

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091519\
 Data File : VN058088.D
 Acq On : 15 Sep 2019 13:54
 Operator : JC/SP
 Sample : K4695-22
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Sep 16 03:40:41 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	323132	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	534761	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	493730	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	261539	50.00	ug/l	0.00

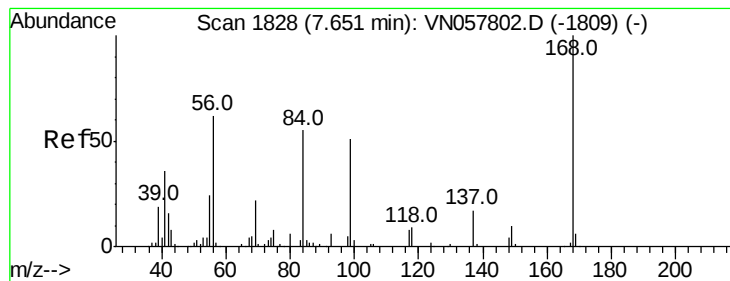
System Monitoring Compounds

33) 1,2-Dichloroethane-d4	8.01	65	374712	57.25	ug/l	0.00
Spiked Amount	50.000		Recovery	=	114.50%	
35) Dibromofluoromethane	7.58	113	250714	50.80	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.60%	
50) Toluene-d8	10.09	98	995363	51.94	ug/l	0.00
Spiked Amount	50.000		Recovery	=	103.88%	
62) 4-Bromofluorobenzene	12.40	95	328119	44.93	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.86%	

Target Compounds

					Qvalue
5) Bromomethane	2.55	94	306	Below Cal	87
16) Acetone	3.80	43	24898	11.605 ug/l	96
18) Methyl Acetate	4.31	43	6278	1.097 ug/l #	67
20) Methylene Chloride	4.53	84	12260	1.815 ug/l	94
25) 2-Butanone	6.84	43	3464	1.116 ug/l	97
29) Tetrahydrofuran	7.19	42	458	0.239 ug/l #	34
31) Cyclohexane	7.65	56	7416	Below Cal #	4
36) 1,1-Dichloropropene	7.65	75	28321	4.567 ug/l #	45
38) Carbon Tetrachloride	7.65	117	33005	5.829 ug/l #	16
43) Isopropyl Acetate	8.15	43	137499	12.760 ug/l #	83
45) 1,2-Dichloropropane	9.26	63	1886	0.347 ug/l #	44
48) Methyl methacrylate	9.17	41	6577	1.203 ug/l #	13
49) 1,4-Dioxane	9.26	88	68	0.736 ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	9044	1.418 ug/l	97
54) cis-1,3-Dichloropropene	9.90	75	46760	6.135 ug/l #	69
56) Ethyl methacrylate	10.54	69	2063	0.275 ug/l #	1
57) 1,3-Dichloropropane	10.76	76	6386	0.744 ug/l #	43
59) 2-Hexanone	10.76	43	103474	21.649 ug/l #	53
71) Bromoform	12.41	173	1258	0.450 ug/l #	1
74) N-amyl acetate	12.04	43	5294	0.599 ug/l #	46
76) 1,2,3-Trichloropropane	12.40	75	180529	30.513 ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	180529	107.376 ug/l #	6
95) Naphthalene	15.14	128	1645	Below Cal #	69

(#) = 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: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

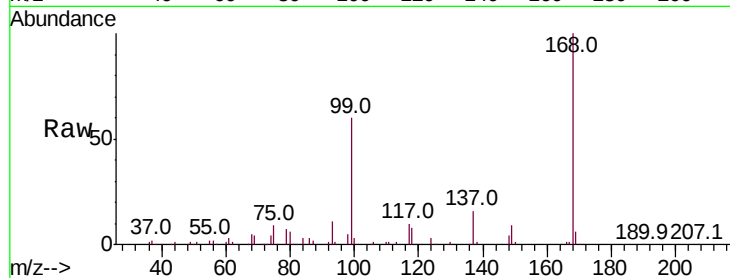
ClientSampleId :

Tot Ion:168 Resp: 323132

Ion Ratio Lower Upper

168 100

99 59.7 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

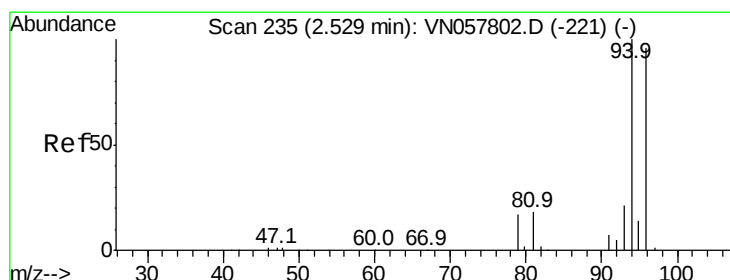
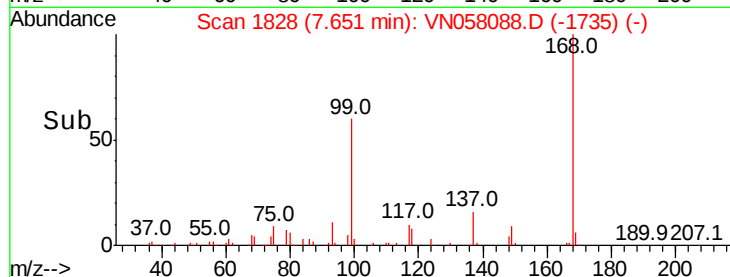
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.55 min Scan# 243

Delta R.T. 0.03 min

Lab File: VN058088.D

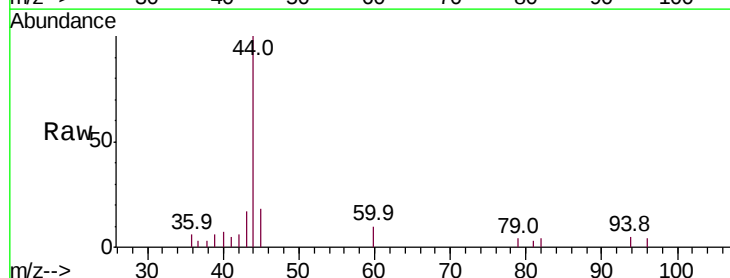
Acq: 15 Sep 2019 13:54

Tgt Ion: 94 Resp: 306

Ion Ratio Lower Upper

94 100

96 83.9 77.0 115.4



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO

2.55

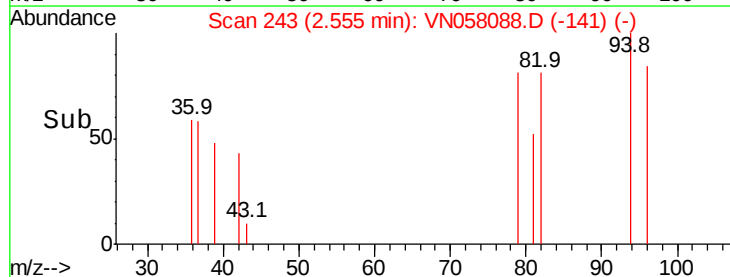
300

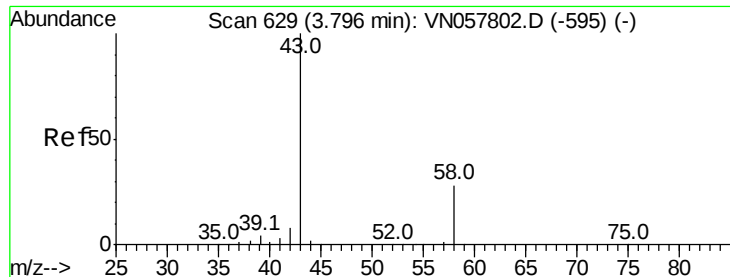
200

100

0

Time-->





#16

Acetone

Concen: 11.605 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

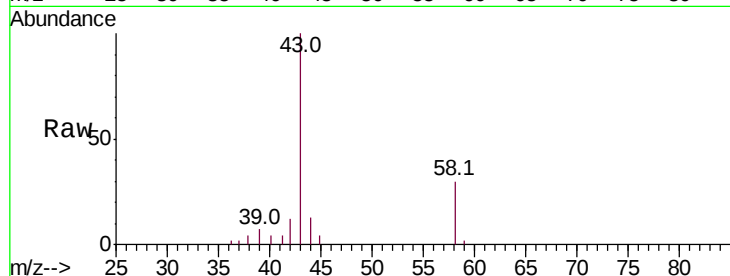
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 43 Resp: 24898

Ion Ratio Lower Upper

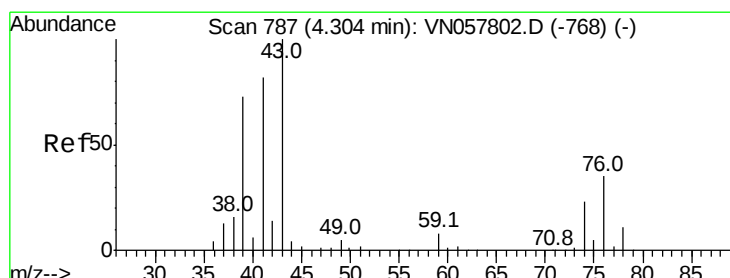
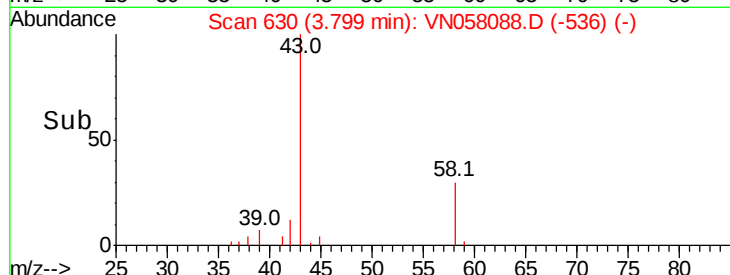
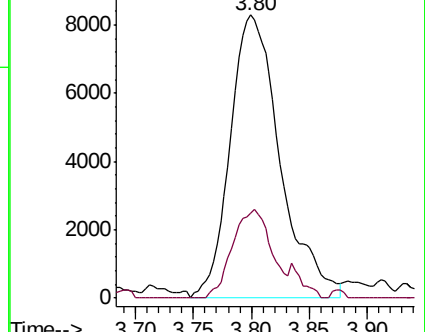
43 100

58 29.9 22.2 33.2



Abundance Ion 43.00 (42.70 to 43.70): VN058088.D (-536) (-)

Ion 58.00 (57.70 to 58.70): VN058088.D (-536) (-)



