

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN120619\  
 Data File : VN059506.D  
 Acq On : 6 Dec 2019 11:22  
 Operator : JC/SP  
 Sample : VN1206WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Dec 06 22:17:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N120319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 03 16:37:42 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 230848   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 368990   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 329152   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 119371   | 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   | 164218   | 57.26 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 114.52% |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 119153   | 51.85 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 103.70% |          |
| 50) Toluene-d8              | 10.08 | 98   | 462833   | 51.08 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.16% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 141422   | 44.69 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.38%  |          |

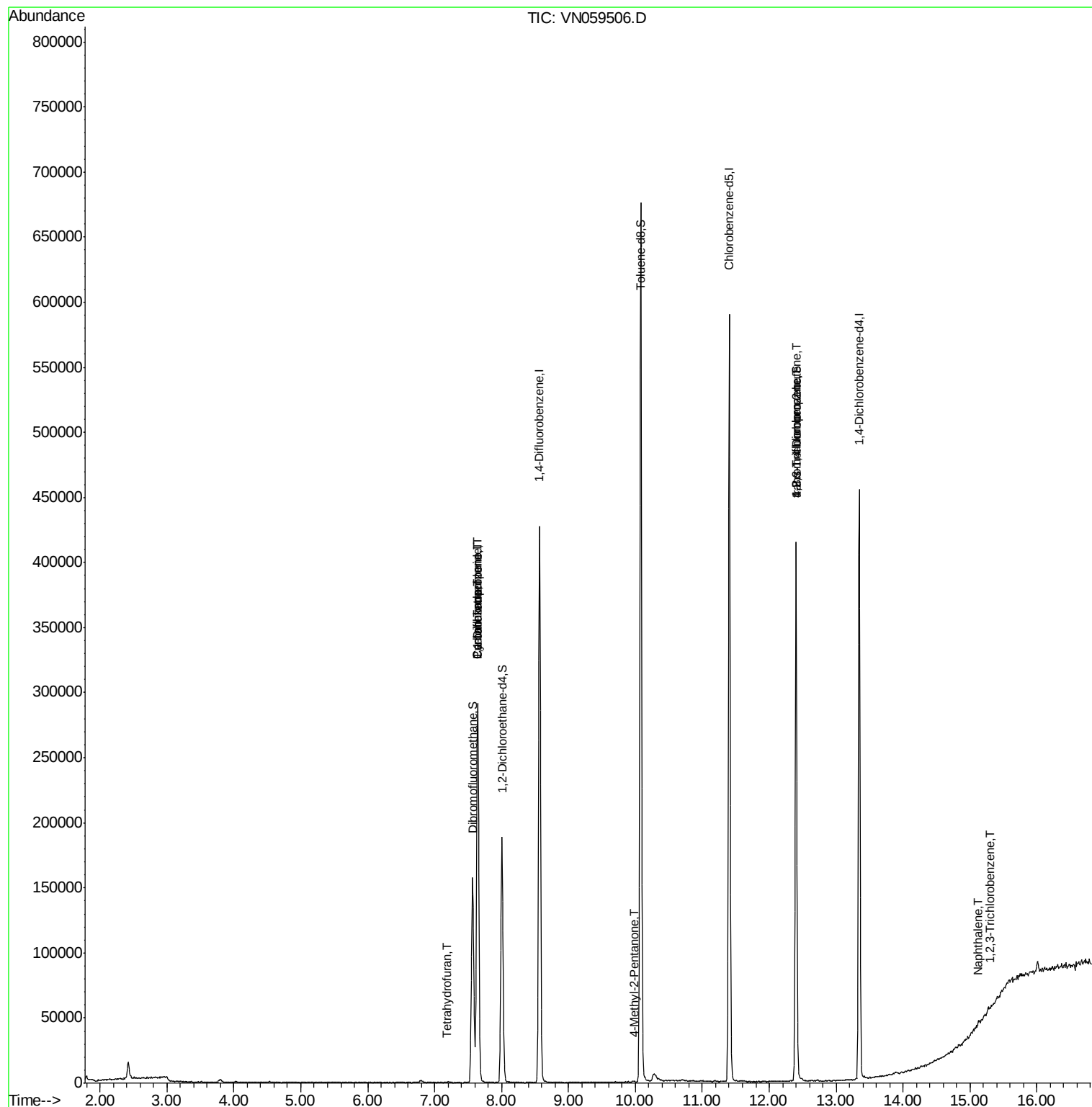
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 16) Acetone                    | 3.80  | 43   | 3859     | Below Cal |        | 96     |
| 20) Methylene Chloride         | 4.52  | 84   | 217      | Below Cal | #      | 61     |
| 29) Tetrahydrofuran            | 7.19  | 42   | 348      | 0.254     | ug/l # | 34     |
| 31) Cyclohexane                | 7.64  | 56   | 5719     | 1.184     | ug/l # | 11     |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 19430    | 5.060     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 23312    | 6.312     | ug/l # | 17     |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 782      | 0.207     | ug/l # | 35     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 77454    | 26.096    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 77454    | 68.485    | ug/l # | 15     |
| 95) Naphthalene                | 15.13 | 128  | 1562     | 2.646     | ug/l # | 85     |
| 96) 1,2,3-Trichlorobenzene     | 15.30 | 180  | 477      | 2.150     | ug/l # | 78     |

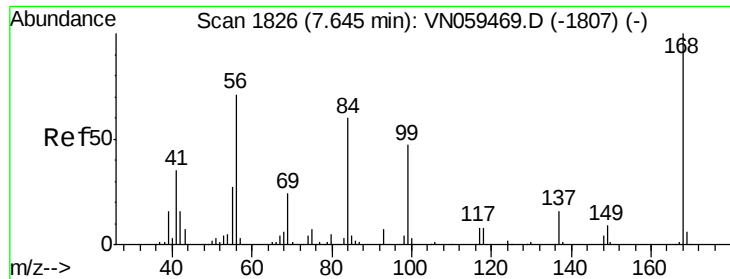
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN120619\  
Data File : VN059506.D  
Acq On : 6 Dec 2019 11:22  
Operator : JC/SP  
Sample : VN1206WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Dec 06 22:17:31 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N120319W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 03 16:37:42 2019  
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: VN059506.D

Acq: 6 Dec 2019 11:22

Instrument :

MSVOA\_N

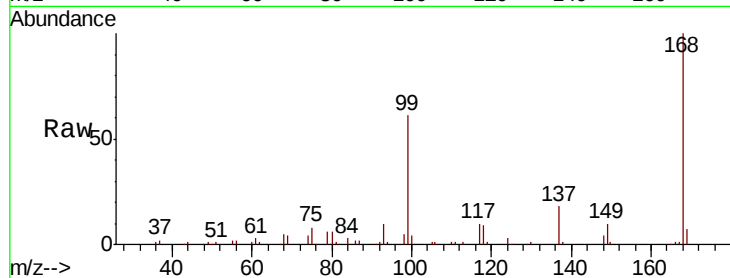
ClientSampleId :

