

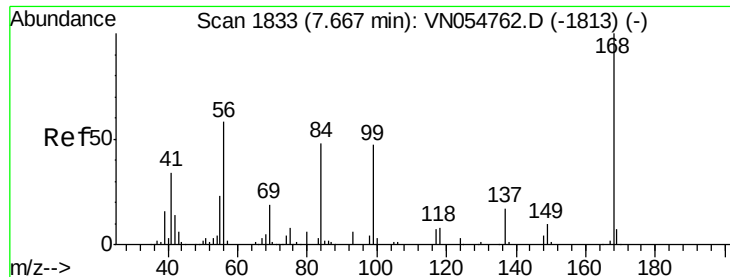
Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN033019\
 Data File : VN054835.D
 Acq On : 31 Mar 2019 6:37
 Operator : JC/SP
 Sample : K2139-06
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Apr 01 01:41:55 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	534966	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	885322	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	757459	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	270232	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.03	65	361736	50.16	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.32%	
35) Dibromofluoromethane	7.59	113	281807	47.74	ug/l	0.00
Spiked Amount	50.000		Recovery	=	95.48%	
50) Toluene-d8	10.09	98	1058402	48.23	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.46%	
62) 4-Bromofluorobenzene	12.40	95	322911	44.25	ug/l	0.00
Spiked Amount	50.000		Recovery	=	88.50%	
Target Compounds						
					Qvalue	
5) Bromomethane	2.57	94	65	Below Cal	#	2
8) Diethyl Ether	3.41	74	765	0.288	ug/l	93
16) Acetone	3.82	43	9104	5.294	ug/l	92
18) Methyl Acetate	4.34	43	2625	Below Cal	#	69
20) Methylene Chloride	4.54	84	19877	3.277	ug/l	# 86
25) 2-Butanone	6.87	43	1861	0.732	ug/l	# 77
31) Cyclohexane	7.66	56	11857	Below Cal	#	17
36) 1,1-Dichloropropene	7.67	75	41155	4.989	ug/l	# 48
38) Carbon Tetrachloride	7.67	117	50706	6.328	ug/l	# 17
43) Isopropyl Acetate	8.17	43	16627	1.692	ug/l	# 95
48) Methyl methacrylate	9.18	41	8095	1.519	ug/l	# 11
49) 1,4-Dioxane	9.27	88	30	0.567	ug/l	# 1
51) 4-Methyl-2-Pentanone	9.99	43	5138	0.930	ug/l	88
54) cis-1,3-Dichloropropene	9.91	75	56306	6.368	ug/l	# 73
57) 1,3-Dichloropropane	10.77	76	10538	1.174	ug/l	# 43
58) 2-Chloroethyl Vinyl ether	9.73	63	68	10.377	ug/l	# 44
59) 2-Hexanone	10.77	43	175933	49.729	ug/l	# 48
71) Bromoform	12.40	173	1323	0.407	ug/l	# 1
74) N-amyl acetate	11.88	43	18173	2.641	ug/l	# 49
75) 1,1,2,2-Tetrachloroethane	12.40	83	208	Below Cal	#	1
76) 1,2,3-Trichloropropane	12.40	75	169718	36.152	ug/l	# 100
81) trans-1,4-Dichloro-2-buten	12.40	75	169718	140.622	ug/l	# 11
83) tert-Butylbenzene	12.74	119	66	Below Cal	#	1

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

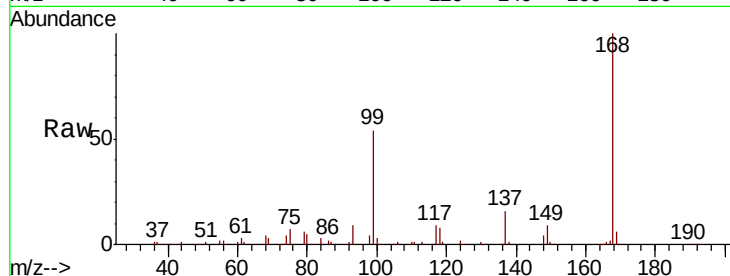
ClientSampled :

Tot Ion:168 Resp: 534966

Ion Ratio Lower Upper

168 100

99 53.9 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): VN054762.D (-1813) (-)

Ion 98.90 (98.60 to 99.60): VN054762.D (-1813) (-)

7.67

250000

200000

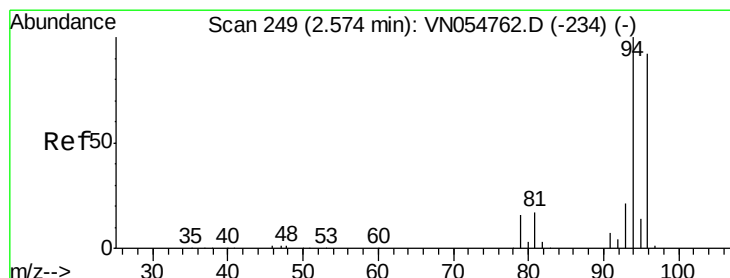
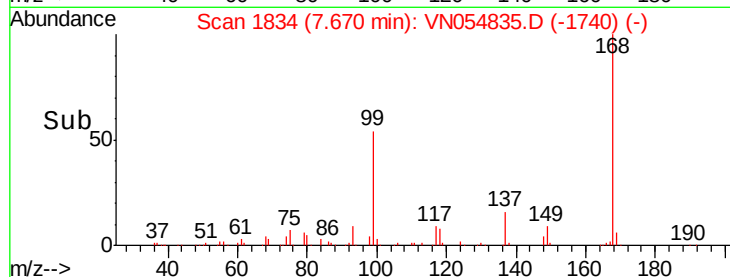
150000

100000

50000

0

Time--> 7.50 7.60 7.70 7.80



#5

Bromomethane

Concen: Below Cal

RT: 2.57 min Scan# 248

Delta R.T. -0.00 min

Lab File: VN054835.D

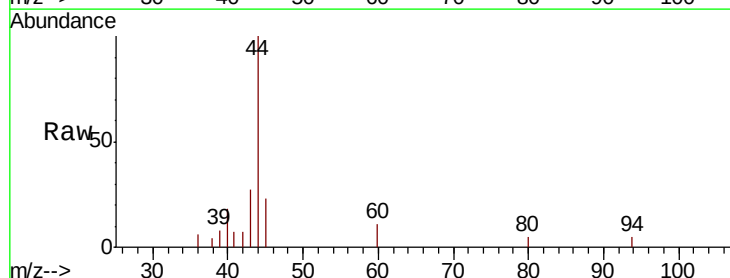
Acq: 31 Mar 2019 6:37

Tgt Ion: 94 Resp: 65

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN054762.D (-234) (-)

Ion 95.90 (95.60 to 96.60): VN054762.D (-234) (-)

2.57

200

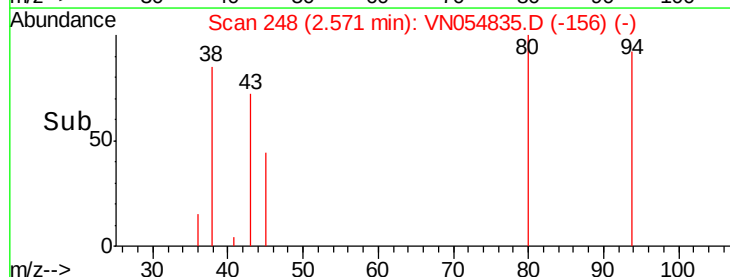
150

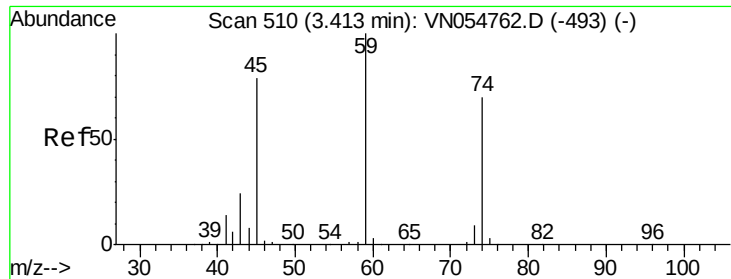
100

50

0

Time--> 2.56 2.57 2.58

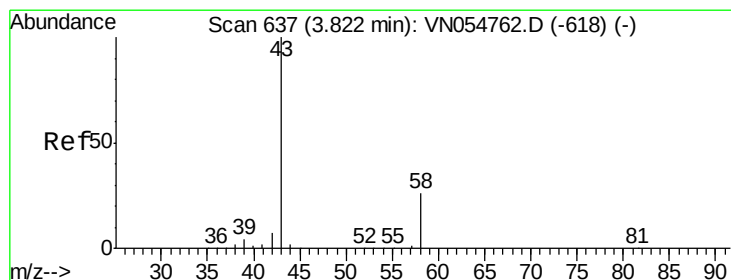
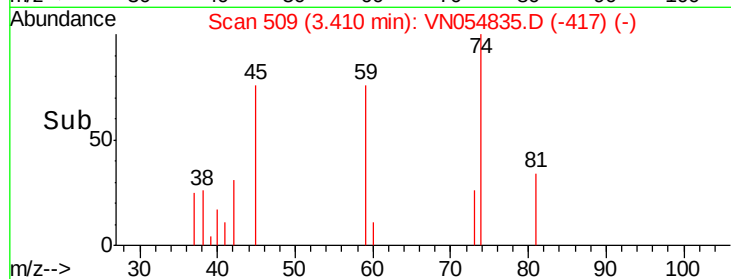
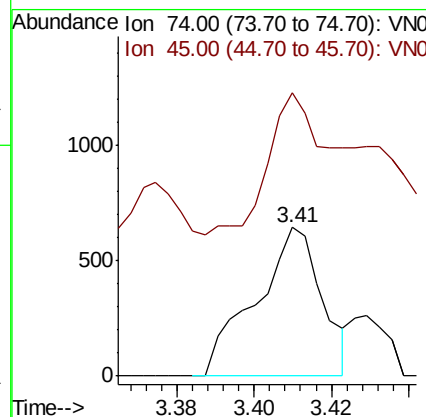
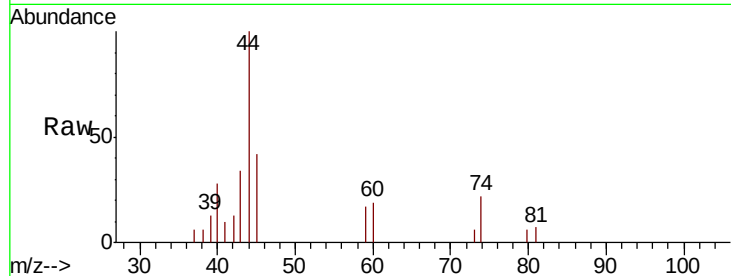




#8
 Diethyl Ether
 Concen: 0.288 ug/l
 RT: 3.41 min Scan# 509
 Delta R.T. -0.00 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

