

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN041520\
 Data File : VN060990.D
 Acq On : 16 Apr 2020 2:27
 Operator : JC/MD
 Sample : L2278-02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 43 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Apr 16 06:44:12 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N031820W.M
 Quant Title : SW846 8260
 QLast Update : Wed Mar 18 08:49:09 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.64	168	142661	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.56	114	240589	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.40	117	226868	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	103682	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.00	65	94392	48.20	ug/l	0.00
Spiked Amount	50.000		Recovery	=	96.40%	
35) Dibromofluoromethane	7.56	113	71457	49.12	ug/l	0.00
Spiked Amount	50.000		Recovery	=	98.24%	
50) Toluene-d8	10.08	98	302644	50.93	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.86%	
62) 4-Bromofluorobenzene	12.39	95	113377	52.06	ug/l	0.00
Spiked Amount	50.000		Recovery	=	104.12%	

Target Compounds					Qvalue	
16) Acetone	3.78	43	30282	43.652	ug/l	95
18) Methyl Acetate	4.29	43	1827	0.936	ug/l #	61
20) Methylene Chloride	4.52	84	3755	2.200	ug/l	97
25) 2-Butanone	6.80	43	9118	8.123	ug/l	98
30) Chloroform	7.34	83	1218	0.406	ug/l	95
31) Cyclohexane	7.64	56	3016	0.956	ug/l #	1
36) 1,1-Dichloropropene	7.64	75	11288	4.845	ug/l #	49
37) Ethyl Acetate	6.80	43	9118	3.622	ug/l #	70
38) Carbon Tetrachloride	7.64	117	13695	6.559	ug/l #	16
41) Methacrylonitrile	7.17	41	217	0.202	ug/l #	100
43) Isopropyl Acetate	8.14	43	27428	6.607	ug/l #	90
48) Methyl methacrylate	9.16	41	2410	1.304	ug/l #	15
51) 4-Methyl-2-Pentanone	9.97	43	43162	18.271	ug/l	96
54) cis-1,3-Dichloropropene	9.89	75	14165	4.822	ug/l #	62
56) Ethyl methacrylate	10.34	69	4647	1.824	ug/l #	62
57) 1,3-Dichloropropane	10.75	76	1188	0.419	ug/l #	42
59) 2-Hexanone	10.75	43	20654	12.137	ug/l #	55
71) Bromoform	12.39	173	429	1.987	ug/l #	1
74) N-amyl acetate	12.02	43	3369	0.937	ug/l #	45
76) 1,2,3-Trichloropropane	12.39	75	57572	25.733	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.39	75	57572	66.091	ug/l #	13
90) Hexachloroethane	13.99	117	238	0.247	ug/l #	8
95) Naphthalene	15.13	128	2515	0.431	ug/l #	83

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

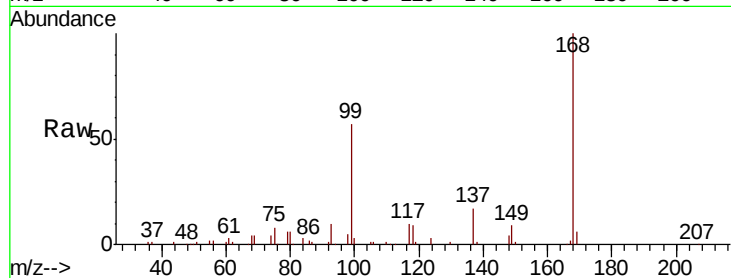
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 142661

Ion Ratio Lower Upper

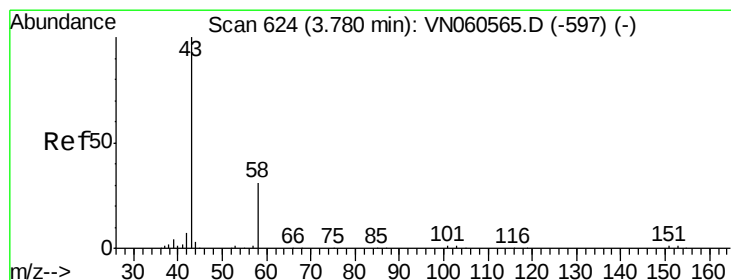
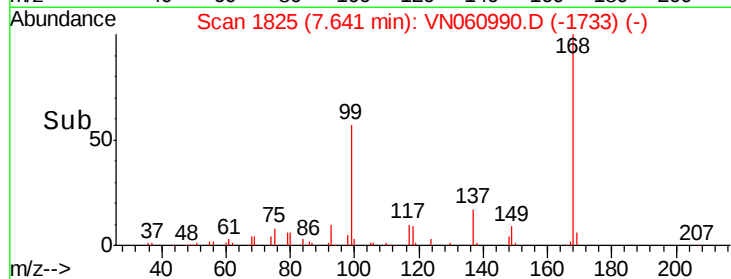
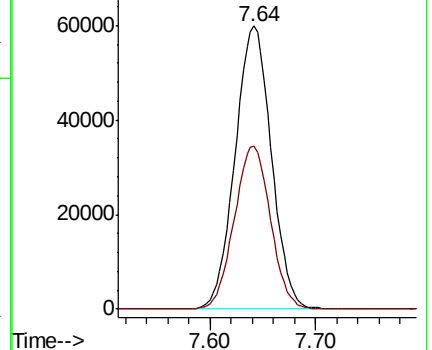
168 100

99 57.4 44.0 66.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN



#16

Acetone

Concen: 43.652 ug/l

RT: 3.78 min Scan# 624

Delta R.T. 0.00 min

Lab File: VN060990.D

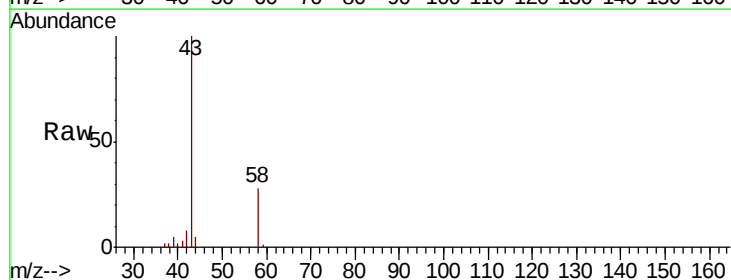
Acq: 16 Apr 2020 2:27

Tgt Ion: 43 Resp: 30282

Ion Ratio Lower Upper

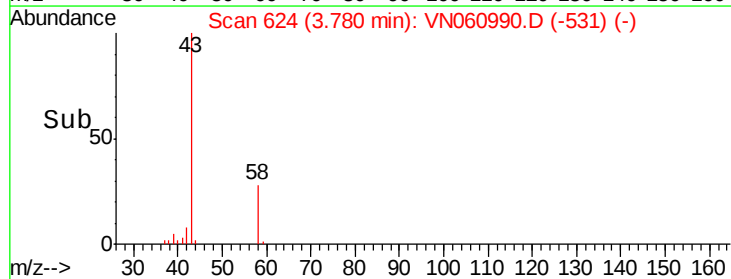
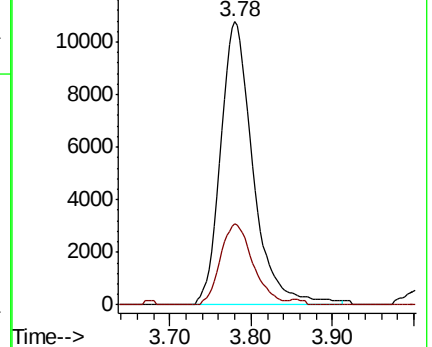
43 100

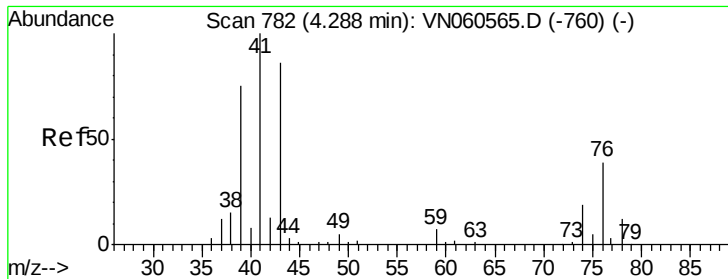
58 28.4 25.1 37.7



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

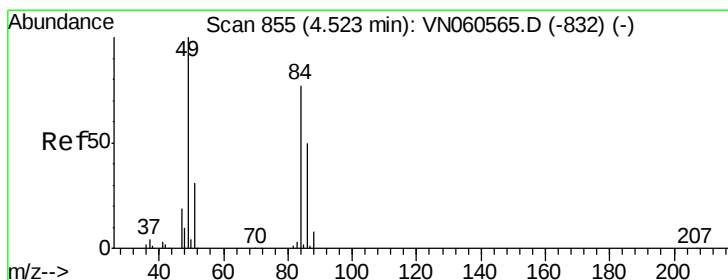
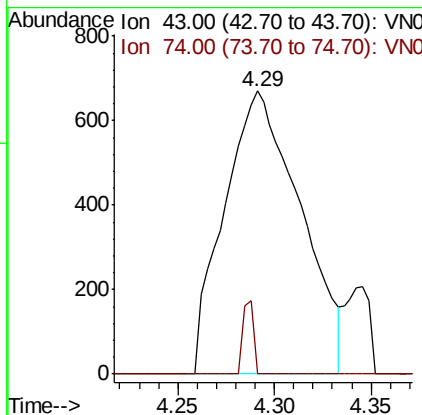
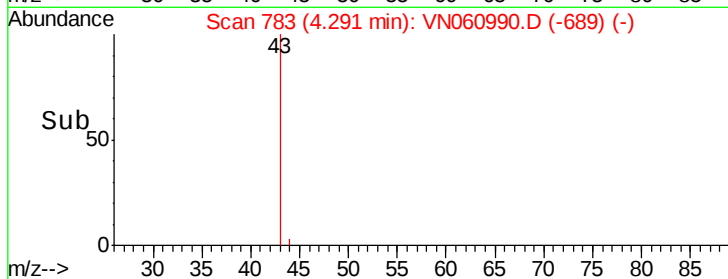
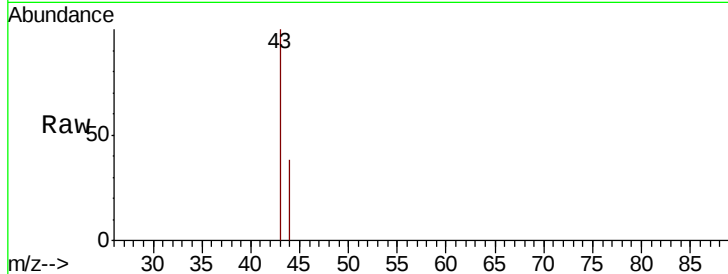




#18
Methyl Acetate
Concen: 0.936 ug/l
RT: 4.29 min Scan# 783
Delta R.T. 0.00 min
Lab File: VN060990.D
Acq: 16 Apr 2020 2:27

