

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN121819\  
 Data File : VN059646.D  
 Acq On : 18 Dec 2019 13:32  
 Operator : JC/SP  
 Sample : VN1218WBL01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Dec 19 04:26:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Dec 13 23:17:39 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 228321   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 370486   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 323980   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 118303   | 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   | 165702   | 49.87 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.74%  |          |
| 35) Dibromofluoromethane    | 7.57  | 113  | 116326   | 50.18 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.36% |          |
| 50) Toluene-d8              | 10.08 | 98   | 455614   | 49.64 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 99.28%  |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 142472   | 42.54 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 85.08%  |          |

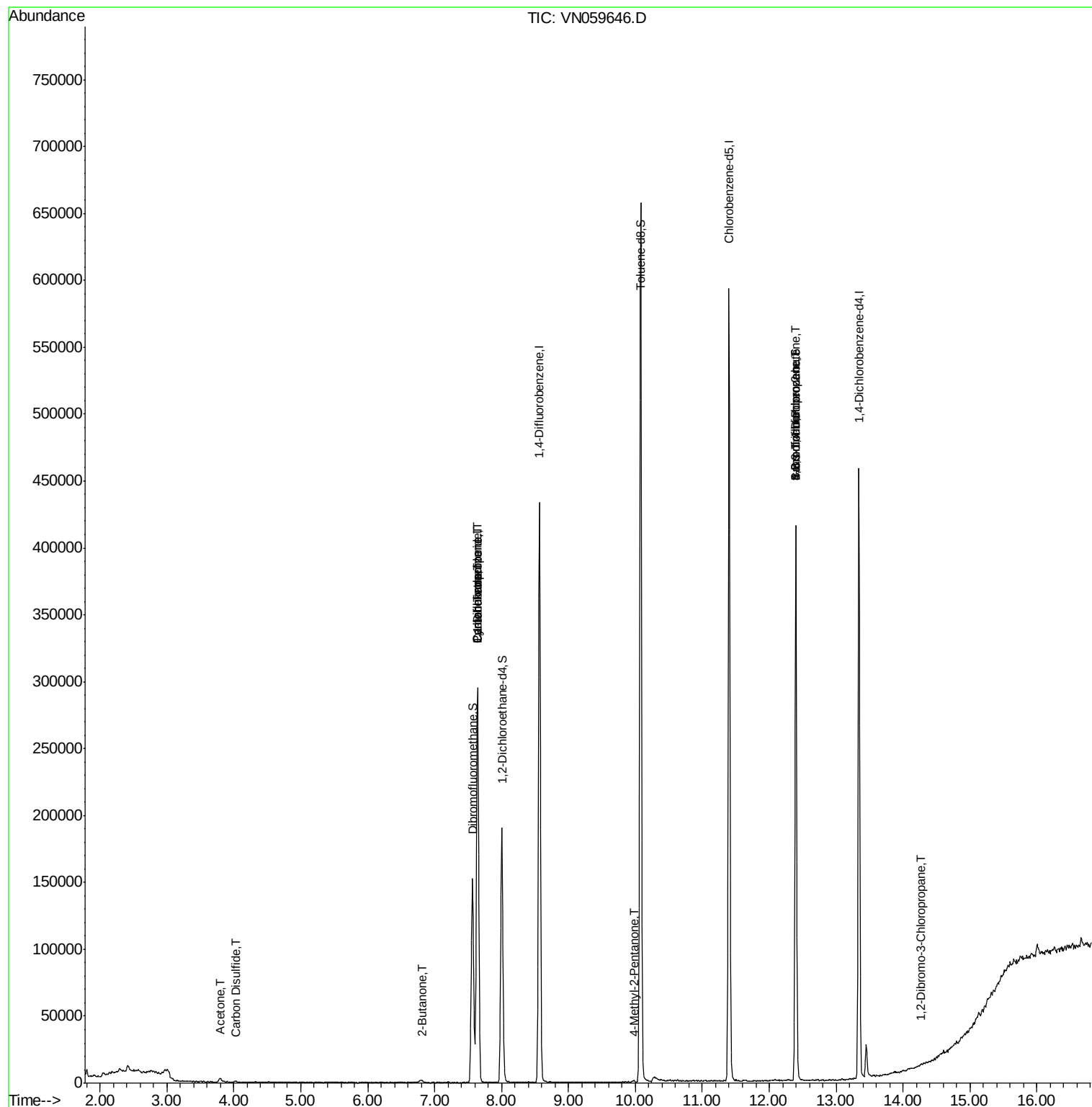
| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 16) Acetone                    | 3.80  | 43   | 4856     | 2.462  | ug/l   | 97     |
| 17) Carbon Disulfide           | 4.02  | 76   | 1158     | 2.015  | ug/l # | 75     |
| 25) 2-Butanone                 | 6.82  | 43   | 755      | 0.320  | ug/l # | 50     |
| 31) Cyclohexane                | 7.64  | 56   | 5429     | 1.119  | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 19740    | 5.109  | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 23031    | 5.745  | ug/l # | 18     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 943      | 0.227  | ug/l # | 76     |
| 71) Bromoform                  | 12.40 | 173  | 1007     | 0.503  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 75496    | 25.778 | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 75496    | 63.670 | ug/l # | 11     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 192      | 1.849  | ug/l # | 6      |

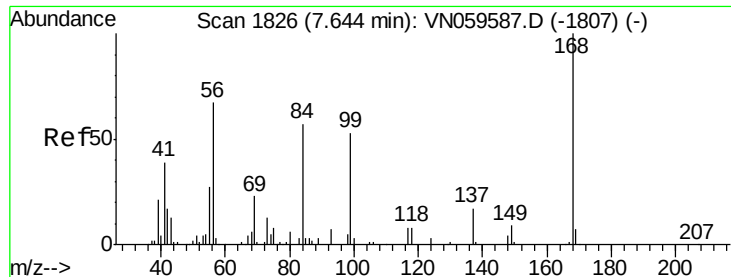
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN121819\  
Data File : VN059646.D  
Acq On : 18 Dec 2019 13:32  
Operator : JC/SP  
Sample : VN1218WBL01  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Dec 19 04:26:05 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N121319W.M  
Quant Title : SW846 8260  
QLast Update : Fri Dec 13 23:17:39 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.00 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

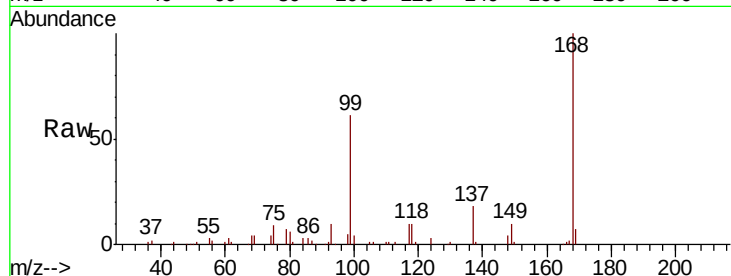
ClientSampled :

Tot Ion:168 Resp: 228321

Ion Ratio Lower Upper

168 100

99 61.3 48.2 72.4



Abundance Ion 167.90 (167.60 to 168.60): VN059587.D (-1807) (-)

Ion 98.90 (98.60 to 99.60): VN059587.D (-1807) (-)

