

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092618\  
 Data File : VN051494.D  
 Acq On : 25 Sep 2018 19:58  
 Operator : MD\SY  
 Sample : PB113206TB  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB113206TB

Quant Time: Sep 26 04:09:45 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N092318W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Sep 24 06:41:32 2018  
 Response via : Initial Calibration

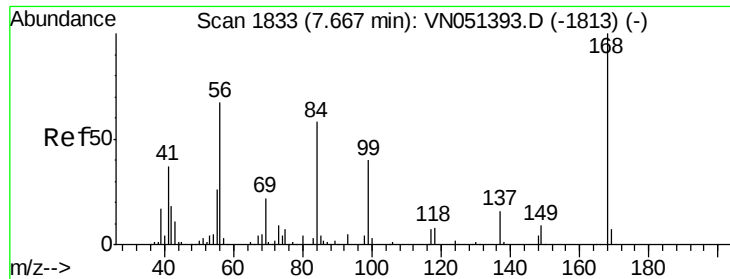
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 653955   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1006163  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 870046   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 298103   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 446704   | 54.53 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.06% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 395629   | 49.17 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.34%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1429894  | 47.19 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.38%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 387897   | 39.58 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 79.16%  |          |

| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 5) Bromomethane                | 2.57  | 94   | 2126     | 0.390     | ug/l   | 98     |
| 10) Methyl Iodide              | 3.95  | 142  | 61       | 0.282     | ug/l # | 42     |
| 11) Tert butyl alcohol         | 4.79  | 59   | 173      | 0.374     | ug/l # | 78     |
| 16) Acetone                    | 3.83  | 43   | 17400    | Below Cal |        | 99     |
| 18) Methyl Acetate             | 4.33  | 43   | 7005     | 1.123     | ug/l # | 74     |
| 20) Methylene Chloride         | 4.56  | 84   | 10084    | 1.244     | ug/l   | 96     |
| 25) 2-Butanone                 | 6.85  | 43   | 6449     | 2.300     | ug/l # | 80     |
| 31) Cyclohexane                | 7.67  | 56   | 12391    | 0.961     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.67  | 75   | 44860    | 3.850     | ug/l # | 47     |
| 37) Ethyl Acetate              | 6.85  | 43   | 6449     | 0.963     | ug/l # | 75     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 58756    | 4.821     | ug/l # | 17     |
| 43) Isopropyl Acetate          | 8.17  | 43   | 239560   | 19.776    | ug/l   | 98     |
| 48) Methyl methacrylate        | 9.18  | 41   | 6484     | 1.074     | ug/l # | 21     |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1886     | 0.283     | ug/l   | 90     |
| 59) 2-Hexanone                 | 10.77 | 43   | 15495    | 3.588     | ug/l # | 60     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 189415   | 38.276    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 189415   | 117.695   | ug/l # | 12     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 834      | 6.109     | ug/l # | 81     |
| 95) Naphthalene                | 15.14 | 128  | 2080     | 8.202     | ug/l # | 71     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.00 min

Lab File: VN051494.D

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Instrument :

MSVOA\_N

ClientSampleId :

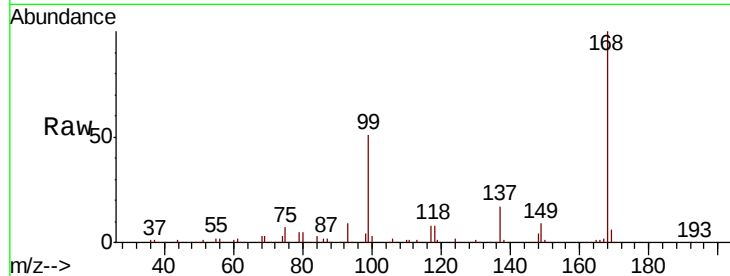
PB113206TB

Tot Ion:168 Resp: 653955

Ion Ratio Lower Upper

168 100

99 50.8 40.2 60.2



Abundance Ion 167.90 (167.60 to 168.60): VN051393.D (-1813) (-)

Ion 98.90 (98.60 to 99.60): VN051393.D (-1813) (-)

7.67

300000

250000

200000

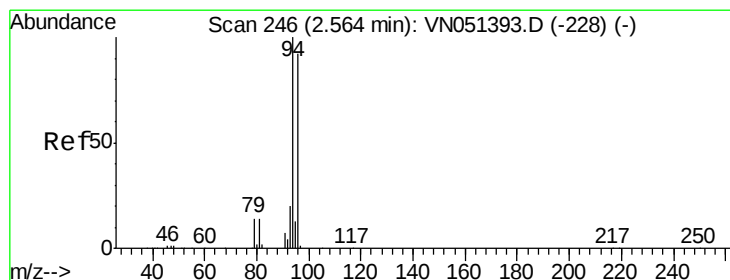
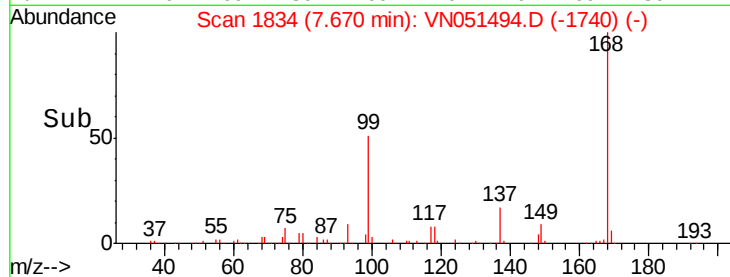
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: 0.390 ug/l

RT: 2.57 min Scan# 249

Delta R.T. 0.01 min

Lab File: VN051494.D

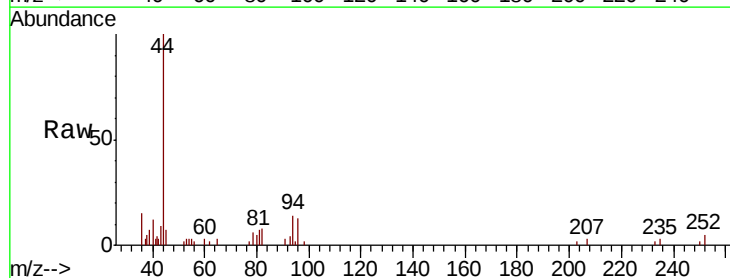
Acq: 25 Sep 2018 19:58

Tgt Ion: 94 Resp: 2126

Ion Ratio Lower Upper

94 100

96 90.3 73.6 110.4



Abundance Ion 93.90 (93.60 to 94.60): VN051393.D (-228) (-)

Ion 95.90 (95.60 to 96.60): VN051393.D (-228) (-)

2.57

1000

800

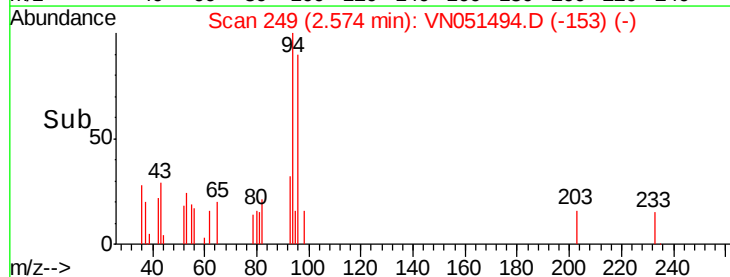
600

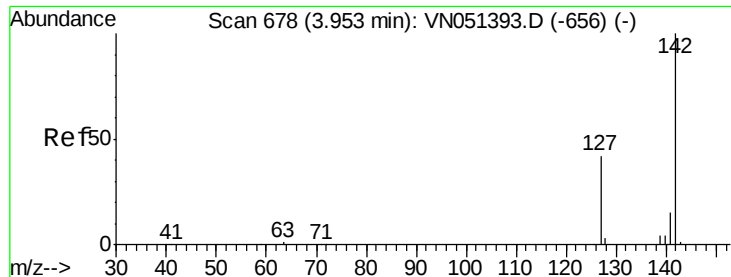
400

200

0

Time-->

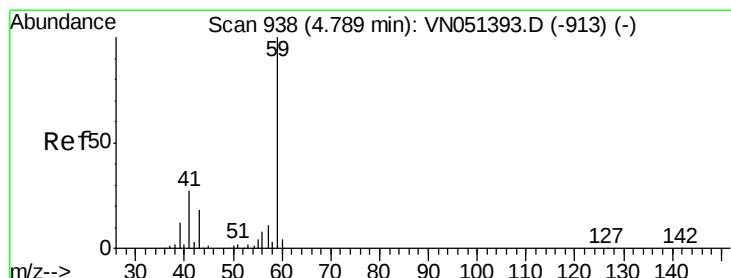
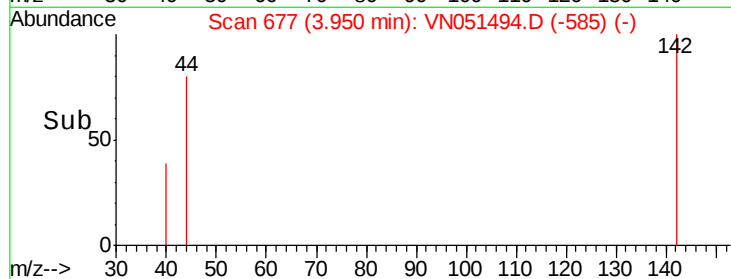
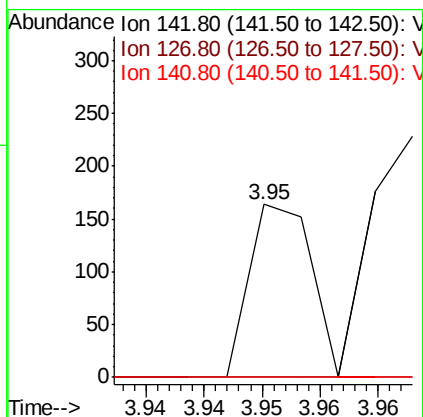
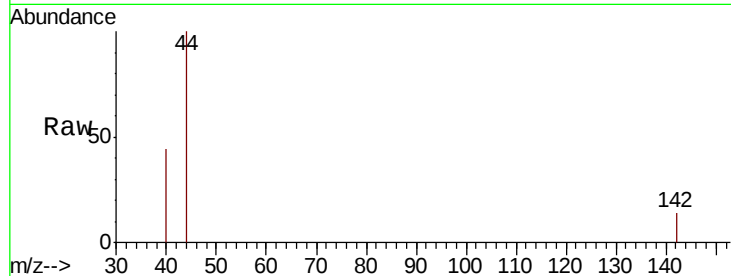




