

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN022420\  
 Data File : VN060216.D  
 Acq On : 24 Feb 2020 17:52  
 Operator : JC/MD  
 Sample : L1671-04  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Feb 25 00:20:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 176332   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 276682   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 257418   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 116603   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.00  | 65   | 102841   | 47.93 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.86% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 83827    | 49.29 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.58% |          |
| 50) Toluene-d8              | 10.08 | 98   | 331700   | 49.53 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.06% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 119406   | 48.52 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.04% |          |

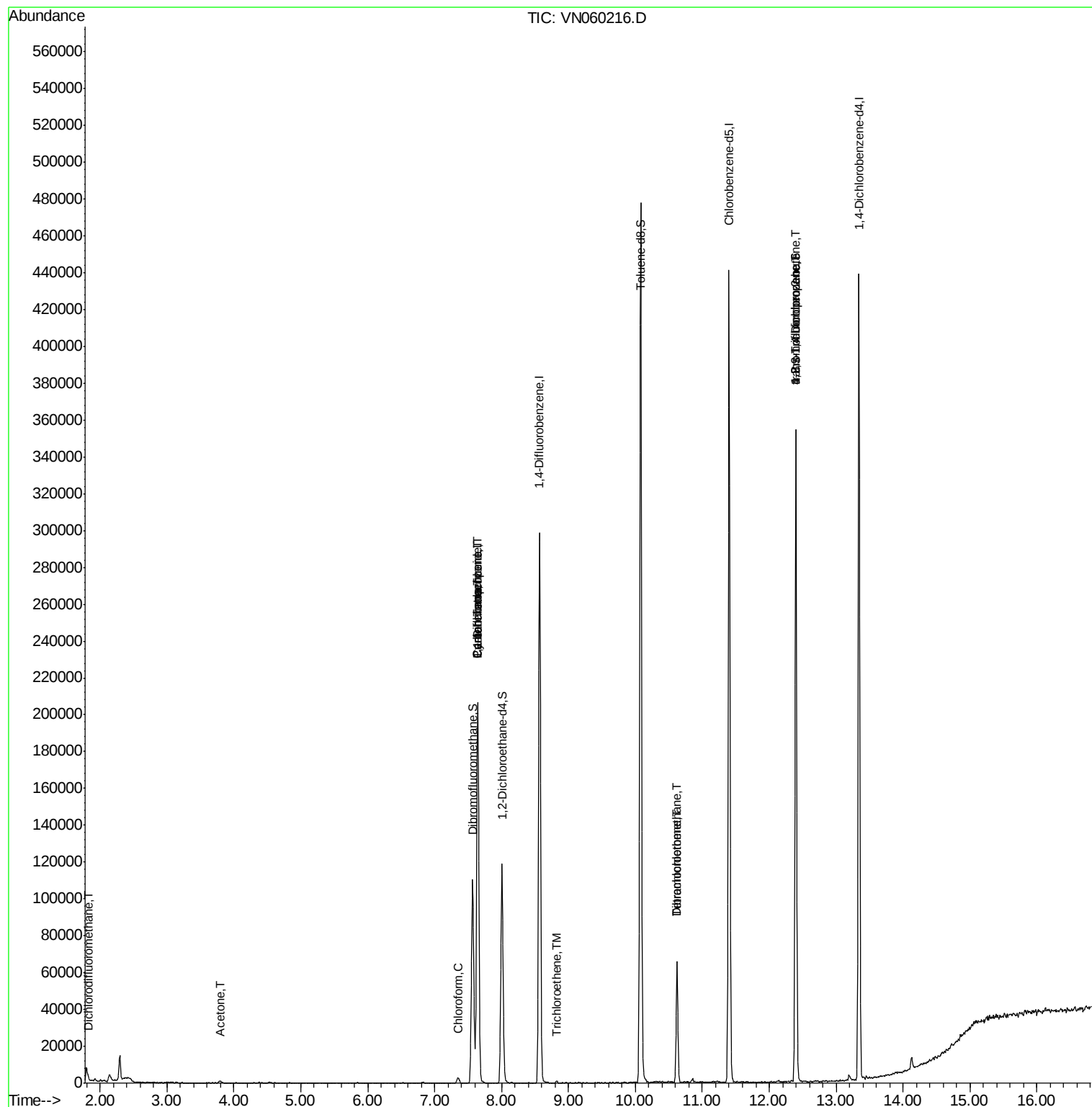
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.83  | 85   | 497      | 0.282     | ug/l   | 91     |
| 16) Acetone                    | 3.79  | 43   | 988      | 1.056     | ug/l   | 99     |
| 30) Chloroform                 | 7.35  | 83   | 3446     | 1.010     | ug/l   | 95     |
| 31) Cyclohexane                | 7.64  | 56   | 3376     | 1.112     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 12694    | 4.953     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 16187    | 5.816     | ug/l # | 16     |
| 44) Trichloroethene            | 8.81  | 130  | 434      | 0.206     | ug/l   | 93     |
| 60) Dibromochloromethane       | 10.62 | 129  | 14252    | 6.530     | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.62 | 164  | 15954    | 8.153     | ug/l   | 97     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 61284    | 27.471    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 61284    | 67.263    | ug/l # | 12     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.35 | 75   | 29       | Below Cal | #      | 1      |

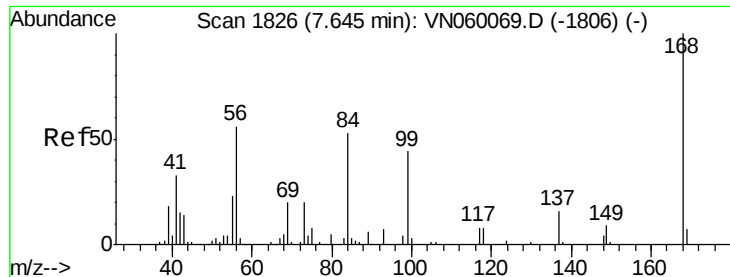
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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MSVOA\_N  
ClientSampleId :

Quant Time: Feb 25 00:20:45 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
Quant Title : SW846 8260  
QLast Update : Wed Feb 12 14:12:21 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.00 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

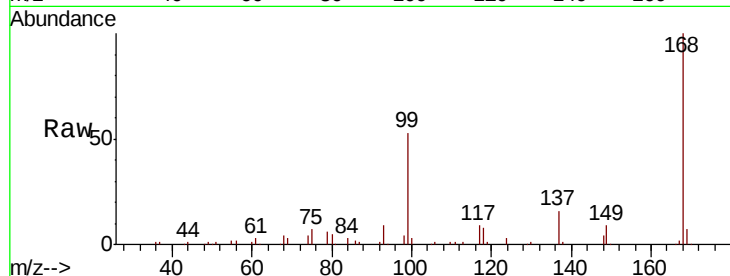
Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion:168 Resp: 176332

Ion Ratio Lower Upper

168 100

99 53.2 42.7 64.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.64

80000

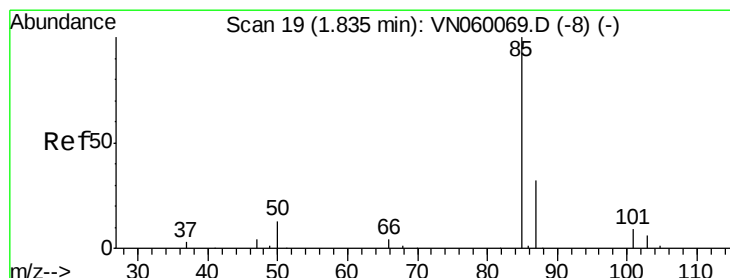
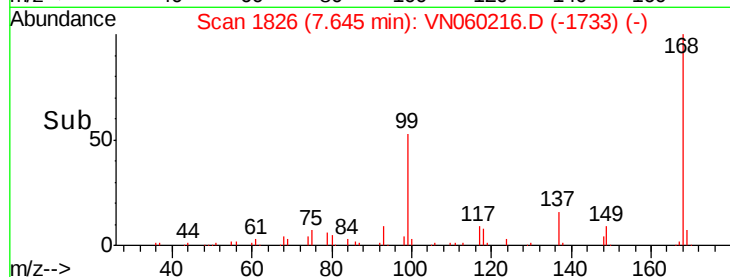
60000

