

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032519\
 Data File : VN054676.D
 Acq On : 25 Mar 2019 16:45
 Operator : JC/SP
 Sample : K2040-12
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 S4B(28)

Quant Time: Mar 26 01:27:12 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N032019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 22 02:09:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.66	168	572357	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	917827	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	775896	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	277974	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	374527	52.61	ug/l	0.00
Spiked Amount			Recovery	=	105.22%	
35) Dibromofluoromethane	7.59	113	289421	48.95	ug/l	0.00
Spiked Amount			Recovery	=	97.90%	
50) Toluene-d8	10.09	98	1099381	49.46	ug/l	0.00
Spiked Amount			Recovery	=	98.92%	
62) 4-Bromofluorobenzene	12.40	95	338798	44.79	ug/l	0.00
Spiked Amount			Recovery	=	89.58%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.41	74	892	0.256	ug/l	63
11) Tert butyl alcohol	4.83	59	619	1.436	ug/l #	70
13) Acrolein	3.61	56	321	0.540	ug/l #	64
16) Acetone	3.82	43	13226	6.179	ug/l #	74
18) Methyl Acetate	4.33	43	1132	0.237	ug/l #	73
20) Methylene Chloride	4.54	84	13979	2.216	ug/l #	85
25) 2-Butanone	6.87	43	5699	2.079	ug/l	93
29) Tetrahydrofuran	7.24	42	1839	1.034	ug/l #	64
31) Cyclohexane	7.66	56	12555	Below Cal	#	31
36) 1,1-Dichloropropene	7.67	75	41864	4.878	ug/l #	48
37) Ethyl Acetate	6.87	43	5699	0.934	ug/l #	68
38) Carbon Tetrachloride	7.67	117	53217	6.381	ug/l #	15
43) Isopropyl Acetate	8.17	43	18377	1.783	ug/l #	94
45) 1,2-Dichloropropane	9.27	63	1721	0.261	ug/l #	43
48) Methyl methacrylate	9.18	41	8011	1.432	ug/l #	11
49) 1,4-Dioxane	9.27	88	61	0.975	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	4773	0.835	ug/l #	84
54) cis-1,3-Dichloropropene	9.91	75	50301	5.377	ug/l #	69
57) 1,3-Dichloropropane	10.76	76	9563	1.014	ug/l #	43
59) 2-Hexanone	10.76	43	164208	44.005	ug/l #	48
71) Bromoform	12.38	173	125	2.251	ug/l #	28
74) N-amyl acetate	11.88	43	15825	2.457	ug/l #	51
76) 1,2,3-Trichloropropane	12.40	75	176857	40.094	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	176857	132.623	ug/l #	11

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampled :

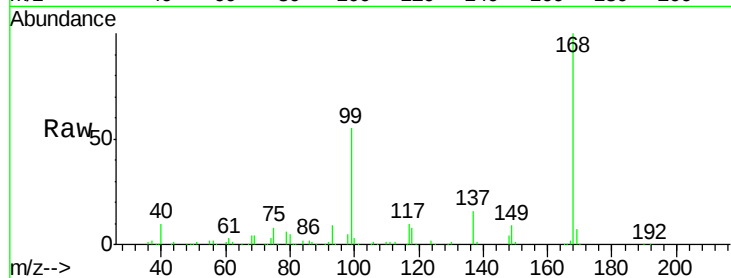
S4B(28)

Tot Ion:168 Resp: 572357

Ion Ratio Lower Upper

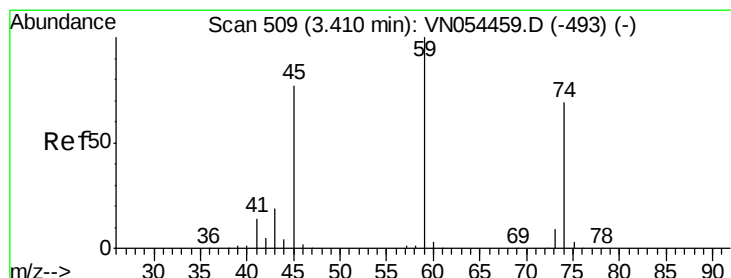
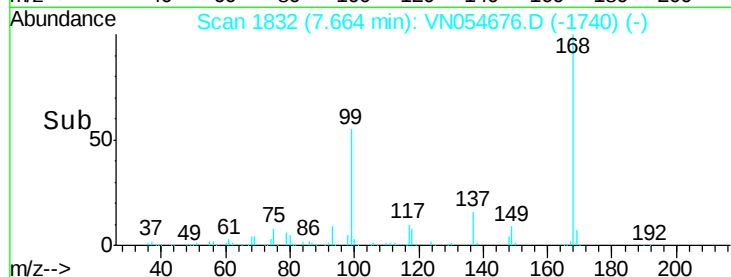
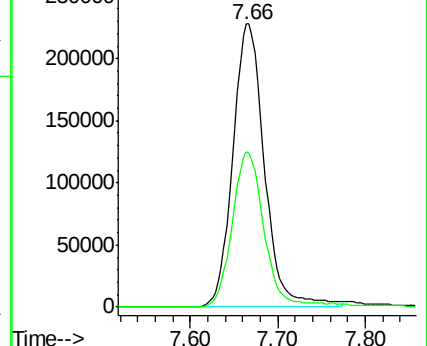
168 100

99 55.1 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#8

Diethyl Ether

Concen: 0.256 ug/l

RT: 3.41 min Scan# 508

Delta R.T. -0.00 min

Lab File: VN054676.D

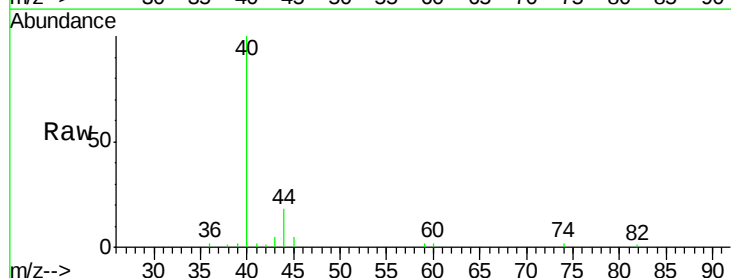
Acq: 25 Mar 2019 16:45

Tgt Ion: 74 Resp: 892

Ion Ratio Lower Upper

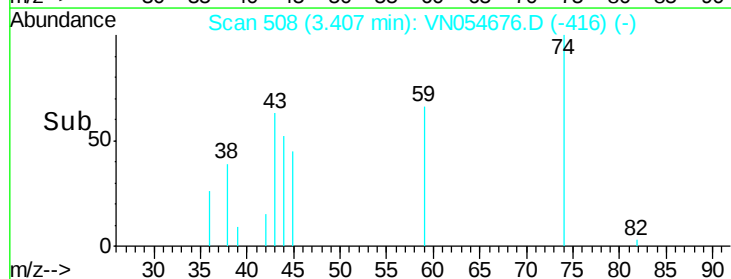
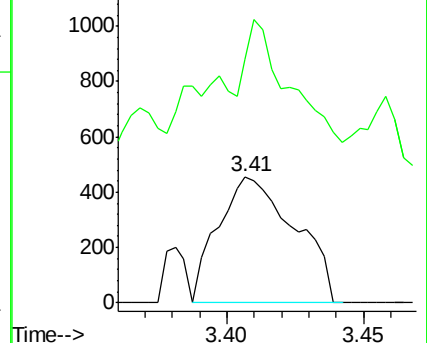
74 100

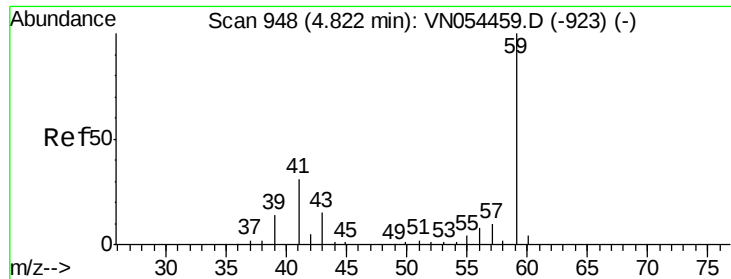
45 52.4 43.1 129.4



Abundance Ion 74.00 (73.70 to 74.70): VNO

Ion 45.00 (44.70 to 45.70): VNO



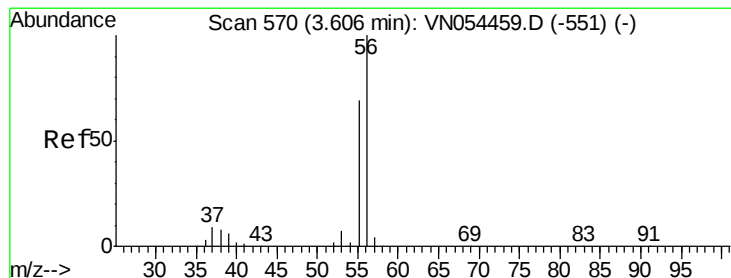
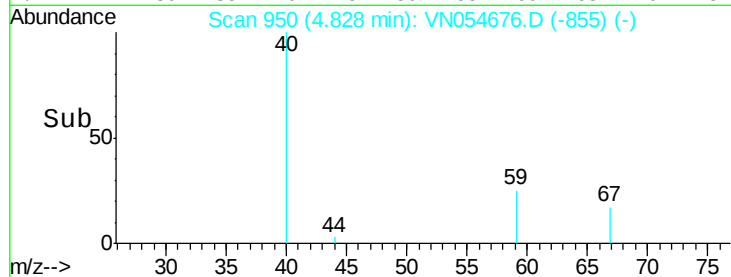
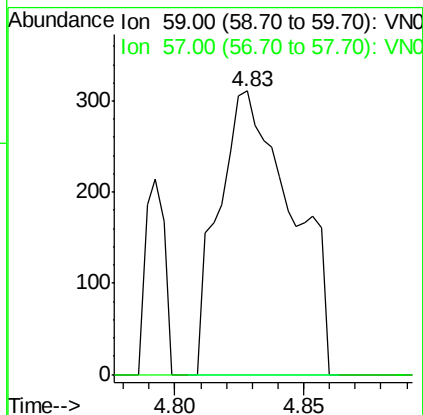
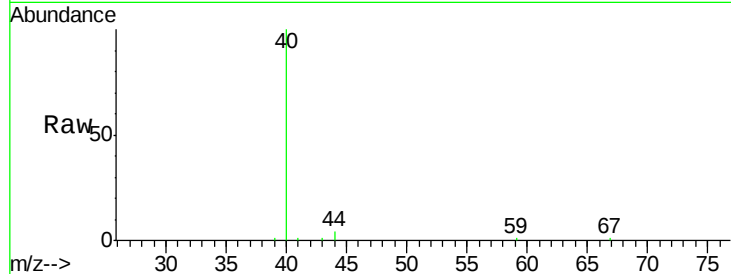


#11

Tert butyl alcohol
 Concen: 1.436 ug/l
 RT: 4.83 min Scan# 950
 Delta R.T. 0.01 min
 Lab File: VN054676.D
 Acq: 25 Mar 2019 16:45

Instrument :
 MSVOA_N
 ClientSampled :
 S4B(28)

