

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111219\  
 Data File : VN059179.D  
 Acq On : 12 Nov 2019 11:04  
 Operator : JC/SP  
 Sample : K5769-13  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Nov 13 05:36:34 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110619W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 07 04:00:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 419912   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 654992   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 576125   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 204447   | 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   | 285846   | 55.38 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 110.76% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 215974   | 55.22 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 110.44% |          |
| 50) Toluene-d8              | 10.08 | 98   | 820631   | 53.27 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 106.54% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 254706   | 45.86 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.72%  |          |

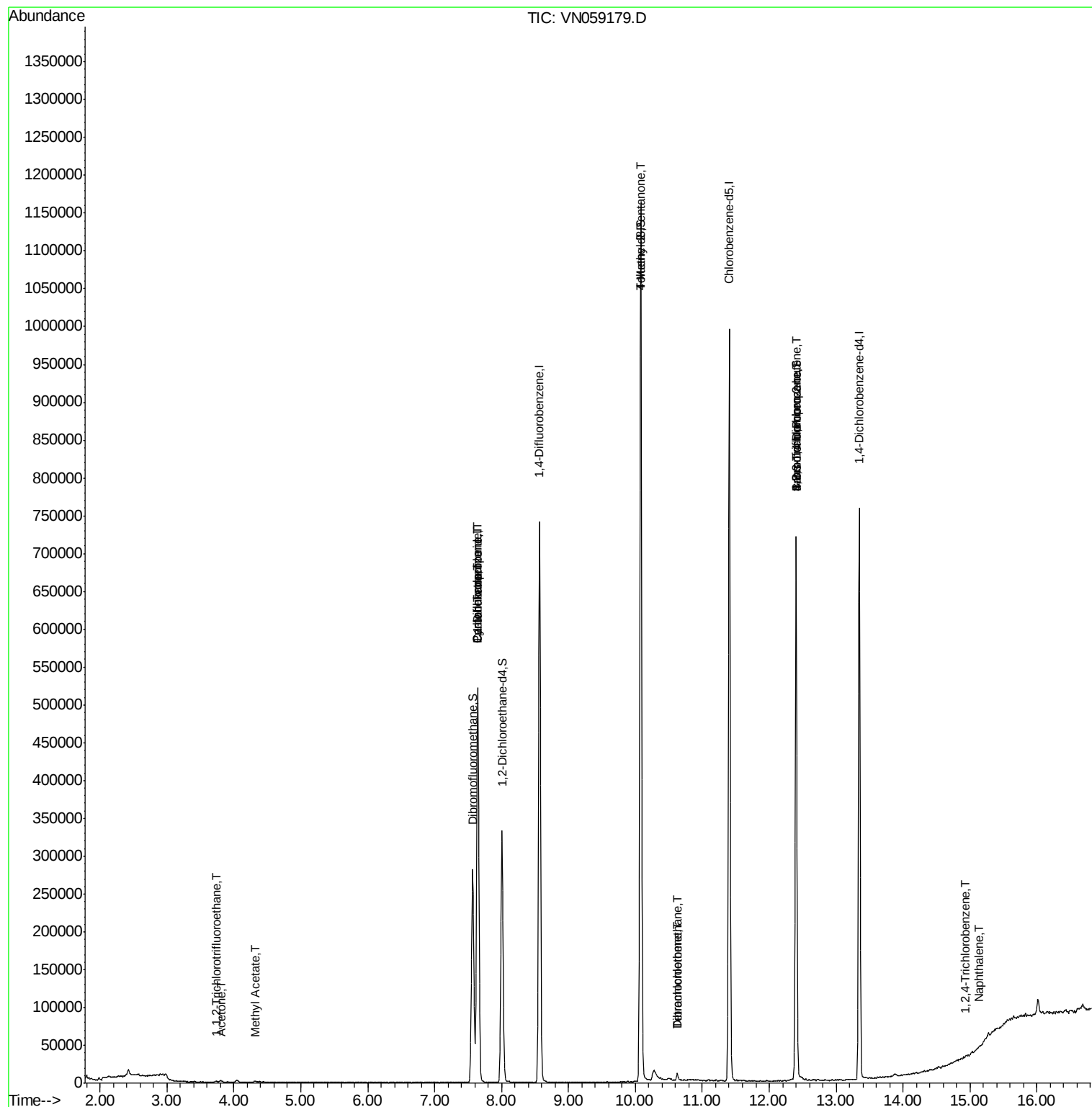
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 9) 1,1,2-Trichlorotrifluoroet  | 3.74  | 101  | 829      | 0.206  | ug/l # | 83     |
| 16) Acetone                    | 3.80  | 43   | 3668     | 1.366  | ug/l   | 99     |
| 18) Methyl Acetate             | 4.31  | 43   | 1631     | 0.256  | ug/l # | 61     |
| 31) Cyclohexane                | 7.65  | 56   | 9085     | 1.131  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 33231    | 5.428  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.65  | 117  | 39919    | 6.551  | ug/l # | 16     |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 3578     | 0.582  | ug/l # | 1      |
| 60) Dibromochloromethane       | 10.63 | 129  | 1828     | 0.387  | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.63 | 164  | 2167     | 0.553  | ug/l   | 90     |
| 71) Bromoform                  | 12.40 | 173  | 1338     | 0.408  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 129240   | 27.766 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 129240   | 73.338 | ug/l # | 13     |
| 93) 1,2,4-Trichlorobenzene     | 14.92 | 180  | 269      | 3.112  | ug/l # | 41     |
| 95) Naphthalene                | 15.13 | 128  | 1218     | 3.153  | ug/l # | 70     |

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

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Quant Title : SW846 8260  
QLast Update : Thu Nov 07 04:00:41 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

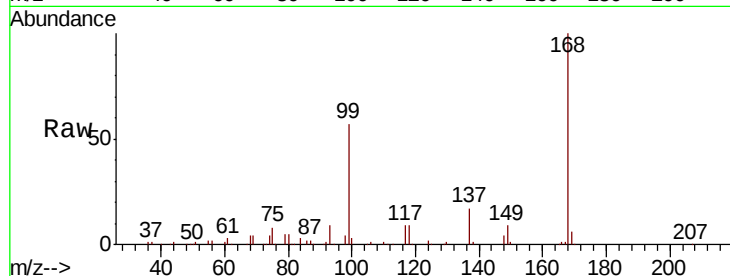
ClientSampled :

Tot Ion:168 Resp: 419912

Ion Ratio Lower Upper

168 100

99 57.2 45.7 68.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.64

200000

150000

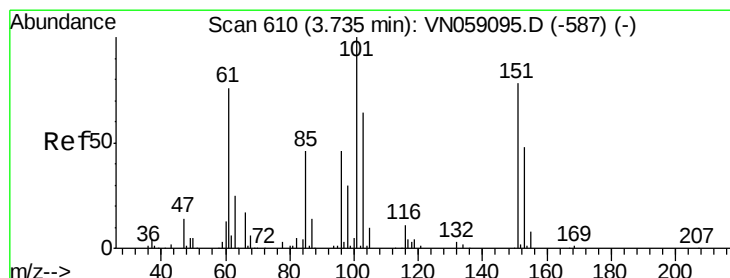
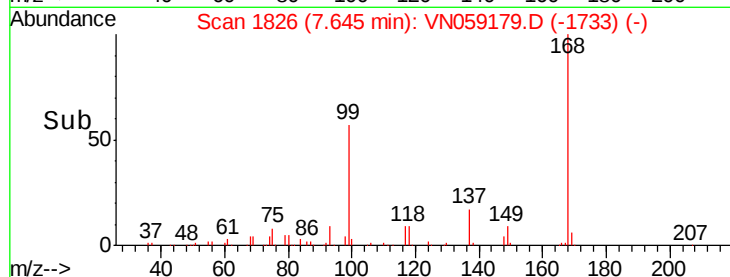
100000

