

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091019\
 Data File : VN057851.D
 Acq On : 10 Sep 2019 10:56
 Operator : JC/SP
 Sample : K4622-32
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 57 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Sep 10 11:35:46 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	297616	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	510098	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	471467	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	246566	50.00	ug/l	0.00

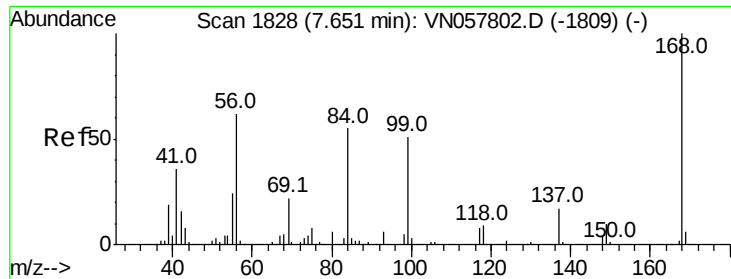
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.01	65	327493	54.33	ug/l	0.00
Spiked Amount	50.000		Recovery	=	108.66%	
35) Dibromofluoromethane	7.58	113	221873	47.13	ug/l	0.00
Spiked Amount	50.000		Recovery	=	94.26%	
50) Toluene-d8	10.08	98	935241	51.16	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.32%	
62) 4-Bromofluorobenzene	12.40	95	303209	43.53	ug/l	0.00
Spiked Amount	50.000		Recovery	=	87.06%	

Target Compounds

					Qvalue
5) Bromomethane	2.56	94	156	Below Cal	# 2
11) Tert butyl alcohol	4.75	59	312	0.428	ug/l # 72
16) Acetone	3.80	43	11040	5.587	ug/l 98
18) Methyl Acetate	4.31	43	6364	1.208	ug/l 95
20) Methylene Chloride	4.54	84	7854	0.878	ug/l 97
25) 2-Butanone	6.81	43	945	0.330	ug/l # 49
29) Tetrahydrofuran	7.21	42	1055	0.599	ug/l # 40
31) Cyclohexane	7.65	56	8069	Below Cal	# 20
36) 1,1-Dichloropropene	7.65	75	25724	4.348	ug/l # 51
38) Carbon Tetrachloride	7.65	117	31312	5.797	ug/l # 15
43) Isopropyl Acetate	8.16	43	100191	9.748	ug/l # 85
45) 1,2-Dichloropropane	9.25	63	1723	0.332	ug/l # 44
48) Methyl methacrylate	9.18	41	4860	0.932	ug/l # 13
51) 4-Methyl-2-Pentanone	9.98	43	4010	0.659	ug/l # 61
54) cis-1,3-Dichloropropene	9.90	75	34933	4.805	ug/l # 66
56) Ethyl methacrylate	10.54	69	1745	0.244	ug/l # 1
57) 1,3-Dichloropropane	10.76	76	6500	0.794	ug/l # 43
59) 2-Hexanone	10.76	43	96377	21.139	ug/l # 53
71) Bromoform	12.41	173	1271	0.476	ug/l # 1
74) N-amyl acetate	12.04	43	2825	0.339	ug/l # 48
76) 1,2,3-Trichloropropane	12.40	75	169718	30.428	ug/l # 100
81) trans-1,4-Dichloro-2-buten	12.40	75	169718	107.076	ug/l # 6
95) Naphthalene	15.14	128	668	Below Cal	# 69
96) 1,2,3-Trichlorobenzene	15.30	180	60	1.010	ug/l # 12

(#) = 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: VN057851.D

Acq: 10 Sep 2019 10:56

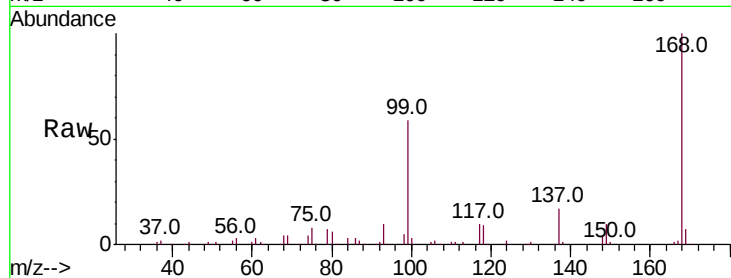
Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:168 Resp: 297616

Ion Ratio Lower Upper

168 100

99 59.1 48.0 72.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

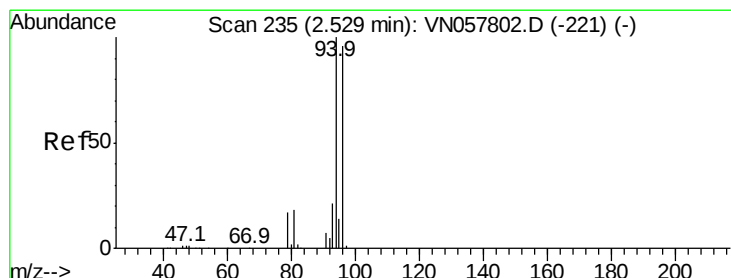
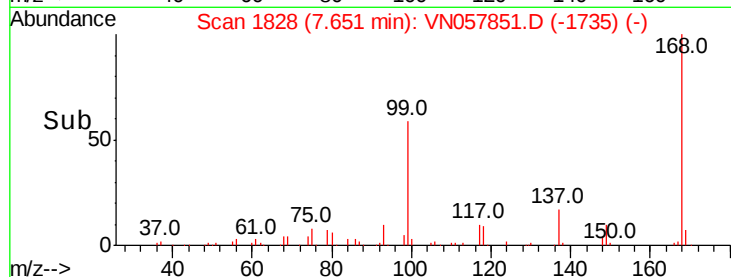
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.56 min Scan# 245

Delta R.T. 0.03 min

Lab File: VN057851.D

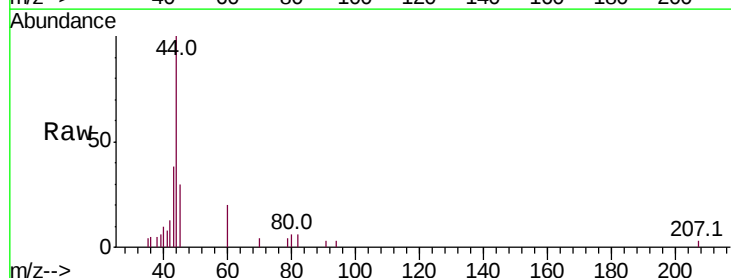
Acq: 10 Sep 2019 10:56

Tgt Ion: 94 Resp: 156

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO

2.56

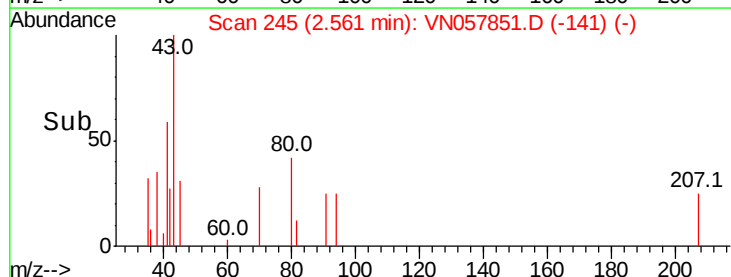
150

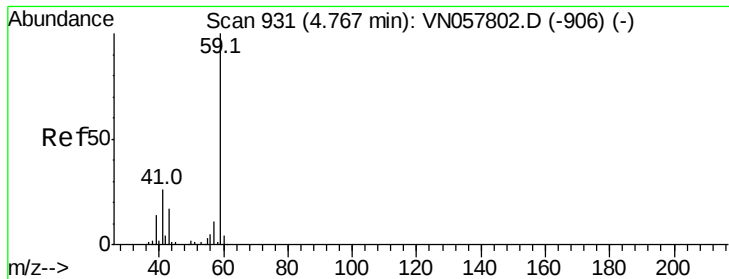
100

50

0

Time-->



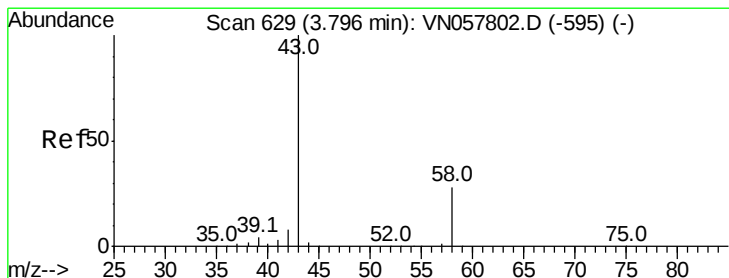
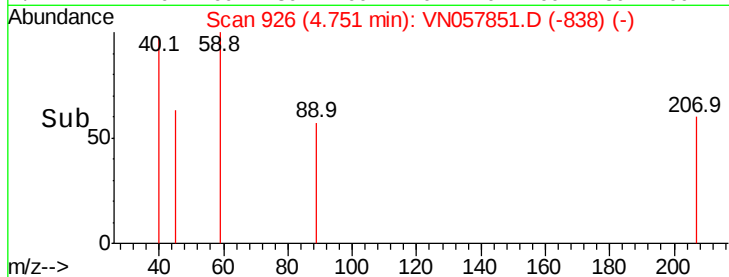
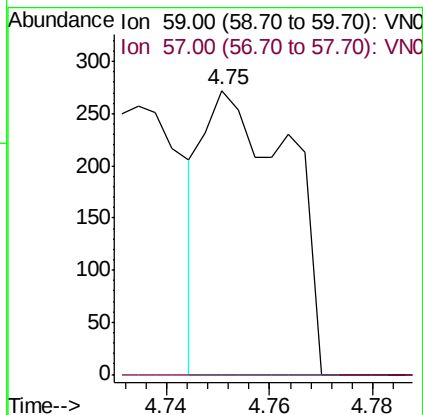
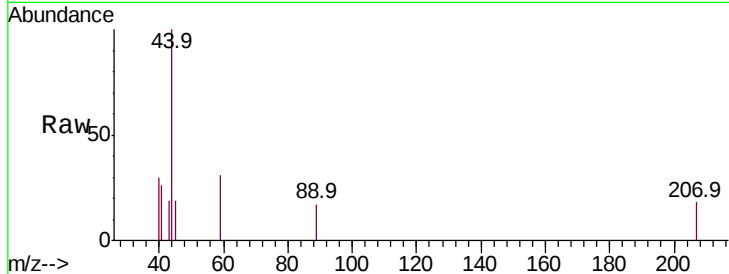


#11

Tert butyl alcohol
Concen: 0.428 ug/l
RT: 4.75 min Scan# 926
Delta R.T. -0.02 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Instrument :
MSVOA_N
ClientSampled :

