

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032119\
 Data File : VN054542.D
 Acq On : 22 Mar 2019 6:24
 Operator : JC/SP
 Sample : K2003-11
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 41 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 S4A(30)

Quant Time: Mar 22 10:22:23 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	7.67	168	665040	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	1032344	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	848523	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	312488	50.00	ug/l	0.00

System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.03	65	420350	50.82	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.64%	
35) Dibromofluoromethane	7.59	113	318145	47.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.68%	
50) Toluene-d8	10.09	98	1210456	48.41	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.82%	
62) 4-Bromofluorobenzene	12.40	95	373386	43.89	ug/l	0.00
Spiked Amount	50.000		Recovery	=	87.78%	

Target Compounds

						Qvalue
13) Acrolein	3.61	56	259	0.375	ug/l #	14
16) Acetone	3.82	43	59581	23.957	ug/l #	86
18) Methyl Acetate	4.34	43	3667	0.662	ug/l #	75
20) Methylene Chloride	4.55	84	28853	3.936	ug/l #	88
25) 2-Butanone	6.85	43	1538	0.483	ug/l #	80
29) Tetrahydrofuran	7.24	42	1498	0.725	ug/l #	34
31) Cyclohexane	7.66	56	13379	Below Cal	#	4
36) 1,1-Dichloropropene	7.66	75	46142	4.780	ug/l #	47
38) Carbon Tetrachloride	7.66	117	60798	6.482	ug/l #	16
43) Isopropyl Acetate	8.17	43	17581	1.516	ug/l #	89
45) 1,2-Dichloropropane	9.27	63	1777	0.240	ug/l #	43
48) Methyl methacrylate	9.19	41	9857	1.566	ug/l #	11
49) 1,4-Dioxane	9.27	88	61	0.867	ug/l #	1
51) 4-Methyl-2-Pentanone	10.03	43	11420	1.777	ug/l #	36
52) Toluene	10.16	92	18749	1.104	ug/l	99
53) t-1,3-Dichloropropene	10.17	75	109	2.243	ug/l #	1
54) cis-1,3-Dichloropropene	9.91	75	65705	6.245	ug/l #	69
57) 1,3-Dichloropropane	10.76	76	12733	1.200	ug/l #	43
59) 2-Hexanone	10.77	43	212394	50.604	ug/l #	47
71) Bromoform	12.39	173	691	2.375	ug/l #	28
74) N-amyl acetate	11.88	43	21971	3.034	ug/l #	50
76) 1,2,3-Trichloropropane	12.40	75	189039	38.123	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	189039	126.257	ug/l #	11

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. 0.00 min

Lab File: VN054542.D

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Instrument :

MSVOA_N

ClientSampleId :

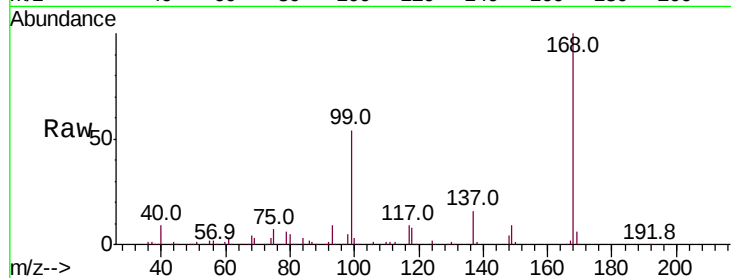
S4A(30)

Tot Ion:168 Resp: 665040

Ion Ratio Lower Upper

168 100

99 54.3 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.67

250000

200000

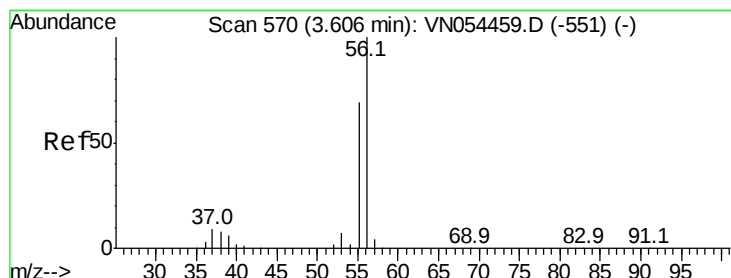
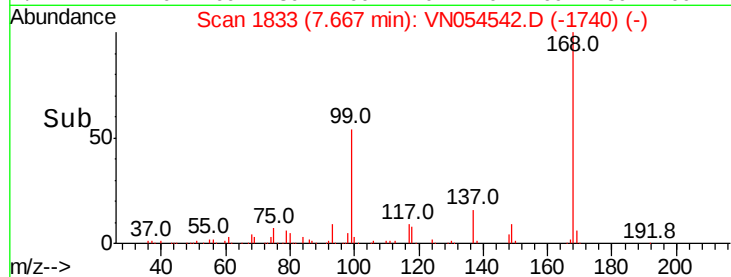
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80 7.90



#13

Acrolein

Concen: 0.375 ug/l

RT: 3.61 min Scan# 571

Delta R.T. 0.00 min

Lab File: VN054542.D

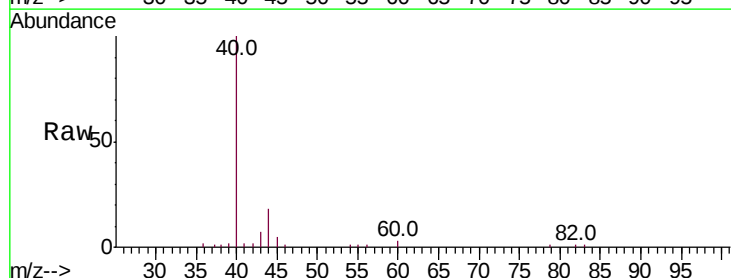
Acq: 22 Mar 2019 6:24

Tgt Ion: 56 Resp: 259

Ion Ratio Lower Upper

56 100

55 0.0 56.7 85.1#



Abundance Ion 56.00 (55.70 to 56.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

3.61

300

250

200

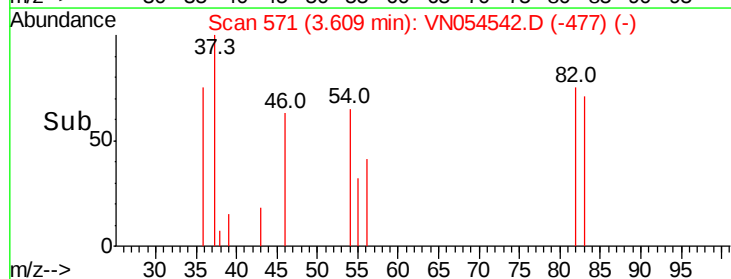
150

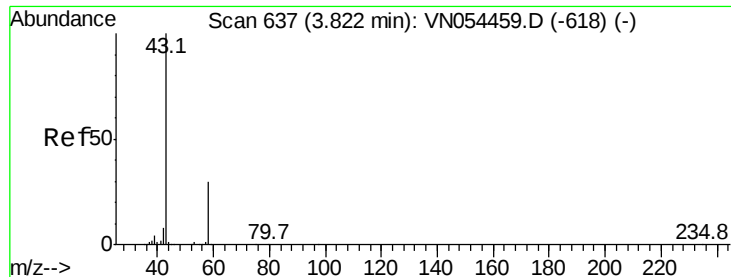
100

50

0

Time--> 3.59 3.60 3.61 3.62 3.63

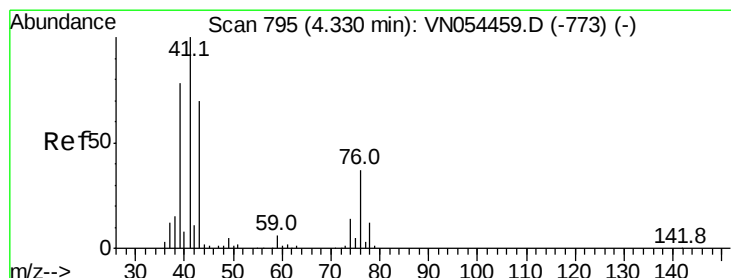
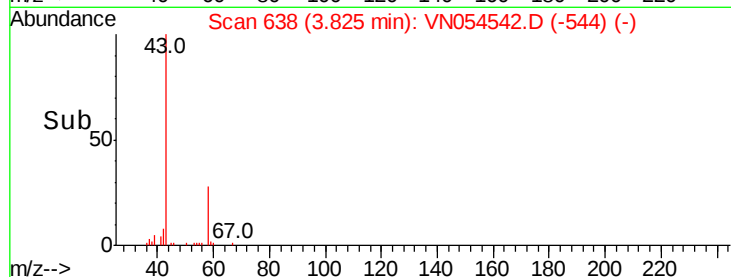
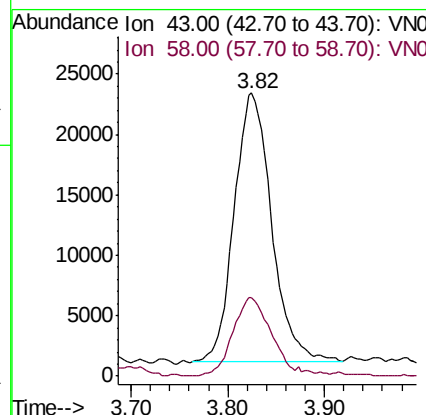
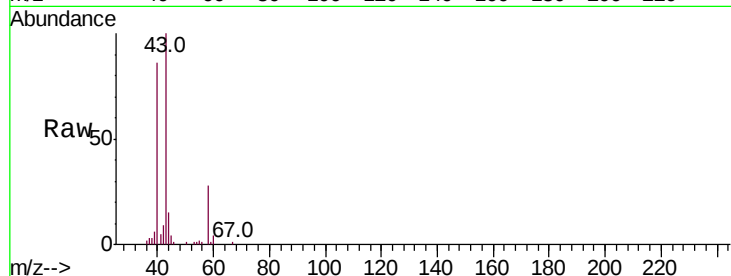




#16
Acetone
Concen: 23.957 ug/l
RT: 3.82 min Scan# 638
Delta R.T. 0.00 min
Lab File: VN054542.D
Acq: 22 Mar 2019 6:24