50000

0

7.60 7.70

Time-->



#9

1,1,2-Trichlorotrifluoroethane

Concen: 0.206 ug/l

RT: 3.74 min Scan# 611

Delta R.T. 0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

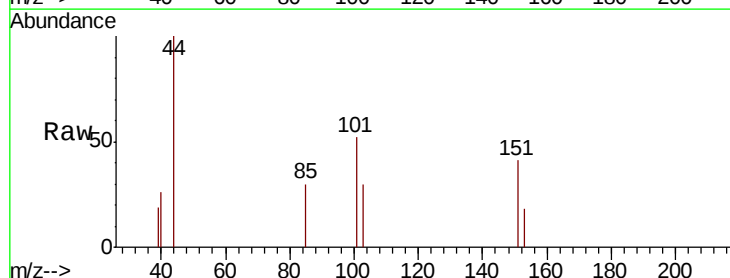
Tgt Ion:101 Resp: 829

Ion Ratio Lower Upper

101 100

85 36.3 35.5 53.3

151 94.1 62.2 93.2#



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VN

Ion 150.80 (150.50 to 151.50): V

3.74

600

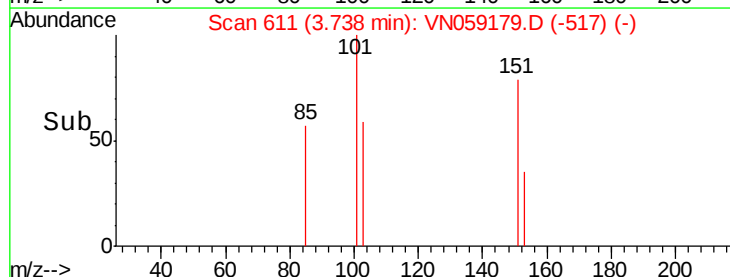
400

200

0

3.70 3.72 3.74

Time-->





#16

Acetone

Concen: 1.366 ug/l

RT: 3.80 min Scan# 631

Delta R.T. 0.01 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

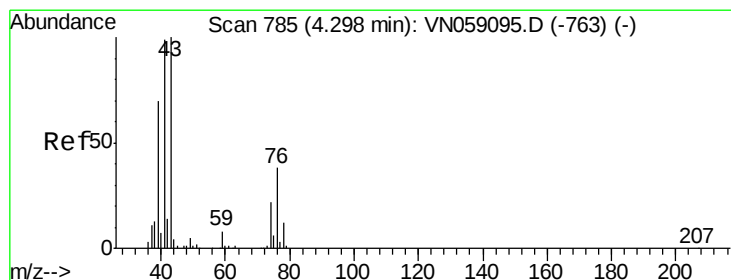
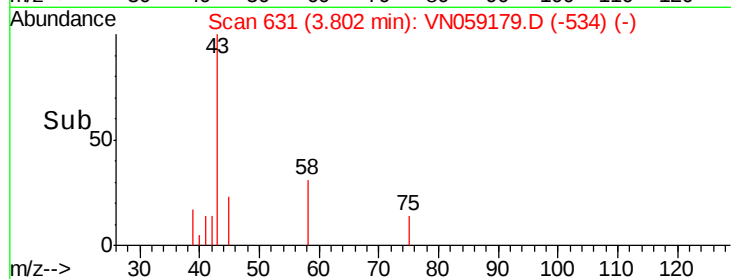
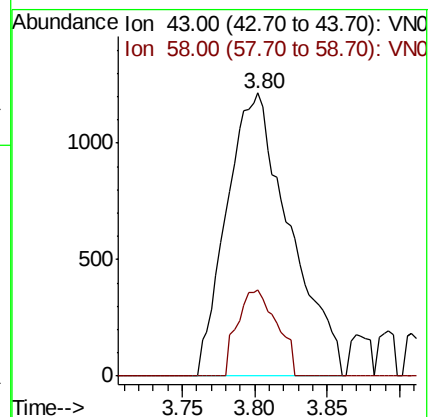
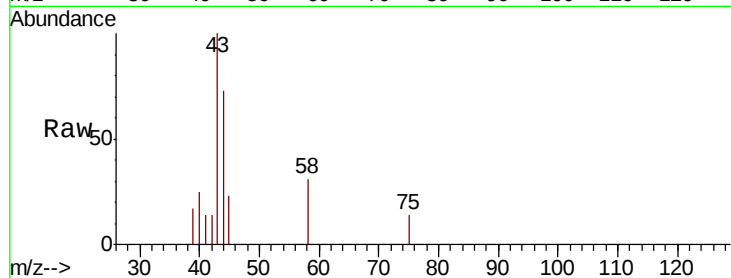
ClientSampled :

Tot Ion: 43 Resp: 3668

Ion Ratio Lower Upper

43 100

58 30.5 24.9 37.3



#18

Methyl Acetate

Concen: 0.256 ug/l

RT: 4.31 min Scan# 788

Delta R.T. 0.01 min

Lab File: VN059179.D

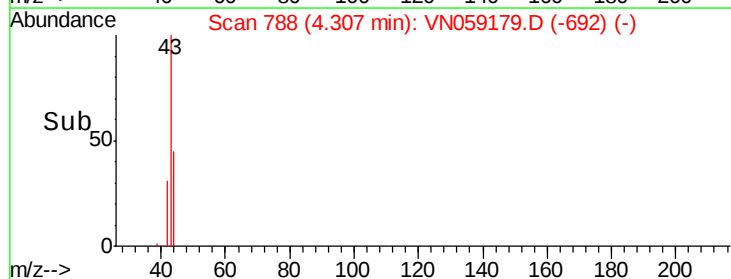
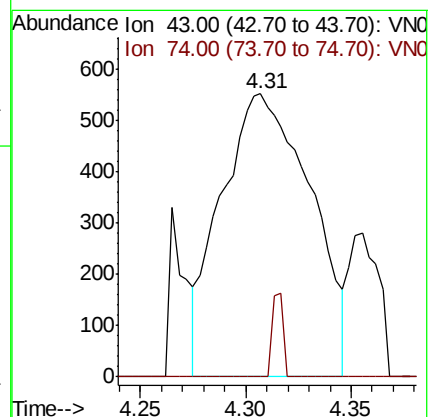
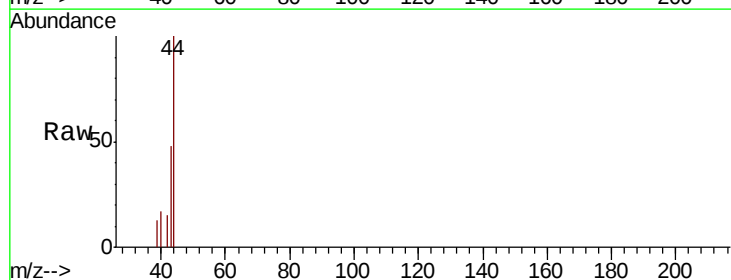
Acq: 12 Nov 2019 11:04

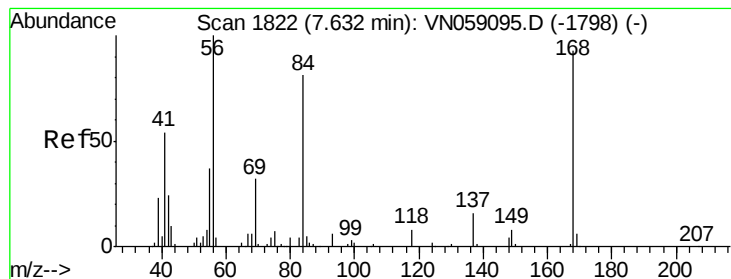
Tgt Ion: 43 Resp: 1631

Ion Ratio Lower Upper

43 100

74 3.8 17.8 26.8#





#31

Cyclohexane

Concen: 1.131 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.02 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :  
MSVOA\_N  
ClientSampled :

