

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN091919\  
 Data File : VN058219.D  
 Acq On : 19 Sep 2019 21:06  
 Operator : JC/SP  
 Sample : K4896-14  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 33 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 MW201D1-20190912

Quant Time: Sep 20 04:25:53 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 19 09:27:53 2019  
 Response via : Initial Calibration

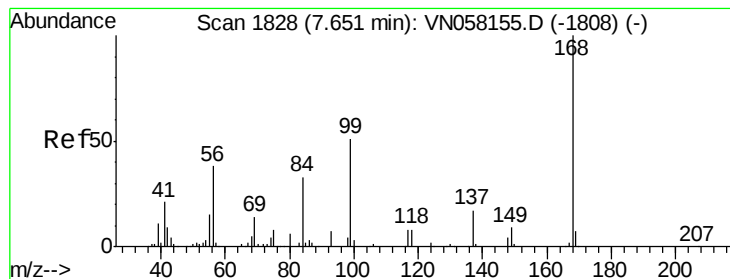
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 513515   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 836872   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 709911   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 286687   | 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   | 372146   | 52.03 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 104.06% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 254759   | 50.08 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 100.16% |          |
| 50) Toluene-d8              | 10.08 | 98   | 1051337  | 53.04 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 106.08% |          |
| 62) 4-Bromofluorobenzene    | 12.41 | 95   | 333677   | 45.32 | ug/l    | 0.00     |
| Spiked Amount               |       |      |          |       |         |          |
|                             |       |      | Recovery | =     | 90.64%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc          | Units | Qvalue |
|--------------------------------|-------|------|----------|---------------|-------|--------|
| 3) Chloromethane               | 2.04  | 50   | 1070     | Below Cal     |       | 98     |
| 5) Bromomethane                | 2.54  | 94   | 166      | 0.809 ug/l #  |       | 4      |
| 6) Chloroethane                | 2.64  | 64   | 99       | Below Cal #   |       | 44     |
| 12) 1,1-Dichloroethene         | 3.71  | 96   | 175      | Below Cal #   |       | 1      |
| 17) Carbon Disulfide           | 4.02  | 76   | 135      | 0.301 ug/l #  |       | 74     |
| 20) Methylene Chloride         | 4.52  | 84   | 116      | Below Cal #   |       | 45     |
| 27) cis-1,2-Dichloroethene     | 6.82  | 96   | 1059     | 0.203 ug/l #  |       | 13     |
| 31) Cyclohexane                | 7.65  | 56   | 13172    | Below Cal #   |       | 16     |
| 36) 1,1-Dichloropropene        | 7.65  | 75   | 44079    | 7.304 ug/l #  |       | 50     |
| 38) Carbon Tetrachloride       | 7.65  | 117  | 52129    | 8.593 ug/l #  |       | 14     |
| 41) Methacrylonitrile          | 7.16  | 41   | 91       | 0.939 ug/l #  |       | 100    |
| 43) Isopropyl Acetate          | 8.24  | 43   | 17025    | 1.455 ug/l #  |       | 57     |
| 44) Trichloroethene            | 8.82  | 130  | 21517    | 4.770 ug/l    |       | 100    |
| 60) Dibromochloromethane       | 10.63 | 129  | 3927     | 0.796 ug/l #  |       | 11     |
| 64) Tetrachloroethene          | 10.63 | 164  | 4217     | 1.219 ug/l    |       | 90     |
| 71) Bromoform                  | 12.40 | 173  | 959      | 3.860 ug/l #  |       | 1      |
| 76) 1,2,3-Trichloropropane     | 12.41 | 75   | 181883   | 35.449 ug/l # |       | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.41 | 75   | 181883   | 99.090 ug/l # |       | 5      |

(#) = 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: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

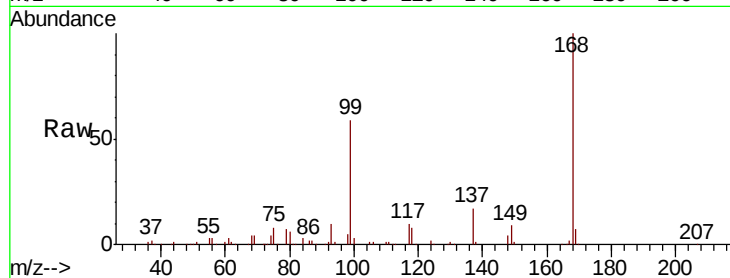
MW201D1-20190912

Tot Ion:168 Resp: 513515

Ion Ratio Lower Upper

168 100

99 59.2 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): VN058155.D (-1808) (-)

Ion 98.90 (98.60 to 99.60): VN058155.D (-1808) (-)

7.65

250000

200000

150000

100000

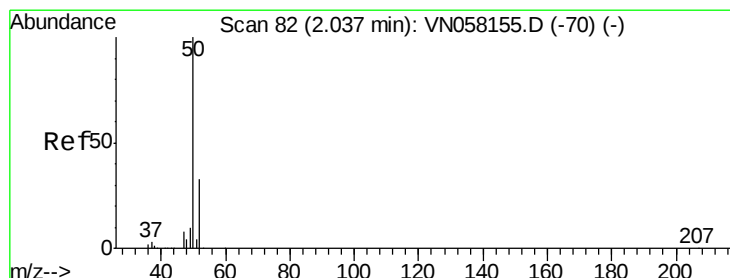
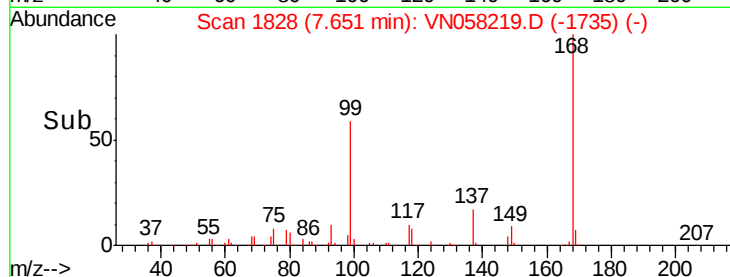
50000

0

7.60

7.70

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 2.04 min Scan# 83

Delta R.T. 0.00 min

Lab File: VN058219.D

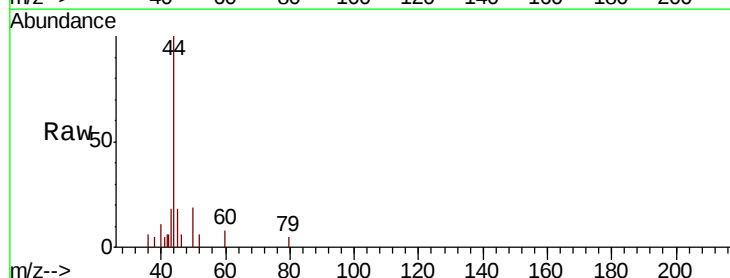
Acq: 19 Sep 2019 21:06

Tgt Ion: 50 Resp: 1070

Ion Ratio Lower Upper

50 100

52 31.9 26.3 39.5



Abundance Ion 49.90 (49.60 to 50.60): VN058155.D (-70) (-)

Ion 51.90 (51.60 to 52.60): VN058155.D (-70) (-)

