

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092319\
 Data File : VN058324.D
 Acq On : 24 Sep 2019 3:43
 Operator : JC/SP
 Sample : K4997-20
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

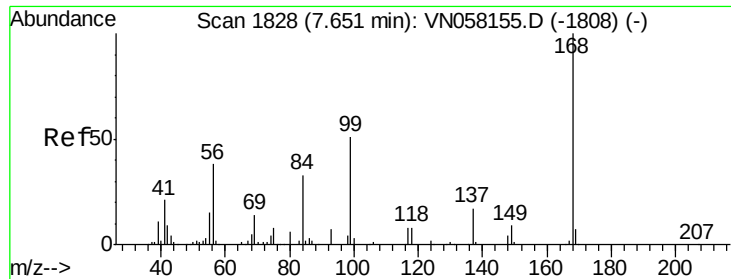
Quant Time: Sep 24 07:10:14 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091819W.M
 Quant Title : SW846 8260
 QLast Update : Thu Sep 19 09:27:53 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	464533	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	791796	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	687860	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	281938	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.01	65	360743	55.76	ug/l	0.00
Spiked Amount			Recovery	=	111.52%	
35) Dibromofluoromethane	7.57	113	244028	50.70	ug/l	0.00
Spiked Amount			Recovery	=	101.40%	
50) Toluene-d8	10.08	98	998009	53.22	ug/l	0.00
Spiked Amount			Recovery	=	106.44%	
62) 4-Bromofluorobenzene	12.41	95	328588	47.17	ug/l	0.00
Spiked Amount			Recovery	=	94.34%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	2.03	50	173	Below Cal	#	35
5) Bromomethane	2.55	94	134	0.800	ug/l	88
6) Chloroethane	2.68	64	92	Below Cal	#	44
13) Acrolein	3.62	56	36	0.316	ug/l #	15
16) Acetone	3.81	43	11617	5.290	ug/l	97
18) Methyl Acetate	4.31	43	3424	0.593	ug/l #	69
20) Methylene Chloride	4.53	84	65004	16.758	ug/l	95
31) Cyclohexane	7.65	56	12188	Below Cal	#	9
36) 1,1-Dichloropropene	7.65	75	41815	7.323	ug/l #	51
37) Ethyl Acetate	6.84	43	1392	0.235	ug/l #	72
38) Carbon Tetrachloride	7.65	117	48154	8.389	ug/l #	16
41) Methacrylonitrile	7.21	41	265	0.998	ug/l #	100
43) Isopropyl Acetate	8.16	43	131044	11.841	ug/l #	82
45) 1,2-Dichloropropane	9.26	63	1833	0.352	ug/l #	45
48) Methyl methacrylate	9.17	41	6343	1.262	ug/l #	14
49) 1,4-Dioxane	9.26	88	36	0.436	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	6702	1.140	ug/l	91
54) cis-1,3-Dichloropropene	9.90	75	37628	5.015	ug/l #	73
56) Ethyl methacrylate	10.54	69	1711	0.244	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	6320	0.758	ug/l #	43
59) 2-Hexanone	10.76	43	97371	22.303	ug/l #	53
71) Bromoform	12.41	173	1887	4.134	ug/l #	1
74) N-amyl acetate	12.04	43	3765	0.510	ug/l #	50
76) 1,2,3-Trichloropropane	12.41	75	177712	35.220	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.41	75	177712	98.486	ug/l #	5

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.00 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

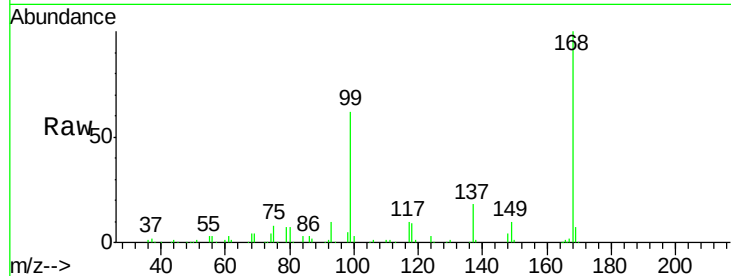
ClientSampled :

Tot Ion:168 Resp: 464533

Ion Ratio Lower Upper

168 100

99 61.8 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

200000

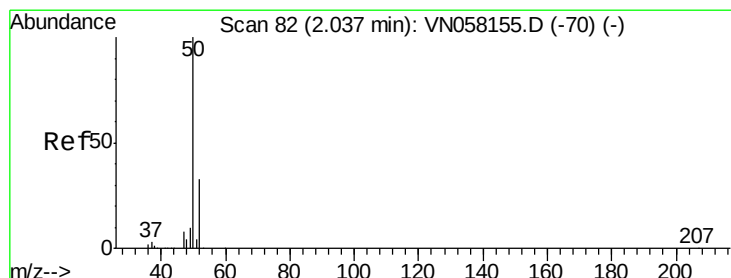
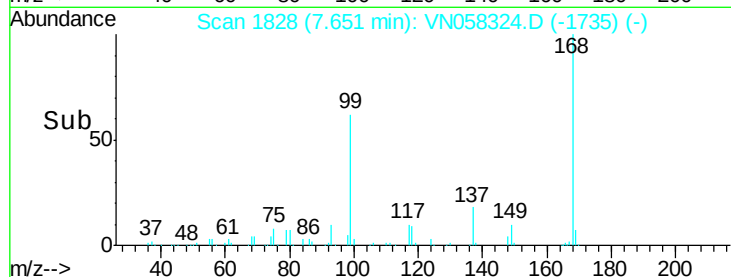
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 2.03 min Scan# 80

Delta R.T. -0.01 min

Lab File: VN058324.D

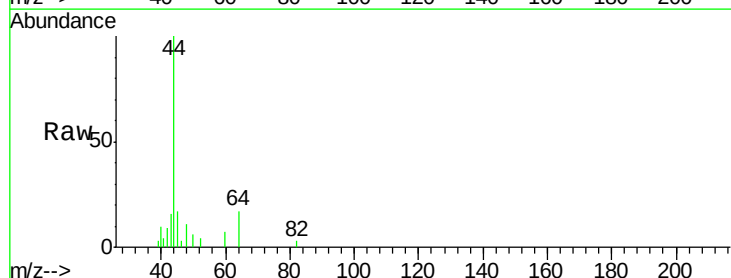
Acq: 24 Sep 2019 3:43

Tgt Ion: 50 Resp: 173

Ion Ratio Lower Upper

50 100

52 69.8 26.3 39.5#



Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO

2.03

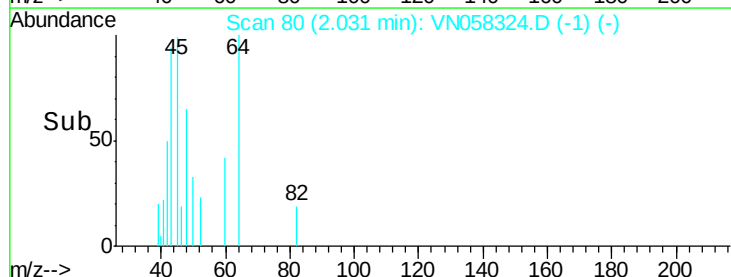
300

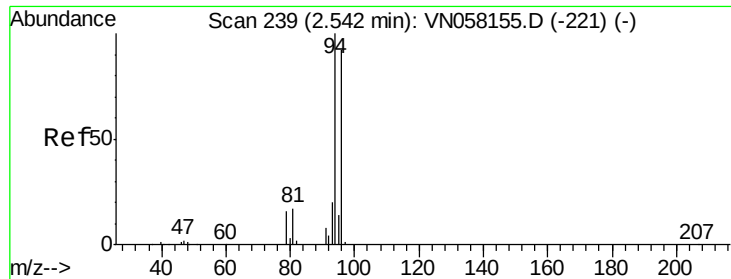
200

100

0

Time-->





#5

Bromomethane

Concen: 0.800 ug/l

RT: 2.55 min Scan# 242

Delta R.T. 0.01 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

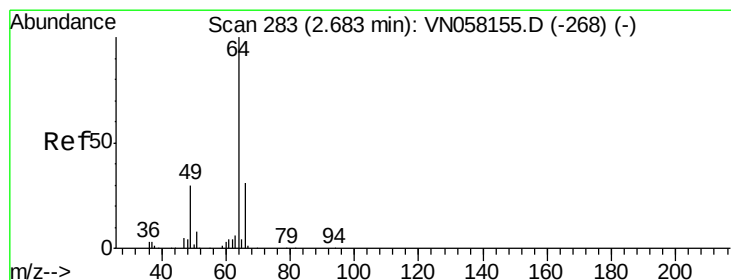
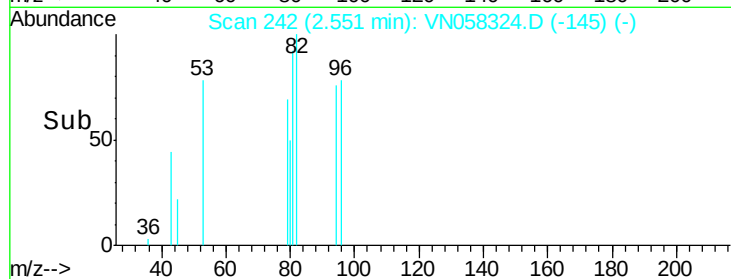
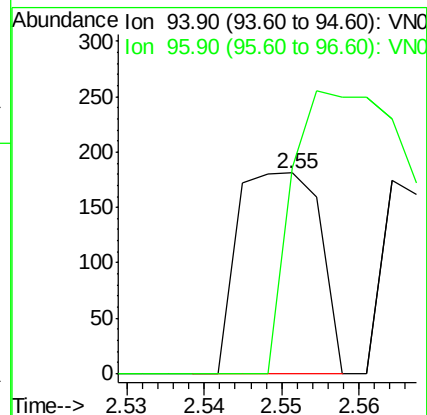
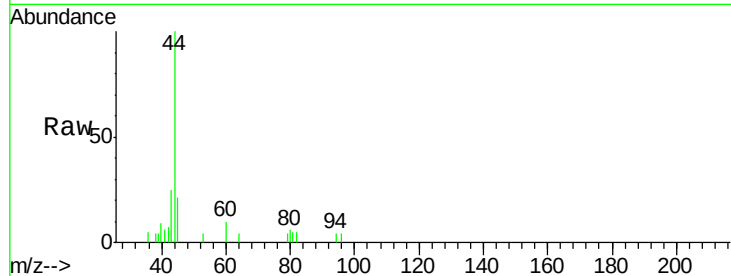
ClientSampleId :