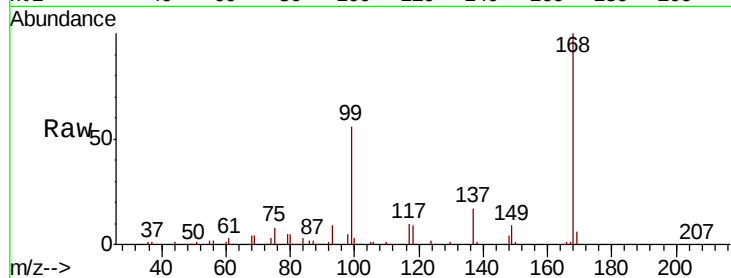
Tot Ion: 56 Resp: 9085

Ion Ratio Lower Upper

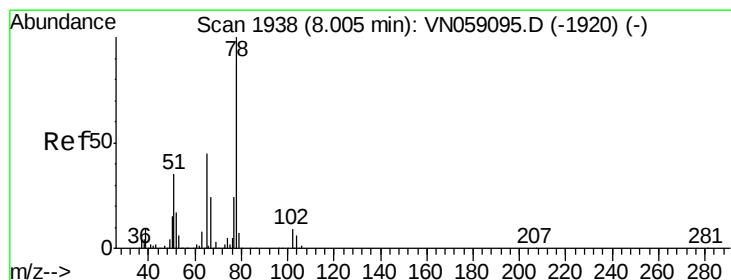
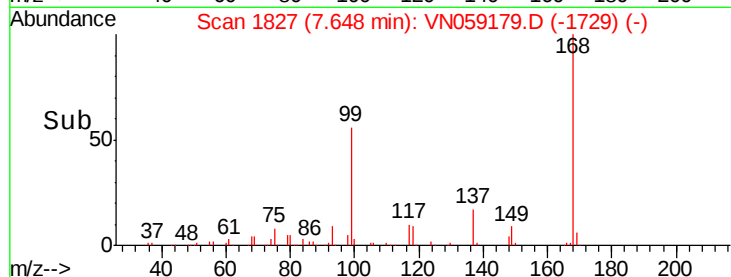
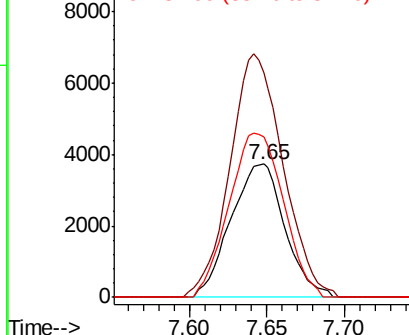
56 100

69 168.3 25.8 38.8#

84 120.3 65.0 97.4#



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: 55.377 ug/l

RT: 8.01 min Scan# 1939

Delta R.T. 0.00 min

Lab File: VN059179.D

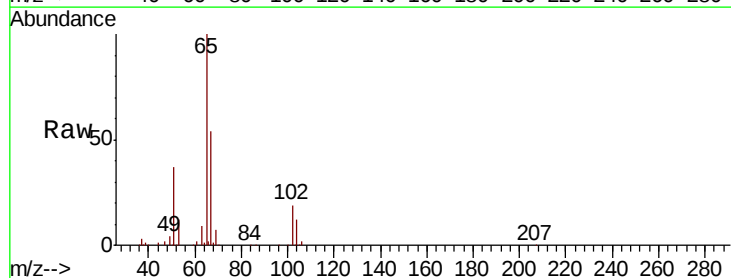
Acq: 12 Nov 2019 11:04

Tgt Ion: 65 Resp: 285846

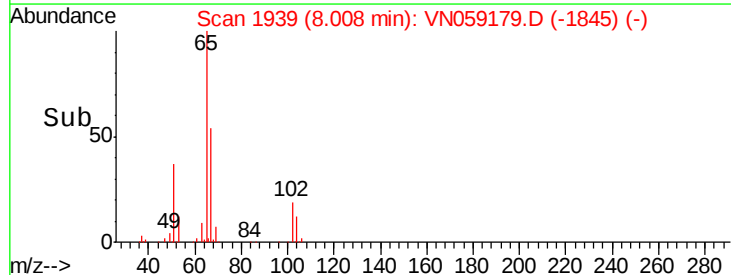
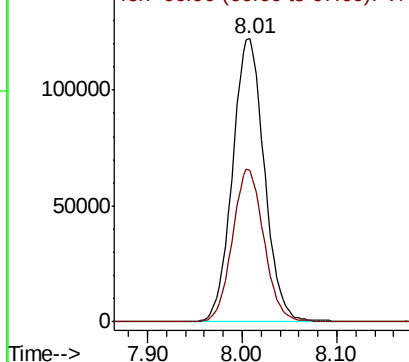
Ion Ratio Lower Upper

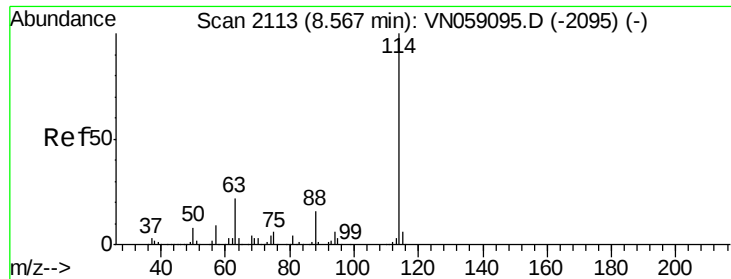
65 100

67 53.4 0.0 107.4



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

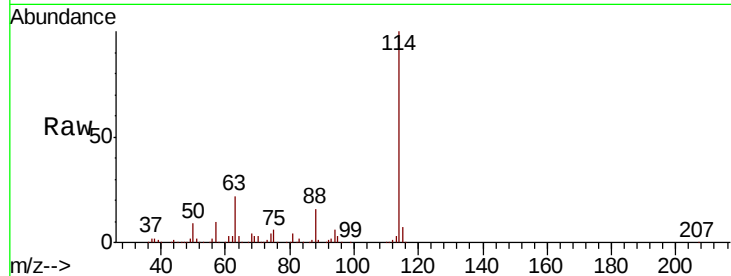




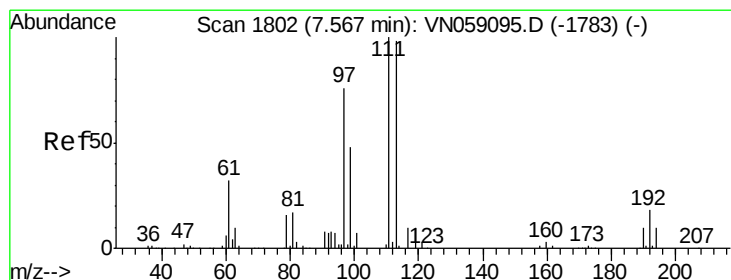
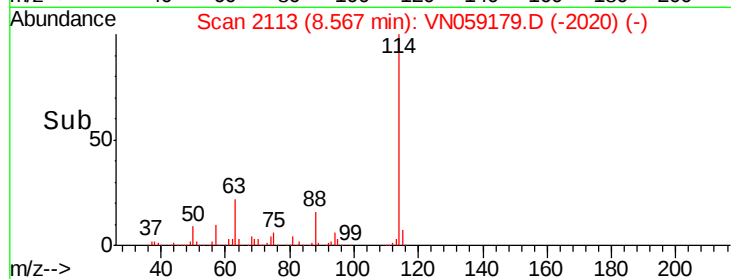
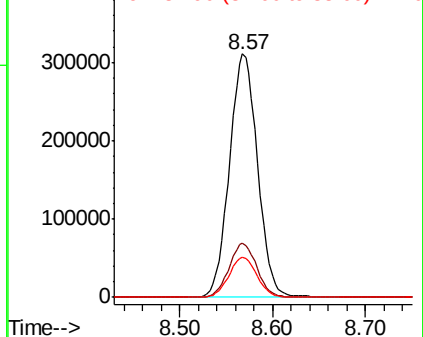
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. -0.00 min  
 Lab File: VN059179.D  
 Acq: 12 Nov 2019 11:04

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.2  | 0.0   | 43.4  |
| 88      | 16.5  | 0.0   | 32.2  |