7.64

100000

80000

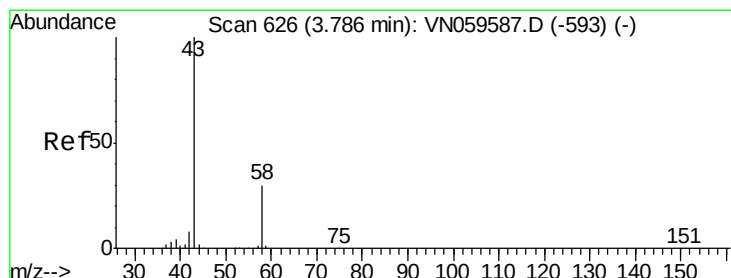
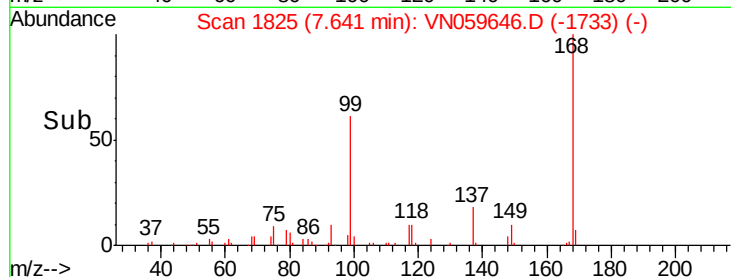
60000

40000

20000

0

Time-->



#16

Acetone

Concen: 2.462 ug/l

RT: 3.80 min Scan# 629

Delta R.T. 0.01 min

Lab File: VN059646.D

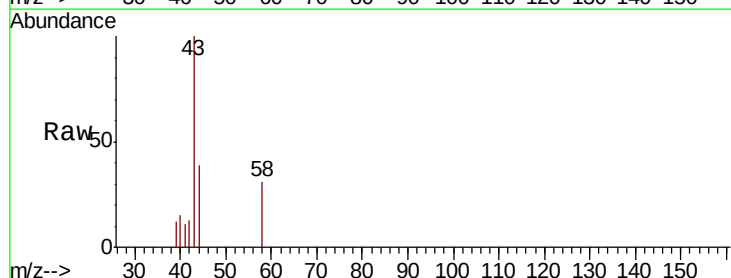
Acq: 18 Dec 2019 13:32

Tgt Ion: 43 Resp: 4856

Ion Ratio Lower Upper

43 100

58 31.0 23.6 35.4



Abundance Ion 43.00 (42.70 to 43.70): VN059587.D (-593) (-)

Ion 58.00 (57.70 to 58.70): VN059587.D (-593) (-)

3.80

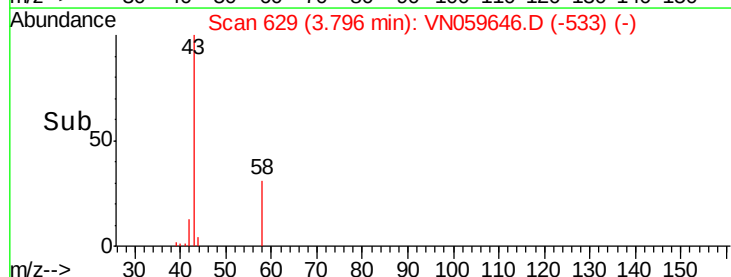
1500

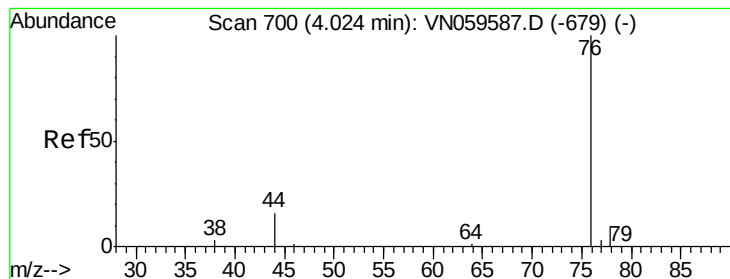
1000

500

0

Time-->





#17

Carbon Disulfide

Concen: 2.015 ug/l

RT: 4.02 min Scan# 700

Delta R.T. 0.00 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

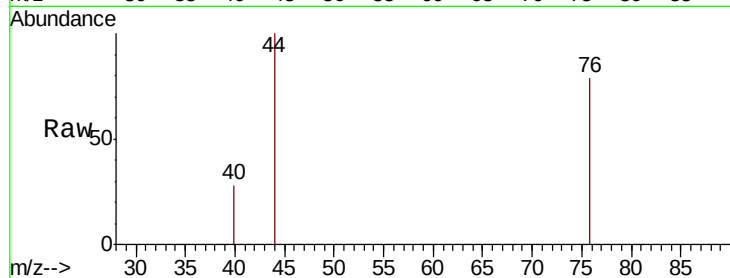
ClientSampled :

Tot Ion: 76 Resp: 1158

Ion Ratio Lower Upper

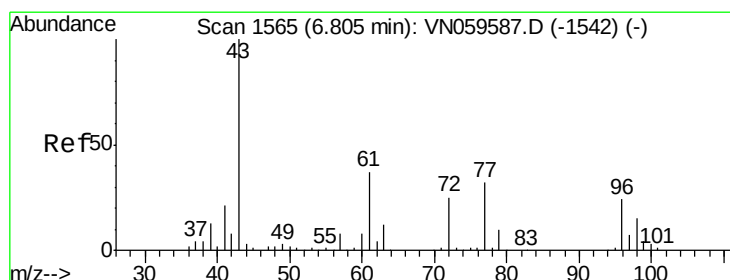
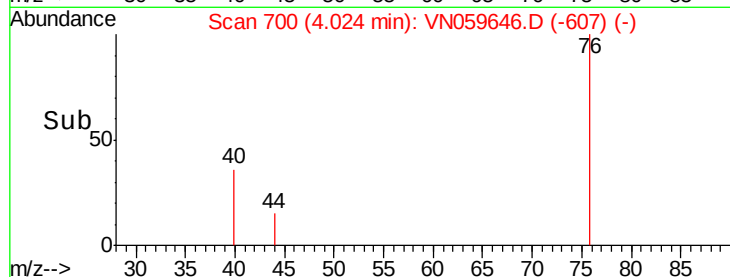
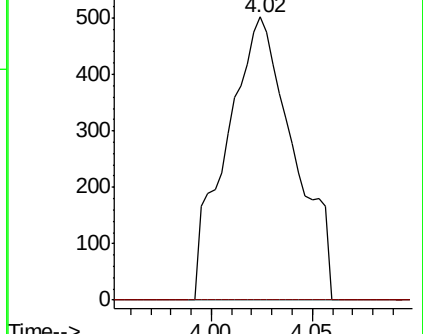
76 100