Tot Ion:168 Resp: 230848

Ion Ratio Lower Upper

168 100

99 61.2 43.4 65.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.64

100000

80000

60000

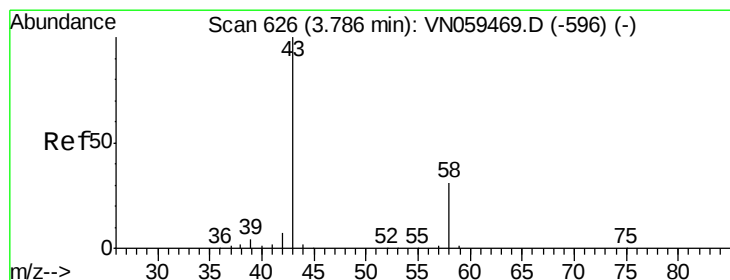
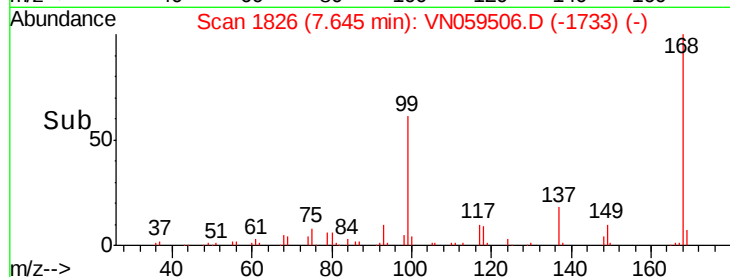
40000

20000

0

Time-->

7.60 7.70 7.80



#16

Acetone

Concen: Below Cal

RT: 3.80 min Scan# 629

Delta R.T. 0.01 min

Lab File: VN059506.D

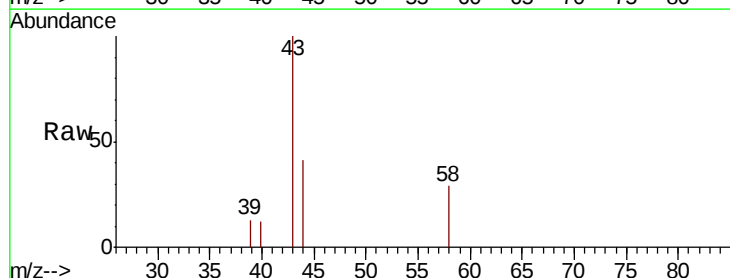
Acq: 6 Dec 2019 11:22

Tgt Ion: 43 Resp: 3859

Ion Ratio Lower Upper

43 100

58 28.7 24.9 37.3



Abundance Ion 43.00 (42.70 to 43.70): VN

Ion 58.00 (57.70 to 58.70): VN

3.80

1500

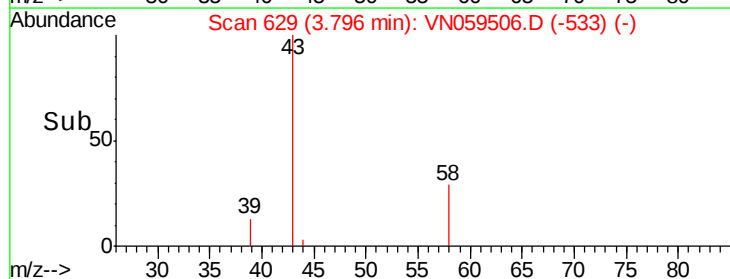
1000

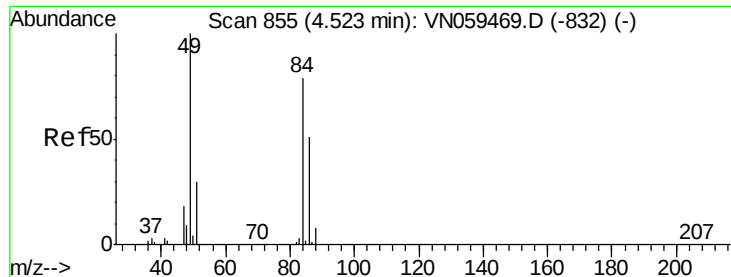
500

0

Time-->

3.75 3.80 3.85





#20

Methvlene Chloride

Concen: Below Cal

RT: 4.52 min Scan# 853

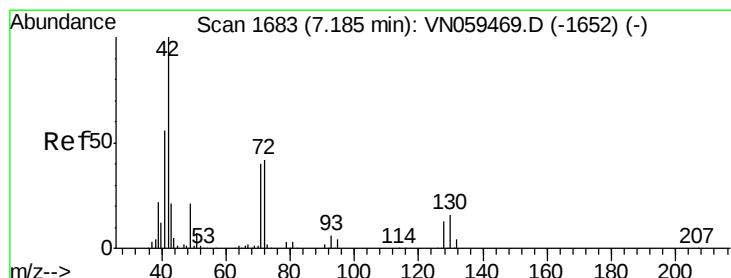
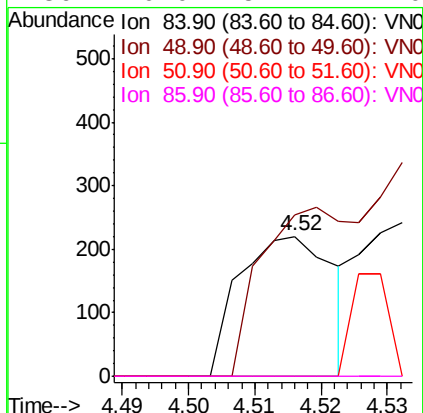
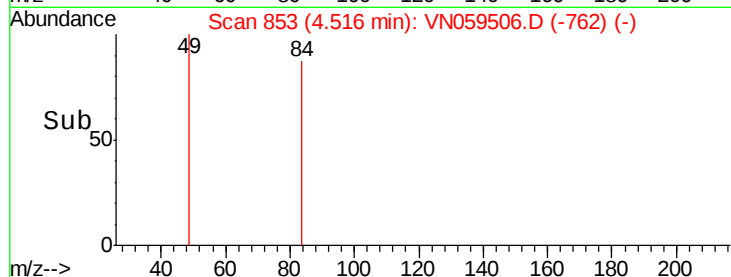
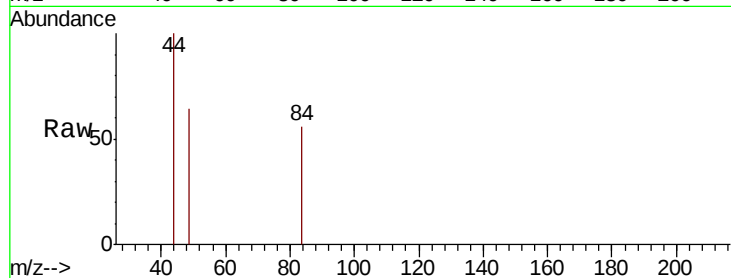
Delta R.T. -0.01 min

Lab File: VN059506.D

Acq: 6 Dec 2019 11:22

Instrument :  
MSVOA\_N  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 217   |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 115.0 | 101.1 | 151.7 |
| 51       | 0.0   | 30.7  | 46.1# |
| 86       | 0.0   | 51.4  | 77.0# |