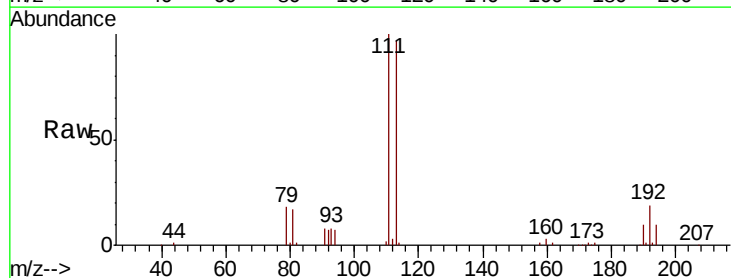


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

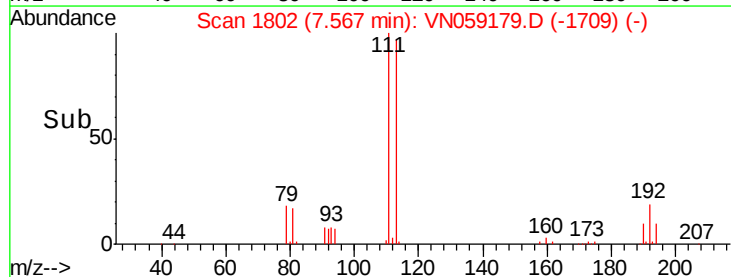
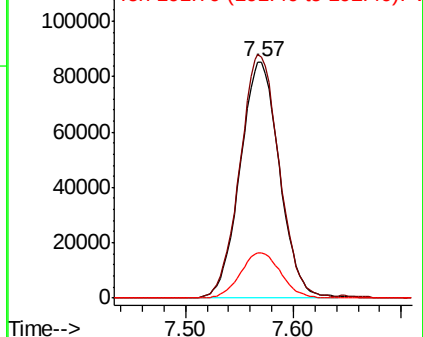


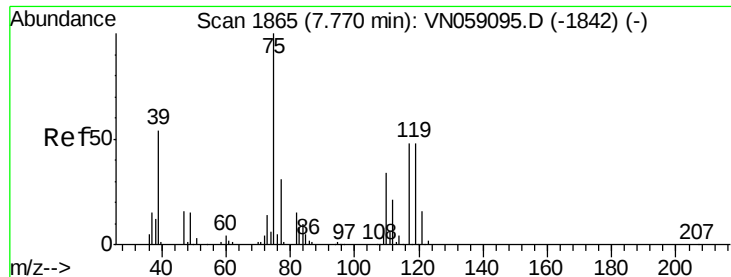
#35  
 Dibromofluoromethane  
 Concen: 55.223 ug/l  
 RT: 7.57 min Scan# 1802  
 Delta R.T. -0.00 min  
 Lab File: VN059179.D  
 Acq: 12 Nov 2019 11:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.1 | 82.8  | 124.2 |
| 192     | 19.8  | 16.1  | 24.1  |



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

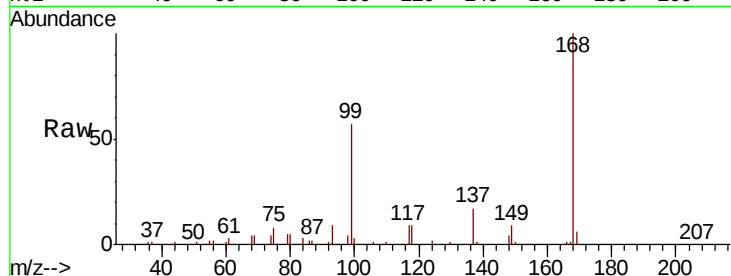




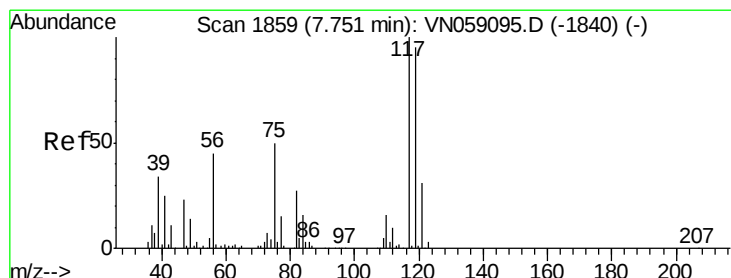
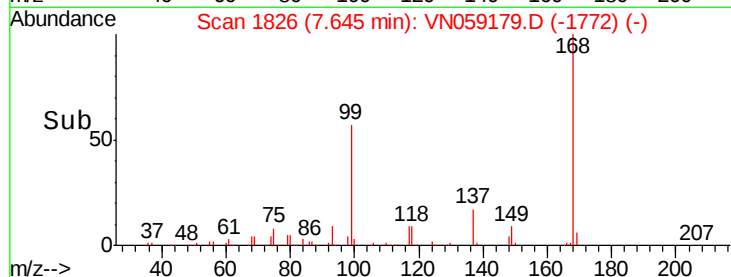
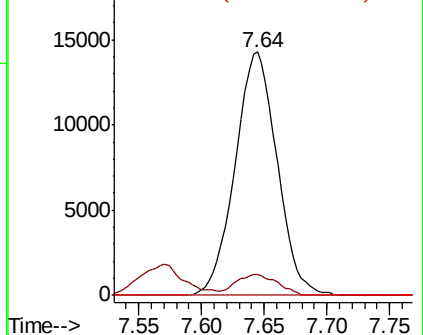
#36  
 1,1-Dichloropropene  
 Concen: 5.428 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.13 min  
 Lab File: VN059179.D  
 Acq: 12 Nov 2019 11:04

Instrument :  
 MSVOA\_N  
 ClientSampled :

| Tot Ion   | 75    | Resp  | 33231 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 110       | 8.4   | 17.1  | 51.2# |
| 77        | 0.0   | 24.8  | 37.2# |

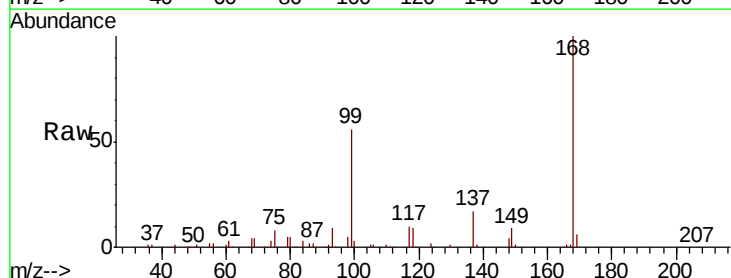


Abundance Ion 74.90 (74.60 to 75.60): VN0  
 Ion 109.90 (109.60 to 110.60): V  
 Ion 76.90 (76.60 to 77.60): VN0

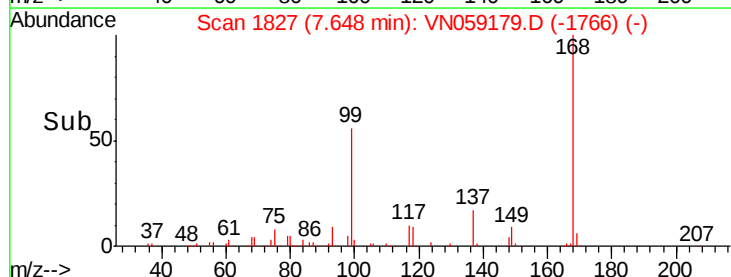
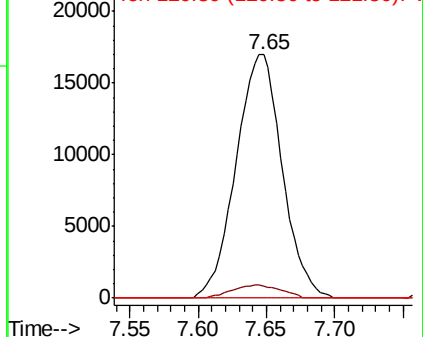


