

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071919\
 Data File : VN056843.D
 Acq On : 19 Jul 2019 19:33
 Operator : JC/SP
 Sample : K3868-10
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Jul 19 23:18:07 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N071519W.M
 Quant Title : SW846 8260
 QLast Update : Tue Jul 16 07:03:34 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	239035	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	447198	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	490975	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	180261	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	145266	54.94	ug/l	0.00
Spiked Amount			Recovery	=	109.88%	
35) Dibromofluoromethane	7.59	113	131958	47.42	ug/l	0.00
Spiked Amount			Recovery	=	94.84%	
50) Toluene-d8	10.09	98	568704	52.91	ug/l	0.00
Spiked Amount			Recovery	=	105.82%	
62) 4-Bromofluorobenzene	12.40	95	213839	58.99	ug/l	0.00
Spiked Amount			Recovery	=	117.98%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.40	74	389	0.268	ug/l #	9
11) Tert butyl alcohol	4.80	59	1352	3.072	ug/l #	73
16) Acetone	3.82	43	17570	14.420	ug/l	99
18) Methyl Acetate	4.34	43	7825	1.923	ug/l #	85
20) Methylene Chloride	4.55	84	6145	2.308	ug/l	93
25) 2-Butanone	6.85	43	2674	1.501	ug/l	98
30) Chloroform	7.37	83	2047	0.460	ug/l #	83
31) Cyclohexane	7.67	56	3845	0.910	ug/l #	1
36) 1,1-Dichloropropene	7.66	75	15523	3.751	ug/l #	48
38) Carbon Tetrachloride	7.66	117	20718	5.339	ug/l #	16
43) Isopropyl Acetate	8.17	43	14871	2.319	ug/l	96
45) 1,2-Dichloropropane	9.27	63	1146	0.340	ug/l #	45
48) Methyl methacrylate	9.18	41	7786	2.511	ug/l #	13
51) 4-Methyl-2-Pentanone	9.98	43	3412	0.822	ug/l	96
54) cis-1,3-Dichloropropene	9.90	75	42262	8.798	ug/l #	60
57) 1,3-Dichloropropane	10.76	76	8792	1.704	ug/l #	42
59) 2-Hexanone	10.76	43	118742	39.848	ug/l #	52
71) Bromoform	12.40	173	1529	0.544	ug/l #	1
76) 1,2,3-Trichloropropane	12.40	75	96317	24.430	ug/l #	100
79) 2-Chlorotoluene	12.73	91	32	Below Cal	#	39
80) 1,3,5-Trimethylbenzene	12.73	105	2729	0.222	ug/l	95
81) trans-1,4-Dichloro-2-buten	12.40	75	96317	75.448	ug/l #	13
83) tert-Butylbenzene	13.03	119	165	Below Cal	#	27
95) Naphthalene	15.13	128	9601	5.430	ug/l	95

(#) = 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: VN056843.D

Acq: 19 Jul 2019 19:33

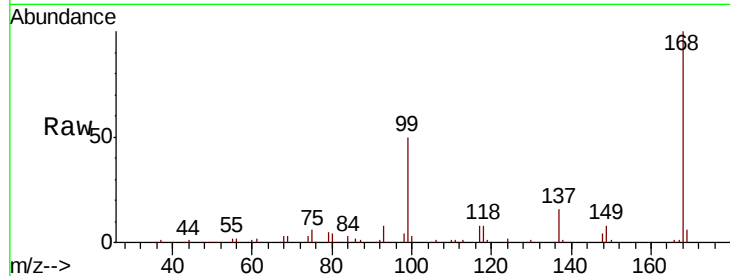
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 239035

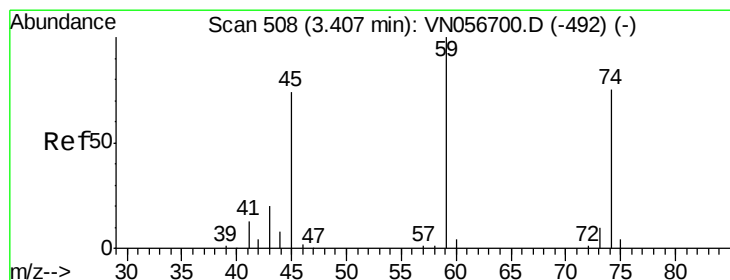
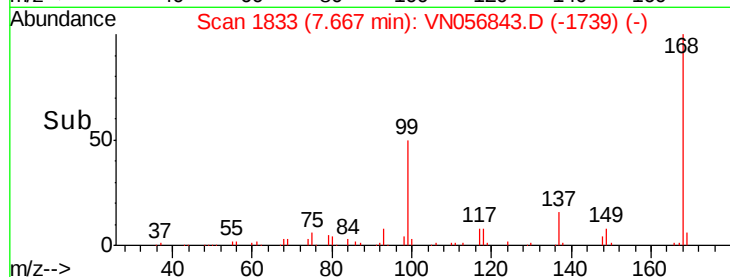
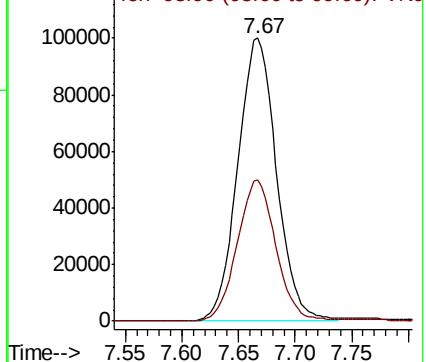
Ion Ratio Lower Upper

168 100

99 49.9 39.4 59.2



Abundance Ion 167.90 (167.60 to 168.60): V
Ion 98.90 (98.60 to 99.60): V



#8

Diethyl Ether

Concen: 0.268 ug/l

RT: 3.40 min Scan# 507

Delta R.T. -0.00 min

Lab File: VN056843.D

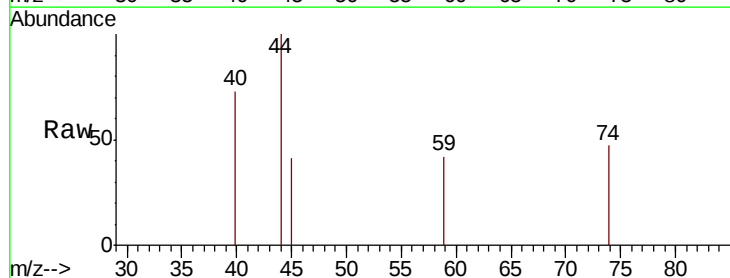
Acq: 19 Jul 2019 19:33

Tgt Ion: 74 Resp: 389

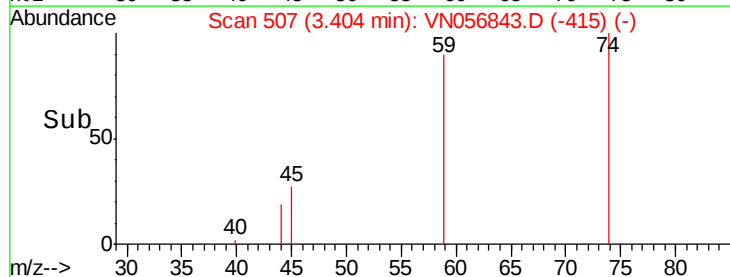
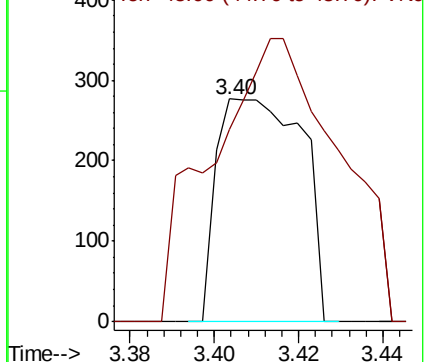
Ion Ratio Lower Upper

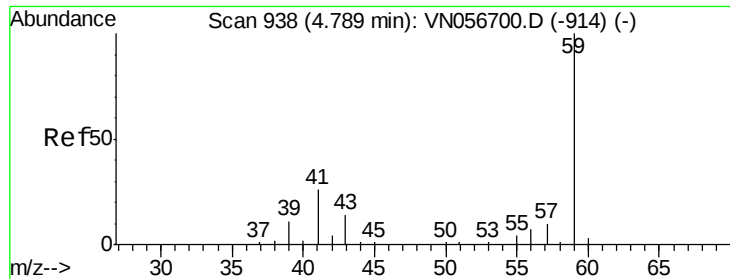
74 100

45 189.5 49.4 148.2#



Abundance Ion 74.00 (73.70 to 74.70): V
Ion 45.00 (44.70 to 45.70): V

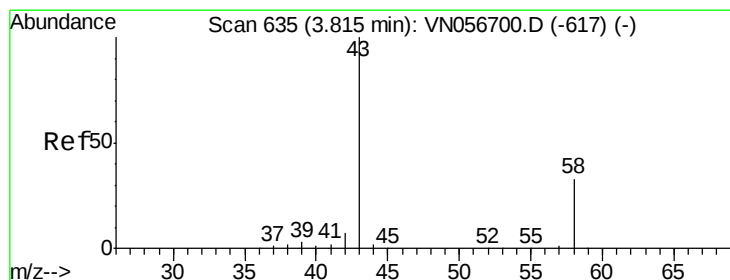
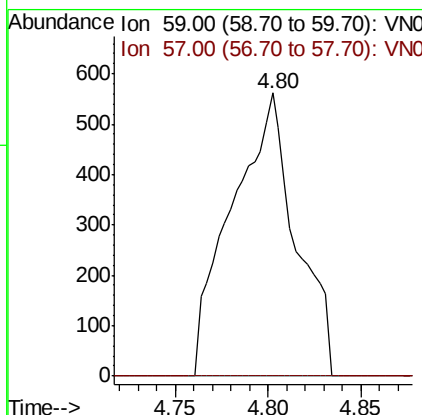
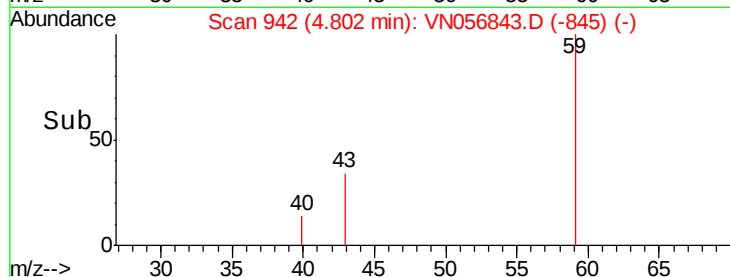
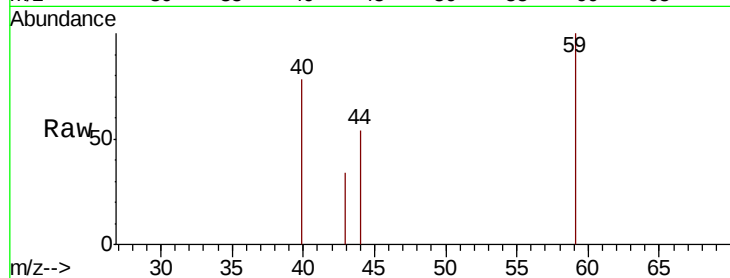




#11
Tert butyl alcohol
Concen: 3.072 ug/l
RT: 4.80 min Scan# 942
Delta R.T. 0.01 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