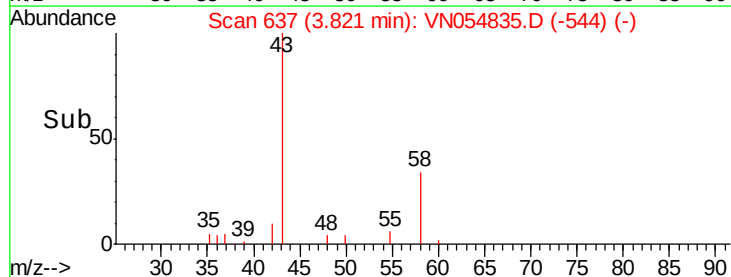
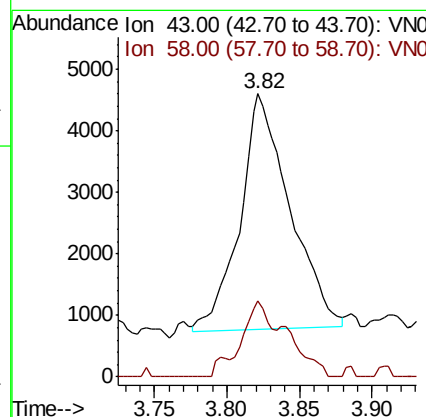
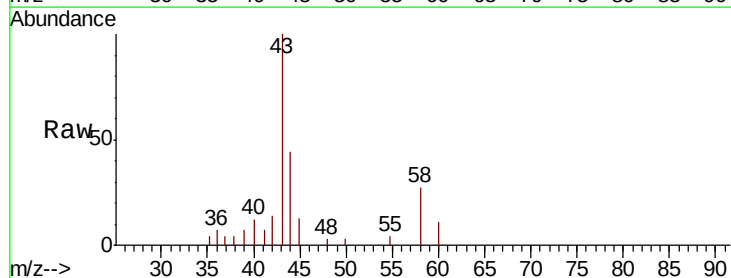
Instrument :
 MSVOA_N
 ClientSampleId :

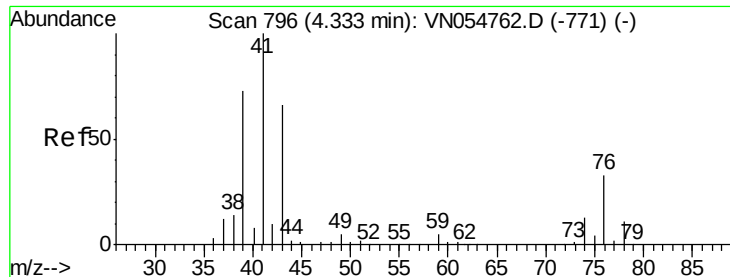
Tot Ion: 74 Resp: 765
 Ion Ratio Lower Upper
 74 100
 45 92.9 43.1 129.4



#16
 Acetone
 Concen: 5.294 ug/l
 RT: 3.82 min Scan# 637
 Delta R.T. -0.00 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Tgt Ion: 43 Resp: 9104
 Ion Ratio Lower Upper
 43 100
 58 32.8 29.9 44.9

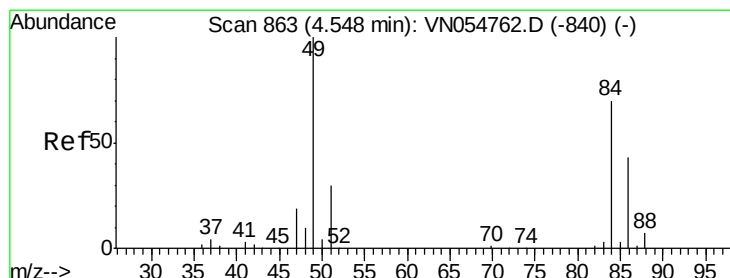
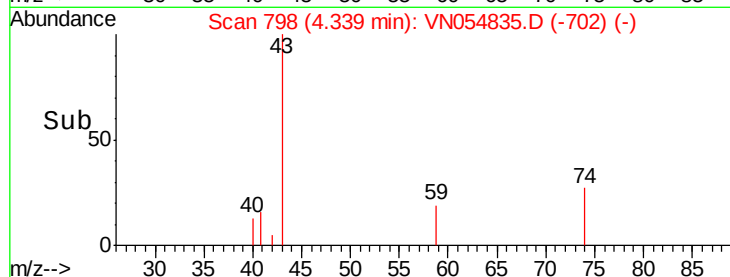
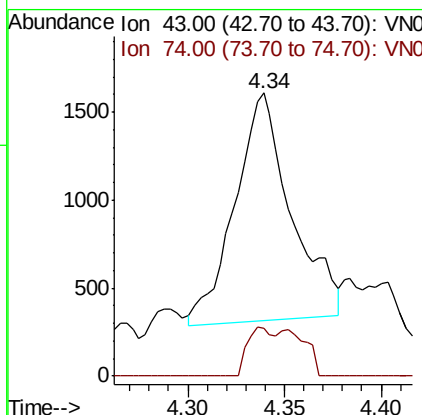
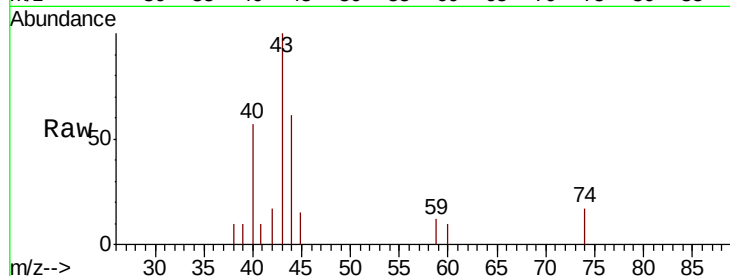




#18
Methyl Acetate
Concen: Below Cal
RT: 4.34 min Scan# 798
Delta R.T. 0.01 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

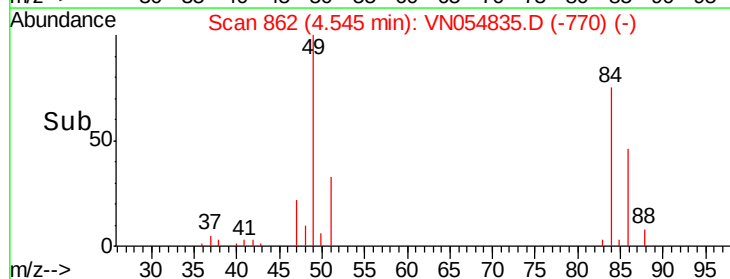
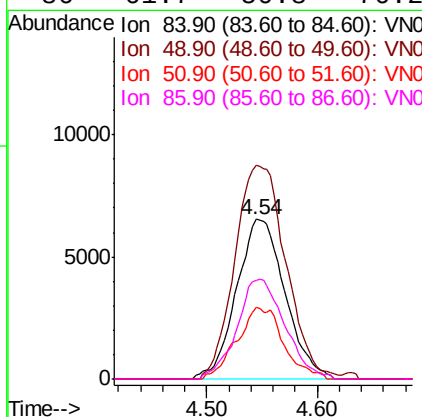
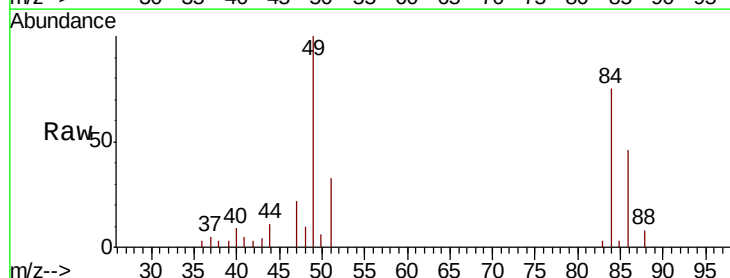
Instrument :
MSVOA_N
ClientSampleId :

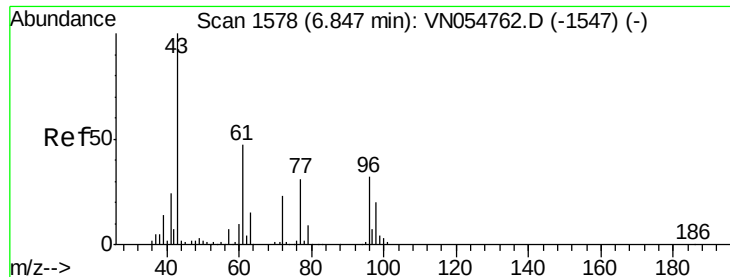
Tot Ion: 43 Resp: 2625
Ion Ratio Lower Upper
43 100
74 10.4 20.8 31.2#



#20
Methylene Chloride
Concen: 3.277 ug/l
RT: 4.54 min Scan# 862
Delta R.T. -0.00 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

Tgt Ion: 84 Resp: 19877
Ion Ratio Lower Upper
84 100
49 133.9 89.7 134.5
51 44.6 28.2 42.4#
86 61.7 50.8 76.2

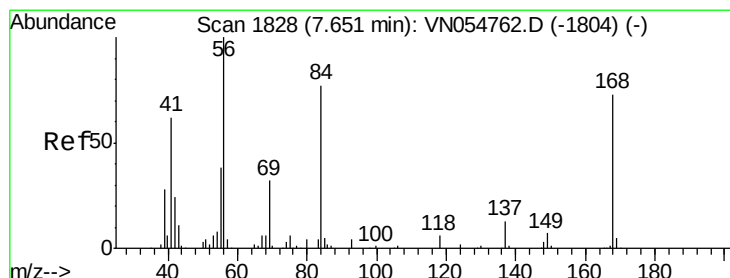
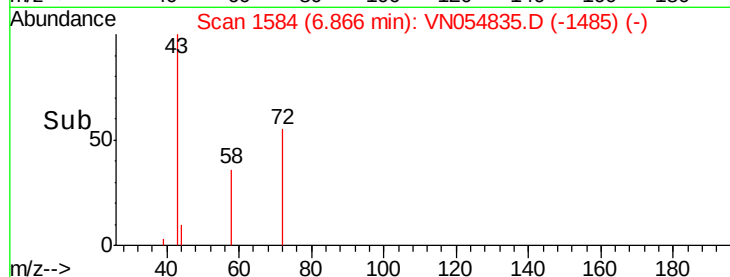
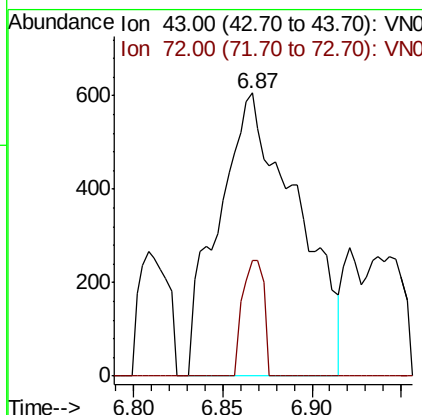
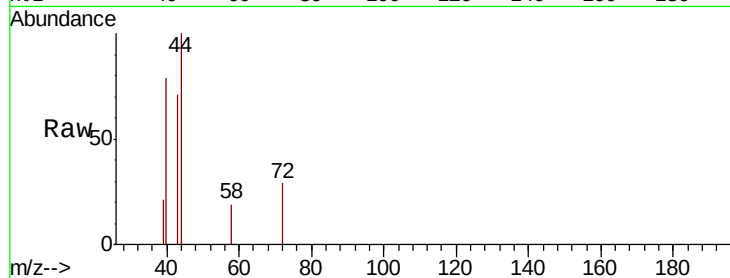




