

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111319\  
 Data File : VN059206.D  
 Acq On : 13 Nov 2019 9:22  
 Operator : JC/SP  
 Sample : VN1113MBL01  
 Misc : 5.00µ/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1113MBL01

Quant Time: Nov 22 04:00:57 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  | 424072   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.56  | 114  | 662922   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 555085   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 185670   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 264969   | 50.83 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.66% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 206422   | 52.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.30% |      |
| 50) Toluene-d8            | 10.08  | 98  | 784014   | 50.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.58% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 233084   | 41.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 82.92%  |      |

## Target Compounds

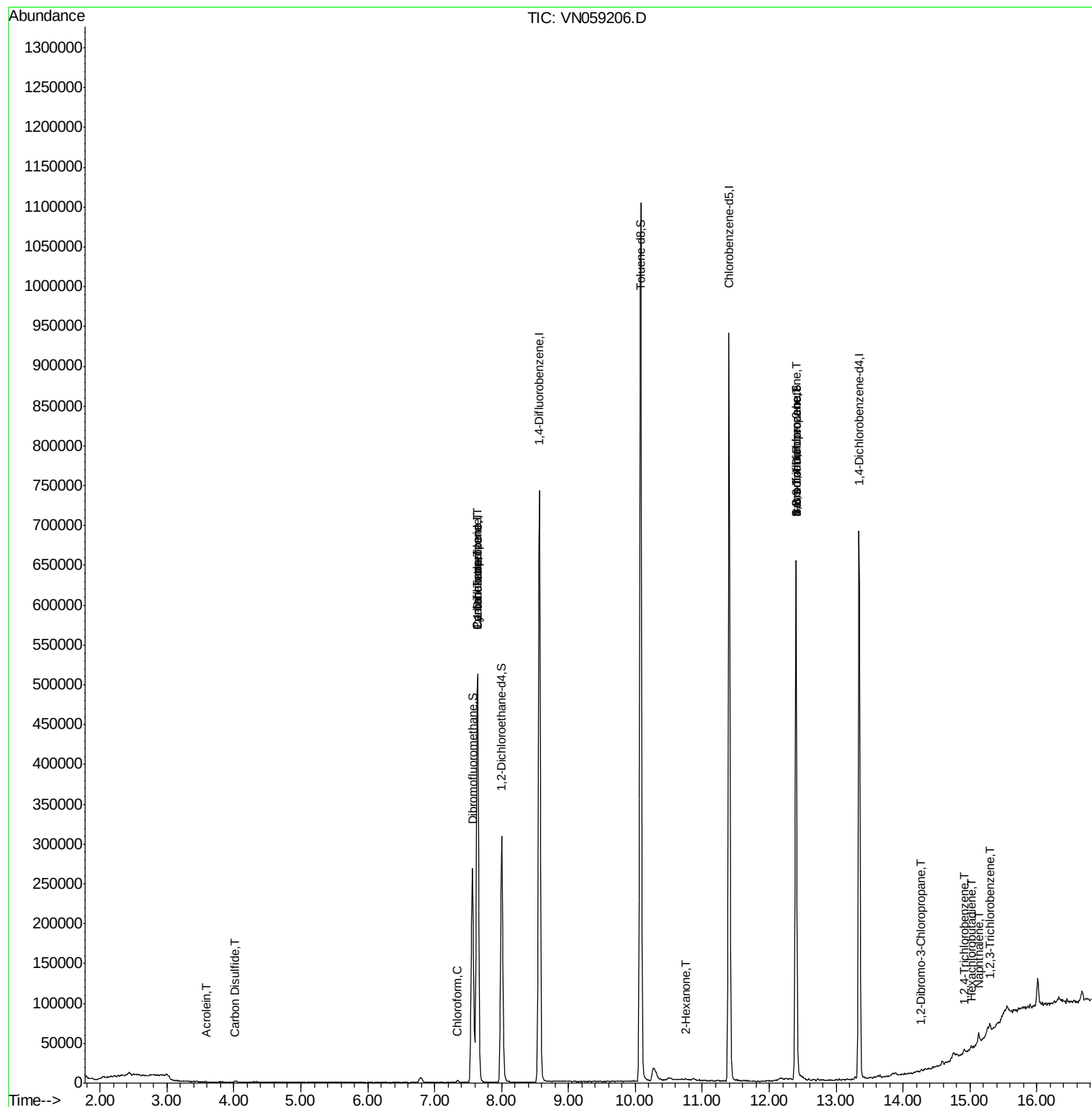
|                                |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 13) Acrolein                   | 3.59  | 56  | 201    | 0.392  | ug/l # | 32     |
| 17) Carbon Disulfide           | 4.02  | 76  | 2724   | 0.222  | ug/l # | 74     |
| 30) Chloroform                 | 7.34  | 83  | 3185   | 0.387  | ug/l   | 97     |
| 31) Cyclohexane                | 7.64  | 56  | 8579   | 1.057  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75  | 32291  | 5.211  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.64  | 117 | 39849  | 6.461  | ug/l # | 17     |
| 59) 2-Hexanone                 | 10.75 | 43  | 1207   | 0.253  | ug/l   | 69     |
| 71) Bromoform                  | 12.40 | 173 | 1310   | 0.415  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75  | 114806 | 27.160 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75  | 114806 | 71.736 | ug/l # | 13     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.28 | 75  | 493    | 0.563  | ug/l # | 22     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180 | 1954   | 3.575  | ug/l   | 95     |
| 94) Hexachlorobutadiene        | 15.01 | 225 | 518    | 0.263  | ug/l   | 74     |
| 95) Naphthalene                | 15.13 | 128 | 9300   | 3.953  | ug/l   | 97     |
| 96) 1,2,3-Trichlorobenzene     | 15.30 | 180 | 3476   | 1.085  | ug/l   | 93     |

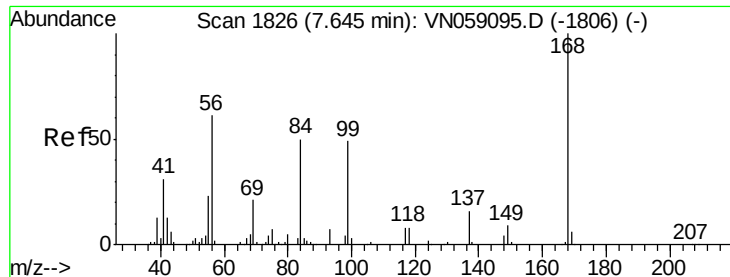
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN111319\  
Data File : VN059206.D  
Acq On : 13 Nov 2019 9:22  
Operator : JC/SP  
Sample : VN1113MBL01  
Misc : 5.00µL/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1113MBL01

Quant Time: Nov 22 04:00:57 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N110619W.M  
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# 1825

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampleId :

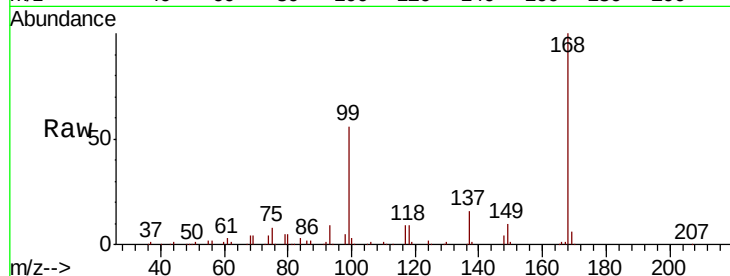
VN1113MBL01

Tot Ion:168 Resp: 424072

Ion Ratio Lower Upper

168 100

99 55.8 45.7 68.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.64

200000

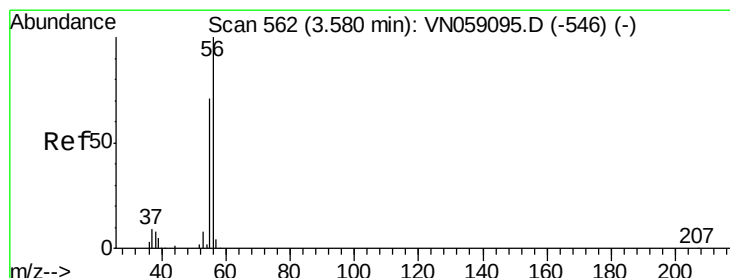
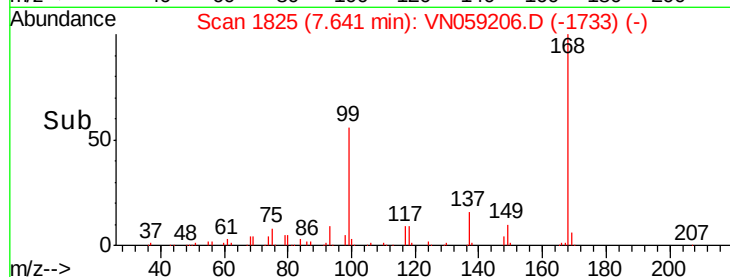
150000