40000

20000

0

Time--> 7.50 7.60 7.70 7.80



#2

Dichlorodifluoromethane

Concen: 0.282 ug/l

RT: 1.83 min Scan# 18

Delta R.T. -0.00 min

Lab File: VN060216.D

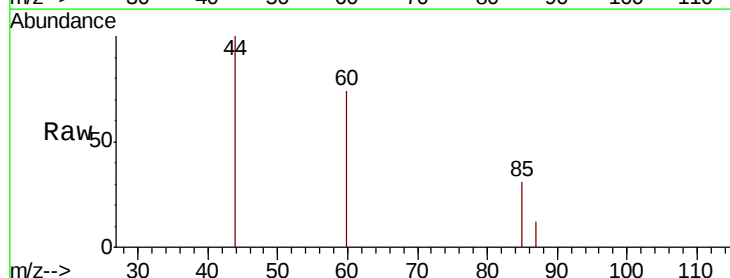
Acq: 24 Feb 2020 17:52

Tgt Ion: 85 Resp: 497

Ion Ratio Lower Upper

85 100

87 37.4 16.1 48.2



Abundance Ion 84.90 (84.60 to 85.60): VN

Ion 86.90 (86.60 to 87.60): VN

1.83

500

400

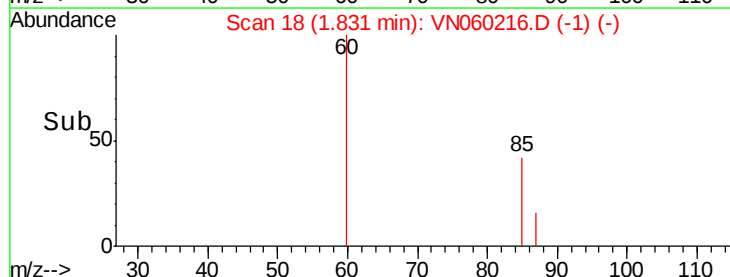
300

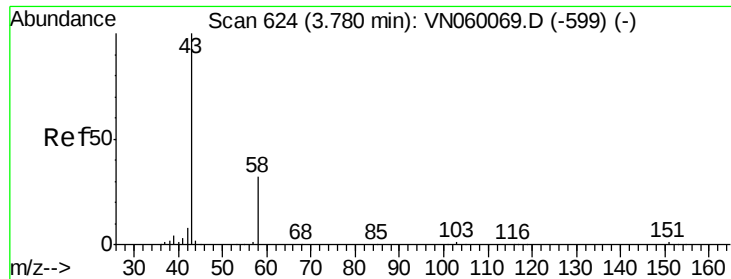
200

100

0

Time--> 1.80 1.82 1.84 1.86

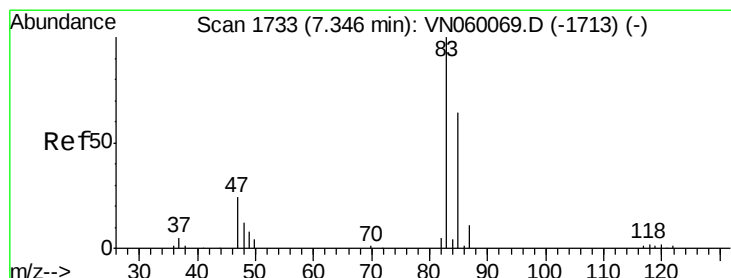
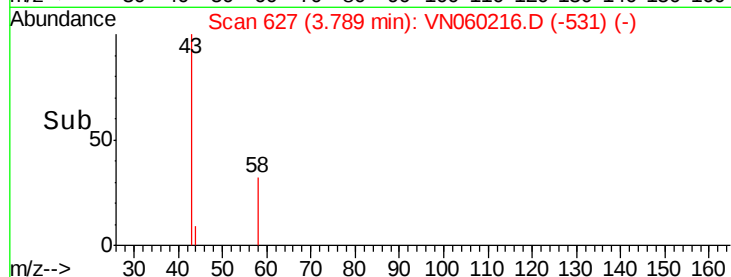
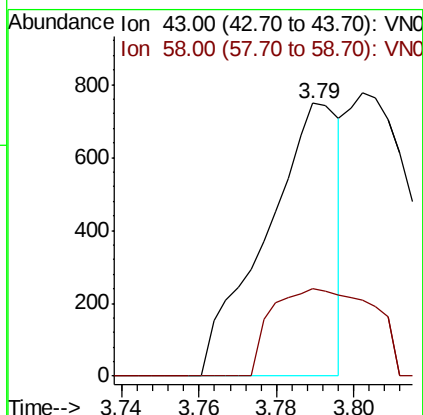
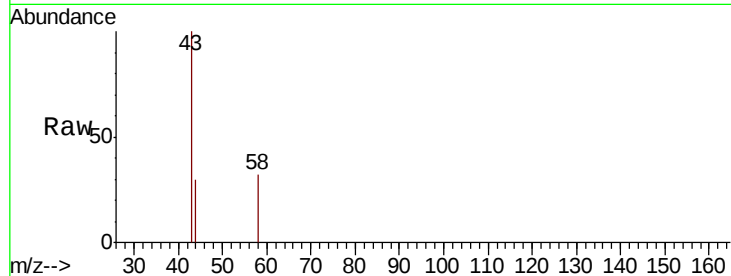




#16  
Acetone  
Concen: 1.056 ug/l  
RT: 3.79 min Scan# 627  
Delta R.T. 0.01 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

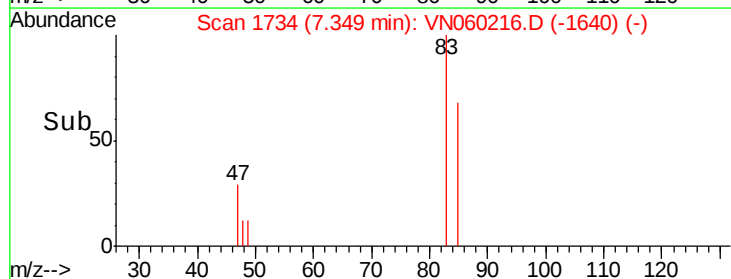
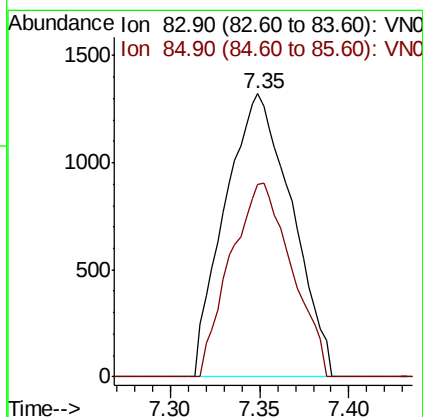
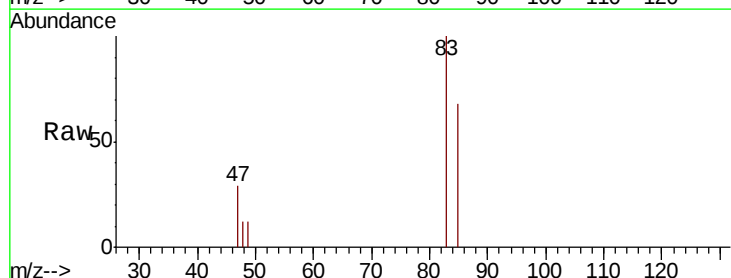
Instrument :  
MSVOA\_N  
ClientSampled :