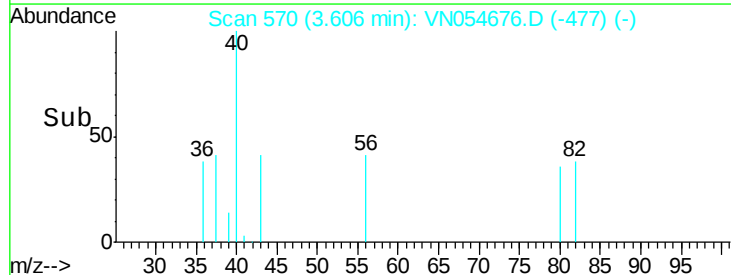
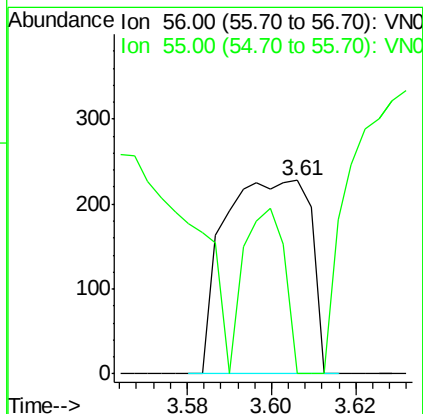
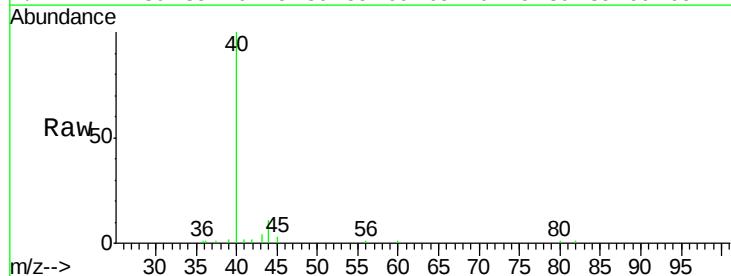
Tot Ion: 59 Resp: 619
 Ion Ratio Lower Upper
 59 100
 57 0.0 9.0 13.6#

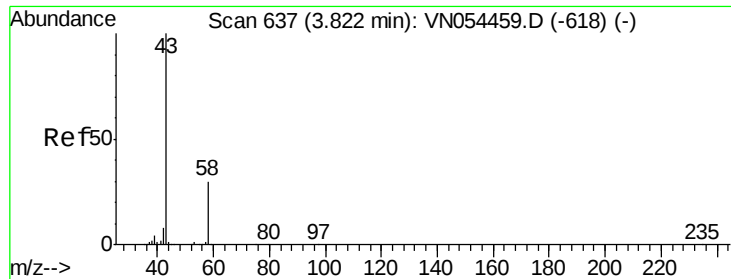


#13

Acrolein
 Concen: 0.540 ug/l
 RT: 3.61 min Scan# 570
 Delta R.T. -0.00 min
 Lab File: VN054676.D
 Acq: 25 Mar 2019 16:45

Tgt Ion: 56 Resp: 321
 Ion Ratio Lower Upper
 56 100
 55 40.8 56.7 85.1#

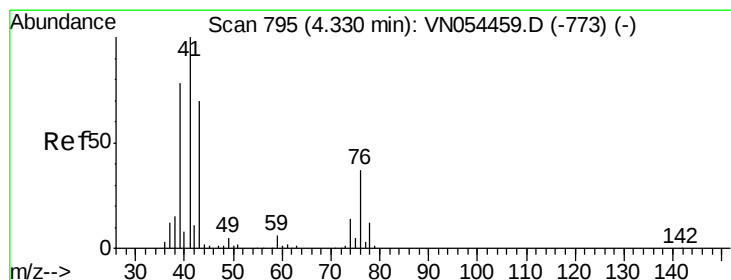
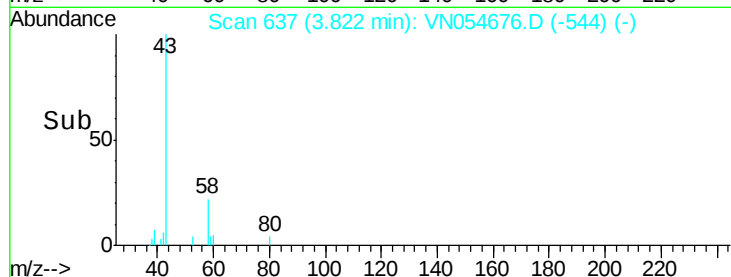
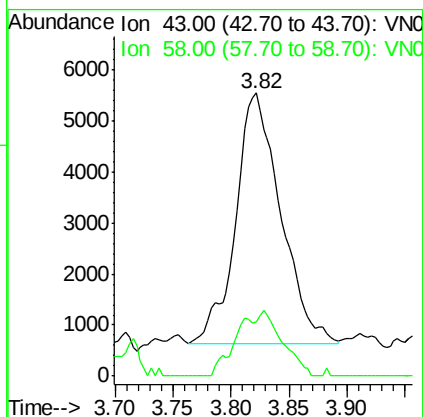
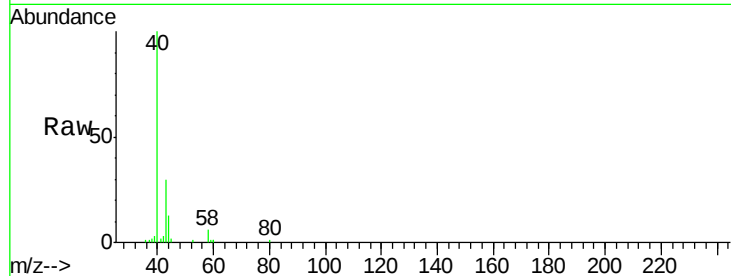




#16
Acetone
Concen: 6.179 ug/l
RT: 3.82 min Scan# 637
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

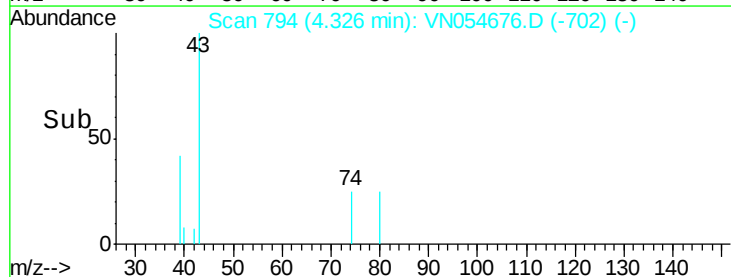
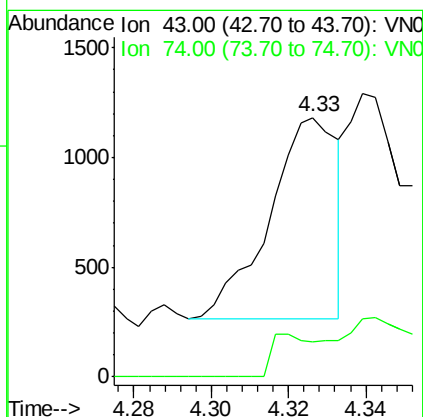
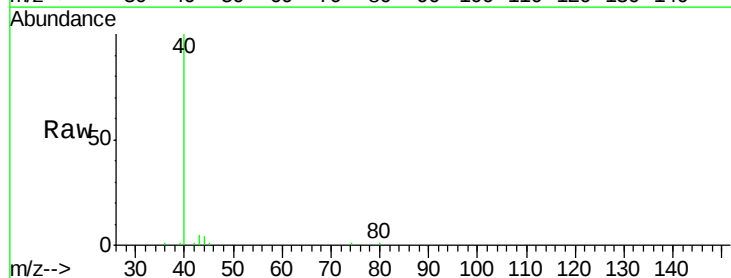
Instrument :
MSVOA_N
ClientSampled :
S4B(28)

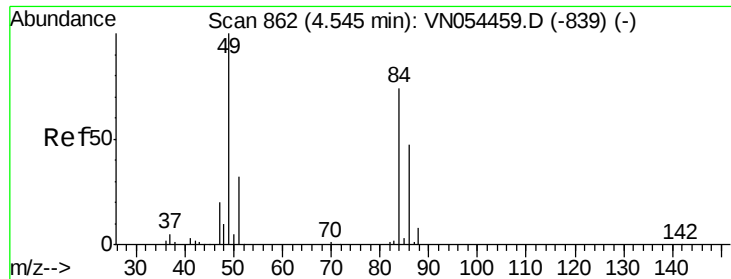
Tot Ion: 43 Resp: 13226
Ion Ratio Lower Upper
43 100
58 21.7 29.9 44.9#



#18
Methyl Acetate
Concen: 0.237 ug/l
RT: 4.33 min Scan# 794
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 43 Resp: 1132
Ion Ratio Lower Upper
43 100
74 12.1 20.8 31.2#

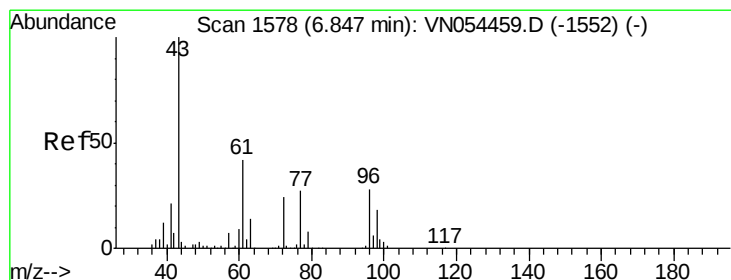
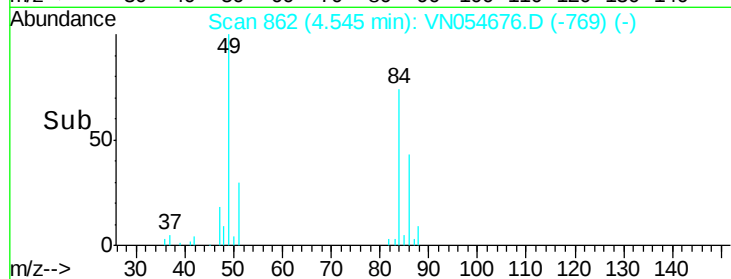
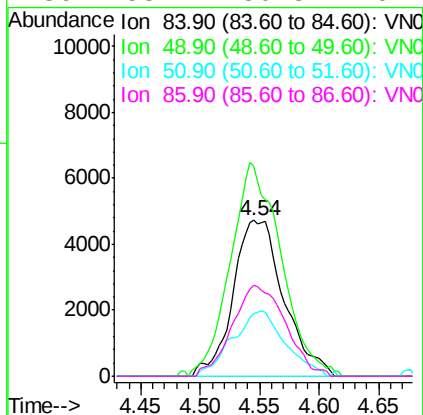
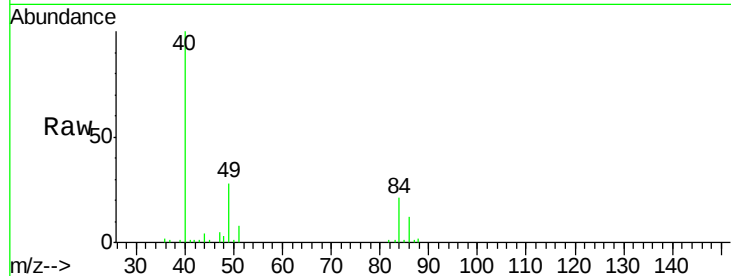




#20
Methvlene Chloride
Concen: 2.216 ug/l
RT: 4.54 min Scan# 862
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