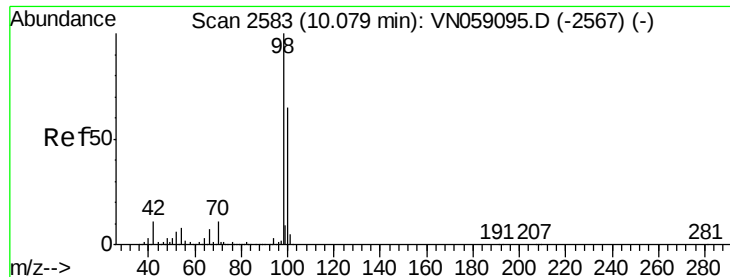
#38  
 Carbon Tetrachloride  
 Concen: 6.551 ug/l  
 RT: 7.65 min Scan# 1827  
 Delta R.T. -0.10 min  
 Lab File: VN059179.D  
 Acq: 12 Nov 2019 11:04

| Tgt Ion                                           | 117   | Resp  | 39919  |
|---------------------------------------------------|-------|-------|--------|
| Ion Ratio <td>Lower</td> <td>Upper</td> <td></td> | Lower | Upper |        |
| 117                                               | 100   |       |        |
| 119                                               | 4.8   | 75.6  | 113.4# |
| 121                                               | 0.0   | 24.6  | 36.8#  |



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





#50

Toluene-d8

Concen: 53.271 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. -0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

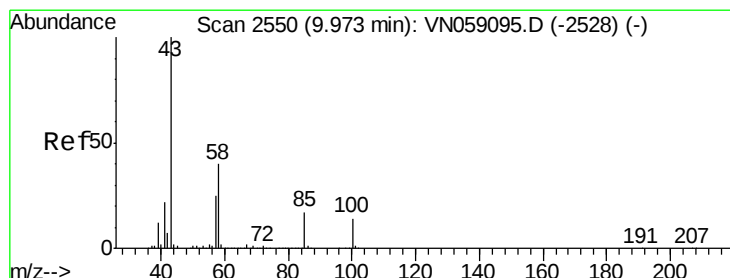
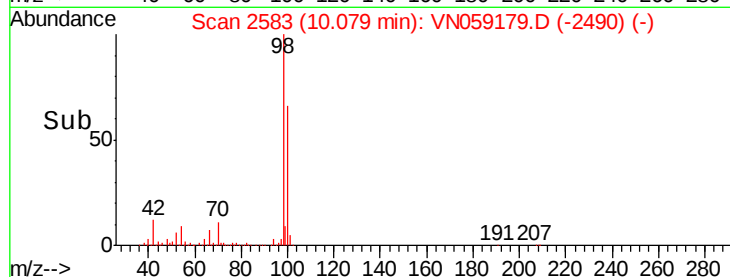
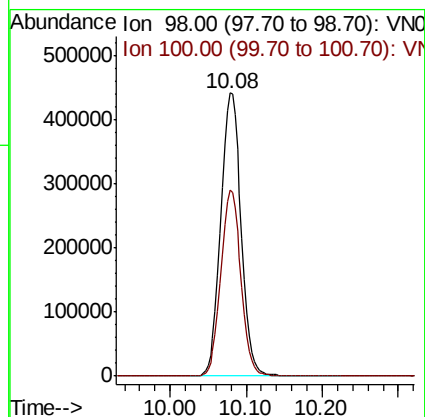
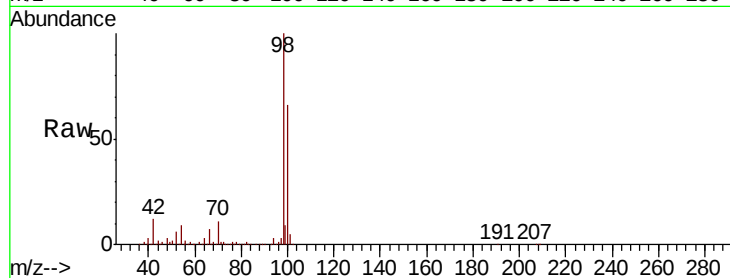
ClientSampleId :

Tot Ion: 98 Resp: 820631

Ion Ratio Lower Upper

98 100

100 64.8 52.2 78.2



#51

4-Methyl-2-Pentanone

Concen: 0.582 ug/l

RT: 10.08 min Scan# 2582

Delta R.T. 0.10 min

Lab File: VN059179.D

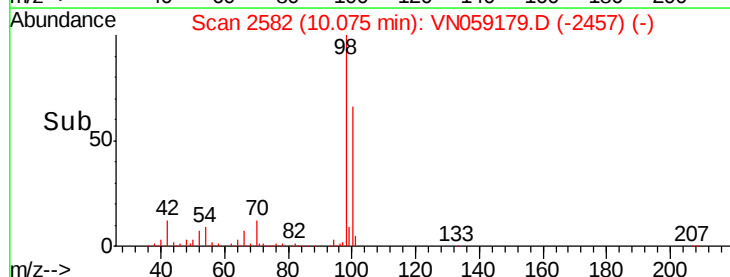
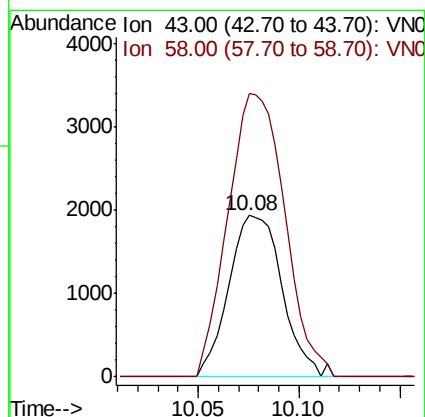
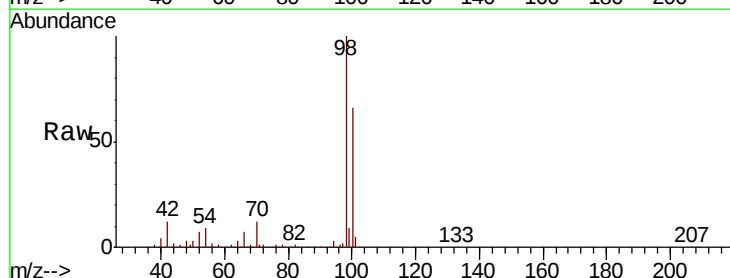
Acq: 12 Nov 2019 11:04

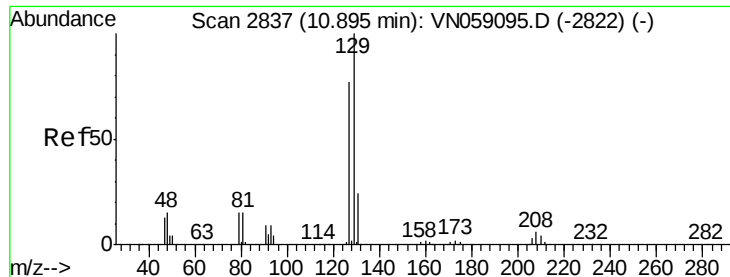
Tgt Ion: 43 Resp: 3578

Ion Ratio Lower Upper

43 100

58 186.6 31.5 47.3#





#60

Dibromochloromethane

Concen: 0.387 ug/l

RT: 10.63 min Scan# 2753

Delta R.T. -0.27 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

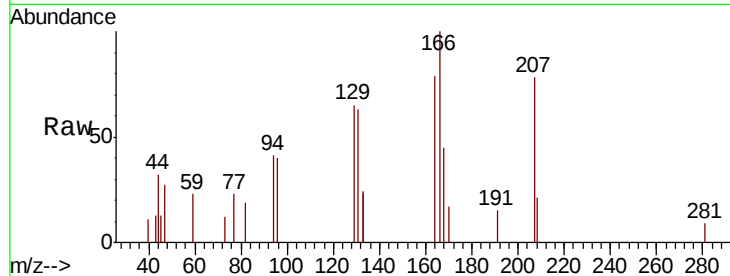
ClientSampleId :