100000

50000

0

Time-->



#13

Acrolein

Concen: 0.392 ug/l

RT: 3.59 min Scan# 564

Delta R.T. 0.01 min

Lab File: VN059206.D

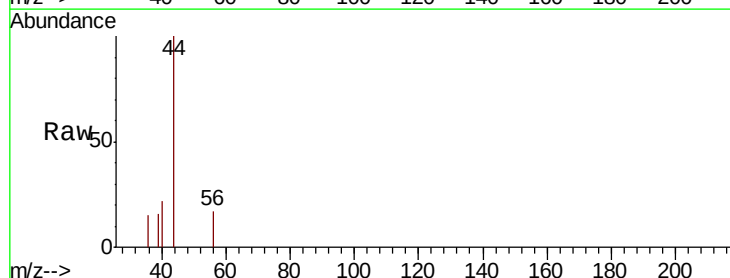
Acq: 13 Nov 2019 9:22

Tgt Ion: 56 Resp: 201

Ion Ratio Lower Upper

56 100

55 14.4 56.4 84.6#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

3.59

200

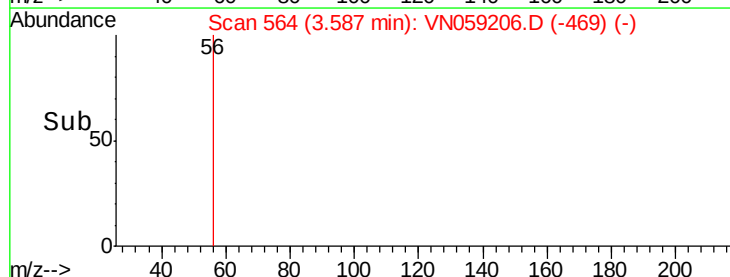
150

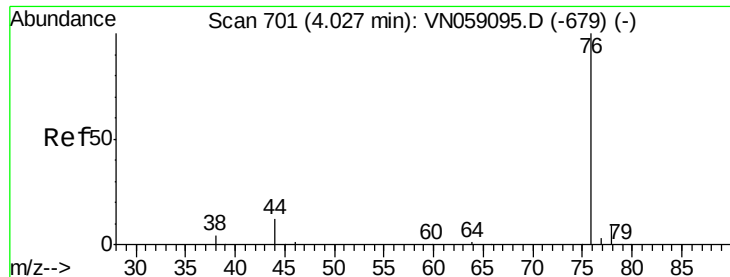
100

50

0

Time-->

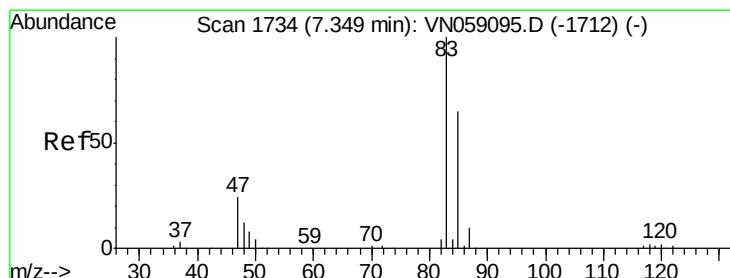
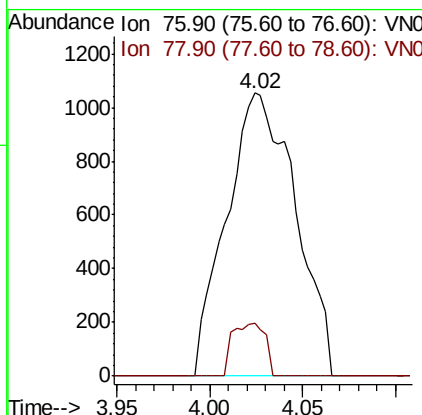
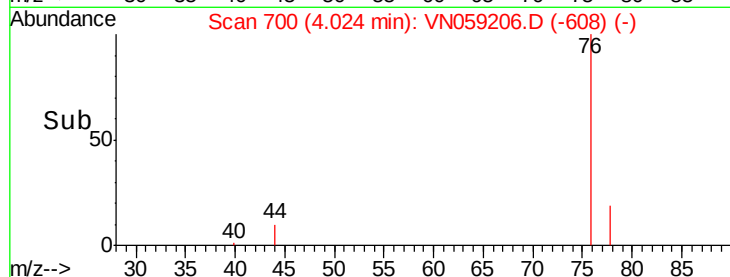
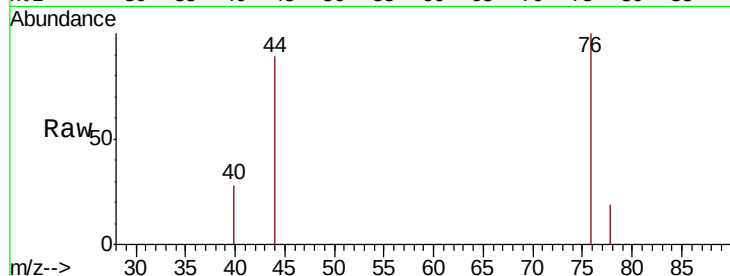




#17  
Carbon Disulfide  
Concen: 0.222 ug/l  
RT: 4.02 min Scan# 700  
Delta R.T. -0.00 min  
Lab File: VN059206.D  
Acq: 13 Nov 2019 9:22

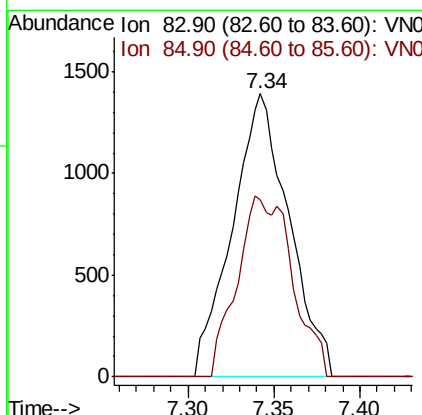
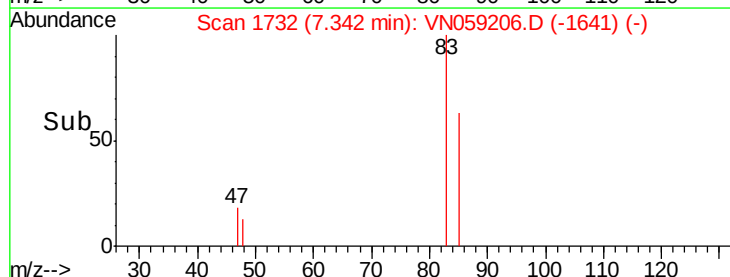
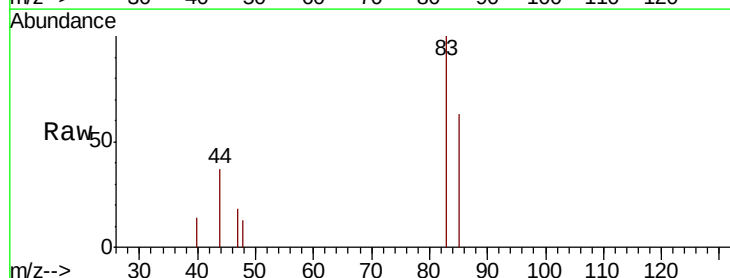
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1113MBL01

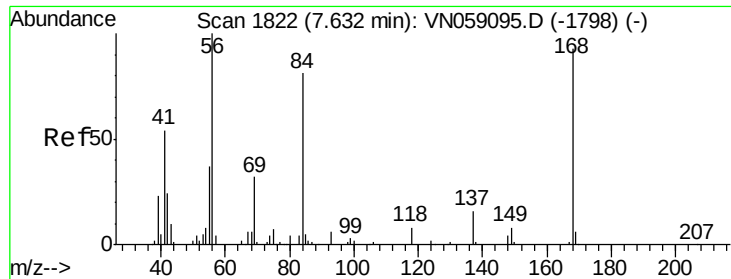
Tot Ion: 76 Resp: 2724  
Ion Ratio Lower Upper  
76 100  
78 18.5 7.4 11.0#



#30  
Chloroform  
Concen: 0.387 ug/l  
RT: 7.34 min Scan# 1732  
Delta R.T. -0.01 min  
Lab File: VN059206.D  
Acq: 13 Nov 2019 9:22

