

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071918\  
 Data File : VN049932.D  
 Acq On : 19 Jul 2018 22:55  
 Operator : MD\SY  
 Sample : VN0719WBL02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0719WBL02

Quant Time: Jul 20 03:08:02 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N071818W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Jul 19 01:58:39 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 546285   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 915801   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 742458   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 272585   | 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   | 396049   | 52.75 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.50% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 351813   | 45.76 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 91.52%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 1219225  | 43.52 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 87.04%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 326049   | 33.80 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 67.60%  |          |

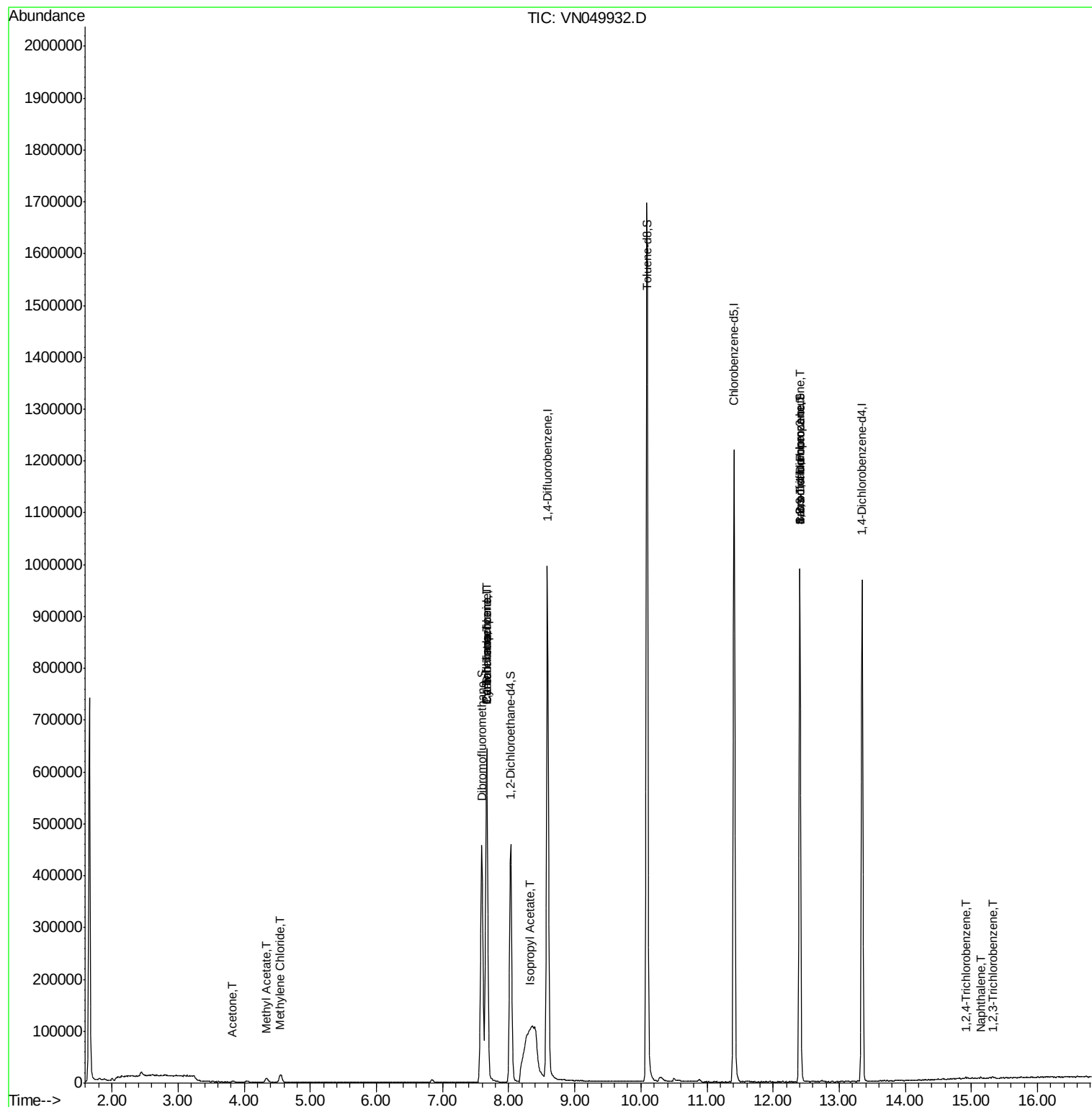
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.85  | 85   | 62       | Below Cal | #      | 44     |
| 5) Bromomethane                | 2.57  | 94   | 942      | Below Cal |        | 97     |
| 16) Acetone                    | 3.82  | 43   | 946      | 0.49      | ug/l # | 42     |
| 18) Methyl Acetate             | 4.33  | 43   | 15721    | 1.78      | ug/l # | 90     |
| 20) Methylene Chloride         | 4.55  | 84   | 11777    | 1.59      | ug/l   | 95     |
| 31) Cyclohexane                | 7.66  | 56   | 10538    | 1.05      | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.67  | 75   | 38891    | 3.82      | ug/l # | 47     |
| 38) Carbon Tetrachloride       | 7.67  | 117  | 49706    | 4.56      | ug/l # | 17     |
| 43) Isopropyl Acetate          | 8.31  | 43   | 198636   | 16.26     | ug/l # | 63     |
| 71) Bromoform                  | 12.40 | 173  | 2973     | 0.58      | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 159017   | 31.10     | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 159017   | 97.24     | ug/l # | 13     |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 716      | 3.60      | ug/l # | 79     |
| 95) Naphthalene                | 15.14 | 128  | 2439     | 4.66      | ug/l # | 89     |
| 96) 1,2,3-Trichlorobenzene     | 15.31 | 180  | 987      | 0.21      | ug/l   | 89     |

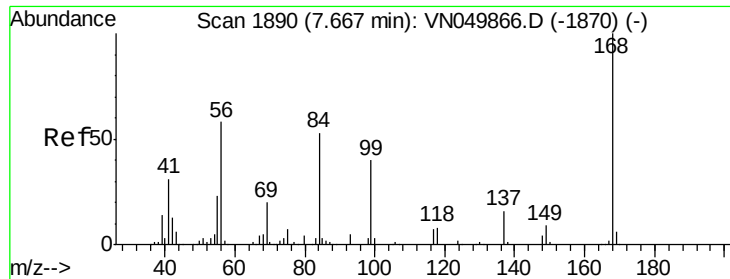
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Jul 20 03:08:02 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N071818W.M  
Quant Title : SW846 8260  
QLast Update : Thu Jul 19 01:58:39 2018  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.67 min Scan# 1890

Delta R.T. 0.00 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampled :

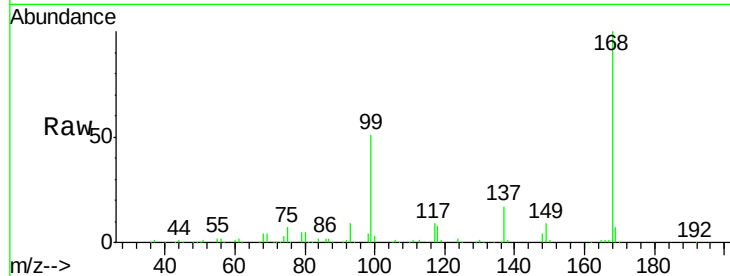
VN0719WBL02

Tot Ion:168 Resp: 546285

Ion Ratio Lower Upper

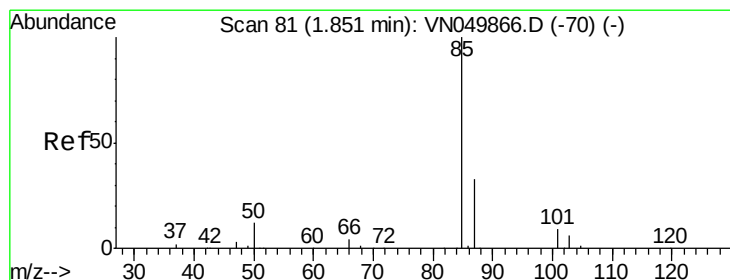
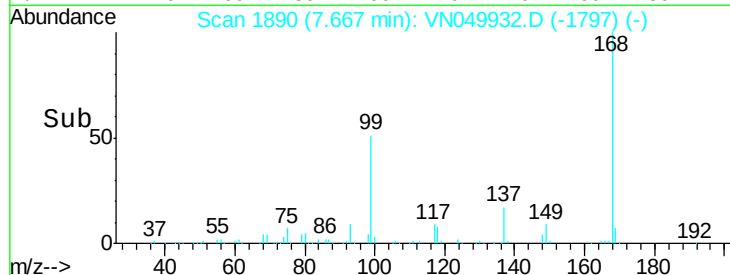
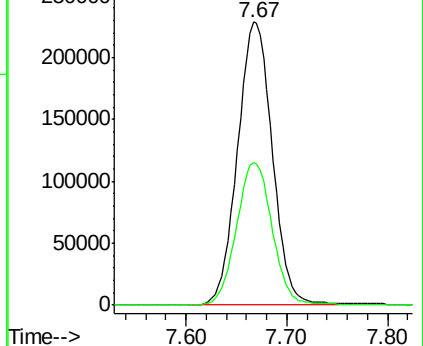
168 100

