

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN100719\
 Data File : VN058562.D
 Acq On : 7 Oct 2019 13:18
 Operator : JC/SP
 Sample : K5227-02
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Oct 08 13:53:24 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N092419W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Sep 25 01:36:25 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.18	128	70272	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.57	114	406574	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	355350	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.01	65	190314	30.64	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	102.13%
60) 4-Bromofluorobenzene	12.41	95	172445	28.05	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	93.50%
63) Toluene-d8	10.09	98	506767	29.88	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	99.60%

Target Compounds

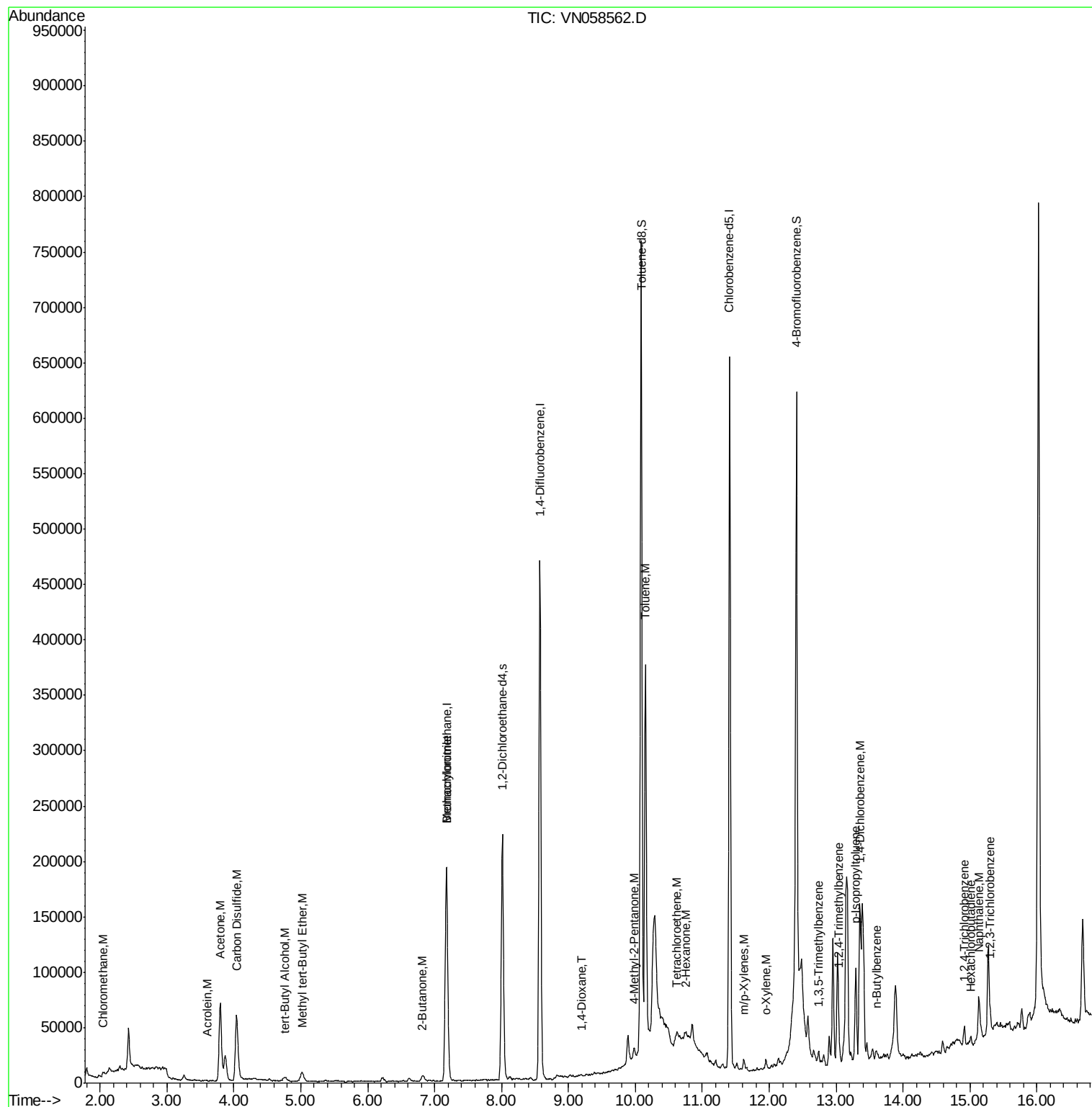
					Ovalue
3) Chloromethane	2.04	50	2165	0.444 ug/l	99
13) Acrolein	3.60	56	218	1.492 ug/l #	46
15) Acetone	3.79	58	33213	56.462 ug/l	100
16) Carbon Disulfide	4.03	76	5116	0.477 ug/l #	93
23) tert-Butyl Alcohol	4.76	59	3922	5.008 ug/l #	100
24) Methyl tert-Butyl Ether	5.02	73	7913	0.571 ug/l #	87
30) 2-Butanone	6.82	43	3596	1.193 ug/l #	63
35) Methacrylonitrile	7.18	41	604	0.233 ug/l #	30
45) 1,4-Dioxane	9.20	88	69	0.764 ug/l #	8
58) 4-Methyl-2-Pentanone	9.98	43	6445	1.158 ug/l #	54
59) 2-Hexanone	10.75	43	2123	0.504 ug/l #	85
61) Tetrachloroethene	10.63	164	932	0.250 ug/l #	52
62) Toluene	10.15	91	250430	12.868 ug/l	99
67) m/p-Xylenes	11.62	106	2883	0.354 ug/l	90
68) o-Xylene	11.96	106	1662	0.210 ug/l	79
76) 1,3,5-Trimethylbenzene	12.74	105	4087	0.231 ug/l	99
80) 1,2,4-Trimethylbenzene	13.05	105	8732	0.495 ug/l	93
82) p-Isopropyltoluene	13.30	119	9207	0.509 ug/l	90
84) 1,4-Dichlorobenzene	13.37	146	1942	0.213 ug/l	86
85) n-Butylbenzene	13.62	91	4269	0.254 ug/l	89
89) 1,2,4-Trichlorobenzene	14.92	180	3177	0.543 ug/l	99
90) Hexachlorobutadiene	15.02	225	884	0.312 ug/l	85
91) Naphthalene	15.13	128	19710	1.226 ug/l	98
92) 1,2,3-Trichlorobenzene	15.30	180	4193	0.746 ug/l	85

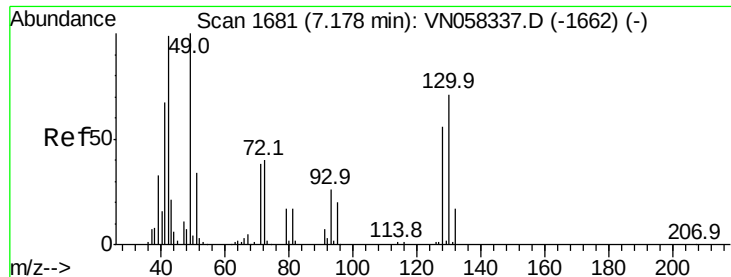
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN100719\
Data File : VN058562.D
Acq On : 7 Oct 2019 13:18
Operator : JC/SP
Sample : K5227-02
Misc : 5.00mL/MSVOA N/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :

Quant Time: Oct 08 13:53:24 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N092419W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Sep 25 01:36:25 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.18 min Scan# 1680

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :
MSVOA_N
ClientSampled :

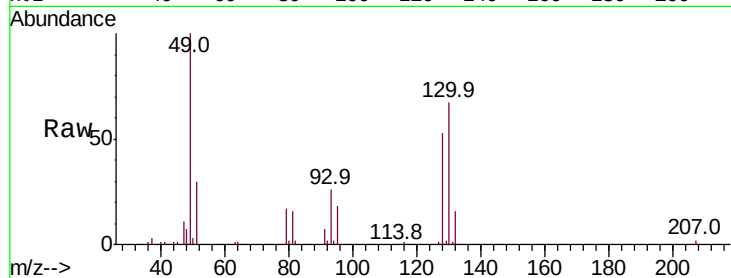
Tot Ion:128 Resp: 70272

Ion Ratio Lower Upper

128 100

49 182.7 0.0 458.5

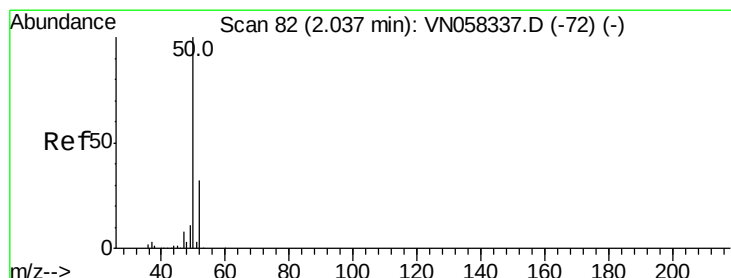
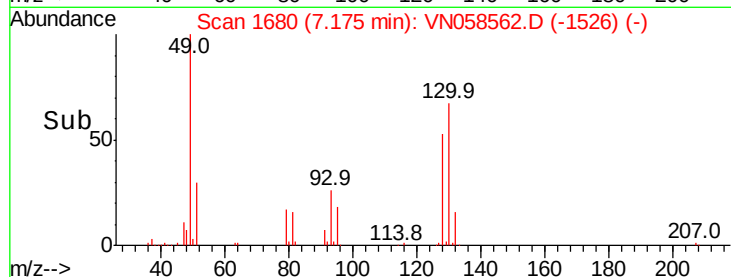
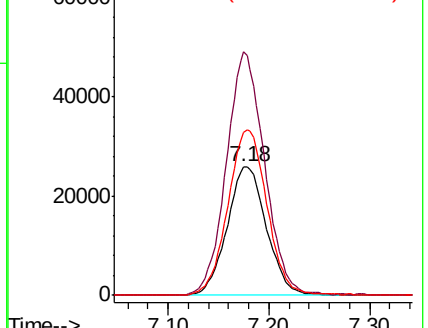
130 127.6 0.0 320.7



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN0

Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 0.444 ug/l

RT: 2.04 min Scan# 83

Delta R.T. 0.00 min

Lab File: VN058562.D

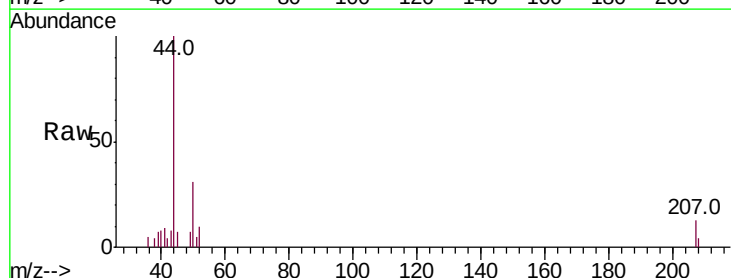
Acq: 7 Oct 2019 13:18

Tgt Ion: 50 Resp: 2165

Ion Ratio Lower Upper

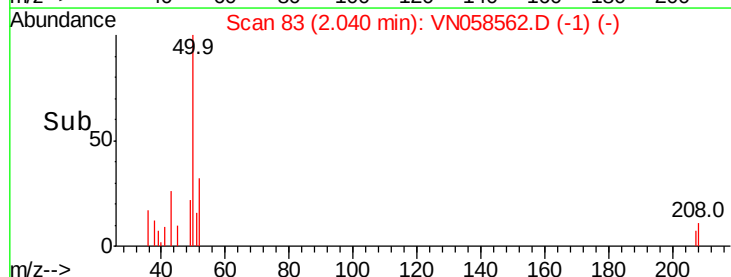
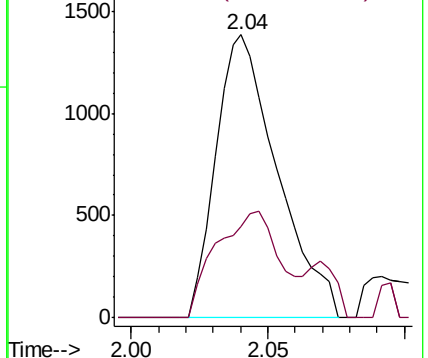
50 100

