

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN020619\
 Data File : VN053639.D
 Acq On : 6 Feb 2019 17:10
 Operator : JC/SP
 Sample : K1379-02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 17 Sample Multiplier: 28

Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

Quant Time: Feb 07 03:44:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N013019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Feb 01 09:11:52 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	796312	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1285092	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	1179974	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	510146	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.03	65	412426	51.63	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.26%	
35) Dibromofluoromethane	7.59	113	403787	49.73	ug/l	0.00
Spiked Amount	50.000		Recovery	=	99.46%	
50) Toluene-d8	10.09	98	1553927	50.97	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.94%	
62) 4-Bromofluorobenzene	12.40	95	524578	51.59	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.18%	

Target Compounds

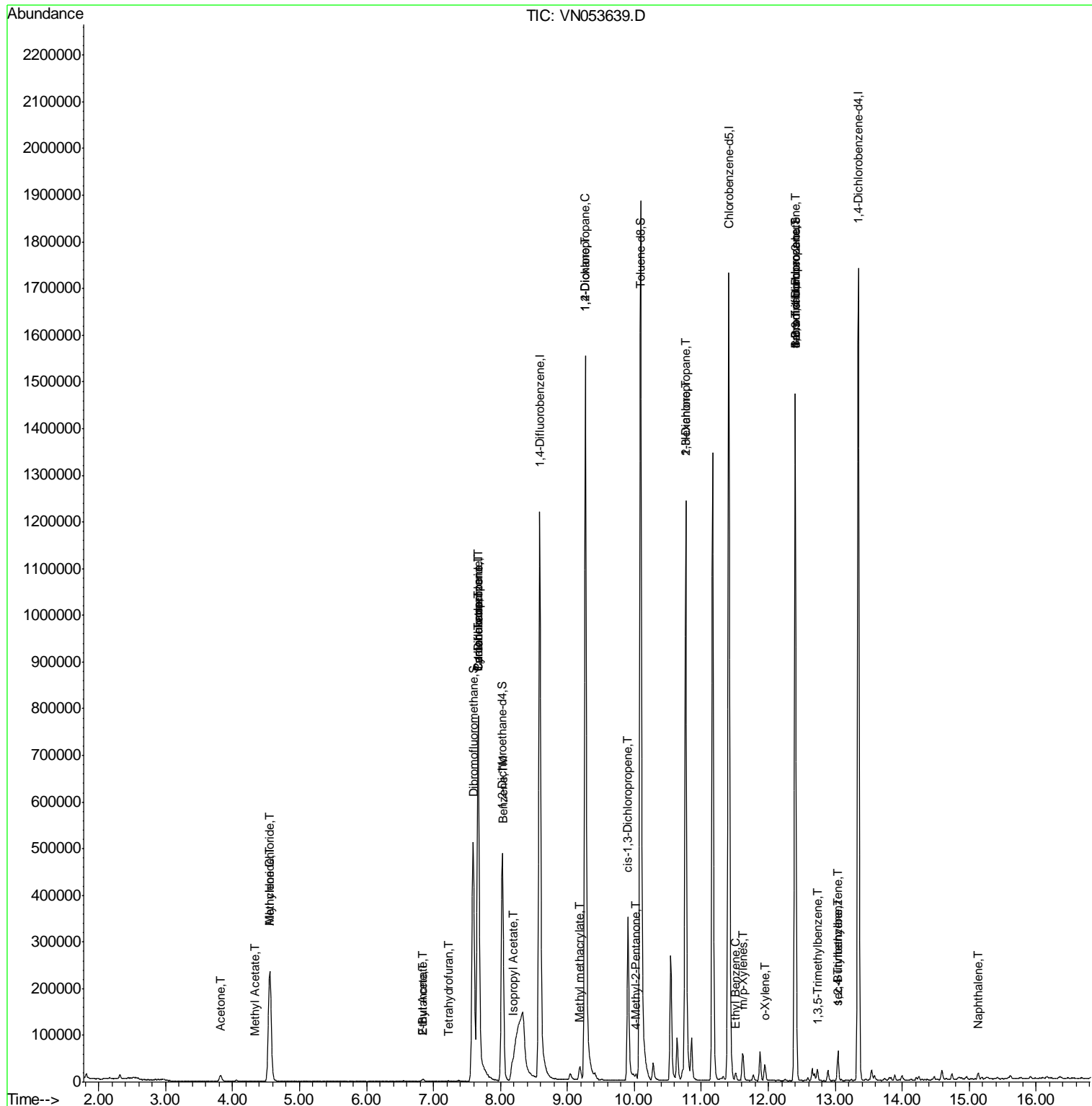
						Qvalue
14) Allyl chloride	4.56	41	6831	0.582	ug/l #	27
16) Acetone	3.82	43	23048	11.248	ug/l	96
18) Methyl Acetate	4.33	43	3676	0.606	ug/l #	80
20) Methylene Chloride	4.55	84	188945	21.979	ug/l	98
25) 2-Butanone	6.85	43	6622	2.266	ug/l	90
29) Tetrahydrofuran	7.23	42	1275	0.679	ug/l #	72
31) Cyclohexane	7.66	56	11323	0.671	ug/l #	1
36) 1,1-Dichloropropene	7.67	75	47056	4.062	ug/l #	48
37) Ethyl Acetate	6.85	43	6622	1.024	ug/l #	67
38) Carbon Tetrachloride	7.67	117	65802	5.639	ug/l #	16
40) Benzene	8.04	78	7661	0.214	ug/l	96
43) Isopropyl Acetate	8.18	43	38587	3.088	ug/l #	79
45) 1,2-Dichloropropane	9.27	63	2049	0.224	ug/l #	43
48) Methyl methacrylate	9.18	41	11260	1.888	ug/l #	12
49) 1,4-Dioxane	9.26	88	149	40.755	ug/l #	1
51) 4-Methyl-2-Pentanone	10.02	43	9226	1.503	ug/l #	34
54) cis-1,3-Dichloropropene	9.90	75	75389	5.548	ug/l #	60
57) 1,3-Dichloropropane	10.76	76	14783	1.132	ug/l #	43
59) 2-Hexanone	10.77	43	188744	45.282	ug/l #	50
67) Ethyl Benzene	11.51	91	12594	0.306	ug/l	98
68) m/p-Xylenes	11.62	106	20776	1.322	ug/l	98
69) o-Xylene	11.95	106	8642	0.569	ug/l	99
71) Bromoform	12.40	173	3326	0.554	ug/l #	1
76) 1,2,3-Trichloropropane	12.40	75	242058	36.941	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.73	105	12046	0.405	ug/l	100
81) trans-1,4-Dichloro-2-buten	12.40	75	242058	103.876	ug/l #	15
84) 1,2,4-Trimethylbenzene	13.04	105	37959	1.253	ug/l	99
85) sec-Butylbenzene	13.04	105	37959	1.061	ug/l #	56
95) Naphthalene	15.13	128	12056	2.256	ug/l	99

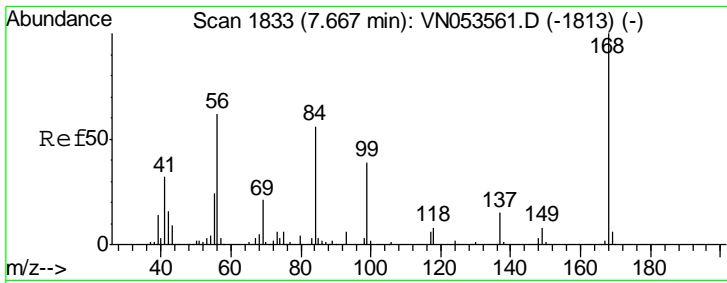
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN020619\
 Data File : VN053639.D
 Acq On : 6 Feb 2019 17:10
 Operator : JC/SP
 Sample : K1379-02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 17 Sample Multiplier: 28

Instrument :
 MSVOA_N
 Client Sampled :
 HR-6A

Quant Time: Feb 07 03:44:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N013019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Feb 01 09:11:52 2019
 Response via : Initial Calibration

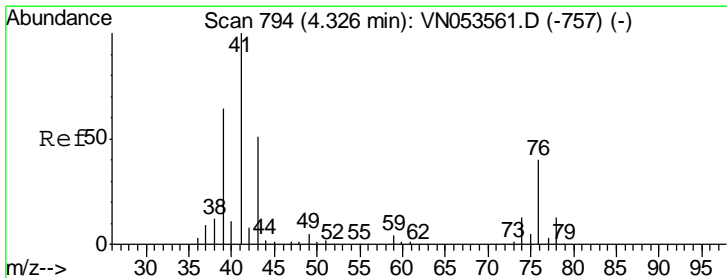
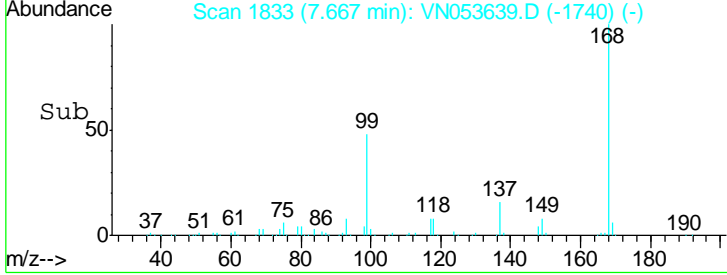
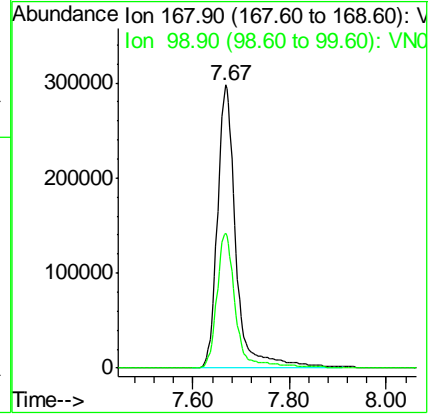
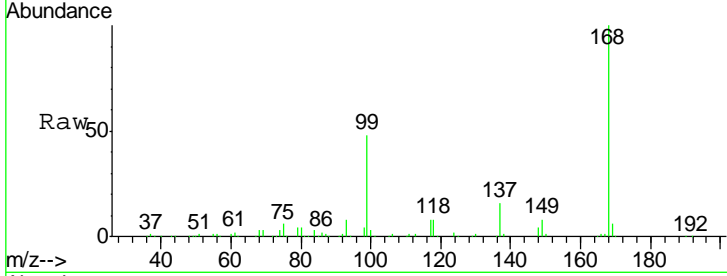




#1
 Pentafluorobenzene
 Concen: 50.000 ug/l
 RT: 7.67 min Scan# 1833
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

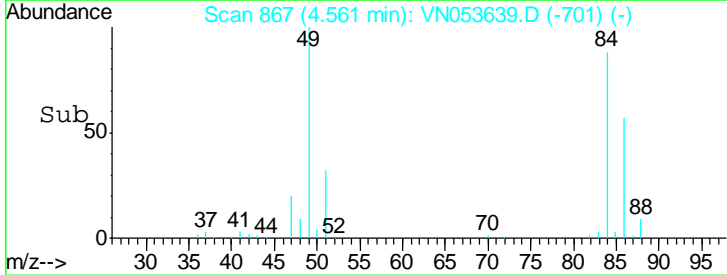
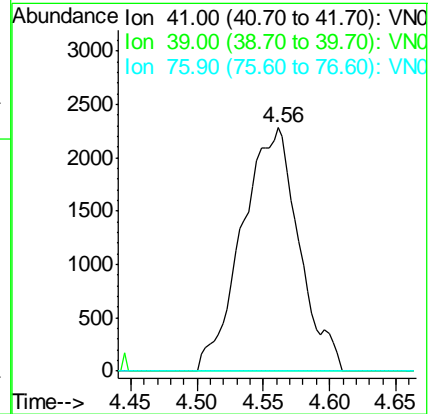
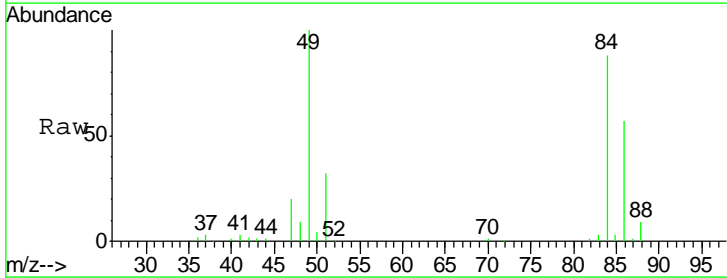
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

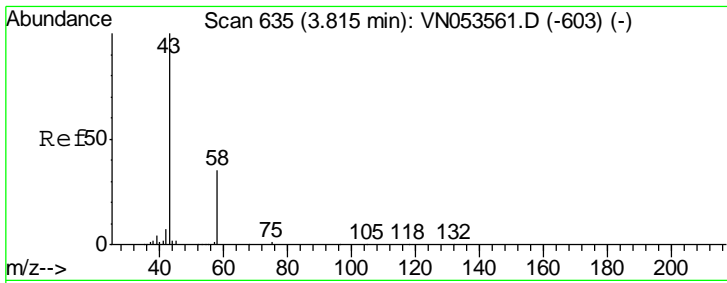
Tgt Ion	Resp	Lower	Upper
168	100		
99	47.8	39.1	58.7



#14
 Allyl chloride
 Concen: 0.582 ug/l
 RT: 4.56 min Scan# 867
 Delta R.T. 0.23 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
41	100		
39	0.0	48.9	73.3#
76	0.0	29.4	44.2#