#10  
Methvl Iodide  
Concen: 0.282 ug/l  
RT: 3.95 min Scan# 677  
Delta R.T. -0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

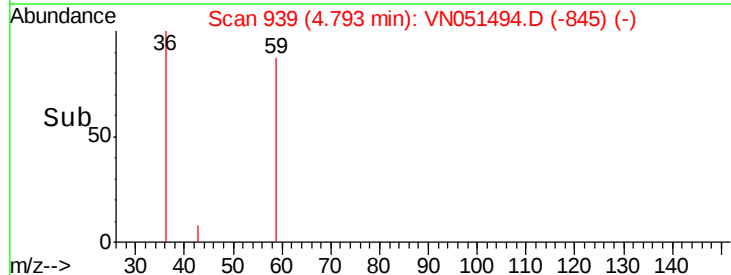
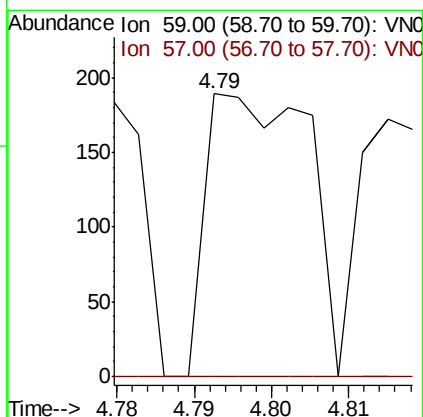
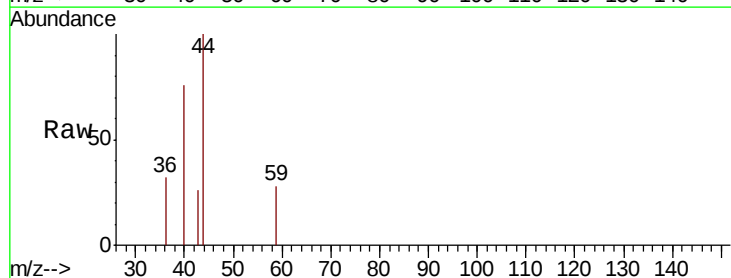
Instrument :  
MSVOA\_N  
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PB113206TB

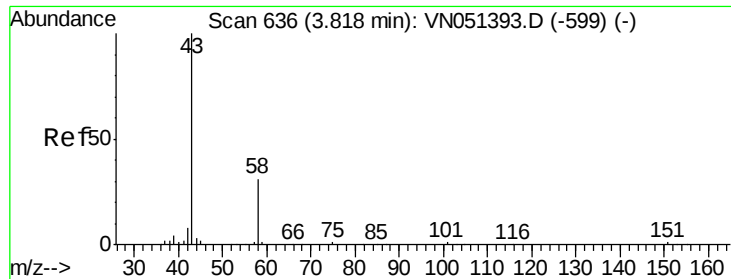
Tot Ion:142 Resp: 61  
Ion Ratio Lower Upper  
142 100  
127 0.0 33.2 49.8#  
141 0.0 11.5 17.3#



#11  
Tert butyl alcohol  
Concen: 0.374 ug/l  
RT: 4.79 min Scan# 939  
Delta R.T. 0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

Tgt Ion: 59 Resp: 173  
Ion Ratio Lower Upper  
59 100  
57 0.0 6.2 9.2#





#16

Acetone

Concen: Below Cal

RT: 3.83 min Scan# 639

Delta R.T. 0.01 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampleId :

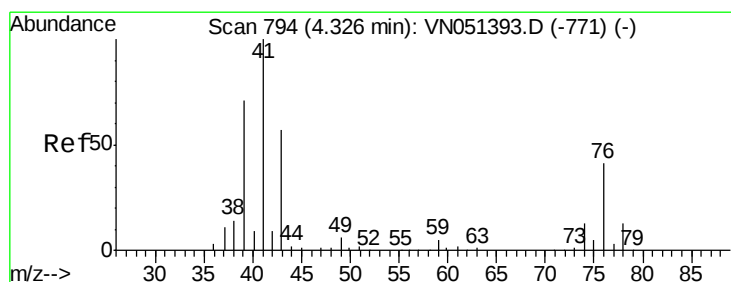
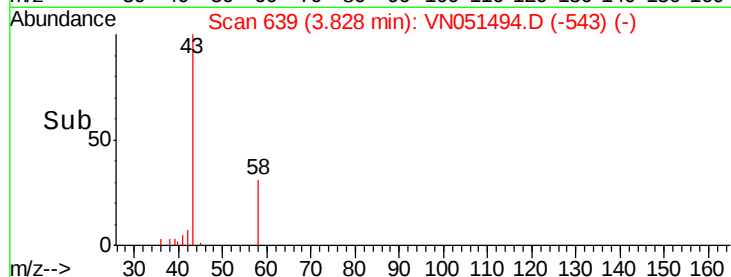
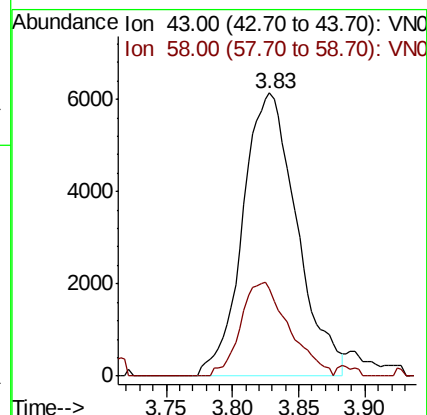
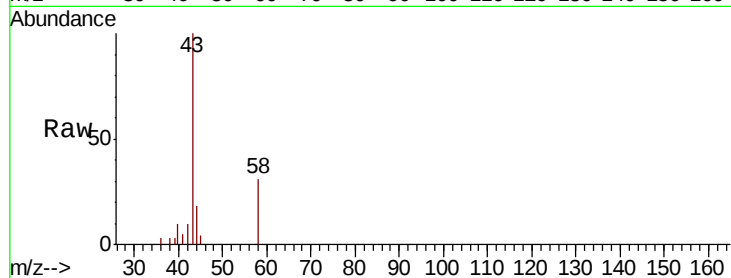
PB113206TB

Tot Ion: 43 Resp: 17400

Ion Ratio Lower Upper

43 100

58 30.9 25.0 37.4



#18

Methyl Acetate

Concen: 1.123 ug/l

RT: 4.33 min Scan# 796

Delta R.T. 0.01 min

Lab File: VN051494.D

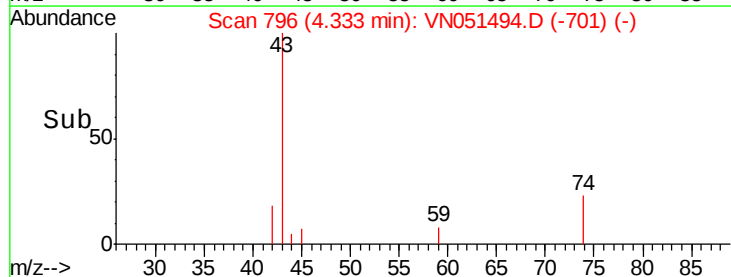
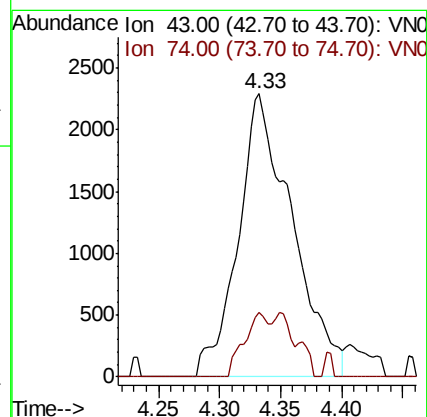
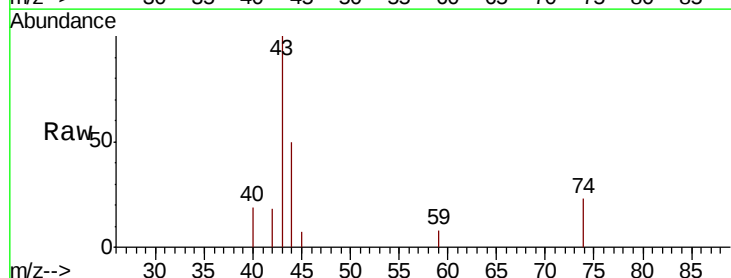
Acq: 25 Sep 2018 19:58