Tot Ion: 94 Resp: 134

Ion Ratio Lower Upper

94 100

96 102.8 73.3 109.9



#6

Chloroethane

Concen: Below Cal

RT: 2.68 min Scan# 282

Delta R.T. -0.00 min

Lab File: VN058324.D

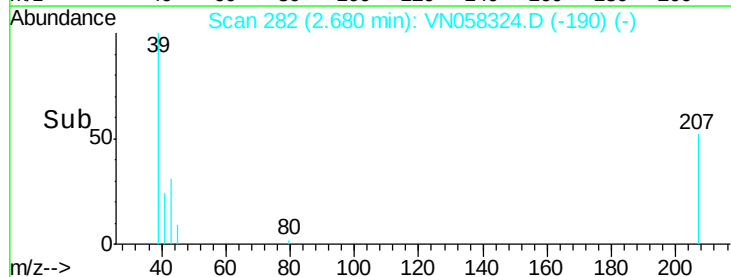
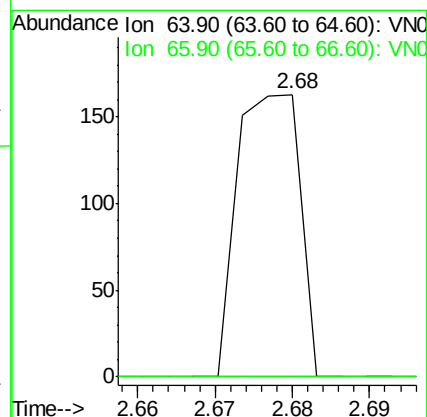
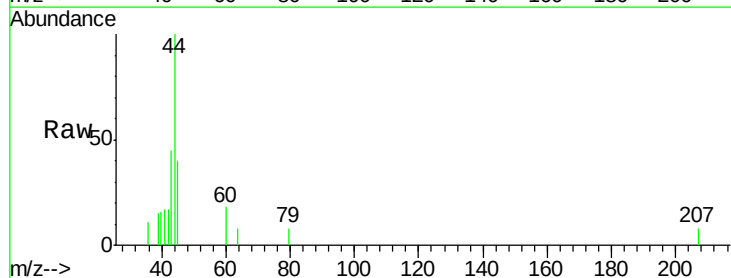
Acq: 24 Sep 2019 3:43

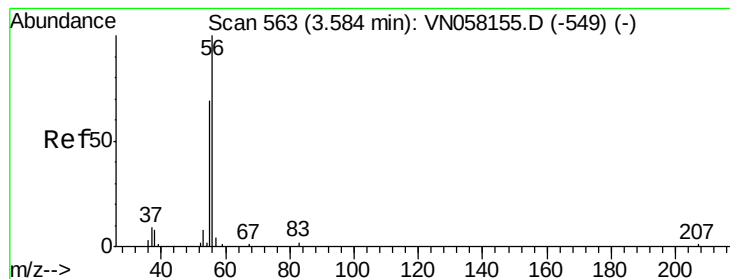
Tgt Ion: 64 Resp: 92

Ion Ratio Lower Upper

64 100

66 0.0 24.6 37.0#





#13

Acrolein

Concen: 0.316 ug/l

RT: 3.62 min Scan# 573

Delta R.T. 0.03 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

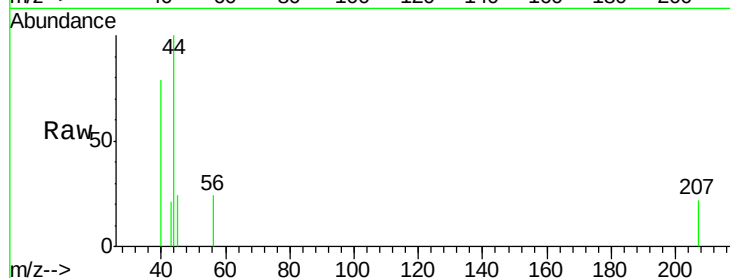
ClientSampleId :

Tot Ion: 56 Resp: 36

Ion Ratio Lower Upper

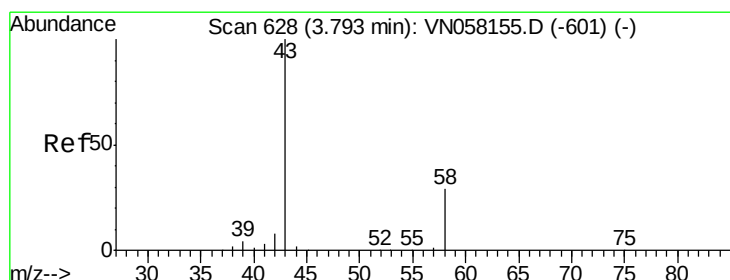
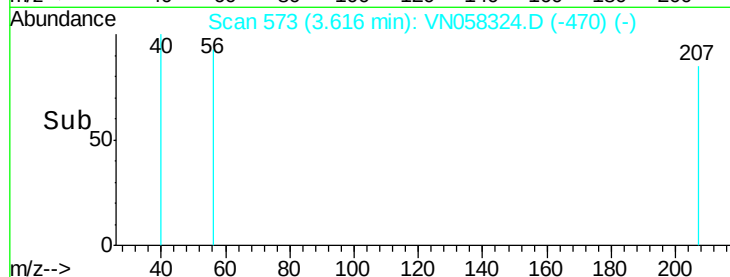
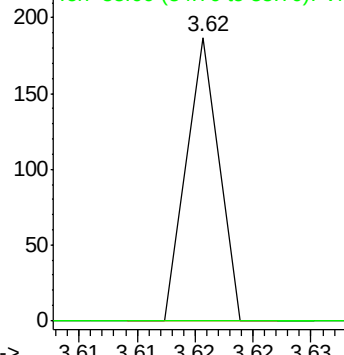
56 100

55 0.0 56.1 84.1#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#16

Acetone

Concen: 5.290 ug/l

RT: 3.81 min Scan# 632

Delta R.T. 0.01 min

Lab File: VN058324.D

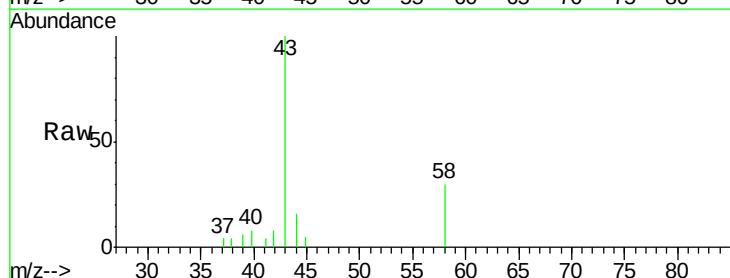
Acq: 24 Sep 2019 3:43

Tgt Ion: 43 Resp: 11617

Ion Ratio Lower Upper

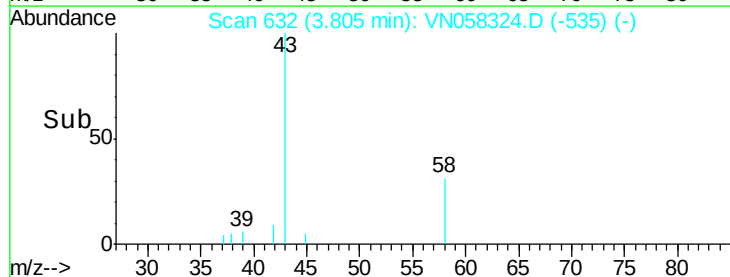
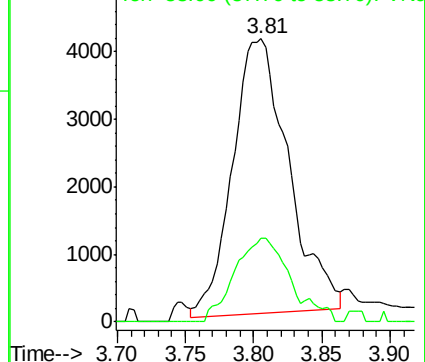
43 100

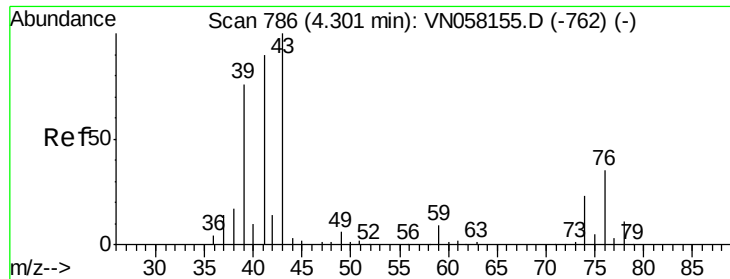
58 31.1 23.4 35.2



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

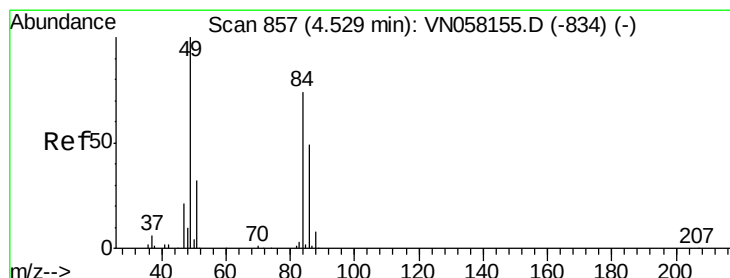
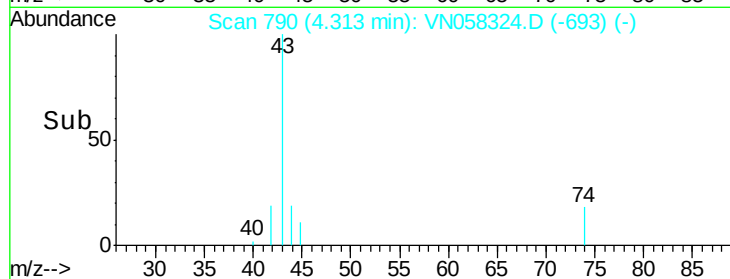
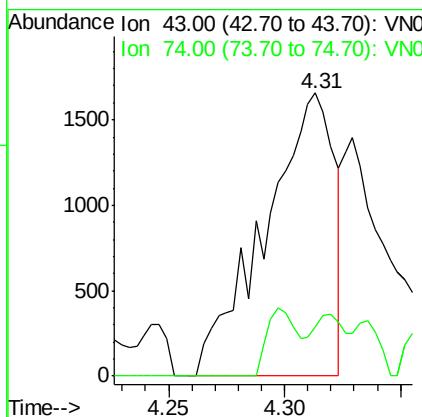
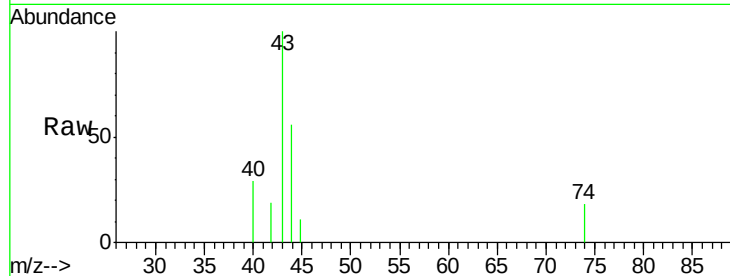




#18
Methvl Acetate
Concen: 0.593 ug/l
RT: 4.31 min Scan# 790
Delta R.T. 0.01 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

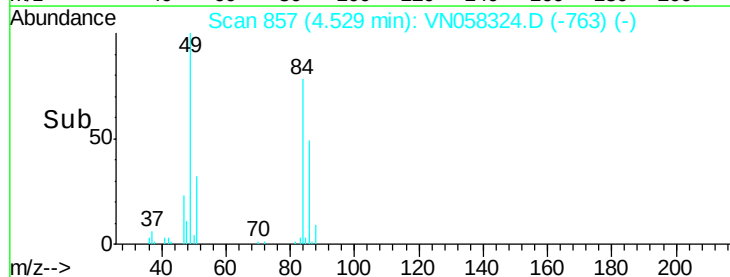
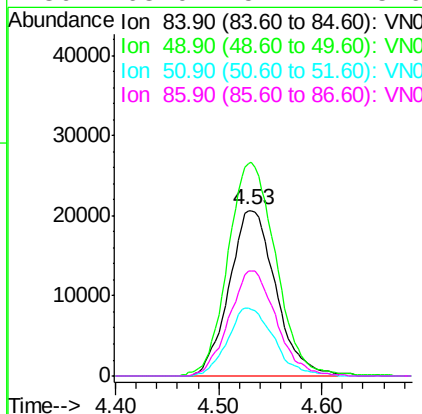
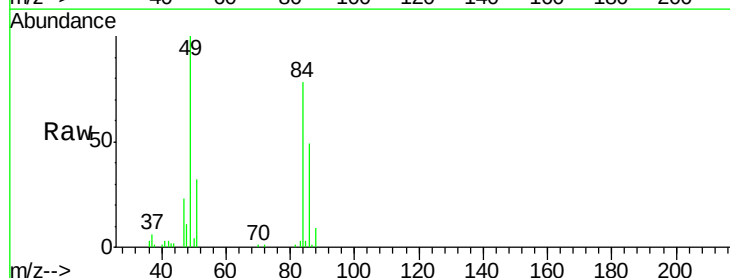
Instrument :
MSVOA_N
ClientSampleId :