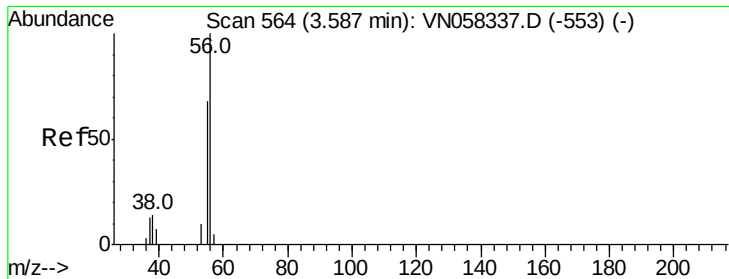
52 32.1 25.9 38.9



Abundance Ion 50.00 (49.70 to 50.70): VN0

Ion 52.00 (51.70 to 52.70): VN0





#13

Acrolein

Concen: 1.492 ug/l

RT: 3.60 min Scan# 568

Delta R.T. 0.01 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :

MSVOA_N

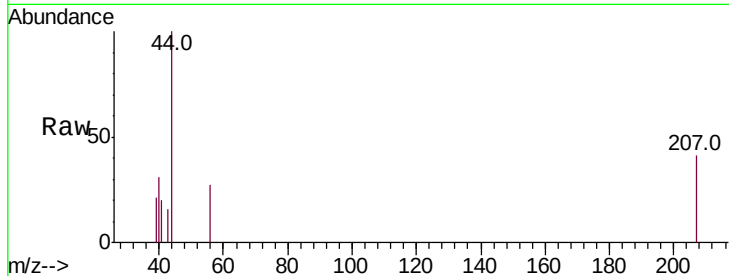
ClientSampled :

Tot Ion: 56 Resp: 218

Ion Ratio Lower Upper

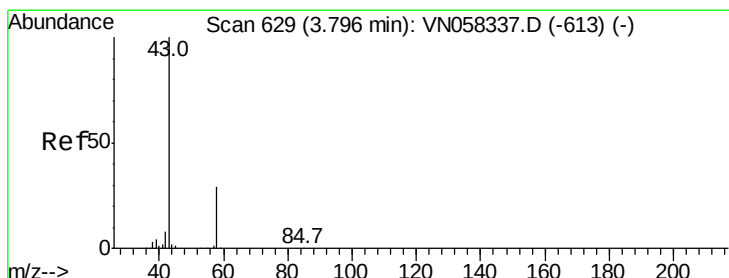
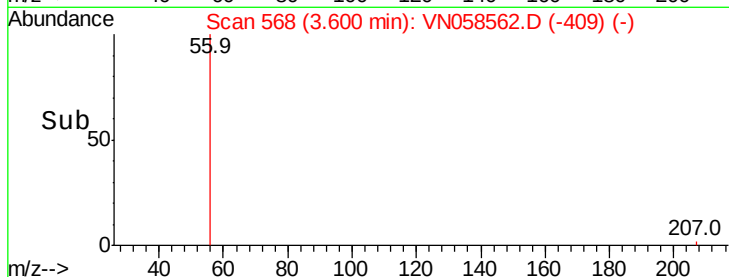
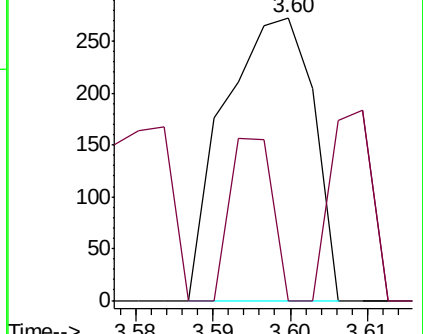
56 100

55 27.5 58.4 87.6#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#15

Acetone

Concen: 56.462 ug/l

RT: 3.79 min Scan# 628

Delta R.T. -0.00 min

Lab File: VN058562.D

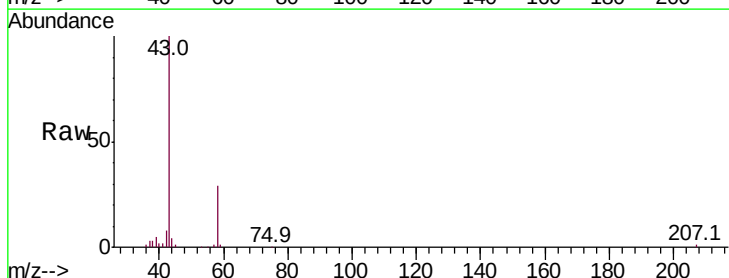
Acq: 7 Oct 2019 13:18

Tgt Ion: 58 Resp: 33213

Ion Ratio Lower Upper

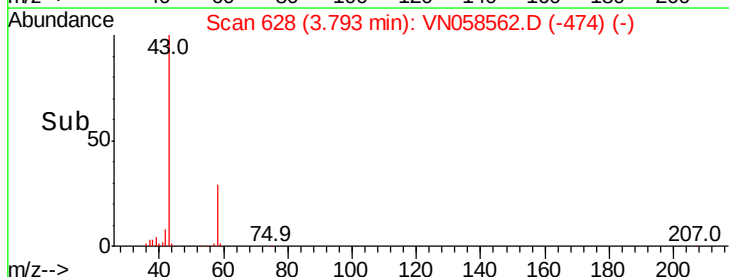
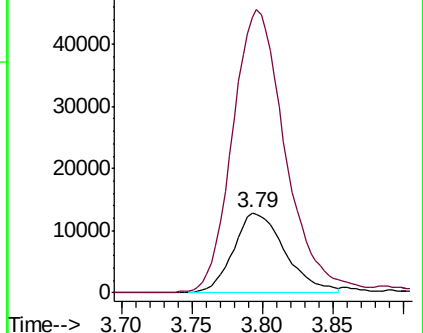
58 100

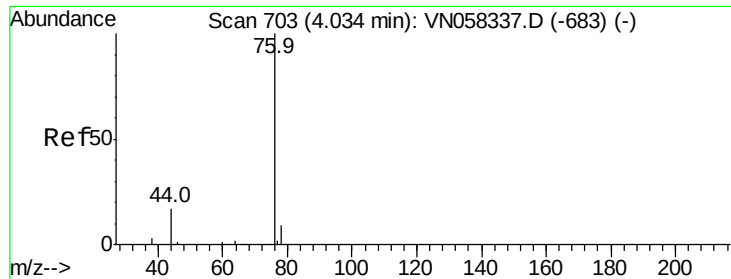
43 340.0 272.6 409.0



Abundance Ion 58.00 (57.70 to 58.70): VN0

Ion 43.00 (42.70 to 43.70): VN0

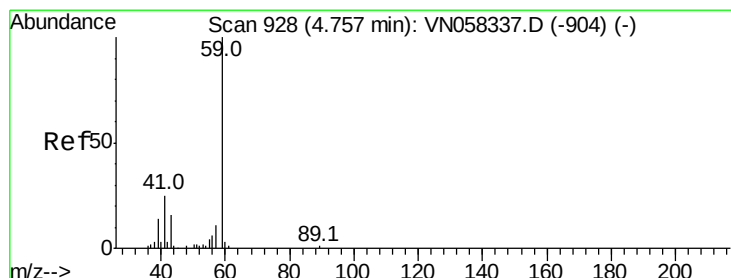
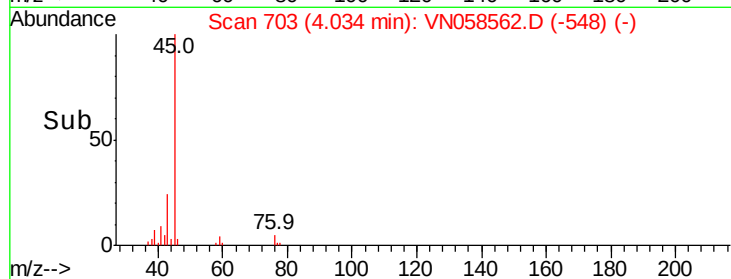
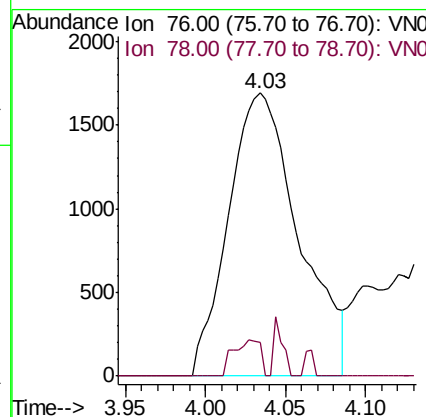
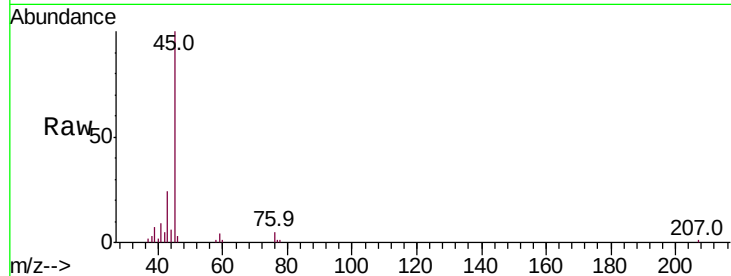




#16
Carbon Disulfide
Concen: 0.477 ug/l
RT: 4.03 min Scan# 703
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

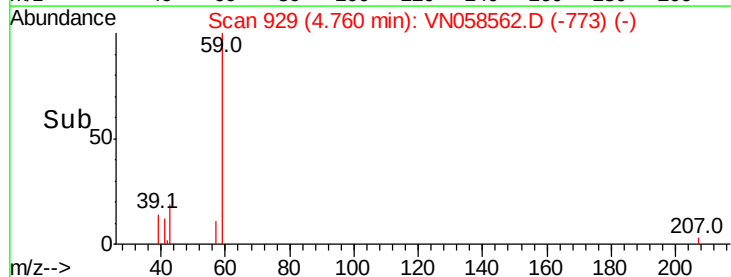
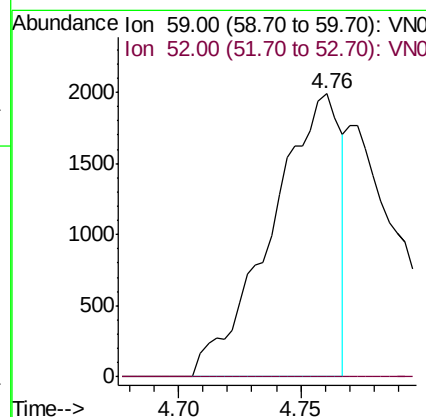
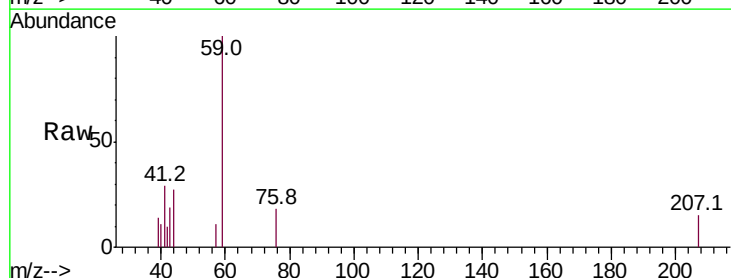
Instrument :
MSVOA_N
ClientSampled :