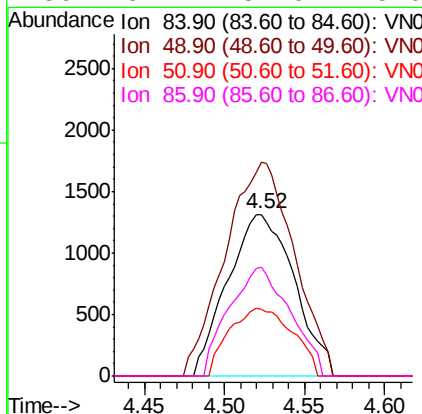
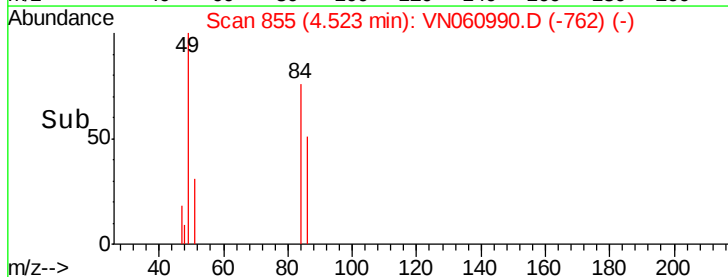
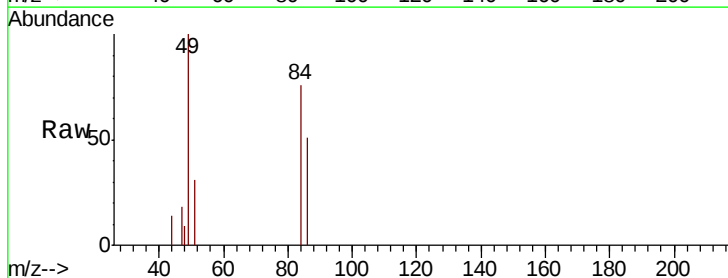
Instrument :
MSVOA_N
ClientSampleId :

Tot Ion: 43 Resp: 1827
Ion Ratio Lower Upper
43 100
74 3.6 17.5 26.3#



#20
Methylene Chloride
Concen: 2.200 ug/l
RT: 4.52 min Scan# 855
Delta R.T. 0.00 min
Lab File: VN060990.D
Acq: 16 Apr 2020 2:27

Tgt Ion: 84 Resp: 3755
Ion Ratio Lower Upper
84 100
49 132.0 103.3 154.9
51 40.8 31.6 47.4
86 67.2 52.0 78.0





#25

2-Butanone

Concen: 8.123 ug/l

RT: 6.80 min Scan# 1563

Delta R.T. 0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

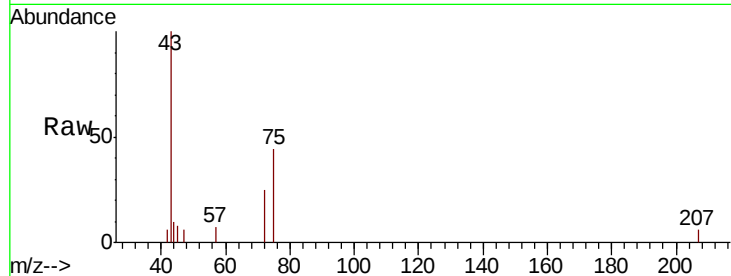
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 43 Resp: 9118

Ion Ratio Lower Upper

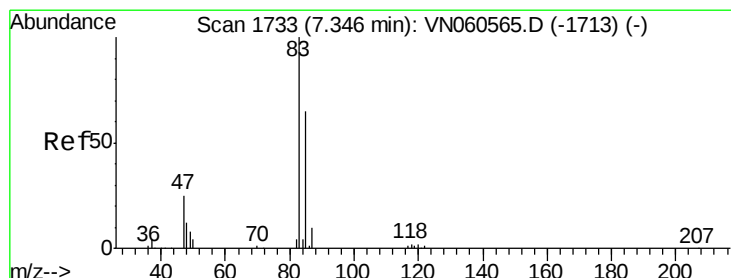
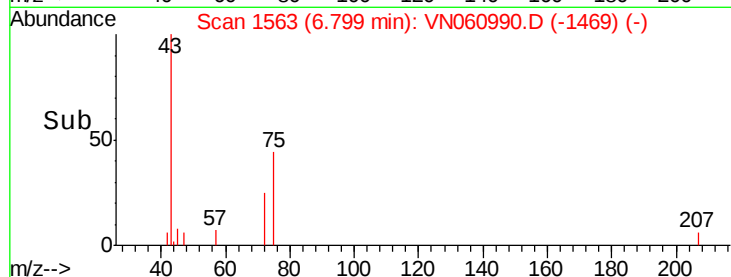
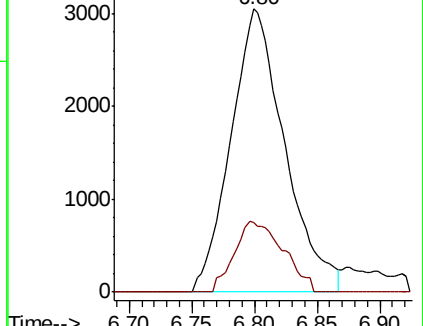
43 100

72 24.7 20.4 30.6



Abundance Ion 43.00 (42.70 to 43.70): VN060990.D (-1562) (-)

Ion 72.00 (71.70 to 72.70): VN060990.D (-1562) (-)



#30

Chloroform

Concen: 0.406 ug/l

RT: 7.34 min Scan# 1731

Delta R.T. -0.01 min

Lab File: VN060990.D

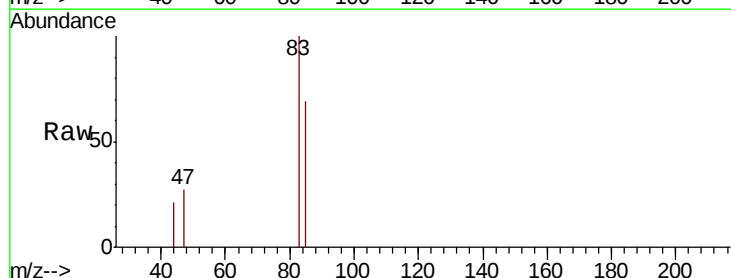
Acq: 16 Apr 2020 2:27

Tgt Ion: 83 Resp: 1218

Ion Ratio Lower Upper

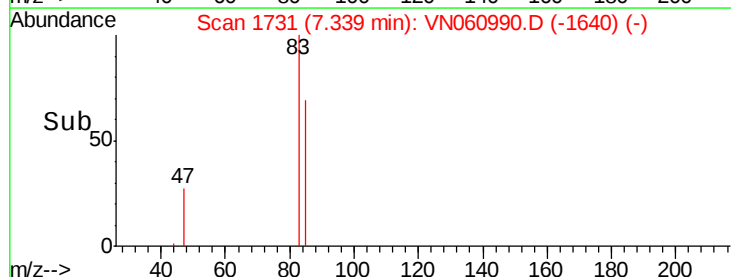
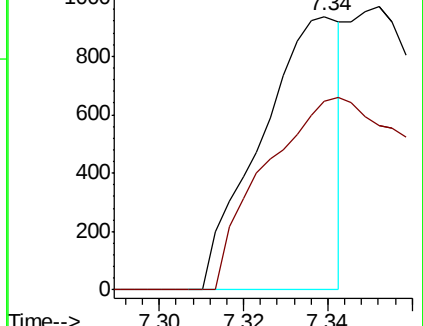
83 100

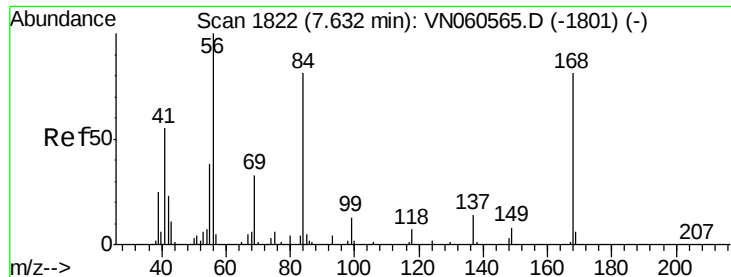
85 69.0 51.8 77.8



Abundance Ion 82.90 (82.60 to 83.60): VN060990.D (-1733) (-)

Ion 84.90 (84.60 to 85.60): VN060990.D (-1733) (-)

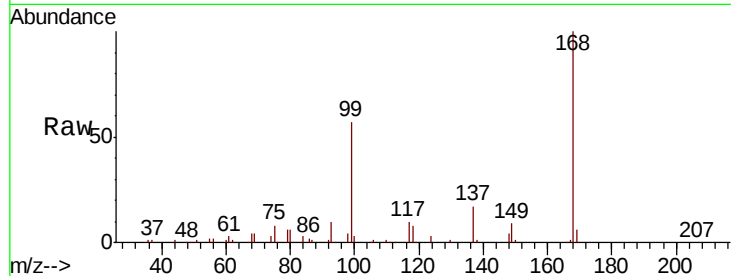




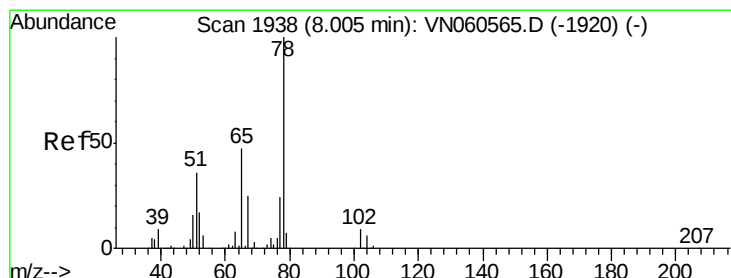
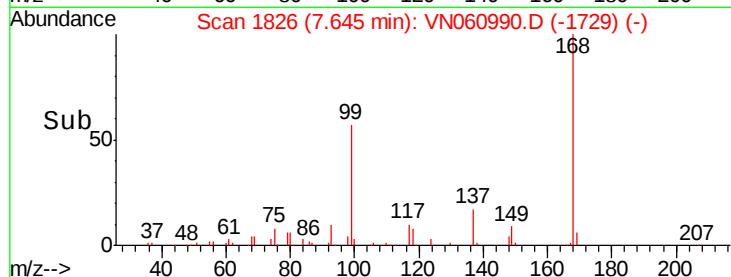
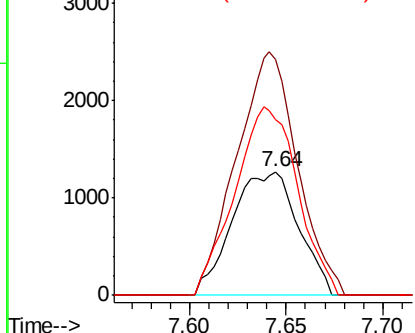
#31
Cyclohexane
Concen: 0.956 ug/l
RT: 7.64 min Scan# 1826
Delta R.T. 0.01 min
Lab File: VN060990.D
Acq: 16 Apr 2020 2:27

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion: 56 Resp: 3016
Ion Ratio Lower Upper
56 100
69 191.2 26.6 40.0#
84 142.8 64.3 96.5#