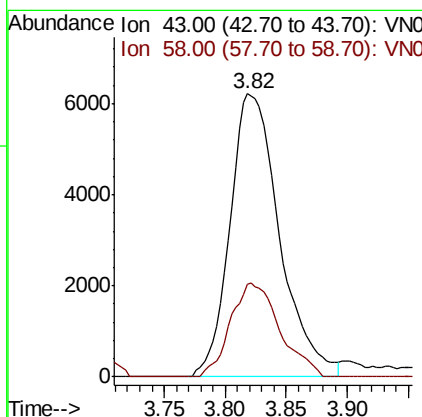
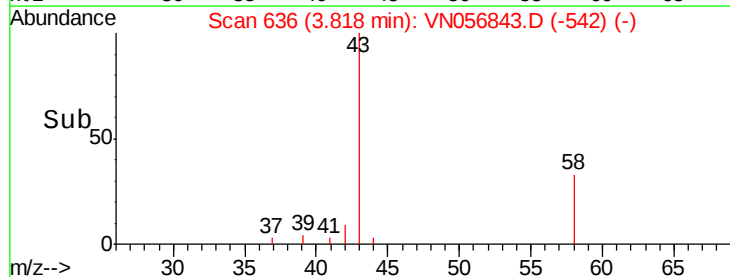
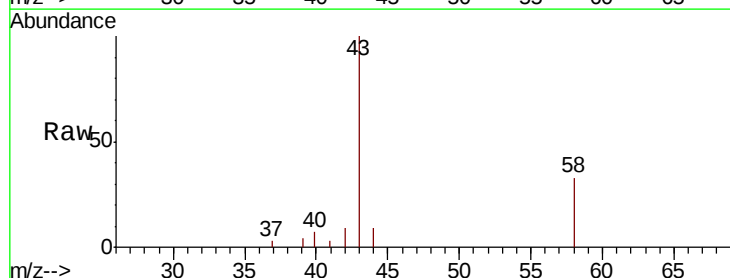
Instrument :
MSVOA_N
ClientSampled :

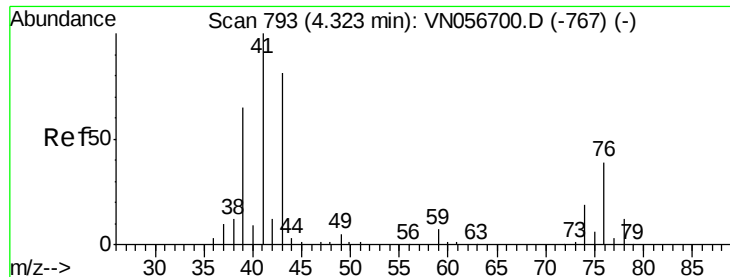
Tot Ion: 59 Resp: 1352
Ion Ratio Lower Upper
59 100
57 0.0 8.0 12.0#



#16
Acetone
Concen: 14.420 ug/l
RT: 3.82 min Scan# 636
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Tgt Ion: 43 Resp: 17570
Ion Ratio Lower Upper
43 100
58 32.6 26.7 40.1

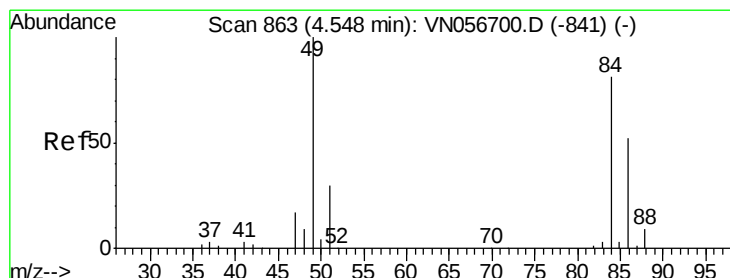
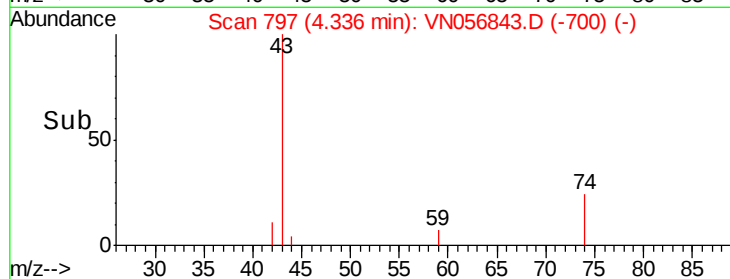
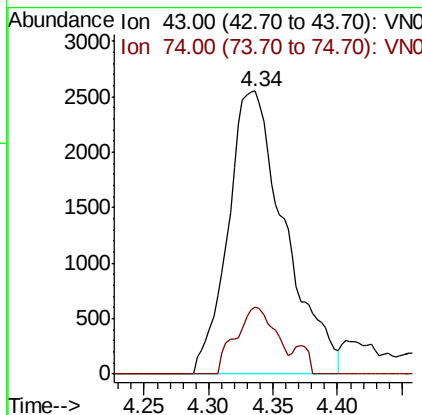
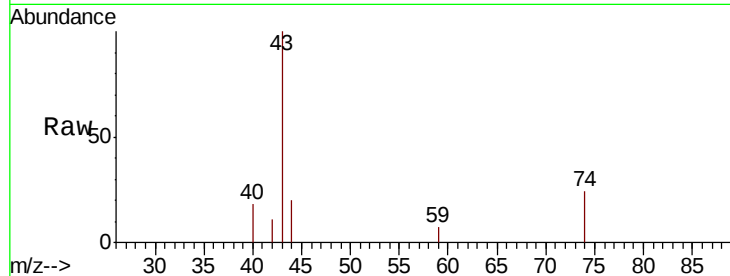




#18
Methyl Acetate
Concen: 1.923 ug/l
RT: 4.34 min Scan# 797
Delta R.T. 0.01 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

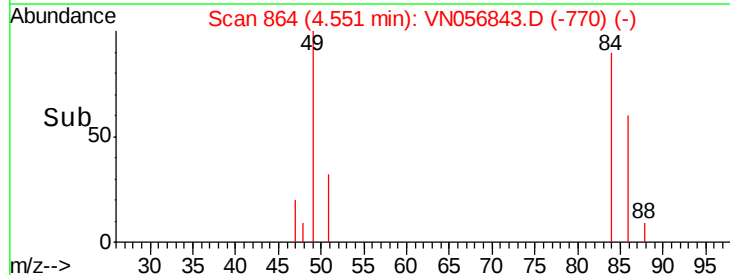
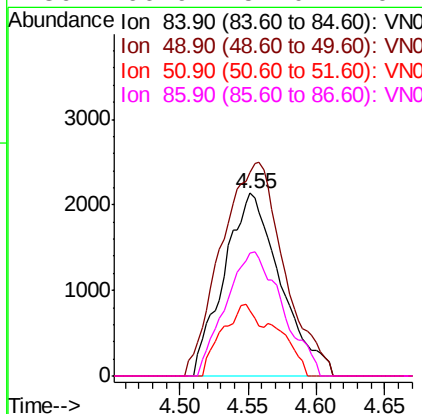
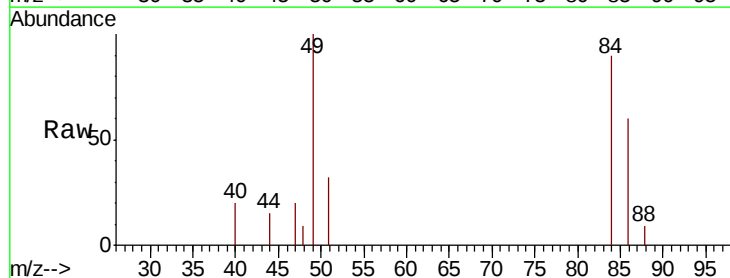
Instrument :
MSVOA_N
ClientSampled :

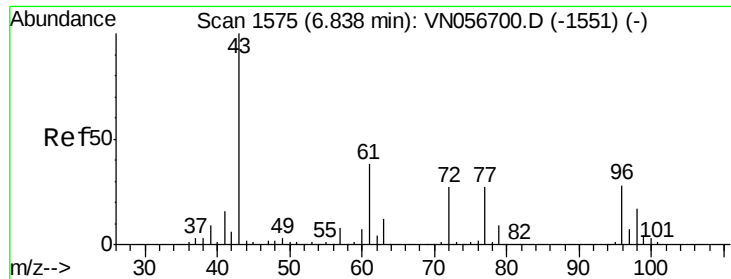
Tot Ion: 43 Resp: 7825
Ion Ratio Lower Upper
43 100
74 16.4 18.9 28.3#



#20
Methylene Chloride
Concen: 2.308 ug/l
RT: 4.55 min Scan# 864
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Tgt Ion: 84 Resp: 6145
Ion Ratio Lower Upper
84 100
49 111.1 98.2 147.4
51 36.0 29.6 44.4
86 66.9 51.0 76.4





#25

2-Butanone

Concen: 1.501 ug/l

RT: 6.85 min Scan# 1580

Delta R.T. 0.02 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

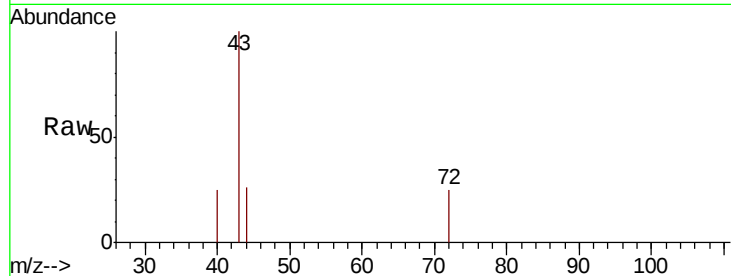
ClientSampled :

Tot Ion: 43 Resp: 2674

Ion Ratio Lower Upper

43 100

72 25.5 21.2 31.8



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

1500

6.85

1000

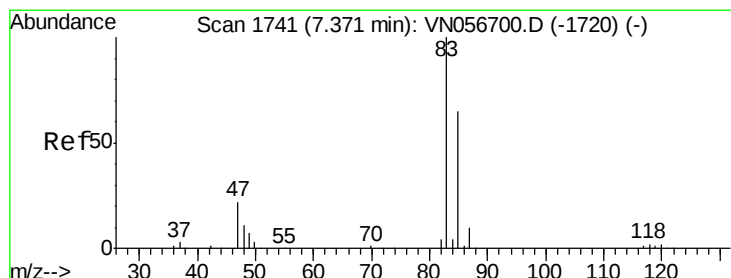
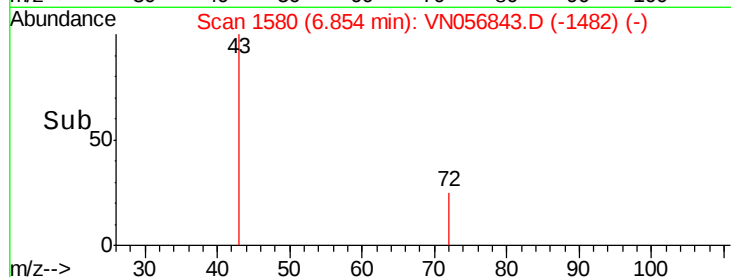
500