2.04

800

600

400

200

0

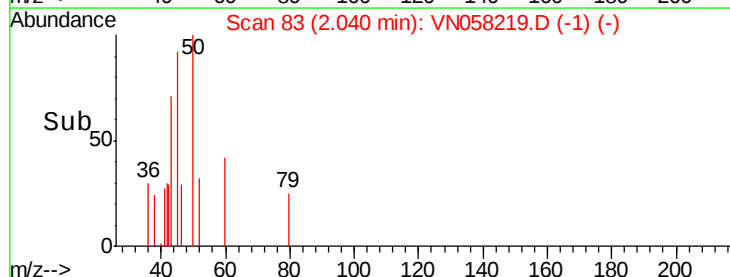
2.00

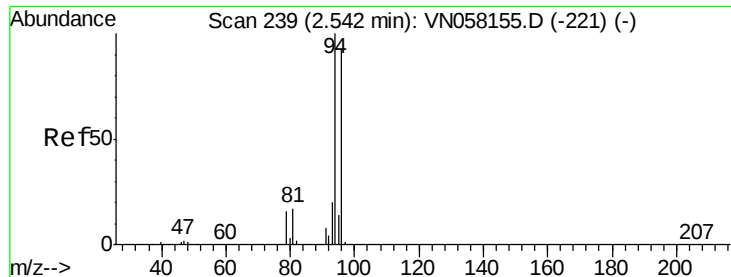
2.02

2.04

2.06

Time-->





#5

Bromomethane

Concen: 0.809 ug/l

RT: 2.54 min Scan# 240

Delta R.T. 0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

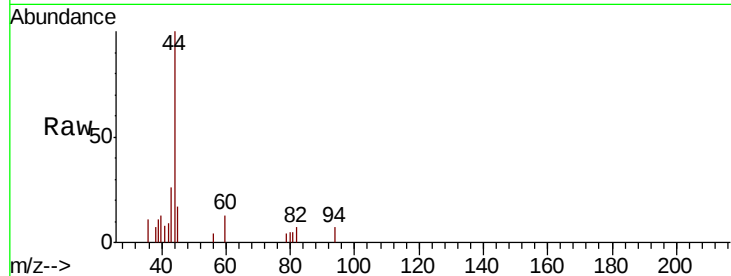
MW201D1-20190912

Tot Ion: 94 Resp: 166

Ion Ratio Lower Upper

94 100

96 0.0 73.3 109.9#



Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0

2.54

2.55

2.56

2.53

2.54

2.55

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2.54

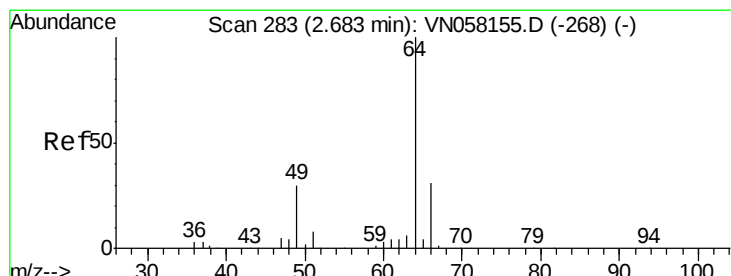
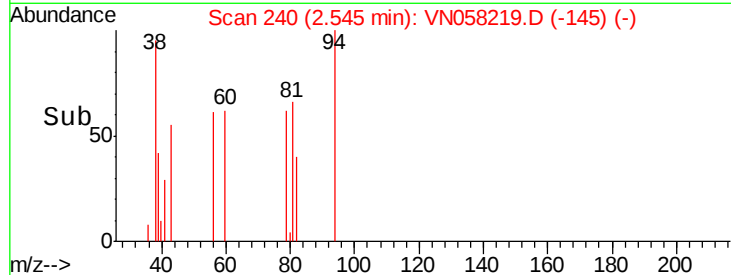
2.55

2.56

2.53

2.54

2.55



#6

Chloroethane

Concen: Below Cal

RT: 2.64 min Scan# 271

Delta R.T. -0.04 min

Lab File: VN058219.D

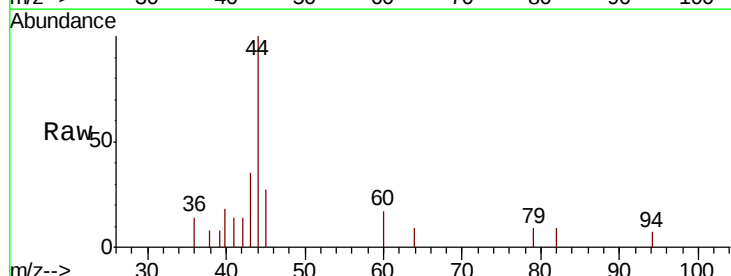
Acq: 19 Sep 2019 21:06

Tgt Ion: 64 Resp: 99

Ion Ratio Lower Upper

64 100

66 0.0 24.6 37.0#



Abundance Ion 63.90 (63.60 to 64.60): VN0

Ion 65.90 (65.60 to 66.60): VN0

2.64

2.65

2.66

2.63

2.64

2.65

2.66

2.63

2.64

2.65

2.66

2.63

2.64

2.65

2.66

2.63

2.64

2.65

2.66

2.63

2.64

2.65

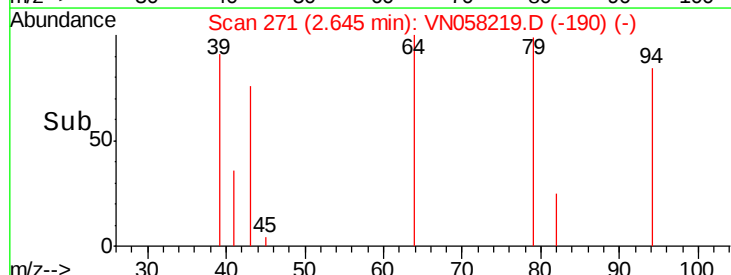
2.66

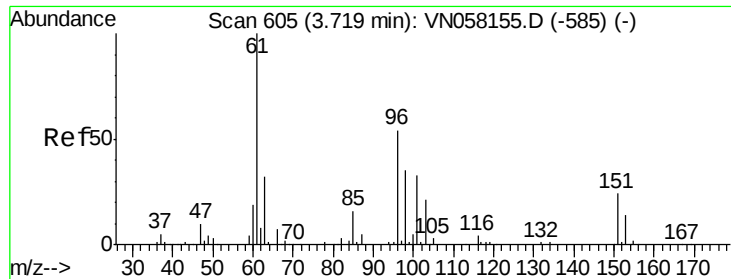
2.63

2.64

2.65

2.66

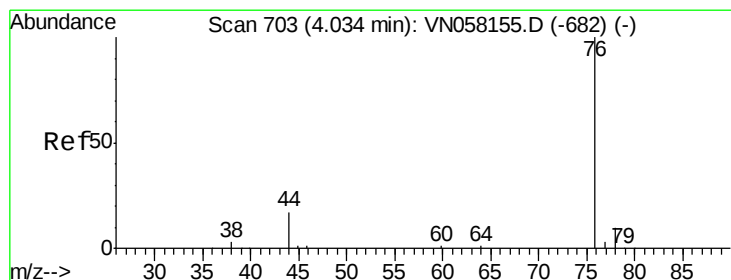
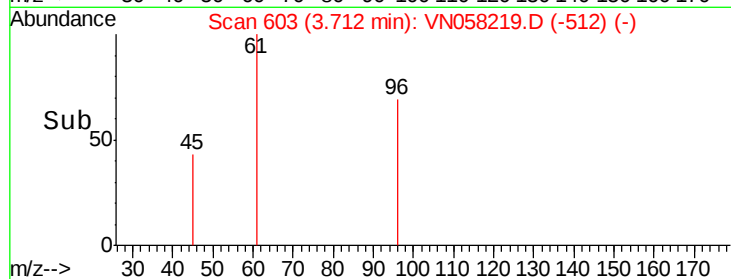
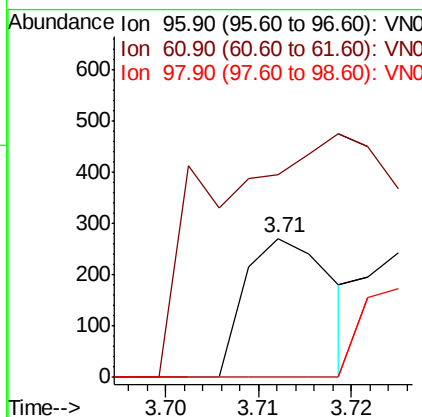
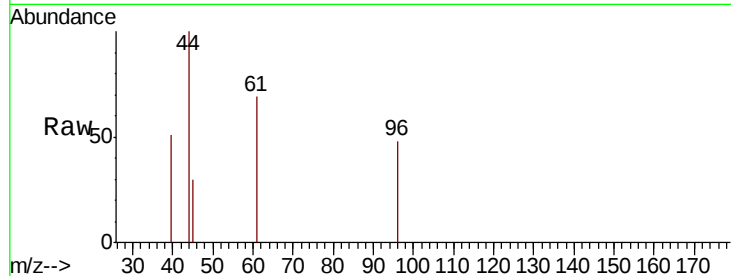




#12  
 1,1-Dichloroethene  
 Concen: Below Cal  
 RT: 3.71 min Scan# 603  
 Delta R.T. -0.01 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

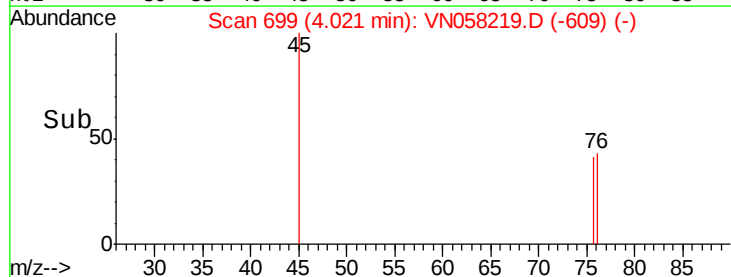
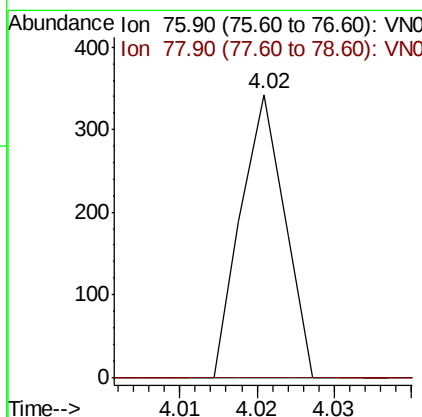
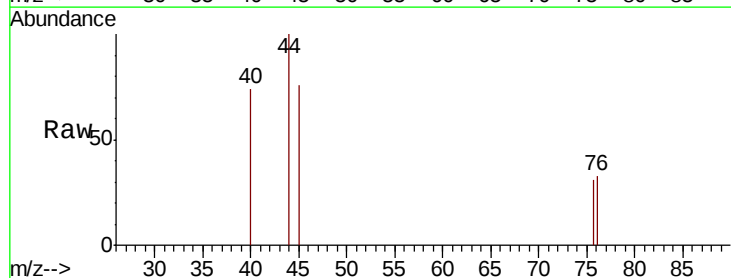
Instrument :  
 MSVOA\_N  
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 MW201D1-20190912