#29

Tetrahydrofuran

Concen: 0.254 ug/l

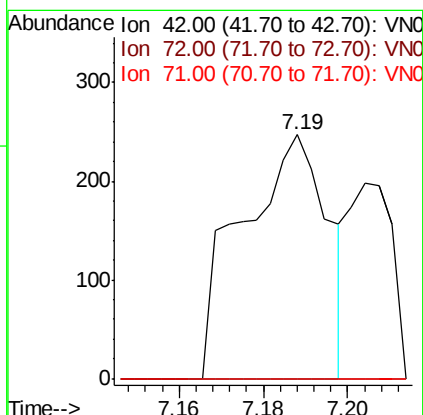
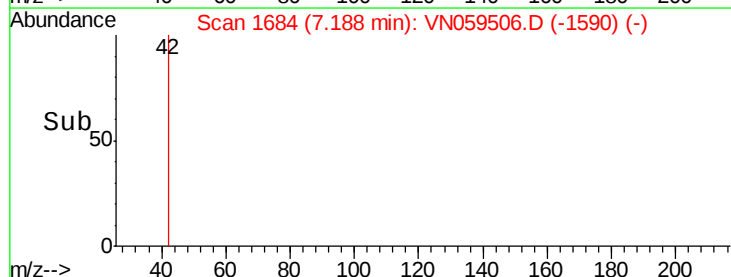
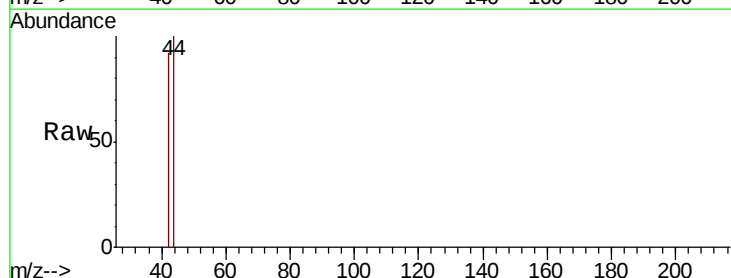
RT: 7.19 min Scan# 1684

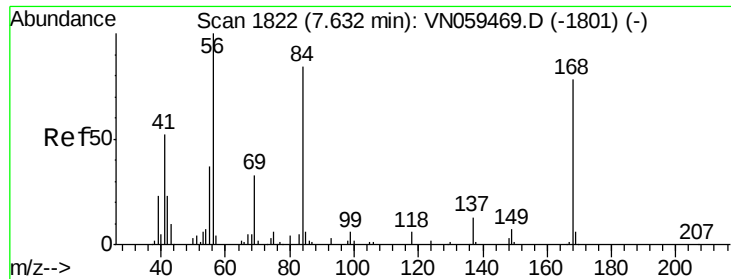
Delta R.T. 0.00 min

Lab File: VN059506.D

Acq: 6 Dec 2019 11:22

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 42    | Resp: | 348   |
| Ion      | Ratio | Lower | Upper |
| 42       | 100   |       |       |
| 72       | 0.0   | 34.2  | 51.2# |
| 71       | 0.0   | 32.0  | 48.0# |

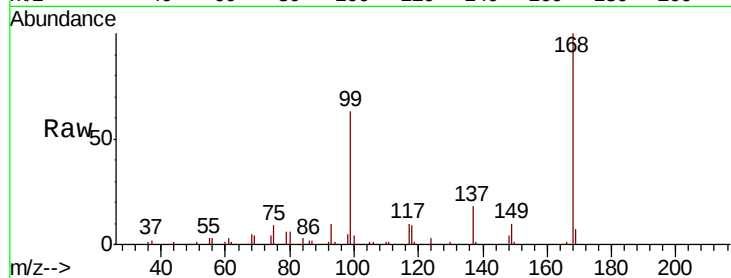




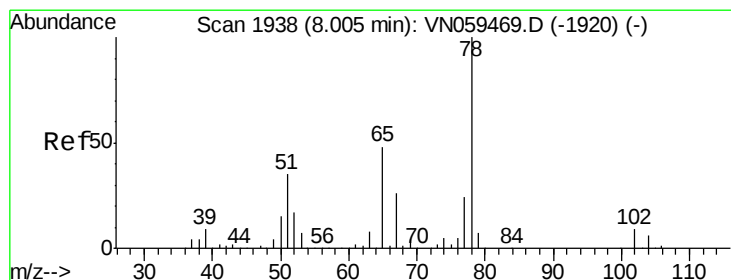
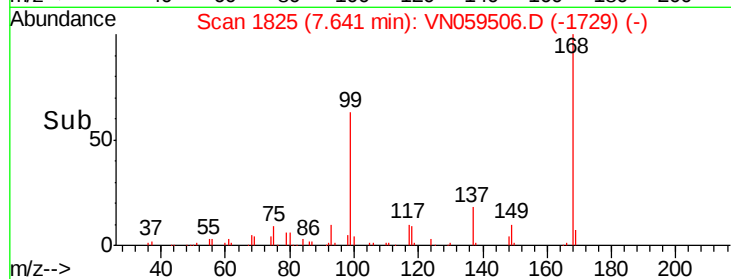
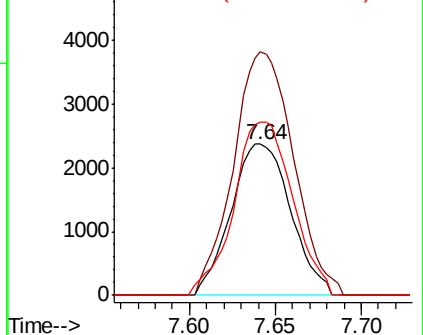
#31  
Cyclohexane  
Concen: 1.184 ug/l  
RT: 7.64 min Scan# 1825  
Delta R.T. 0.01 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 56 Resp: 5719  
Ion Ratio Lower Upper  
56 100  
69 161.0 26.2 39.4#  
84 114.5 66.8 100.2#

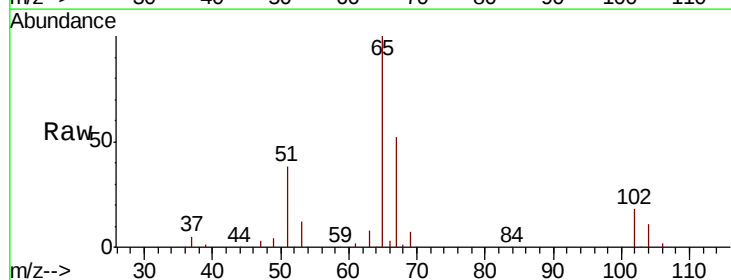


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

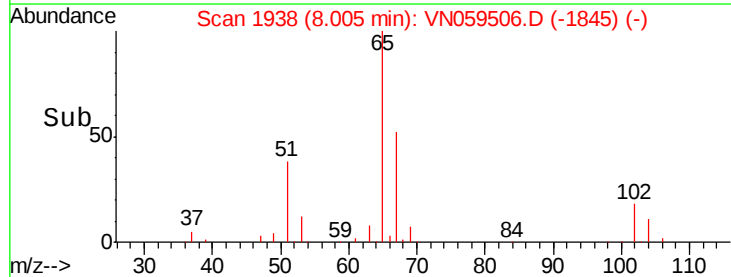
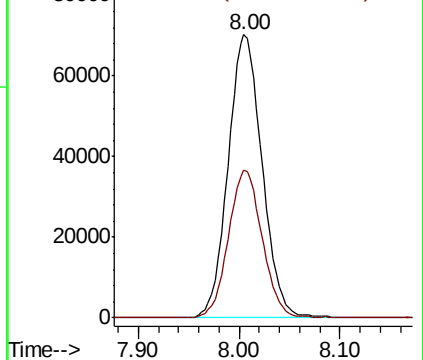