Tgt Ion: 83 Resp: 3185  
Ion Ratio Lower Upper  
83 100  
85 62.6 51.8 77.8

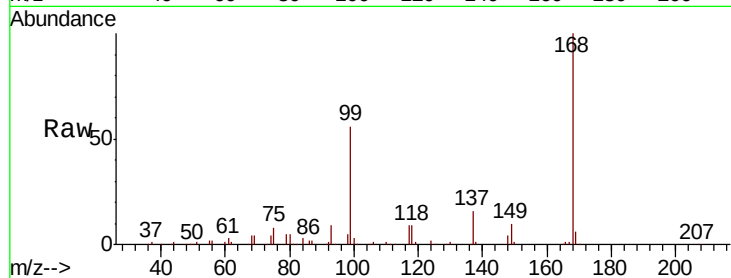




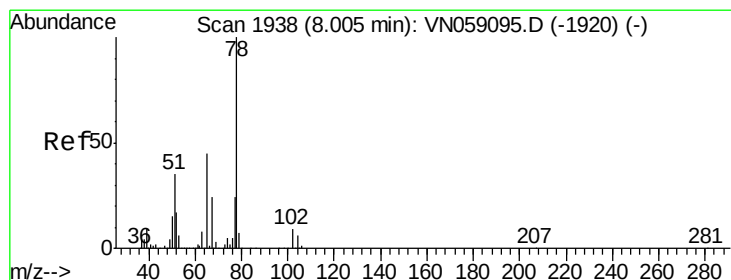
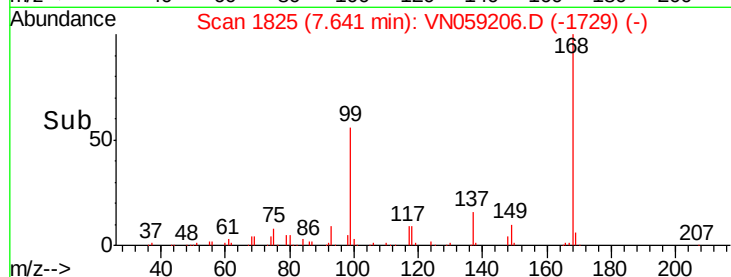
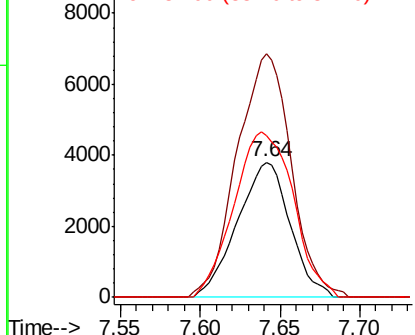
#31  
Cyclohexane  
Concen: 1.057 ug/l  
RT: 7.64 min Scan# 1825  
Delta R.T. 0.01 min  
Lab File: VN059206.D  
Acq: 13 Nov 2019 9:22

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN1113MBL01

| Tot Ion   | 56    | Resp  | 8579  |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 56        | 100   |       |       |
| 69        | 180.6 | 25.8  | 38.8# |
| 84        | 120.4 | 65.0  | 97.4# |

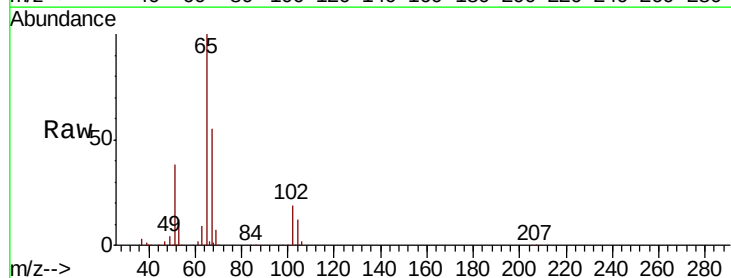


Abundance Ion 56.00 (55.70 to 56.70): VNC  
Ion 69.00 (68.70 to 69.70): VNC  
Ion 84.00 (83.70 to 84.70): VNC

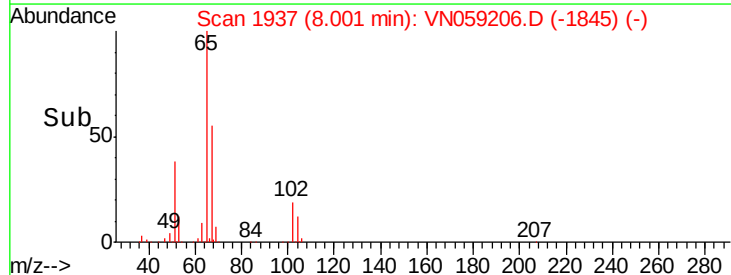
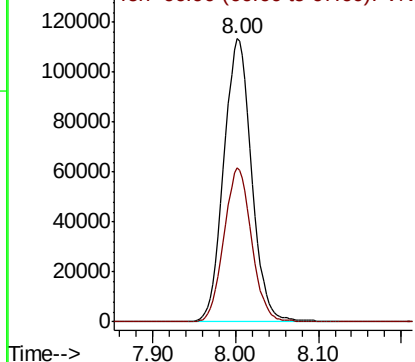


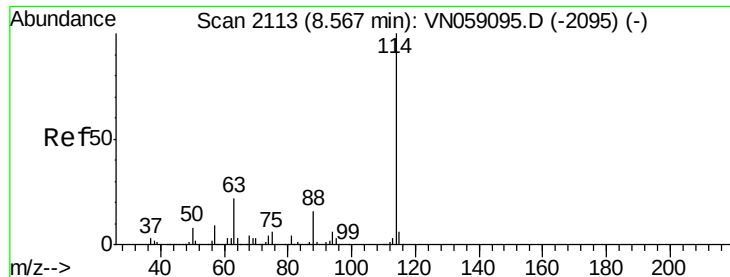
#33  
1,2-Dichloroethane-d4  
Concen: 50.829 ug/l  
RT: 8.00 min Scan# 1937  
Delta R.T. -0.00 min  
Lab File: VN059206.D  
Acq: 13 Nov 2019 9:22

| Tgt Ion   | 65    | Resp  | 264969 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 65        | 100   |       |        |
| 67        | 54.0  | 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: 8.56 min Scan# 2112

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampleId :

VN1113MBL01

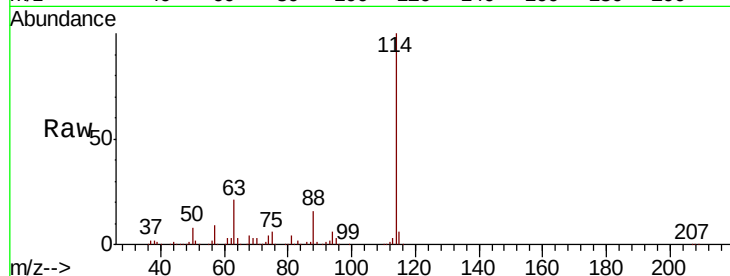
Tot Ion:114 Resp: 662922

Ion Ratio Lower Upper

114 100

63 21.3 0.0 43.4

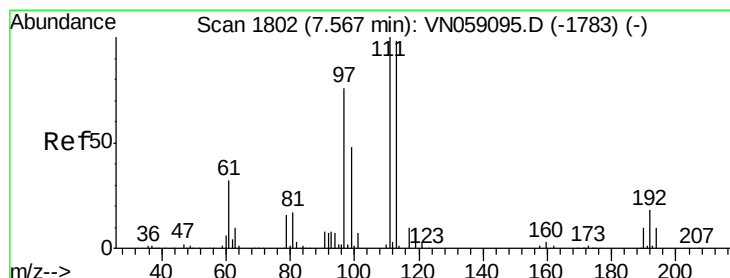
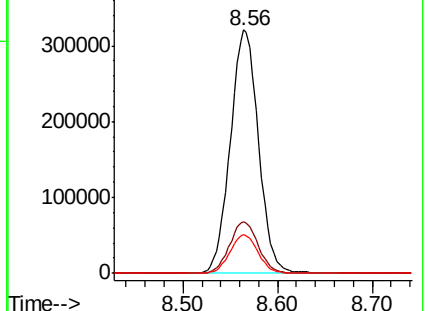
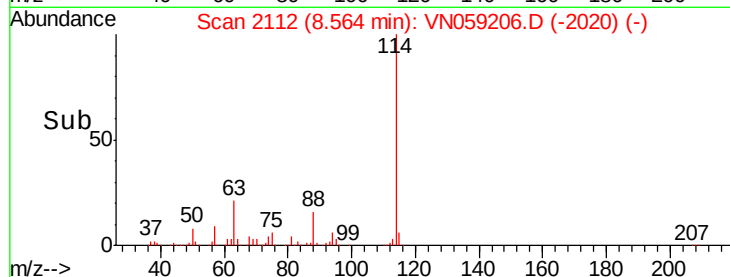
88 16.0 0.0 32.2



