

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN033019\
 Data File : VN054804.D
 Acq On : 30 Mar 2019 15:59
 Operator : JC/SP
 Sample : K2181-03
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

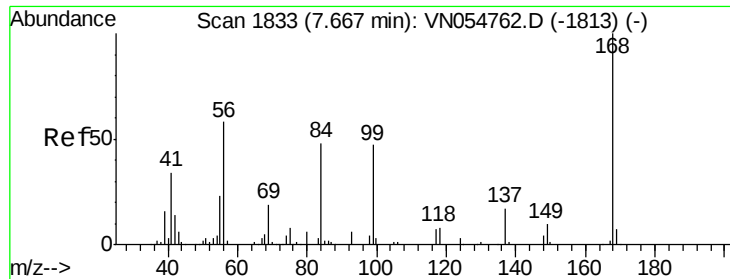
Quant Time: Mar 30 22:40:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N032919W.M
 Quant Title : SW846 8260
 QLast Update : Sat Mar 30 00:48:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	538587	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	873883	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	729345	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	259073	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	357132	49.19	ug/l	0.00
Spiked Amount			Recovery	=	98.38%	
35) Dibromofluoromethane	7.59	113	283645	48.69	ug/l	0.00
Spiked Amount			Recovery	=	97.38%	
50) Toluene-d8	10.09	98	1039167	47.98	ug/l	0.00
Spiked Amount			Recovery	=	95.96%	
62) 4-Bromofluorobenzene	12.40	95	314184	43.61	ug/l	0.00
Spiked Amount			Recovery	=	87.22%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.57	94	62	Below Cal	#	2
11) Tert butyl alcohol	4.82	59	23753	62.793	ug/l #	81
13) Acrolein	3.62	56	254	0.751	ug/l #	13
16) Acetone	3.83	43	6794	3.924	ug/l	89
18) Methyl Acetate	4.33	43	269	Below Cal	#	77
19) Methyl tert-butyl Ether	5.07	73	31747	2.144	ug/l	98
31) Cyclohexane	7.66	56	12562	Below Cal	#	28
36) 1,1-Dichloropropene	7.67	75	41014	5.037	ug/l #	44
38) Carbon Tetrachloride	7.67	117	52243	6.606	ug/l #	16
43) Isopropyl Acetate	8.34	43	17637	1.818	ug/l #	60
58) 2-Chloroethyl Vinyl ether	9.87	63	60	10.374	ug/l #	44
71) Bromoform	12.41	173	3404	1.087	ug/l #	1
75) 1,1,2,2-Tetrachloroethane	12.44	83	38	Below Cal	#	26
76) 1,2,3-Trichloropropane	12.40	75	166273	36.944	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	166273	143.702	ug/l #	11
83) tert-Butylbenzene	13.00	119	325	Below Cal	#	28

(#) = 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: VN054804.D

Acq: 30 Mar 2019 15:59

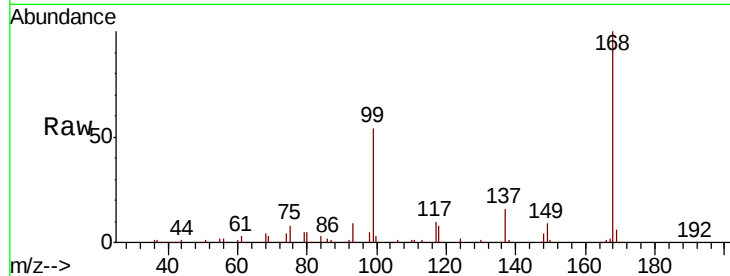
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 538587

Ion Ratio Lower Upper

168 100

99 53.8 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): VN054804.D (-1740) (-)

Ion 98.90 (98.60 to 99.60): VN054804.D (-1740) (-)

7.67

250000

200000

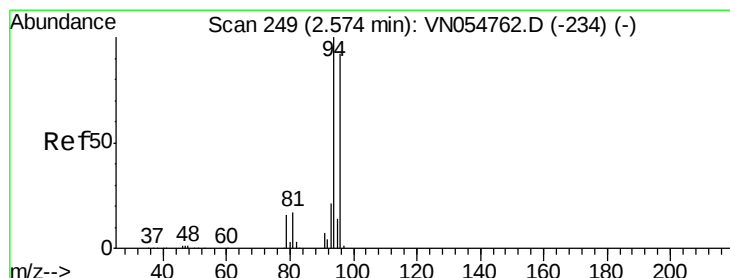
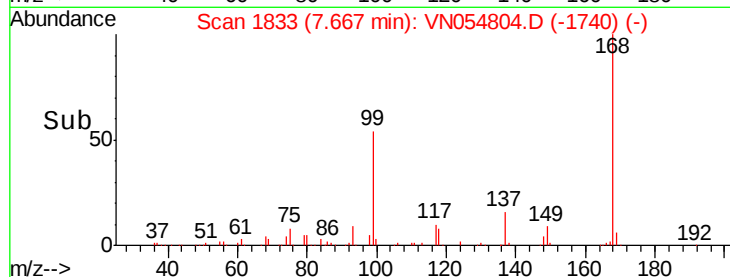
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.57 min Scan# 247

Delta R.T. -0.01 min

Lab File: VN054804.D

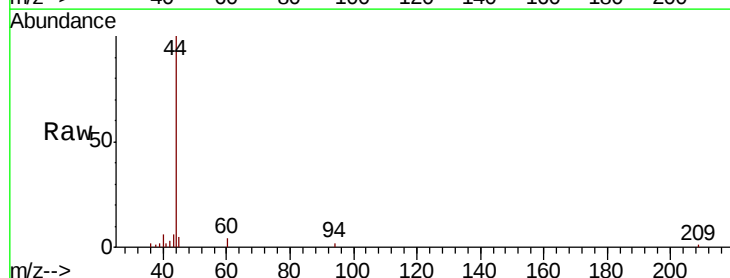
Acq: 30 Mar 2019 15:59

Tgt Ion: 94 Resp: 62

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN054804.D (-156) (-)

Ion 95.90 (95.60 to 96.60): VN054804.D (-156) (-)