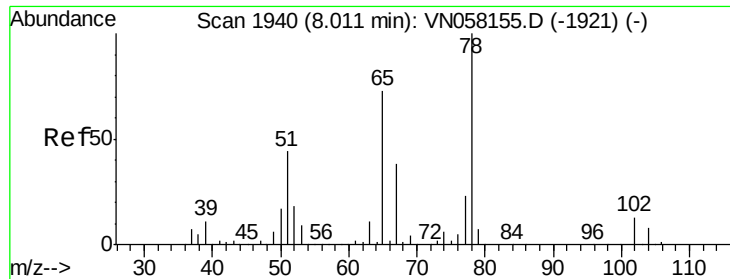
Tot Ion: 43 Resp: 3424
Ion Ratio Lower Upper
43 100
74 7.7 18.0 27.0#



#20
Methylene Chloride
Concen: 16.758 ug/l
RT: 4.53 min Scan# 857
Delta R.T. 0.00 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion: 84 Resp: 65004
Ion Ratio Lower Upper
84 100
49 126.8 107.5 161.3
51 40.8 33.9 50.9
86 63.0 52.4 78.6

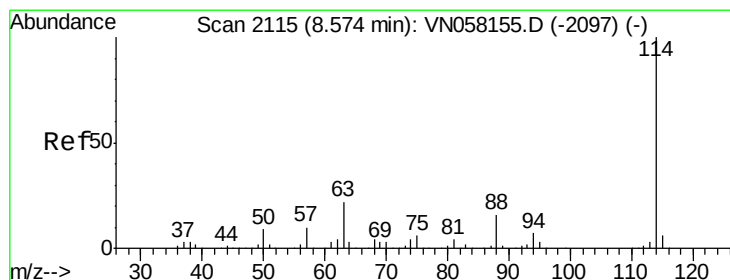
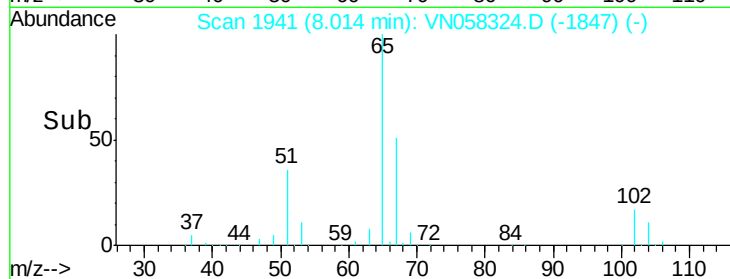
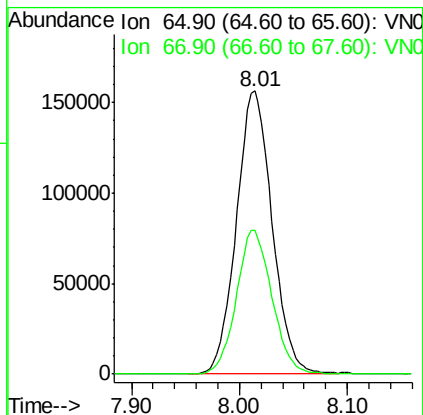
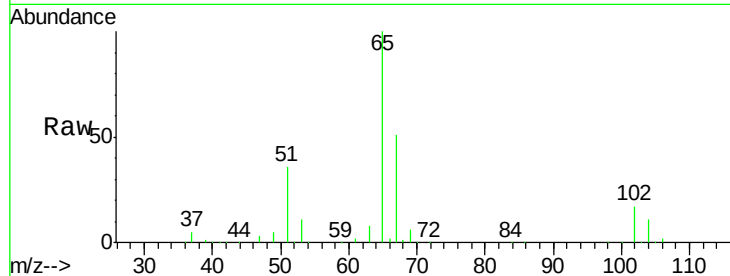




#33
 1,2-Dichloroethane-d4
 Concen: 55.756 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN058324.D
 Acq: 24 Sep 2019 3:43

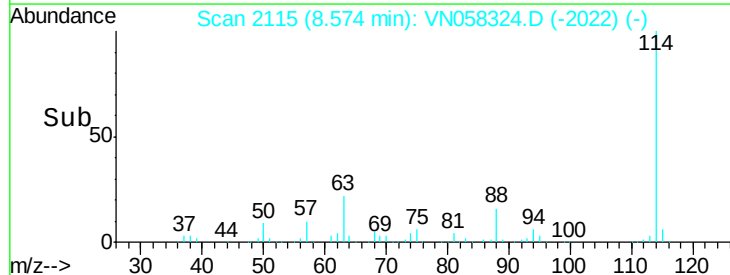
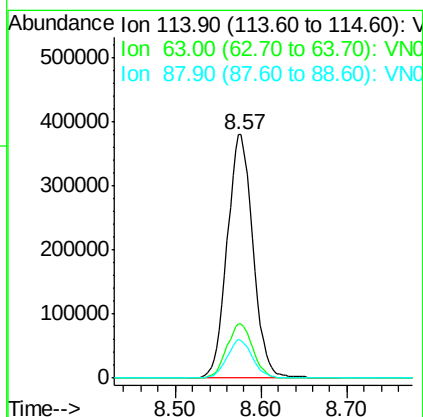
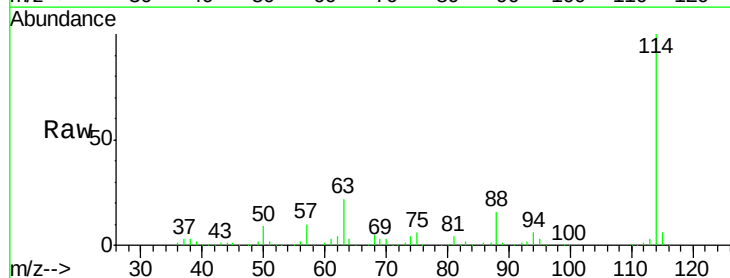
Instrument :
 MSVOA_N
 ClientSampleId :

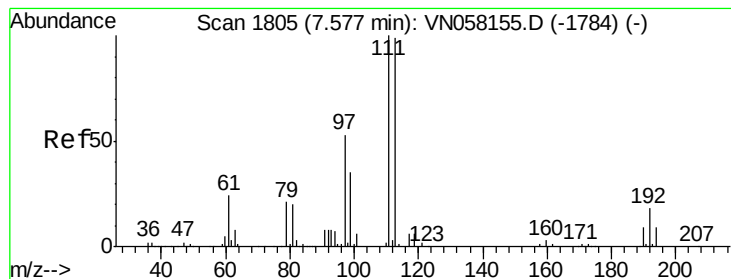
Tot Ion: 65 Resp: 360743
 Ion Ratio Lower Upper
 65 100
 67 50.6 0.0 103.4



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. -0.00 min
 Lab File: VN058324.D
 Acq: 24 Sep 2019 3:43

Tgt Ion: 114 Resp: 791796
 Ion Ratio Lower Upper
 114 100
 63 22.3 0.0 44.2
 88 15.8 0.0 31.6





#35

Dibromofluoromethane

Concen: 50.697 ug/l

RT: 7.57 min Scan# 1804

Delta R.T. -0.00 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

ClientSampled :

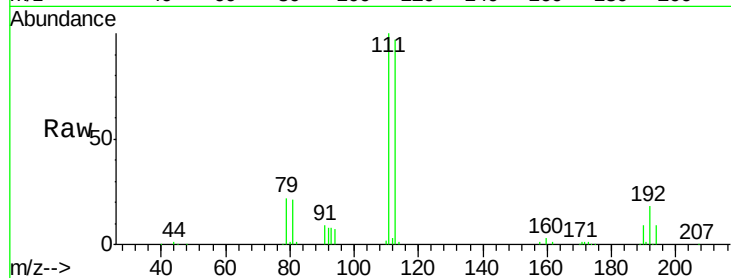
Tot Ion:113 Resp: 244028

Ion Ratio Lower Upper

113 100

111 102.9 81.8 122.6

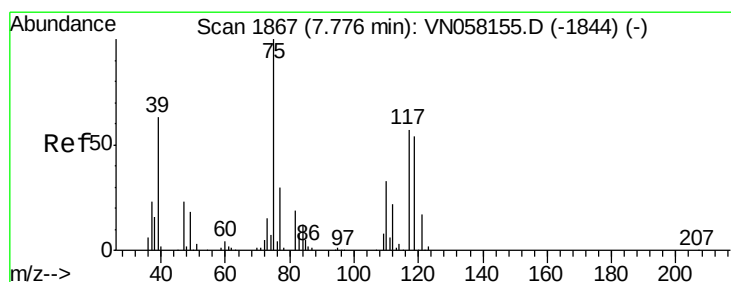
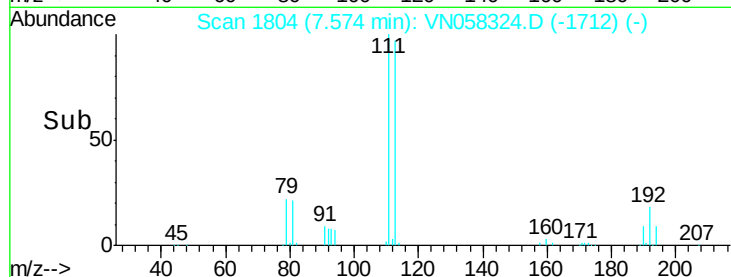
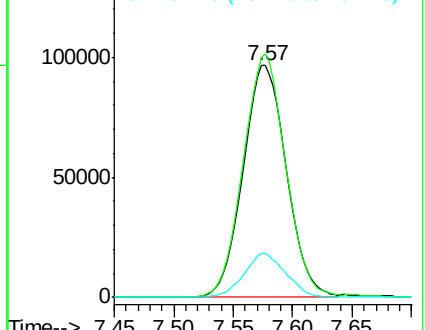
192 18.2 14.5 21.7



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: 7.323 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. -0.12 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

