

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092319\  
 Data File : VN058314.D  
 Acq On : 24 Sep 2019 00:01  
 Operator : JC/SP  
 Sample : K5002-03  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 43 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :

Quant Time: Sep 24 01:39:48 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 19 09:27:53 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 462607   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 750306   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 647251   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 267310   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.01  | 65   | 351805   | 54.60 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 109.20% |          |
| 35) Dibromofluoromethane    | 7.58  | 113  | 238466   | 52.28 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.56% |          |
| 50) Toluene-d8              | 10.08 | 98   | 966985   | 54.41 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 108.82% |          |
| 62) 4-Bromofluorobenzene    | 12.41 | 95   | 307128   | 46.52 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 93.04%  |          |

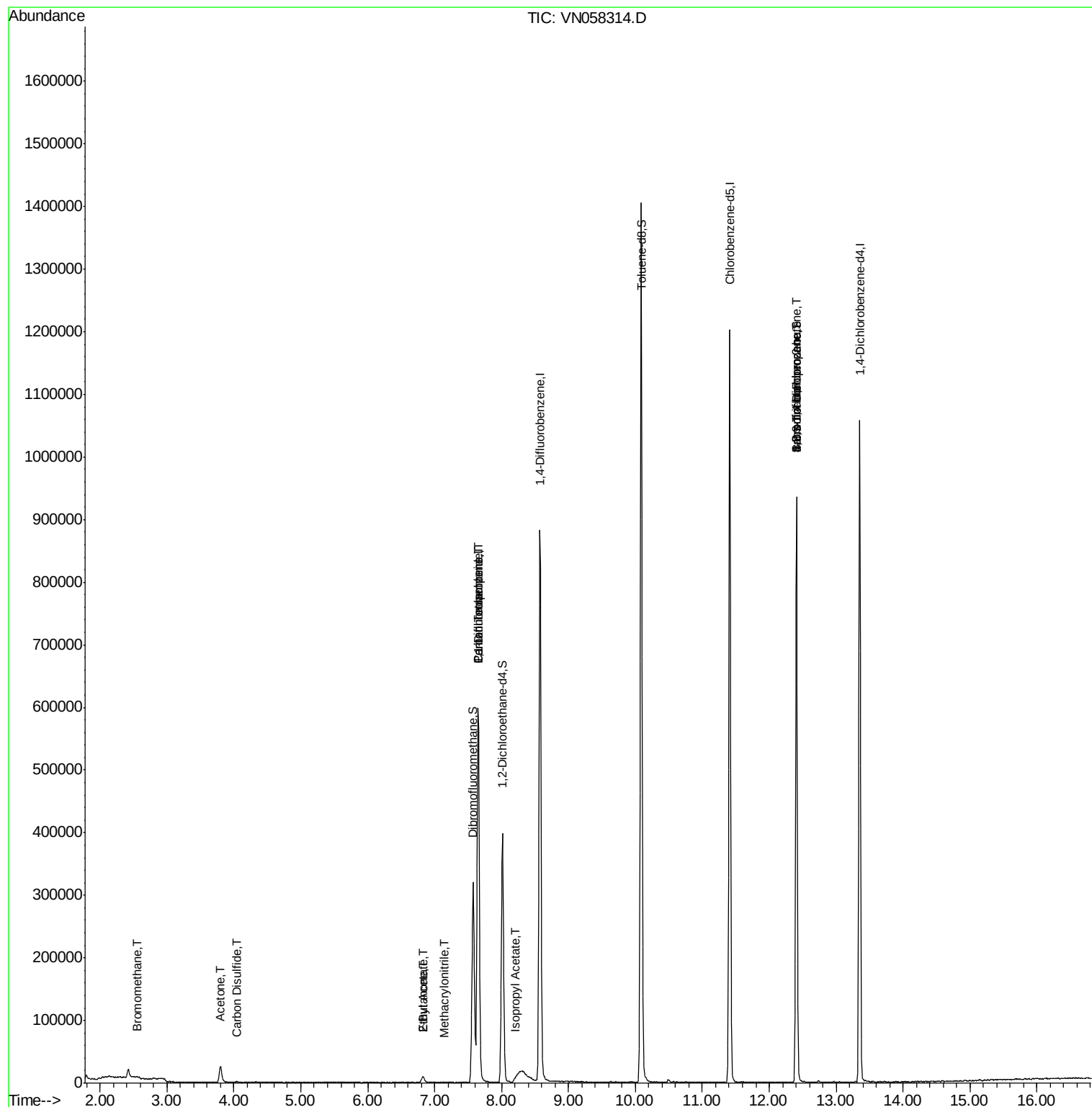
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 2.04  | 50   | 394      | Below Cal | #      | 42     |
| 5) Bromomethane                | 2.55  | 94   | 718      | 1.140     | ug/l # | 72     |
| 6) Chloroethane                | 2.68  | 64   | 94       | Below Cal | #      | 44     |
| 16) Acetone                    | 3.80  | 43   | 45459    | 20.785    | ug/l   | 99     |
| 17) Carbon Disulfide           | 4.04  | 76   | 924      | 0.501     | ug/l # | 74     |
| 20) Methylene Chloride         | 4.54  | 84   | 30       | Below Cal | #      | 65     |
| 25) 2-Butanone                 | 6.83  | 43   | 14707    | 4.936     | ug/l   | 99     |
| 31) Cyclohexane                | 7.65  | 56   | 11018    | Below Cal | #      | 14     |
| 36) 1,1-Dichloropropene        | 7.65  | 75   | 41730    | 7.712     | ug/l # | 50     |
| 37) Ethyl Acetate              | 6.83  | 43   | 14707    | 2.619     | ug/l # | 71     |
| 38) Carbon Tetrachloride       | 7.65  | 117  | 47206    | 8.679     | ug/l # | 15     |
| 41) Methacrylonitrile          | 7.15  | 41   | 35       | 0.923     | ug/l # | 100    |
| 43) Isopropyl Acetate          | 8.20  | 43   | 5372     | 0.512     | ug/l # | 57     |
| 71) Bromoform                  | 12.41 | 173  | 2364     | 4.312     | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.41 | 75   | 168814   | 35.287    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.41 | 75   | 168814   | 98.663    | ug/l # | 5      |

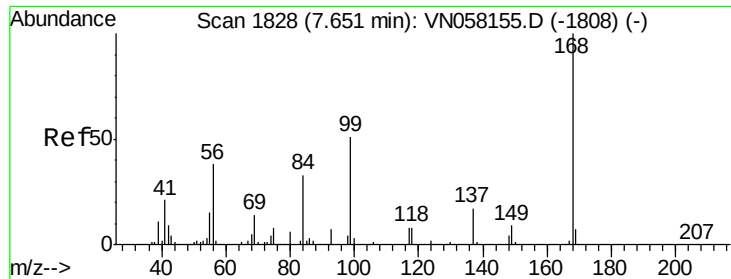
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN092319\  
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ALS Vial : 43 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :

Quant Time: Sep 24 01:39:48 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N091819W.M  
Quant Title : SW846 8260  
QLast Update : Thu Sep 19 09:27:53 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. 0.00 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

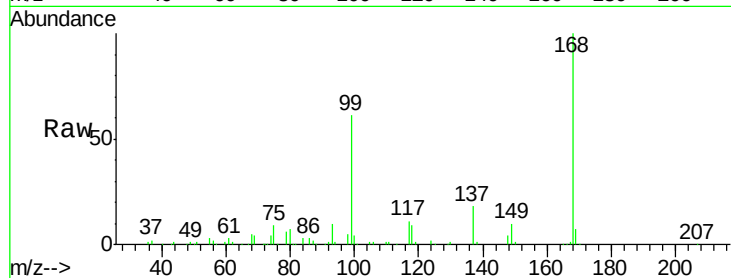
ClientSampled :

Tot Ion:168 Resp: 462607

Ion Ratio Lower Upper

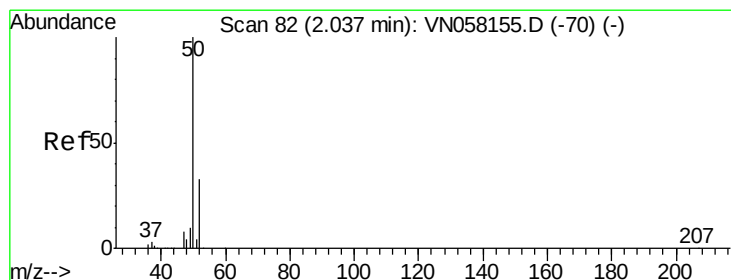
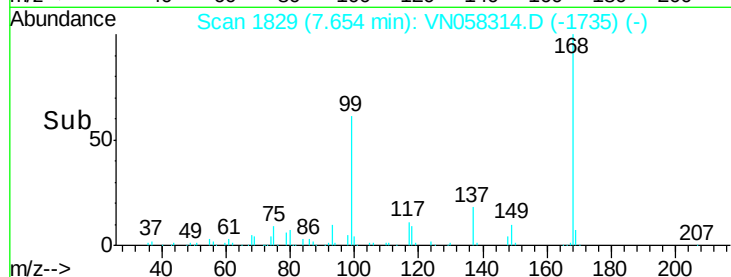
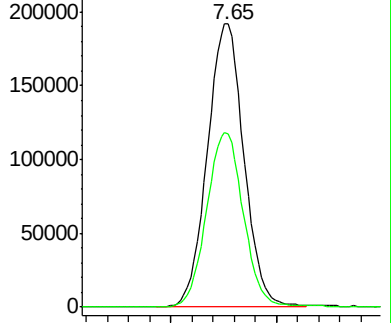
168 100