#18

Methyl Acetate

Concen: 1.097 ug/l

RT: 4.31 min Scan# 788

Delta R.T. 0.00 min

Lab File: VN058088.D

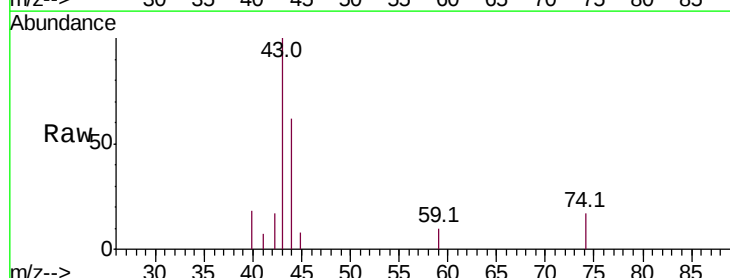
Acq: 15 Sep 2019 13:54

Tgt Ion: 43 Resp: 6278

Ion Ratio Lower Upper

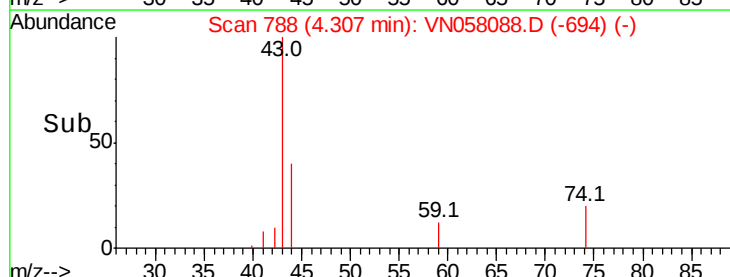
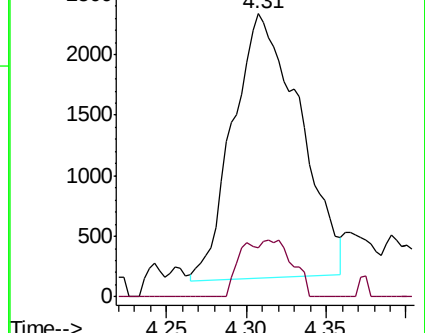
43 100

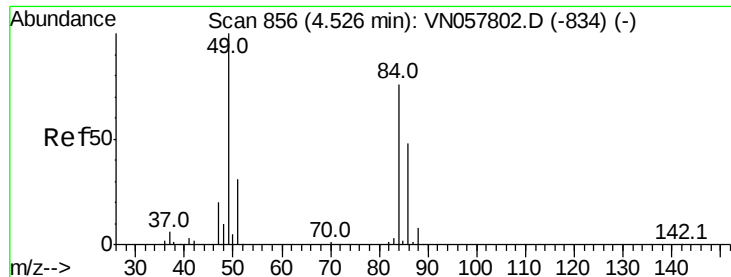
74 6.5 17.9 26.9#



Abundance Ion 43.00 (42.70 to 43.70): VN058088.D (-694) (-)

Ion 74.00 (73.70 to 74.70): VN058088.D (-694) (-)

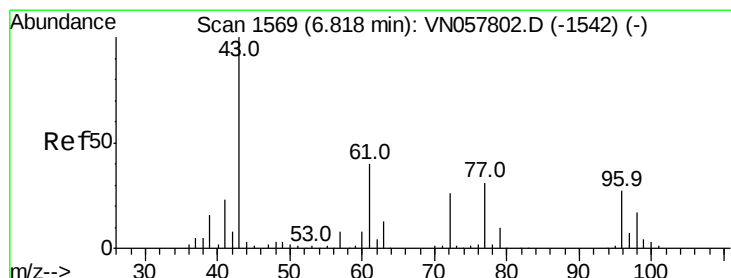
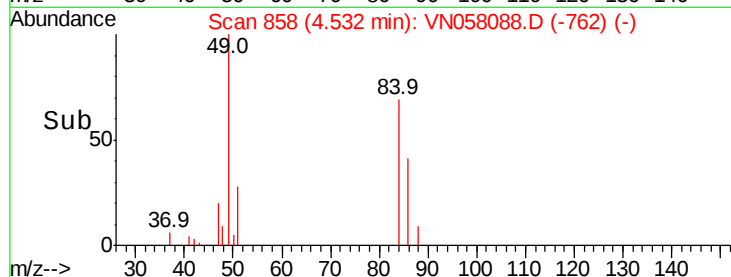
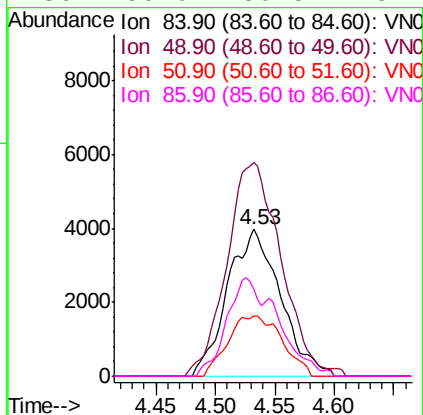
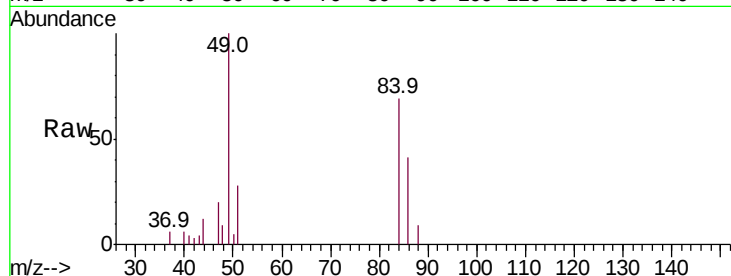




#20
Methvlene Chloride
Concen: 1.815 ug/l
RT: 4.53 min Scan# 858
Delta R.T. 0.01 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

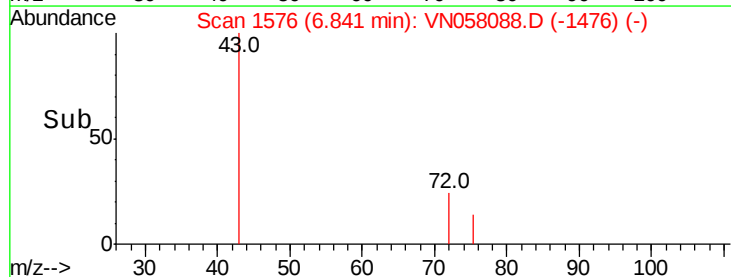
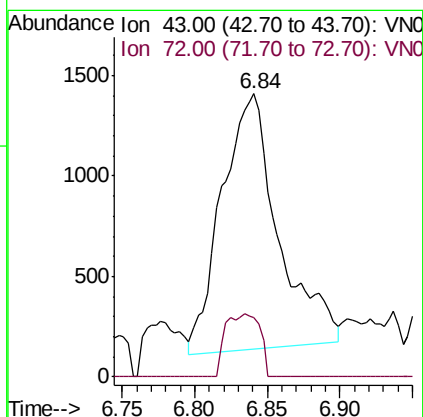
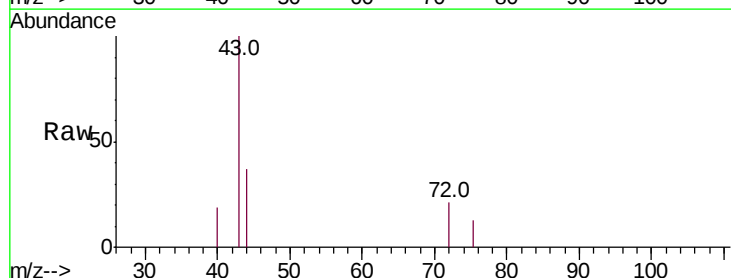
Instrument :
MSVOA_N
ClientSampled :

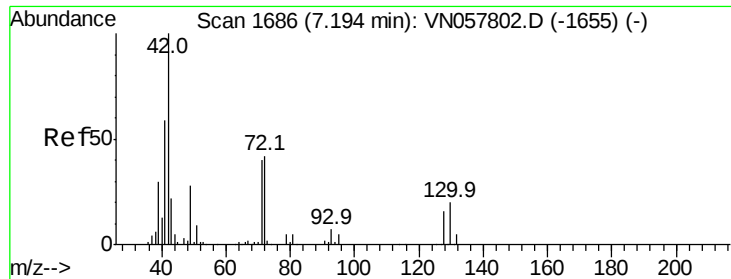
Tot Ion: 84 Resp: 12260
Ion Ratio Lower Upper
84 100
49 141.3 104.8 157.2
51 41.2 33.0 49.4
86 59.0 50.5 75.7



#25
2-Butanone
Concen: 1.116 ug/l
RT: 6.84 min Scan# 1576
Delta R.T. 0.02 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

Tgt Ion: 43 Resp: 3464
Ion Ratio Lower Upper
43 100
72 24.0 20.6 30.8

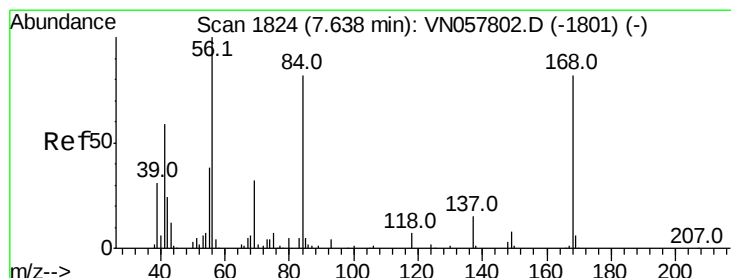
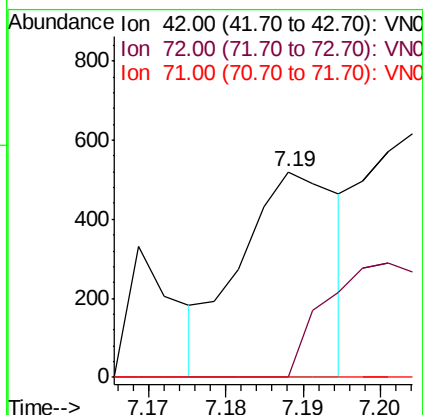
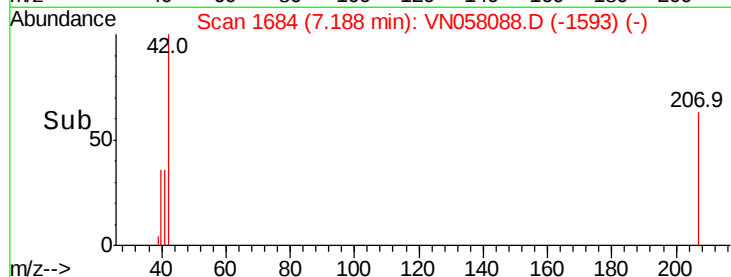
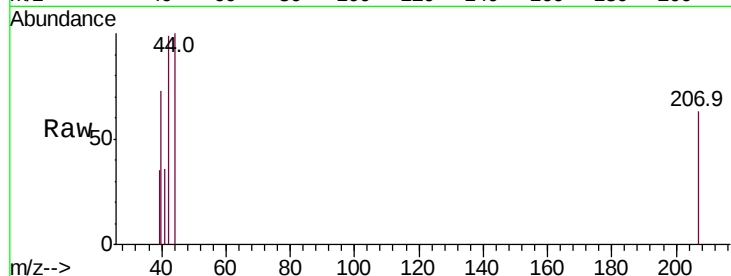




