

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091019\
 Data File : VN057839.D
 Acq On : 10 Sep 2019 6:30
 Operator : JC/SP
 Sample : K4622-24
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 45 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

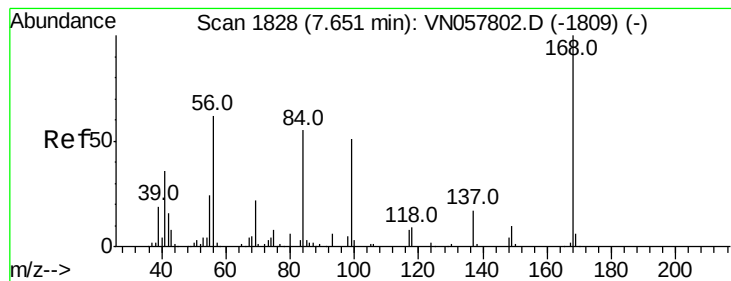
Quant Time: Sep 10 07:16:31 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	303567	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	520068	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	481306	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	247068	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	337339	54.87	ug/l	0.00
Spiked Amount			Recovery	=	109.74%	
35) Dibromofluoromethane	7.58	113	230384	48.00	ug/l	0.00
Spiked Amount			Recovery	=	96.00%	
50) Toluene-d8	10.08	98	960890	51.56	ug/l	0.00
Spiked Amount			Recovery	=	103.12%	
62) 4-Bromofluorobenzene	12.40	95	310854	43.77	ug/l	0.00
Spiked Amount			Recovery	=	87.54%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.55	94	362	Below Cal	#	2
16) Acetone	3.81	43	7636	3.788	ug/l #	83
18) Methyl Acetate	4.31	43	6201	1.154	ug/l	93
20) Methylene Chloride	4.53	84	8307	0.957	ug/l #	84
25) 2-Butanone	6.81	43	662	0.227	ug/l #	49
31) Cyclohexane	7.65	56	8162	Below Cal	#	16
36) 1,1-Dichloropropene	7.65	75	25546	4.235	ug/l #	51
38) Carbon Tetrachloride	7.65	117	31879	5.789	ug/l #	17
43) Isopropyl Acetate	8.16	43	94284	8.997	ug/l #	88
45) 1,2-Dichloropropane	9.27	63	1792	0.339	ug/l #	44
48) Methyl methacrylate	9.18	41	4891	0.920	ug/l #	13
49) 1,4-Dioxane	9.27	88	29	0.323	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	5857	0.944	ug/l	98
54) cis-1,3-Dichloropropene	9.90	75	37200	5.018	ug/l #	69
56) Ethyl methacrylate	10.55	69	1698	0.233	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	6210	0.744	ug/l #	43
59) 2-Hexanone	10.76	43	94761	20.387	ug/l #	54
71) Bromoform	12.39	173	651	0.239	ug/l #	1
74) N-amyl acetate	12.03	43	4341	0.520	ug/l #	48
76) 1,2,3-Trichloropropane	12.40	75	169547	30.335	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	169547	106.750	ug/l #	6
95) Naphthalene	15.13	128	1368	Below Cal	#	88
96) 1,2,3-Trichlorobenzene	15.31	180	300	1.057	ug/l #	28

(#) = 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: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

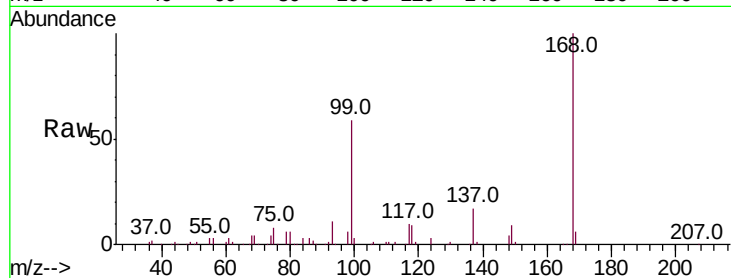
ClientSampled :

Tot Ion:168 Resp: 303567

Ion Ratio Lower Upper

168 100

99 58.7 48.0 72.0



Abundance Ion 167.90 (167.60 to 168.60): VN057802.D (-1809) (-)

Ion 98.90 (98.60 to 99.60): VN057802.D (-1809) (-)

7.65

150000

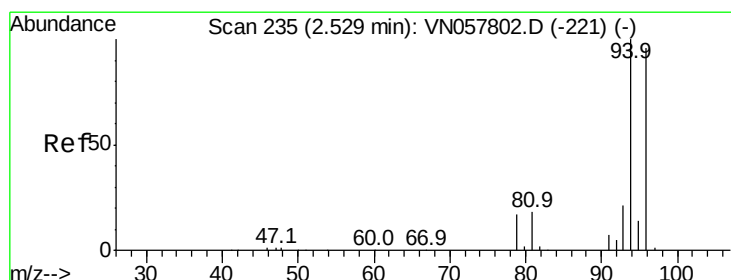
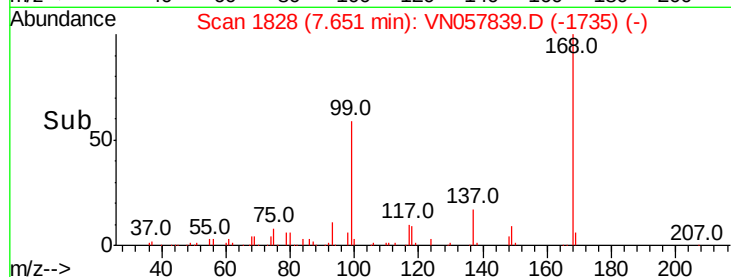
100000

50000

0

7.60 7.70

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.55 min Scan# 241

Delta R.T. 0.02 min

Lab File: VN057839.D

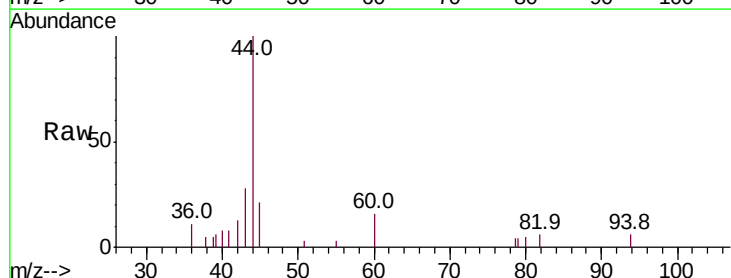
Acq: 10 Sep 2019 6:30

Tgt Ion: 94 Resp: 362

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN057802.D (-221) (-)

Ion 95.90 (95.60 to 96.60): VN057802.D (-221) (-)

2.55

300

250

200

150

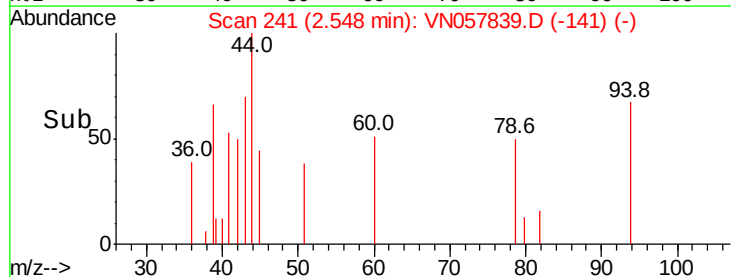
100

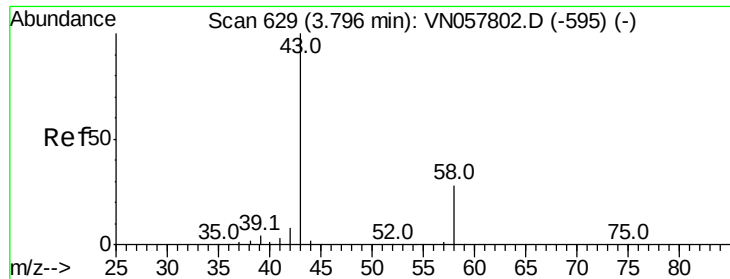
50

0

2.52 2.54 2.56 2.58

Time-->

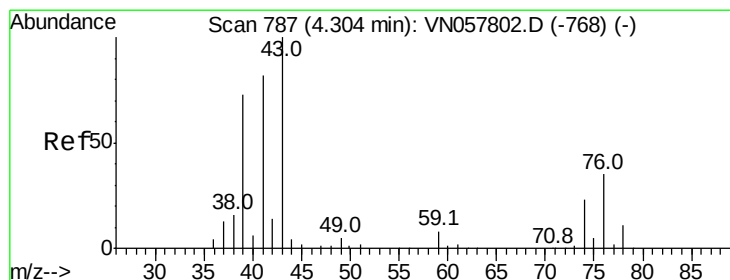
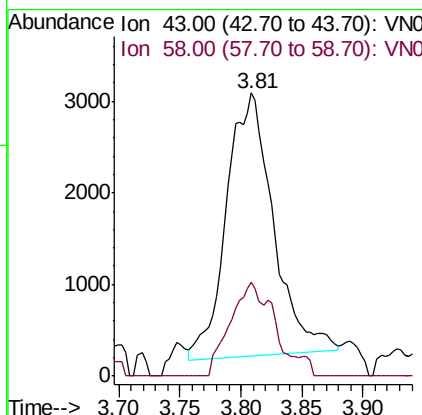
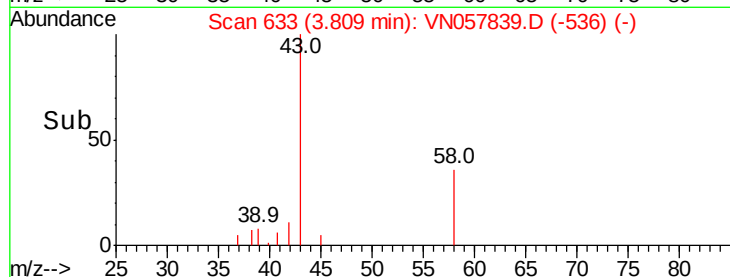
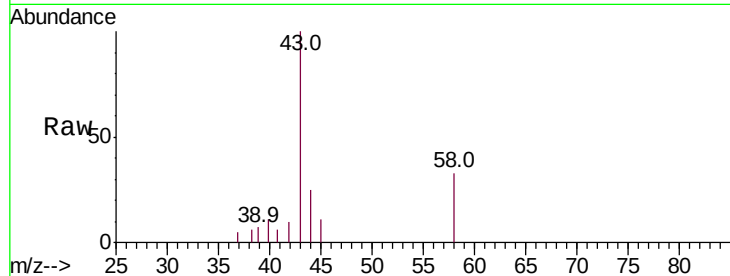




#16
Acetone
Concen: 3.788 ug/l
RT: 3.81 min Scan# 633
Delta R.T. 0.01 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