99 61.0 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO



#3

Chloromethane

Concen: Below Cal

RT: 2.04 min Scan# 83

Delta R.T. 0.00 min

Lab File: VN058314.D

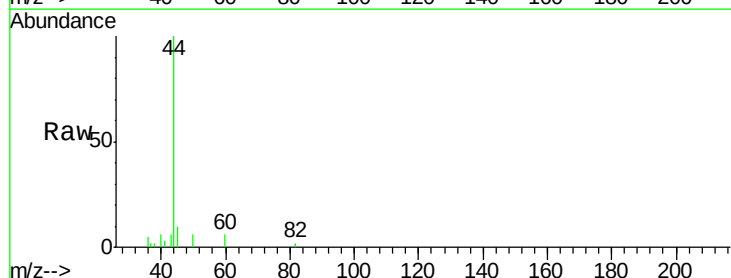
Acq: 24 Sep 2019 00:01

Tgt Ion: 50 Resp: 394

Ion Ratio Lower Upper

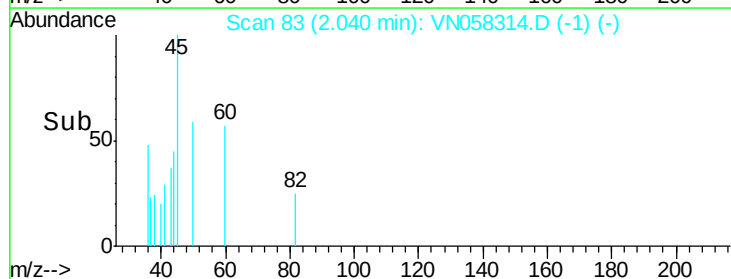
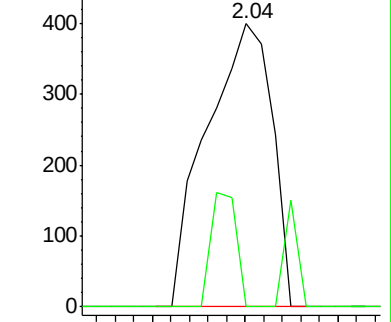
50 100

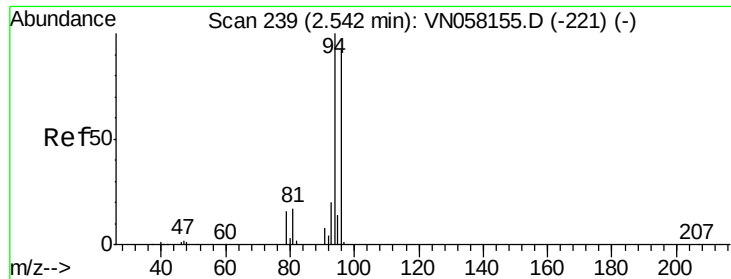
52 0.0 26.3 39.5#



Abundance Ion 49.90 (49.60 to 50.60): VNO

Ion 51.90 (51.60 to 52.60): VNO





#5

Bromomethane

Concen: 1.140 ug/l

RT: 2.55 min Scan# 243

Delta R.T. 0.01 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

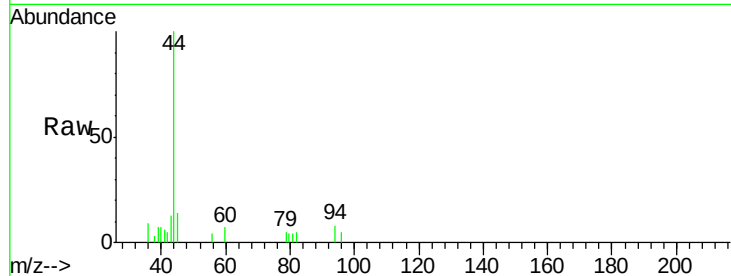
ClientSampled :

Tot Ion: 94 Resp: 718

Ion Ratio Lower Upper

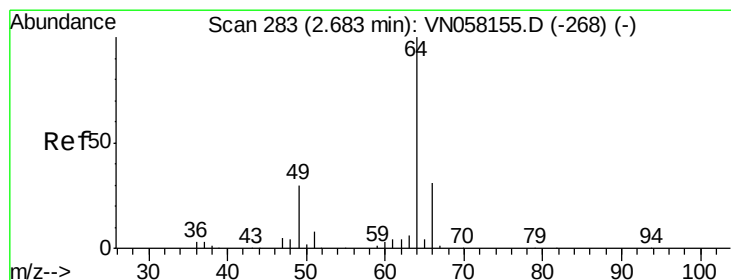
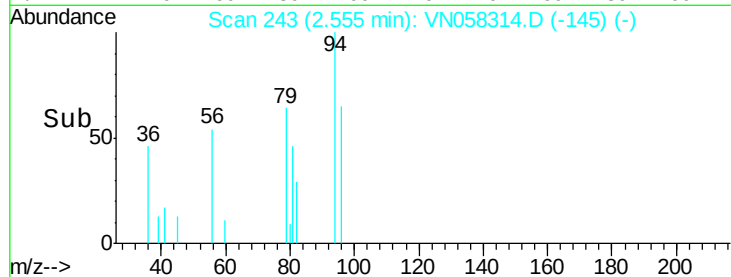
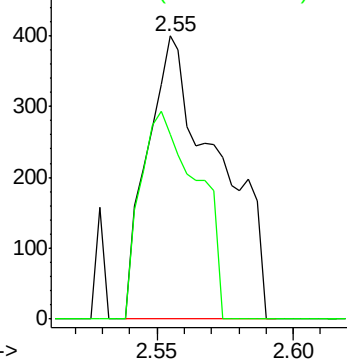
94 100

96 65.4 73.3 109.9#



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO



#6

Chloroethane

Concen: Below Cal

RT: 2.68 min Scan# 282

Delta R.T. -0.00 min

Lab File: VN058314.D

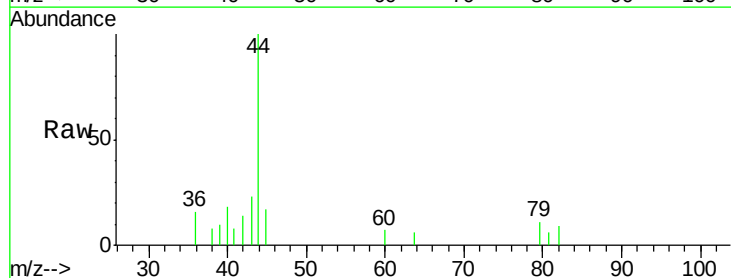
Acq: 24 Sep 2019 00:01

Tgt Ion: 64 Resp: 94

Ion Ratio Lower Upper

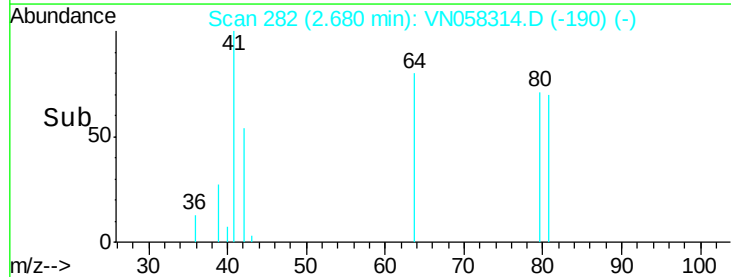
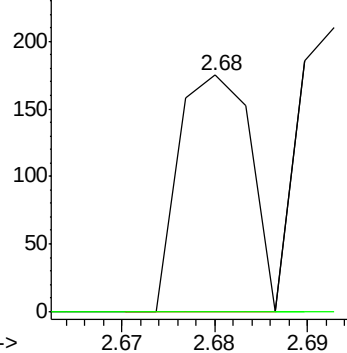
64 100

