

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092319\  
 Data File : VN058281.D  
 Acq On : 23 Sep 2019 11:06  
 Operator : JC/SP  
 Sample : K4975-10 25X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE108D2-20190918

Quant Time: Sep 24 01:29:46 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  | 479529   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 787699   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 674144   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 264433   | 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   | 360034   | 53.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.82% |          |
| 35) Dibromofluoromethane    | 7.58  | 113  | 250462   | 52.30 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 104.60% |          |
| 50) Toluene-d8              | 10.09 | 98   | 999162   | 53.55 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 107.10% |          |
| 62) 4-Bromofluorobenzene    | 12.41 | 95   | 311345   | 44.92 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 89.84%  |          |

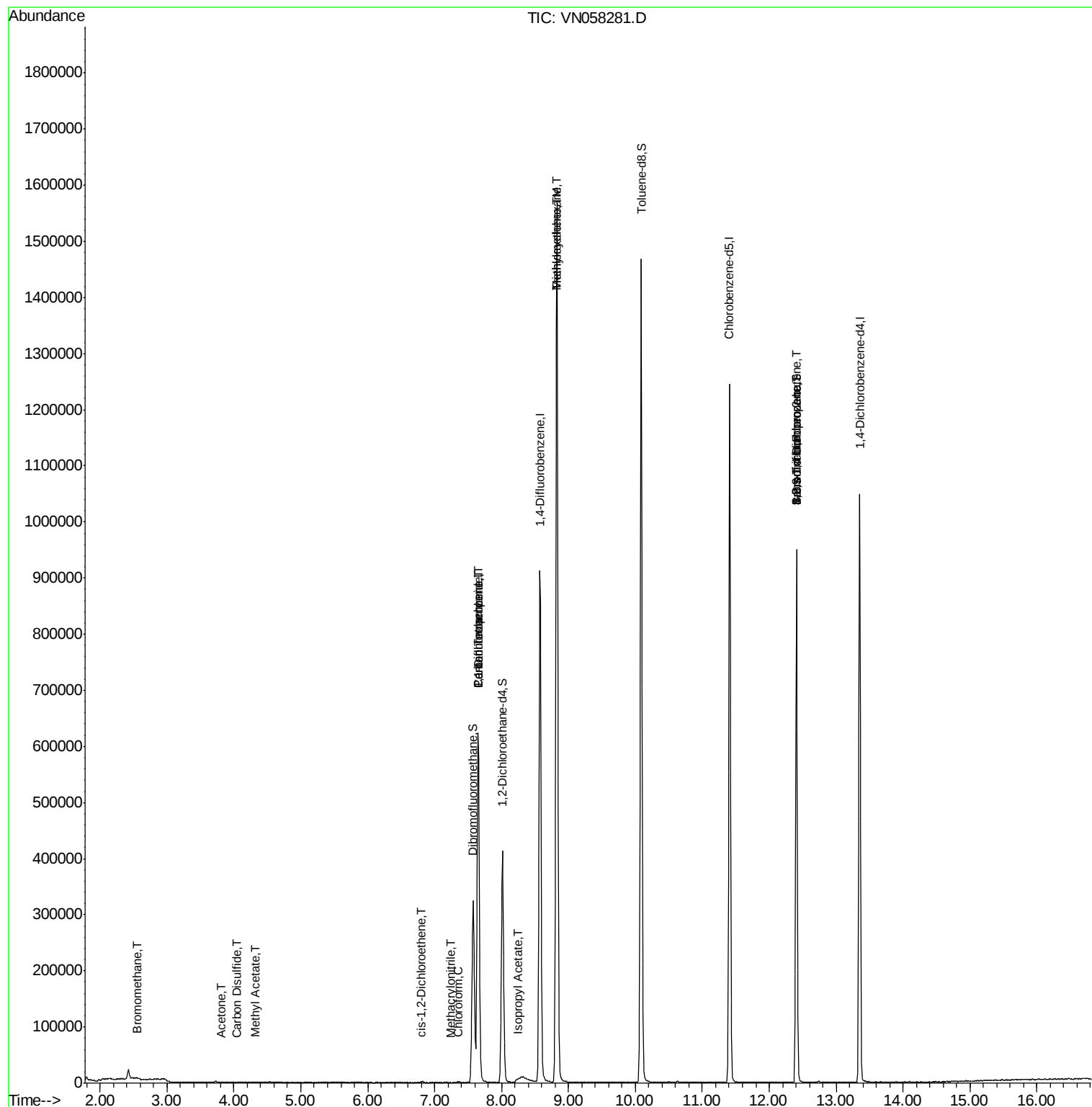
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 3) Chloromethane               | 2.04  | 50   | 522      | Below Cal | #      | 42     |
| 5) Bromomethane                | 2.56  | 94   | 101      | 0.779     | ug/l   | 85     |
| 6) Chloroethane                | 2.80  | 64   | 33       | Below Cal | #      | 44     |
| 12) 1,1-Dichloroethene         | 3.73  | 96   | 665      | Below Cal | #      | 52     |
| 16) Acetone                    | 3.82  | 43   | 837      | 0.369     | ug/l # | 45     |
| 17) Carbon Disulfide           | 4.03  | 76   | 66       | 0.287     | ug/l # | 74     |
| 18) Methyl Acetate             | 4.32  | 43   | 1663     | 0.279     | ug/l # | 73     |
| 20) Methylene Chloride         | 4.55  | 84   | 573      | Below Cal | #      | 32     |
| 27) cis-1,2-Dichloroethene     | 6.80  | 96   | 1139     | 0.234     | ug/l   | 31     |
| 30) Chloroform                 | 7.35  | 83   | 2305     | 0.249     | ug/l # | 80     |
| 31) Cyclohexane                | 7.65  | 56   | 12185    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 7.65  | 75   | 40867    | 7.194     | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 7.65  | 117  | 48514    | 8.496     | ug/l # | 15     |
| 39) Methylcyclohexane          | 8.82  | 83   | 7857     | 1.499     | ug/l # | 1      |
| 41) Methacrylonitrile          | 7.25  | 41   | 30       | 0.921     | ug/l # | 100    |
| 43) Isopropyl Acetate          | 8.25  | 43   | 6357     | 0.577     | ug/l # | 57     |
| 44) Trichloroethene            | 8.82  | 130  | 544775   | 128.309   | ug/l   | 99     |
| 71) Bromoform                  | 12.40 | 173  | 373      | 3.704     | ug/l # | 29     |
| 76) 1,2,3-Trichloropropane     | 12.41 | 75   | 172970   | 36.549    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.41 | 75   | 172970   | 101.985   | ug/l # | 5      |