#25
2-Butanone
Concen: 0.732 ug/l
RT: 6.87 min Scan# 1584
Delta R.T. 0.02 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

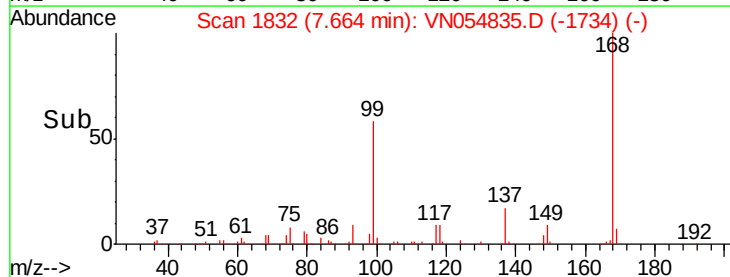
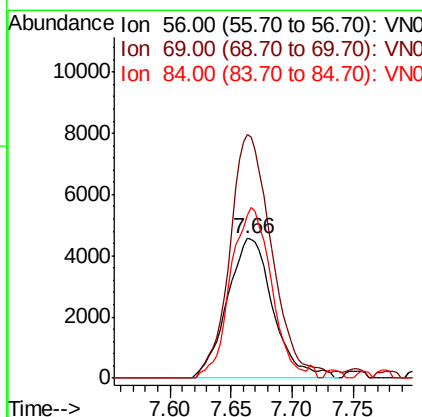
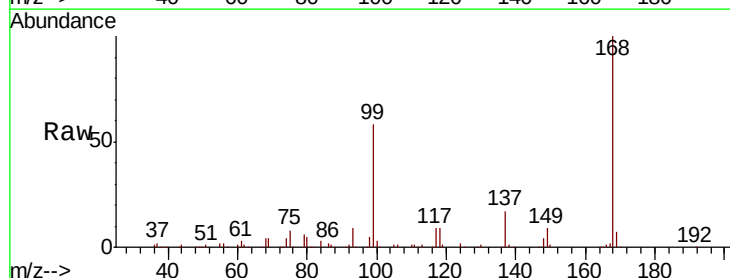
Instrument :
MSVOA_N
ClientSampleId :

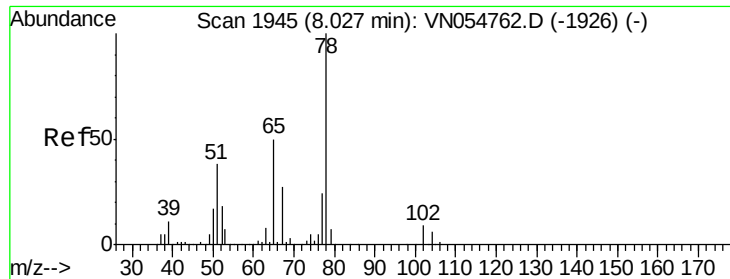
Tot Ion: 43 Resp: 1861
Ion Ratio Lower Upper
43 100
72 40.9 23.0 34.6#



#31
Cyclohexane
Concen: Below Cal
RT: 7.66 min Scan# 1832
Delta R.T. 0.01 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

Tgt Ion: 56 Resp: 11857
Ion Ratio Lower Upper
56 100
69 174.3 27.8 41.6#
84 116.2 74.6 111.8#

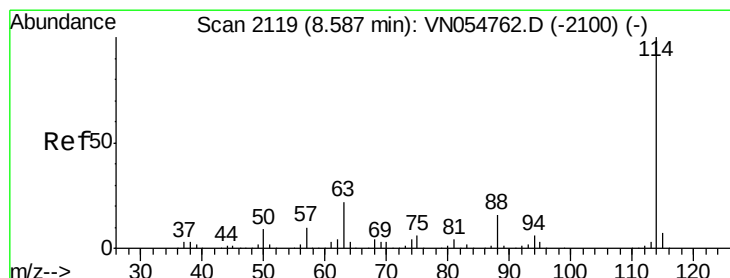
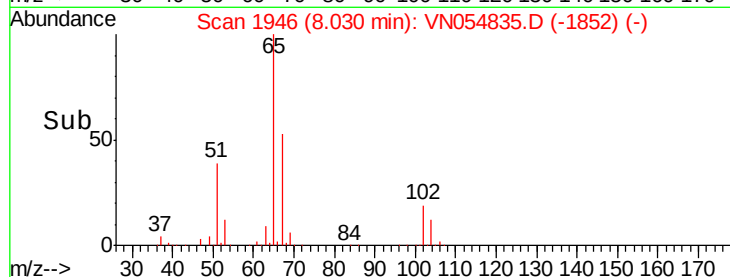
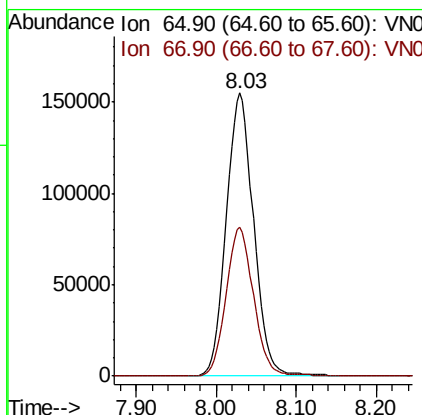
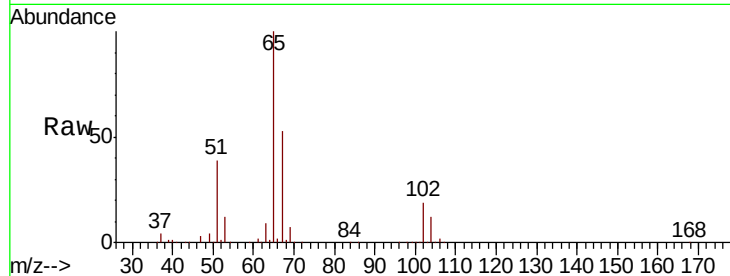




#33
 1,2-Dichloroethane-d4
 Concen: 50.161 ug/l
 RT: 8.03 min Scan# 1946
 Delta R.T. 0.00 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

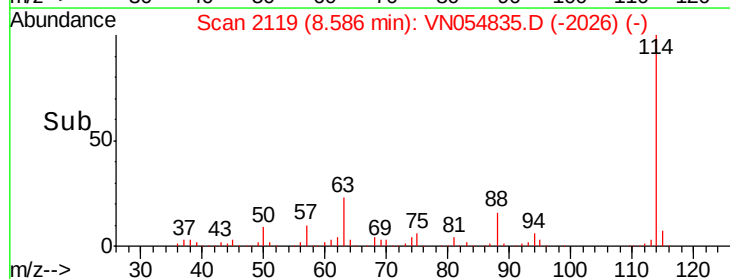
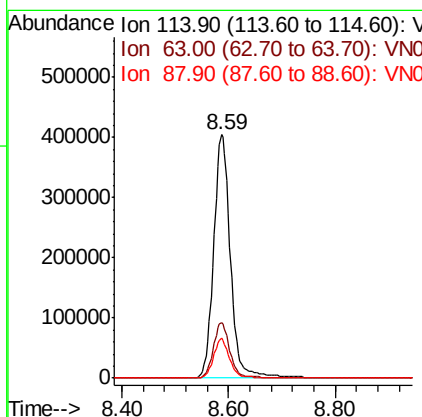
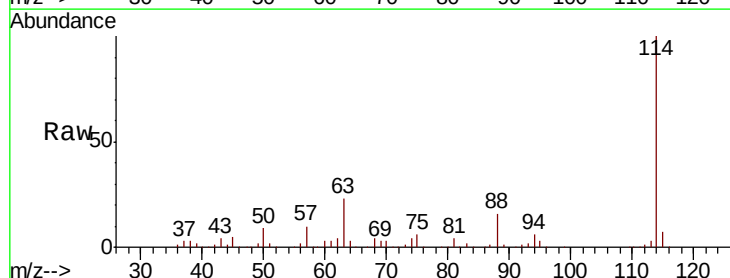
Instrument :
 MSVOA_N
 ClientSampleId :

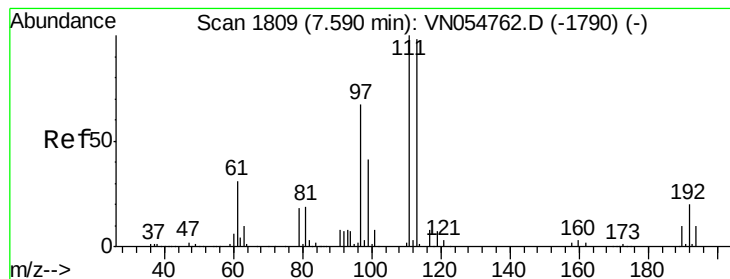
Tot Ion: 65 Resp: 361736
 Ion Ratio Lower Upper
 65 100
 67 52.5 0.0 104.6



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.59 min Scan# 2119
 Delta R.T. -0.00 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Tgt Ion: 114 Resp: 885322
 Ion Ratio Lower Upper
 114 100
 63 22.7 0.0 35.2
 88 16.2 0.0 30.2





#35

Dibromofluoromethane

Concen: 47.745 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. 0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

ClientSampled :