99 50.5 40.6 61.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.85 min Scan# 81

Delta R.T. 0.00 min

Lab File: VN049932.D

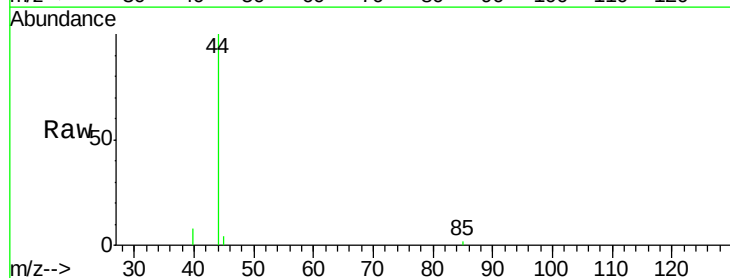
Acq: 19 Jul 2018 22:55

Tgt Ion: 85 Resp: 62

Ion Ratio Lower Upper

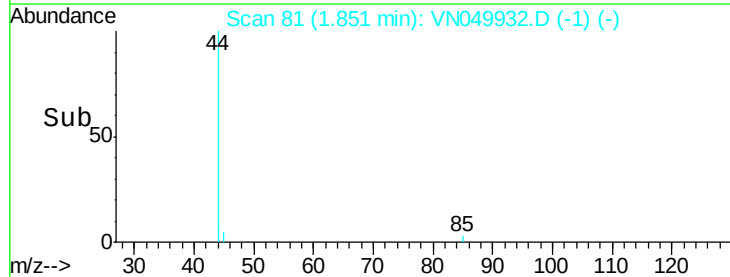
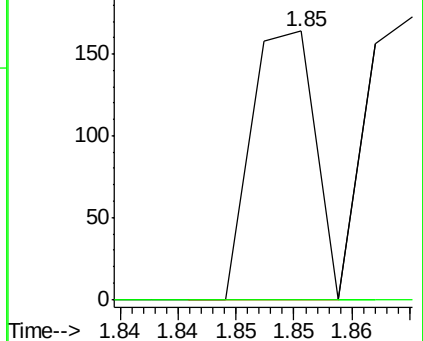
85 100

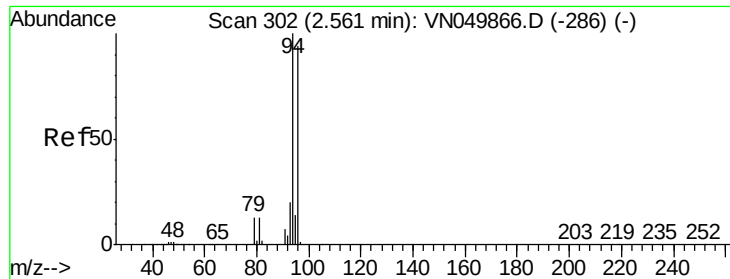
87 0.0 15.4 46.1#



Abundance Ion 84.90 (84.60 to 85.60): VN0

Ion 86.90 (86.60 to 87.60): VN0





#5

Bromomethane

Concen: Below Cal

RT: 2.57 min Scan# 304

Delta R.T. 0.01 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampled :

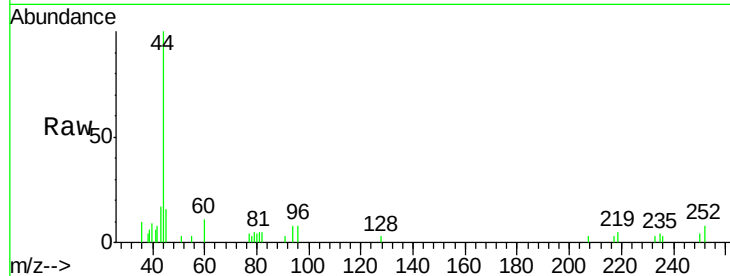
VN0719WBL02

Tot Ion: 94 Resp: 942

Ion Ratio Lower Upper

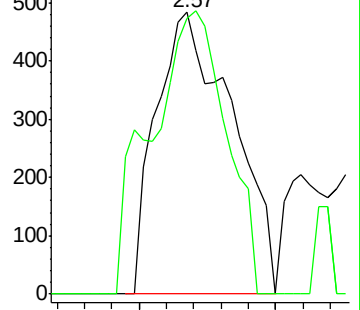
94 100

96 97.7 75.7 113.5

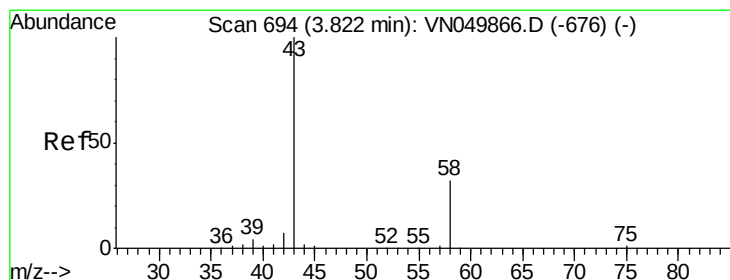
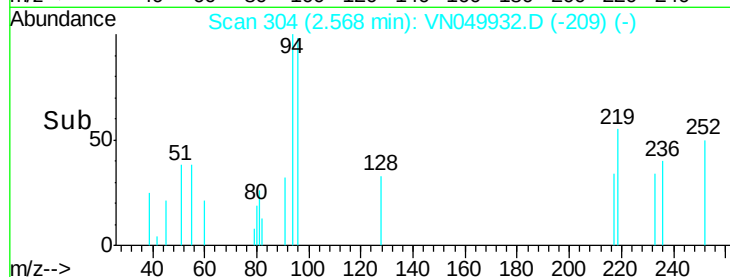


Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0



Time-->



#16

Acetone

Concen: 0.49 ug/l

RT: 3.82 min Scan# 694

Delta R.T. 0.00 min

Lab File: VN049932.D

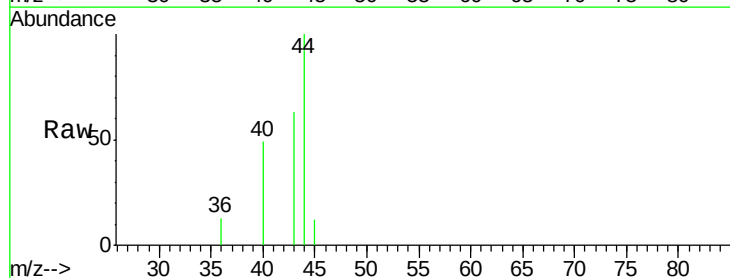
Acq: 19 Jul 2018 22:55

Tgt Ion: 43 Resp: 946

Ion Ratio Lower Upper

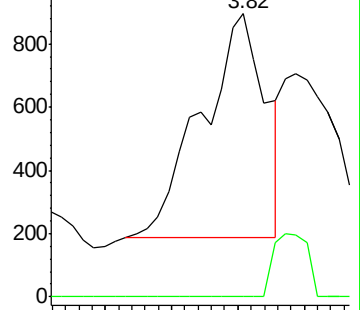
43 100

58 0.0 25.9 38.9#

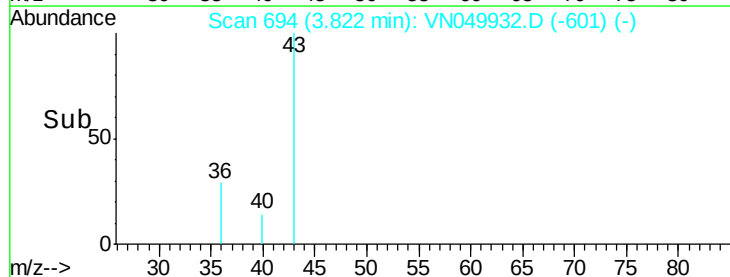


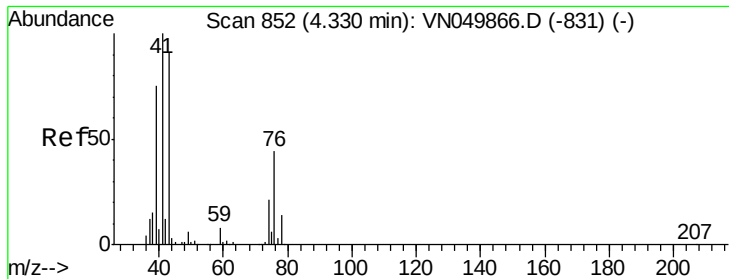
Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