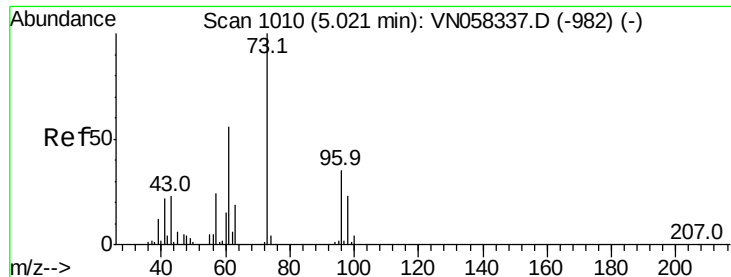
Tot Ion: 76 Resp: 5116
Ion Ratio Lower Upper
76 100
78 12.0 7.4 11.2#



#23
tert-Butyl Alcohol
Concen: 5.008 ug/l
RT: 4.76 min Scan# 929
Delta R.T. 0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion: 59 Resp: 3922
Ion Ratio Lower Upper
59 100
52 0.0 0.1 0.1#

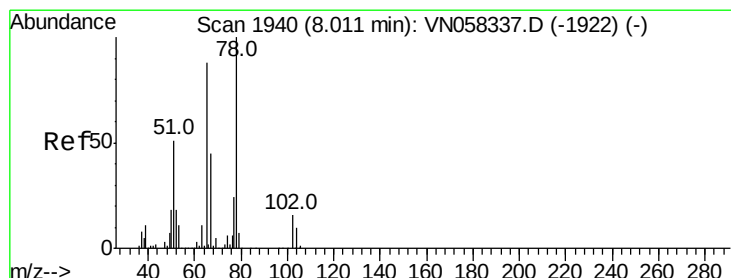
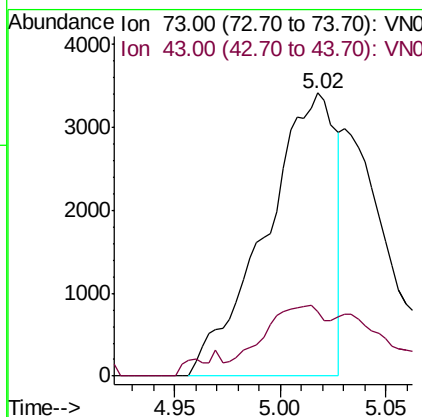
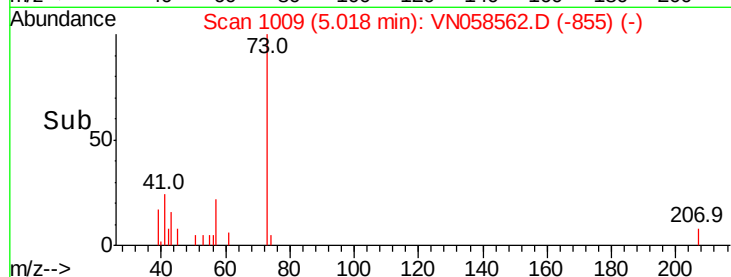
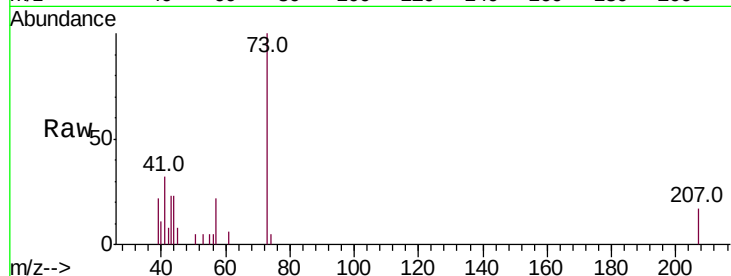




#24
Methyl tert-Butyl Ether
Concen: 0.571 ug/l
RT: 5.02 min Scan# 1009
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

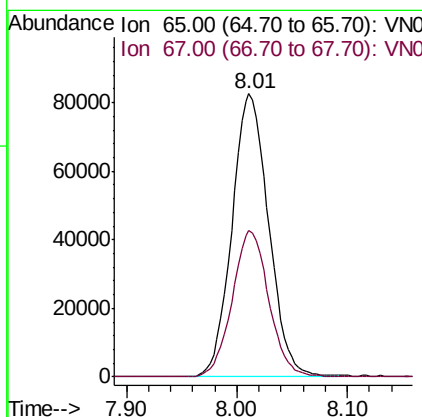
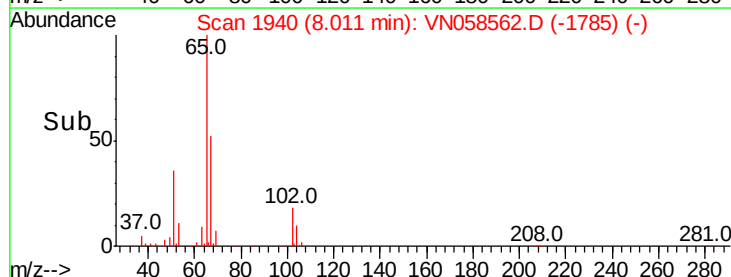
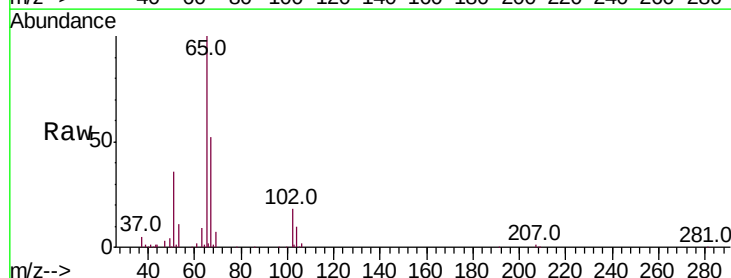
Instrument :
MSVOA_N
ClientSampleId :

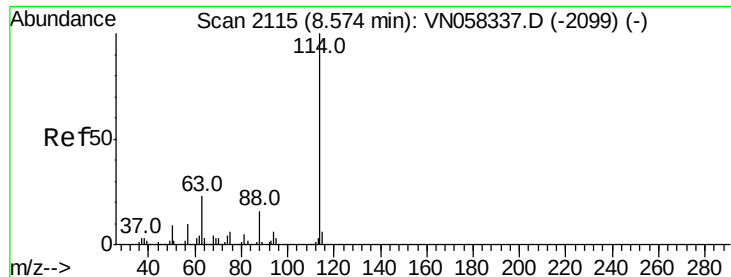
Tot Ion: 73 Resp: 7913
Ion Ratio Lower Upper
73 100
43 16.9 18.4 27.6#



#27
1,2-Dichloroethane-d4
Concen: 30.637 ug/l
RT: 8.01 min Scan# 1940
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion: 65 Resp: 190314
Ion Ratio Lower Upper
65 100
67 51.5 40.4 60.6

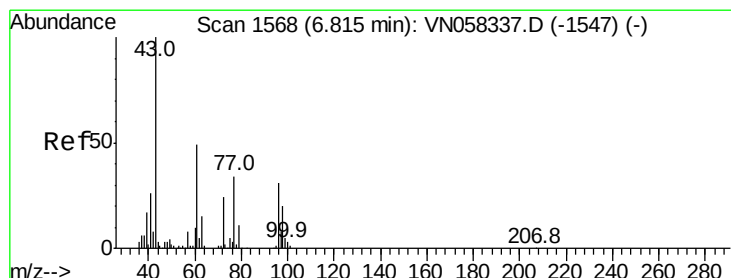
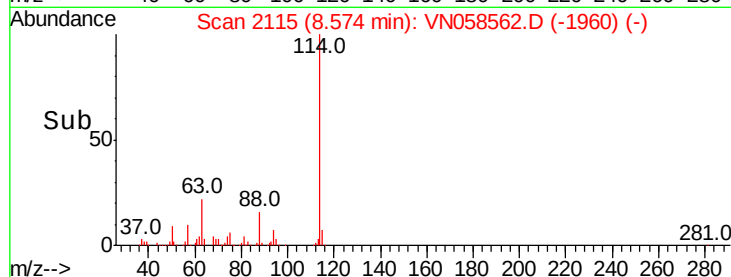
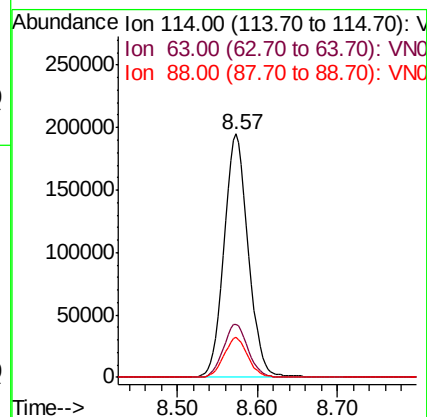
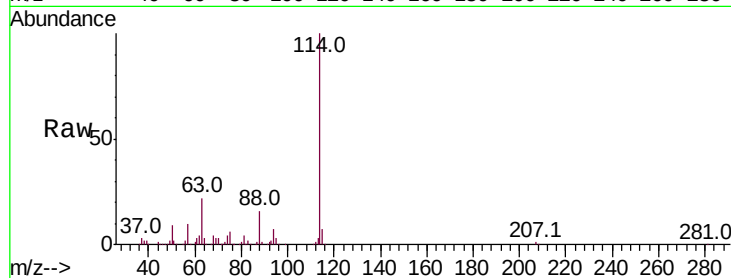




#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. -0.00 min
 Lab File: VN058562.D
 Acq: 7 Oct 2019 13:18

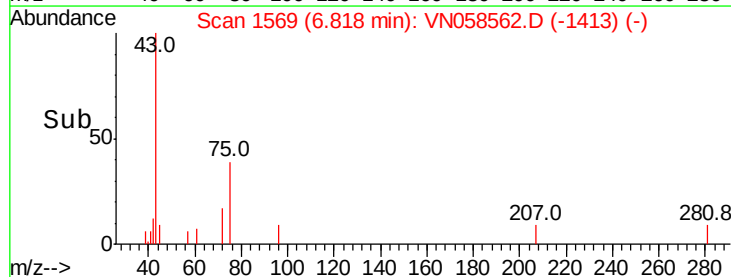
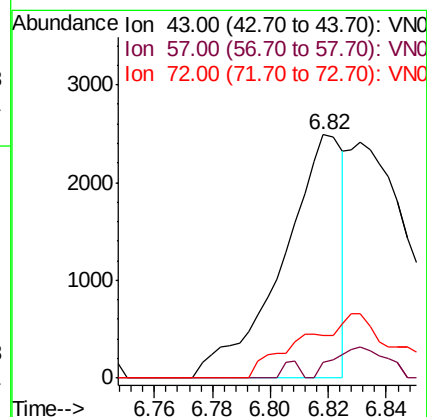
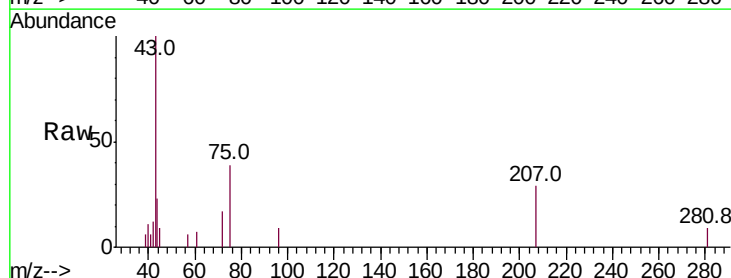
Instrument :
 MSVOA_N
 ClientSampled :