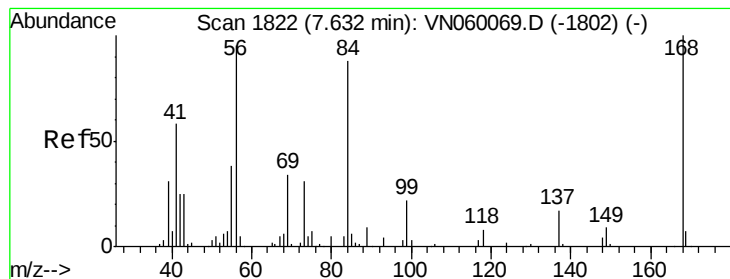
Tot Ion: 43 Resp: 988  
Ion Ratio Lower Upper  
43 100  
58 32.0 25.2 37.8



#30  
Chloroform  
Concen: 1.010 ug/l  
RT: 7.35 min Scan# 1734  
Delta R.T. 0.00 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Tgt Ion: 83 Resp: 3446  
Ion Ratio Lower Upper  
83 100  
85 67.9 51.4 77.0





#31

Cyclohexane

Concen: 1.112 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.01 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

Instrument :

MSVOA\_N

ClientSampled :

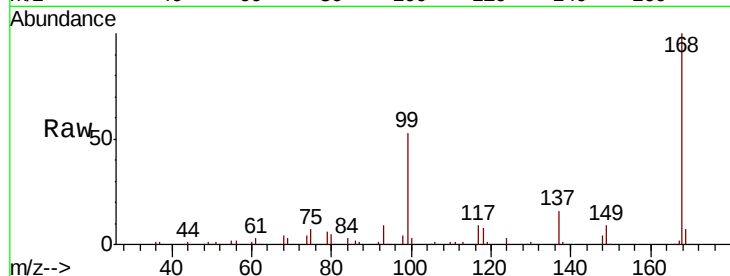
Tot Ion: 56 Resp: 3376

Ion Ratio Lower Upper

56 100

69 169.6 28.3 42.5#

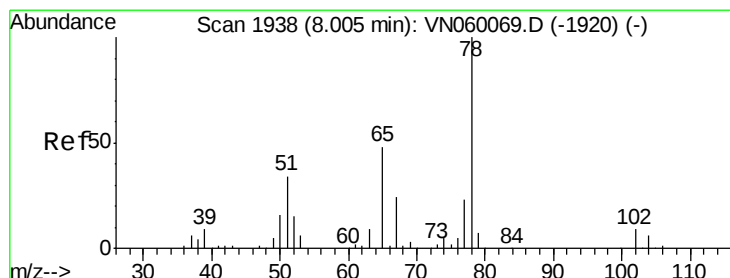
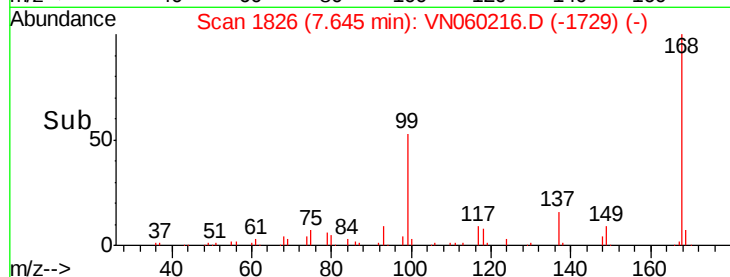
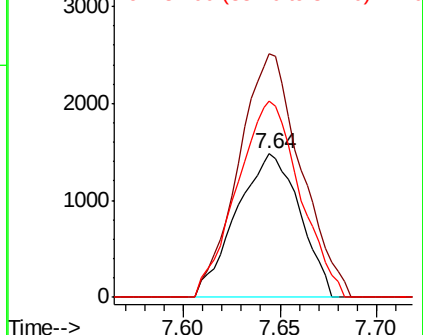
84 137.1 72.6 108.8#



Abundance Ion 56.00 (55.70 to 56.70): VN060069.D (-1802) (-)

Ion 69.00 (68.70 to 69.70): VN060069.D (-1802) (-)

Ion 84.00 (83.70 to 84.70): VN060069.D (-1802) (-)



#33

1,2-Dichloroethane-d4

Concen: 47.930 ug/l

RT: 8.00 min Scan# 1938

Delta R.T. 0.00 min

Lab File: VN060216.D

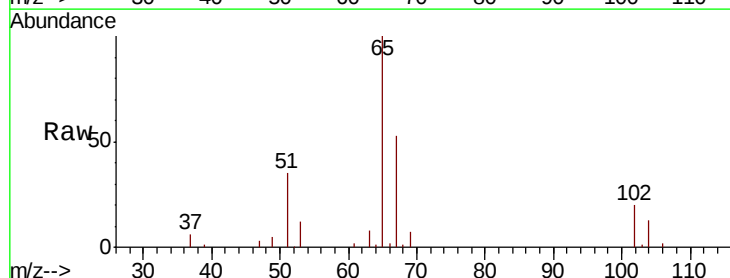
Acq: 24 Feb 2020 17:52

Tgt Ion: 65 Resp: 102841

Ion Ratio Lower Upper

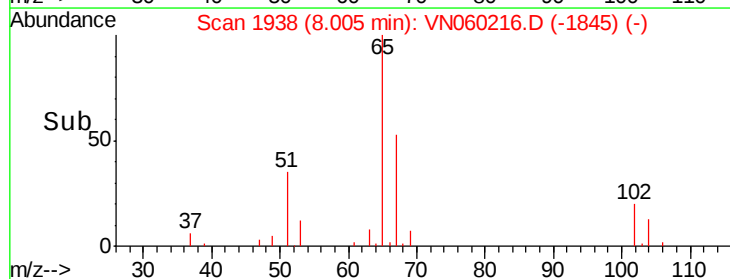
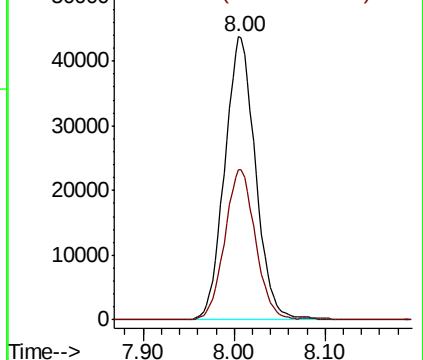
65 100

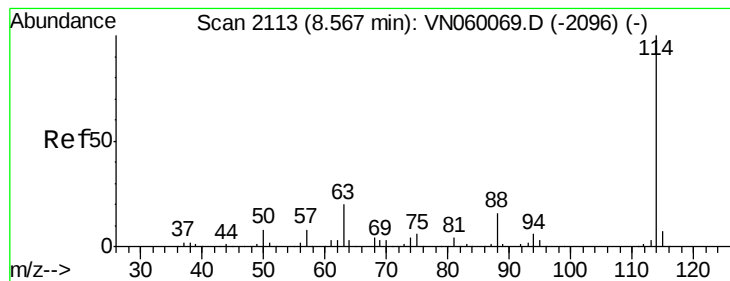
67 52.8 0.0 104.0



Abundance Ion 64.90 (64.60 to 65.60): VN060069.D (-1920) (-)