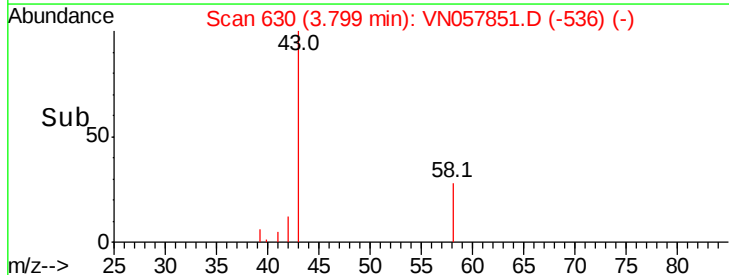
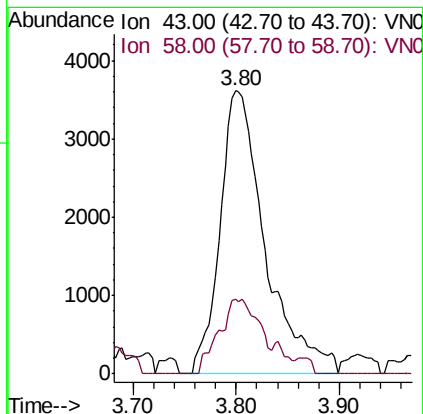
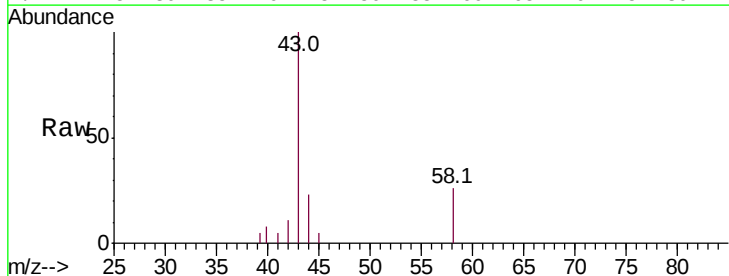
Tot Ion: 59 Resp: 312
Ion Ratio Lower Upper
59 100
57 0.0 8.4 12.6#

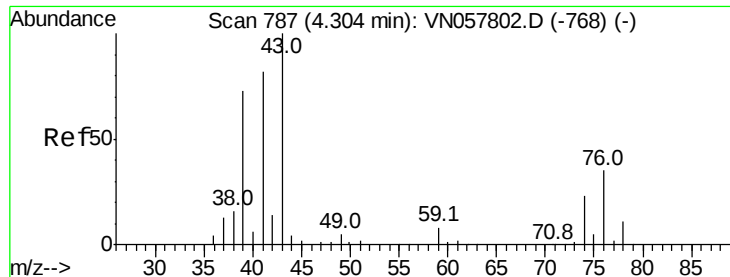


#16

Acetone
Concen: 5.587 ug/l
RT: 3.80 min Scan# 630
Delta R.T. 0.00 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Tgt Ion: 43 Resp: 11040
Ion Ratio Lower Upper
43 100
58 26.4 22.2 33.2

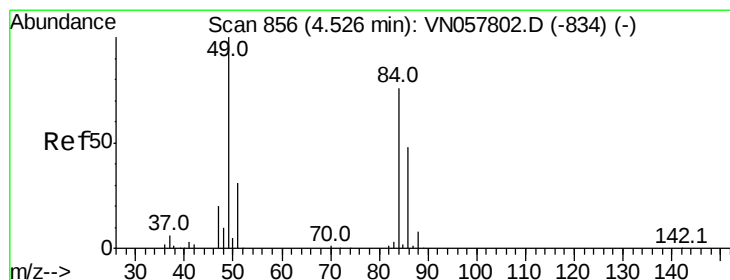
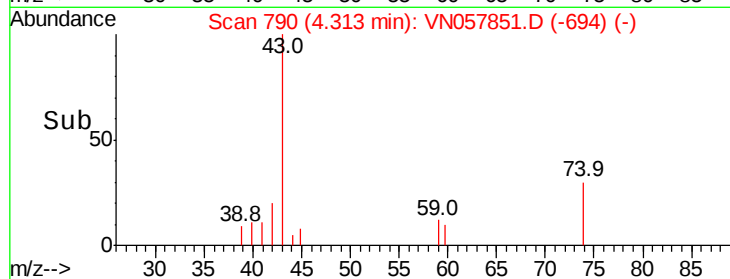
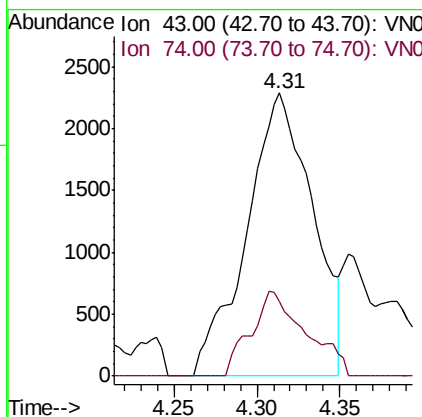
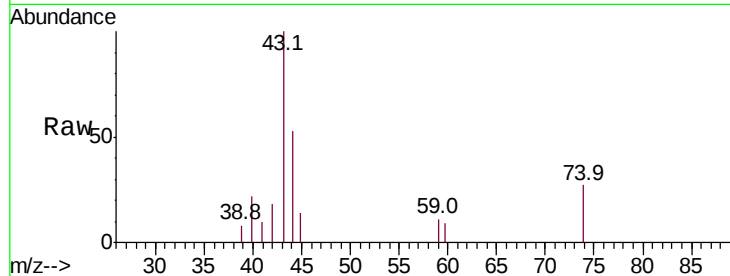




#18
Methyl Acetate
Concen: 1.208 ug/l
RT: 4.31 min Scan# 790
Delta R.T. 0.01 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

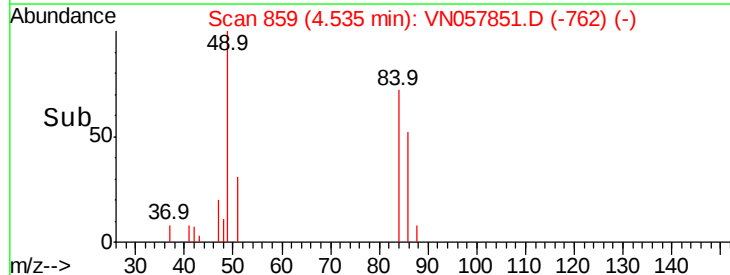
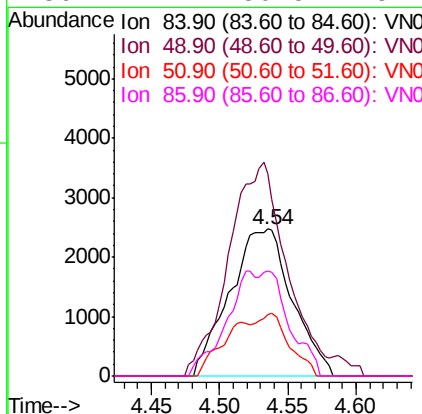
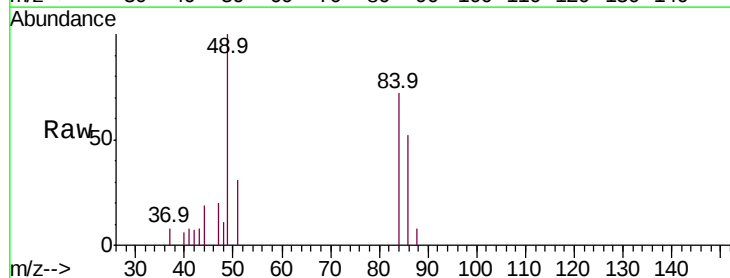
Instrument :
MSVOA_N
ClientSampled :

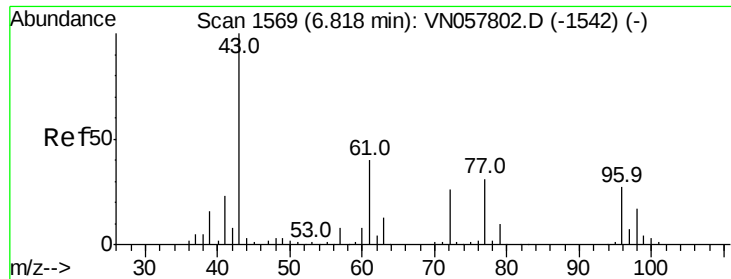
Tot Ion: 43 Resp: 6364
Ion Ratio Lower Upper
43 100
74 24.9 17.9 26.9



#20
Methylene Chloride
Concen: 0.878 ug/l
RT: 4.54 min Scan# 859
Delta R.T. 0.01 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Tgt Ion: 84 Resp: 7854
Ion Ratio Lower Upper
84 100
49 130.6 104.8 157.2
51 42.3 33.0 49.4
86 71.7 50.5 75.7

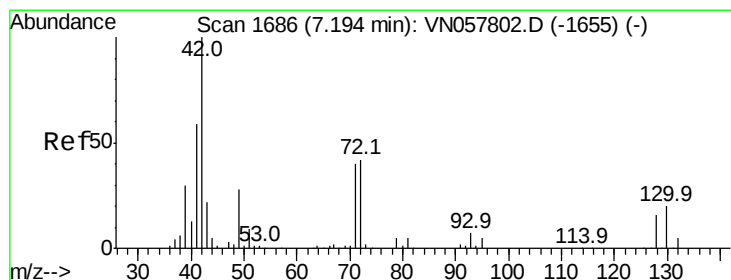
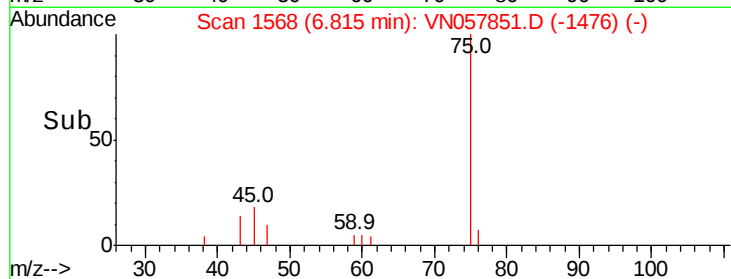
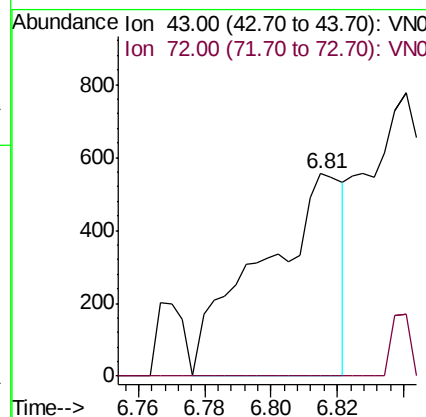
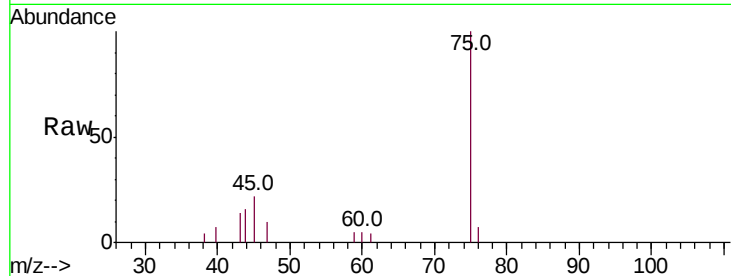




#25
2-Butanone
Concen: 0.330 ug/l
RT: 6.81 min Scan# 1568
Delta R.T. -0.00 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