78 0.0 7.4 11.0#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#25

2-Butanone

Concen: 0.320 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. 0.02 min

Lab File: VN059646.D

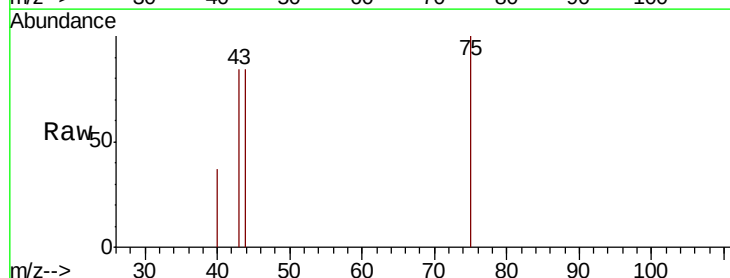
Acq: 18 Dec 2019 13:32

Tgt Ion: 43 Resp: 755

Ion Ratio Lower Upper

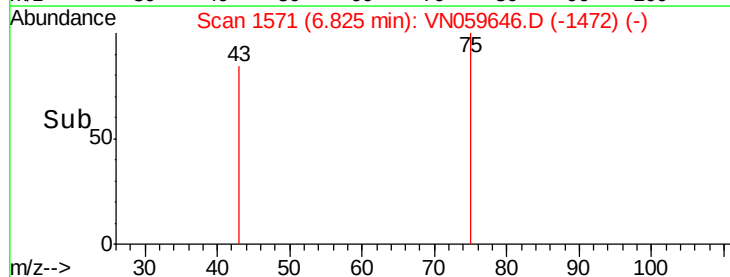
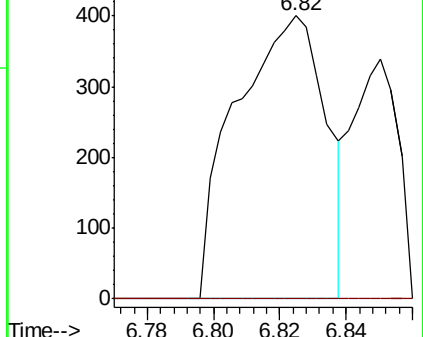
43 100

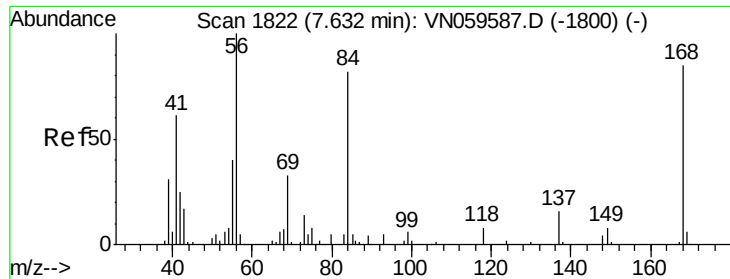
72 0.0 19.9 29.9#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

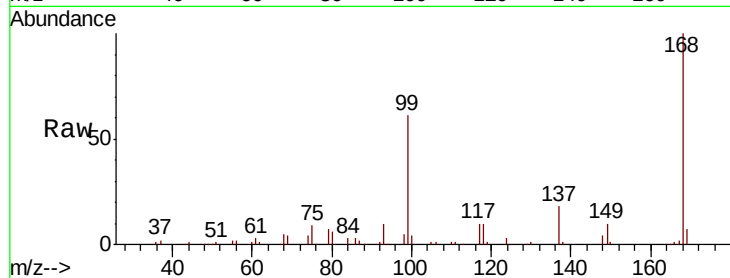




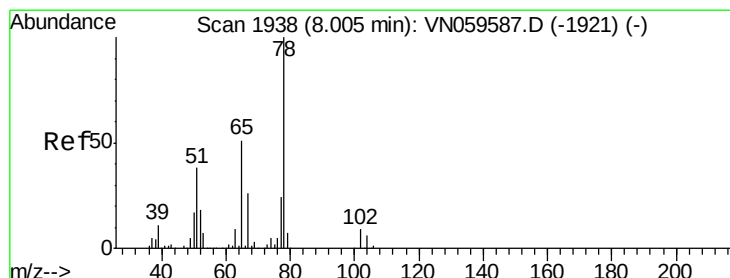
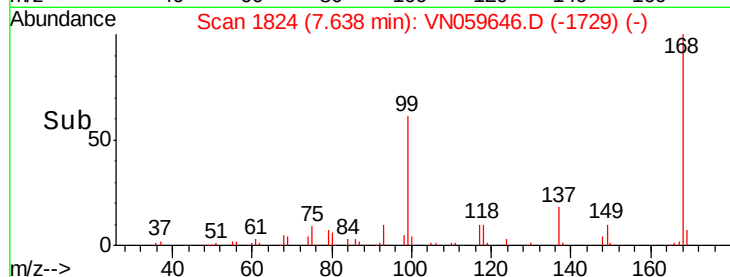
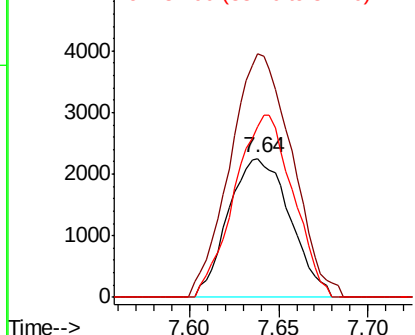
#31  
Cyclohexane  
Concen: 1.119 ug/l  
RT: 7.64 min Scan# 1824  
Delta R.T. 0.01 min  
Lab File: VN059646.D  
Acq: 18 Dec 2019 13:32

Instrument :  
MSVOA\_N  
ClientSampled :

Tot Ion: 56 Resp: 5429  
Ion Ratio Lower Upper  
56 100  
69 175.6 26.5 39.7#  
84 123.1 65.3 97.9#

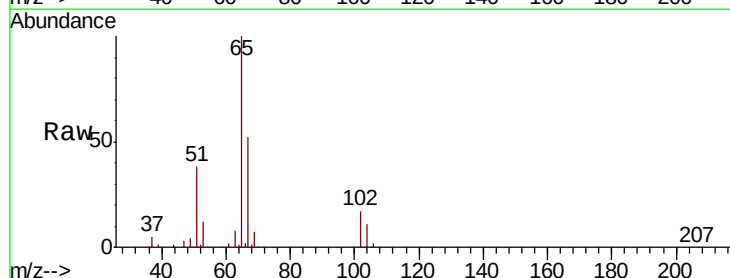


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

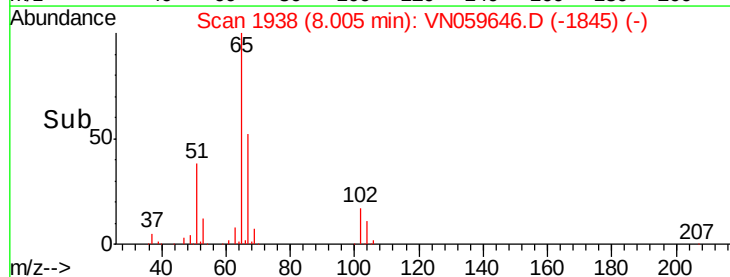
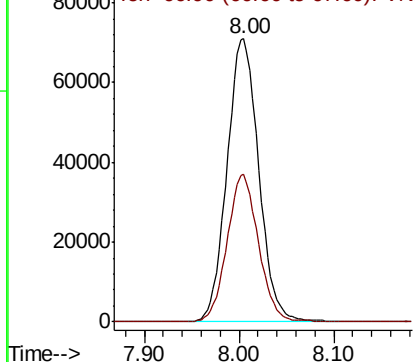


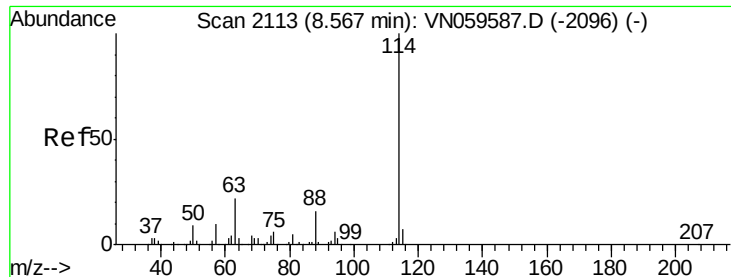
#33  
1,2-Dichloroethane-d4  
Concen: 49.874 ug/l  
RT: 8.00 min Scan# 1938  
Delta R.T. 0.00 min  
Lab File: VN059646.D  
Acq: 18 Dec 2019 13:32