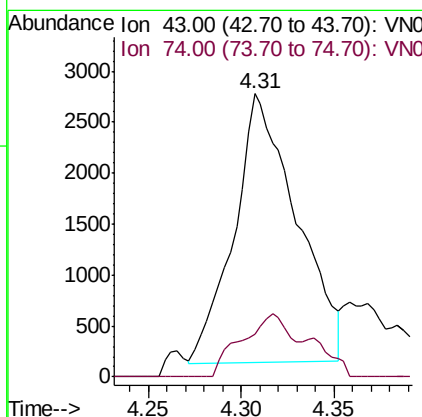
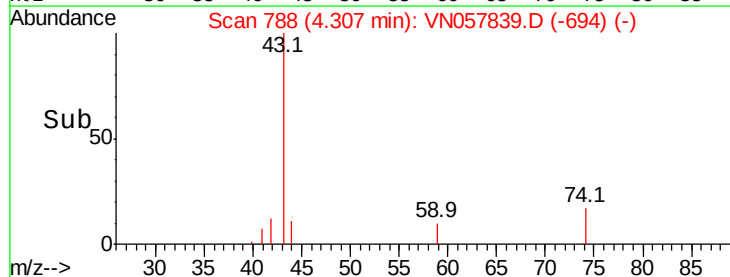
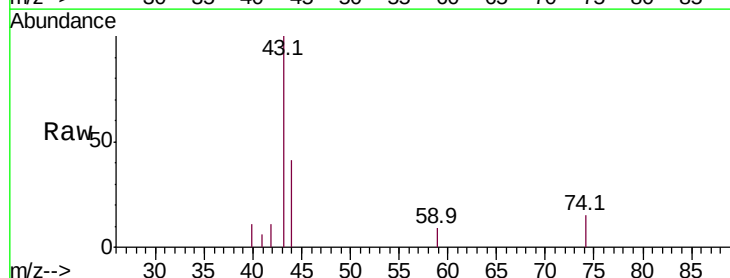
Instrument :
MSVOA_N
ClientSampled :

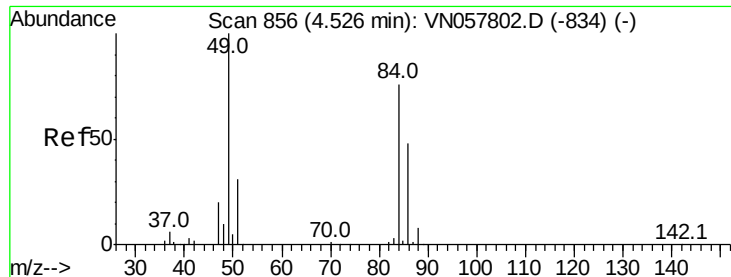
Tot Ion: 43 Resp: 7636
Ion Ratio Lower Upper
43 100
58 36.6 22.2 33.2#



#18
Methyl Acetate
Concen: 1.154 ug/l
RT: 4.31 min Scan# 788
Delta R.T. 0.00 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

Tgt Ion: 43 Resp: 6201
Ion Ratio Lower Upper
43 100
74 18.9 17.9 26.9

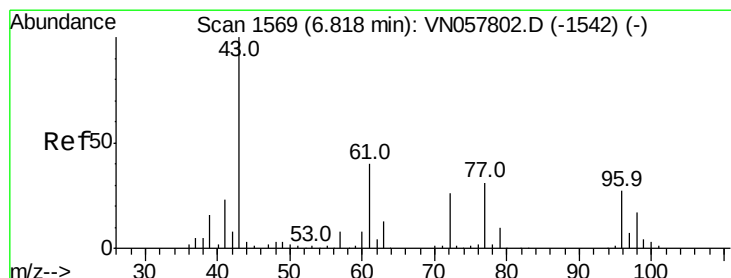
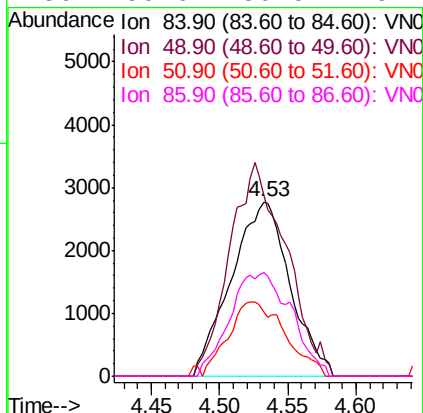
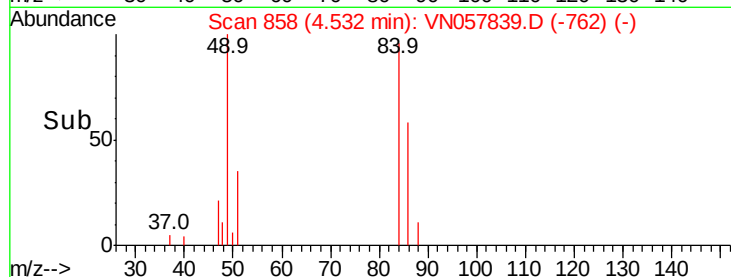
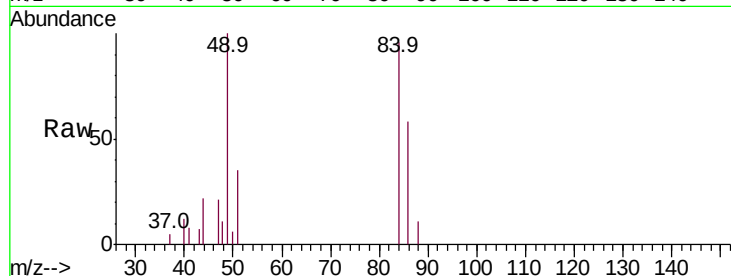




#20
Methylene Chloride
Concen: 0.957 ug/l
RT: 4.53 min Scan# 858
Delta R.T. 0.01 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

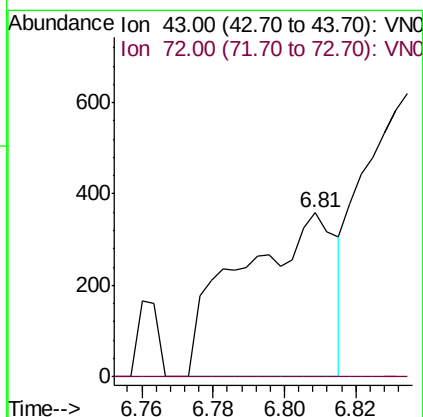
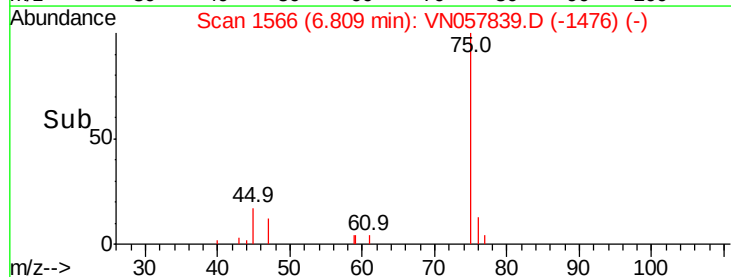
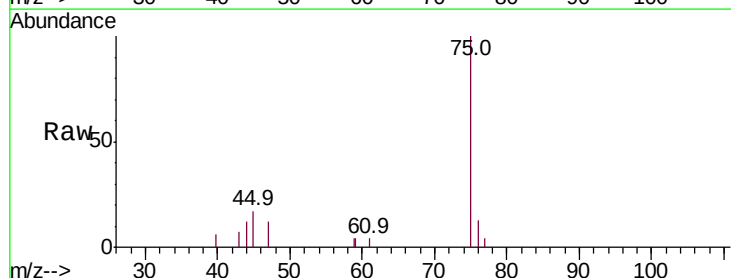
Instrument :
MSVOA_N
ClientSampled :

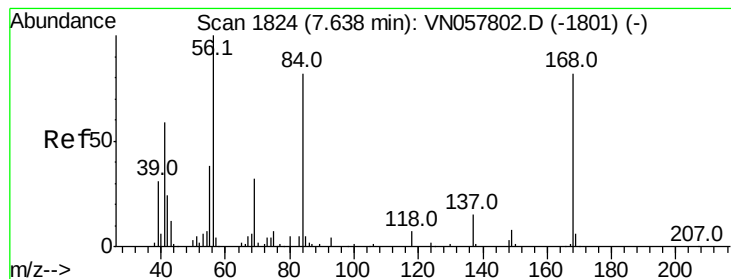
Tot Ion: 84 Resp: 8307
Ion Ratio Lower Upper
84 100
49 103.6 104.8 157.2#
51 36.5 33.0 49.4
86 59.6 50.5 75.7



#25
2-Butanone
Concen: 0.227 ug/l
RT: 6.81 min Scan# 1566
Delta R.T. -0.01 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

Tgt Ion: 43 Resp: 662
Ion Ratio Lower Upper
43 100
72 0.0 20.6 30.8#





#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1829

Delta R.T. 0.02 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :
MSVOA_N
ClientSampleId :

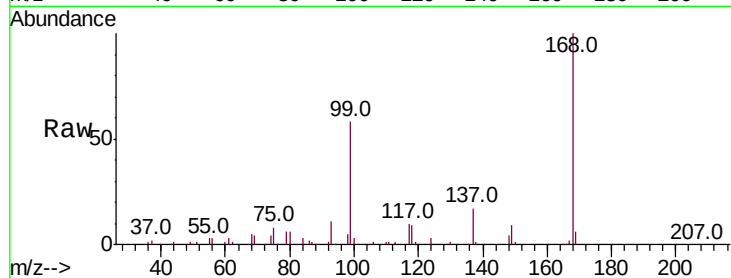
Tot Ion: 56 Resp: 8162

Ion Ratio Lower Upper

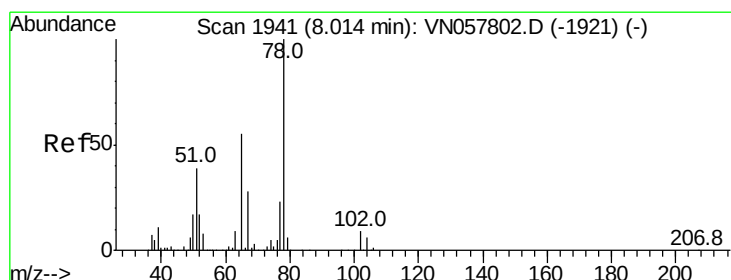
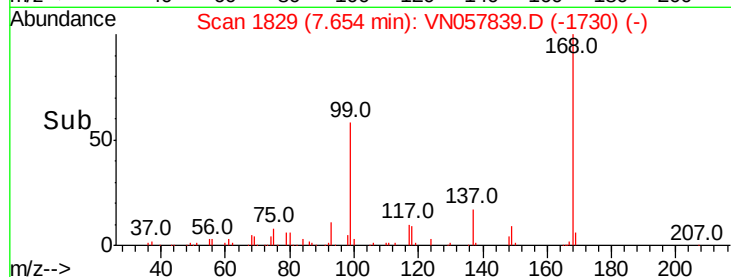
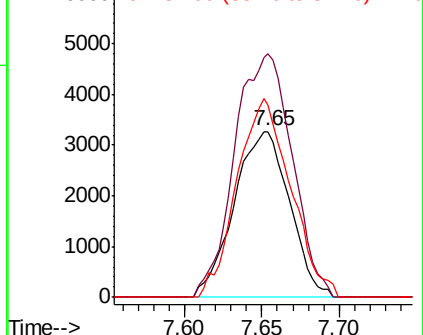
56 100