#29
Tetrahydrofuran
Concen: 0.239 ug/l
RT: 7.19 min Scan# 1684
Delta R.T. -0.01 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

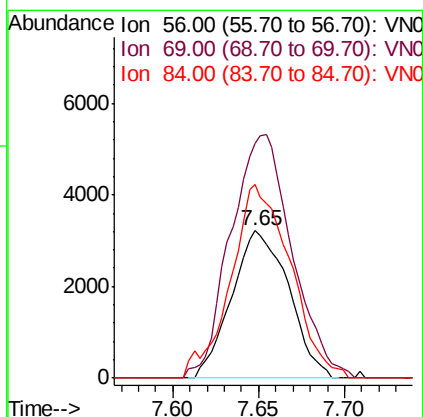
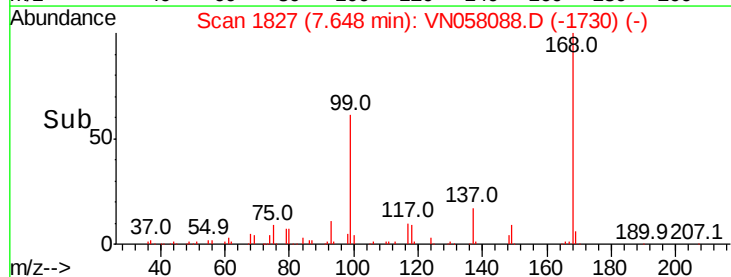
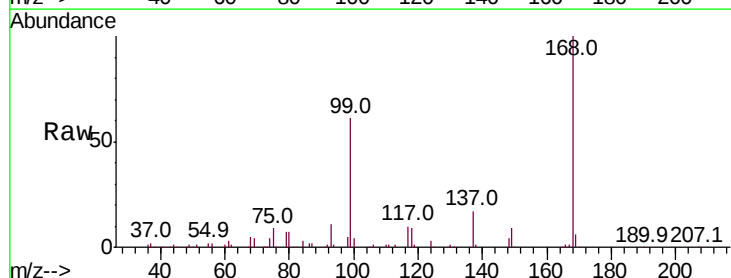
Instrument :
MSVOA_N
ClientSampleId :

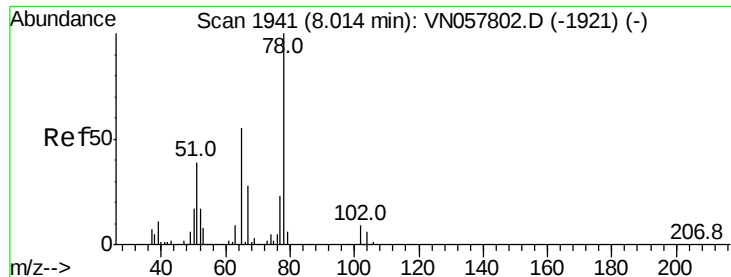
Tot Ion: 42 Resp: 458
Ion Ratio Lower Upper
42 100
72 0.0 33.7 50.5#
71 0.0 31.9 47.9#



#31
Cyclohexane
Concen: Below Cal
RT: 7.65 min Scan# 1827
Delta R.T. 0.01 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

Tgt Ion: 56 Resp: 7416
Ion Ratio Lower Upper
56 100
69 153.3 25.9 38.9#
84 126.0 65.6 98.4#





#33

1,2-Dichloroethane-d4

Concen: 57.254 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

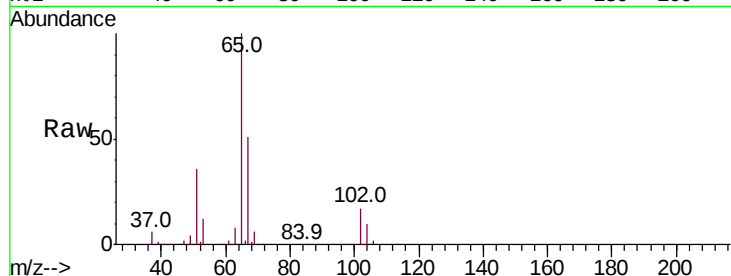
Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 65 Resp: 374712

Ion Ratio Lower Upper

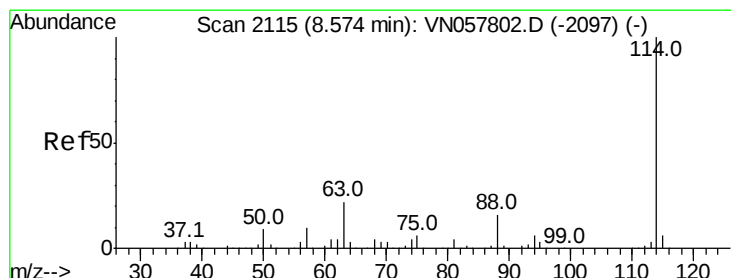
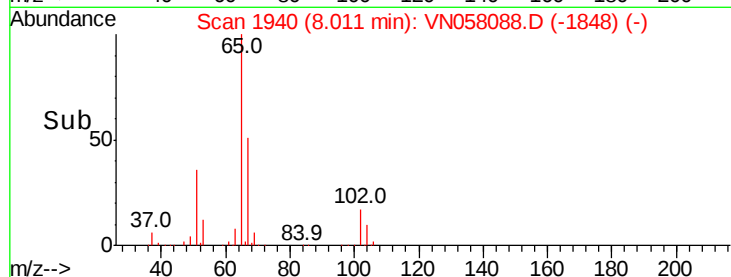
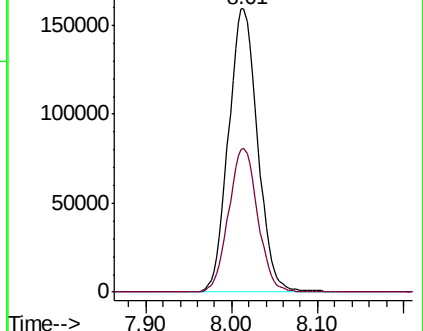
65 100

67 50.8 0.0 104.0



Abundance Ion 64.90 (64.60 to 65.60): VN057802.D (-1921) (-)

Ion 66.90 (66.60 to 67.60): VN057802.D (-1921) (-)



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

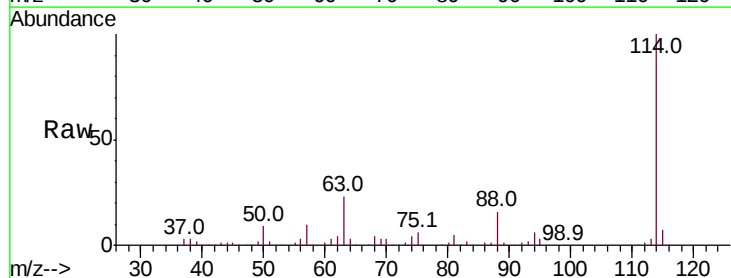
Tgt Ion: 114 Resp: 534761

Ion Ratio Lower Upper

114 100

63 23.2 0.0 44.0

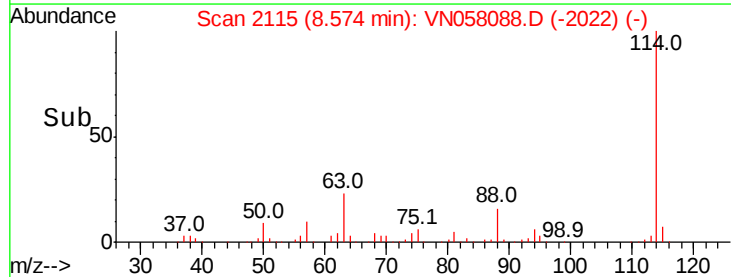
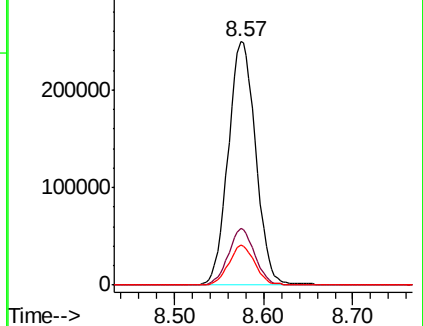
88 16.2 0.0 31.4

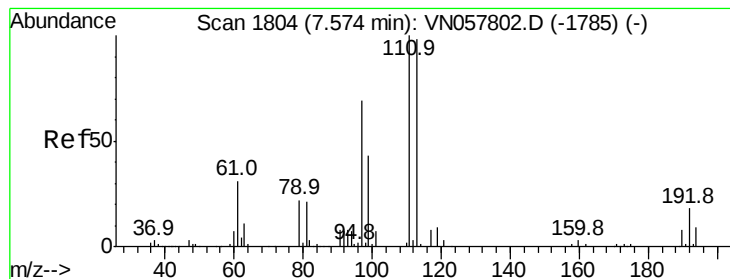


Abundance Ion 113.90 (113.60 to 114.60): VN057802.D (-2097) (-)

Ion 63.00 (62.70 to 63.70): VN057802.D (-2097) (-)

Ion 87.90 (87.60 to 88.60): VN057802.D (-2097) (-)





#35

Dibromofluoromethane

Concen: 50.797 ug/l

RT: 7.58 min Scan# 1805

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :
MSVOA_N
ClientSampled :

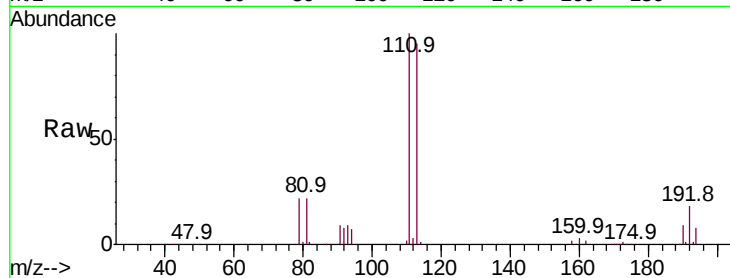
Tot Ion:113 Resp: 250714

Ion Ratio Lower Upper

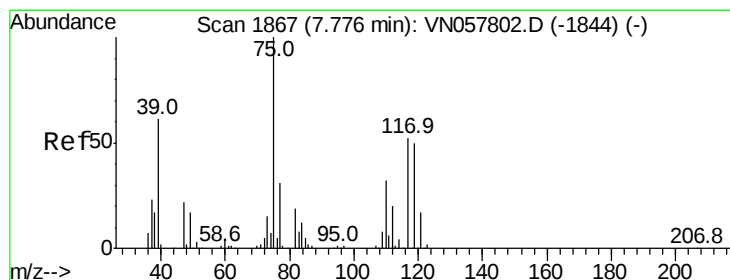
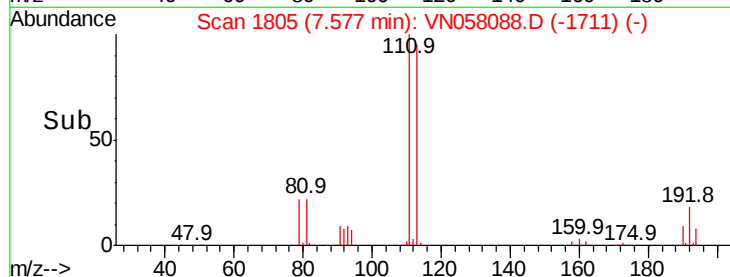
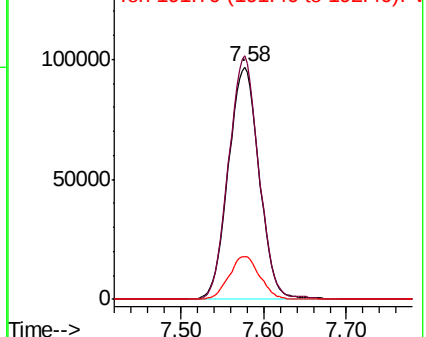
113 100

