2-Dichloroethane-d4
Concen: 48.092 ug/l
RT: 8.03 min Scan# 1945
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Tgt Ion: 65 Resp: 217988
Ion Ratio Lower Upper
65 100
67 52.6 0.0 106.4

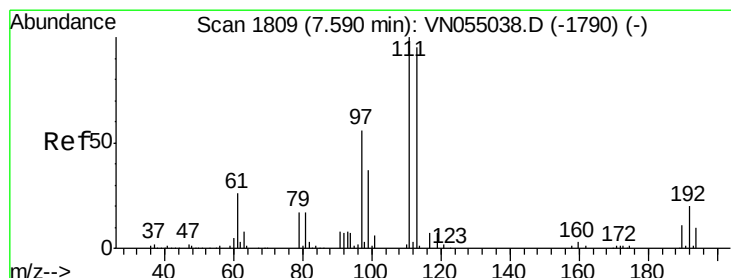
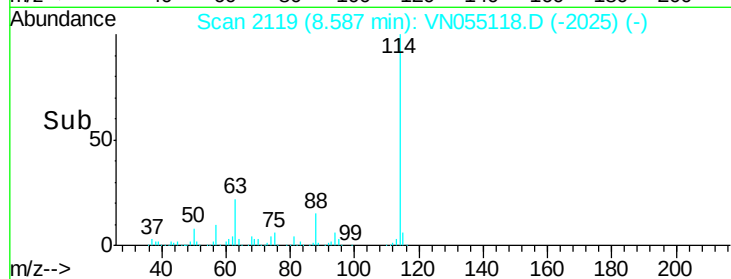
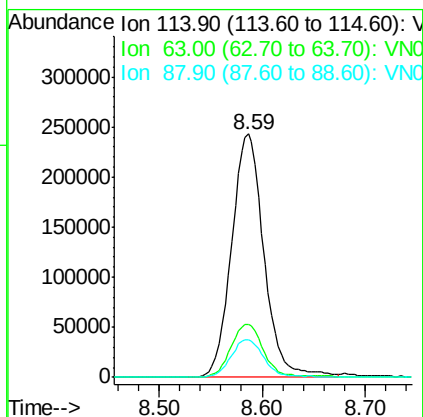
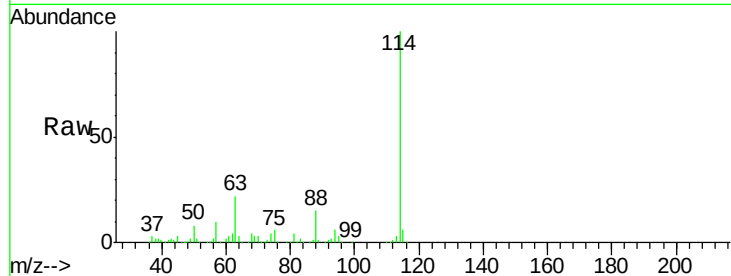




#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

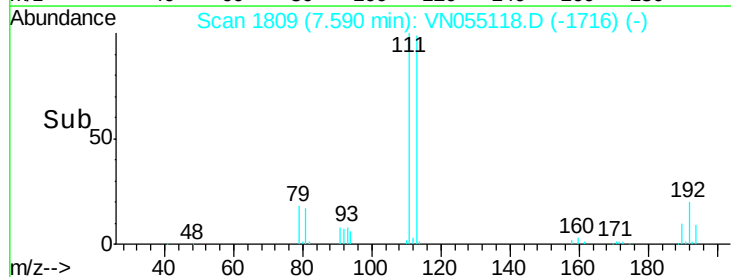
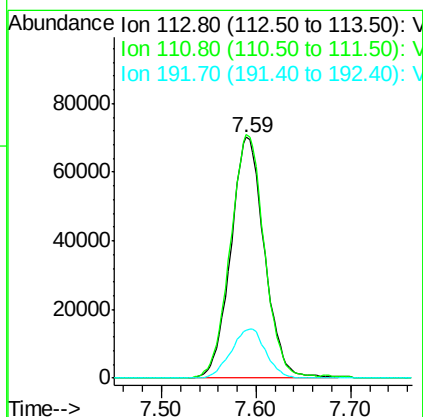
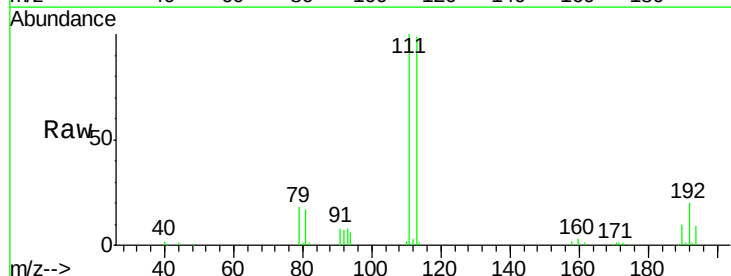
Instrument :
 MSVOA_N
 ClientSampleId :

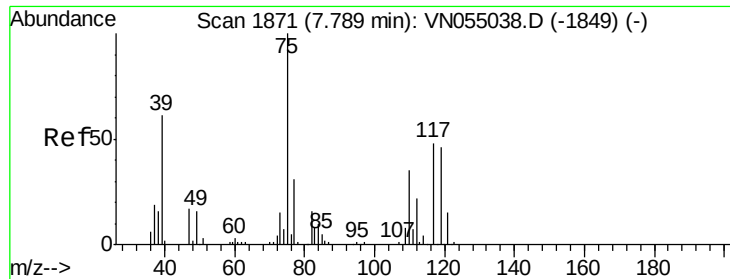
Tot Ion	Ratio	Lower	Upper
114	100		
63	21.7	0.0	45.2
88	15.4	0.0	31.8



#35
 Dibromofluoromethane
 Concen: 48.692 ug/l
 RT: 7.59 min Scan# 1809
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.1	82.1	123.1
192	21.0	16.5	24.7

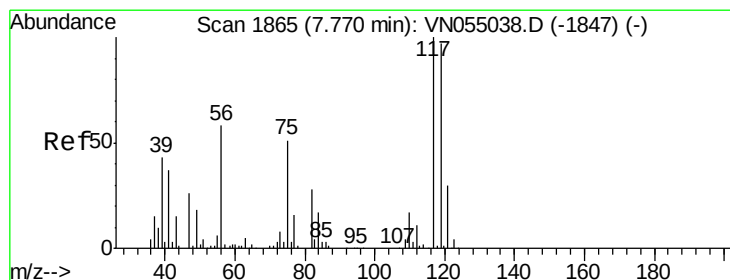
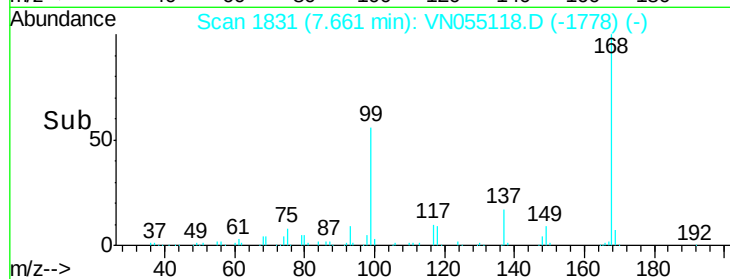
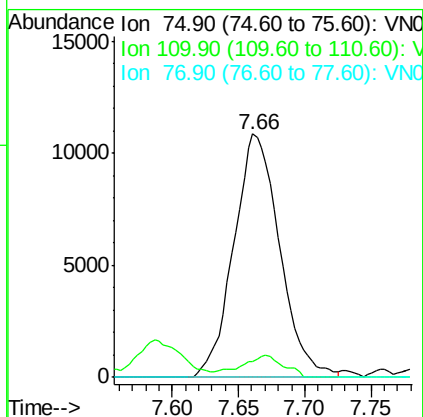
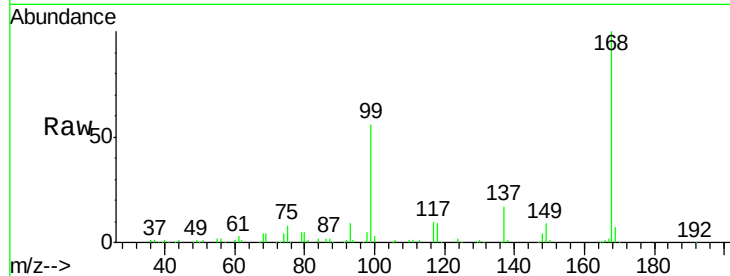




#36
 1,1-Dichloropropene
 Concen: 5.216 ug/l
 RT: 7.66 min Scan# 1831
 Delta R.T. -0.13 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