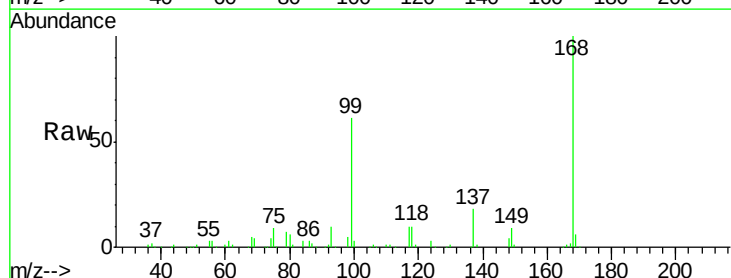
Tgt Ion: 75 Resp: 41815

Ion Ratio Lower Upper

75 100

110 8.7 16.6 49.7#

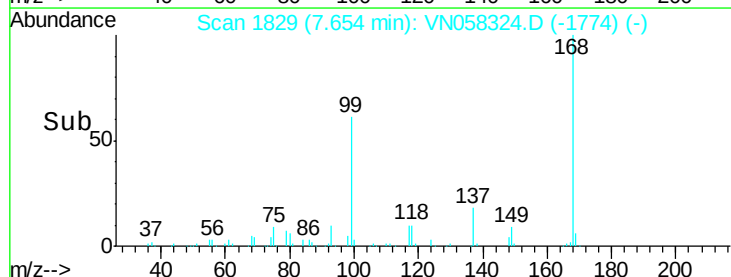
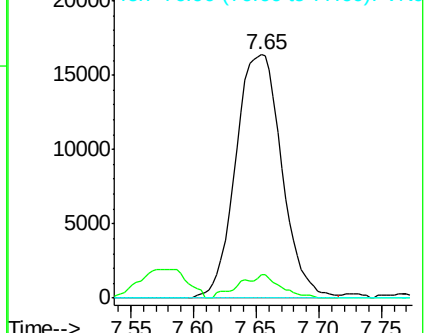
77 0.0 24.3 36.5#

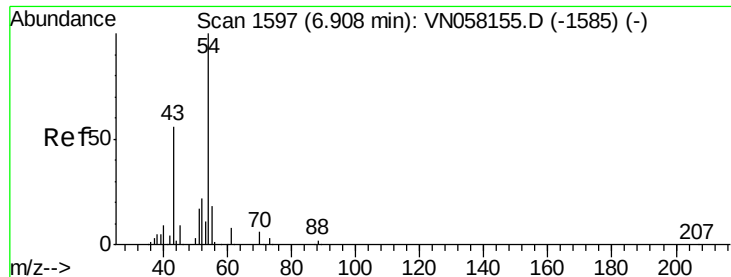


Abundance Ion 74.90 (74.60 to 75.60): V

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): V

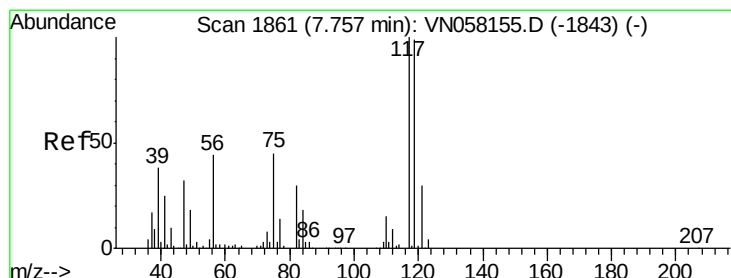
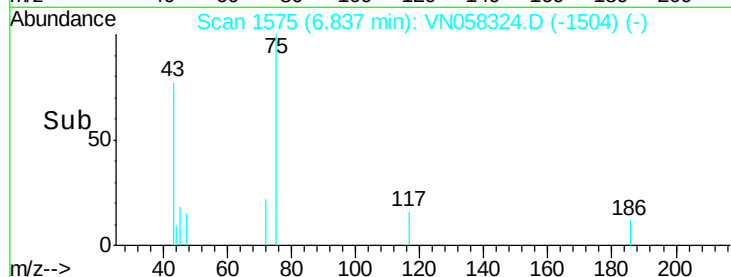
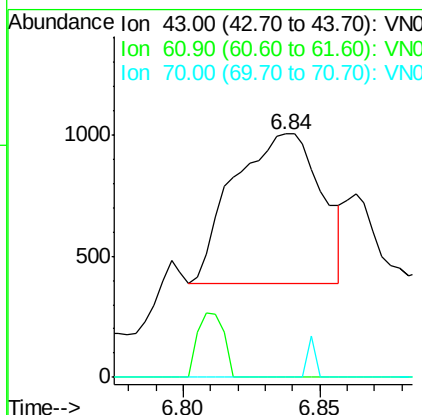
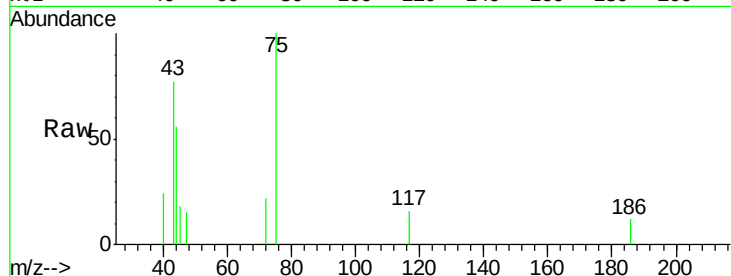




#37
Ethyl Acetate
Concen: 0.235 ug/l
RT: 6.84 min Scan# 1575
Delta R.T. -0.07 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

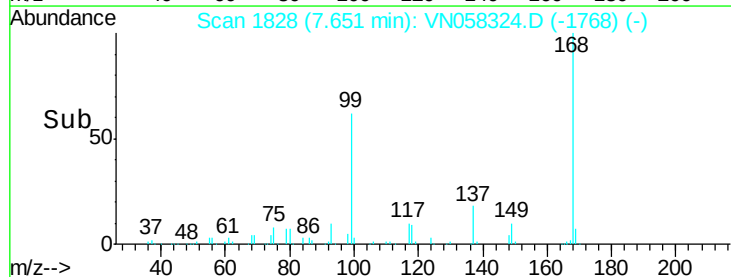
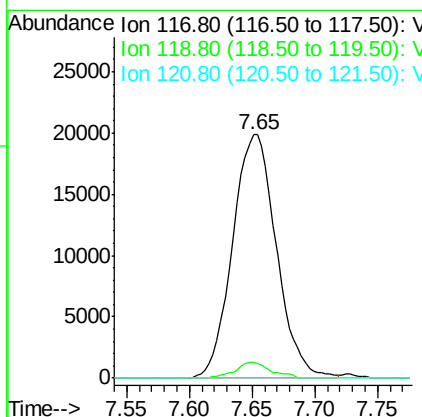
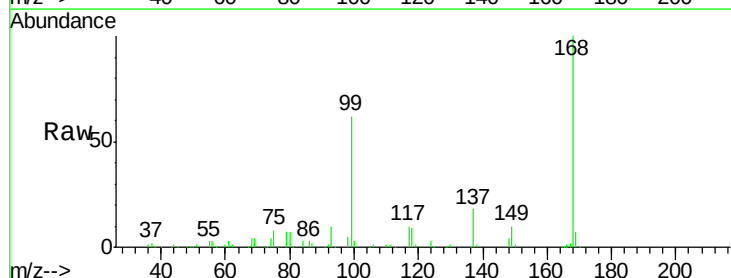
Instrument :
MSVOA_N
ClientSampled :

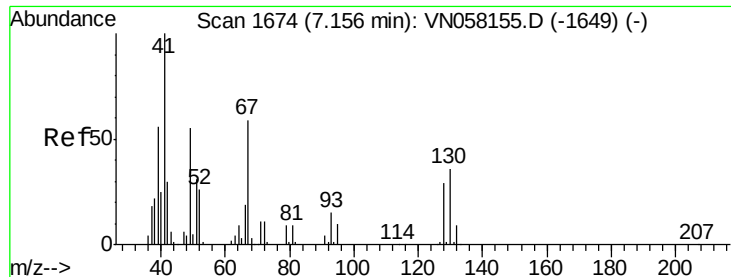
Tot Ion: 43 Resp: 1392
Ion Ratio Lower Upper
43 100
61 0.0 10.7 16.1#
70 2.4 7.6 11.4#



#38
Carbon Tetrachloride
Concen: 8.389 ug/l
RT: 7.65 min Scan# 1828
Delta R.T. -0.11 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion: 117 Resp: 48154
Ion Ratio Lower Upper
117 100
119 6.4 78.6 117.8#
121 0.0 24.1 36.1#

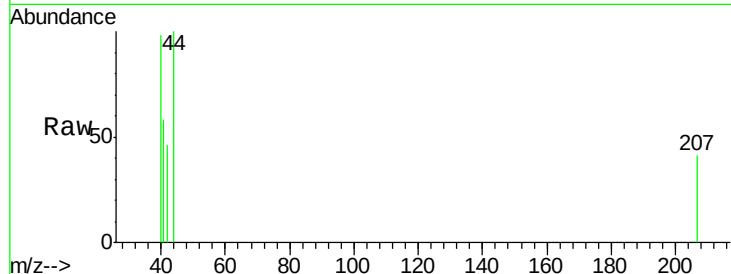




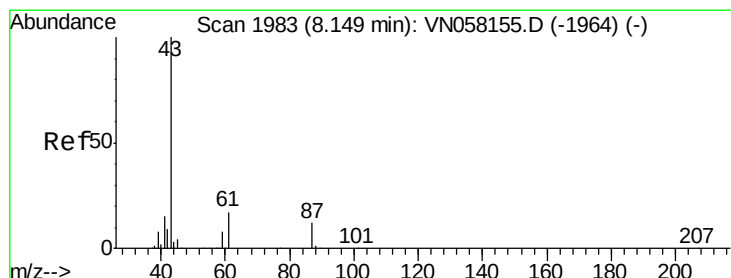
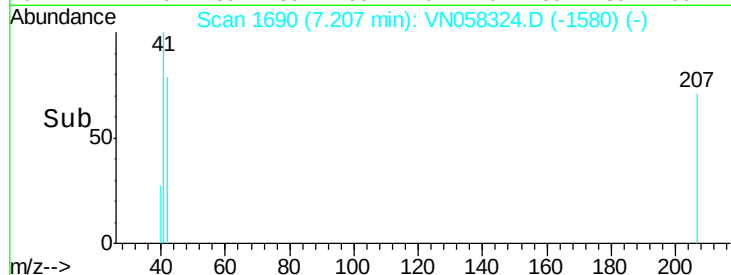
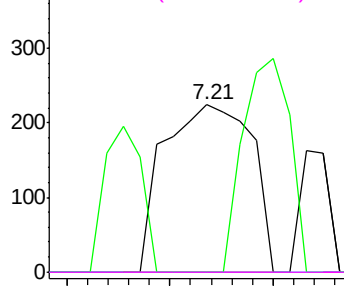
#41
Methacrylonitrile
Concen: 0.998 ug/l
RT: 7.21 min Scan# 1690
Delta R.T. 0.05 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 41 Resp: 265
Ion Ratio Lower Upper
41 100
39 37.0 0.0 0.0#
67 0.0 0.0 0.0
52 0.0 0.0 0.0

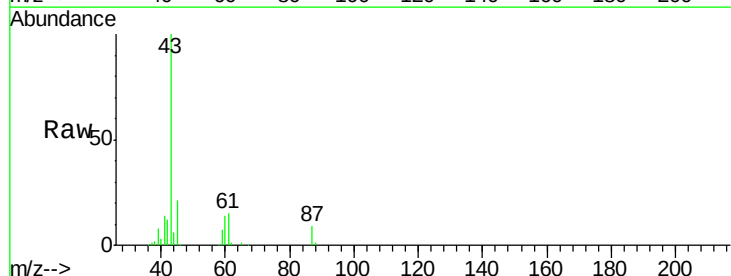


Abundance Ion 41.00 (40.70 to 41.70): VNC
Ion 39.00 (38.70 to 39.70): VNC
Ion 67.00 (66.70 to 67.70): VNC
Ion 52.00 (51.70 to 52.70): VNC