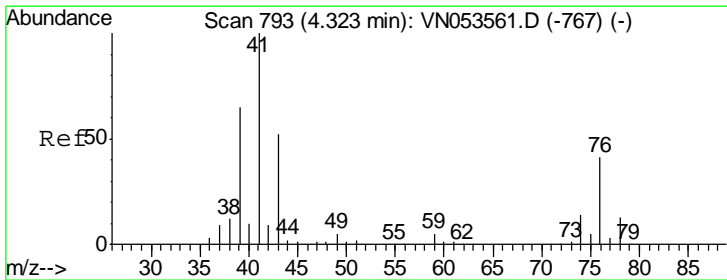
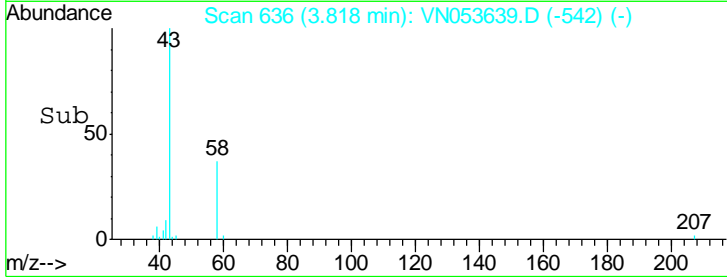
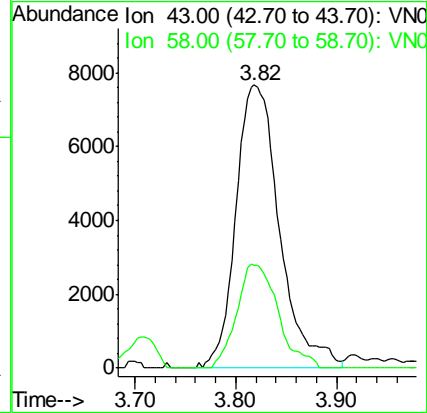
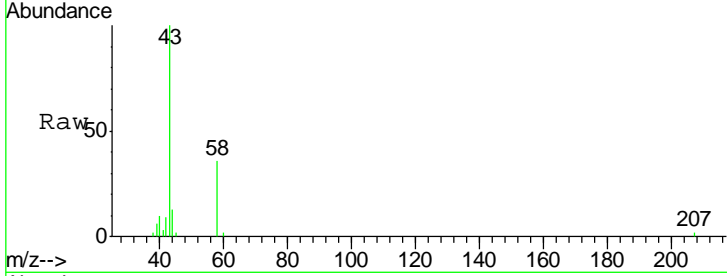




#16
 Acetone
 Concen: 11.248 ug/l
 RT: 3.82 min Scan# 636
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

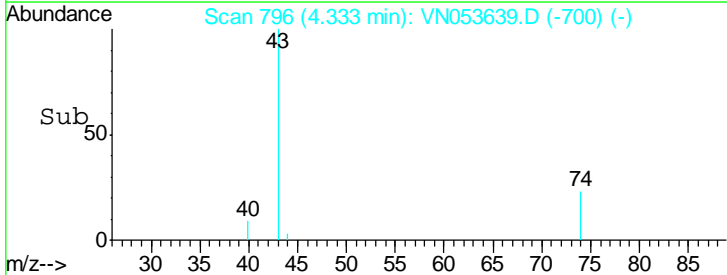
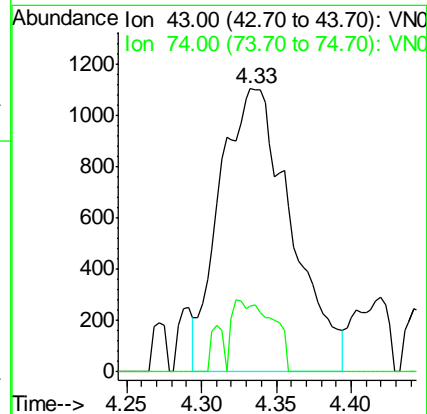
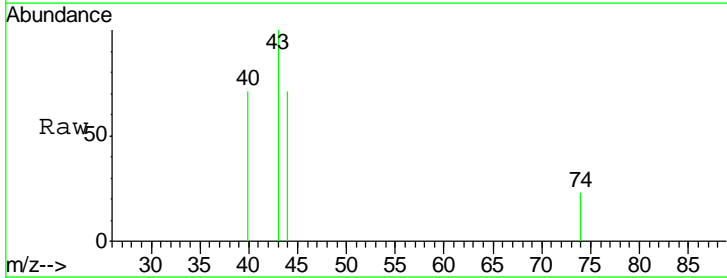
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

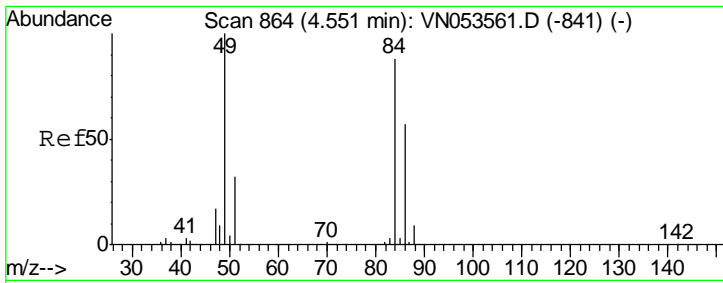
Tgt Ion: 43 Resp: 23048
 Ion Ratio Lower Upper
 43 100
 58 36.4 27.1 40.7



#18
 Methyl Acetate
 Concen: 0.606 ug/l
 RT: 4.33 min Scan# 796
 Delta R.T. 0.01 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 43 Resp: 3676
 Ion Ratio Lower Upper
 43 100
 74 14.4 19.4 29.2#

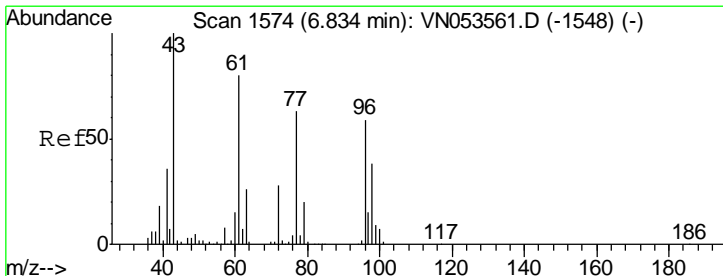
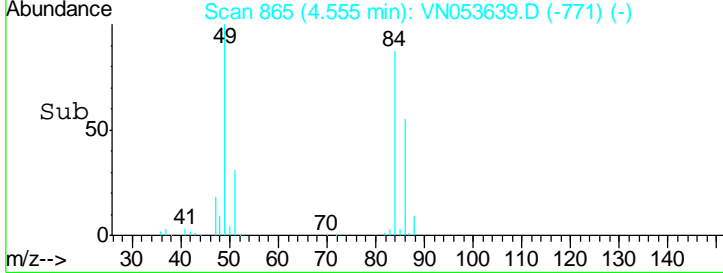
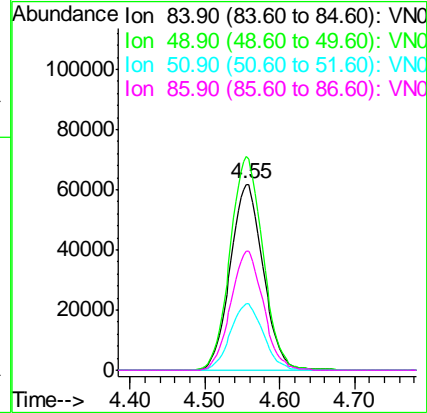
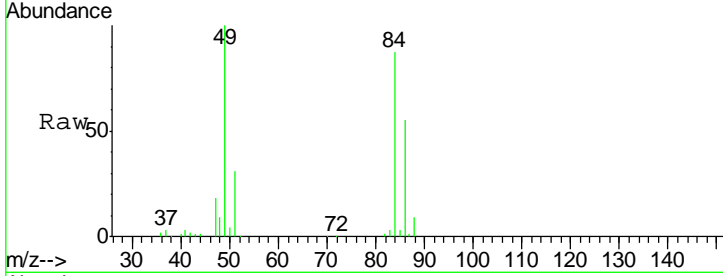




#20
 Methylene Chloride
 Concen: 21.979 ug/l
 RT: 4.55 min Scan# 865
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

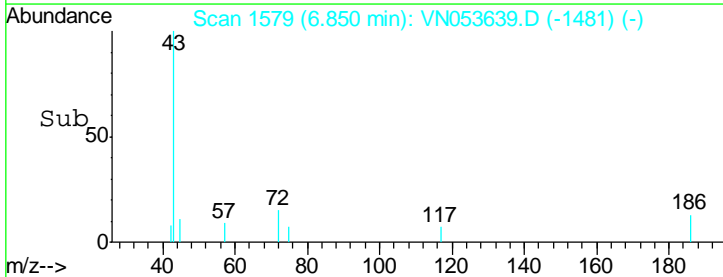
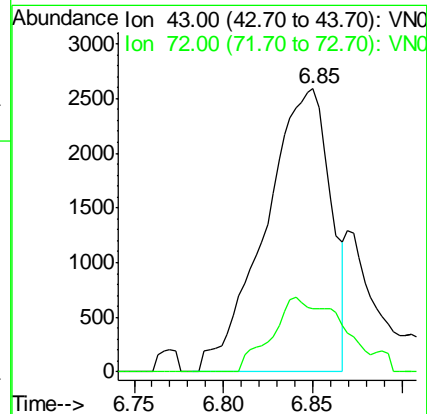
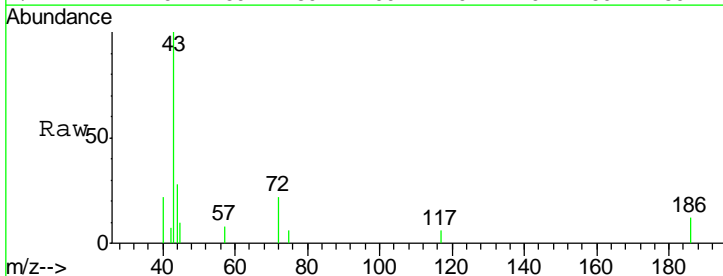
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

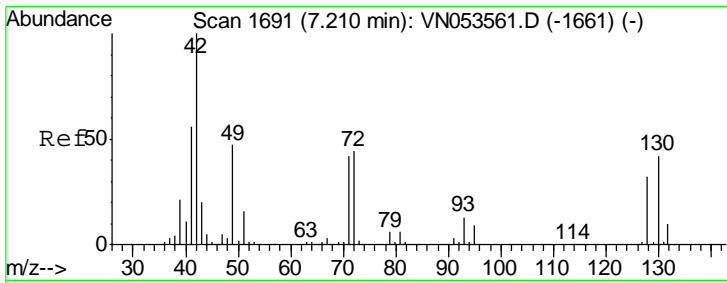
Tgt Ion	Resp	Lower	Upper
84	188945		
49	114.7	94.3	141.5
51	35.5	29.4	44.2
86	63.6	51.4	77.0



#25
 2-Butanone
 Concen: 2.266 ug/l
 RT: 6.85 min Scan# 1579
 Delta R.T. 0.02 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
43	6622		
72	22.4	22.0	33.0



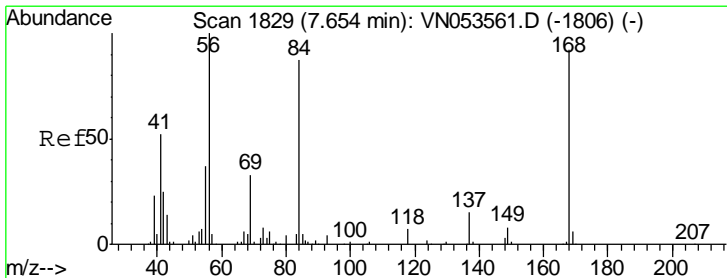
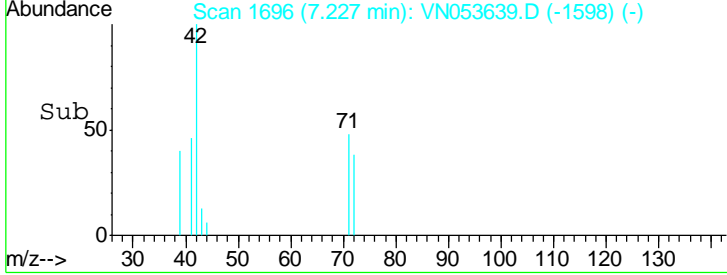
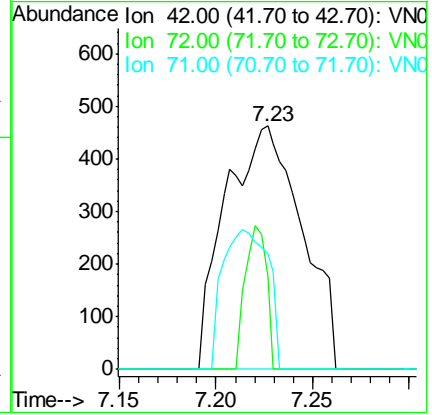
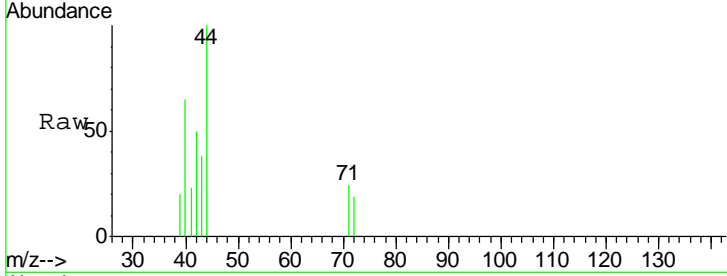


#29
 Tetrahydrofuran
 Concen: 0.679 ug/l
 RT: 7.23 min Scan# 1696
 Delta R.T. 0.02 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