250

200

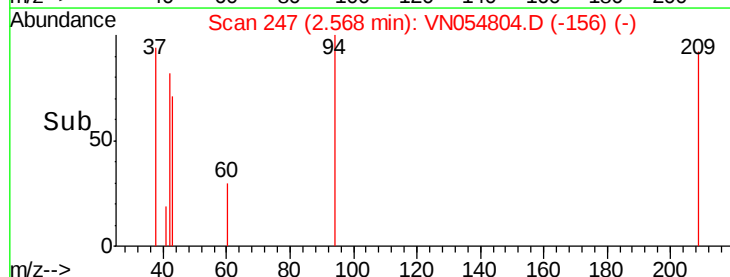
150

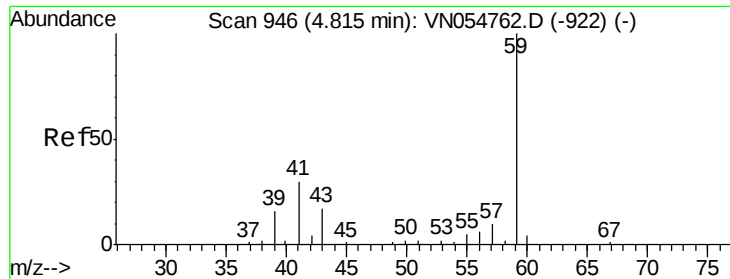
100

50

0

Time-->

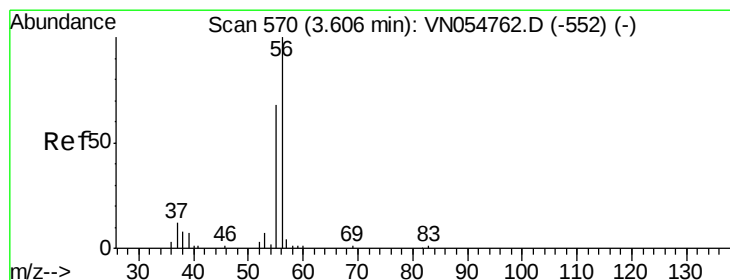
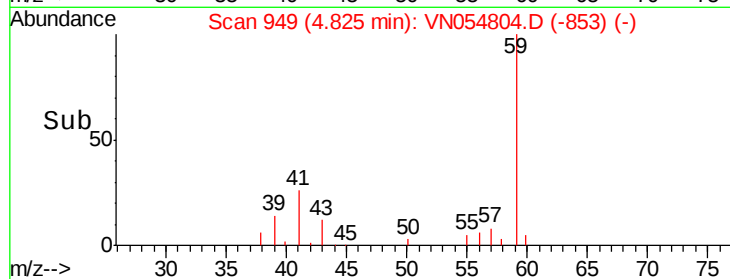
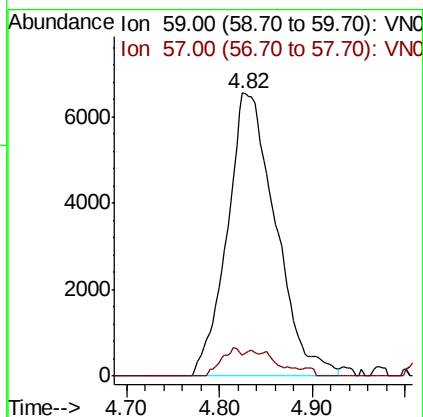
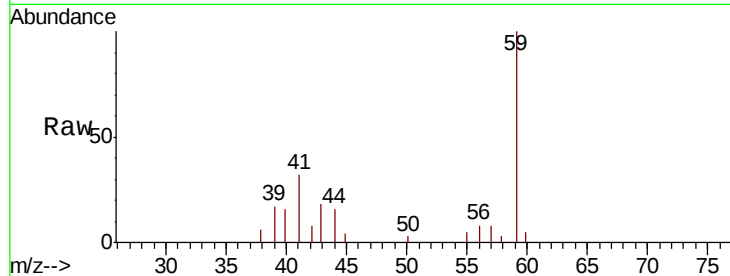




#11
Tert butyl alcohol
Concen: 62.793 ug/l
RT: 4.82 min Scan# 949
Delta R.T. 0.01 min
Lab File: VN054804.D
Acq: 30 Mar 2019 15:59

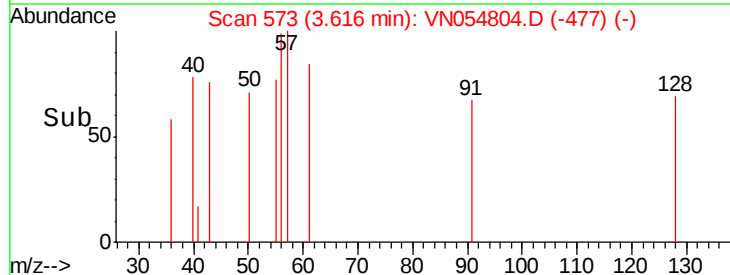
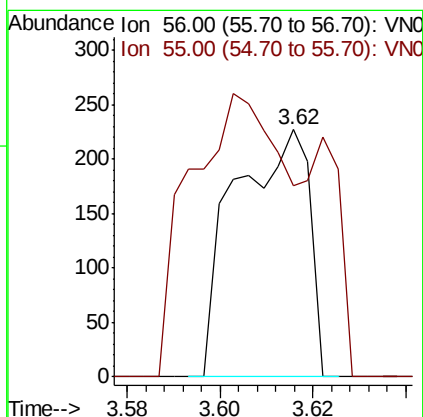
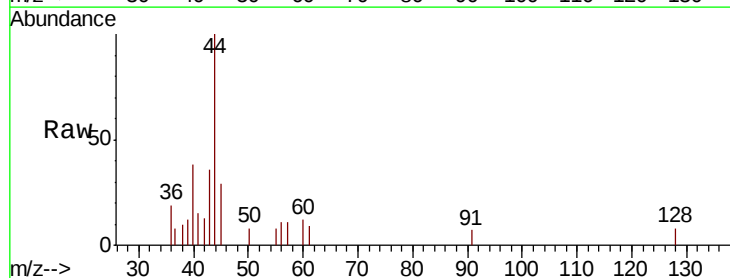
Instrument :
MSVOA_N
ClientSampled :

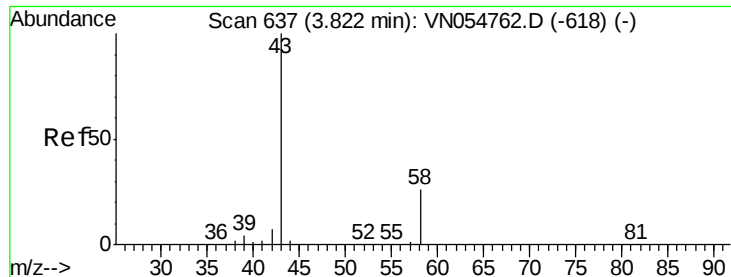
Tot Ion: 59 Resp: 23753
Ion Ratio Lower Upper
59 100
57 4.2 9.0 13.6#



#13
Acrolein
Concen: 0.751 ug/l
RT: 3.62 min Scan# 573
Delta R.T. 0.01 min
Lab File: VN054804.D
Acq: 30 Mar 2019 15:59

Tgt Ion: 56 Resp: 254
Ion Ratio Lower Upper
56 100
55 142.5 56.7 85.1#





#16

Acetone

Concen: 3.924 ug/l

RT: 3.83 min Scan# 640

Delta R.T. 0.01 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

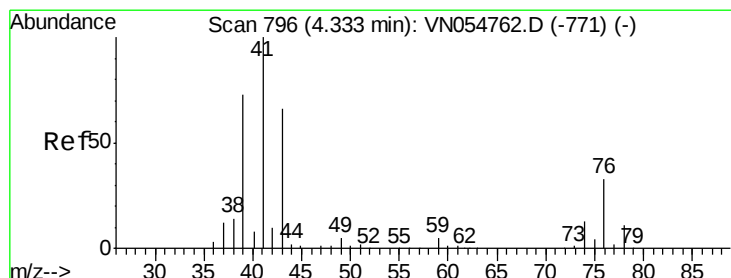
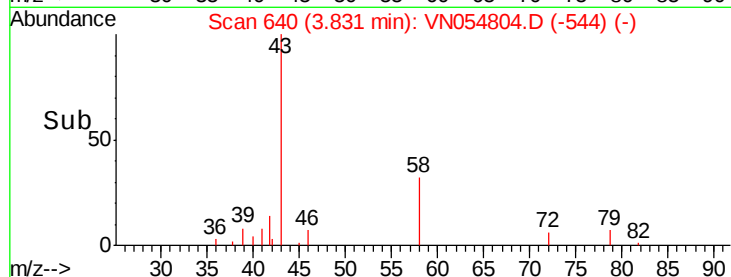
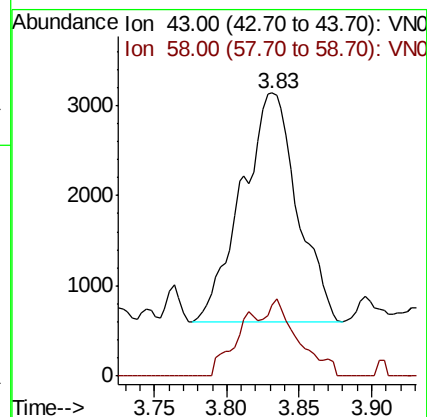
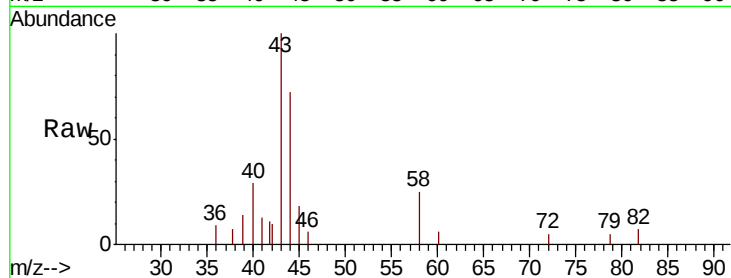
ClientSampled :