111 102.5 81.3 121.9

192 18.4 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: 4.567 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.13 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

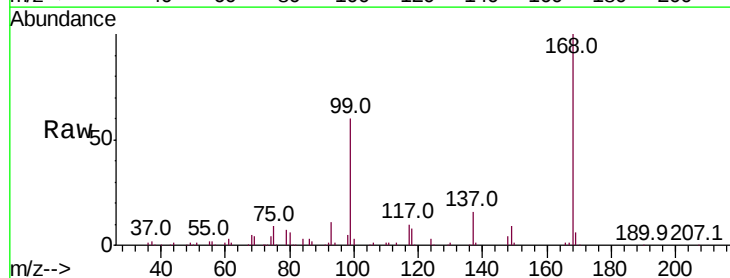
Tgt Ion: 75 Resp: 28321

Ion Ratio Lower Upper

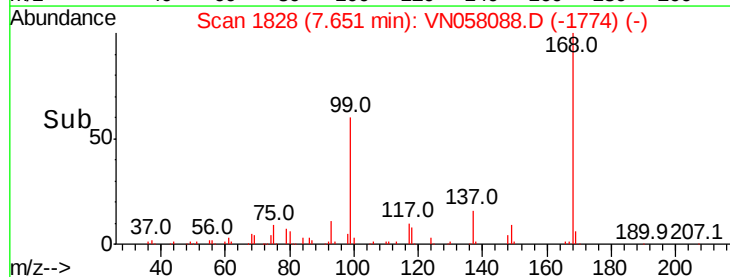
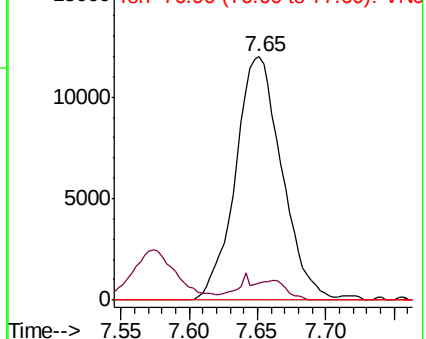
75 100

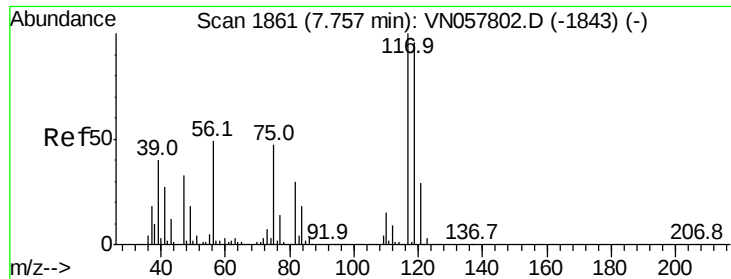
110 2.2 16.3 48.9#

77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): V
Ion 109.90 (109.60 to 110.60): V
Ion 76.90 (76.60 to 77.60): V





#38

Carbon Tetrachloride

Concen: 5.829 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. -0.10 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

ClientSampleId :

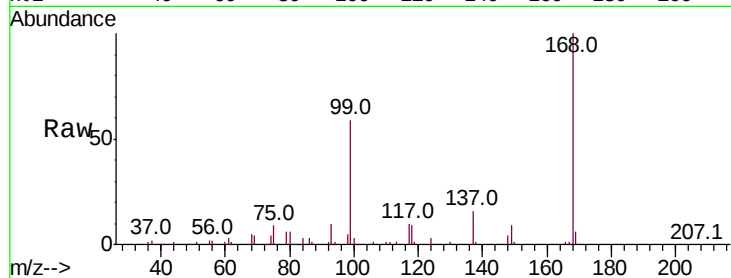
Tot Ion:117 Resp: 33005

Ion Ratio Lower Upper

117 100

119 4.9 76.9 115.3#

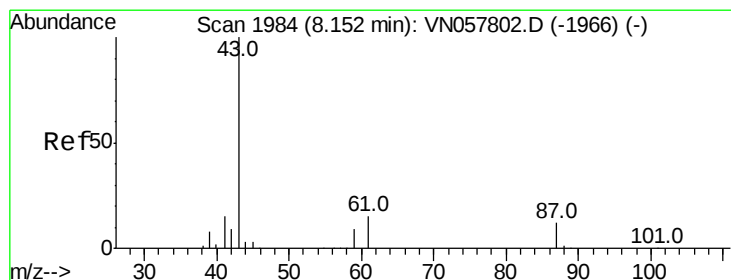
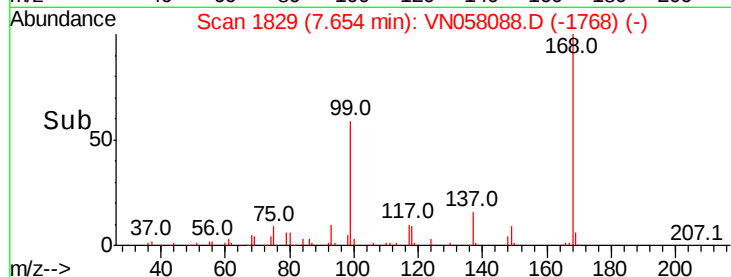
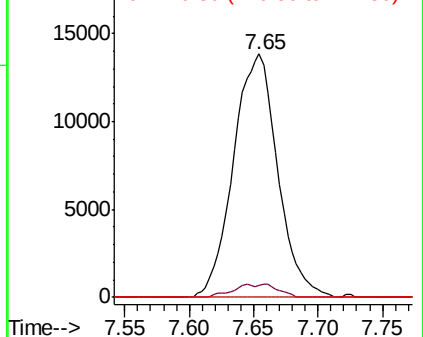
121 0.0 23.4 35.2#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#43

Isopropyl Acetate

Concen: 12.760 ug/l

RT: 8.15 min Scan# 1984

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

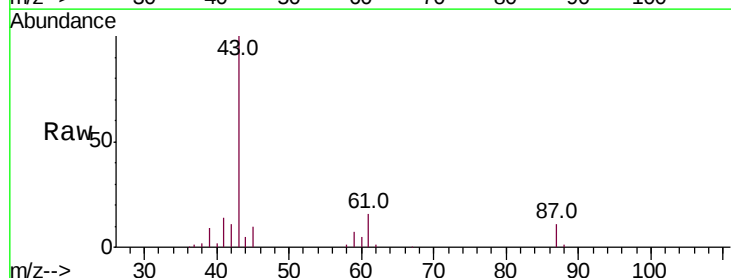
Tgt Ion: 43 Resp: 137499

Ion Ratio Lower Upper

43 100

61 14.3 20.1 30.1#

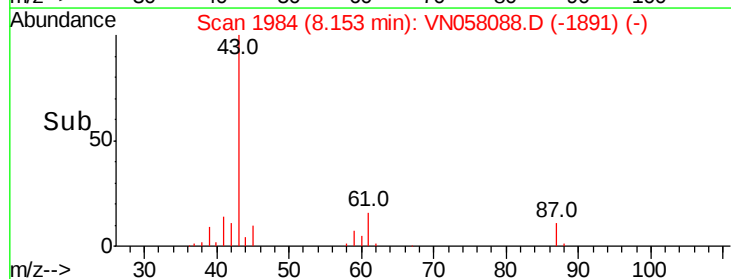
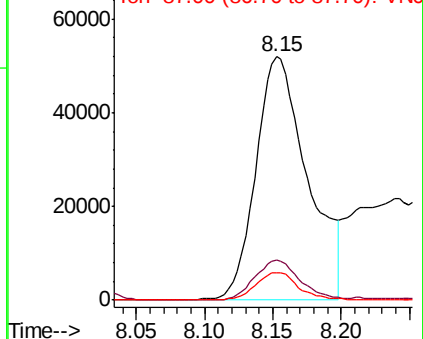
87 9.4 9.5 14.3#

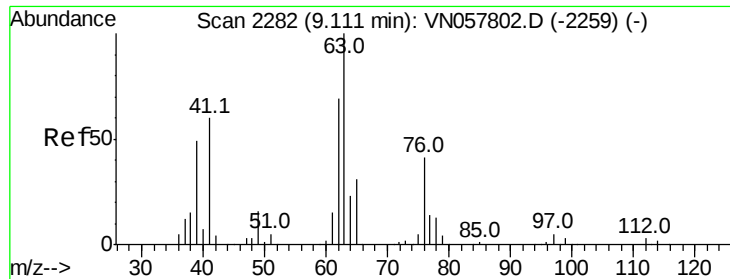


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V





#45

1,2-Dichloropropane

Concen: 0.347 ug/l

RT: 9.26 min Scan# 2328

Delta R.T. 0.15 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

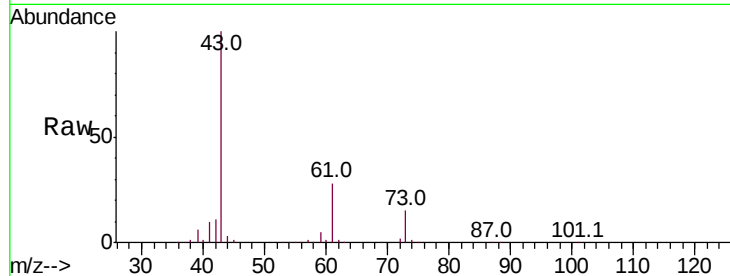
ClientSampleId :

Tot Ion: 63 Resp: 1886

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

9.26

1200

1000

800

600

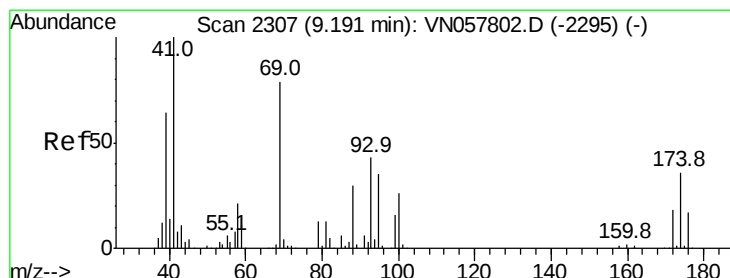
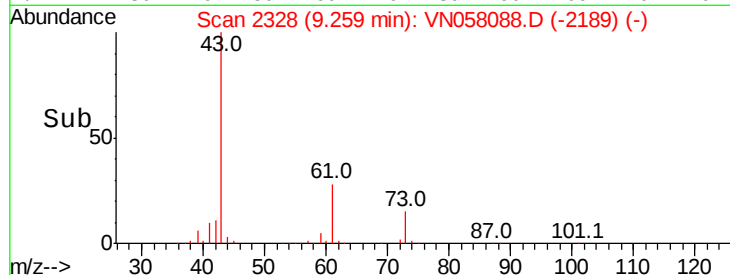
400