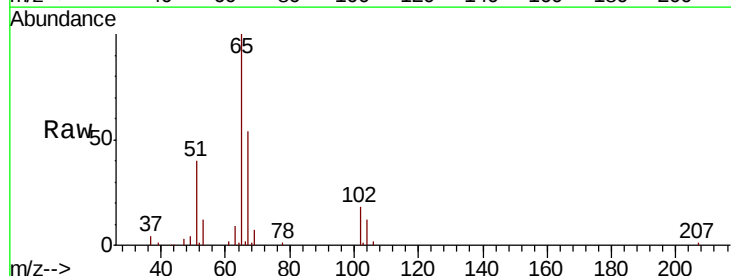


Abundance Ion 56.00 (55.70 to 56.70): VN0
Ion 69.00 (68.70 to 69.70): VN0
Ion 84.00 (83.70 to 84.70): VN0

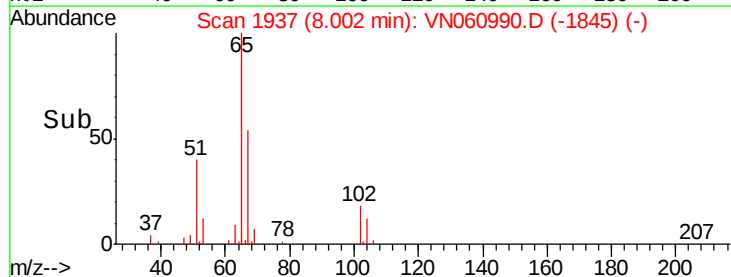
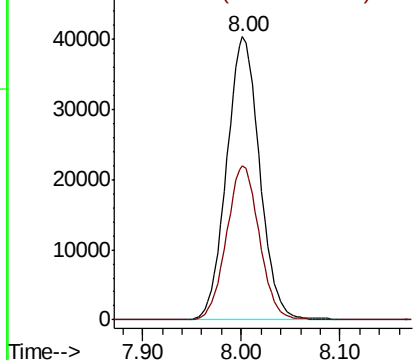


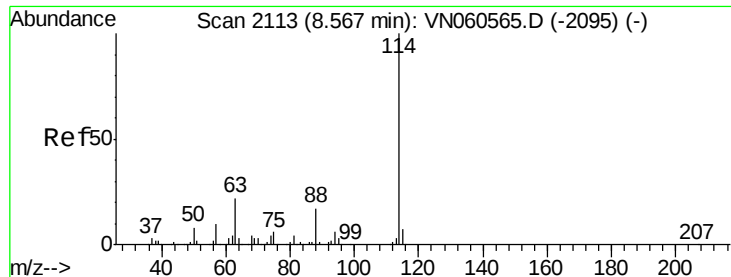
#33
1,2-Dichloroethane-d4
Concen: 48.198 ug/l
RT: 8.00 min Scan# 1937
Delta R.T. -0.00 min
Lab File: VN060990.D
Acq: 16 Apr 2020 2:27

Tgt Ion: 65 Resp: 94392
Ion Ratio Lower Upper
65 100
67 54.0 0.0 107.6



Abundance Ion 64.90 (64.60 to 65.60): VN0
Ion 66.90 (66.60 to 67.60): VN0

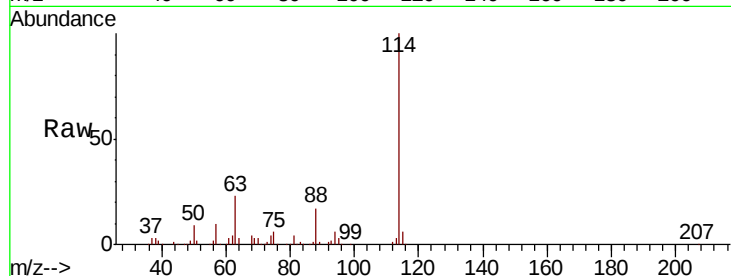




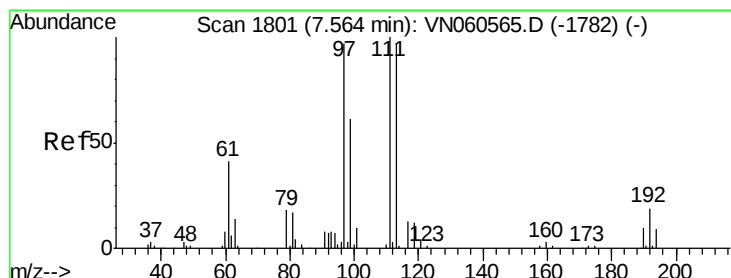
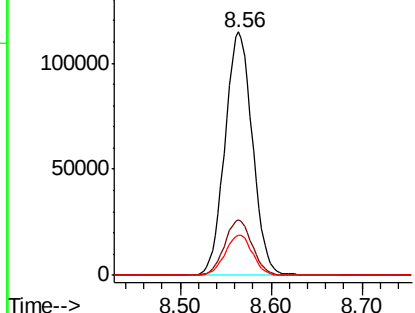
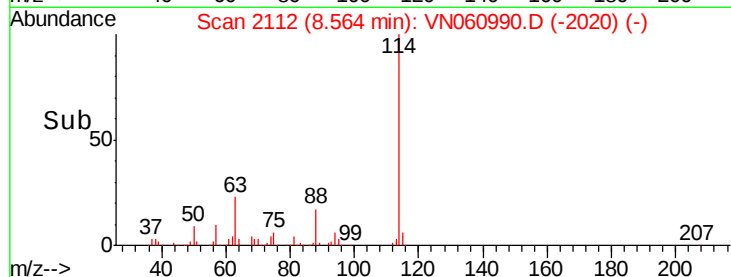
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.56 min Scan# 2112
 Delta R.T. -0.00 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
114	100		
63	23.0	0.0	43.8
88	16.6	0.0	33.0

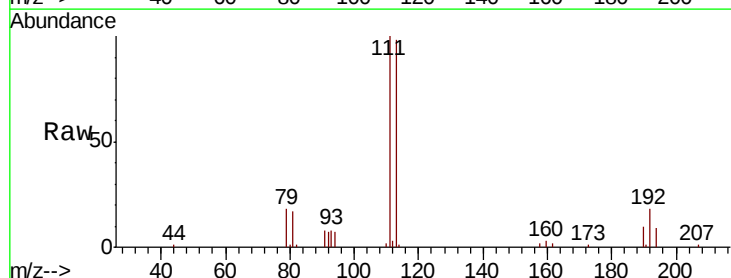


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VN
 Ion 87.90 (87.60 to 88.60): VN

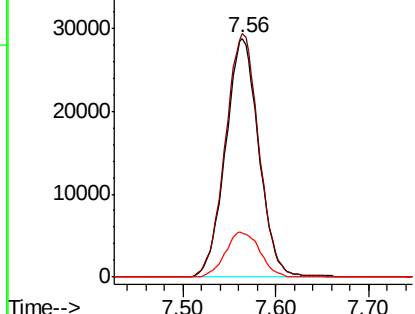
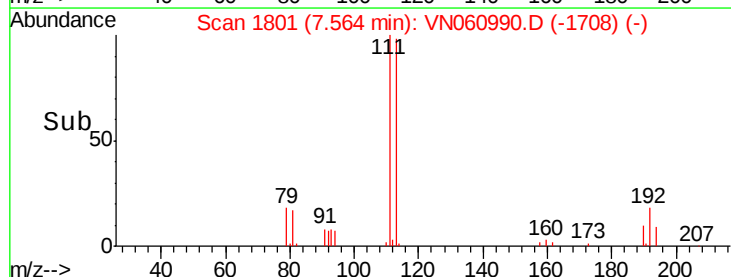


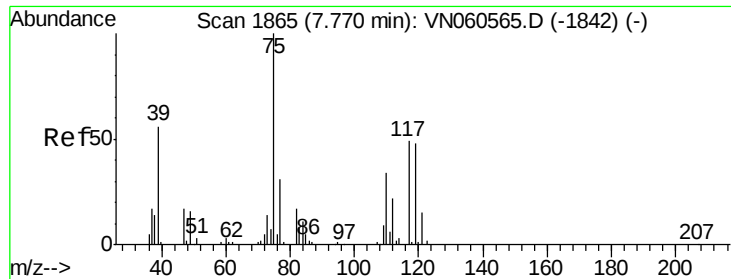
#35
 Dibromofluoromethane
 Concen: 49.119 ug/l
 RT: 7.56 min Scan# 1801
 Delta R.T. 0.00 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

Tgt Ion	Ratio	Lower	Upper
113	100		
111	103.5	82.9	124.3
192	19.5	15.8	23.8



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

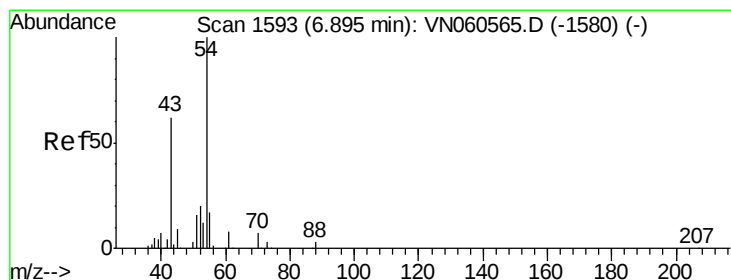
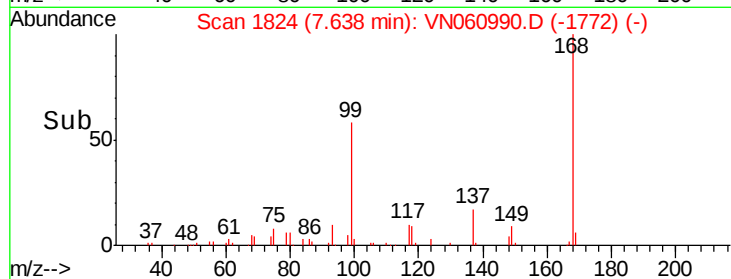
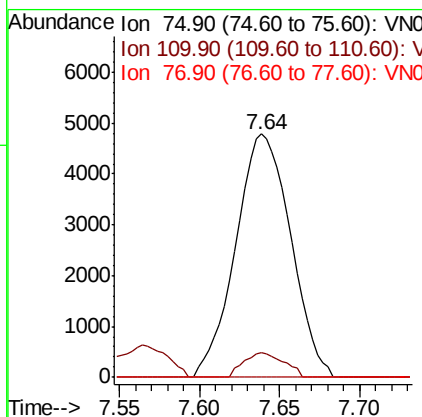
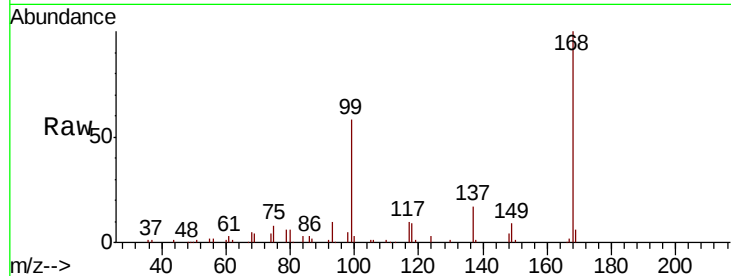




#36
 1,1-Dichloropropene
 Concen: 4.845 ug/l
 RT: 7.64 min Scan# 1824
 Delta R.T. -0.13 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