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: 52.149 ug/l

RT: 7.56 min Scan# 1801

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

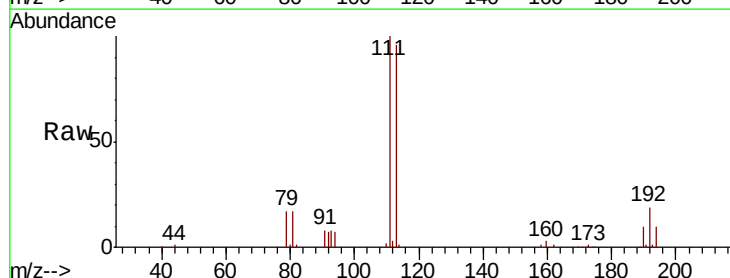
Tgt Ion:113 Resp: 206422

Ion Ratio Lower Upper

113 100

111 103.0 82.8 124.2

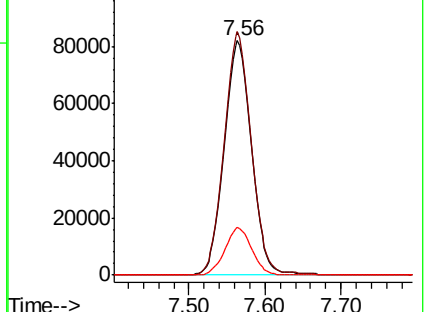
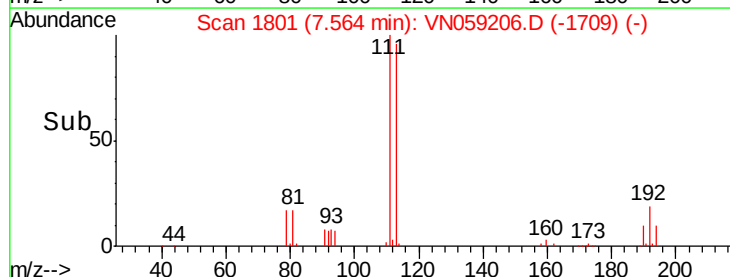
192 19.8 16.1 24.1

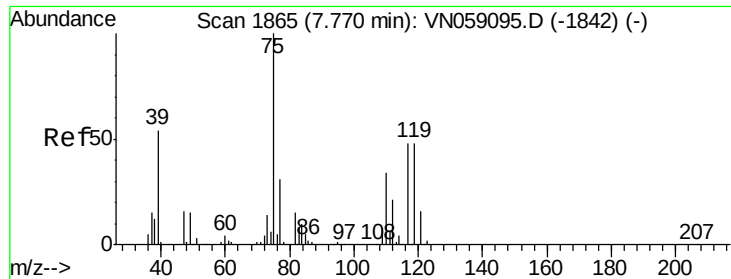


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.211 ug/l

RT: 7.64 min Scan# 1824

Delta R.T. -0.13 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampled :

VN1113MBL01

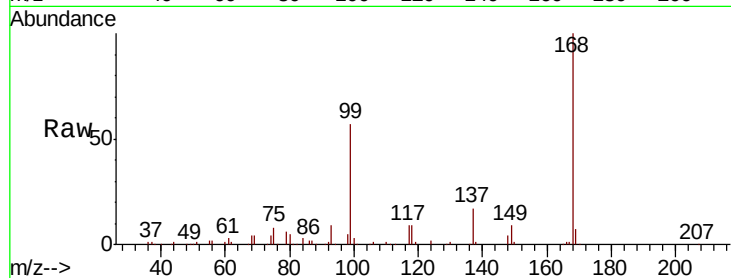
Tot Ion: 75 Resp: 32291

Ion Ratio Lower Upper

75 100

110 9.0 17.1 51.2#

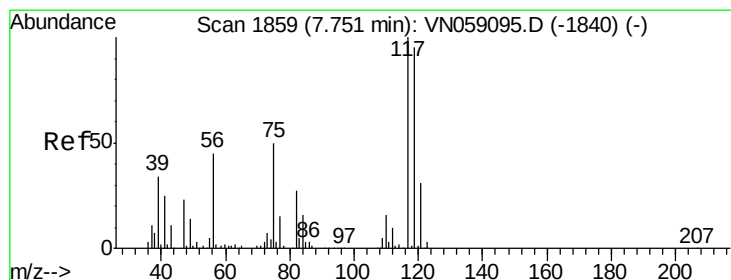
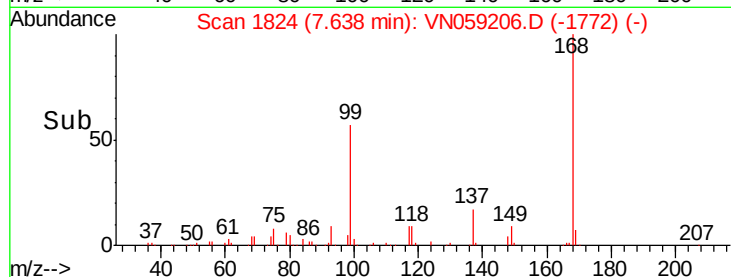
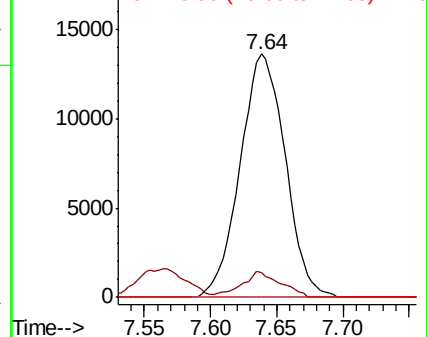
77 0.0 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VN059206.D (-1772) (-)

Ion 109.90 (109.60 to 110.60): VN059206.D (-1772) (-)

Ion 76.90 (76.60 to 77.60): VN059206.D (-1772) (-)



#38

Carbon Tetrachloride

Concen: 6.461 ug/l

RT: 7.64 min Scan# 1824

Delta R.T. -0.11 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

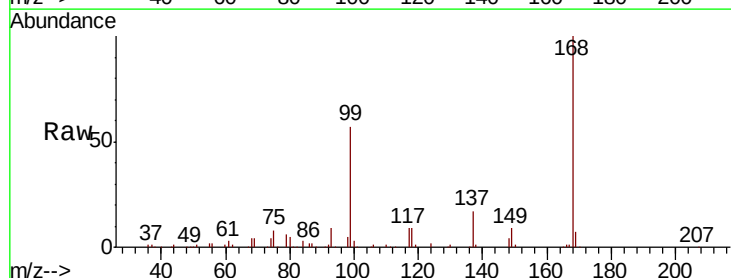
Tgt Ion: 117 Resp: 39849

Ion Ratio Lower Upper

117 100

119 5.5 75.6 113.4#

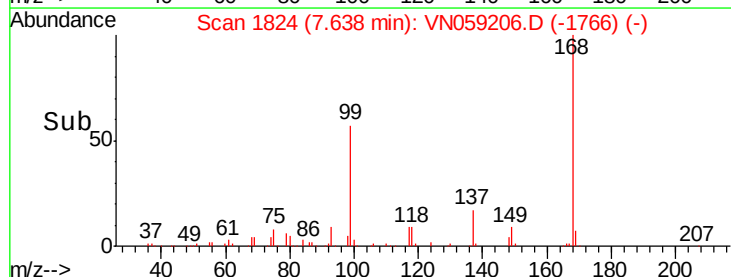
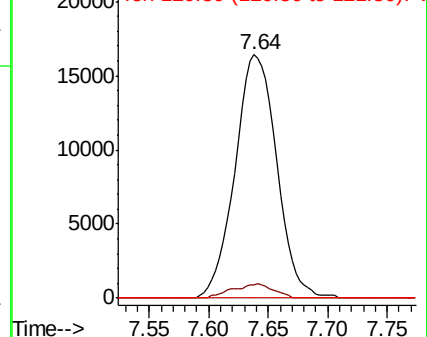
121 0.0 24.6 36.8#