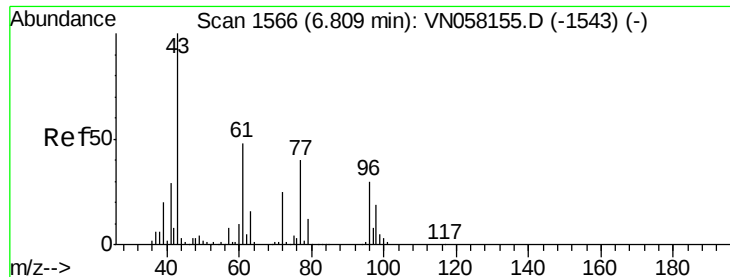
| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 96      | 100   |       |        |
| 61      | 0.0   | 149.5 | 224.3# |
| 98      | 0.0   | 52.4  | 78.6#  |



#17  
 Carbon Disulfide  
 Concen: 0.301 ug/l  
 RT: 4.02 min Scan# 699  
 Delta R.T. -0.01 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 76      | 100   |       |       |
| 78      | 0.0   | 7.7   | 11.5# |

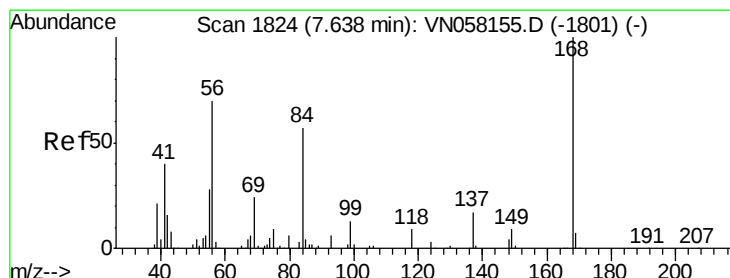
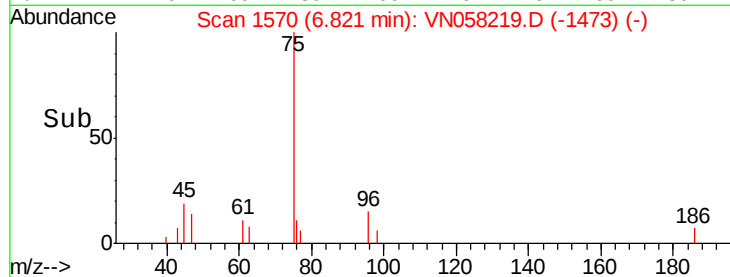
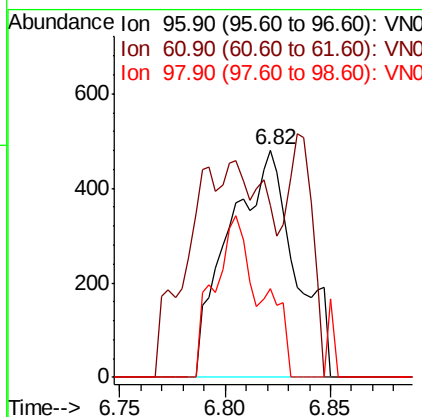
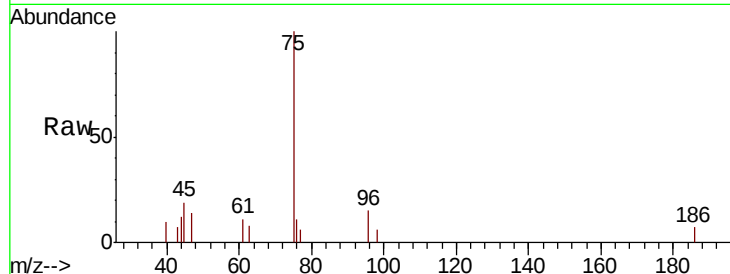




#27  
 cis-1,2-Dichloroethene  
 Concen: 0.203 ug/l  
 RT: 6.82 min Scan# 1570  
 Delta R.T. 0.01 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

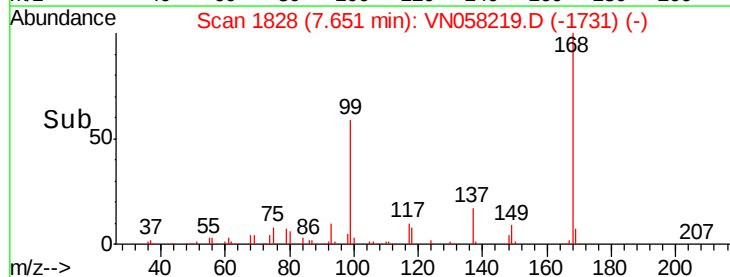
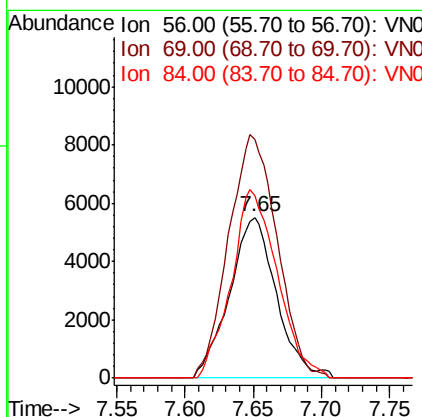
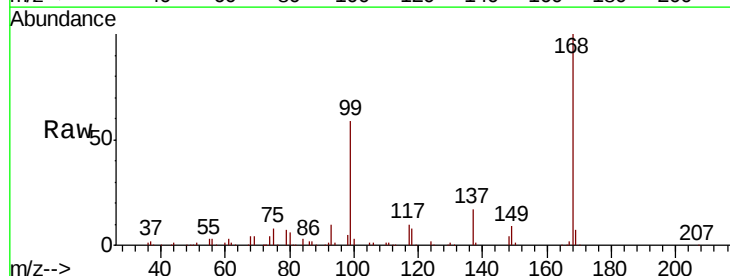
Instrument :  
 MSVOA\_N  
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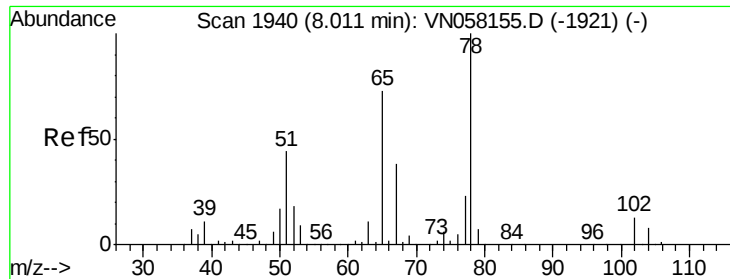
| Tot Ion | 96    | Resp  | 1059  |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 96      | 100   |       |       |
| 61      | 42.6  | 0.0   | 319.0 |
| 98      | 0.0   | 0.0   | 126.6 |



#31  
 Cyclohexane  
 Concen: Below Cal  
 RT: 7.65 min Scan# 1828  
 Delta R.T. 0.01 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

| Tgt Ion | 56    | Resp  | 13172 |
|---------|-------|-------|-------|
| Ion     | Ratio | Lower | Upper |
| 56      | 100   |       |       |
| 69      | 148.2 | 27.3  | 40.9# |
| 84      | 112.9 | 65.0  | 97.4# |