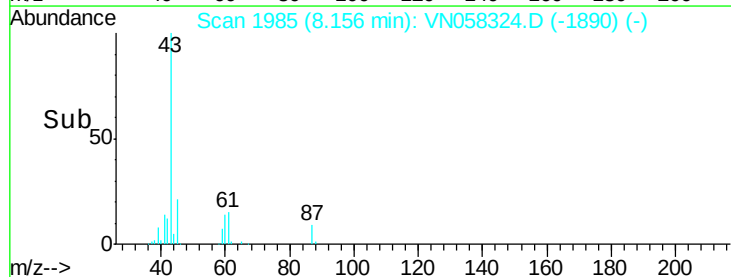
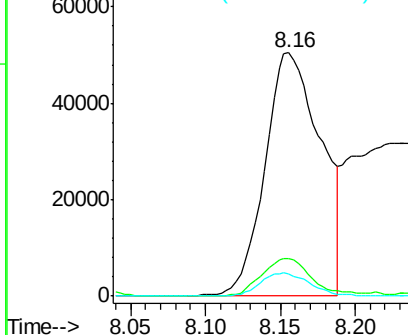


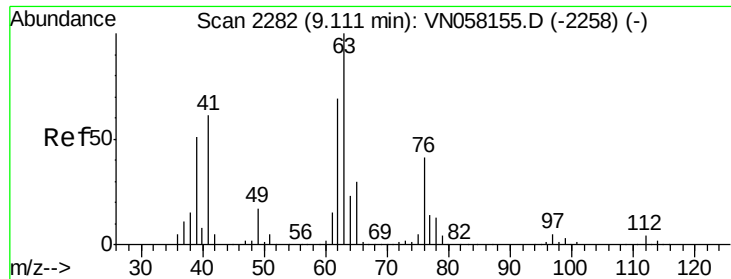
#43
Isopropyl Acetate
Concen: 11.841 ug/l
RT: 8.16 min Scan# 1985
Delta R.T. 0.01 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion: 43 Resp: 131044
Ion Ratio Lower Upper
43 100
61 13.7 19.7 29.5#
87 8.5 9.4 14.2#



Abundance Ion 43.00 (42.70 to 43.70): VNC
Ion 61.00 (60.70 to 61.70): VNC
Ion 87.00 (86.70 to 87.70): VNC

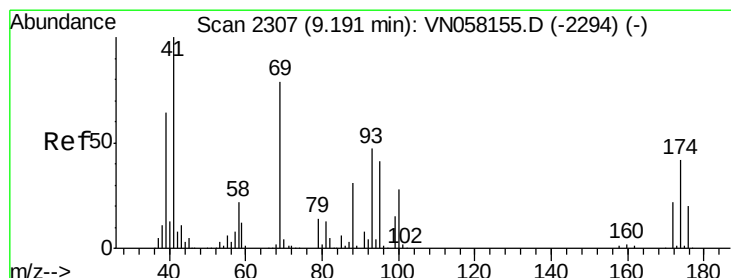
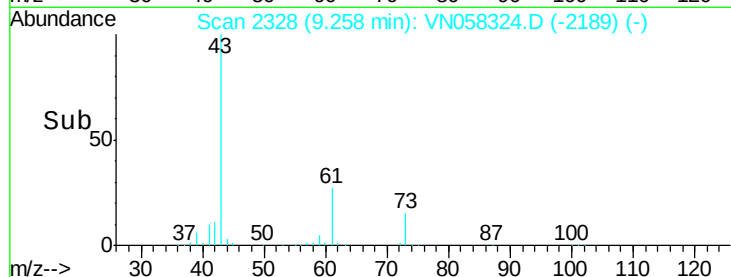
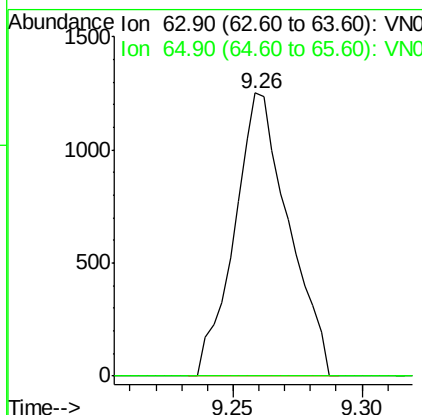
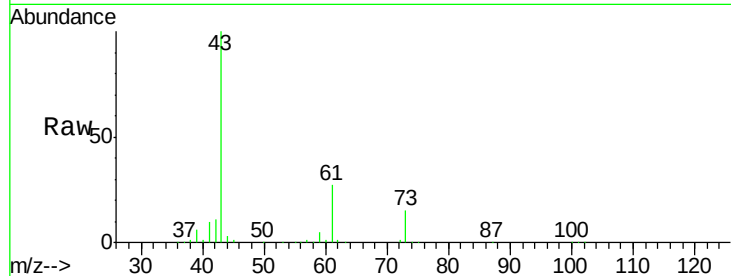




#45
 1,2-Dichloropropane
 Concen: 0.352 ug/l
 RT: 9.26 min Scan# 2328
 Delta R.T. 0.15 min
 Lab File: VN058324.D
 Acq: 24 Sep 2019 3:43

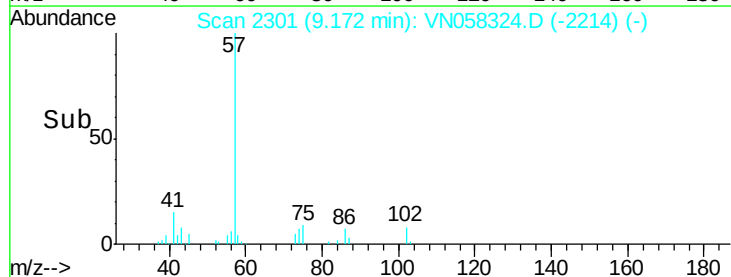
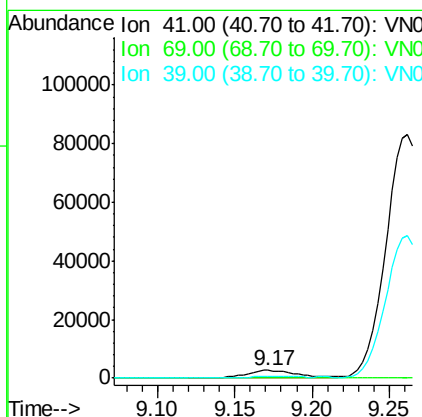
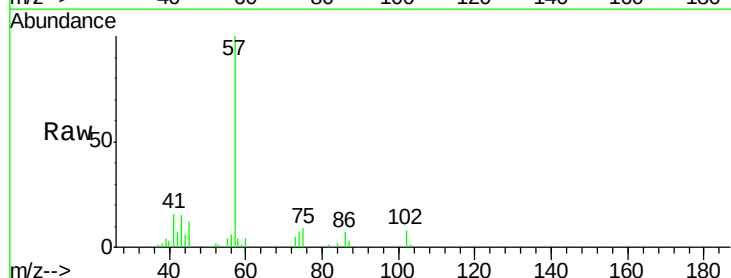
Instrument :
 MSVOA_N
 ClientSampled :

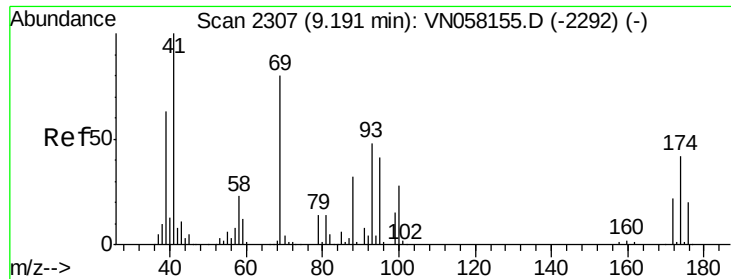
Tot Ion: 63 Resp: 1833
 Ion Ratio Lower Upper
 63 100
 65 0.0 23.8 35.6#



#48
 Methyl methacrylate
 Concen: 1.262 ug/l
 RT: 9.17 min Scan# 2301
 Delta R.T. -0.02 min
 Lab File: VN058324.D
 Acq: 24 Sep 2019 3:43

Tgt Ion: 41 Resp: 6343
 Ion Ratio Lower Upper
 41 100
 69 0.0 62.5 93.7#
 39 0.0 52.3 78.5#





#49

1,4-Dioxane

Concen: 0.436 ug/l

RT: 9.26 min Scan# 2329

Delta R.T. 0.07 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :
MSVOA_N
ClientSampled :

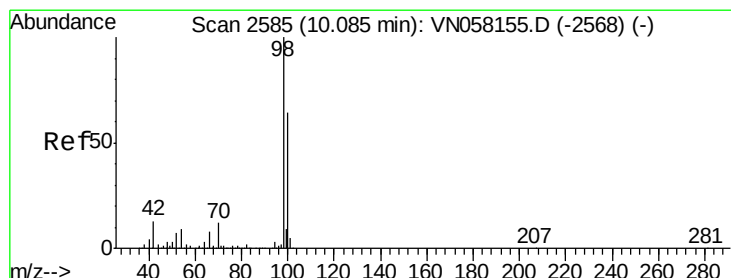
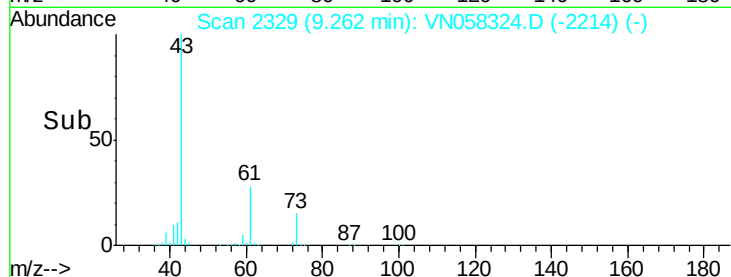
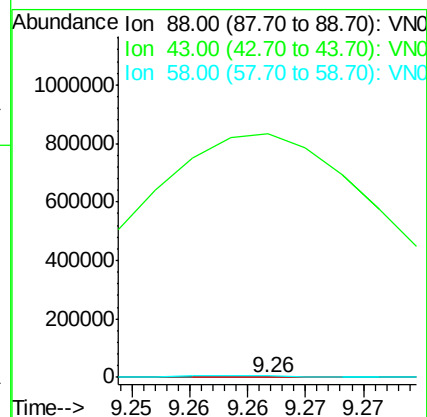
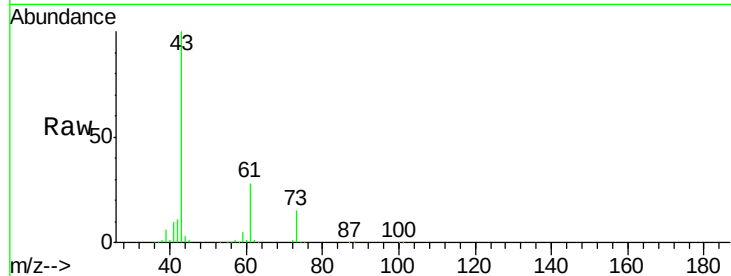
Tot Ion: 88 Resp: 36