Tot Ion:129 Resp: 1828

Ion Ratio Lower Upper

129 100

127 0.0 38.6 115.8#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V

10.63

1200

1000

800

600

400

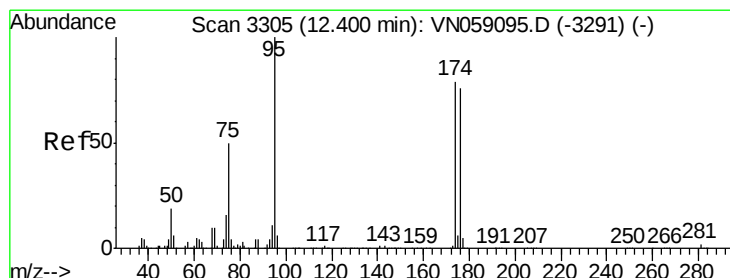
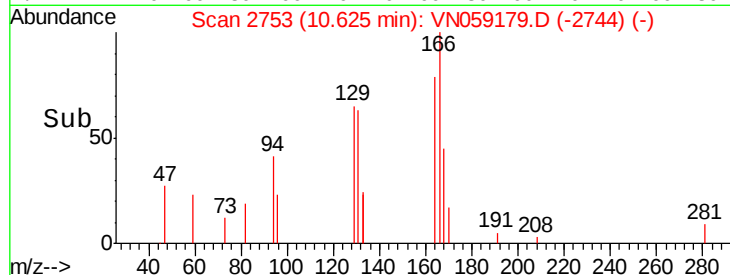
200

0

10.60

10.65

Time-->



#62

4-Bromofluorobenzene

Concen: 45.857 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

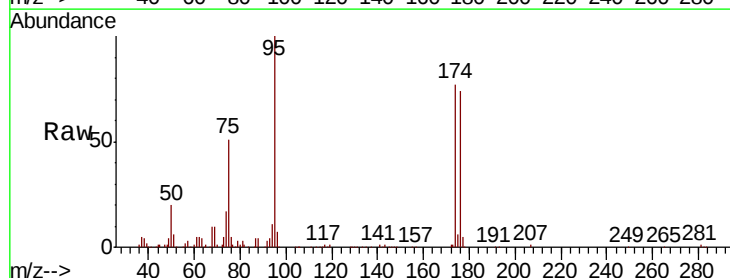
Tgt Ion: 95 Resp: 254706

Ion Ratio Lower Upper

95 100

174 77.4 0.0 158.2

176 75.0 0.0 151.8



Abundance Ion 94.90 (94.60 to 95.60): VN0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

200000

150000

100000

50000

0

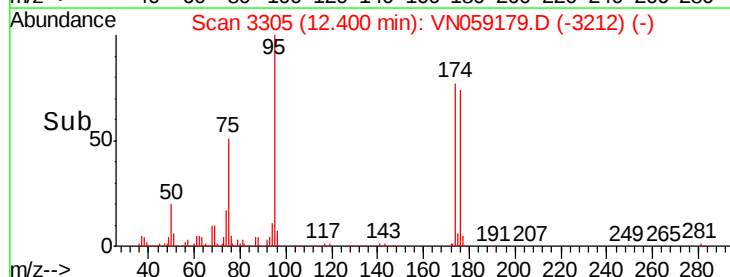
12.35

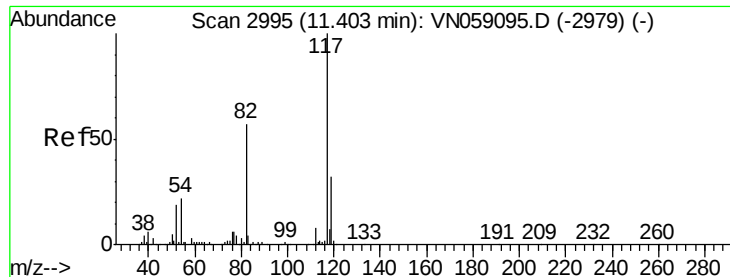
12.40

12.45

12.50

Time-->





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.40 min Scan# 2995

Delta R.T. -0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

ClientSampled :

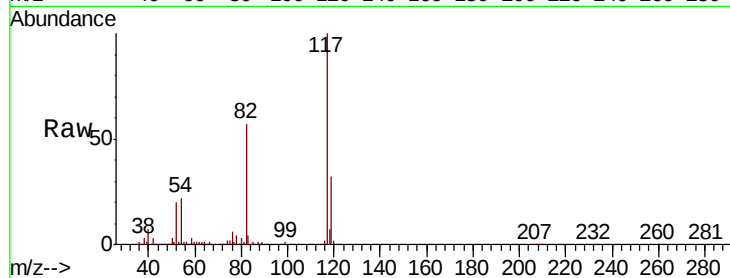
Tot Ion:117 Resp: 576125

Ion Ratio Lower Upper

117 100

82 57.3 45.8 68.8

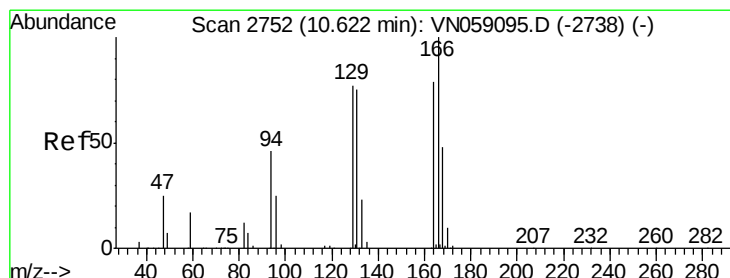
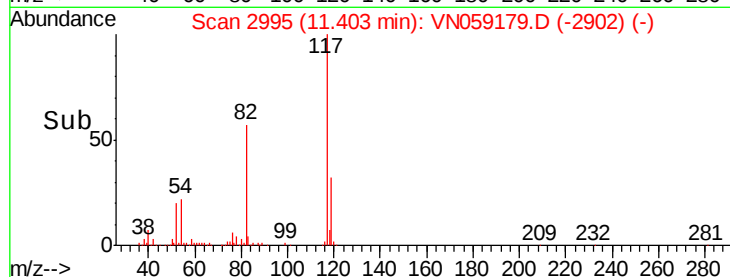
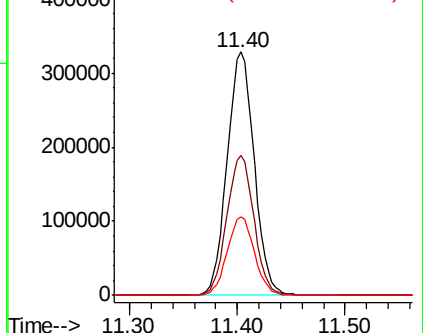
119 32.2 25.8 38.6



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VN

Ion 118.90 (118.60 to 119.60): V



#64

Tetrachloroethene

Concen: 0.553 ug/l

RT: 10.63 min Scan# 2753

Delta R.T. 0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Tgt Ion:164 Resp: 2167

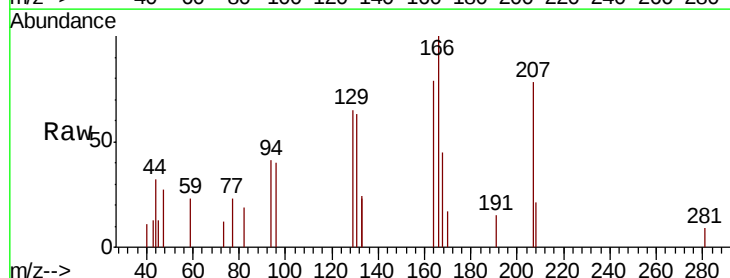
Ion Ratio Lower Upper

164 100

166 126.4 101.5 152.3

129 82.1 78.3 117.5

131 79.6 75.9 113.9

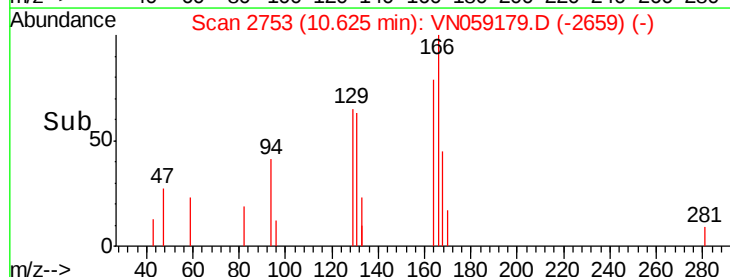
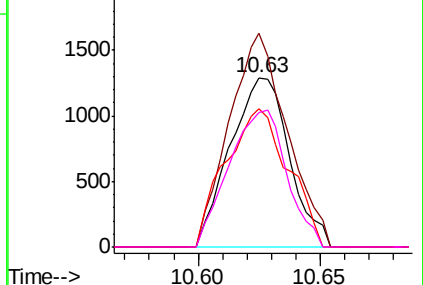