Tgt Ion: 42 Resp: 1275

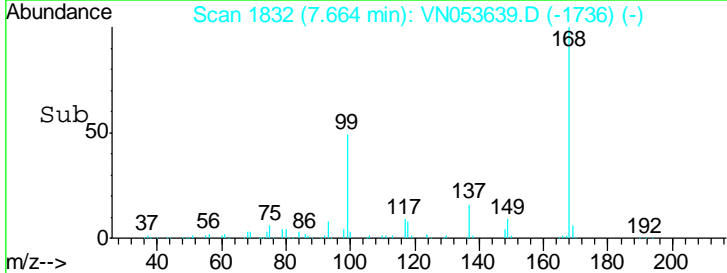
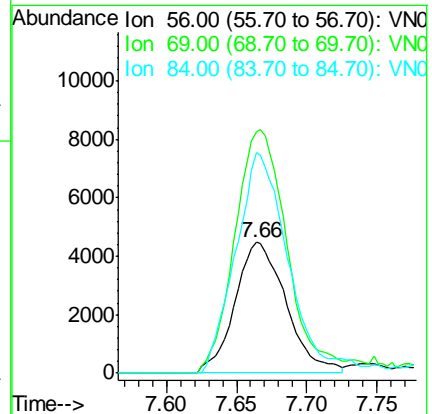
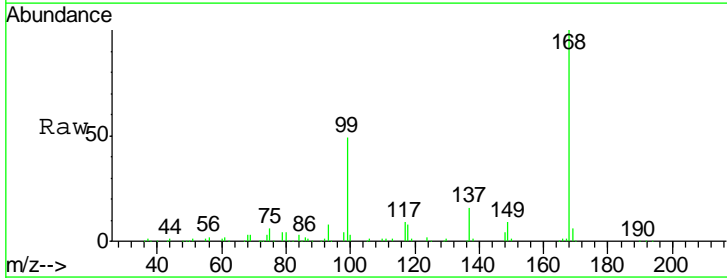
Ion	Ratio	Lower	Upper
42	100		
72	16.2	35.2	52.8#
71	34.4	33.0	49.4

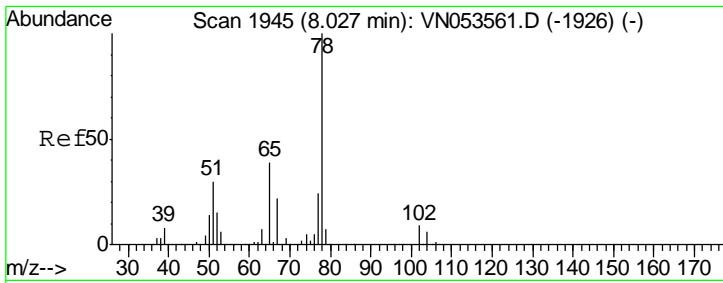


#31
 Cyclohexane
 Concen: 0.671 ug/l
 RT: 7.66 min Scan# 1832
 Delta R.T. 0.01 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 56 Resp: 11323

Ion	Ratio	Lower	Upper
56	100		
69	185.2	26.4	39.6#
84	168.6	67.9	101.9#

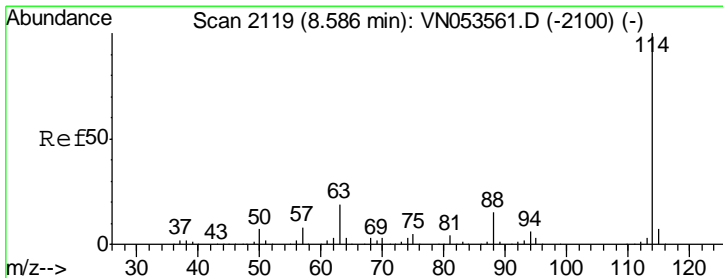
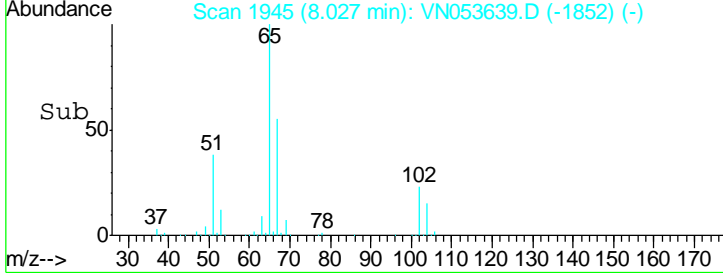
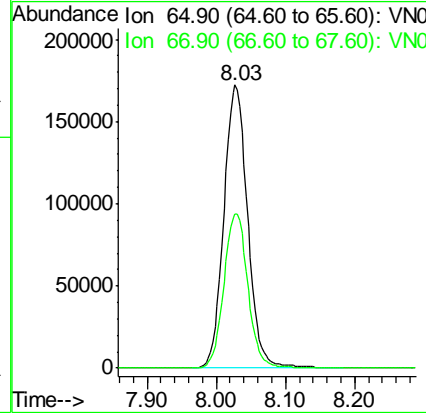
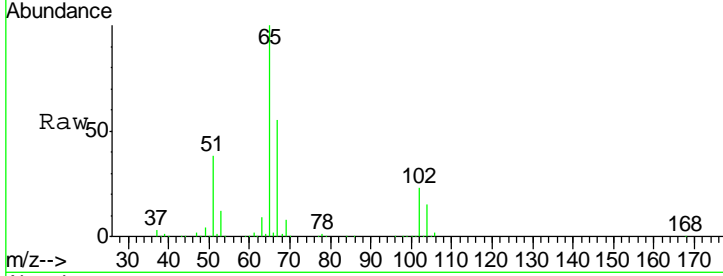




#33
 1,2-Dichloroethane-d4
 Concen: N.D. ug/l
 RT: 8.03 min Scan# 1945
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

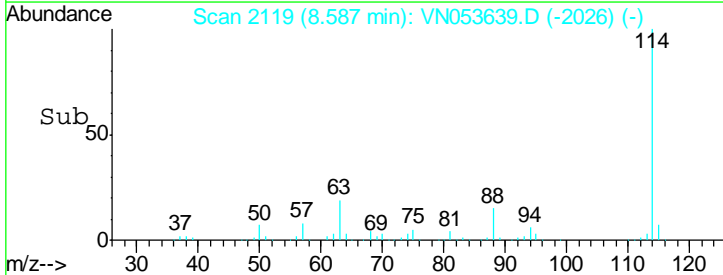
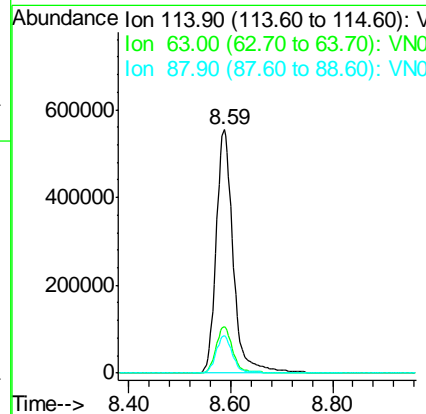
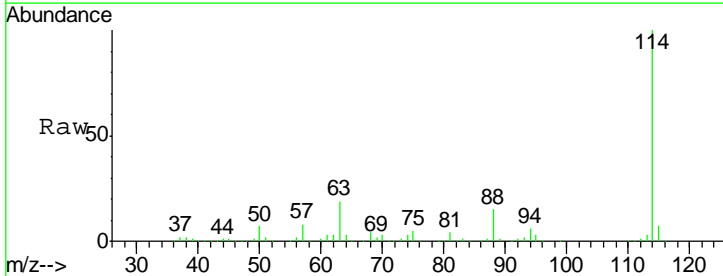
Instrument :
 MSVOA_N
ClientSampled :
 HR-6A

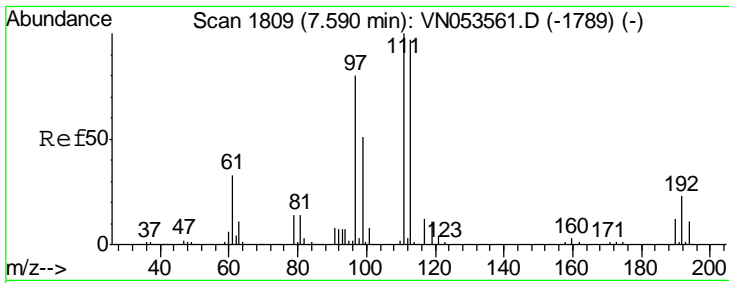
Tgt Ion	Resp	Lower	Upper
65	412426		
67	55.1	0.0	111.2



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
114	1285092		
63	19.0	0.0	38.6
88	15.2	0.0	30.4

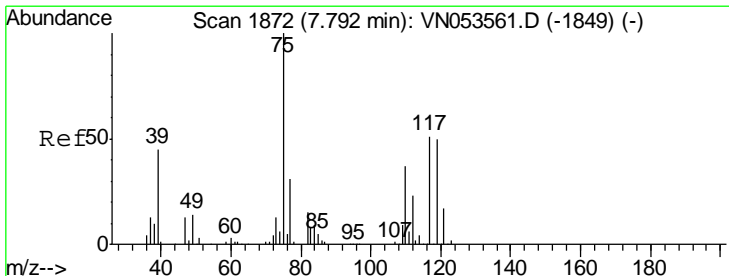
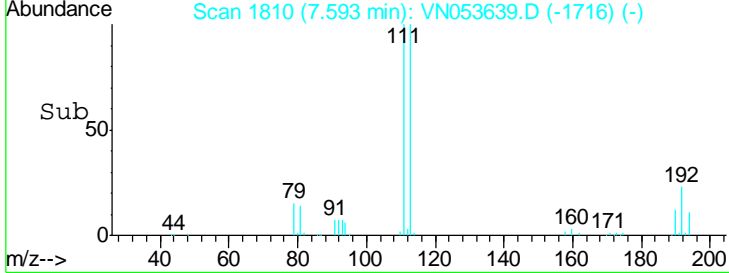
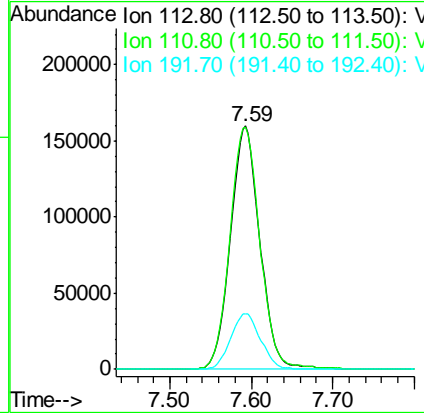
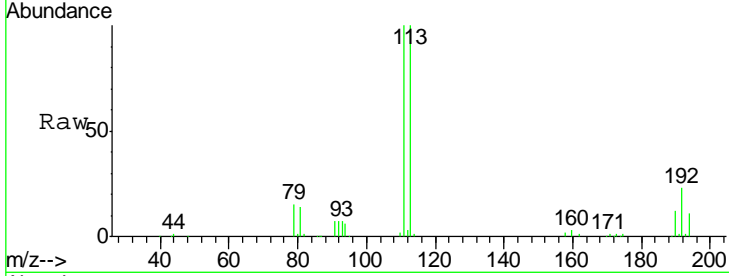




#35
 Dibromofluoromethane
 Concen: 50.000 ug/l
 RT: 7.59 min Scan# 1810
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

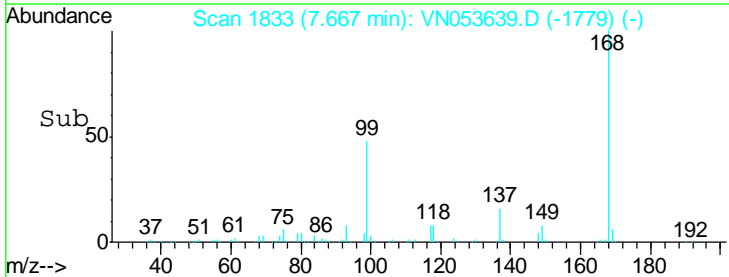
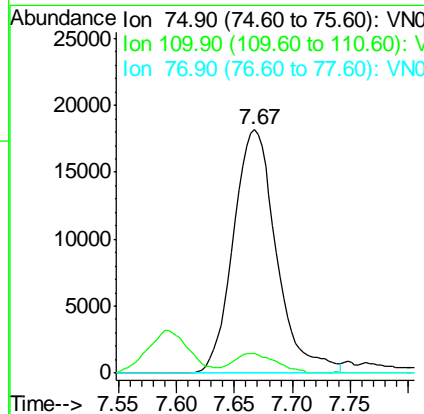
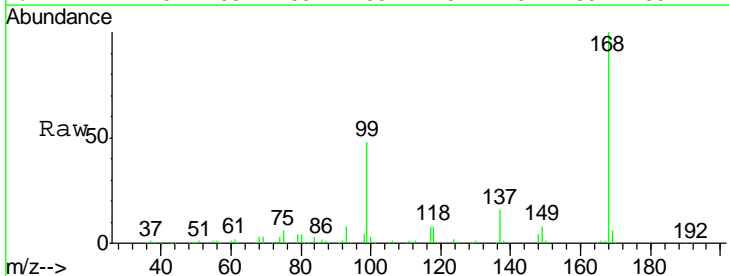
Instrument : MSVOA_N
 ClientSampled : HR-6A

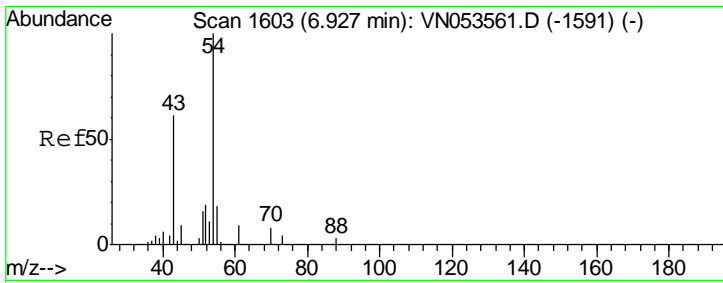
Tgt Ion	Resp	Lower	Upper
113	403787		
111	101.8	81.1	121.7
192	23.3	18.2	27.2