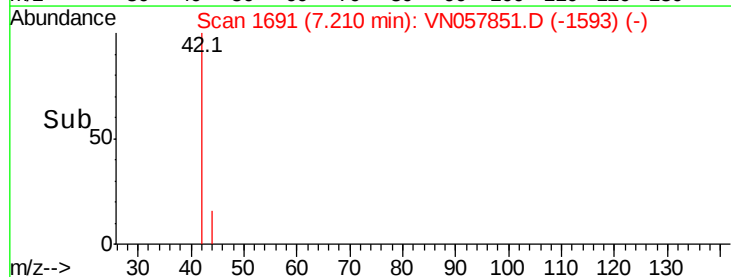
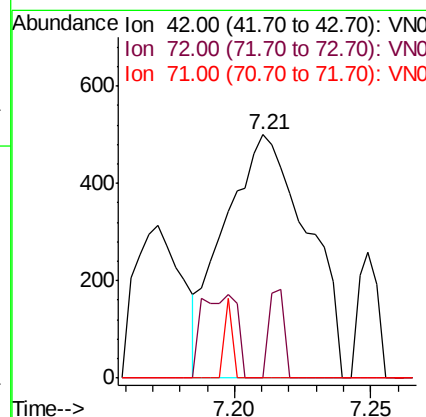
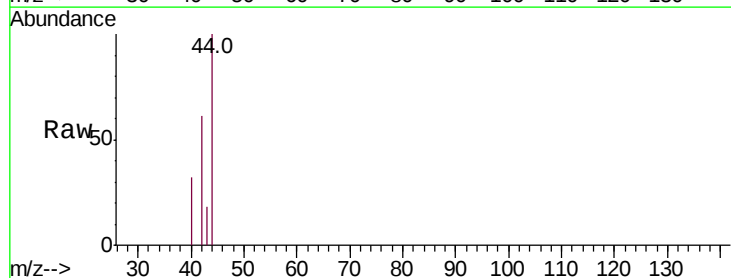
Instrument :
MSVOA_N
ClientSampled :

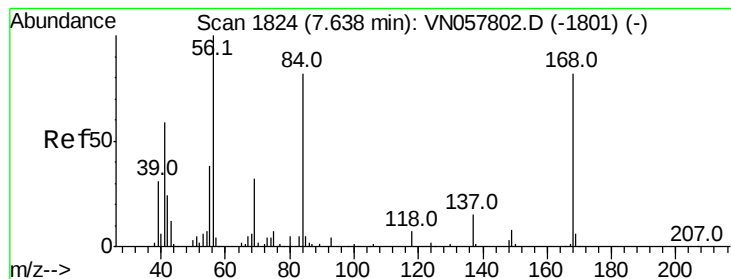
Tot Ion: 43 Resp: 945
Ion Ratio Lower Upper
43 100
72 0.0 20.6 30.8#



#29
Tetrahydrofuran
Concen: 0.599 ug/l
RT: 7.21 min Scan# 1691
Delta R.T. 0.02 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Tgt Ion: 42 Resp: 1055
Ion Ratio Lower Upper
42 100
72 6.5 33.7 50.5#
71 0.0 31.9 47.9#





#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1828

Delta R.T. 0.01 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :
MSVOA_N
ClientSampleId :

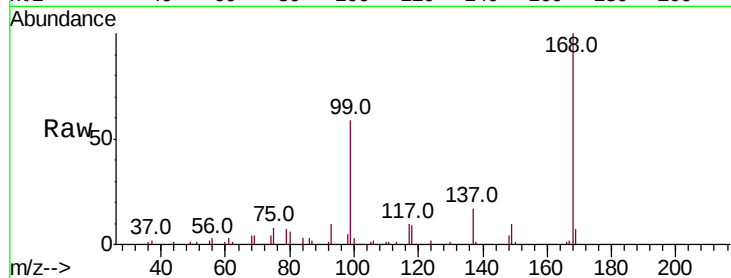
Tot Ion: 56 Resp: 8069

Ion Ratio Lower Upper

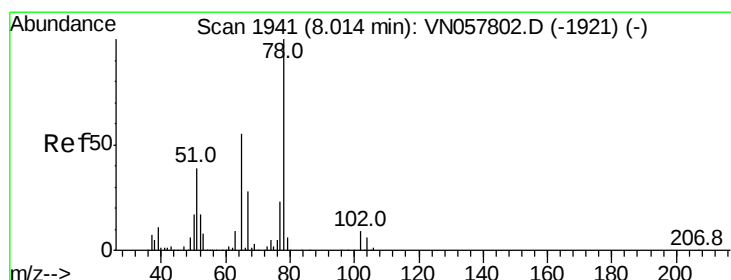
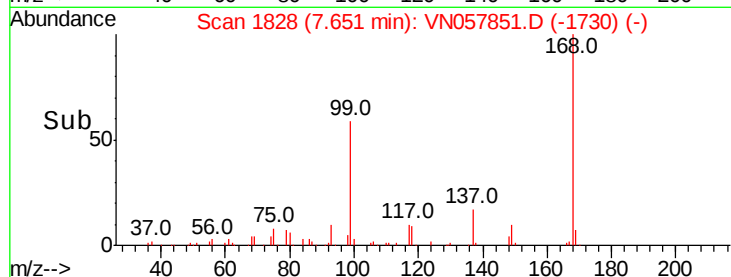
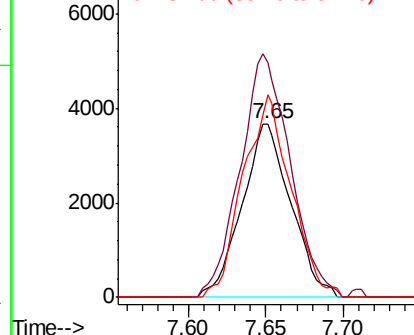
56 100

69 135.7 25.9 38.9#

84 117.3 65.6 98.4#



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



#33

1,2-Dichloroethane-d4

Concen: 54.329 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN057851.D

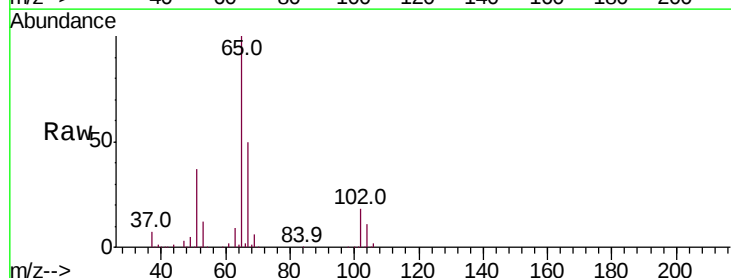
Acq: 10 Sep 2019 10:56

Tgt Ion: 65 Resp: 327493

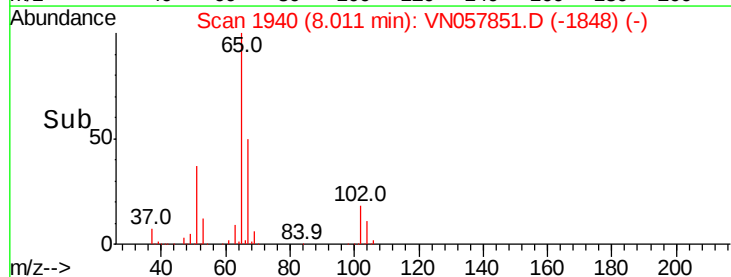
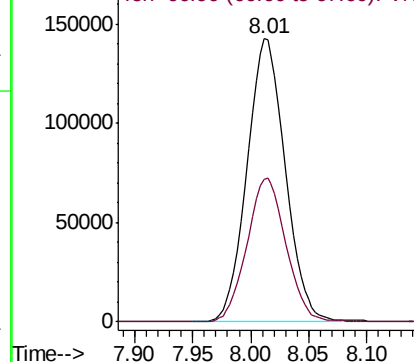
Ion Ratio Lower Upper

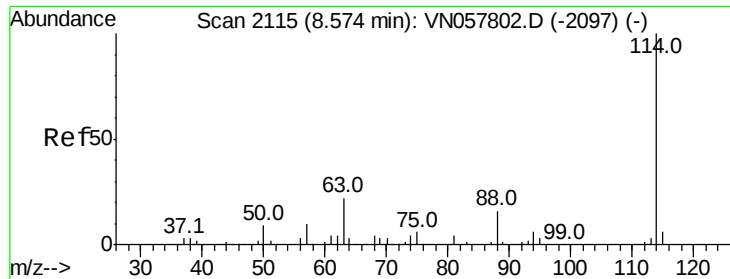
65 100

67 51.8 0.0 104.0



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

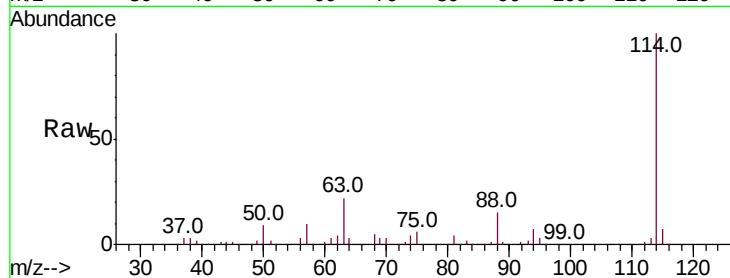




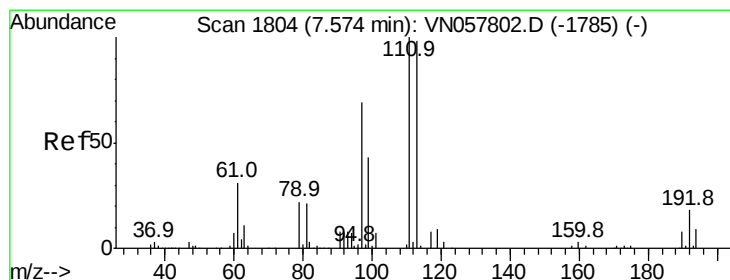
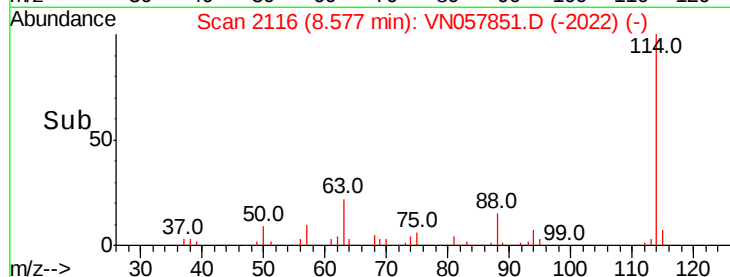
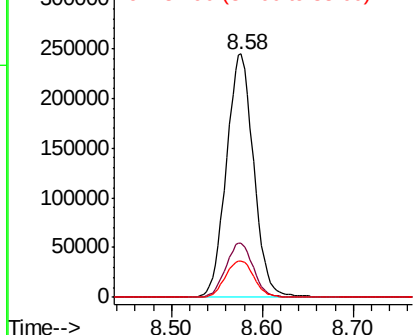
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.58 min Scan# 2116
 Delta R.T. 0.00 min
 Lab File: VN057851.D
 Acq: 10 Sep 2019 10:56

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion:114 Resp: 510098
 Ion Ratio Lower Upper
 114 100
 63 22.1 0.0 44.0
 88 15.0 0.0 31.4

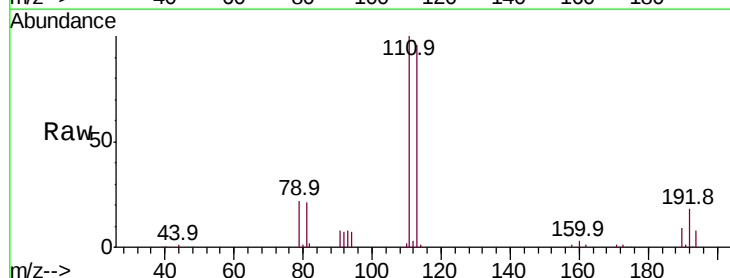


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VN
 Ion 87.90 (87.60 to 88.60): VN