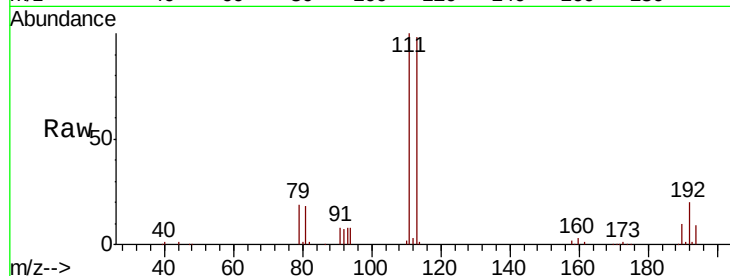
Tot Ion:113 Resp: 281807

Ion Ratio Lower Upper

113 100

111 102.1 82.2 123.4

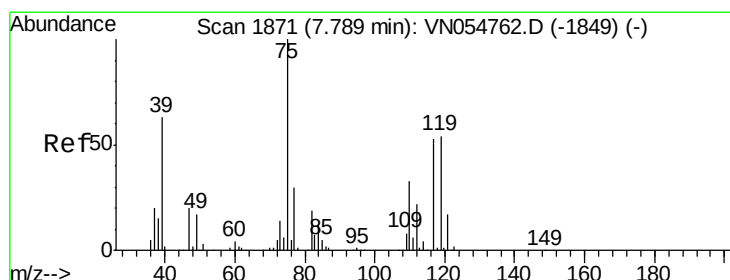
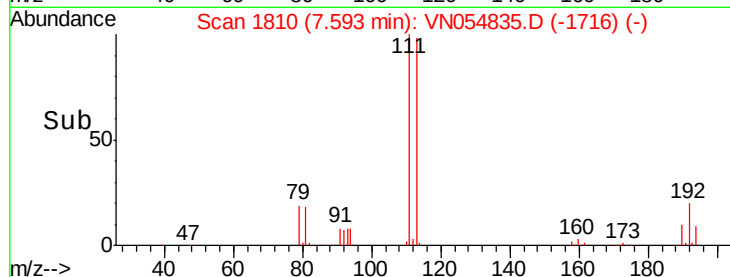
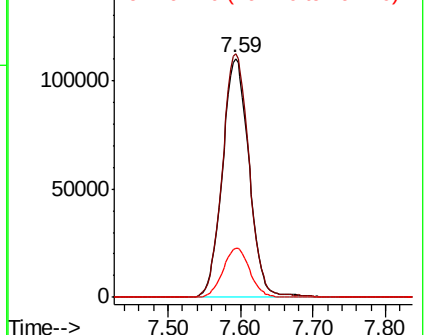
192 20.7 19.2 28.8



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: 4.989 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.12 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

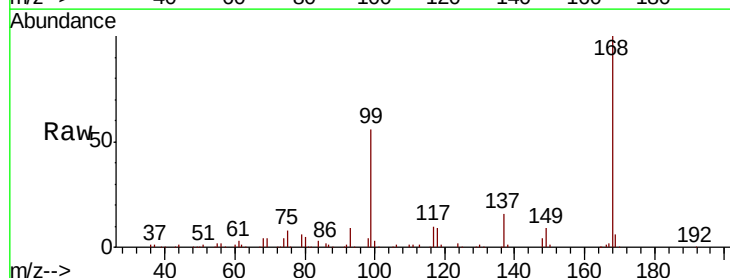
Tgt Ion: 75 Resp: 41155

Ion Ratio Lower Upper

75 100

110 8.9 19.1 57.5#

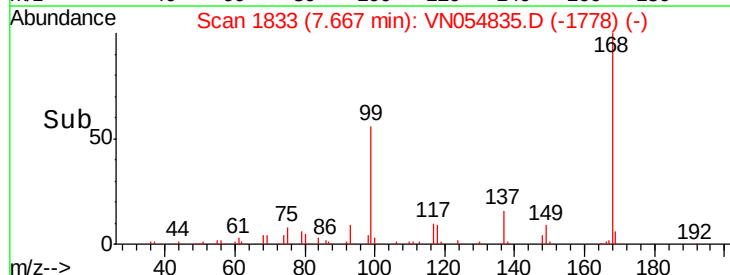
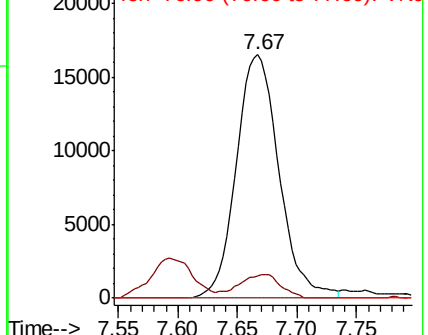
77 0.0 25.0 37.4#

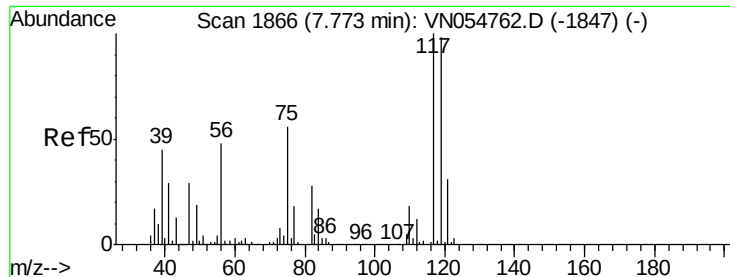


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 6.328 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

ClientSampled :

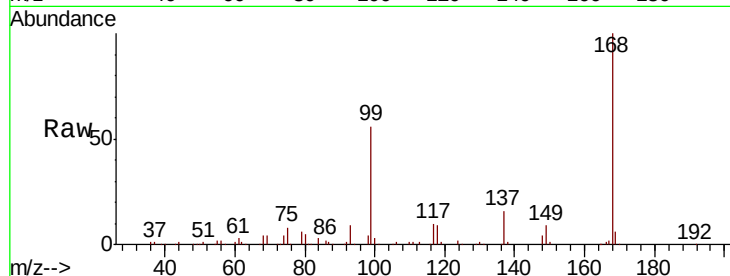
Tot Ion:117 Resp: 50706

Ion Ratio Lower Upper

117 100

119 5.7 76.3 114.5#

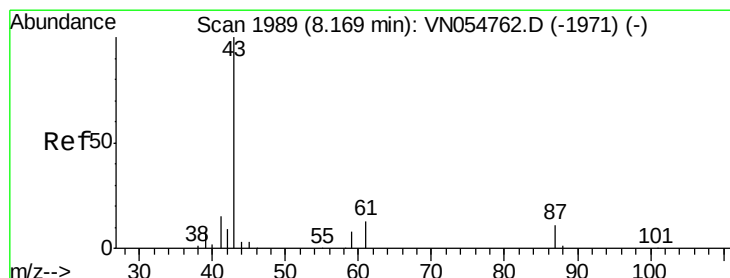
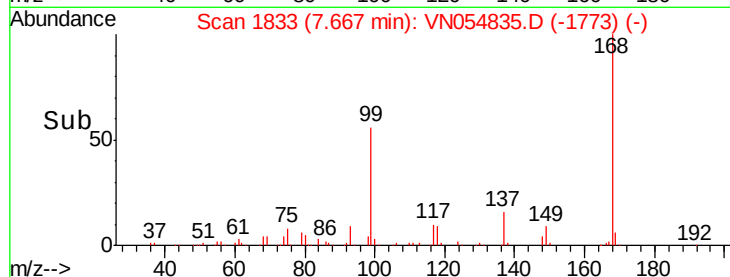
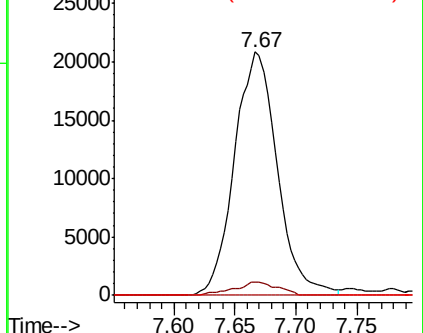
121 0.0 24.6 36.8#



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: 1.692 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

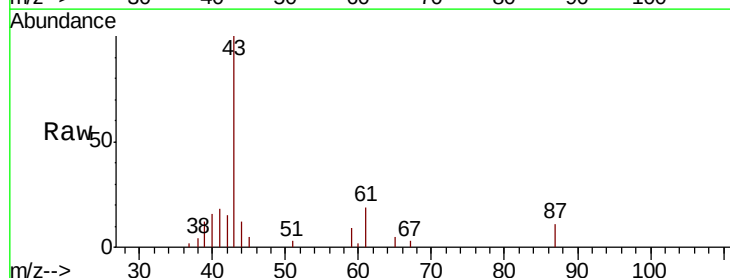
Tgt Ion: 43 Resp: 16627

Ion Ratio Lower Upper

43 100

61 18.1 15.8 23.8

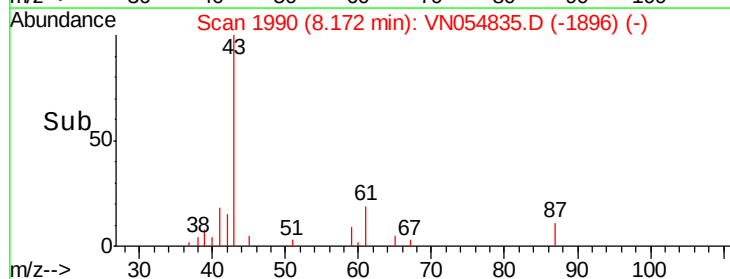
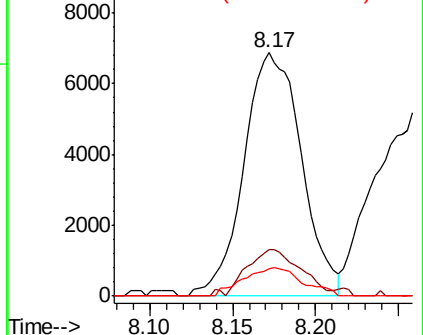
87 12.0 12.0 18.0#

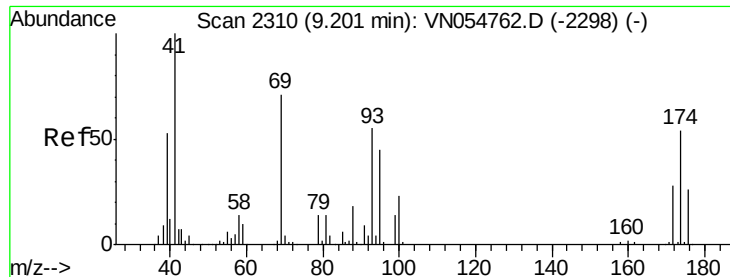


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

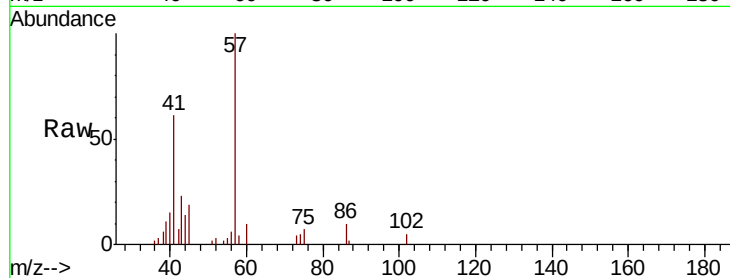




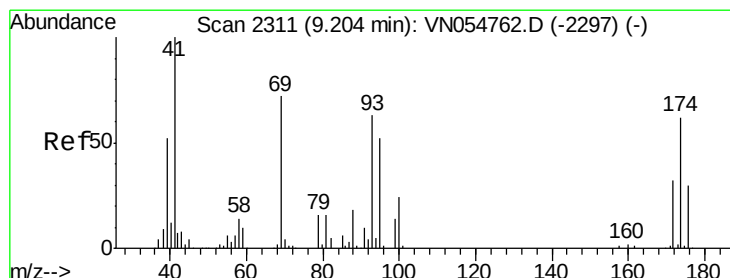
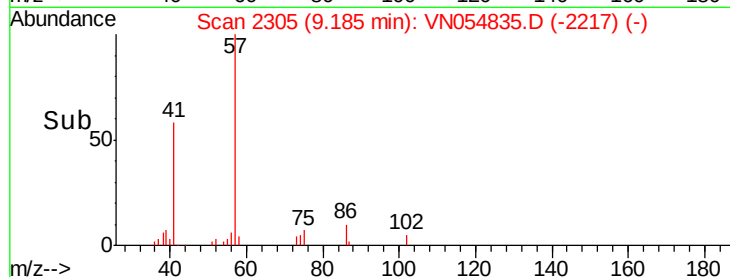
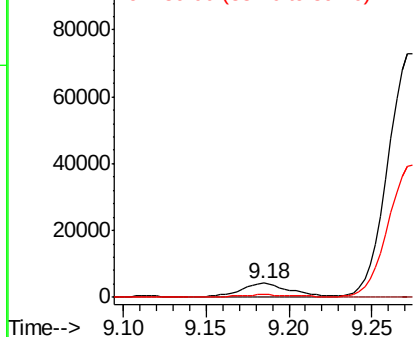
#48
Methvl methacrylate
Concen: 1.519 ug/l
RT: 9.18 min Scan# 2305
Delta R.T. -0.02 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 41 Resp: 8095
Ion Ratio Lower Upper
41 100
69 0.0 72.6 108.8#
39 0.0 47.5 71.3#