Tot Ion: 43 Resp: 6794

Ion Ratio Lower Upper

43 100

58 31.0 29.9 44.9



#18

Methyl Acetate

Concen: Below Cal

RT: 4.33 min Scan# 794

Delta R.T. -0.01 min

Lab File: VN054804.D

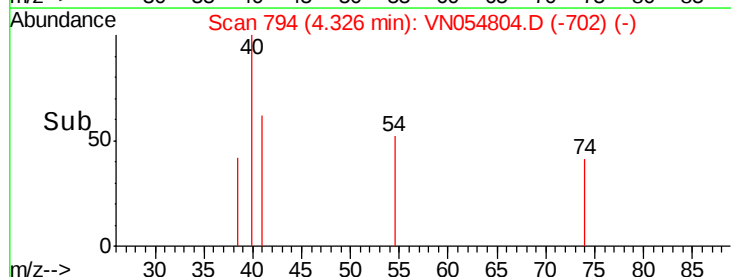
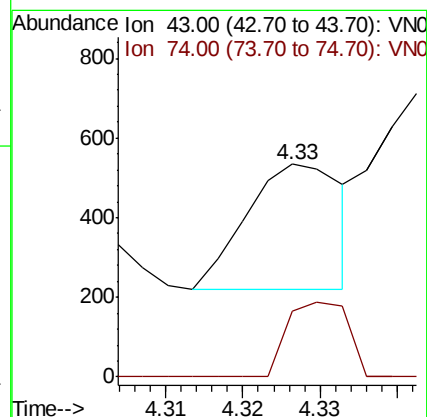
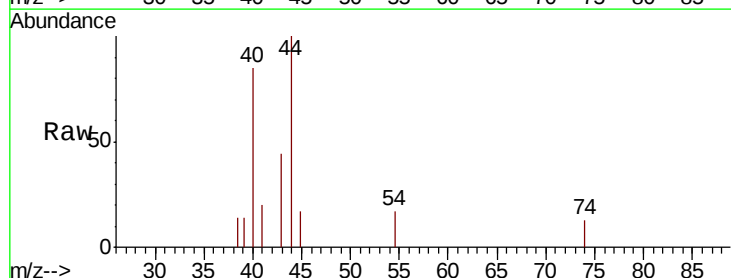
Acq: 30 Mar 2019 15:59

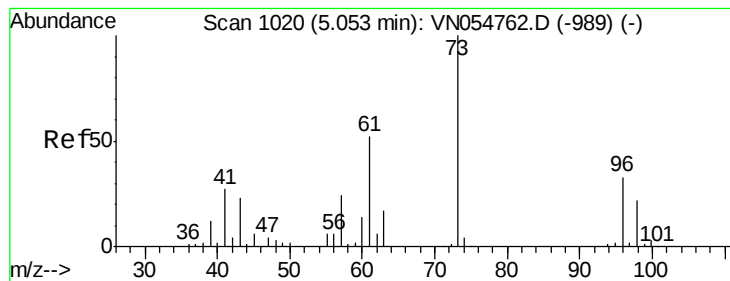
Tgt Ion: 43 Resp: 269

Ion Ratio Lower Upper

43 100

74 37.9 20.8 31.2#



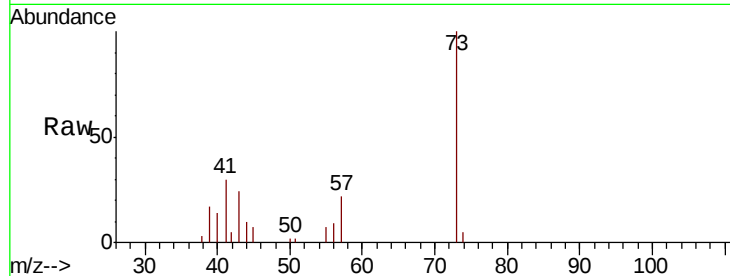


#19

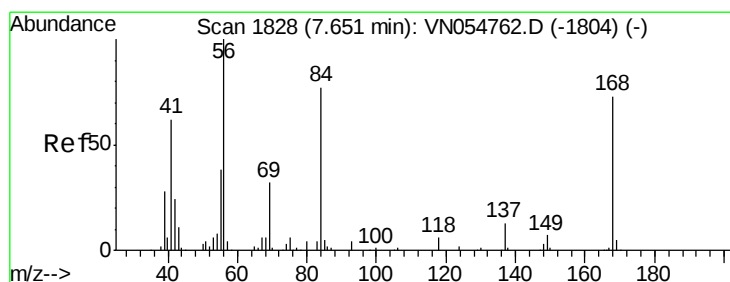
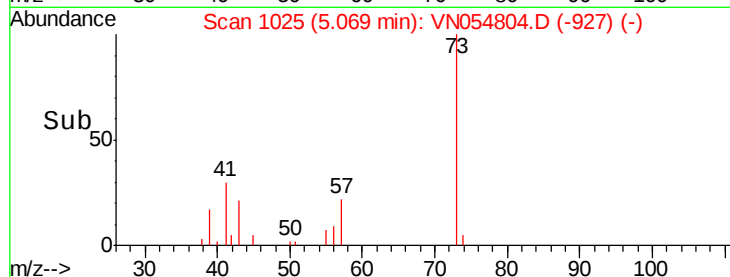
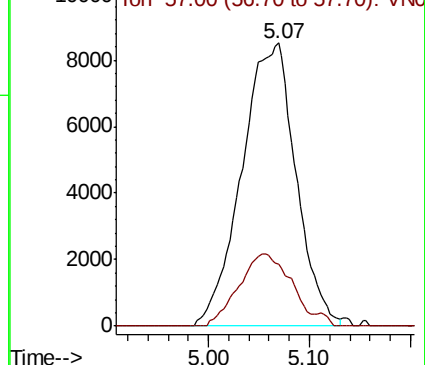
Methvl tert-butvl Ether
 Concen: 2.144 ug/l
 RT: 5.07 min Scan# 1025
 Delta R.T. 0.02 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion: 73 Resp: 31747
 Ion Ratio Lower Upper
 73 100
 57 21.9 16.8 25.2



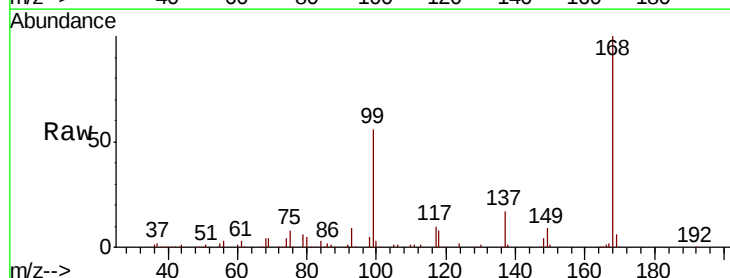
Abundance Ion 73.00 (72.70 to 73.70): VN0
 Ion 57.00 (56.70 to 57.70): VN0



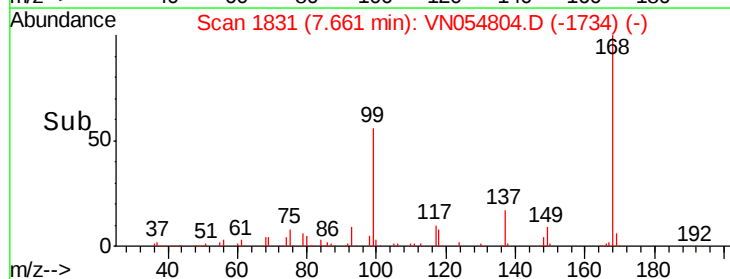
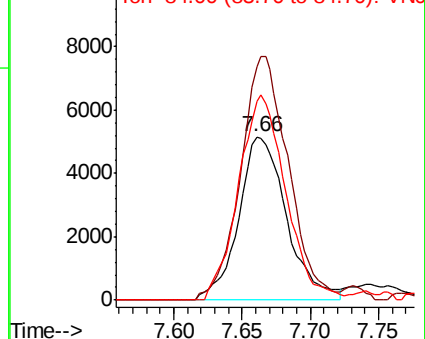
#31

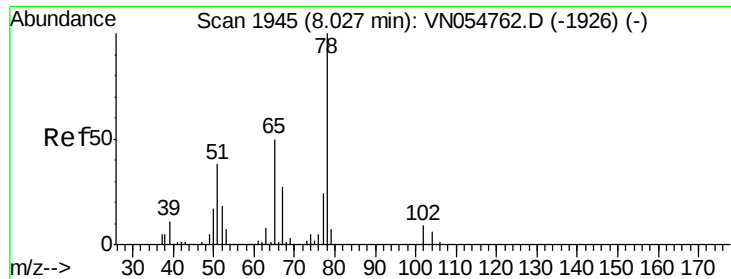
Cyclohexane
 Concen: Below Cal
 RT: 7.66 min Scan# 1831
 Delta R.T. 0.01 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