69 146.5 25.9 38.9#

84 115.5 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: 54.865 ug/l

RT: 8.01 min Scan# 1941

Delta R.T. 0.00 min

Lab File: VN057839.D

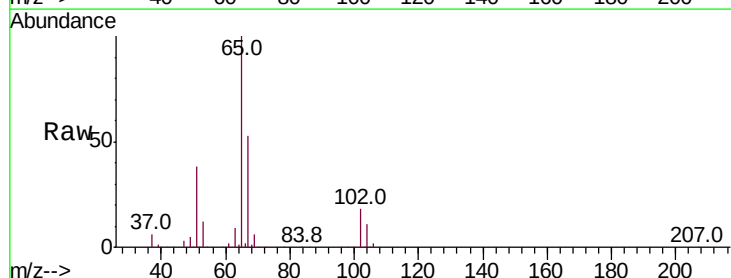
Acq: 10 Sep 2019 6:30

Tgt Ion: 65 Resp: 337339

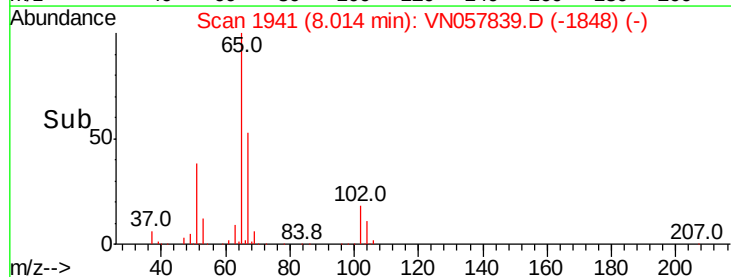
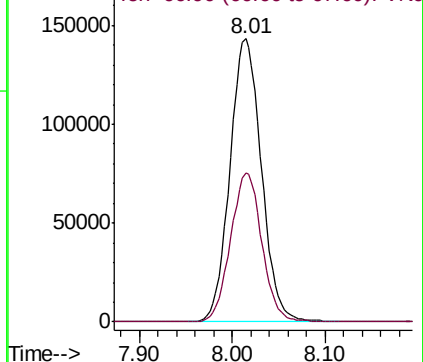
Ion Ratio Lower Upper

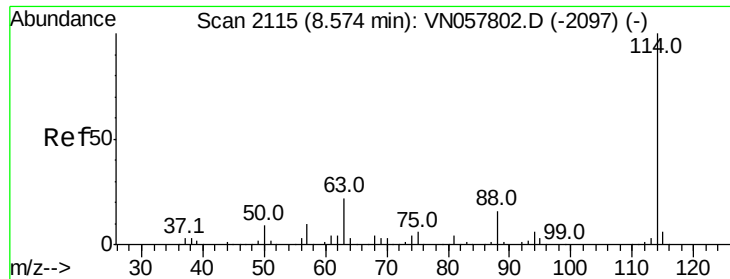
65 100

67 52.3 0.0 104.0



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

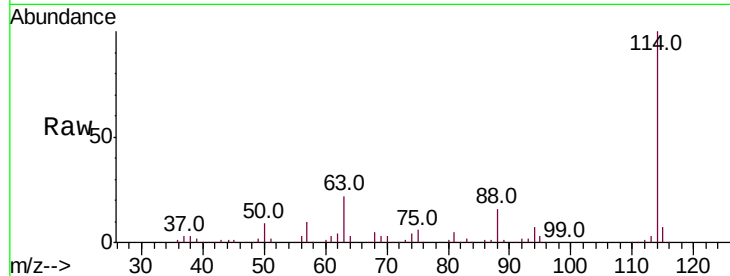




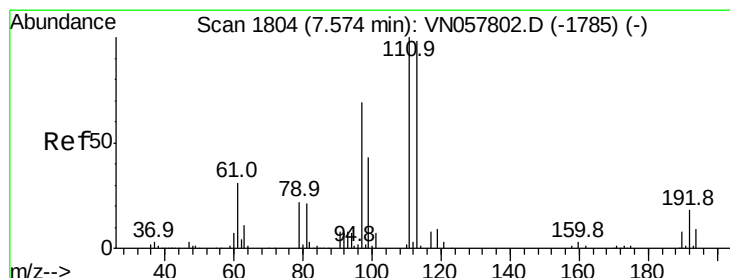
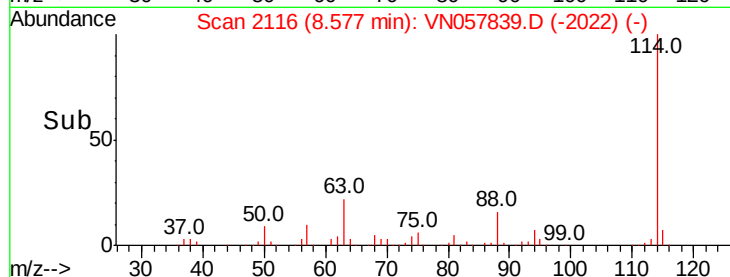
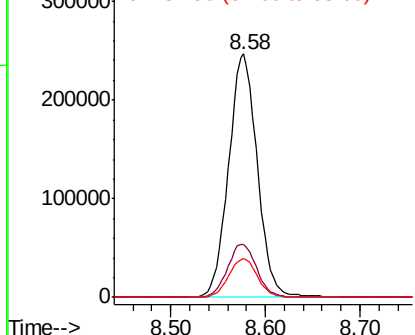
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.58 min Scan# 2116
 Delta R.T. 0.00 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

Instrument :
 MSVOA_N
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
114	100		
63	21.9	0.0	44.0
88	15.7	0.0	31.4

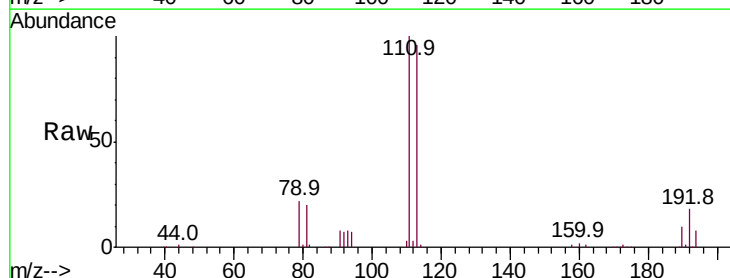


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VN
 Ion 87.90 (87.60 to 88.60): VN

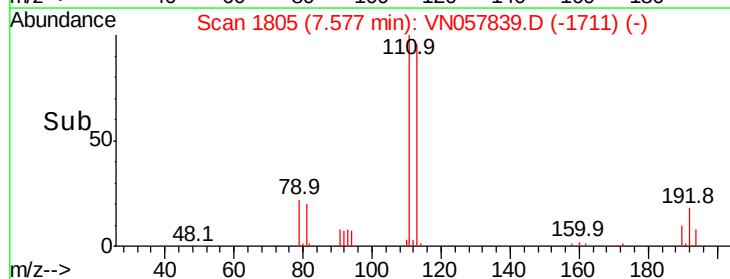
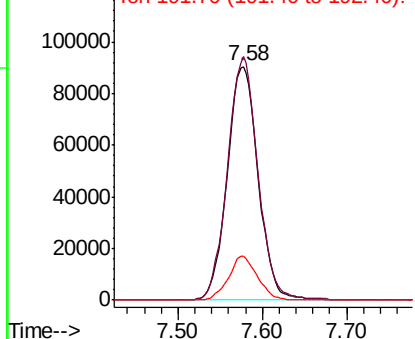


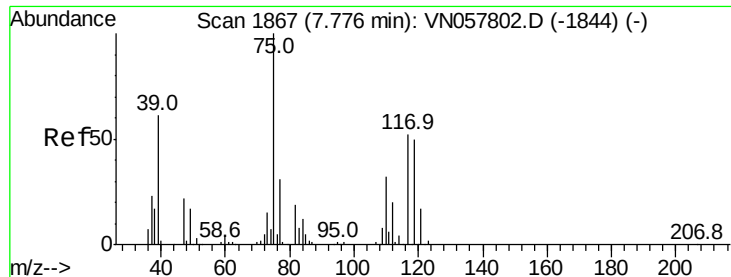
#35
 Dibromofluoromethane
 Concen: 47.996 ug/l
 RT: 7.58 min Scan# 1805
 Delta R.T. 0.00 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

Tgt Ion	Ratio	Lower	Upper
113	100		
111	102.8	81.3	121.9
192	17.6	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

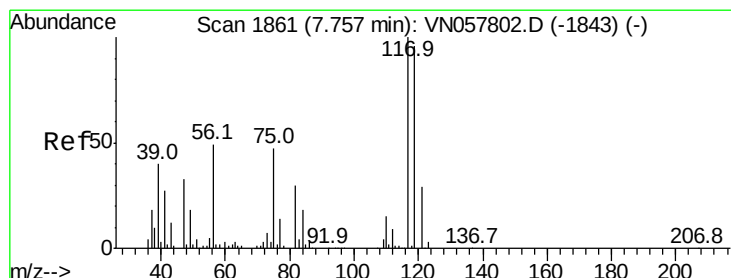
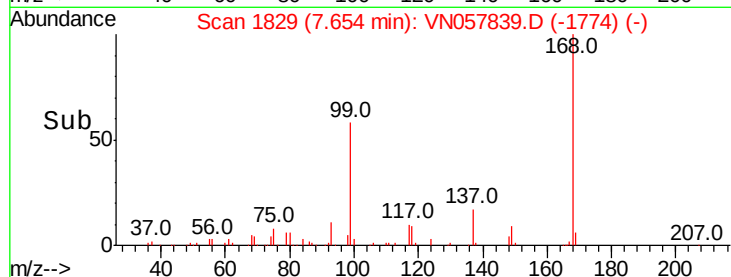
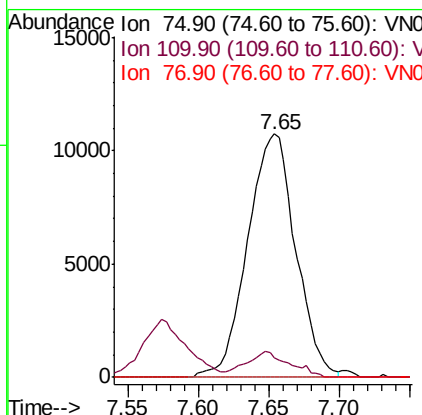
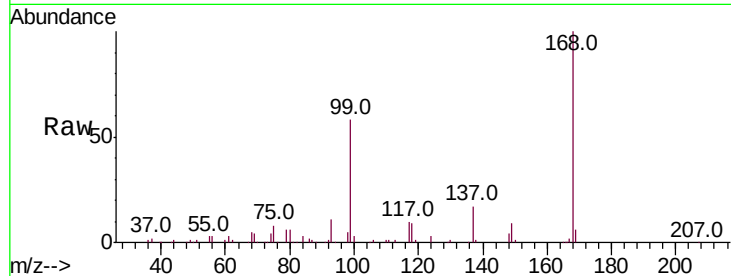