#33

1,2-Dichloroethane-d4

Concen: 52.032 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

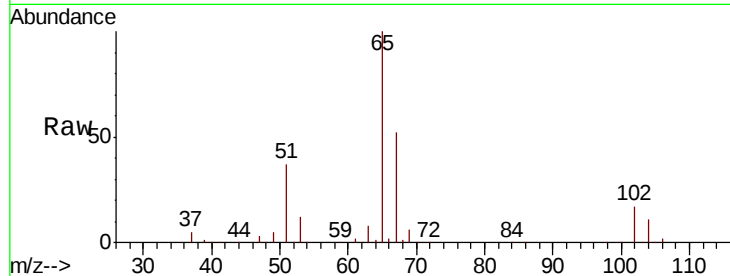
MW201D1-20190912

Tot Ion: 65 Resp: 372146

Ion Ratio Lower Upper

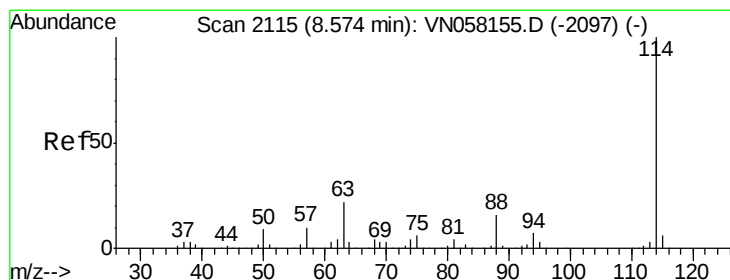
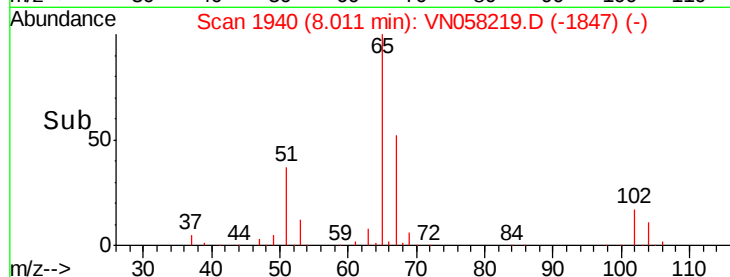
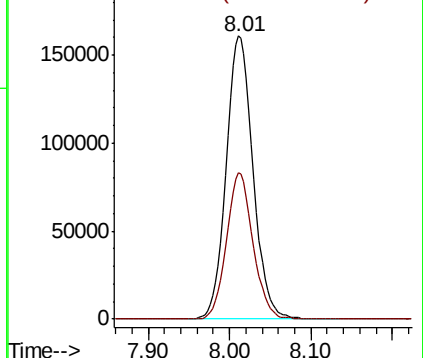
65 100

67 50.9 0.0 103.4



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

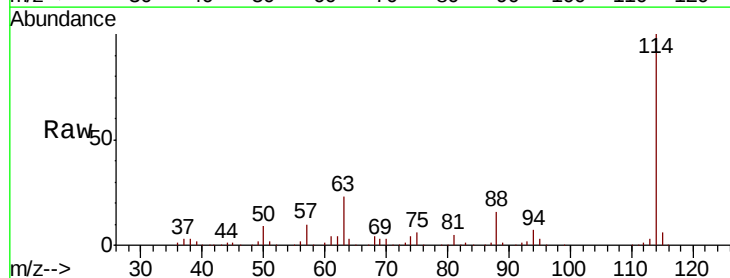
Tgt Ion: 114 Resp: 836872

Ion Ratio Lower Upper

114 100

63 22.7 0.0 44.2

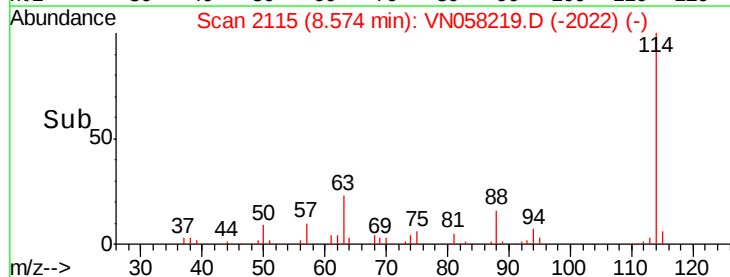
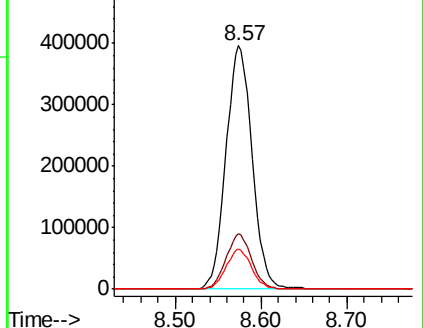
88 16.3 0.0 31.6

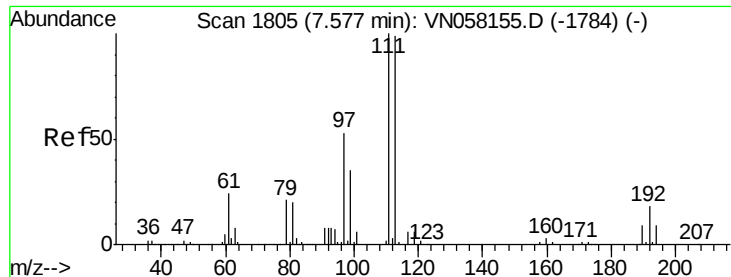


Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0

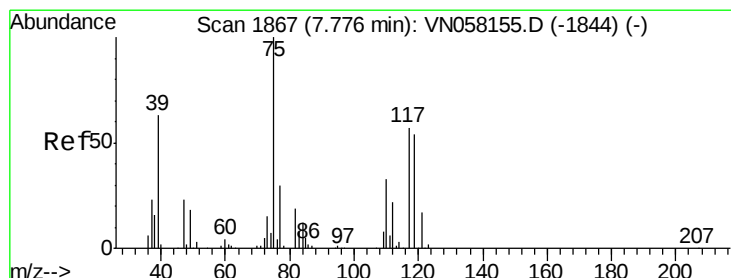
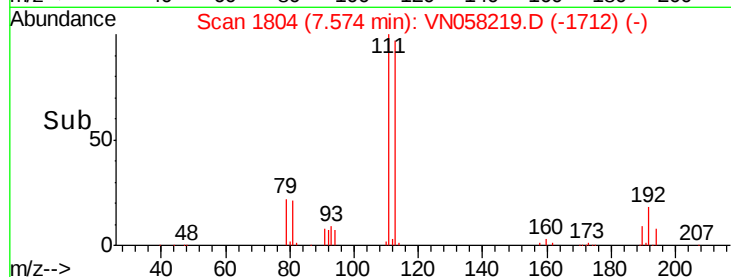
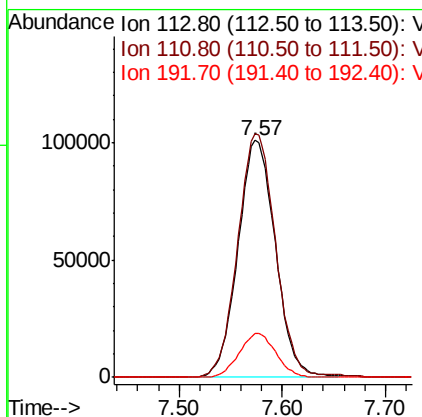
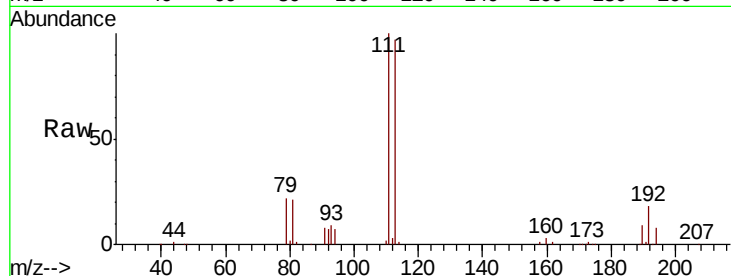




#35  
 Dibromofluoromethane  
 Concen: 50.076 ug/l  
 RT: 7.57 min Scan# 1804  
 Delta R.T. -0.00 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

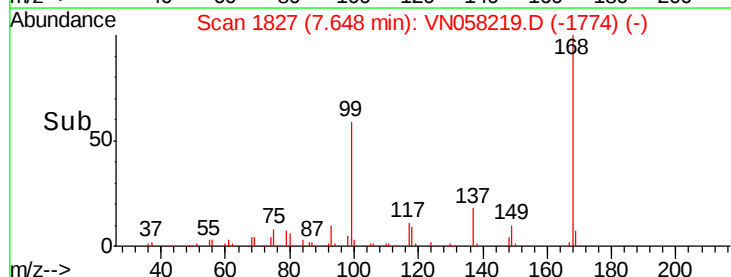
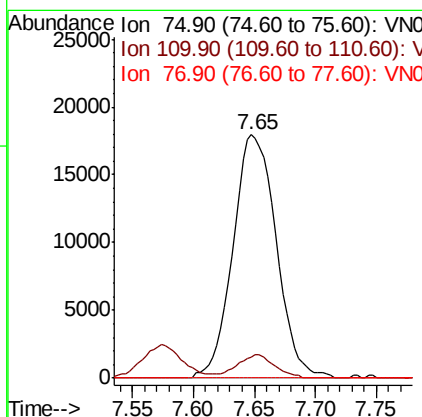
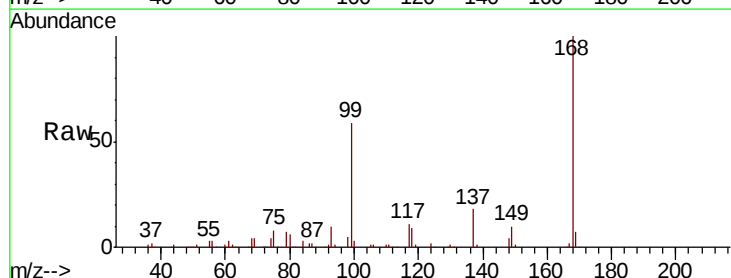
Instrument :  
 MSVOA\_N  
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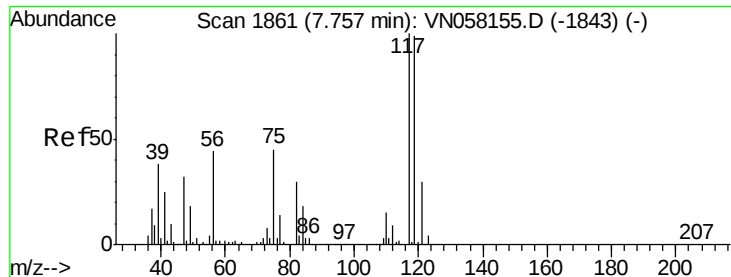
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.4 | 81.8  | 122.6 |
| 192     | 18.2  | 14.5  | 21.7  |