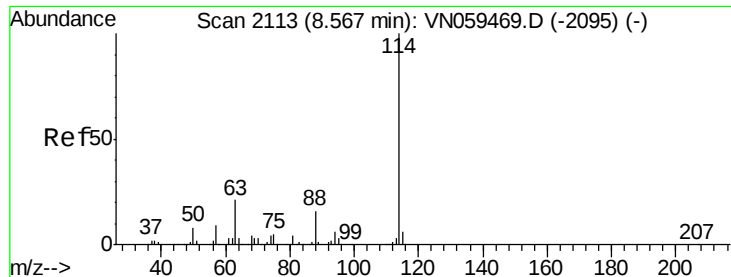
#33  
1,2-Dichloroethane-d4  
Concen: 57.264 ug/l  
RT: 8.00 min Scan# 1938  
Delta R.T. -0.00 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

Tgt Ion: 65 Resp: 164218  
Ion Ratio Lower Upper  
65 100  
67 51.9 0.0 107.4



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

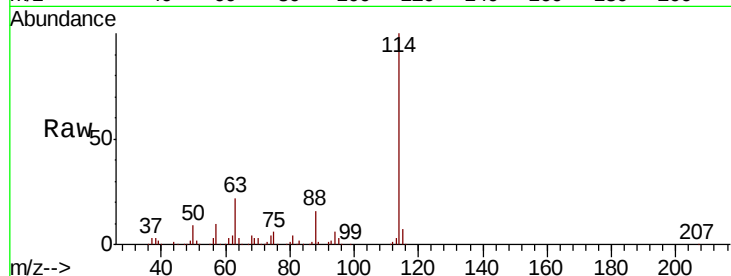




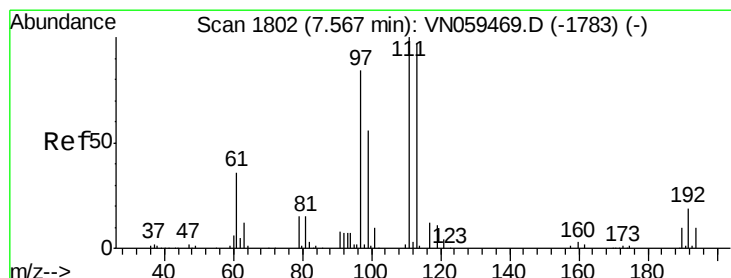
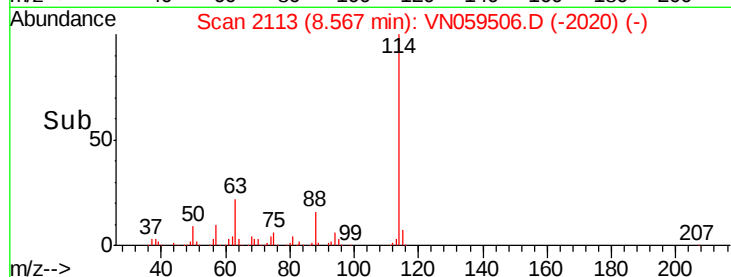
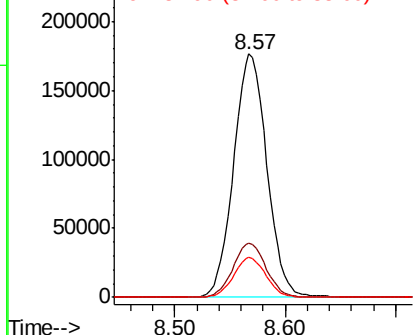
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. -0.00 min  
 Lab File: VN059506.D  
 Acq: 6 Dec 2019 11:22

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 22.3  | 0.0   | 42.4  |
| 88      | 16.2  | 0.0   | 32.8  |

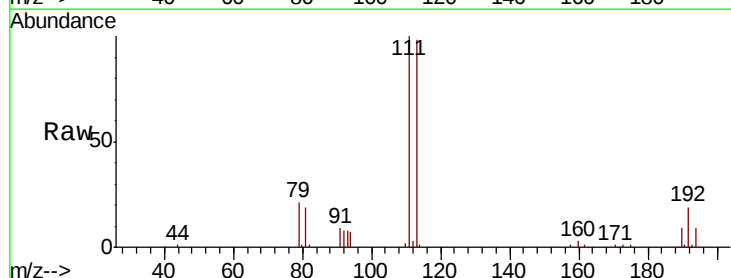


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

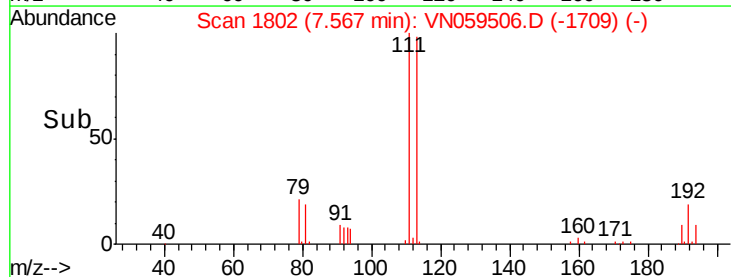
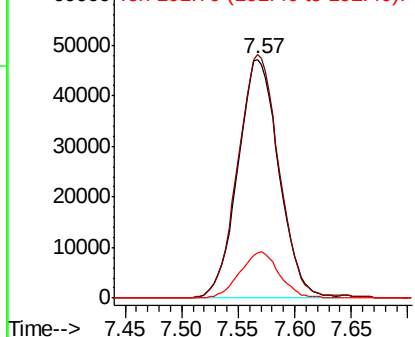


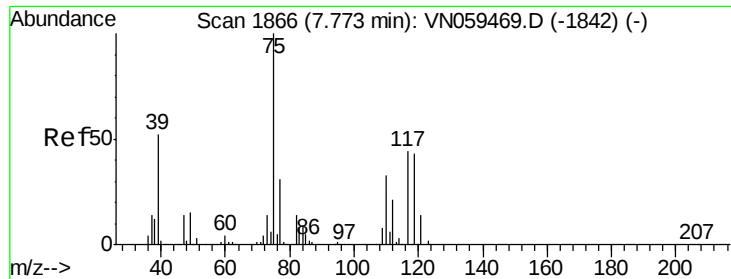
#35  
 Dibromofluoromethane  
 Concen: 51.847 ug/l  
 RT: 7.57 min Scan# 1802  
 Delta R.T. -0.00 min  
 Lab File: VN059506.D  
 Acq: 6 Dec 2019 11:22

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.8 | 82.5  | 123.7 |
| 192     | 18.6  | 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