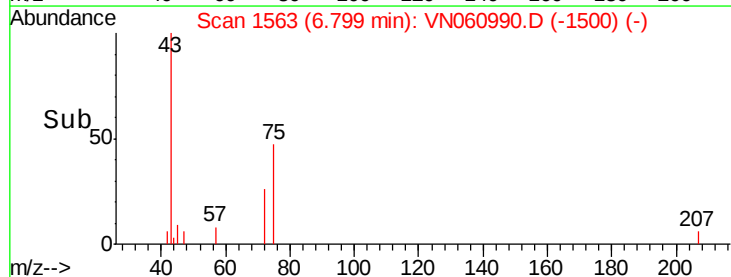
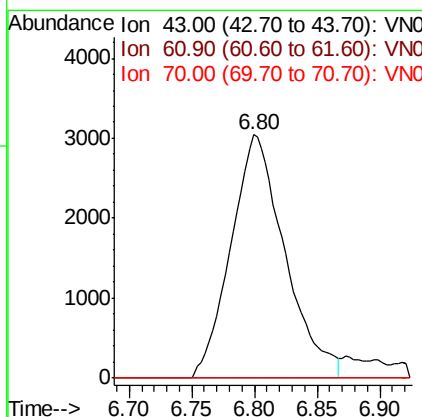
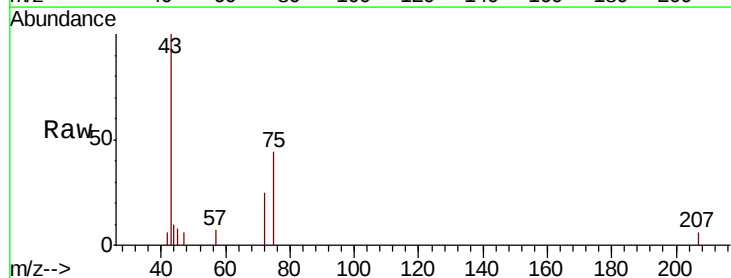
Instrument :
 MSVOA_N
 ClientSampled :

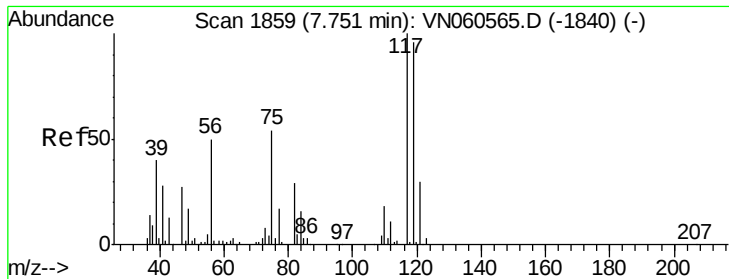
Tot Ion: 75 Resp: 11288
 Ion Ratio Lower Upper
 75 100
 110 7.3 16.9 50.6#
 77 0.0 24.6 36.8#



#37
 Ethyl Acetate
 Concen: 3.622 ug/l
 RT: 6.80 min Scan# 1563
 Delta R.T. -0.10 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

Tgt Ion: 43 Resp: 9118
 Ion Ratio Lower Upper
 43 100
 61 0.0 10.6 15.8#
 70 0.0 7.9 11.9#





#38

Carbon Tetrachloride

Concen: 6.559 ug/l

RT: 7.64 min Scan# 1824

Delta R.T. -0.11 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampled :

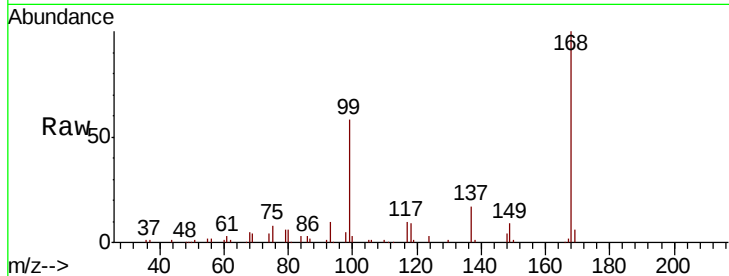
Tot Ion:117 Resp: 13695

Ion Ratio Lower Upper

117 100

119 5.4 76.2 114.2#

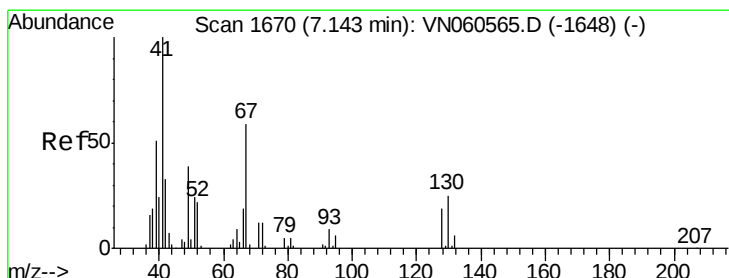
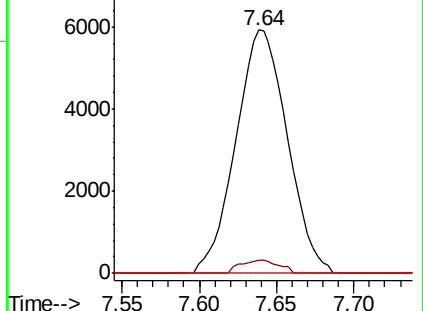
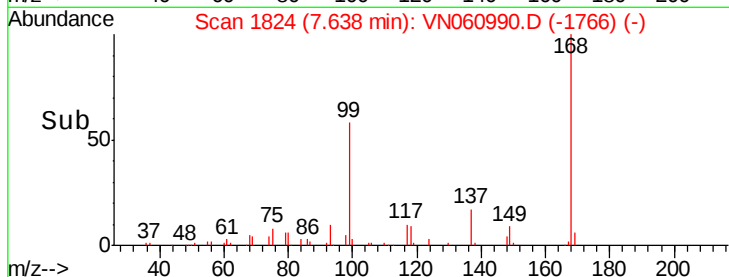
121 0.0 23.7 35.5#



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



#41

Methacrylonitrile

Concen: 0.202 ug/l

RT: 7.17 min Scan# 1679

Delta R.T. 0.03 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Tgt Ion: 41 Resp: 217

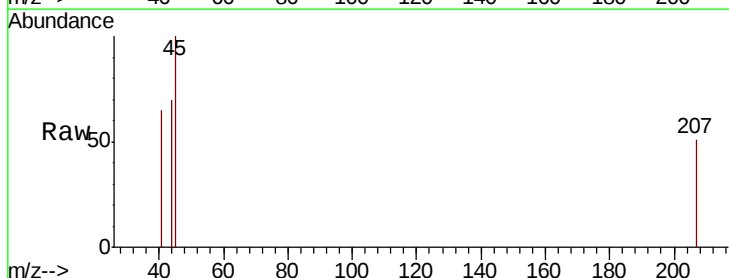
Ion Ratio Lower Upper

41 100

39 0.0 0.0 0.0

67 0.0 0.0 0.0

52 0.0 0.0 0.0

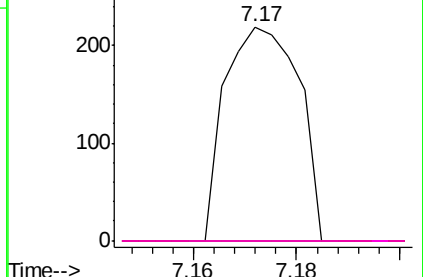
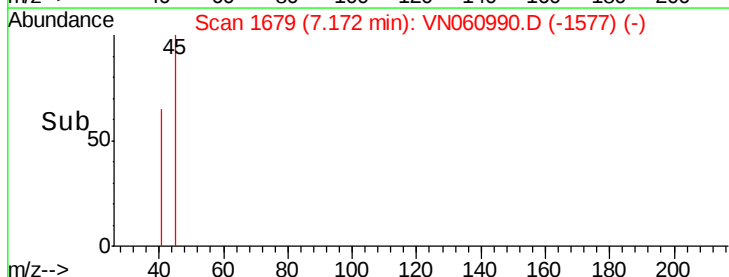


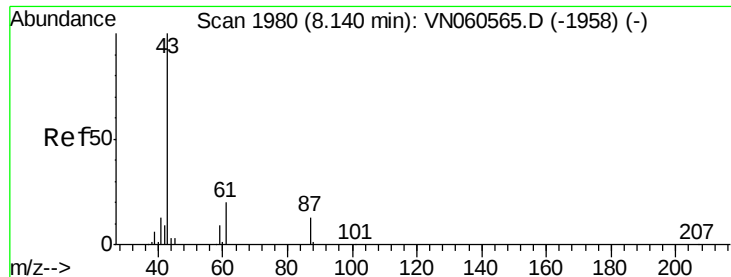
Abundance Ion 41.00 (40.70 to 41.70): V

Ion 39.00 (38.70 to 39.70): V

Ion 67.00 (66.70 to 67.70): V

Ion 52.00 (51.70 to 52.70): V





#43

Isopropyl Acetate

Concen: 6.607 ug/l

RT: 8.14 min Scan# 1980

Delta R.T. 0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampled :

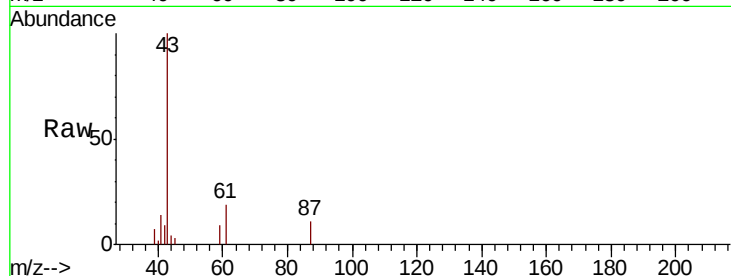
Tot Ion: 43 Resp: 27428

Ion Ratio Lower Upper

43 100

61 19.1 20.7 31.1#

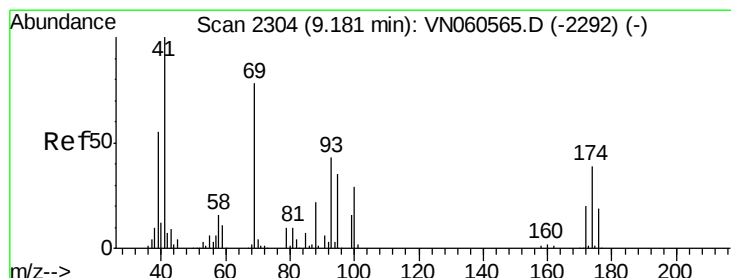
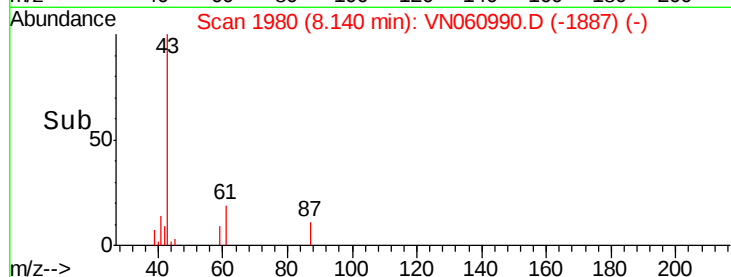
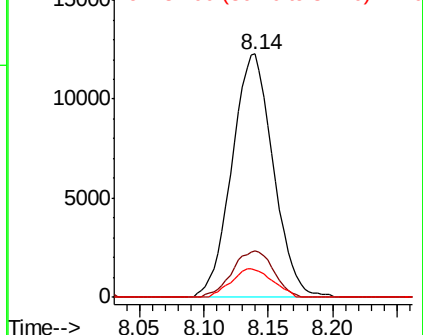
87 11.5 9.8 14.8