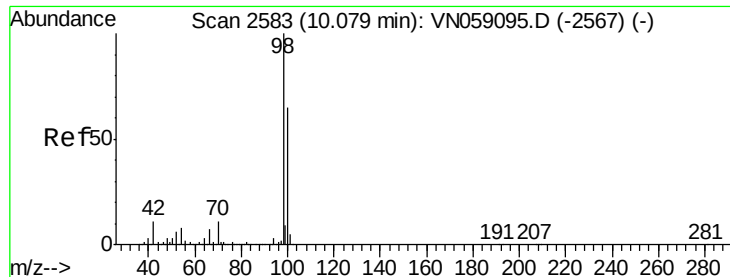


Abundance Ion 116.80 (116.50 to 117.50): VN059206.D (-1766) (-)

Ion 118.80 (118.50 to 119.50): VN059206.D (-1766) (-)

Ion 120.80 (120.50 to 121.50): VN059206.D (-1766) (-)





#50

Toluene-d8

Concen: 50.285 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampled :

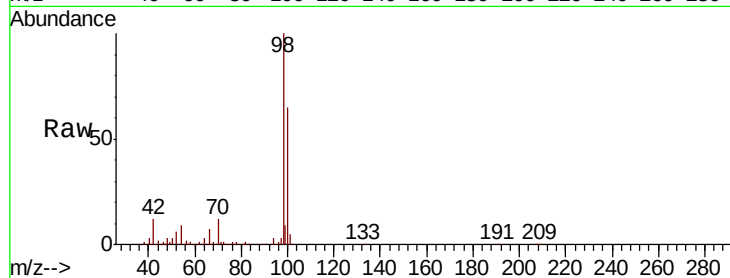
VN1113MBL01

Tot Ion: 98 Resp: 784014

Ion Ratio Lower Upper

98 100

100 64.2 52.2 78.2



Abundance Ion 98.00 (97.70 to 98.70): VN059095.D (-2567) (-)

Ion 100.00 (99.70 to 100.70): VN059095.D (-2567) (-)

10.08

400000

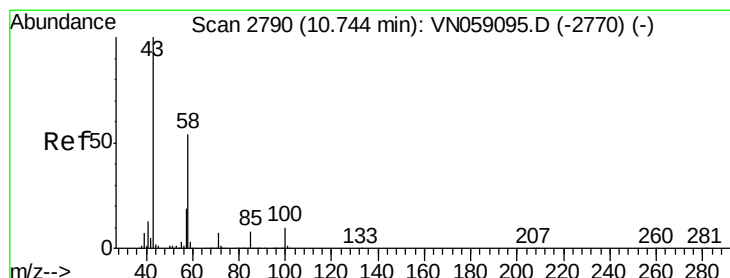
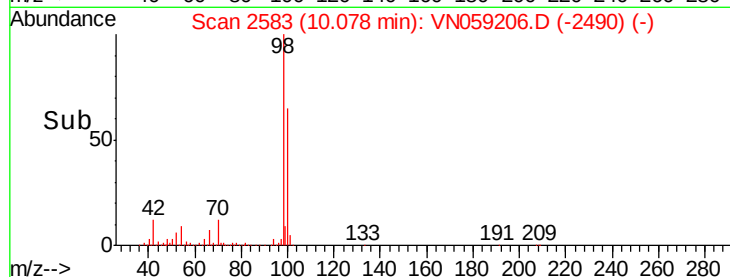
300000

200000

100000

0

Time-->



#59

2-Hexanone

Concen: 0.253 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.01 min

Lab File: VN059206.D

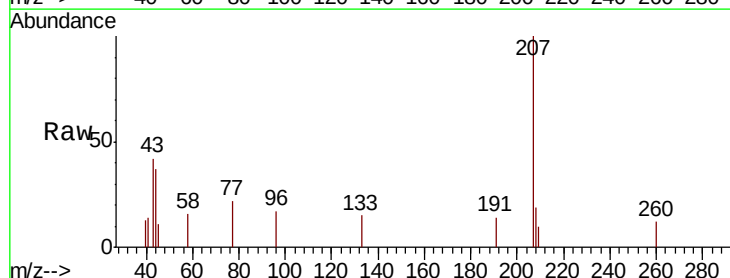
Acq: 13 Nov 2019 9:22

Tgt Ion: 43 Resp: 1207

Ion Ratio Lower Upper

43 100

58 32.1 27.3 81.8



Abundance Ion 43.00 (42.70 to 43.70): VN059095.D (-2770) (-)

Ion 58.00 (57.70 to 58.70): VN059095.D (-2770) (-)

10.75

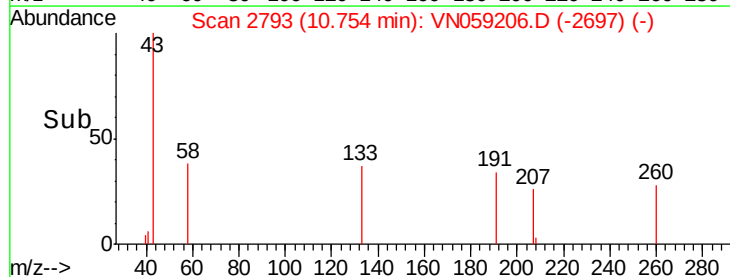
600

400

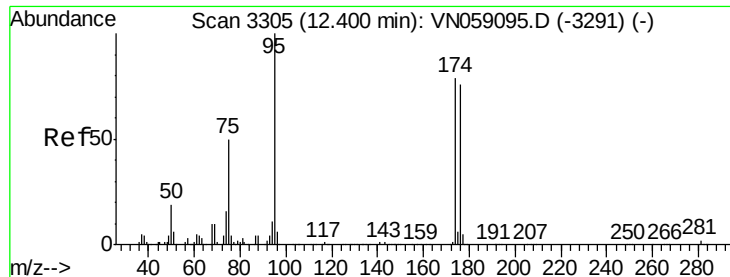
200

0

Time-->







#62

4-Bromofluorobenzene

Concen: 41.462 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampleId :

VN1113MBL01

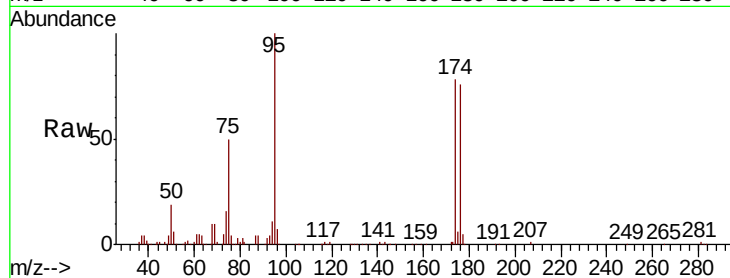
Tot Ion: 95 Resp: 233084

Ion Ratio Lower Upper

95 100

174 77.6 0.0 158.2

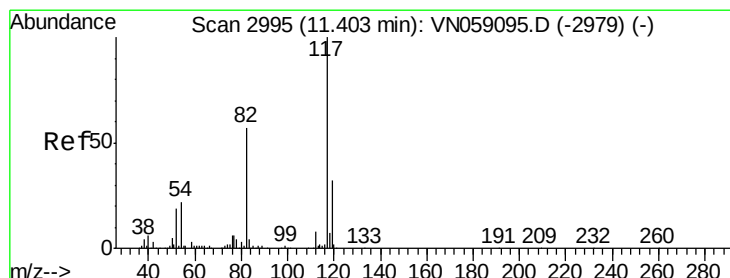
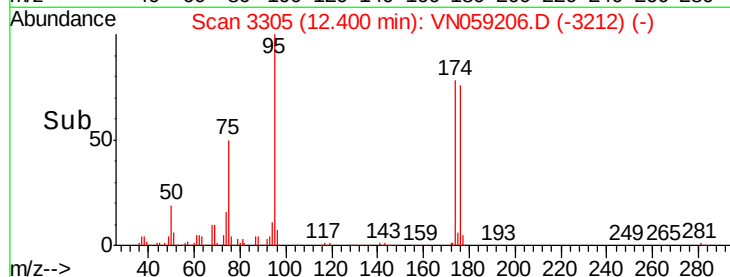
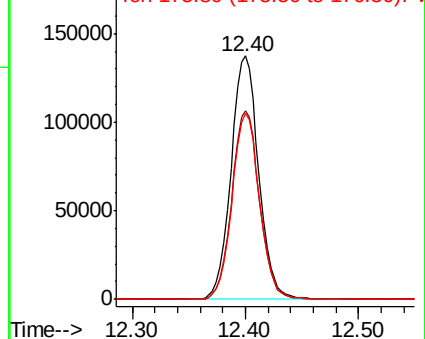
176 75.8 0.0 151.8



Abundance Ion 94.90 (94.60 to 95.60): VN059206.D (-3212) (-)

Ion 173.80 (173.50 to 174.50): VN059206.D (-3212) (-)

Ion 175.80 (175.50 to 176.50): VN059206.D (-3212) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.40 min Scan# 2994