#36  
 1,1-Dichloropropene  
 Concen: 7.304 ug/l  
 RT: 7.65 min Scan# 1827  
 Delta R.T. -0.13 min  
 Lab File: VN058219.D  
 Acq: 19 Sep 2019 21:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.2   | 16.6  | 49.7# |
| 77      | 0.0   | 24.3  | 36.5# |





#38

Carbon Tetrachloride

Concen: 8.593 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.11 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

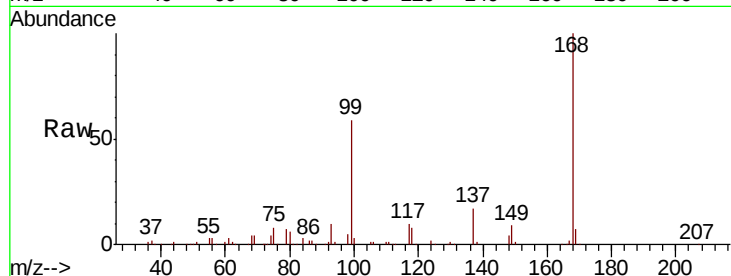
Tot Ion:117 Resp: 52129

Ion Ratio Lower Upper

117 100

119 4.3 78.6 117.8#

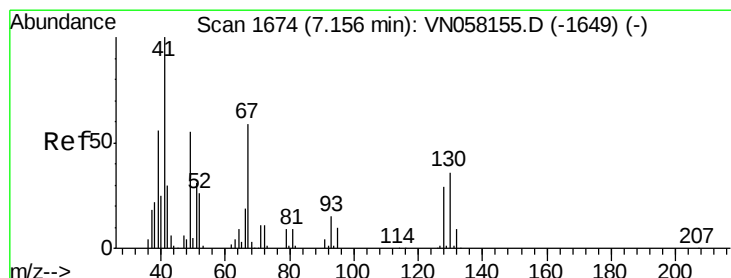
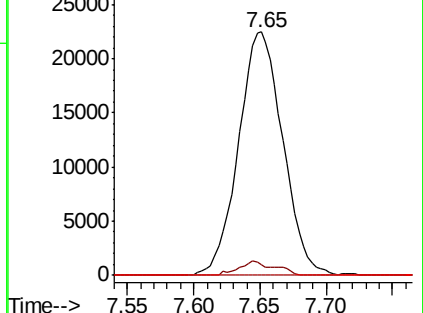
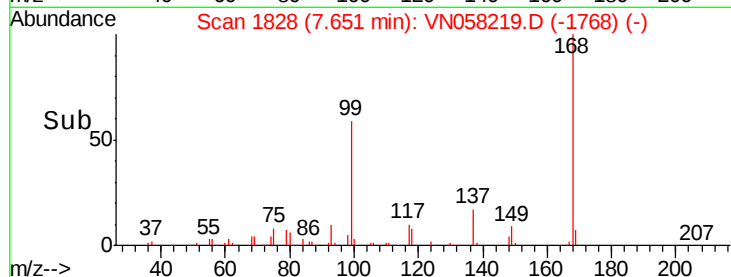
121 0.0 24.1 36.1#



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



#41

Methacrylonitrile

Concen: 0.939 ug/l

RT: 7.16 min Scan# 1674

Delta R.T. 0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Tgt Ion: 41 Resp: 91

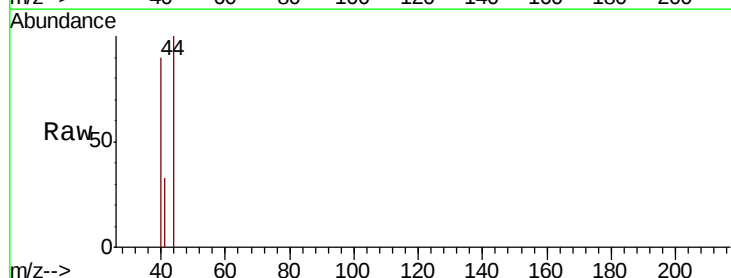
Ion Ratio Lower Upper

41 100

39 0.0 0.0 0.0

67 0.0 0.0 0.0

52 0.0 0.0 0.0

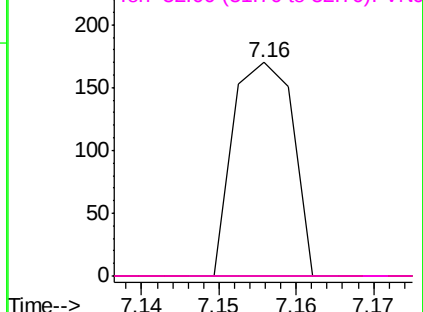
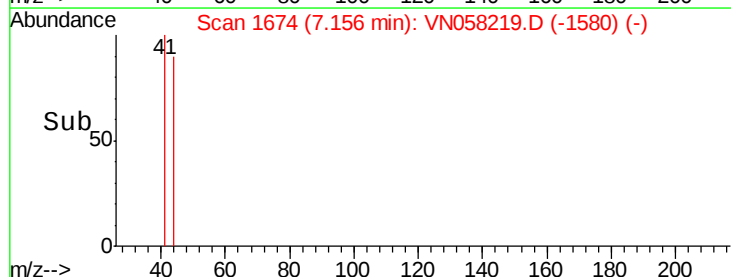


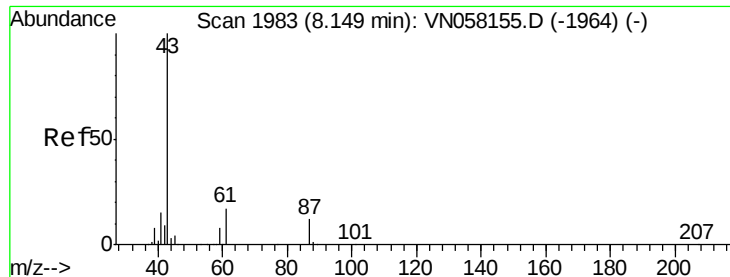
Abundance Ion 41.00 (40.70 to 41.70): VNC

Ion 39.00 (38.70 to 39.70): VNC

Ion 67.00 (66.70 to 67.70): VNC

Ion 52.00 (51.70 to 52.70): VNC





#43

Isopropyl Acetate

Concen: 1.455 ug/l

RT: 8.24 min Scan# 2011

Delta R.T. 0.09 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

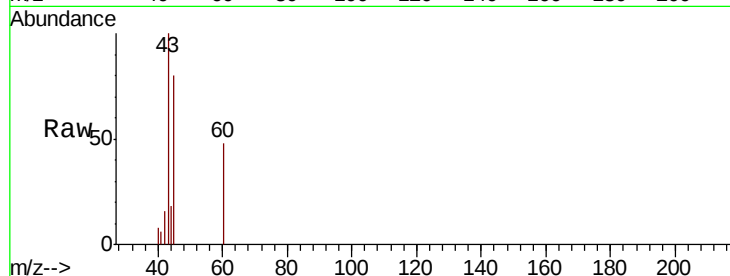
Tot Ion: 43 Resp: 17025

Ion Ratio Lower Upper

43 100

61 0.0 19.7 29.5#

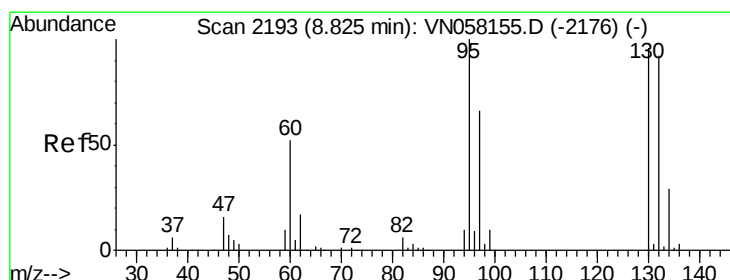
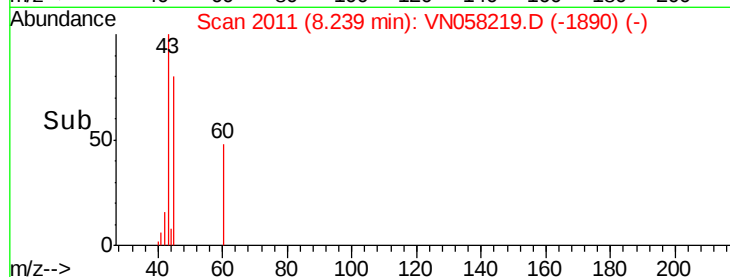
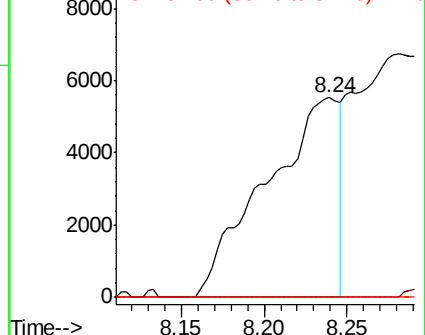
87 0.0 9.4 14.2#