#36
 1,1-Dichloropropene
 Concen: 4.062 ug/l
 RT: 7.67 min Scan# 1833
 Delta R.T. -0.13 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
75	47056		
110	7.8	18.1	54.3#
77	0.0	25.1	37.7#

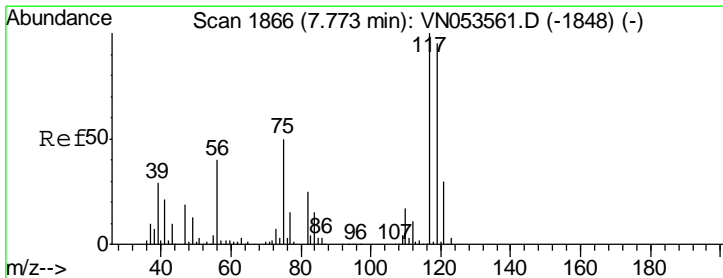
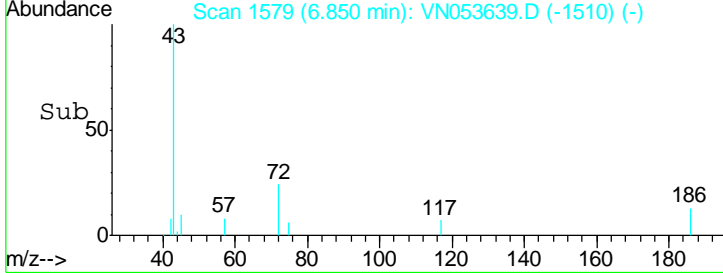
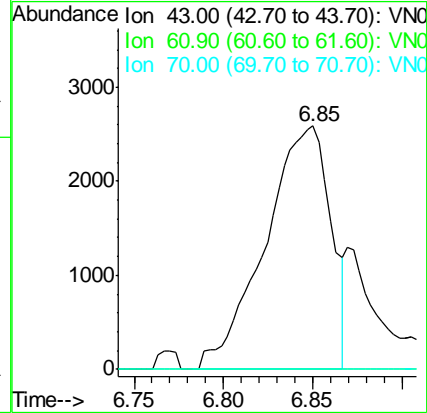
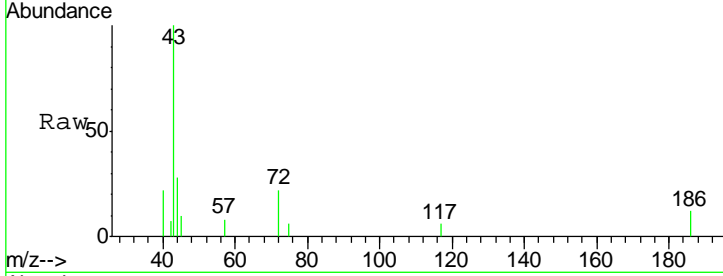




#37
Ethyl Acetate
Concen: 1.024 ug/l
RT: 6.85 min Scan# 1579
Delta R.T. -0.08 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

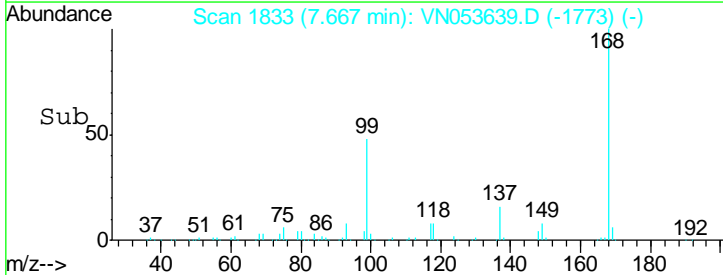
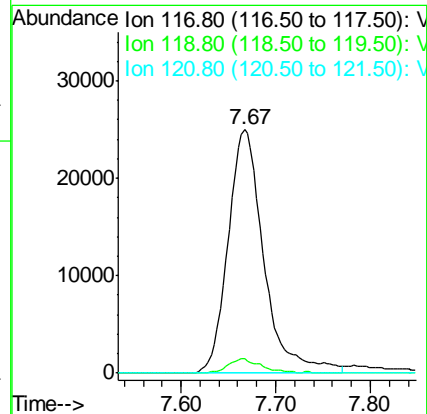
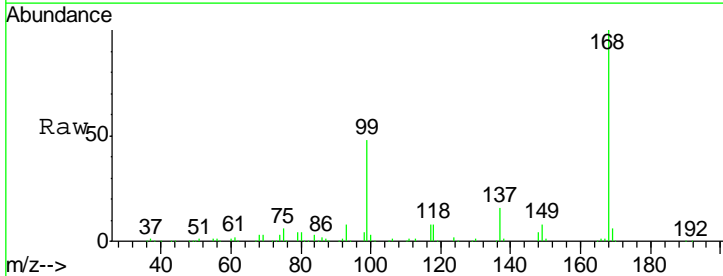
Instrument :
MSVOA_N
ClientSampled :
HR-6A

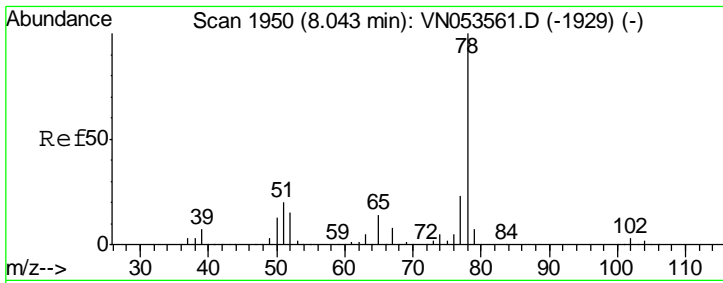
Tgt Ion	Resp	Lower	Upper
43	100		
61	0.0	11.8	17.6#
70	0.0	8.6	12.8#



#38
Carbon Tetrachloride
Concen: 5.639 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. -0.11 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
117	100		
119	5.9	77.2	115.8#
121	0.0	24.6	37.0#

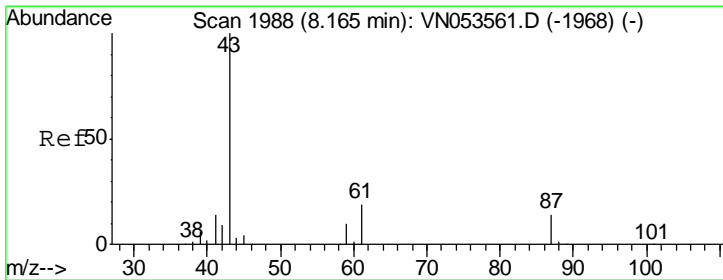
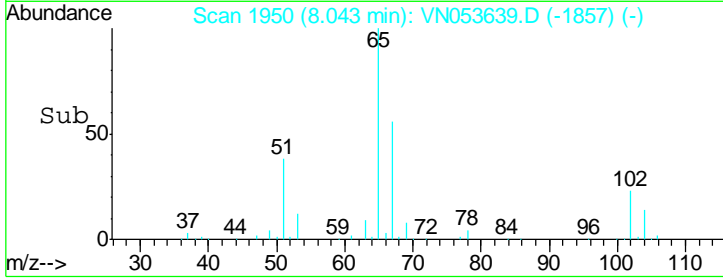
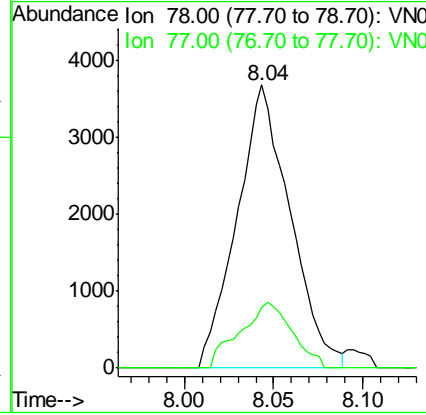
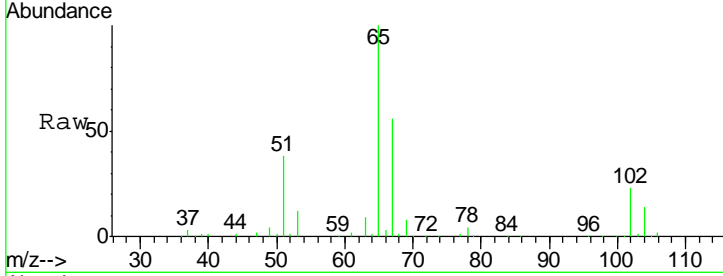




#40
Benzene
Concen: 0.214 ug/l
RT: 8.04 min Scan# 1950
Delta R.T. 0.00 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

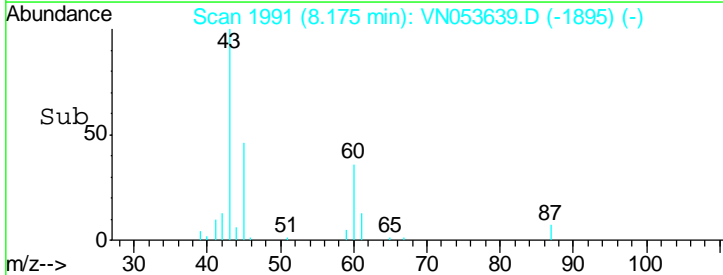
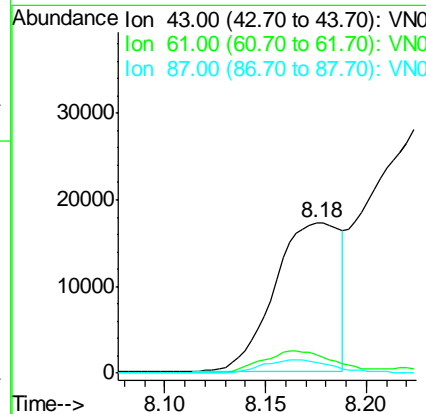
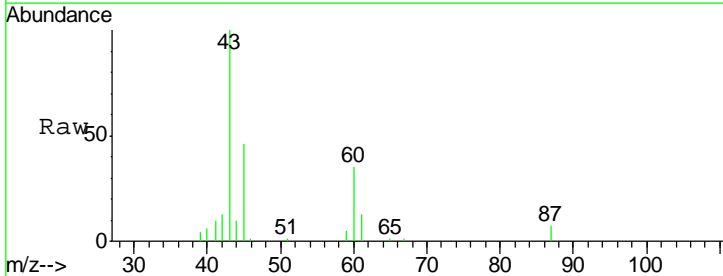
Instrument :
MSVOA_N
ClientSampled :
HR-6A

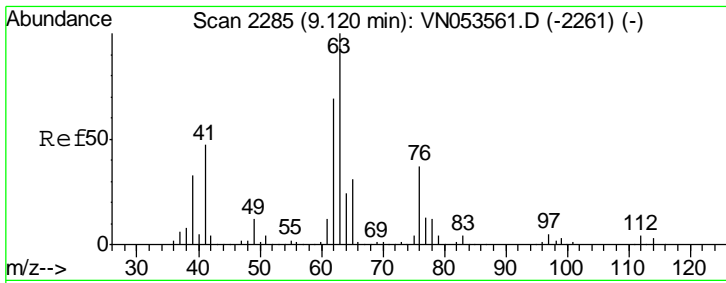
Tgt Ion	Resp	Lower	Upper
78	7661		
77	21.3	18.8	28.2



#43
Isopropyl Acetate
Concen: 3.088 ug/l
RT: 8.18 min Scan# 1991
Delta R.T. 0.01 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
43	38587		
61	16.2	23.9	35.9#
87	9.6	11.0	16.6#

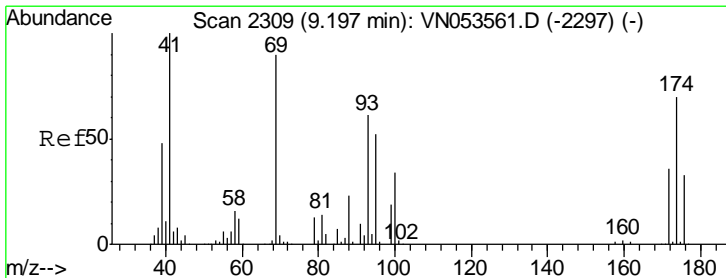
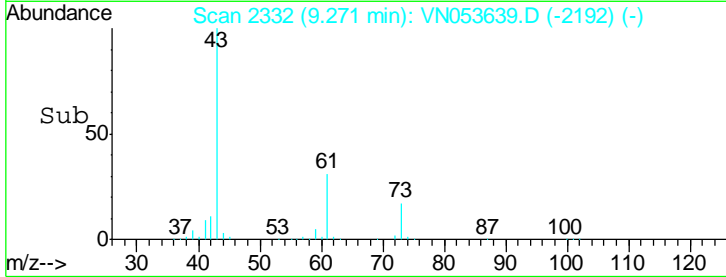
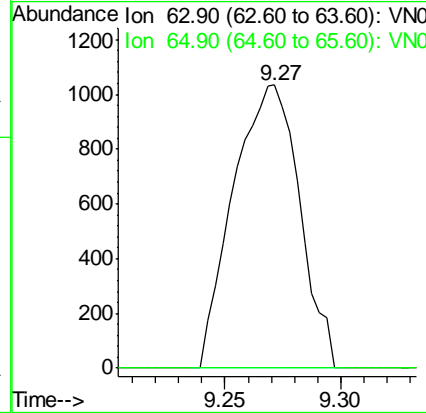
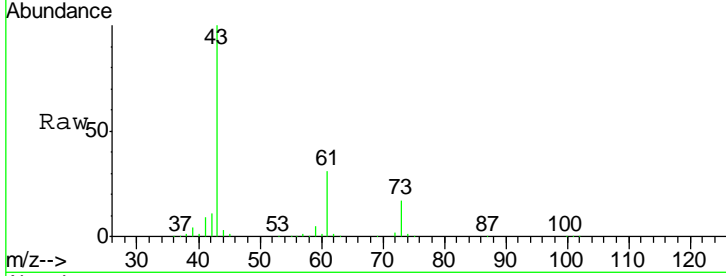