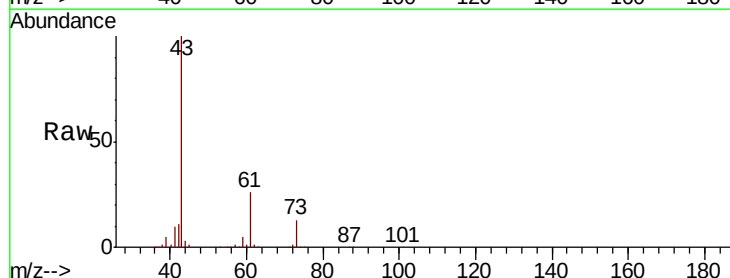


Abundance Ion 41.00 (40.70 to 41.70): VNC
Ion 69.00 (68.70 to 69.70): VNC
Ion 39.00 (38.70 to 39.70): VNC

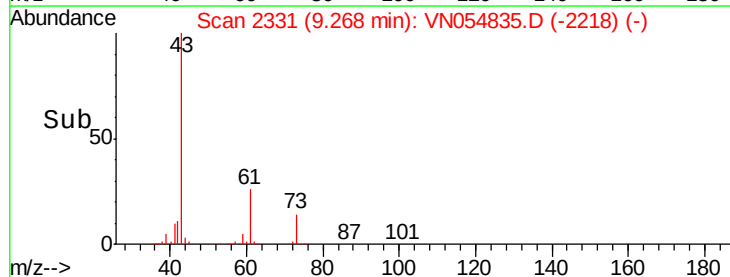
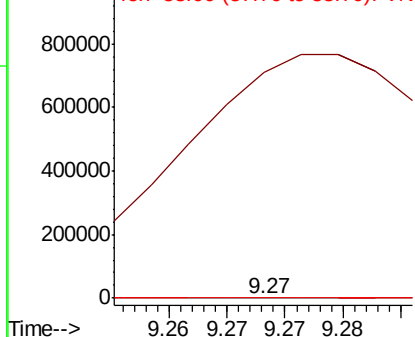


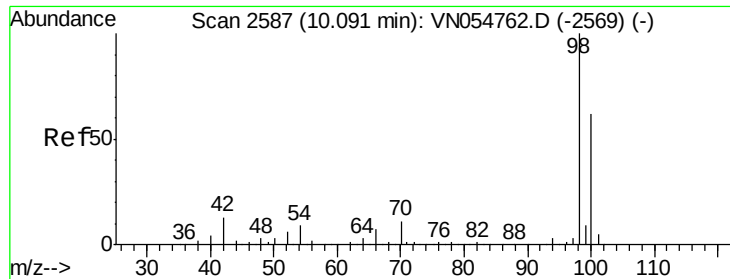
#49
1,4-Dioxane
Concen: 0.567 ug/l
RT: 9.27 min Scan# 2331
Delta R.T. 0.06 min
Lab File: VN054835.D
Acq: 31 Mar 2019 6:37

Tgt Ion: 88 Resp: 30
Ion Ratio Lower Upper
88 100
43 4957306.7 24.1 36.1#
58 20946.7 50.8 76.2#



Abundance Ion 88.00 (87.70 to 88.70): VNC
Ion 43.00 (42.70 to 43.70): VNC
Ion 58.00 (57.70 to 58.70): VNC





#50

Toluene-d8

Concen: 48.233 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

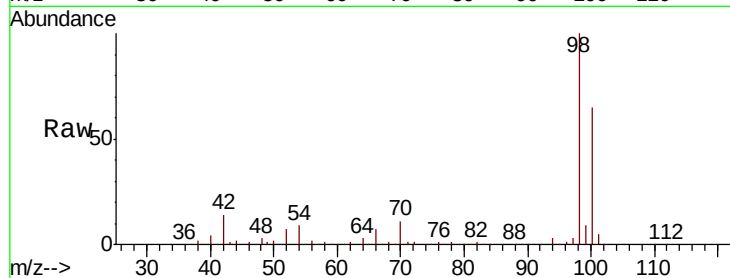
ClientSampled :

Tot Ion: 98 Resp: 1058402

Ion Ratio Lower Upper

98 100

100 64.1 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

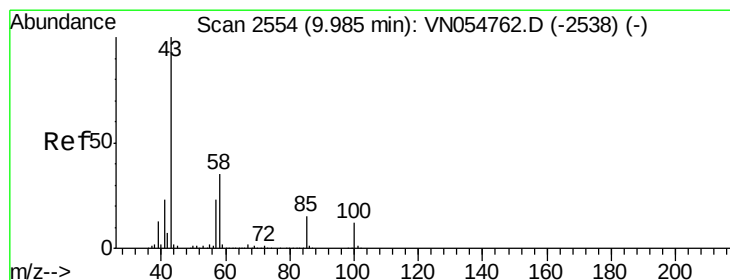
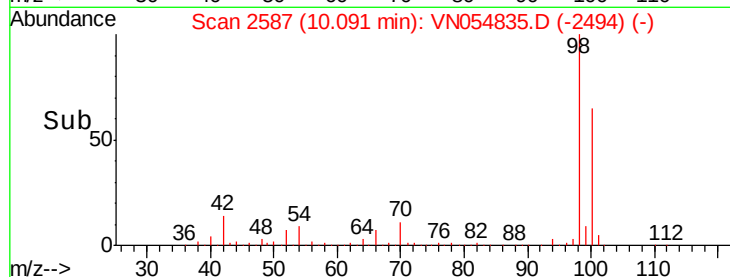
300000

200000

100000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.930 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN054835.D

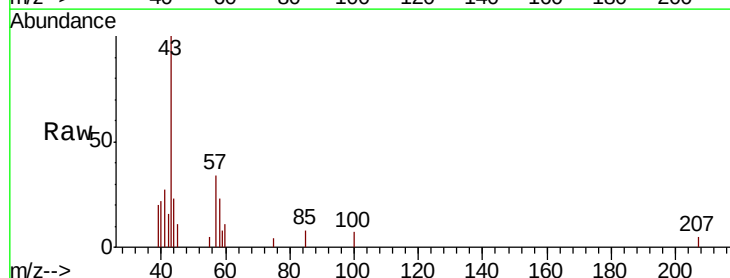
Acq: 31 Mar 2019 6:37

Tgt Ion: 43 Resp: 5138

Ion Ratio Lower Upper

43 100

58 32.1 31.8 47.6



Abundance Ion 43.00 (42.70 to 43.70): VN054762.D (-2538) (-)

Ion 58.00 (57.70 to 58.70): VN054762.D (-2538) (-)

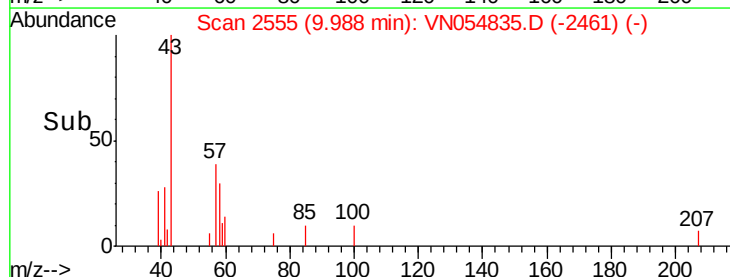
6000

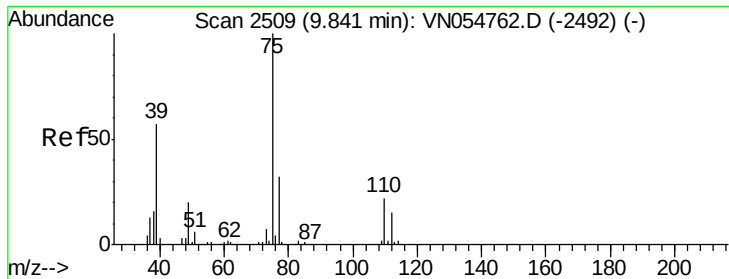
4000

2000

0

Time-->



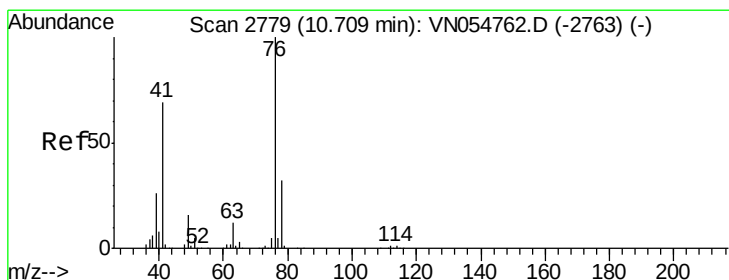
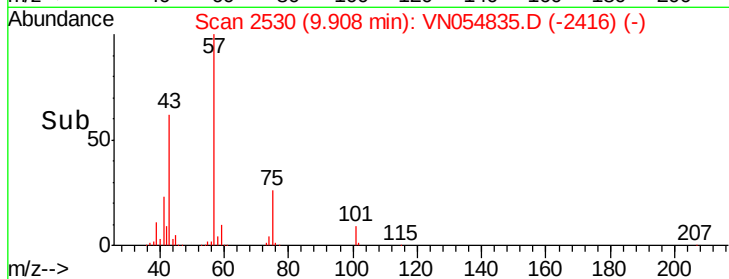
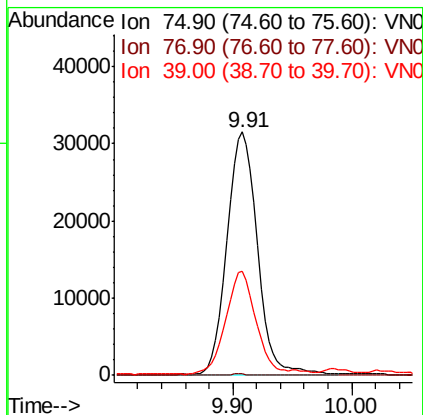
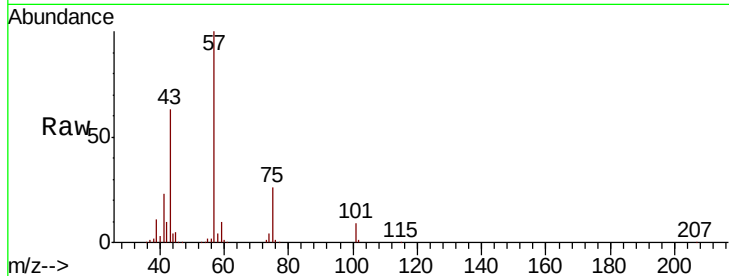