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

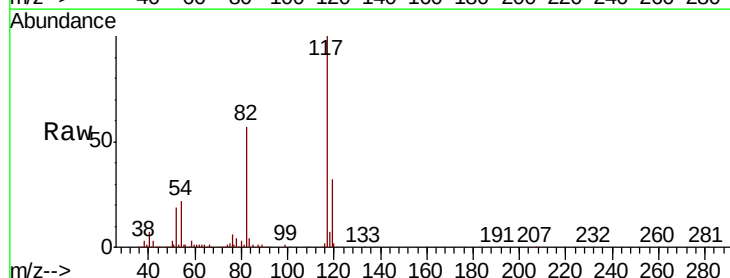
Tgt Ion: 117 Resp: 555085

Ion Ratio Lower Upper

117 100

82 57.2 45.8 68.8

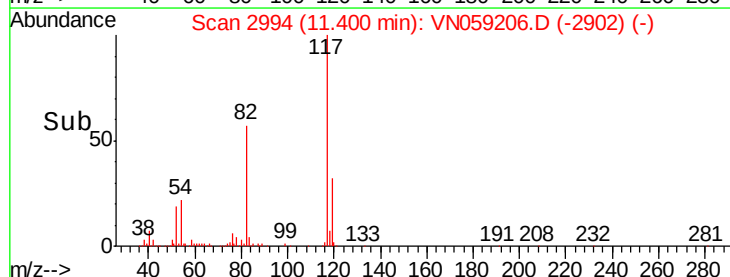
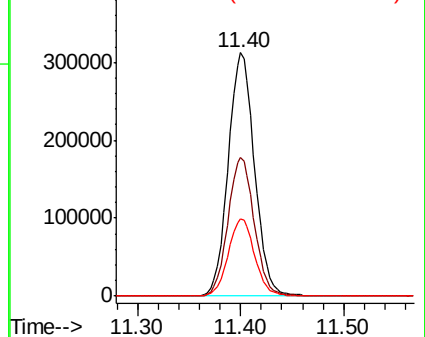
119 31.8 25.8 38.6

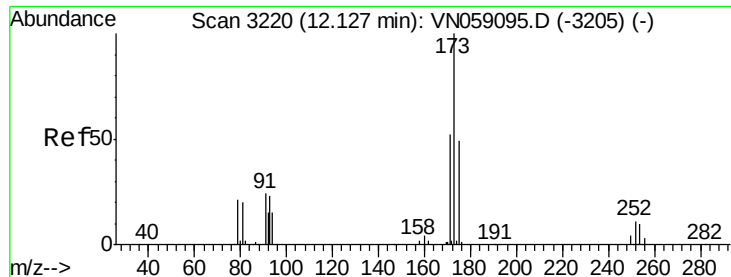


Abundance Ion 116.90 (116.60 to 117.60): VN059206.D (-2902) (-)

Ion 82.00 (81.70 to 82.70): VN059206.D (-2902) (-)

Ion 118.90 (118.60 to 119.60): VN059206.D (-2902) (-)





#71

Bromoform

Concen: 0.415 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampleId :

VN1113MBL01

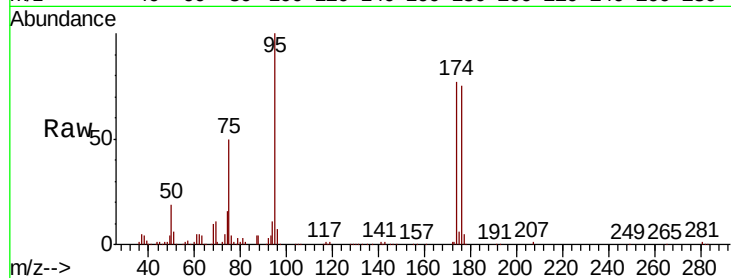
Tot Ion:173 Resp: 1310

Ion Ratio Lower Upper

173 100

175 926.9 24.2 72.6#

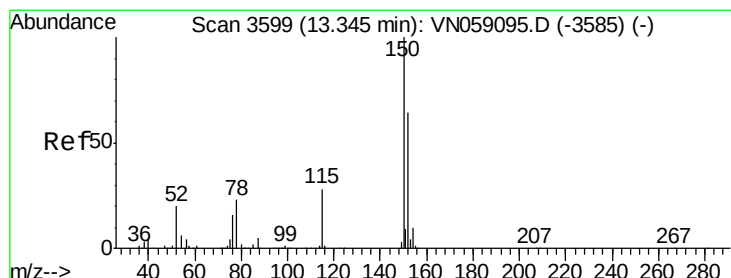
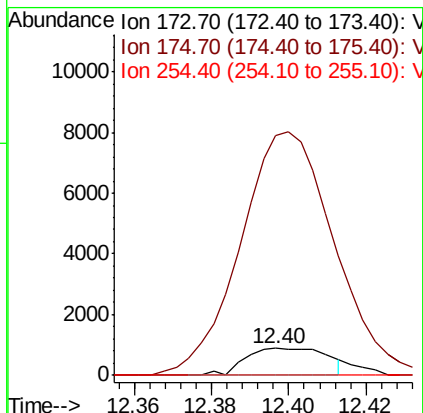
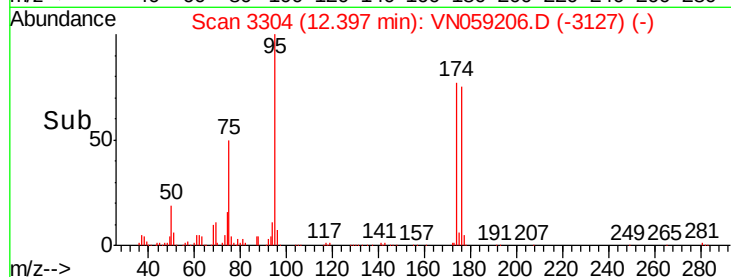
254 0.0 0.1 0.1#



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: VN059206.D

Acq: 13 Nov 2019 9:22

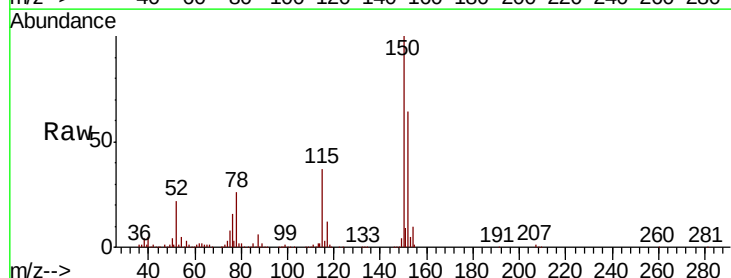
Tgt Ion:152 Resp: 185670

Ion Ratio Lower Upper

152 100

115 59.6 29.4 88.2

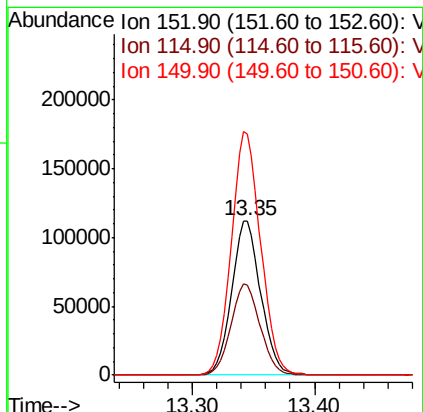
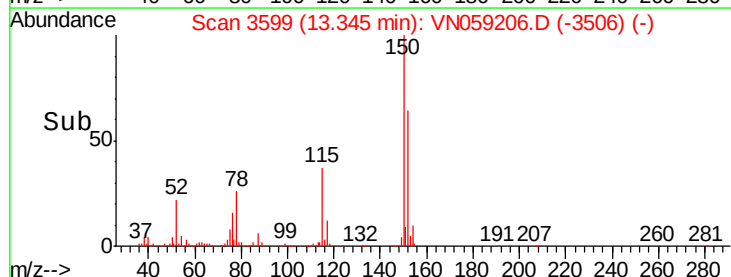
150 159.3 0.0 345.8

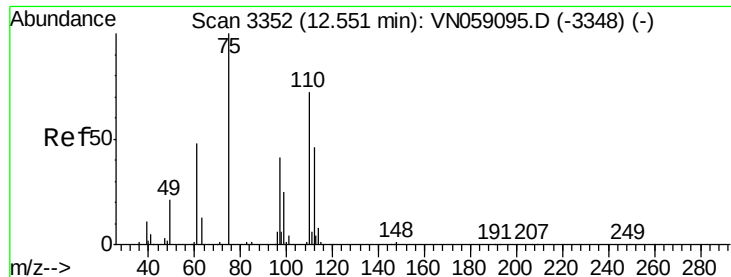


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 27.160 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampleId :

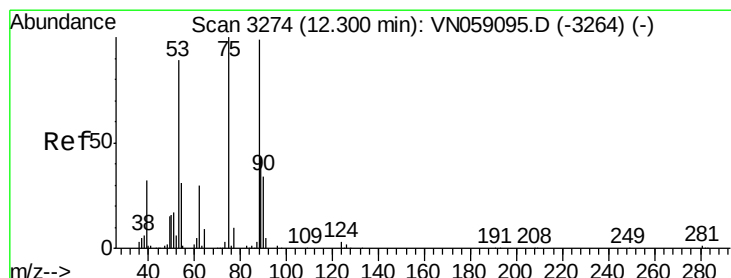
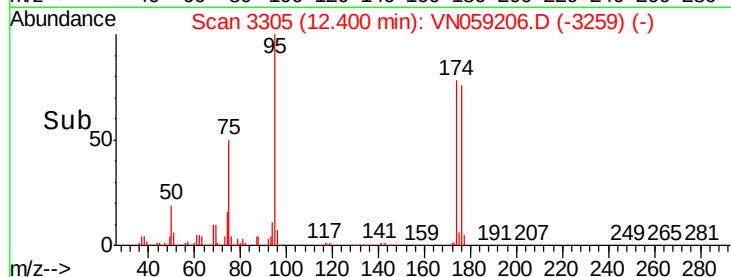
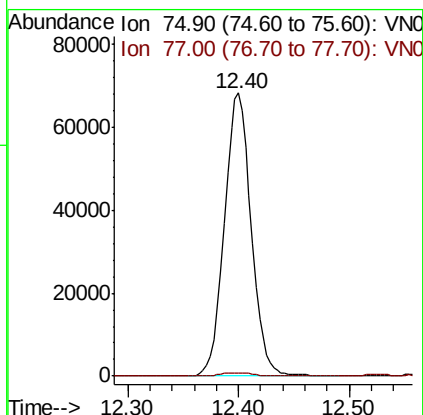
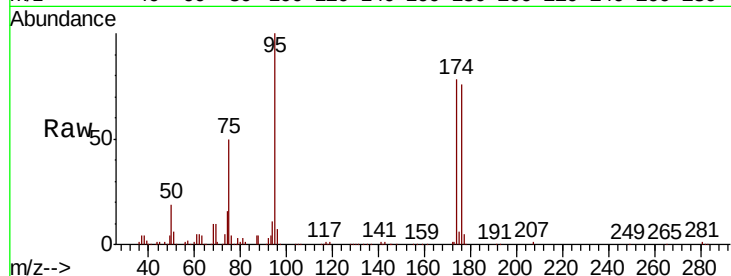
VN1113MBL01

Tot Ion: 75 Resp: 114806

Ion Ratio Lower Upper

75 100

77 1.5 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 71.736 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

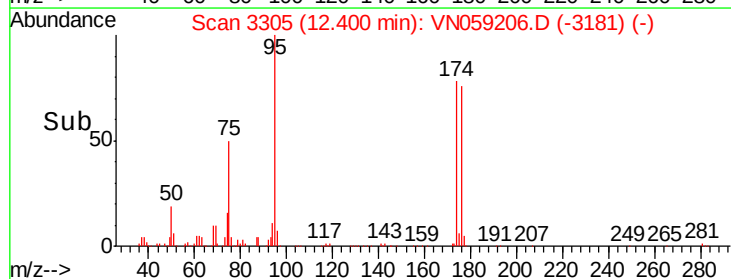
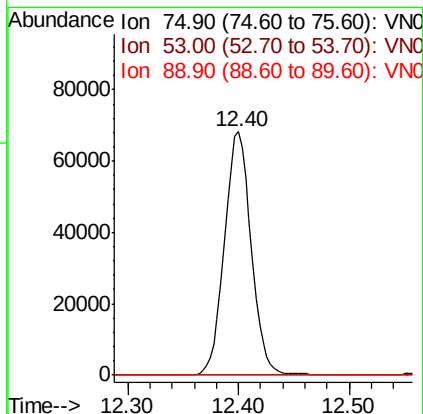
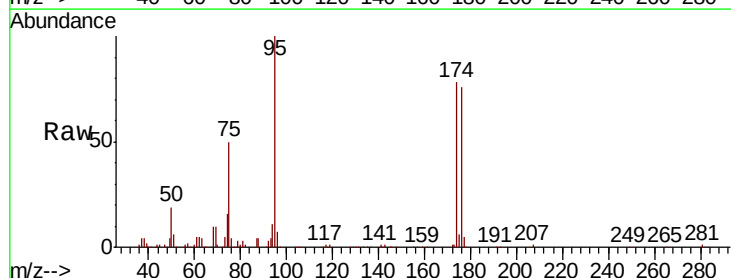
Tgt Ion: 75 Resp: 114806

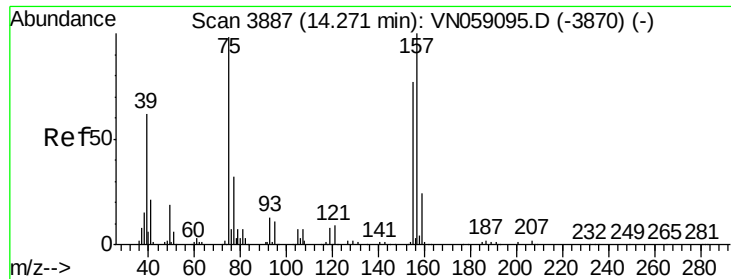
Ion Ratio Lower Upper

75 100

53 0.0 72.2 108.2#

89 0.0 35.8 53.8#





#92

1,2-Dibromo-3-Chloropropane

Concen: 0.563 ug/l

RT: 14.28 min Scan# 3889

Delta R.T. 0.01 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampled :

VN1113MBL01

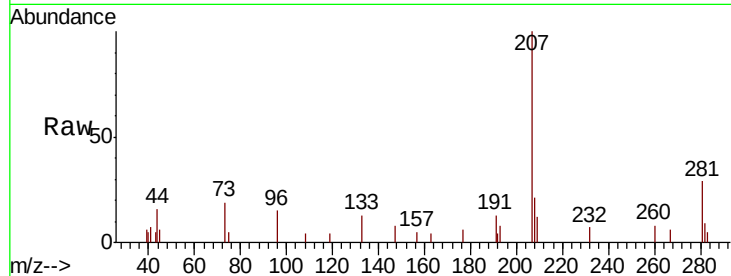
Tot Ion: 75 Resp: 493

Ion Ratio Lower Upper

75 100

155 0.0 40.2 120.6#

157 34.5 51.8 155.5#



Abundance Ion 74.90 (74.60 to 75.60): VN059095.D (-3870) (-)

Ion 154.80 (154.50 to 155.50): VN059095.D (-3870) (-)

Ion 156.80 (156.50 to 157.50): VN059095.D (-3870) (-)

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

14.28

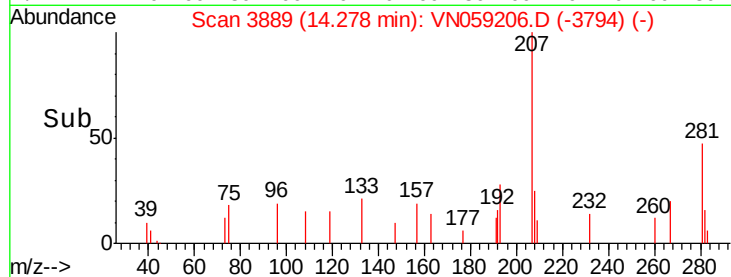
14.28

14.28

14.28

14.28

14.28



#93

1,2,4-Trichlorobenzene

Concen: 3.575 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

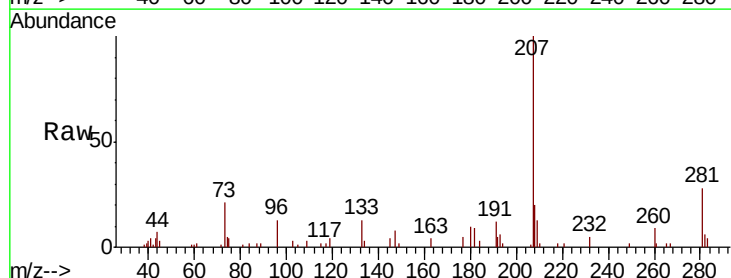
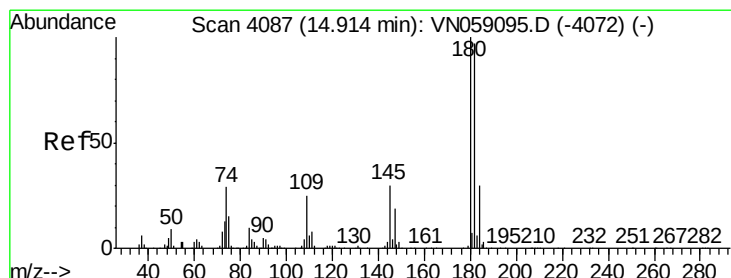
Tgt Ion: 180 Resp: 1954