0

6.80

6.85

Time-->



#30

Chloroform

Concen: 0.460 ug/l

RT: 7.37 min Scan# 1740

Delta R.T. -0.00 min

Lab File: VN056843.D

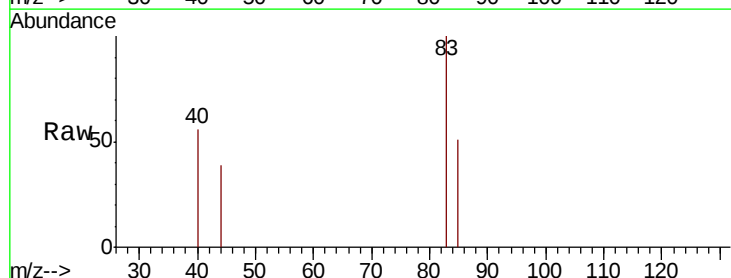
Acq: 19 Jul 2019 19:33

Tgt Ion: 83 Resp: 2047

Ion Ratio Lower Upper

83 100

85 51.4 51.9 77.9#



Abundance Ion 82.90 (82.60 to 83.60): VN0

Ion 84.90 (84.60 to 85.60): VN0

800

600

400

200

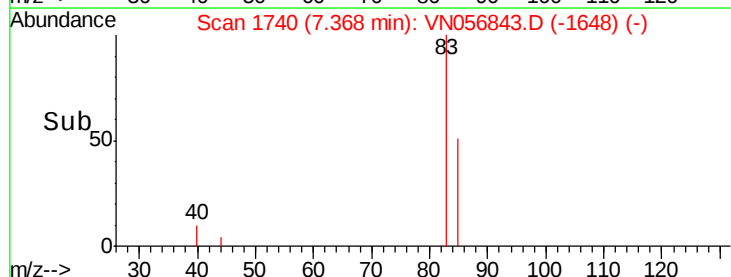
0

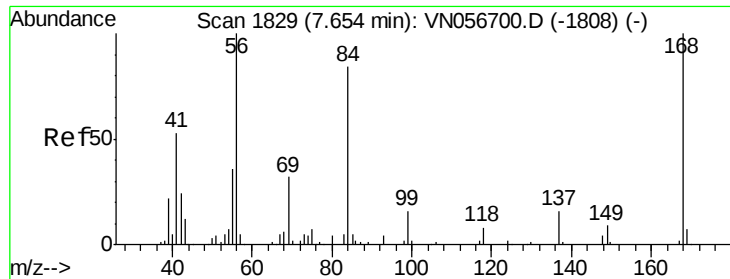
7.30

7.35

7.40

Time-->

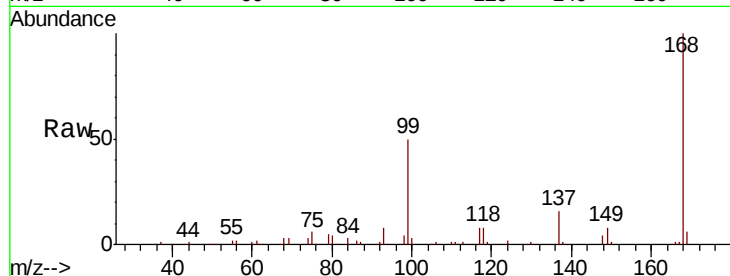




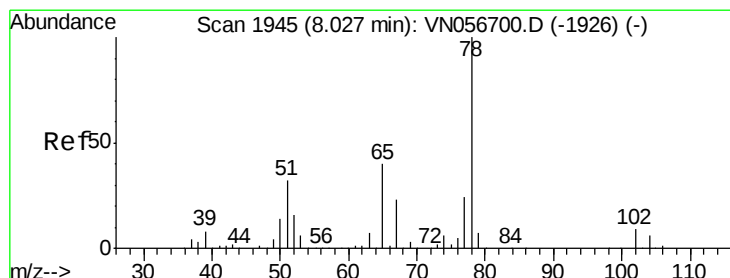
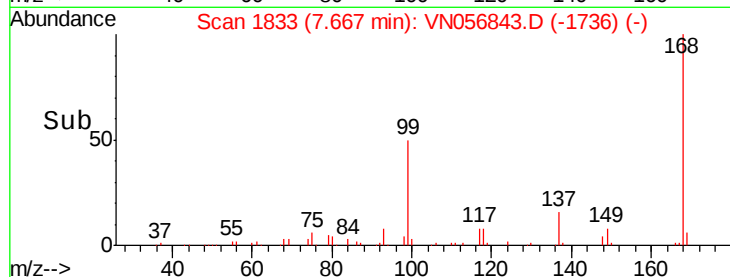
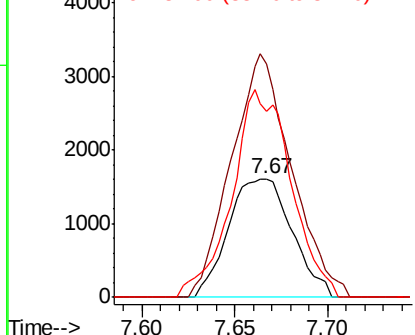
#31
Cyclohexane
Concen: 0.910 ug/l
RT: 7.67 min Scan# 1833
Delta R.T. 0.01 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 56 Resp: 3845
Ion Ratio Lower Upper
56 100
69 196.5 25.8 38.8#
84 156.7 67.4 101.0#

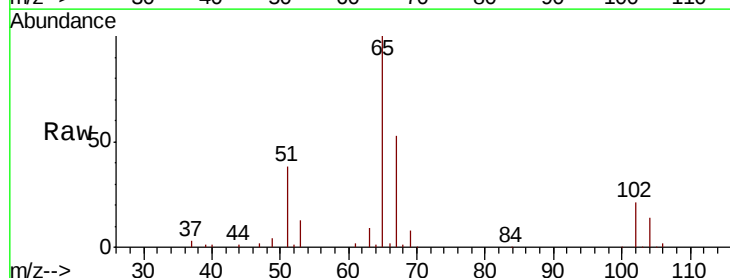


Abundance Ion 56.00 (55.70 to 56.70): VN0
Ion 69.00 (68.70 to 69.70): VN0
Ion 84.00 (83.70 to 84.70): VN0

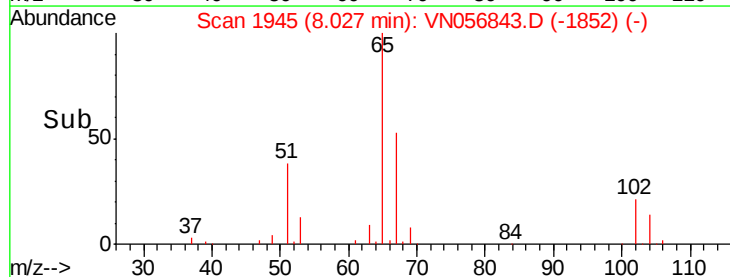
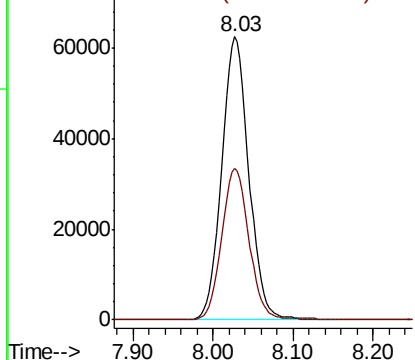


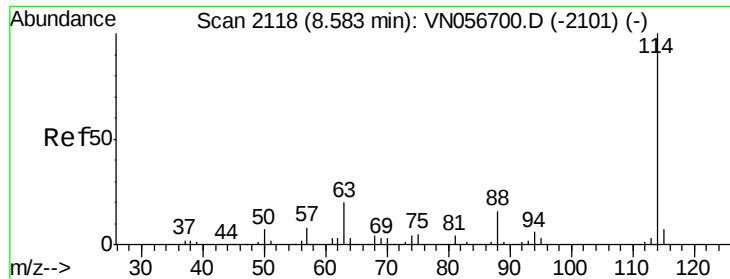
#33
1,2-Dichloroethane-d4
Concen: 54.941 ug/l
RT: 8.03 min Scan# 1945
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Tgt Ion: 65 Resp: 145266
Ion Ratio Lower Upper
65 100
67 54.0 0.0 109.0



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

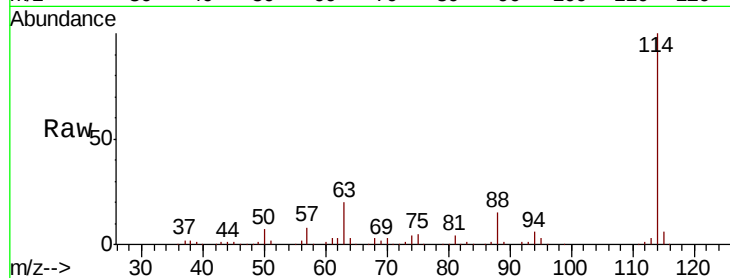




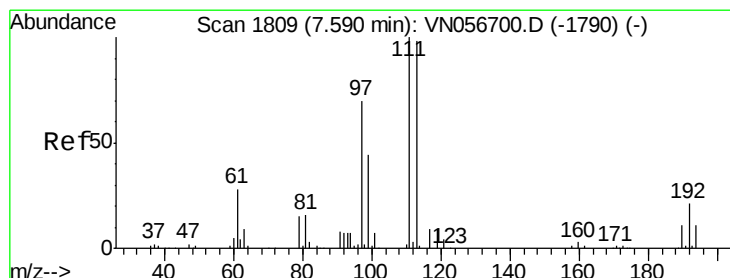
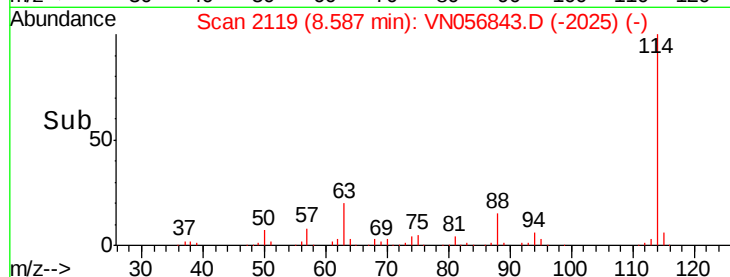
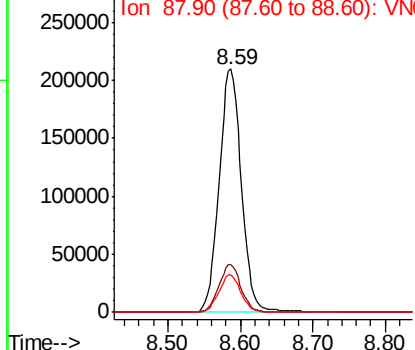
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.59 min Scan# 2119
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:114 Resp: 447198
Ion Ratio Lower Upper
114 100
63 19.7 0.0 39.4
88 15.4 0.0 31.2

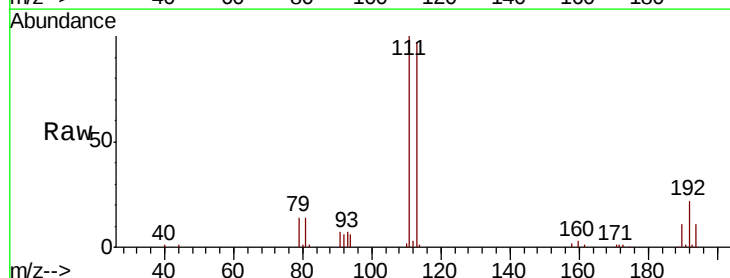


Abundance Ion 113.90 (113.60 to 114.60): V
Ion 63.00 (62.70 to 63.70): VN
Ion 87.90 (87.60 to 88.60): VN