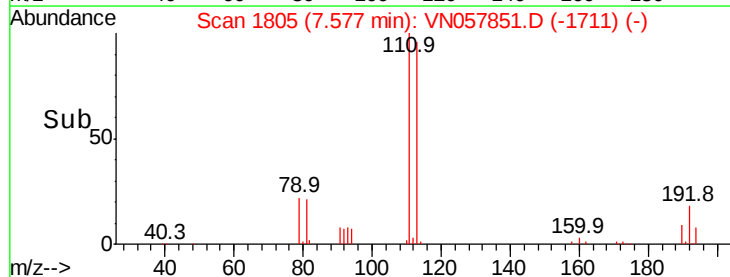
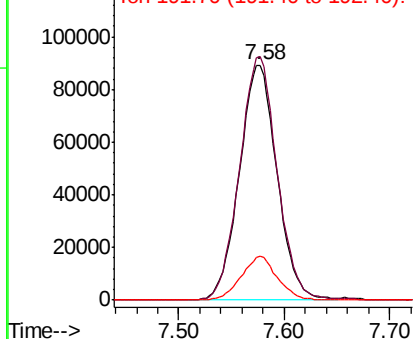


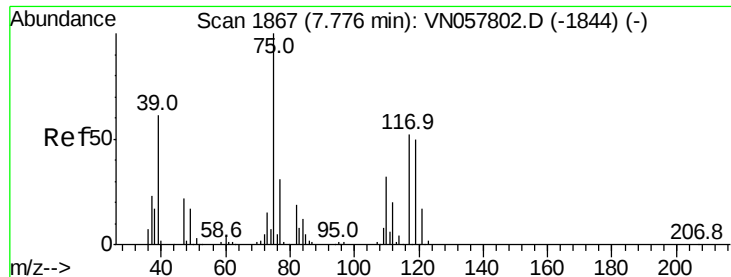
#35
 Dibromofluoromethane
 Concen: 47.127 ug/l
 RT: 7.58 min Scan# 1805
 Delta R.T. 0.00 min
 Lab File: VN057851.D
 Acq: 10 Sep 2019 10:56

Tgt Ion:113 Resp: 221873
 Ion Ratio Lower Upper
 113 100
 111 103.7 81.3 121.9
 192 17.8 14.6 22.0



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

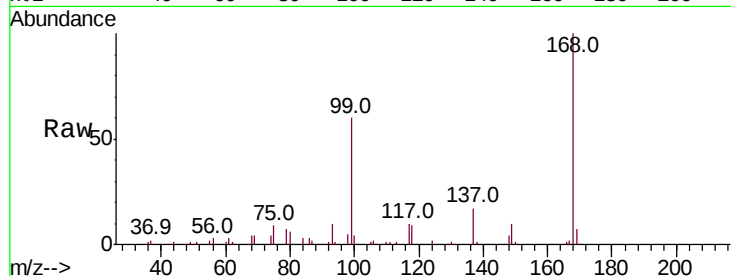




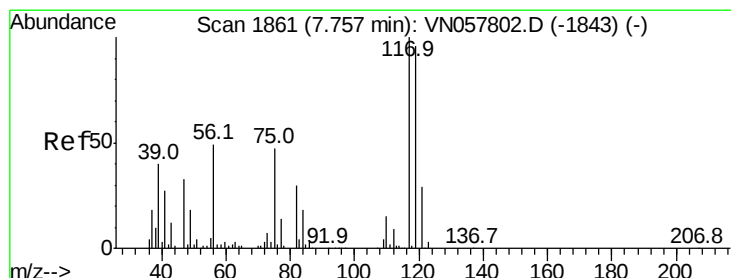
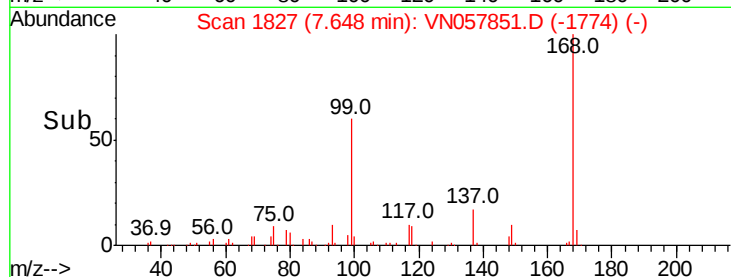
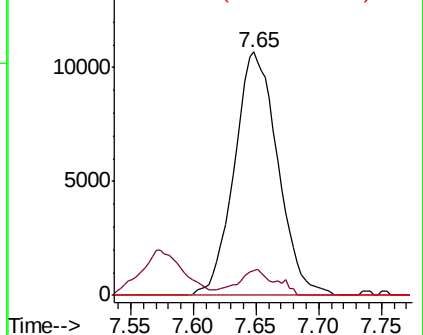
#36
 1,1-Dichloropropene
 Concen: 4.348 ug/l
 RT: 7.65 min Scan# 1827
 Delta R.T. -0.13 min
 Lab File: VN057851.D
 Acq: 10 Sep 2019 10:56

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion: 75 Resp: 25724
 Ion Ratio Lower Upper
 75 100
 110 9.1 16.3 48.9#
 77 0.0 25.0 37.4#

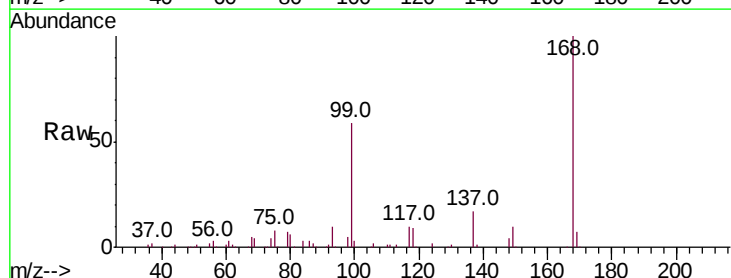


Abundance Ion 74.90 (74.60 to 75.60): VN057802.D (-1844) (-)
 Ion 109.90 (109.60 to 110.60): VN057802.D (-1844) (-)
 Ion 76.90 (76.60 to 77.60): VN057802.D (-1844) (-)

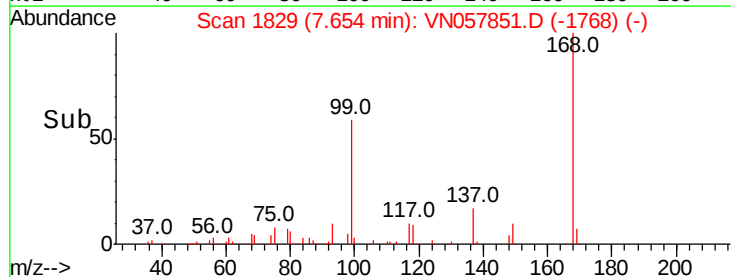
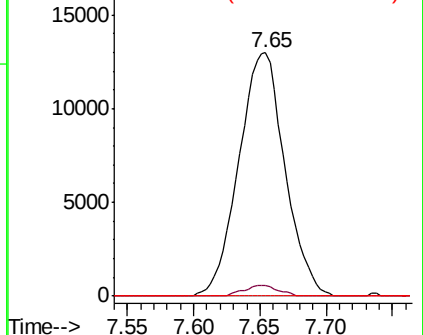


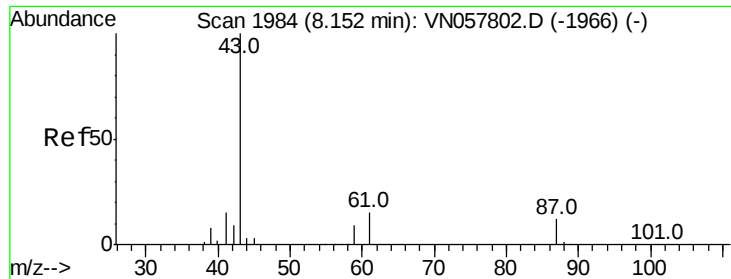
#38
 Carbon Tetrachloride
 Concen: 5.797 ug/l
 RT: 7.65 min Scan# 1829
 Delta R.T. -0.10 min
 Lab File: VN057851.D
 Acq: 10 Sep 2019 10:56

Tgt Ion: 117 Resp: 31312
 Ion Ratio Lower Upper
 117 100
 119 4.1 76.9 115.3#
 121 0.0 23.4 35.2#



Abundance Ion 116.80 (116.50 to 117.50): VN057802.D (-1843) (-)
 Ion 118.80 (118.50 to 119.50): VN057802.D (-1843) (-)
 Ion 120.80 (120.50 to 121.50): VN057802.D (-1843) (-)





#43

Isopropyl Acetate

Concen: 9.748 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.00 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

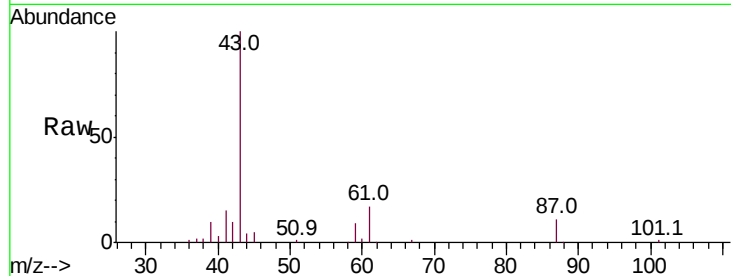
Instrument :

MSVOA_N

ClientSampled :

Tot Ion: 43 Resp: 100191

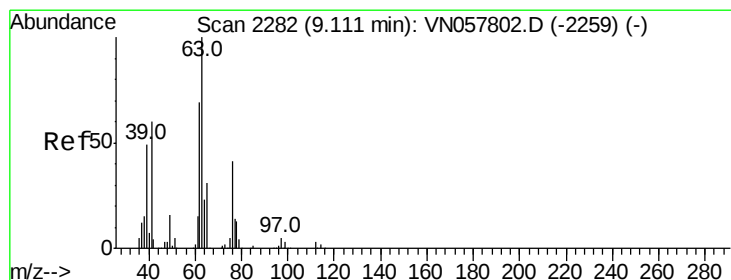
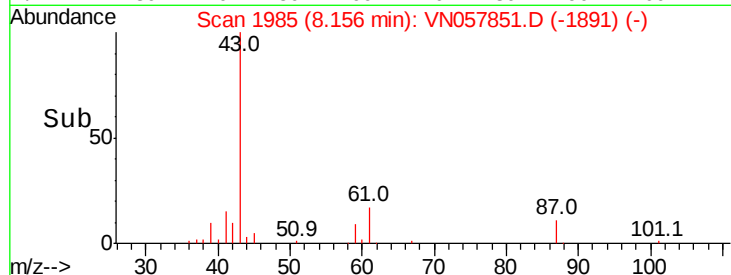
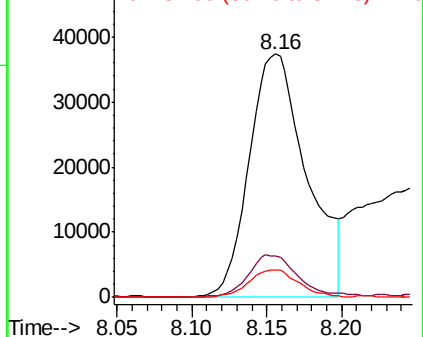
Ion	Ratio	Lower	Upper
43	100		
61	15.4	20.1	30.1#
87	9.8	9.5	14.3



Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 61.00 (60.70 to 61.70): VNO

Ion 87.00 (86.70 to 87.70): VNO



#45

1,2-Dichloropropane

Concen: 0.332 ug/l

RT: 9.25 min Scan# 2326

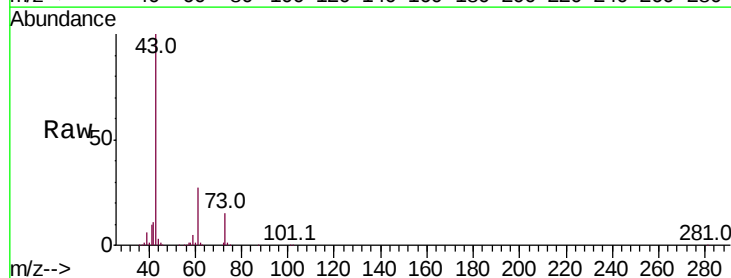
Delta R.T. 0.14 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

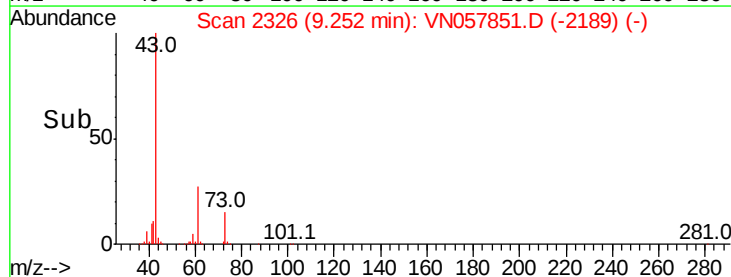
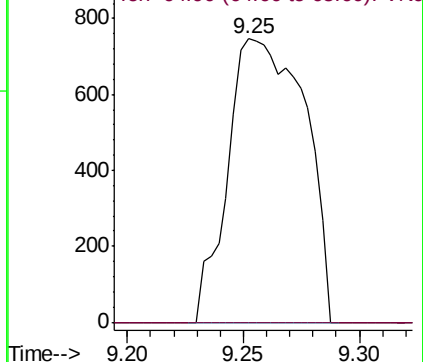
Tgt Ion: 63 Resp: 1723

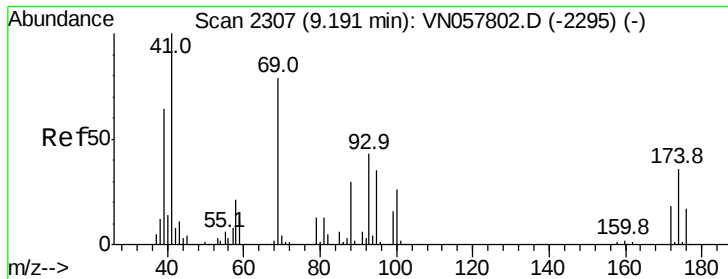
Ion	Ratio	Lower	Upper
63	100		
65	0.0	24.8	37.2#



Abundance Ion 62.90 (62.60 to 63.60): VNO

Ion 64.90 (64.60 to 65.60): VNO





#48

Methvl methacrylate

Concen: 0.932 ug/l

RT: 9.18 min Scan# 2302

Delta R.T. -0.02 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :
MSVOA_N
ClientSampled :

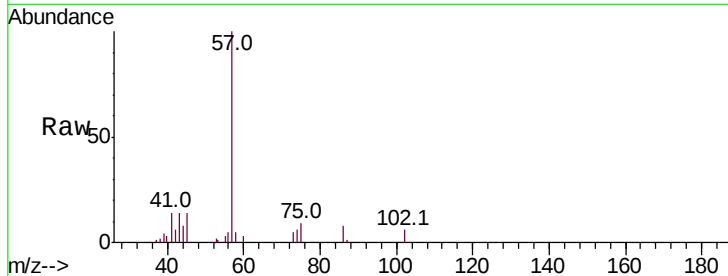
Tot Ion: 41 Resp: 4860

Ion Ratio Lower Upper

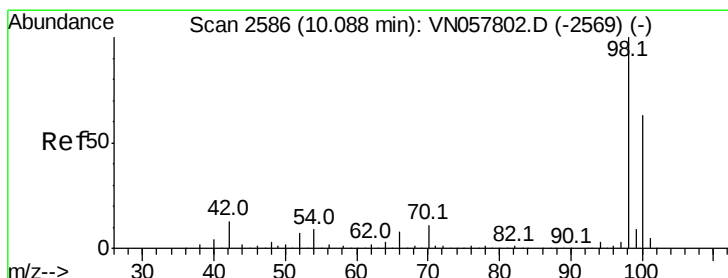
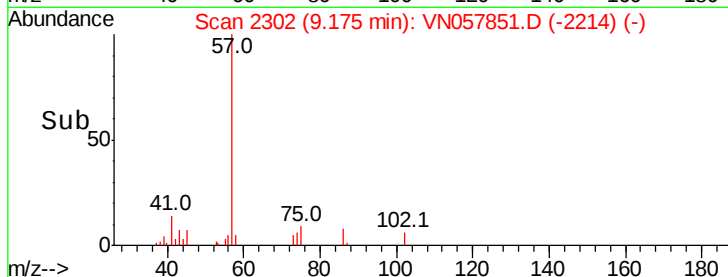
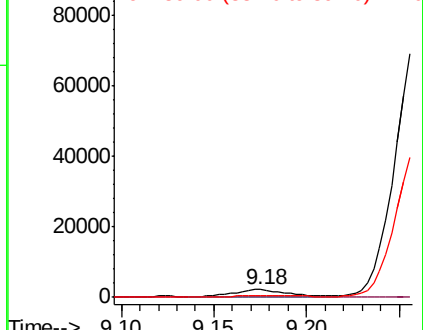
41 100

69 0.0 62.7 94.1#

39 0.0 52.7 79.1#



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: 51.165 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN057851.D

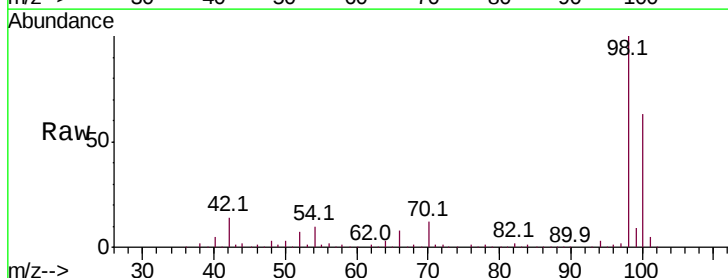
Acq: 10 Sep 2019 10:56

Tgt Ion: 98 Resp: 935241

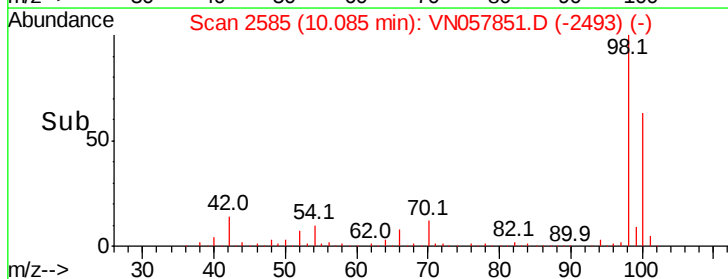
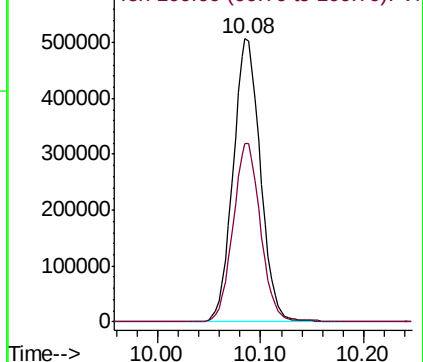
Ion Ratio Lower Upper

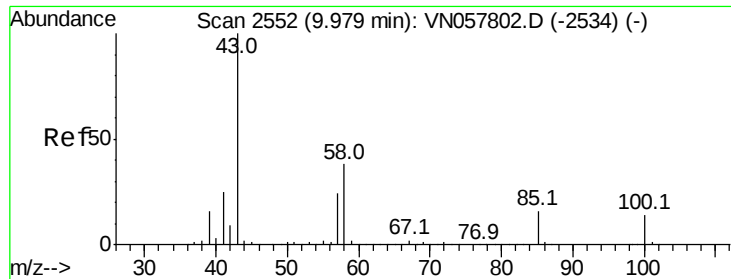
98 100

100 63.5 50.3 75.5



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: 0.659 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :

MSVOA_N

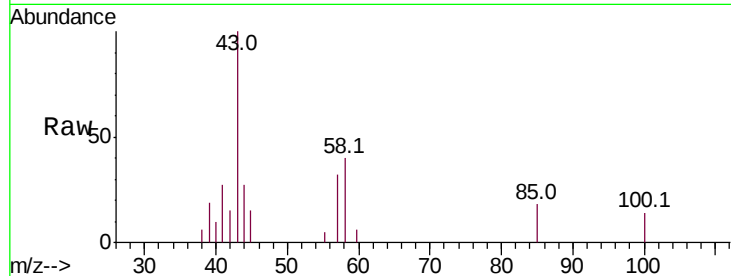
ClientSampled :

Tot Ion: 43 Resp: 4010

Ion Ratio Lower Upper

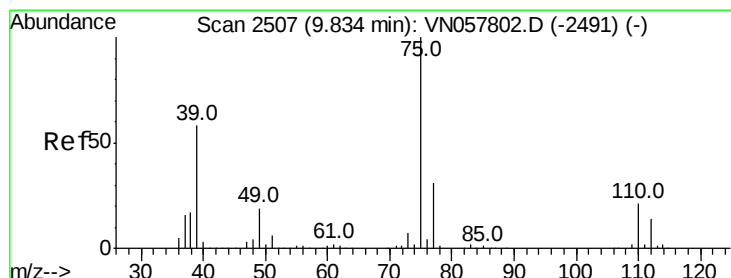
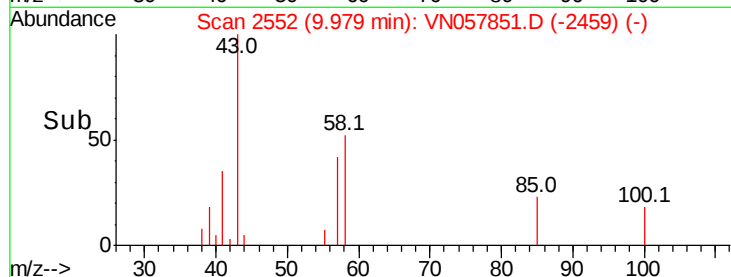
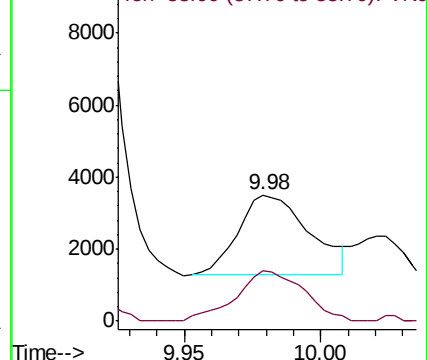
43 100