Abundance Ion 43.00 (42.70 to 43.70): VN060990.D (-2211) (-)

Ion 61.00 (60.70 to 61.70): VN060990.D (-2211) (-)

Ion 87.00 (86.70 to 87.70): VN060990.D (-2211) (-)



#48

Methyl methacrylate

Concen: 1.304 ug/l

RT: 9.16 min Scan# 2297

Delta R.T. -0.02 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

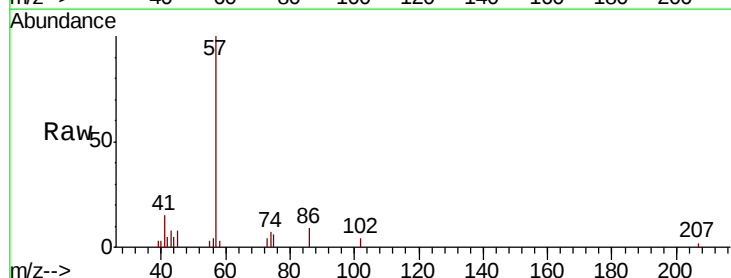
Tgt Ion: 41 Resp: 2410

Ion Ratio Lower Upper

41 100

69 0.0 65.4 98.0#

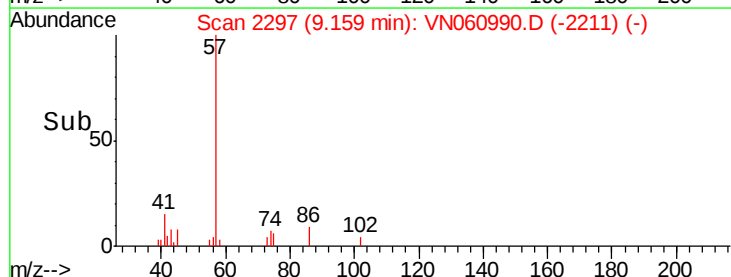
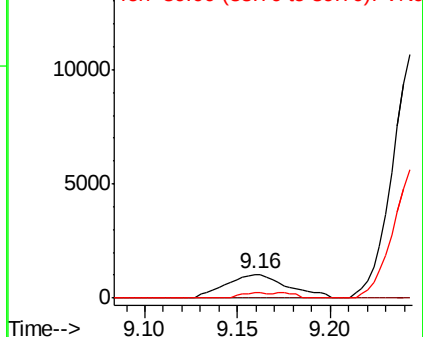
39 0.0 44.0 66.0#

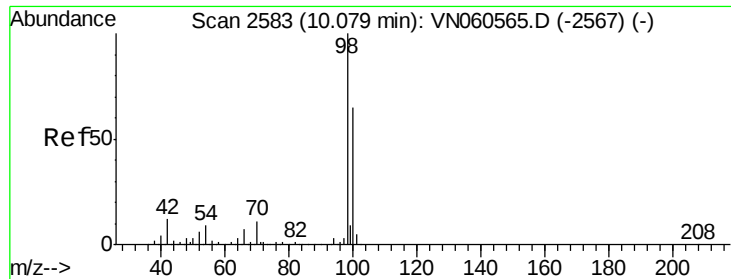


Abundance Ion 41.00 (40.70 to 41.70): VN060990.D (-2211) (-)

Ion 69.00 (68.70 to 69.70): VN060990.D (-2211) (-)

Ion 39.00 (38.70 to 39.70): VN060990.D (-2211) (-)





#50

Toluene-d8

Concen: 50.932 ug/l

RT: 10.08 min Scan# 2582

Delta R.T. -0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

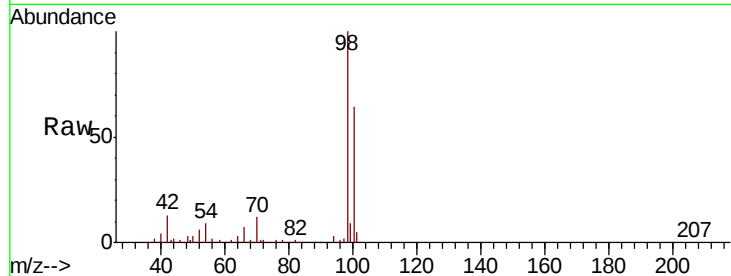
ClientSampleId :

Tot Ion: 98 Resp: 302644

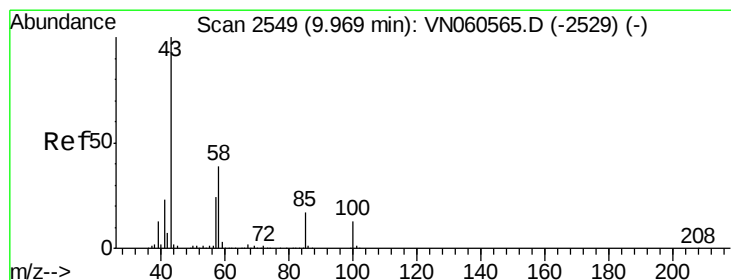
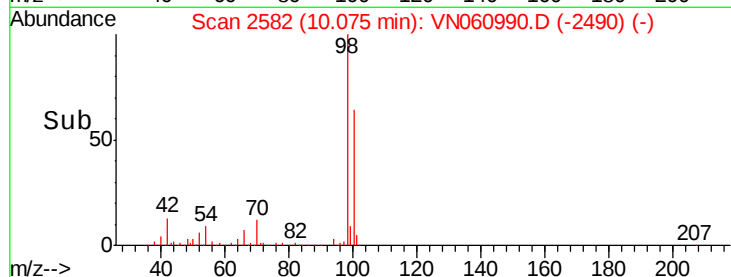
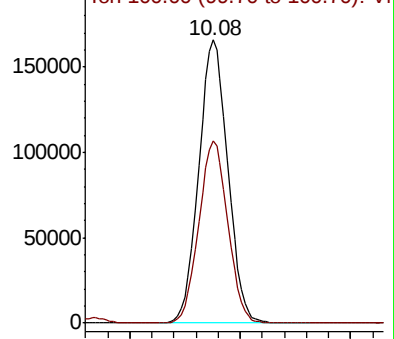
Ion Ratio Lower Upper

98 100

100 64.3 51.8 77.8



Abundance Ion 98.00 (97.70 to 98.70): VN060990.D (-2490) (-)



#51

4-Methyl-2-Pentanone

Concen: 18.271 ug/l

RT: 9.97 min Scan# 2548

Delta R.T. -0.00 min

Lab File: VN060990.D

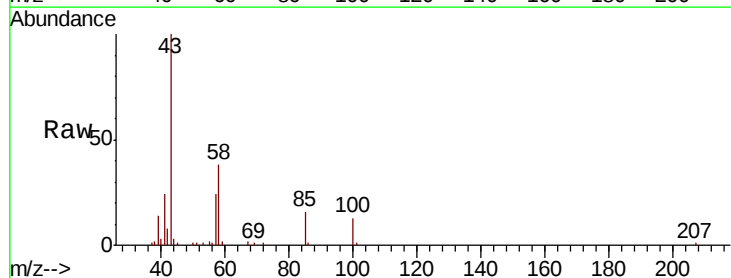
Acq: 16 Apr 2020 2:27

Tgt Ion: 43 Resp: 43162

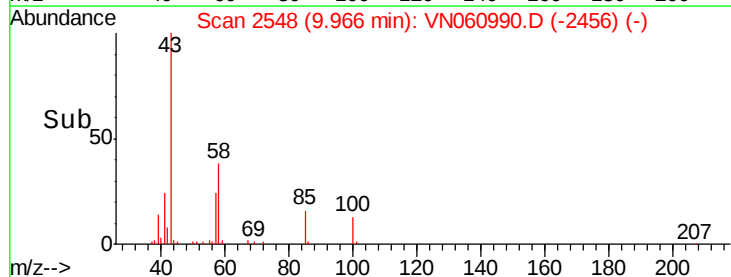
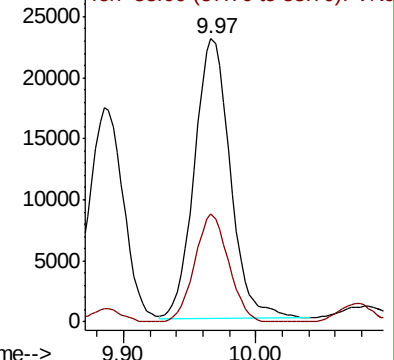
Ion Ratio Lower Upper

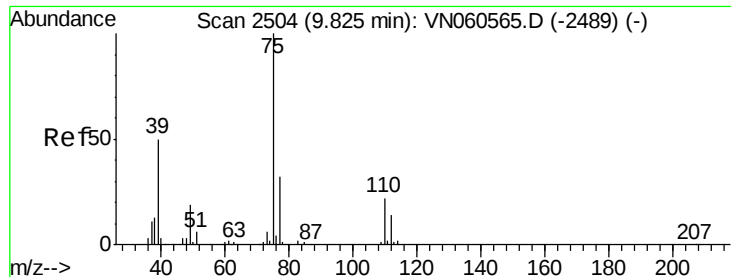
43 100

58 36.3 30.8 46.2



Abundance Ion 43.00 (42.70 to 43.70): VN060990.D (-2456) (-)

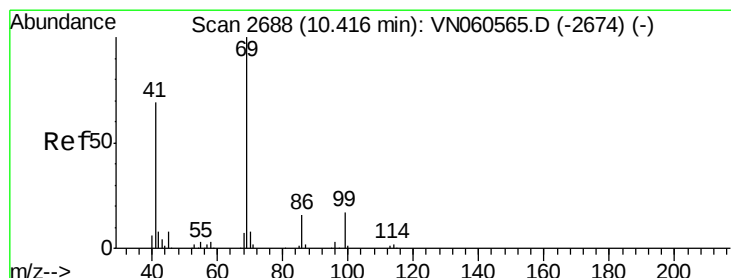
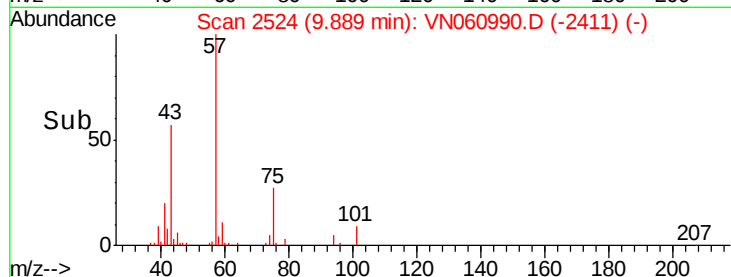
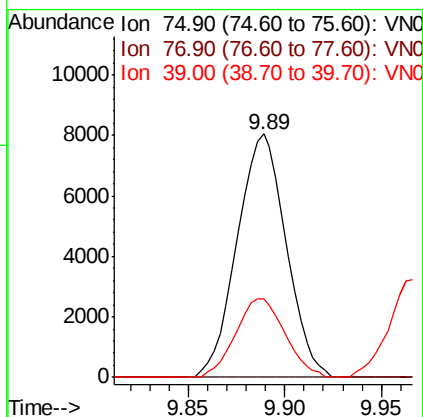
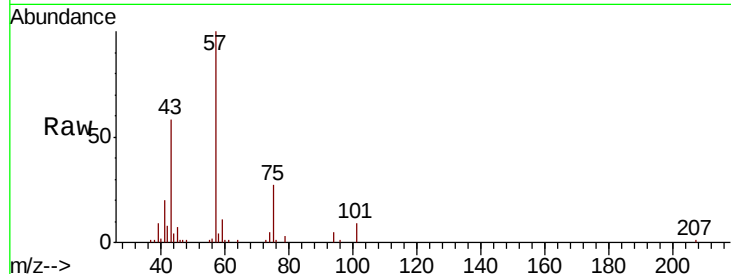