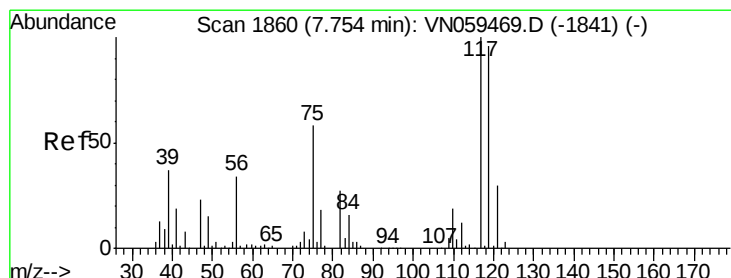
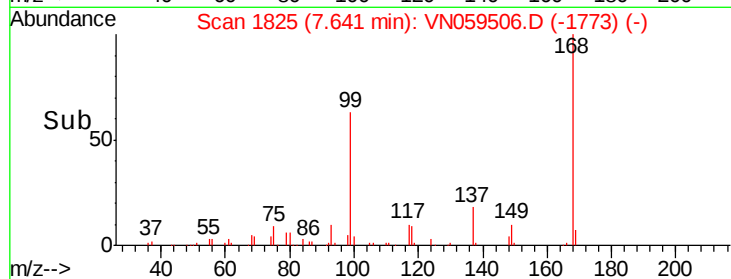
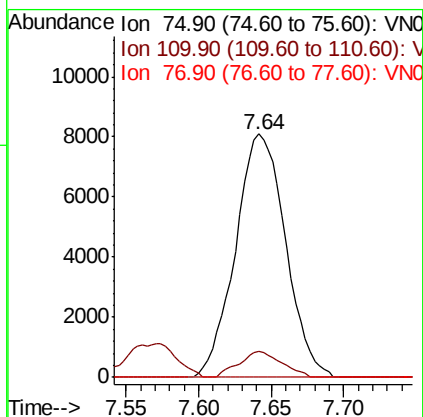
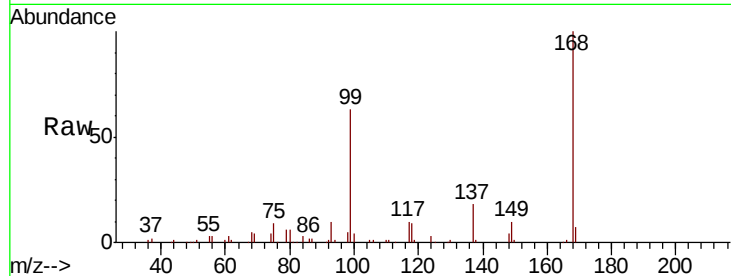




#36  
 1,1-Dichloropropene  
 Concen: 5.060 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.13 min  
 Lab File: VN059506.D  
 Acq: 6 Dec 2019 11:22

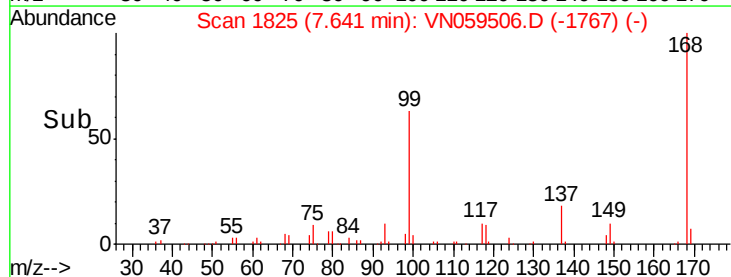
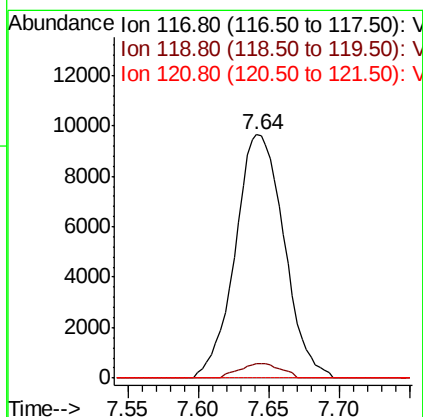
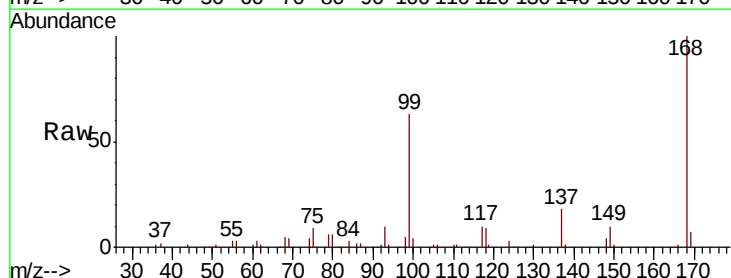
Instrument :  
 MSVOA\_N  
 ClientSampled :

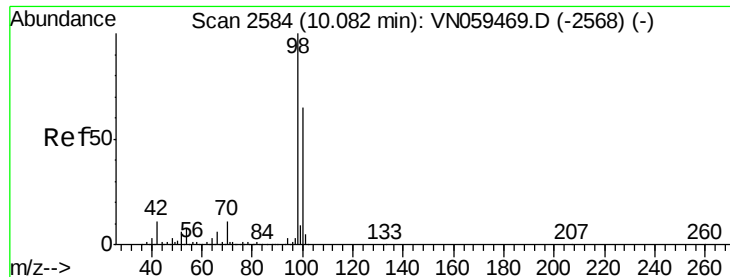
Tot Ion: 75 Resp: 19430  
 Ion Ratio Lower Upper  
 75 100  
 110 9.1 16.9 50.7#  
 77 0.0 25.1 37.7#



#38  
 Carbon Tetrachloride  
 Concen: 6.312 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.11 min  
 Lab File: VN059506.D  
 Acq: 6 Dec 2019 11:22

Tgt Ion: 117 Resp: 23312  
 Ion Ratio Lower Upper  
 117 100  
 119 5.8 76.6 114.8#  
 121 0.0 24.0 36.0#





#50

Toluene-d8

Concen: 51.079 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. -0.00 min

Lab File: VN059506.D

Acq: 6 Dec 2019 11:22

Instrument :

MSVOA\_N

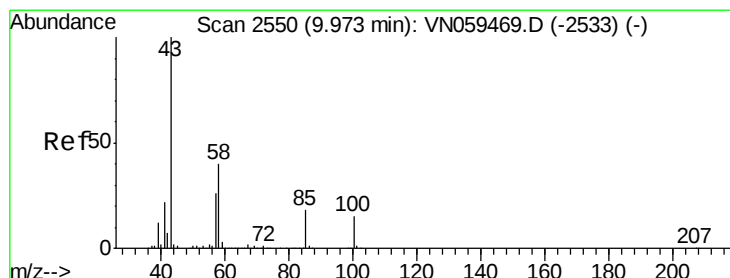
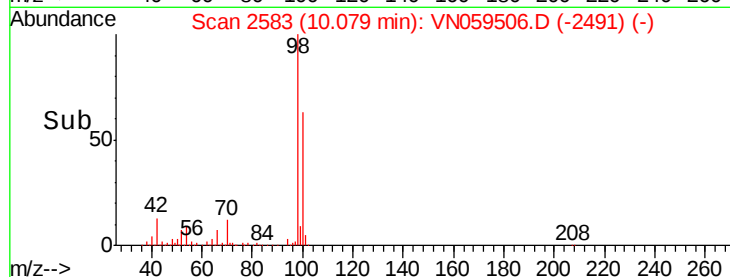
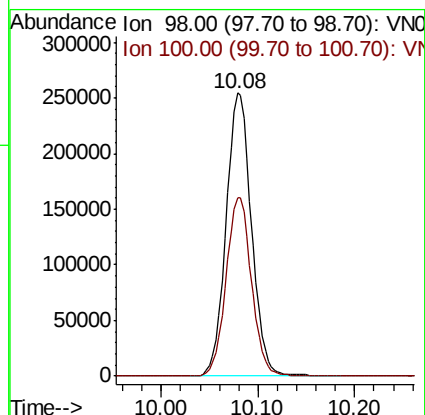
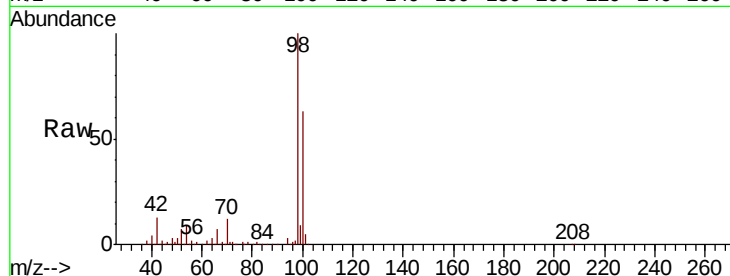
ClientSampleId :