Time-->

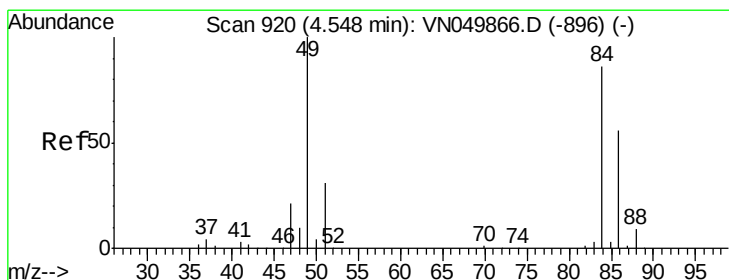
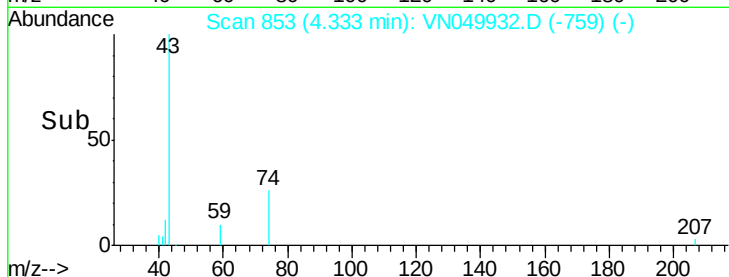
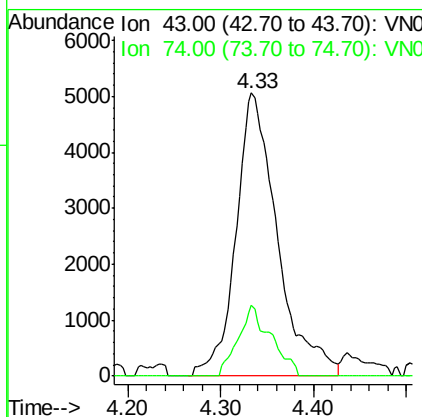
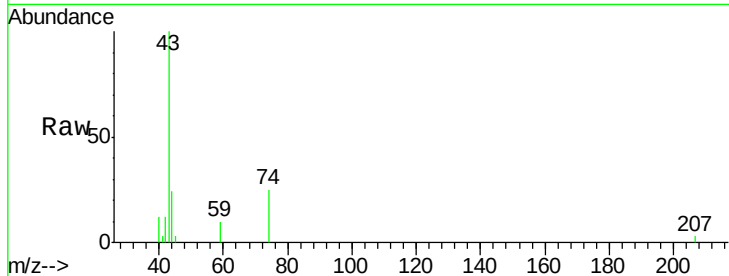




#18  
Methvl Acetate  
Concen: 1.78 ug/l  
RT: 4.33 min Scan# 853  
Delta R.T. 0.00 min  
Lab File: VN049932.D  
Acq: 19 Jul 2018 22:55

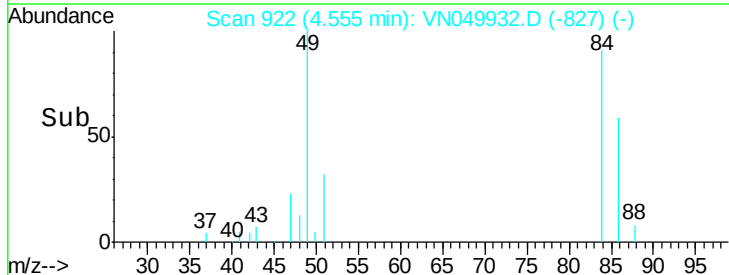
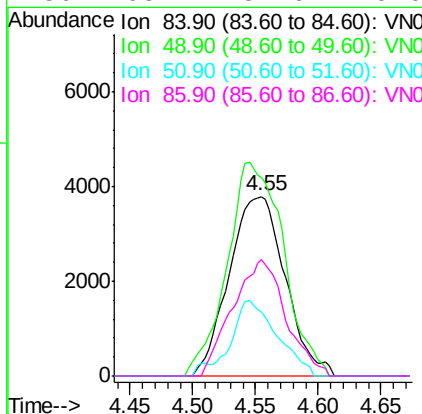
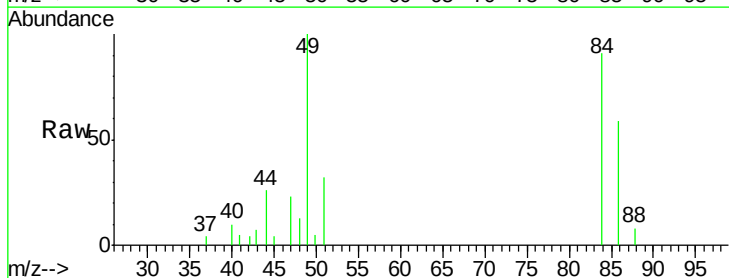
Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0719WBL02

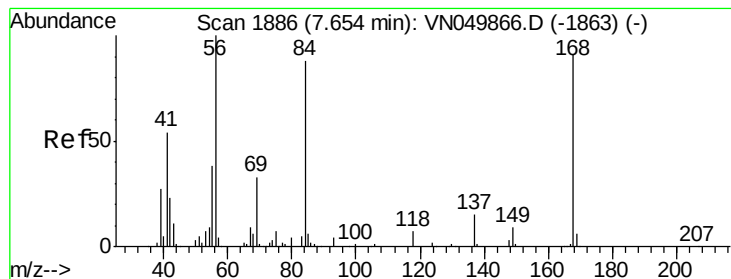
Tot Ion: 43 Resp: 15721  
Ion Ratio Lower Upper  
43 100  
74 19.8 19.8 29.8#



#20  
Methylene Chloride  
Concen: 1.59 ug/l  
RT: 4.55 min Scan# 922  
Delta R.T. 0.01 min  
Lab File: VN049932.D  
Acq: 19 Jul 2018 22:55

Tgt Ion: 84 Resp: 11777  
Ion Ratio Lower Upper  
84 100  
49 110.3 95.4 143.2  
51 35.7 28.4 42.6  
86 65.2 52.6 79.0





#31

Cyclohexane

Concen: 1.05 ug/l

RT: 7.66 min Scan# 1889

Delta R.T. 0.01 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampled :

VN0719WBL02

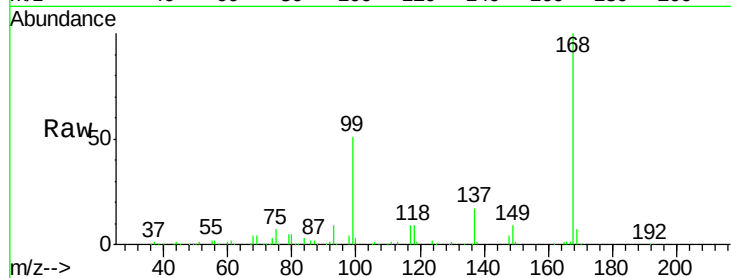
Tot Ion: 56 Resp: 10538

Ion Ratio Lower Upper

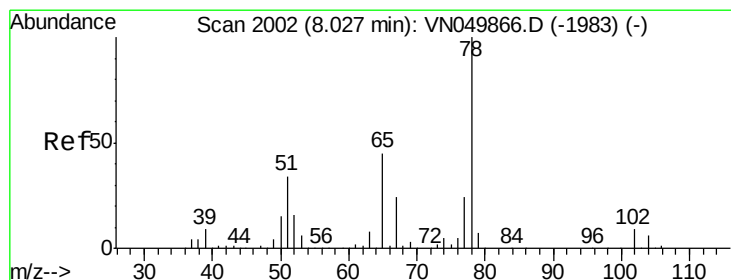
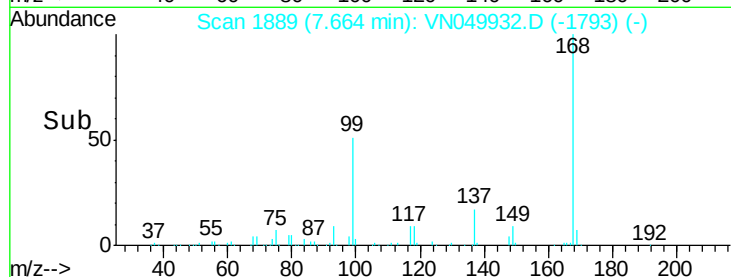
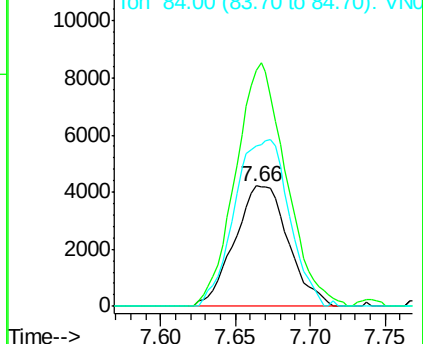
56 100