#54

cis-1,3-Dichloropropene
 Concen: 6.368 ug/l
 RT: 9.91 min Scan# 2530
 Delta R.T. 0.07 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Instrument :
 MSVOA_N
 ClientSampleId :

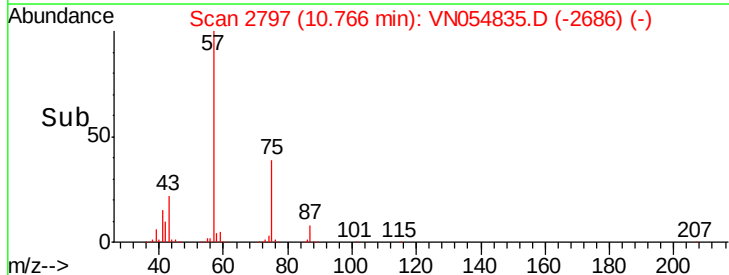
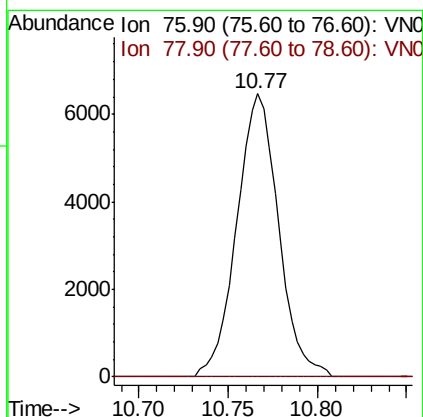
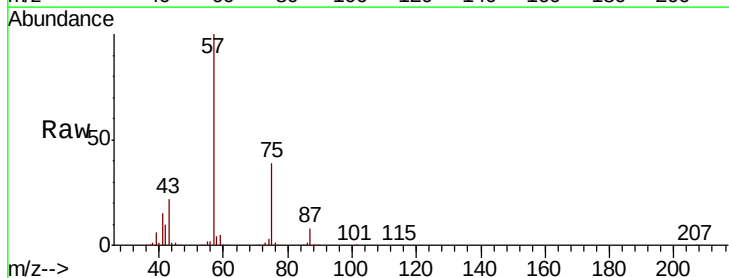
Tot Ion	Ratio	Lower	Upper
75	100		
77	0.6	25.4	38.0#
39	42.1	37.2	55.8

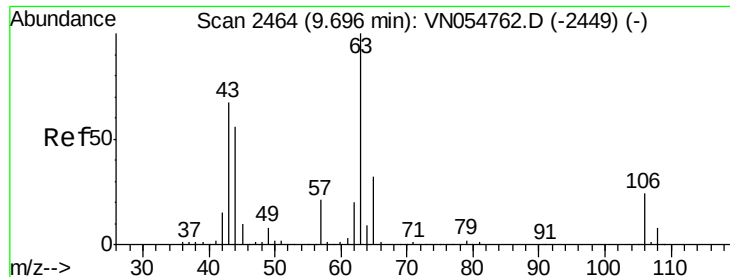


#57

1,3-Dichloropropane
 Concen: 1.174 ug/l
 RT: 10.77 min Scan# 2797
 Delta R.T. 0.06 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Tgt Ion	Ratio	Lower	Upper
76	100		
78	0.0	25.7	38.5#

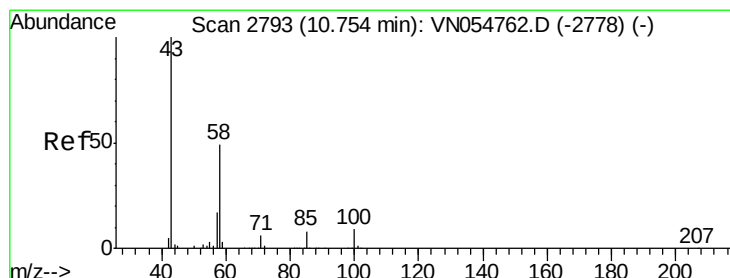
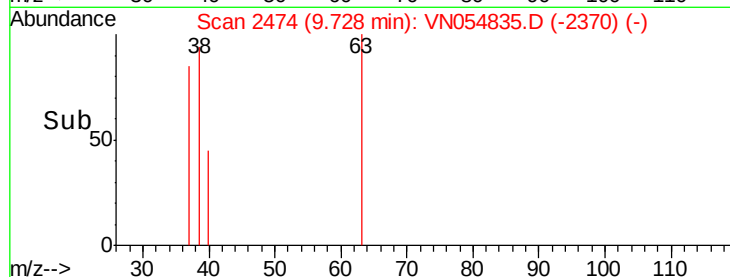
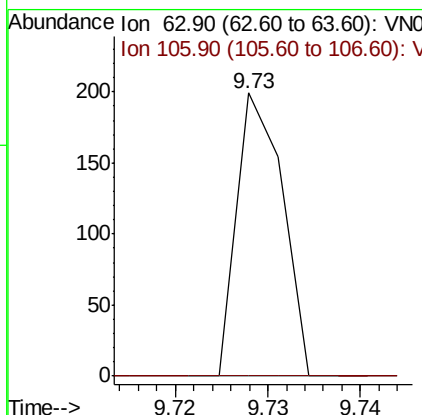
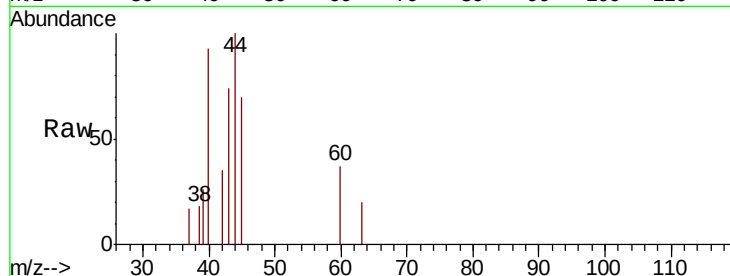




#58
 2-Chloroethyl Vinyl ether
 Concen: 10.377 ug/l
 RT: 9.73 min Scan# 2474
 Delta R.T. 0.03 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

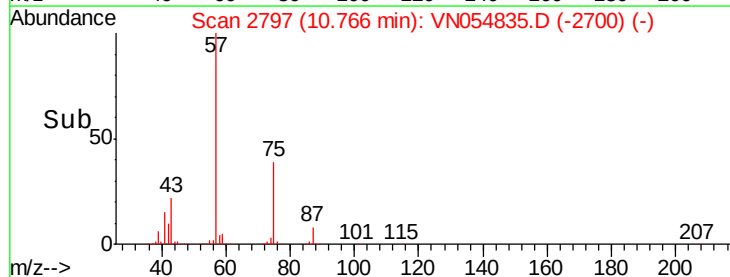
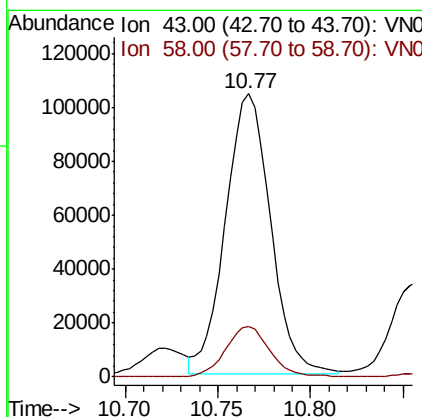
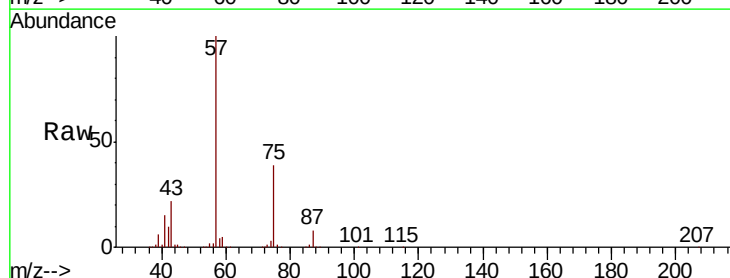
Instrument :
 MSVOA_N
 ClientSampleId :

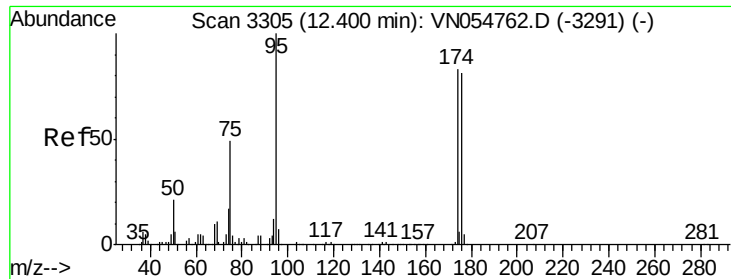
Tot Ion: 63 Resp: 68
 Ion Ratio Lower Upper
 63 100
 106 0.0 24.4 36.6#



#59
 2-Hexanone
 Concen: 49.729 ug/l
 RT: 10.77 min Scan# 2797
 Delta R.T. 0.01 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Tgt Ion: 43 Resp: 175933
 Ion Ratio Lower Upper
 43 100
 58 17.8 28.0 83.9#





#62

4-Bromofluorobenzene

Concen: 44.247 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

ClientSampled :