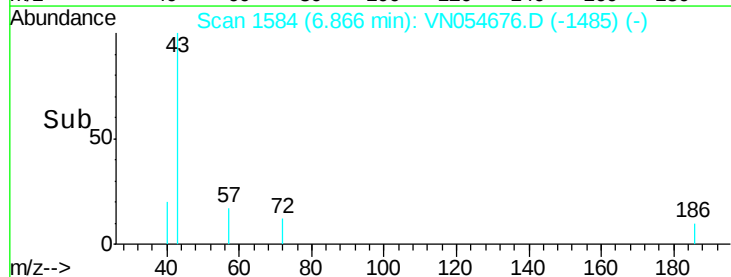
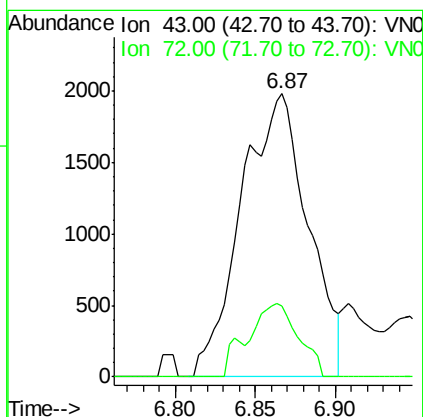
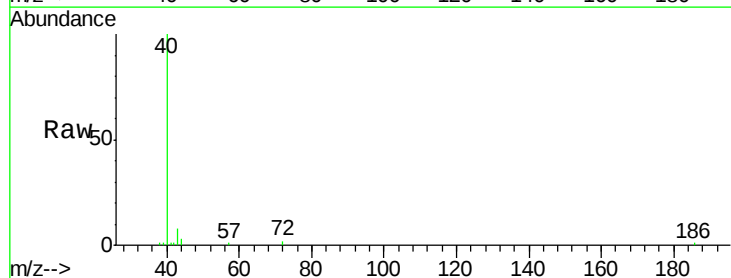
Instrument :
MSVOA_N
ClientSampleId :
S4B(28)

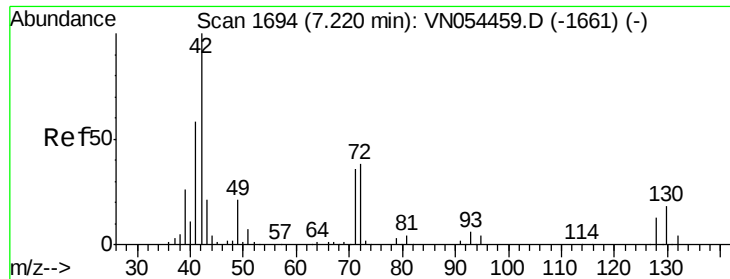
Tot Ion: 84 Resp: 13979
Ion Ratio Lower Upper
84 100
49 134.6 89.7 134.5#
51 39.8 28.2 42.4
86 58.2 50.8 76.2



#25
2-Butanone
Concen: 2.079 ug/l
RT: 6.87 min Scan# 1584
Delta R.T. 0.02 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 43 Resp: 5699
Ion Ratio Lower Upper
43 100
72 25.1 23.0 34.6





#29

Tetrahydrofuran

Concen: 1.034 ug/l

RT: 7.24 min Scan# 1699

Delta R.T. 0.02 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampleId :

S4B(28)

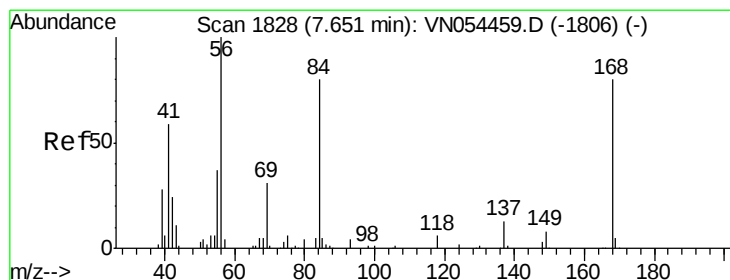
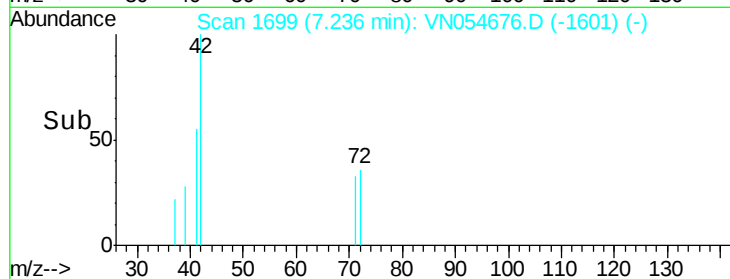
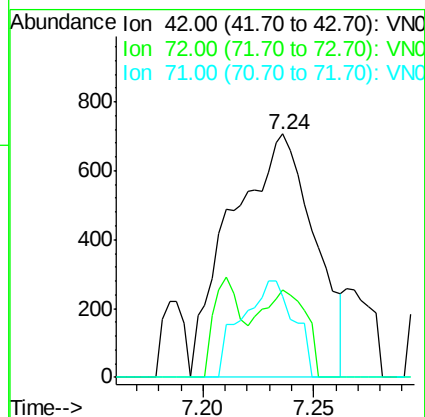
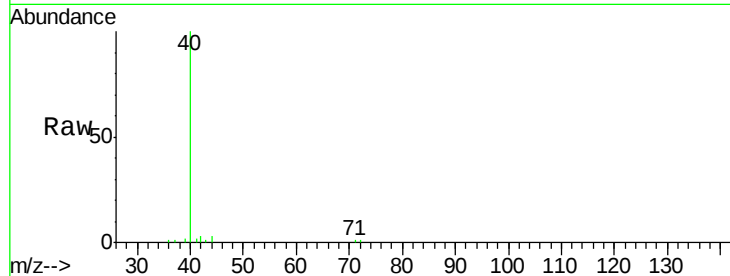
Tot Ion: 42 Resp: 1839

Ion Ratio Lower Upper

42 100

72 19.7 37.8 56.6#

71 25.0 36.2 54.2#



#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1832

Delta R.T. 0.01 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

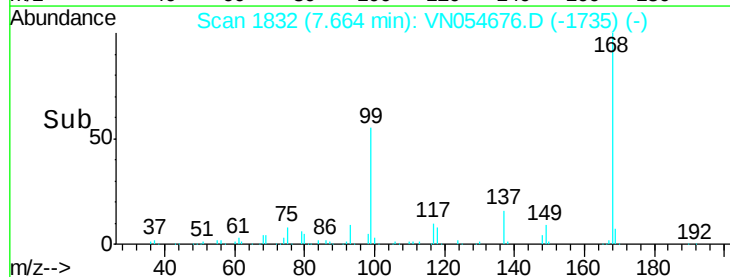
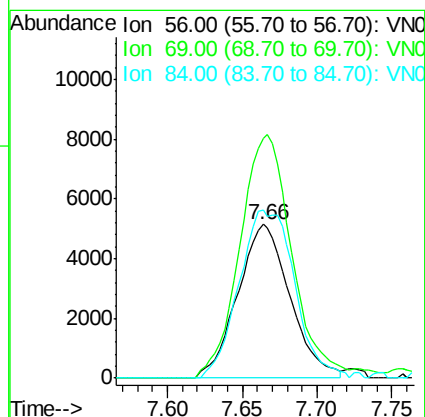
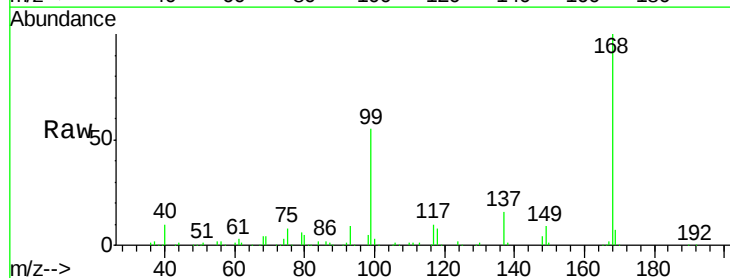
Tgt Ion: 56 Resp: 12555

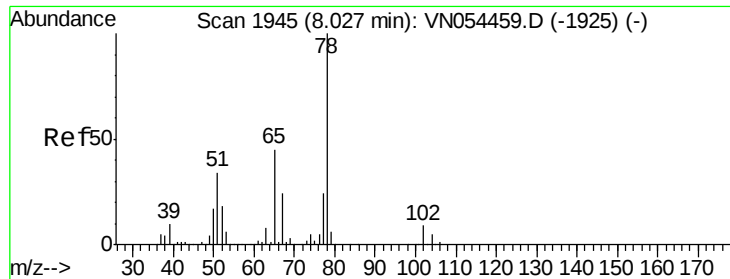
Ion Ratio Lower Upper

56 100

69 156.1 27.8 41.6#

84 109.2 74.6 111.8





#33

1,2-Dichloroethane-d4

Concen: 52.608 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampleId :

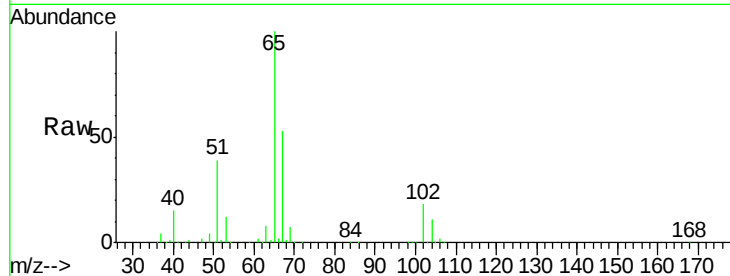
S4B(28)

Tot Ion: 65 Resp: 374527

Ion Ratio Lower Upper

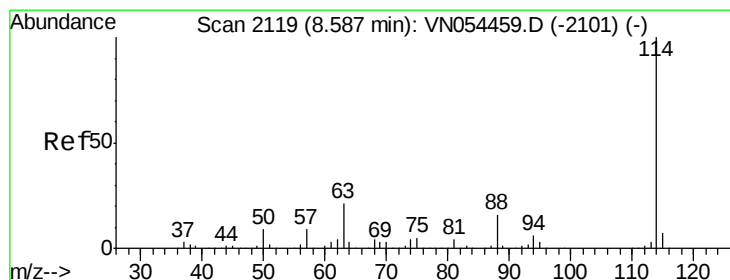
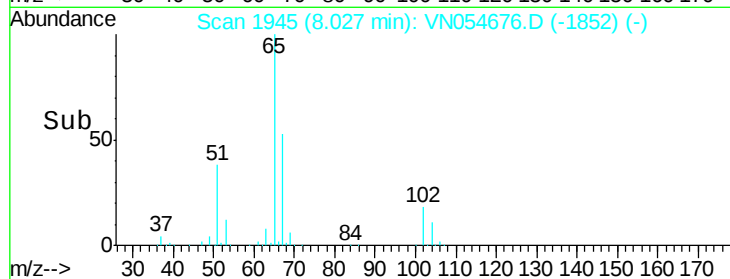
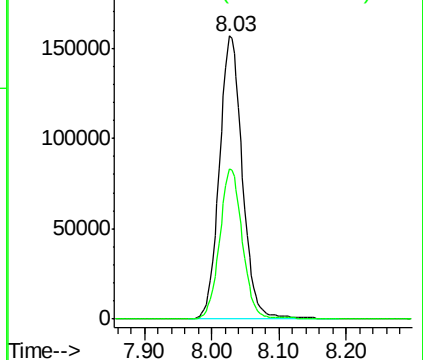
65 100