Ion 66.90 (66.60 to 67.60): VN060069.D (-1920) (-)





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2113

Delta R.T. 0.00 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

Instrument :

MSVOA\_N

ClientSampleId :

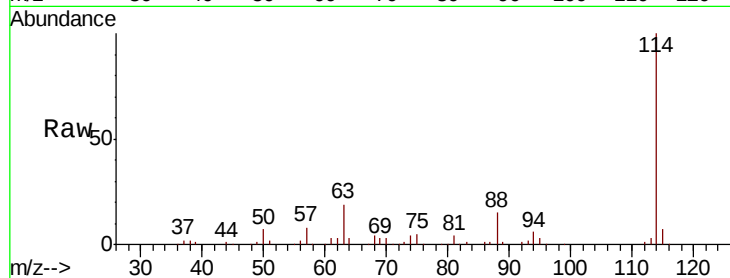
Tot Ion:114 Resp: 276682

Ion Ratio Lower Upper

114 100

63 19.2 0.0 40.0

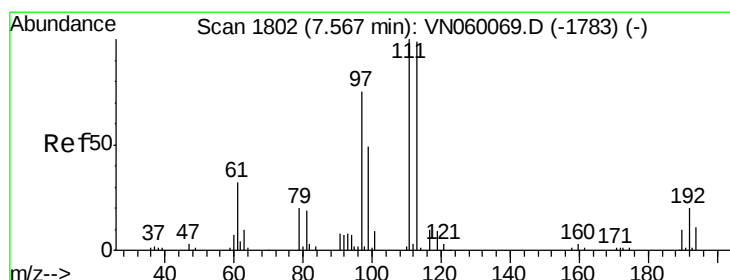
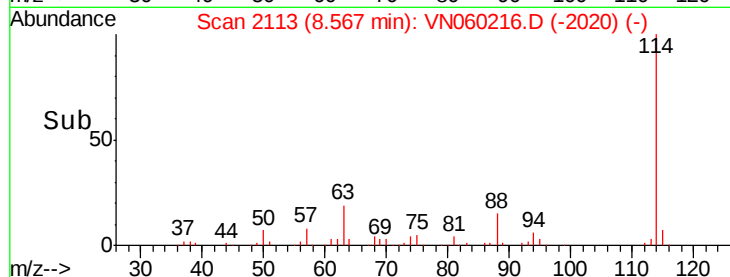
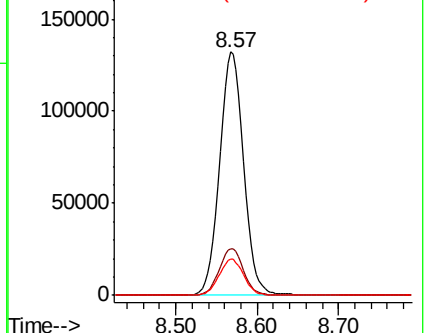
88 15.0 0.0 31.6



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: 49.288 ug/l

RT: 7.57 min Scan# 1802

Delta R.T. 0.00 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

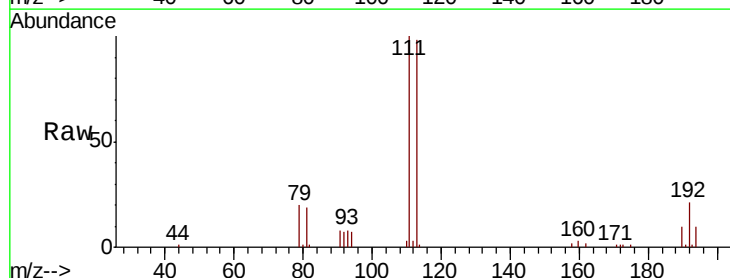
Tgt Ion:113 Resp: 83827

Ion Ratio Lower Upper

113 100

111 102.2 81.4 122.2

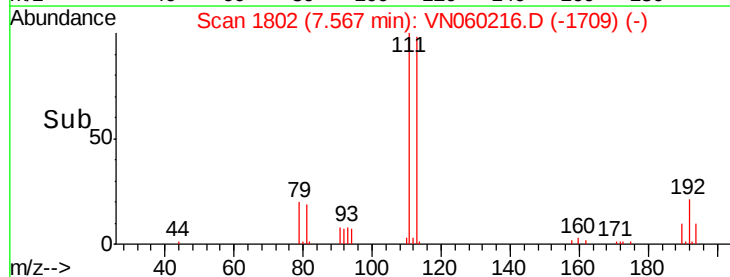
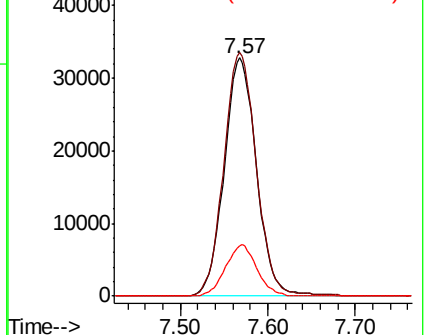
192 21.0 16.2 24.2

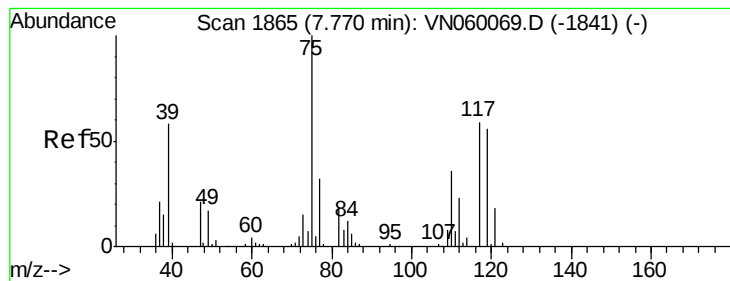


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.953 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. -0.13 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

Instrument :

MSVOA\_N

ClientSampleId :

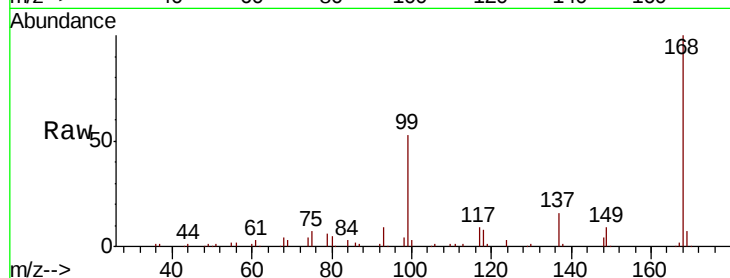
Tot Ion: 75 Resp: 12694

Ion Ratio Lower Upper

75 100

110 8.1 18.1 54.3#

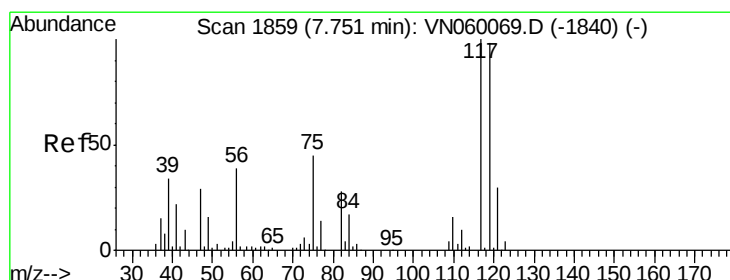
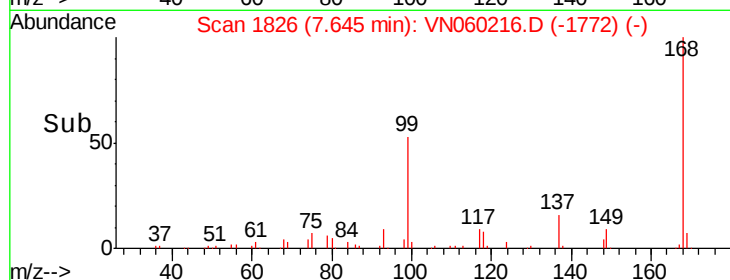
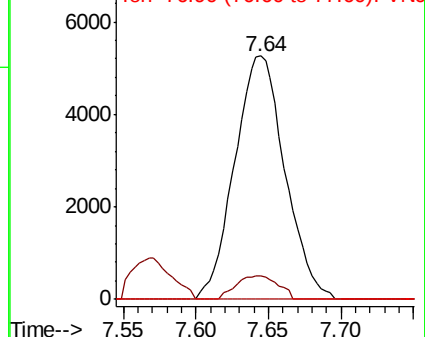
77 0.0 25.1 37.7#