Tgt Ion: 56 Resp: 12562
 Ion Ratio Lower Upper
 56 100
 69 142.8 27.8 41.6#
 84 121.8 74.6 111.8#



Abundance Ion 56.00 (55.70 to 56.70): VN0
 Ion 69.00 (68.70 to 69.70): VN0
 Ion 84.00 (83.70 to 84.70): VN0

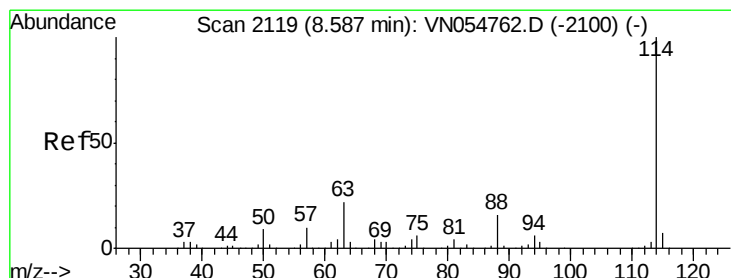
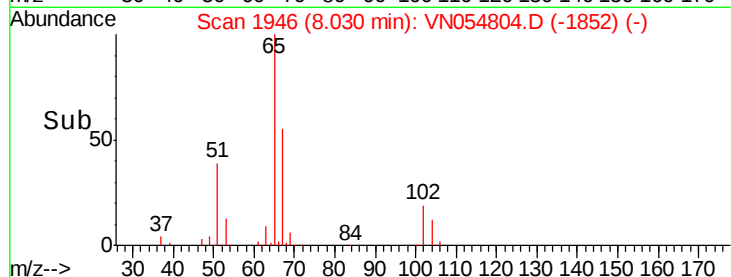
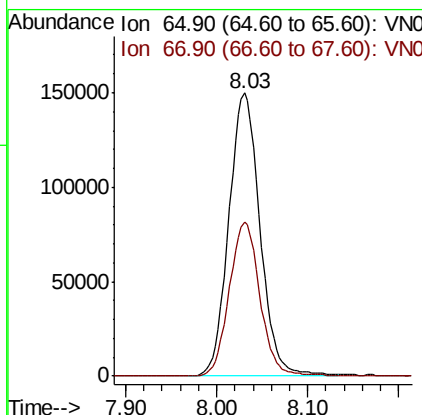
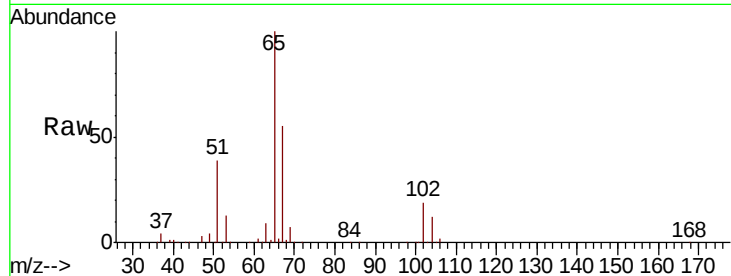




#33
 1,2-Dichloroethane-d4
 Concen: 49.190 ug/l
 RT: 8.03 min Scan# 1946
 Delta R.T. 0.00 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

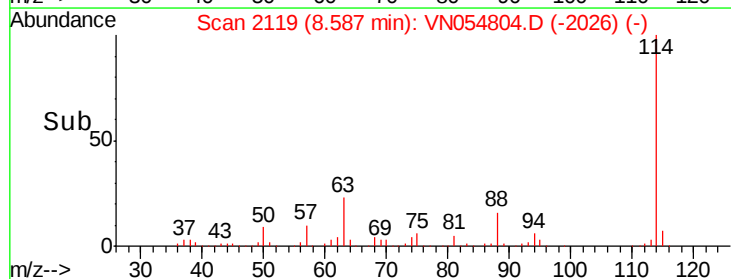
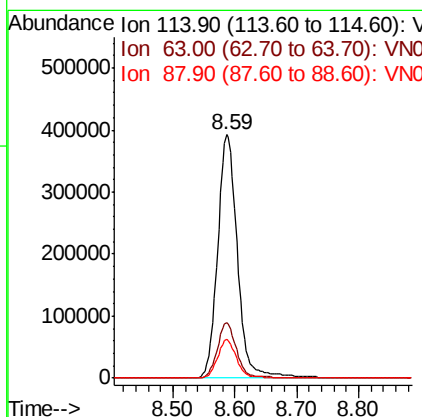
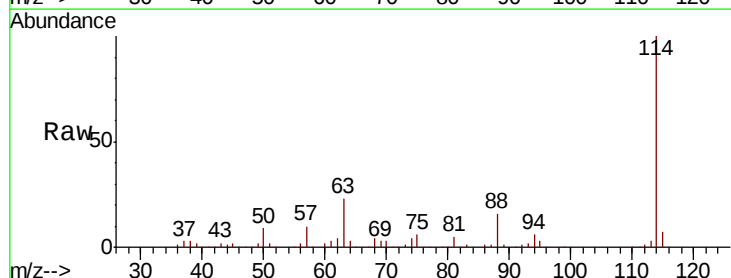
Instrument :
 MSVOA_N
 ClientSampleId :

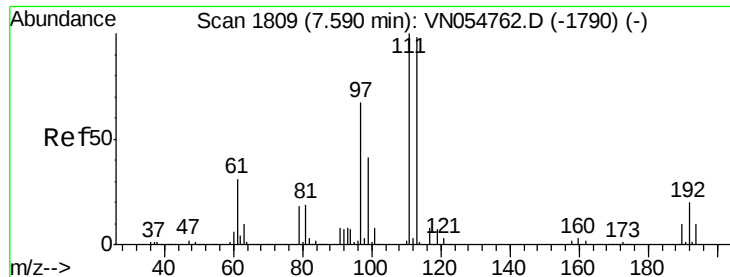
Tot Ion: 65 Resp: 357132
 Ion Ratio Lower Upper
 65 100
 67 53.8 0.0 104.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. 0.00 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

Tgt Ion: 114 Resp: 873883
 Ion Ratio Lower Upper
 114 100
 63 23.0 0.0 35.2
 88 16.0 0.0 30.2





#35

Dibromofluoromethane

Concen: 48.685 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :
MSVOA_N
ClientSampleId :

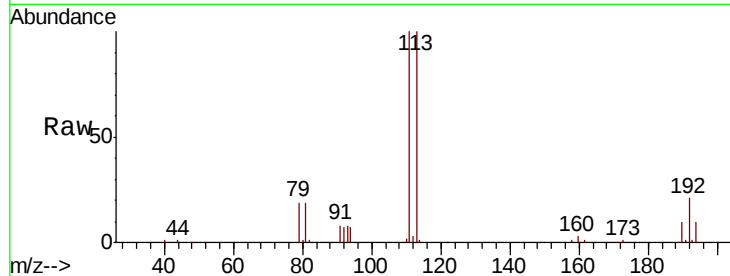
Tot Ion:113 Resp: 283645

Ion Ratio Lower Upper

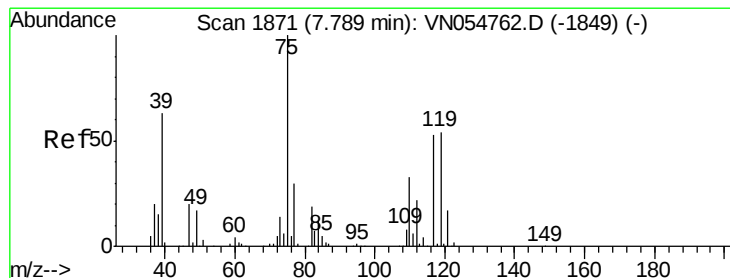
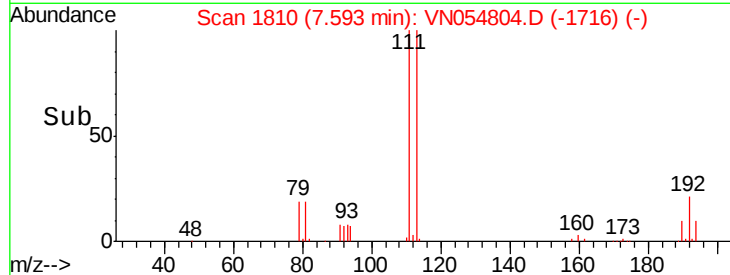
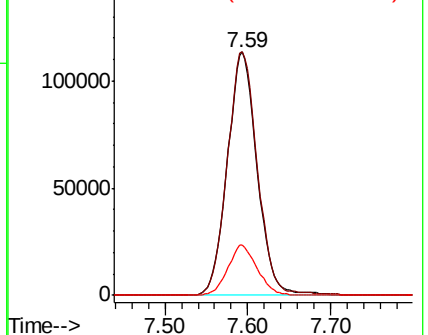
113 100