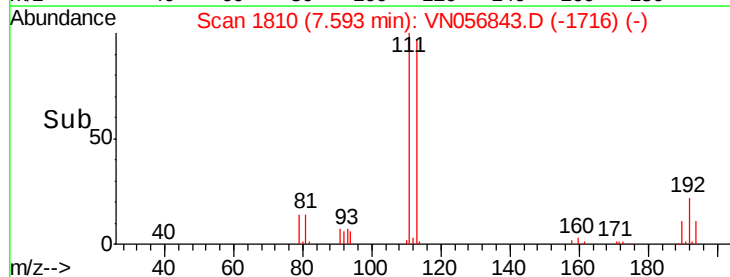
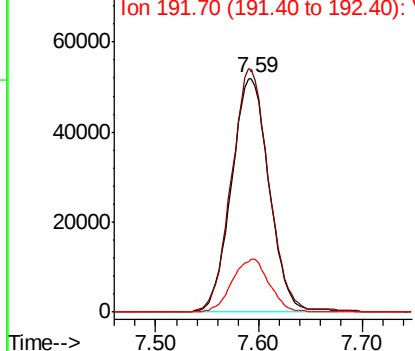


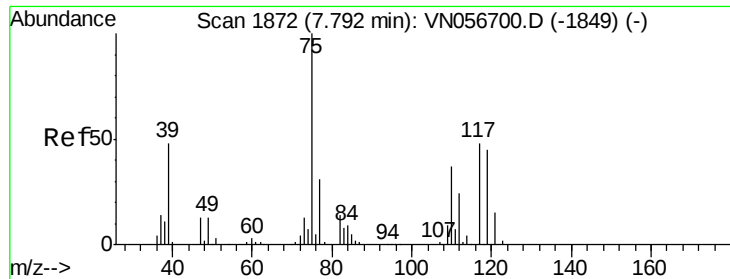
#35
Dibromofluoromethane
Concen: 47.416 ug/l
RT: 7.59 min Scan# 1810
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Tgt Ion:113 Resp: 131958
Ion Ratio Lower Upper
113 100
111 103.4 81.8 122.6
192 22.4 17.5 26.3



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: 3.751 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

ClientSampleId :

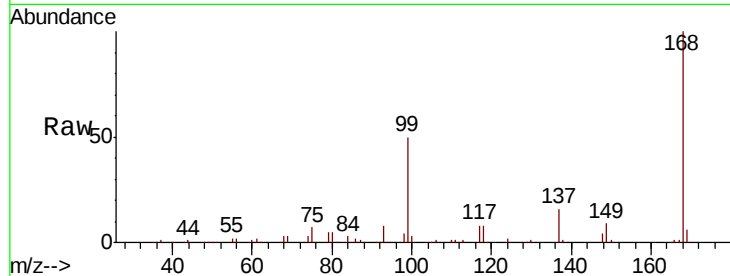
Tot Ion: 75 Resp: 15523

Ion Ratio Lower Upper

75 100

110 7.6 18.4 55.4#

77 0.0 24.6 36.8#



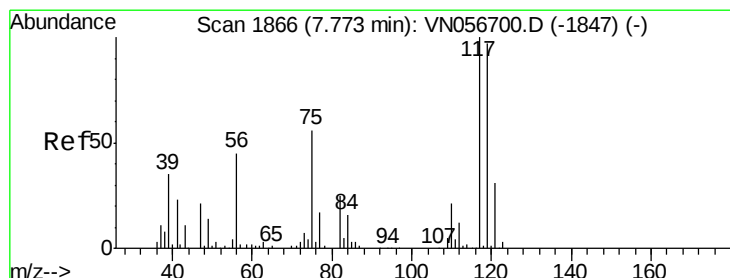
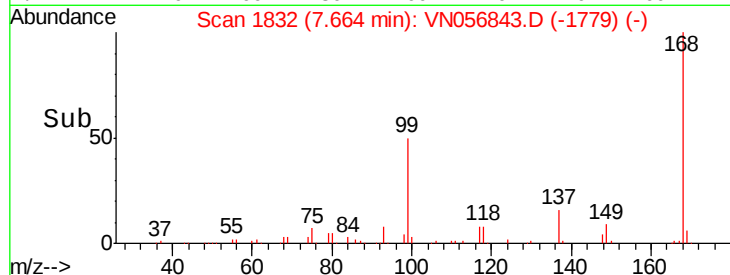
Abundance Ion 74.90 (74.60 to 75.60): VN056700.D (-1849) (-)

Ion 109.90 (109.60 to 110.60): VN056700.D (-1849) (-)

Ion 76.90 (76.60 to 77.60): VN056700.D (-1849) (-)

7.66

Time-->



#38

Carbon Tetrachloride

Concen: 5.339 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

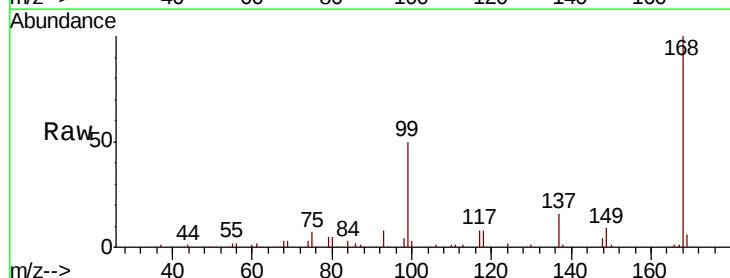
Tgt Ion: 117 Resp: 20718

Ion Ratio Lower Upper

117 100

119 5.4 77.5 116.3#

121 0.0 24.7 37.1#



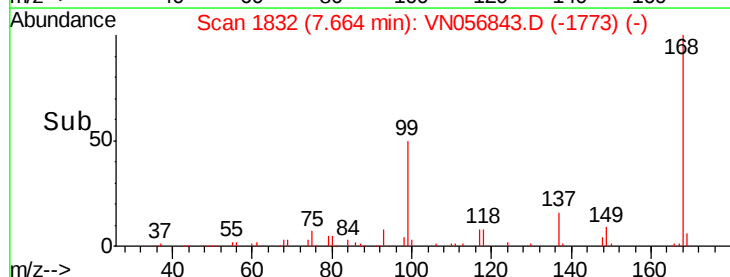
Abundance Ion 116.80 (116.50 to 117.50): VN056700.D (-1847) (-)

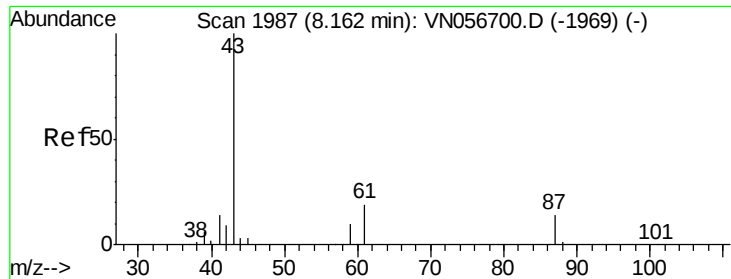
Ion 118.80 (118.50 to 119.50): VN056700.D (-1847) (-)

Ion 120.80 (120.50 to 121.50): VN056700.D (-1847) (-)

7.66

Time-->





#43

Isopropyl Acetate

Concen: 2.319 ug/l

RT: 8.17 min Scan# 1988

Delta R.T. 0.00 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

ClientSampleId :

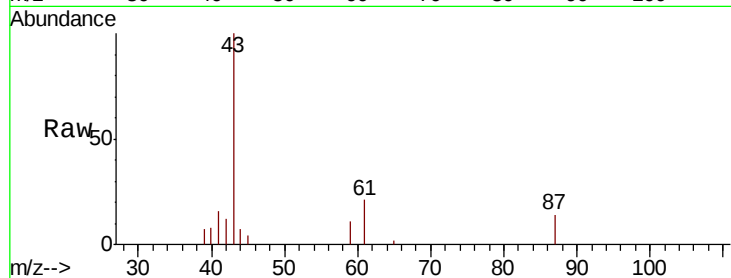
Tot Ion: 43 Resp: 14871

Ion Ratio Lower Upper

43 100

61 24.5 22.3 33.5

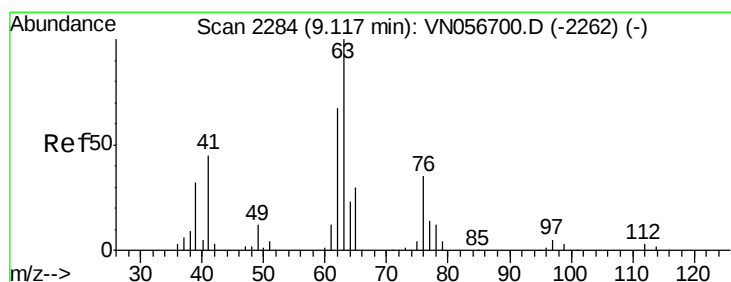
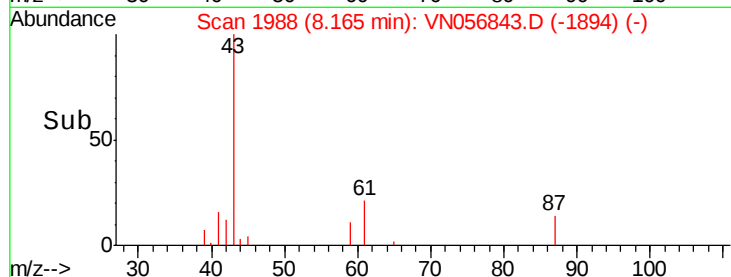
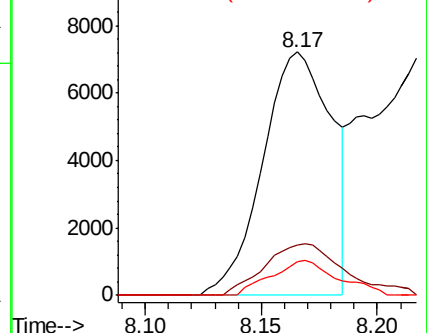
87 13.9 11.1 16.7



Abundance Ion 43.00 (42.70 to 43.70): VN056700.D (-1969) (-)

Ion 61.00 (60.70 to 61.70): VN056700.D (-1969) (-)

Ion 87.00 (86.70 to 87.70): VN056700.D (-1969) (-)