Abundance Ion 43.00 (42.70 to 43.70): VN058219.D (-2011) (-)

Ion 61.00 (60.70 to 61.70): VN058219.D (-2011) (-)

Ion 87.00 (86.70 to 87.70): VN058219.D (-2011) (-)



#44

Trichloroethene

Concen: 4.770 ug/l

RT: 8.82 min Scan# 2193

Delta R.T. -0.00 min

Lab File: VN058219.D

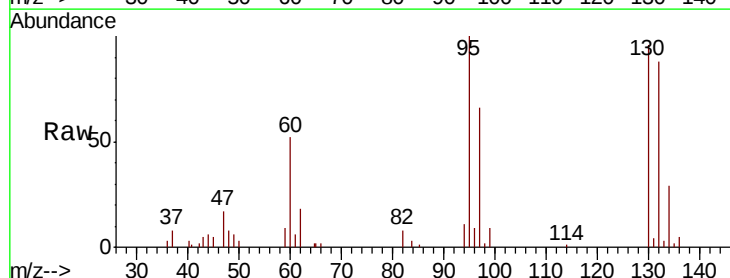
Acq: 19 Sep 2019 21:06

Tgt Ion: 130 Resp: 21517

Ion Ratio Lower Upper

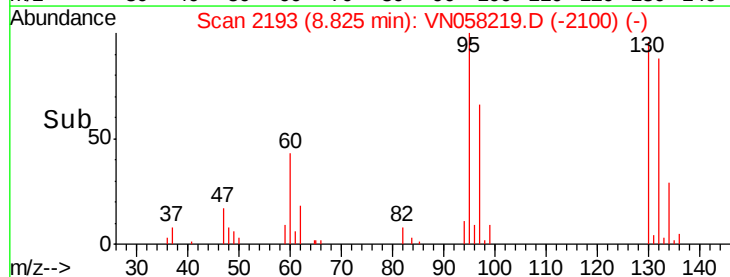
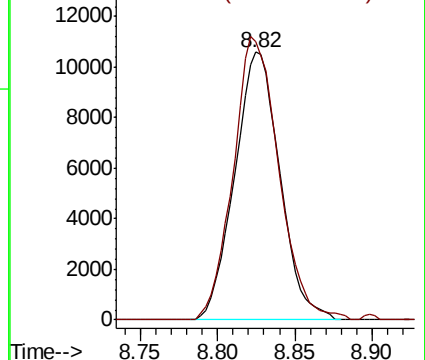
130 100

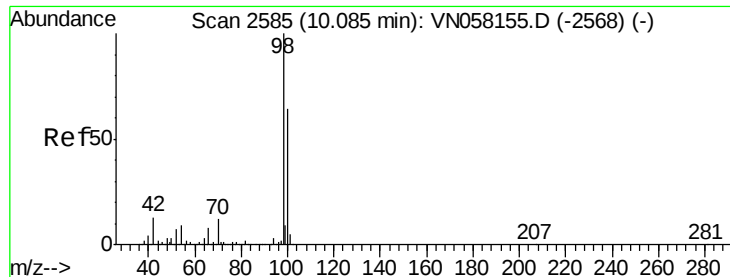
95 104.1 0.0 207.8



Abundance Ion 129.80 (129.50 to 130.50): VN058219.D (-2193) (-)

Ion 94.90 (94.60 to 95.60): VN058219.D (-2193) (-)





#50

Toluene-d8

Concen: 53.039 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

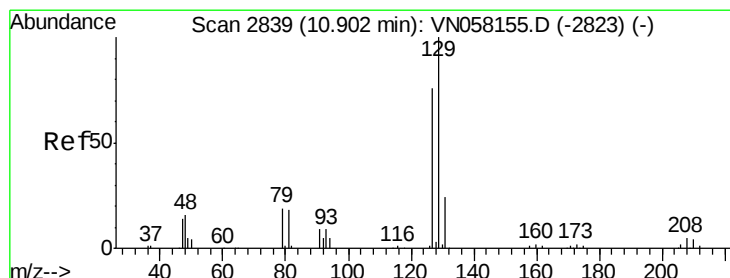
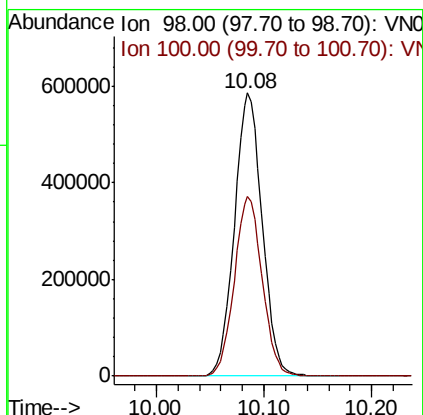
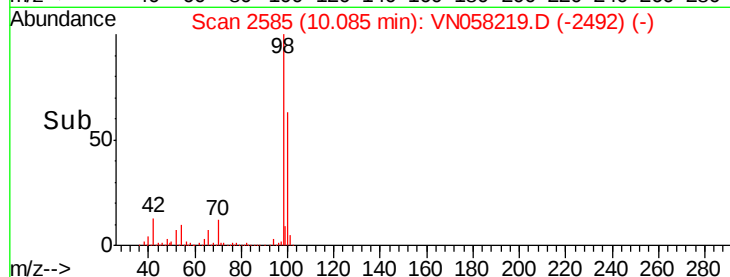
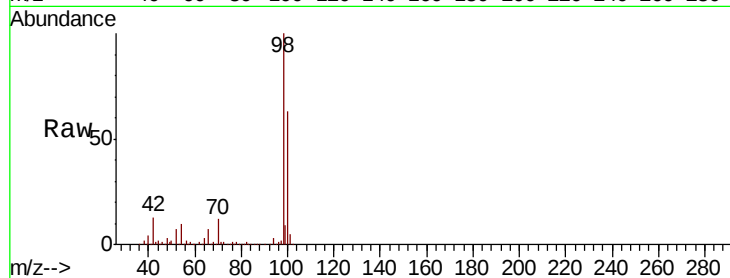
MW201D1-20190912

Tot Ion: 98 Resp: 1051337

Ion Ratio Lower Upper

98 100

100 63.7 51.1 76.7



#60

Dibromochloromethane

Concen: 0.796 ug/l

RT: 10.63 min Scan# 2754

Delta R.T. -0.27 min

Lab File: VN058219.D

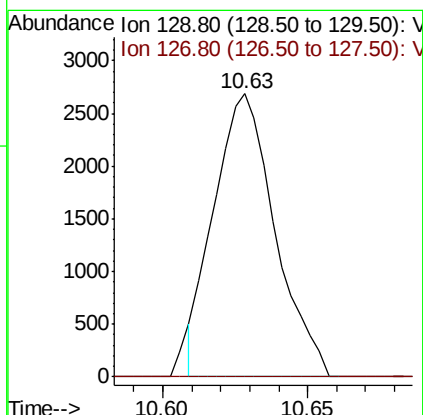
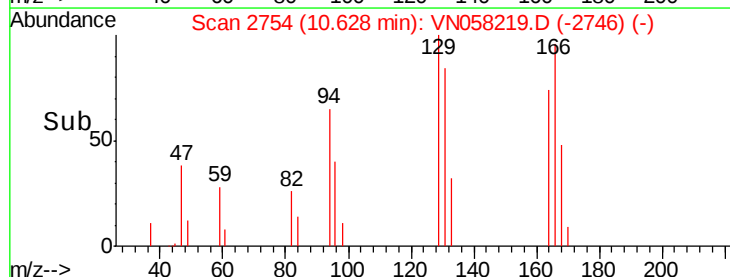
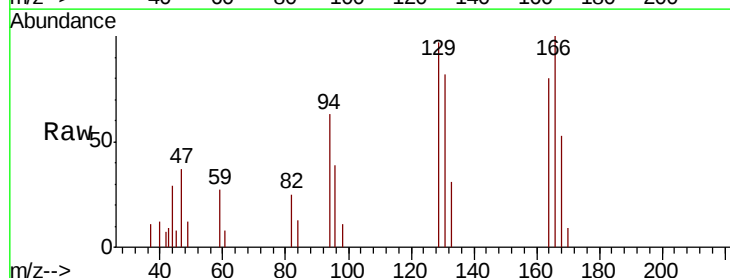
Acq: 19 Sep 2019 21:06