111 101.3 82.2 123.4

192 20.4 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: 5.037 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

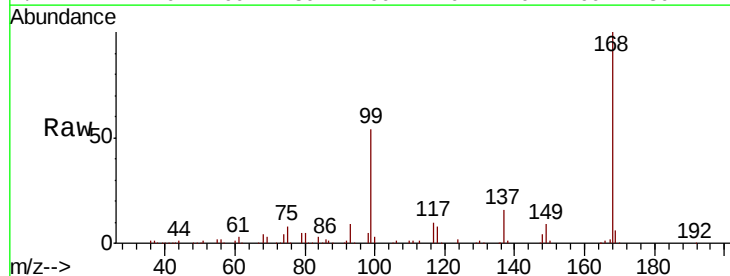
Tgt Ion: 75 Resp: 41014

Ion Ratio Lower Upper

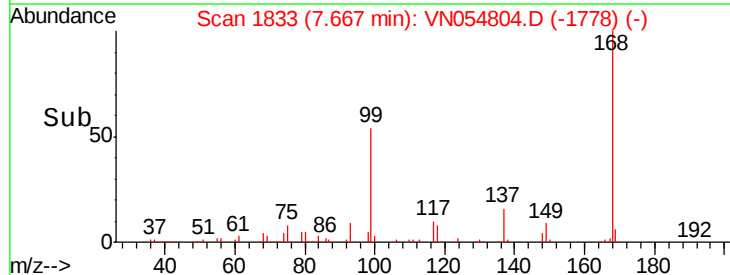
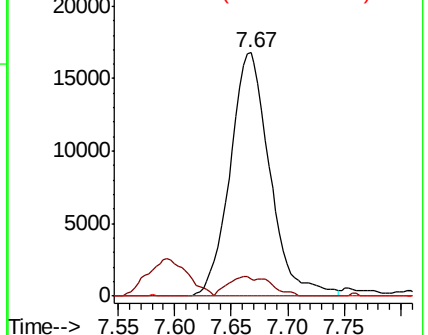
75 100

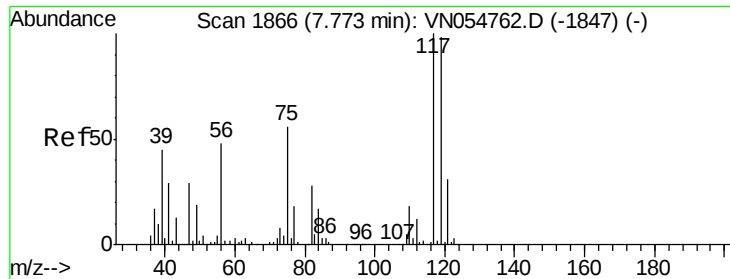
110 5.2 19.1 57.5#

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





#38

Carbon Tetrachloride

Concen: 6.606 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

ClientSampleId :

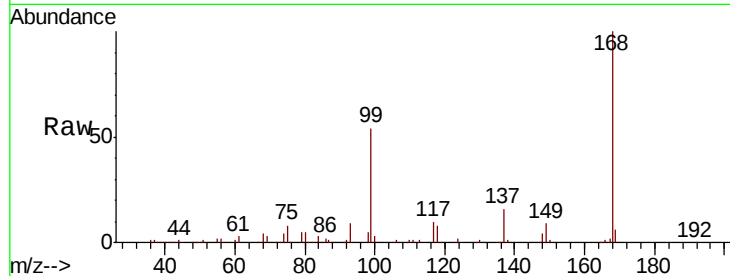
Tot Ion:117 Resp: 52243

Ion Ratio Lower Upper

117 100

119 4.5 76.3 114.5#

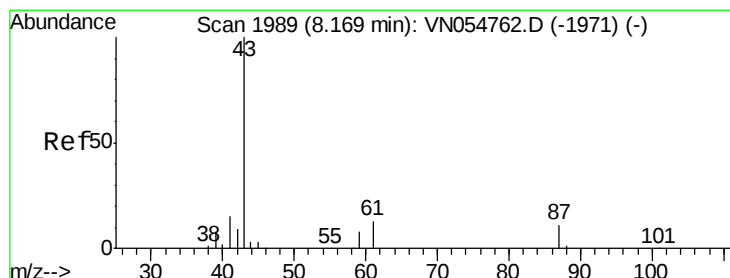
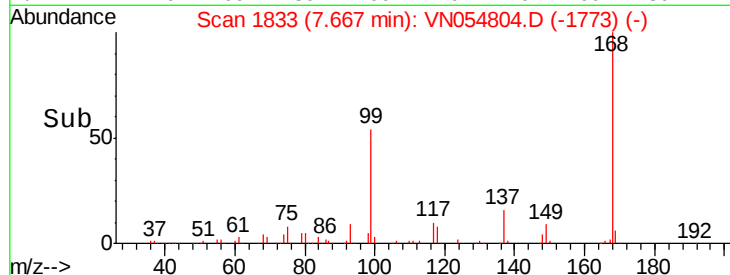
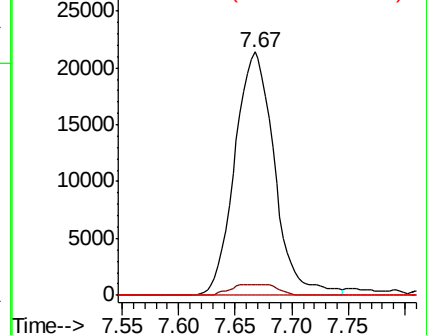
121 0.0 24.6 36.8#



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: 1.818 ug/l

RT: 8.34 min Scan# 2043

Delta R.T. 0.17 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

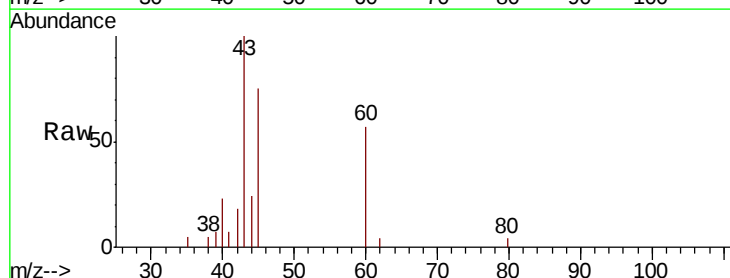
Tgt Ion: 43 Resp: 17637

Ion Ratio Lower Upper

43 100

61 0.0 15.8 23.8#

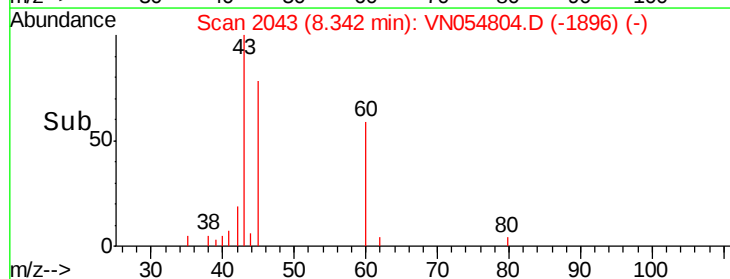
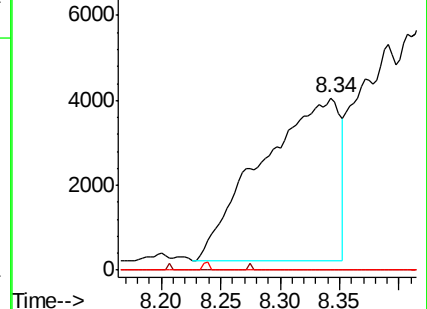
87 0.0 12.0 18.0#