#45
 1,2-Dichloropropane
 Concen: 0.224 ug/l
 RT: 9.27 min Scan# 2332
 Delta R.T. 0.15 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

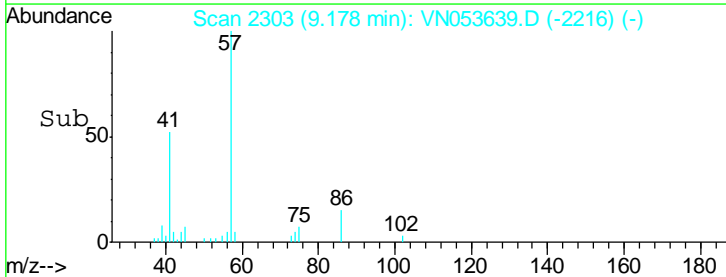
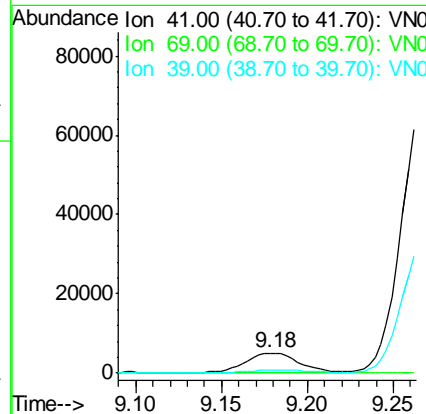
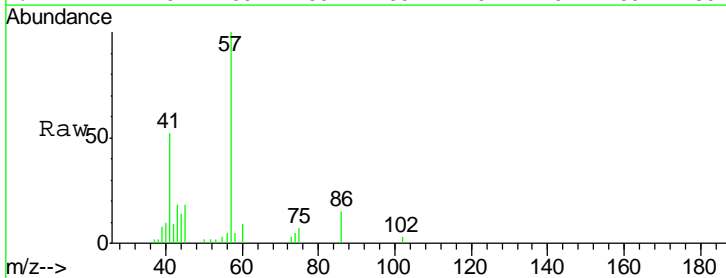
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

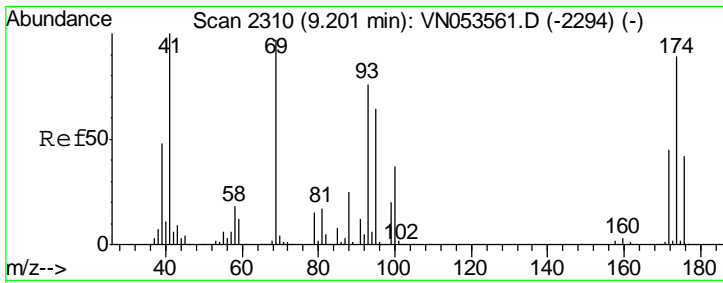
Tgt Ion: 63 Resp: 2049
 Ion Ratio Lower Upper
 63 100
 65 0.0 25.0 37.4#



#48
 Methyl methacrylate
 Concen: 1.888 ug/l
 RT: 9.18 min Scan# 2303
 Delta R.T. -0.02 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 41 Resp: 11260
 Ion Ratio Lower Upper
 41 100
 69 0.0 73.8 110.6#
 39 0.0 40.0 60.0#

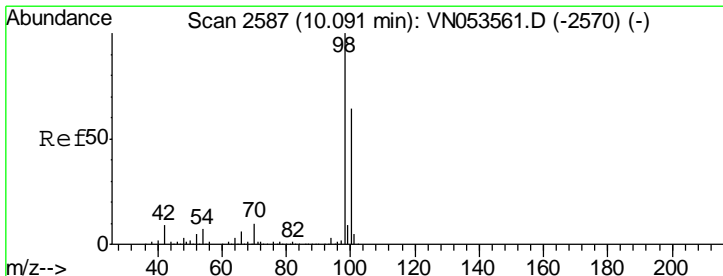
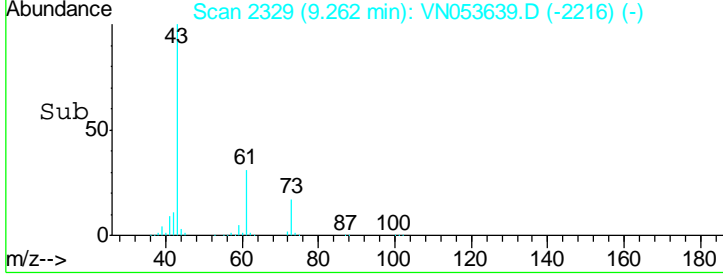
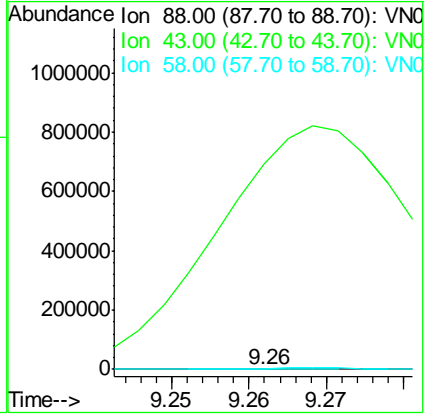
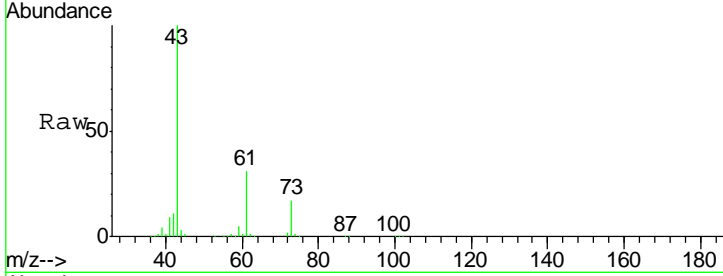




#49
 1,4-Dioxane
 Concen: 40.755 ug/l
 RT: 9.26 min Scan# 2329
 Delta R.T. 0.06 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

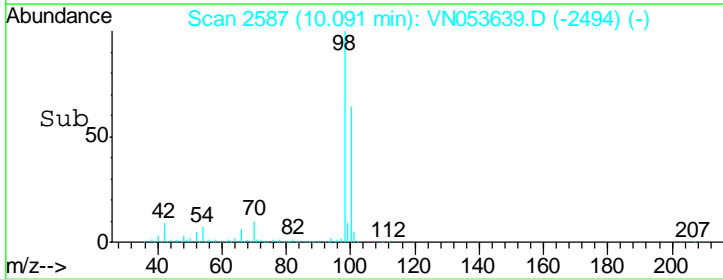
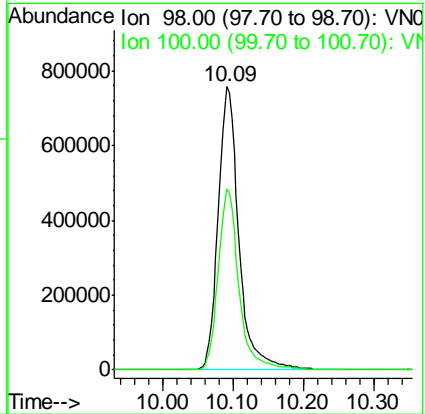
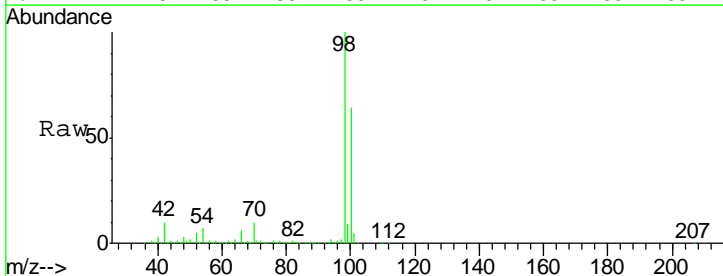
Tgt Ion	Resp	Lower	Upper
88	149		
43	1117477.2	27.8	41.6#
58	5048.3	56.5	84.7#

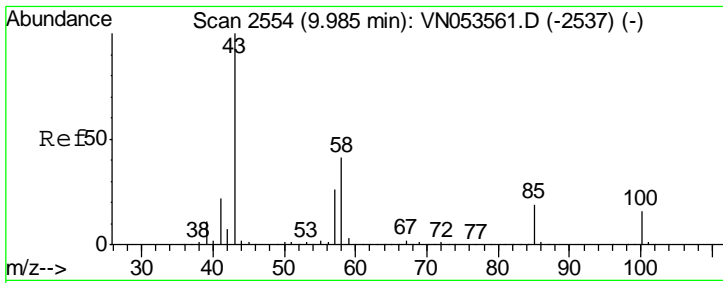
Instrument :
 MSVOA_N
ClientSampled :
 HR-6A



#50
 Toluene-d8
 Concen: 40.755 ug/l
 RT: 10.09 min Scan# 2587
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
98	1553927		
100	63.9	51.4	77.0

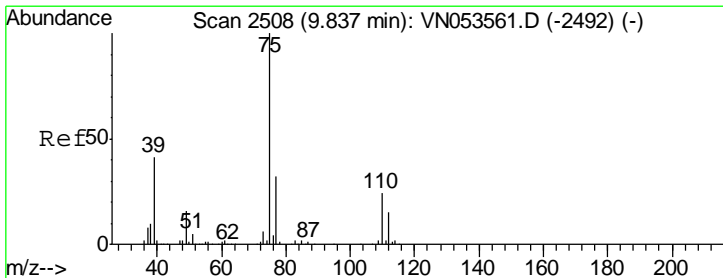
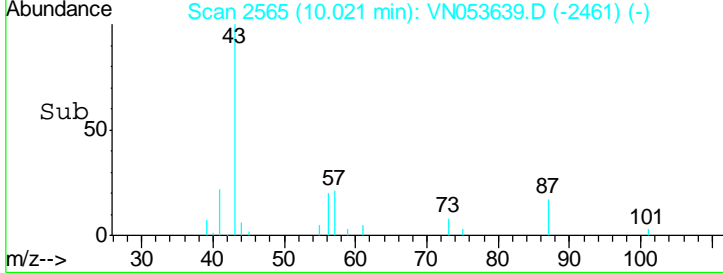
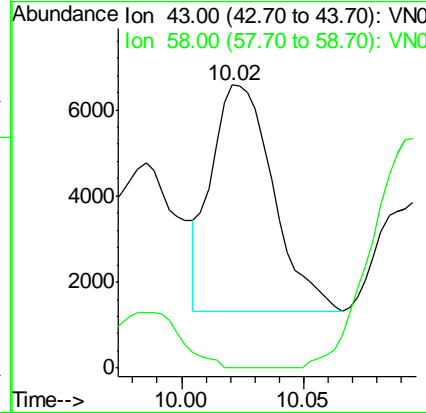
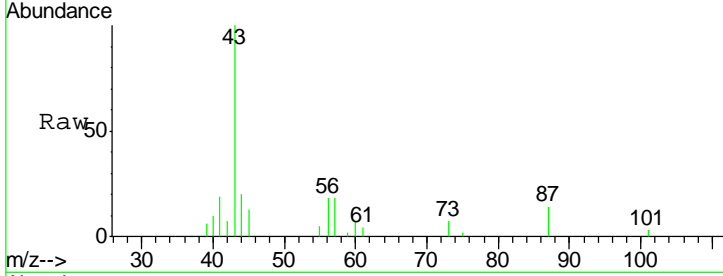




#51
 4-Methyl-2-Pentanone
 Concen: 1.503 ug/l
 RT: 10.02 min Scan# 2565
 Delta R.T. 0.04 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

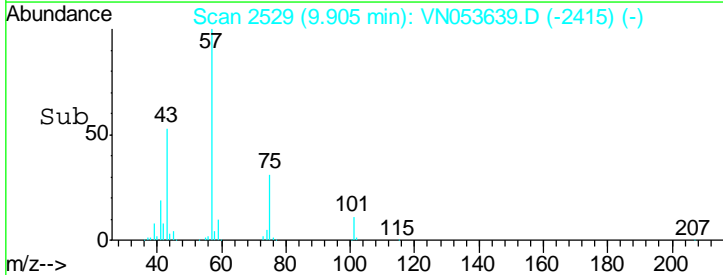
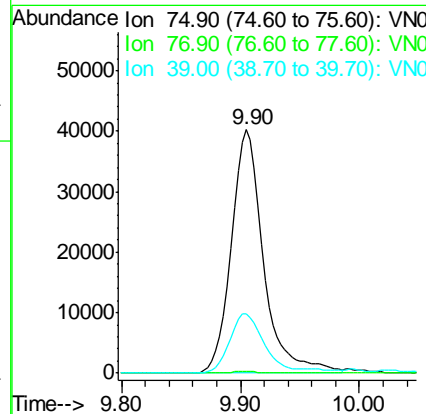
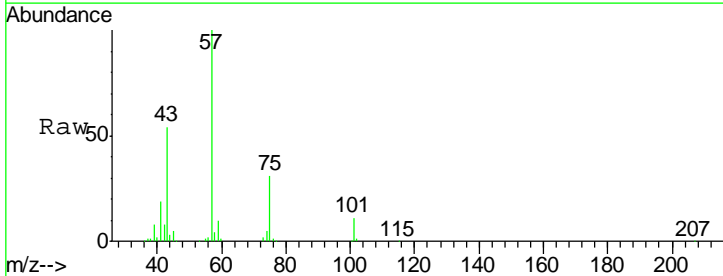
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