Tgt Ion: 65 Resp: 165702  
Ion Ratio Lower Upper  
65 100  
67 51.5 0.0 103.0



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

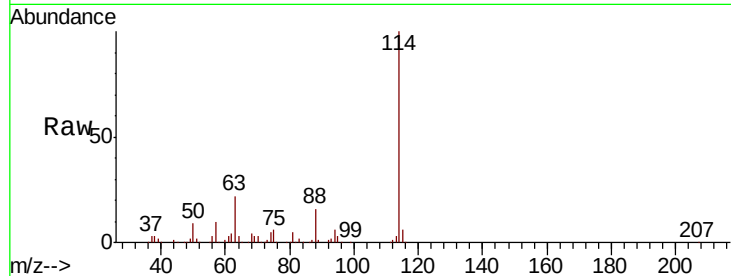




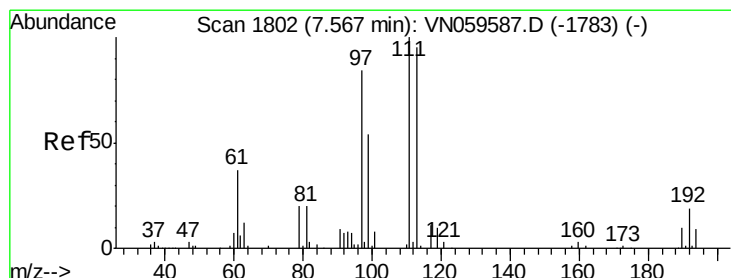
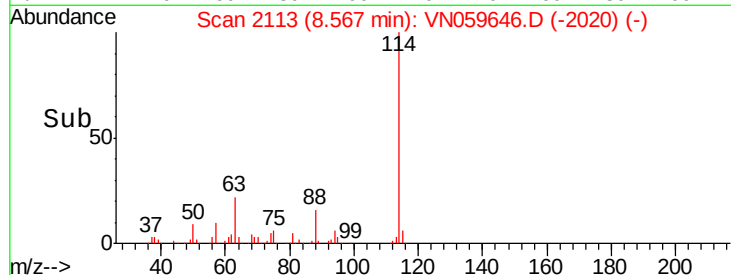
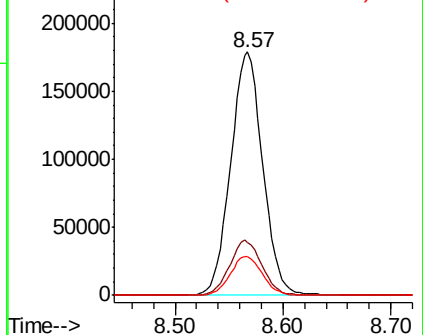
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.57 min Scan# 2113  
 Delta R.T. 0.00 min  
 Lab File: VN059646.D  
 Acq: 18 Dec 2019 13:32

Instrument :  
 MSVOA\_N  
 ClientSampleId :

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 21.9  | 0.0   | 43.6  |
| 88      | 16.1  | 0.0   | 31.4  |

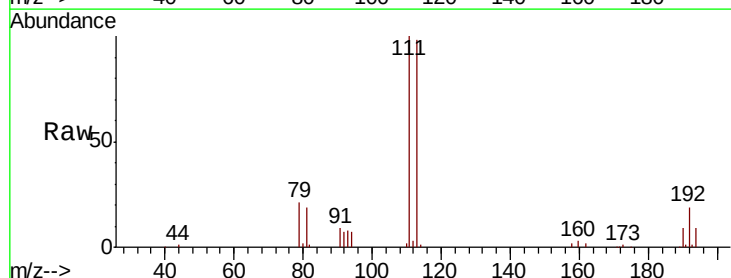


Abundance Ion 113.90 (113.60 to 114.60): V  
 Ion 63.00 (62.70 to 63.70): VN  
 Ion 87.90 (87.60 to 88.60): VN

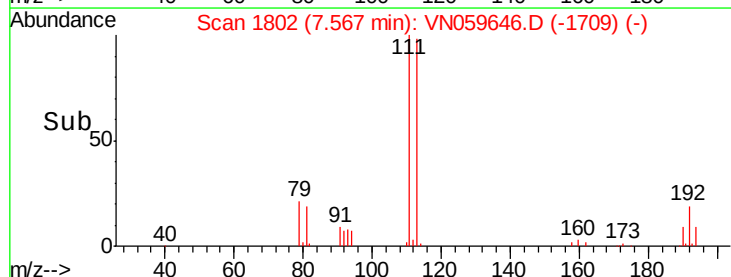
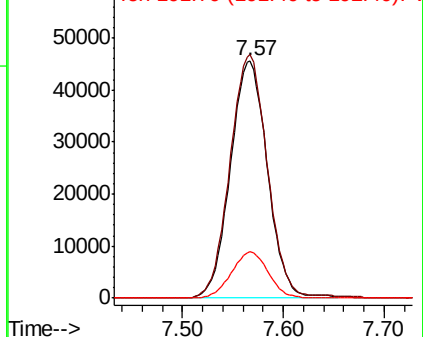


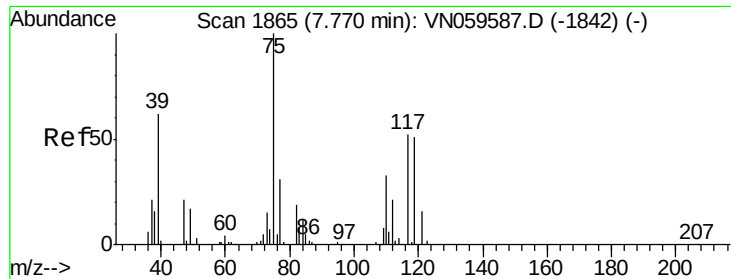
#35  
 Dibromofluoromethane  
 Concen: 50.182 ug/l  
 RT: 7.57 min Scan# 1802  
 Delta R.T. 0.00 min  
 Lab File: VN059646.D  
 Acq: 18 Dec 2019 13:32

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 103.0 | 83.5  | 125.3 |
| 192     | 19.3  | 15.4  | 23.2  |