Tot Ion: 98 Resp: 462833

Ion Ratio Lower Upper

98 100

100 63.4 52.1 78.1



#51

4-Methyl-2-Pentanone

Concen: 0.207 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.01 min

Lab File: VN059506.D

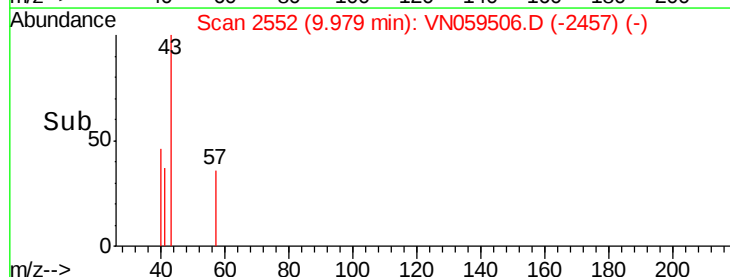
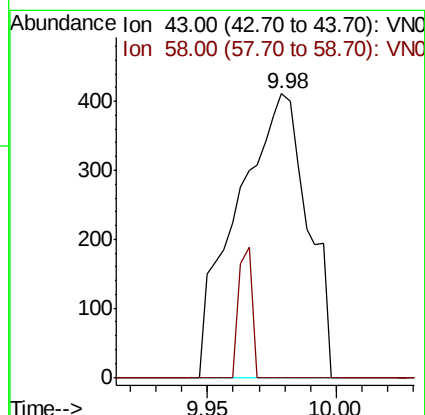
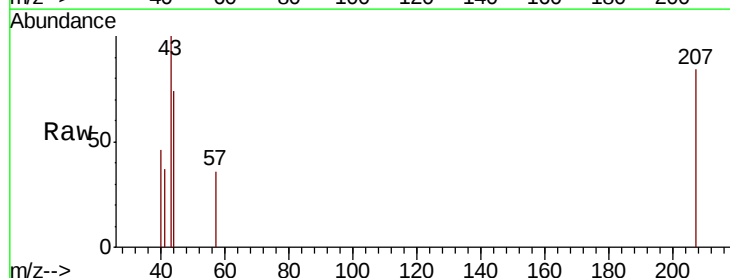
Acq: 6 Dec 2019 11:22

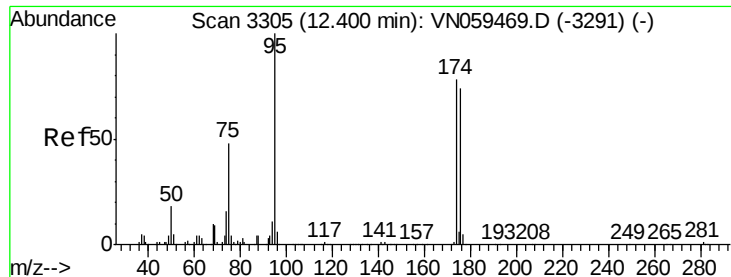
Tgt Ion: 43 Resp: 782

Ion Ratio Lower Upper

43 100

58 0.0 32.1 48.1#

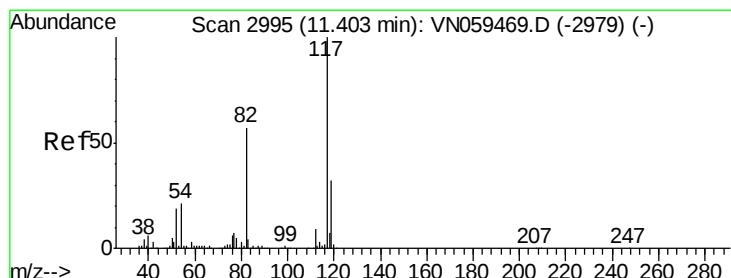
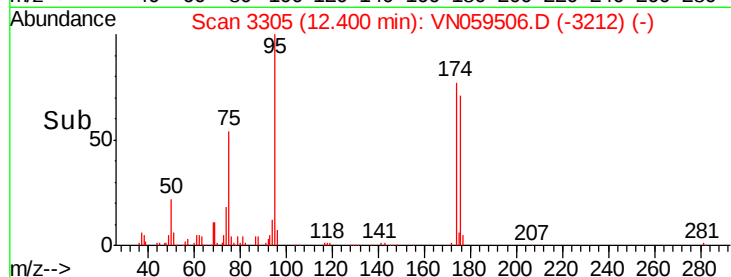
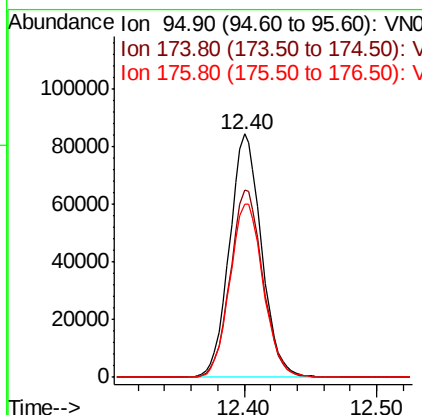
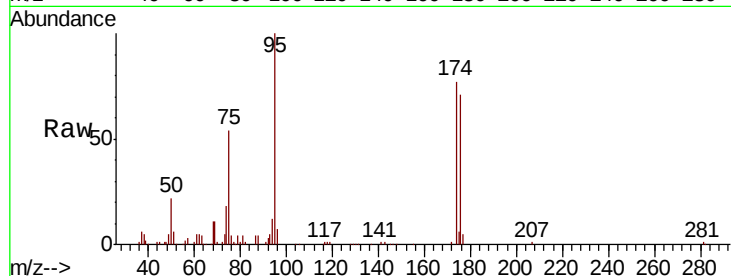




#62  
4-Bromofluorobenzene  
Concen: 44.691 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. -0.00 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