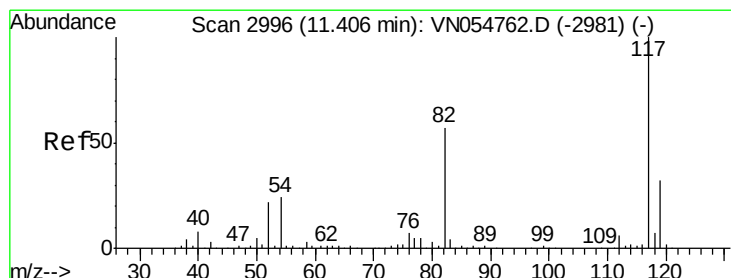
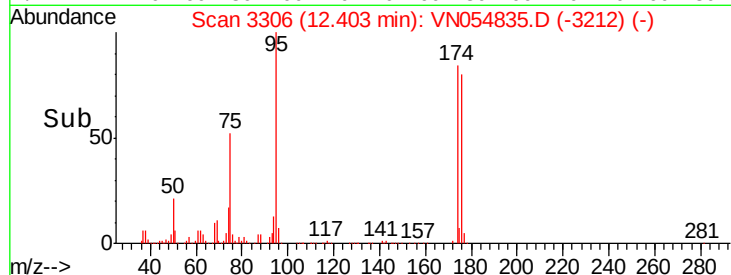
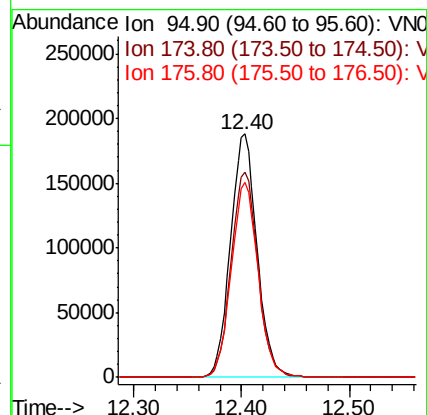
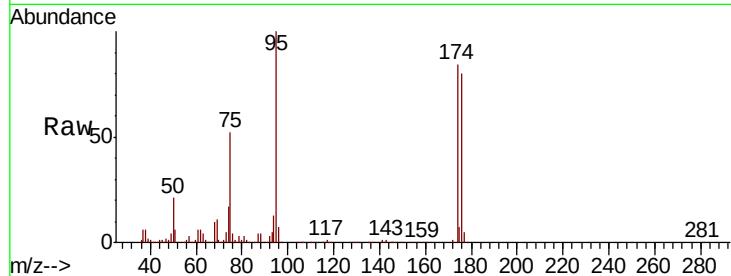
Tot Ion: 95 Resp: 322911

Ion Ratio Lower Upper

95 100

174 85.0 0.0 191.0

176 80.7 0.0 187.4



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

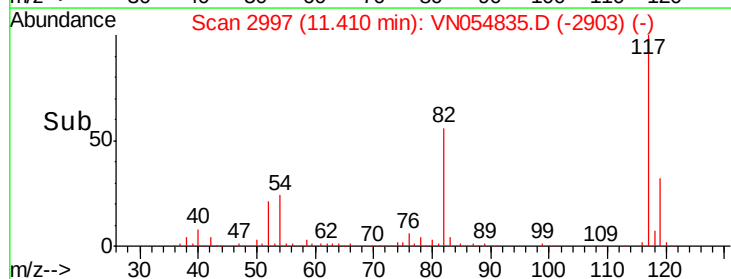
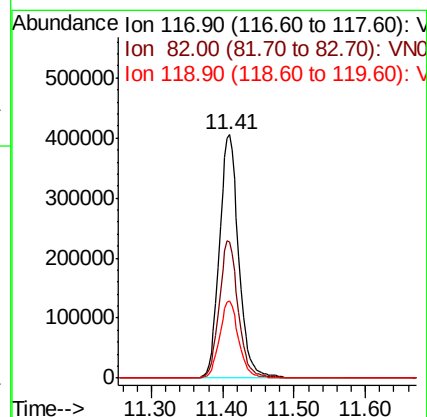
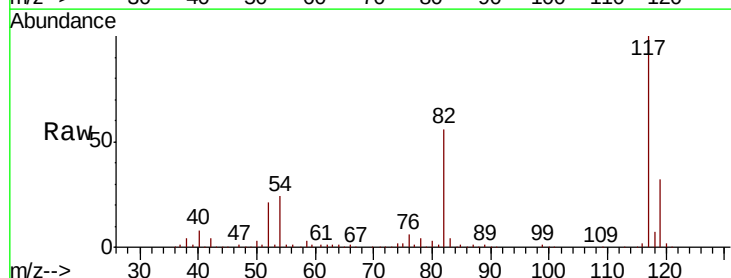
Tgt Ion: 117 Resp: 757459

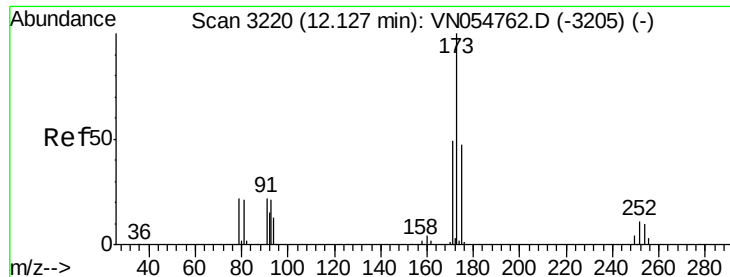
Ion Ratio Lower Upper

117 100

82 55.8 40.0 60.0

119 31.9 25.8 38.6





#71

Bromoform

Concen: 0.407 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

ClientSampleId :

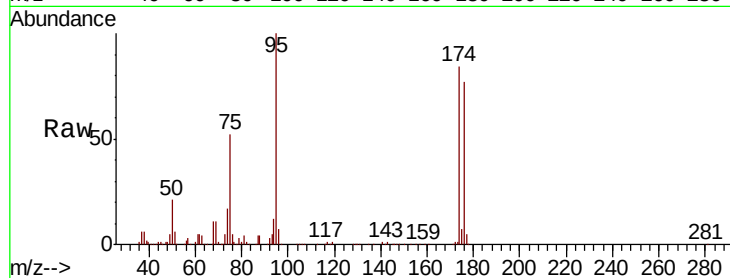
Tot Ion:173 Resp: 1323

Ion Ratio Lower Upper

173 100

175 1333.9 24.4 73.2#

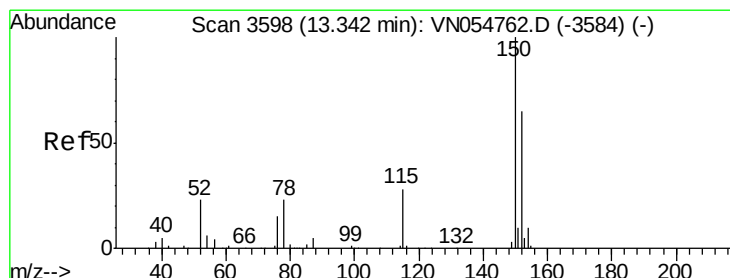
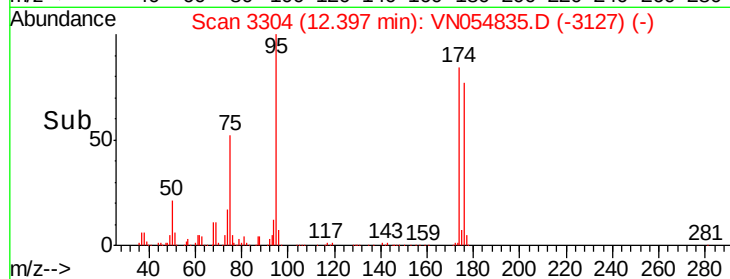
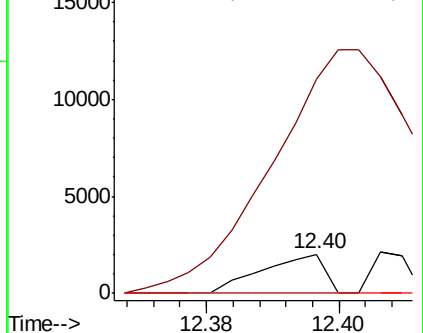
254 0.0 0.1 0.1#



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: VN054835.D

Acq: 31 Mar 2019 6:37

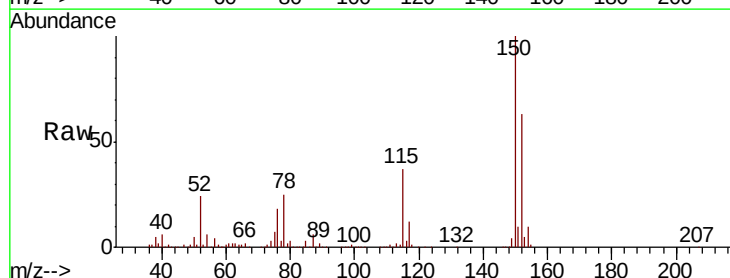
Tgt Ion:152 Resp: 270232

Ion Ratio Lower Upper

152 100

115 57.5 27.2 81.6

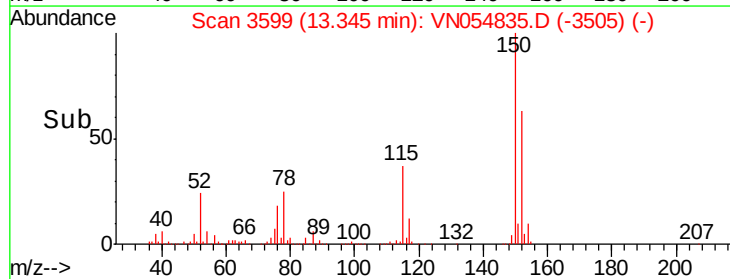
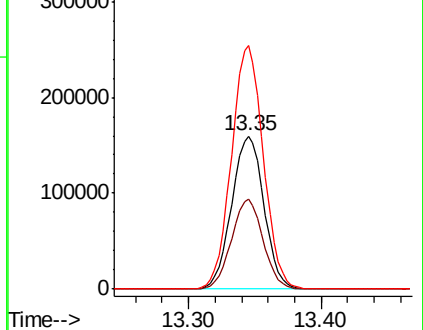
150 156.4 0.0 349.2

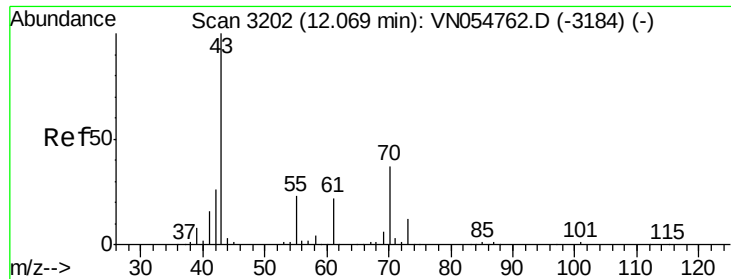


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 2.641 ug/l

RT: 11.88 min Scan# 3142

Delta R.T. -0.19 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

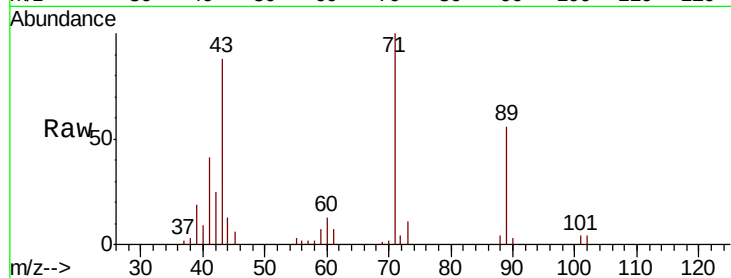
Instrument :

MSVOA_N

ClientSampleId :