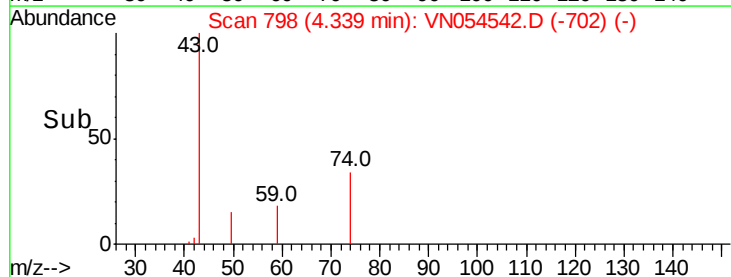
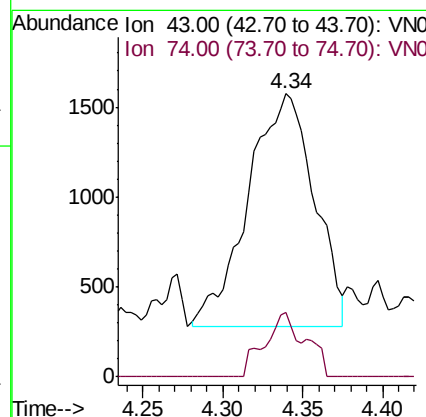
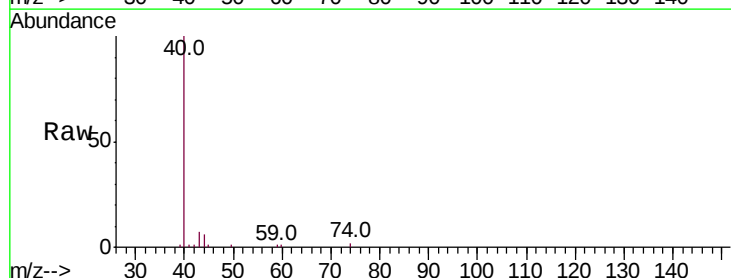
Instrument :
MSVOA_N
ClientSampled :
S4A(30)

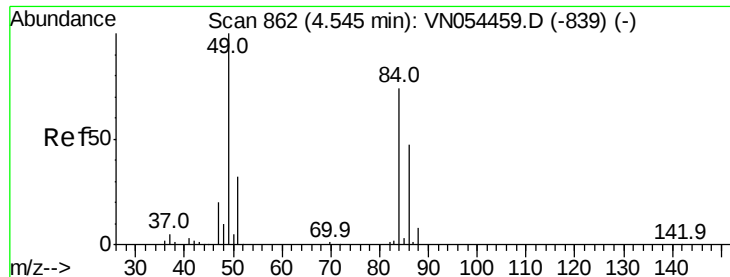
Tot Ion: 43 Resp: 59581
Ion Ratio Lower Upper
43 100
58 29.1 29.9 44.9#



#18
Methyl Acetate
Concen: 0.662 ug/l
RT: 4.34 min Scan# 798
Delta R.T. 0.01 min
Lab File: VN054542.D
Acq: 22 Mar 2019 6:24

Tgt Ion: 43 Resp: 3667
Ion Ratio Lower Upper
43 100
74 13.1 20.8 31.2#

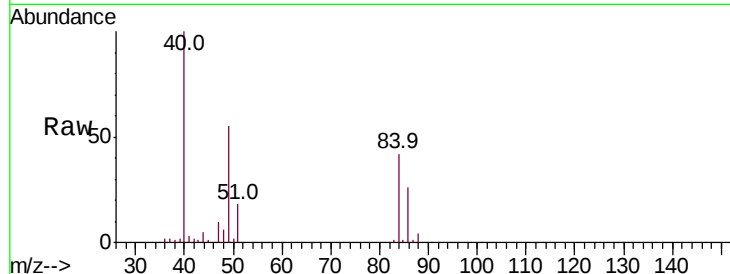




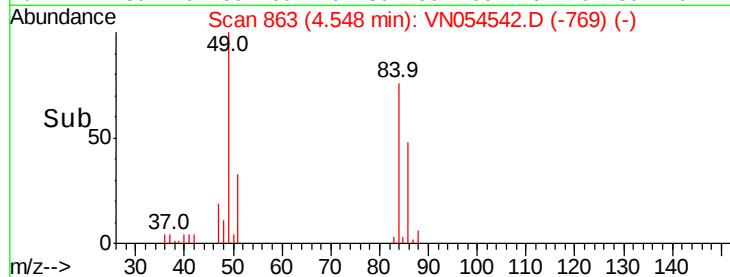
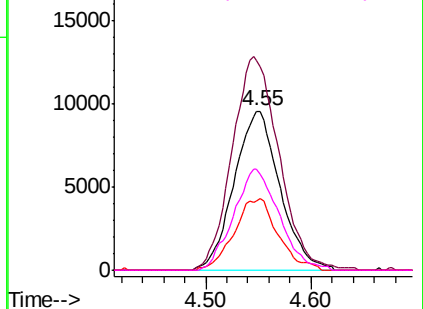
#20
Methvlene Chloride
Concen: 3.936 ug/l
RT: 4.55 min Scan# 863
Delta R.T. 0.00 min
Lab File: VN054542.D
Acq: 22 Mar 2019 6:24

Instrument :
MSVOA_N
ClientSampleId :
S4A(30)

Tot Ion: 84 Resp: 28853
Ion Ratio Lower Upper
84 100
49 132.2 89.7 134.5
51 43.6 28.2 42.4#
86 63.5 50.8 76.2

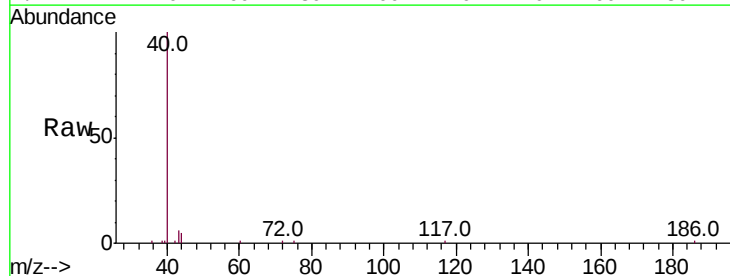
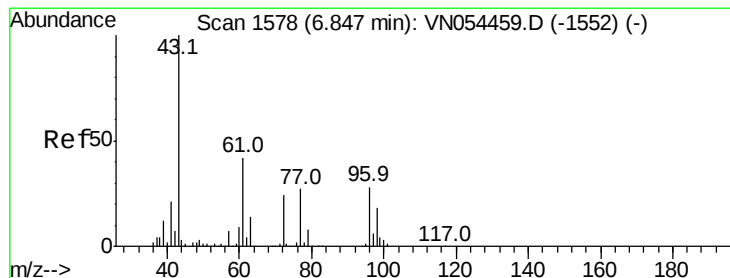


Abundance Ion 83.90 (83.60 to 84.60): VN0
20000 Ion 48.90 (48.60 to 49.60): VN0
15000 Ion 50.90 (50.60 to 51.60): VN0
10000 Ion 85.90 (85.60 to 86.60): VN0
5000
0

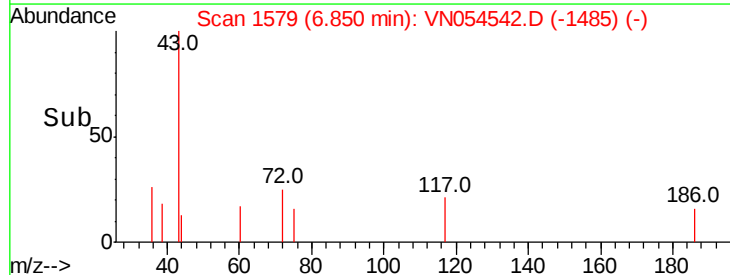
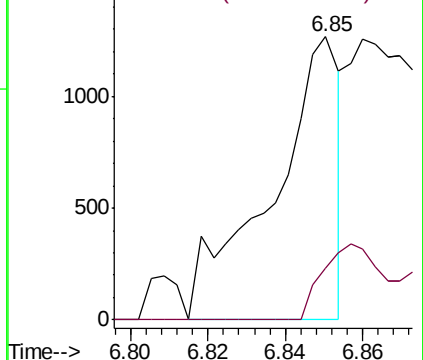


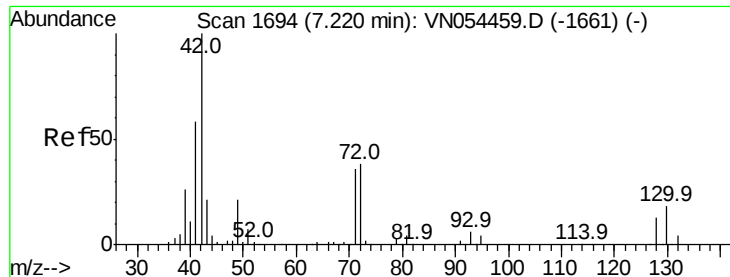
#25
2-Butanone
Concen: 0.483 ug/l
RT: 6.85 min Scan# 1579
Delta R.T. 0.00 min
Lab File: VN054542.D
Acq: 22 Mar 2019 6:24

Tgt Ion: 43 Resp: 1538
Ion Ratio Lower Upper
43 100
72 18.4 23.0 34.6#



Abundance Ion 43.00 (42.70 to 43.70): VN0
1500 Ion 72.00 (71.70 to 72.70): VN0
1000
500
0





#29

Tetrahydrofuran

Concen: 0.725 ug/l

RT: 7.24 min Scan# 1701

Delta R.T. 0.02 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampled :

S4A(30)

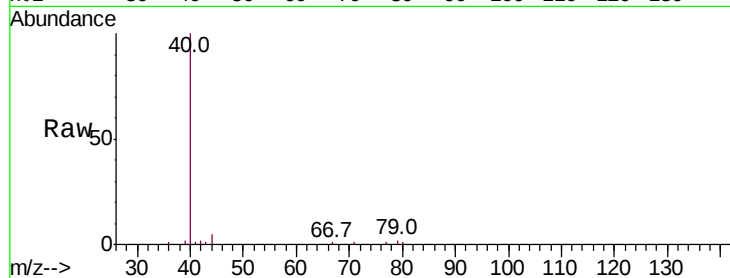
Tot Ion: 42 Resp: 1498

Ion Ratio Lower Upper

42 100

72 4.7 37.8 56.6#

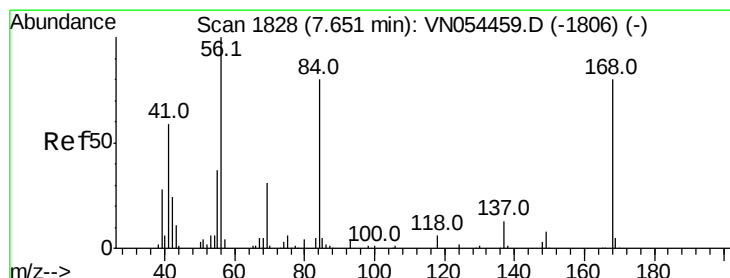
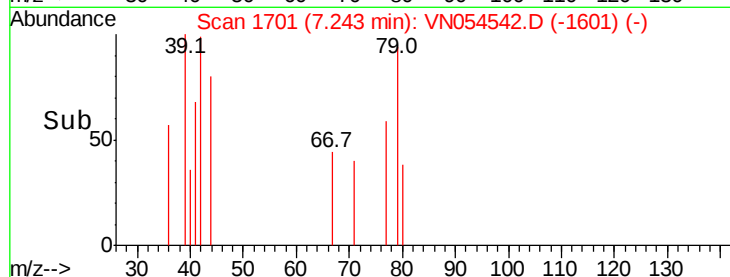
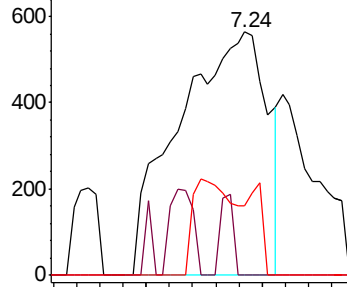
71 0.0 36.2 54.2#