#45

1,2-Dichloropropane

Concen: 0.340 ug/l

RT: 9.27 min Scan# 2331

Delta R.T. 0.15 min

Lab File: VN056843.D

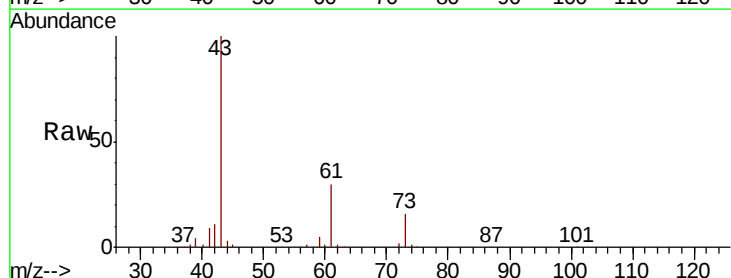
Acq: 19 Jul 2019 19:33

Tgt Ion: 63 Resp: 1146

Ion Ratio Lower Upper

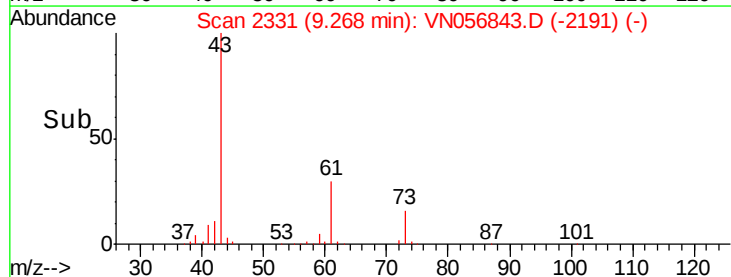
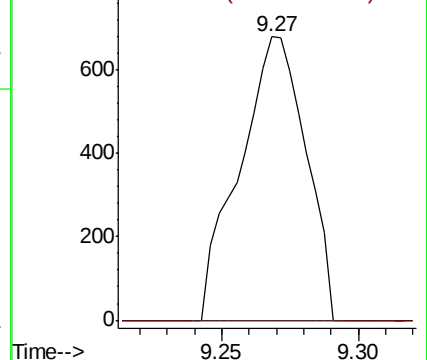
63 100

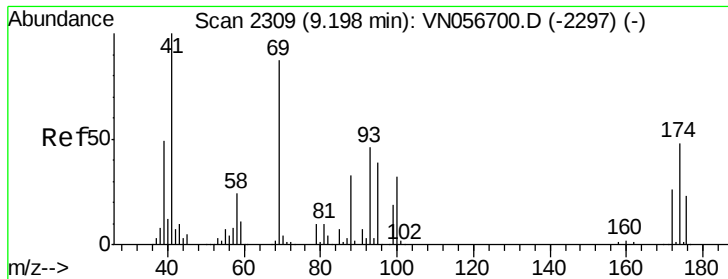
65 0.0 24.0 36.0#



Abundance Ion 62.90 (62.60 to 63.60): VN056700.D (-2262) (-)

Ion 64.90 (64.60 to 65.60): VN056700.D (-2262) (-)





#48

Methyl methacrylate

Concen: 2.511 ug/l

RT: 9.18 min Scan# 2304

Delta R.T. -0.02 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :
MSVOA_N
ClientSampled :

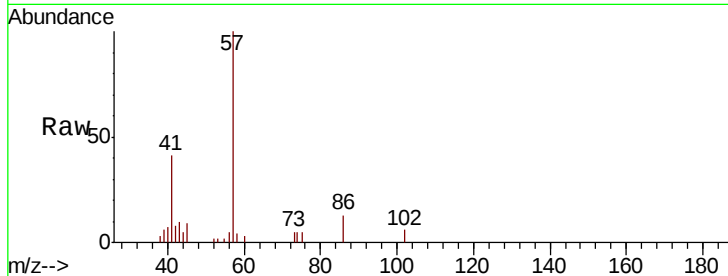
Tot Ion: 41 Resp: 7786

Ion Ratio Lower Upper

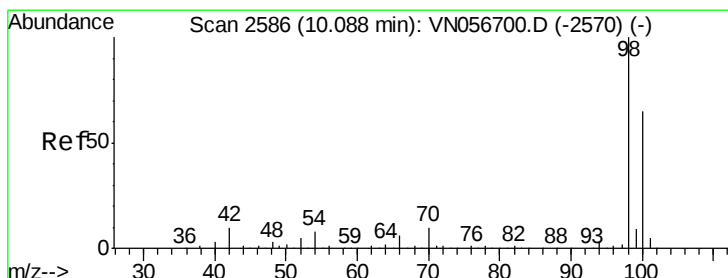
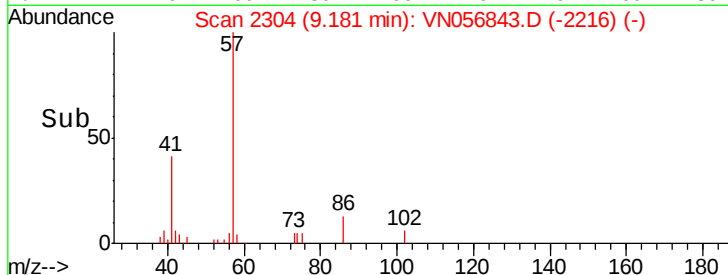
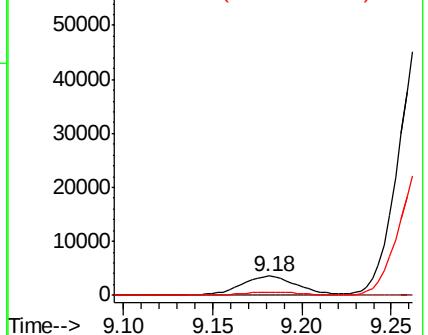
41 100

69 0.0 71.4 107.0#

39 0.0 41.2 61.8#



Abundance Ion 41.00 (40.70 to 41.70): VN0
Ion 69.00 (68.70 to 69.70): VN0
Ion 39.00 (38.70 to 39.70): VN0



#50

Toluene-d8

Concen: 52.910 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN056843.D

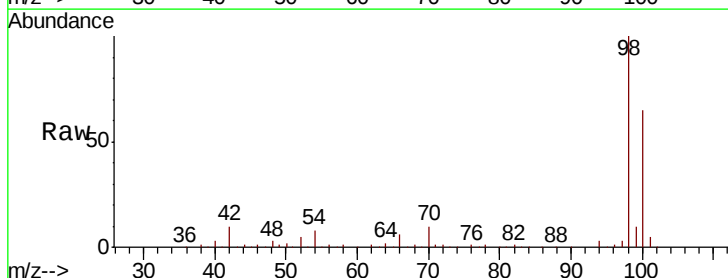
Acq: 19 Jul 2019 19:33

Tgt Ion: 98 Resp: 568704

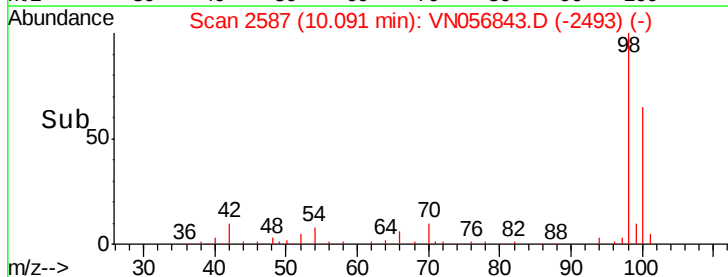
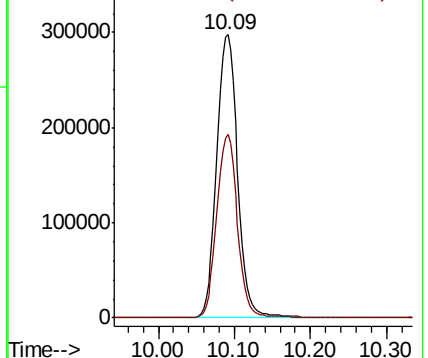
Ion Ratio Lower Upper

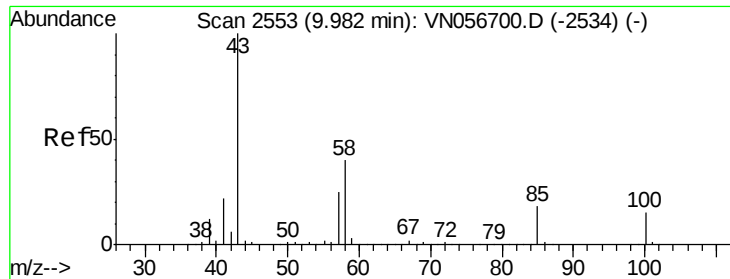
98 100

100 64.4 52.0 78.0



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: 0.822 ug/l

RT: 9.98 min Scan# 2553

Delta R.T. 0.00 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

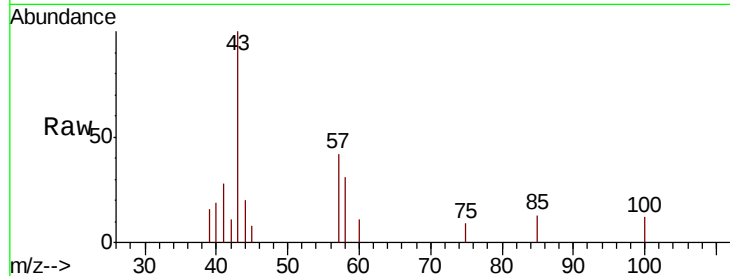
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 43 Resp: 3412

Ion Ratio Lower Upper

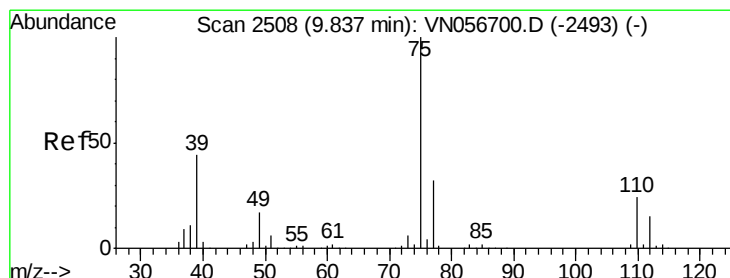
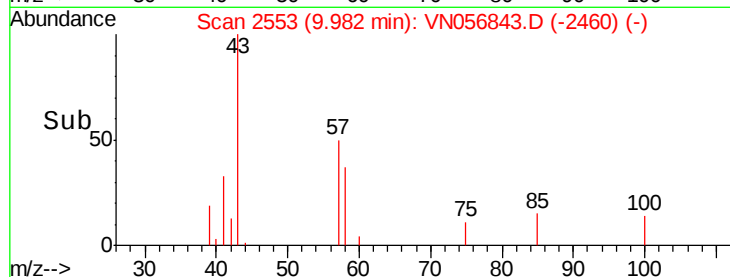
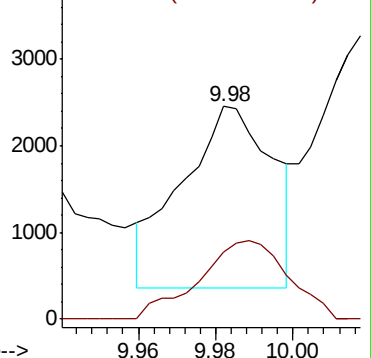
43 100

58 42.3 32.0 48.0



Abundance Ion 43.00 (42.70 to 43.70): VN056700.D (-2534) (-)

Ion 58.00 (57.70 to 58.70): VN056700.D (-2534) (-)