Tot Ion: 43 Resp: 18173

Ion	Ratio	Lower	Upper
43	100		
70	1.3	35.4	53.0#
55	3.5	19.8	29.6#
61	8.3	19.8	29.6#

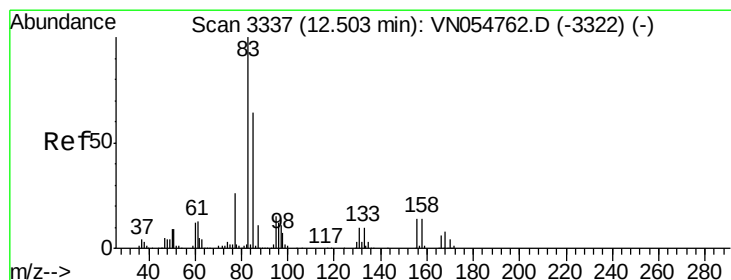
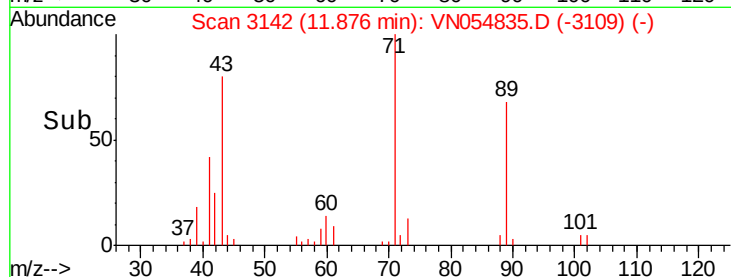
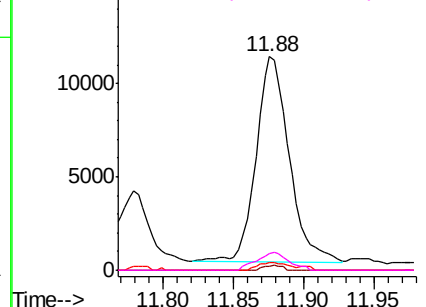


Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 70.00 (69.70 to 70.70): VNO

Ion 55.00 (54.70 to 55.70): VNO

Ion 61.00 (60.70 to 61.70): VNO



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.40 min Scan# 3305

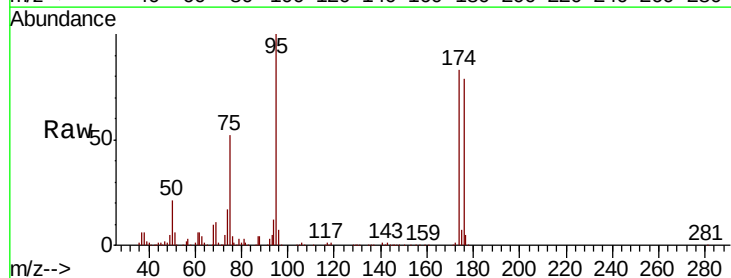
Delta R.T. -0.10 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Tgt Ion: 83 Resp: 208

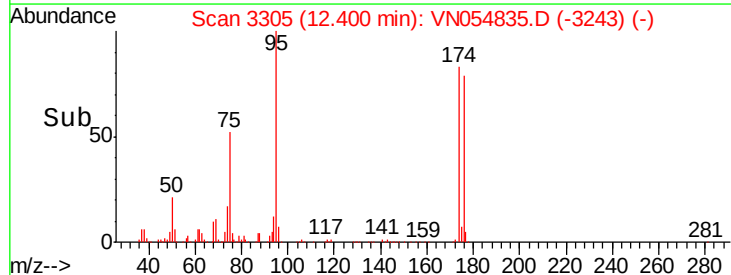
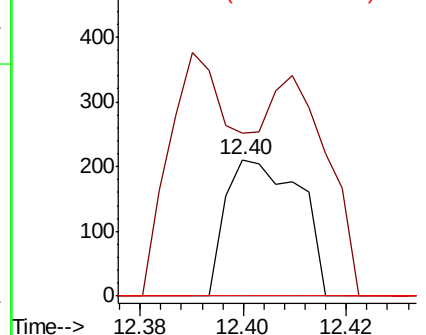
Ion	Ratio	Lower	Upper
83	100		
131	155.8	5.8	17.4#
85	0.0	32.2	96.6#

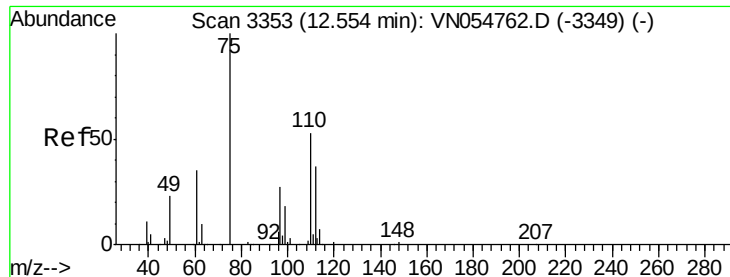


Abundance Ion 82.90 (82.60 to 83.60): VNO

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): VNO





#76

1,2,3-Trichloropropane

Concen: 36.152 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

Instrument :

MSVOA_N

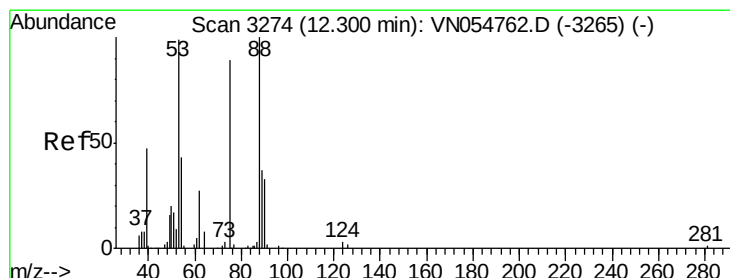
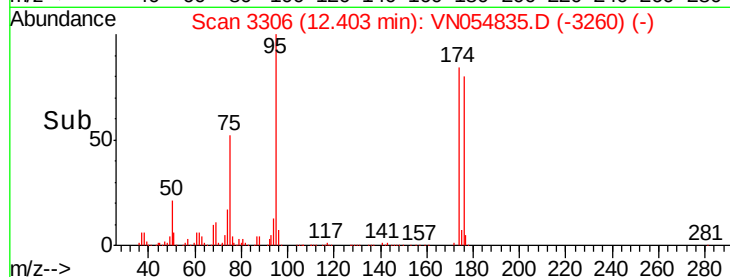
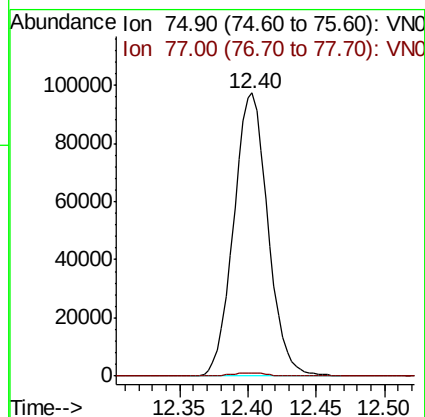
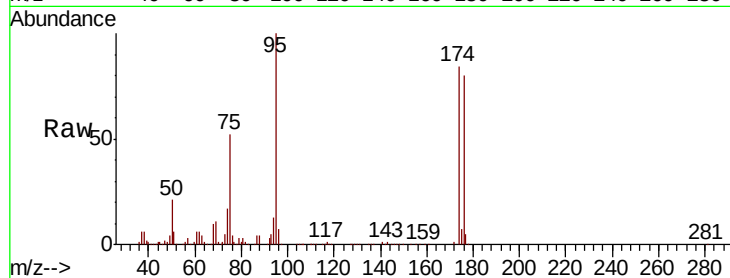
ClientSampled :

Tot Ion: 75 Resp: 169718

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 140.622 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN054835.D

Acq: 31 Mar 2019 6:37

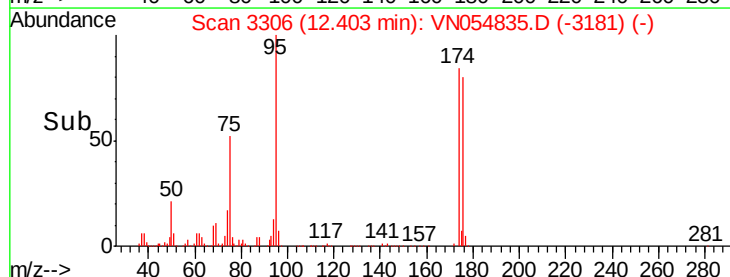
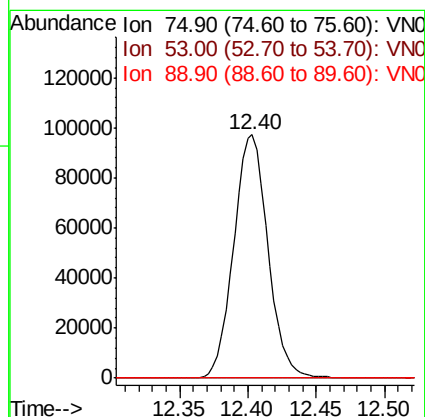
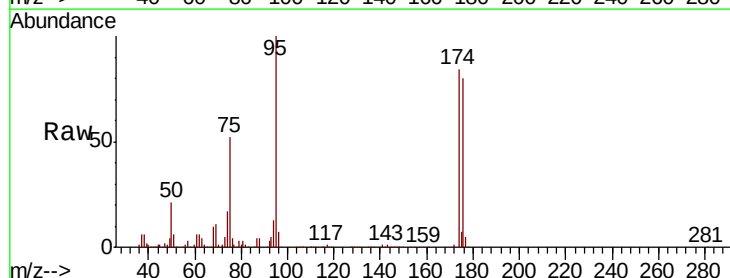
Tgt Ion: 75 Resp: 169718

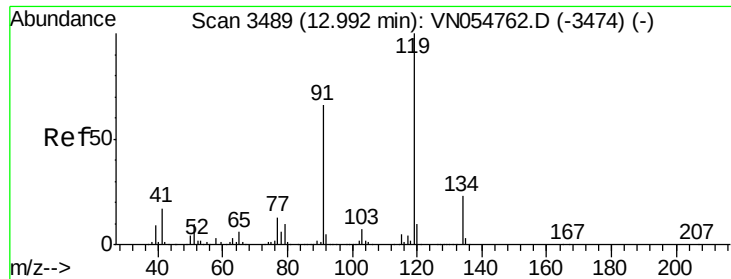
Ion Ratio Lower Upper

75 100

53 0.0 76.2 114.2#

89 0.0 39.2 58.8#





#83
 tert-Butylbenzene
 Concen: Below Cal
 RT: 12.74 min Scan# 3410
 Delta R.T. -0.25 min
 Lab File: VN054835.D
 Acq: 31 Mar 2019 6:37

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
119	100		
91	310.6	30.9	92.8#
134	0.0	13.2	39.6#