69 195.6 26.6 40.0#

84 132.8 69.0 103.6#



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: 52.75 ug/l

RT: 8.03 min Scan# 2003

Delta R.T. 0.00 min

Lab File: VN049932.D

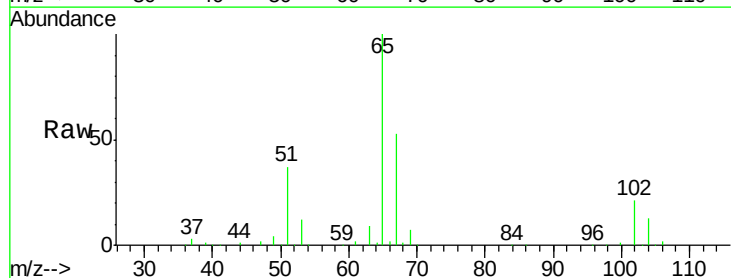
Acq: 19 Jul 2018 22:55

Tgt Ion: 65 Resp: 396049

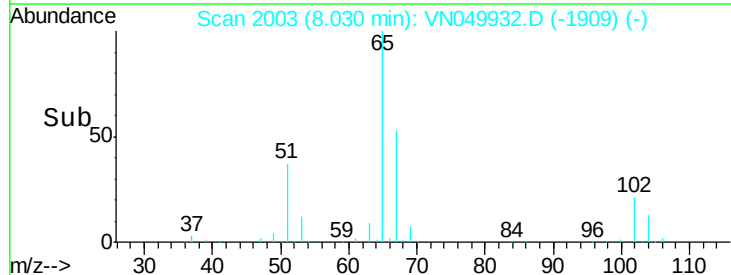
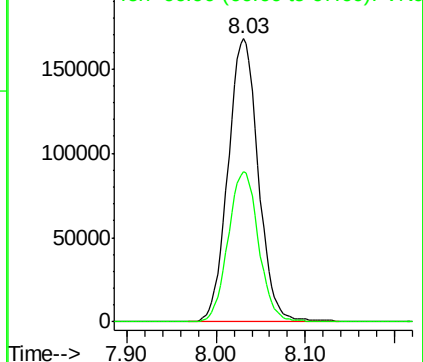
Ion Ratio Lower Upper

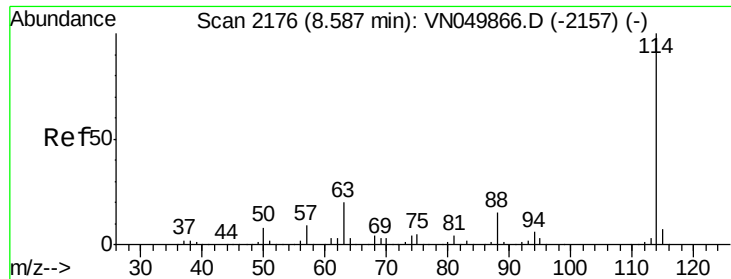
65 100

67 53.2 0.0 107.2



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

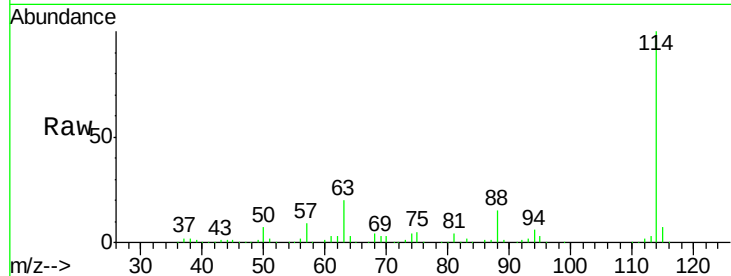




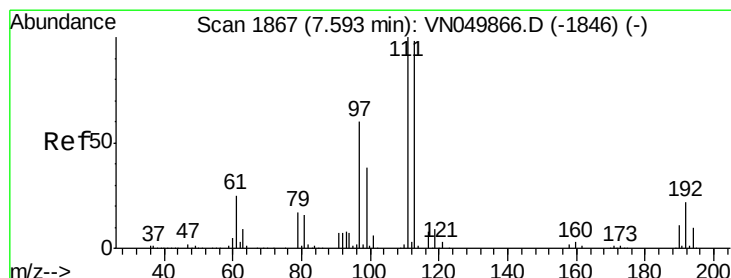
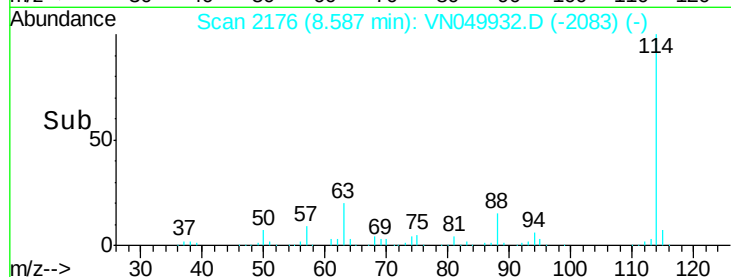
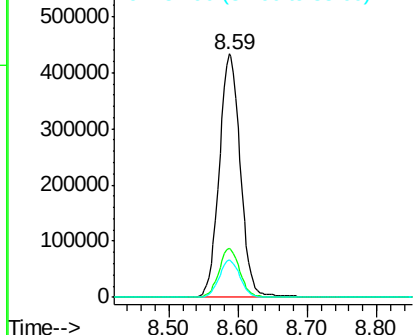
#34  
 1,4-Difluorobenzene  
 Concen: 50.00 ug/l  
 RT: 8.59 min Scan# 2176  
 Delta R.T. 0.00 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0719WBL02

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 20.2  | 0.0   | 39.8  |
| 88      | 15.4  | 0.0   | 30.6  |

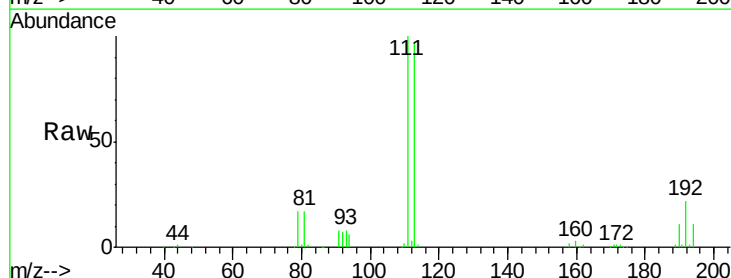


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

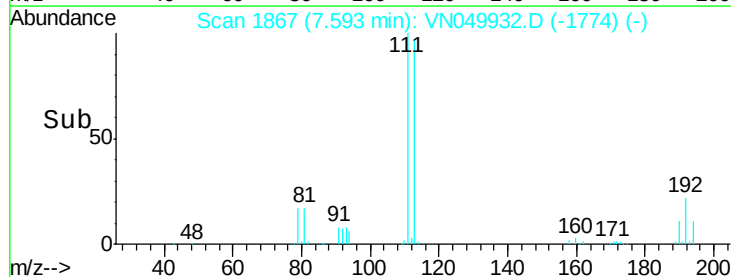
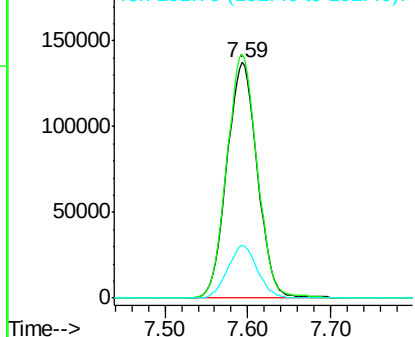


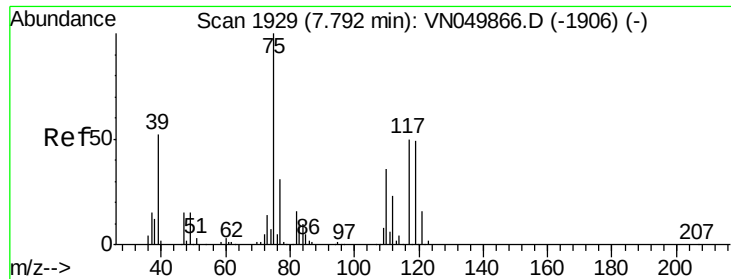
#35  
 Dibromofluoromethane  
 Concen: 45.76 ug/l  
 RT: 7.59 min Scan# 1867  
 Delta R.T. 0.00 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.0 | 81.8  | 122.8 |
| 192     | 21.8  | 17.8  | 26.6  |