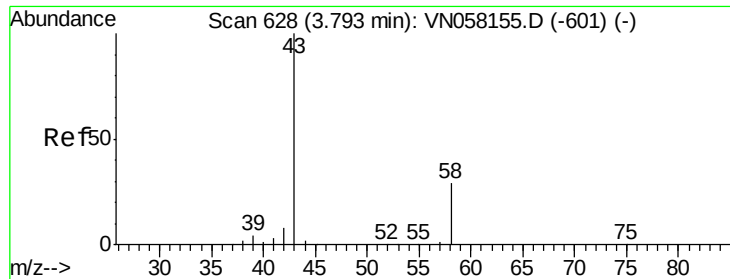
66 0.0 24.6 37.0#



Abundance Ion 63.90 (63.60 to 64.60): VNO

Ion 65.90 (65.60 to 66.60): VNO

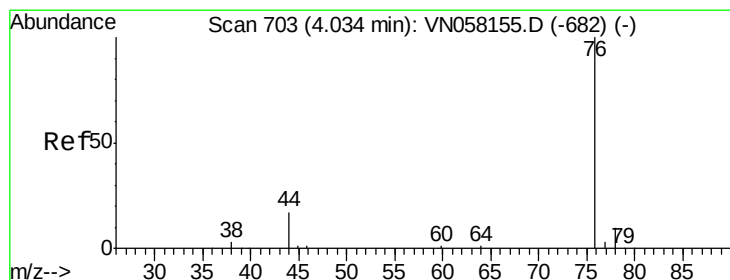
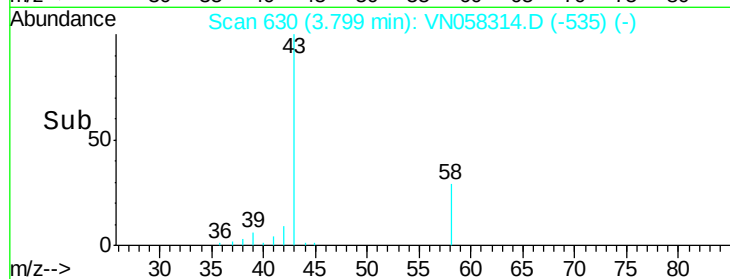
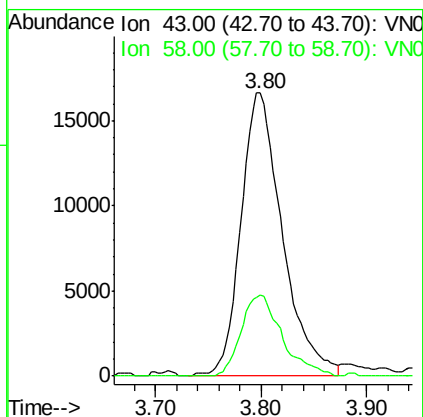
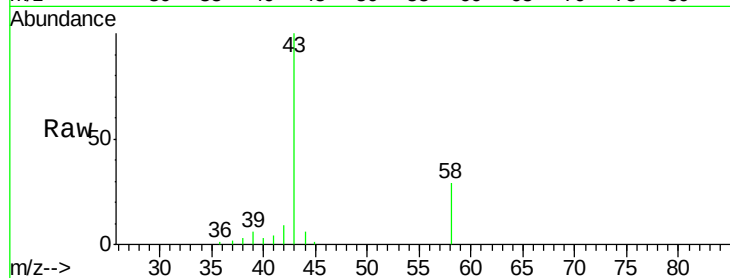




#16  
 Acetone  
 Concen: 20.785 ug/l  
 RT: 3.80 min Scan# 630  
 Delta R.T. 0.01 min  
 Lab File: VN058314.D  
 Acq: 24 Sep 2019 00:01

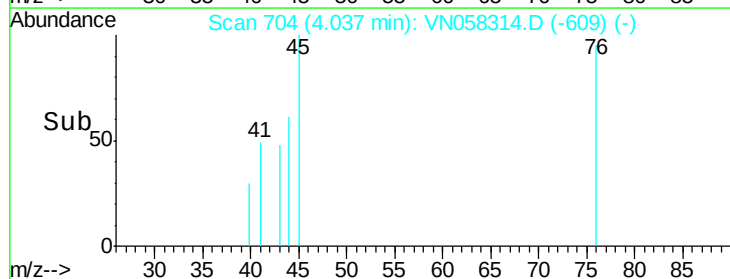
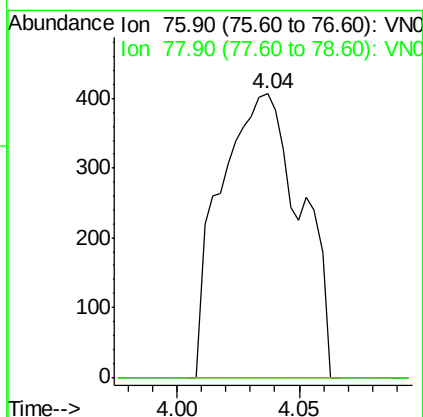
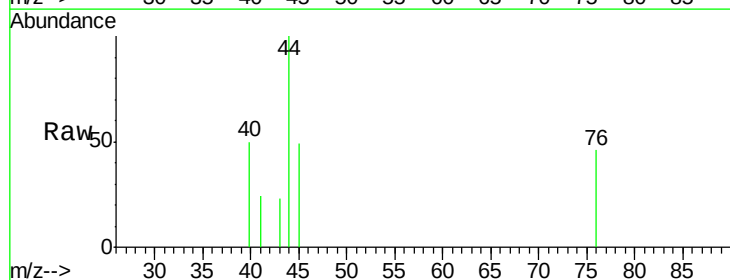
Instrument :  
 MSVOA\_N  
 ClientSampleId :

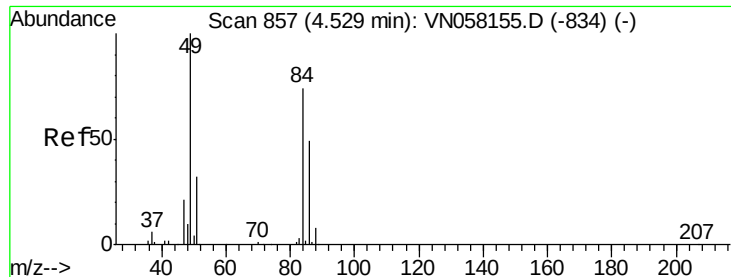
Tot Ion: 43 Resp: 45459  
 Ion Ratio Lower Upper  
 43 100  
 58 28.8 23.4 35.2



#17  
 Carbon Disulfide  
 Concen: 0.501 ug/l  
 RT: 4.04 min Scan# 704  
 Delta R.T. 0.00 min  
 Lab File: VN058314.D  
 Acq: 24 Sep 2019 00:01

Tgt Ion: 76 Resp: 924  
 Ion Ratio Lower Upper  
 76 100  
 78 0.0 7.7 11.5#





#20

Methvlene Chloride

Concen: Below Cal

RT: 4.54 min Scan# 862

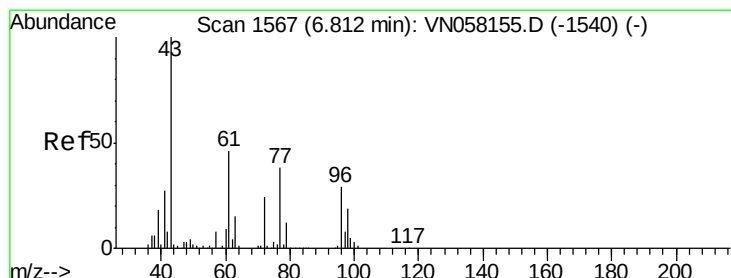
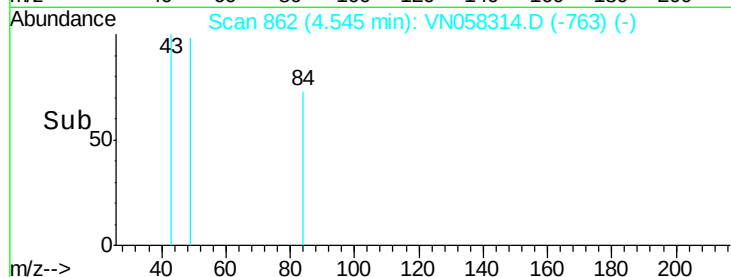
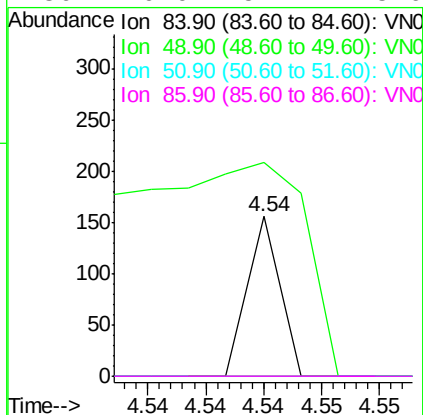
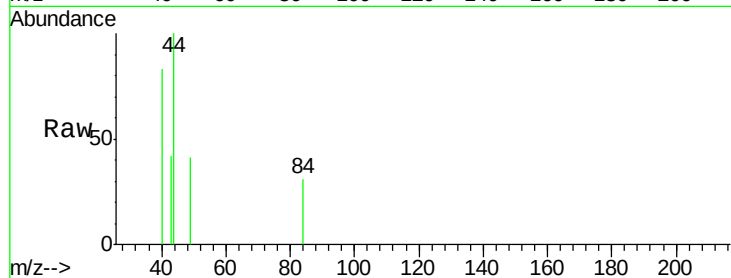
Delta R.T. 0.02 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :  
MSVOA\_N  
ClientSampled :

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 84    | Resp: | 30    |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 133.3 | 107.5 | 161.3 |
| 51       | 0.0   | 33.9  | 50.9# |
| 86       | 0.0   | 52.4  | 78.6# |