#54

cis-1,3-Dichloropropene

Concen: 8.798 ug/l

RT: 9.90 min Scan# 2529

Delta R.T. 0.07 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

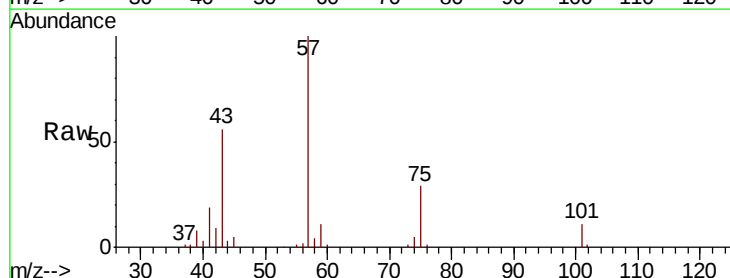
Tgt Ion: 75 Resp: 42262

Ion Ratio Lower Upper

75 100

77 0.0 26.0 39.0#

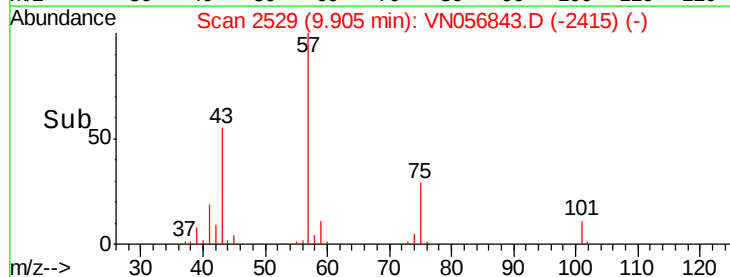
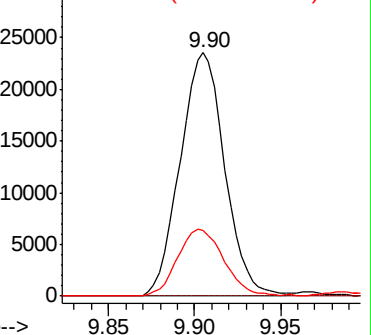
39 26.8 35.1 52.7#

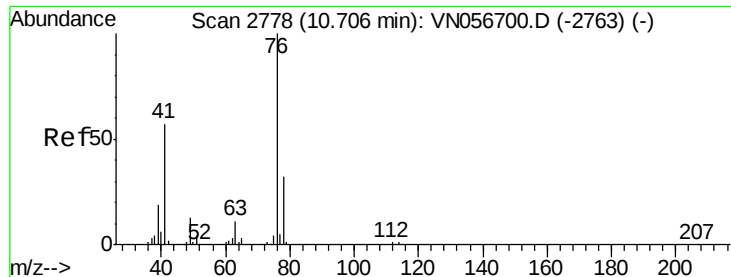


Abundance Ion 74.90 (74.60 to 75.60): VN056700.D (-2493) (-)

Ion 76.90 (76.60 to 77.60): VN056700.D (-2493) (-)

Ion 39.00 (38.70 to 39.70): VN056700.D (-2493) (-)





#57

1,3-Dichloropropane

Concen: 1.704 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

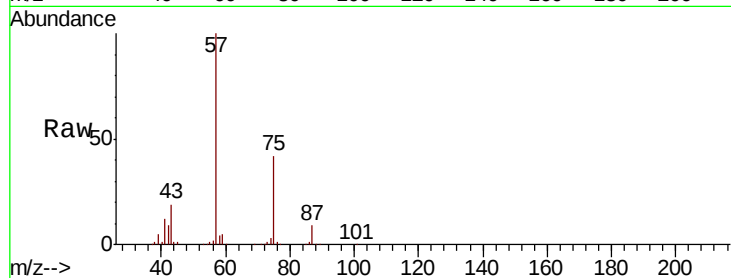
ClientSampled :

Tot Ion: 76 Resp: 8792

Ion Ratio Lower Upper

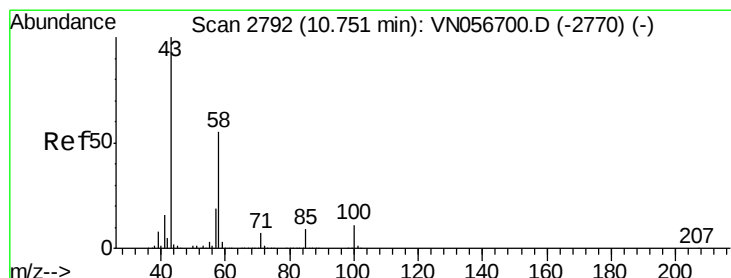
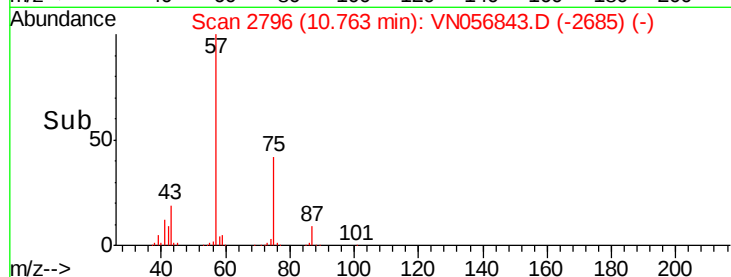
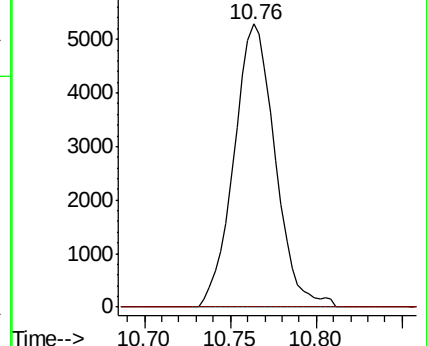
76 100

78 0.0 26.0 39.0#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#59

2-Hexanone

Concen: 39.848 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN056843.D

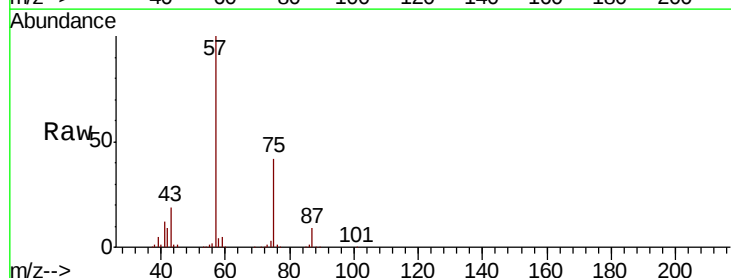
Acq: 19 Jul 2019 19:33

Tgt Ion: 43 Resp: 118742

Ion Ratio Lower Upper

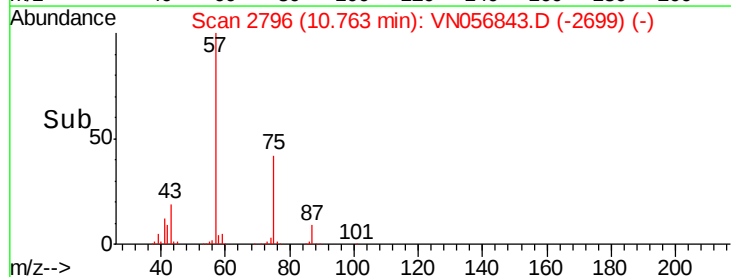
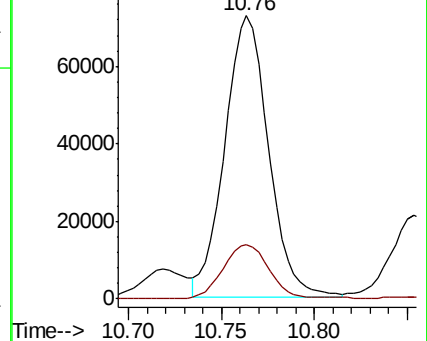
43 100

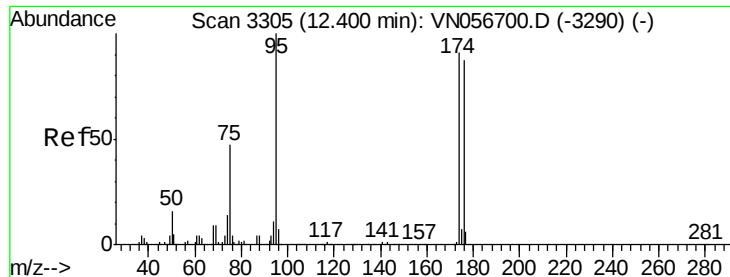
58 20.7 27.9 83.6#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: 58.993 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

ClientSampleId :

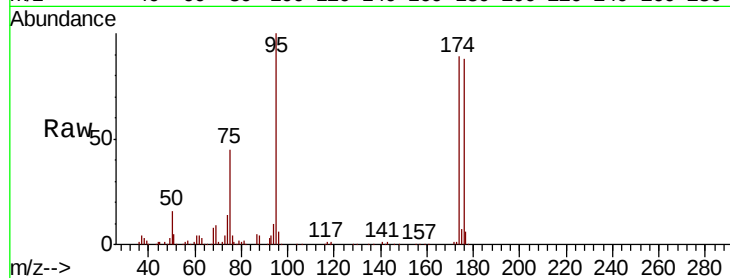
Tot Ion: 95 Resp: 213839

Ion Ratio Lower Upper

95 100

174 90.4 0.0 180.0

176 88.9 0.0 173.2

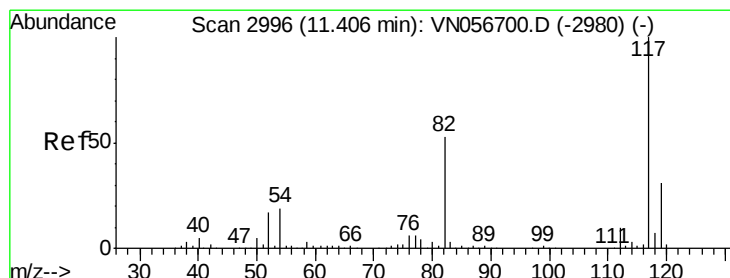
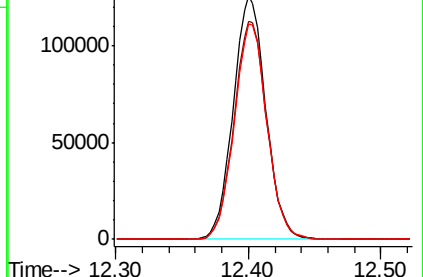
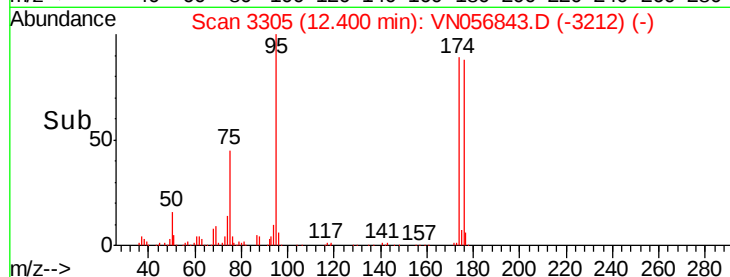


Abundance Ion 94.90 (94.60 to 95.60): VN056843.D (-2903) (-)

Ion 173.80 (173.50 to 174.50): VN056843.D (-2903) (-)

Ion 175.80 (175.50 to 176.50): VN056843.D (-2903) (-)