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

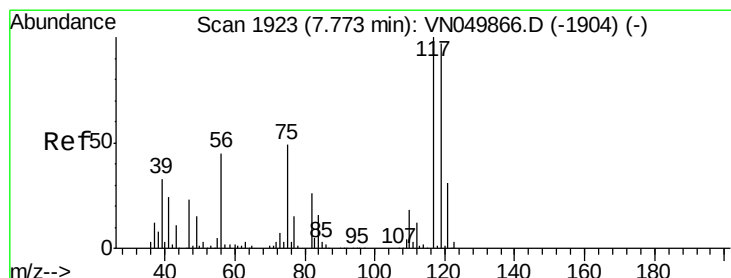
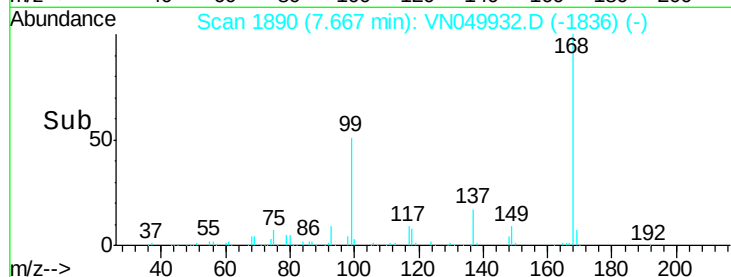
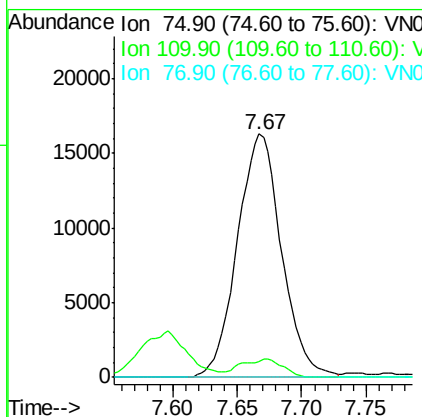
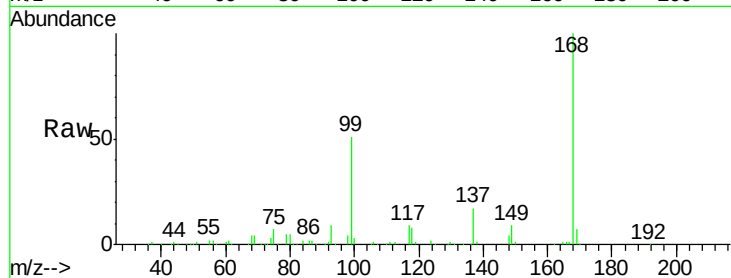




#36  
 1,1-Dichloropropene  
 Concen: 3.82 ug/l  
 RT: 7.67 min Scan# 1890  
 Delta R.T. -0.13 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

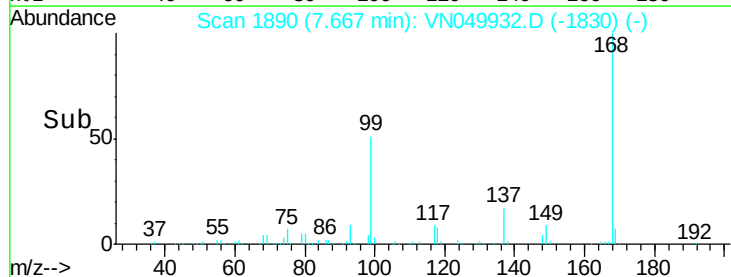
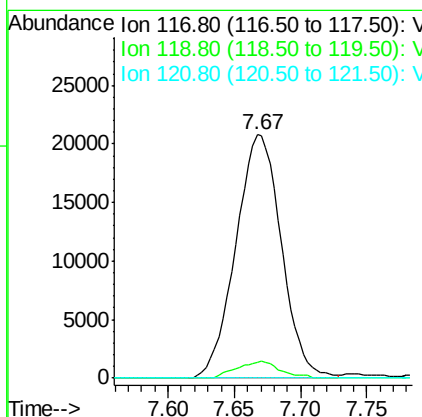
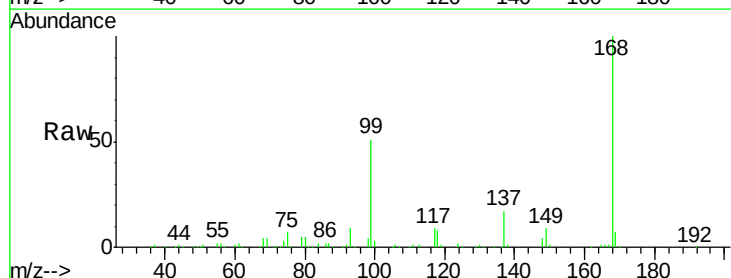
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0719WBL02

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 7.0   | 18.1  | 54.4# |
| 77      | 0.0   | 24.9  | 37.3# |

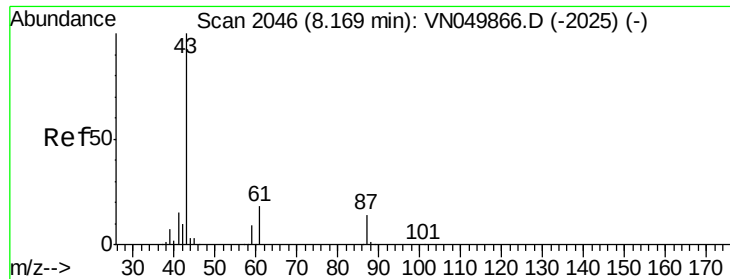


#38  
 Carbon Tetrachloride  
 Concen: 4.56 ug/l  
 RT: 7.67 min Scan# 1890  
 Delta R.T. -0.11 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 6.6   | 77.2  | 115.8# |
| 121     | 0.0   | 25.0  | 37.6#  |







#43

Isopropyl Acetate

Concen: 16.26 ug/l

RT: 8.31 min Scan# 2091

Delta R.T. 0.14 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0719WBL02

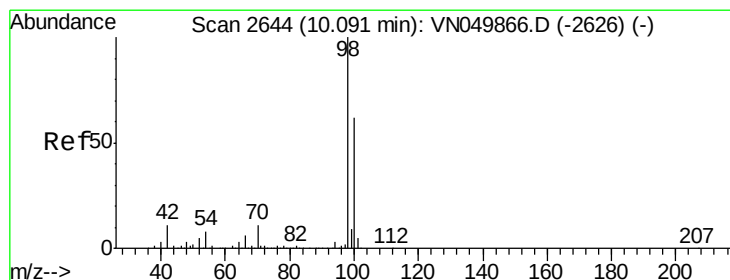
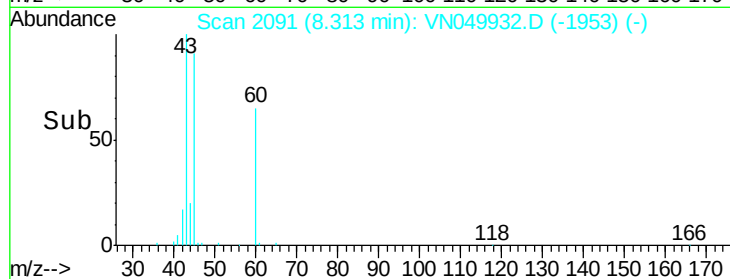
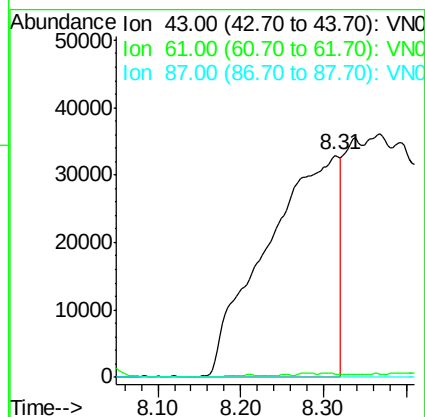
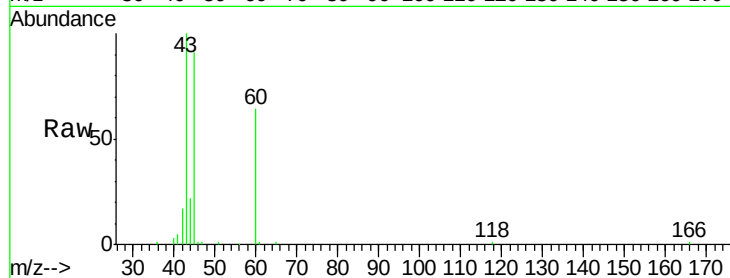
Tot Ion: 43 Resp: 198636