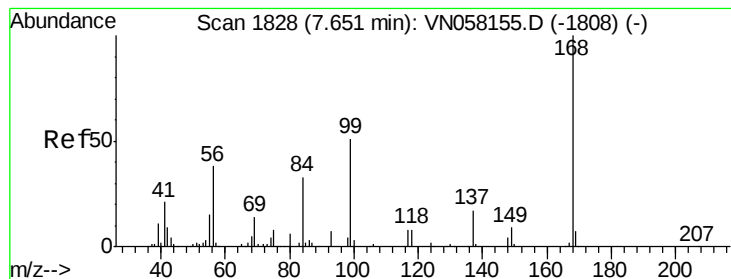
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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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: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

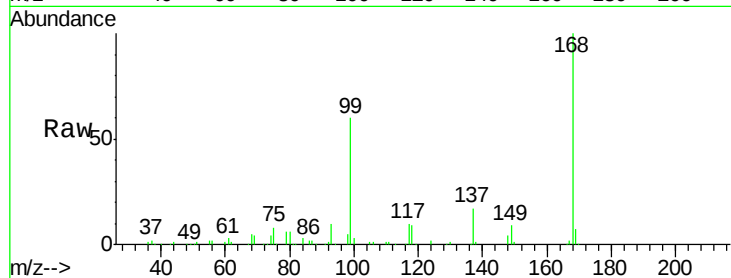
RE108D2-20190918

Tot Ion:168 Resp: 479529

Ion Ratio Lower Upper

168 100

99 60.4 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): VN0

Ion 98.90 (98.60 to 99.60): VN0

7.65

200000

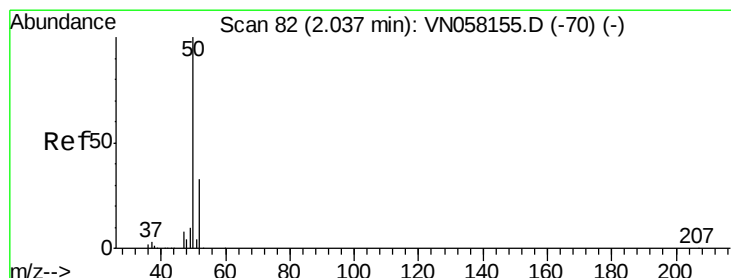
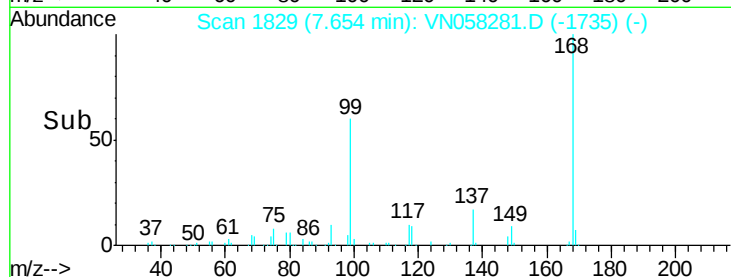
150000