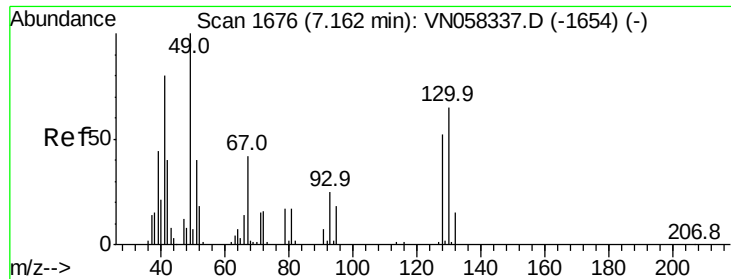
Tot Ion:114 Resp: 406574
 Ion Ratio Lower Upper
 114 100
 63 22.3 17.8 26.8
 88 16.2 12.7 19.1



#30
 2-Butanone
 Concen: 1.193 ug/l
 RT: 6.82 min Scan# 1569
 Delta R.T. 0.00 min
 Lab File: VN058562.D
 Acq: 7 Oct 2019 13:18

Tgt Ion: 43 Resp: 3596
 Ion Ratio Lower Upper
 43 100
 57 1.8 6.2 9.4#
 72 3.8 20.3 30.5#

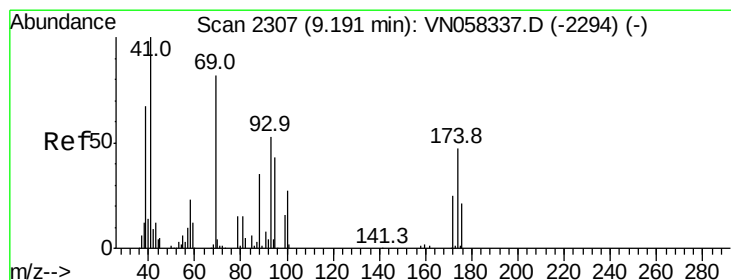
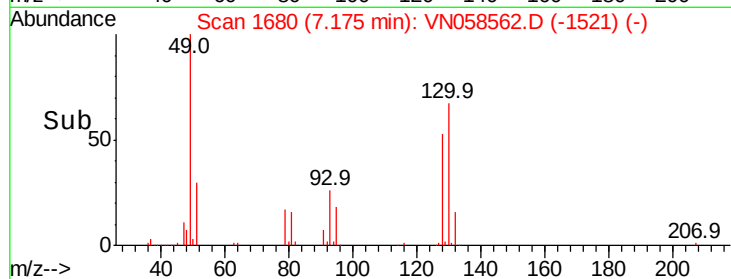
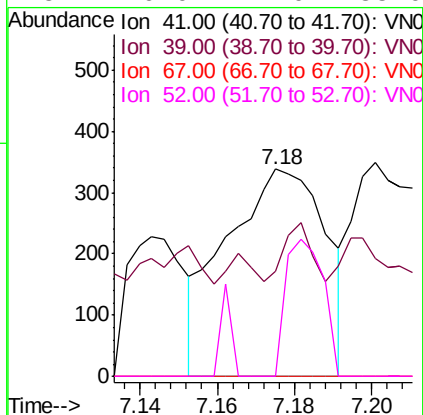
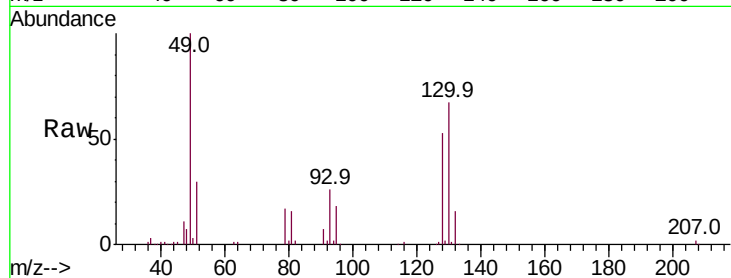




#35
Methacrylonitrile
Concen: 0.233 ug/l
RT: 7.18 min Scan# 1680
Delta R.T. 0.01 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

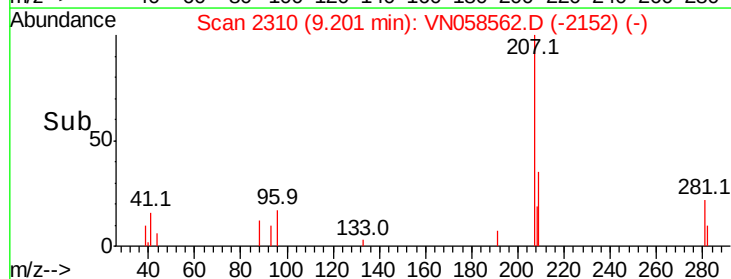
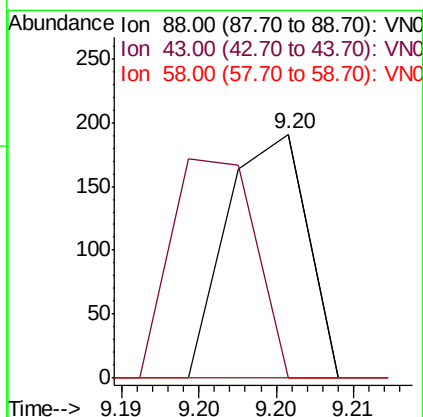
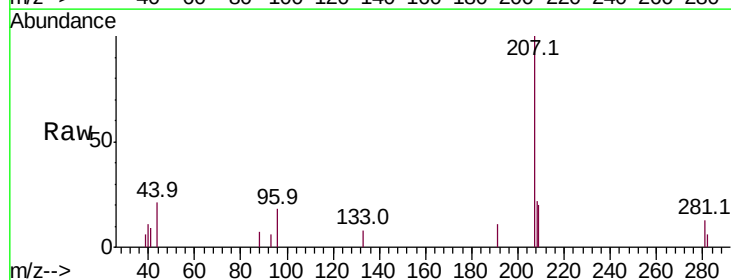
Instrument :
MSVOA_N
ClientSampled :

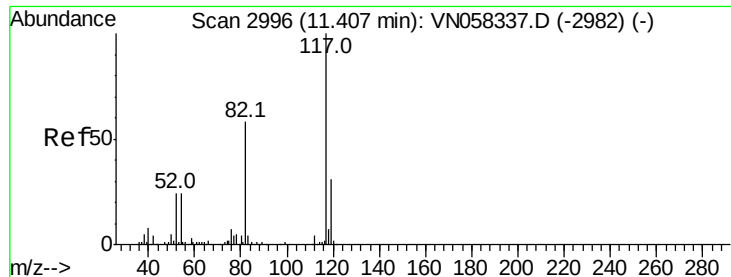
Tot Ion: 41 Resp: 604
Ion Ratio Lower Upper
41 100
39 0.0 27.3 81.9#
67 0.0 26.3 78.9#
52 0.0 11.0 33.0#



#45
1,4-Dioxane
Concen: 0.764 ug/l
RT: 9.20 min Scan# 2310
Delta R.T. 0.01 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion: 88 Resp: 69
Ion Ratio Lower Upper
88 100
43 94.2 27.2 40.8#
58 0.0 55.4 83.0#

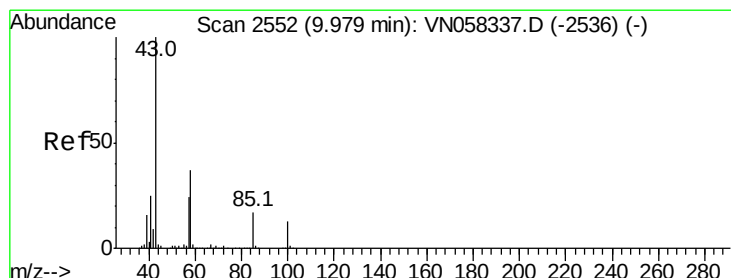
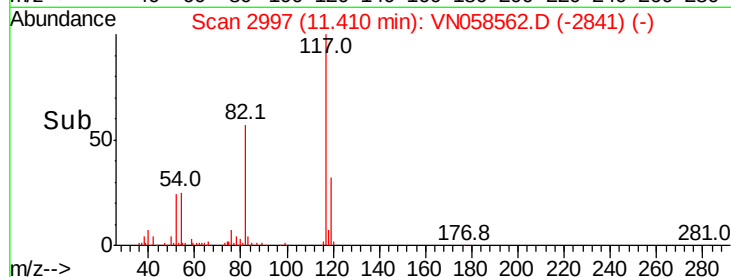
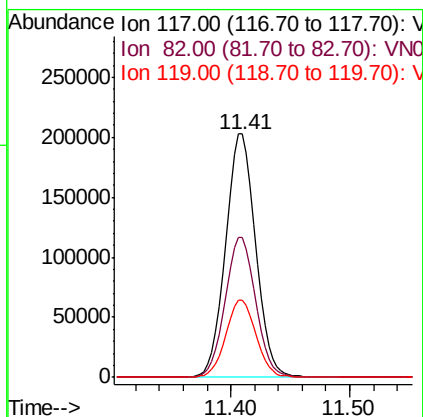
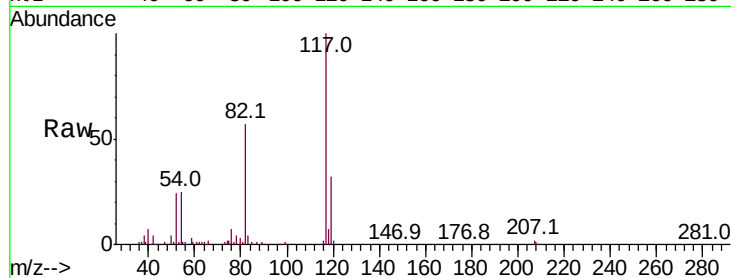




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.41 min Scan# 2997
Delta R.T. 0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

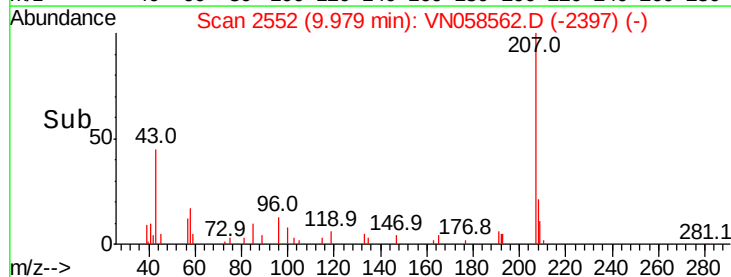
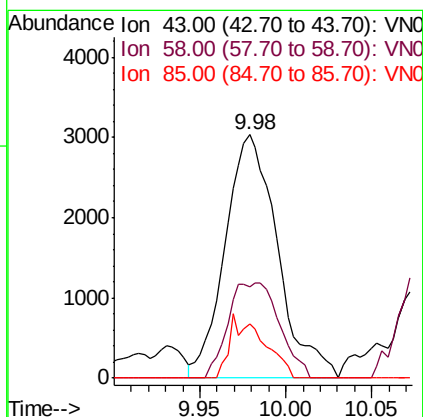
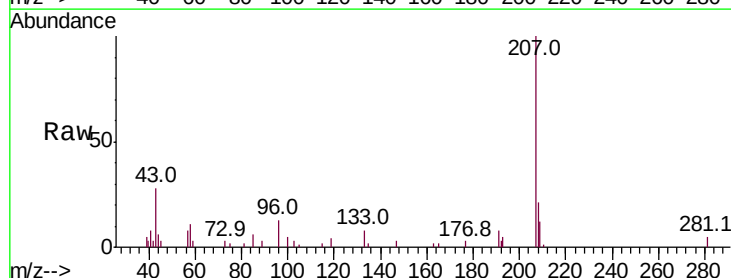
Instrument :
MSVOA_N
ClientSampled :