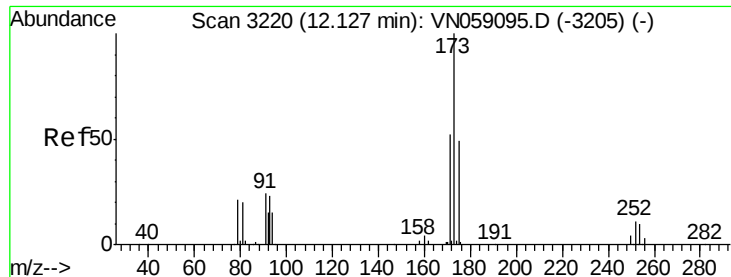
Abundance Ion 163.80 (163.50 to 164.50): V

Ion 165.80 (165.50 to 166.50): V

Ion 128.80 (128.50 to 129.50): V

Ion 130.80 (130.50 to 131.50): V





#71

Bromoform

Concen: 0.408 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.28 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

ClientSampleId :

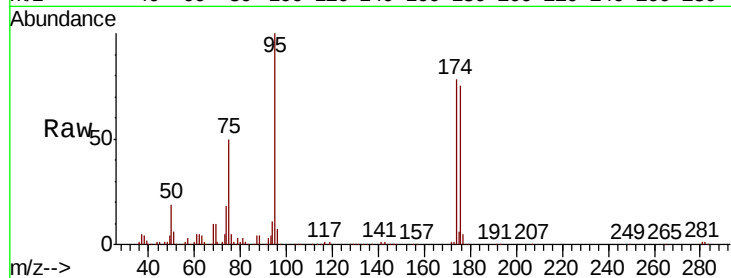
Tot Ion:173 Resp: 1338

Ion Ratio Lower Upper

173 100

175 973.4 24.2 72.6#

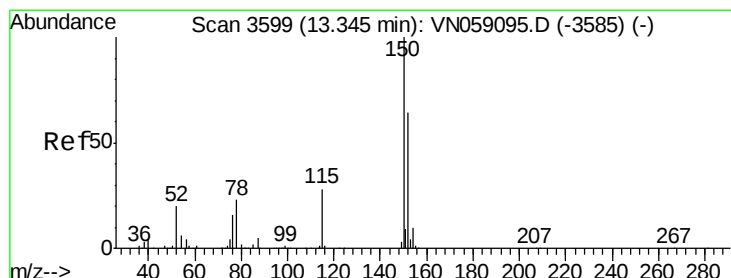
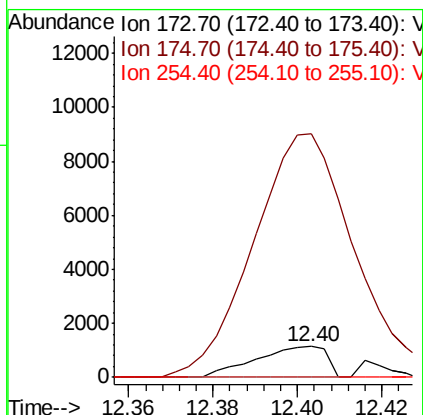
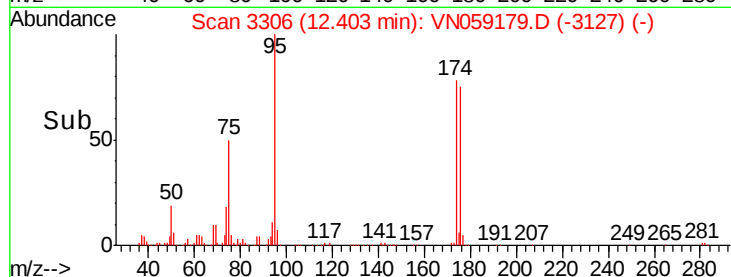
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. -0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

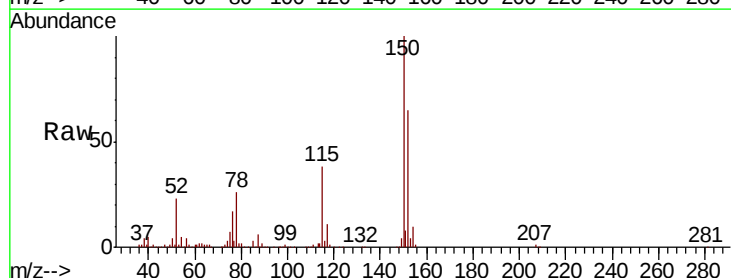
Tgt Ion:152 Resp: 204447

Ion Ratio Lower Upper

152 100

115 59.9 29.4 88.2

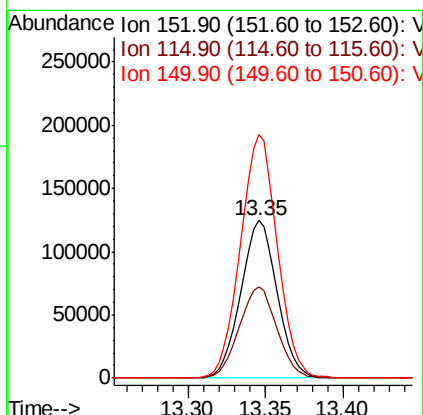
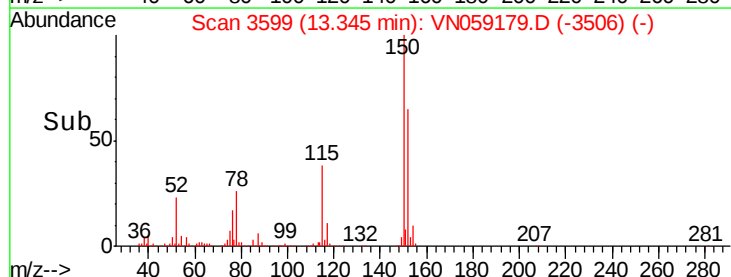
150 156.4 0.0 345.8

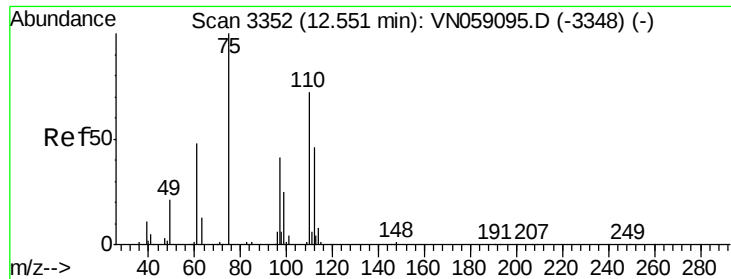


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 27.766 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

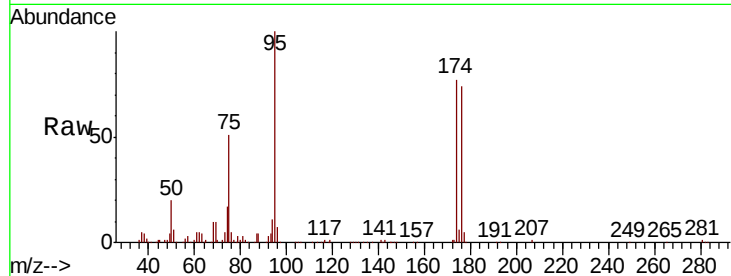
ClientSampled :