100000

50000

0

Time-->



#3

Chloromethane

Concen: Below Cal

RT: 2.04 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN058281.D

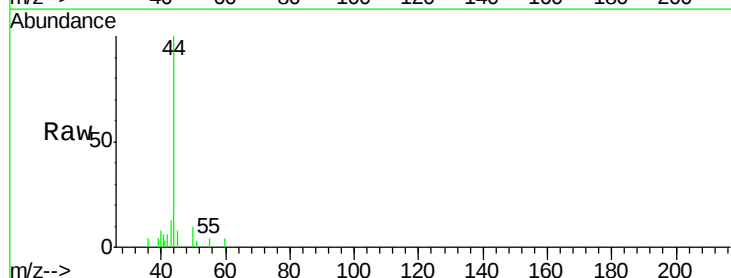
Acq: 23 Sep 2019 11:06

Tgt Ion: 50 Resp: 522

Ion Ratio Lower Upper

50 100

52 0.0 26.3 39.5#



Abundance Ion 49.90 (49.60 to 50.60): VN0

Ion 51.90 (51.60 to 52.60): VN0

2.04

500

400

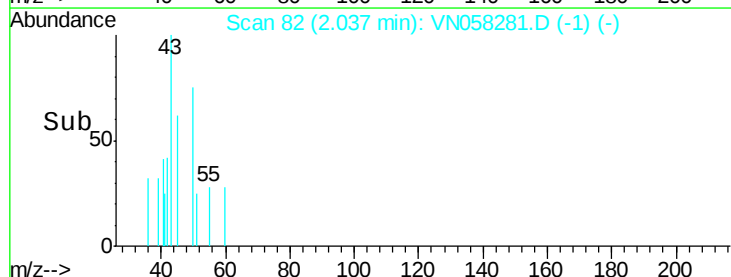
300

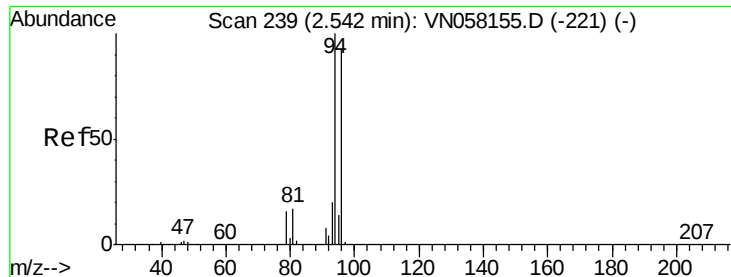
200

100

0

Time-->

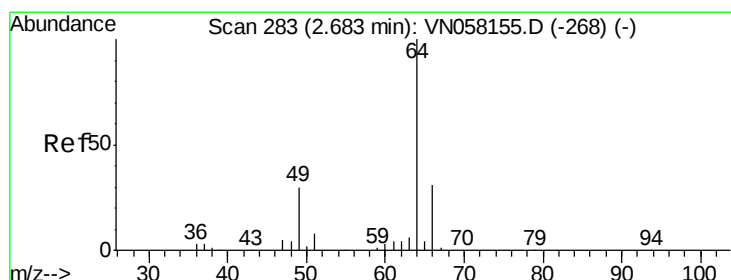
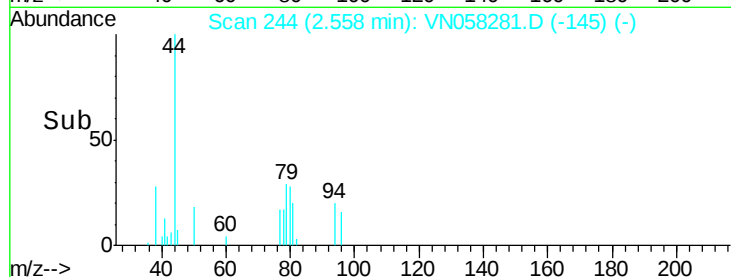