58 60.3 29.8 44.6#



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: 4.805 ug/l

RT: 9.90 min Scan# 2528

Delta R.T. 0.07 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

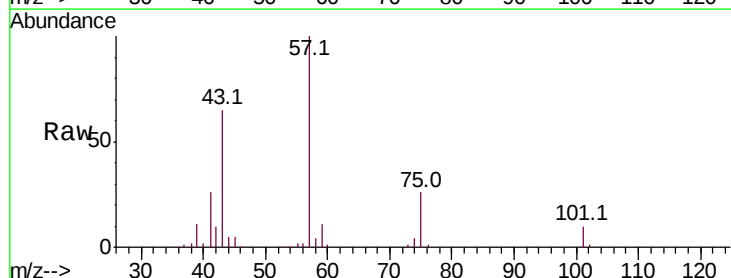
Tgt Ion: 75 Resp: 34933

Ion Ratio Lower Upper

75 100

77 0.0 24.8 37.2#

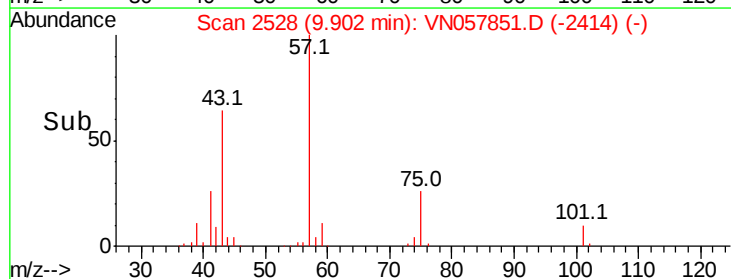
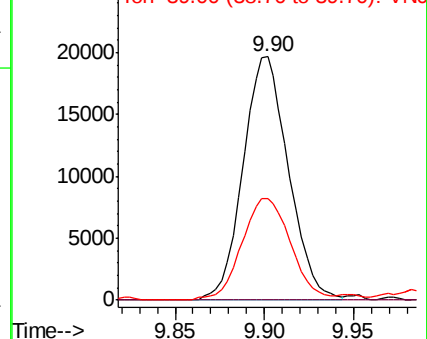
39 41.7 46.2 69.4#

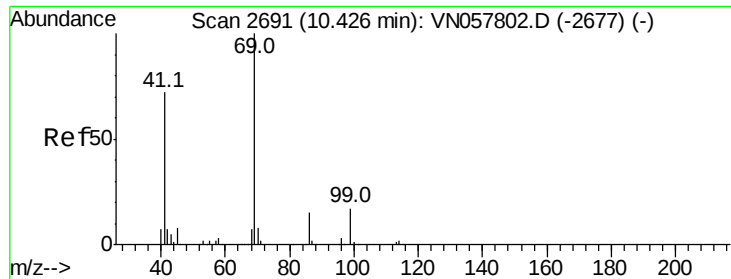


Abundance Ion 74.90 (74.60 to 75.60): VN0

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# 2728

Delta R.T. 0.12 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :

MSVOA_N

ClientSampled :

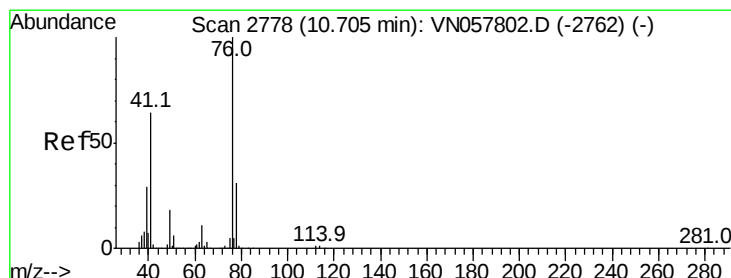
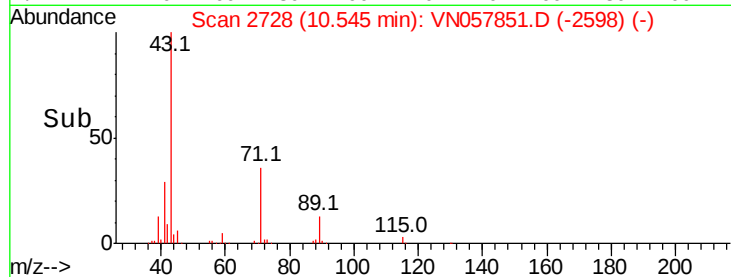
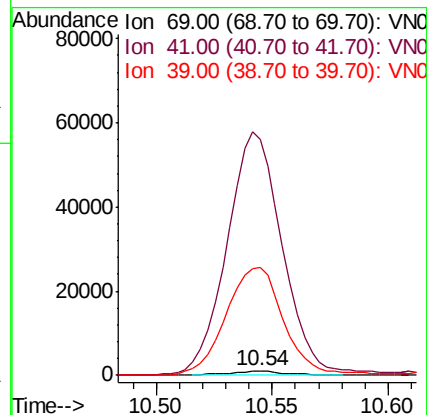
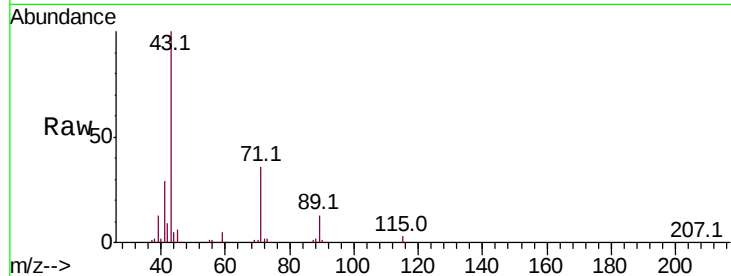
Tot Ion: 69 Resp: 1745

Ion Ratio Lower Upper

69 100

41 5527.1 56.7 85.1#

39 2546.6 36.3 54.5#



#57

1,3-Dichloropropane

Concen: 0.794 ug/l

RT: 10.76 min Scan# 2795

Delta R.T. 0.05 min

Lab File: VN057851.D

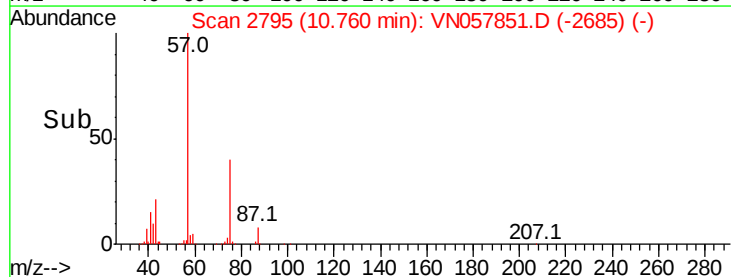
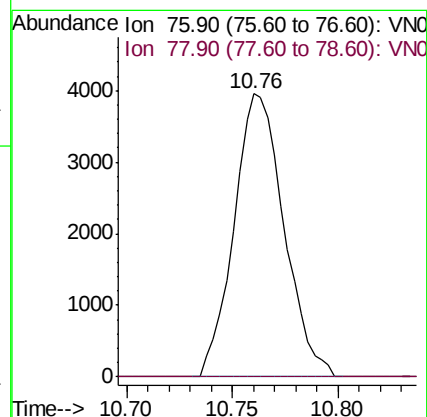
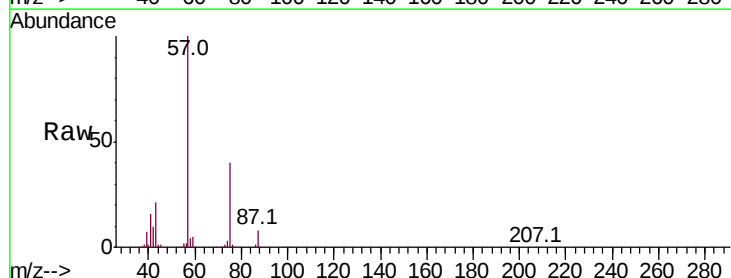
Acq: 10 Sep 2019 10:56

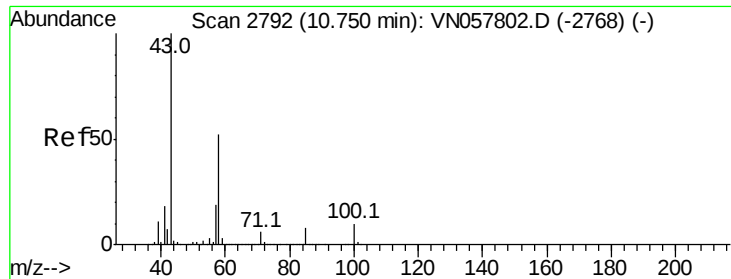
Tgt Ion: 76 Resp: 6500

Ion Ratio Lower Upper

76 100

78 0.0 25.4 38.2#

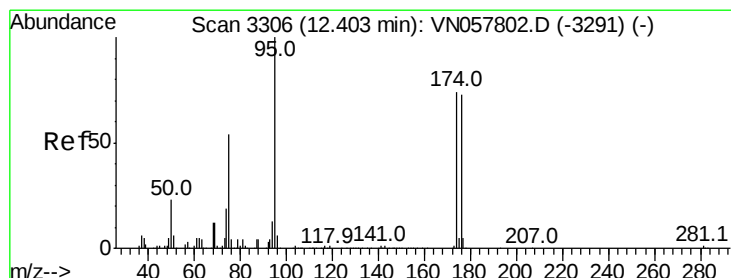
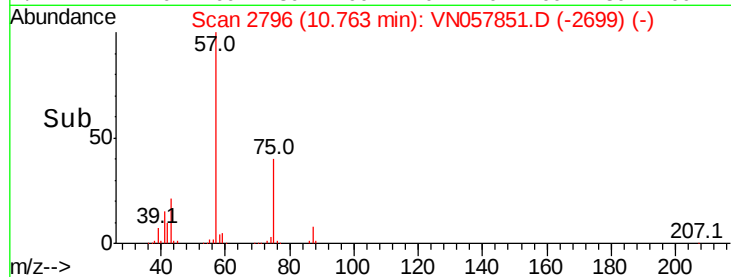
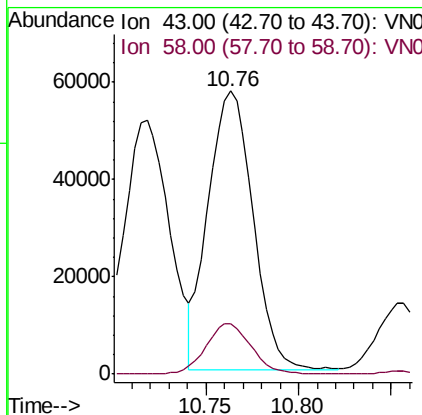
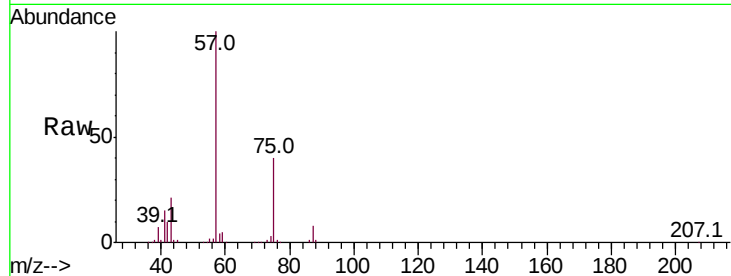




#59
2-Hexanone
Concen: 21.139 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