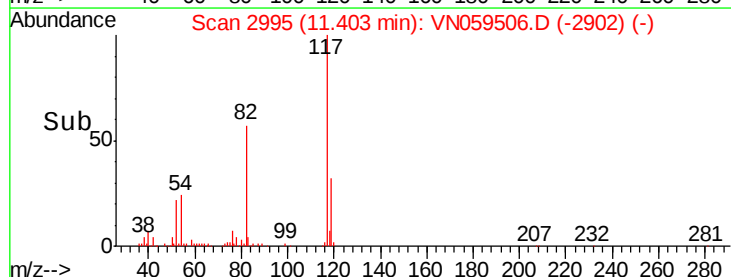
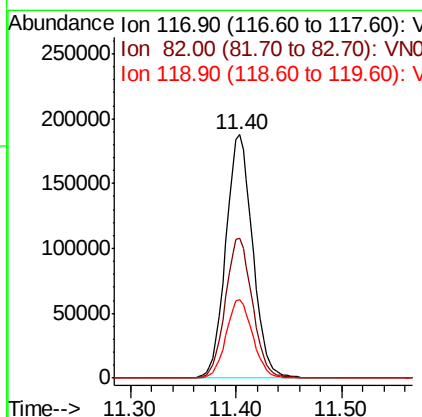
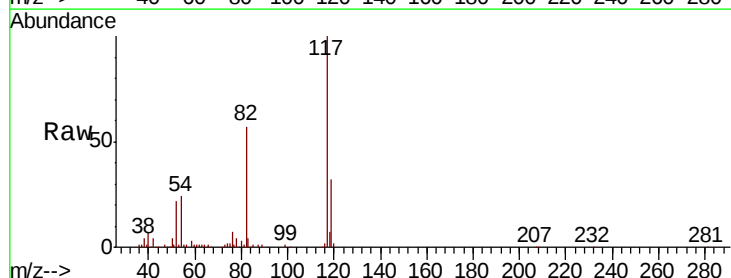
Instrument :  
MSVOA\_N  
ClientSampled :

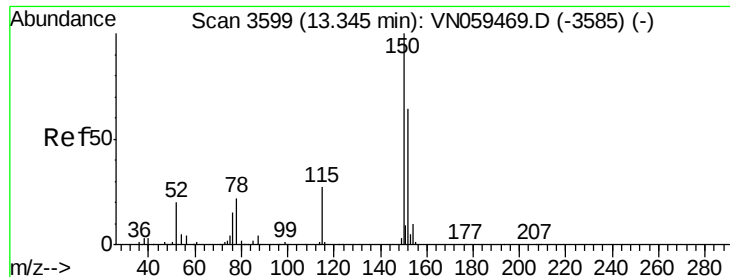
Tot Ion: 95 Resp: 141422  
Ion Ratio Lower Upper  
95 100  
174 78.1 0.0 157.0  
176 74.6 0.0 152.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2995  
Delta R.T. -0.00 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

Tgt Ion: 117 Resp: 329152  
Ion Ratio Lower Upper  
117 100  
82 57.4 45.8 68.8  
119 32.2 25.4 38.0



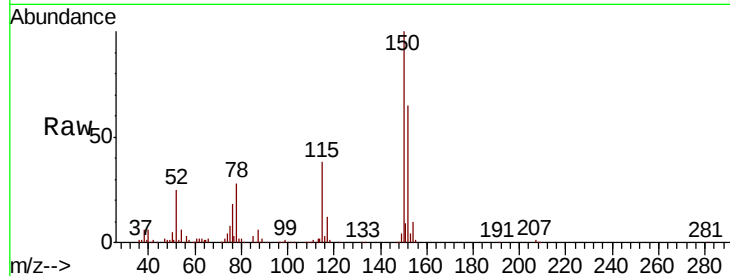


#72

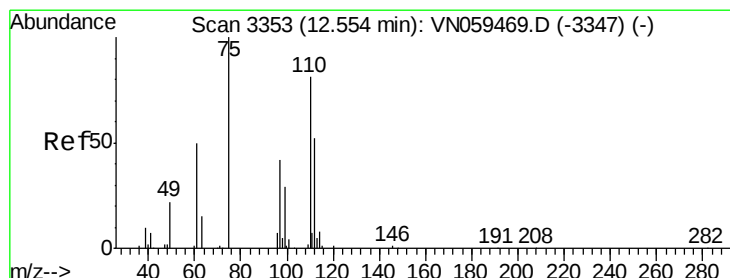
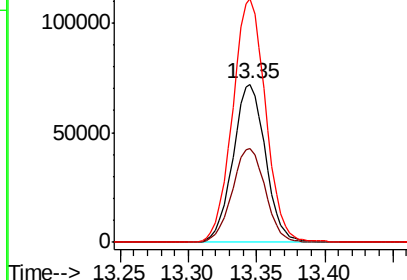
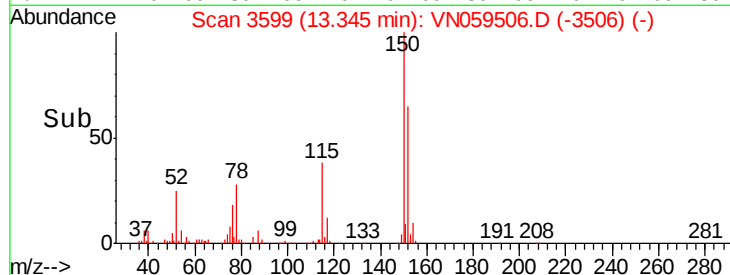
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.35 min Scan# 3599  
Delta R.T. -0.00 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

Instrument :  
MSVOA\_N  
ClientSampled :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 60.6  | 29.2  | 87.6  |
| 150     | 156.4 | 0.0   | 352.8 |



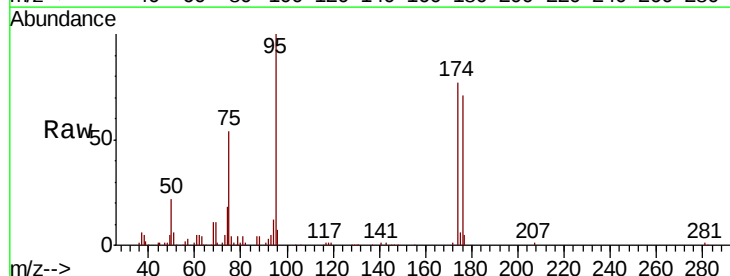
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



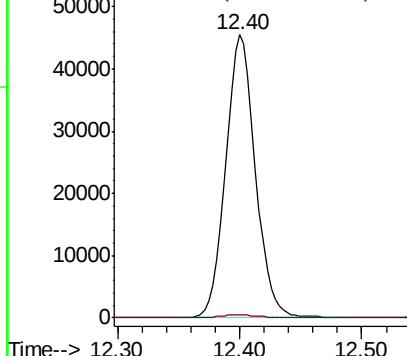
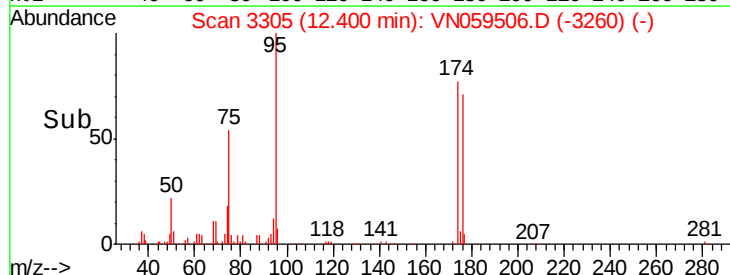
#76