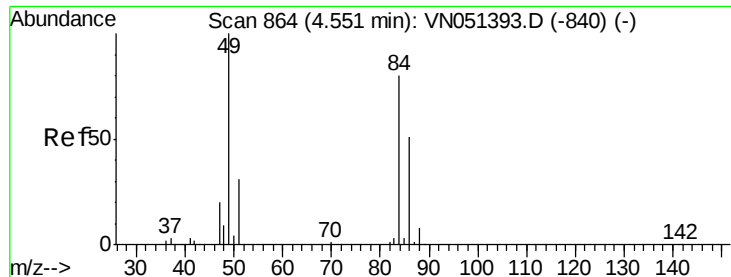
Tgt Ion: 43 Resp: 7005

Ion Ratio Lower Upper

43 100

74 10.9 18.8 28.2#

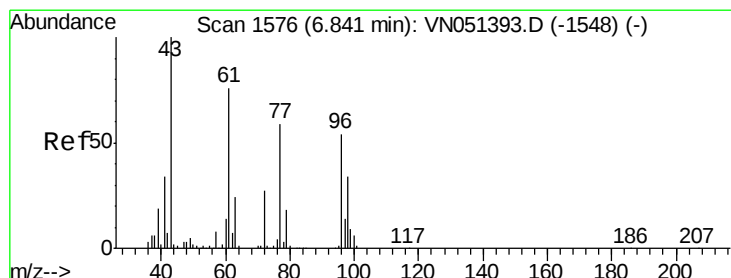
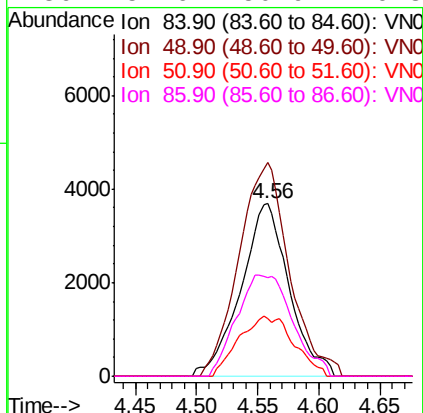
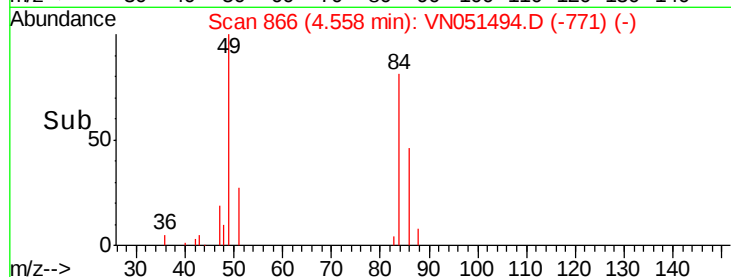
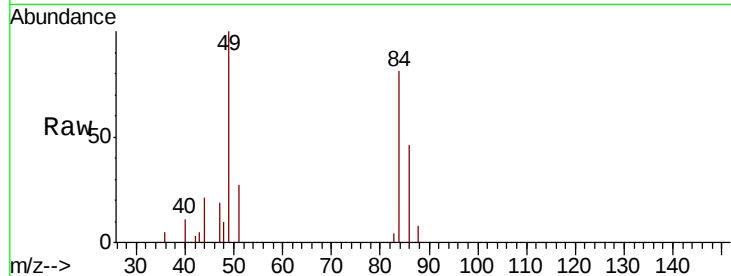




#20  
Methvlene Chloride  
Concen: 1.244 ug/l  
RT: 4.56 min Scan# 866  
Delta R.T. 0.01 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

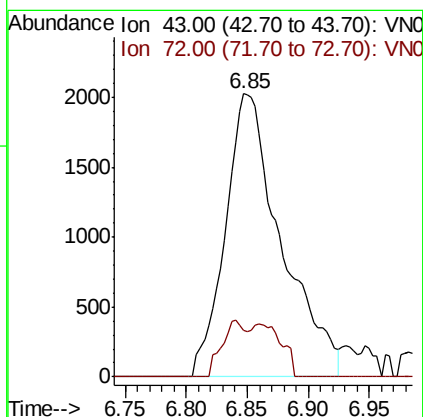
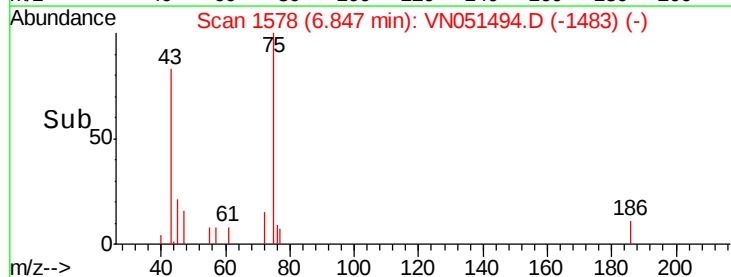
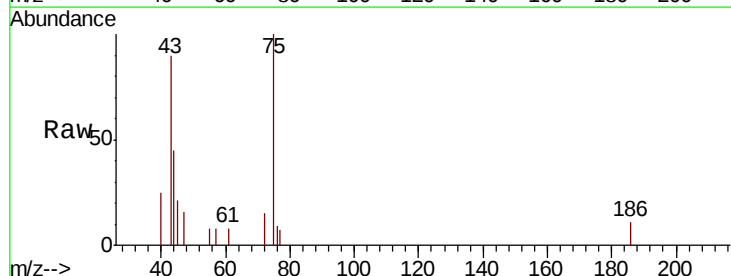
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB113206TB

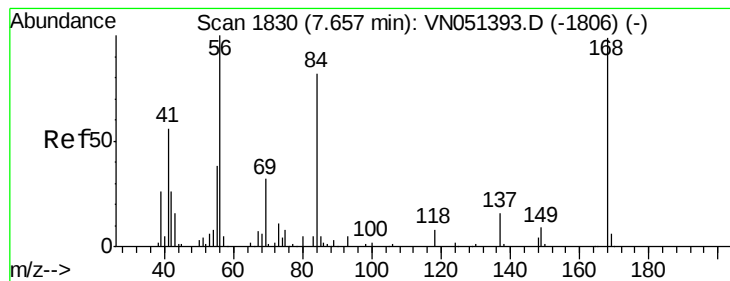
Tot Ion: 84 Resp: 10084  
Ion Ratio Lower Upper  
84 100  
49 124.0 99.9 149.9  
51 33.6 31.4 47.2  
86 57.6 50.9 76.3



#25  
2-Butanone  
Concen: 2.300 ug/l  
RT: 6.85 min Scan# 1578  
Delta R.T. 0.01 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

Tgt Ion: 43 Resp: 6449  
Ion Ratio Lower Upper  
43 100  
72 16.6 21.8 32.6#





#31

Cyclohexane

Concen: 0.961 ug/l

RT: 7.67 min Scan# 1834

Delta R.T. 0.01 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampleId :

PB113206TB

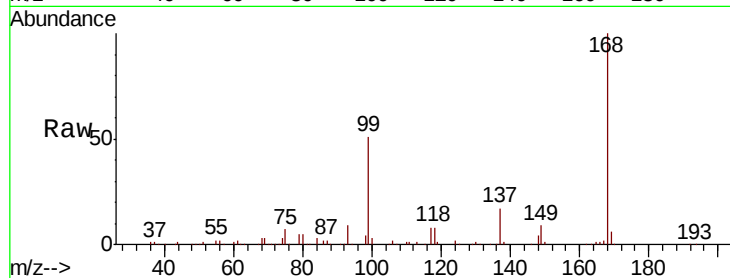
Tot Ion: 56 Resp: 12391

Ion Ratio Lower Upper

56 100

69 177.3 25.8 38.6#

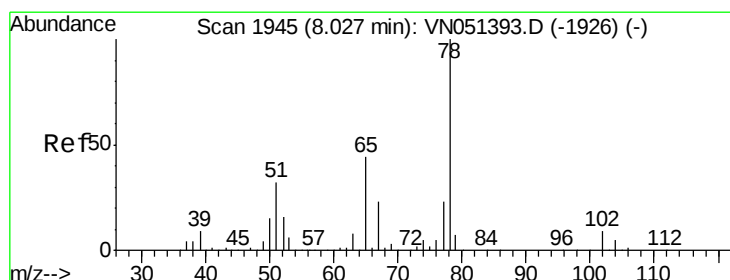
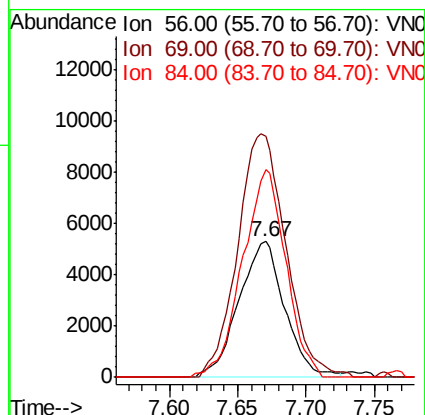
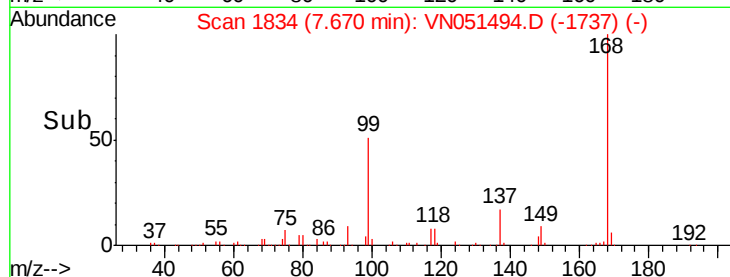
84 153.3 66.0 99.0#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#33