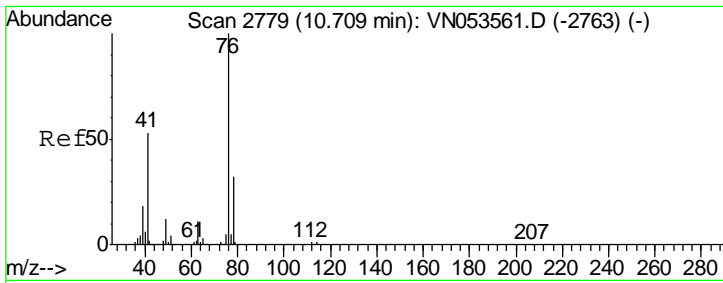
Tgt Ion	Resp	Lower	Upper
43	100		
58	0.0	32.8	49.2#



#54
 cis-1,3-Dichloropropene
 Concen: 5.548 ug/l
 RT: 9.90 min Scan# 2529
 Delta R.T. 0.07 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
75	100		
77	0.6	25.8	38.6#
39	24.5	33.4	50.0#

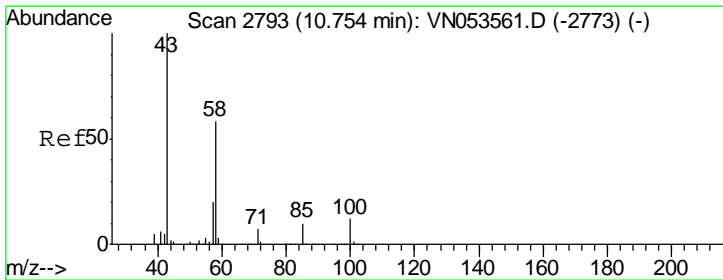
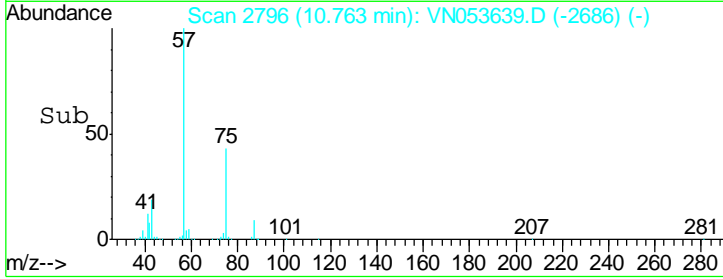
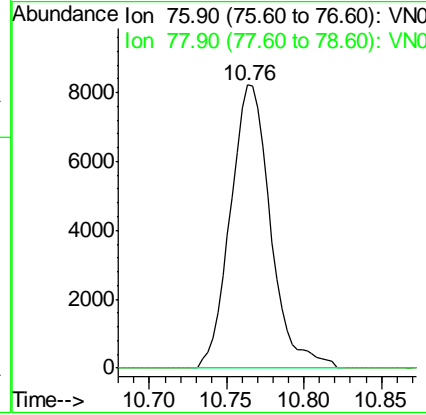
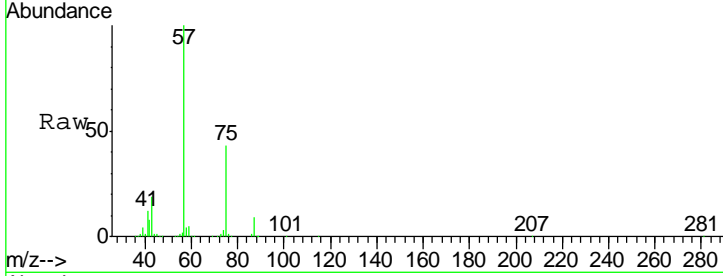




#57
 1,3-Dichloropropane
 Concen: 1.132 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.05 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

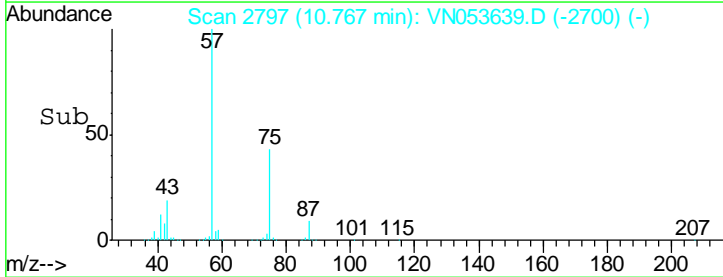
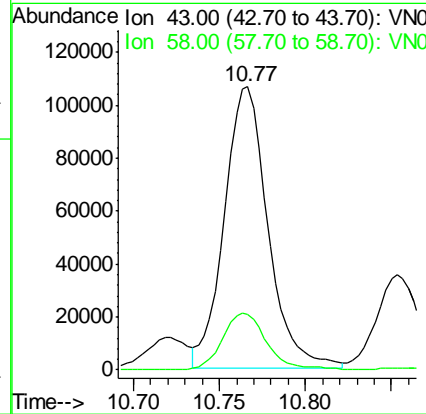
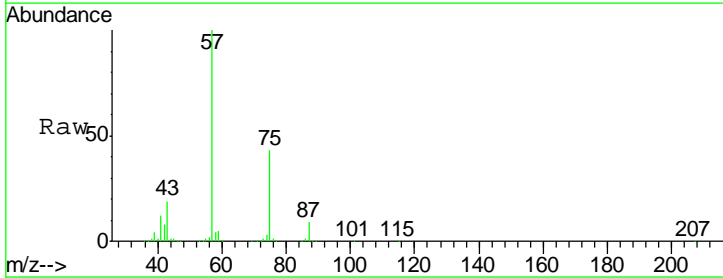
Instrument : MSVOA_N
 ClientSampled : HR-6A

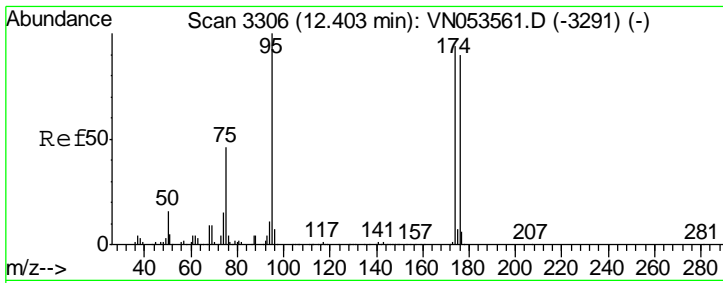
Tgt Ion: 76 Resp: 14783
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.6 38.4#



#59
 2-Hexanone
 Concen: 45.282 ug/l
 RT: 10.77 min Scan# 2797
 Delta R.T. 0.01 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 43 Resp: 188744
 Ion Ratio Lower Upper
 43 100
 58 20.5 28.6 85.8#

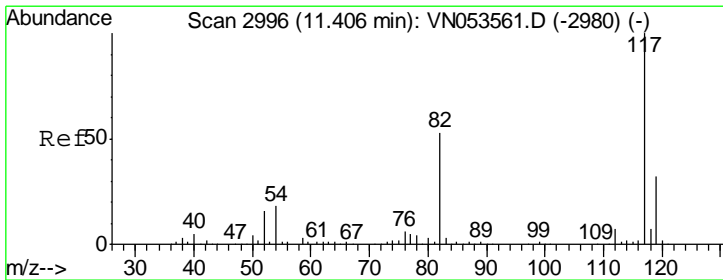
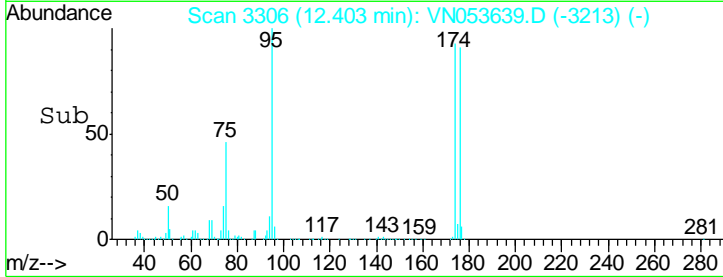
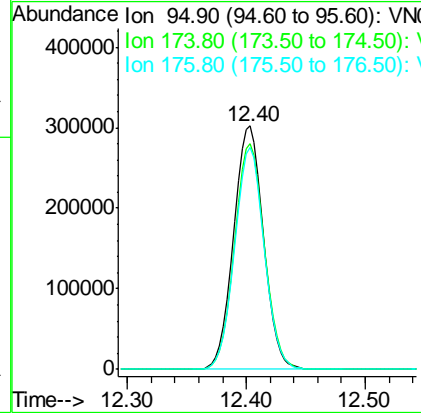
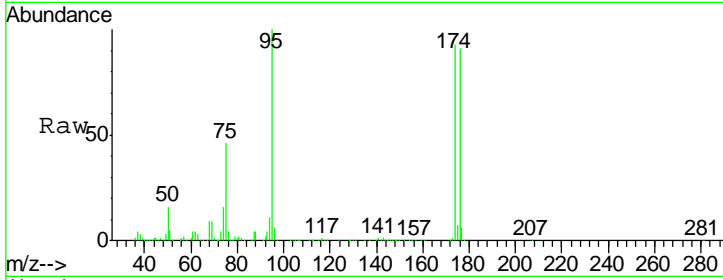




#62
 4-Bromofluorobenzene
 Concen: N.D. ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

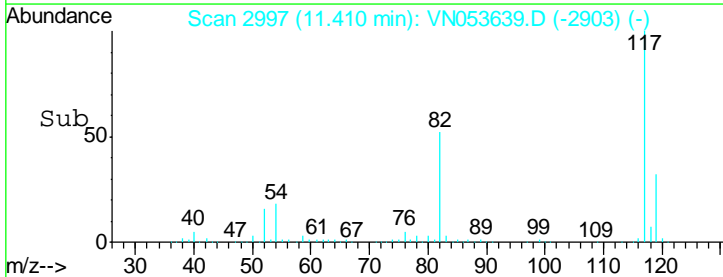
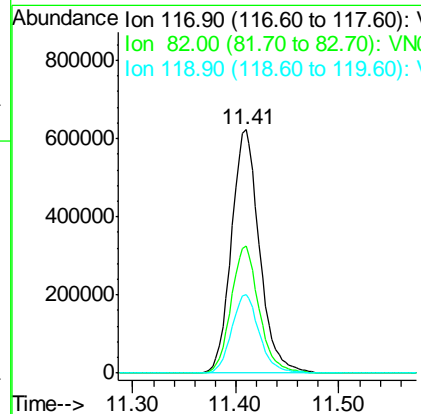
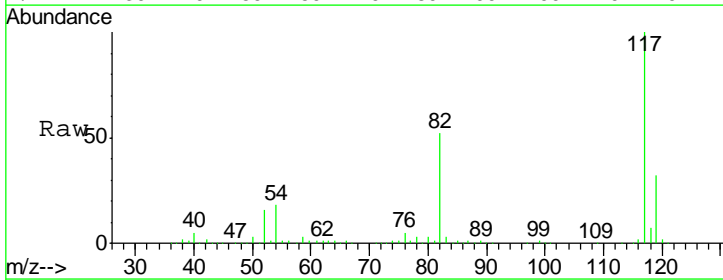
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

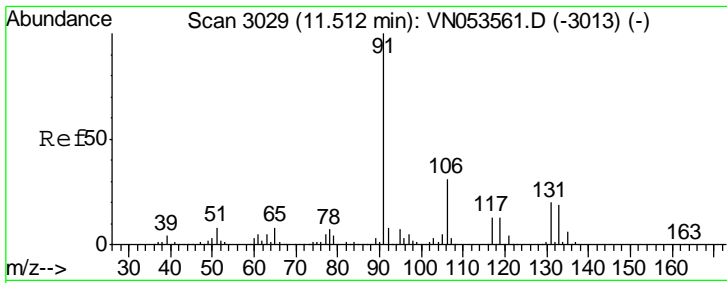
Tgt Ion	Resp	Lower	Upper
95	100		
174	92.9	0.0	183.2
176	90.0	0.0	177.4



#63
 Chlorobenzene-d5
 Concen: 50.000 ug/l
 RT: 11.41 min Scan# 2997
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
117	100		
82	52.0	42.9	64.3
119	32.4	26.0	39.0