67 52.2 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

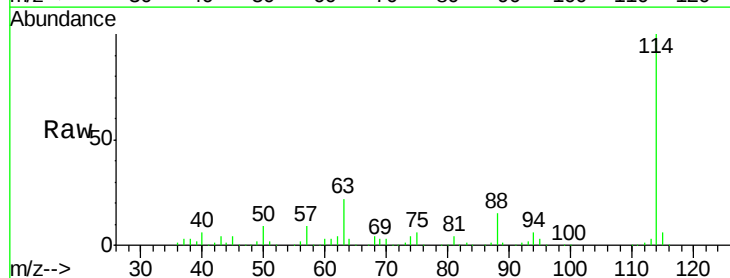
Tgt Ion: 114 Resp: 917827

Ion Ratio Lower Upper

114 100

63 21.9 0.0 35.2

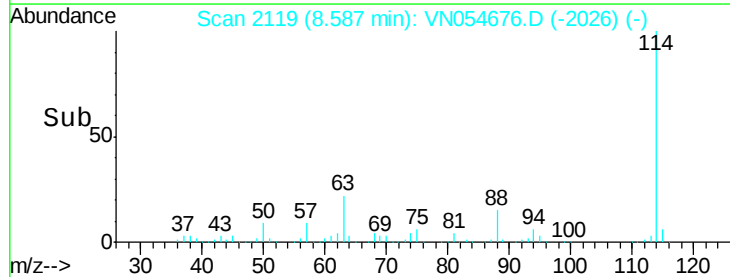
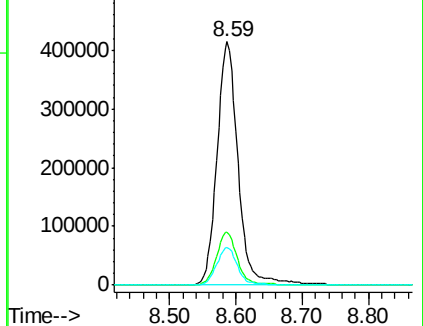
88 15.5 0.0 30.2

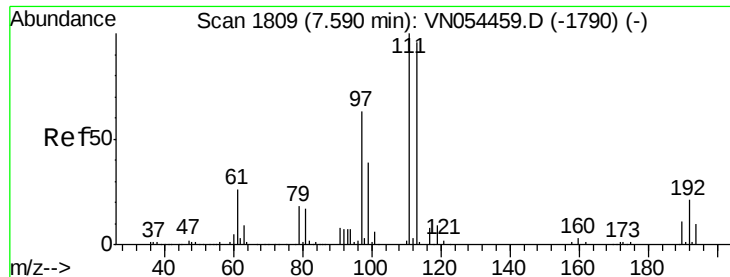


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0





#35

Dibromofluoromethane

Concen: 48.946 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampleId :

S4B(28)

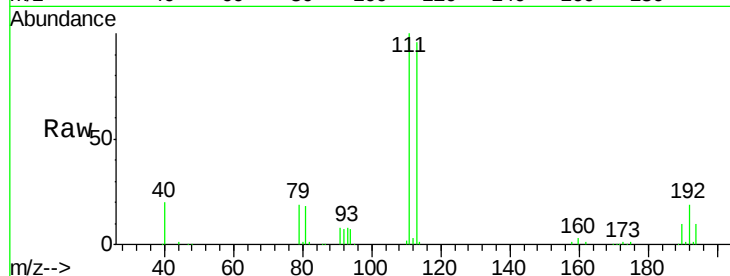
Tot Ion:113 Resp: 289421

Ion Ratio Lower Upper

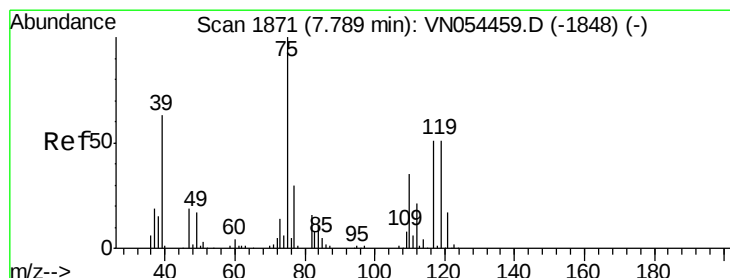
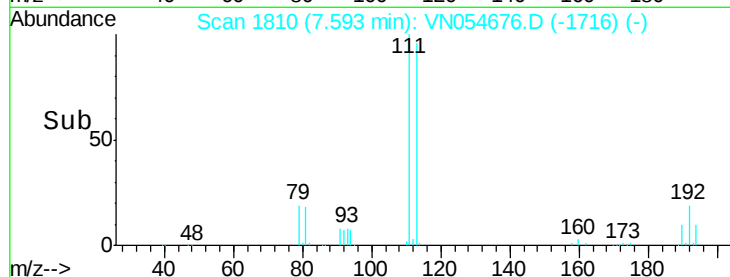
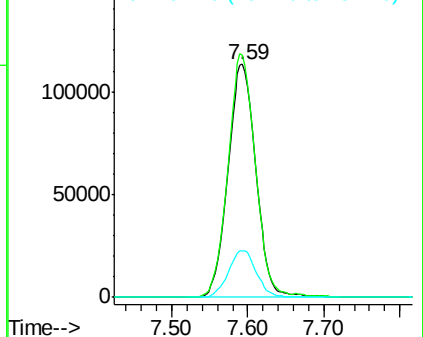
113 100

111 101.8 82.2 123.4

192 20.0 19.2 28.8



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



#36

1,1-Dichloropropene

Concen: 4.878 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

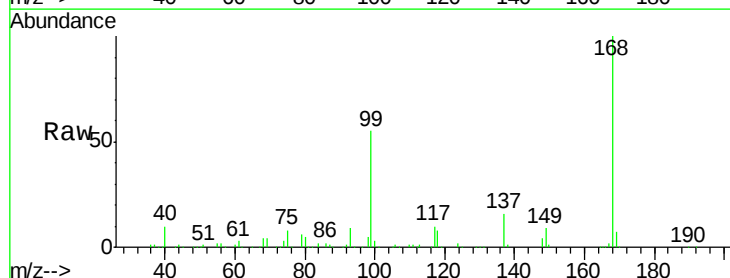
Tgt Ion: 75 Resp: 41864

Ion Ratio Lower Upper

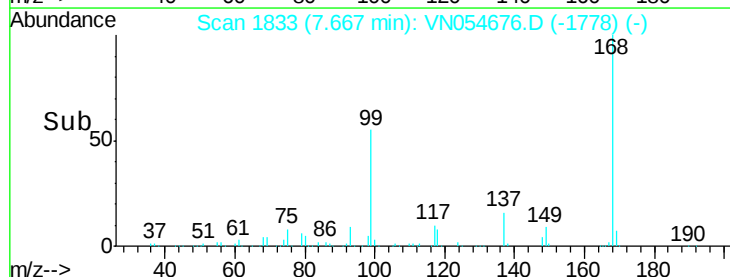
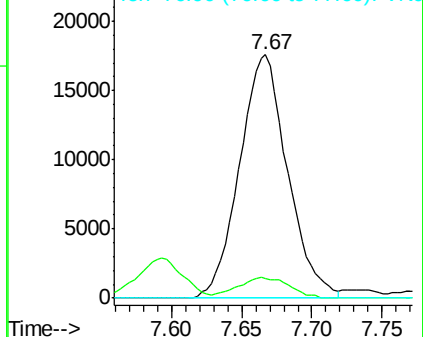
75 100

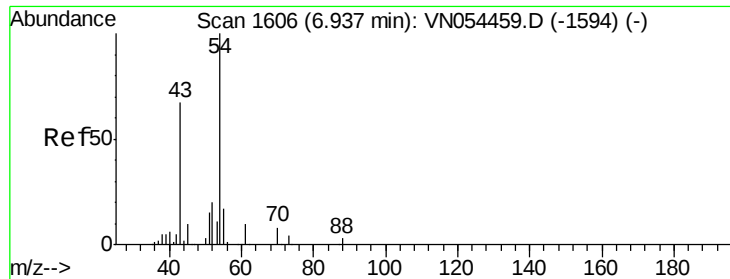
110 9.1 19.1 57.5#

77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): V
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): V

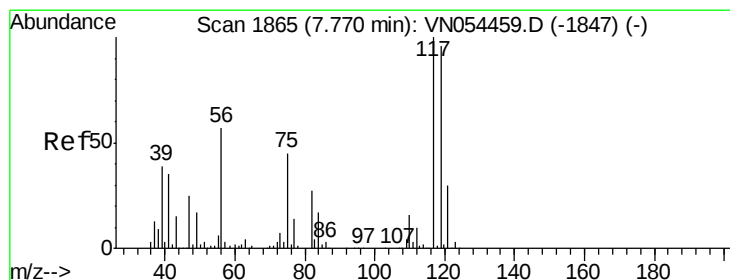
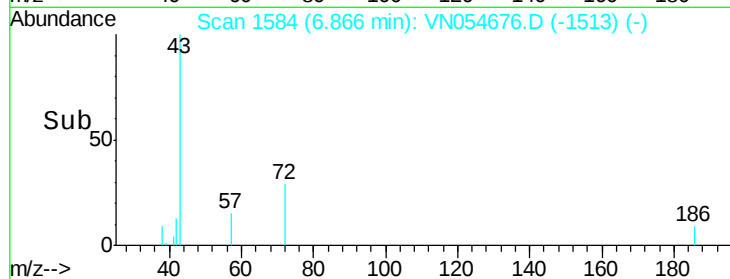
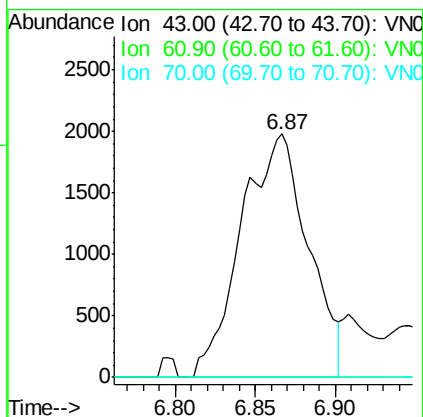
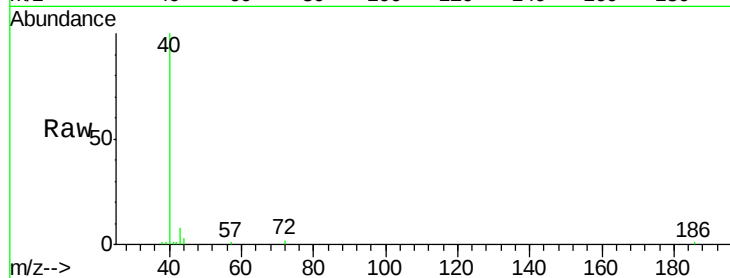




#37
Ethyl Acetate
Concen: 0.934 ug/l
RT: 6.87 min Scan# 1584
Delta R.T. -0.07 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