#36
 1,1-Dichloropropene
 Concen: 4.235 ug/l
 RT: 7.65 min Scan# 1829
 Delta R.T. -0.12 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

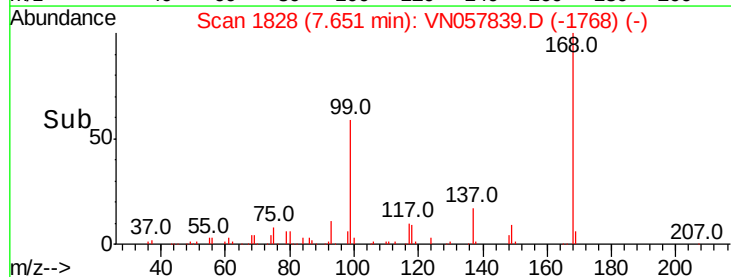
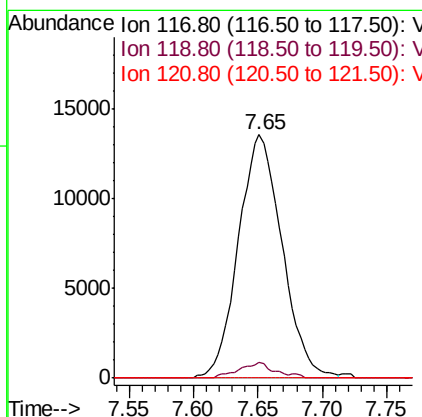
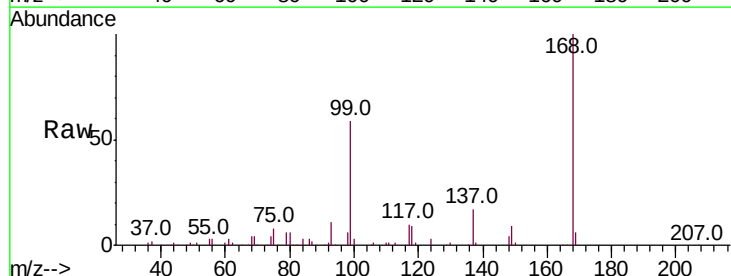
Instrument :
 MSVOA_N
 ClientSampled :

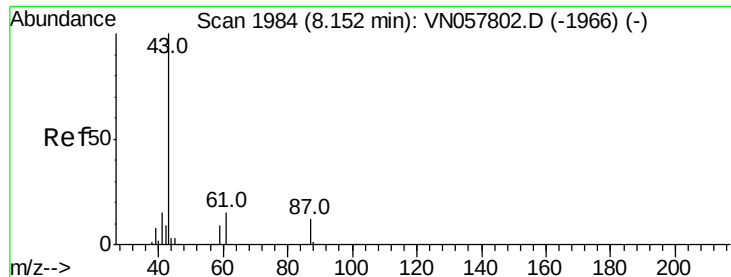
Tot Ion	Ratio	Lower	Upper
75	100		
110	9.6	16.3	48.9#
77	0.0	25.0	37.4#



#38
 Carbon Tetrachloride
 Concen: 5.789 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.11 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

Tgt Ion	Ratio	Lower	Upper
117	100		
119	6.5	76.9	115.3#
121	0.0	23.4	35.2#





#43

Isopropyl Acetate

Concen: 8.997 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.00 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampleId :

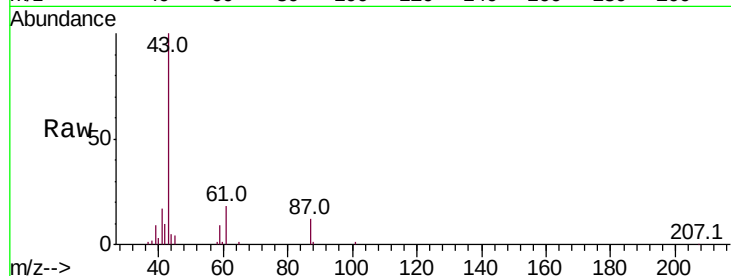
Tot Ion: 43 Resp: 94284

Ion Ratio Lower Upper

43 100

61 16.8 20.1 30.1#

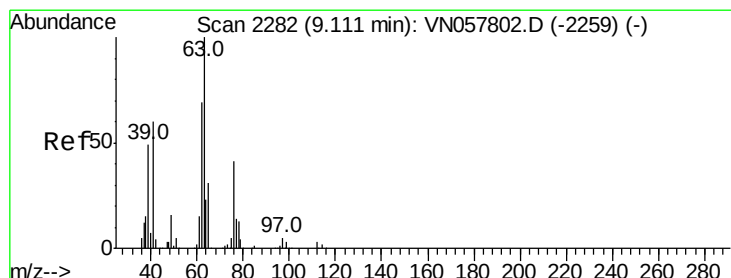
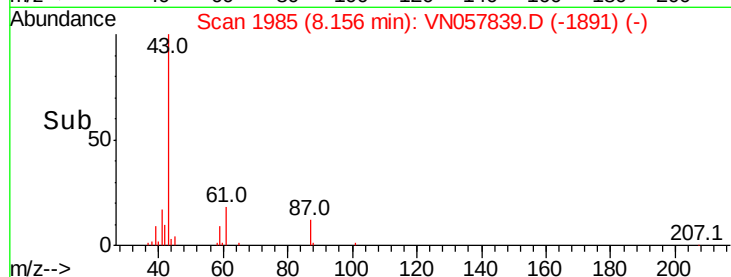
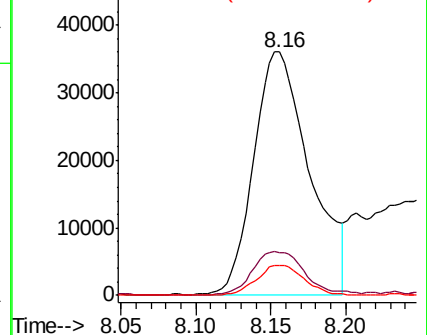
87 10.4 9.5 14.3



Abundance Ion 43.00 (42.70 to 43.70): VN057802.D (-1966) (-)

Ion 61.00 (60.70 to 61.70): VN057802.D (-1966) (-)

Ion 87.00 (86.70 to 87.70): VN057802.D (-1966) (-)



#45

1,2-Dichloropropane

Concen: 0.339 ug/l

RT: 9.27 min Scan# 2330

Delta R.T. 0.15 min

Lab File: VN057839.D

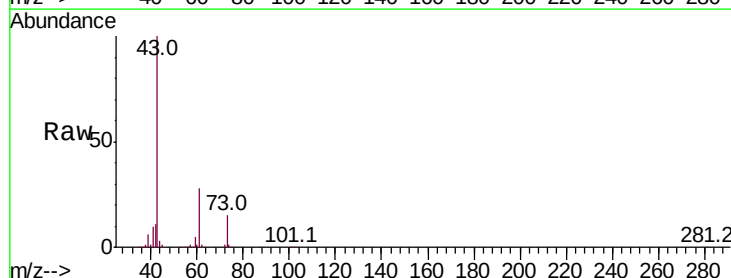
Acq: 10 Sep 2019 6:30

Tgt Ion: 63 Resp: 1792

Ion Ratio Lower Upper

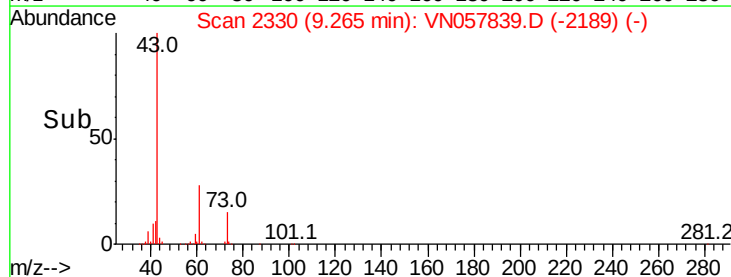
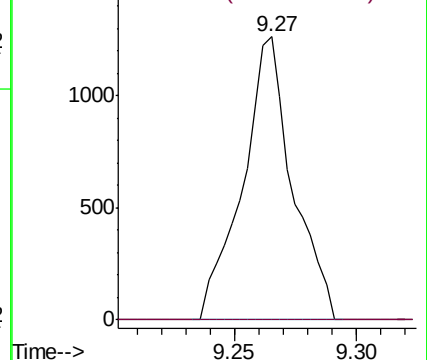
63 100

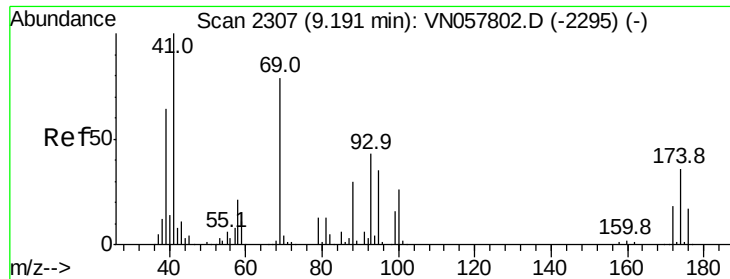
65 0.0 24.8 37.2#



Abundance Ion 62.90 (62.60 to 63.60): VN057802.D (-2259) (-)

Ion 64.90 (64.60 to 65.60): VN057802.D (-2259) (-)