#25

2-Butanone

Concen: 4.936 ug/l

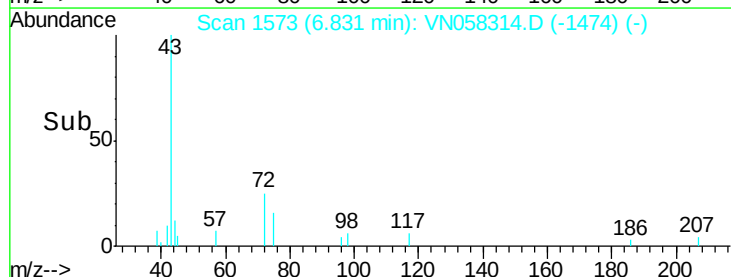
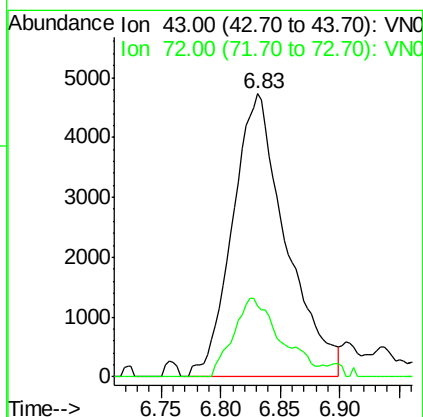
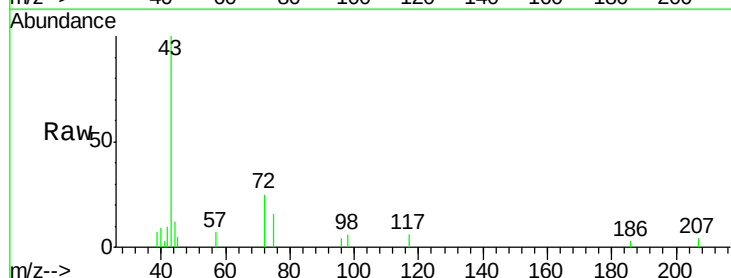
RT: 6.83 min Scan# 1573

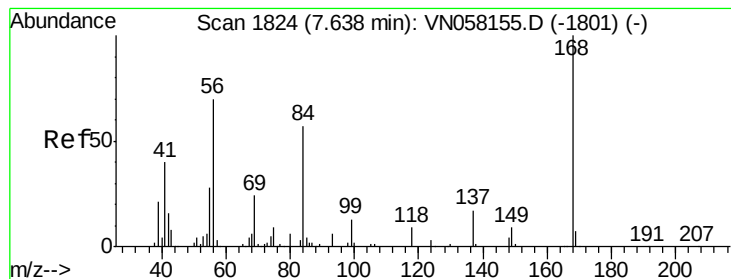
Delta R.T. 0.02 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 14707 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 24.9  | 19.5  | 29.3  |





#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1828

Delta R.T. 0.01 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

ClientSampled :

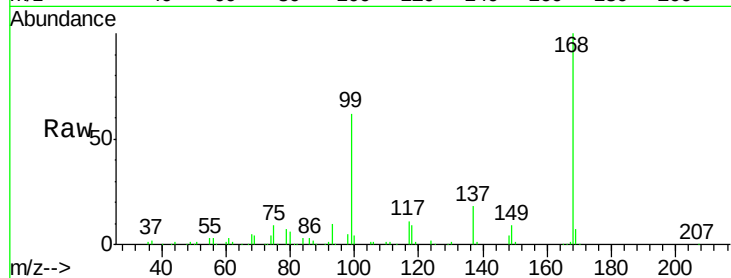
Tot Ion: 56 Resp: 11018

Ion Ratio Lower Upper

56 100

69 153.2 27.3 40.9#

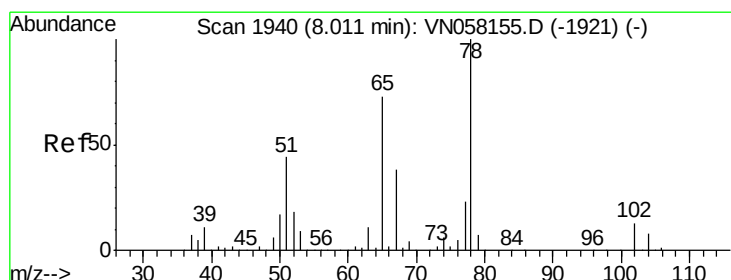
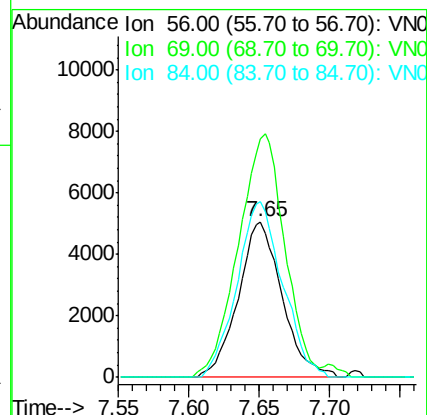
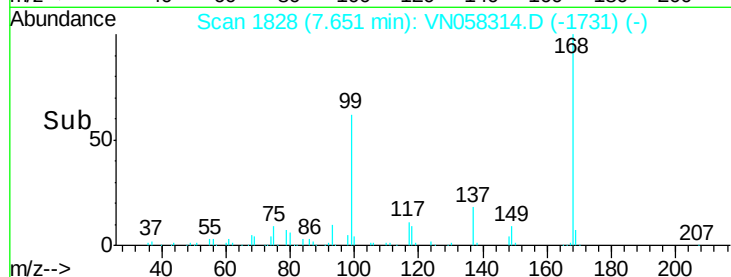
84 112.6 65.0 97.4#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#33

1,2-Dichloroethane-d4

Concen: 54.601 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. -0.00 min

Lab File: VN058314.D

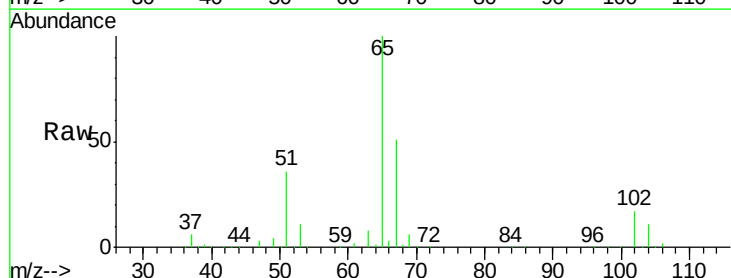
Acq: 24 Sep 2019 00:01

Tgt Ion: 65 Resp: 351805

Ion Ratio Lower Upper

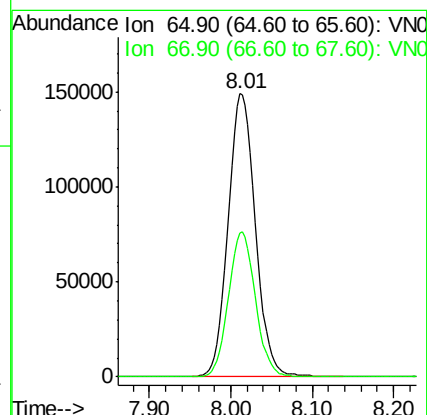
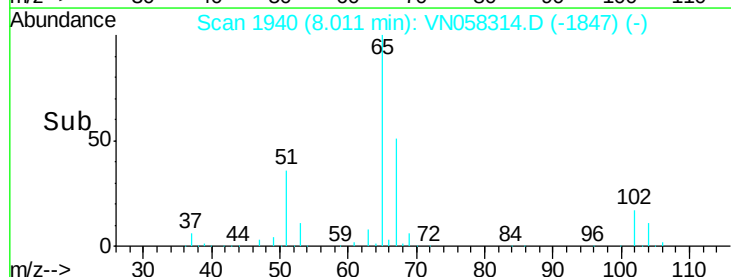
65 100

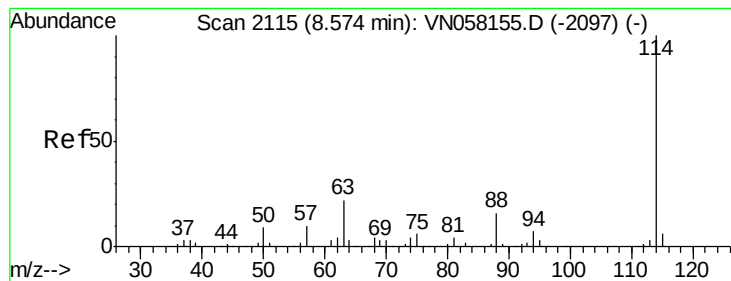
67 50.5 0.0 103.4



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# 2115

Delta R.T. -0.00 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

ClientSampled :