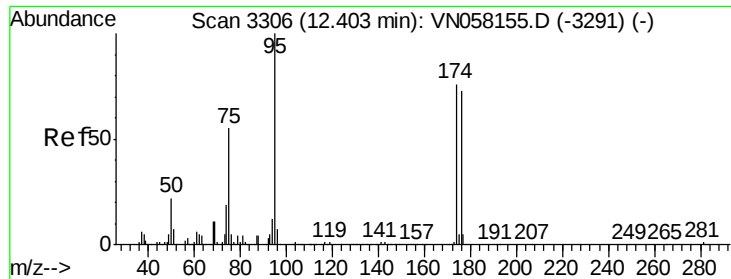
Tgt Ion: 129 Resp: 3927

Ion Ratio Lower Upper

129 100

127 0.0 38.7 116.1#





#62

4-Bromofluorobenzene

Concen: 45.318 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

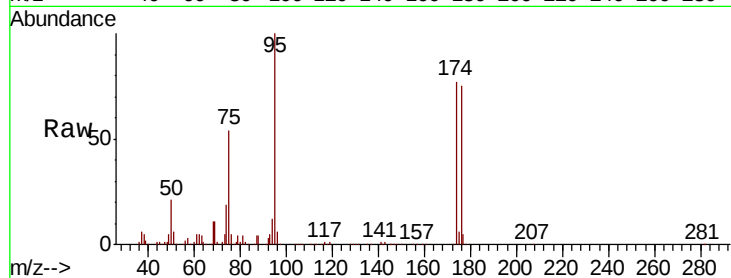
Tot Ion: 95 Resp: 333677

Ion Ratio Lower Upper

95 100

174 76.1 0.0 152.2

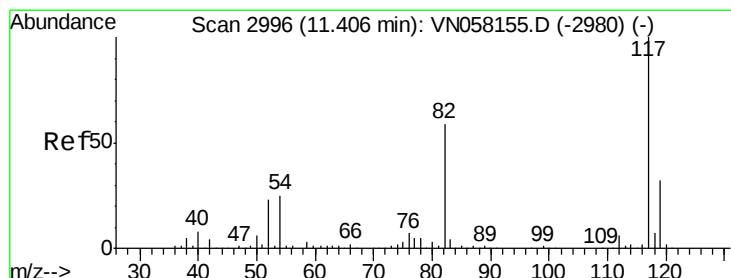
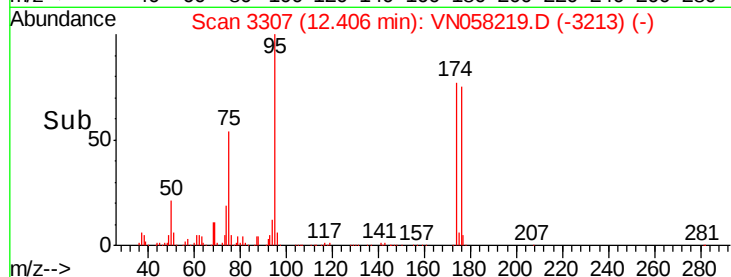
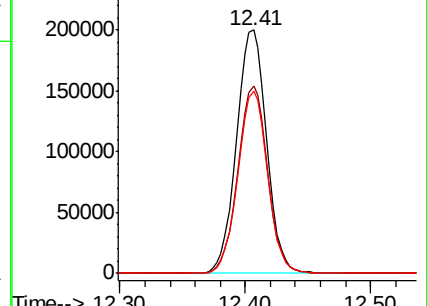
176 73.7 0.0 148.0



Abundance Ion 94.90 (94.60 to 95.60): VN058219.D (-2903) (-)

Ion 173.80 (173.50 to 174.50): VN058219.D (-2903) (-)

Ion 175.80 (175.50 to 176.50): VN058219.D (-2903) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

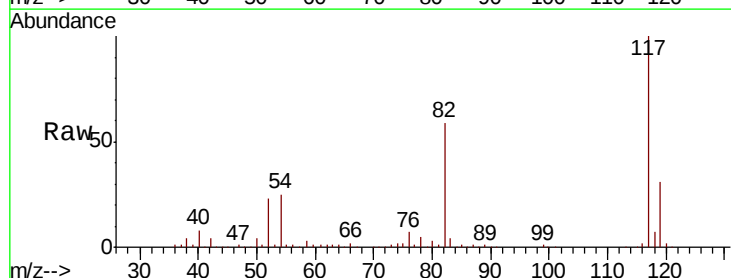
Tgt Ion: 117 Resp: 709911

Ion Ratio Lower Upper

117 100

82 58.7 46.9 70.3

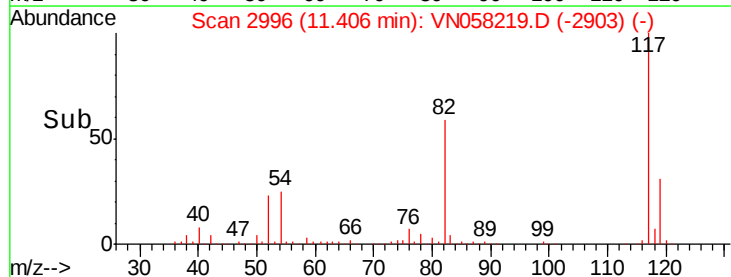
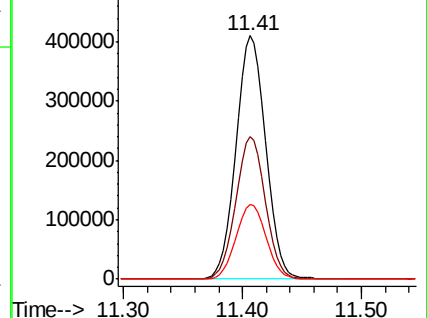
119 30.9 25.3 37.9

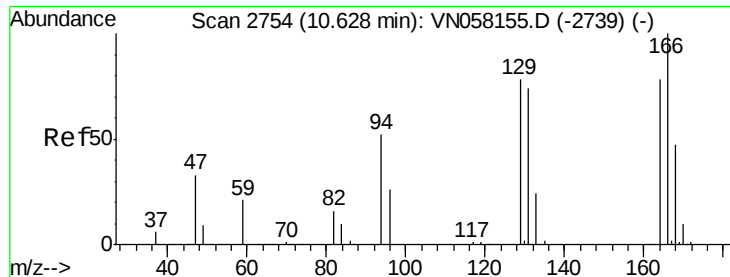


Abundance Ion 116.90 (116.60 to 117.60): VN058219.D (-2903) (-)

Ion 82.00 (81.70 to 82.70): VN058219.D (-2903) (-)

Ion 118.90 (118.60 to 119.60): VN058219.D (-2903) (-)





#64

Tetrachloroethene

Concen: 1.219 ug/l

RT: 10.63 min Scan# 2753

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

Tot Ion:164 Resp: 4217

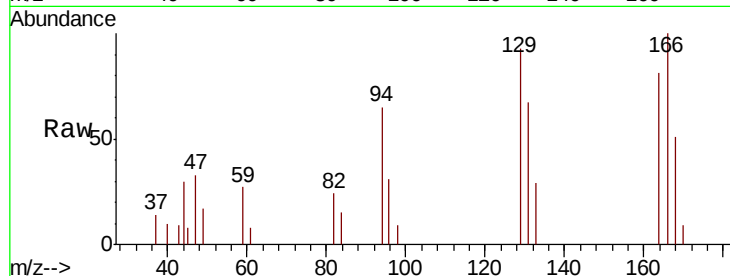
Ion Ratio Lower Upper

164 100

166 123.4 102.2 153.4

129 115.3 79.6 119.4

131 82.8 76.0 114.0

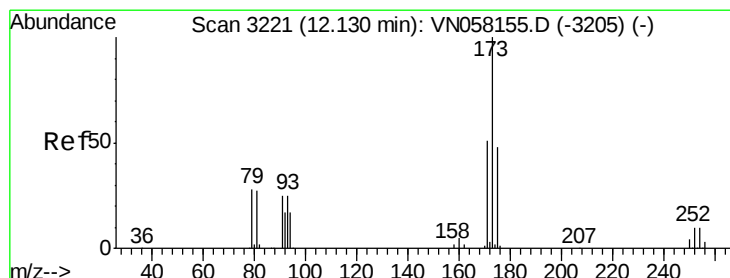
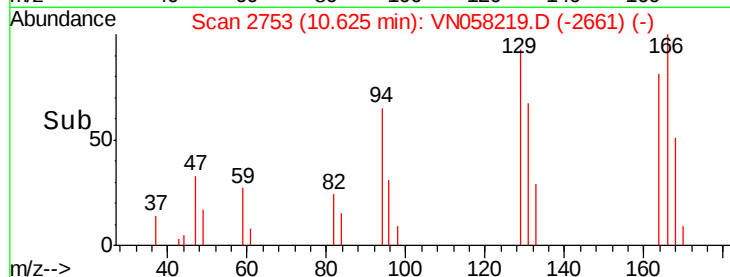
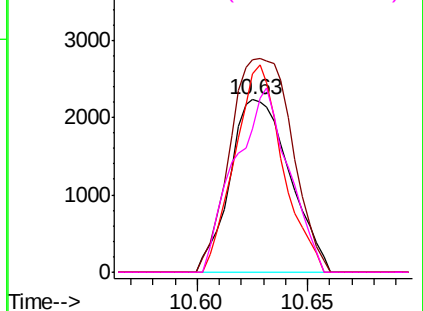