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

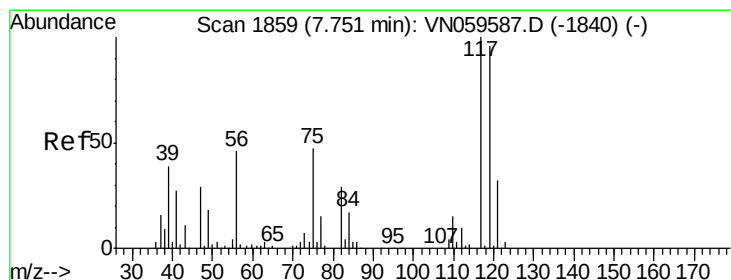
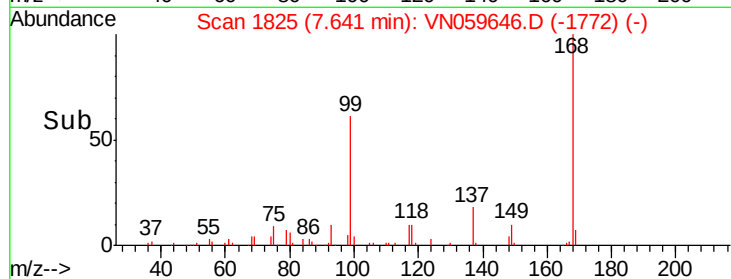
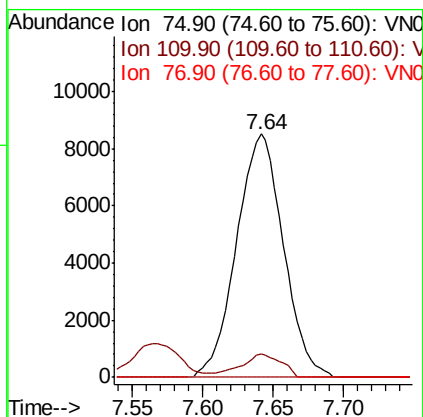
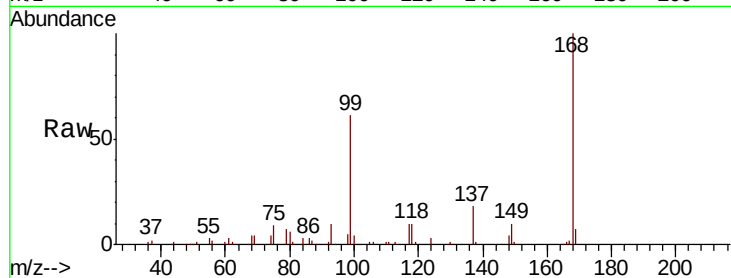




#36  
 1,1-Dichloropropene  
 Concen: 5.109 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.13 min  
 Lab File: VN059646.D  
 Acq: 18 Dec 2019 13:32

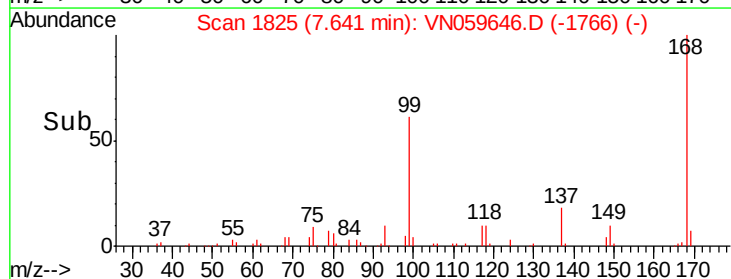
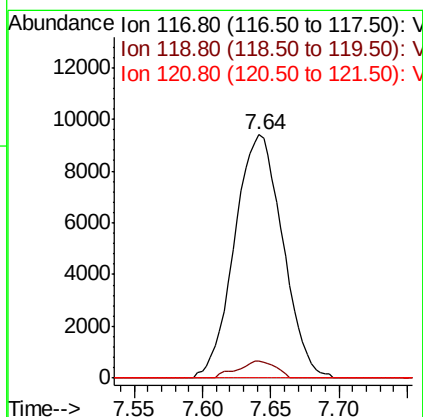
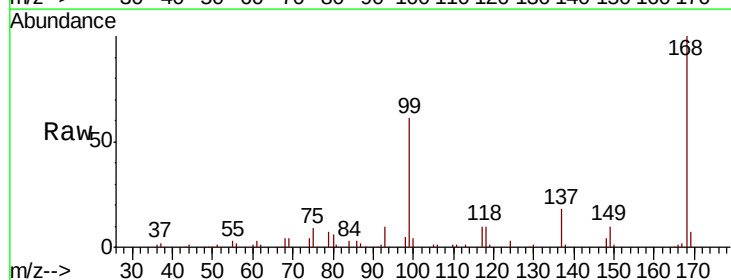
Instrument :  
 MSVOA\_N  
 ClientSampled :

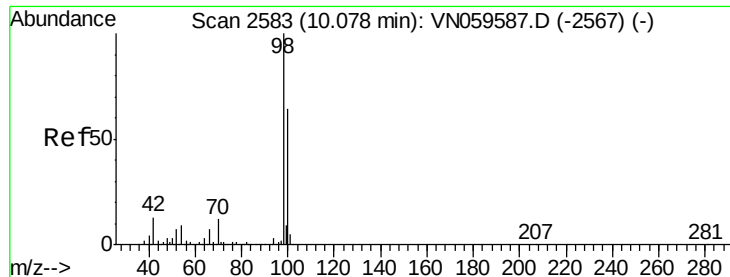
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.4   | 16.6  | 49.7# |
| 77      | 0.0   | 25.1  | 37.7# |



#38  
 Carbon Tetrachloride  
 Concen: 5.745 ug/l  
 RT: 7.64 min Scan# 1825  
 Delta R.T. -0.11 min  
 Lab File: VN059646.D  
 Acq: 18 Dec 2019 13:32

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 7.2   | 76.5  | 114.7# |
| 121     | 0.0   | 25.1  | 37.7#  |





#50

Toluene-d8

Concen: 49.644 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. 0.00 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

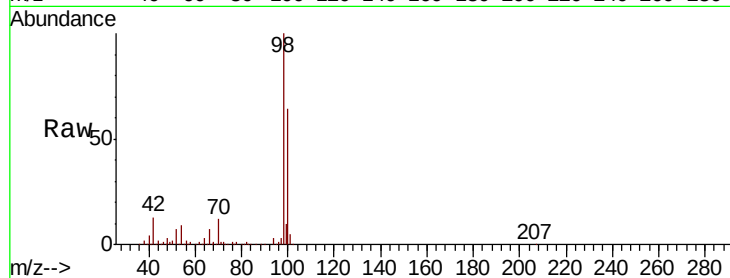
ClientSampled :

Tot Ion: 98 Resp: 455614

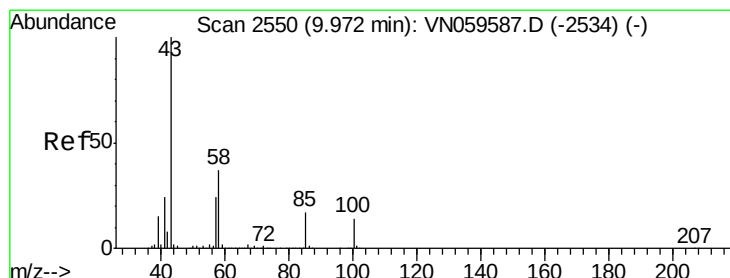
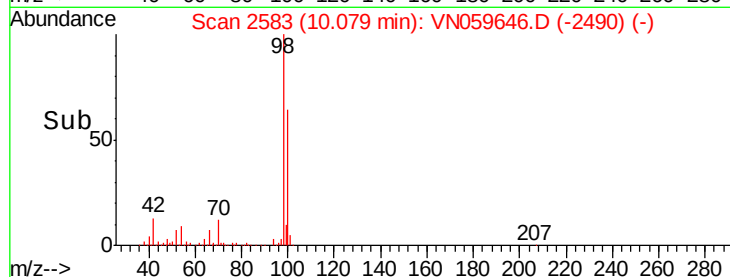
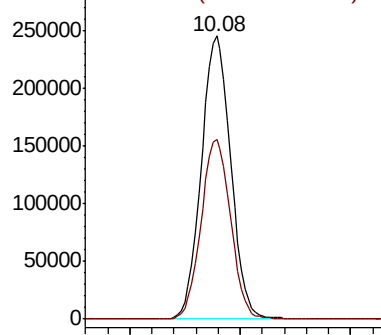
Ion Ratio Lower Upper