#54
 cis-1,3-Dichloropropene
 Concen: 4.822 ug/l
 RT: 9.89 min Scan# 2524
 Delta R.T. 0.06 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

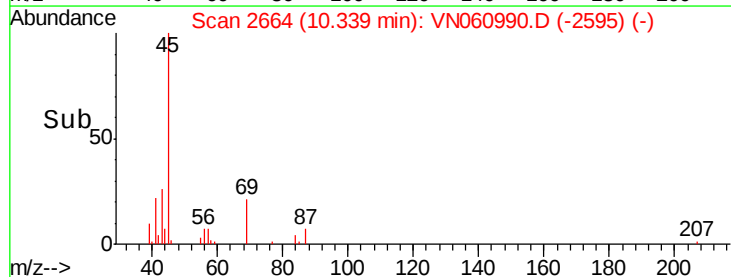
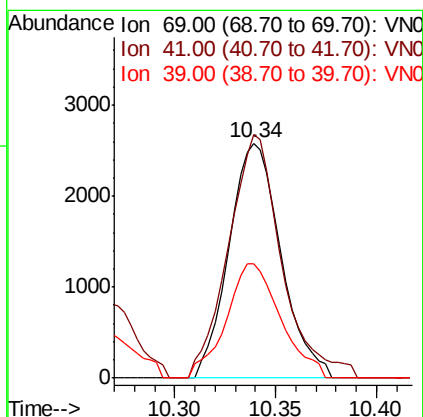
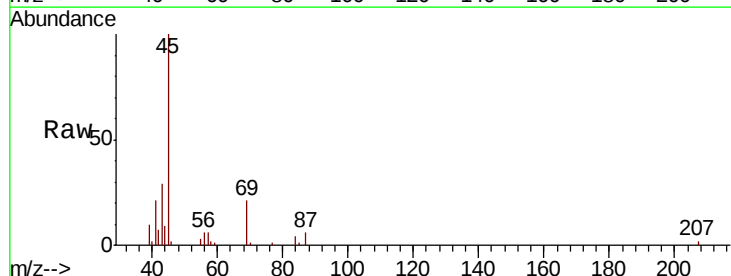
Instrument :
 MSVOA_N
 ClientSampled :

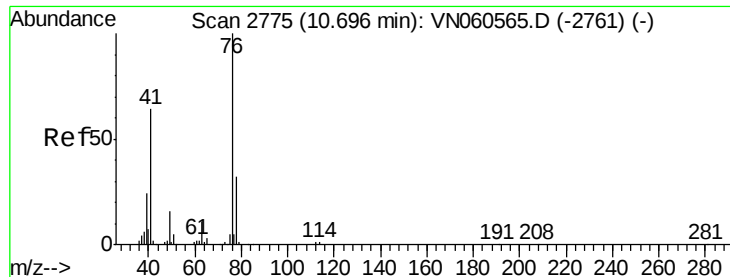
Tot Ion: 75 Resp: 14165
 Ion Ratio Lower Upper
 75 100
 77 0.0 25.4 38.0#
 39 32.0 40.2 60.4#



#56
 Ethyl methacrylate
 Concen: 1.824 ug/l
 RT: 10.34 min Scan# 2664
 Delta R.T. -0.08 min
 Lab File: VN060990.D
 Acq: 16 Apr 2020 2:27

Tgt Ion: 69 Resp: 4647
 Ion Ratio Lower Upper
 69 100
 41 106.3 55.4 83.2#
 39 51.0 29.4 44.0#





#57

1,3-Dichloropropane

Concen: 0.419 ug/l

RT: 10.75 min Scan# 2792

Delta R.T. 0.05 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

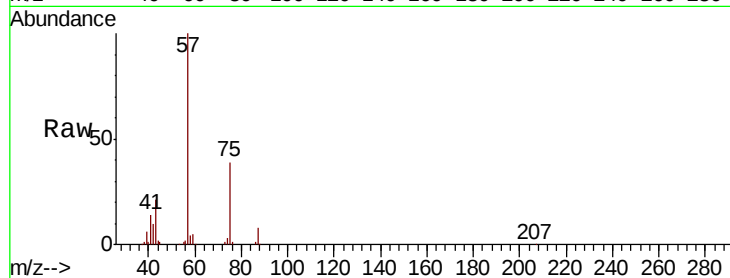
ClientSampleId :

Tot Ion: 76 Resp: 1188

Ion Ratio Lower Upper

76 100

78 0.0 25.8 38.6#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

10.75

800

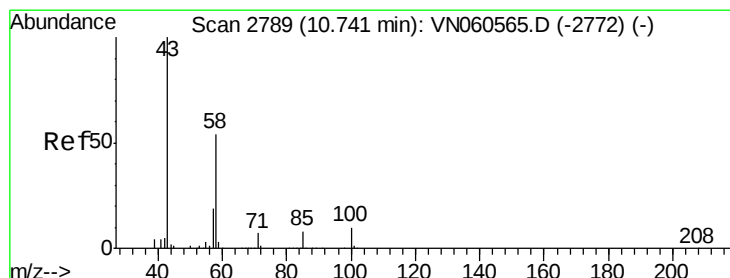
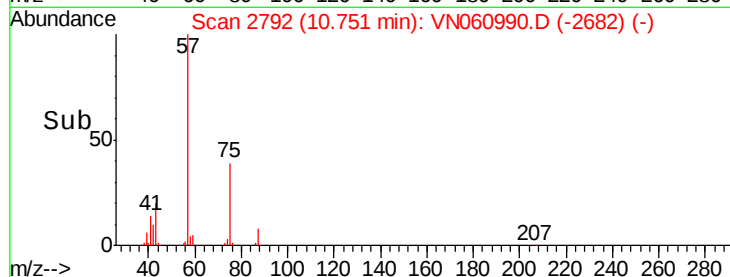
600

400

200

0

Time-->



#59

2-Hexanone

Concen: 12.137 ug/l

RT: 10.75 min Scan# 2792

Delta R.T. 0.01 min

Lab File: VN060990.D

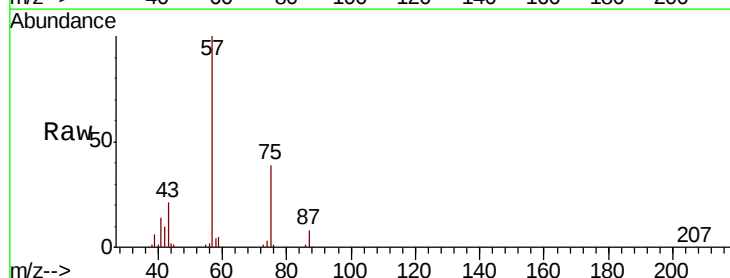
Acq: 16 Apr 2020 2:27

Tgt Ion: 43 Resp: 20654

Ion Ratio Lower Upper

43 100

58 21.0 26.7 80.1#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

25000

20000

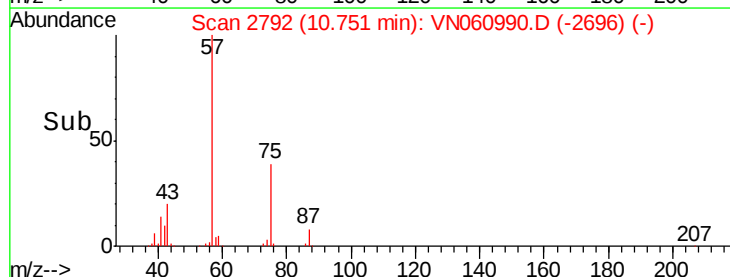
15000

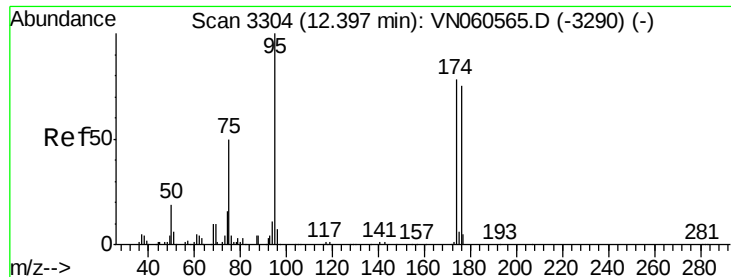
10000

5000

0

Time-->





#62

4-Bromofluorobenzene

Concen: 52.062 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. -0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampleId :

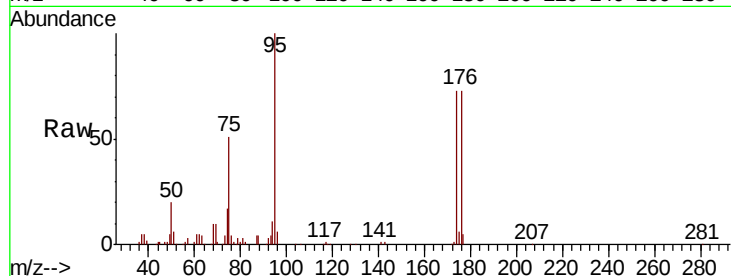
Tot Ion: 95 Resp: 113377

Ion Ratio Lower Upper

95 100

174 75.0 0.0 157.6

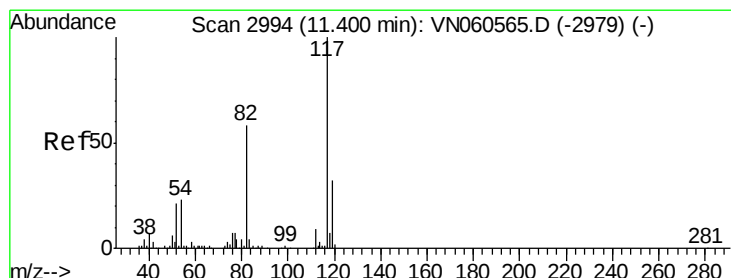
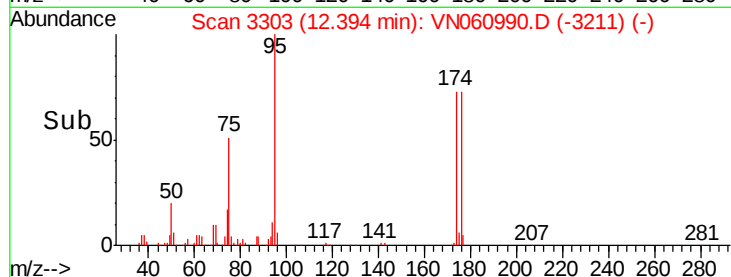
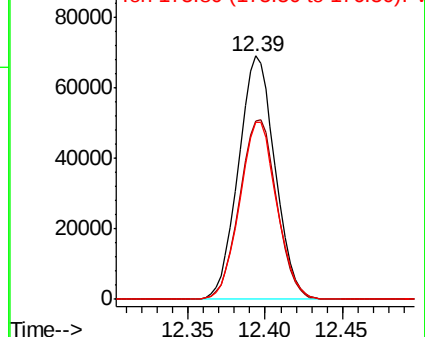
176 73.9 0.0 150.6