Ion Ratio Lower Upper

180 100

182 96.2 48.1 144.3

145 41.8 15.1 45.3



Abundance Ion 179.80 (179.50 to 180.50): VN059095.D (-4072) (-)

Ion 181.80 (181.50 to 182.50): VN059095.D (-4072) (-)

Ion 144.80 (144.50 to 145.50): VN059095.D (-4072) (-)

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

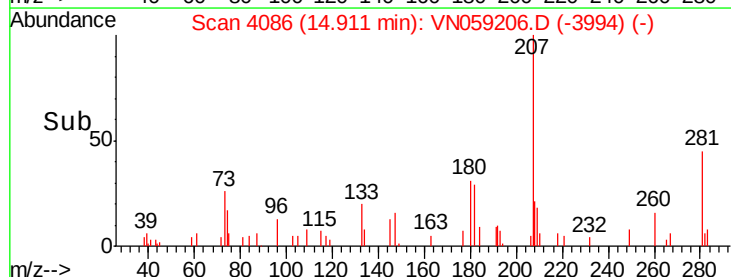
14.91

14.91

14.91

14.91

14.91



Time--> 14.85

14.90

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

14.91

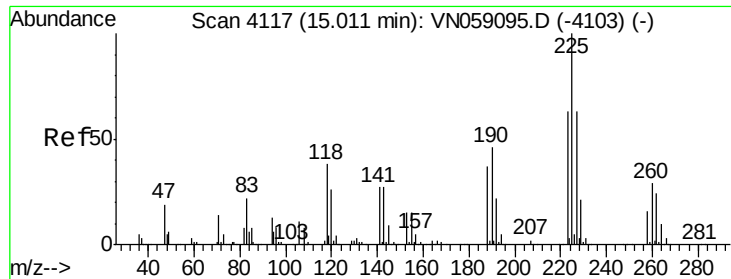
14.91

14.91

14.91

14.91

14.91



#94

Hexachlorobutadiene

Concen: 0.263 ug/l

RT: 15.01 min Scan# 4118

Delta R.T. 0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

Instrument :

MSVOA\_N

ClientSampled :

VN1113MBL01

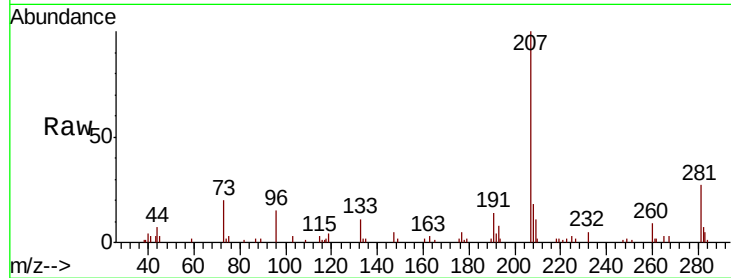
Tot Ion:225 Resp: 518

Ion Ratio Lower Upper

225 100

223 43.4 31.3 93.9

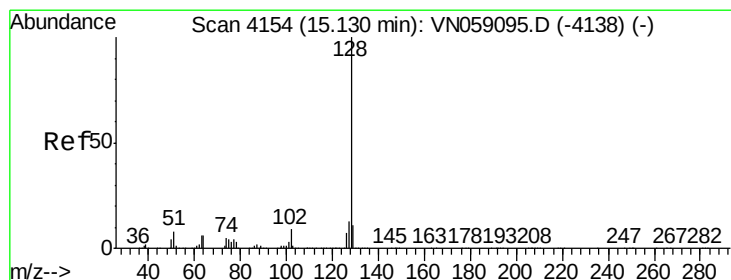
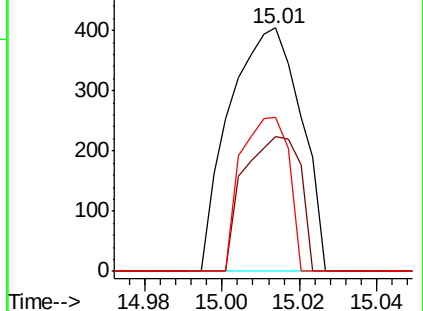
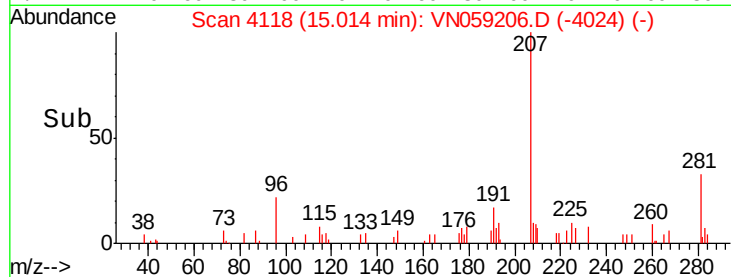
227 42.1 31.5 94.5



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 3.953 ug/l

RT: 15.13 min Scan# 4153

Delta R.T. -0.00 min

Lab File: VN059206.D

Acq: 13 Nov 2019 9:22

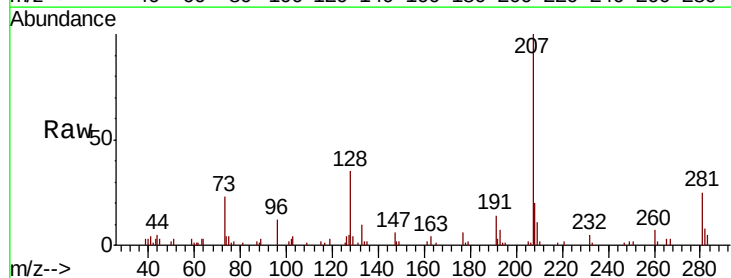
Tgt Ion:128 Resp: 9300

Ion Ratio Lower Upper

128 100

127 13.7 10.2 15.2

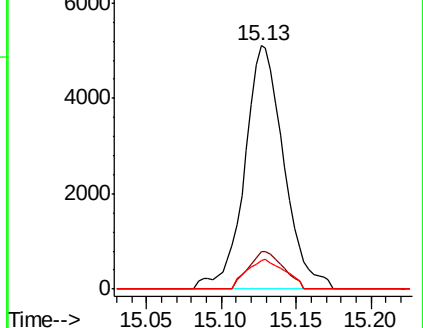
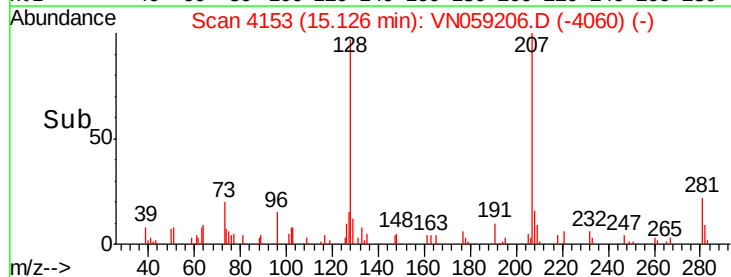
129 11.9 8.6 12.8

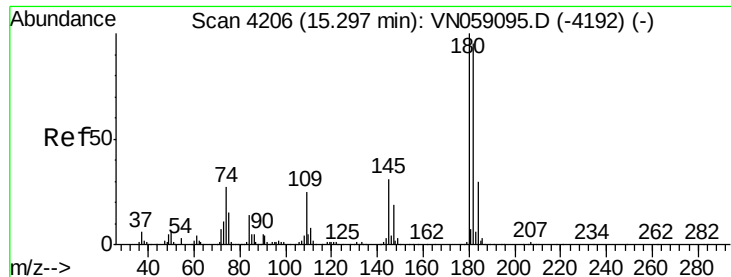


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96  
 1,2,3-Trichlorobenzene  
 Concen: 1.085 ug/l  
 RT: 15.30 min Scan# 4206  
 Delta R.T. -0.00 min  
 Lab File: VN059206.D  
 Acq: 13 Nov 2019 9:22

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN1113MBL01

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 86.0  | 47.3  | 141.8 |
| 145     | 32.7  | 15.8  | 47.3  |