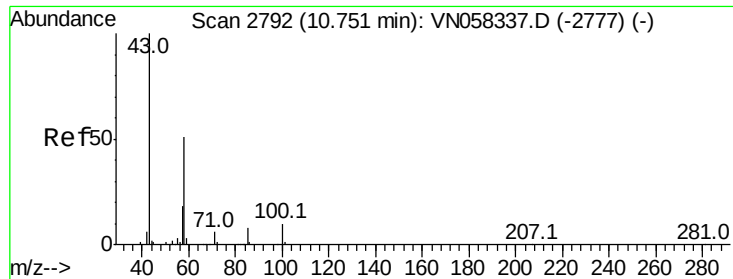
Tot Ion:117 Resp: 355350
Ion Ratio Lower Upper
117 100
82 58.5 46.4 69.6
119 31.8 25.1 37.7



#58
4-Methyl-2-Pentanone
Concen: 1.158 ug/l
RT: 9.98 min Scan# 2552
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion: 43 Resp: 6445
Ion Ratio Lower Upper
43 100
58 0.0 29.3 43.9#
85 11.4 13.1 19.7#

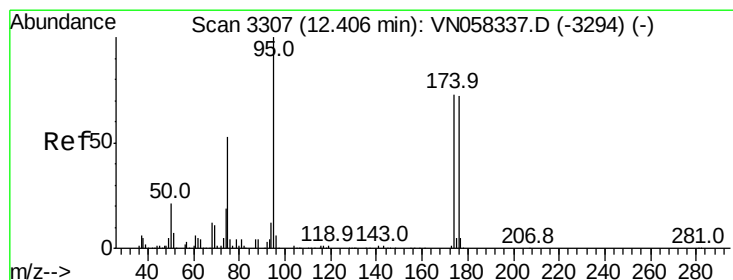
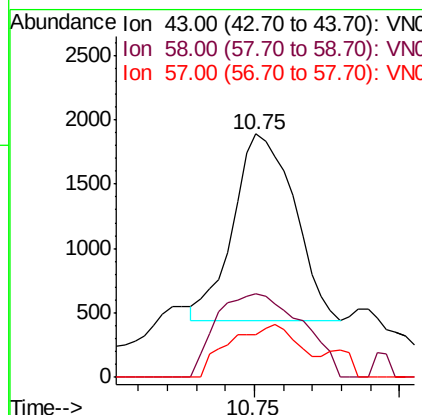
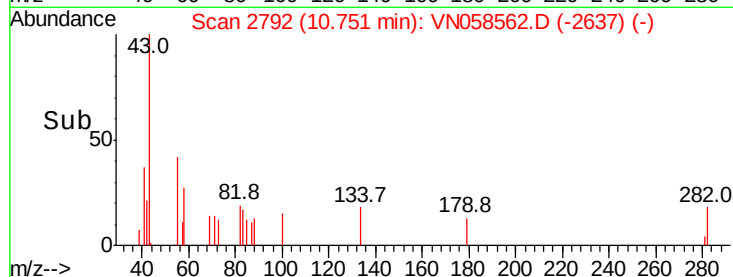
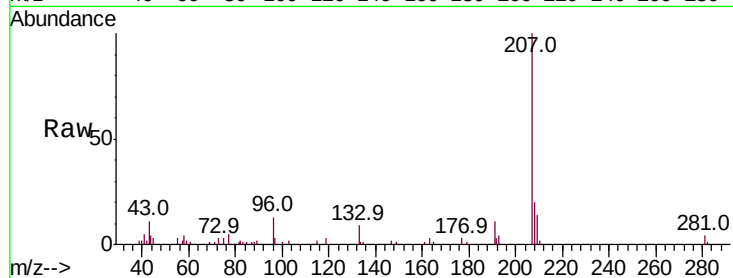




#59
2-Hexanone
Concen: 0.504 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

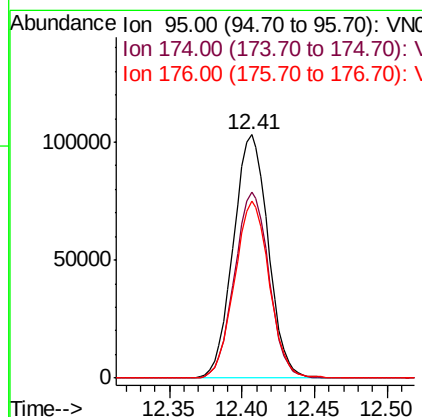
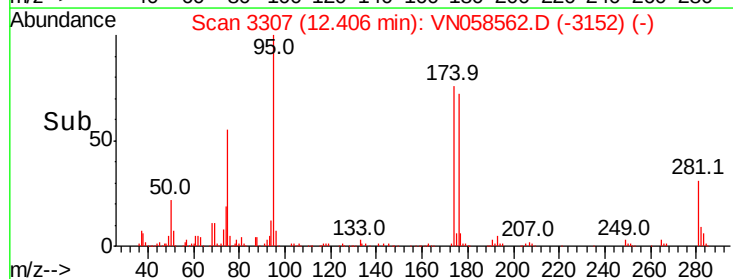
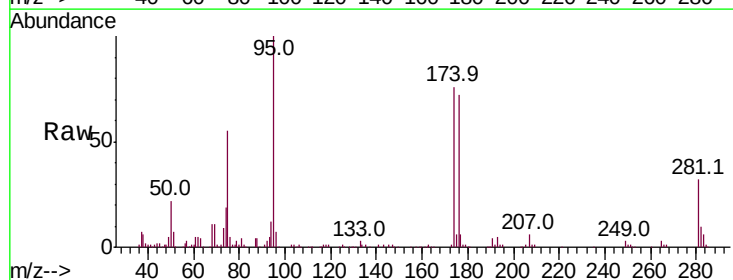
Instrument :
MSVOA_N
ClientSampleId :

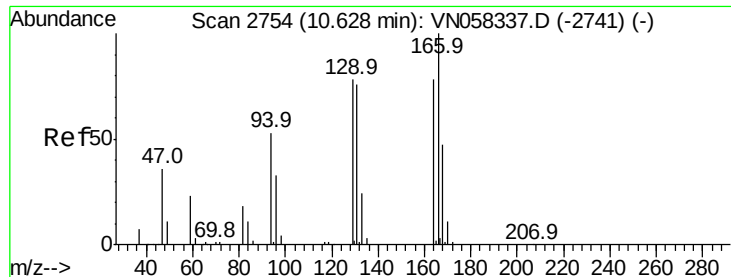
Tot Ion: 43 Resp: 2123
Ion Ratio Lower Upper
43 100
58 63.0 40.7 61.1#
57 15.0 14.7 22.1



#60
4-Bromofluorobenzene
Concen: 28.046 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion: 95 Resp: 172445
Ion Ratio Lower Upper
95 100
174 75.5 59.0 88.6
176 72.6 58.2 87.2





#61

Tetrachloroethene

Concen: 0.250 ug/l

RT: 10.63 min Scan# 2753

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :

MSVOA_N

ClientSampleId :

Tot Ion:164 Resp: 932

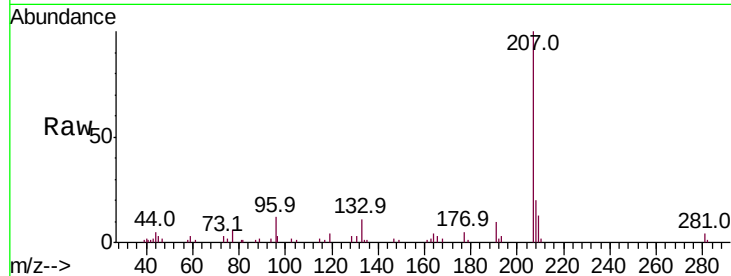
Ion Ratio Lower Upper

164 100

166 52.5 102.6 154.0#

129 74.8 79.8 119.6#

131 48.3 78.1 117.1#

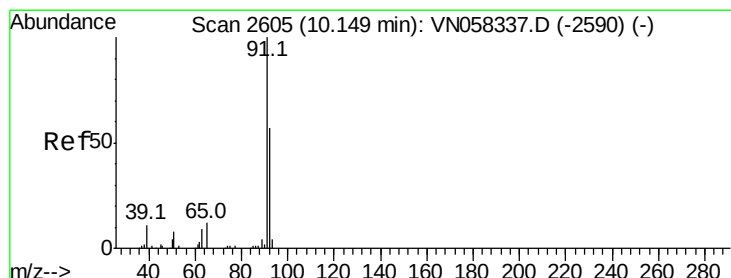
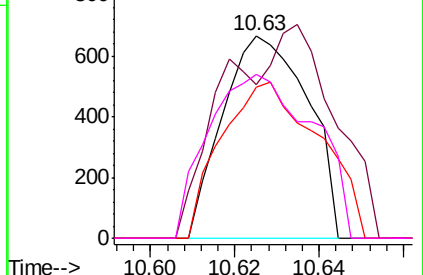
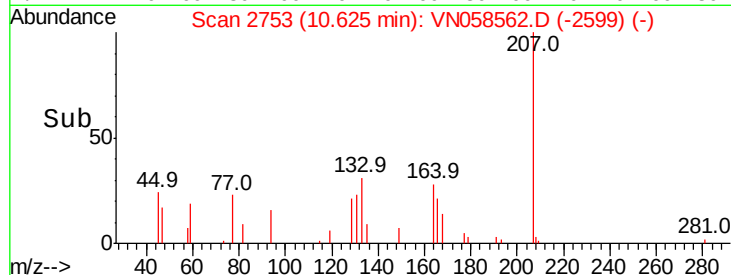


Abundance Ion 163.85 (163.55 to 164.55): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.90 (128.60 to 129.60): V