Abundance Ion 42.00 (41.70 to 42.70): VNC

Ion 72.00 (71.70 to 72.70): VNC

Ion 71.00 (70.70 to 71.70): VNC



#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1831

Delta R.T. 0.01 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

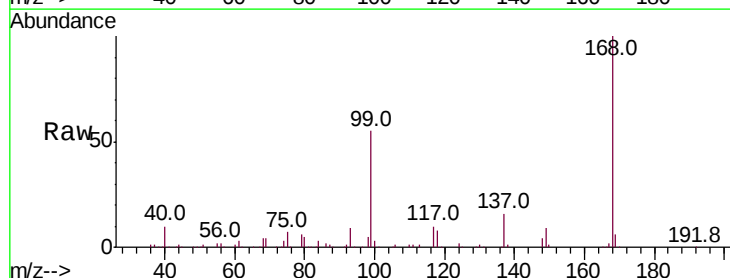
Tgt Ion: 56 Resp: 13379

Ion Ratio Lower Upper

56 100

69 173.3 27.8 41.6#

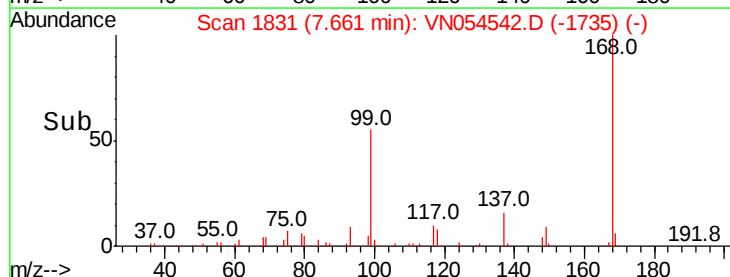
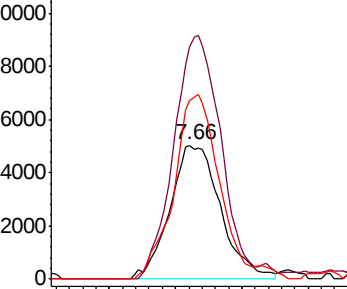
84 133.5 74.6 111.8#

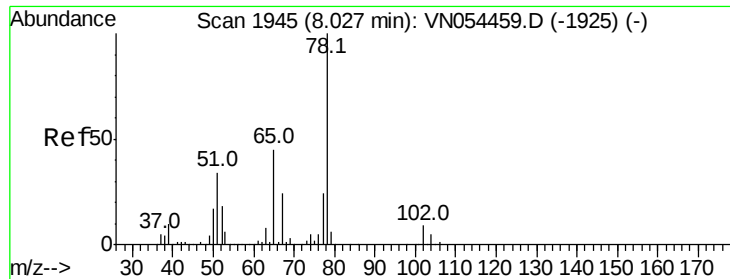


Abundance Ion 56.00 (55.70 to 56.70): VNC

Ion 69.00 (68.70 to 69.70): VNC

Ion 84.00 (83.70 to 84.70): VNC





#33

1,2-Dichloroethane-d4

Concen: 50.816 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. 0.00 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

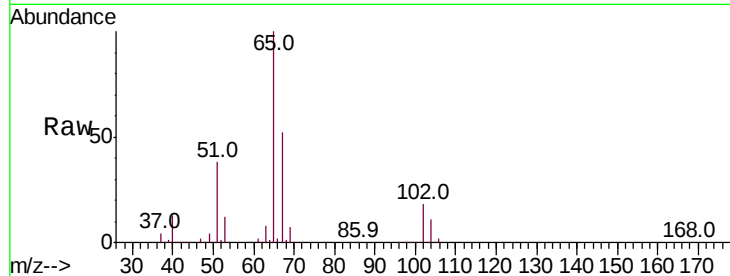
S4A(30)

Tot Ion: 65 Resp: 420350

Ion Ratio Lower Upper

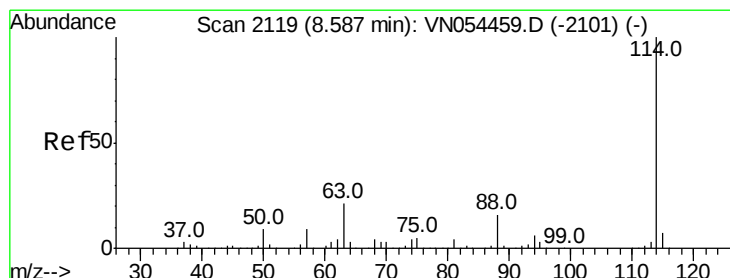
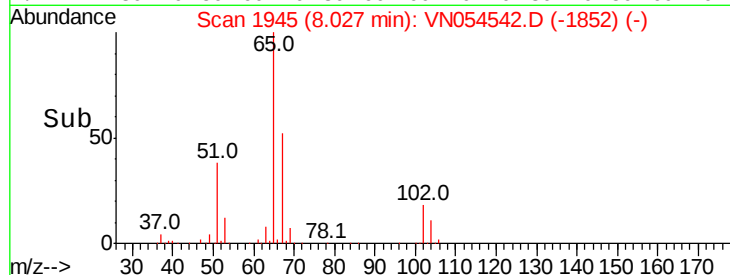
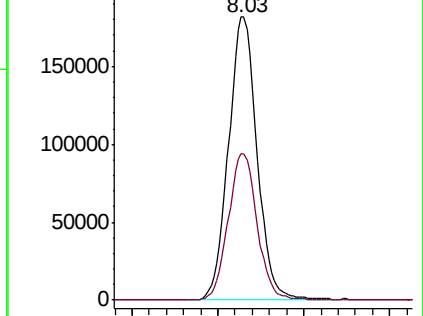
65 100

67 52.3 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: VN054542.D

Acq: 22 Mar 2019 6:24

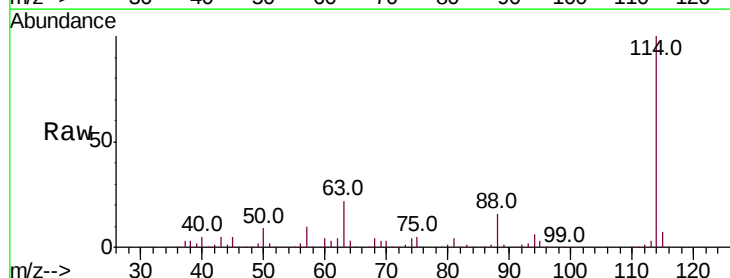
Tgt Ion:114 Resp: 1032344

Ion Ratio Lower Upper

114 100

63 22.0 0.0 35.2

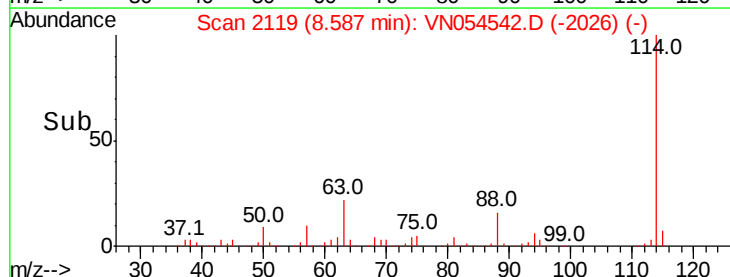
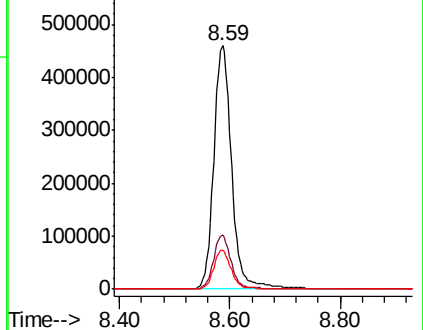
88 16.0 0.0 30.2

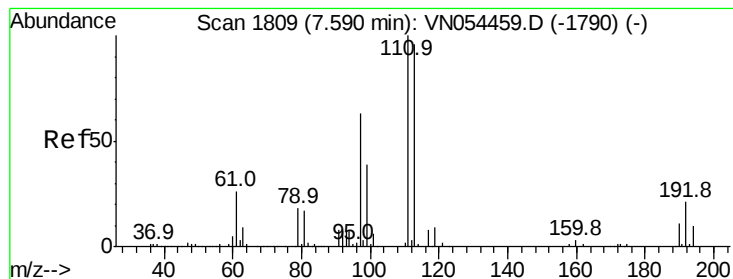


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0





#35

Dibromofluoromethane

Concen: 47.835 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

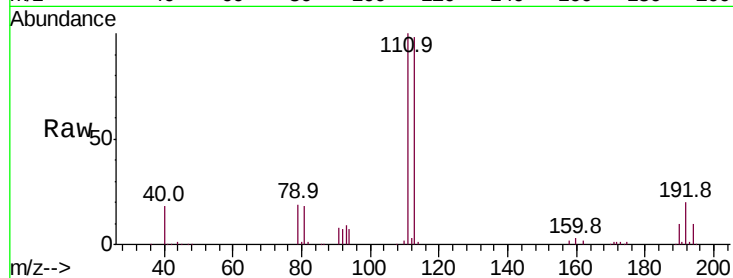
Tot Ion:113 Resp: 318145

Ion Ratio Lower Upper

113 100

111 102.0 82.2 123.4

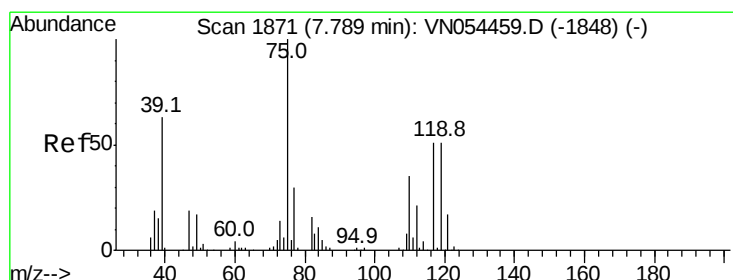
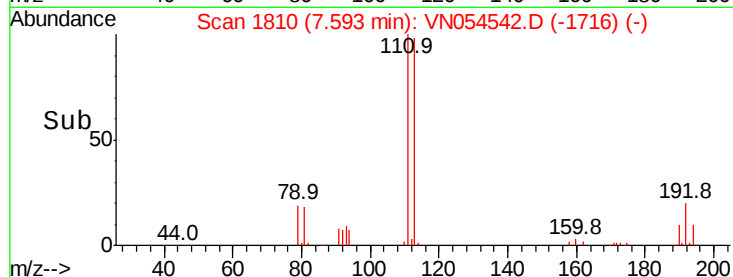
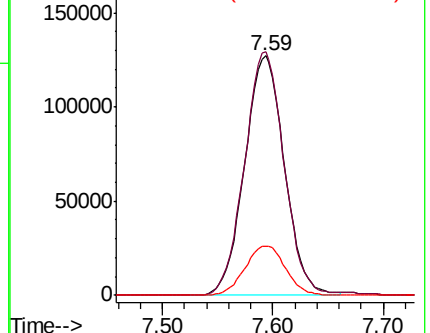
192 21.0 19.2 28.8