Ion Ratio Lower Upper

43 100

61 0.1 14.9 22.3#

87 0.0 10.0 15.0#



#50

Toluene-d8

Concen: 43.52 ug/l

RT: 10.09 min Scan# 2644

Delta R.T. 0.00 min

Lab File: VN049932.D

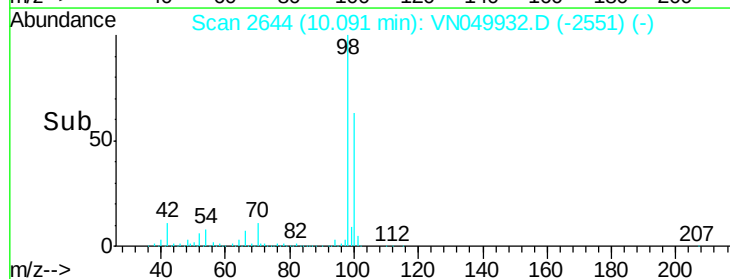
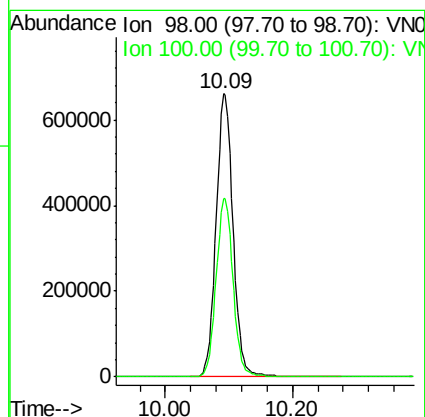
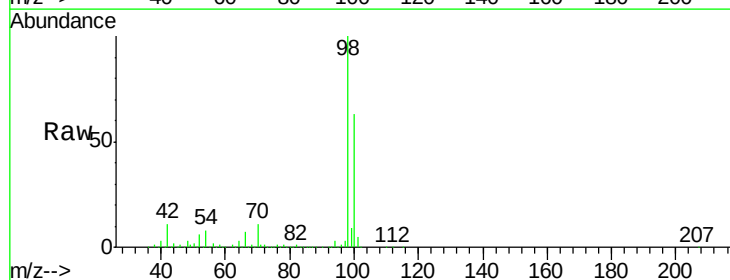
Acq: 19 Jul 2018 22:55

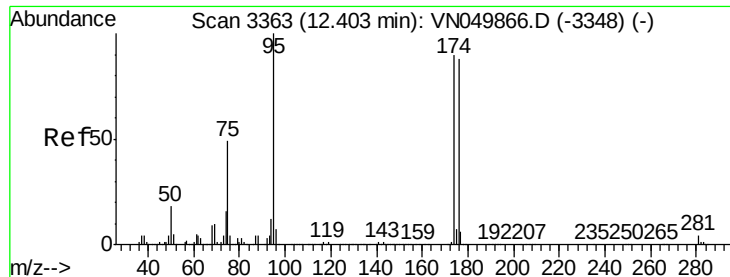
Tgt Ion: 98 Resp: 1219225

Ion Ratio Lower Upper

98 100

100 63.0 51.7 77.5





#62

4-Bromofluorobenzene

Concen: 33.80 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. 0.00 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampled :

VN0719WBL02

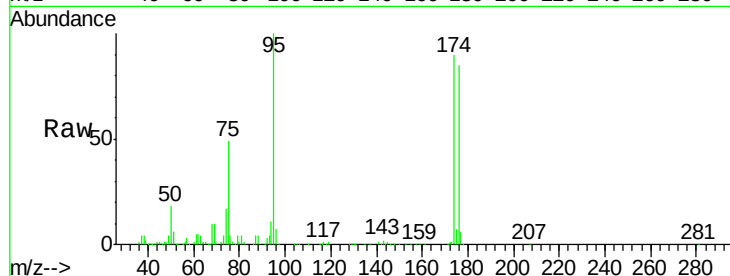
Tot Ion: 95 Resp: 326049

Ion Ratio Lower Upper

95 100

174 91.2 0.0 179.6

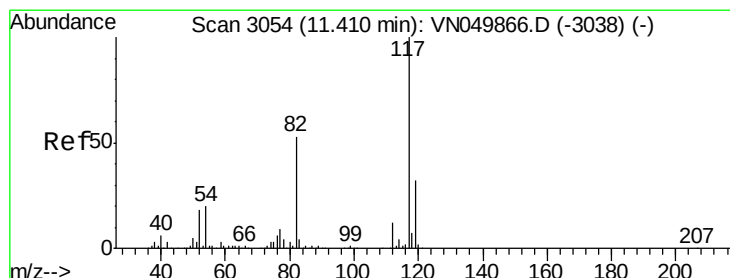
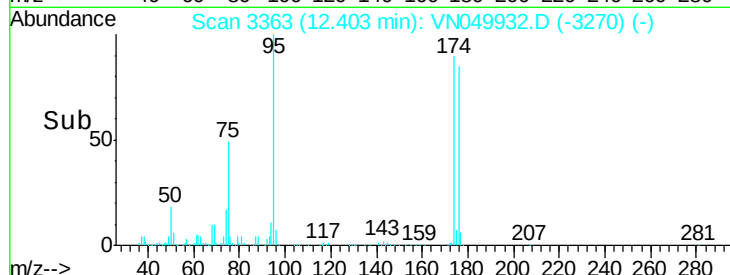
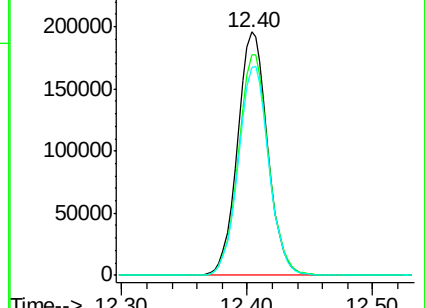
176 86.8 0.0 174.0



Abundance Ion 94.90 (94.60 to 95.60): VN049932.D (-3270) (-)

Ion 173.80 (173.50 to 174.50): VN049932.D (-3270) (-)

Ion 175.80 (175.50 to 176.50): VN049932.D (-3270) (-)



#63

Chlorobenzene-d5

Concen: 50.00 ug/l

RT: 11.41 min Scan# 3054

Delta R.T. 0.00 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

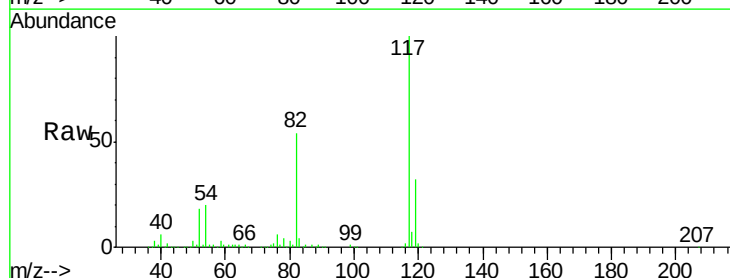
Tgt Ion: 117 Resp: 742458

Ion Ratio Lower Upper

117 100

82 54.0 41.9 62.9

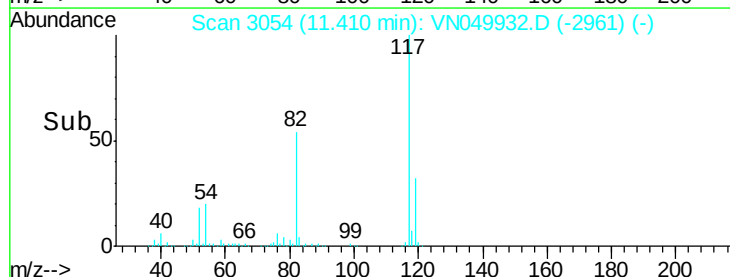
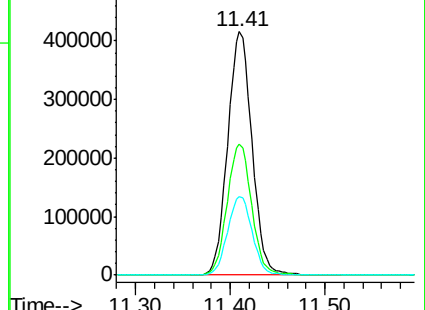
119 32.4 25.4 38.2

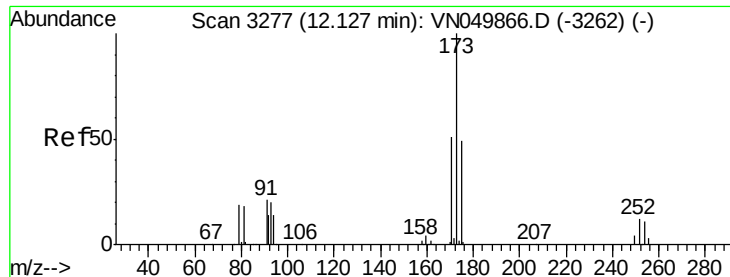


Abundance Ion 116.90 (116.60 to 117.60): VN049932.D (-2961) (-)

Ion 82.00 (81.70 to 82.70): VN049932.D (-2961) (-)

Ion 118.90 (118.60 to 119.60): VN049932.D (-2961) (-)





#71

Bromoform

Concen: 0.58 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. 0.28 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampleId :

VN0719WBL02

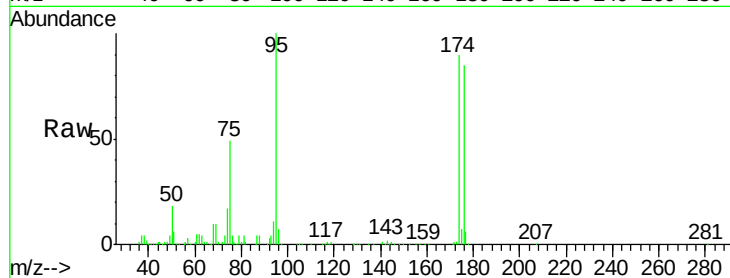
Tot Ion:173 Resp: 2973

Ion Ratio Lower Upper

173 100

175 586.3 24.6 73.8#

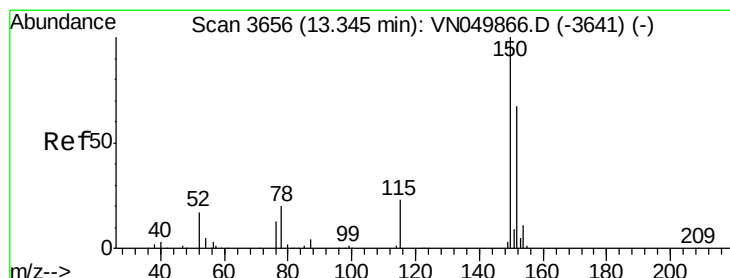
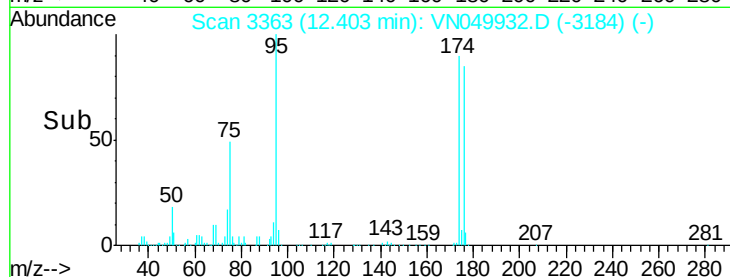
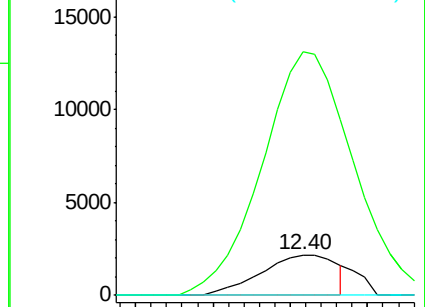
254 0.0 0.2 0.2#



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: 50.00 ug/l

RT: 13.35 min Scan# 3657

Delta R.T. 0.00 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

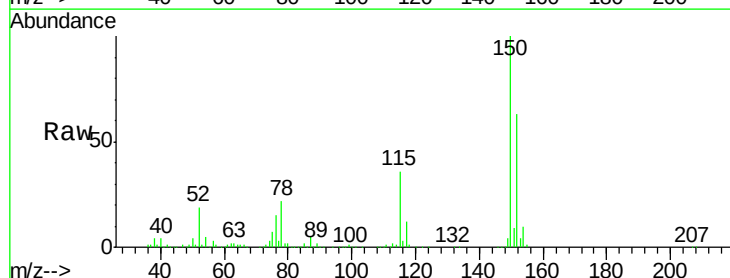
Tgt Ion:152 Resp: 272585

Ion Ratio Lower Upper

152 100

115 56.9 28.1 84.2

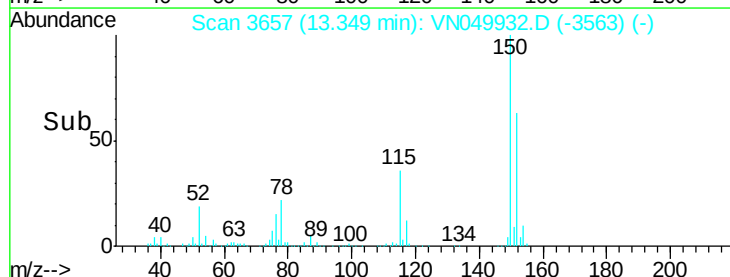
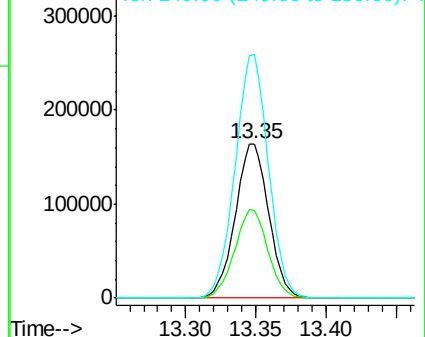
150 157.2 0.0 347.6

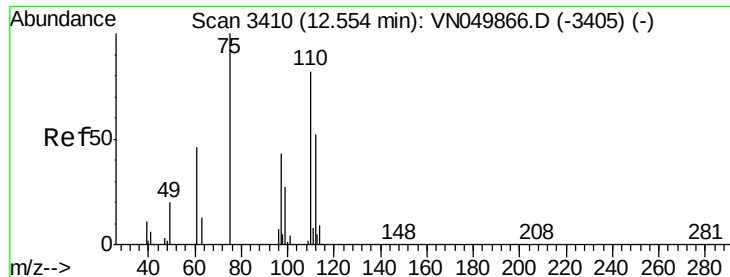


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 31.10 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. -0.15 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

Instrument :

MSVOA\_N

ClientSampleId :

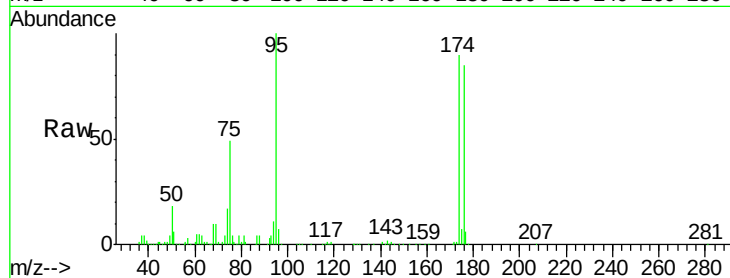
VN0719WBL02

Tot Ion: 75 Resp: 159017

Ion Ratio Lower Upper

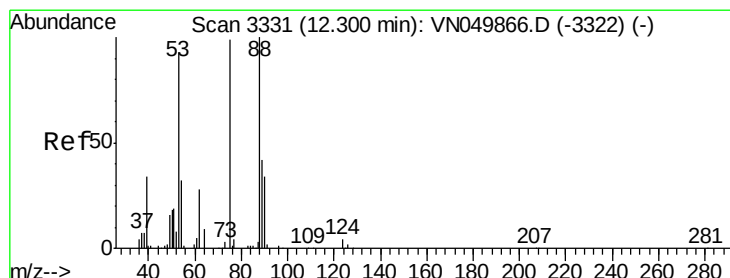
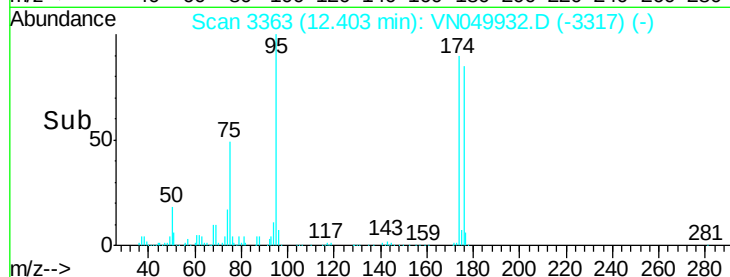
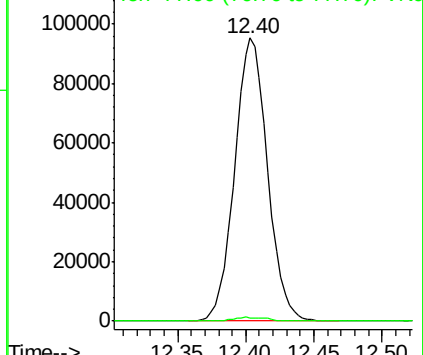
75 100