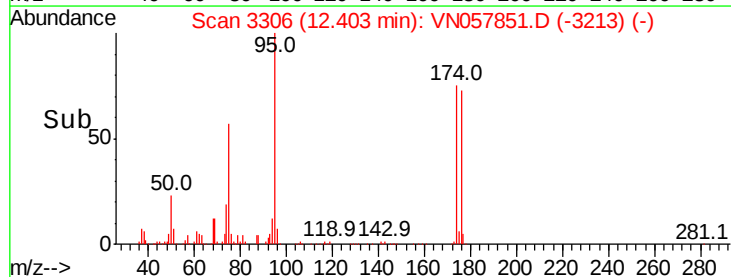
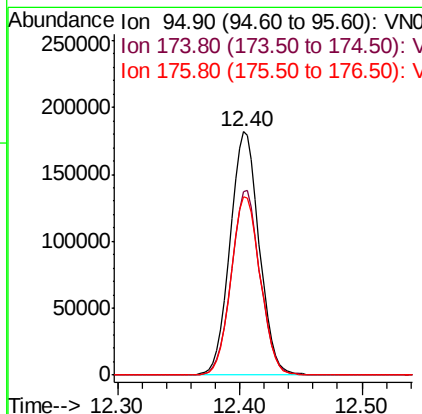
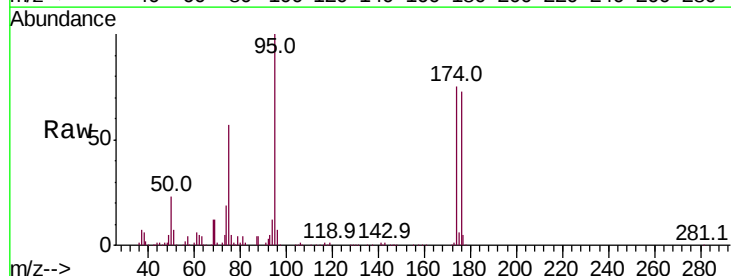
Instrument :
MSVOA_N
ClientSampled :

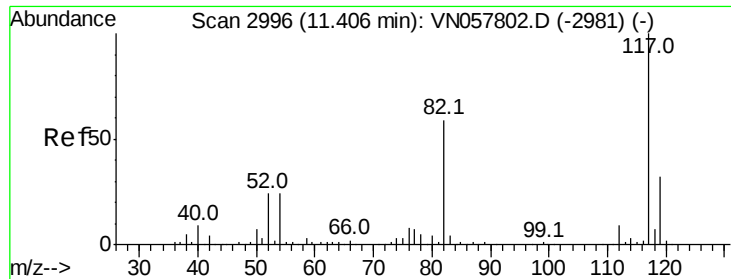
Tot Ion: 43 Resp: 96377
Ion Ratio Lower Upper
43 100
58 18.4 25.6 76.8#



#62
4-Bromofluorobenzene
Concen: 43.528 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Tgt Ion: 95 Resp: 303209
Ion Ratio Lower Upper
95 100
174 74.6 0.0 150.2
176 73.3 0.0 146.0

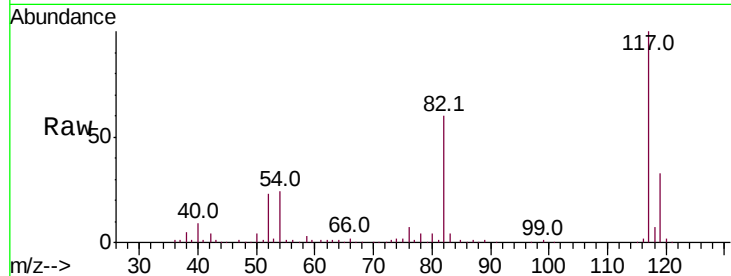




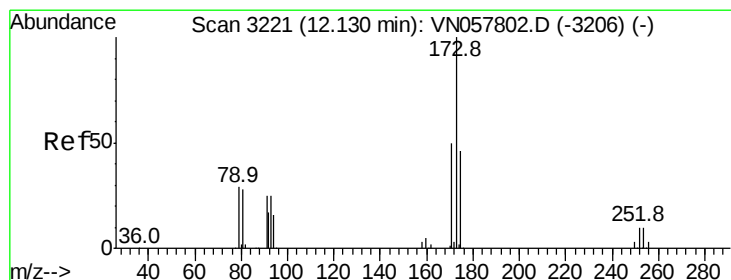
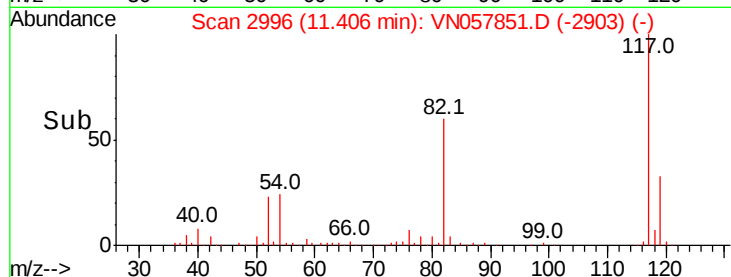
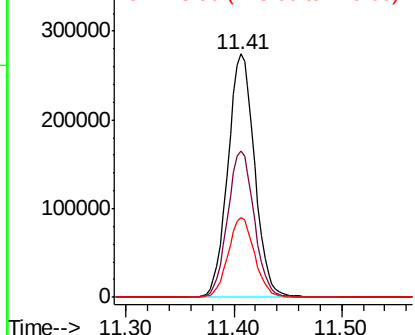
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:117 Resp: 471467
Ion Ratio Lower Upper
117 100
82 60.2 47.2 70.8
119 32.7 25.3 37.9

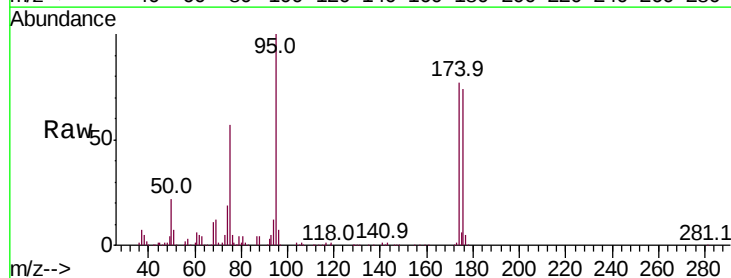


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

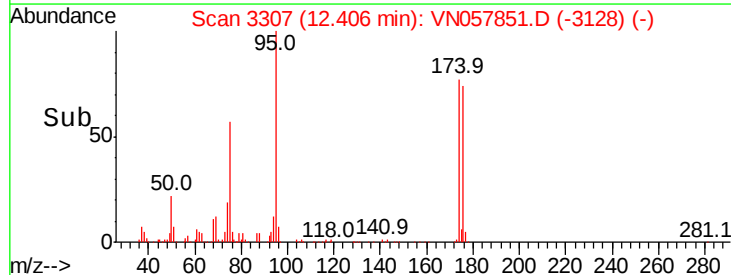
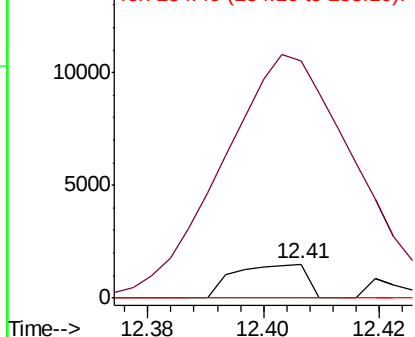


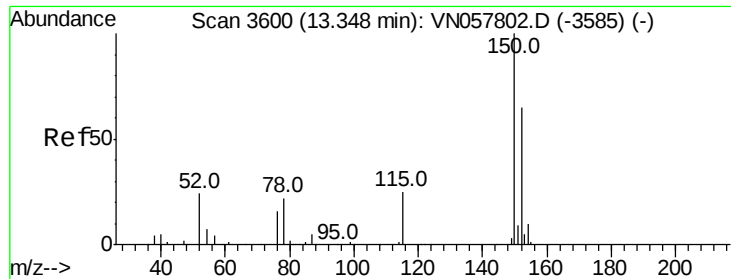
#71
Bromoform
Concen: 0.476 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. 0.28 min
Lab File: VN057851.D
Acq: 10 Sep 2019 10:56

Tgt Ion:173 Resp: 1271
Ion Ratio Lower Upper
173 100
175 1203.3 23.5 70.6#
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# 3600

Delta R.T. 0.00 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :

MSVOA_N

ClientSampleId :

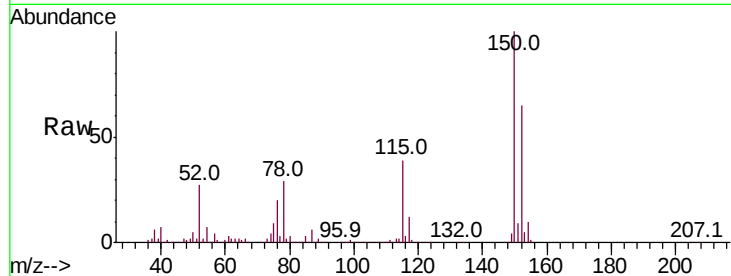
Tot Ion:152 Resp: 246566

Ion Ratio Lower Upper

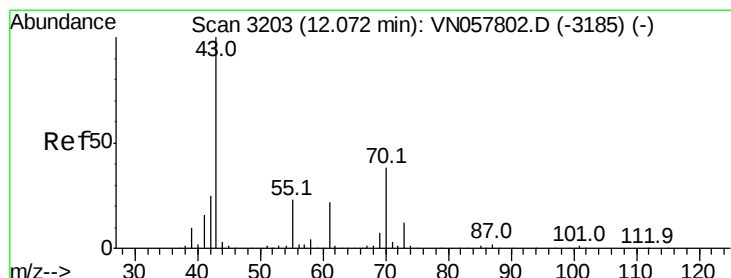
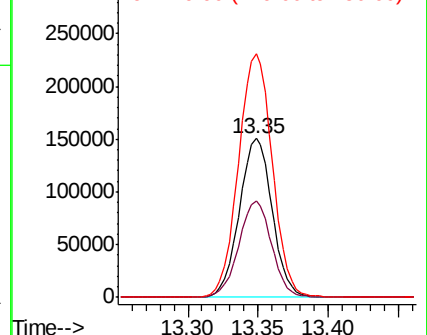
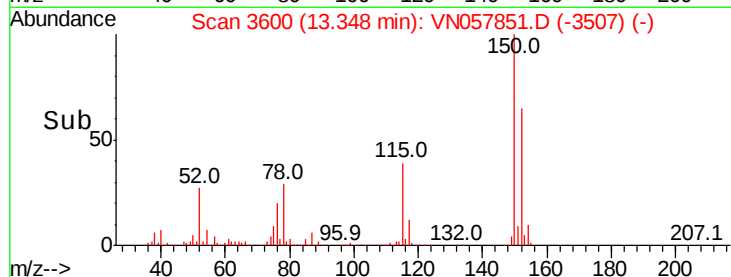
152 100

115 60.7 30.3 91.0

150 157.3 0.0 352.4



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-ethyl acetate

Concen: 0.339 ug/l

RT: 12.04 min Scan# 3192

Delta R.T. -0.04 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Tgt Ion: 43 Resp: 2825