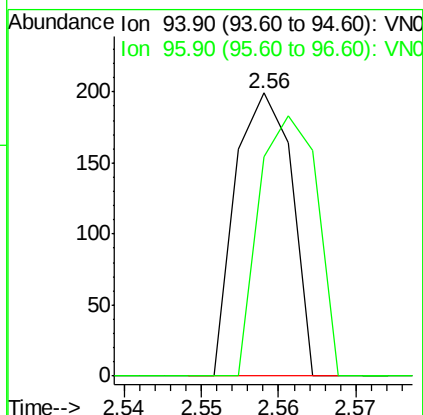
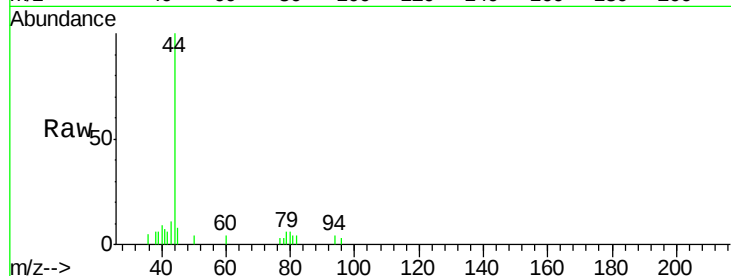




#5  
 Bromomethane  
 Concen: 0.779 ug/l  
 RT: 2.56 min Scan# 244  
 Delta R.T. 0.02 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

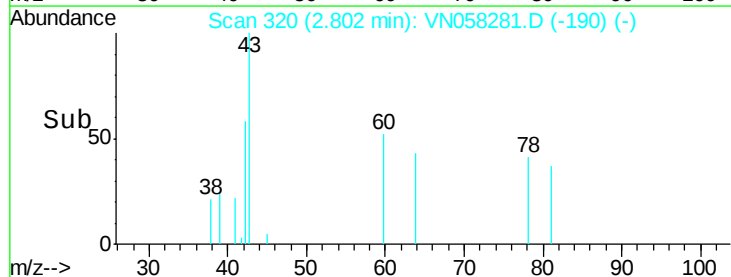
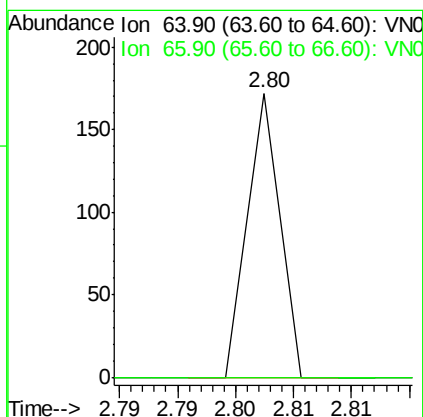
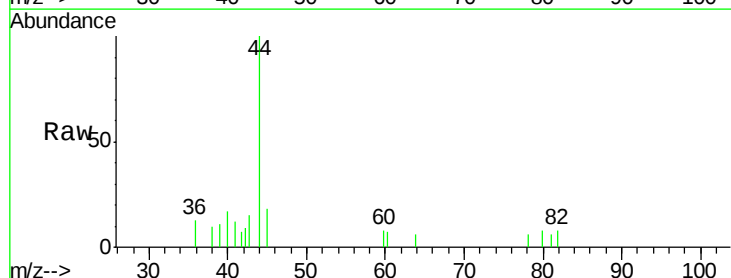
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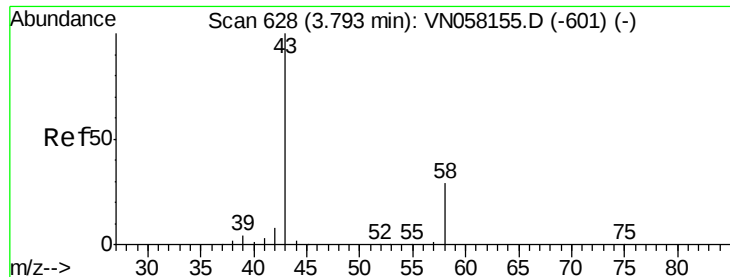
Tot Ion: 94 Resp: 101  
 Ion Ratio Lower Upper  
 94 100  
 96 77.4 73.3 109.9