1,2-Dichloroethane-d4

Concen: 54.529 ug/l

RT: 8.03 min Scan# 1946

Delta R.T. 0.00 min

Lab File: VN051494.D

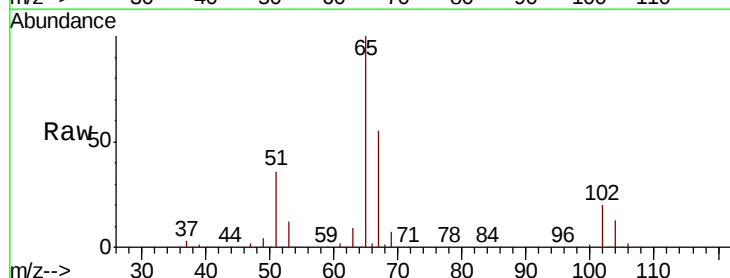
Acq: 25 Sep 2018 19:58

Tgt Ion: 65 Resp: 446704

Ion Ratio Lower Upper

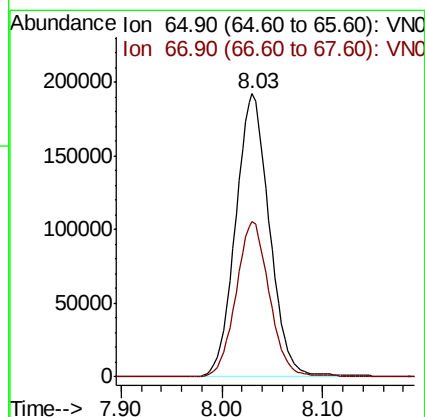
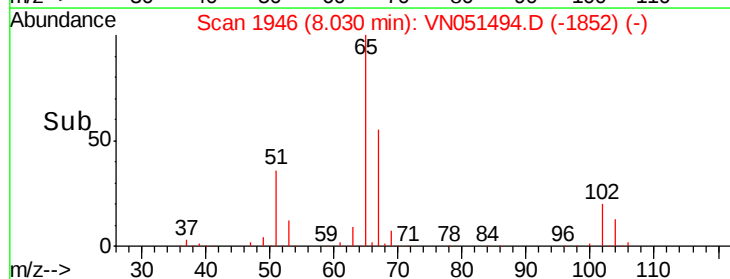
65 100

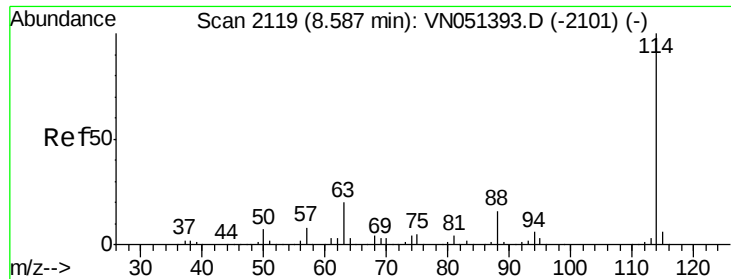
67 53.9 0.0 107.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

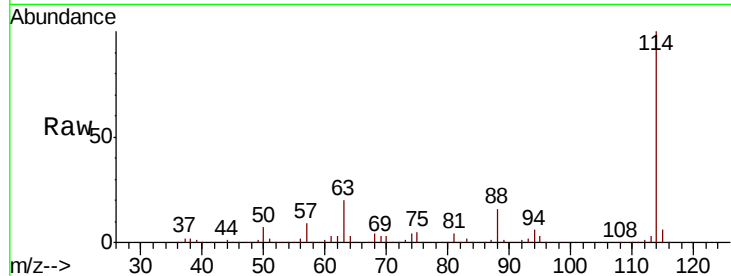




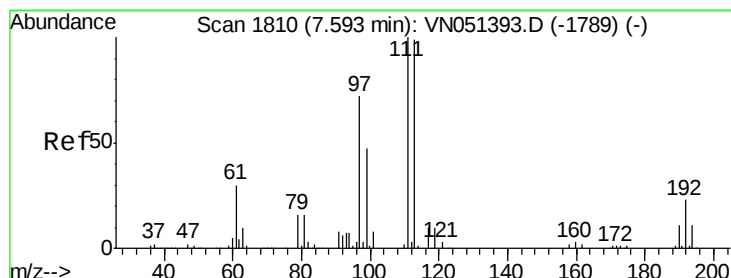
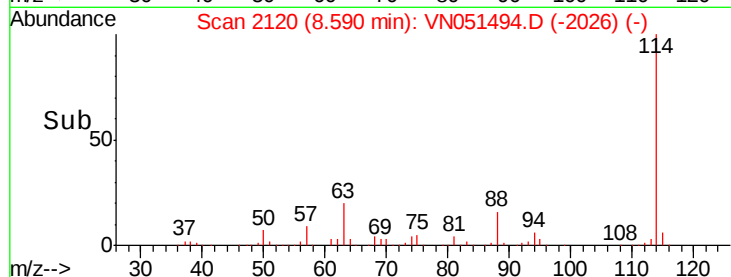
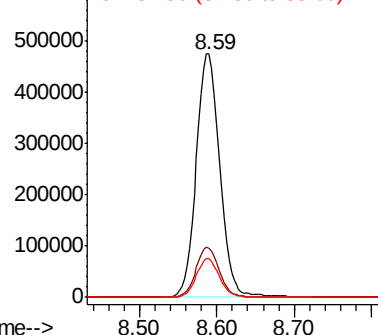
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.59 min Scan# 2120  
 Delta R.T. 0.00 min  
 Lab File: VN051494.D  
 Acq: 25 Sep 2018 19:58

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 PB113206TB

Tot Ion:114 Resp: 1006163  
 Ion Ratio Lower Upper  
 114 100  
 63 20.3 0.0 40.2  
 88 16.1 0.0 31.4

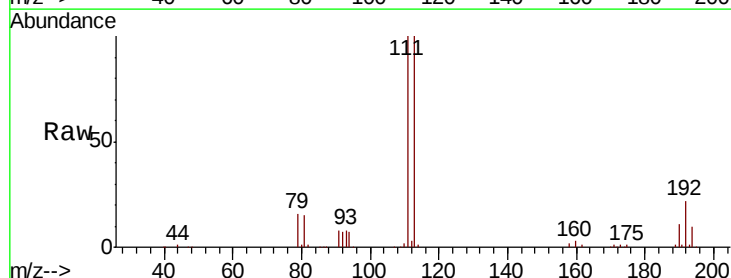


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

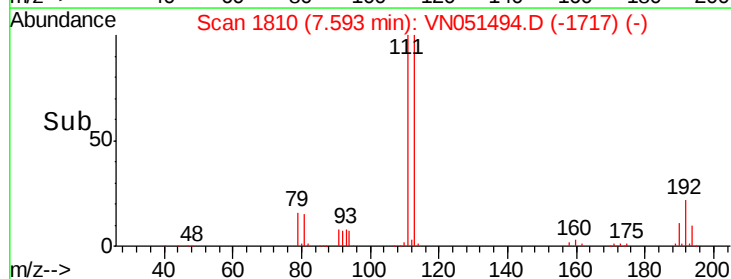
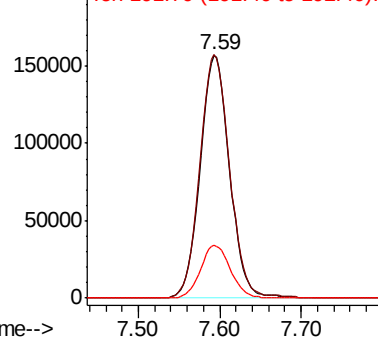


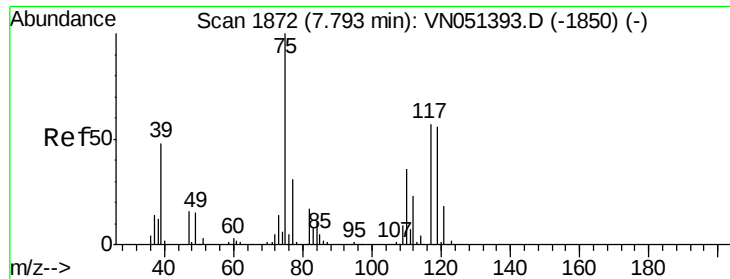
#35  
 Dibromofluoromethane  
 Concen: 49.172 ug/l  
 RT: 7.59 min Scan# 1810  
 Delta R.T. -0.00 min  
 Lab File: VN051494.D  
 Acq: 25 Sep 2018 19:58

Tgt Ion:113 Resp: 395629  
 Ion Ratio Lower Upper  
 113 100  
 111 101.7 82.6 123.8  
 192 22.1 18.0 27.0



Abundance Ion 112.80 (112.50 to 113.50): V  
 Ion 110.80 (110.50 to 111.50): V  
 Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 3.850 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.13 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampled :

PB113206TB

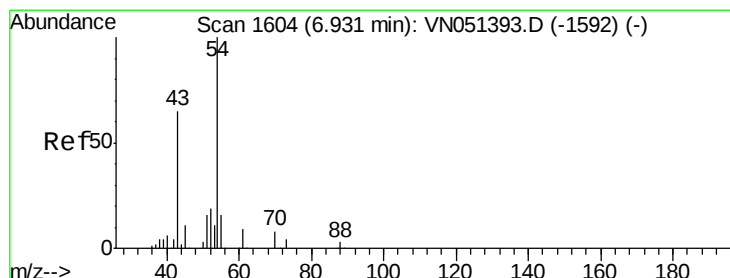
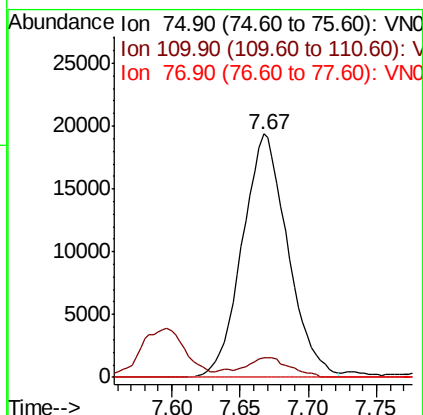
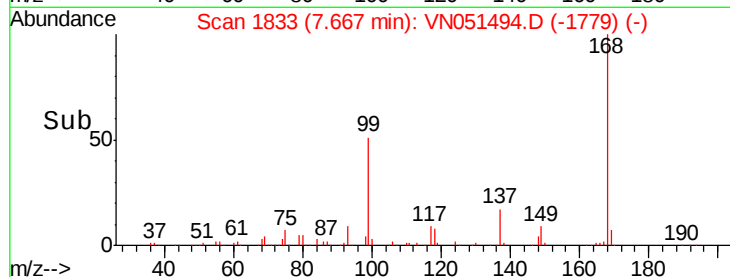
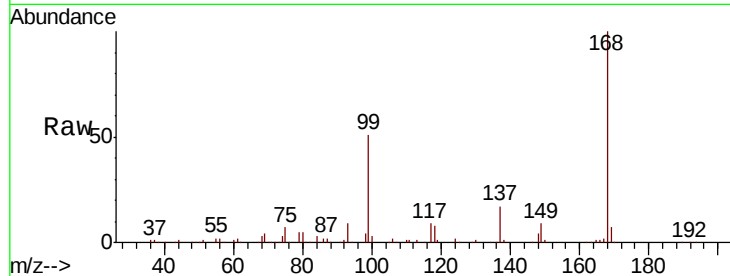
Tot Ion: 75 Resp: 44860