Abundance Ion 163.80 (163.50 to 164.50): V

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: 3.860 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

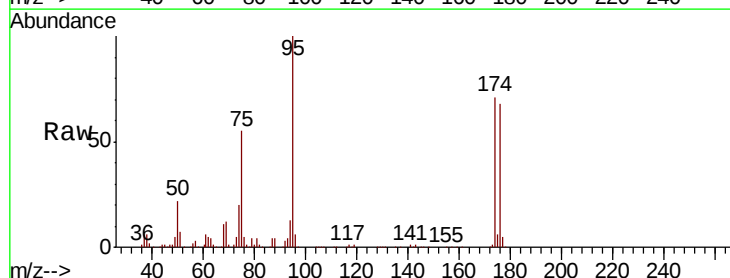
Tgt Ion:173 Resp: 959

Ion Ratio Lower Upper

173 100

175 1695.3 24.2 72.6#

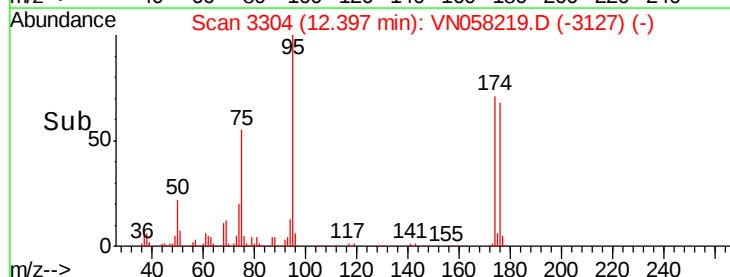
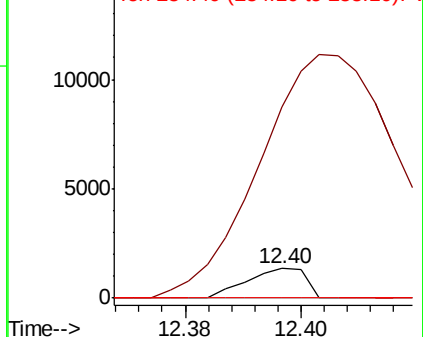
254 0.0 0.1 0.1#

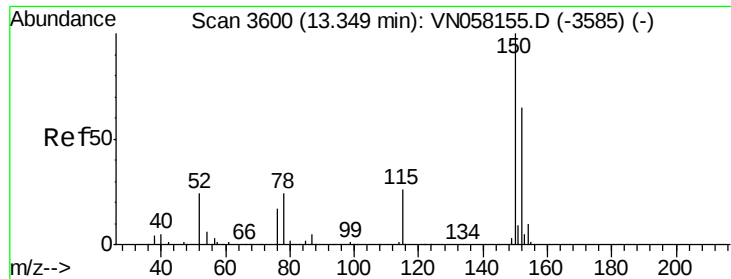


Abundance Ion 172.70 (172.40 to 173.40): V

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# 3600

Delta R.T. -0.00 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

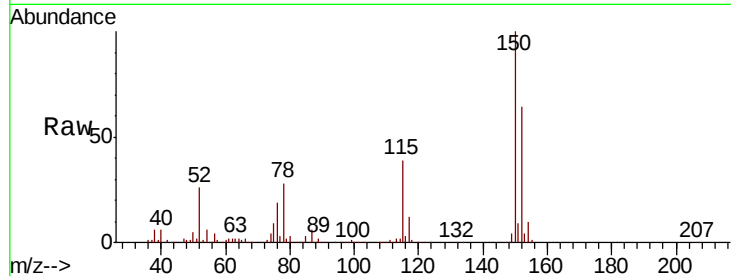
Tot Ion:152 Resp: 286687

Ion Ratio Lower Upper

152 100

115 60.7 30.1 90.3

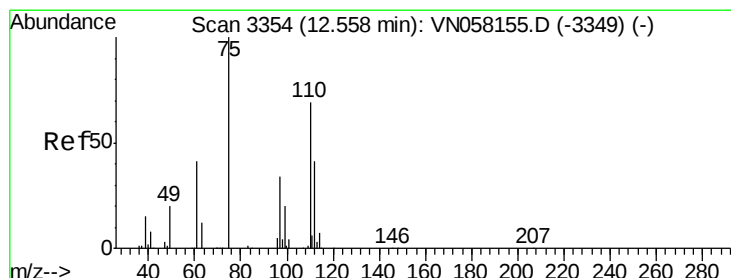
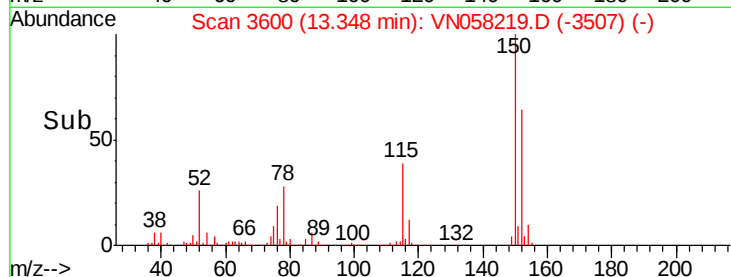
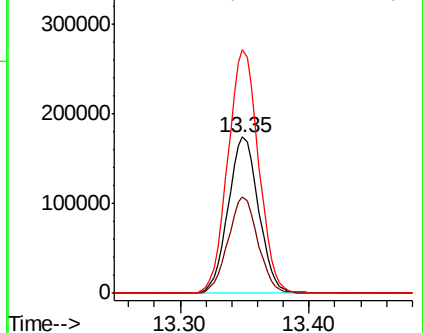
150 157.2 0.0 346.4



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



#76

1,2,3-Trichloropropane

Concen: 35.449 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058219.D

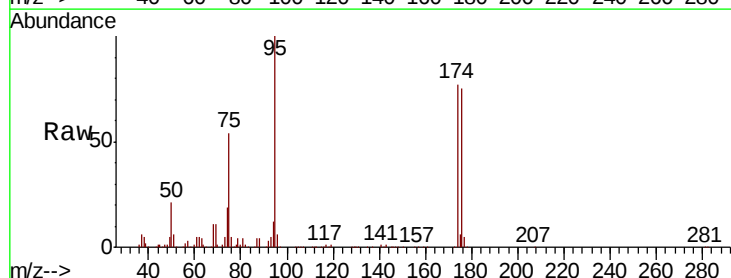
Acq: 19 Sep 2019 21:06

Tgt Ion: 75 Resp: 181883

Ion Ratio Lower Upper

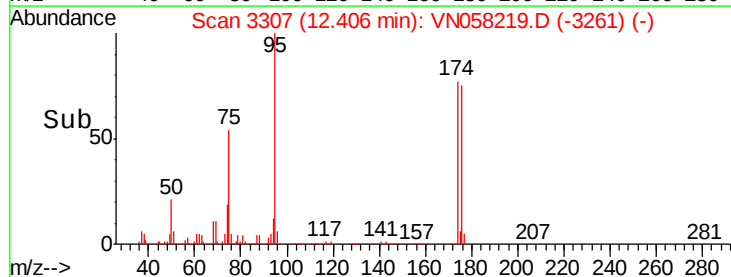
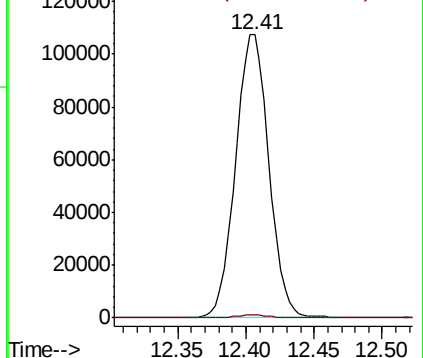
75 100

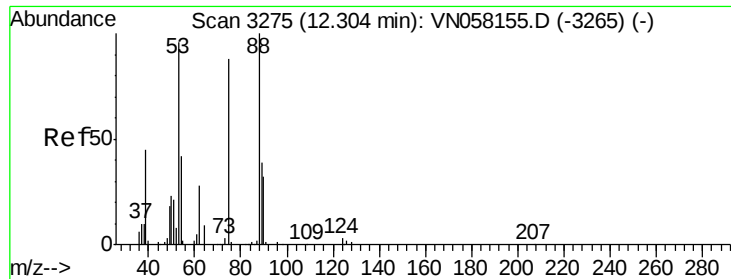
77 0.9 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 99.090 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058219.D

Acq: 19 Sep 2019 21:06

Instrument :

MSVOA\_N

ClientSampleId :

MW201D1-20190912

Tot Ion: 75 Resp: 181883

Ion Ratio Lower Upper

75 100

53 0.0 90.1 135.1#

89 0.0 36.2 54.2#