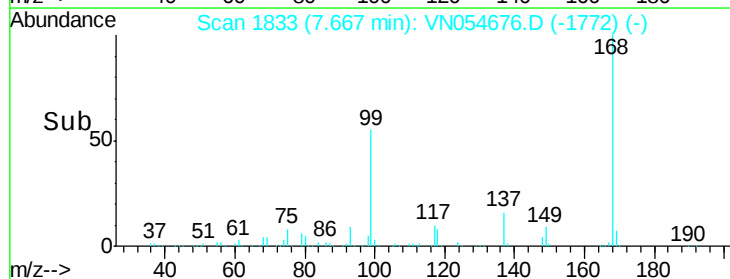
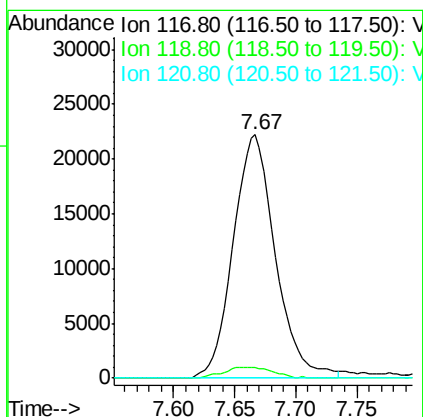
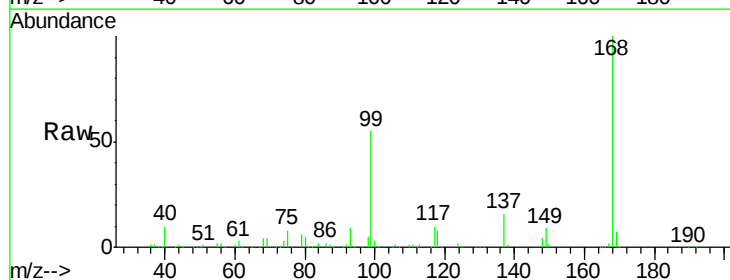
Instrument :
MSVOA_N
ClientSampleId :
S4B(28)

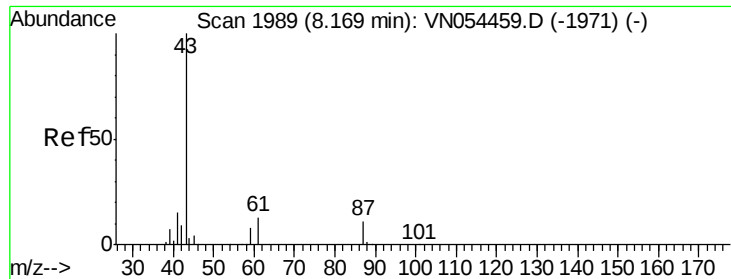
Tot Ion: 43 Resp: 5699
Ion Ratio Lower Upper
43 100
61 0.0 11.8 17.6#
70 0.0 8.4 12.6#



#38
Carbon Tetrachloride
Concen: 6.381 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. -0.10 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 117 Resp: 53217
Ion Ratio Lower Upper
117 100
119 4.2 76.3 114.5#
121 0.0 24.6 36.8#





#43

Isopropyl Acetate

Concen: 1.783 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampled :

S4B(28)

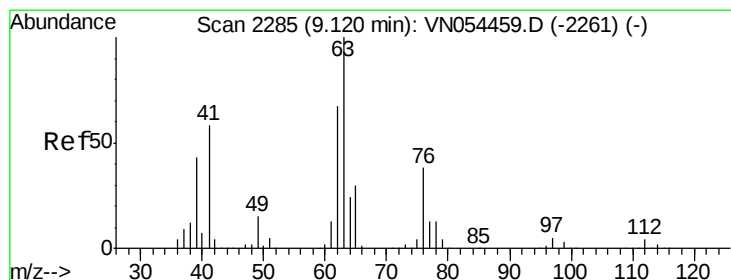
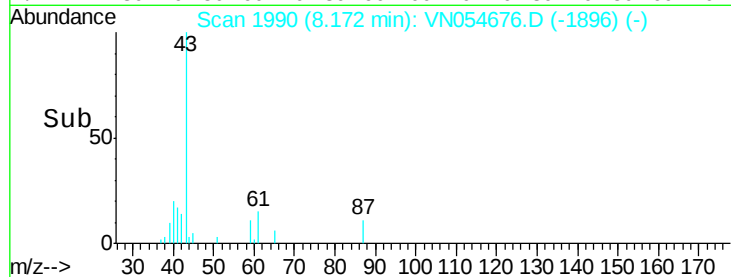
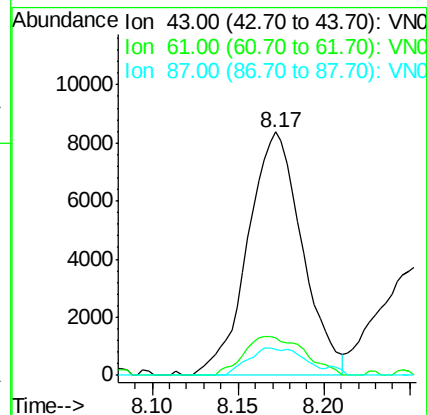
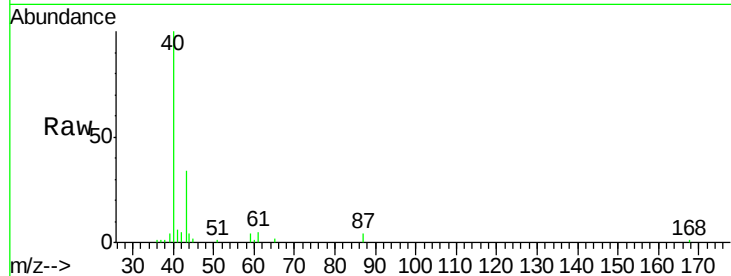
Tot Ion: 43 Resp: 18377

Ion Ratio Lower Upper

43 100

61 17.8 15.8 23.8

87 11.2 12.0 18.0#



#45

1,2-Dichloropropane

Concen: 0.261 ug/l

RT: 9.27 min Scan# 2331

Delta R.T. 0.15 min

Lab File: VN054676.D

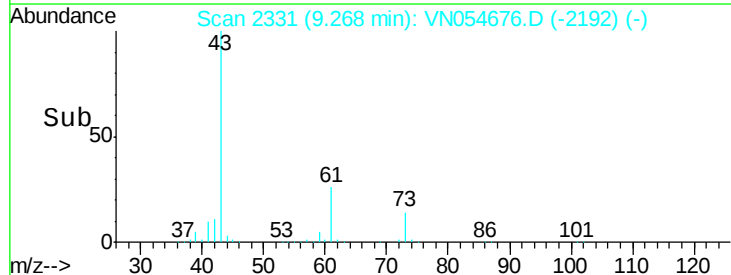
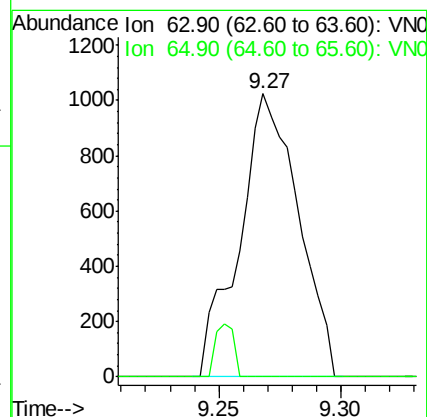
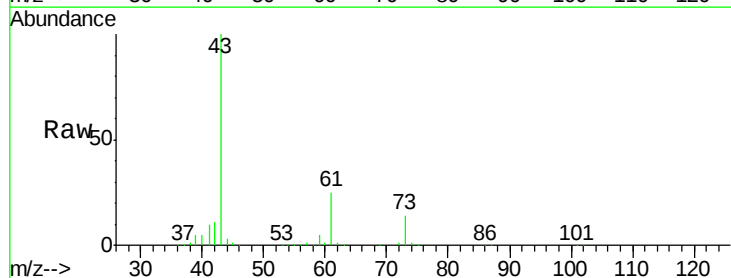
Acq: 25 Mar 2019 16:45

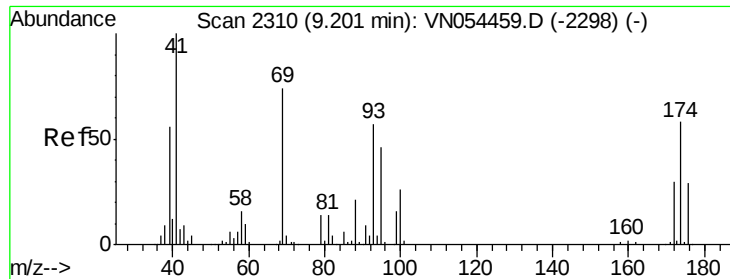
Tgt Ion: 63 Resp: 1721

Ion Ratio Lower Upper

63 100

65 0.0 25.0 37.6#

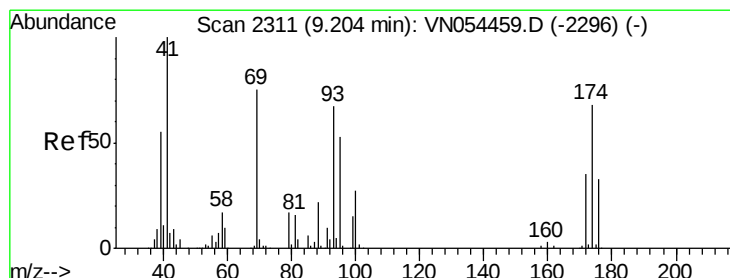
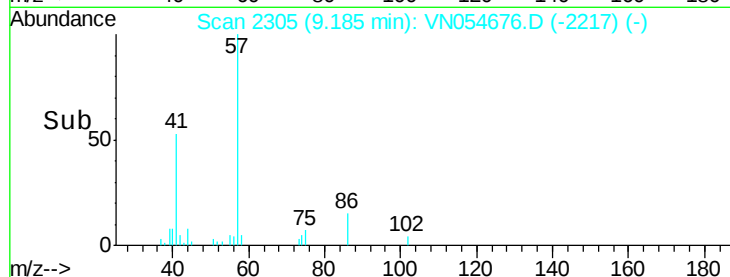
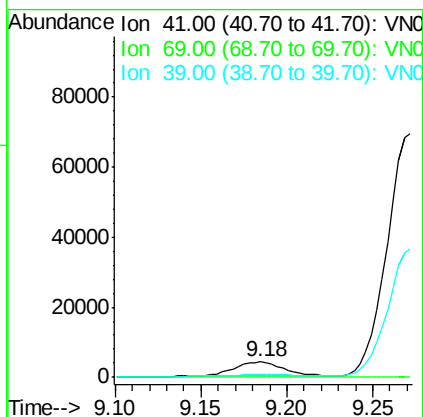
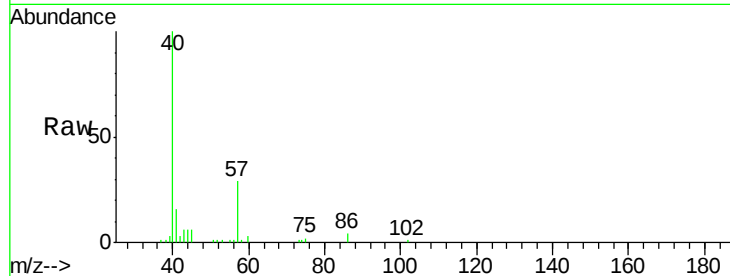




#48
Methyl methacrylate
Concen: 1.432 ug/l
RT: 9.18 min Scan# 2305
Delta R.T. -0.02 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