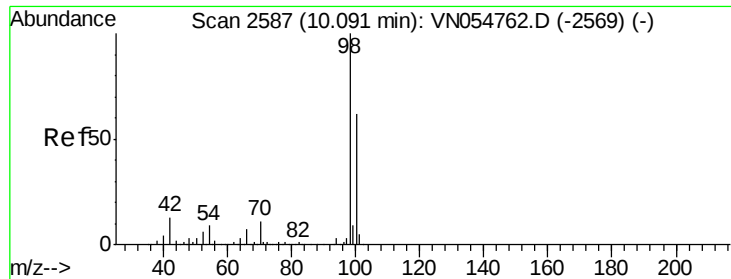


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V





#50

Toluene-d8

Concen: 47.976 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

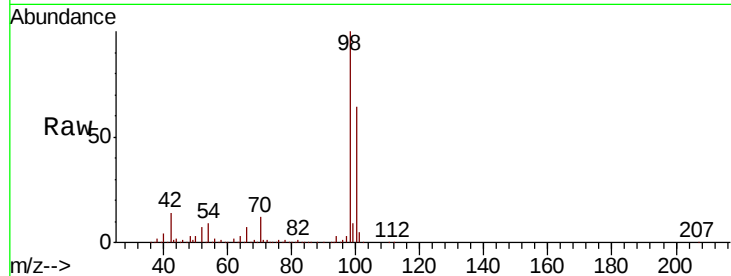
ClientSampled :

Tot Ion: 98 Resp: 1039167

Ion Ratio Lower Upper

98 100

100 63.5 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VN054762.D (-2569) (-)

Ion 100.00 (99.70 to 100.70): VN054762.D (-2569) (-)

10.09

600000

500000

400000

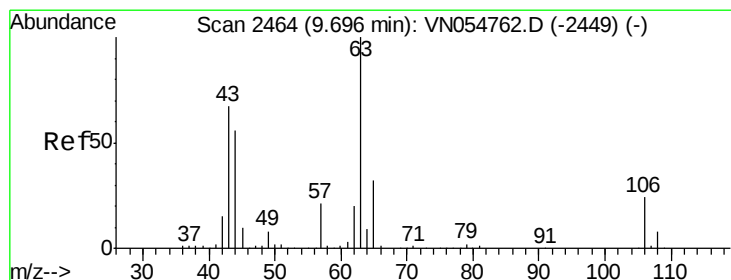
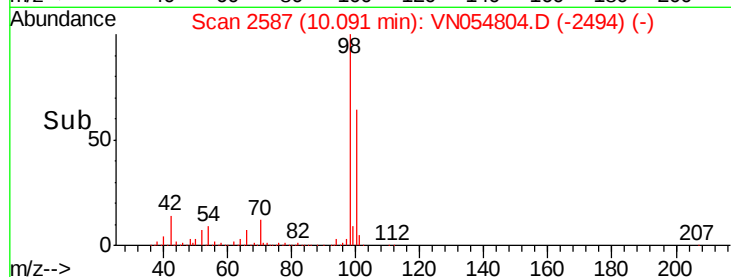
300000

200000

100000

0

Time-->



#58

2-Chloroethyl Vinyl ether

Concen: 10.374 ug/l

RT: 9.87 min Scan# 2518

Delta R.T. 0.17 min

Lab File: VN054804.D

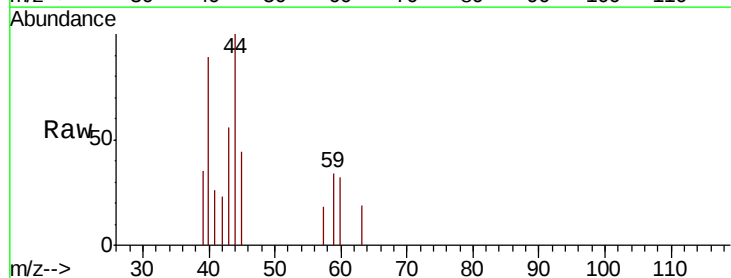
Acq: 30 Mar 2019 15:59

Tgt Ion: 63 Resp: 60

Ion Ratio Lower Upper

63 100

106 0.0 24.4 36.6#



Abundance Ion 62.90 (62.60 to 63.60): VN054762.D (-2449) (-)

Ion 105.90 (105.60 to 106.60): VN054762.D (-2449) (-)

9.87

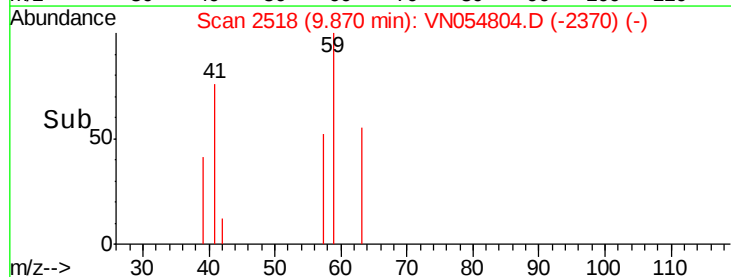
150

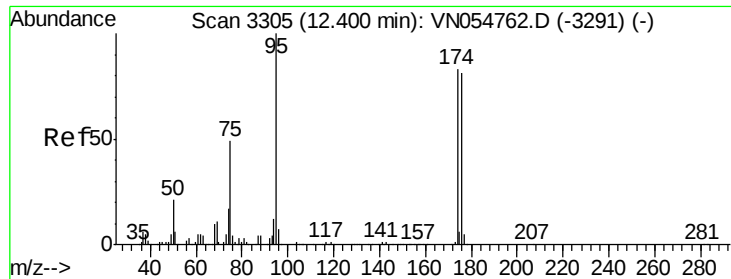
100

50

0

Time-->





#62

4-Bromofluorobenzene

Concen: 43.615 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

ClientSampled :

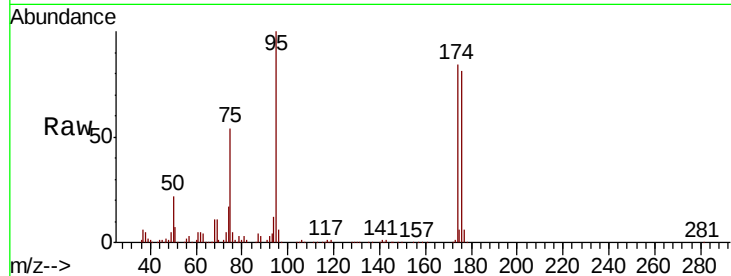
Tot Ion: 95 Resp: 314184

Ion Ratio Lower Upper

95 100

174 84.4 0.0 191.0

176 82.2 0.0 187.4



Abundance Ion 94.90 (94.60 to 95.60): VN054762.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN054762.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN054762.D (-3291) (-)

250000

200000

150000

100000

50000

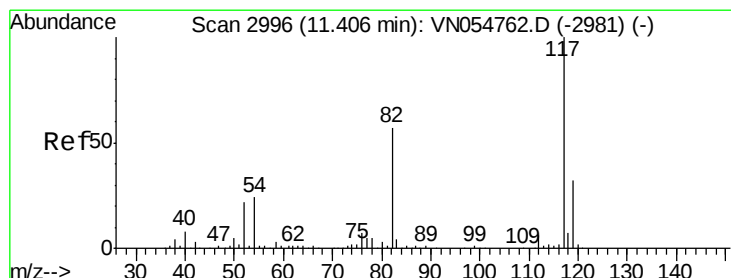
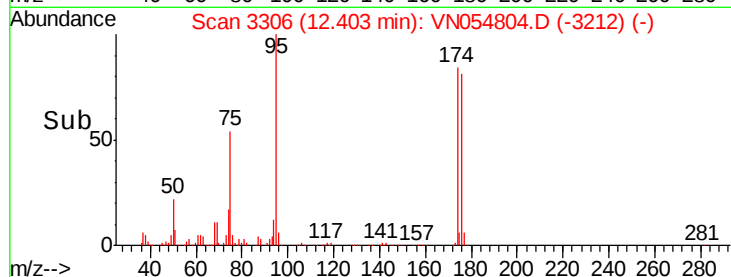
0

12.40

12.30

12.50

Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

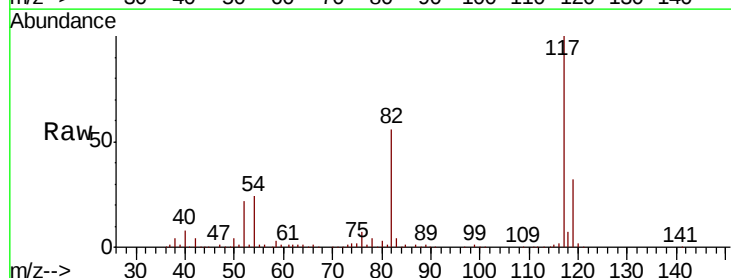
Tgt Ion: 117 Resp: 729345

Ion Ratio Lower Upper

117 100

82 55.8 40.0 60.0

119 32.4 25.8 38.6



Abundance Ion 116.90 (116.60 to 117.60): VN054762.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN054762.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN054762.D (-2981) (-)