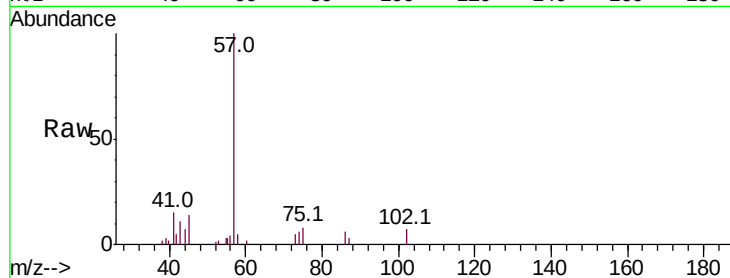




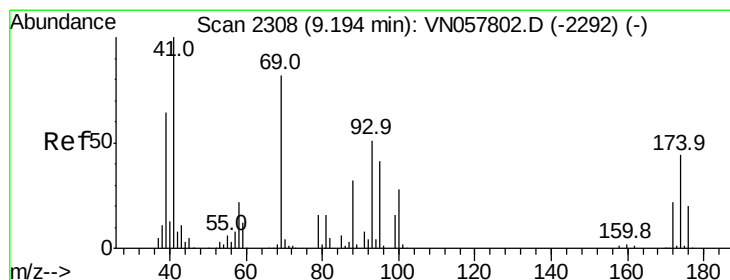
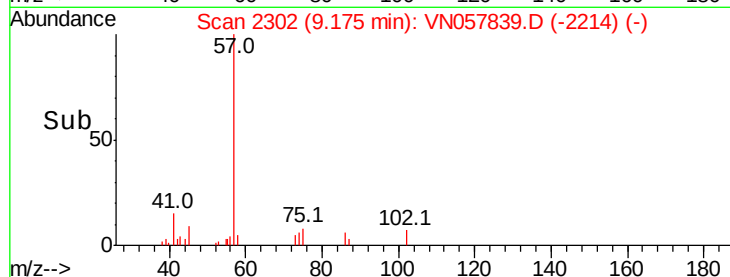
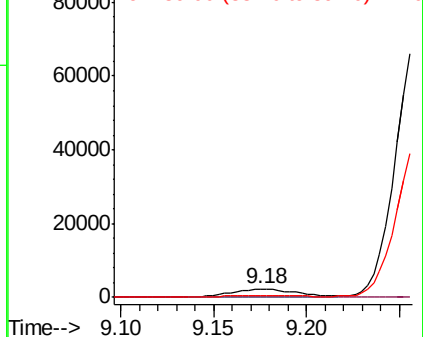
#48
Methyl methacrylate
Concen: 0.920 ug/l
RT: 9.18 min Scan# 2302
Delta R.T. -0.02 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

Instrument :
MSVOA_N
ClientSampled :

Tot Ion: 41 Resp: 4891
Ion Ratio Lower Upper
41 100
69 0.0 62.7 94.1#
39 0.0 52.7 79.1#

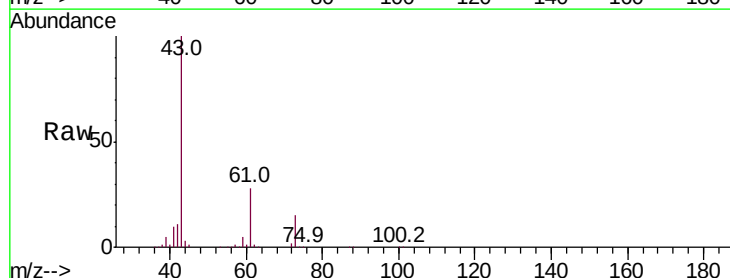


Abundance Ion 41.00 (40.70 to 41.70): VNC
Ion 69.00 (68.70 to 69.70): VNC
Ion 39.00 (38.70 to 39.70): VNC

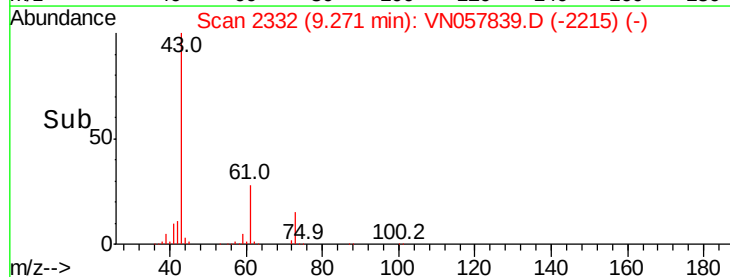
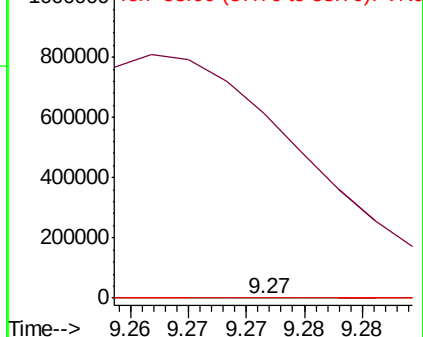


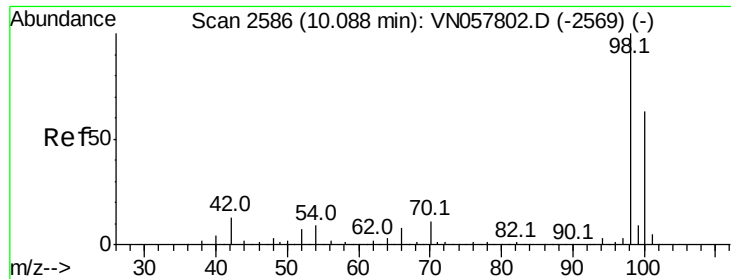
#49
1,4-Dioxane
Concen: 0.323 ug/l
RT: 9.27 min Scan# 2332
Delta R.T. 0.08 min
Lab File: VN057839.D
Acq: 10 Sep 2019 6:30

Tgt Ion: 88 Resp: 29
Ion Ratio Lower Upper
88 100
43 5160427.6 28.5 42.7#
58 23255.2 55.8 83.6#



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





#50

Toluene-d8

Concen: 51.560 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

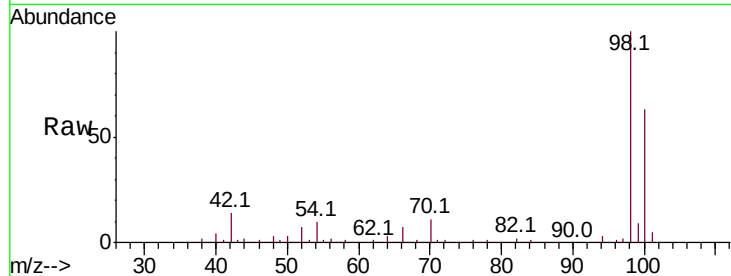
ClientSampled :

Tot Ion: 98 Resp: 960890

Ion Ratio Lower Upper

98 100

100 62.8 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VN057802.D (-2569) (-)

Ion 100.00 (99.70 to 100.70): VN057802.D (-2569) (-)

10.08

600000

500000

400000

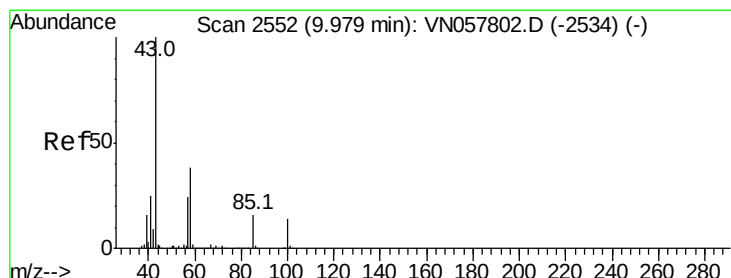
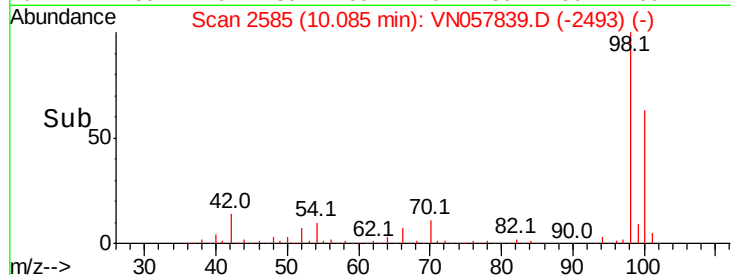
300000

200000

100000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.944 ug/l

RT: 9.98 min Scan# 2553

Delta R.T. 0.00 min

Lab File: VN057839.D

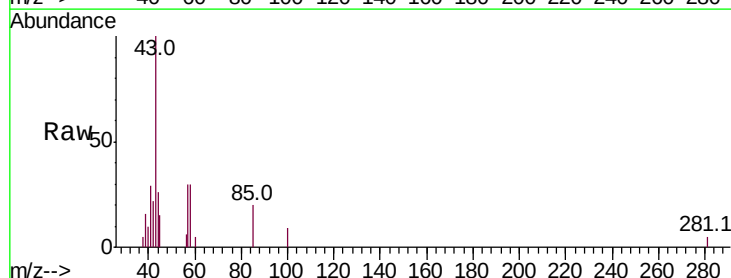
Acq: 10 Sep 2019 6:30

Tgt Ion: 43 Resp: 5857

Ion Ratio Lower Upper

43 100

58 36.1 29.8 44.6



Abundance Ion 43.00 (42.70 to 43.70): VN057802.D (-2534) (-)

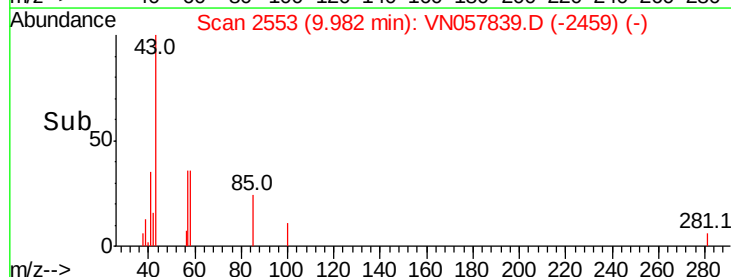
Ion 58.00 (57.70 to 58.70): VN057802.D (-2534) (-)

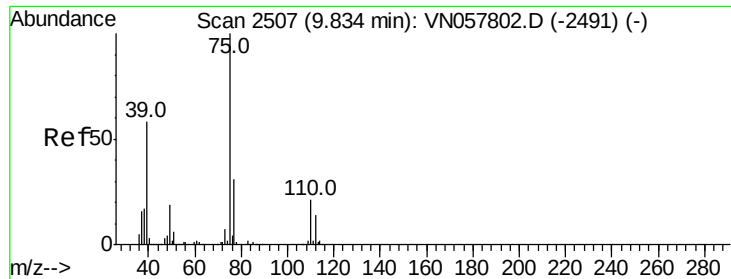
10000

5000

0

Time-->



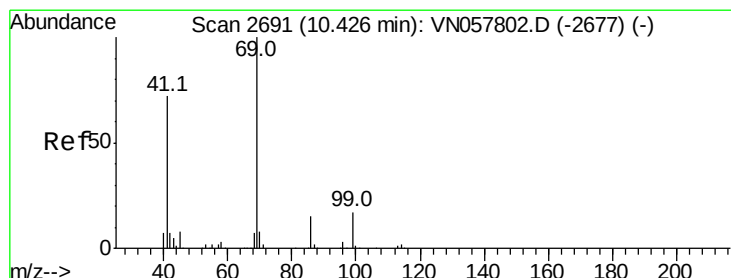
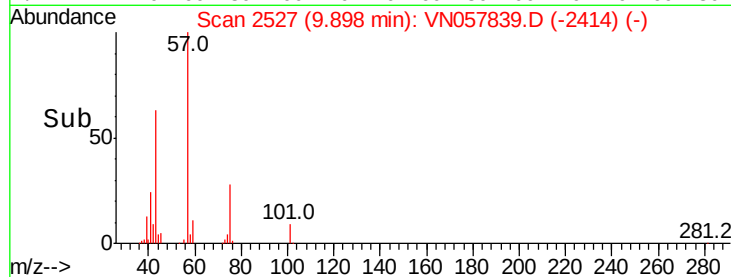
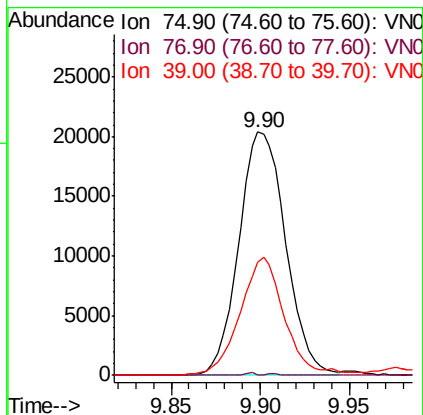
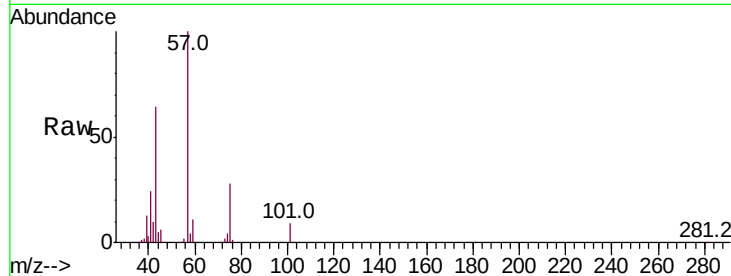