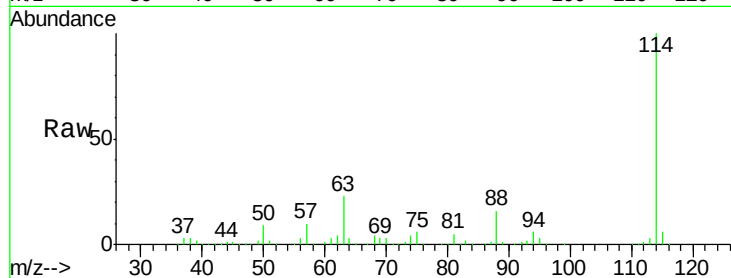
Tot Ion:114 Resp: 750306

Ion Ratio Lower Upper

114 100

63 22.7 0.0 44.2

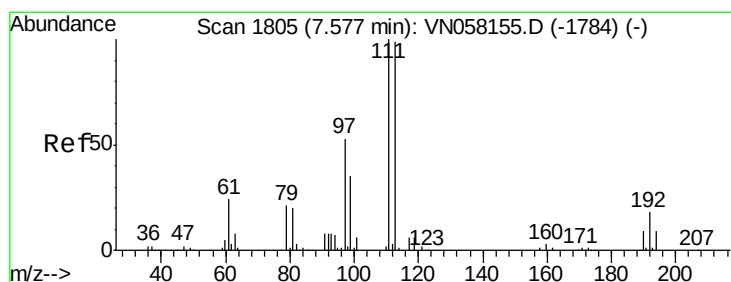
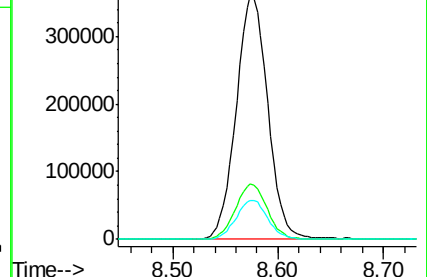
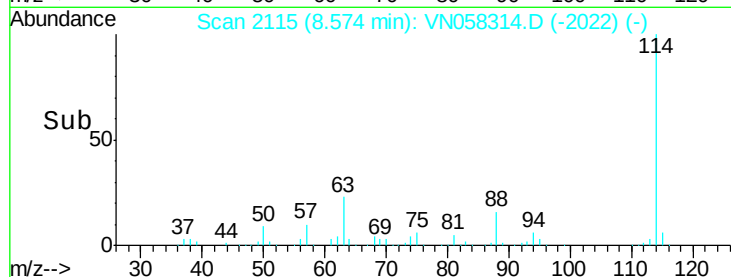
88 16.0 0.0 31.6



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: 52.281 ug/l

RT: 7.58 min Scan# 1805

Delta R.T. -0.00 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

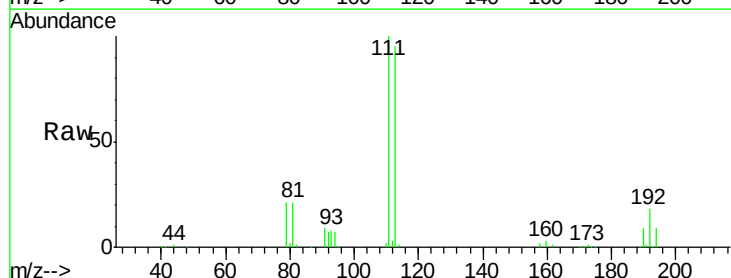
Tgt Ion:113 Resp: 238466

Ion Ratio Lower Upper

113 100

111 103.8 81.8 122.6

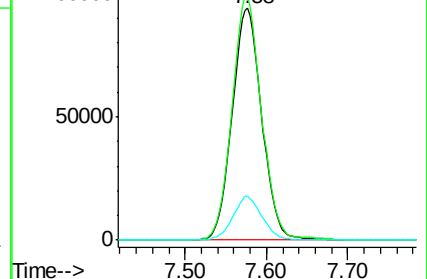
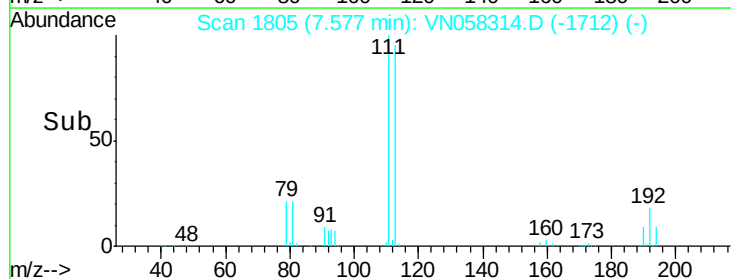
192 18.5 14.5 21.7



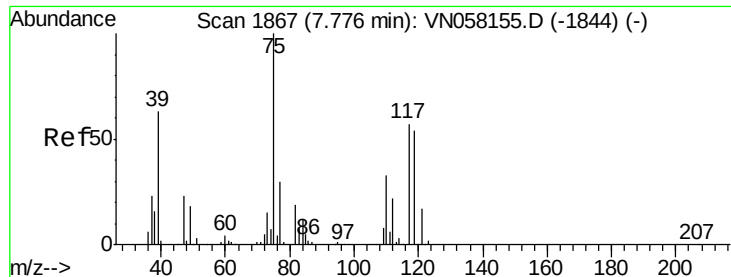
Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V



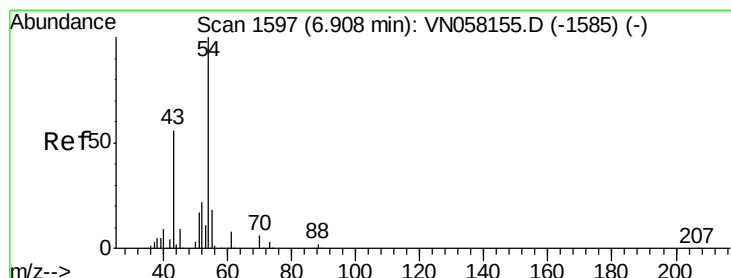
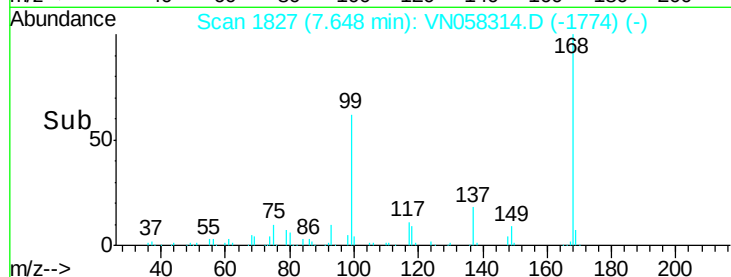
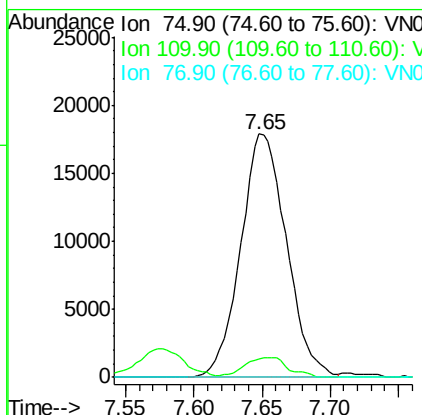
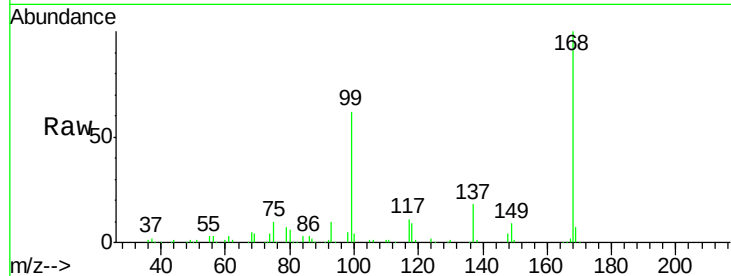




#36  
 1,1-Dichloropropene  
 Concen: 7.712 ug/l  
 RT: 7.65 min Scan# 1827  
 Delta R.T. -0.13 min  
 Lab File: VN058314.D  
 Acq: 24 Sep 2019 00:01

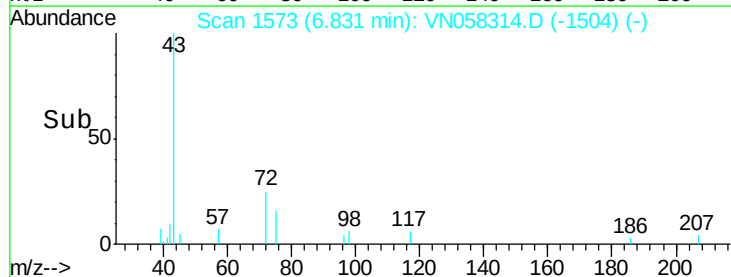
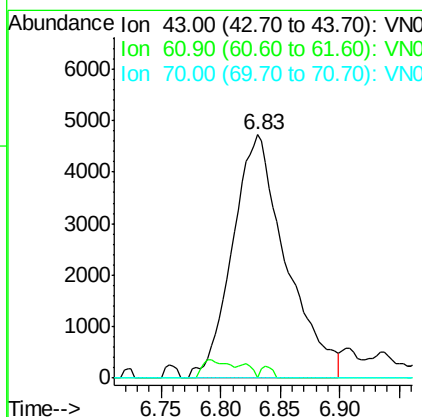
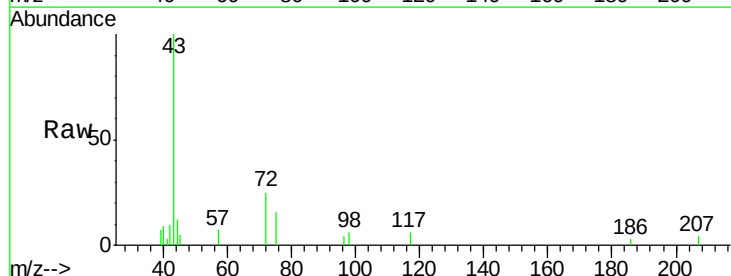
Instrument :  
 MSVOA\_N  
 ClientSampleId :