Ion Ratio Lower Upper

88 100

43 4289433.3 27.8 41.8#

58 21080.6 55.0 82.4#



#50

Toluene-d8

Concen: 53.215 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058324.D

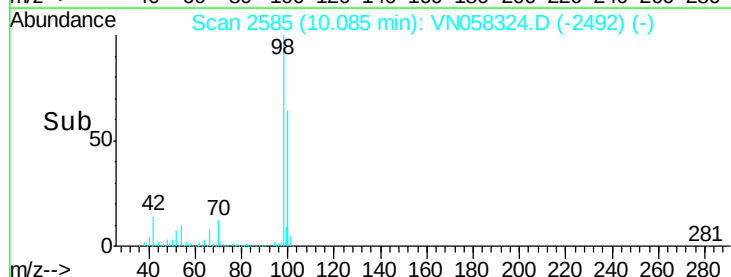
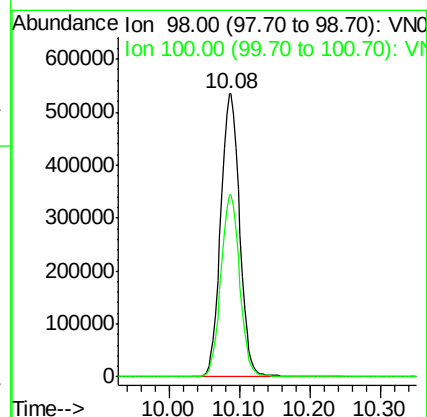
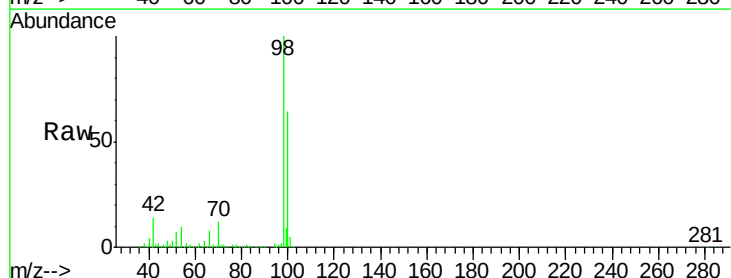
Acq: 24 Sep 2019 3:43

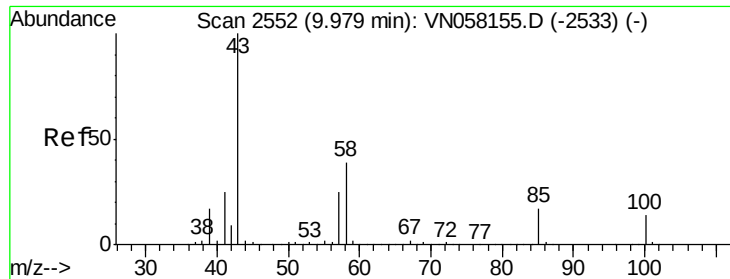
Tgt Ion: 98 Resp: 998009

Ion Ratio Lower Upper

98 100

100 63.7 51.1 76.7

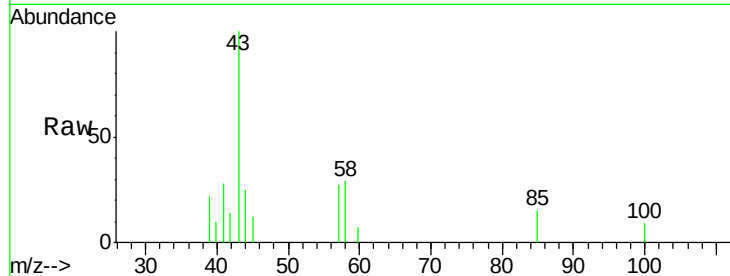




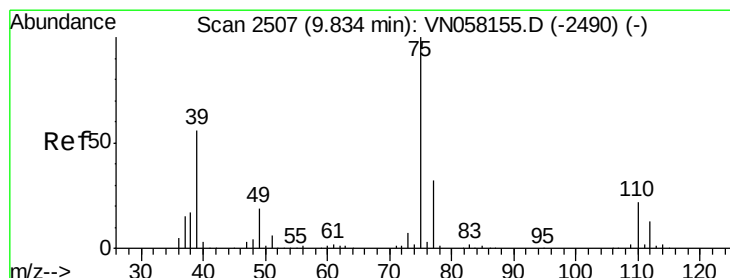
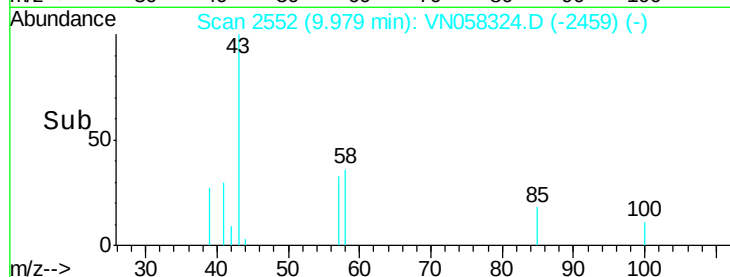
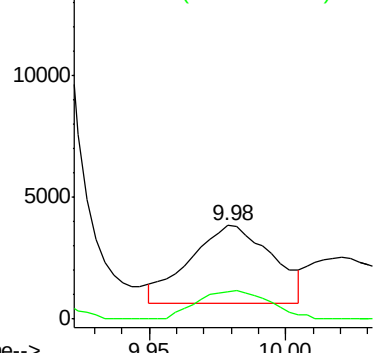
#51
4-Methyl-2-Pentanone
Concen: 1.140 ug/l
RT: 9.98 min Scan# 2552
Delta R.T. -0.00 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 43 Resp: 6702
Ion Ratio Lower Upper
43 100
58 32.5 30.2 45.4

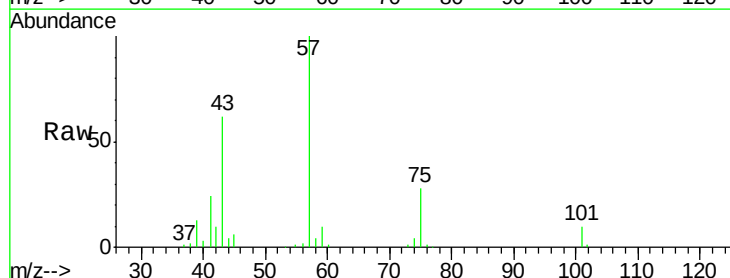


Abundance Ion 43.00 (42.70 to 43.70): VN0
Ion 58.00 (57.70 to 58.70): VN0

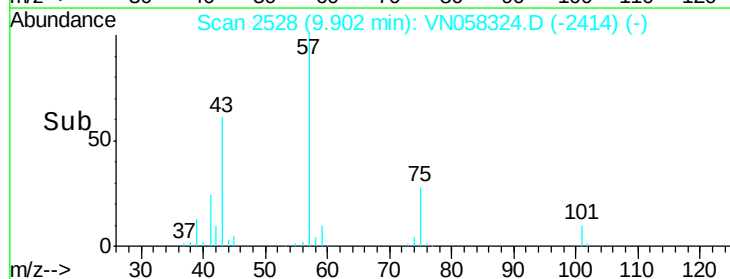
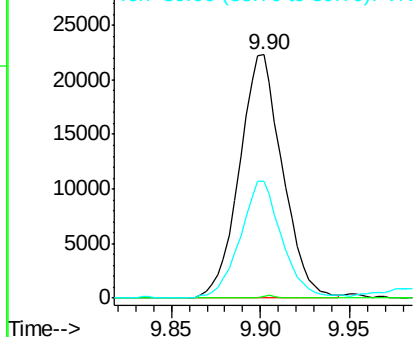


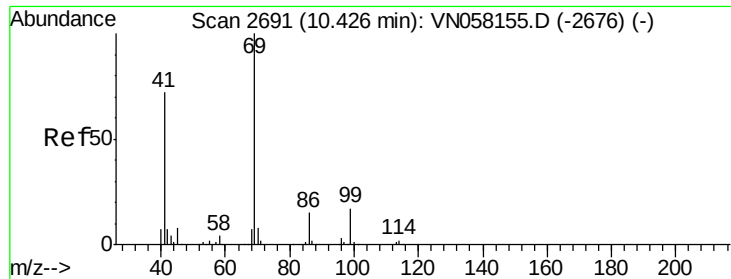
#54
cis-1,3-Dichloropropene
Concen: 5.015 ug/l
RT: 9.90 min Scan# 2528
Delta R.T. 0.07 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion: 75 Resp: 37628
Ion Ratio Lower Upper
75 100
77 0.8 25.4 38.0#
39 48.1 45.0 67.6



Abundance Ion 74.90 (74.60 to 75.60): VN0
Ion 76.90 (76.60 to 77.60): VN0
Ion 39.00 (38.70 to 39.70): VN0





#56

Ethyl methacrylate

Concen: 0.244 ug/l

RT: 10.54 min Scan# 2727

Delta R.T. 0.12 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

ClientSampled :

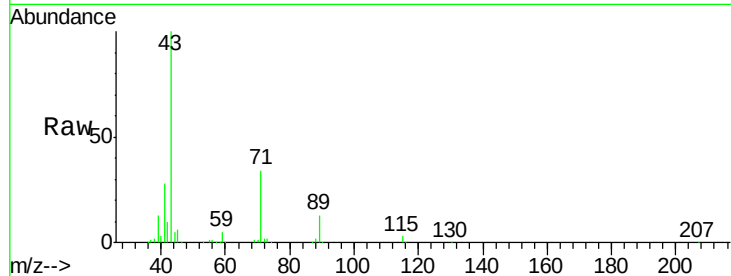
Tot Ion: 69 Resp: 1711

Ion Ratio Lower Upper

69 100

41 5584.7 57.5 86.3#

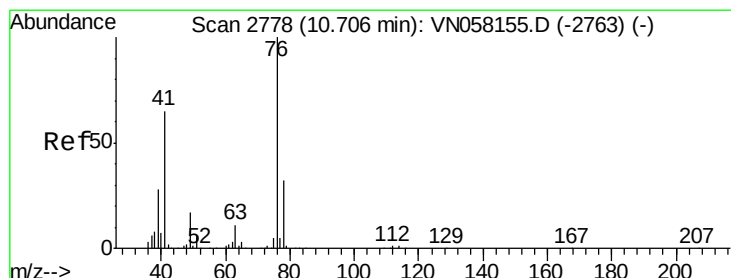
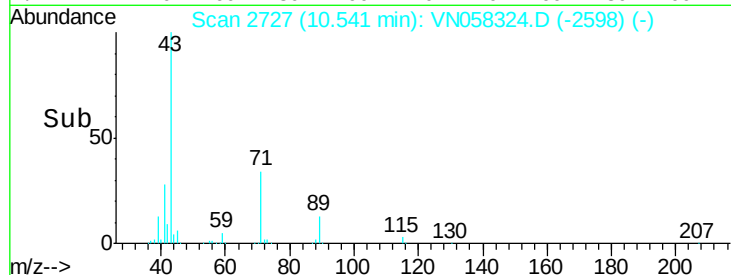
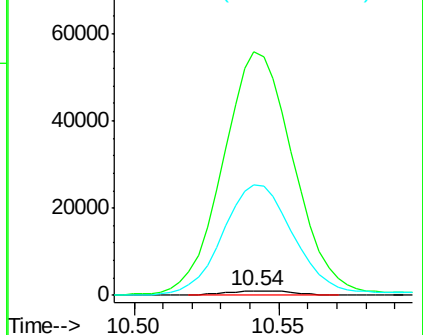
39 2594.7 36.1 54.1#