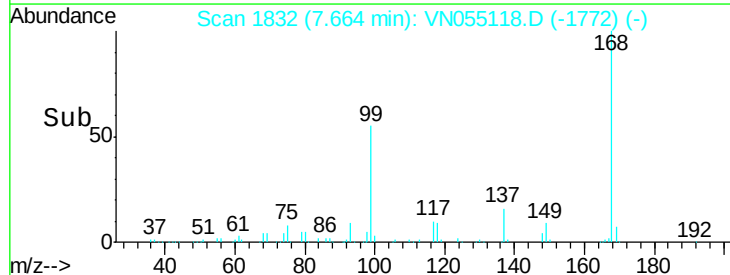
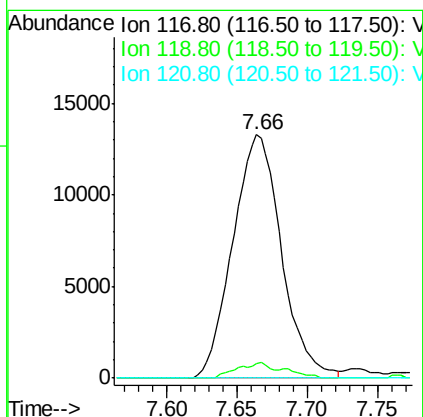
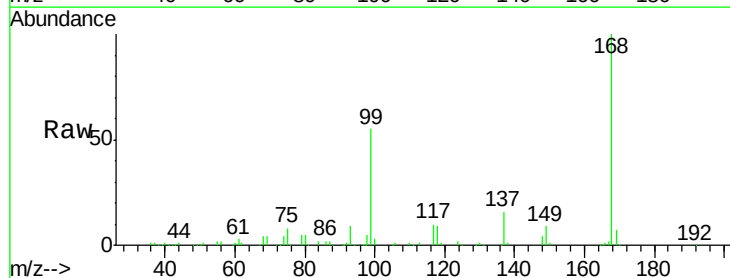
Instrument :
 MSVOA_N
 ClientSampleId :

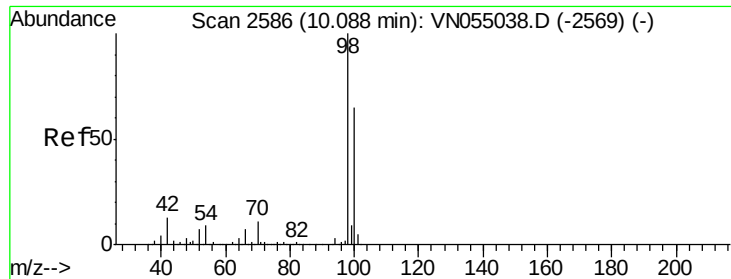
Tot Ion	75	Resp	26212
Ion Ratio	Lower	Upper	
75	100		
110	8.4	17.5	52.5#
77	0.0	24.9	37.3#



#38
 Carbon Tetrachloride
 Concen: 6.696 ug/l
 RT: 7.66 min Scan# 1832
 Delta R.T. -0.11 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Tgt Ion	117	Resp	32014
Ion Ratio	Lower	Upper	
117	100		
119	5.9	76.3	114.5#
121	0.0	23.9	35.9#





#50

Toluene-d8

Concen: 50.131 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

Instrument :

MSVOA_N

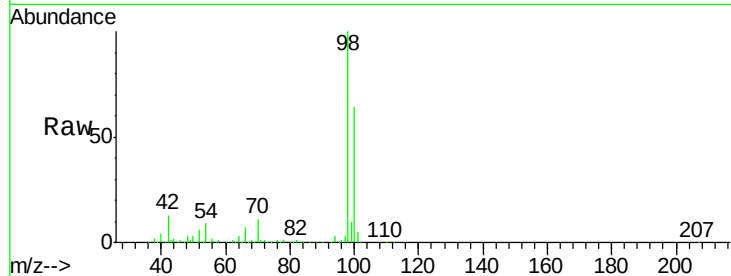
ClientSampled :

Tot Ion: 98 Resp: 639257

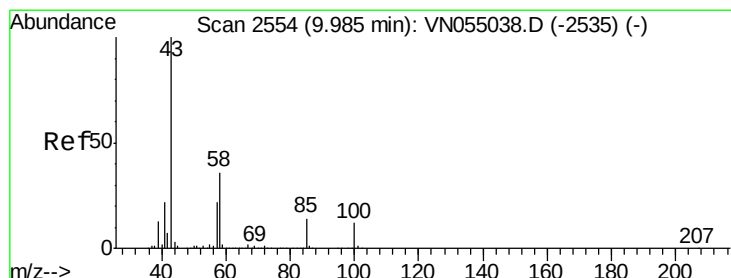
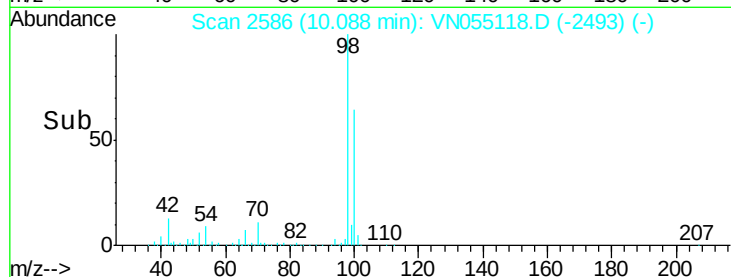
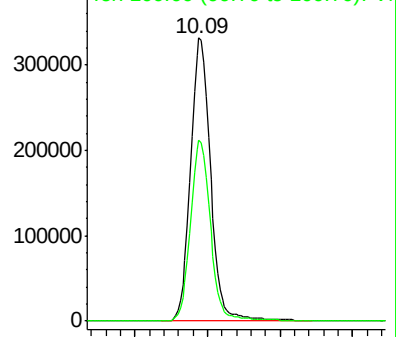
Ion Ratio Lower Upper

98 100

100 63.3 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN055118.D (-2493) (-)



#51

4-Methyl-2-Pentanone

Concen: 1.437 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN055118.D

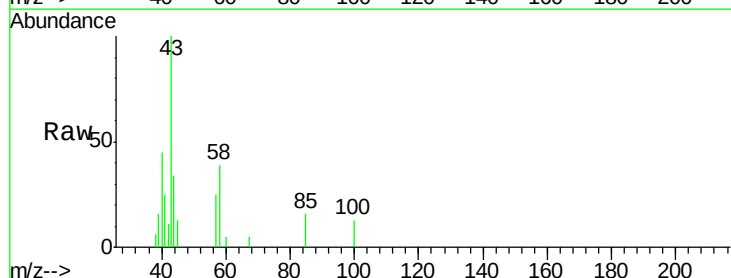
Acq: 18 Apr 2019 11:39

Tgt Ion: 43 Resp: 5232

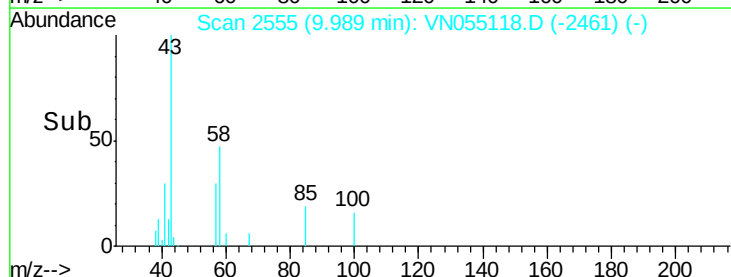
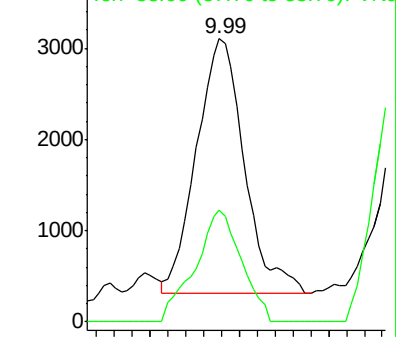
Ion Ratio Lower Upper

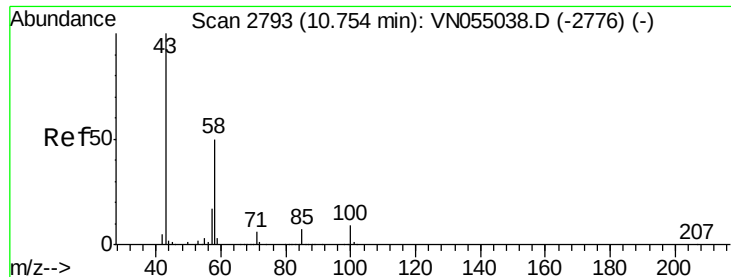
43 100

58 42.0 29.0 43.4



Abundance Ion 43.00 (42.70 to 43.70): VN055118.D (-2461) (-)