12.40



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

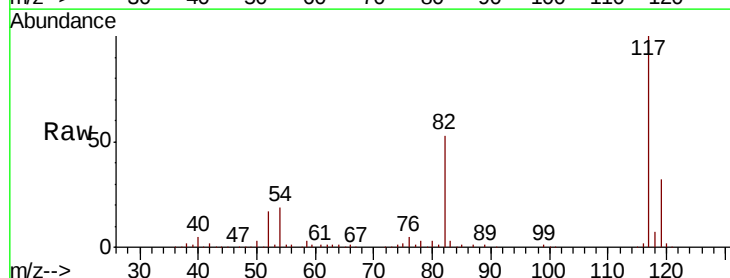
Tgt Ion: 117 Resp: 490975

Ion Ratio Lower Upper

117 100

82 53.0 42.2 63.2

119 32.2 25.2 37.8

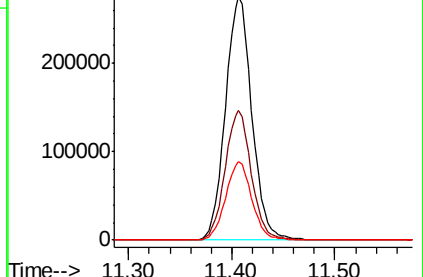
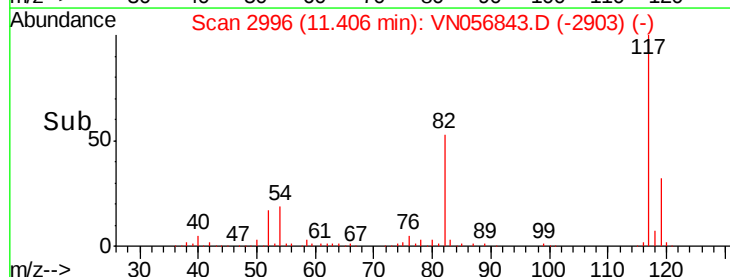


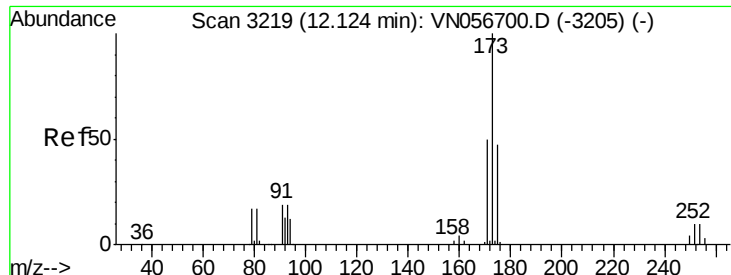
Abundance Ion 116.90 (116.60 to 117.60): VN056843.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN056843.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN056843.D (-2903) (-)

11.41

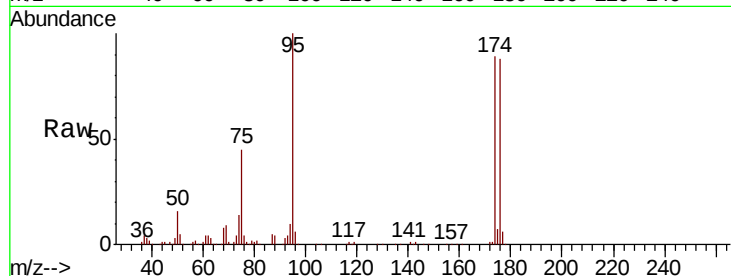




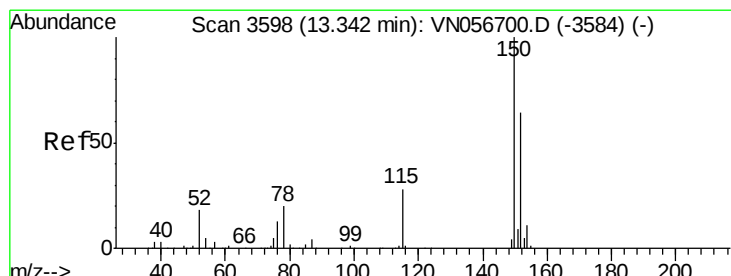
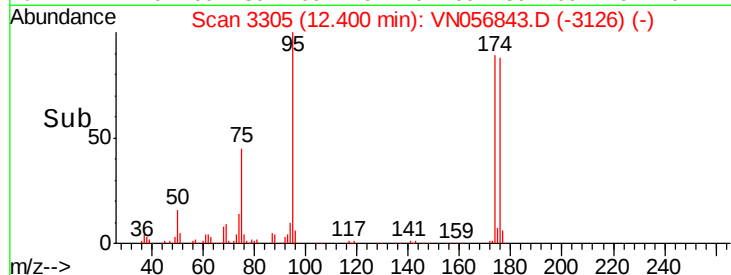
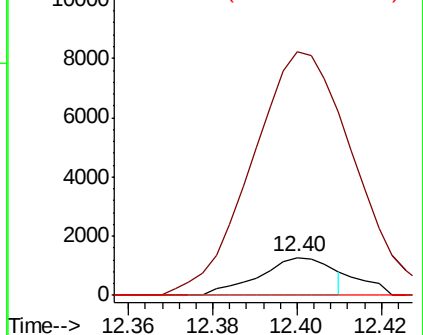
#71
Bromoform
Concen: 0.544 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.28 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Instrument :
MSVOA_N
ClientSampled :

Tot Ion:173 Resp: 1529
Ion Ratio Lower Upper
173 100
175 726.7 23.8 71.4#
254 0.0 0.0 0.0

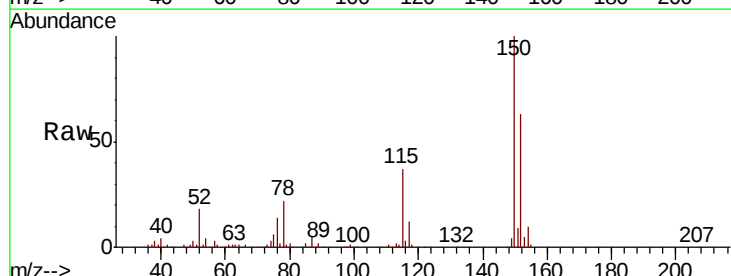


Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V

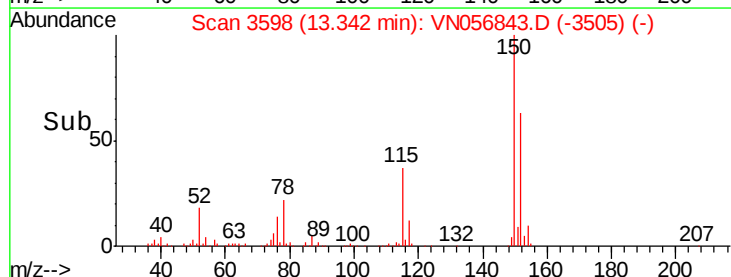
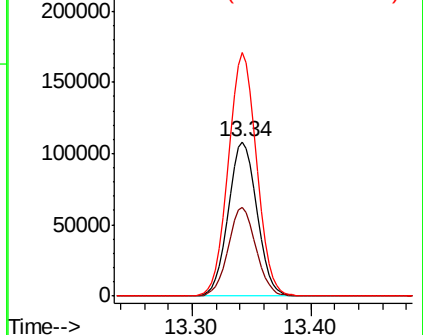


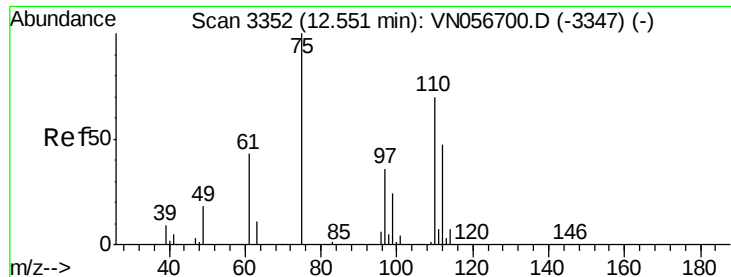
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.34 min Scan# 3598
Delta R.T. 0.00 min
Lab File: VN056843.D
Acq: 19 Jul 2019 19:33

Tgt Ion:152 Resp: 180261
Ion Ratio Lower Upper
152 100
115 55.8 28.2 84.7
150 156.0 0.0 345.8



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





#76

1,2,3-Trichloropropane

Concen: 24.430 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

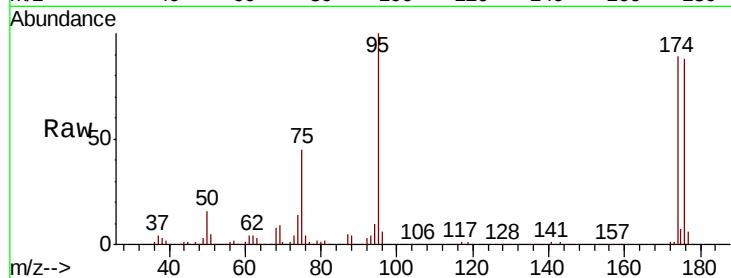
ClientSampled :

Tot Ion: 75 Resp: 96317

Ion Ratio Lower Upper

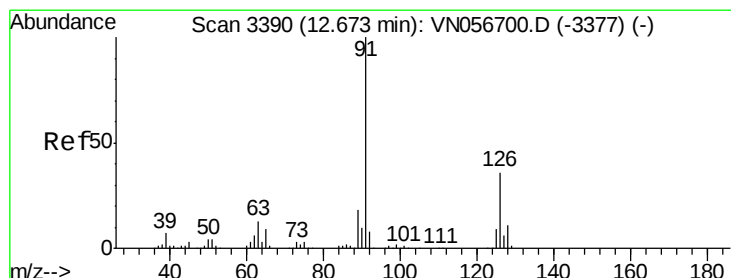
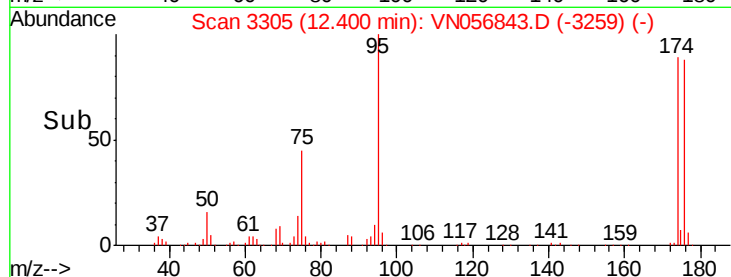
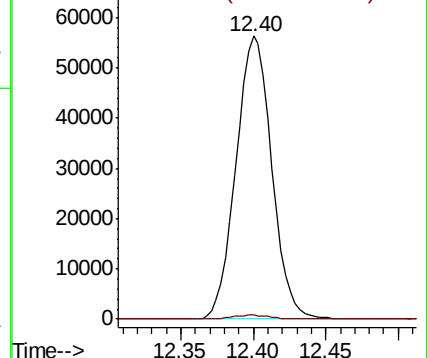
75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#79