#54

cis-1,3-Dichloropropene
 Concen: 5.018 ug/l
 RT: 9.90 min Scan# 2527
 Delta R.T. 0.06 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

Instrument :
 MSVOA_N
 ClientSampled :

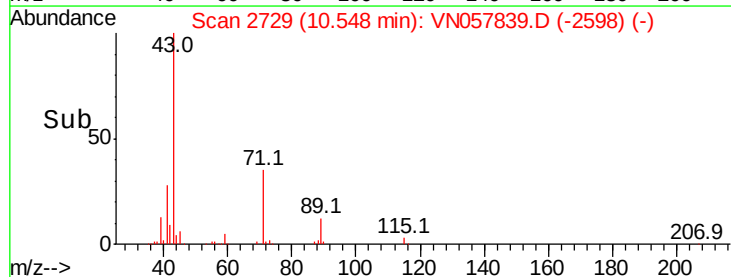
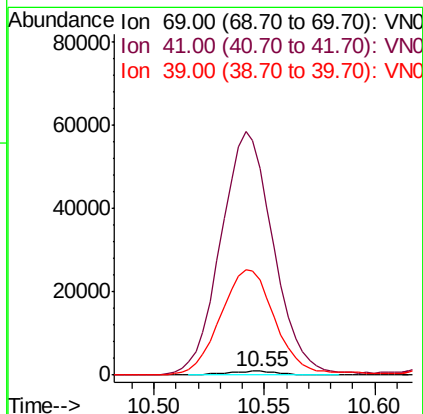
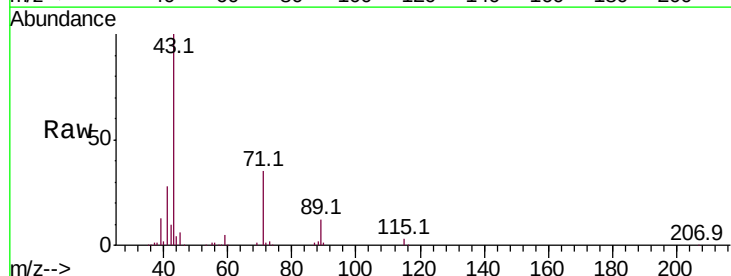
Tot Ion: 75 Resp: 37200
 Ion Ratio Lower Upper
 75 100
 77 0.0 24.8 37.2#
 39 45.4 46.2 69.4#

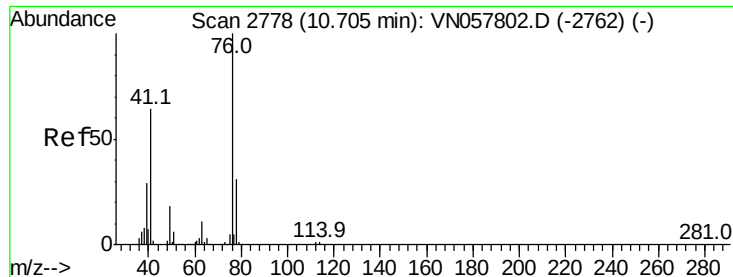


#56

Ethyl methacrylate
 Concen: 0.233 ug/l
 RT: 10.55 min Scan# 2729
 Delta R.T. 0.12 min
 Lab File: VN057839.D
 Acq: 10 Sep 2019 6:30

Tgt Ion: 69 Resp: 1698
 Ion Ratio Lower Upper
 69 100
 41 5707.1 56.7 85.1#
 39 2593.0 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: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

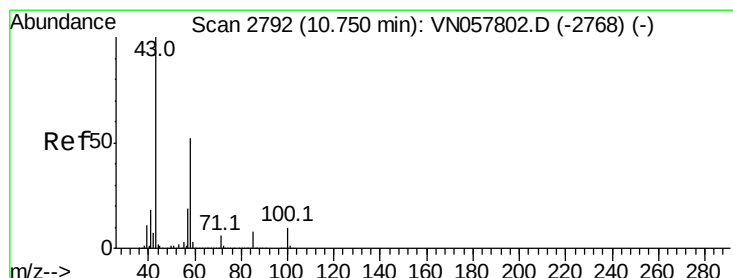
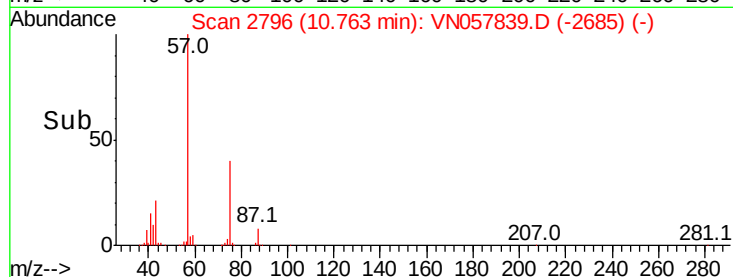
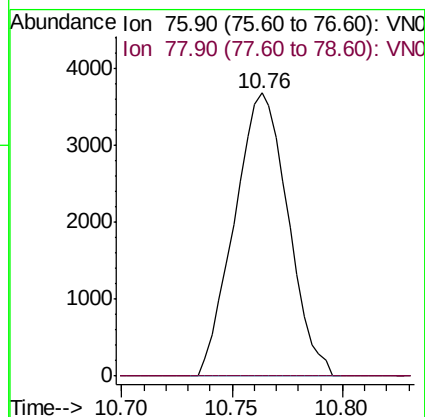
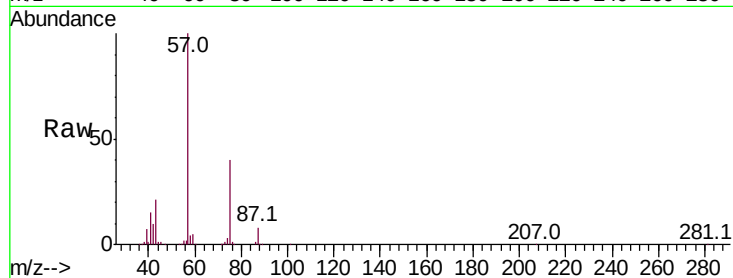
ClientSampled :

Tot Ion: 76 Resp: 6210

Ion Ratio Lower Upper

76 100

78 0.0 25.4 38.2#



#59

2-Hexanone

Concen: 20.387 ug/l

RT: 10.76 min Scan# 2796

Delta R.T. 0.01 min

Lab File: VN057839.D

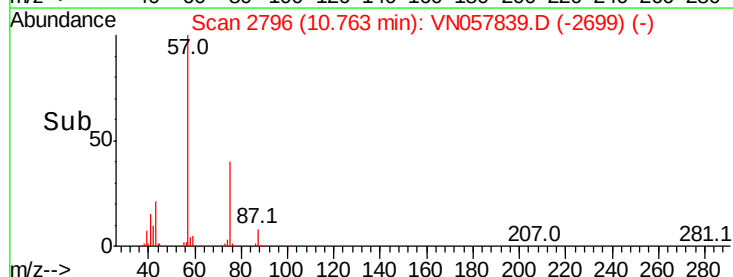
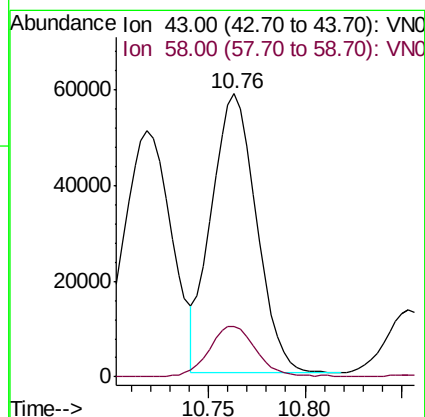
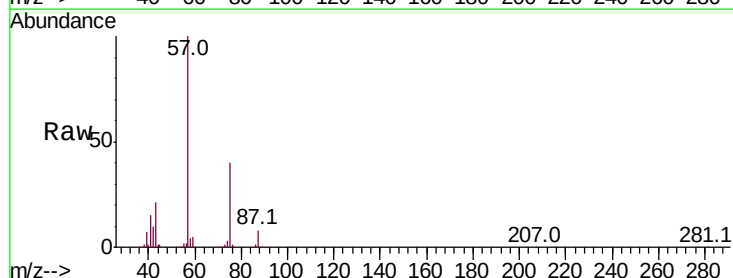
Acq: 10 Sep 2019 6:30

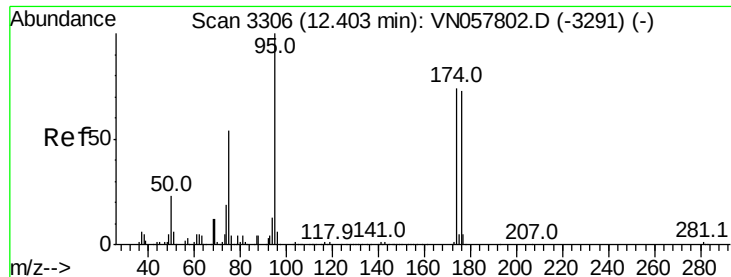
Tgt Ion: 43 Resp: 94761

Ion Ratio Lower Upper

43 100

58 19.0 25.6 76.8#





#62

4-Bromofluorobenzene

Concen: 43.770 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampled :

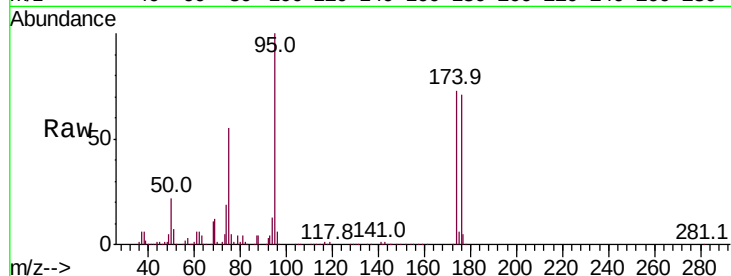
Tot Ion: 95 Resp: 310854

Ion Ratio Lower Upper

95 100

174 74.1 0.0 150.2

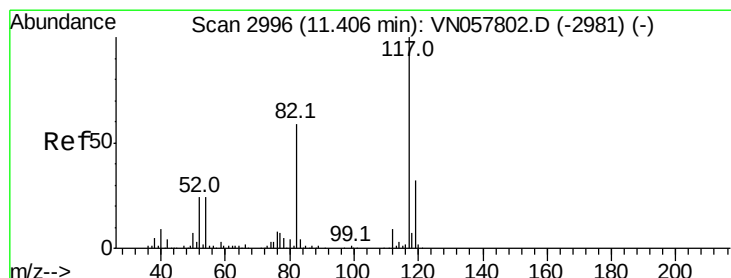
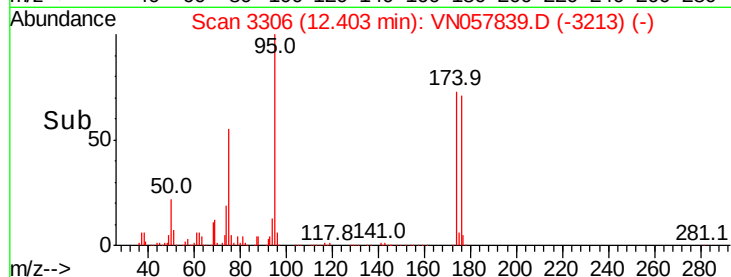
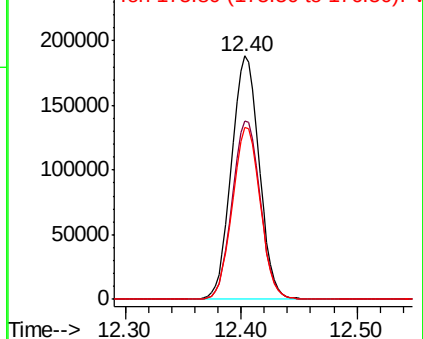
176 70.8 0.0 146.0



Abundance Ion 94.90 (94.60 to 95.60): VN057802.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN057802.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN057802.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

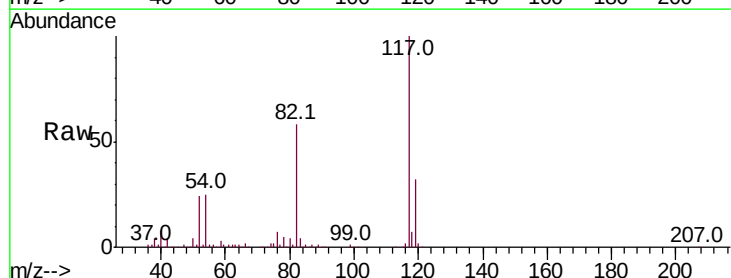
Tgt Ion: 117 Resp: 481306

Ion Ratio Lower Upper

117 100

82 57.9 47.2 70.8

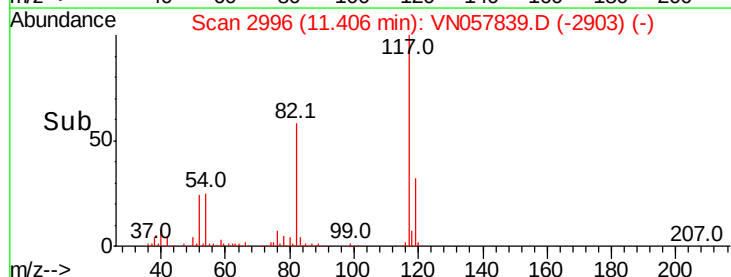
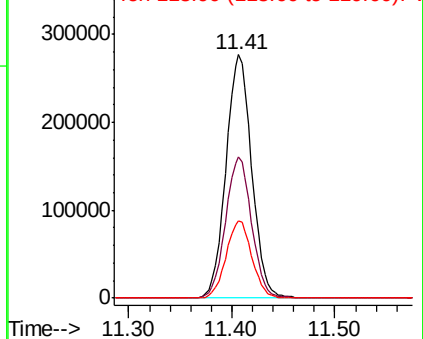
119 31.8 25.3 37.9

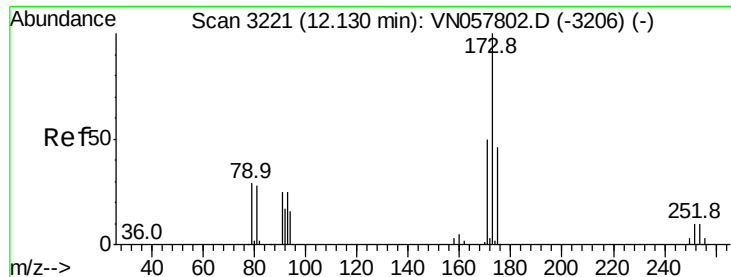


Abundance Ion 116.90 (116.60 to 117.60): VN057802.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN057802.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN057802.D (-2981) (-)





#71

Bromoform

Concen: 0.239 ug/l

RT: 12.39 min Scan# 3303

Delta R.T. 0.26 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampleId :

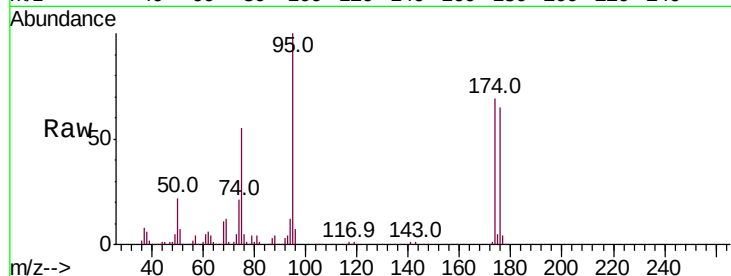
Tot Ion:173 Resp: 651

Ion Ratio Lower Upper

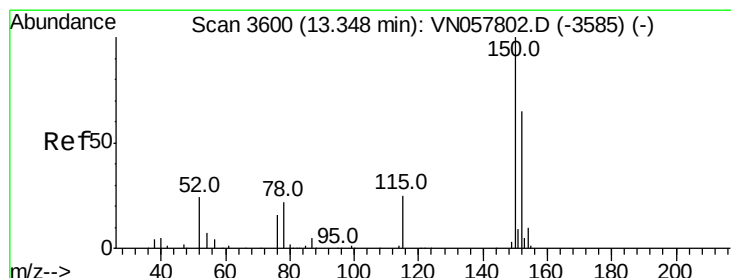
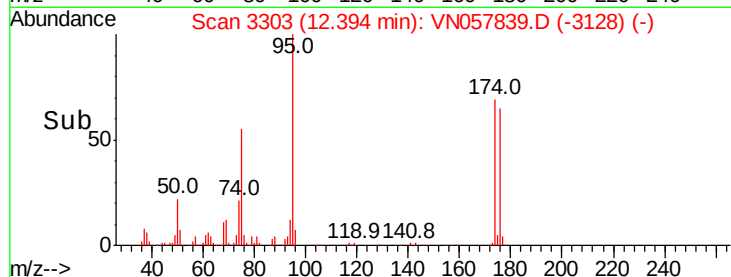
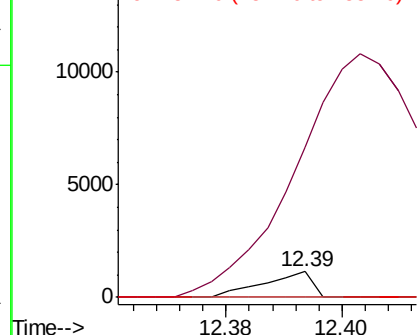
173 100

175 2402.3 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: VN057839.D

Acq: 10 Sep 2019 6:30

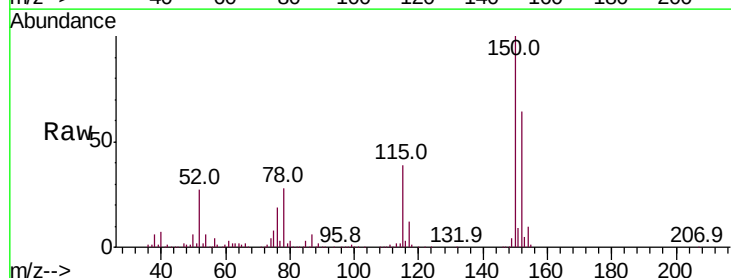
Tgt Ion:152 Resp: 247068

Ion Ratio Lower Upper

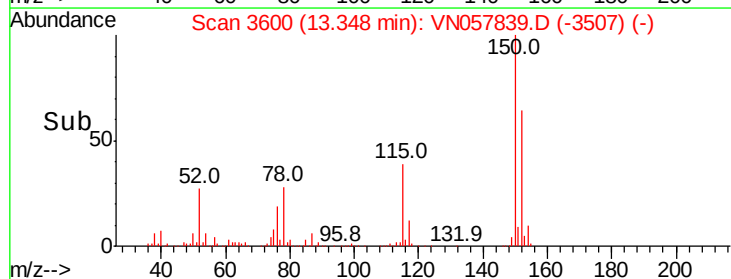
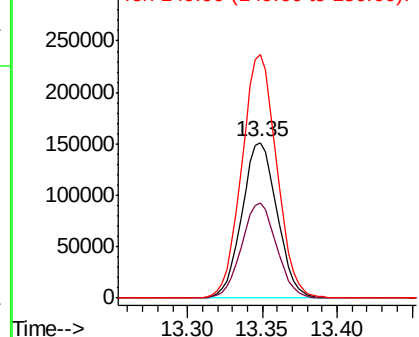
152 100

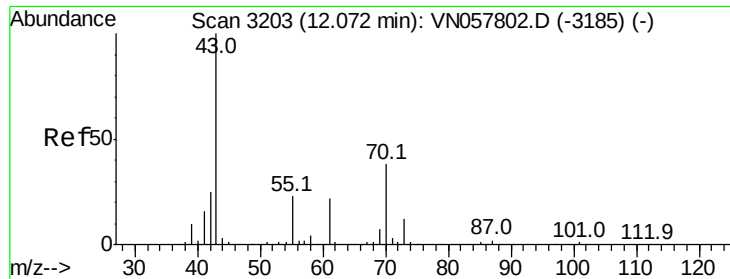
115 60.9 30.3 91.0

150 156.1 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-amvl acetate

Concen: 0.520 ug/l

RT: 12.03 min Scan# 3191

Delta R.T. -0.04 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion: 43 Resp: 4341