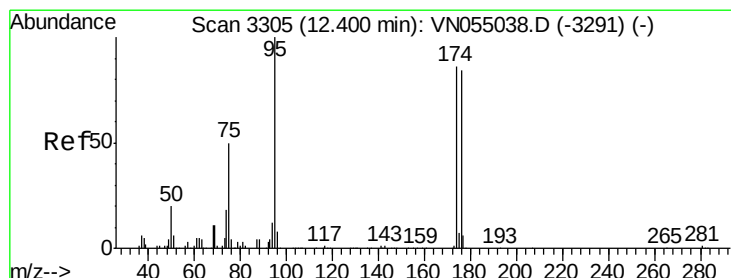
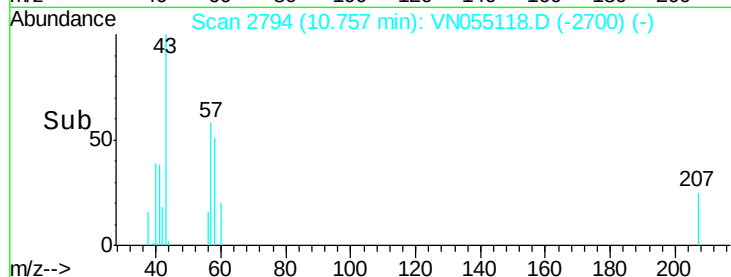
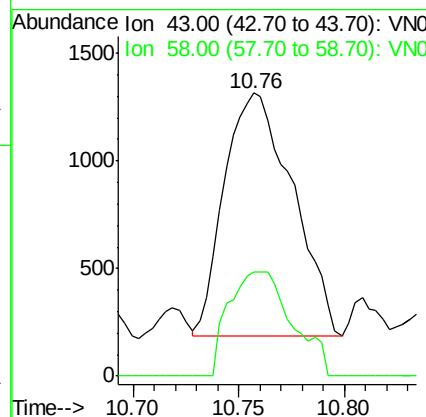
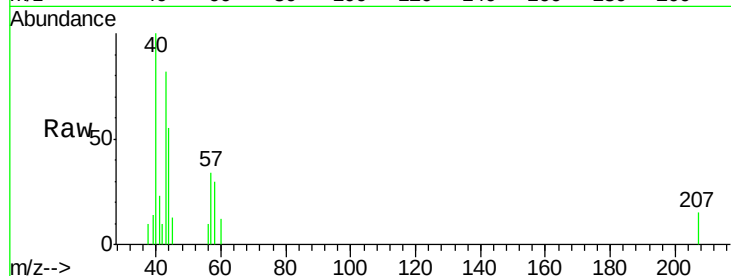




#59
2-Hexanone
Concen: 1.104 ug/l
RT: 10.76 min Scan# 2794
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

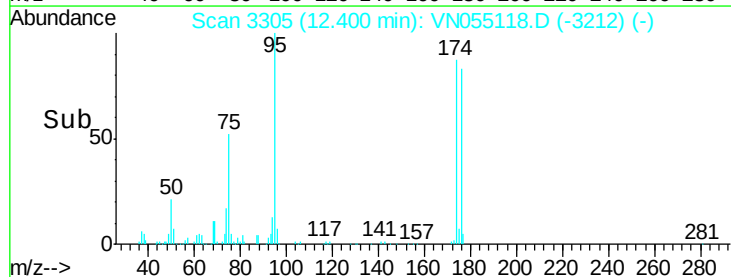
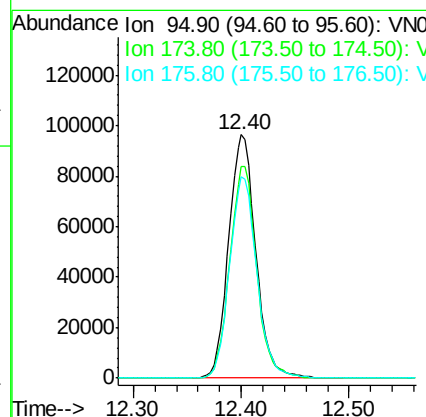
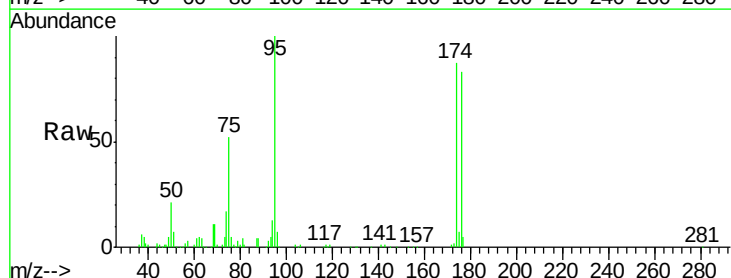
Instrument :
MSVOA_N
ClientSampled :

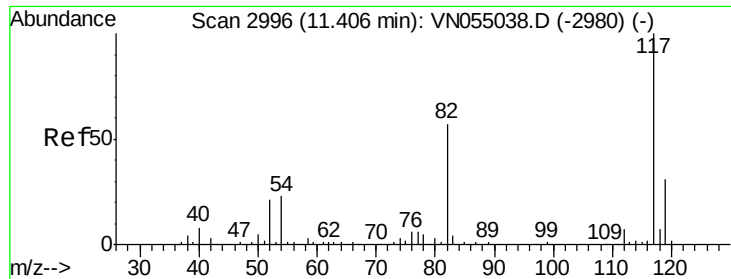
Tot Ion: 43 Resp: 2526
Ion Ratio Lower Upper
43 100
58 39.9 25.1 75.2



#62
4-Bromofluorobenzene
Concen: 40.748 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Tgt Ion: 95 Resp: 168922
Ion Ratio Lower Upper
95 100
174 85.8 0.0 174.4
176 83.0 0.0 166.8

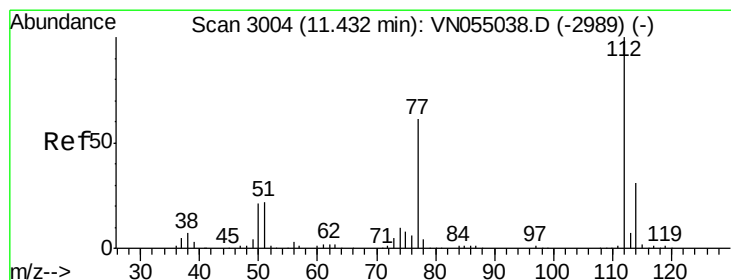
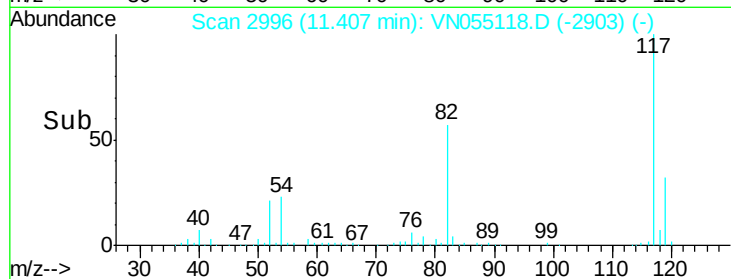
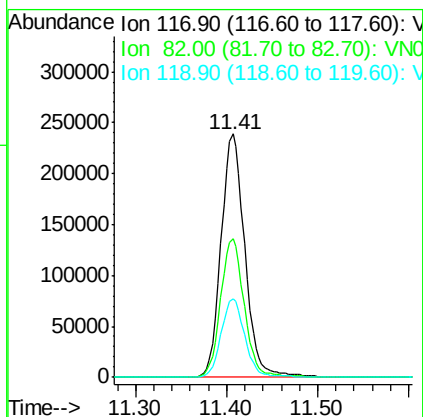
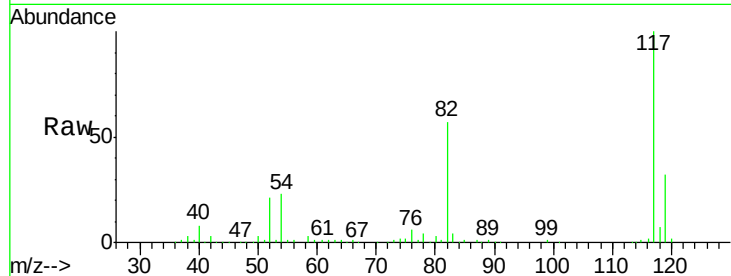