Abundance Ion 74.90 (74.60 to 75.60): VN060069.D (-1841) (-)

Ion 109.90 (109.60 to 110.60): VN060069.D (-1841) (-)

Ion 76.90 (76.60 to 77.60): VN060069.D (-1841) (-)



#38

Carbon Tetrachloride

Concen: 5.816 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.11 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

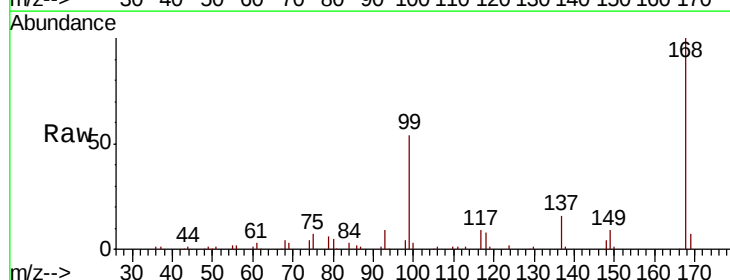
Tgt Ion: 117 Resp: 16187

Ion Ratio Lower Upper

117 100

119 5.7 78.2 117.4#

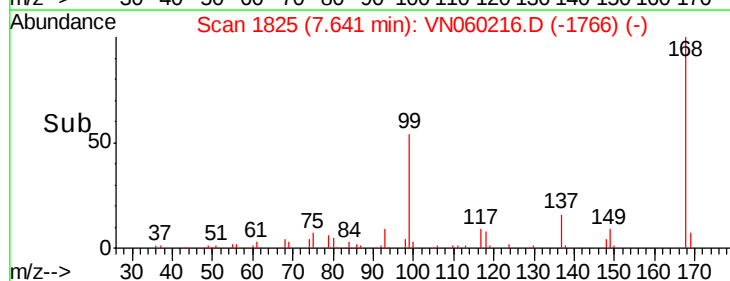
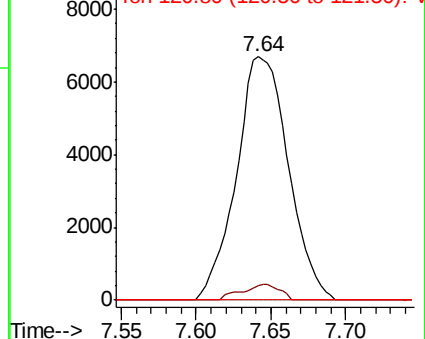
121 0.0 24.2 36.2#

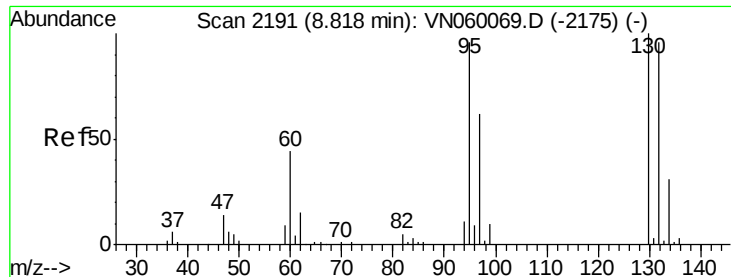


Abundance Ion 116.80 (116.50 to 117.50): VN060069.D (-1840) (-)

Ion 118.80 (118.50 to 119.50): VN060069.D (-1840) (-)

Ion 120.80 (120.50 to 121.50): VN060069.D (-1840) (-)





#44

Trichloroethene

Concen: 0.206 ug/l

RT: 8.81 min Scan# 2190

Delta R.T. -0.00 min

Lab File: VN060216.D

Acq: 24 Feb 2020 17:52

Instrument :

MSVOA\_N

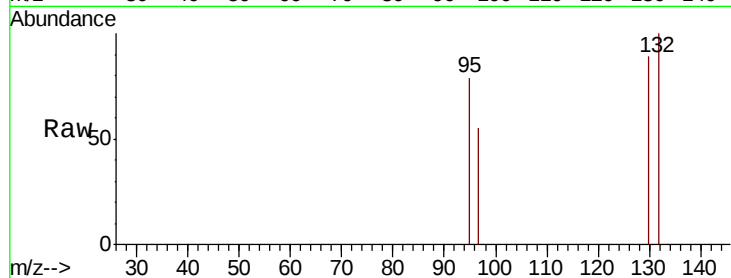
ClientSampled :

Tot Ion:130 Resp: 434

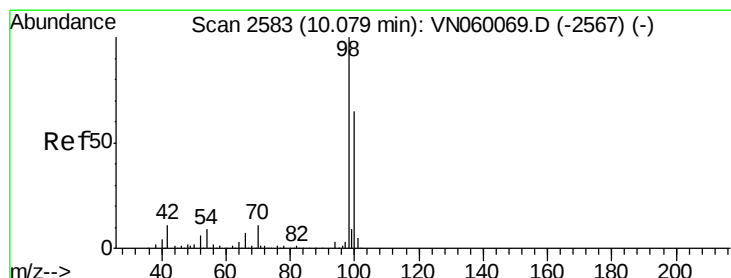
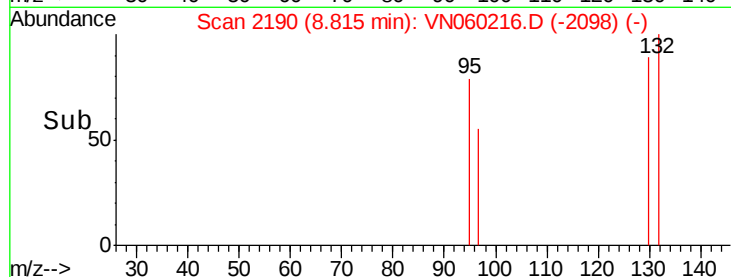
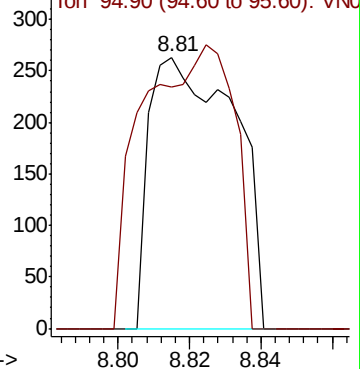
Ion Ratio Lower Upper

130 100

95 89.0 0.0 192.4



Abundance Ion 129.80 (129.50 to 130.50): VN060069.D (-2175) (-)