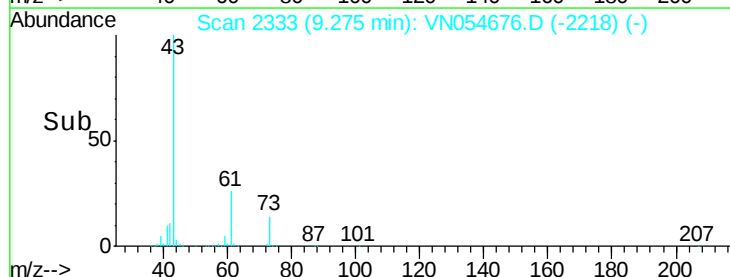
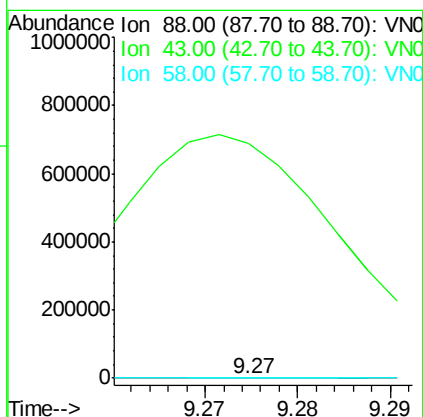
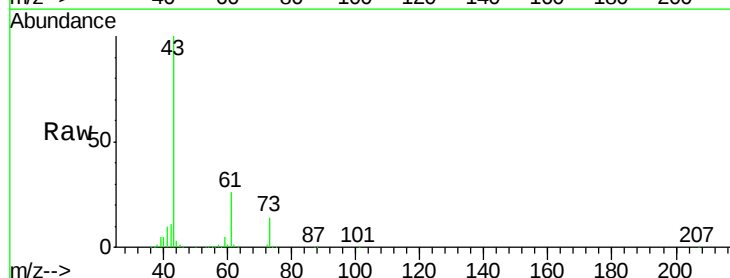
Instrument :
MSVOA_N
ClientSampled :
S4B(28)

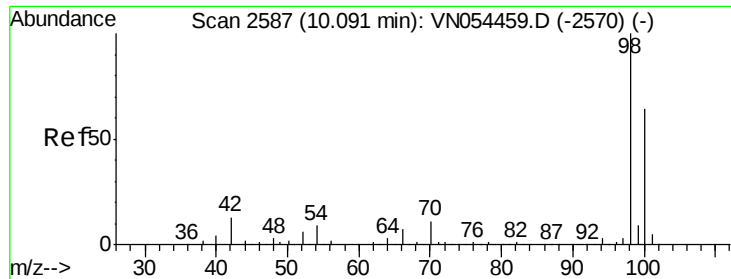
Tot Ion: 41 Resp: 8011
Ion Ratio Lower Upper
41 100
69 0.0 72.6 108.8#
39 0.0 47.5 71.3#



#49
1,4-Dioxane
Concen: 0.975 ug/l
RT: 9.27 min Scan# 2333
Delta R.T. 0.07 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 88 Resp: 61
Ion Ratio Lower Upper
88 100
43 2286544.3 24.1 36.1#
58 9165.6 50.8 76.2#





#50

Toluene-d8

Concen: 49.456 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampled :

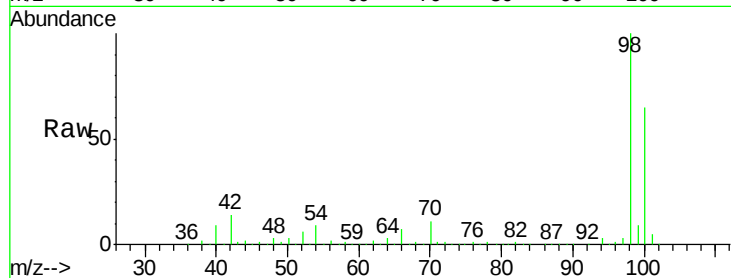
S4B(28)

Tot Ion: 98 Resp: 1099381

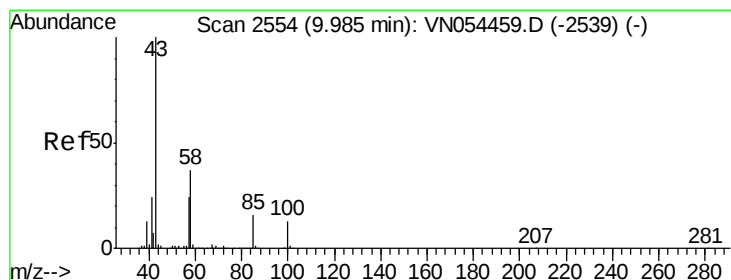
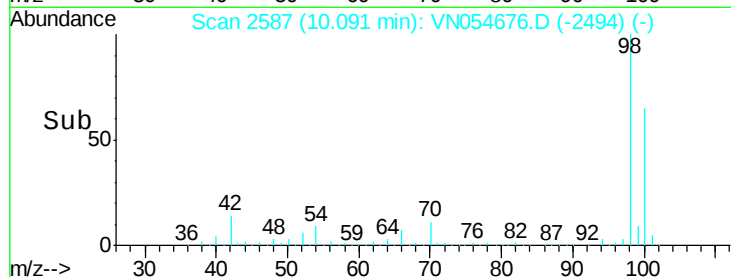
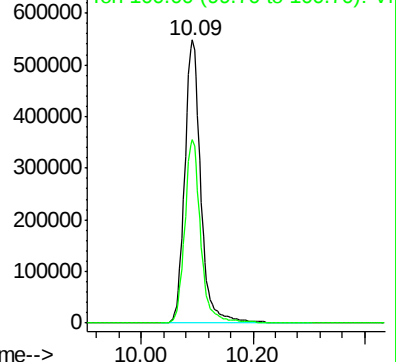
Ion Ratio Lower Upper

98 100

100 63.8 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VN054459.D (-2570) (-)



#51

4-Methyl-2-Pentanone

Concen: 0.835 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. -0.01 min

Lab File: VN054676.D

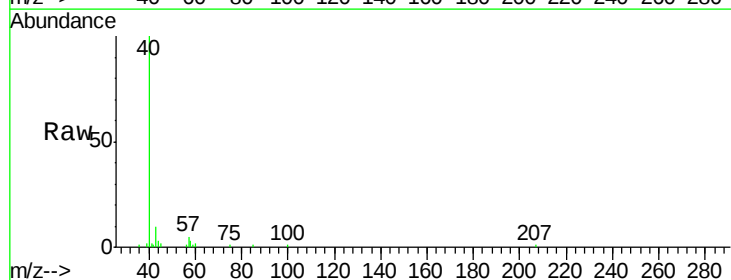
Acq: 25 Mar 2019 16:45

Tgt Ion: 43 Resp: 4773

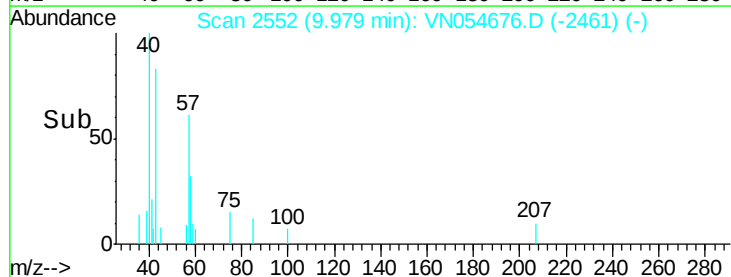
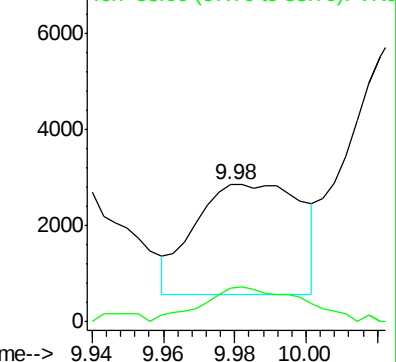
Ion Ratio Lower Upper

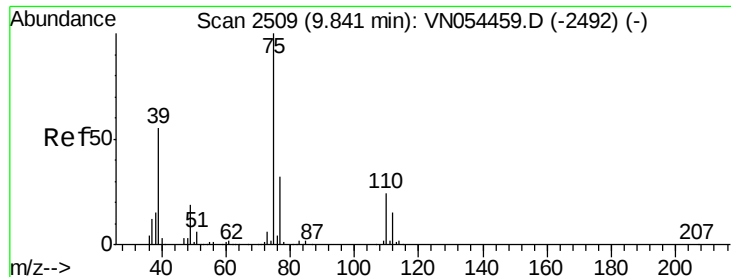
43 100

58 29.8 31.8 47.6#



Abundance Ion 43.00 (42.70 to 43.70): VN054459.D (-2539) (-)





#54

cis-1,3-Dichloropropene

Concen: 5.377 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampleId :

S4B(28)

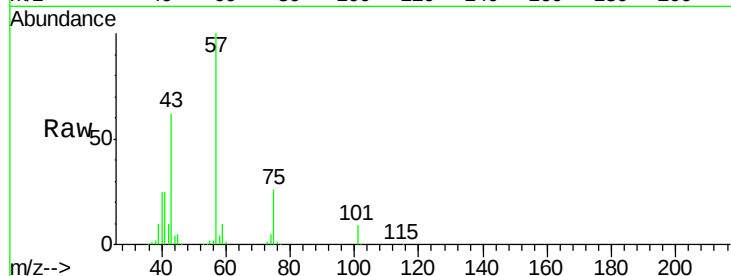
Tot Ion: 75 Resp: 50301

Ion Ratio Lower Upper

75 100

77 0.8 25.4 38.0#

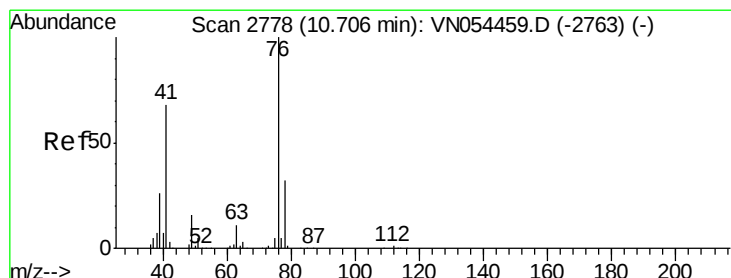
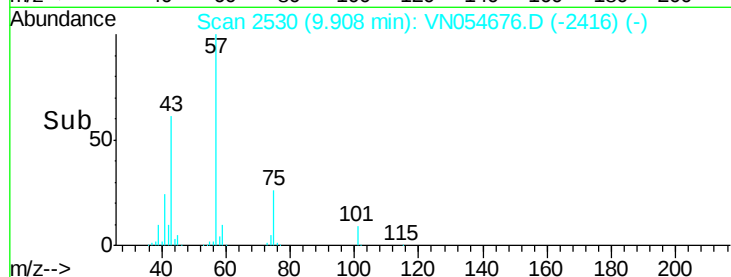
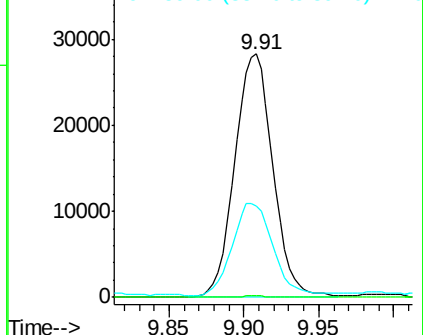
39 36.7 37.2 55.8#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0