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: 4.780 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

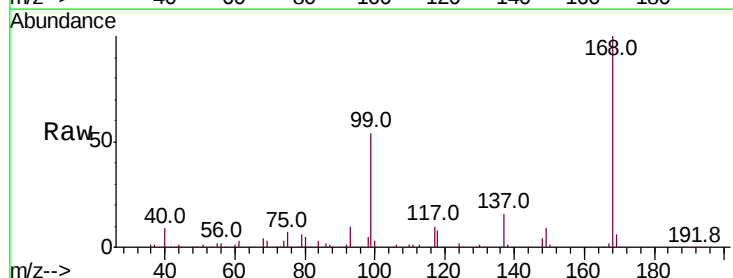
Tgt Ion: 75 Resp: 46142

Ion Ratio Lower Upper

75 100

110 8.1 19.1 57.5#

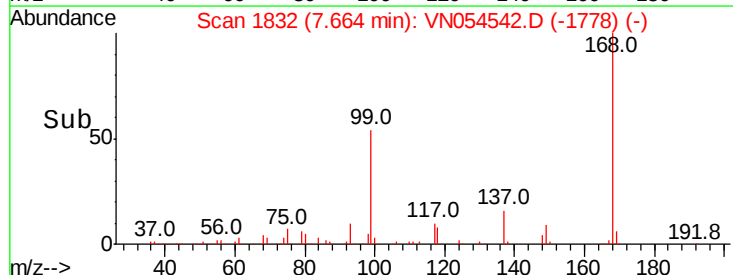
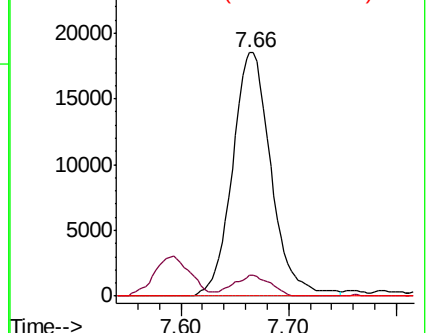
77 0.0 25.0 37.4#

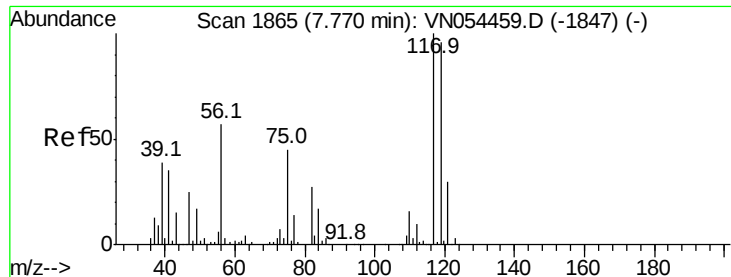


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VN0





#38

Carbon Tetrachloride

Concen: 6.482 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

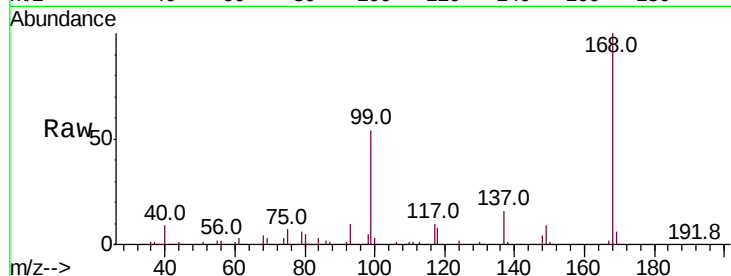
Tot Ion:117 Resp: 60798

Ion Ratio Lower Upper

117 100

119 4.6 76.3 114.5#

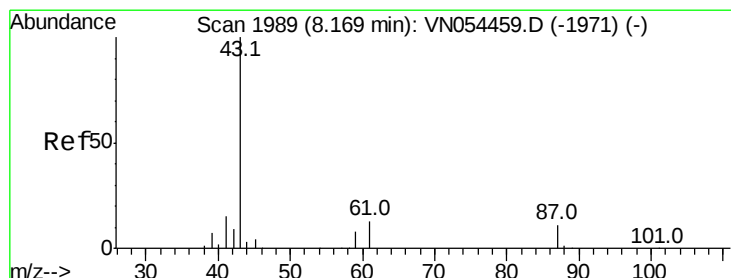
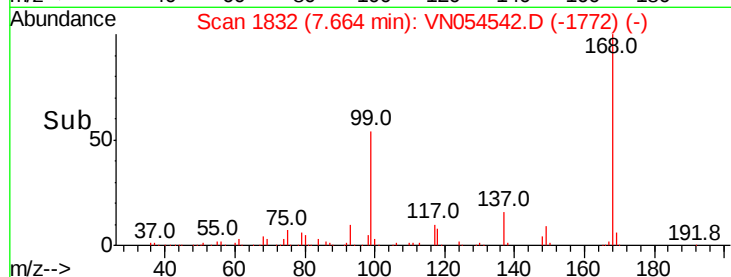
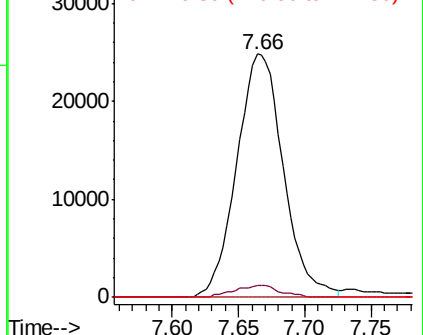
121 0.0 24.6 36.8#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 1.516 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

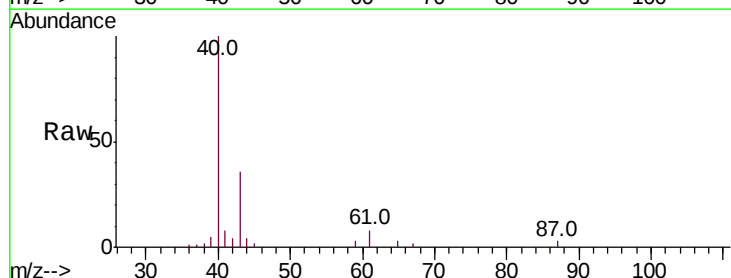
Tgt Ion: 43 Resp: 17581

Ion Ratio Lower Upper

43 100

61 19.4 15.8 23.8

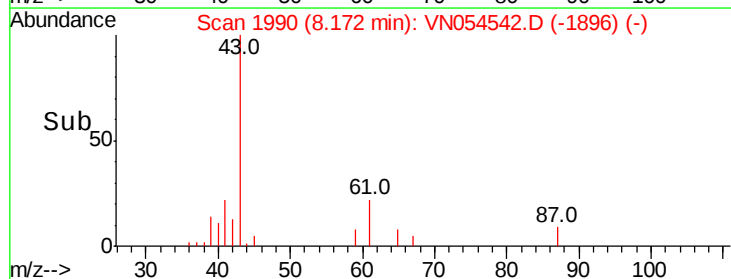
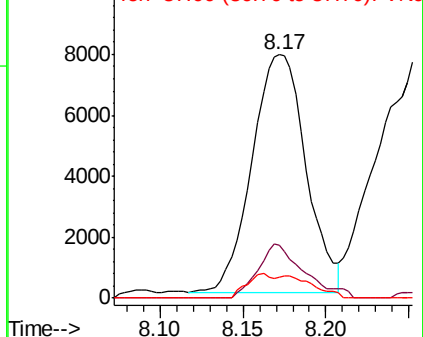
87 5.1 12.0 18.0#

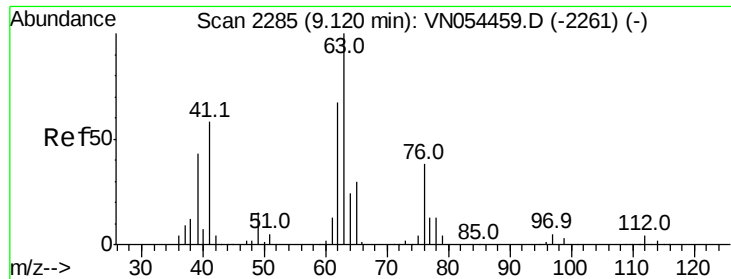


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V





#45

1,2-Dichloropropane

Concen: 0.240 ug/l

RT: 9.27 min Scan# 2332

Delta R.T. 0.15 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampled :

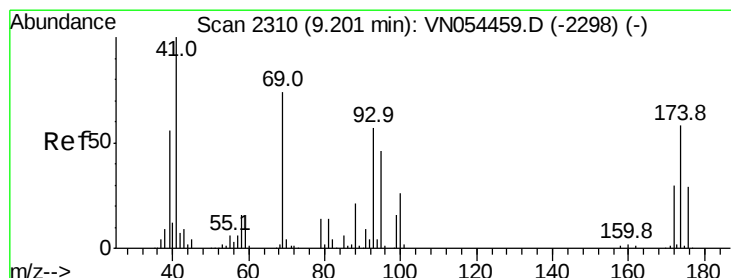
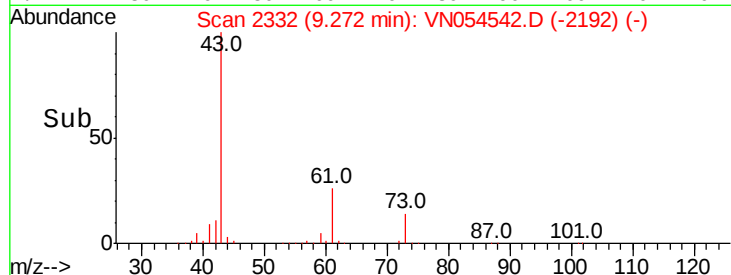
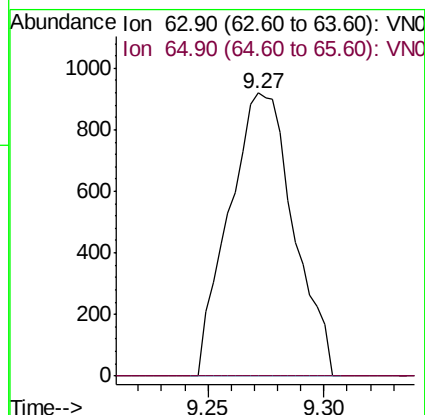
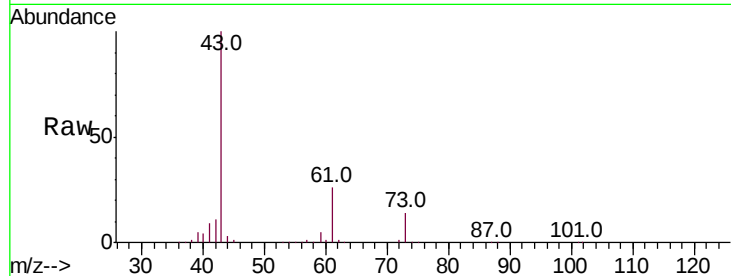
S4A(30)