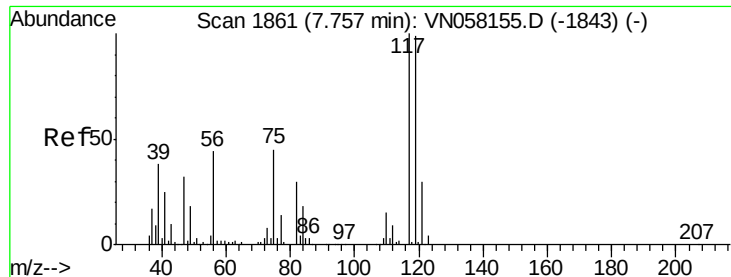
| Tot Ion   | 75    | Resp  | 41730 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 75        | 100   |       |       |
| 110       | 7.8   | 16.6  | 49.7# |
| 77        | 0.0   | 24.3  | 36.5# |



#37  
 Ethyl Acetate  
 Concen: 2.619 ug/l  
 RT: 6.83 min Scan# 1573  
 Delta R.T. -0.08 min  
 Lab File: VN058314.D  
 Acq: 24 Sep 2019 00:01

| Tgt Ion   | 43    | Resp  | 14707 |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 61        | 1.0   | 10.7  | 16.1# |
| 70        | 0.0   | 7.6   | 11.4# |





#38

Carbon Tetrachloride

Concen: 8.679 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. -0.10 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

ClientSampleId :

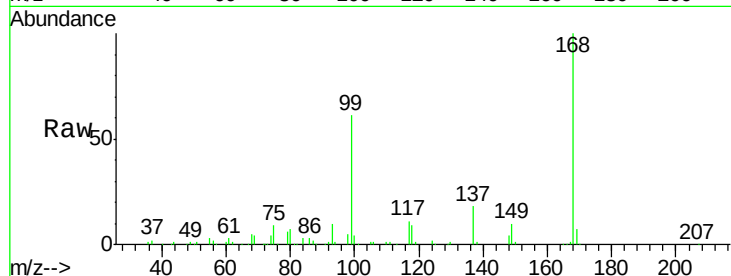
Tot Ion:117 Resp: 47206

Ion Ratio Lower Upper

117 100

119 5.1 78.6 117.8#

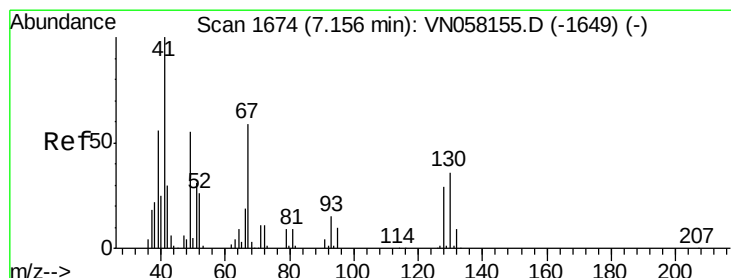
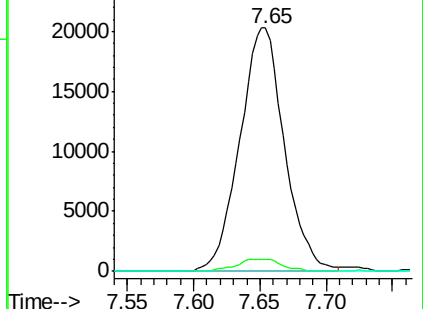
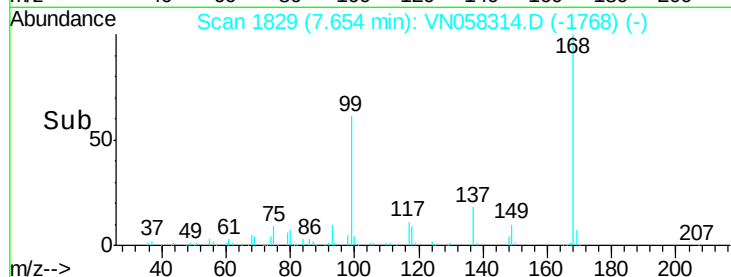
121 0.0 24.1 36.1#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#41

Methacrylonitrile

Concen: 0.923 ug/l

RT: 7.15 min Scan# 1673

Delta R.T. -0.00 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Tgt Ion: 41 Resp: 35

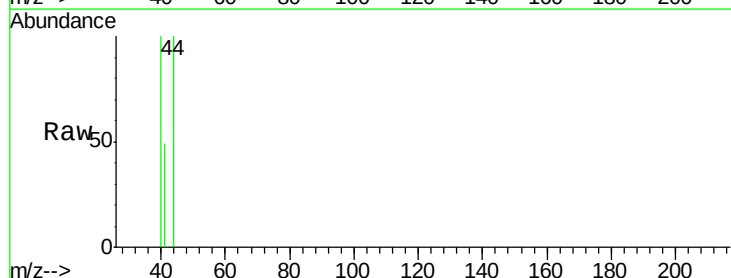
Ion Ratio Lower Upper

41 100

39 0.0 0.0 0.0

67 0.0 0.0 0.0

52 0.0 0.0 0.0

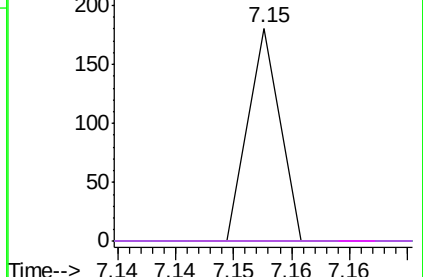
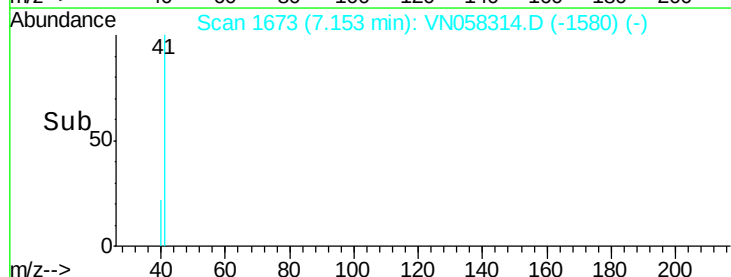


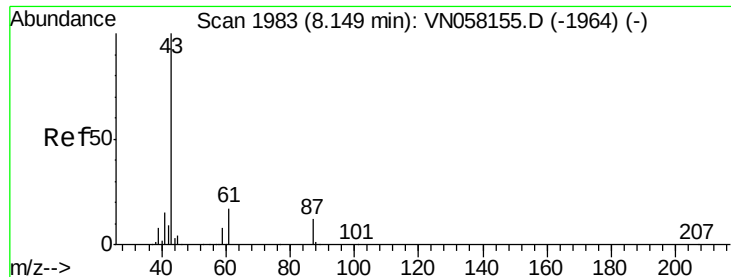
Abundance Ion 41.00 (40.70 to 41.70): V

Ion 39.00 (38.70 to 39.70): V

Ion 67.00 (66.70 to 67.70): V

Ion 52.00 (51.70 to 52.70): V





#43

Isopropyl Acetate

Concen: 0.512 ug/l

RT: 8.20 min Scan# 2000

Delta R.T. 0.05 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

ClientSampleId :

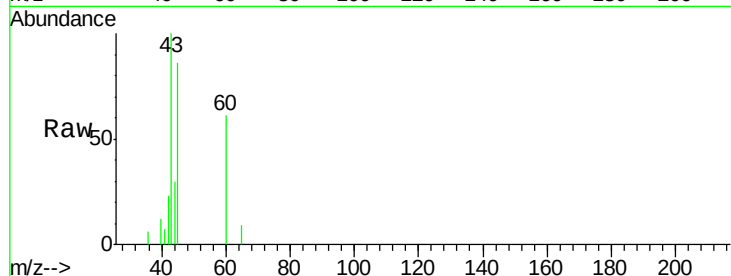
Tot Ion: 43 Resp: 5372

Ion Ratio Lower Upper

43 100

61 0.0 19.7 29.5#

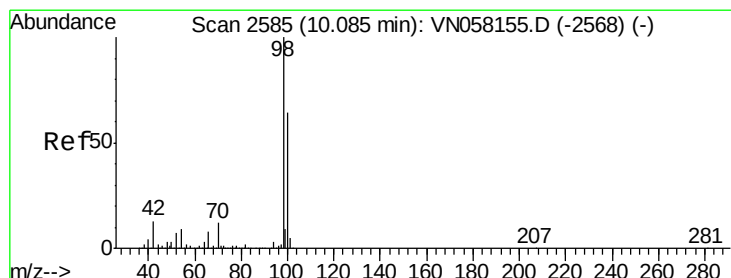
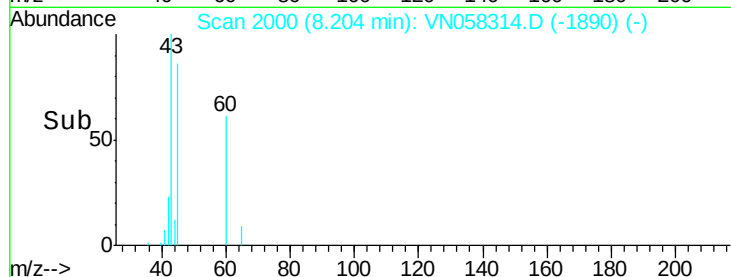
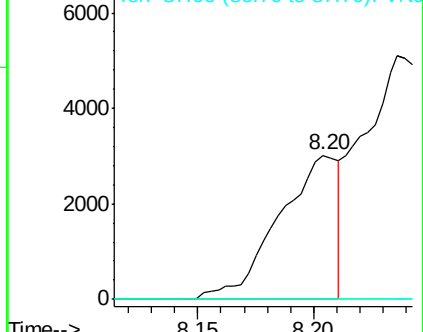
87 0.0 9.4 14.2#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 87.00 (86.70 to 87.70): VN0