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

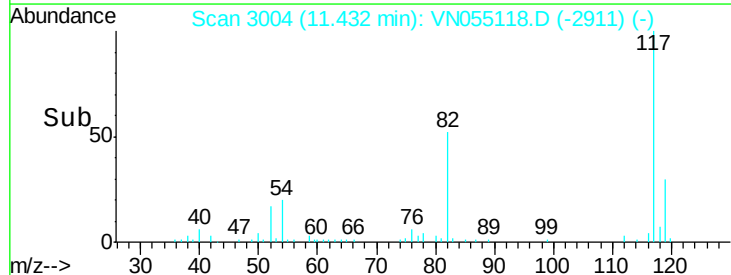
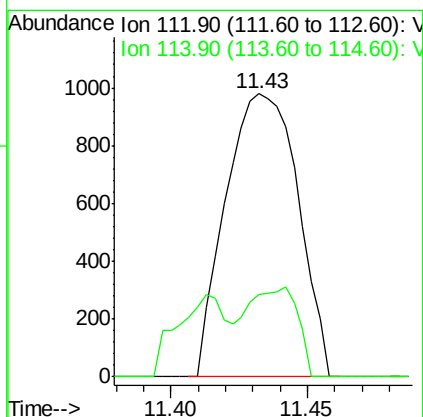
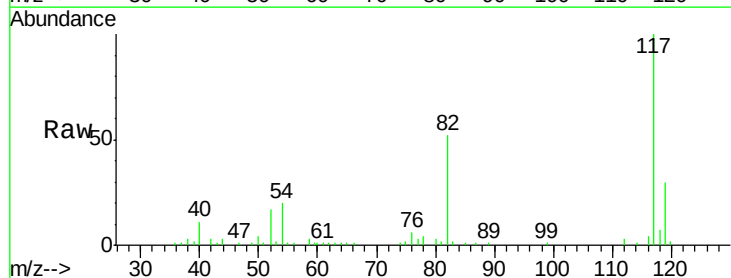
Instrument :
MSVOA_N
ClientSampled :

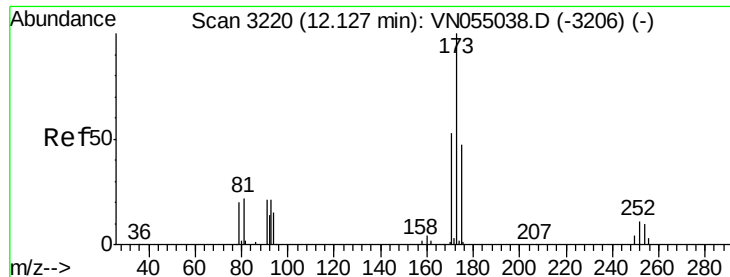
Tot Ion:117 Resp: 435650
Ion Ratio Lower Upper
117 100
82 56.7 44.6 66.8
119 32.4 25.5 38.3



#65
Chlorobenzene
Concen: 0.205 ug/l
RT: 11.43 min Scan# 3004
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Tgt Ion:112 Resp: 1801
Ion Ratio Lower Upper
112 100
114 29.1 25.3 37.9

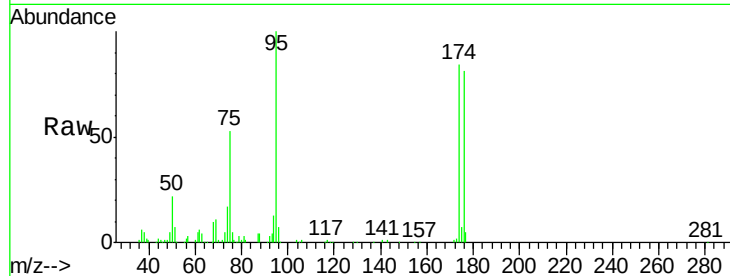




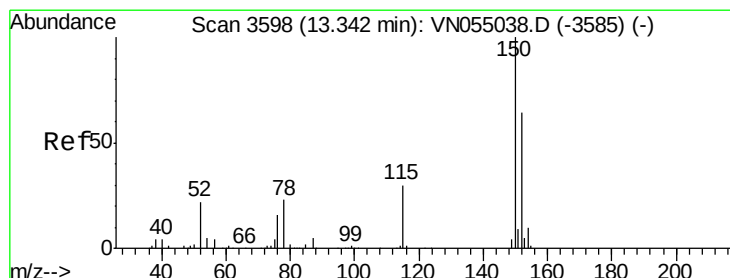
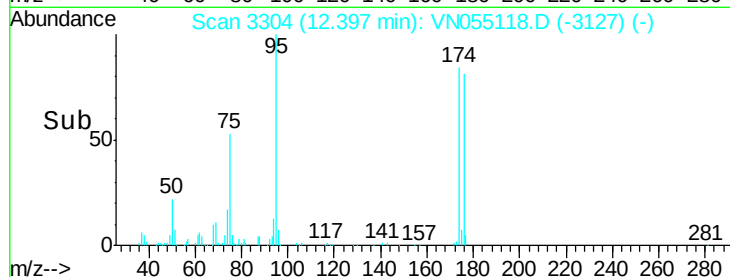
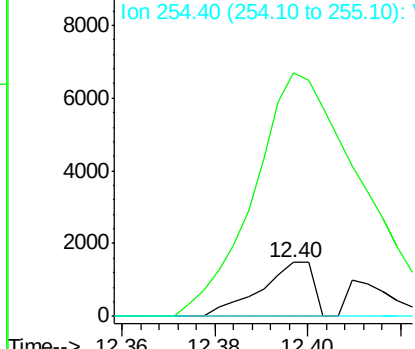
#71
Bromoform
Concen: 0.629 ug/l
RT: 12.40 min Scan# 3304
Delta R.T. 0.27 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Instrument :
MSVOA_N
ClientSampled :

Tot Ion:173 Resp: 1162
Ion Ratio Lower Upper
173 100
175 808.5 24.3 73.0#
254 0.0 0.1 0.1#

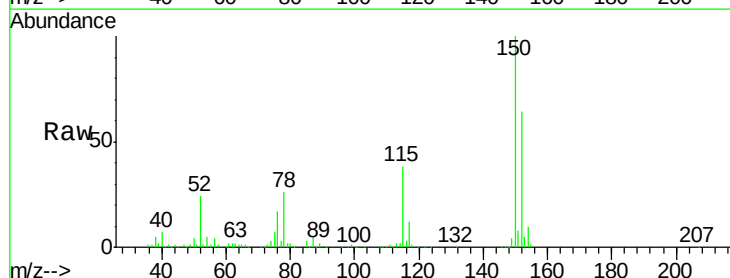


Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V

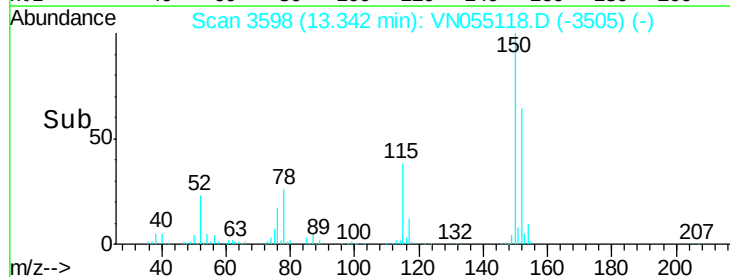
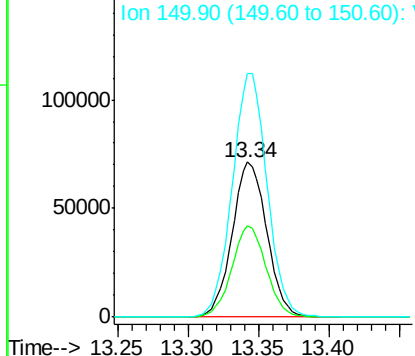


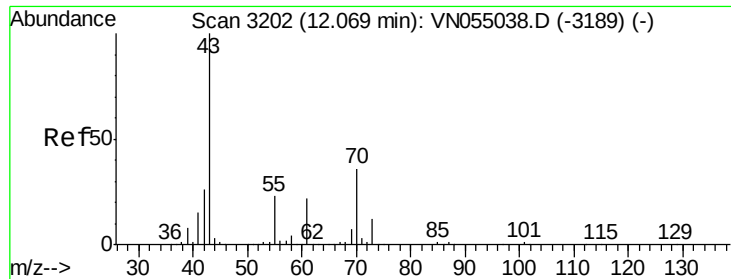
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.34 min Scan# 3598
Delta R.T. 0.00 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Tgt Ion:152 Resp: 122673
Ion Ratio Lower Upper
152 100
115 58.0 28.5 85.6
150 157.9 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