Tot Ion: 63 Resp: 1777

Ion Ratio Lower Upper

63 100

65 0.0 25.0 37.6#



#48

Methyl methacrylate

Concen: 1.566 ug/l

RT: 9.19 min Scan# 2306

Delta R.T. -0.01 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

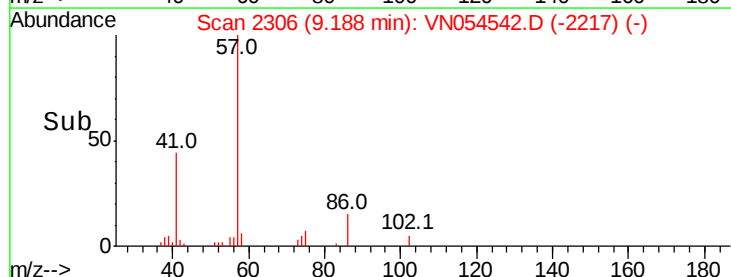
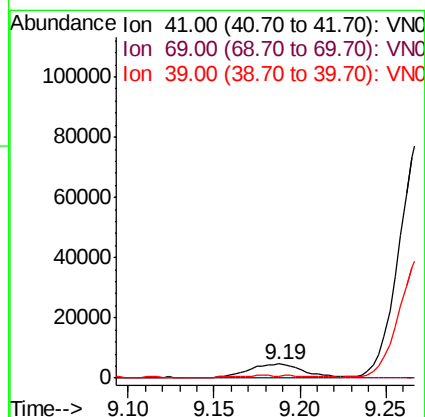
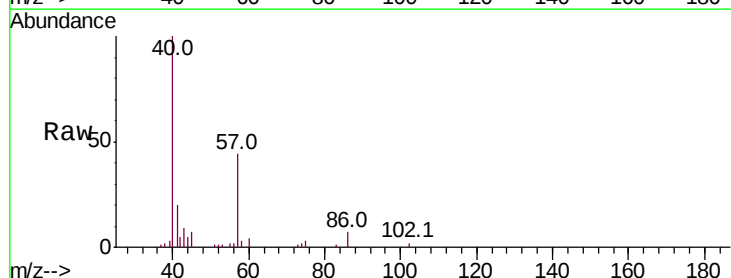
Tgt Ion: 41 Resp: 9857

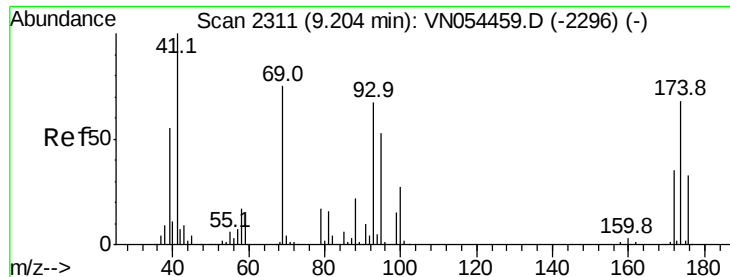
Ion Ratio Lower Upper

41 100

69 0.0 72.6 108.8#

39 0.0 47.5 71.3#





#49

1,4-Dioxane

Concen: 0.867 ug/l

RT: 9.27 min Scan# 2332

Delta R.T. 0.07 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampled :

S4A(30)

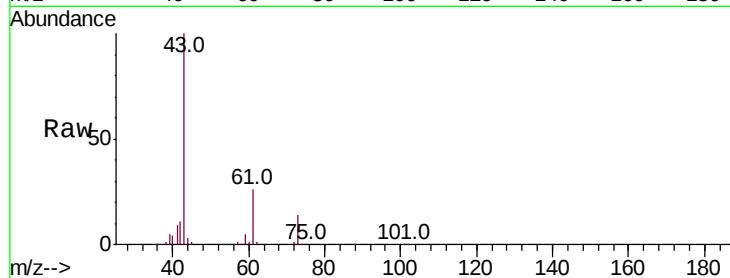
Tot Ion: 88 Resp: 61

Ion Ratio Lower Upper

88 100

43 2826491.8 24.1 36.1#

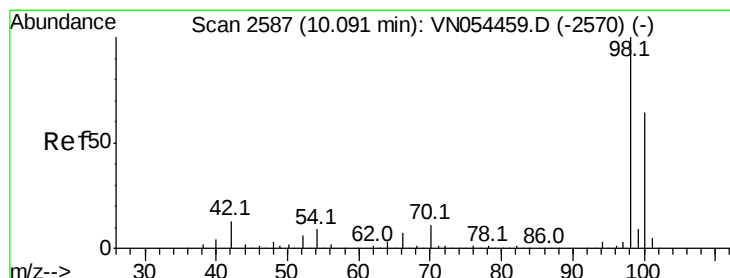
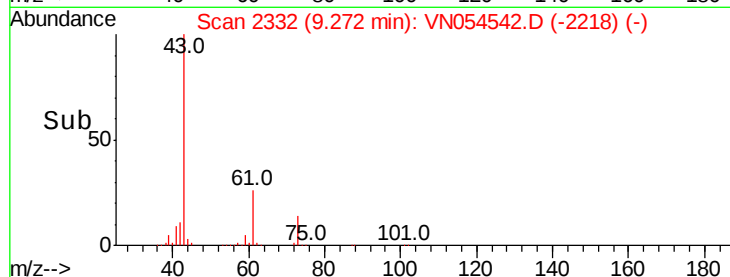
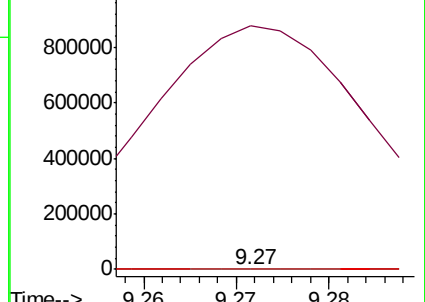
58 10762.3 50.8 76.2#



Abundance Ion 88.00 (87.70 to 88.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



#50

Toluene-d8

Concen: 48.412 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN054542.D

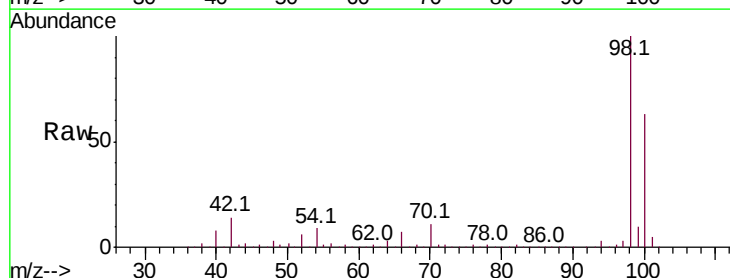
Acq: 22 Mar 2019 6:24

Tgt Ion: 98 Resp: 1210456

Ion Ratio Lower Upper

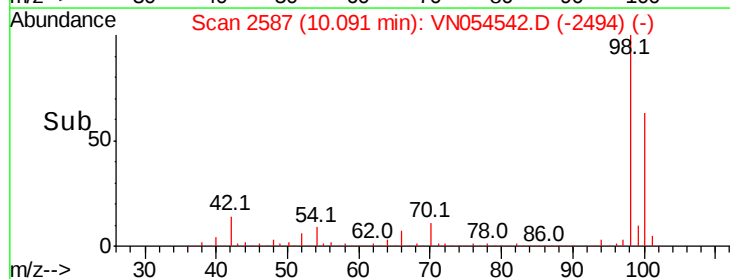
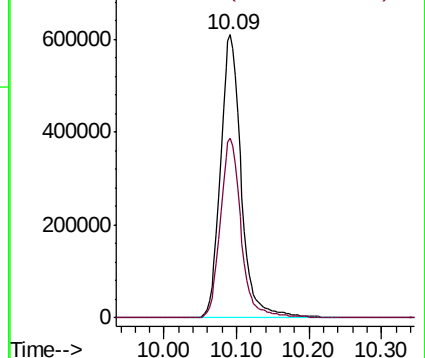
98 100

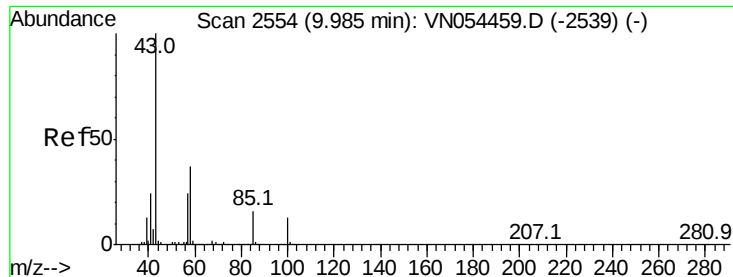
100 63.7 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0





#51

4-Methyl-2-Pentanone

Concen: 1.777 ug/l

RT: 10.03 min Scan# 2567

Delta R.T. 0.04 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

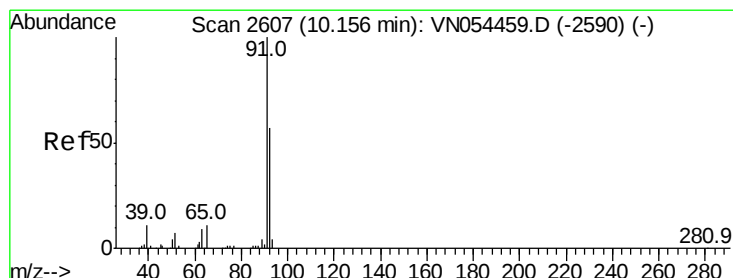
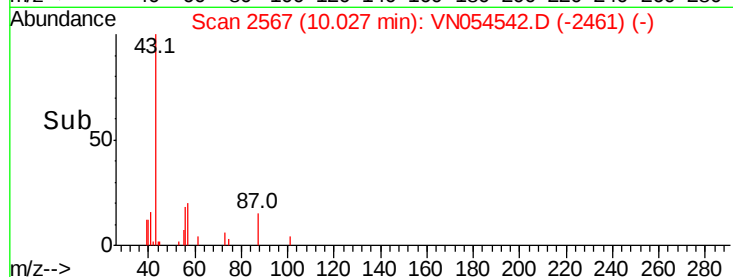
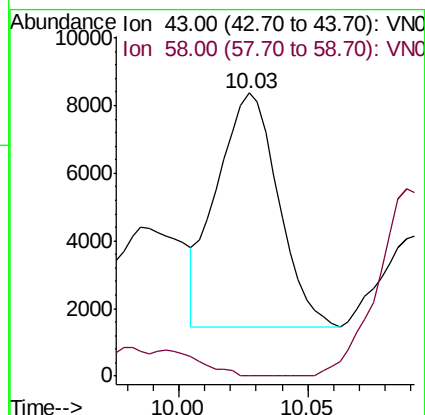
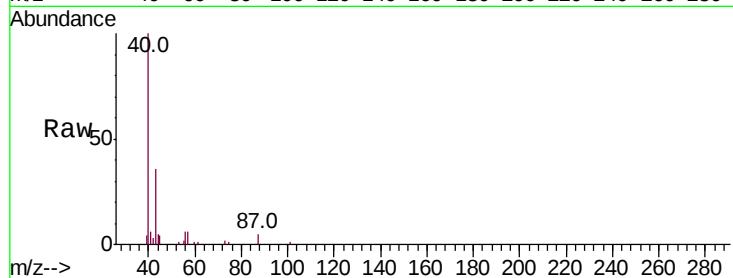
S4A(30)