200

0

9.22 9.24 9.26 9.28 9.30

Time-->



#48

Methyl methacrylate

Concen: 1.203 ug/l

RT: 9.17 min Scan# 2301

Delta R.T. -0.02 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

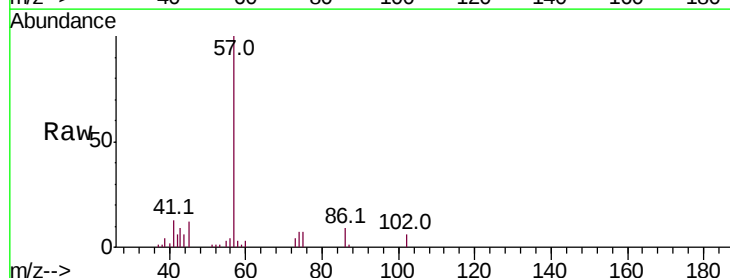
Tgt Ion: 41 Resp: 6577

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): VNO

Ion 69.00 (68.70 to 69.70): VNO

Ion 39.00 (38.70 to 39.70): VNO

120000

100000

80000

60000

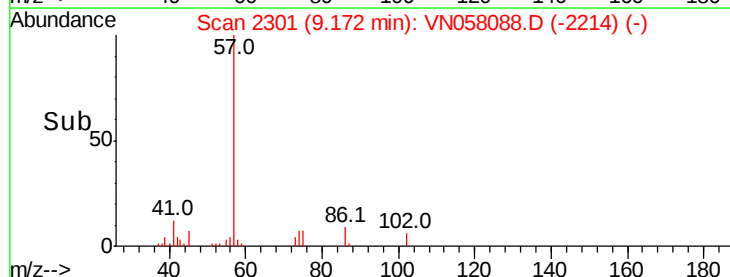
40000

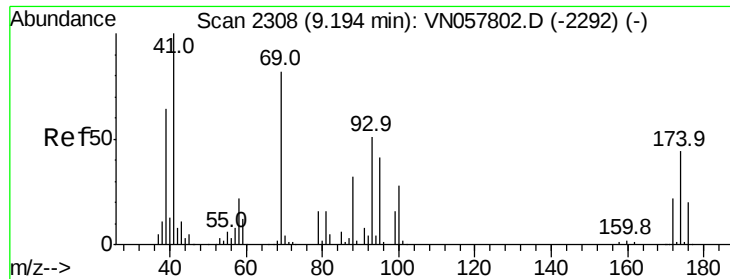
20000

0

9.10 9.15 9.20

Time-->





#49

1,4-Dioxane

Concen: 0.736 ug/l

RT: 9.26 min Scan# 2328

Delta R.T. 0.06 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :
MSVOA_N
ClientSampleId :

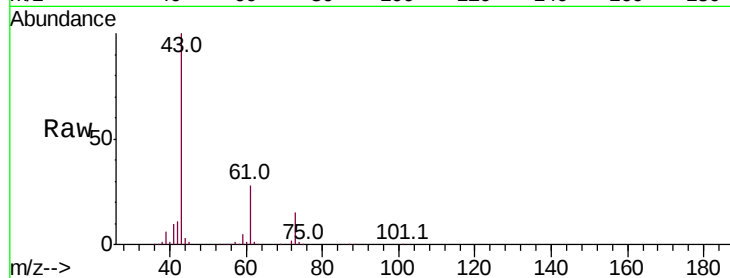
Tot Ion: 88 Resp: 68

Ion Ratio Lower Upper

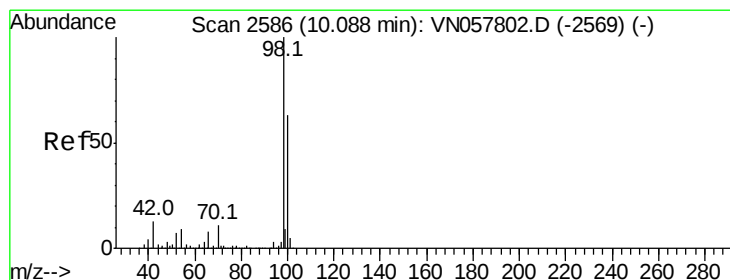
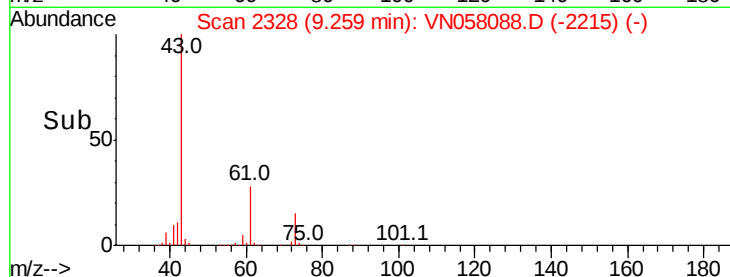
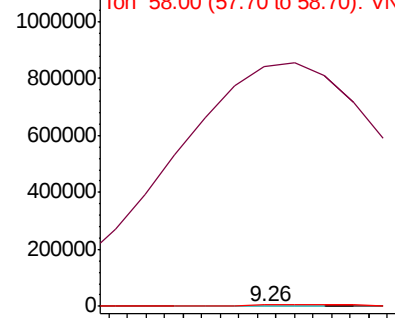
88 100

43 2344663.2 28.5 42.7#

58 11835.3 55.8 83.6#



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



#50

Toluene-d8

Concen: 51.943 ug/l

RT: 10.09 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058088.D

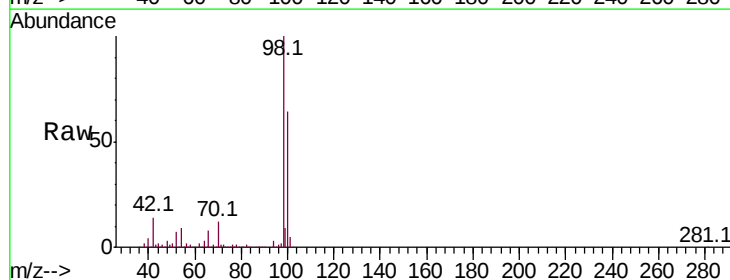
Acq: 15 Sep 2019 13:54

Tgt Ion: 98 Resp: 995363

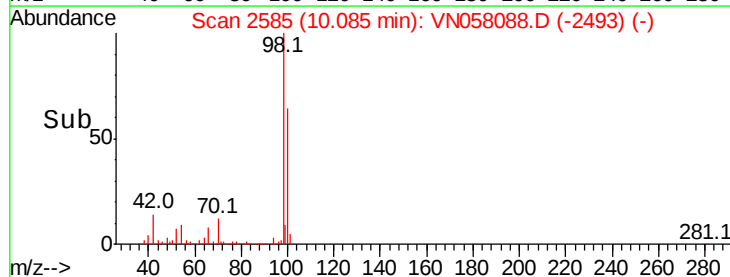
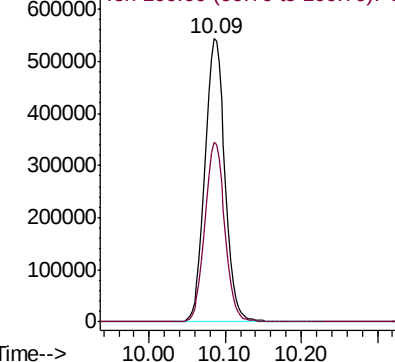
Ion Ratio Lower Upper

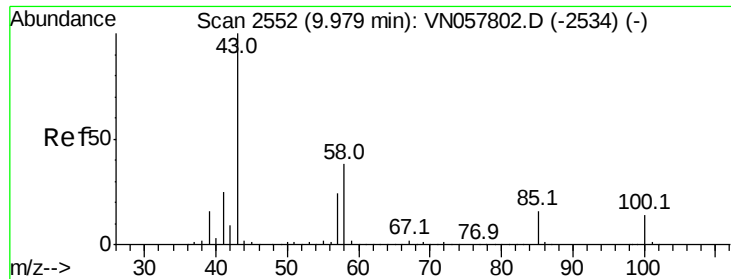
98 100

100 63.2 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VNO
Ion 100.00 (99.70 to 100.70): VNO





#51

4-Methyl-2-Pentanone

Concen: 1.418 ug/l

RT: 9.98 min Scan# 2553

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

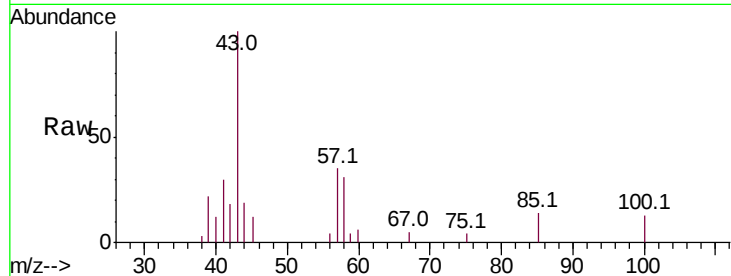
ClientSampled :

Tot Ion: 43 Resp: 9044

Ion Ratio Lower Upper

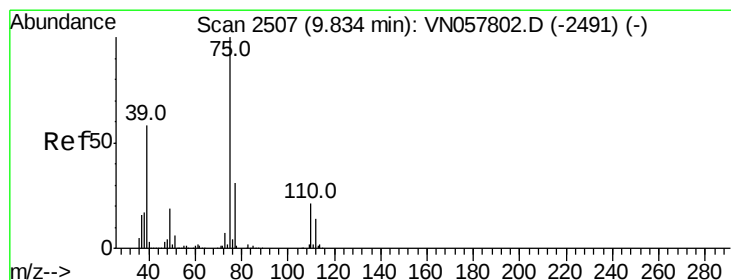
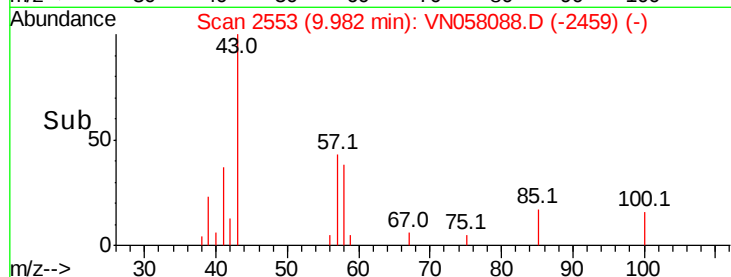
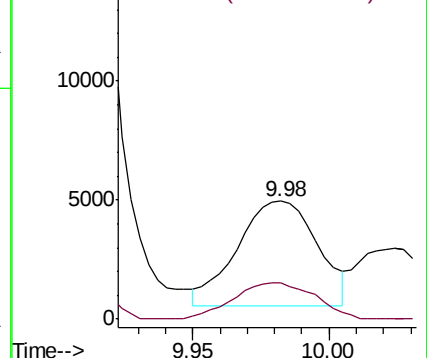
43 100