Ion 39.00 (38.70 to 39.70): VN0



#57

1,3-Dichloropropane

Concen: 1.014 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN054676.D

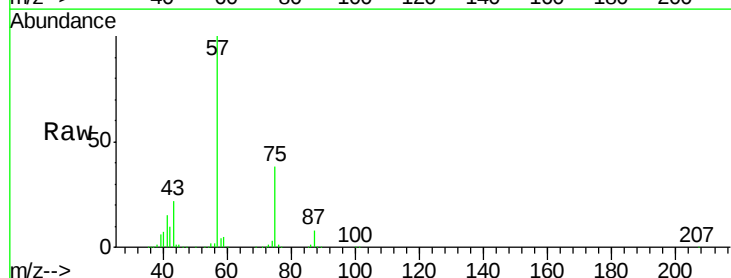
Acq: 25 Mar 2019 16:45

Tgt Ion: 76 Resp: 9563

Ion Ratio Lower Upper

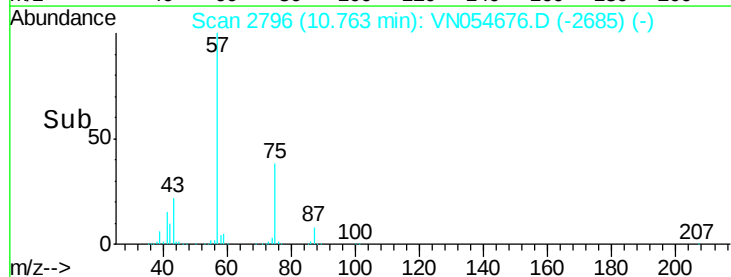
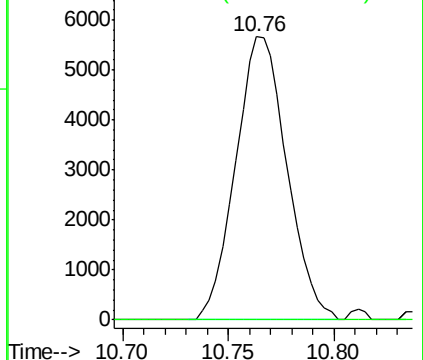
76 100

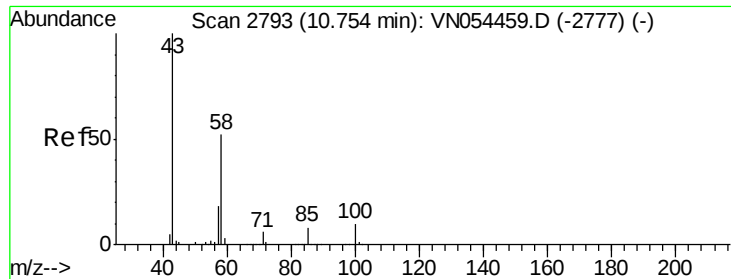
78 0.0 25.7 38.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

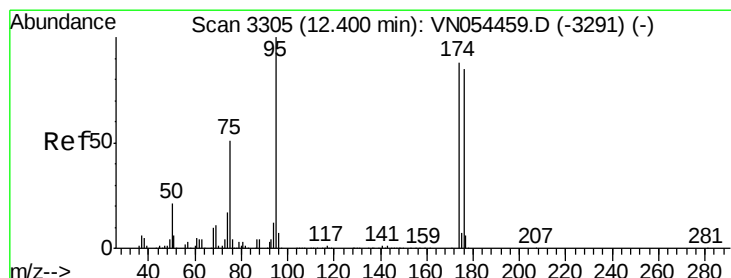
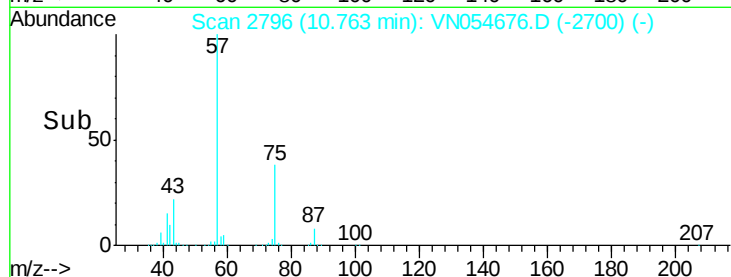
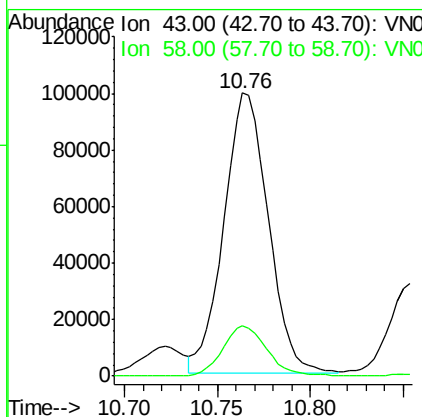
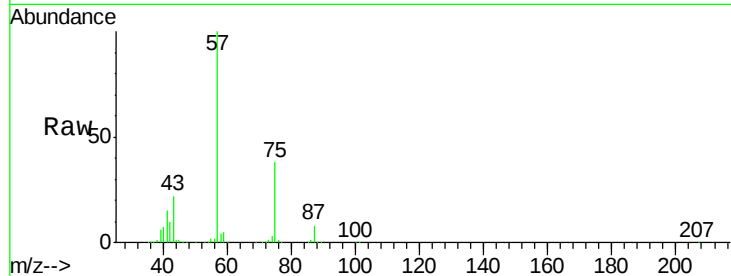




#59
2-Hexanone
Concen: 44.005 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

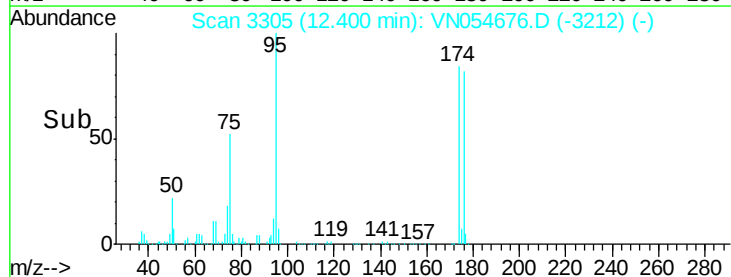
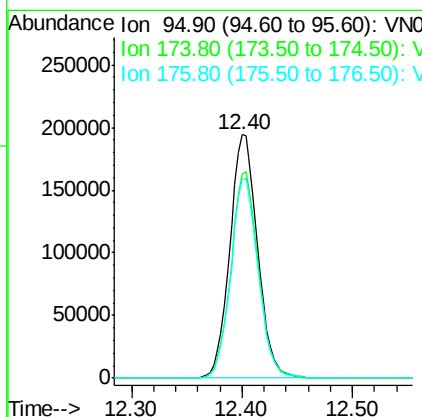
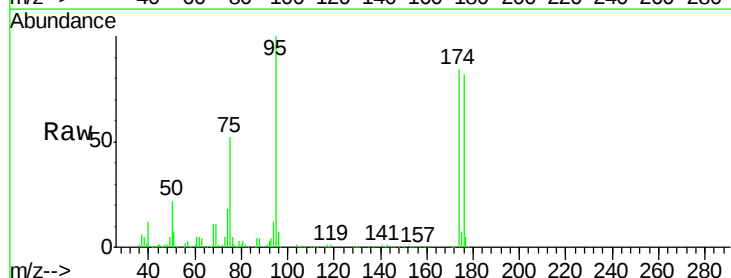
Instrument :
MSVOA_N
ClientSampled :
S4B(28)

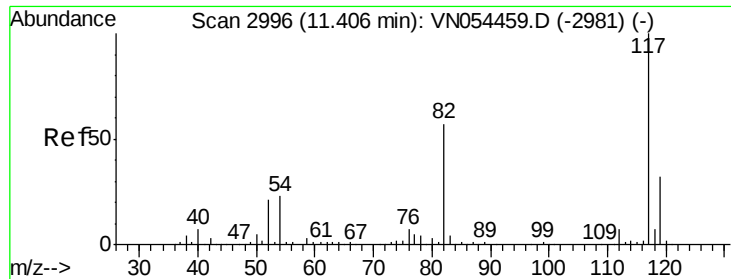
Tot Ion: 43 Resp: 164208
Ion Ratio Lower Upper
43 100
58 18.2 28.0 83.9#



#62
4-Bromofluorobenzene
Concen: 44.789 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 95 Resp: 338798
Ion Ratio Lower Upper
95 100
174 83.6 0.0 191.0
176 81.1 0.0 187.4

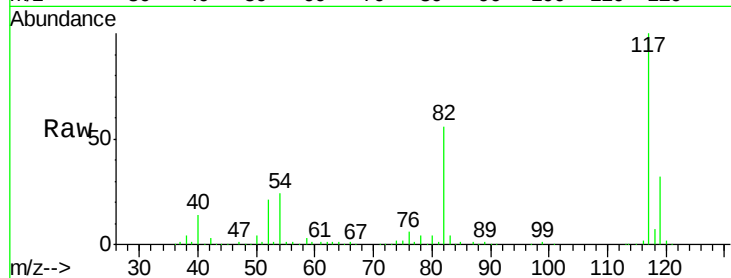




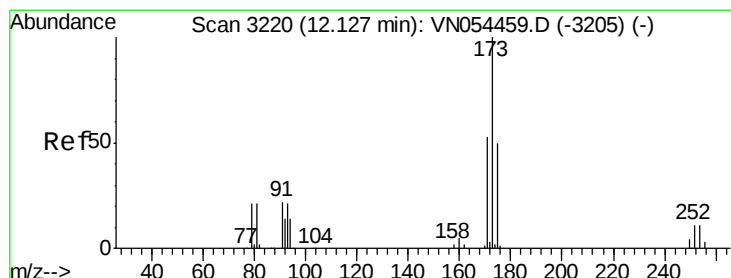
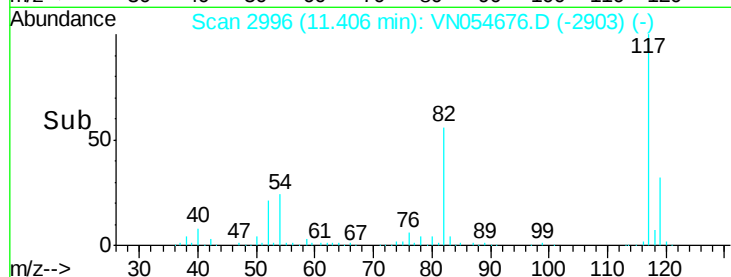
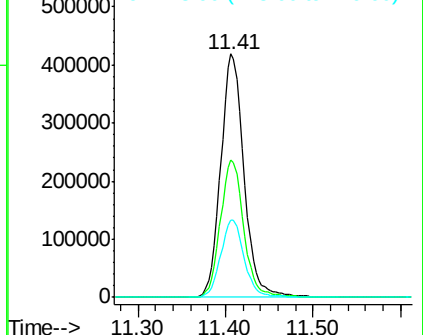
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Instrument :
MSVOA_N
ClientSampled :
S4B(28)

Tot Ion:117 Resp: 775896
Ion Ratio Lower Upper
117 100
82 56.3 40.0 60.0
119 31.6 25.8 38.6