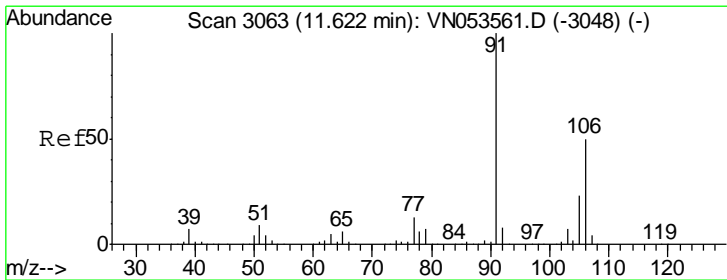
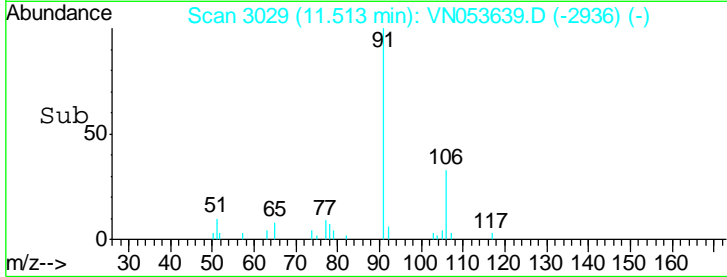
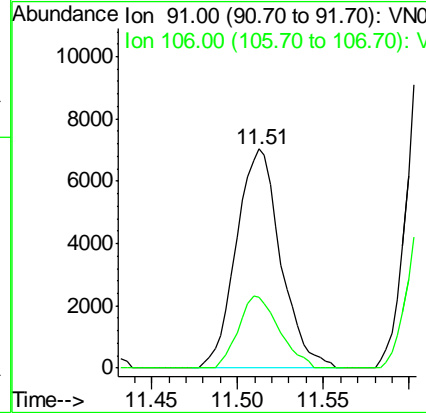
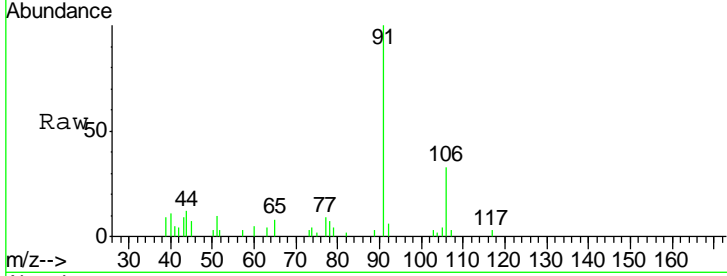




#67
Ethyl Benzene
Concen: 0.306 ug/l
RT: 11.51 min Scan# 3029
Delta R.T. 0.00 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

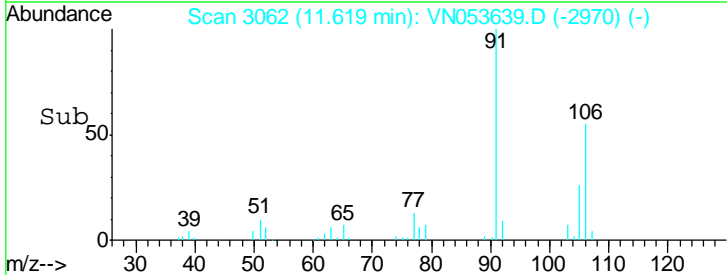
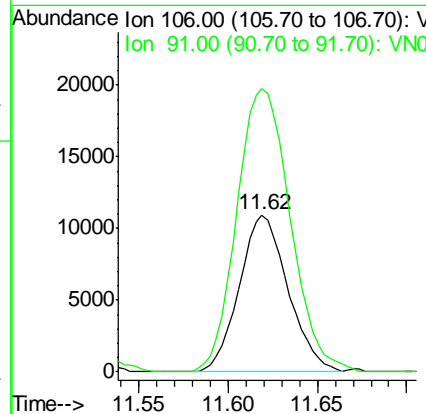
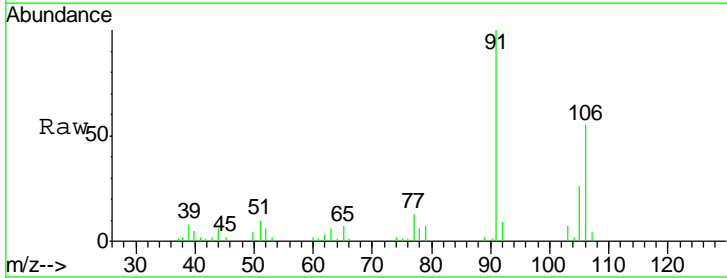
Instrument :
MSVOA_N
ClientSampled :
HR-6A

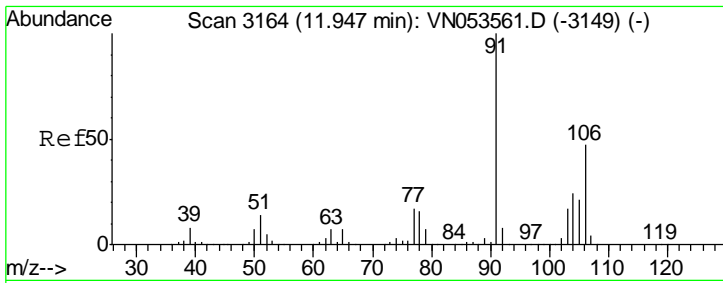
Tgt Ion: 91 Resp: 12594
Ion Ratio Lower Upper
91 100
106 32.6 25.0 37.6



#68
m/p-Xylenes
Concen: 1.322 ug/l
RT: 11.62 min Scan# 3062
Delta R.T. -0.00 min
Lab File: VN053639.D
Acq: 6 Feb 2019 17:10

Tgt Ion: 106 Resp: 20776
Ion Ratio Lower Upper
106 100
91 198.4 161.4 242.2

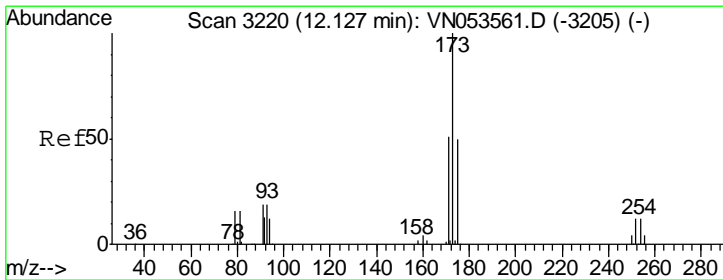
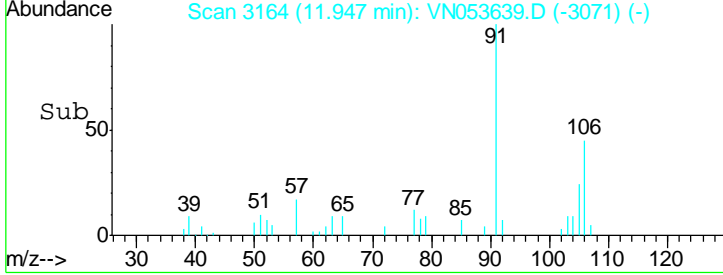
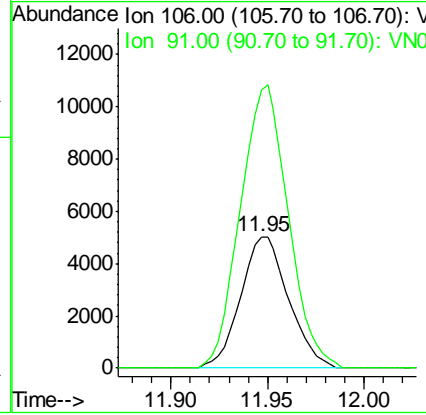
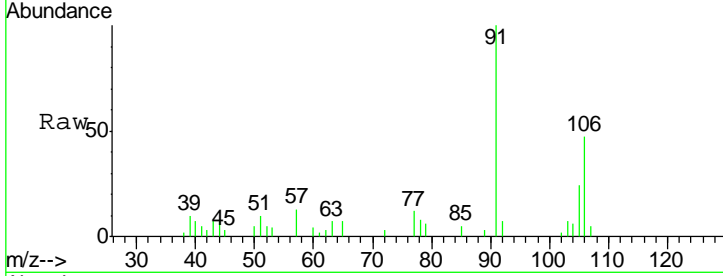




#69
 o-Xylene
 Concen: 0.569 ug/l
 RT: 11.95 min Scan# 3164
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

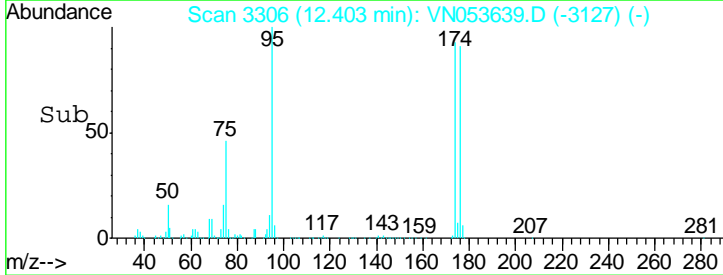
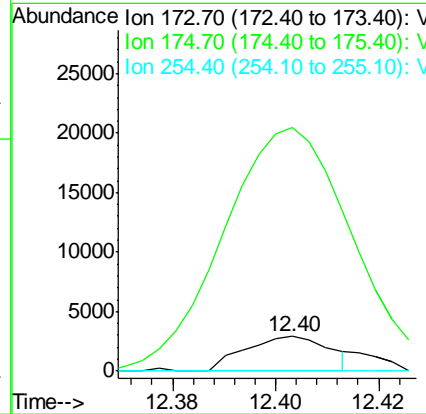
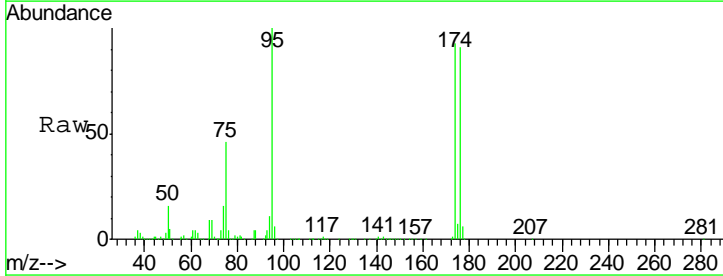
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

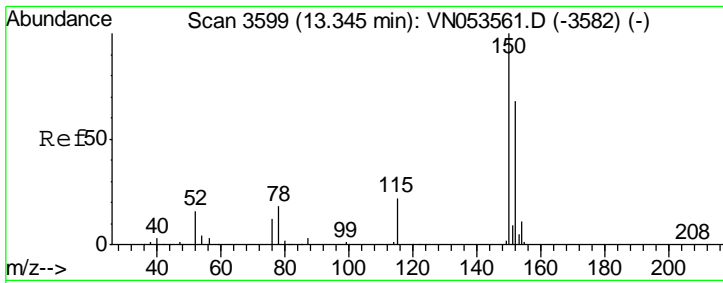
Tgt Ion:106 Resp: 8642
 Ion Ratio Lower Upper
 106 100
 91 215.5 106.9 320.8



#71
 Bromoform
 Concen: 0.554 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. 0.28 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion:173 Resp: 3326
 Ion Ratio Lower Upper
 173 100
 175 909.4 24.6 74.0#
 254 0.0 0.2 0.2#

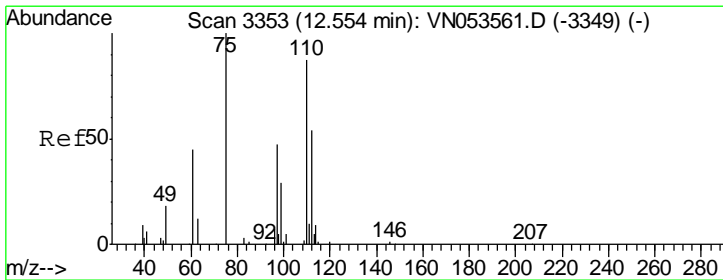
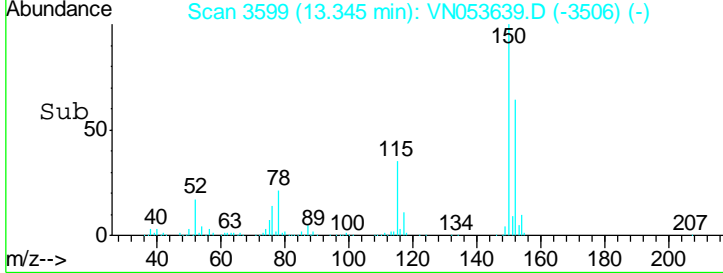
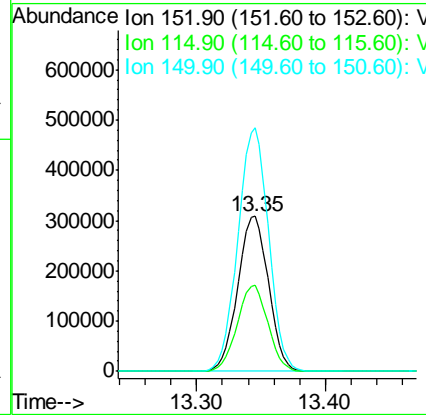
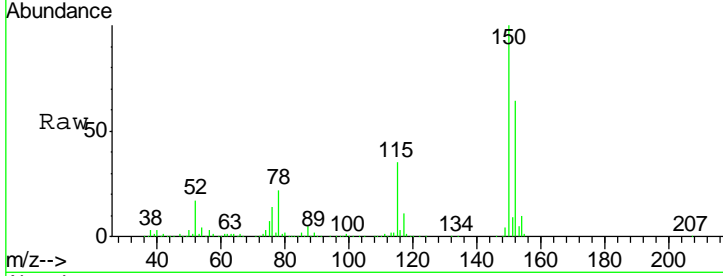




#72
 1,4-Dichlorobenzene-d4
 Concen: 50.000 ug/l
 RT: 13.35 min Scan# 3599
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