Abundance Ion 94.90 (94.60 to 95.60): VN060990.D (-3290) (-)

Ion 173.80 (173.50 to 174.50): VN060990.D (-3290) (-)

Ion 175.80 (175.50 to 176.50): VN060990.D (-3290) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.40 min Scan# 2993

Delta R.T. -0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

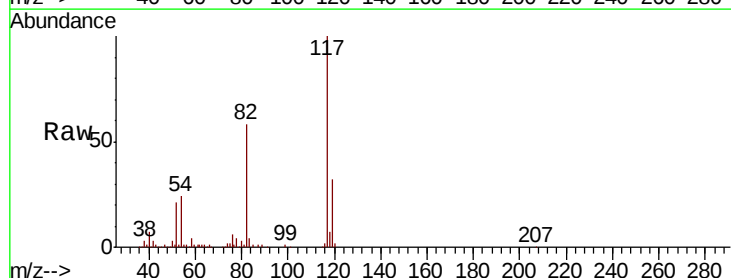
Tgt Ion: 117 Resp: 226868

Ion Ratio Lower Upper

117 100

82 58.4 46.7 70.1

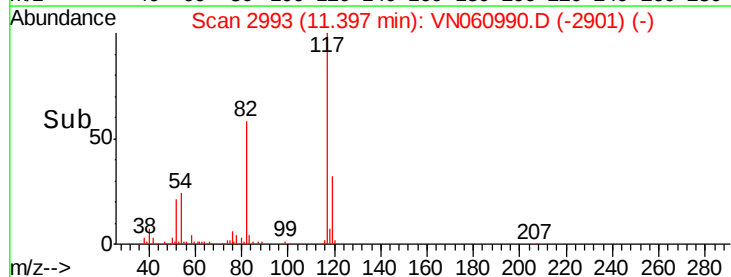
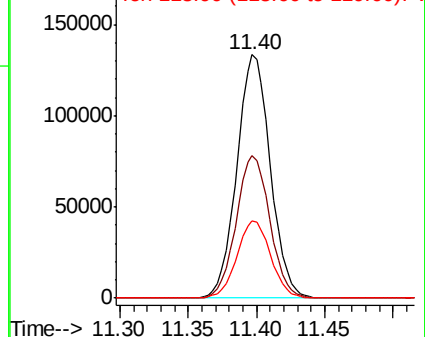
119 31.6 25.5 38.3

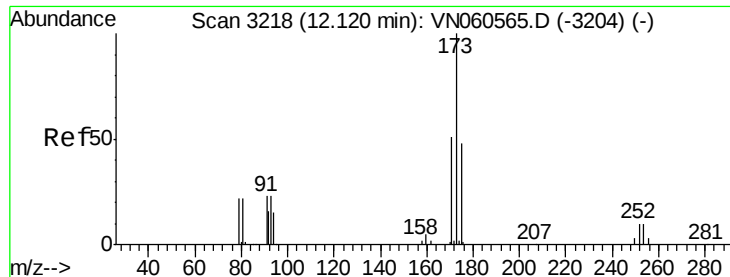


Abundance Ion 116.90 (116.60 to 117.60): VN060990.D (-2979) (-)

Ion 82.00 (81.70 to 82.70): VN060990.D (-2979) (-)

Ion 118.90 (118.60 to 119.60): VN060990.D (-2979) (-)





#71

Bromoform

Concen: 1.987 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.27 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampled :

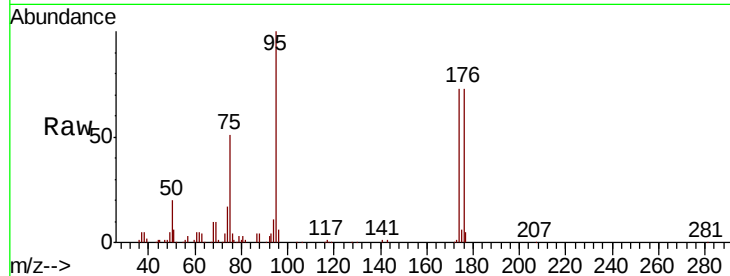
Tot Ion:173 Resp: 429

Ion Ratio Lower Upper

173 100

175 1318.6 24.1 72.4#

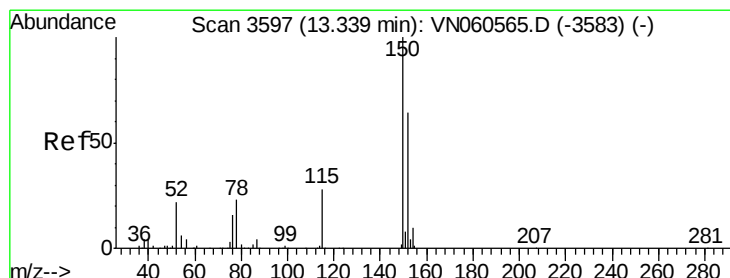
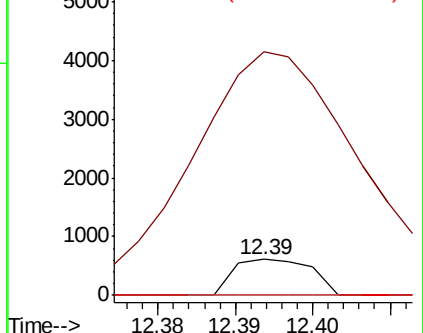
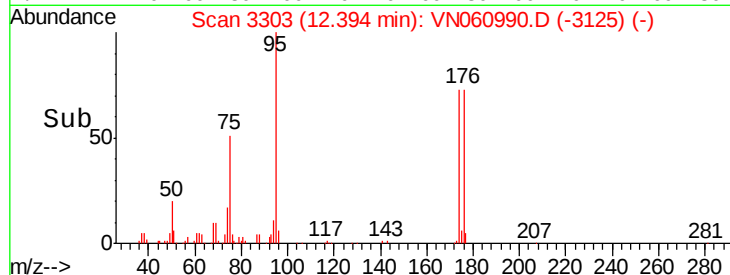
254 0.0 0.0 0.0



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# 3597

Delta R.T. 0.00 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

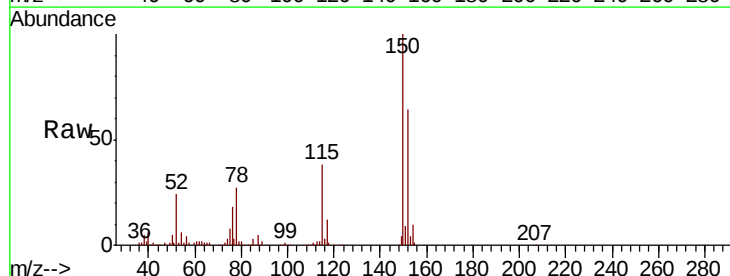
Tgt Ion:152 Resp: 103682

Ion Ratio Lower Upper

152 100

115 60.5 30.2 90.6

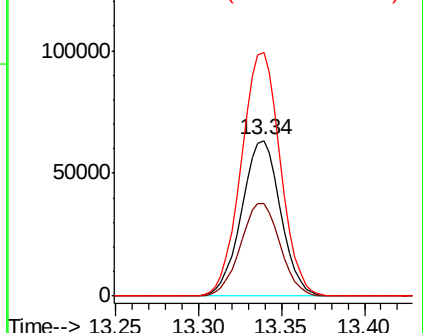
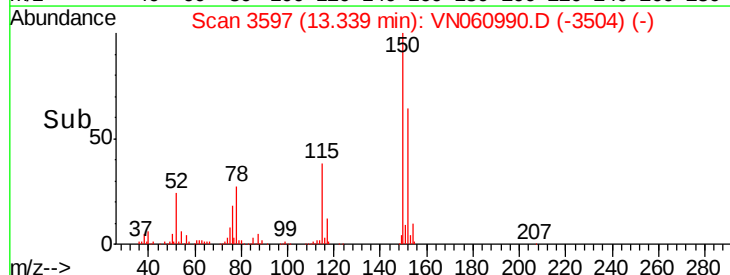
150 157.2 0.0 350.2

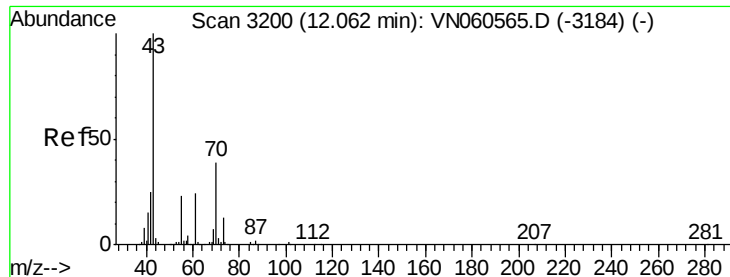


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 0.937 ug/l

RT: 12.02 min Scan# 3188

Delta R.T. -0.04 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion: 43 Resp: 3369

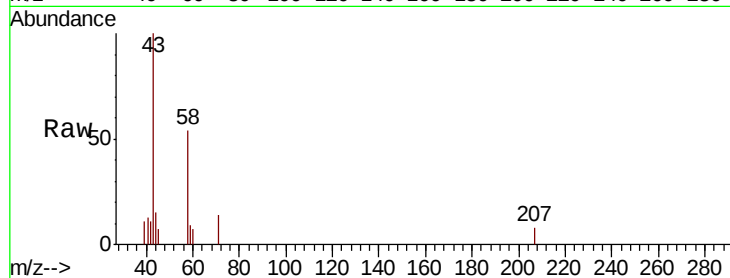
Ion Ratio Lower Upper

43 100

70 0.0 31.1 46.7#

55 0.0 18.6 27.8#

61 0.0 18.9 28.3#

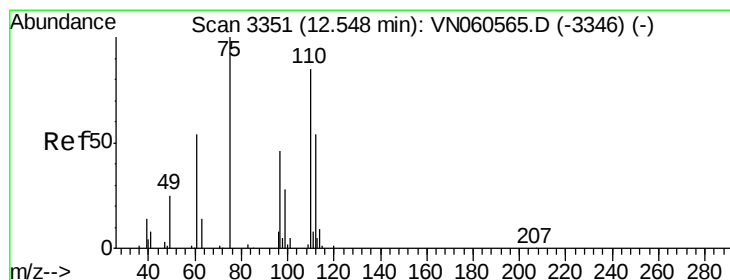
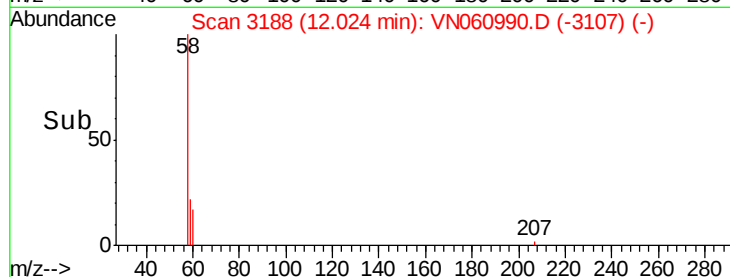
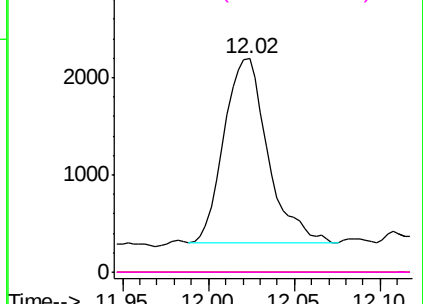