98 100

100 63.7 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VN059587.D (-2567) (-)



#51

4-Methyl-2-Pentanone

Concen: 0.227 ug/l

RT: 9.97 min Scan# 2550

Delta R.T. 0.00 min

Lab File: VN059646.D

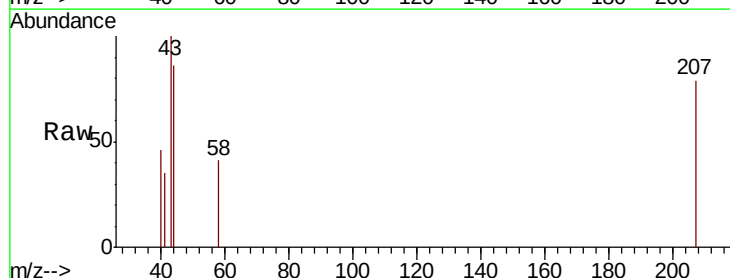
Acq: 18 Dec 2019 13:32

Tgt Ion: 43 Resp: 943

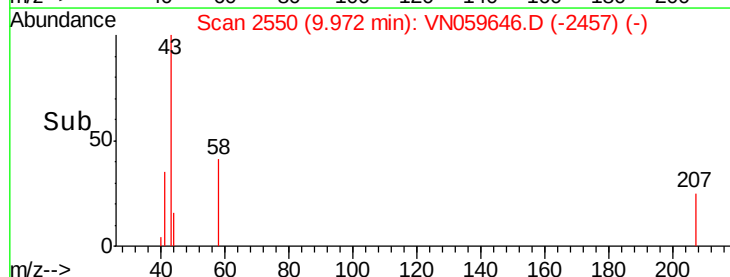
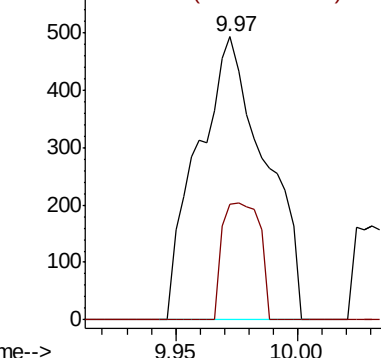
Ion Ratio Lower Upper

43 100

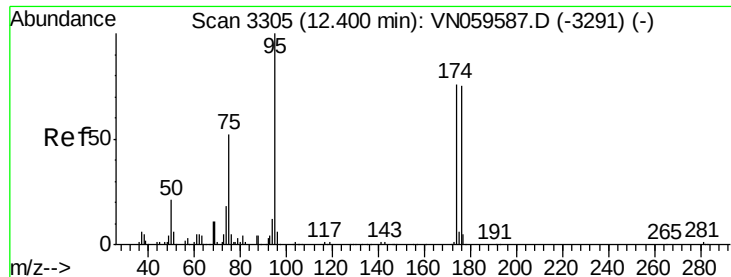
58 22.8 29.8 44.8#



Abundance Ion 43.00 (42.70 to 43.70): VN059587.D (-2534) (-)



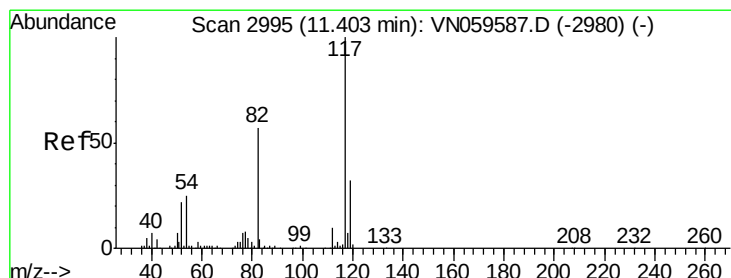
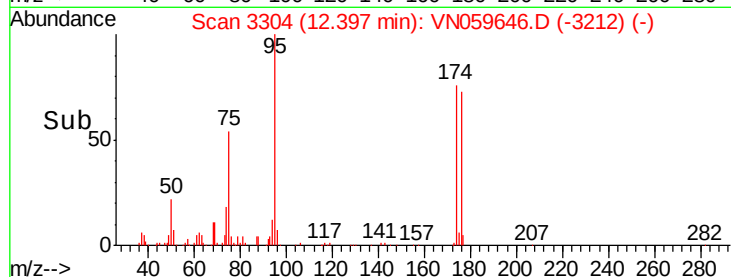
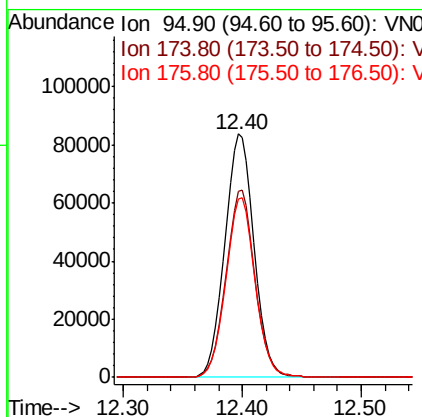
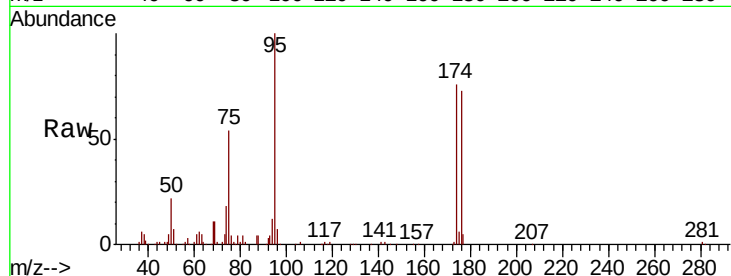




#62  
4-Bromofluorobenzene  
Concen: 42.544 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. -0.00 min  
Lab File: VN059646.D  
Acq: 18 Dec 2019 13:32

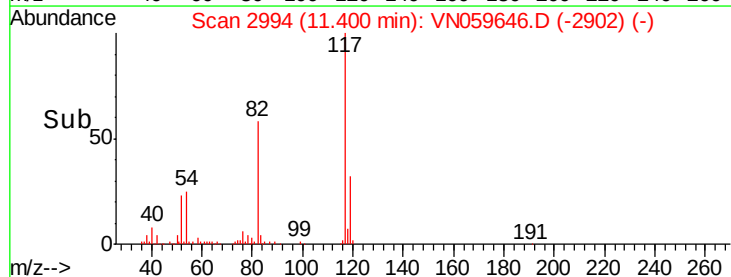
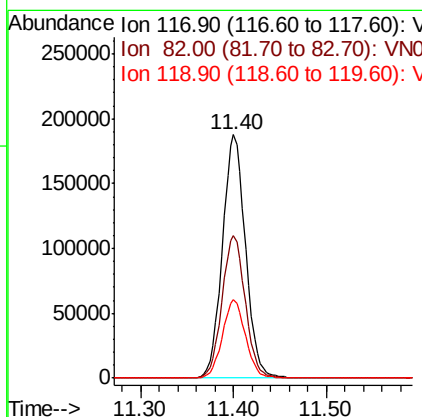
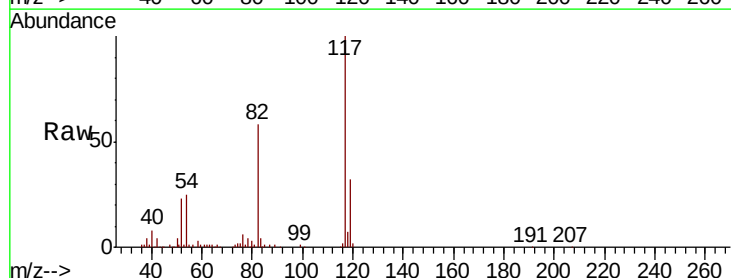
Instrument :  
MSVOA\_N  
ClientSampled :