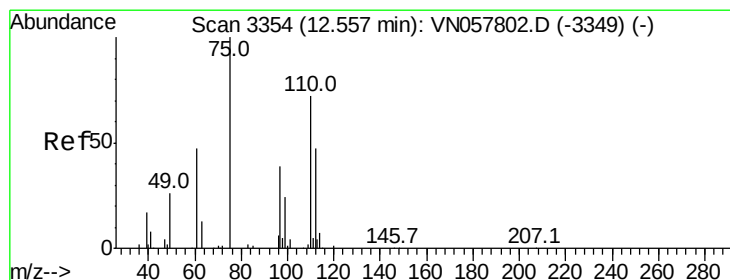
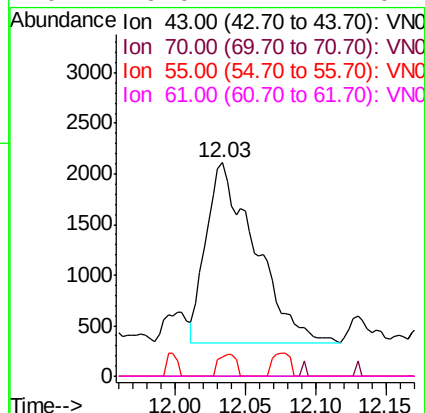
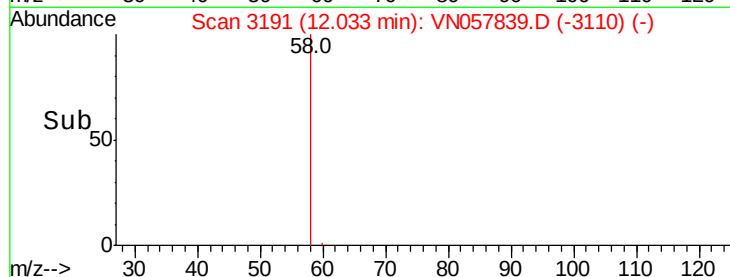
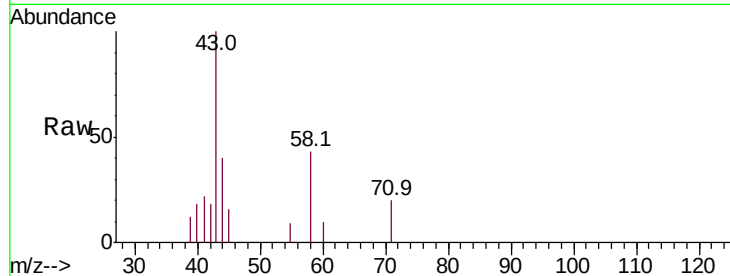
Ion Ratio Lower Upper

43 100

70 0.0 30.6 45.8#

55 4.2 18.6 27.8#

61 0.0 17.4 26.2#



#76

1,2,3-Trichloropropane

Concen: 30.335 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN057839.D

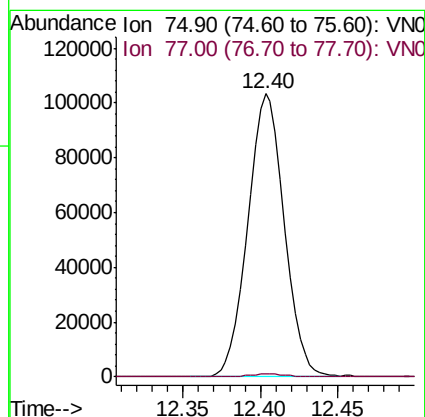
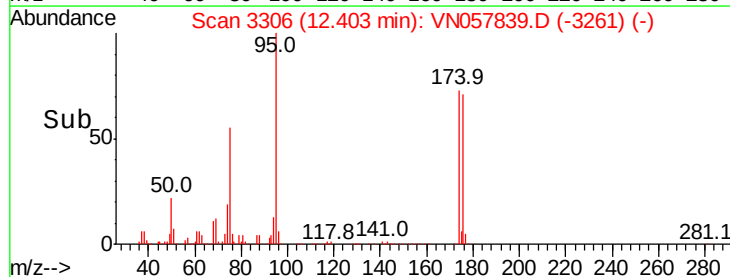
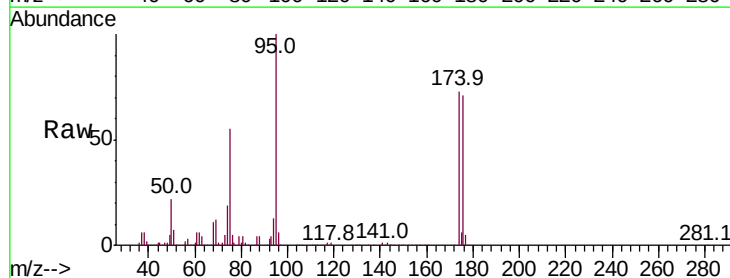
Acq: 10 Sep 2019 6:30

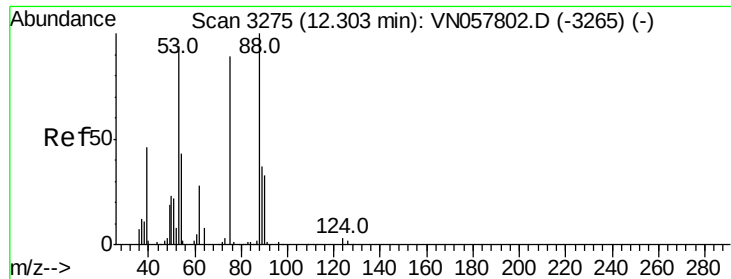
Tgt Ion: 75 Resp: 169547

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 106.750 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampleId :

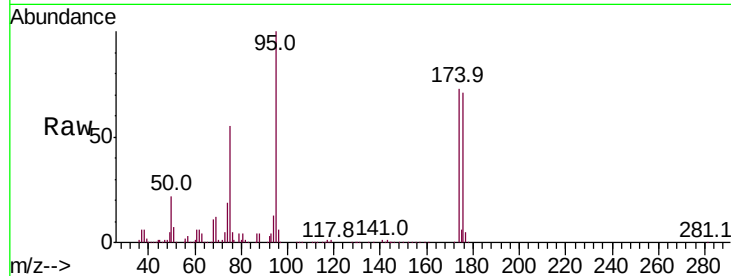
Tot Ion: 75 Resp: 169547

Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

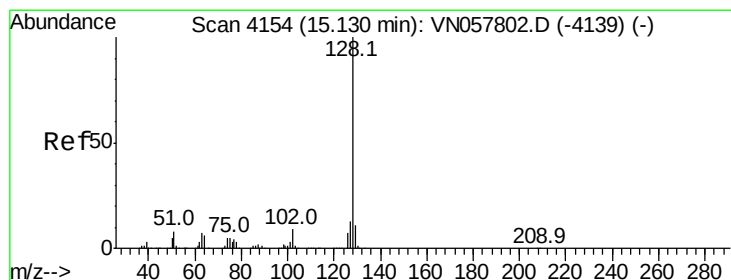
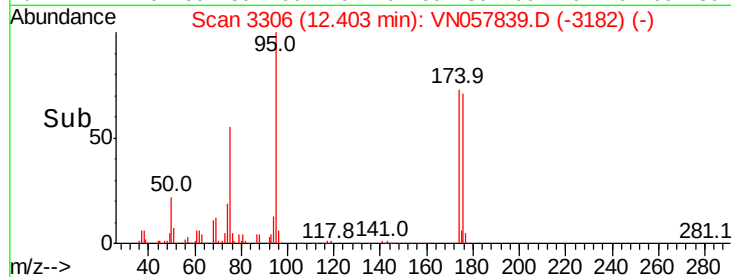
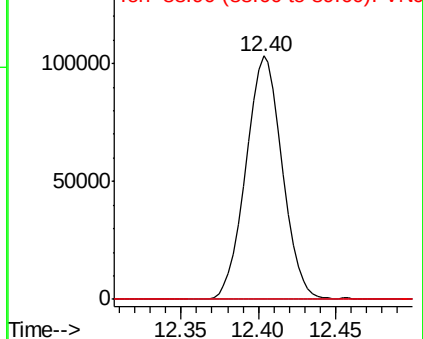
89 0.0 35.3 52.9#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0



#95

Naphthalene

Concen: Below Cal

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

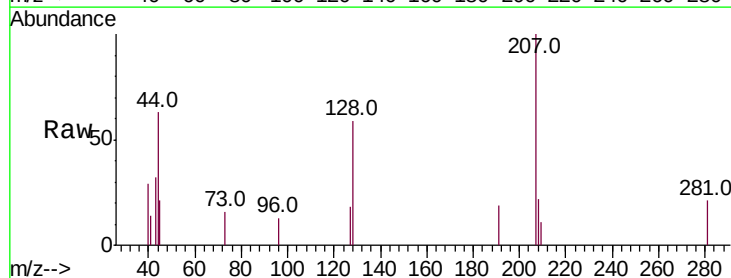
Tgt Ion: 128 Resp: 1368

Ion Ratio Lower Upper

128 100

127 9.0 10.3 15.5#

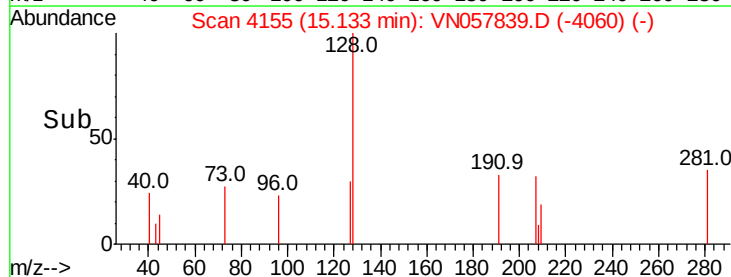
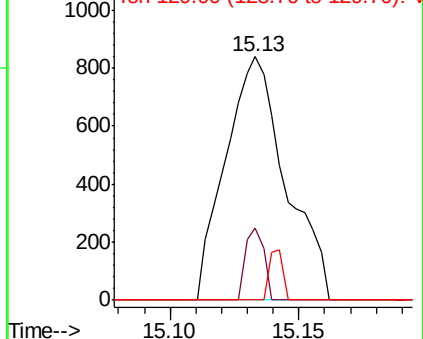
129 4.8 8.6 12.8#

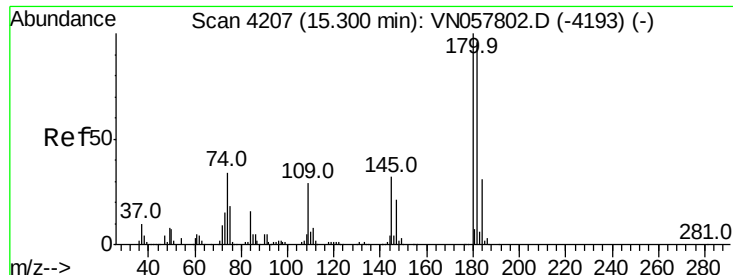


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96

1,2,3-Trichlorobenzene

Concen: 1.057 ug/l

RT: 15.31 min Scan# 4209

Delta R.T. 0.01 min

Lab File: VN057839.D

Acq: 10 Sep 2019 6:30

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion:180 Resp: 300

Ion Ratio Lower Upper

180 100

182 21.3 48.3 144.8#

145 0.0 16.3 48.8#