#50

Toluene-d8

Concen: 49.526 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. 0.00 min

Lab File: VN060216.D

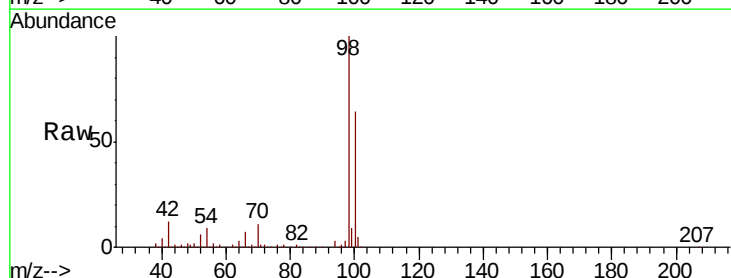
Acq: 24 Feb 2020 17:52

Tgt Ion: 98 Resp: 331700

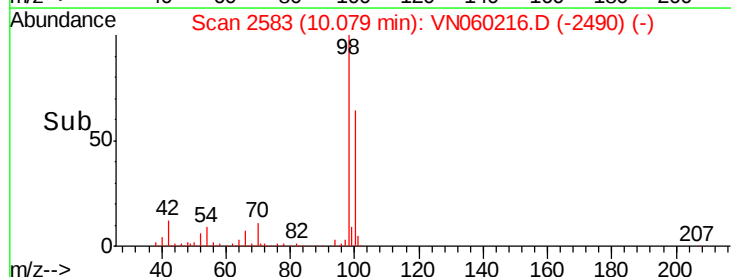
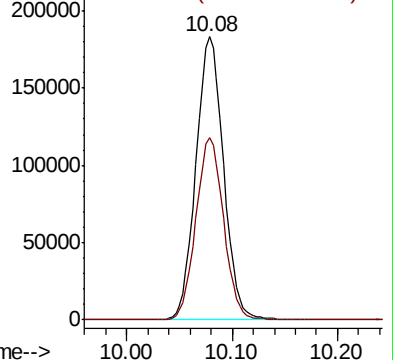
Ion Ratio Lower Upper

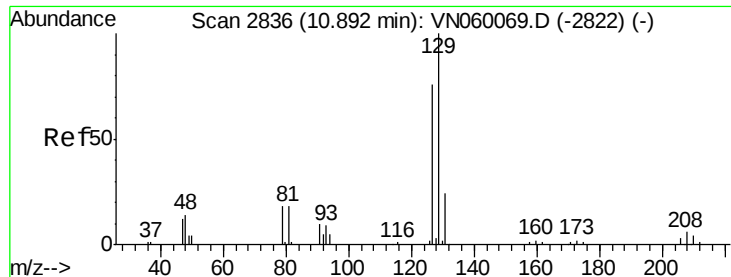
98 100

100 64.6 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VN060069.D (-2567) (-)

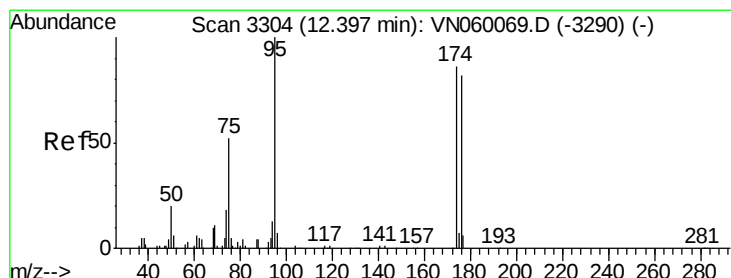
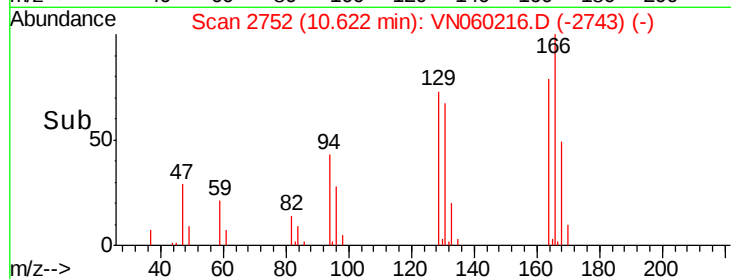
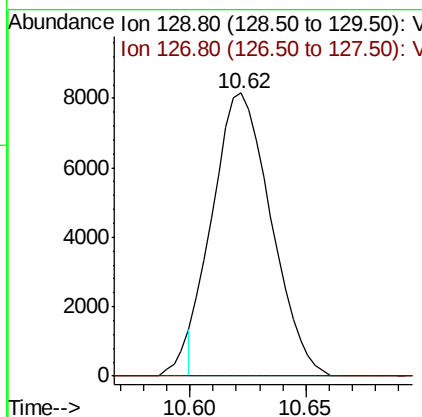
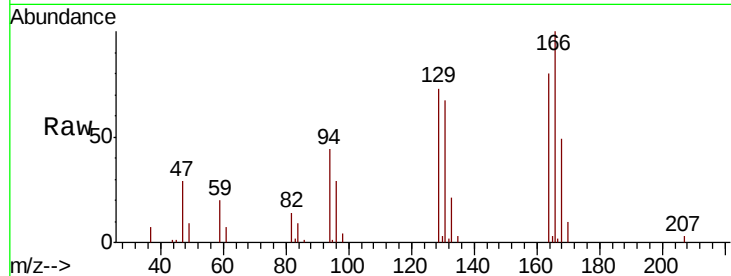




#60  
 Dibromochloromethane  
 Concen: 6.530 ug/l  
 RT: 10.62 min Scan# 2752  
 Delta R.T. -0.27 min  
 Lab File: VN060216.D  
 Acq: 24 Feb 2020 17:52

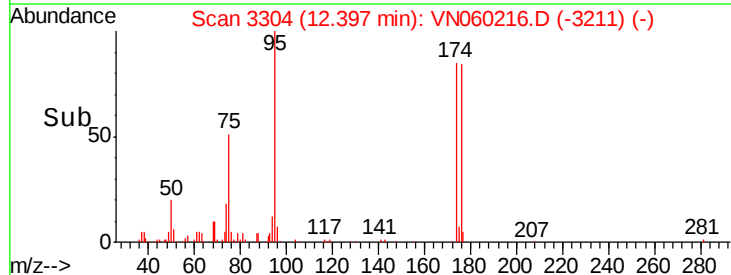
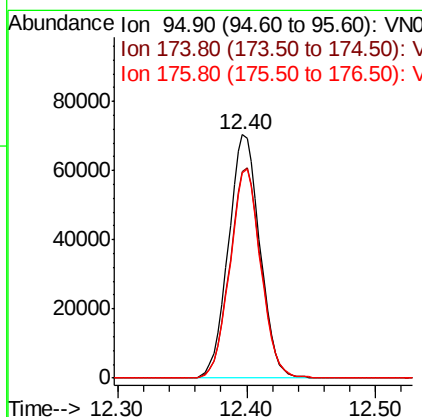
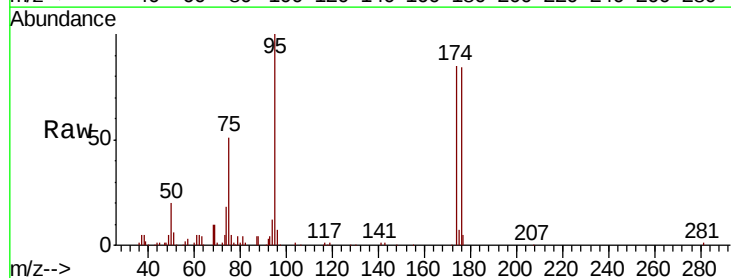
Instrument :  
 MSVOA\_N  
 ClientSampleId :