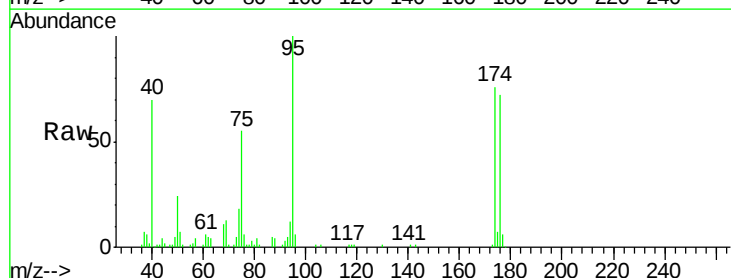


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

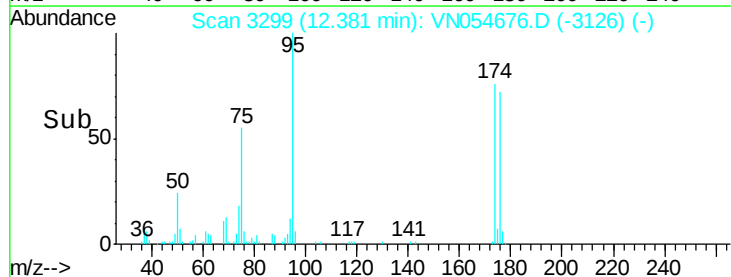
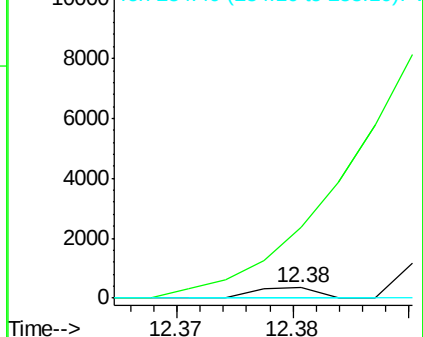


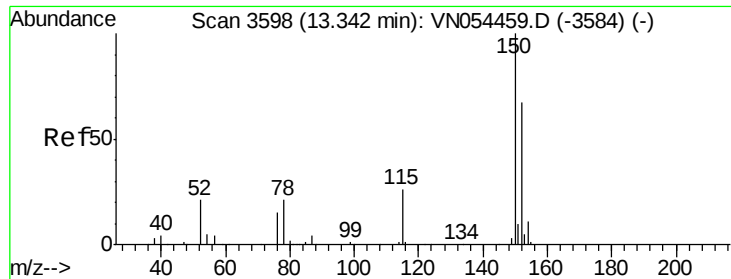
#71
Bromoform
Concen: 2.251 ug/l
RT: 12.38 min Scan# 3299
Delta R.T. 0.25 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion:173 Resp: 125
Ion Ratio Lower Upper
173 100
175 0.0 24.4 73.2#
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



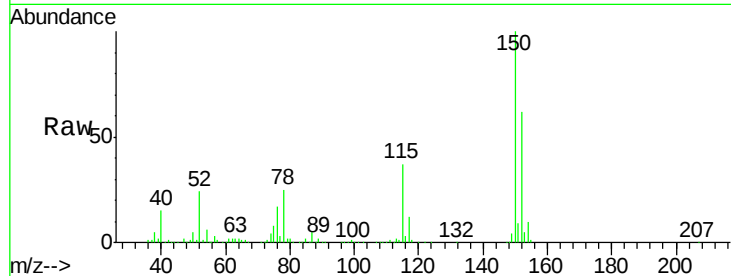


#72

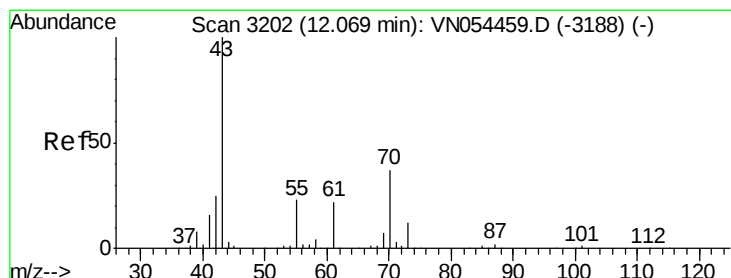
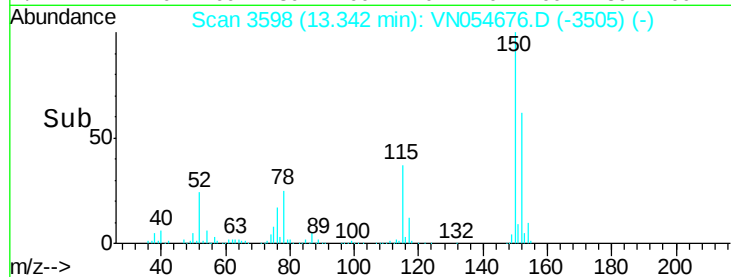
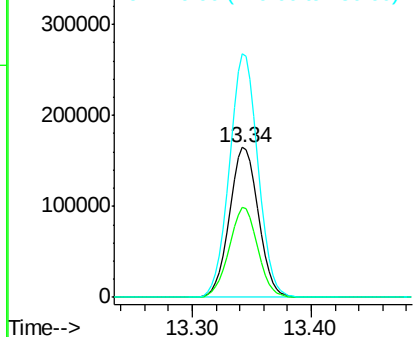
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.34 min Scan# 3598
Delta R.T. -0.00 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Instrument :
MSVOA_N
ClientSampleId :
S4B(28)

Tot Ion:152 Resp: 277974
Ion Ratio Lower Upper
152 100
115 59.1 27.2 81.6
150 159.8 0.0 349.2



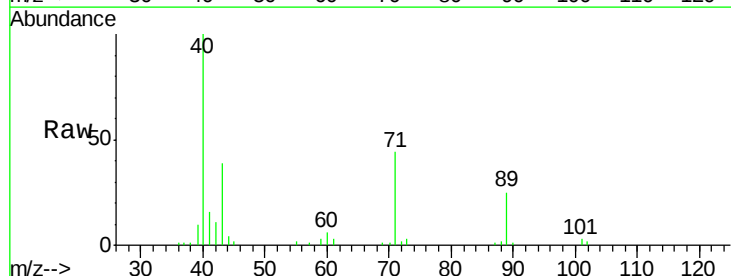
Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V



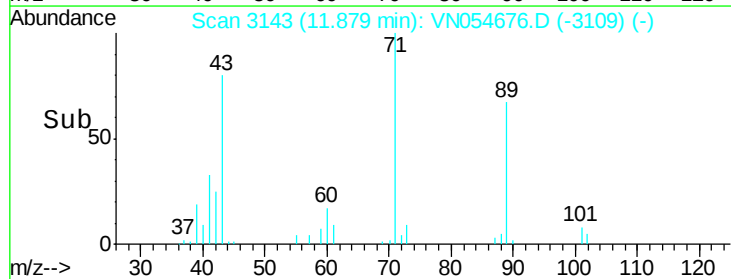
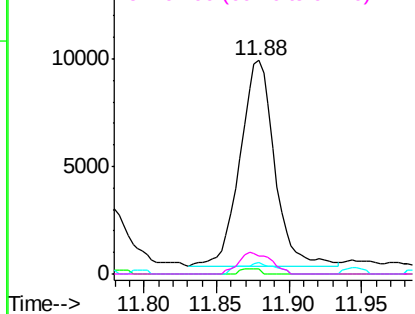
#74

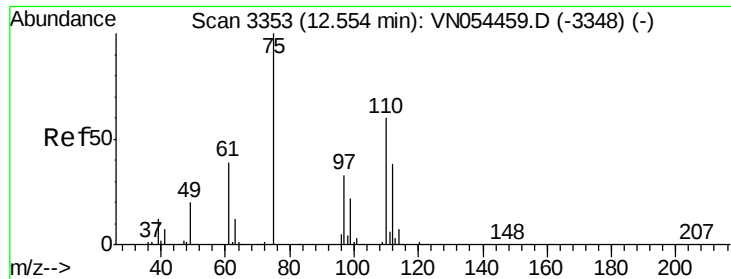
N-ethyl acetate
Concen: 2.457 ug/l
RT: 11.88 min Scan# 3143
Delta R.T. -0.19 min
Lab File: VN054676.D
Acq: 25 Mar 2019 16:45

Tgt Ion: 43 Resp: 15825
Ion Ratio Lower Upper
43 100
70 1.4 35.4 53.0#
55 5.4 19.8 29.6#
61 9.9 19.8 29.6#



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: 40.094 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Instrument :

MSVOA_N

ClientSampled :

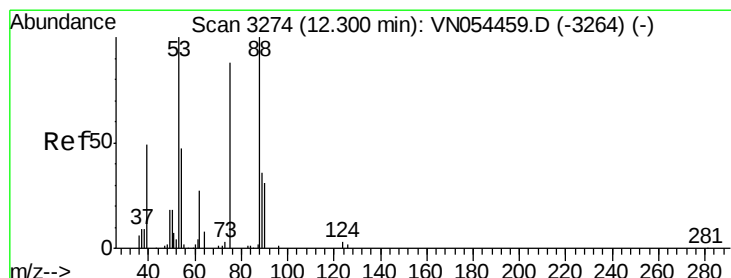
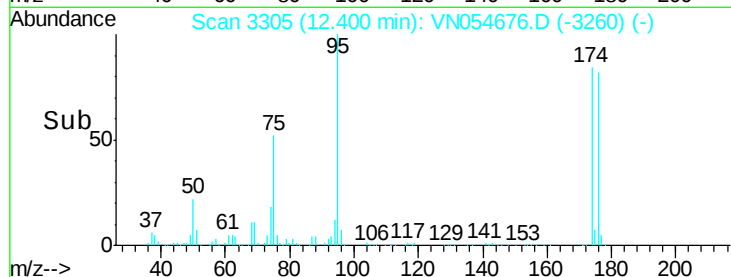
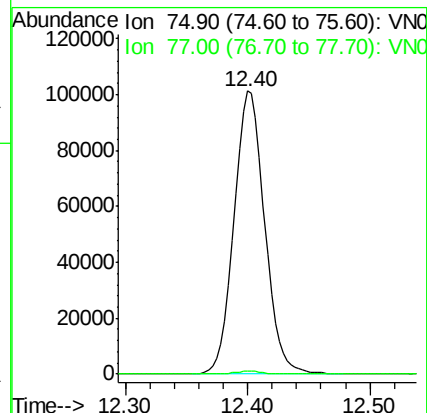
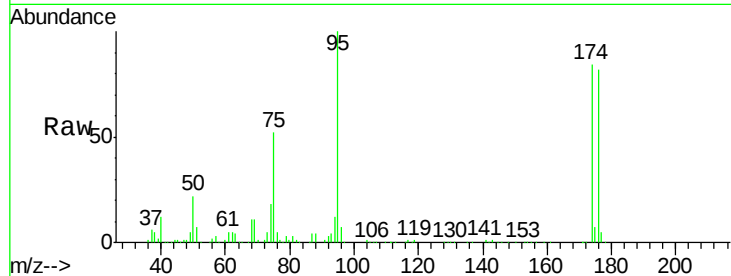
S4B(28)

Tot Ion: 75 Resp: 176857

Ion Ratio Lower Upper

75 100

77 1.0 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 132.623 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054676.D

Acq: 25 Mar 2019 16:45

Tgt Ion: 75 Resp: 176857

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#