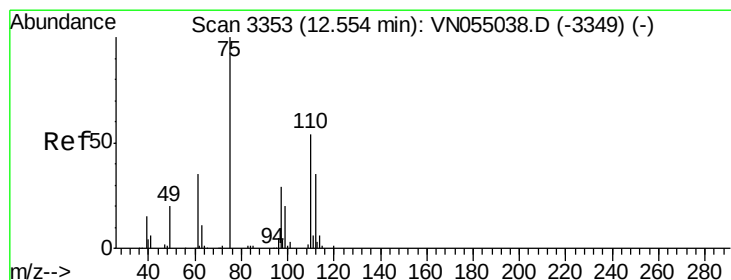
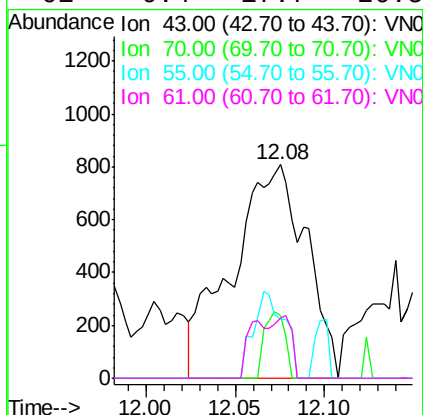
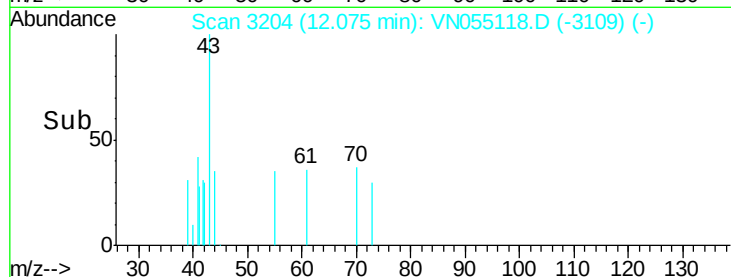
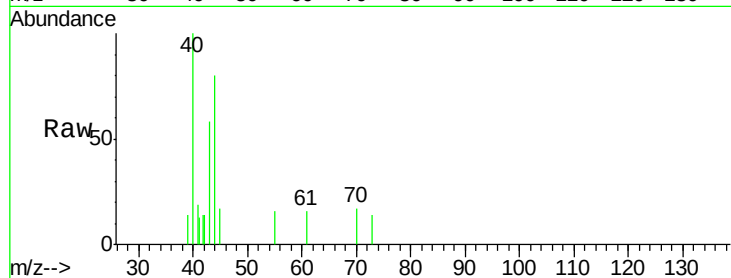




#74
N-amvl acetate
Concen: 0.764 ug/l
RT: 12.08 min Scan# 3204
Delta R.T. 0.01 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

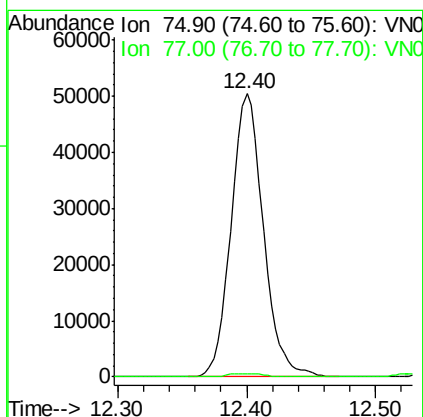
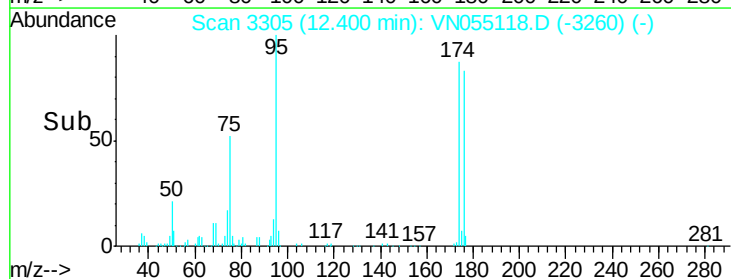
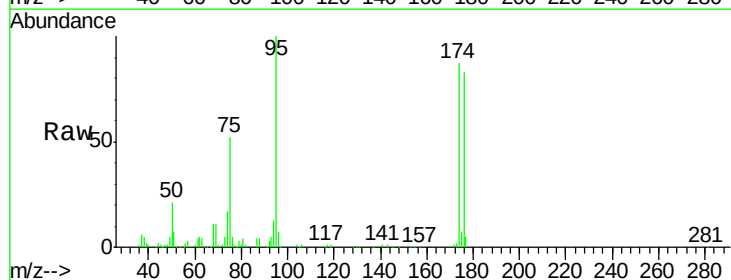
Instrument :
MSVOA_N
ClientSampleId :

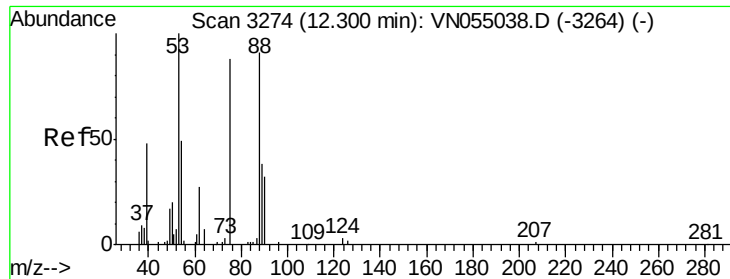
Tot Ion: 43 Resp: 2341
Ion Ratio Lower Upper
43 100
70 8.7 29.4 44.0#
55 17.0 19.0 28.4#
61 6.4 17.7 26.5#



#76
1,2,3-Trichloropropane
Concen: 39.728 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. -0.15 min
Lab File: VN055118.D
Acq: 18 Apr 2019 11:39

Tgt Ion: 75 Resp: 87639
Ion Ratio Lower Upper
75 100
77 0.5 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 158.868 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

Instrument :

MSVOA_N

ClientSampleId :

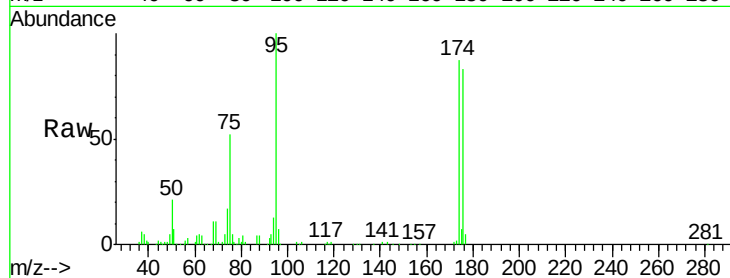
Tot Ion: 75 Resp: 87639

Ion Ratio Lower Upper

75 100

53 0.0 96.3 144.5#

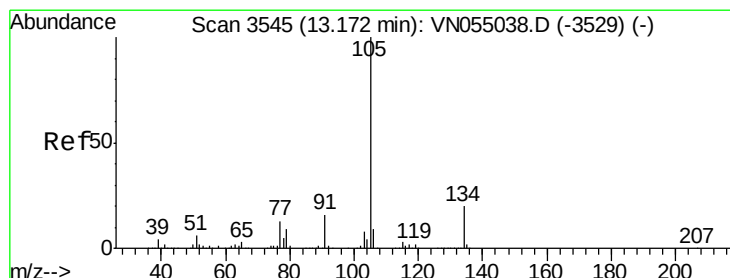
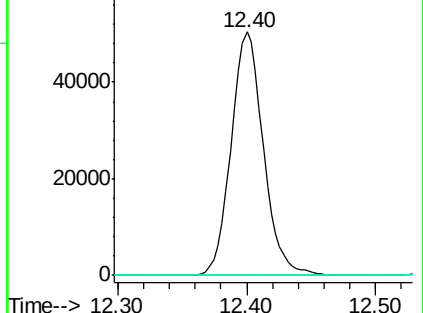
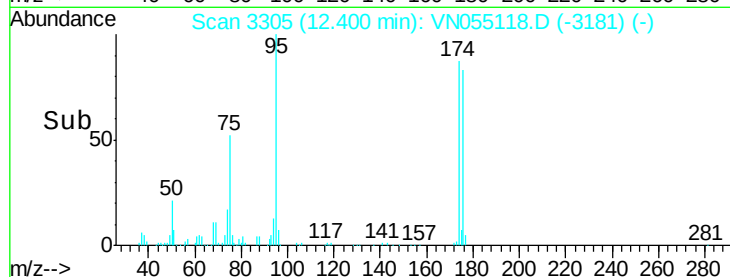
89 0.0 38.6 57.8#



Abundance Ion 74.90 (74.60 to 75.60): VN055118.D (-3181) (-)

Ion 53.00 (52.70 to 53.70): VN055118.D (-3181) (-)

Ion 88.90 (88.60 to 89.60): VN055118.D (-3181) (-)