#50

Toluene-d8

Concen: 54.412 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058314.D

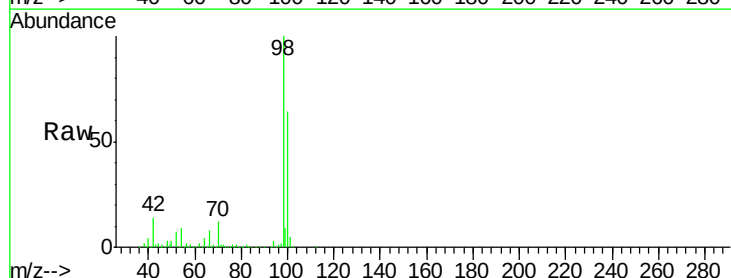
Acq: 24 Sep 2019 00:01

Tgt Ion: 98 Resp: 966985

Ion Ratio Lower Upper

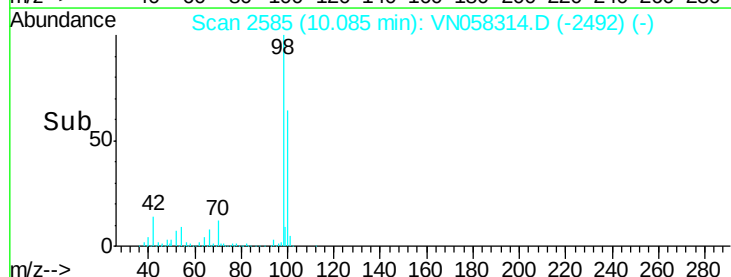
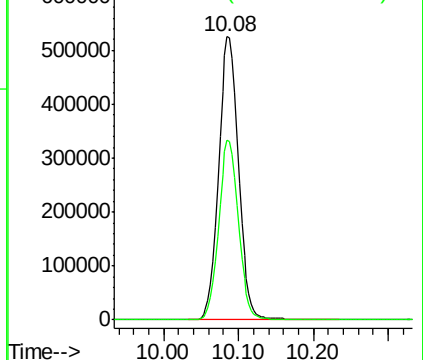
98 100

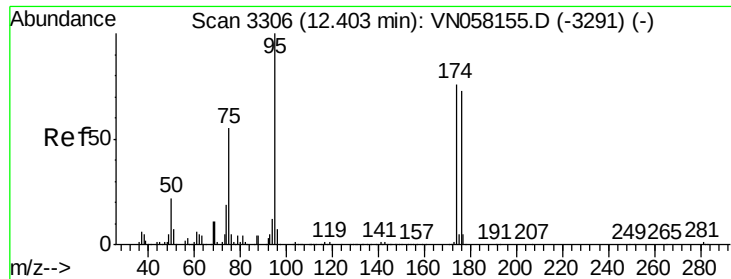
100 62.9 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN0

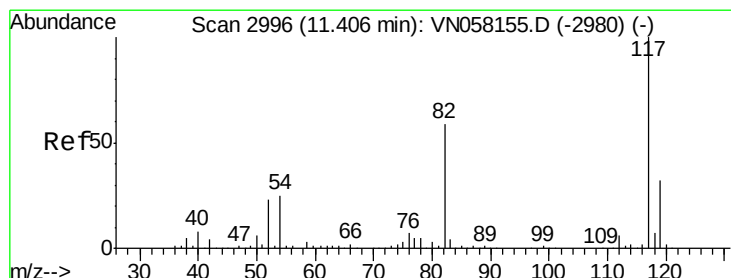
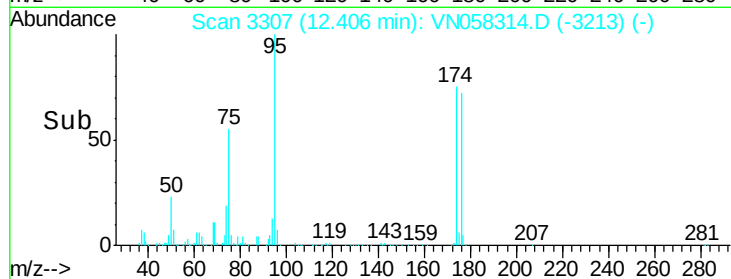
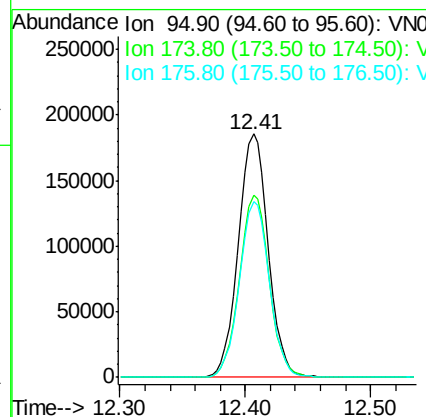
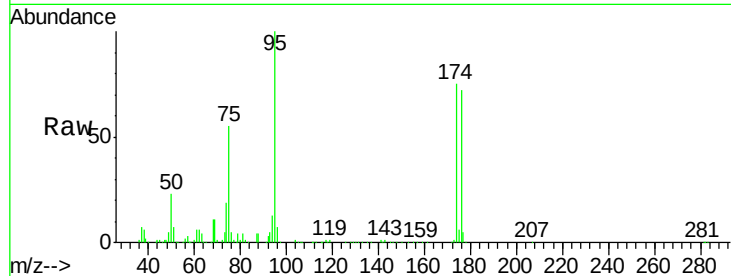




#62  
4-Bromofluorobenzene  
Concen: 46.524 ug/l  
RT: 12.41 min Scan# 3307  
Delta R.T. 0.00 min  
Lab File: VN058314.D  
Acq: 24 Sep 2019 00:01

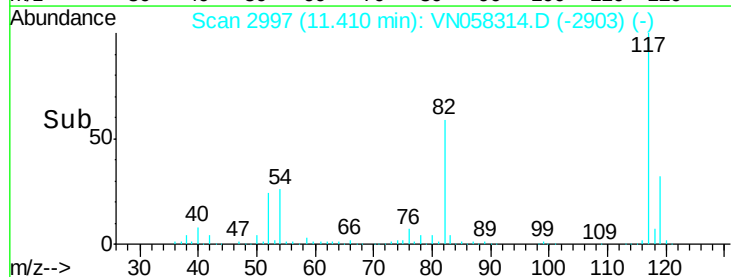
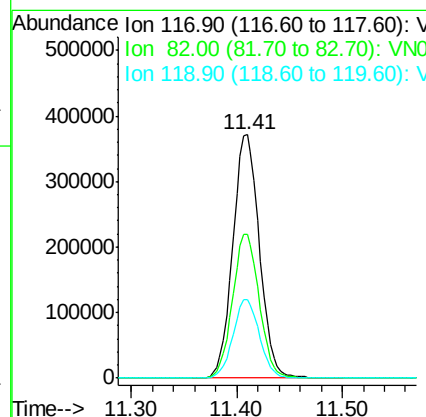
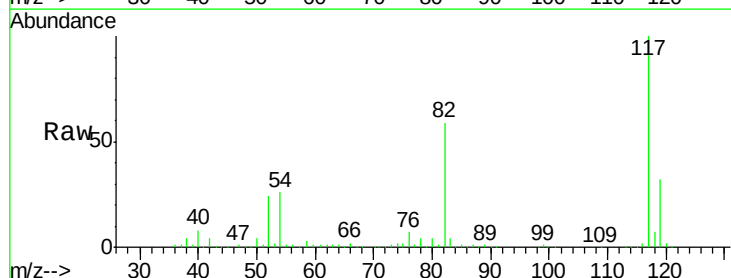
Instrument :  
MSVOA\_N  
ClientSampled :

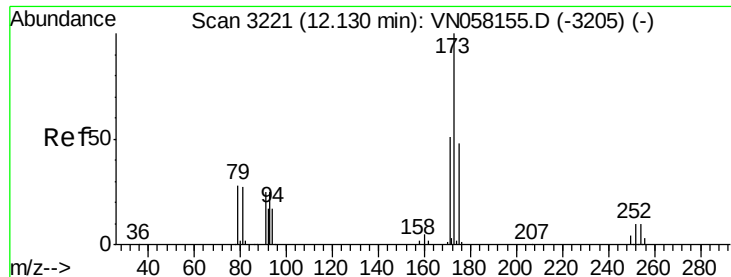
| Tot Ion   | 95    | Resp  | 307128 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 95        | 100   |       |        |
| 174       | 74.6  | 0.0   | 152.2  |
| 176       | 72.7  | 0.0   | 148.0  |