Tot Ion: 43 Resp: 11420

Ion Ratio Lower Upper

43 100

58 0.0 31.8 47.6#



#52

Toluene

Concen: 1.104 ug/l

RT: 10.16 min Scan# 2607

Delta R.T. 0.00 min

Lab File: VN054542.D

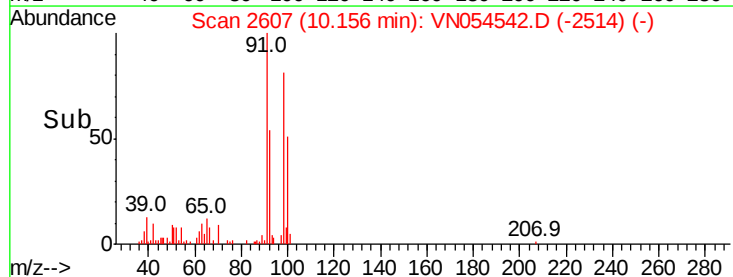
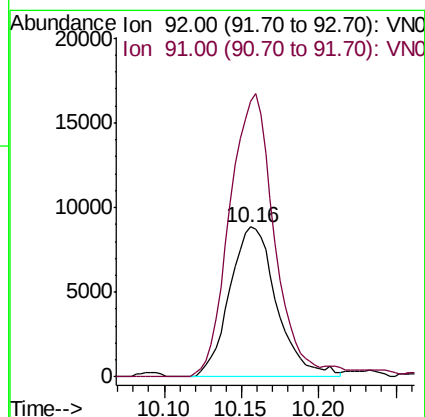
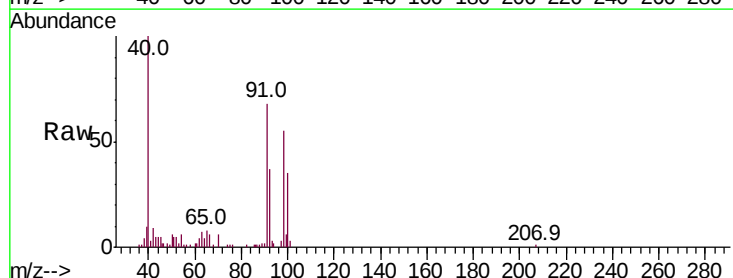
Acq: 22 Mar 2019 6:24

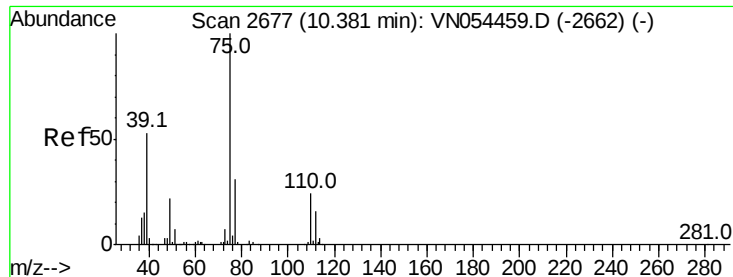
Tgt Ion: 92 Resp: 18749

Ion Ratio Lower Upper

92 100

91 177.7 140.7 211.1





#53

t-1,3-Dichloropropene

Concen: 2.243 ug/l

RT: 10.17 min Scan# 2611

Delta R.T. -0.21 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampled :

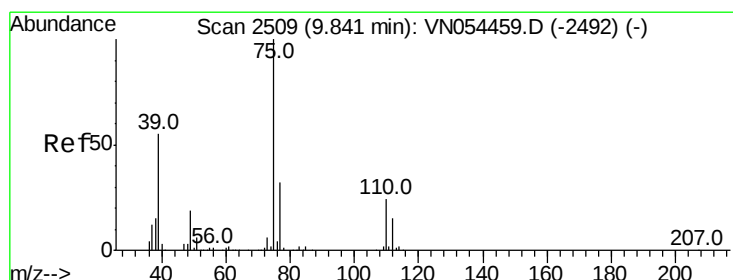
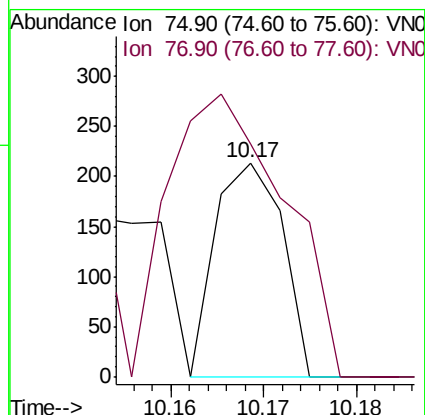
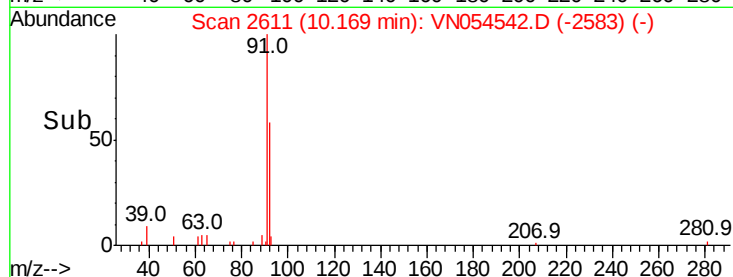
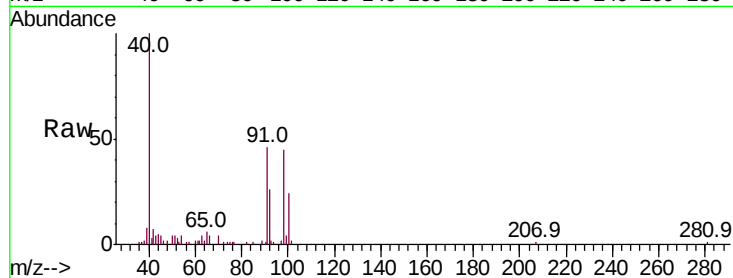
S4A(30)

Tot Ion: 75 Resp: 109

Ion Ratio Lower Upper

75 100

77 108.9 25.8 38.8#



#54

cis-1,3-Dichloropropene

Concen: 6.245 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

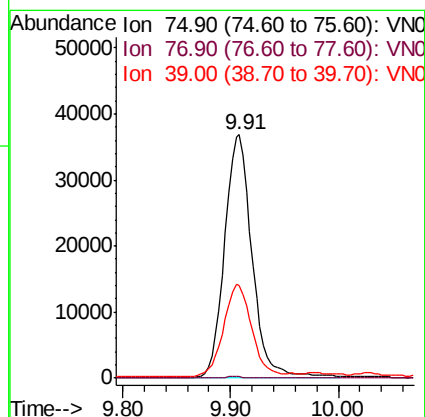
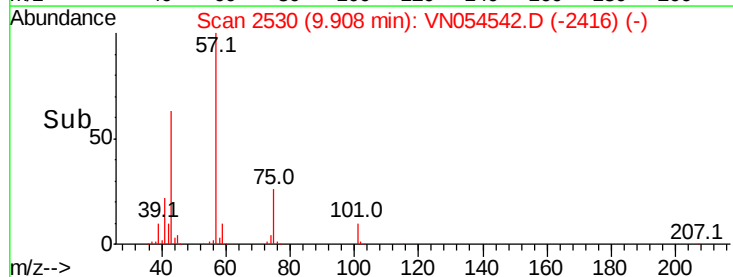
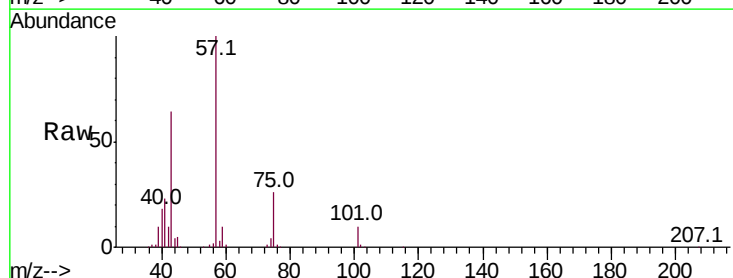
Tgt Ion: 75 Resp: 65705

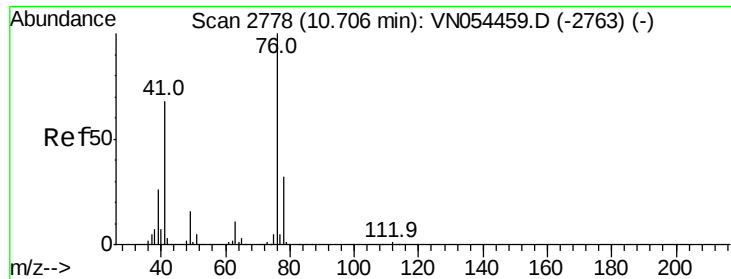
Ion Ratio Lower Upper

75 100

77 0.4 25.4 38.0#

39 37.7 37.2 55.8





#57

1,3-Dichloropropane

Concen: 1.200 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

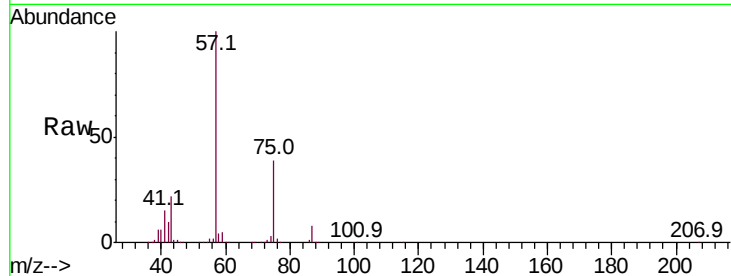
S4A(30)