Ion Ratio Lower Upper

75 100

110 7.6 18.1 54.3#

77 0.0 25.6 38.4#



#37

Ethyl Acetate

Concen: 0.963 ug/l

RT: 6.85 min Scan# 1578

Delta R.T. -0.08 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

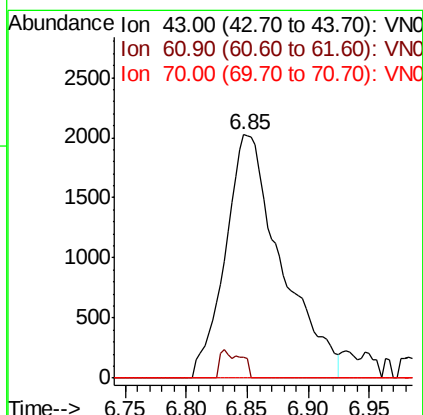
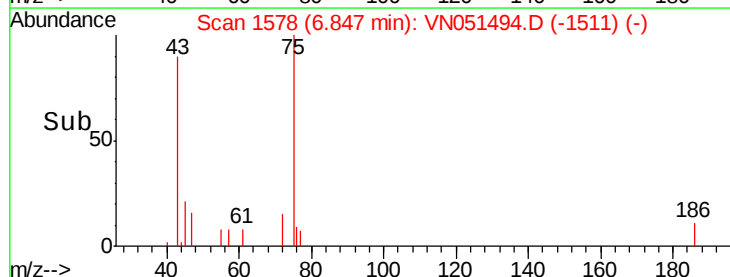
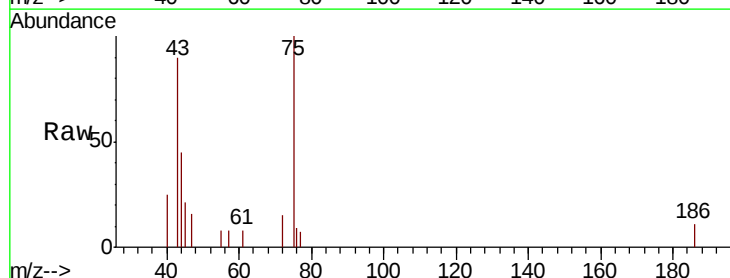
Tgt Ion: 43 Resp: 6449

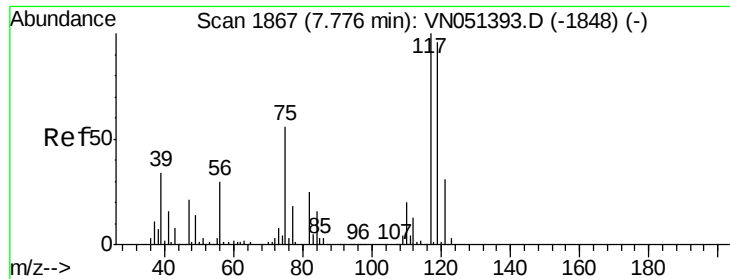
Ion Ratio Lower Upper

43 100

61 4.5 11.5 17.3#

70 0.0 7.9 11.9#





#38

Carbon Tetrachloride

Concen: 4.821 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.11 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampleId :

PB113206TB

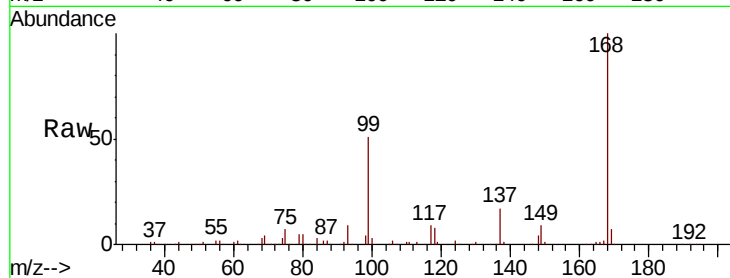
Tot Ion:117 Resp: 58756

Ion Ratio Lower Upper

117 100

119 6.8 76.9 115.3#

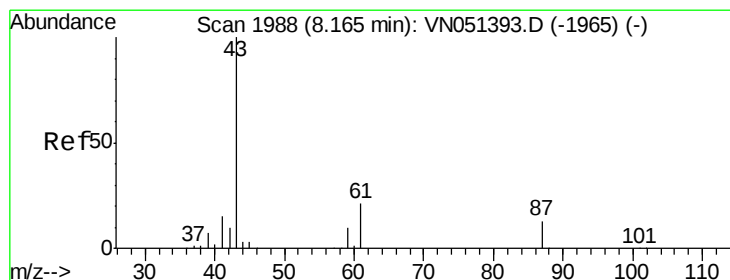
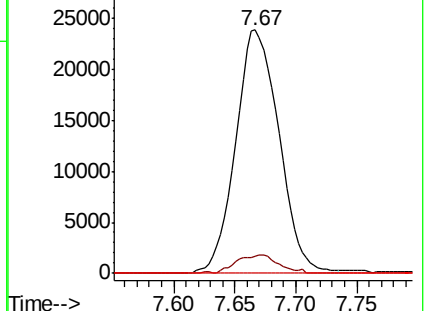
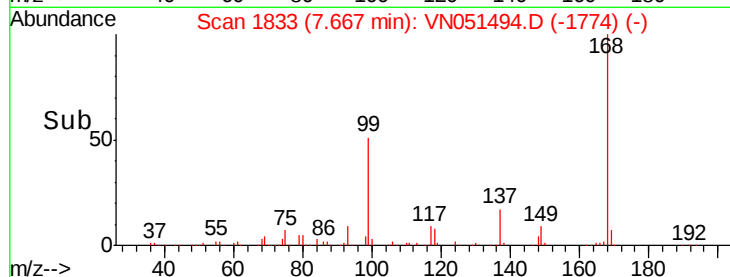
121 0.0 24.6 37.0#



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



#43

Isopropyl Acetate

Concen: 19.776 ug/l

RT: 8.17 min Scan# 1989

Delta R.T. 0.00 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

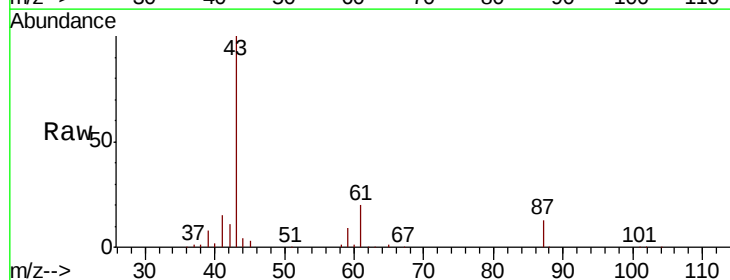
Tgt Ion: 43 Resp: 239560

Ion Ratio Lower Upper

43 100

61 19.9 16.8 25.2

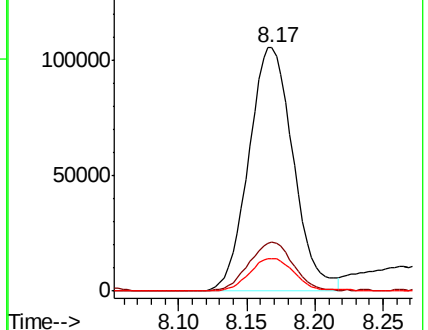
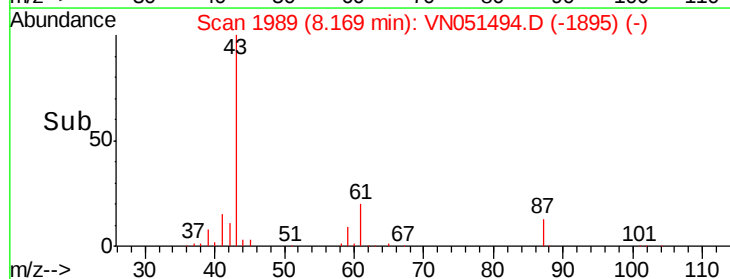
87 13.7 10.7 16.1