Abundance Ion 43.00 (42.70 to 43.70): VN0

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: 25.733 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. -0.15 min

Lab File: VN060990.D

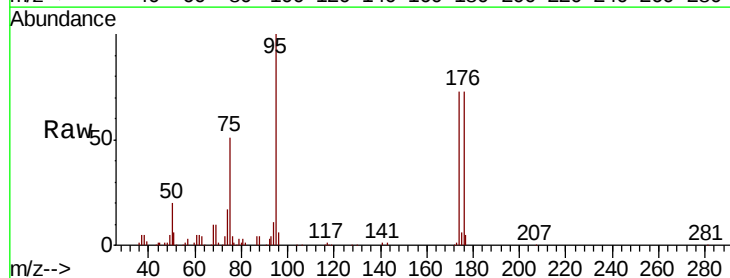
Acq: 16 Apr 2020 2:27

Tgt Ion: 75 Resp: 57572

Ion Ratio Lower Upper

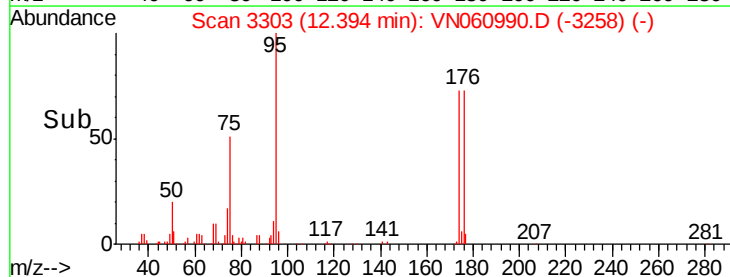
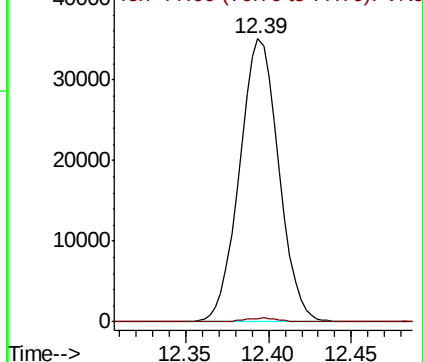
75 100

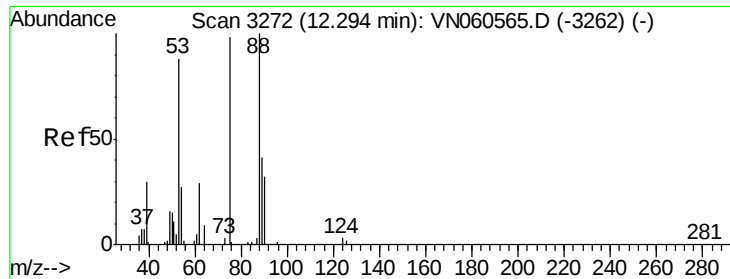
77 1.1 0.0 0.0#



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: 66.091 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.10 min

Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampleId :

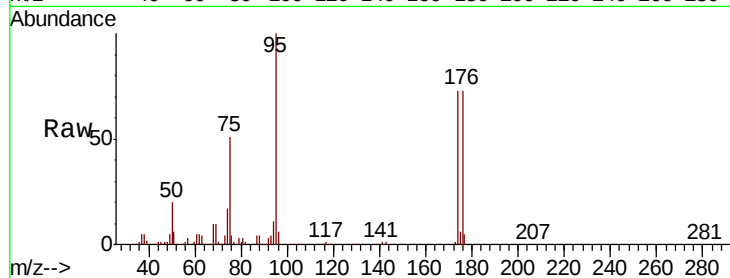
Tot Ion: 75 Resp: 57572

Ion Ratio Lower Upper

75 100

53 0.0 73.0 109.4#

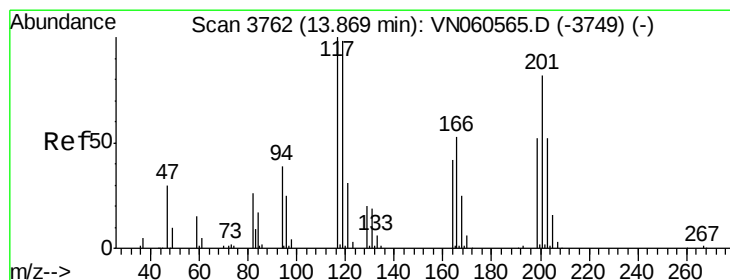
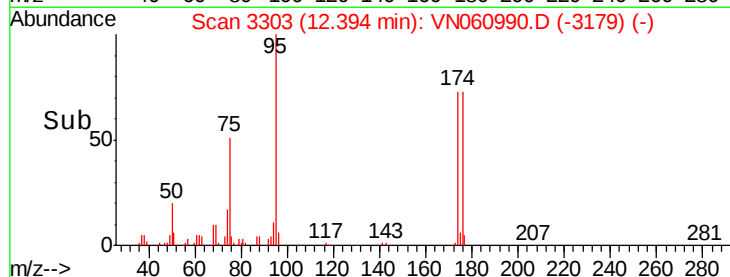
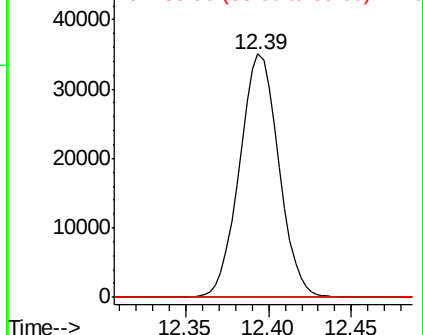
89 0.0 34.8 52.2#



Abundance Ion 74.90 (74.60 to 75.60): VN060990.D (-3179) (-)

Ion 53.00 (52.70 to 53.70): VN060990.D (-3179) (-)

Ion 88.90 (88.60 to 89.60): VN060990.D (-3179) (-)



#90

Hexachloroethane

Concen: 0.247 ug/l

RT: 13.99 min Scan# 3799

Delta R.T. 0.12 min

Lab File: VN060990.D

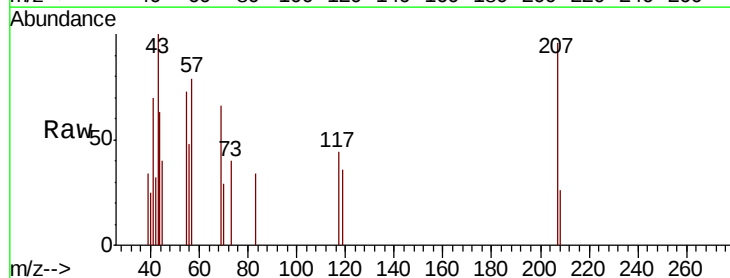
Acq: 16 Apr 2020 2:27

Tgt Ion: 117 Resp: 238

Ion Ratio Lower Upper

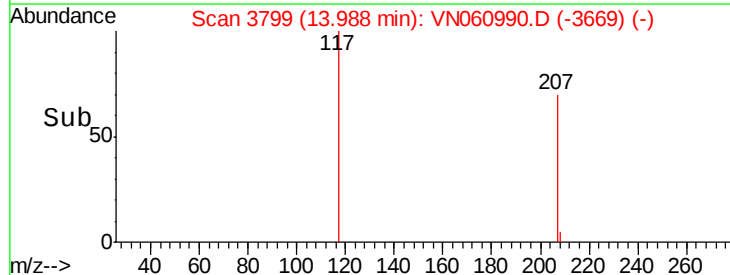
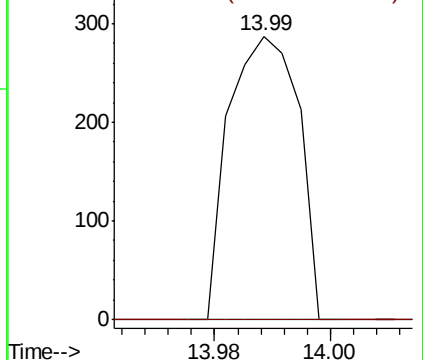
117 100

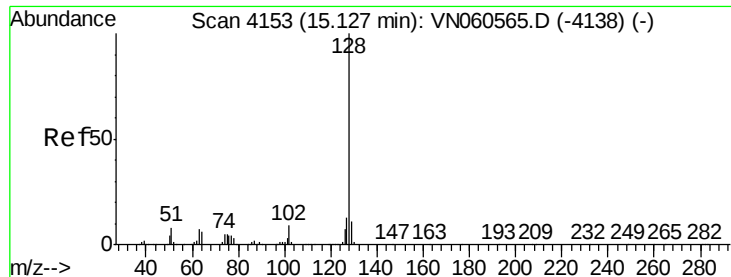
201 0.0 40.8 122.5#



Abundance Ion 116.80 (116.50 to 117.50): VN060990.D (-3669) (-)

Ion 200.70 (200.40 to 201.40): VN060990.D (-3669) (-)





#95

Naphthalene

Concen: 0.431 ug/l

RT: 15.13 min Scan# 4153

Delta R.T. 0.00 min

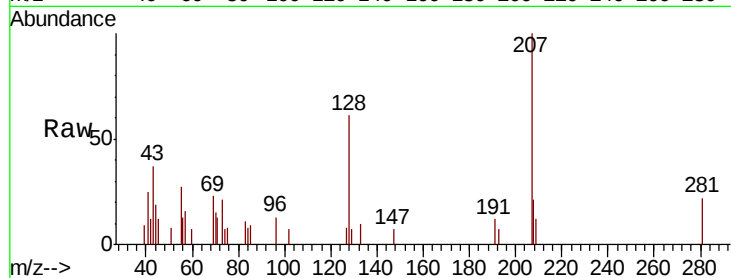
Lab File: VN060990.D

Acq: 16 Apr 2020 2:27

Instrument :

MSVOA_N

ClientSampleId :



Tot Ion:	128	Resp:	2515
Ion	Ratio	Lower	Upper
128	100		
127	7.0	10.2	15.2#
129	3.7	8.8	13.2#