#85

sec-Butylbenzene

Concen: 0.200 ug/l

RT: 13.17 min Scan# 3545

Delta R.T. 0.00 min

Lab File: VN055118.D

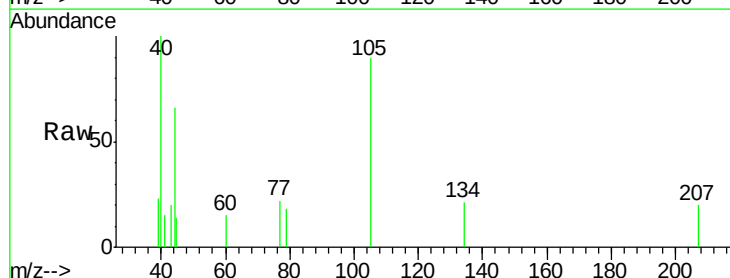
Acq: 18 Apr 2019 11:39

Tgt Ion: 105 Resp: 1891

Ion Ratio Lower Upper

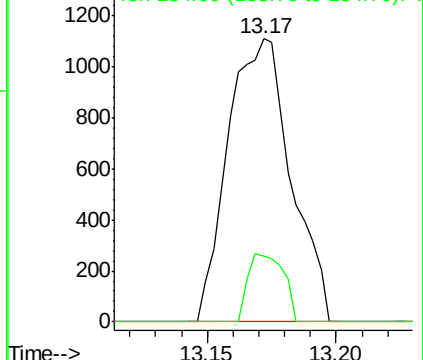
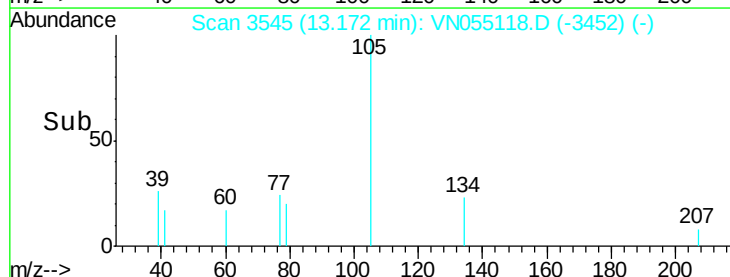
105 100

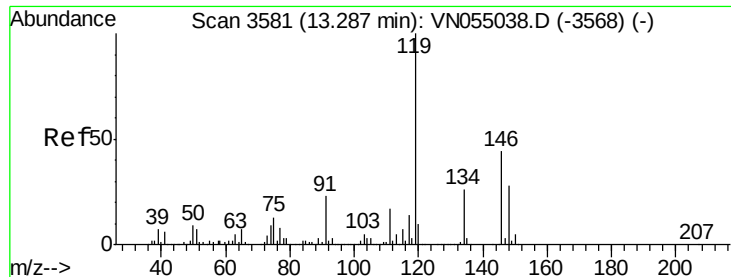
134 13.6 9.8 29.3



Abundance Ion 105.00 (104.70 to 105.70): VN055118.D (-3452) (-)

Ion 134.00 (133.70 to 134.70): VN055118.D (-3452) (-)





#86

p-Isopropyltoluene

Concen: 0.214 ug/l

RT: 13.29 min Scan# 3582

Delta R.T. 0.00 min

Lab File: VN055118.D

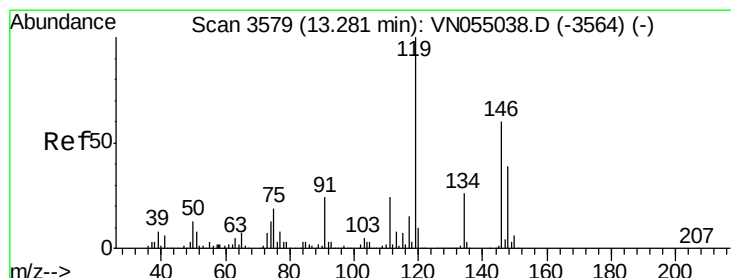
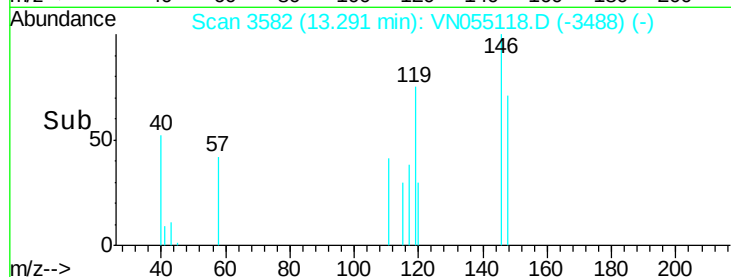
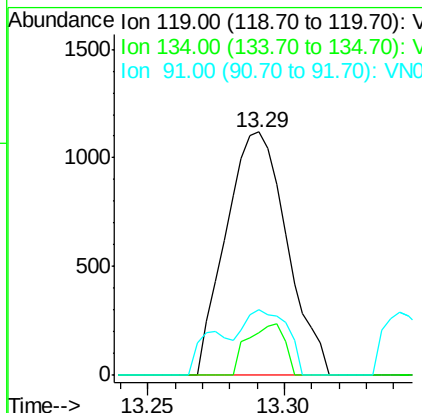
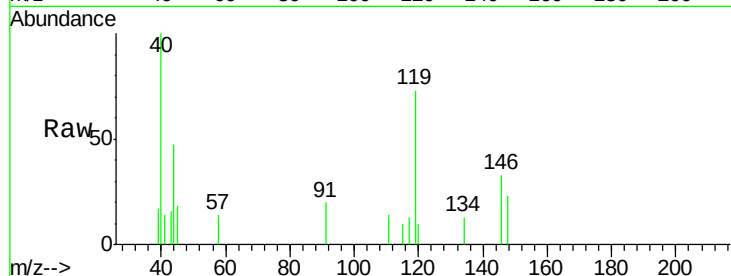
Acq: 18 Apr 2019 11:39

Instrument :

MSVOA_N

ClientSampled :

Tot Ion	Ratio	Lower	Upper
119	100		
134	12.7	13.2	39.5#
91	19.5	11.7	35.1



#87

1,3-Dichlorobenzene

Concen: 0.247 ug/l

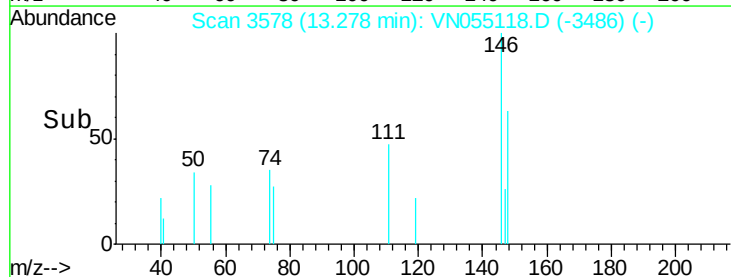
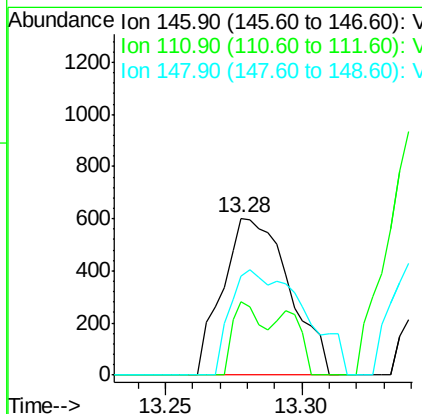
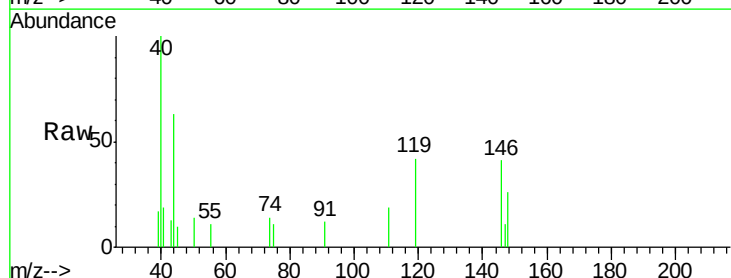
RT: 13.28 min Scan# 3578

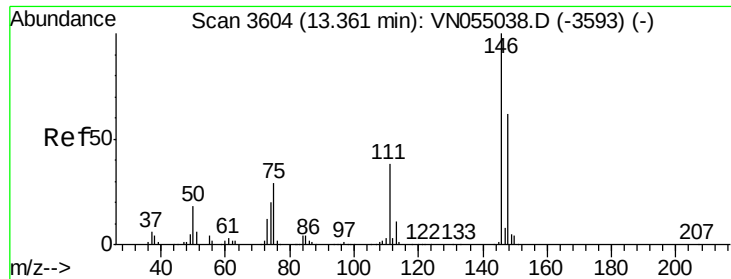
Delta R.T. -0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