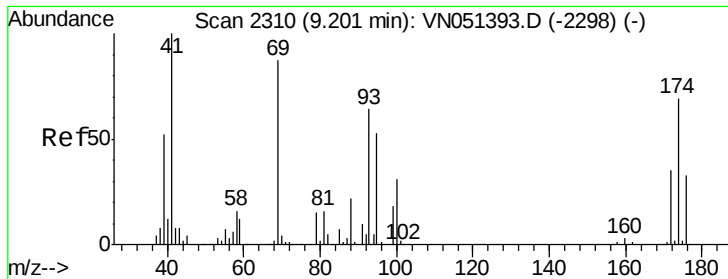


Abundance Ion 43.00 (42.70 to 43.70): V

Ion 61.00 (60.70 to 61.70): V

Ion 87.00 (86.70 to 87.70): V

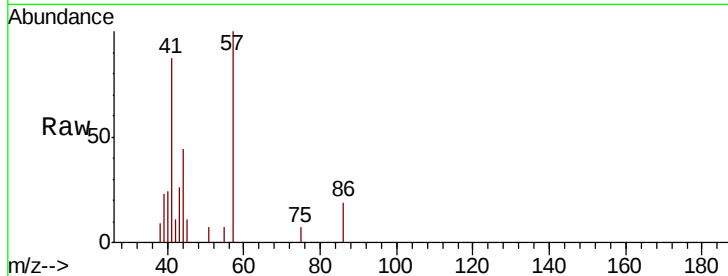




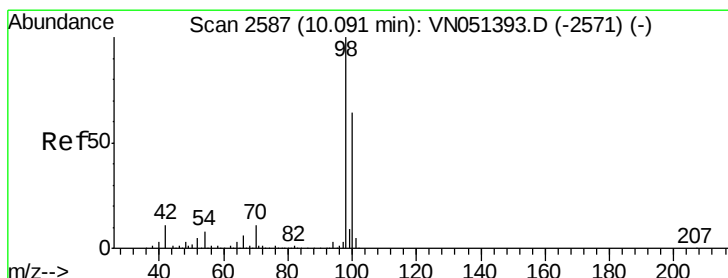
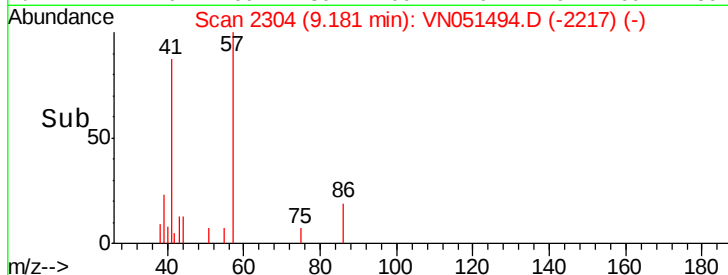
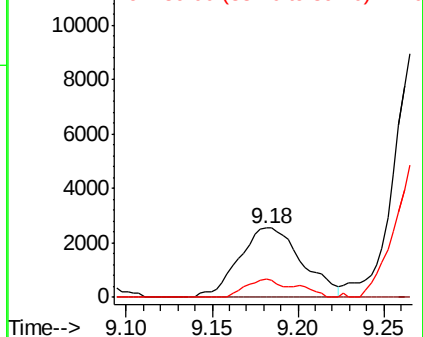
#48  
Methyl methacrylate  
Concen: 1.074 ug/l  
RT: 9.18 min Scan# 2304  
Delta R.T. -0.02 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

Instrument :  
MSVOA\_N  
ClientSampled :  
PB113206TB

Tot Ion: 41 Resp: 6484  
Ion Ratio Lower Upper  
41 100  
69 0.0 70.4 105.6#  
39 15.1 43.8 65.8#

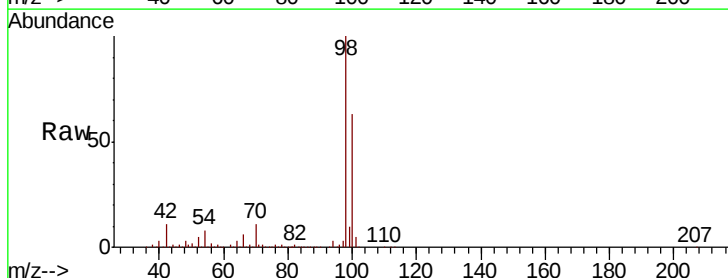


Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0

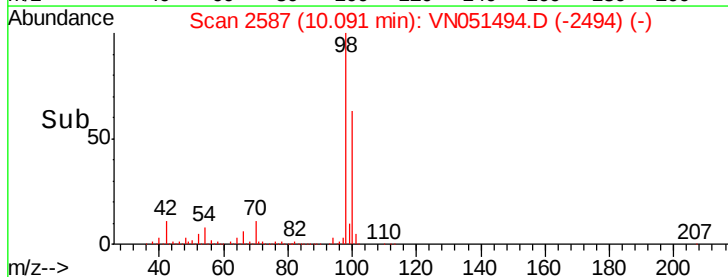
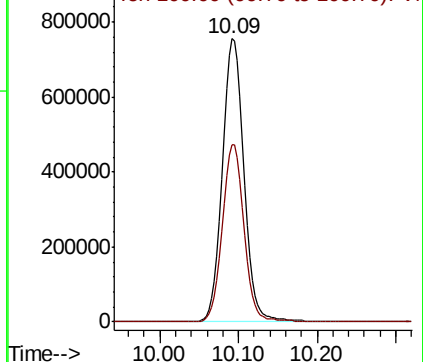


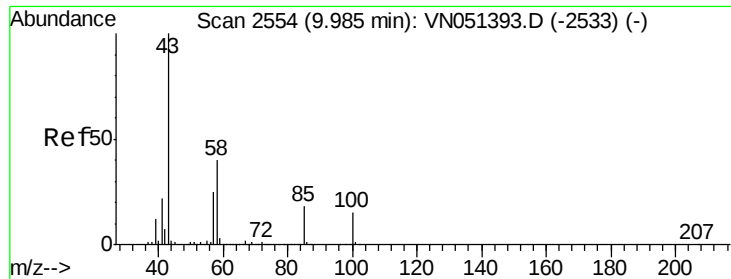
#50  
Toluene-d8  
Concen: 47.195 ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. -0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

Tgt Ion: 98 Resp: 1429894  
Ion Ratio Lower Upper  
98 100  
100 62.7 50.6 75.8



Abundance Ion 98.00 (97.70 to 98.70): VN0  
Ion 100.00 (99.70 to 100.70): VN0

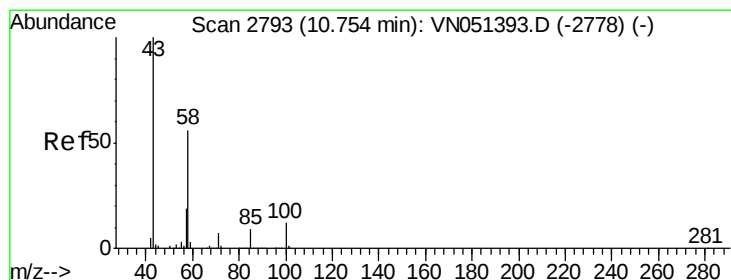
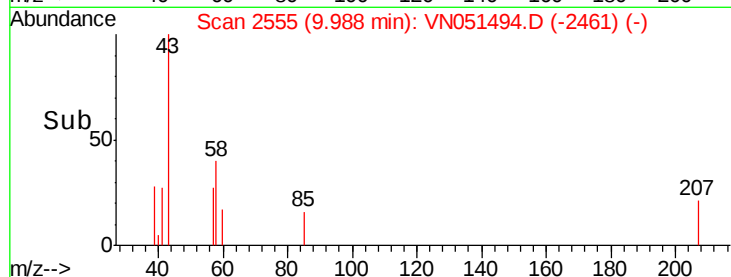
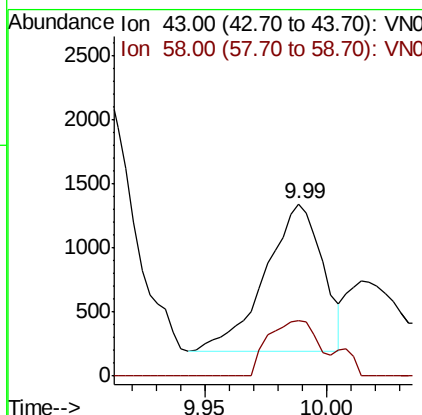
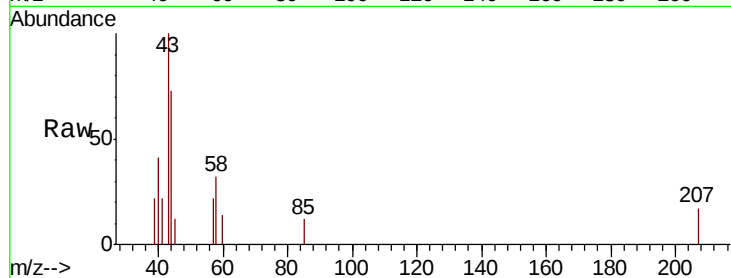




#51  
4-Methyl-2-Pentanone  
Concen: 0.283 ug/l  
RT: 9.99 min Scan# 2555  
Delta R.T. 0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

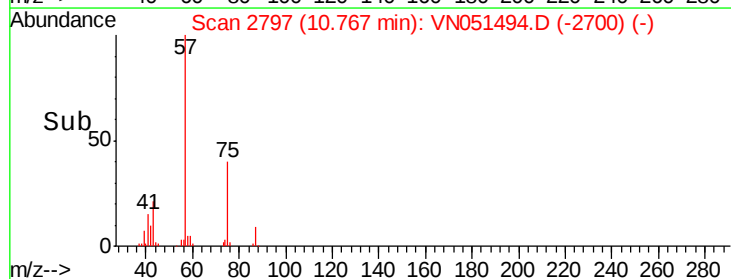
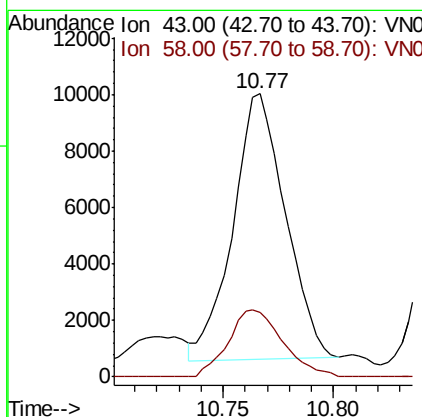
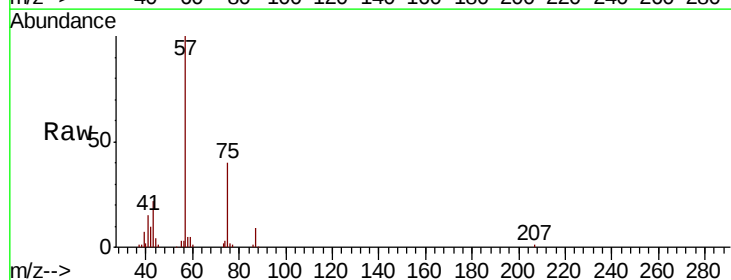
Instrument :  
MSVOA\_N  
ClientSampleID :  
PB113206TB