58 35.2 29.8 44.6



Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 58.00 (57.70 to 58.70): VNO



#54

cis-1,3-Dichloropropene

Concen: 6.135 ug/l

RT: 9.90 min Scan# 2527

Delta R.T. 0.06 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

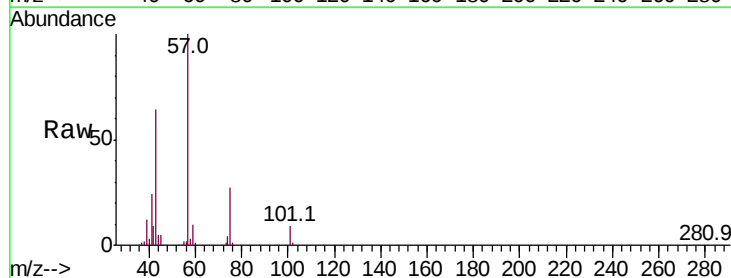
Tgt Ion: 75 Resp: 46760

Ion Ratio Lower Upper

75 100

77 0.0 24.8 37.2#

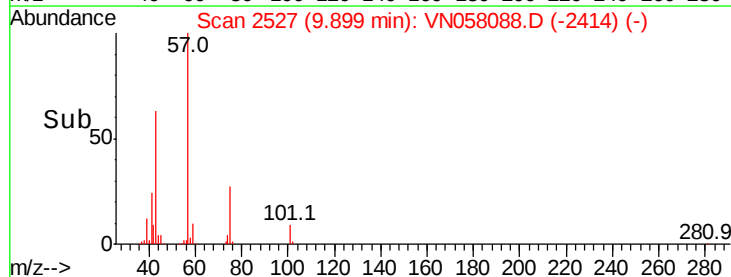
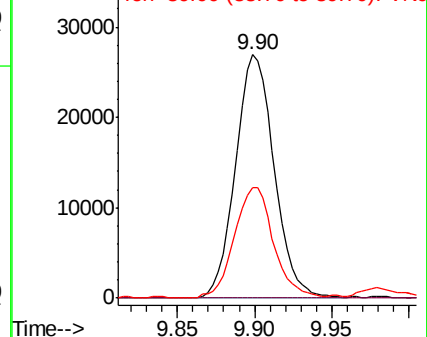
39 45.1 46.2 69.4#

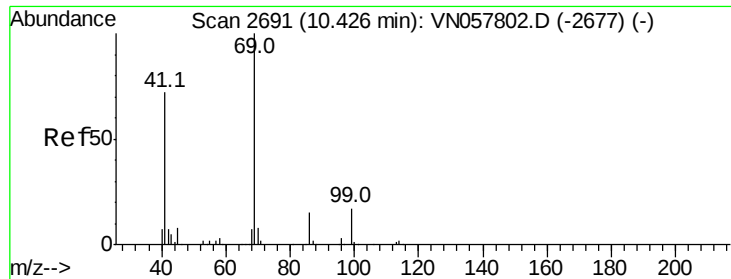


Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 76.90 (76.60 to 77.60): VNO

Ion 39.00 (38.70 to 39.70): VNO





#56

Ethyl methacrylate

Concen: 0.275 ug/l

RT: 10.54 min Scan# 2726

Delta R.T. 0.11 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

ClientSampled :

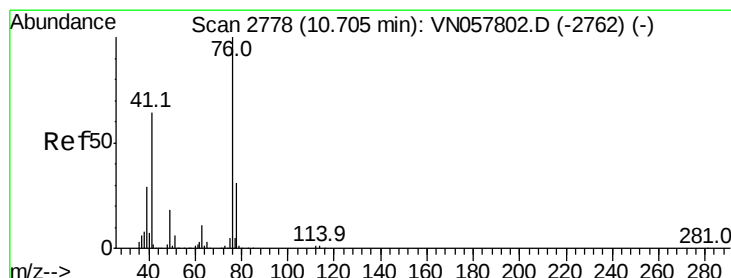
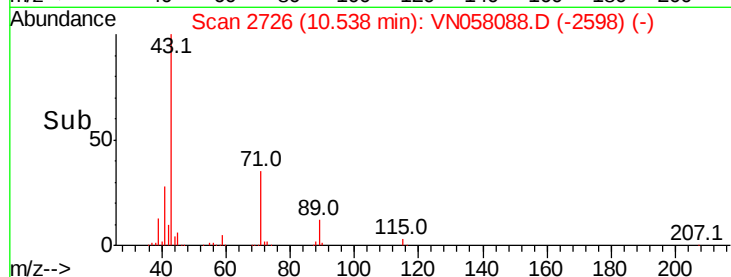
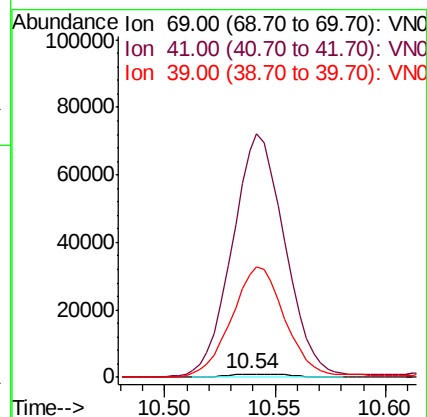
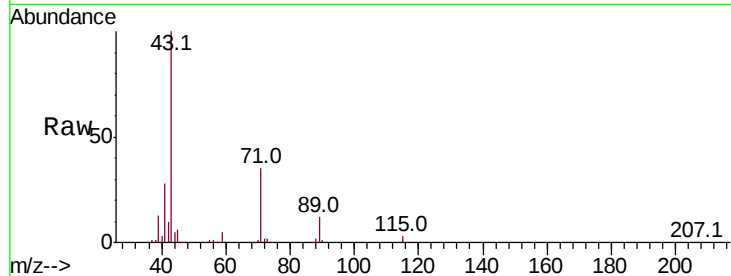
Tot Ion: 69 Resp: 2063

Ion Ratio Lower Upper

69 100

41 5868.9 56.7 85.1#

39 2667.6 36.3 54.5#



#57

1,3-Dichloropropane

Concen: 0.744 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.06 min

Lab File: VN058088.D

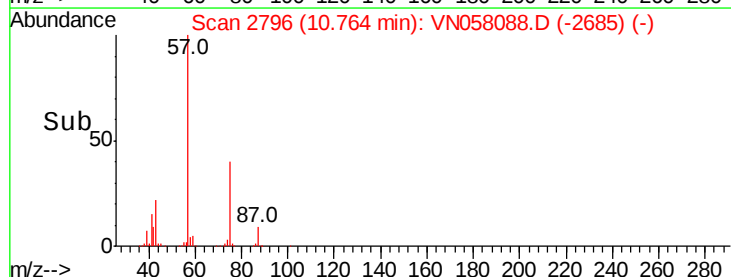
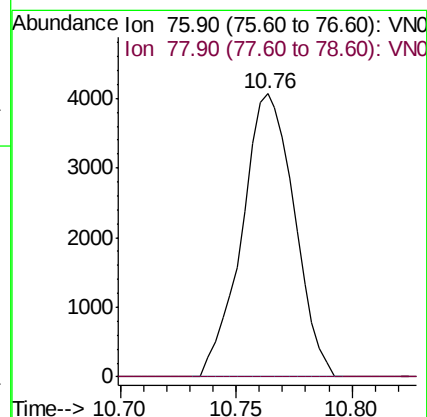
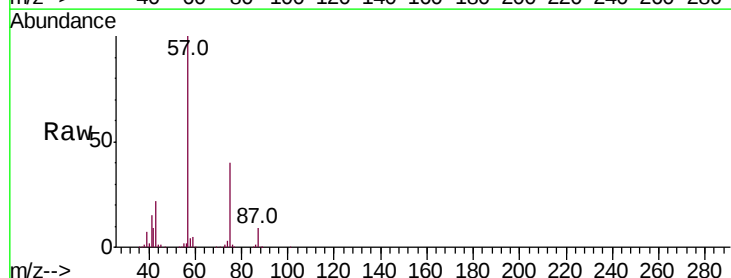
Acq: 15 Sep 2019 13:54

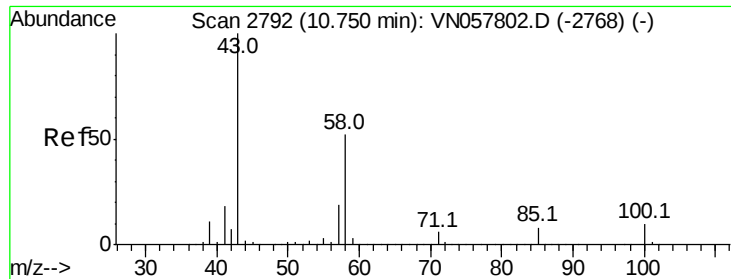
Tgt Ion: 76 Resp: 6386

Ion Ratio Lower Upper

76 100

78 0.0 25.4 38.2#





#59

2-Hexanone

Concen: 21.649 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

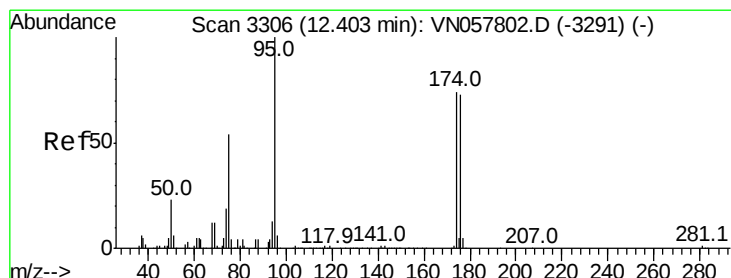
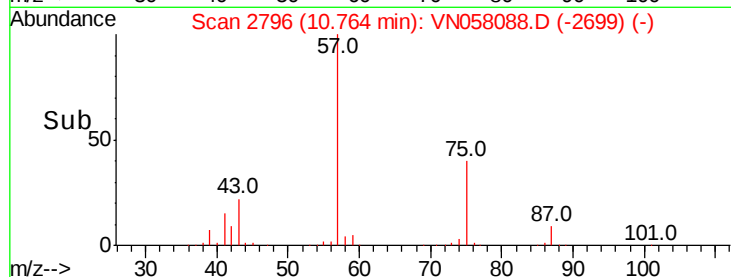
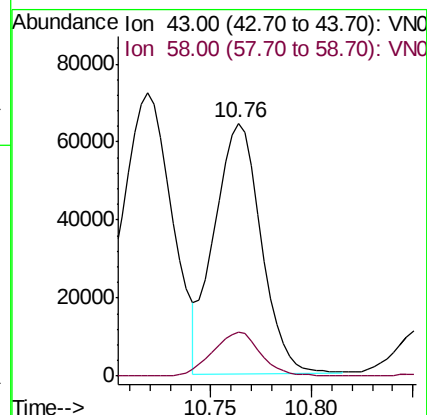
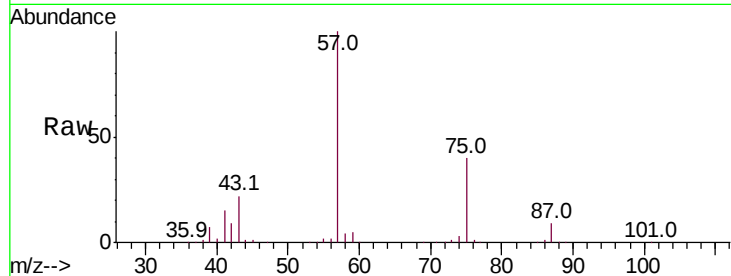
ClientSampled :