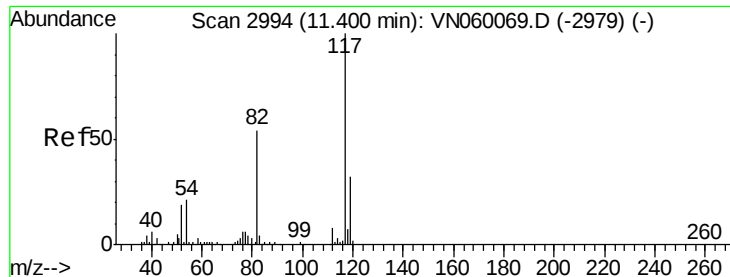
Tot Ion:129 Resp: 14252  
 Ion Ratio Lower Upper  
 129 100  
 127 0.0 38.0 114.1#



#62  
 4-Bromofluorobenzene  
 Concen: 48.519 ug/l  
 RT: 12.40 min Scan# 3304  
 Delta R.T. 0.00 min  
 Lab File: VN060216.D  
 Acq: 24 Feb 2020 17:52

Tgt Ion: 95 Resp: 119406  
 Ion Ratio Lower Upper  
 95 100  
 174 85.2 0.0 169.8  
 176 83.9 0.0 164.8

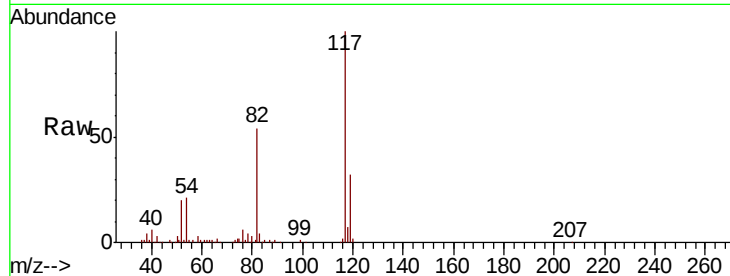




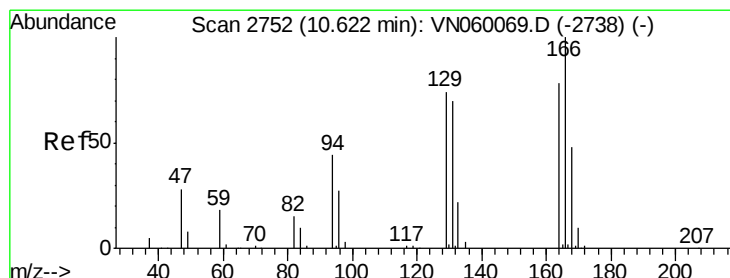
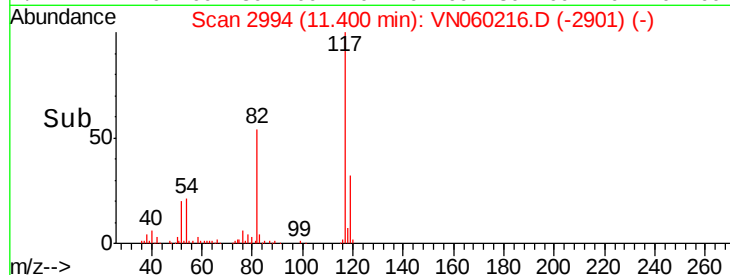
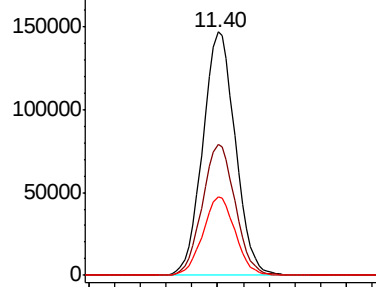
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2994  
Delta R.T. 0.00 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Instrument :  
MSVOA\_N  
ClientSampleId :

Tot Ion:117 Resp: 257418  
Ion Ratio Lower Upper  
117 100  
82 53.7 43.4 65.0  
119 32.1 25.8 38.6

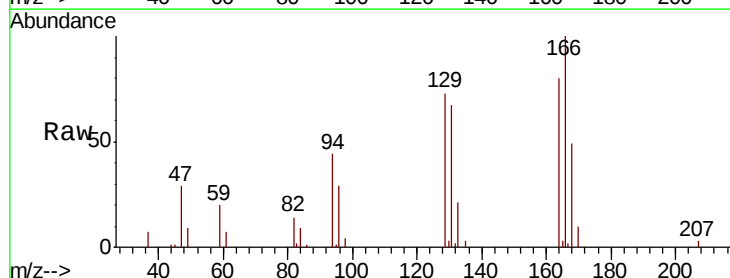


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

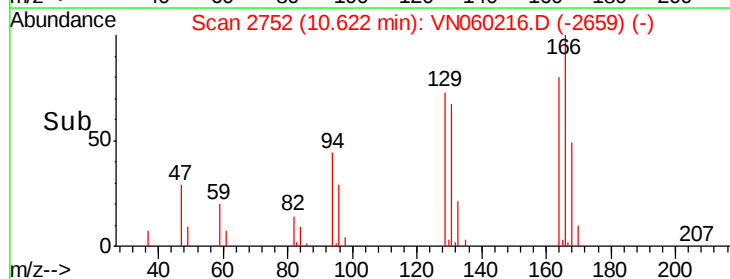
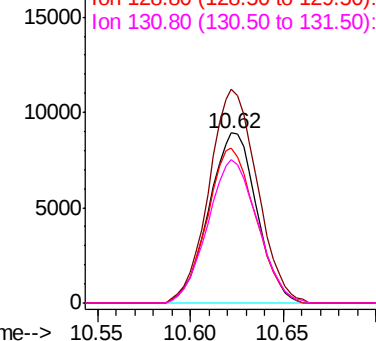


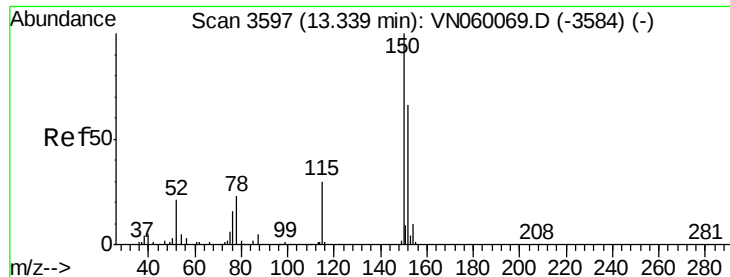
#64  
Tetrachloroethene  
Concen: 8.153 ug/l  
RT: 10.62 min Scan# 2752  
Delta R.T. 0.00 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Tgt Ion:164 Resp: 15954  
Ion Ratio Lower Upper  
164 100  
166 125.6 101.9 152.9  
129 91.4 75.4 113.0  
131 84.5 71.4 107.2