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2997  
Delta R.T. 0.00 min  
Lab File: VN058314.D  
Acq: 24 Sep 2019 00:01

| Tgt Ion   | 117   | Resp  | 647251 |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 117       | 100   |       |        |
| 82        | 59.2  | 46.9  | 70.3   |
| 119       | 32.1  | 25.3  | 37.9   |





#71

Bromoform

Concen: 4.312 ug/l

RT: 12.41 min Scan# 3308

Delta R.T. 0.28 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

ClientSampleId :

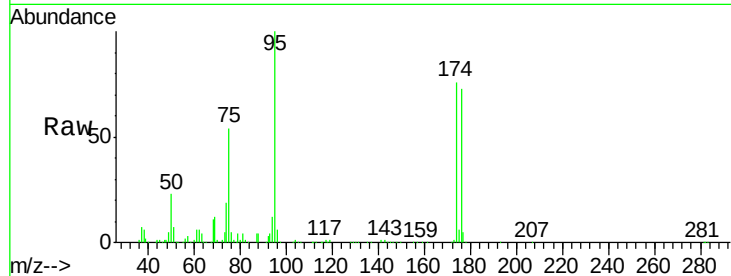
Tot Ion:173 Resp: 2364

Ion Ratio Lower Upper

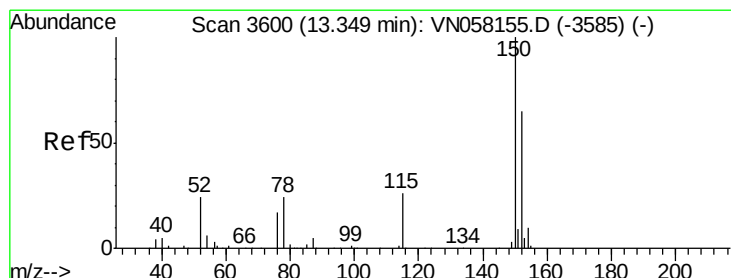
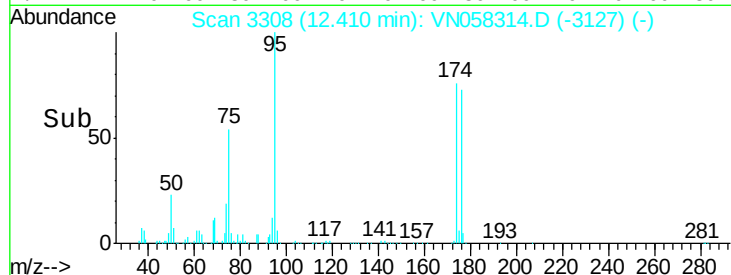
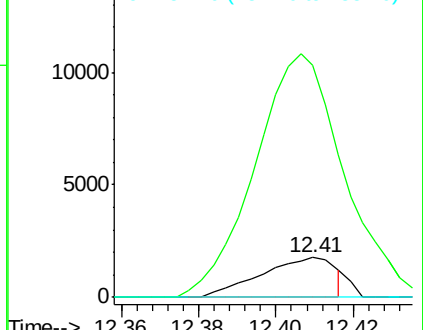
173 100

175 621.9 24.2 72.6#

254 0.0 0.1 0.1#



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: 13.35 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

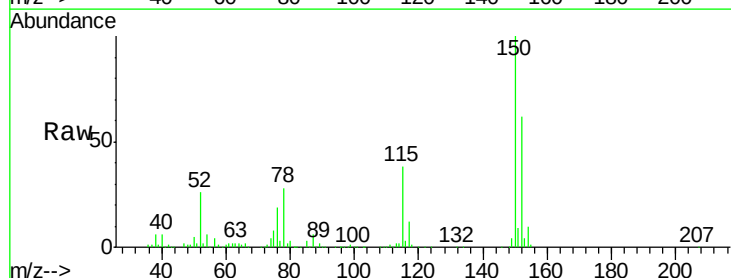
Tgt Ion:152 Resp: 267310

Ion Ratio Lower Upper

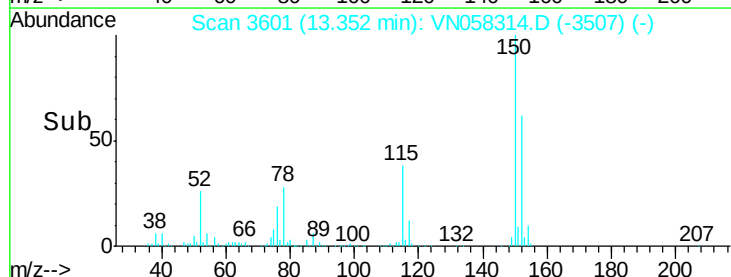
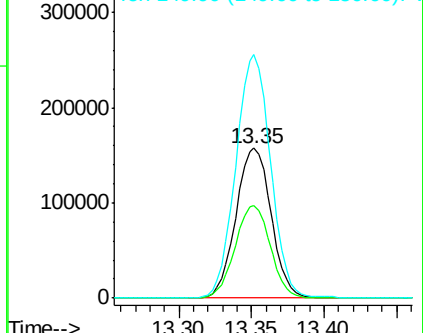
152 100

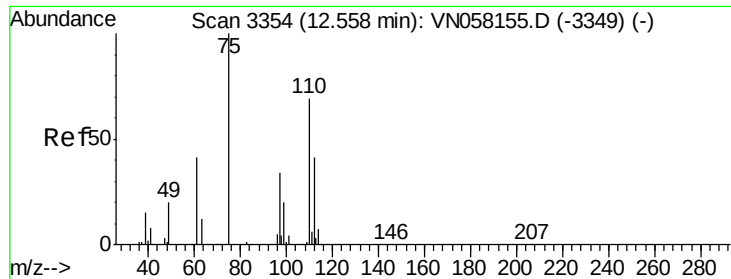
115 61.7 30.1 90.3

150 159.9 0.0 346.4



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: 35.287 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

Instrument :

MSVOA\_N

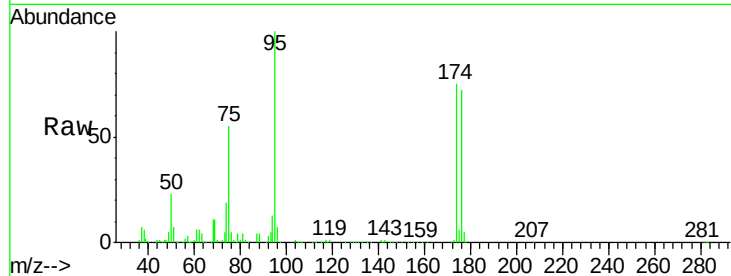
ClientSampleId :

Tot Ion: 75 Resp: 168814

Ion Ratio Lower Upper

75 100

77 1.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

120000

100000

80000

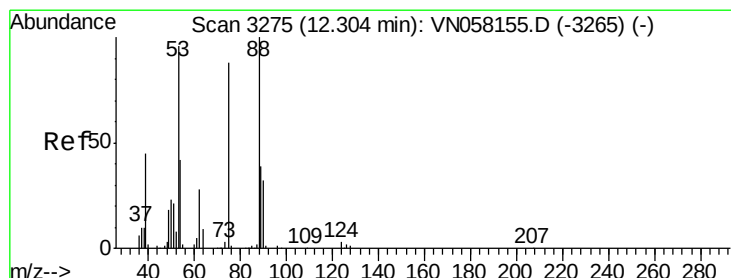
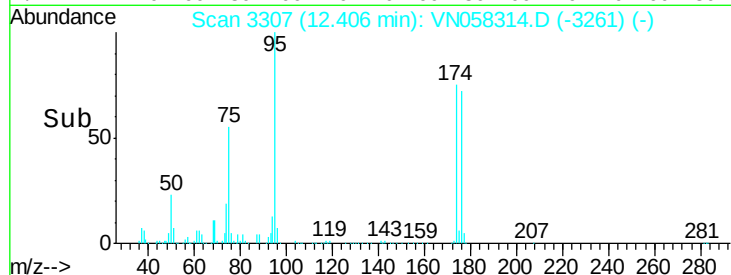
60000

40000

20000

0

Time--> 12.30 12.40 12.50



#81

trans-1,4-Dichloro-2-butene

Concen: 98.663 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058314.D

Acq: 24 Sep 2019 00:01

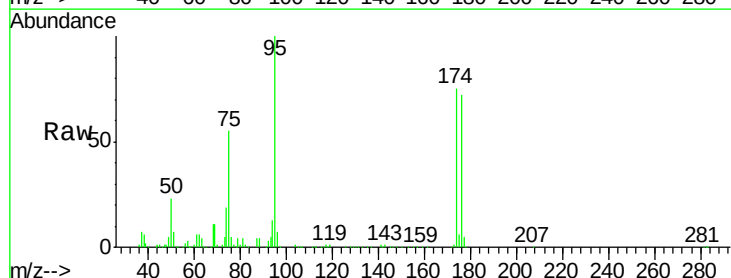
Tgt Ion: 75 Resp: 168814

Ion Ratio Lower Upper

75 100

53 0.1 90.1 135.1#

89 0.0 36.2 54.2#



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

100000

50000

0

Time--> 12.30 12.40 12.50