Ion 130.90 (130.60 to 131.60): V



#62

Toluene

Concen: 12.868 ug/l

RT: 10.15 min Scan# 2606

Delta R.T. 0.00 min

Lab File: VN058562.D

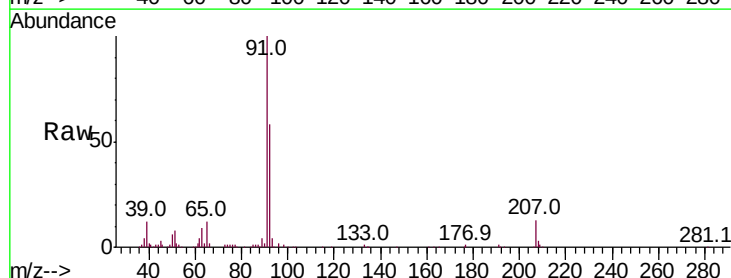
Acq: 7 Oct 2019 13:18

Tgt Ion: 91 Resp: 250430

Ion Ratio Lower Upper

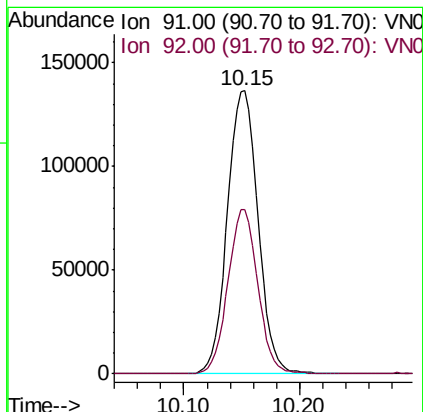
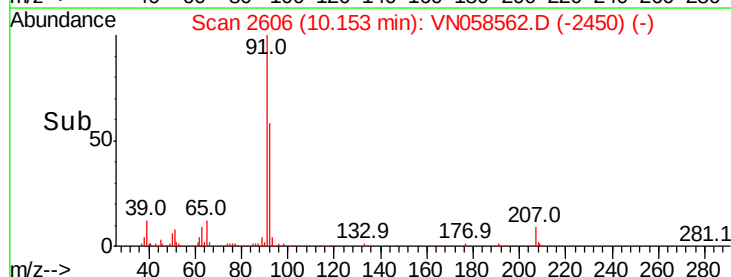
91 100

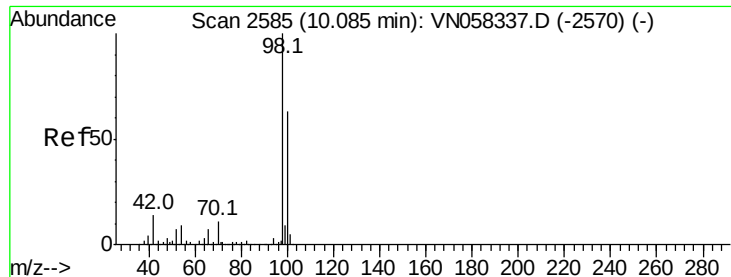
92 56.4 45.5 68.3



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 92.00 (91.70 to 92.70): VN0





#63

Toluene-d8

Concen: 29.882 ug/l

RT: 10.09 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :

MSVOA_N

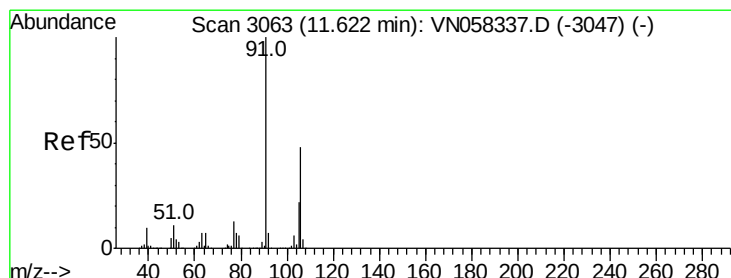
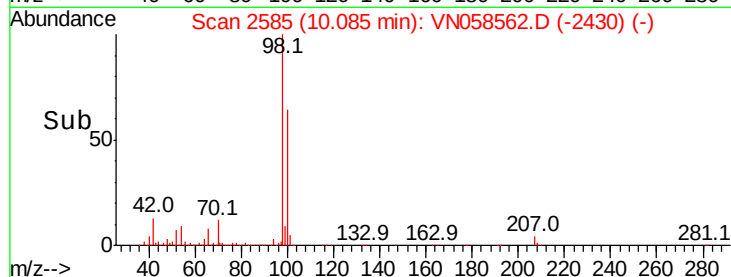
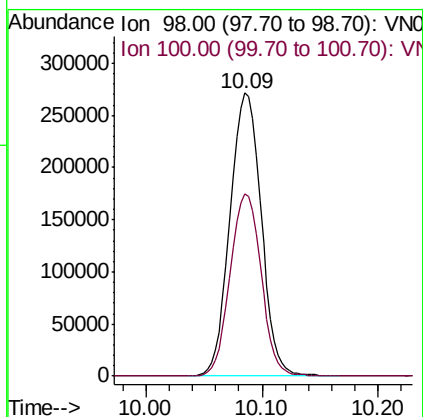
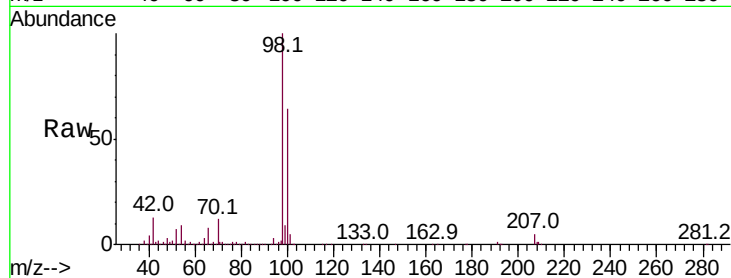
ClientSampleId :

Tot Ion: 98 Resp: 506767

Ion Ratio Lower Upper

98 100

100 64.0 50.2 75.2



#67

m/p-Xylenes

Concen: 0.354 ug/l

RT: 11.62 min Scan# 3063

Delta R.T. -0.00 min

Lab File: VN058562.D

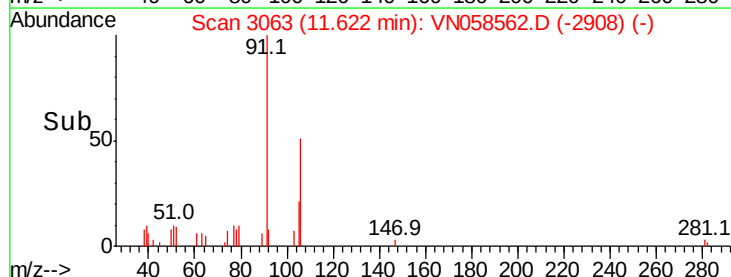
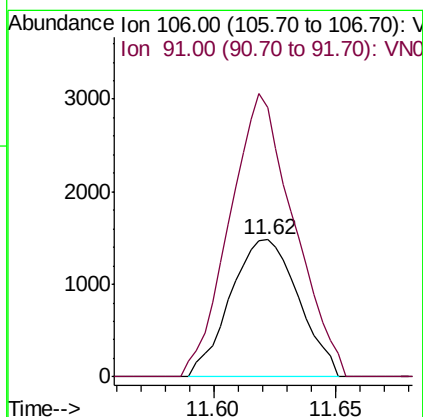
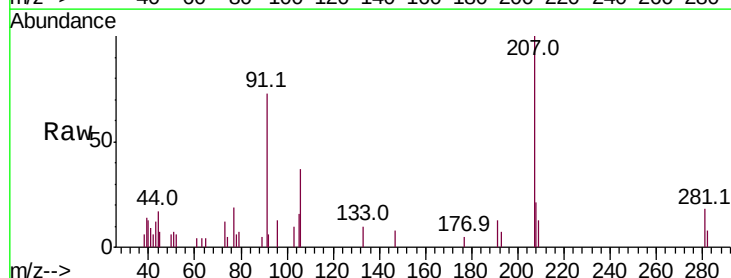
Acq: 7 Oct 2019 13:18

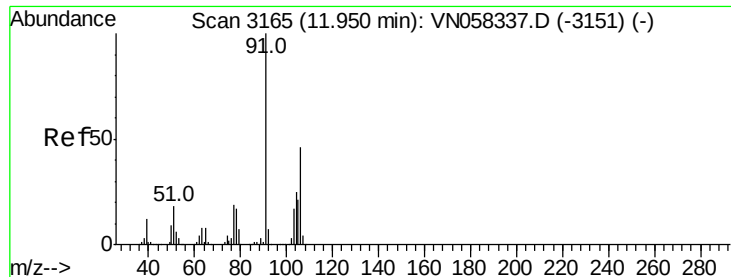
Tgt Ion: 106 Resp: 2883

Ion Ratio Lower Upper

106 100

91 194.2 167.8 251.6

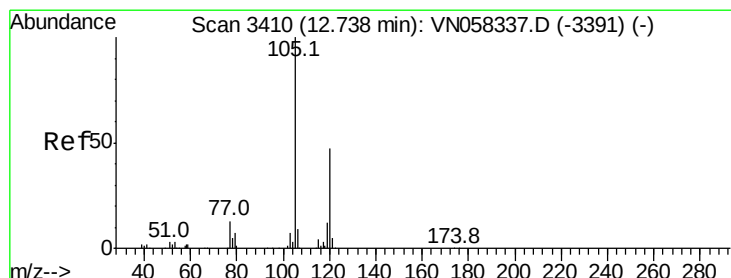
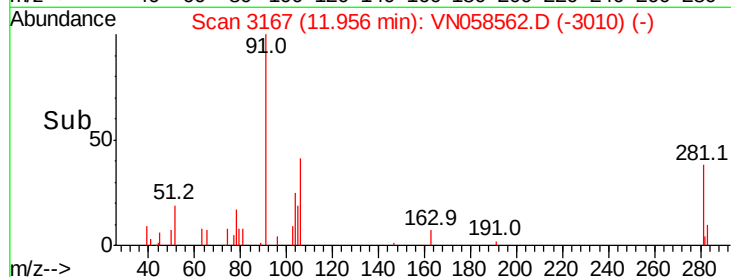
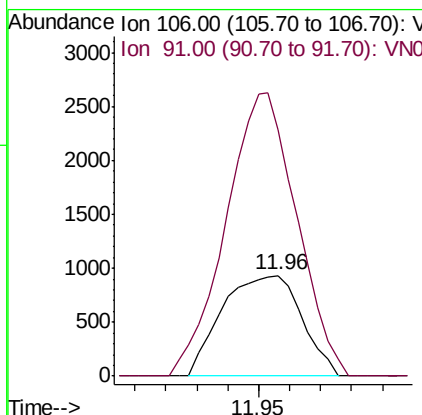
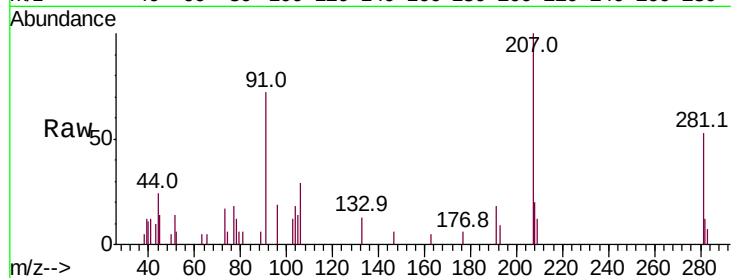




#68
o-Xylene
Concen: 0.210 ug/l
RT: 11.96 min Scan# 3167
Delta R.T. 0.01 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