Abundance Ion 69.00 (68.70 to 69.70): VN0

Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0



#57

1,3-Dichloropropane

Concen: 0.758 ug/l

RT: 10.76 min Scan# 2795

Delta R.T. 0.05 min

Lab File: VN058324.D

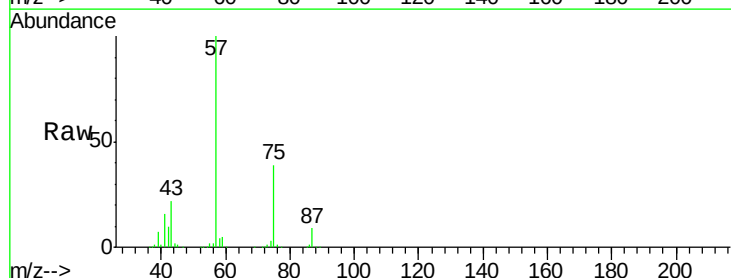
Acq: 24 Sep 2019 3:43

Tgt Ion: 76 Resp: 6320

Ion Ratio Lower Upper

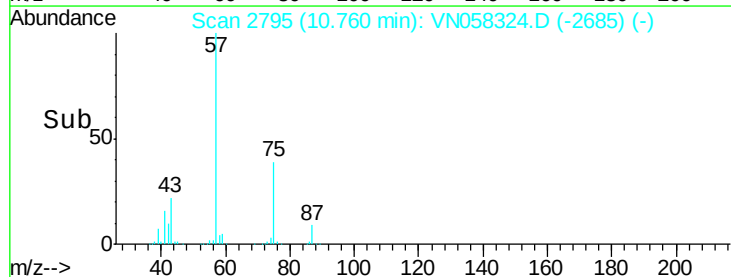
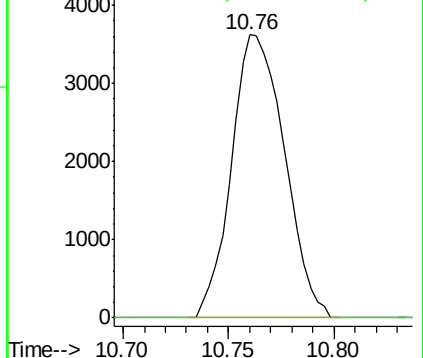
76 100

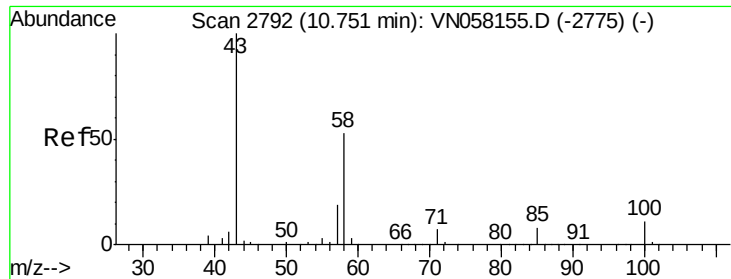
78 0.0 25.4 38.0#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0

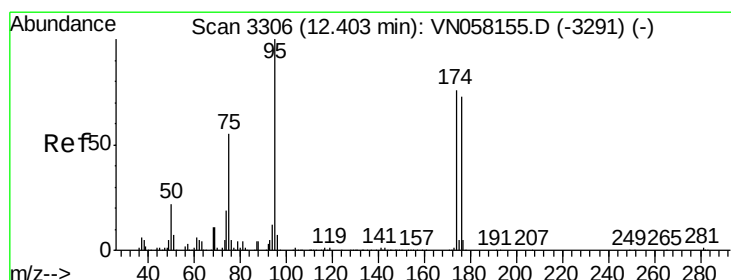
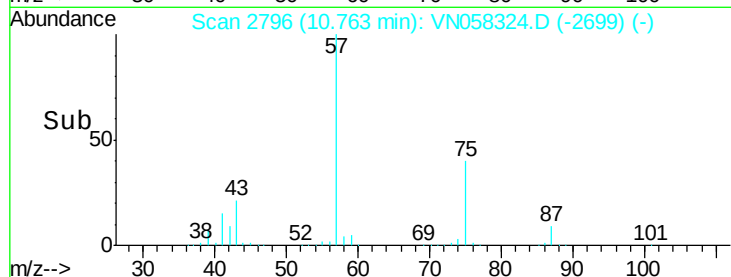
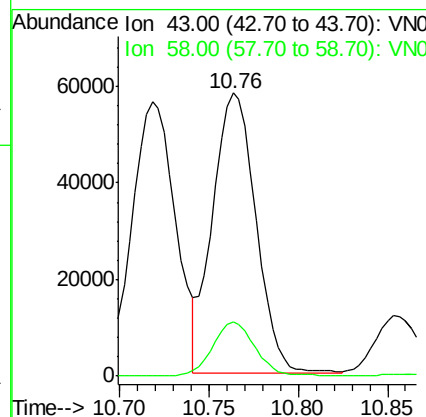
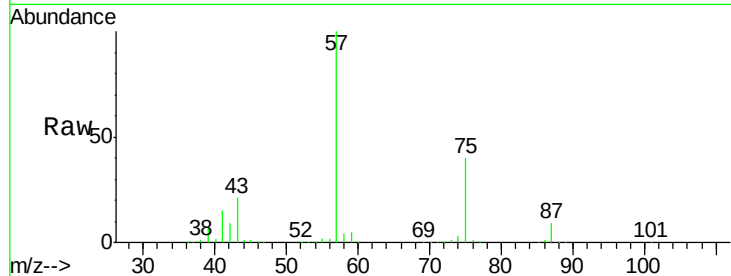




#59
2-Hexanone
Concen: 22.303 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

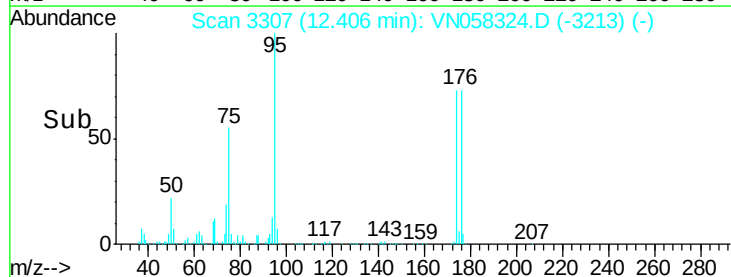
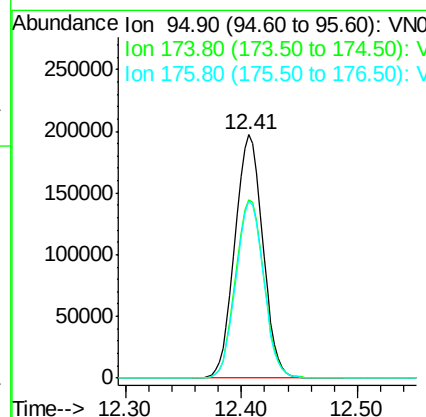
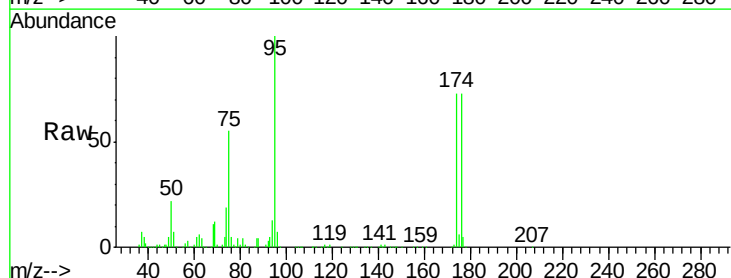
Instrument :
MSVOA_N
ClientSampled :

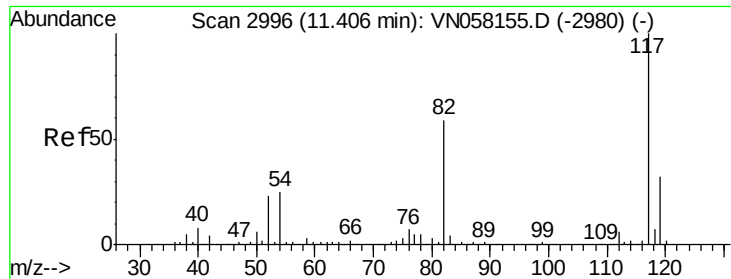
Tot Ion: 43 Resp: 97371
Ion Ratio Lower Upper
43 100
58 19.1 26.0 78.0#



#62
4-Bromofluorobenzene
Concen: 47.167 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. 0.00 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion: 95 Resp: 328588
Ion Ratio Lower Upper
95 100
174 74.2 0.0 152.2
176 72.3 0.0 148.0

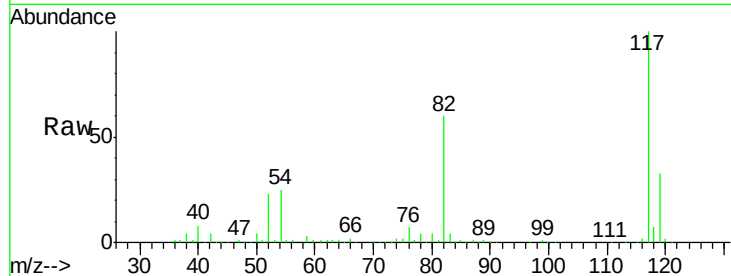




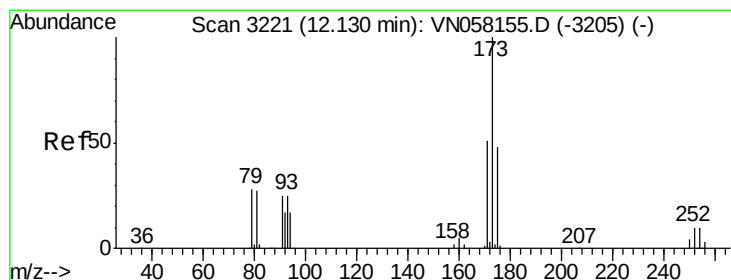
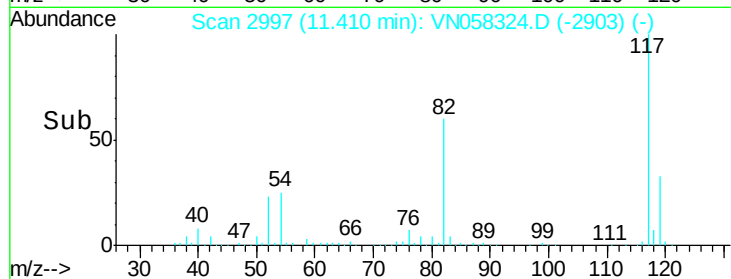
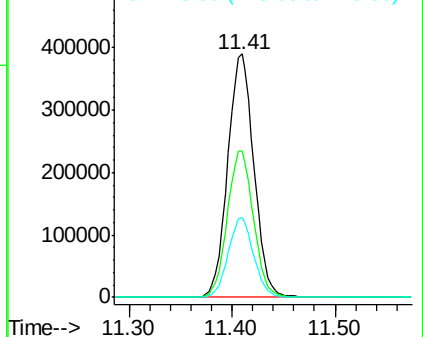
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2997
Delta R.T. 0.00 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:117 Resp: 687860
Ion Ratio Lower Upper
117 100
82 60.1 46.9 70.3
119 32.6 25.3 37.9