Tot Ion: 76 Resp: 12733

Ion Ratio Lower Upper

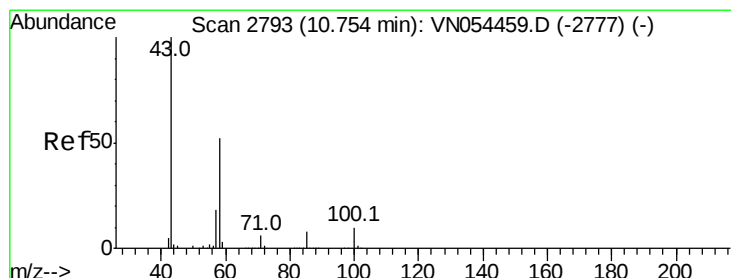
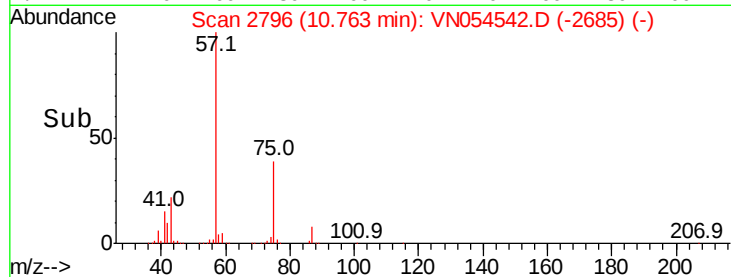
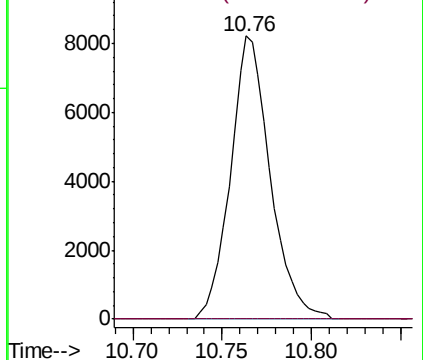
76 100

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: 50.604 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.01 min

Lab File: VN054542.D

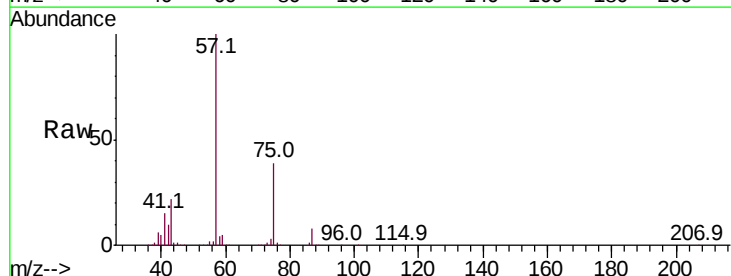
Acq: 22 Mar 2019 6:24

Tgt Ion: 43 Resp: 212394

Ion Ratio Lower Upper

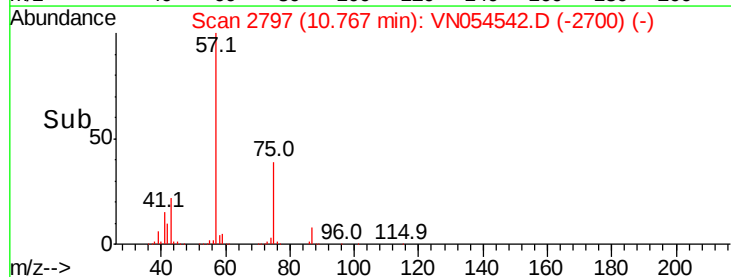
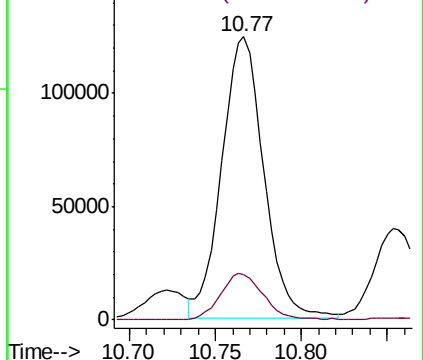
43 100

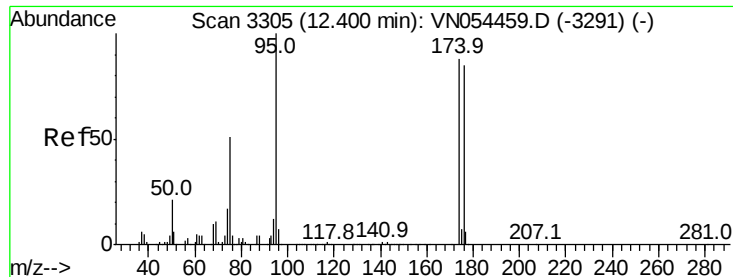
58 17.1 28.0 83.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: 43.886 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

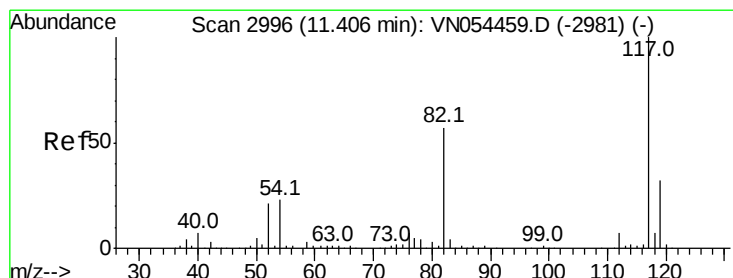
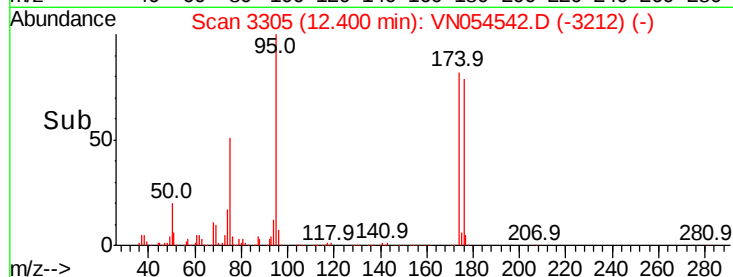
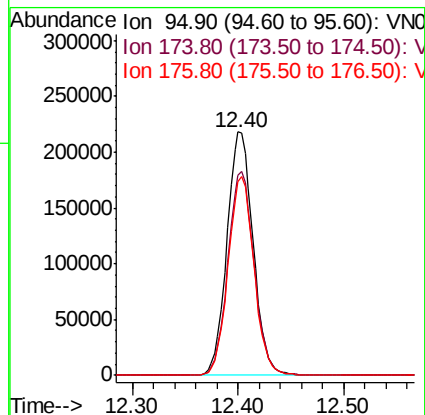
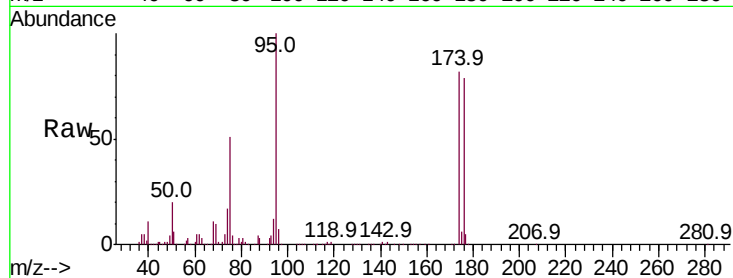
Tot Ion: 95 Resp: 373386

Ion Ratio Lower Upper

95 100

174 84.0 0.0 191.0

176 81.0 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: VN054542.D

Acq: 22 Mar 2019 6:24

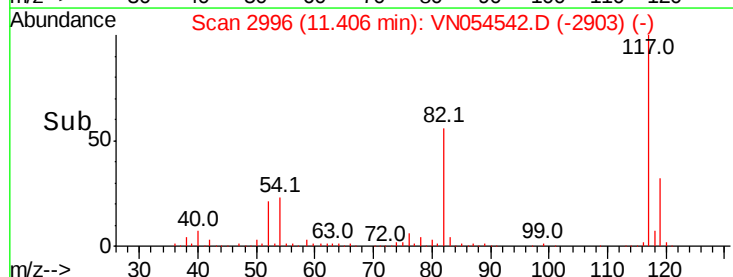
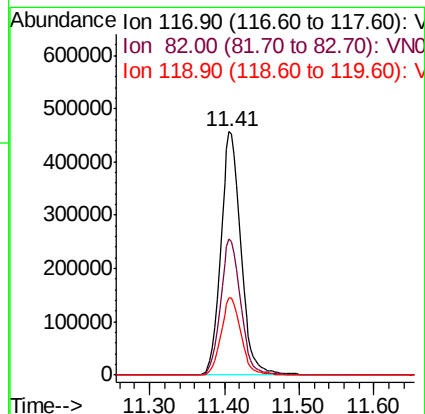
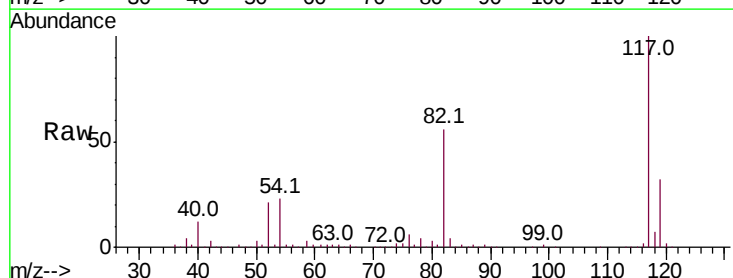
Tgt Ion: 117 Resp: 848523

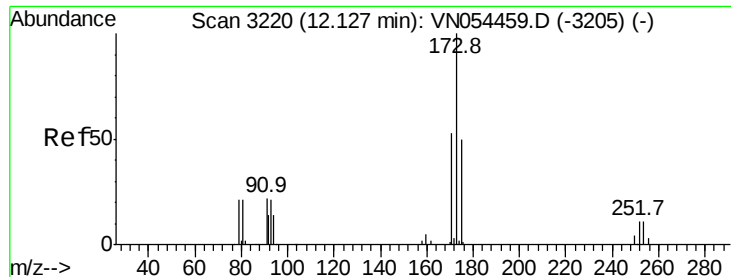
Ion Ratio Lower Upper

117 100

82 56.0 40.0 60.0

119 32.0 25.8 38.6





#71

Bromoform

Concen: 2.375 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.27 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

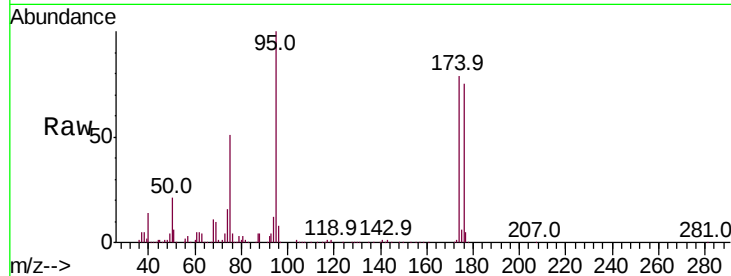
Tot Ion:173 Resp: 691

Ion Ratio Lower Upper

173 100

175 0.0 24.4 73.2#

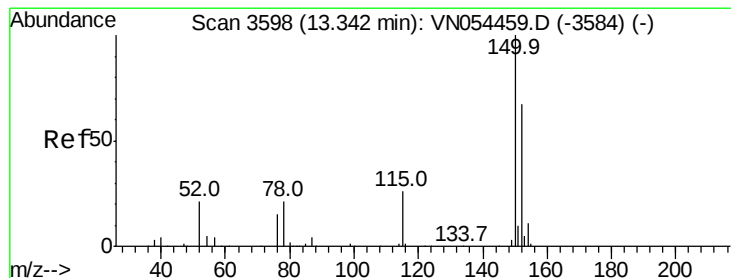
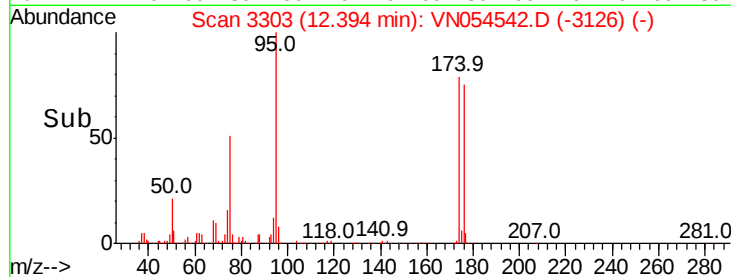
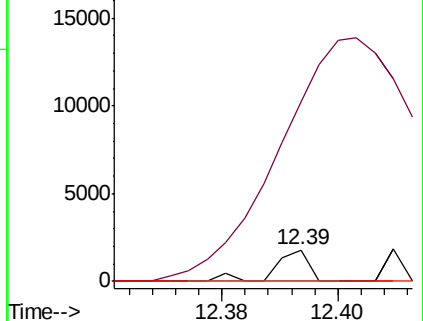
254 0.0 0.1 0.1#