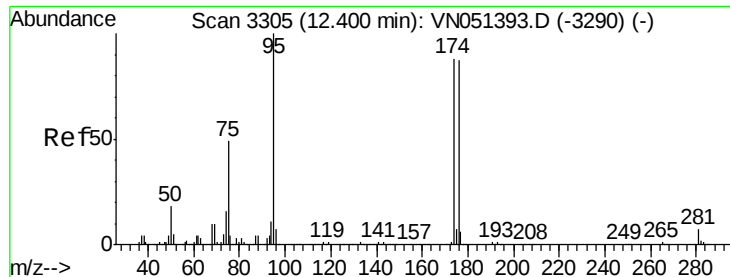
Tot Ion: 43 Resp: 1886  
Ion Ratio Lower Upper  
43 100  
58 33.0 31.5 47.3



#59  
2-Hexanone  
Concen: 3.588 ug/l  
RT: 10.77 min Scan# 2797  
Delta R.T. 0.01 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

Tgt Ion: 43 Resp: 15495  
Ion Ratio Lower Upper  
43 100  
58 26.3 27.7 83.0#

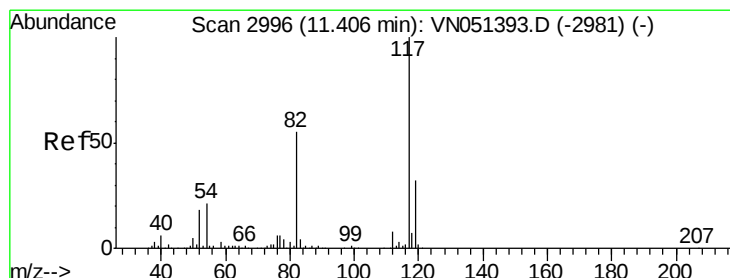
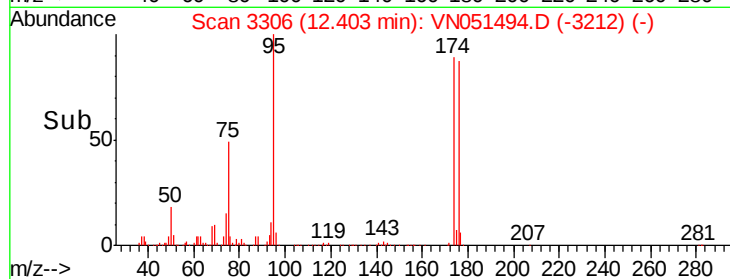
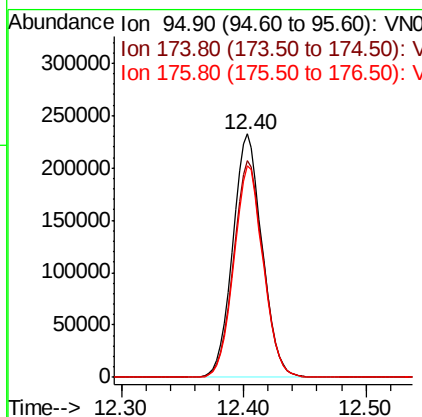
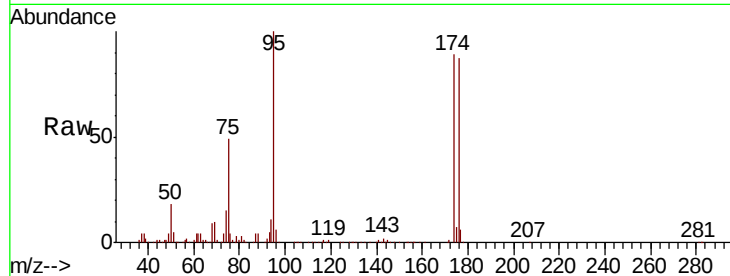




#62  
4-Bromofluorobenzene  
Concen: 39.576 ug/l  
RT: 12.40 min Scan# 3306  
Delta R.T. 0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

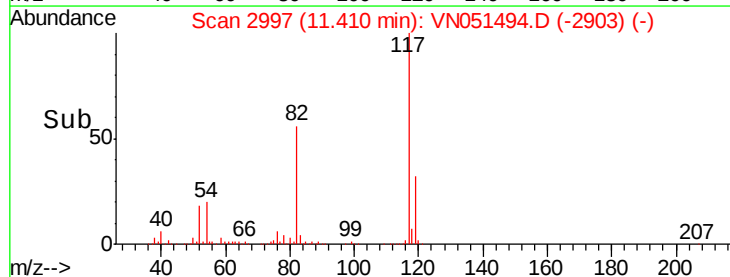
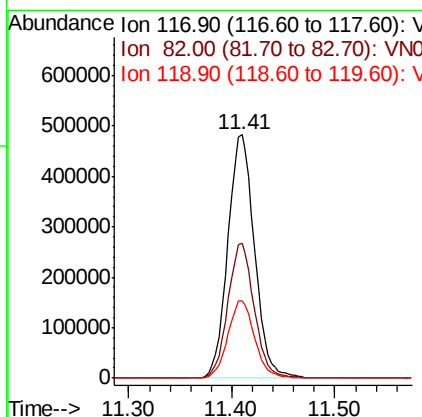
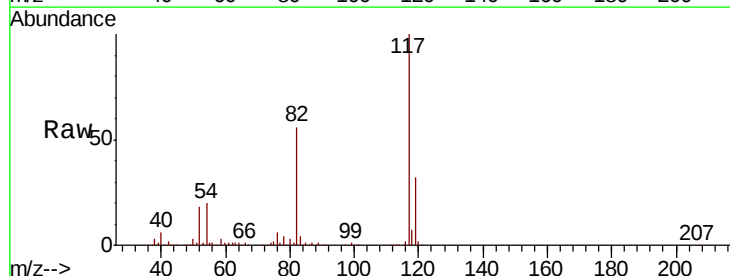
Instrument :  
MSVOA\_N  
ClientSampleId :  
PB113206TB

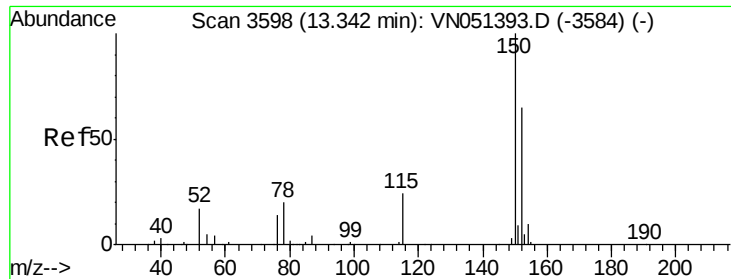
| Tot Ion   | 95    | Resp  | 387897 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 90.0  | 0.0   | 181.6  |
| 176       | 86.7  | 0.0   | 176.4  |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2997  
Delta R.T. 0.00 min  
Lab File: VN051494.D  
Acq: 25 Sep 2018 19:58

| Tgt Ion   | 117   | Resp  | 870046 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 55.6  | 44.2  | 66.2   |
| 119       | 31.9  | 25.9  | 38.9   |





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampleId :

PB113206TB

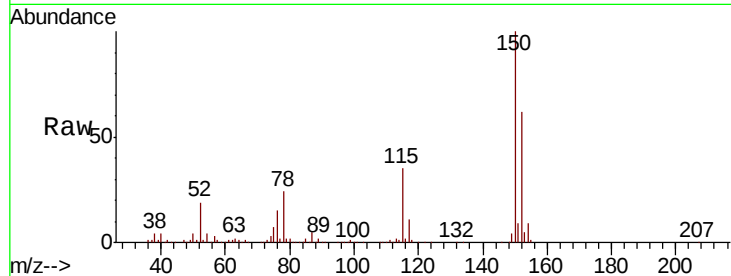
Tot Ion:152 Resp: 298103

Ion Ratio Lower Upper

152 100

115 56.1 28.3 84.9

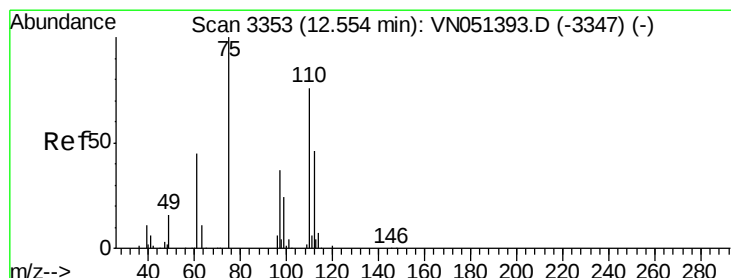
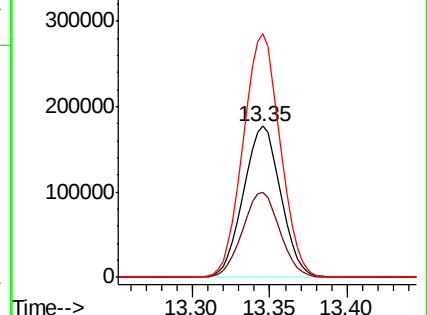
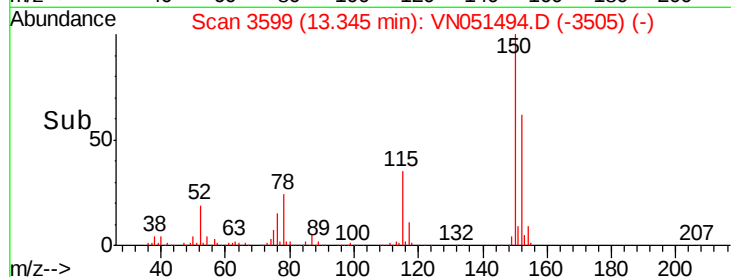
150 159.7 0.0 353.6