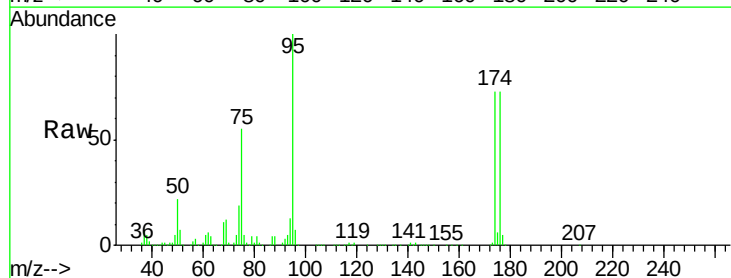


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

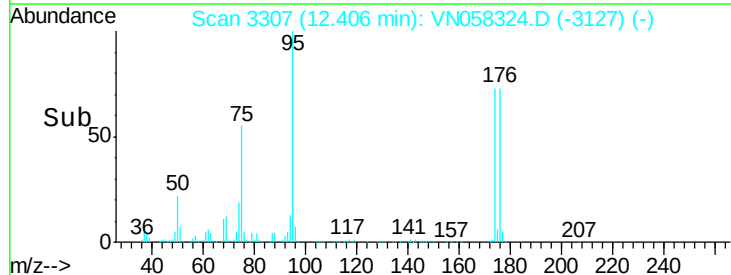
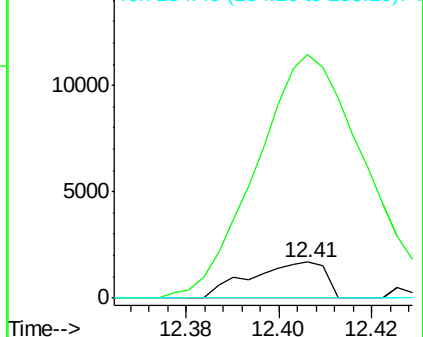


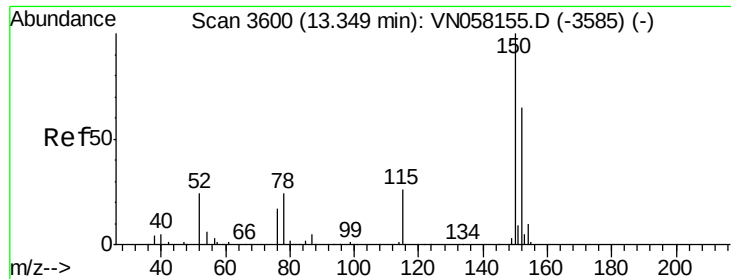
#71
Bromoform
Concen: 4.134 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. 0.28 min
Lab File: VN058324.D
Acq: 24 Sep 2019 3:43

Tgt Ion:173 Resp: 1887
Ion Ratio Lower Upper
173 100
175 809.5 24.2 72.6#
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# 3601

Delta R.T. 0.00 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

ClientSampleId :

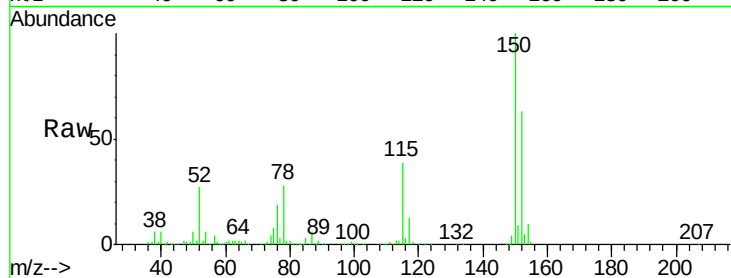
Tot Ion:152 Resp: 281938

Ion Ratio Lower Upper

152 100

115 62.6 30.1 90.3

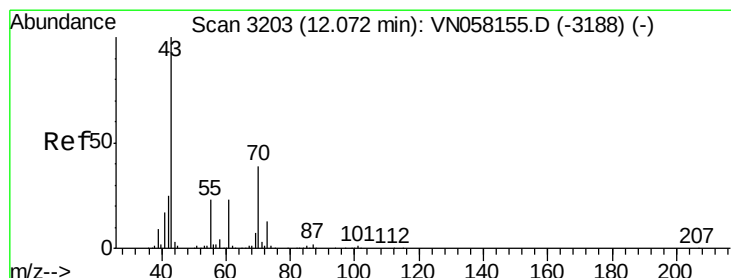
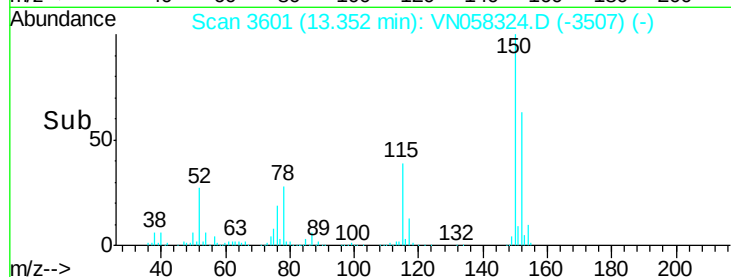
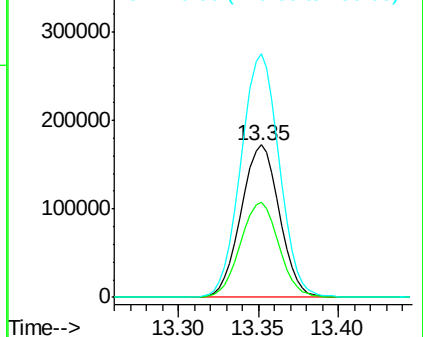
150 159.8 0.0 346.4



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-amil acetate

Concen: 0.510 ug/l

RT: 12.04 min Scan# 3193

Delta R.T. -0.03 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Tgt Ion: 43 Resp: 3765

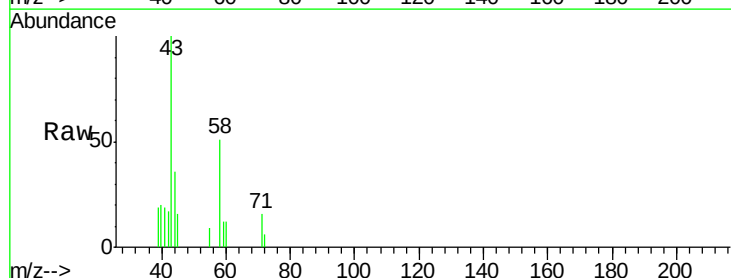
Ion Ratio Lower Upper

43 100

70 0.0 31.0 46.6#

55 8.0 18.5 27.7#

61 0.0 18.2 27.2#

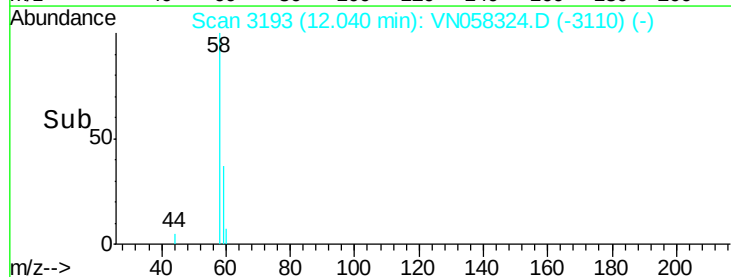
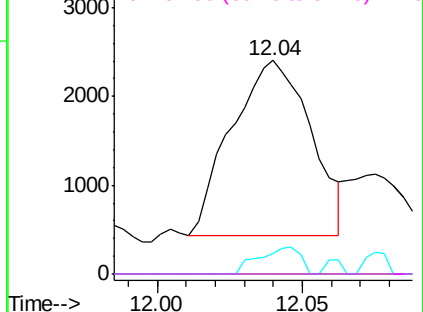


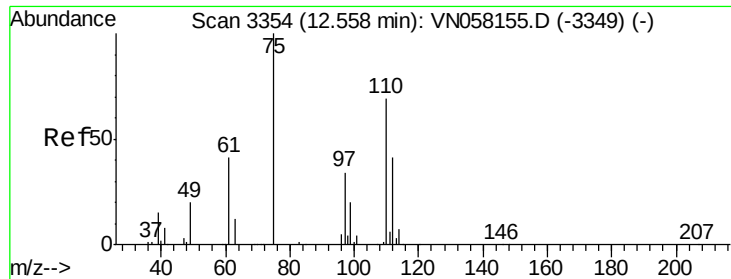
Abundance Ion 43.00 (42.70 to 43.70): VNO

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





#76

1,2,3-Trichloropropane

Concen: 35.220 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

Instrument :

MSVOA_N

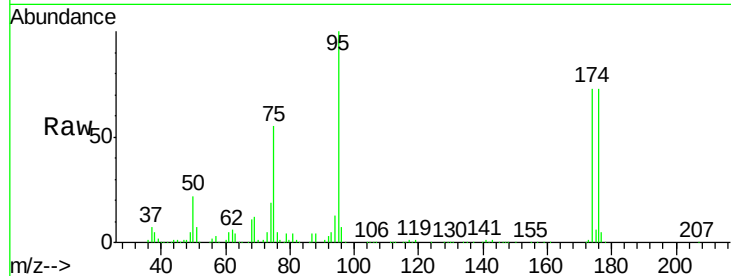
ClientSampled :

Tot Ion: 75 Resp: 177712

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

12.41

120000

100000

80000

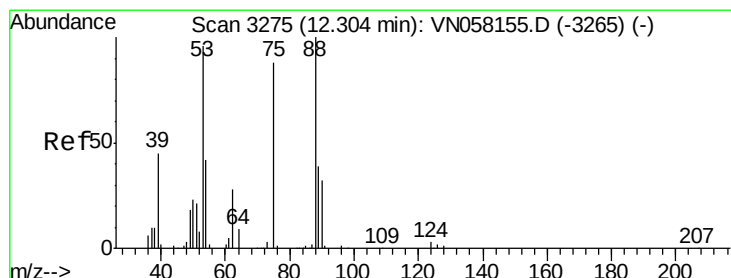
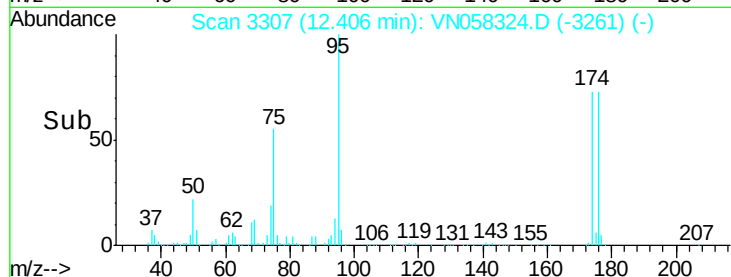
60000

40000

20000

0

Time-->



#81

trans-1,4-Dichloro-2-butene

Concen: 98.486 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058324.D

Acq: 24 Sep 2019 3:43

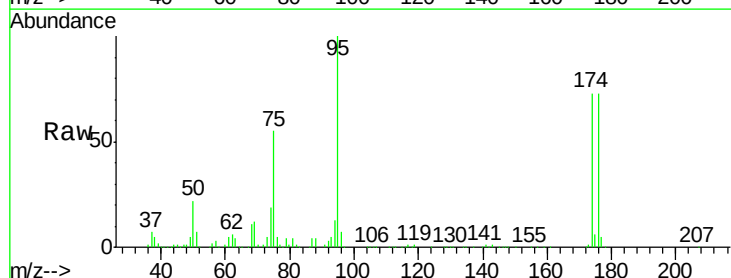
Tgt Ion: 75 Resp: 177712

Ion Ratio Lower Upper

75 100

53 0.0 90.1 135.1#

89 0.0 36.2 54.2#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

150000

100000

50000

0

Time-->