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: VN054542.D

Acq: 22 Mar 2019 6:24

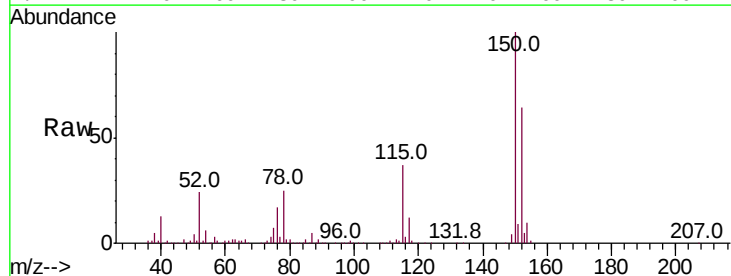
Tgt Ion:152 Resp: 312488

Ion Ratio Lower Upper

152 100

115 57.9 27.2 81.6

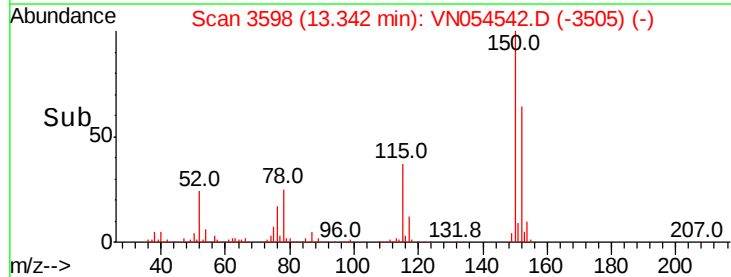
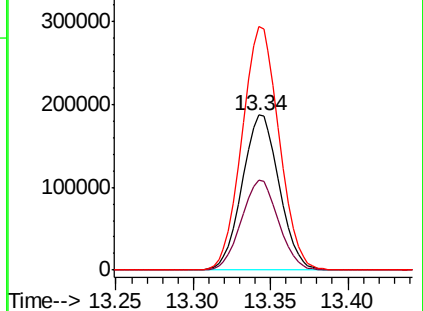
150 157.1 0.0 349.2

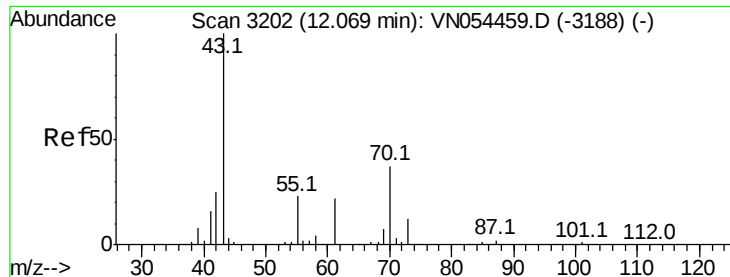


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 3.034 ug/l

RT: 11.88 min Scan# 3142

Delta R.T. -0.19 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

Tot Ion: 43 Resp: 21971

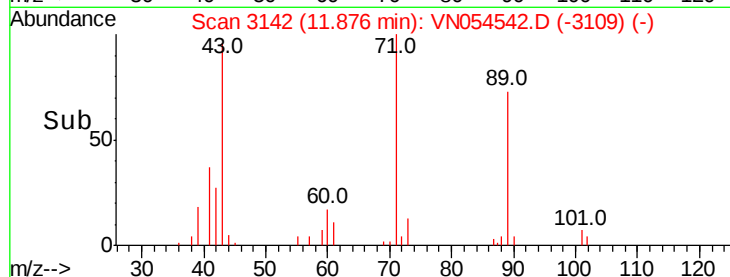
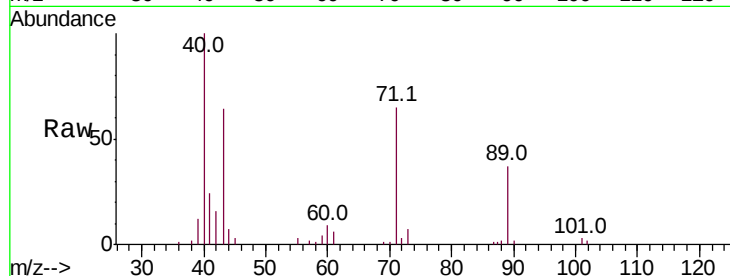
Ion Ratio Lower Upper

43 100

70 1.0 35.4 53.0#

55 4.4 19.8 29.6#

61 9.9 19.8 29.6#

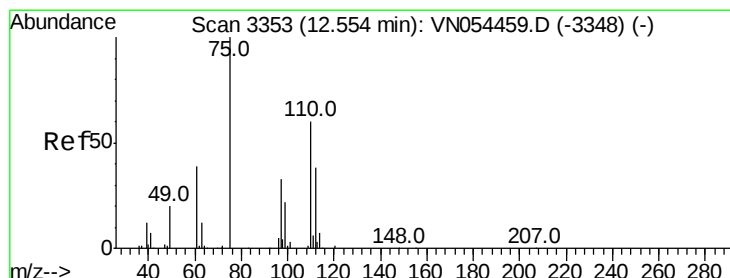
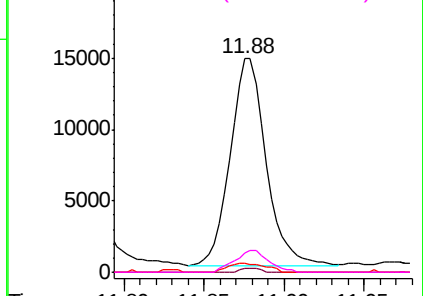


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 70.00 (69.70 to 70.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

Ion 61.00 (60.70 to 61.70): VN0



#76

1,2,3-Trichloropropane

Concen: 38.123 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054542.D

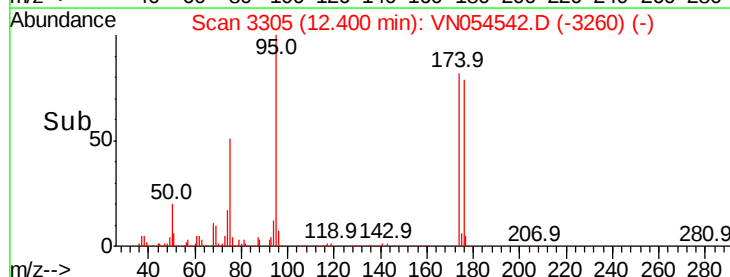
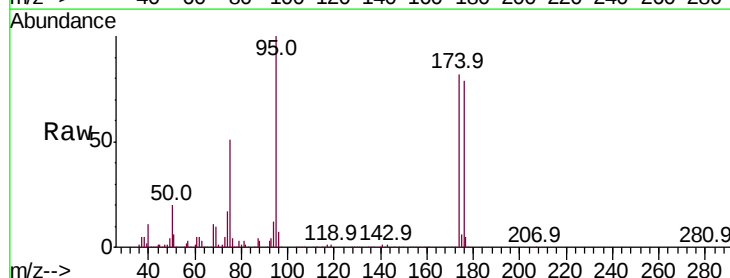
Acq: 22 Mar 2019 6:24

Tgt Ion: 75 Resp: 189039

Ion Ratio Lower Upper

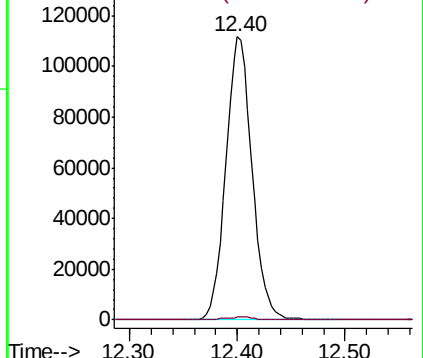
75 100

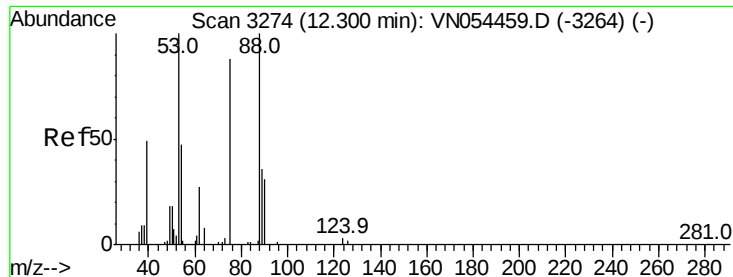
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0





#81

trans-1,4-Dichloro-2-butene

Concen: 126.257 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054542.D

Acq: 22 Mar 2019 6:24

Instrument :

MSVOA_N

ClientSampleId :

S4A(30)

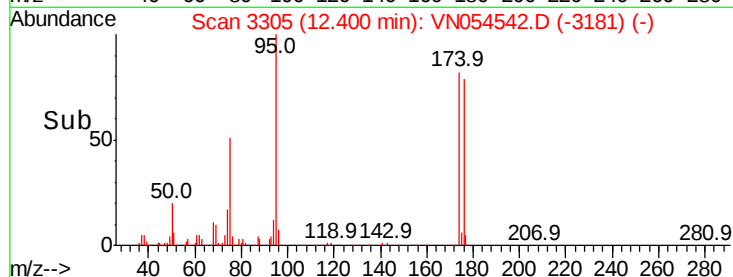
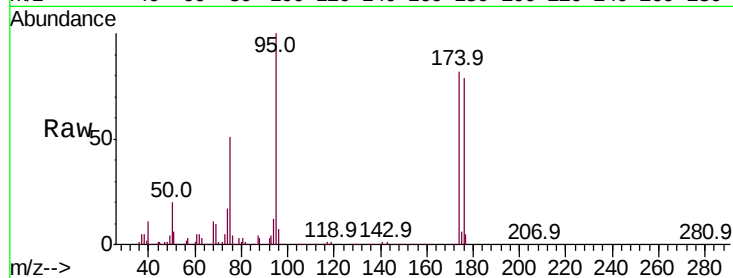
Tot Ion: 75 Resp: 189039

Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