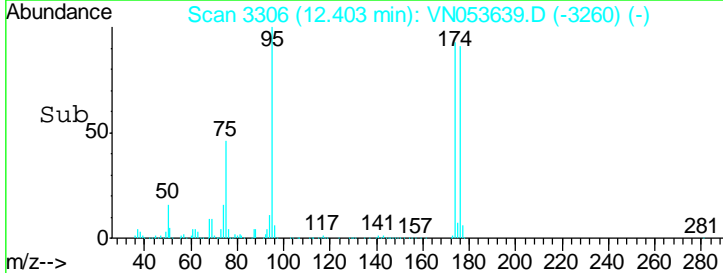
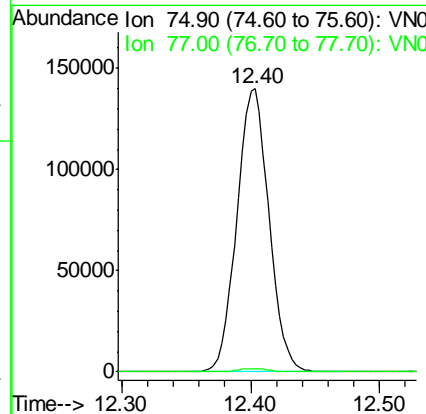
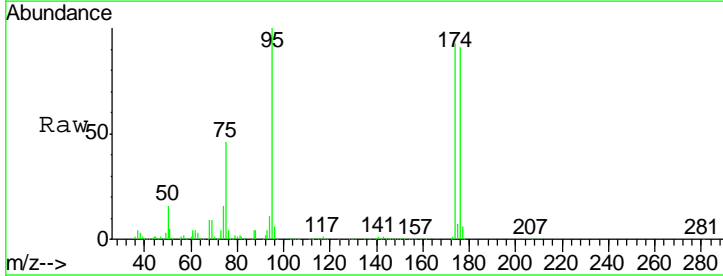
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

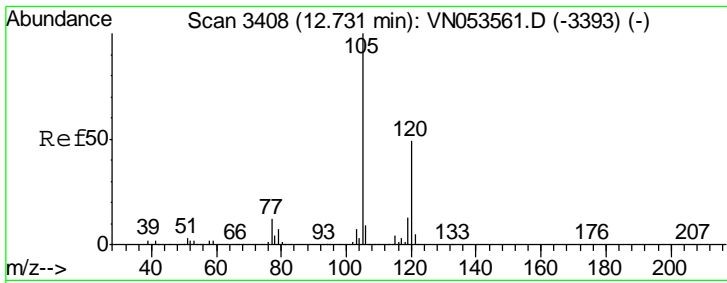
Tgt Ion	Resp	Lower	Upper
152	100		
115	55.5	27.8	83.4
150	156.9	0.0	349.0



#76
 1,2,3-Trichloropropane
 Concen: 36.941 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. -0.15 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion	Resp	Lower	Upper
75	100		
77	1.1	0.0	0.0#

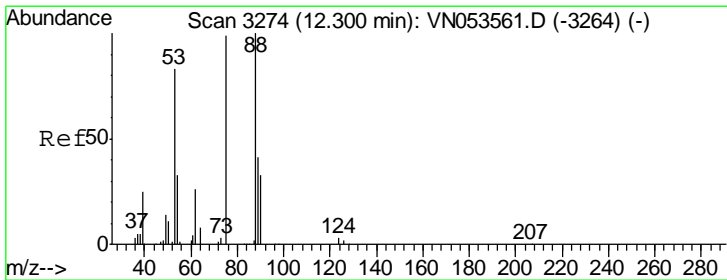
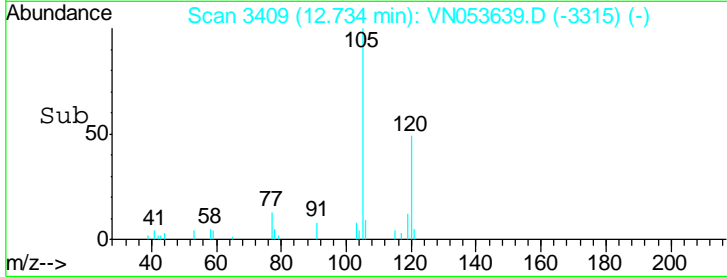
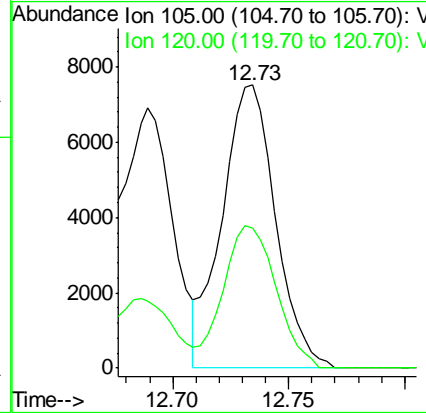
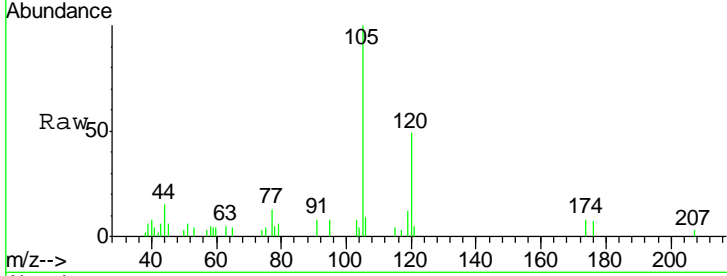




#80
 1,3,5-Trimethylbenzene
 Concen: 0.405 ug/l
 RT: 12.73 min Scan# 3409
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

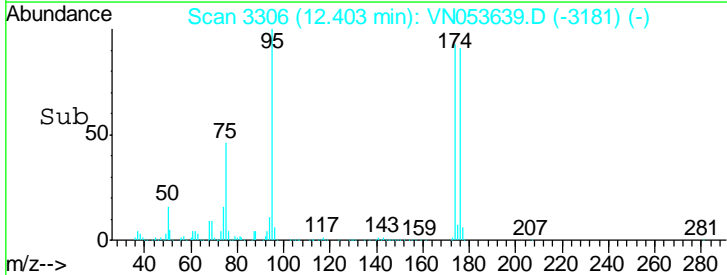
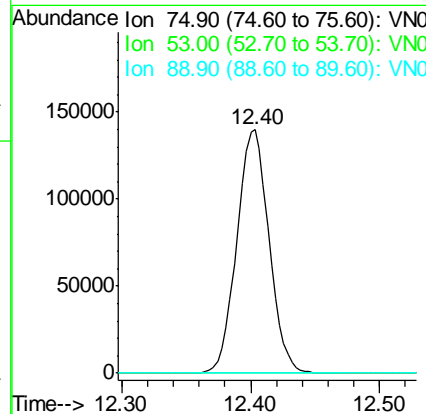
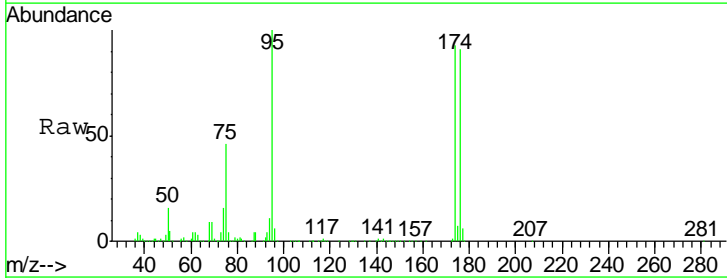
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

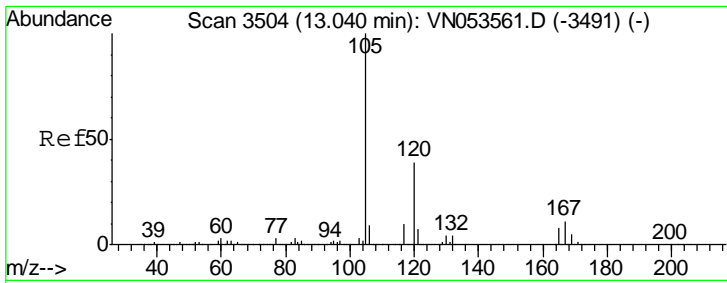
Tgt Ion: 105 Resp: 12046
 Ion Ratio Lower Upper
 105 100
 120 49.9 24.9 74.6



#81
 trans-1,4-Dichloro-2-butene
 Concen: 103.876 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. 0.10 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion: 75 Resp: 242058
 Ion Ratio Lower Upper
 75 100
 53 0.0 69.8 104.6#
 89 0.0 35.6 53.4#

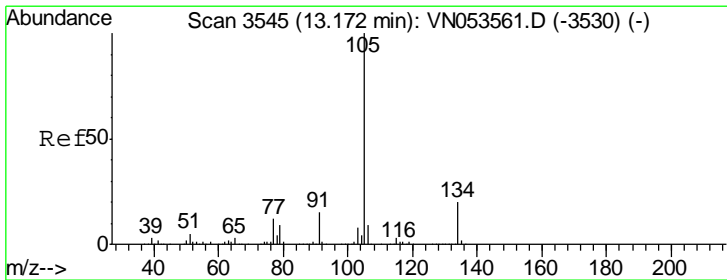
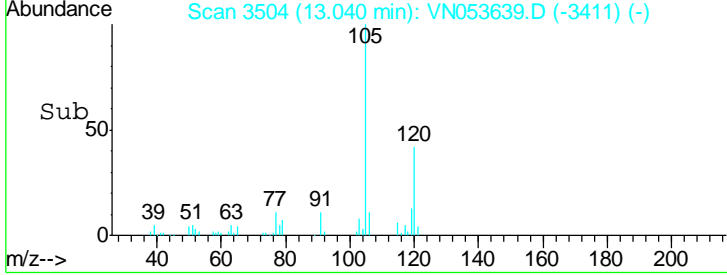
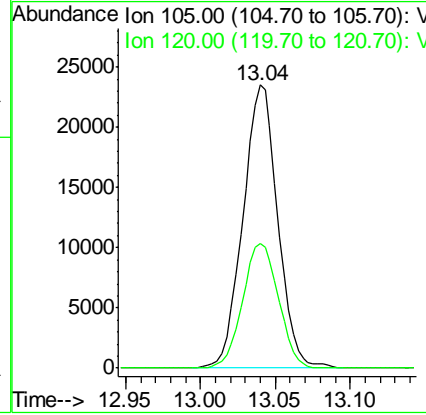
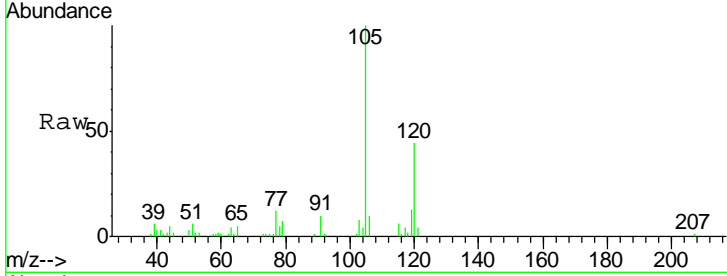




#84
 1,2,4-Trimethylbenzene
 Concen: 1.253 ug/l
 RT: 13.04 min Scan# 3504
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

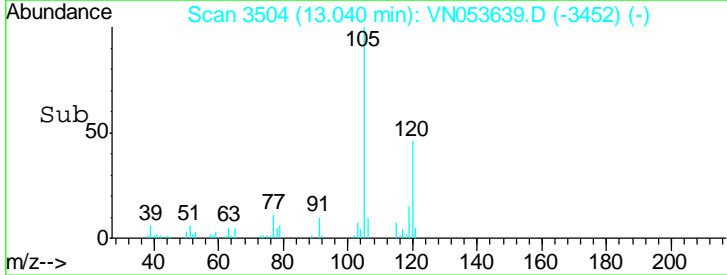
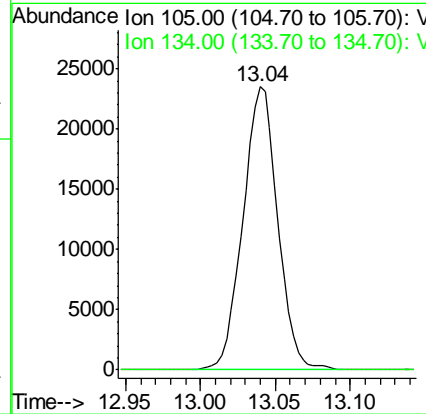
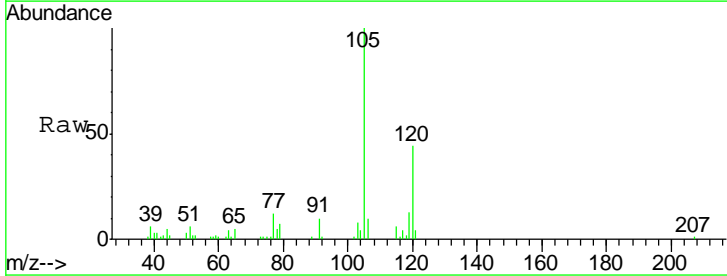
Instrument :
 MSVOA_N
 ClientSampled :
 HR-6A

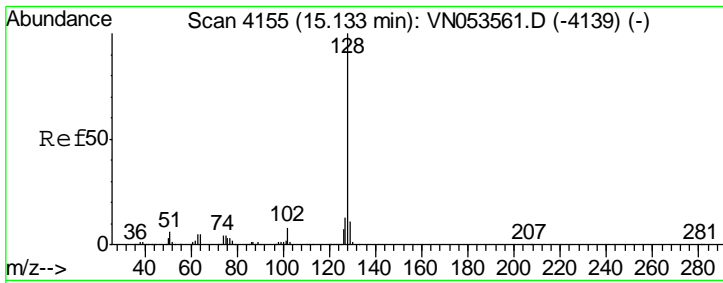
Tgt Ion:105 Resp: 37959
 Ion Ratio Lower Upper
 105 100
 120 45.2 23.0 69.0



#85
 sec-Butylbenzene
 Concen: 1.061 ug/l
 RT: 13.04 min Scan# 3504
 Delta R.T. -0.13 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Tgt Ion:105 Resp: 37959
 Ion Ratio Lower Upper
 105 100
 134 0.0 10.2 30.6#





#95
 Naphthalene
 Concen: 2.256 ug/l
 RT: 15.13 min Scan# 4155
 Delta R.T. 0.00 min
 Lab File: VN053639.D
 Acq: 6 Feb 2019 17:10

Instrument : MSVOA_N
 ClientSampled : HR-6A

Tot Ion	128	Resp	12056
Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.3	15.5
129	10.2	8.6	13.0