Tgt Ion	Ratio	Lower	Upper
146	100		
111	21.3	19.5	58.5
148	74.8	31.6	94.7

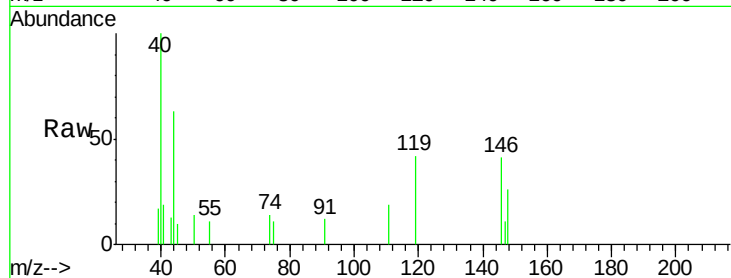




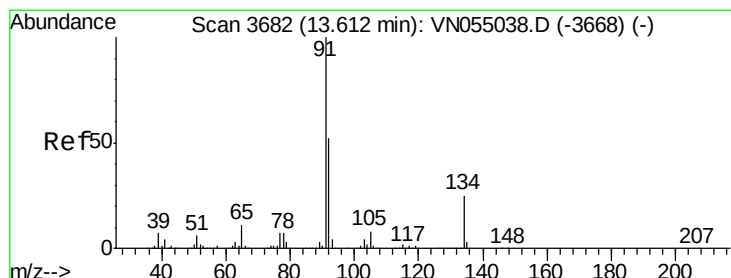
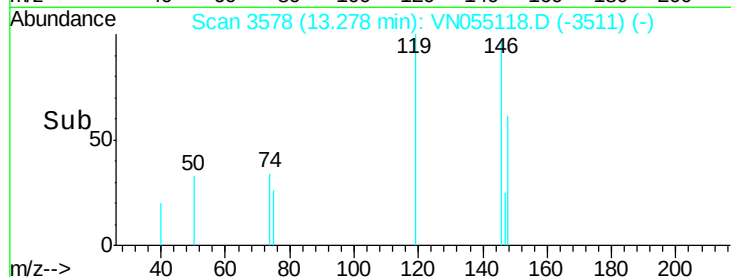
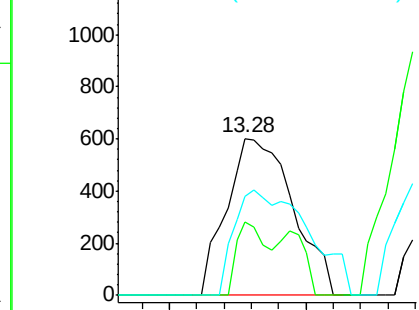
#88
 1,4-Dichlorobenzene
 Concen: 0.259 ug/l
 RT: 13.28 min Scan# 3578
 Delta R.T. -0.08 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion:146 Resp: 1018
 Ion Ratio Lower Upper
 146 100
 111 21.3 18.8 56.4
 148 74.8 32.4 97.2

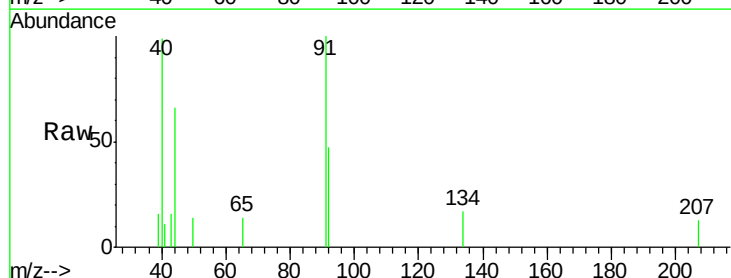


Abundance Ion 145.90 (145.60 to 146.60): V
 Ion 110.90 (110.60 to 111.60): V
 Ion 147.90 (147.60 to 148.60): V

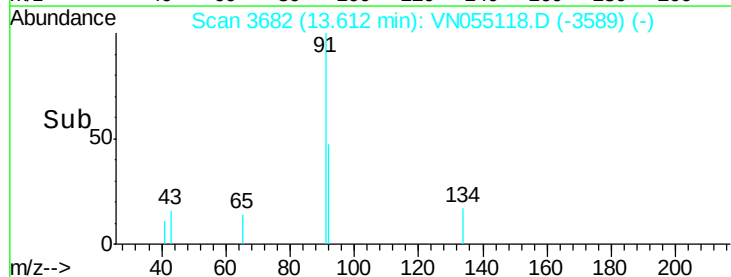
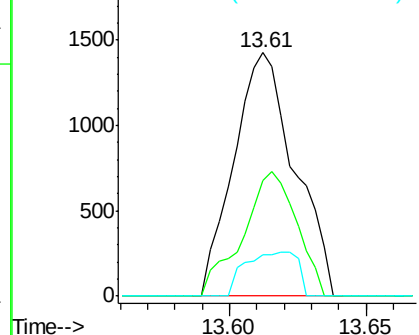


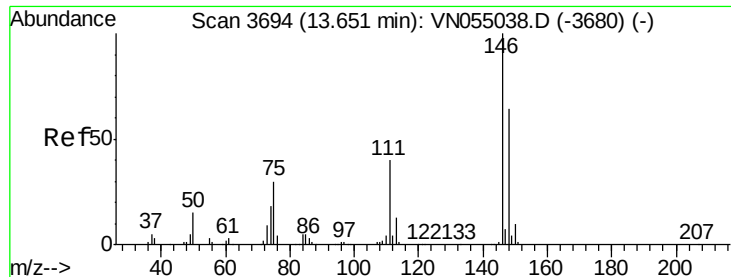
#89
 n-Butylbenzene
 Concen: 0.367 ug/l
 RT: 13.61 min Scan# 3682
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Tgt Ion: 91 Resp: 2208
 Ion Ratio Lower Upper
 91 100
 92 45.2 25.9 77.7
 134 15.6 12.8 38.3



Abundance Ion 91.00 (90.70 to 91.70): V
 Ion 92.00 (91.70 to 92.70): V
 Ion 134.00 (133.70 to 134.70): V

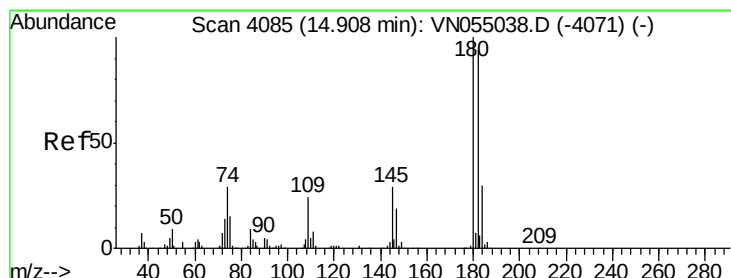
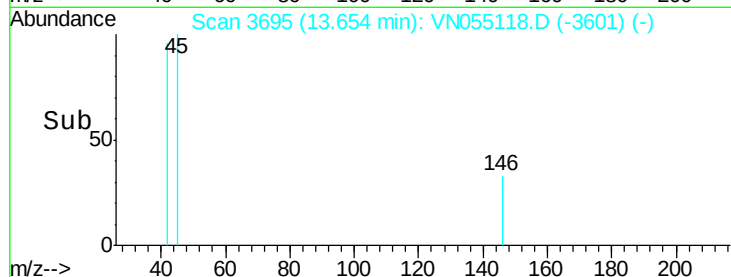
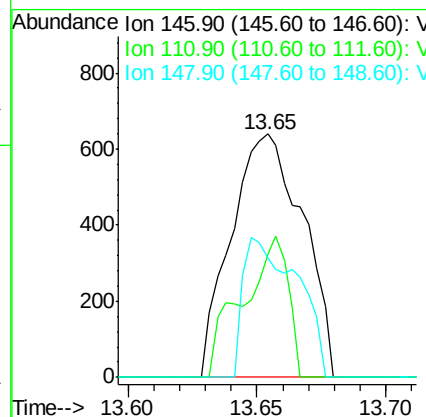
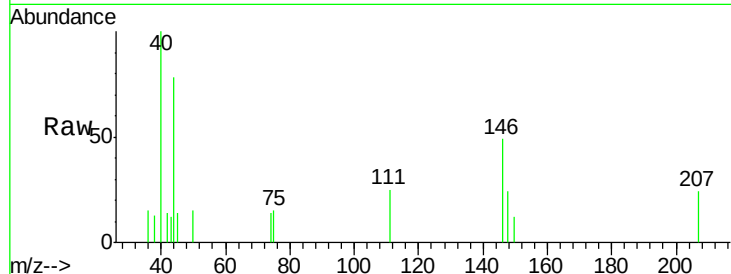




#91
 1,2-Dichlorobenzene
 Concen: 0.298 ug/l
 RT: 13.65 min Scan# 3695
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