Tot Ion: 43 Resp: 103474

Ion Ratio Lower Upper

43 100

58 18.2 25.6 76.8#



#62

4-Bromofluorobenzene

Concen: 44.931 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

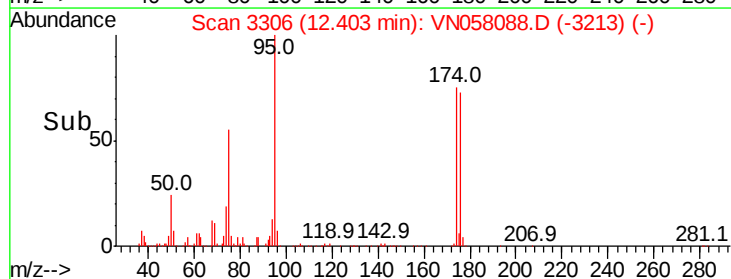
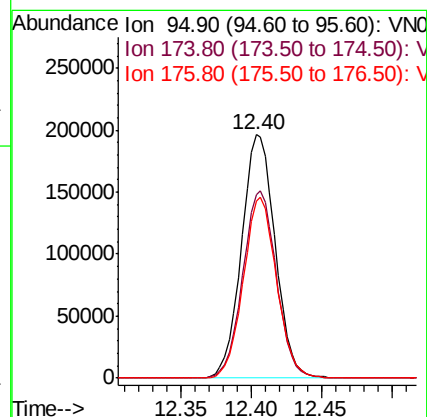
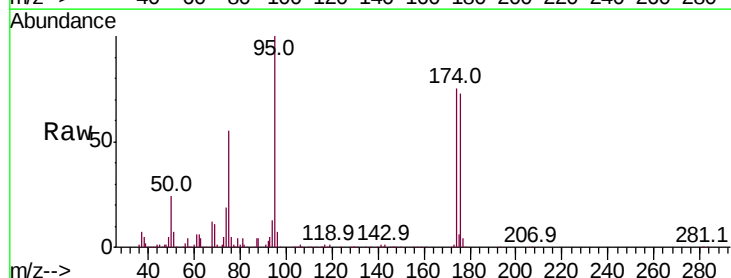
Tgt Ion: 95 Resp: 328119

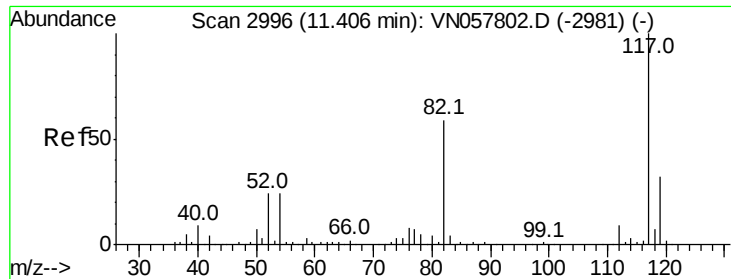
Ion Ratio Lower Upper

95 100

174 77.1 0.0 150.2

176 73.4 0.0 146.0

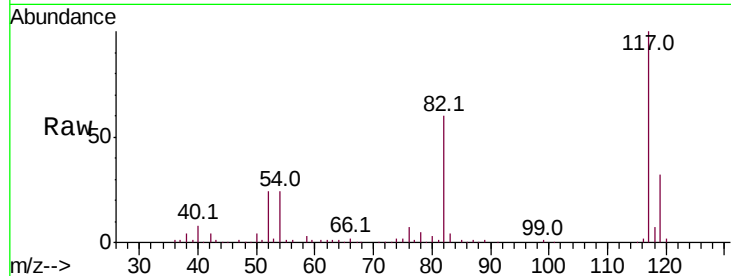




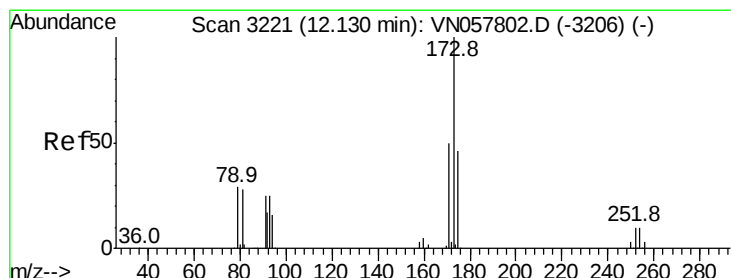
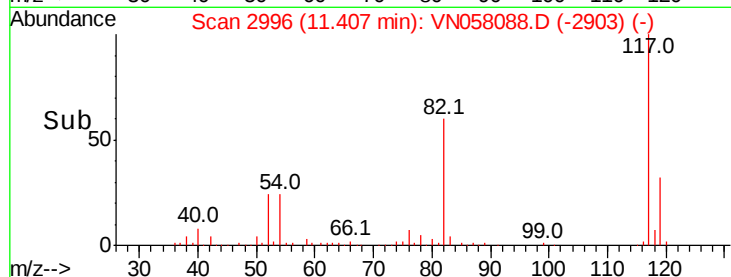
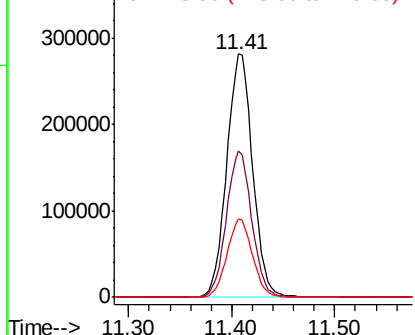
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:117 Resp: 493730
Ion Ratio Lower Upper
117 100
82 60.1 47.2 70.8
119 32.3 25.3 37.9

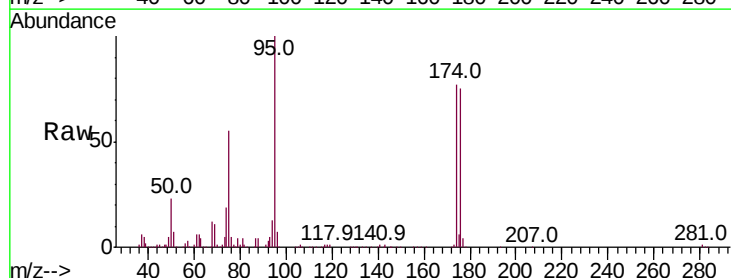


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

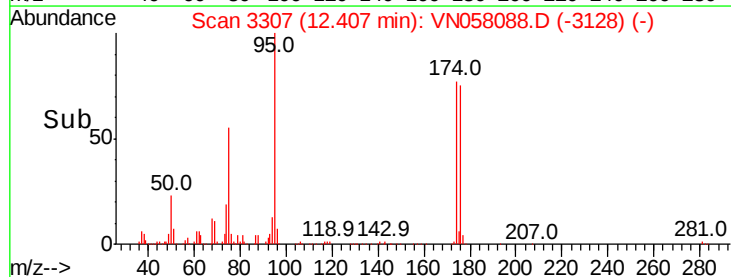
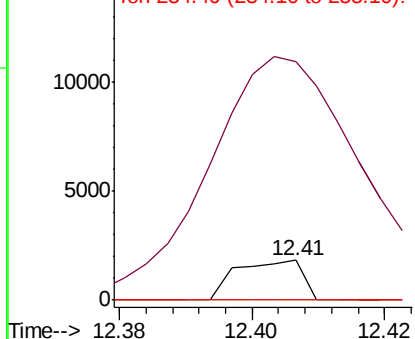


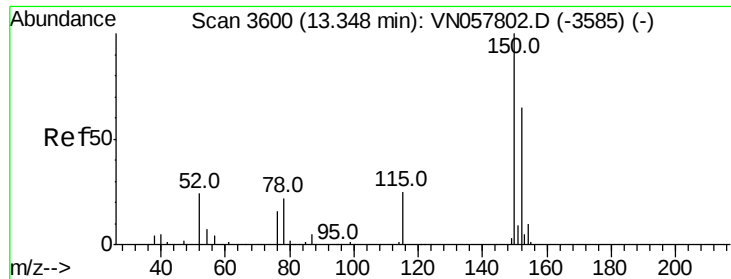
#71
Bromoform
Concen: 0.450 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. 0.28 min
Lab File: VN058088.D
Acq: 15 Sep 2019 13:54

Tgt Ion:173 Resp: 1258
Ion Ratio Lower Upper
173 100
175 1253.5 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: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

ClientSampleId :

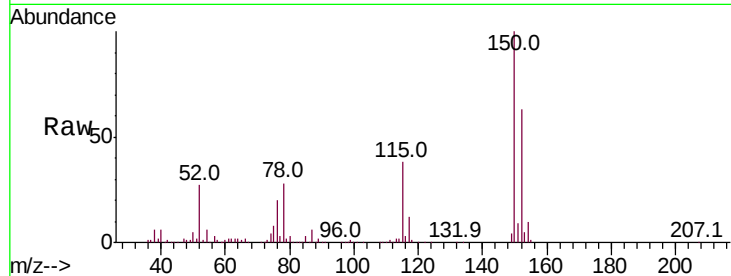
Tot Ion:152 Resp: 261539

Ion Ratio Lower Upper

152 100

115 60.6 30.3 91.0

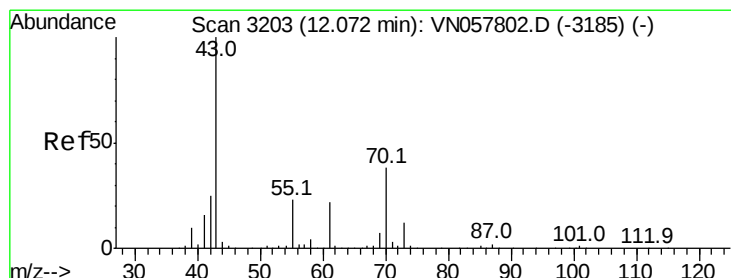
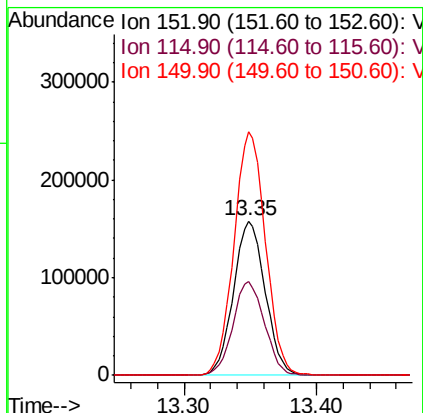
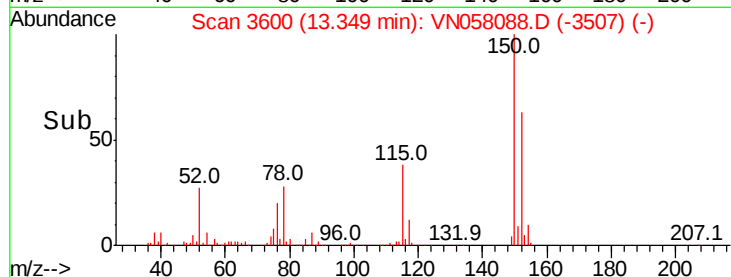
150 157.0 0.0 352.4