500000

400000

300000

200000

100000

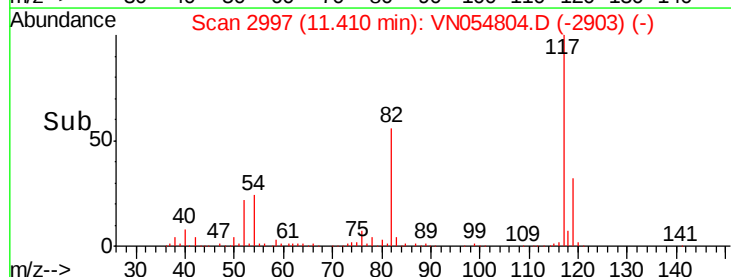
0

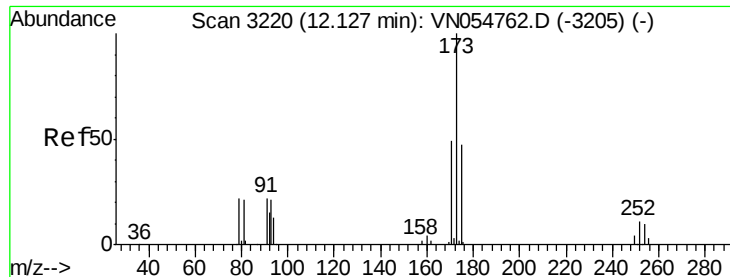
11.41

11.30

11.50

Time-->





#71

Bromoform

Concen: 1.087 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.28 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

ClientSampleId :

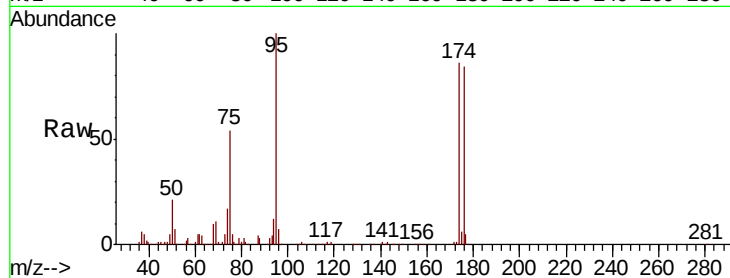
Tot Ion:173 Resp: 3404

Ion Ratio Lower Upper

173 100

175 483.9 24.4 73.2#

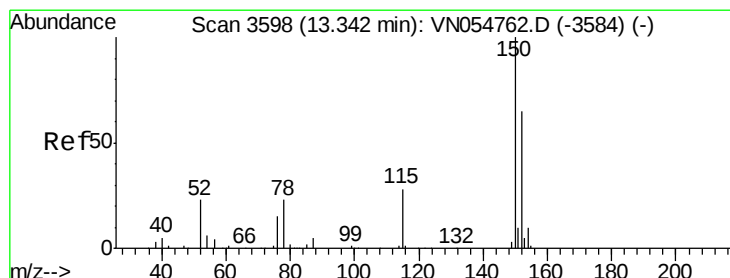
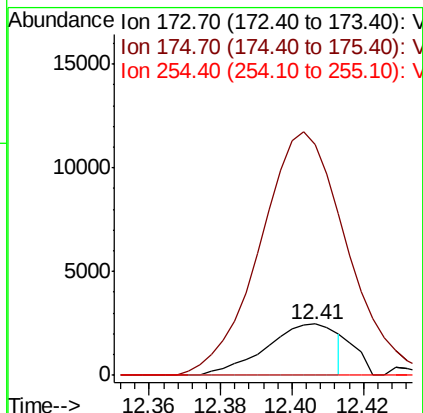
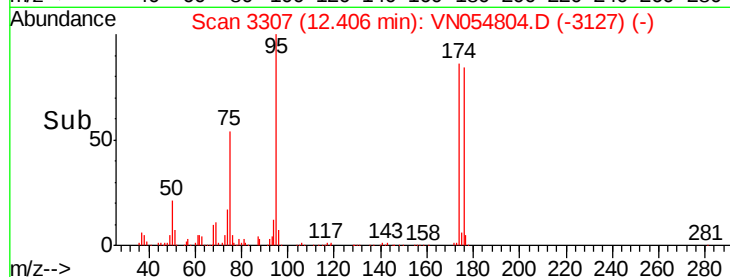
254 0.0 0.1 0.1#



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: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

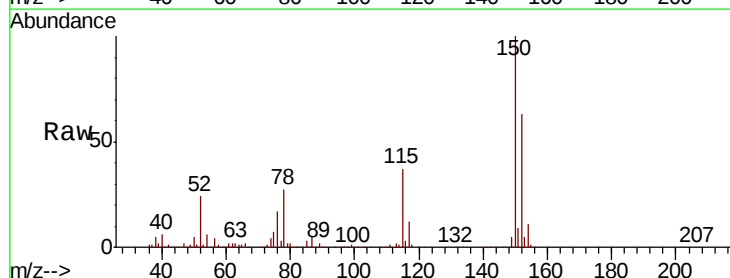
Tgt Ion:152 Resp: 259073

Ion Ratio Lower Upper

152 100

115 58.7 27.2 81.6

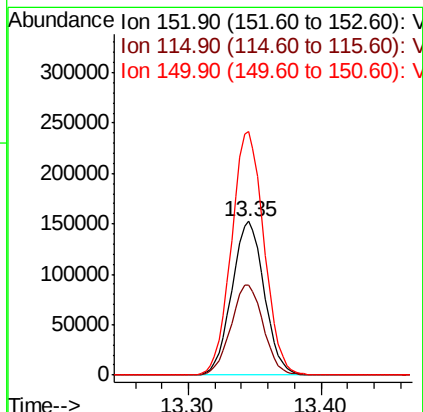
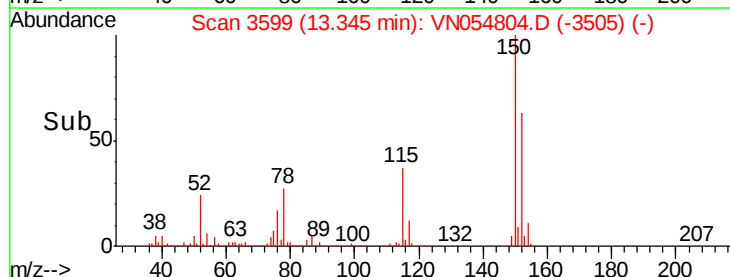
150 158.6 0.0 349.2

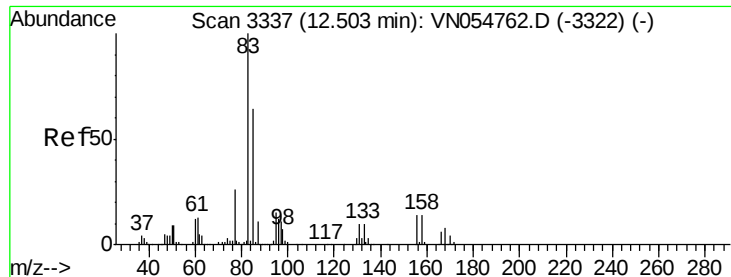


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.44 min Scan# 3318

Delta R.T. -0.06 min

Lab File: VN054804.D

Acq: 30 Mar 2019 15:59

Instrument :

MSVOA_N

ClientSampleId :

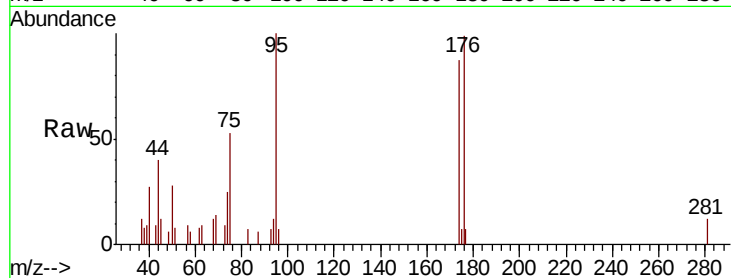
Tot Ion: 83 Resp: 38

Ion Ratio Lower Upper

83 100

131 0.0 5.8 17.4#

85 0.0 32.2 96.6#



Abundance Ion 82.90 (82.60 to 83.60): VN054804.D (-3243) (-)