Tot Ion: 75 Resp: 129240

Ion Ratio Lower Upper

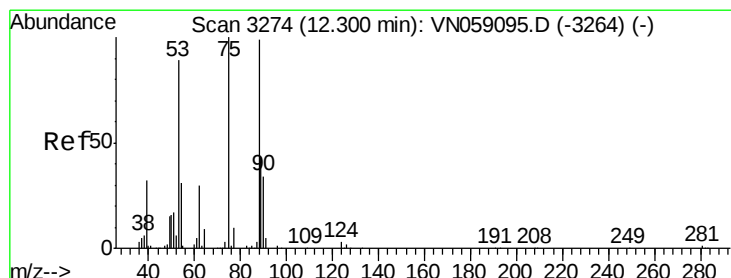
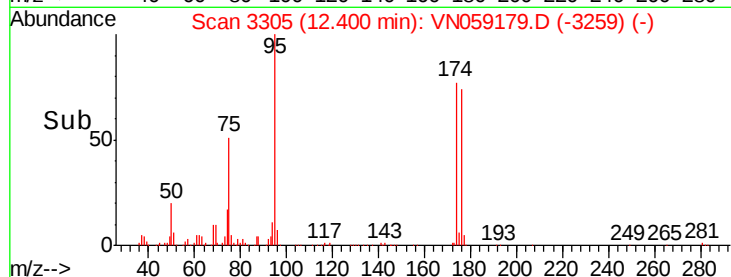
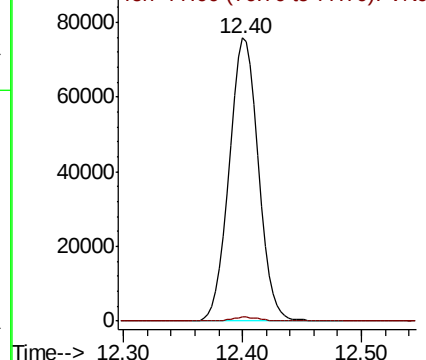
75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#81

trans-1,4-Dichloro-2-butene

Concen: 73.338 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

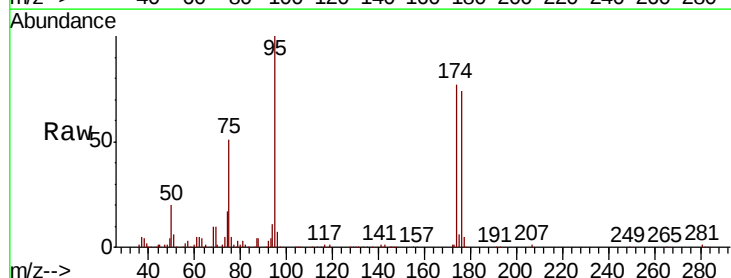
Tgt Ion: 75 Resp: 129240

Ion Ratio Lower Upper

75 100

53 0.0 72.2 108.2#

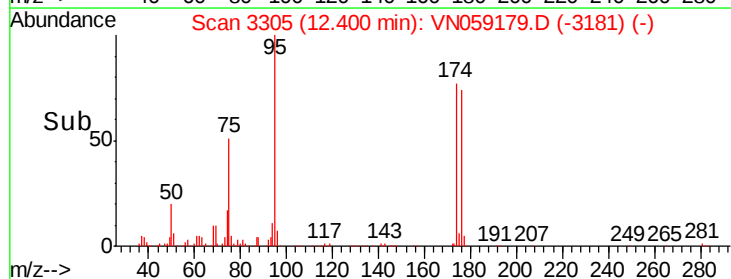
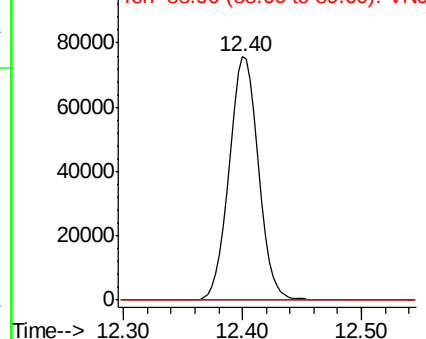
89 0.0 35.8 53.8#

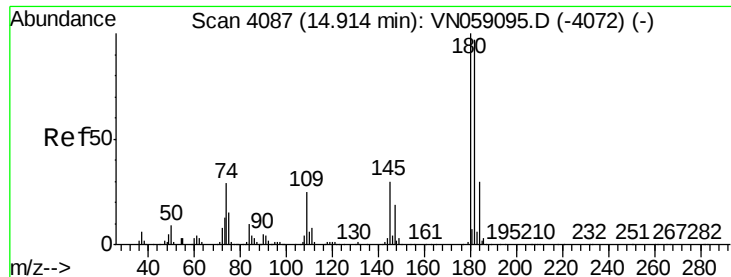


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0





#93

1,2,4-Trichlorobenzene

Concen: 3.112 ug/l

RT: 14.92 min Scan# 4089

Delta R.T. 0.01 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

Instrument :

MSVOA\_N

ClientSampled :

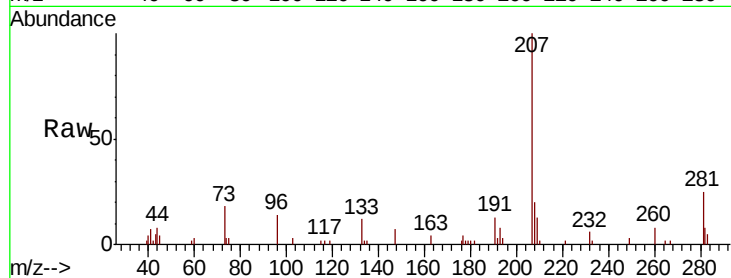
Tot Ion:180 Resp: 269

Ion Ratio Lower Upper

180 100

182 36.8 48.1 144.3#

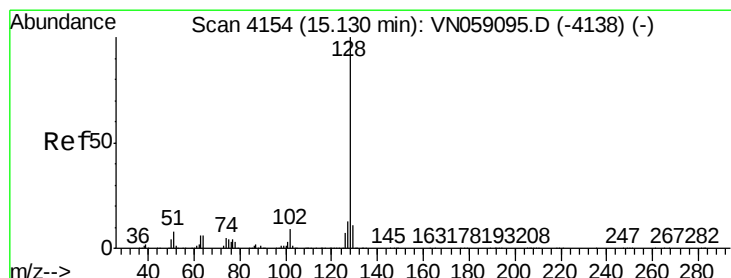
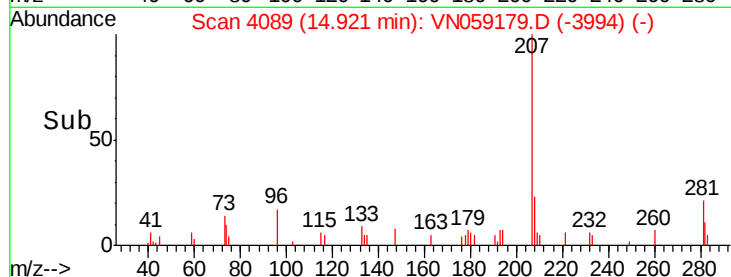
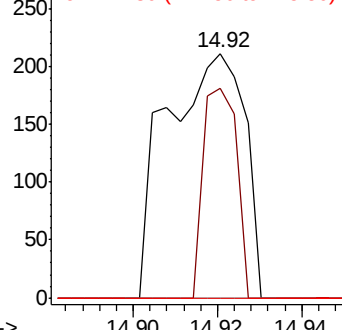
145 0.0 15.1 45.3#



Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V



#95

Naphthalene

Concen: 3.153 ug/l

RT: 15.13 min Scan# 4154

Delta R.T. 0.00 min

Lab File: VN059179.D

Acq: 12 Nov 2019 11:04

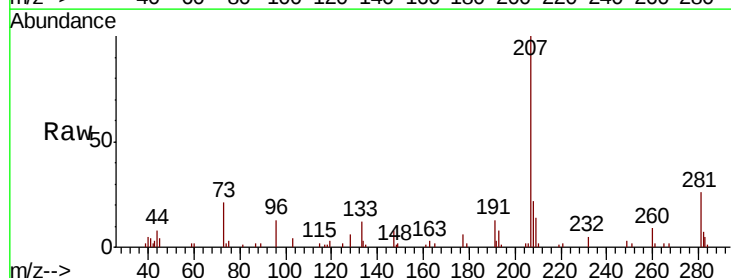
Tgt Ion:128 Resp: 1218

Ion Ratio Lower Upper

128 100

127 0.0 10.2 15.2#

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