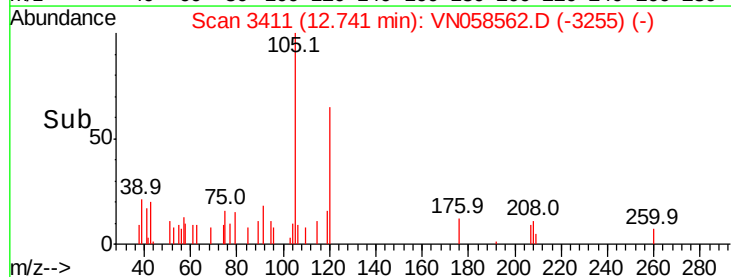
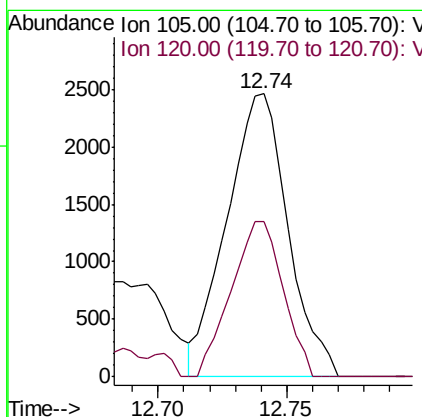
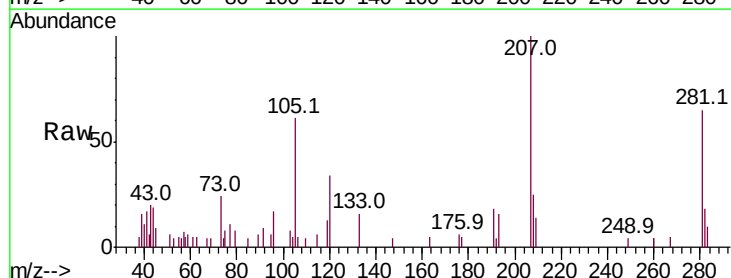
Instrument :
MSVOA_N
ClientSampled :

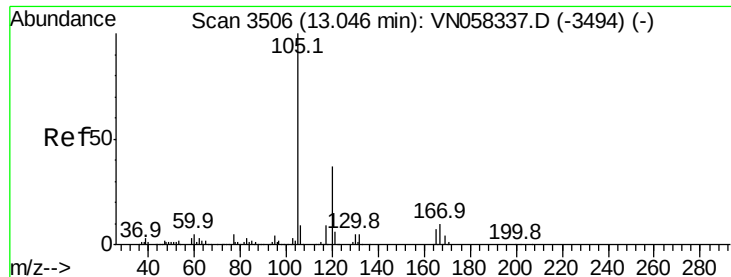
Tot Ion:106 Resp: 1662
Ion Ratio Lower Upper
106 100
91 251.2 108.7 325.9



#76
1,3,5-Trimethylbenzene
Concen: 0.231 ug/l
RT: 12.74 min Scan# 3411
Delta R.T. 0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion:105 Resp: 4087
Ion Ratio Lower Upper
105 100
120 46.5 0.0 94.4





#80

1,2,4-Trimethylbenzene

Concen: 0.495 ug/l

RT: 13.05 min Scan# 3506

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :

MSVOA_N

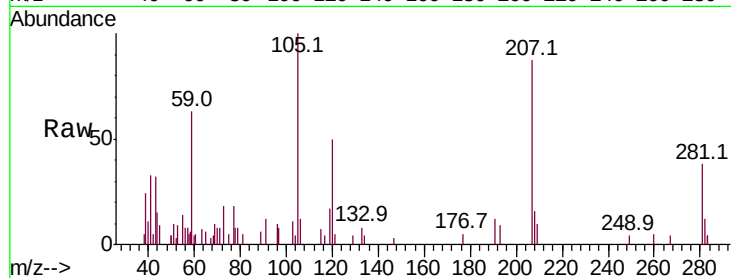
ClientSampleId :

Tot Ion:105 Resp: 8732

Ion Ratio Lower Upper

105 100

120 48.0 0.0 86.6



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

13.05

5000

4000

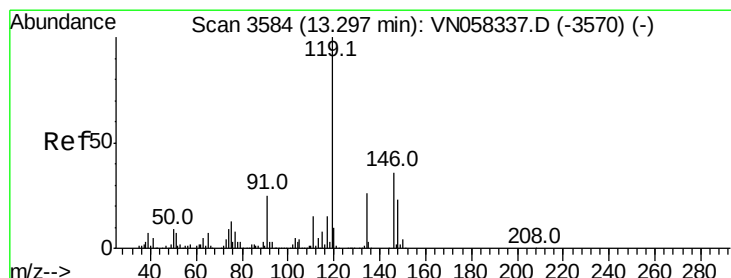
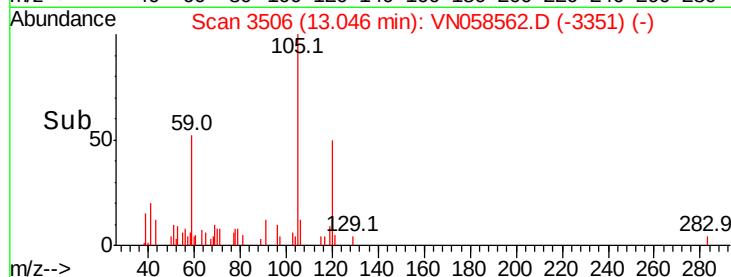
3000

2000

1000

0

Time-->



#82

p-Isopropyltoluene

Concen: 0.509 ug/l

RT: 13.30 min Scan# 3584

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

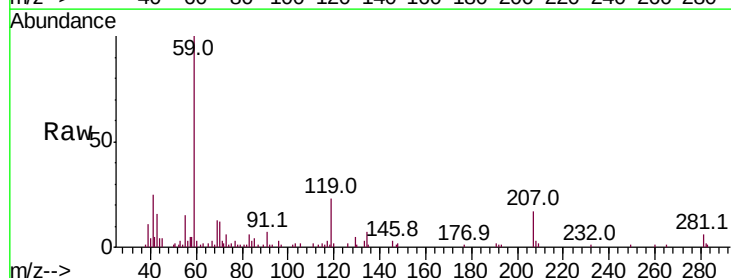
Tgt Ion:119 Resp: 9207

Ion Ratio Lower Upper

119 100

134 29.2 0.0 51.6

91 31.1 0.0 49.6



Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V

8000

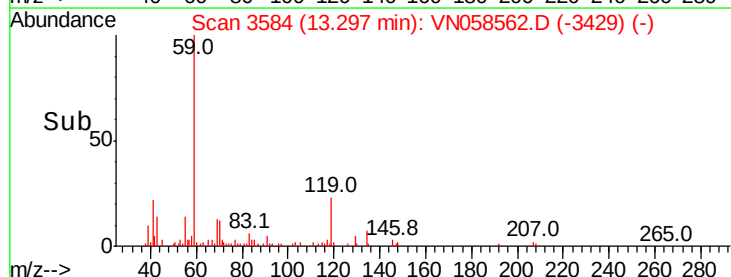
6000

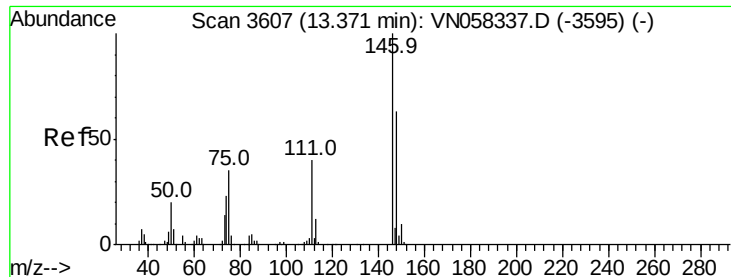
4000

2000

0

Time-->

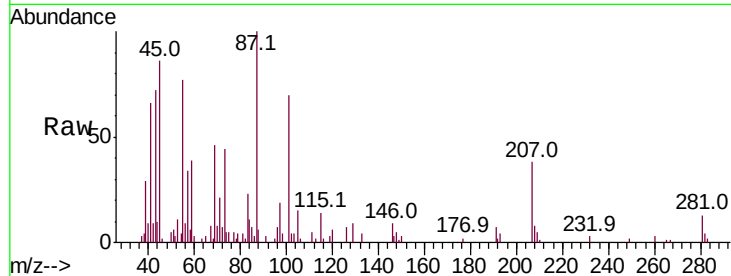




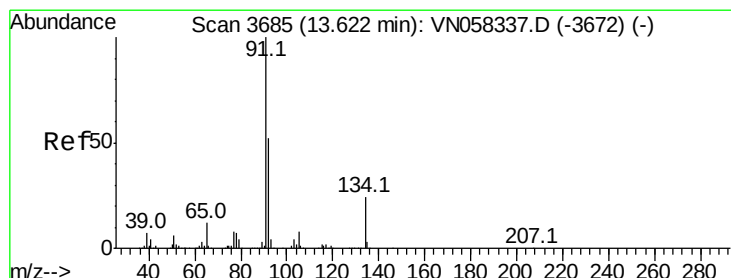
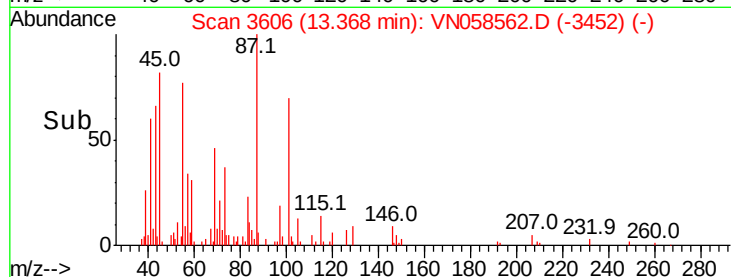
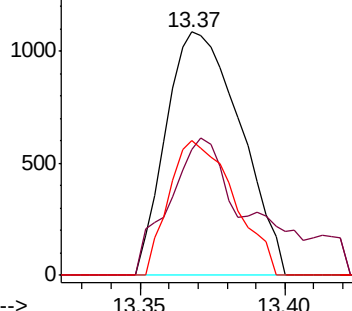
#84
 1,4-Dichlorobenzene
 Concen: 0.213 ug/l
 RT: 13.37 min Scan# 3606
 Delta R.T. -0.00 min
 Lab File: VN058562.D
 Acq: 7 Oct 2019 13:18

Instrument :
 MSVOA_N
 ClientSampled :

Tot Ion:146 Resp: 1942
 Ion Ratio Lower Upper
 146 100
 111 43.4 20.4 61.3
 148 48.3 31.9 95.7

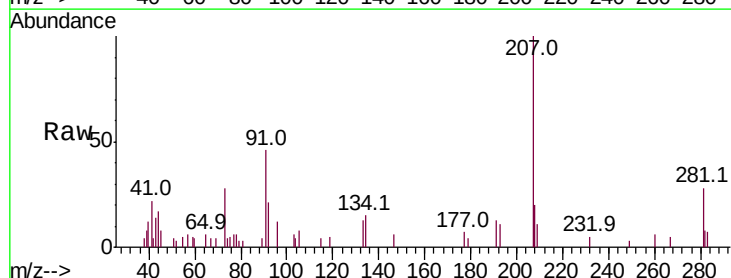


Abundance Ion 146.00 (145.70 to 146.70): V
 Ion 111.00 (110.70 to 111.70): V
 Ion 148.00 (147.70 to 148.70): V

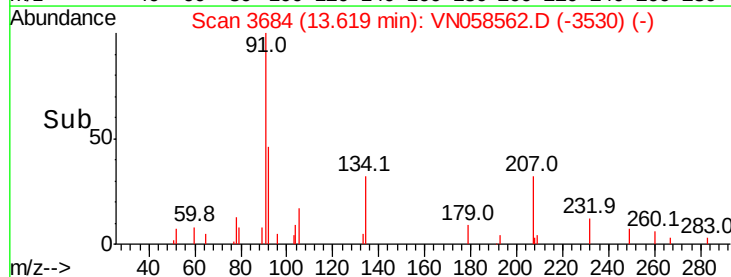
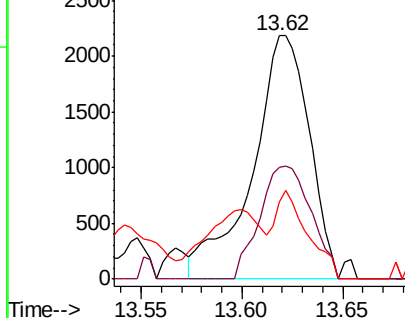