Ion 130.80 (130.50 to 131.50): VN054804.D (-3243) (-)

Ion 84.90 (84.60 to 85.60): VN054804.D (-3243) (-)

12.44

200

150

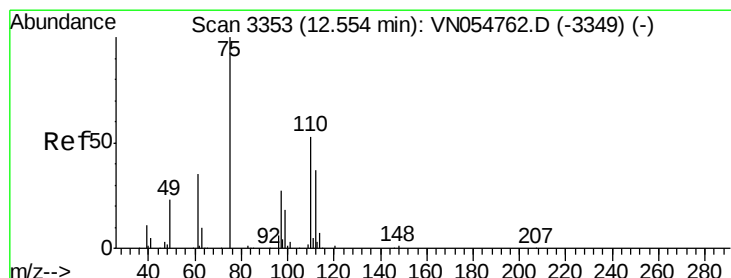
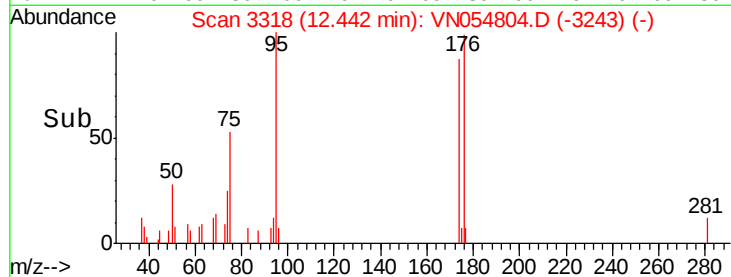
100

50

0

12.43 12.44 12.45

Time-->



#76

1,2,3-Trichloropropane

Concen: 36.944 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN054804.D

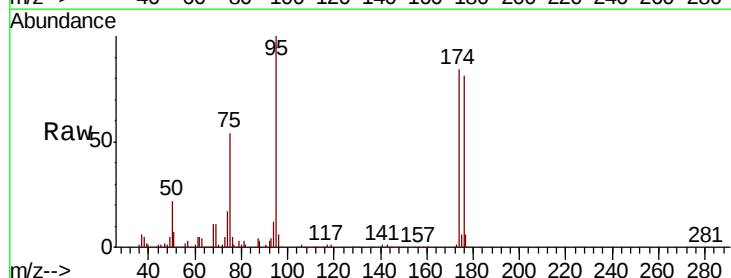
Acq: 30 Mar 2019 15:59

Tgt Ion: 75 Resp: 166273

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN054804.D (-3260) (-)

Ion 77.00 (76.70 to 77.70): VN054804.D (-3260) (-)

12.40

100000

80000

60000

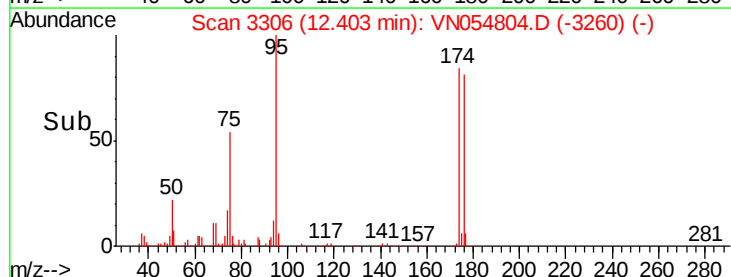
40000

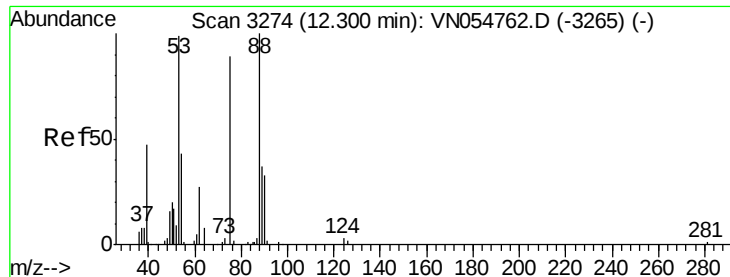
20000

0

12.40 12.50

Time-->

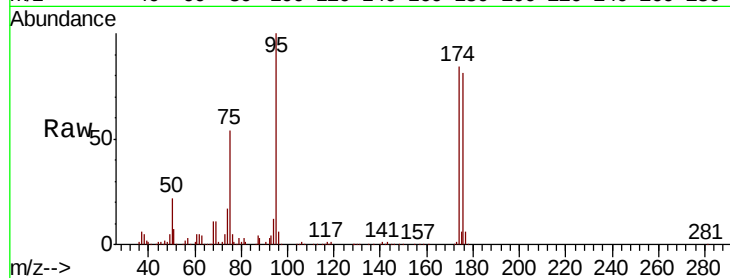




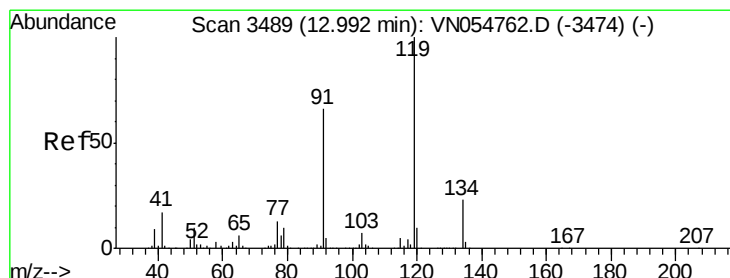
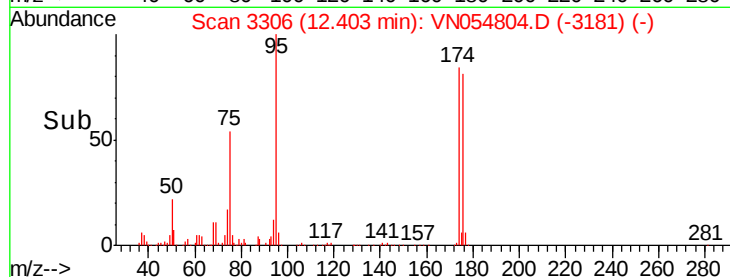
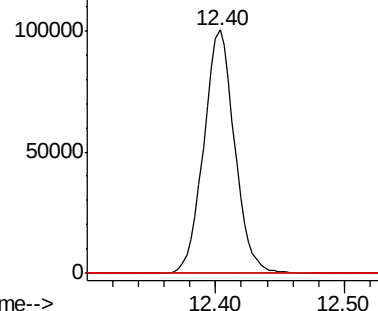
#81
 trans-1,4-Dichloro-2-butene
 Concen: 143.702 ug/l
 RT: 12.40 min Scan# 3306
 Delta R.T. 0.10 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion: 75 Resp: 166273
 Ion Ratio Lower Upper
 75 100
 53 0.0 76.2 114.2#
 89 0.0 39.2 58.8#

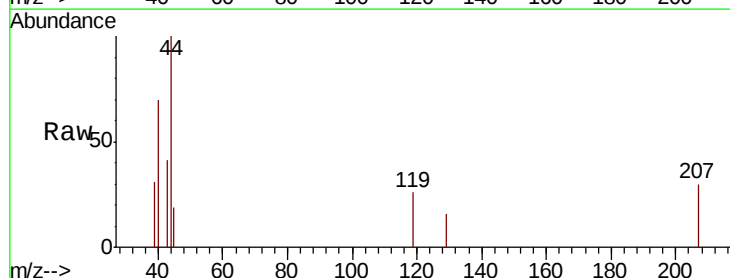


Abundance Ion 74.90 (74.60 to 75.60): VN0
 Ion 53.00 (52.70 to 53.70): VN0
 Ion 88.90 (88.60 to 89.60): VN0



#83
 tert-Butylbenzene
 Concen: Below Cal
 RT: 13.00 min Scan# 3493
 Delta R.T. 0.01 min
 Lab File: VN054804.D
 Acq: 30 Mar 2019 15:59

Tgt Ion: 119 Resp: 325
 Ion Ratio Lower Upper
 119 100
 91 0.0 30.9 92.8#
 134 0.0 13.2 39.6#



Abundance Ion 119.00 (118.70 to 119.70): V
 Ion 91.00 (90.70 to 91.70): VN0
 Ion 134.00 (133.70 to 134.70): V