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: 0.599 ug/l

RT: 12.04 min Scan# 3192

Delta R.T. -0.04 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Tgt Ion: 43 Resp: 5294

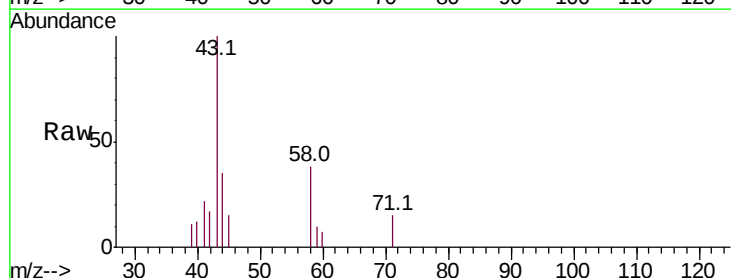
Ion Ratio Lower Upper

43 100

70 0.0 30.6 45.8#

55 1.2 18.6 27.8#

61 0.0 17.4 26.2#

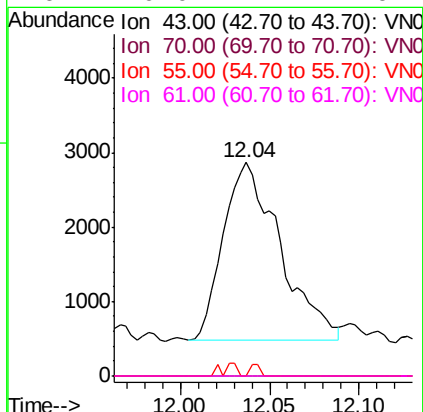
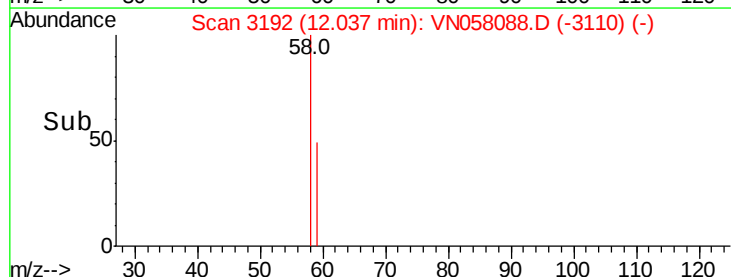


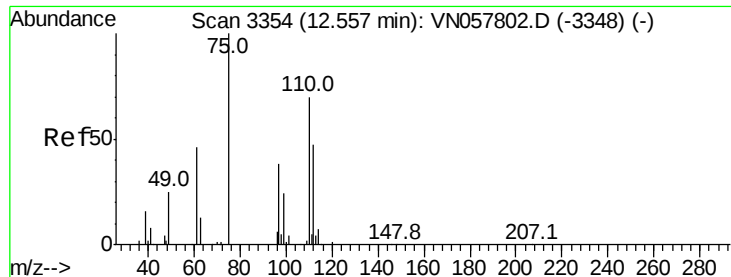
Abundance Ion 43.00 (42.70 to 43.70): VNO

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: 30.513 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

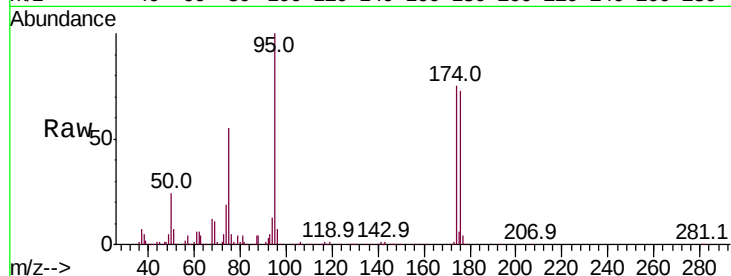
ClientSampleId :

Tot Ion: 75 Resp: 180529

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 77.00 (76.70 to 77.70): VNO

120000

100000

80000

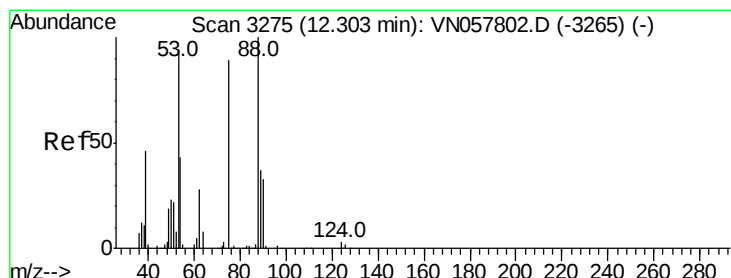
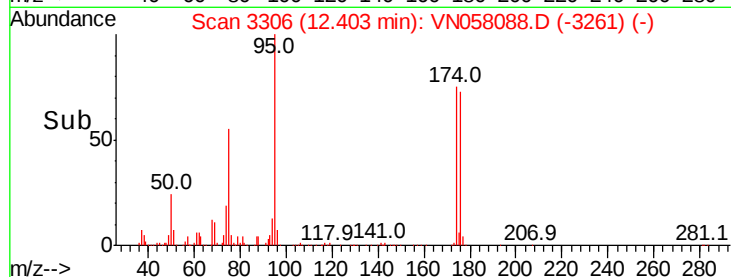
60000

40000

20000

0

Time--> 12.30 12.40 12.50



#81

trans-1,4-Dichloro-2-butene

Concen: 107.376 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

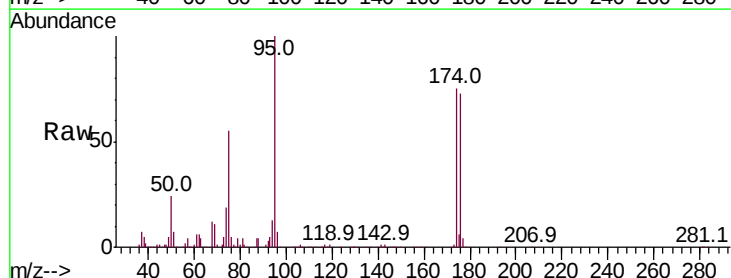
Tgt Ion: 75 Resp: 180529

Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

89 0.0 35.3 52.9#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

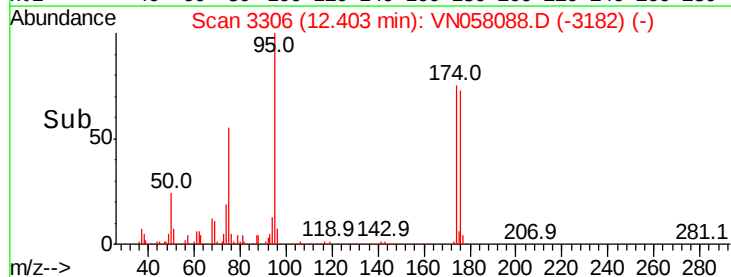
150000

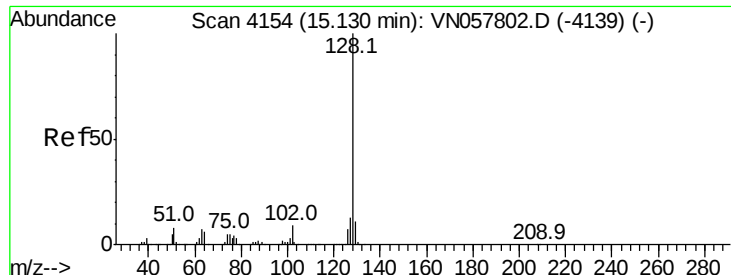
100000

50000

0

Time--> 12.30 12.40 12.50





#95

Naphthalene

Concen: Below Cal

RT: 15.14 min Scan# 4157

Delta R.T. 0.01 min

Lab File: VN058088.D

Acq: 15 Sep 2019 13:54

Instrument :

MSVOA_N

ClientSampleId :

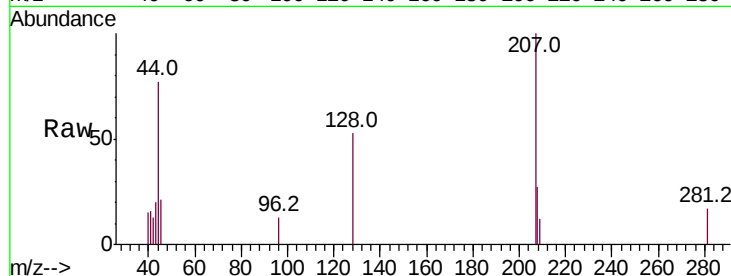
Tot Ion:128 Resp: 1645

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

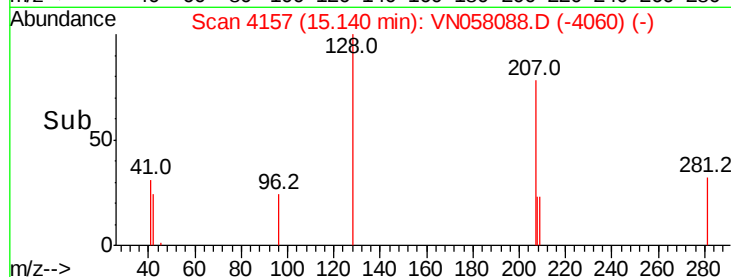
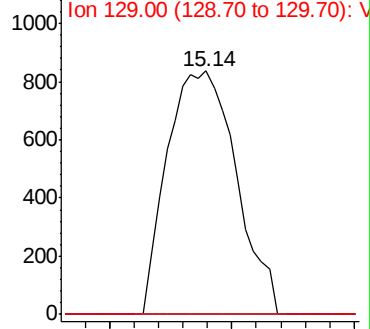
129 0.0 8.6 12.8#



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



Time-->