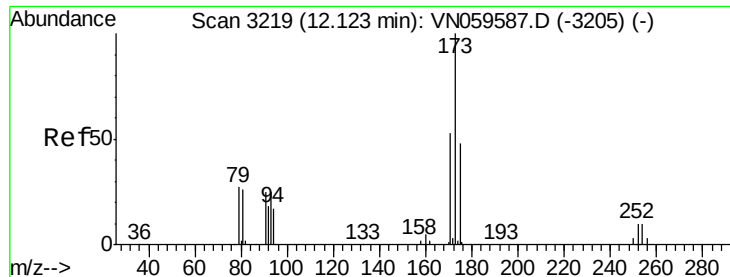
Tot Ion: 95 Resp: 142472  
Ion Ratio Lower Upper  
95 100  
174 76.2 0.0 151.4  
176 73.7 0.0 146.0



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.40 min Scan# 2994  
Delta R.T. -0.00 min  
Lab File: VN059646.D  
Acq: 18 Dec 2019 13:32

Tgt Ion: 117 Resp: 323980  
Ion Ratio Lower Upper  
117 100  
82 58.5 45.9 68.9  
119 32.0 25.5 38.3





#71

Bromoform

Concen: 0.503 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.27 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

ClientSampleId :

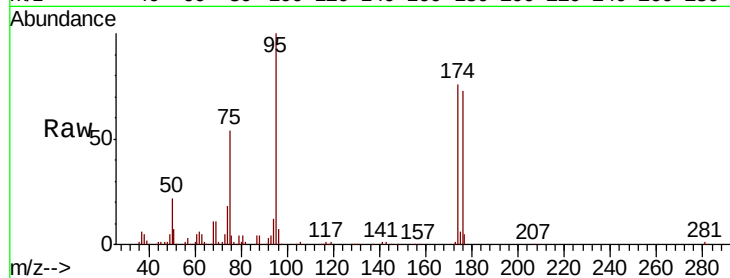
Tot Ion:173 Resp: 1007

Ion Ratio Lower Upper

173 100

175 706.4 23.8 71.4#

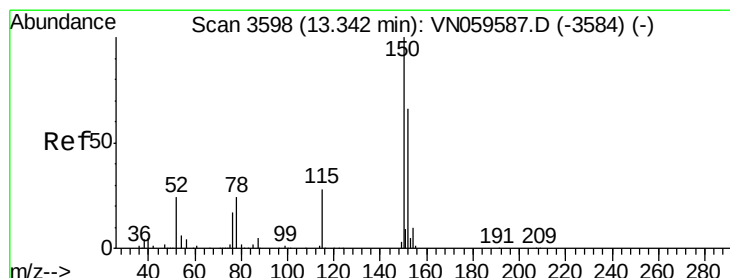
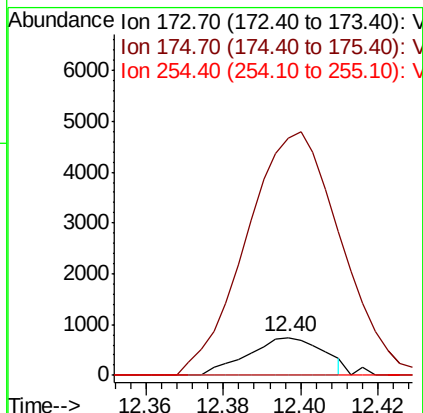
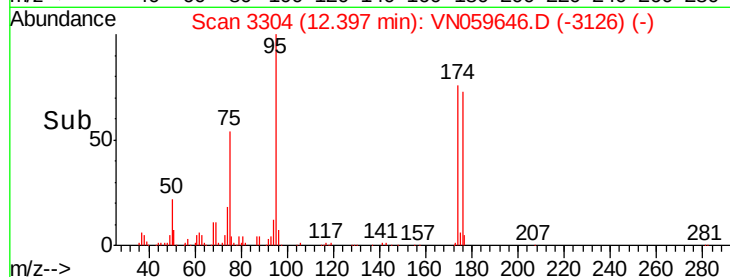
254 0.0 0.0 0.0



Abundance Ion 172.70 (172.40 to 173.40): V

Ion 174.70 (174.40 to 175.40): V

Ion 254.40 (254.10 to 255.10): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3597

Delta R.T. -0.00 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

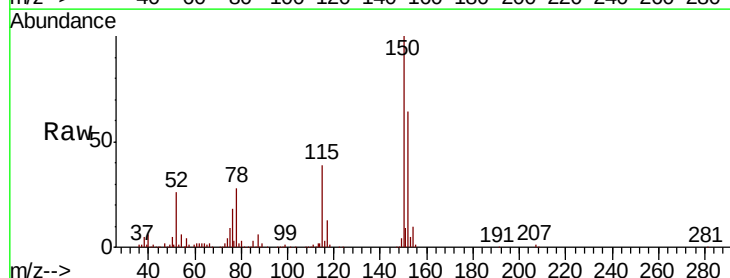
Tgt Ion:152 Resp: 118303

Ion Ratio Lower Upper

152 100

115 60.9 30.3 90.9

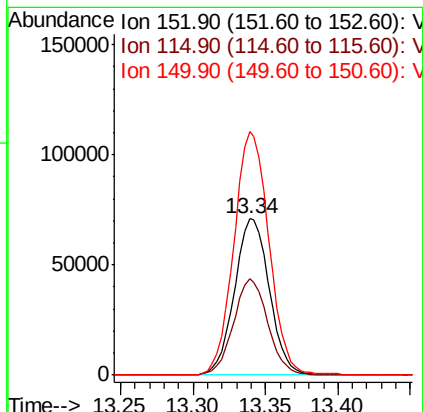
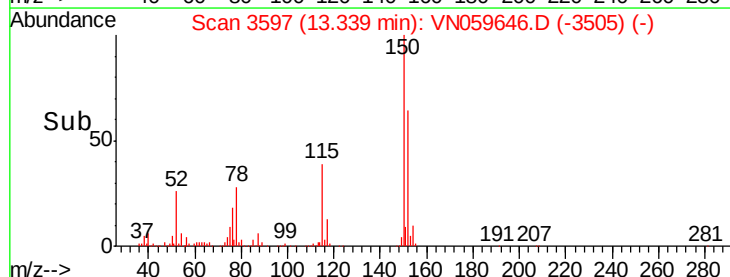
150 156.8 0.0 345.2