77 1.5 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: 97.24 ug/l

RT: 12.40 min Scan# 3363

Delta R.T. 0.10 min

Lab File: VN049932.D

Acq: 19 Jul 2018 22:55

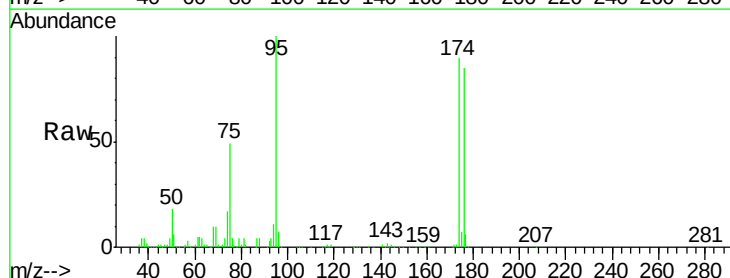
Tgt Ion: 75 Resp: 159017

Ion Ratio Lower Upper

75 100

53 0.1 73.9 110.9#

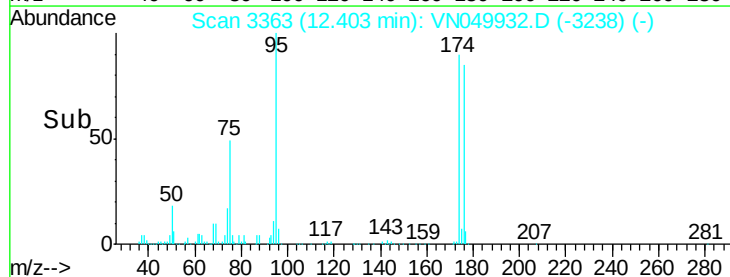
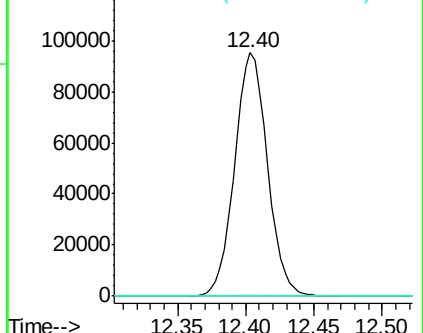
89 0.0 35.9 53.9#

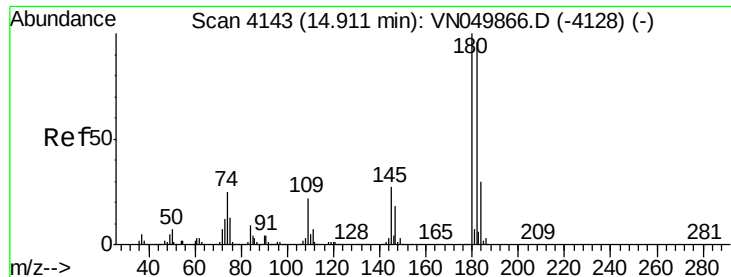


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0

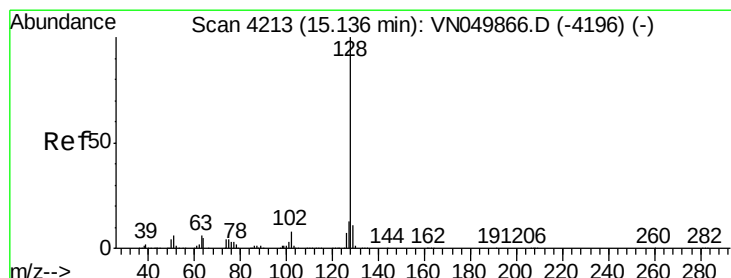
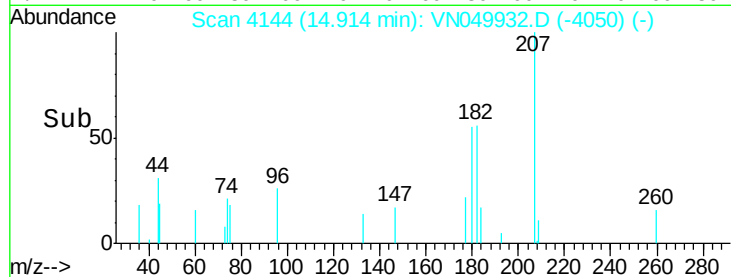
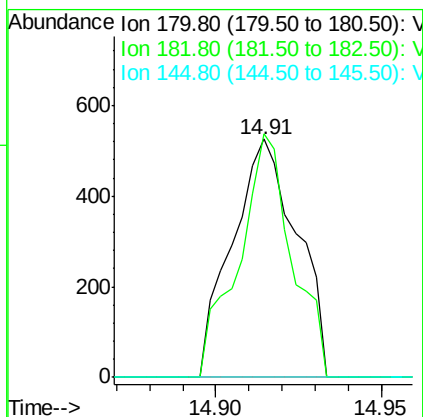
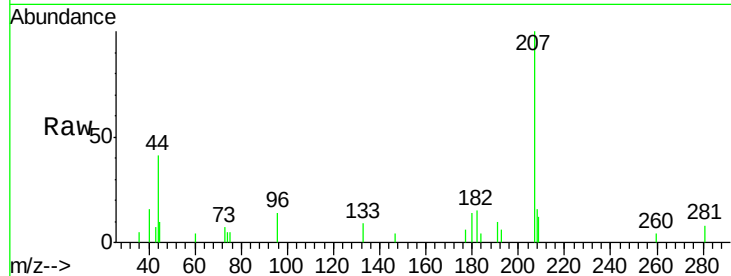




#93  
 1,2,4-Trichlorobenzene  
 Concen: 3.60 ug/l  
 RT: 14.91 min Scan# 4144  
 Delta R.T. 0.00 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

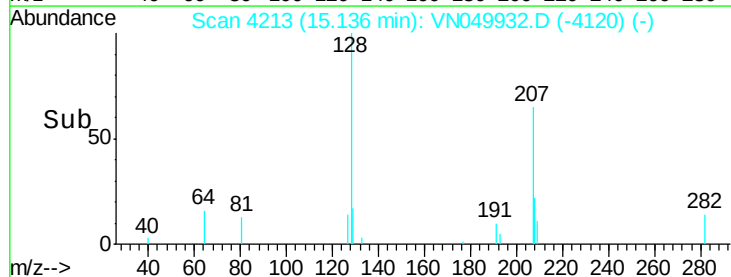
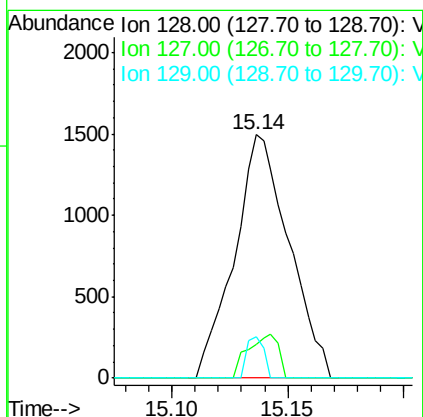
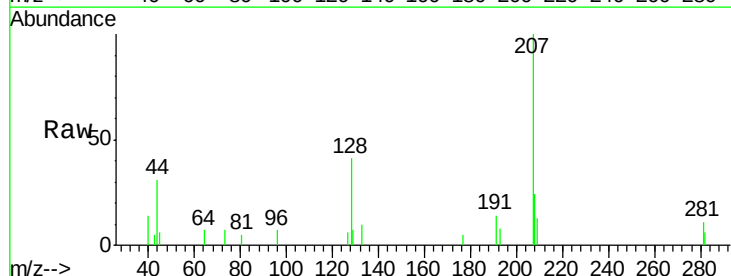
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0719WBL02

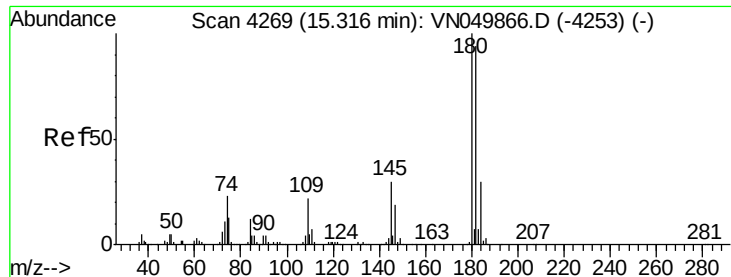
Tot Ion:180 Resp: 716  
 Ion Ratio Lower Upper  
 180 100  
 182 84.1 47.3 141.9  
 145 0.0 14.4 43.0#



#95  
 Naphthalene  
 Concen: 4.66 ug/l  
 RT: 15.14 min Scan# 4213  
 Delta R.T. 0.00 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

Tgt Ion:128 Resp: 2439  
 Ion Ratio Lower Upper  
 128 100  
 127 10.1 10.4 15.6#  
 129 5.2 8.6 13.0#

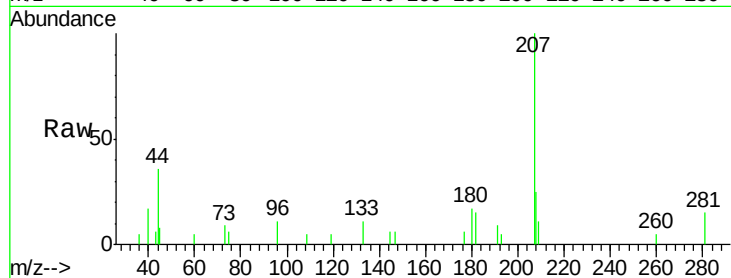




#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.21 ug/l  
 RT: 15.31 min Scan# 4268  
 Delta R.T. -0.00 min  
 Lab File: VN049932.D  
 Acq: 19 Jul 2018 22:55

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0719WBL02

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 83.8  | 47.4  | 142.2 |
| 145     | 24.6  | 15.2  | 45.6  |



Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.90 (144.60 to 145.60): V