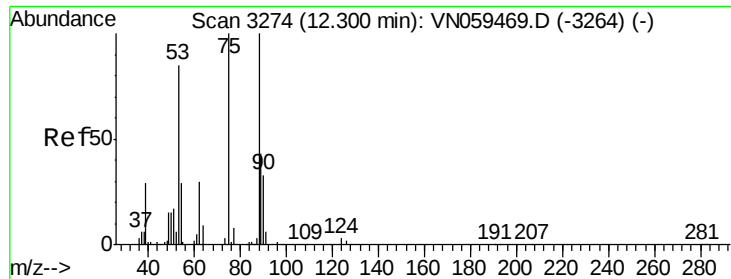
1,2,3-Trichloropropane  
Concen: 26.096 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. -0.15 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

| 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

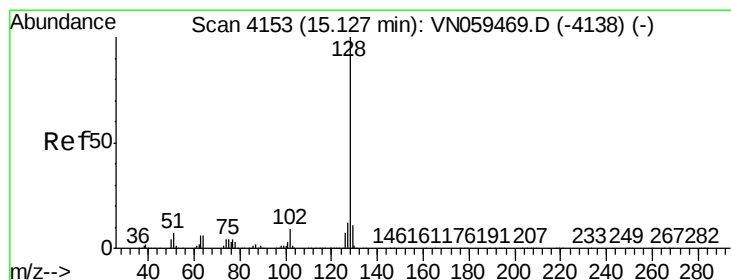
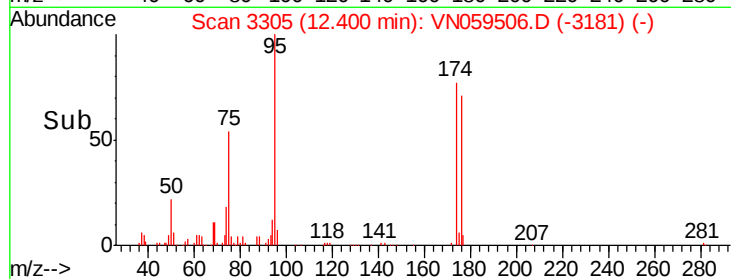
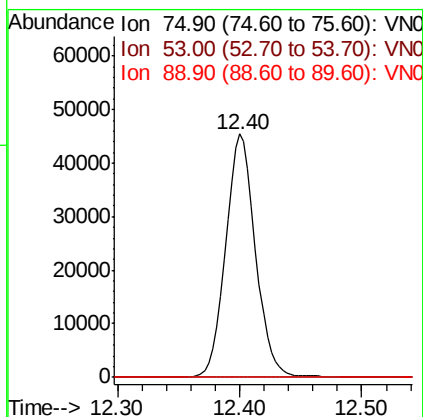
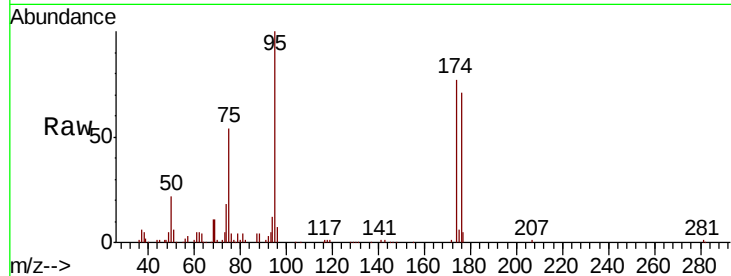




#81  
trans-1,4-Dichloro-2-butene  
Concen: 68.485 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. 0.10 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

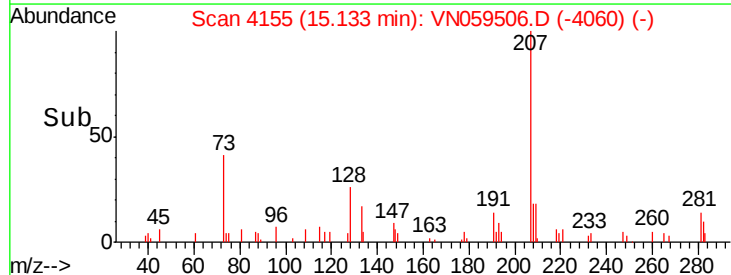
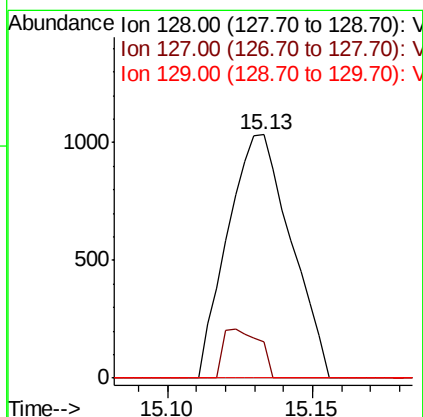
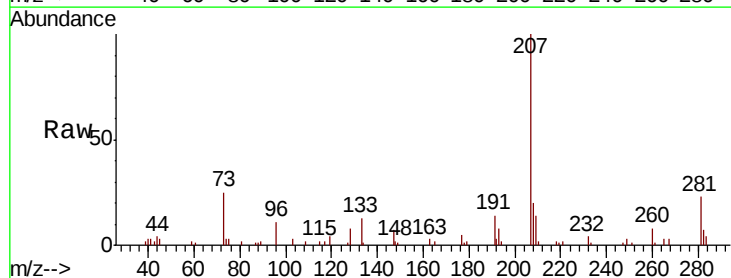
Instrument :  
MSVOA\_N  
ClientSampleId :

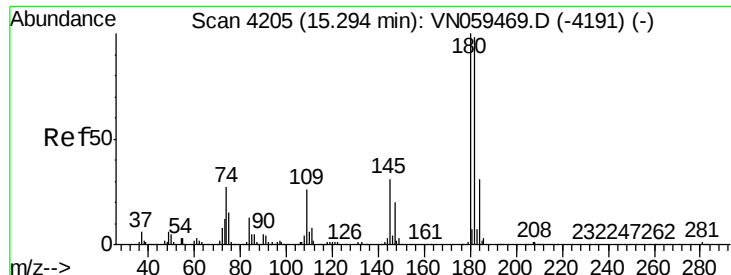
Tot Ion: 75 Resp: 77454  
Ion Ratio Lower Upper  
75 100  
53 0.0 69.8 104.6#  
89 0.0 35.2 52.8#



#95  
Naphthalene  
Concen: 2.646 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. 0.01 min  
Lab File: VN059506.D  
Acq: 6 Dec 2019 11:22

Tgt Ion: 128 Resp: 1562  
Ion Ratio Lower Upper  
128 100  
127 11.4 10.2 15.4  
129 0.0 8.8 13.2#

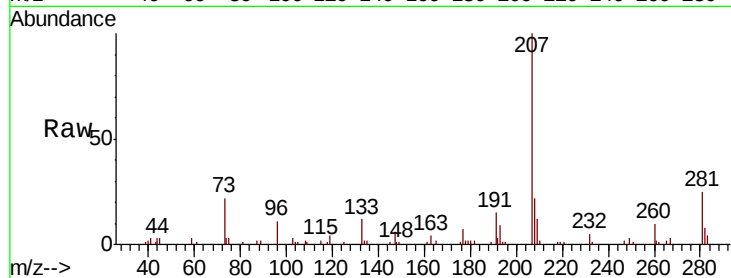




#96  
 1,2,3-Trichlorobenzene  
 Concen: 2.150 ug/l  
 RT: 15.30 min Scan# 4206  
 Delta R.T. 0.00 min  
 Lab File: VN059506.D  
 Acq: 6 Dec 2019 11:22

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 79.2  | 48.5  | 145.5 |
| 145     | 12.6  | 16.1  | 48.2# |



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