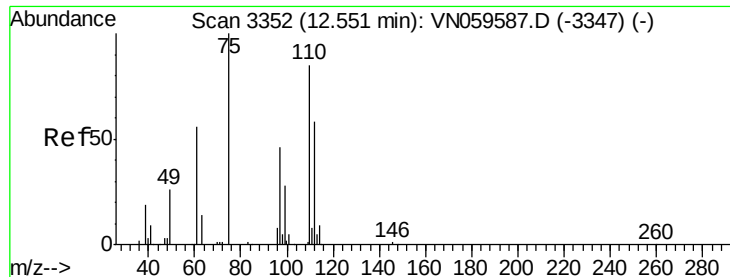


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 25.778 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. -0.15 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

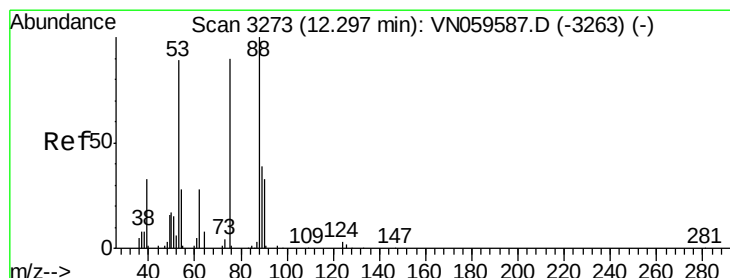
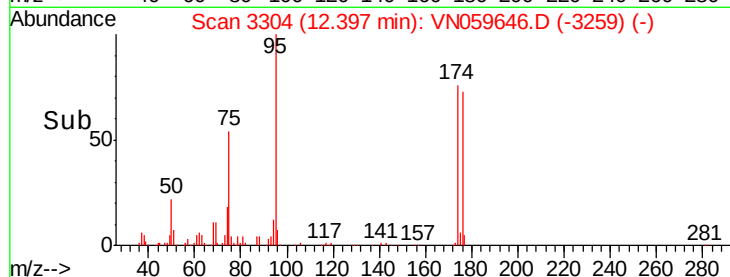
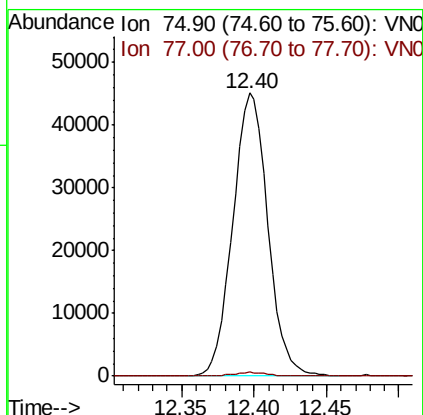
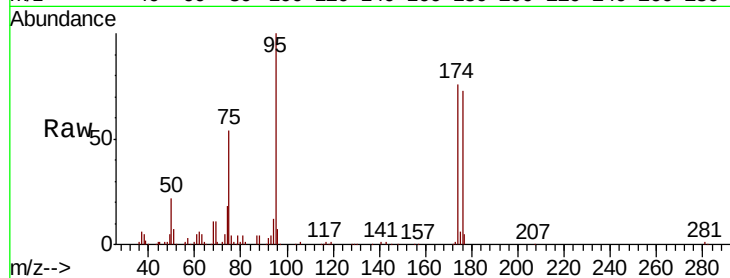
ClientSampled :

Tot Ion: 75 Resp: 75496

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 63.670 ug/l

RT: 12.40 min Scan# 3304

Delta R.T. 0.10 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

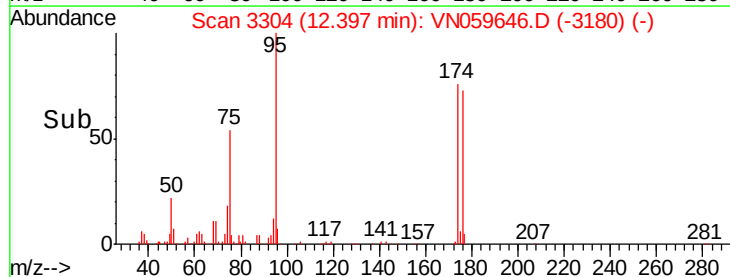
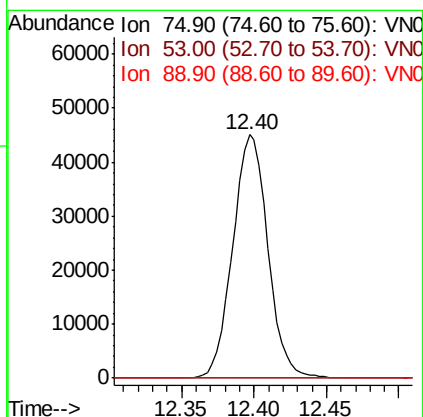
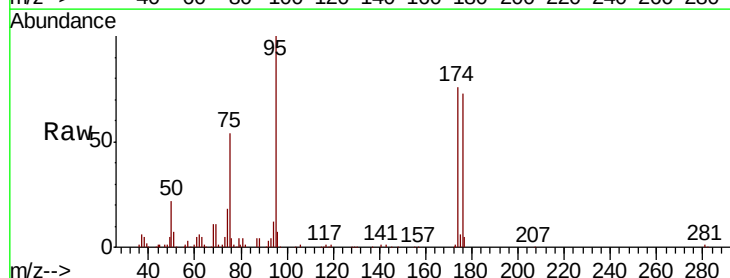
Tgt Ion: 75 Resp: 75496

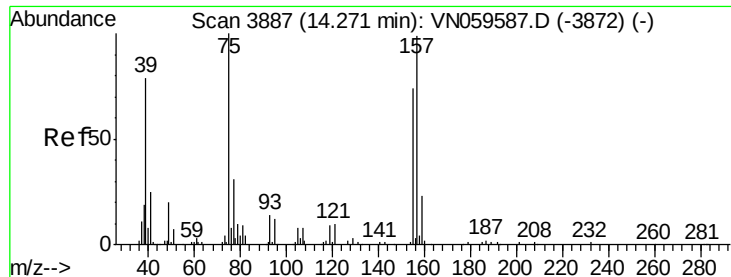
Ion Ratio Lower Upper

75 100

53 0.0 78.1 117.1#

89 0.0 35.4 53.2#





#92

1,2-Dibromo-3-Chloropropane

Concen: 1.849 ug/l

RT: 14.26 min Scan# 3882

Delta R.T. -0.02 min

Lab File: VN059646.D

Acq: 18 Dec 2019 13:32

Instrument :

MSVOA\_N

ClientSampleId :

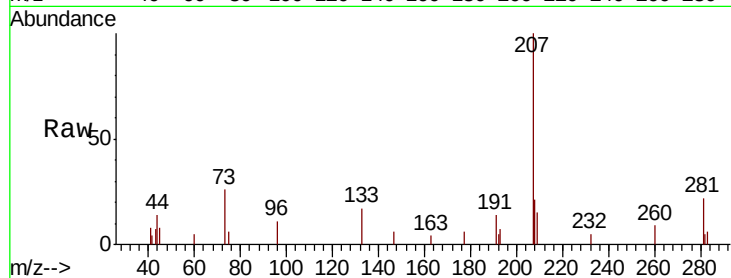
Tot Ion: 75 Resp: 192

Ion Ratio Lower Upper

75 100

155 0.0 37.0 110.9#

157 0.0 48.4 145.2#



Abundance Ion 74.90 (74.60 to 75.60): VN059646.D (-3794) (-)

Ion 154.80 (154.50 to 155.50): VN059646.D (-3794) (-)

Ion 156.80 (156.50 to 157.50): VN059646.D (-3794) (-)