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: 38.276 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN051494.D

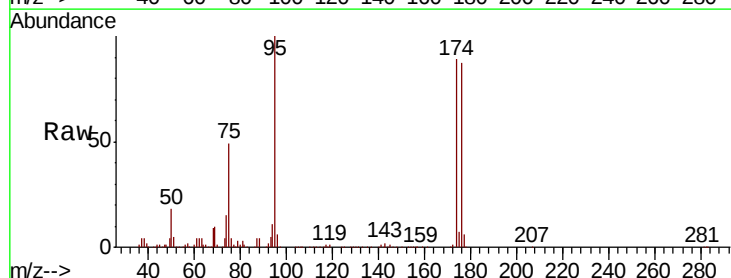
Acq: 25 Sep 2018 19:58

Tgt Ion: 75 Resp: 189415

Ion Ratio Lower Upper

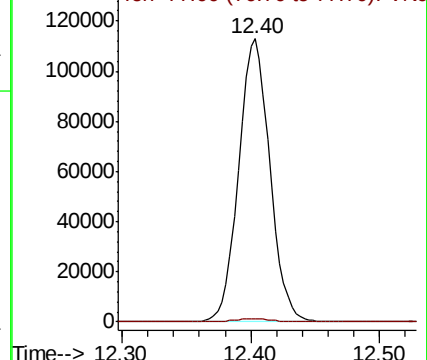
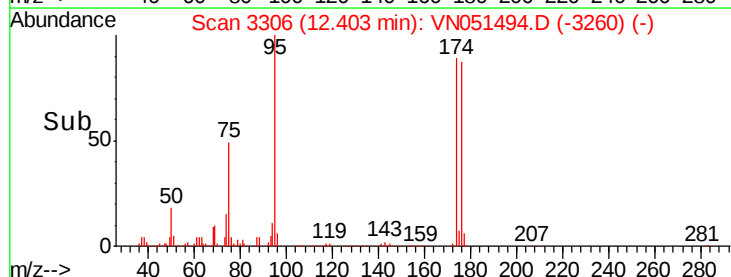
75 100

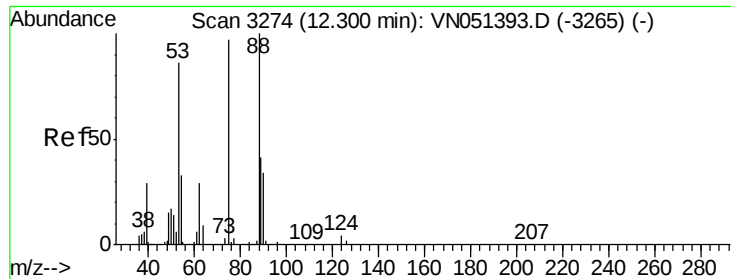
77 1.3 0.0 0.0#



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: 117.695 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampled :

PB113206TB

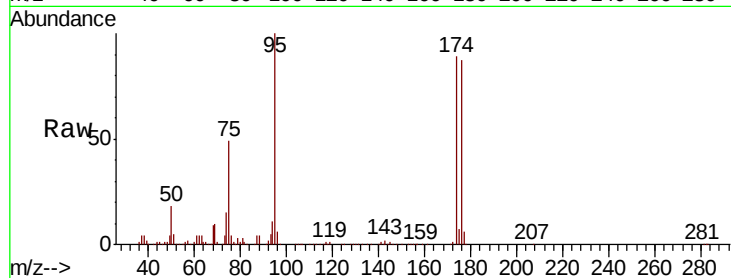
Tot Ion: 75 Resp: 189415

Ion Ratio Lower Upper

75 100

53 0.1 73.9 110.9#

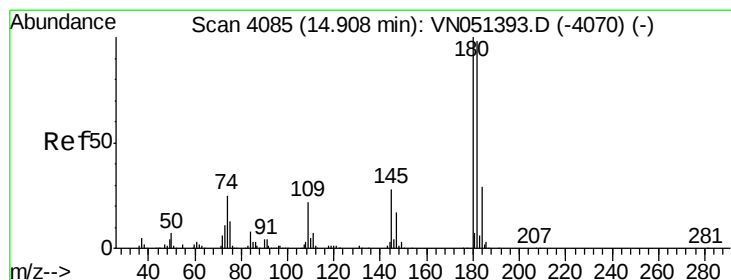
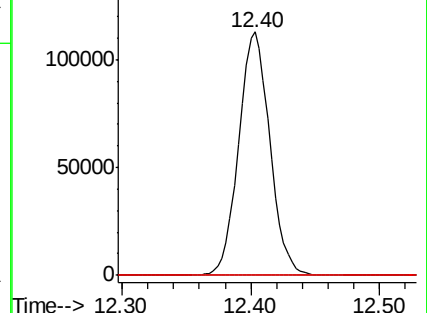
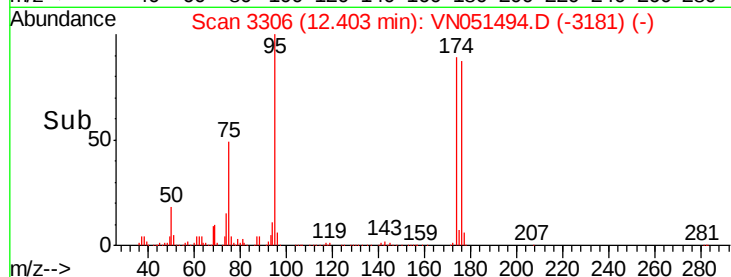
89 0.0 36.7 55.1#



Abundance Ion 74.90 (74.60 to 75.60): VN051393.D (-3265) (-)

Ion 53.00 (52.70 to 53.70): VN051393.D (-3265) (-)

Ion 88.90 (88.60 to 89.60): VN051393.D (-3265) (-)



#93

1,2,4-Trichlorobenzene

Concen: 6.109 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. 0.00 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

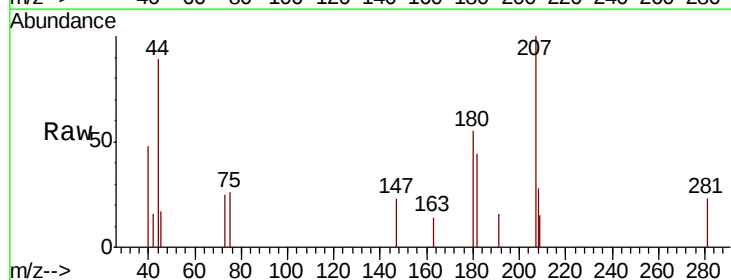
Tgt Ion: 180 Resp: 834

Ion Ratio Lower Upper

180 100

182 88.5 48.5 145.6

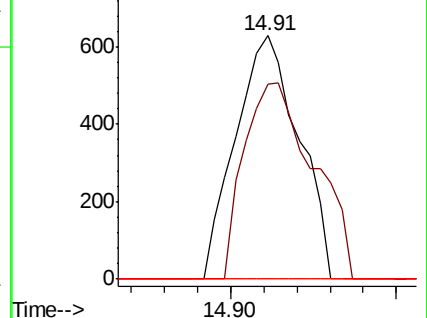
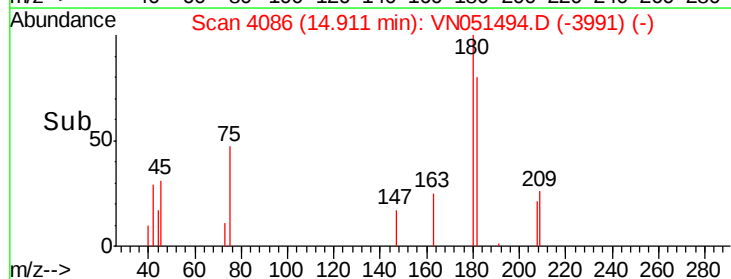
145 0.0 14.1 42.4#

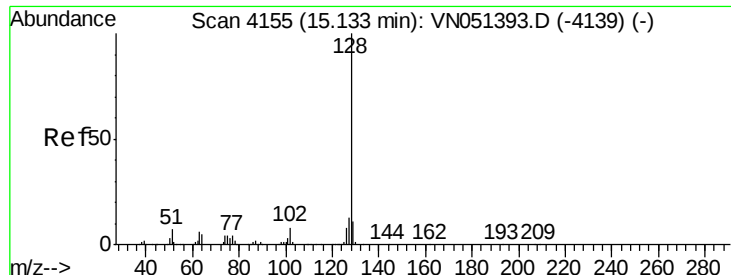


Abundance Ion 179.80 (179.50 to 180.50): VN051393.D (-4070) (-)

Ion 181.80 (181.50 to 182.50): VN051393.D (-4070) (-)

Ion 144.80 (144.50 to 145.50): VN051393.D (-4070) (-)





#95

Naphthalene

Concen: 8.202 ug/l

RT: 15.14 min Scan# 4157

Delta R.T. 0.01 min

Lab File: VN051494.D

Acq: 25 Sep 2018 19:58

Instrument :

MSVOA\_N

ClientSampleId :

PB113206TB

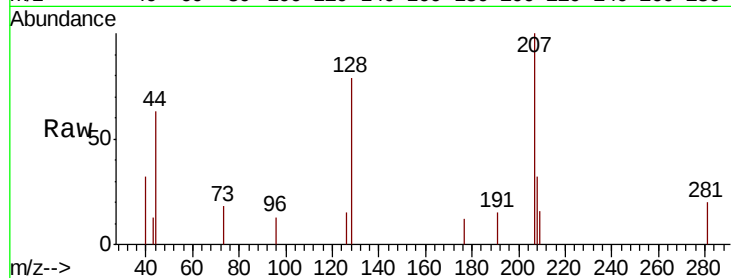
Tot Ion:128 Resp: 2080

Ion Ratio Lower Upper

128 100

127 0.0 10.5 15.7#

129 1.4 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