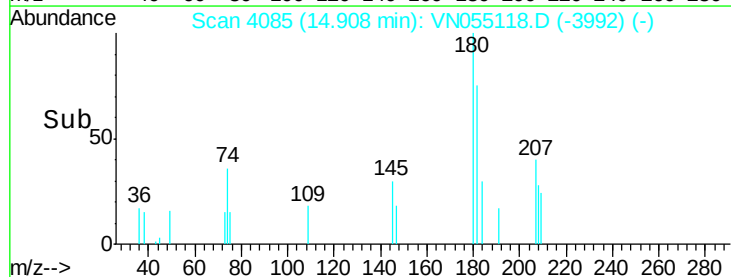
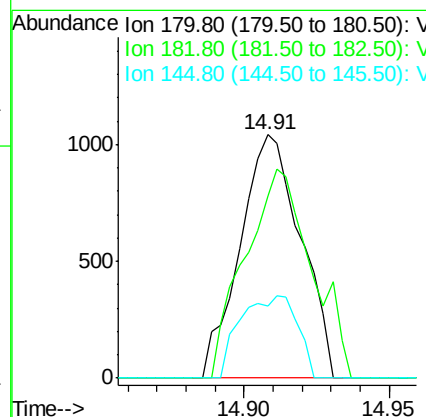
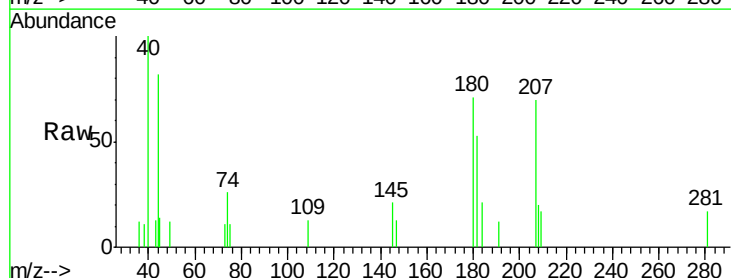
Instrument :
 MSVOA_N
 ClientSampleId :

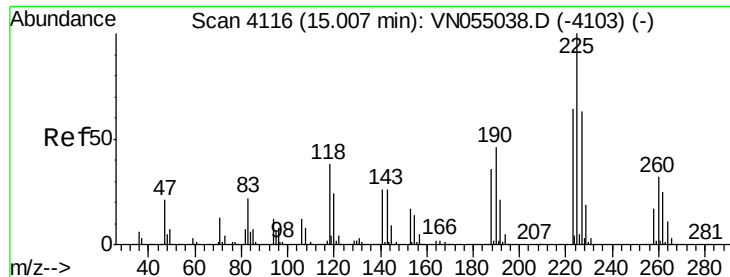
Tot Ion	Ratio	Lower	Upper
146	100		
111	37.0	20.3	60.9
148	43.5	32.2	96.6



#93
 1,2,4-Trichlorobenzene
 Concen: 3.440 ug/l
 RT: 14.91 min Scan# 4085
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Tgt Ion	Ratio	Lower	Upper
180	100		
182	94.0	47.5	142.6
145	31.6	14.2	42.8





#94

Hexachlorobutadiene

Concen: 0.730 ug/l

RT: 15.01 min Scan# 4116

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

Instrument :

MSVOA_N

ClientSampleId :

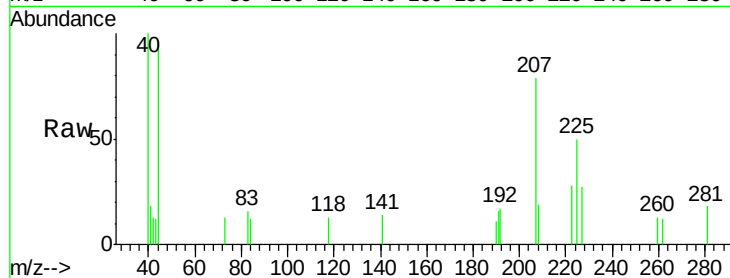
Tot Ion:225 Resp: 936

Ion Ratio Lower Upper

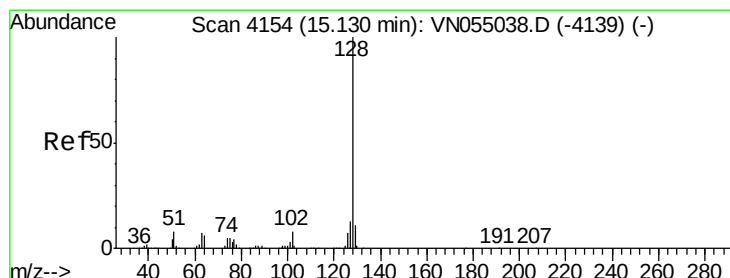
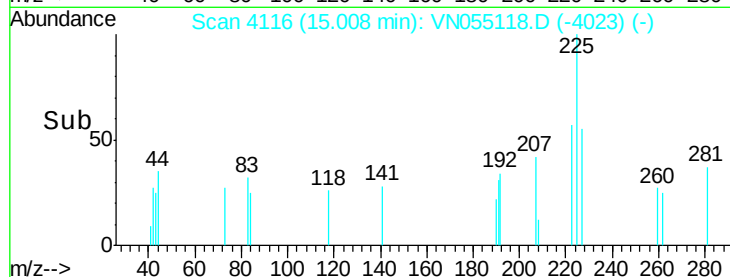
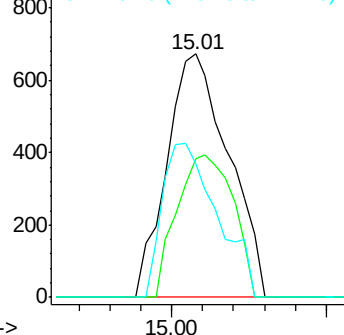
225 100

223 53.3 31.4 94.0

227 56.2 32.6 97.7



Abundance Ion 224.70 (224.40 to 225.40): V
Ion 222.70 (222.40 to 223.40): V
Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 3.953 ug/l

RT: 15.13 min Scan# 4154

Delta R.T. 0.00 min

Lab File: VN055118.D

Acq: 18 Apr 2019 11:39

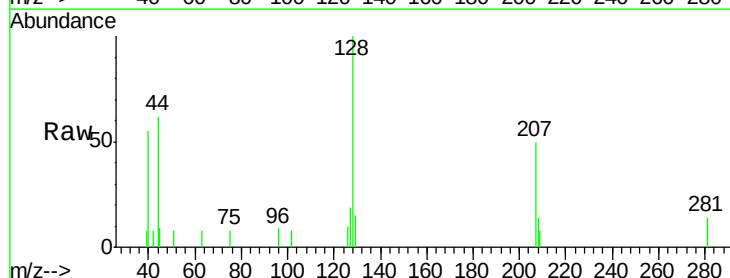
Tgt Ion:128 Resp: 4094

Ion Ratio Lower Upper

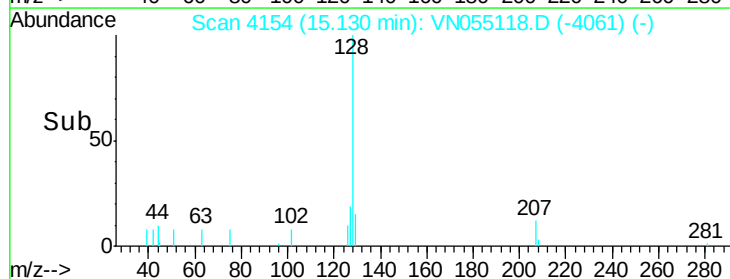
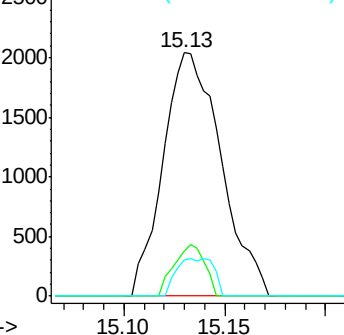
128 100

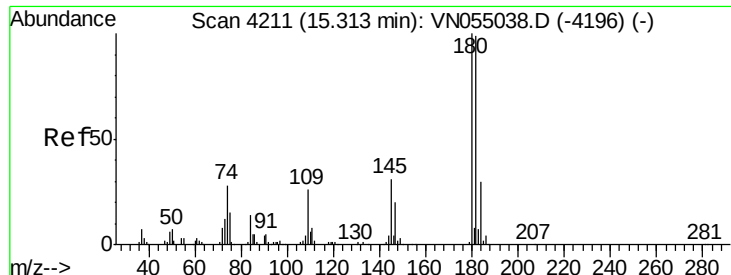
127 11.3 10.1 15.1

129 10.0 8.8 13.2



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

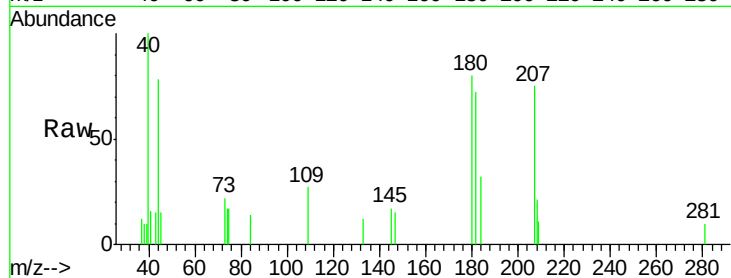




#96
 1,2,3-Trichlorobenzene
 Concen: 1.220 ug/l
 RT: 15.31 min Scan# 4211
 Delta R.T. 0.00 min
 Lab File: VN055118.D
 Acq: 18 Apr 2019 11:39

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
180	100		
182	89.8	48.0	144.0
145	22.5	15.3	45.9



Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.90 (144.60 to 145.60): V