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



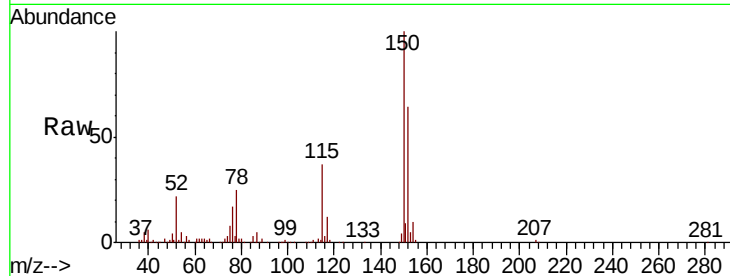


#72

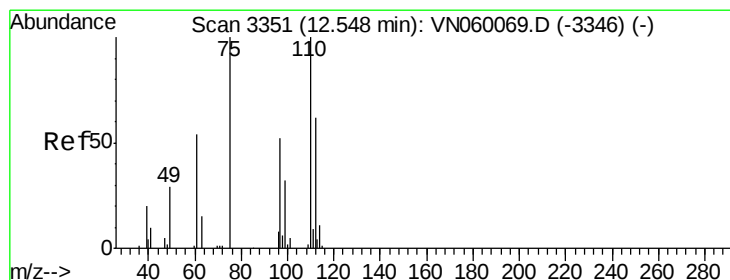
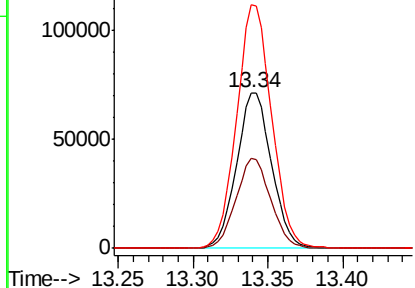
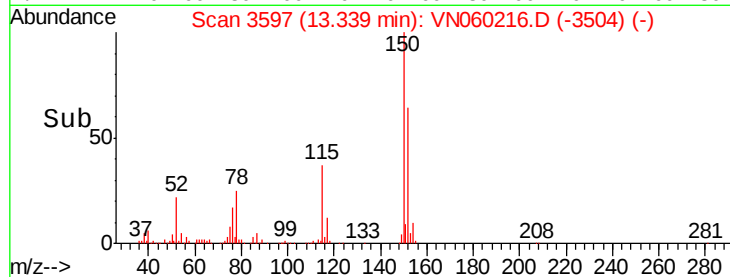
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.34 min Scan# 3597  
Delta R.T. 0.00 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Instrument :  
MSVOA\_N  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 57.6  | 28.9  | 86.8  |
| 150     | 156.2 | 0.0   | 342.4 |



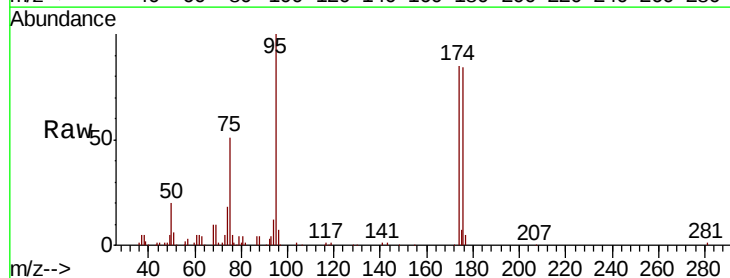
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



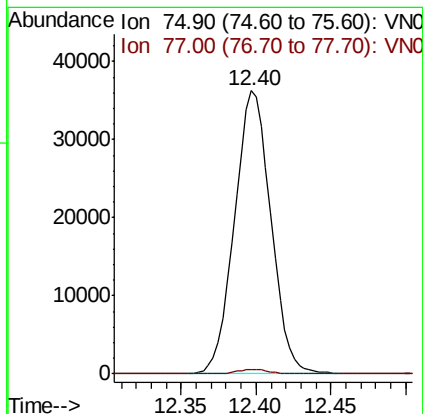
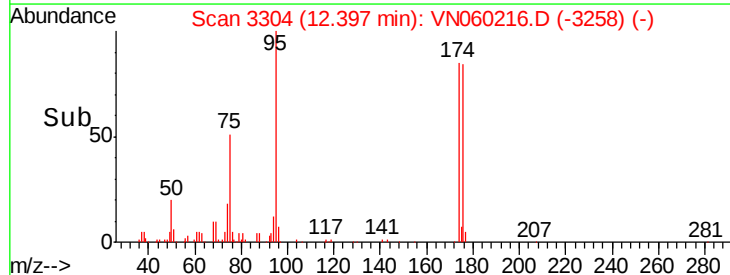
#76

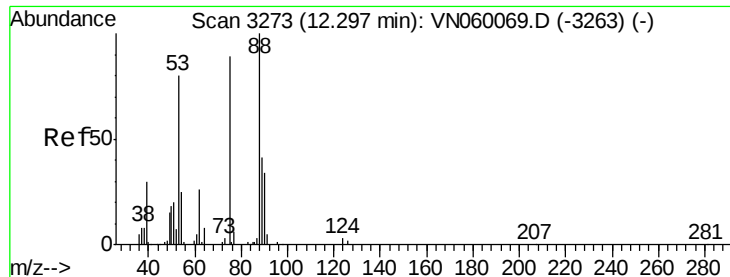
1,2,3-Trichloropropane  
Concen: 27.471 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. -0.15 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.2   | 0.0   | 0.0#  |



Abundance Ion 74.90 (74.60 to 75.60): V  
Ion 77.00 (76.70 to 77.70): V

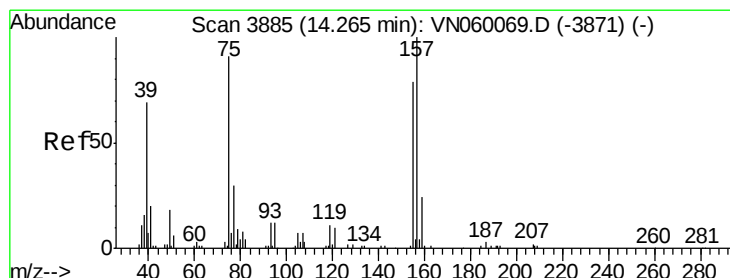
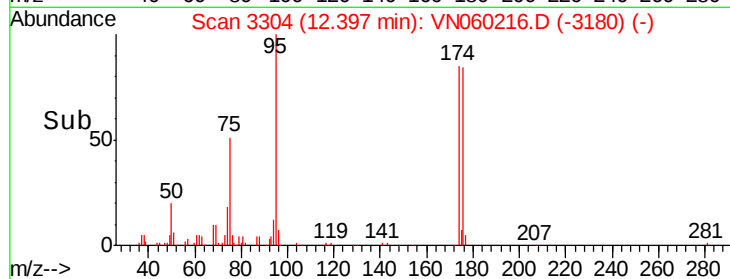
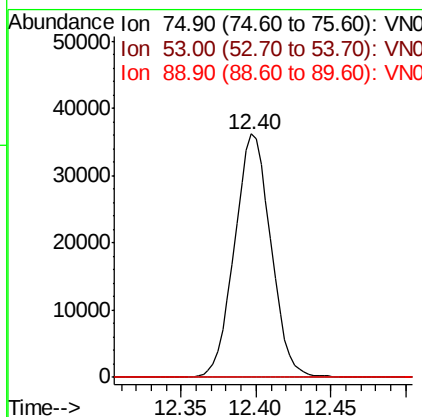
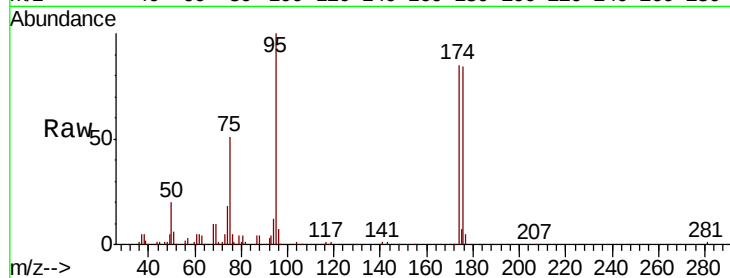




#81  
trans-1,4-Dichloro-2-butene  
Concen: 67.263 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.10 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 75 Resp: 61284  
Ion Ratio Lower Upper  
75 100  
53 0.0 73.9 110.9#  
89 0.0 37.0 55.4#



#92  
1,2-Dibromo-3-Chloropropane  
Concen: Below Cal  
RT: 14.35 min Scan# 3913  
Delta R.T. 0.09 min  
Lab File: VN060216.D  
Acq: 24 Feb 2020 17:52

Tgt Ion: 75 Resp: 29  
Ion Ratio Lower Upper  
75 100  
155 0.0 43.0 129.0#  
157 0.0 54.9 164.5#