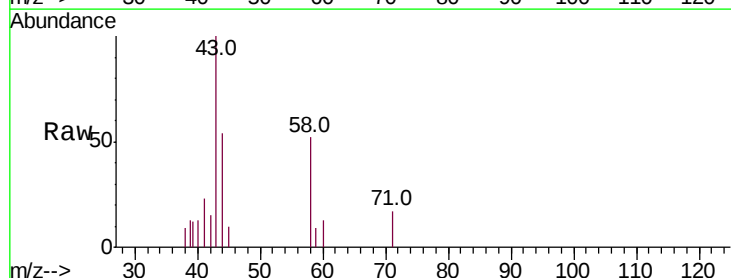
Ion Ratio Lower Upper

43 100

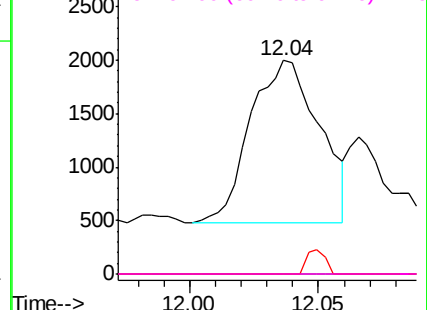
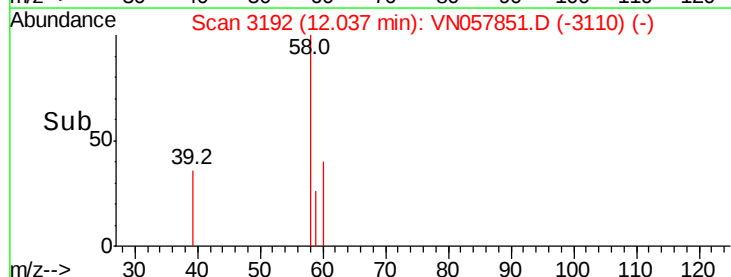
70 0.0 30.6 45.8#

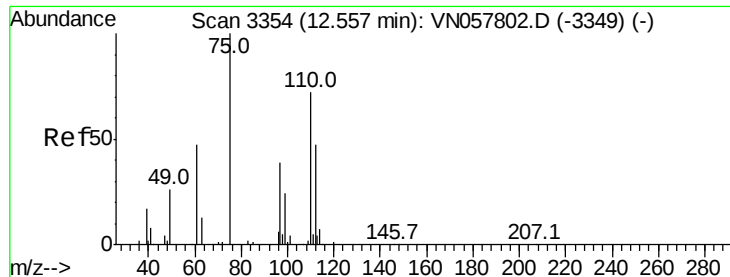
55 4.0 18.6 27.8#

61 0.0 17.4 26.2#



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: 30.428 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :

MSVOA_N

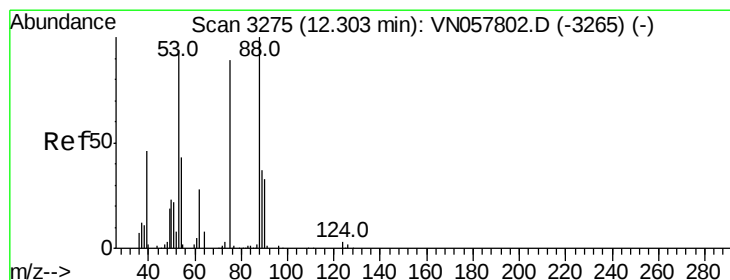
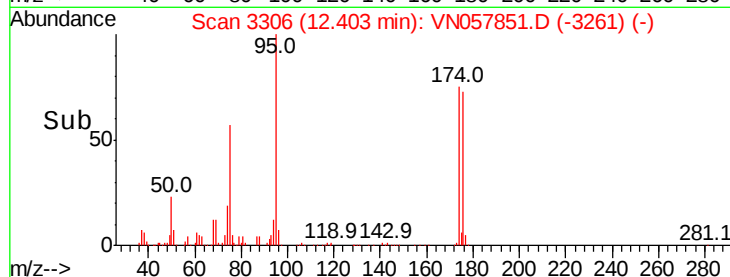
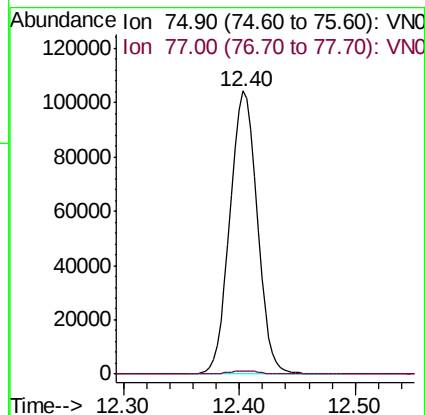
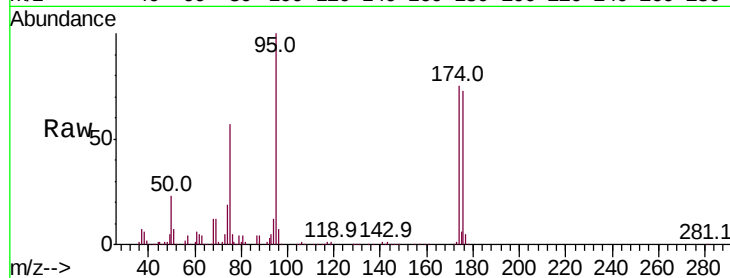
ClientSampleId :

Tot Ion: 75 Resp: 169718

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 107.076 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

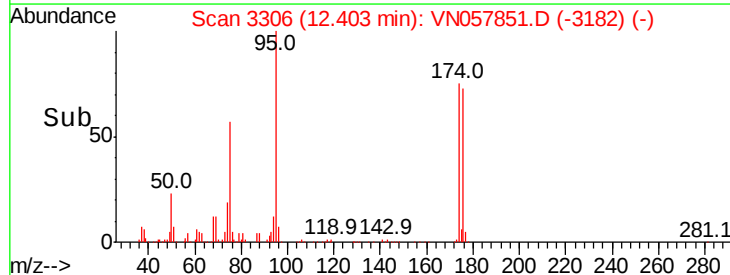
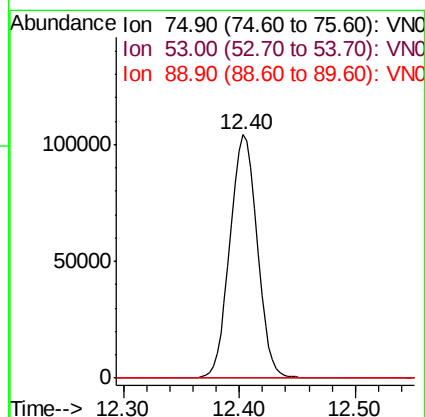
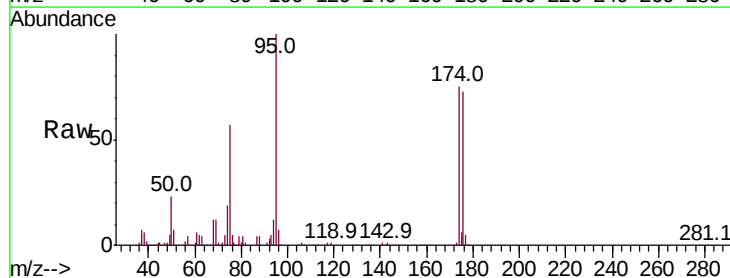
Tgt Ion: 75 Resp: 169718

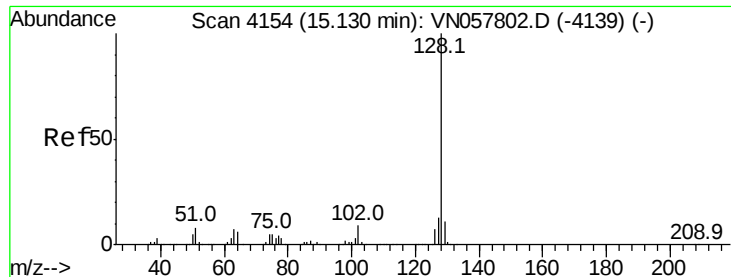
Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

89 0.0 35.3 52.9#





#95

Naphthalene

Concen: Below Cal

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

Instrument :

MSVOA_N

ClientSampleId :

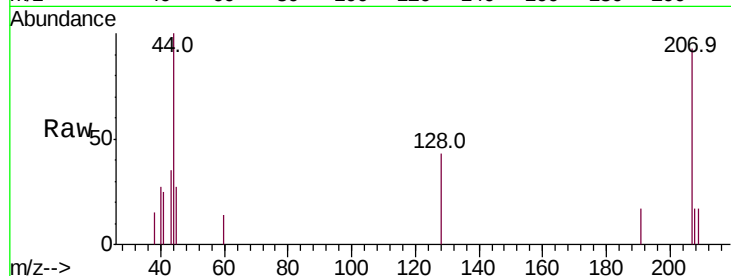
Tot Ion:128 Resp: 668

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

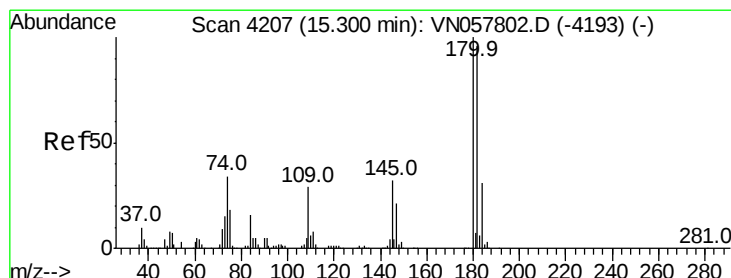
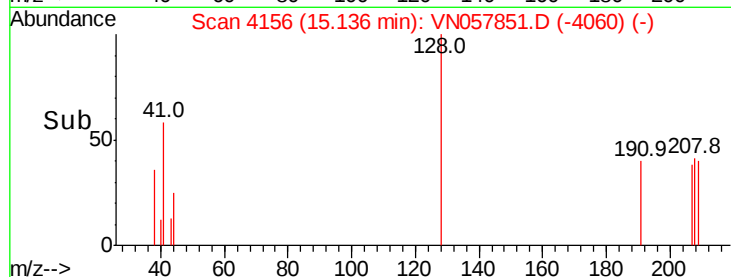
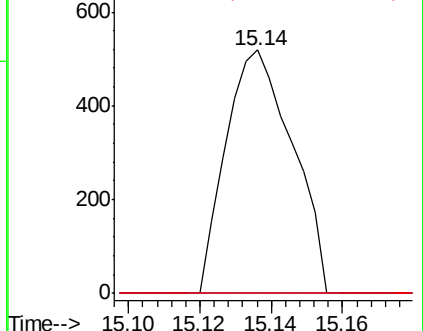
129 0.0 8.6 12.8#



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



#96

1,2,3-Trichlorobenzene

Concen: 1.010 ug/l

RT: 15.30 min Scan# 4208

Delta R.T. 0.00 min

Lab File: VN057851.D

Acq: 10 Sep 2019 10:56

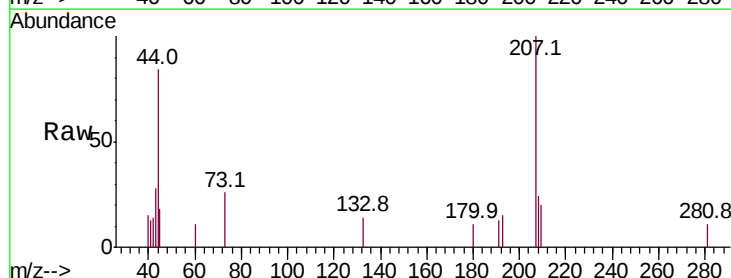
Tgt Ion:180 Resp: 60

Ion Ratio Lower Upper

180 100

182 0.0 48.3 144.8#

145 0.0 16.3 48.8#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