2-Chlorotoluene

Concen: Below Cal

RT: 12.73 min Scan# 3409

Delta R.T. 0.06 min

Lab File: VN056843.D

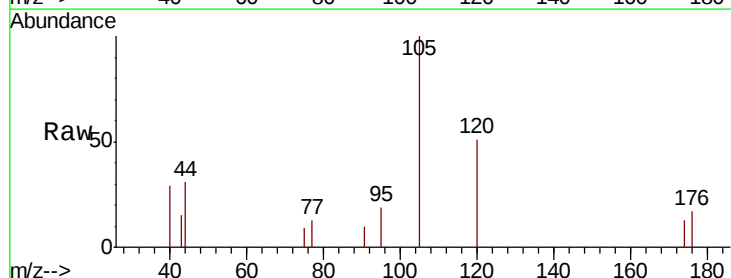
Acq: 19 Jul 2019 19:33

Tgt Ion: 91 Resp: 32

Ion Ratio Lower Upper

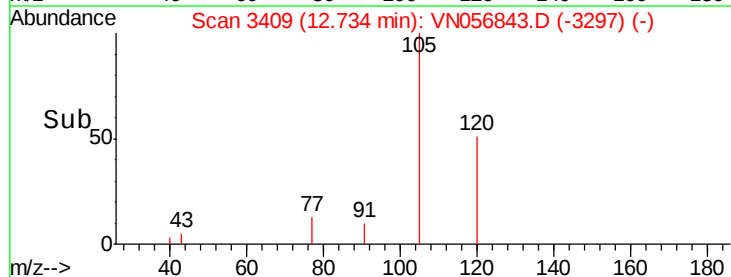
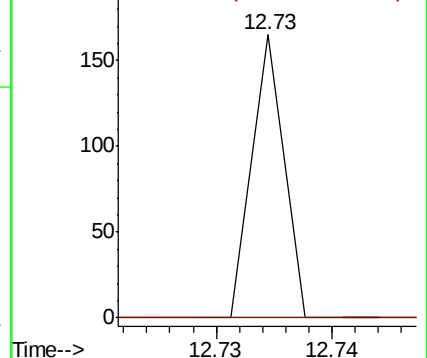
91 100

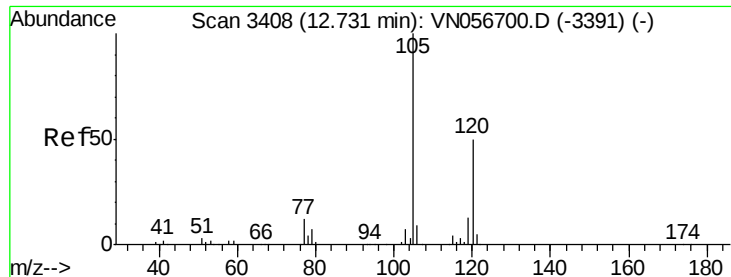
126 0.0 17.9 53.7#



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): V





#80

1,3,5-Trimethylbenzene

Concen: 0.222 ug/l

RT: 12.73 min Scan# 3408

Delta R.T. 0.00 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

Instrument :

MSVOA_N

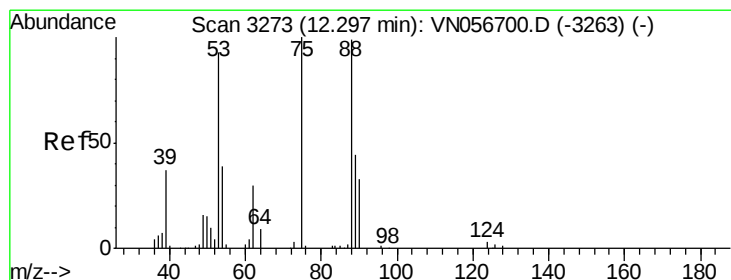
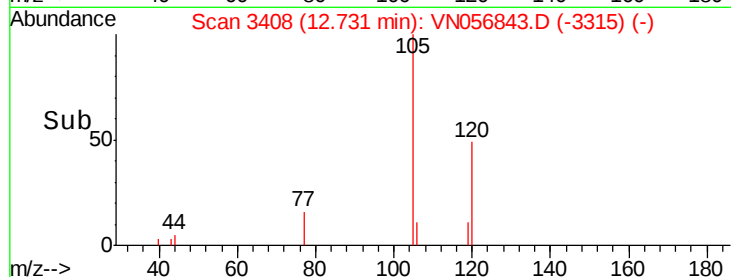
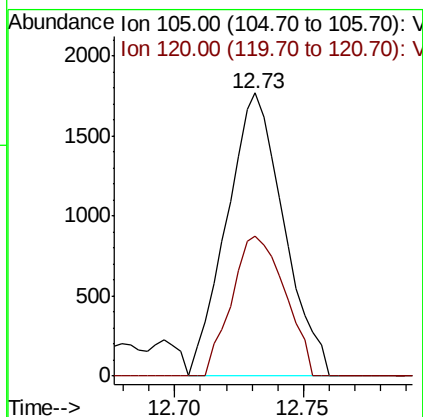
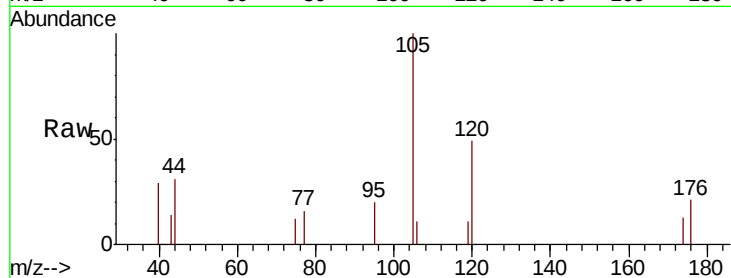
ClientSampled :

Tot Ion:105 Resp: 2729

Ion Ratio Lower Upper

105 100

120 46.1 24.8 74.3



#81

trans-1,4-Dichloro-2-butene

Concen: 75.448 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN056843.D

Acq: 19 Jul 2019 19:33

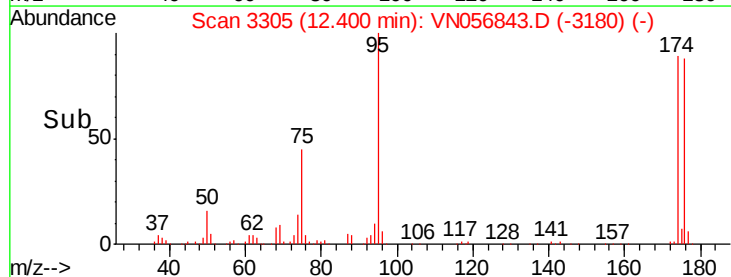
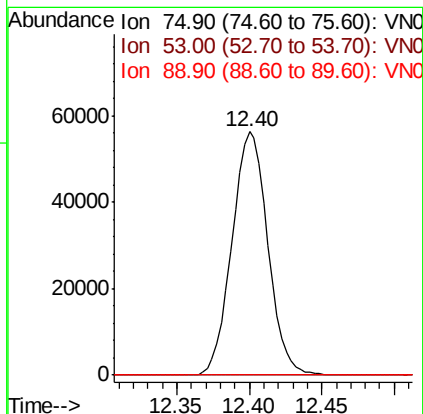
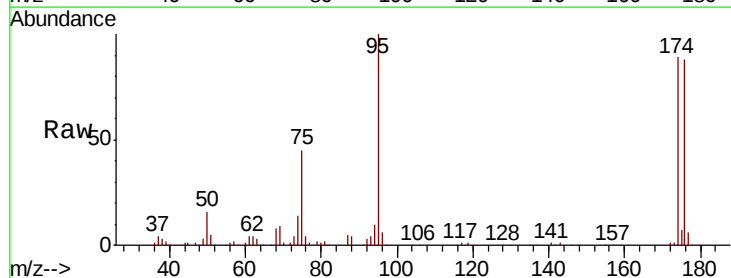
Tgt Ion: 75 Resp: 96317

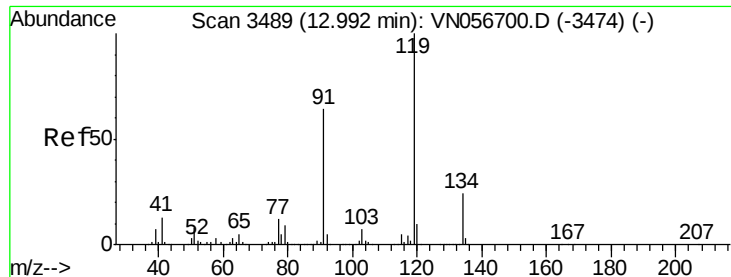
Ion Ratio Lower Upper

75 100

53 0.0 73.7 110.5#

89 0.0 36.2 54.2#

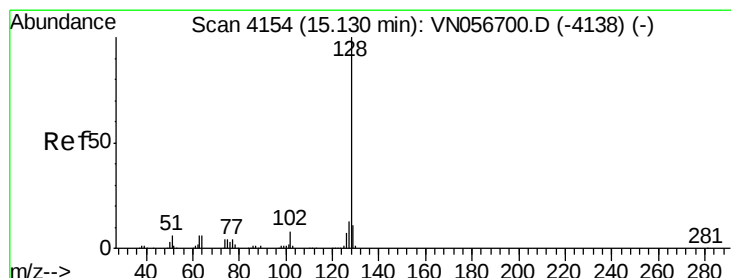
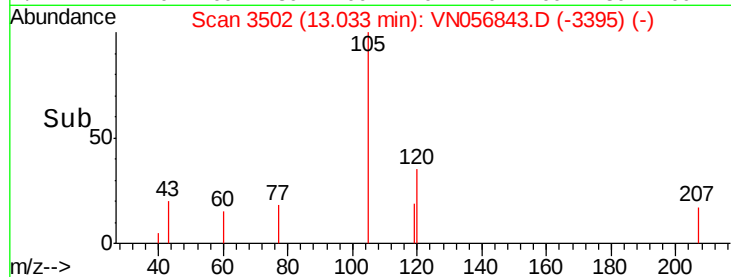
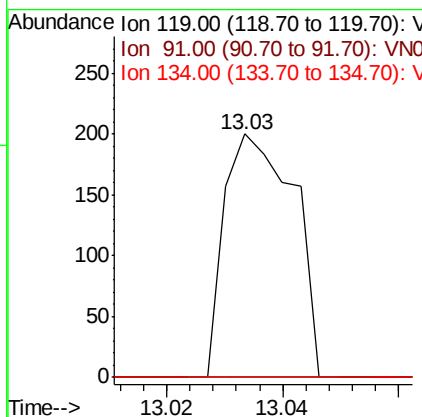
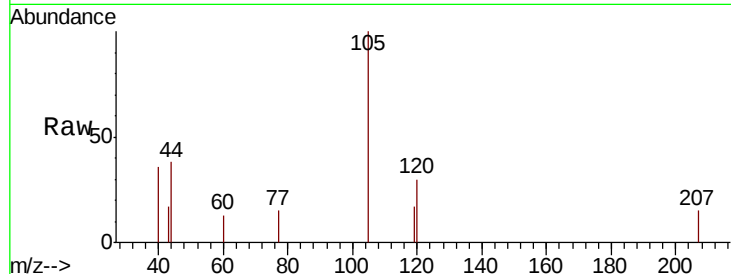




#83
 tert-Butylbenzene
 Concen: Below Cal
 RT: 13.03 min Scan# 3502
 Delta R.T. 0.04 min
 Lab File: VN056843.D
 Acq: 19 Jul 2019 19:33

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion:119 Resp: 165
 Ion Ratio Lower Upper
 119 100
 91 0.0 31.8 95.4#
 134 0.0 13.0 38.9#



#95
 Naphthalene
 Concen: 5.430 ug/l
 RT: 15.13 min Scan# 4155
 Delta R.T. 0.00 min
 Lab File: VN056843.D
 Acq: 19 Jul 2019 19:33

Tgt Ion:128 Resp: 9601
 Ion Ratio Lower Upper
 128 100
 127 10.7 10.3 15.5
 129 9.4 8.7 13.1