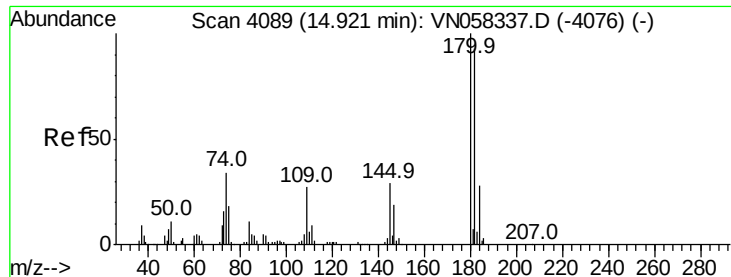
#85
 n-Butylbenzene
 Concen: 0.254 ug/l
 RT: 13.62 min Scan# 3684
 Delta R.T. -0.00 min
 Lab File: VN058562.D
 Acq: 7 Oct 2019 13:18

Tgt Ion: 91 Resp: 4269
 Ion Ratio Lower Upper
 91 100
 92 41.8 0.0 102.6
 134 21.1 0.0 47.8



Abundance Ion 91.00 (90.70 to 91.70): V
 Ion 92.00 (91.70 to 92.70): V
 Ion 134.00 (133.70 to 134.70): V

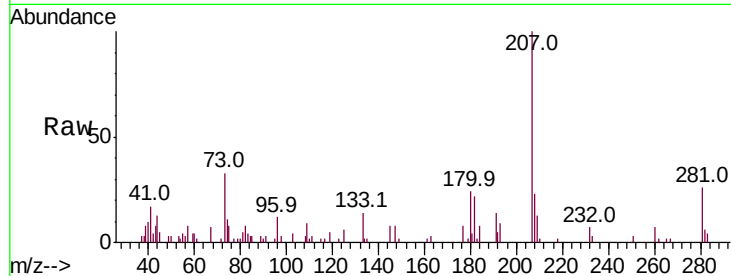




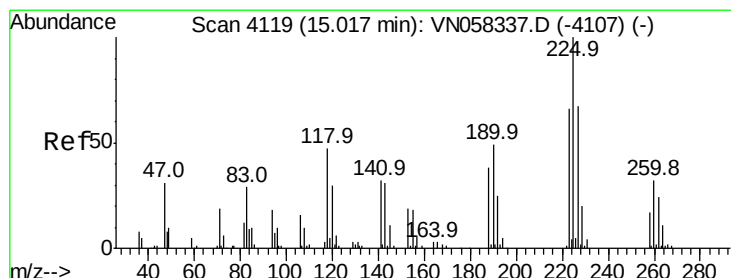
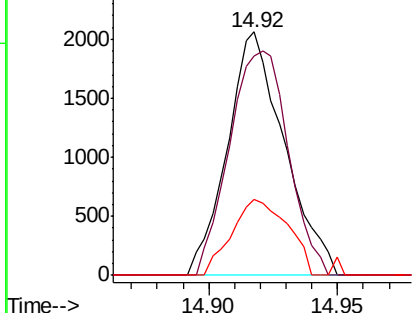
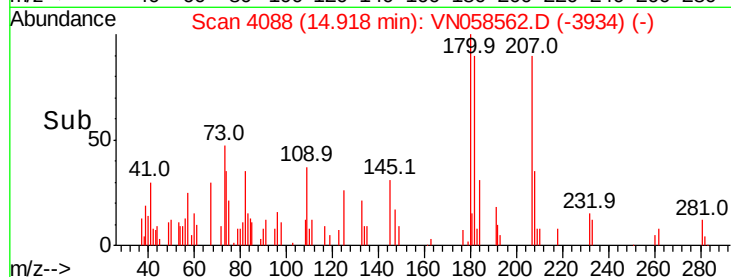
#89
1,2,4-Trichlorobenzene
Concen: 0.543 ug/l
RT: 14.92 min Scan# 4088
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Instrument :
MSVOA_N
ClientSampled :

Tot Ion:180 Resp: 3177
Ion Ratio Lower Upper
180 100
182 95.0 75.2 112.8
145 30.6 25.1 37.7

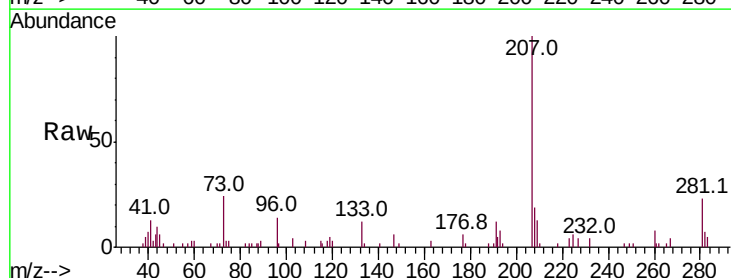


Abundance Ion 180.00 (179.70 to 180.70): V
Ion 182.00 (181.70 to 182.70): V
Ion 145.00 (144.70 to 145.70): V

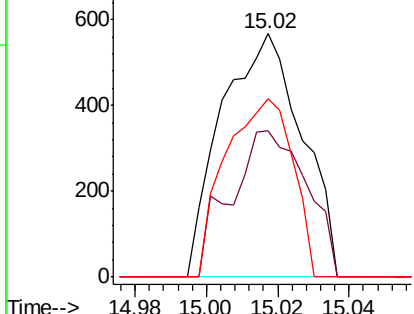
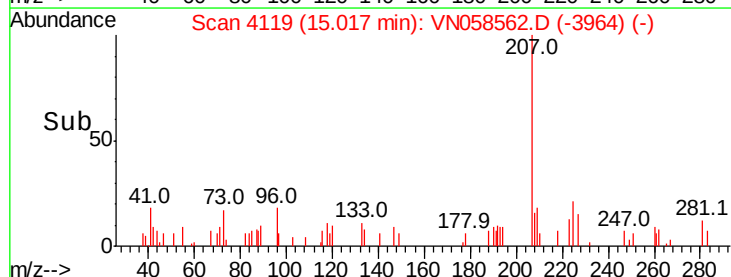


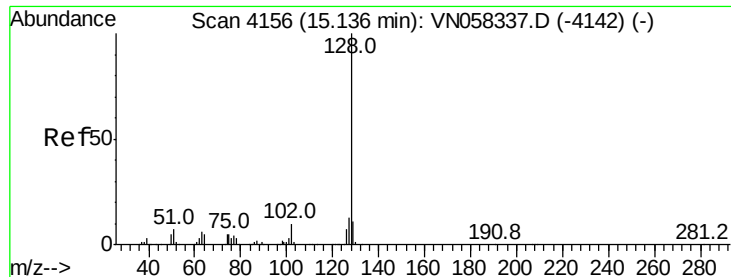
#90
Hexachlorobutadiene
Concen: 0.312 ug/l
RT: 15.02 min Scan# 4119
Delta R.T. -0.00 min
Lab File: VN058562.D
Acq: 7 Oct 2019 13:18

Tgt Ion:225 Resp: 884
Ion Ratio Lower Upper
225 100
223 45.4 0.0 132.6
227 61.2 0.0 129.2



Abundance Ion 225.00 (224.70 to 225.70): V
Ion 223.00 (222.70 to 223.70): V
Ion 227.00 (226.70 to 227.70): V





#91

Naphthalene

Concen: 1.226 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

Instrument :

MSVOA_N

ClientSampled :

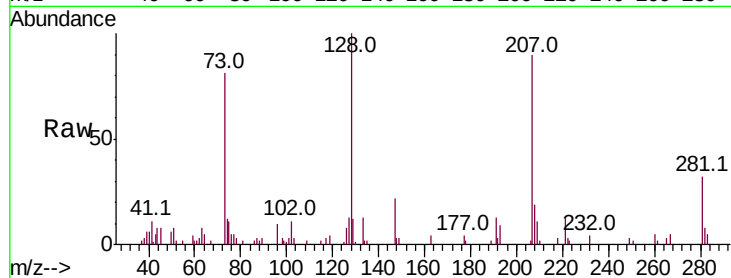
Tot Ion:128 Resp: 19710

Ion Ratio Lower Upper

128 100

127 13.1 10.2 15.4

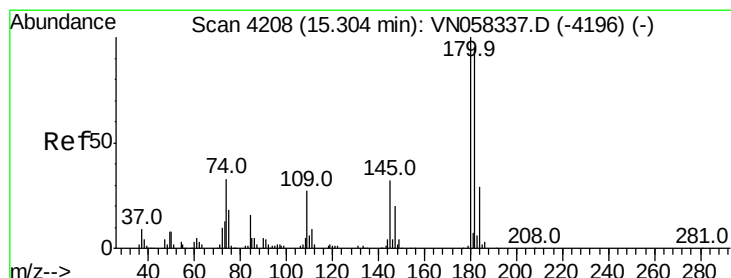
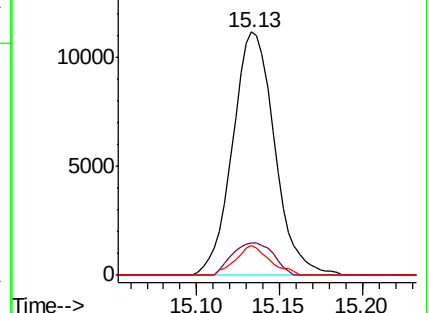
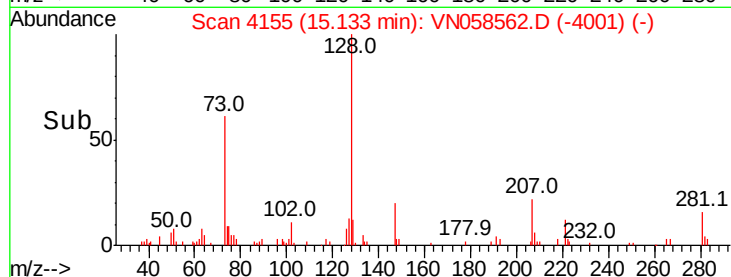
129 9.8 8.6 13.0



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



#92

1,2,3-Trichlorobenzene

Concen: 0.746 ug/l

RT: 15.30 min Scan# 4208

Delta R.T. -0.00 min

Lab File: VN058562.D

Acq: 7 Oct 2019 13:18

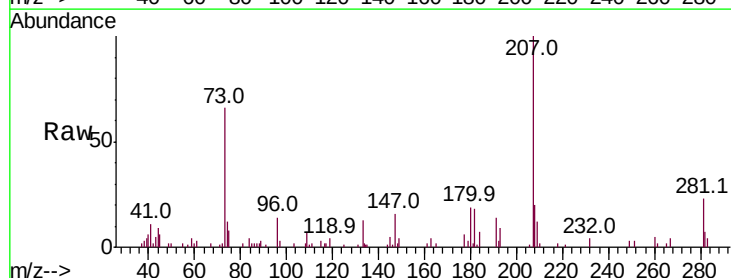
Tgt Ion:180 Resp: 4193

Ion Ratio Lower Upper

180 100

182 87.0 0.0 189.4

145 11.8 0.0 64.0



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