#6  
 Chloroethane  
 Concen: Below Cal  
 RT: 2.80 min Scan# 320  
 Delta R.T. 0.12 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

Tgt Ion: 64 Resp: 33  
 Ion Ratio Lower Upper  
 64 100  
 66 0.0 24.6 37.0#





#16

Acetone

Concen: 0.369 ug/l

RT: 3.82 min Scan# 635

Delta R.T. 0.02 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

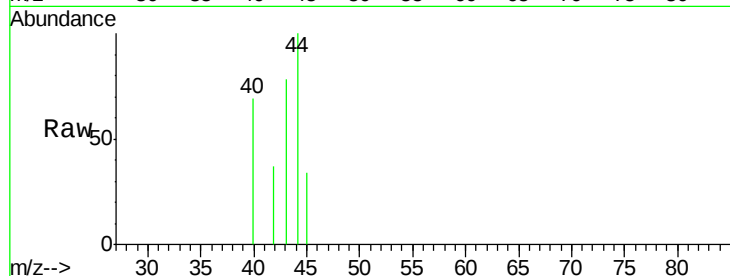
RE108D2-20190918

Tot Ion: 43 Resp: 837

Ion Ratio Lower Upper

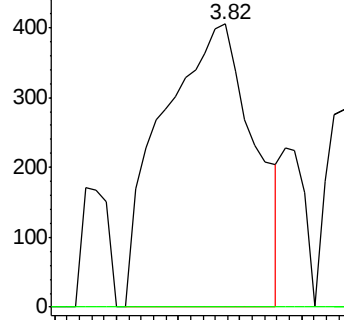
43 100

58 0.0 23.4 35.2#

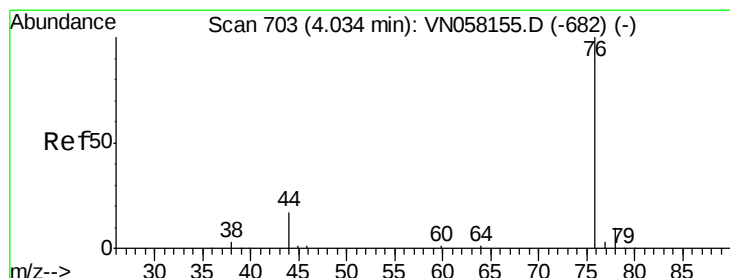
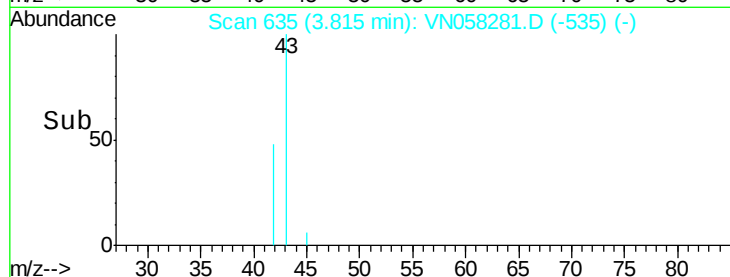


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0



Time--> 3.76 3.78 3.80 3.82 3.84



#17

Carbon Disulfide

Concen: 0.287 ug/l

RT: 4.03 min Scan# 702

Delta R.T. -0.00 min

Lab File: VN058281.D

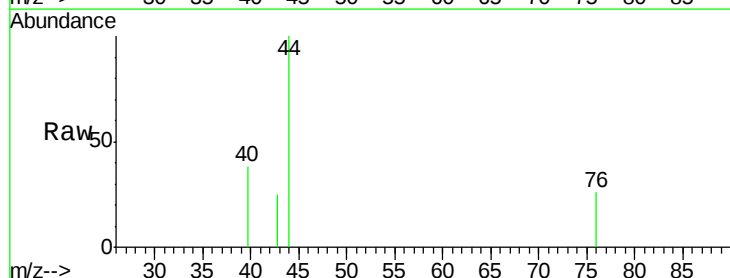
Acq: 23 Sep 2019 11:06

Tgt Ion: 76 Resp: 66

Ion Ratio Lower Upper

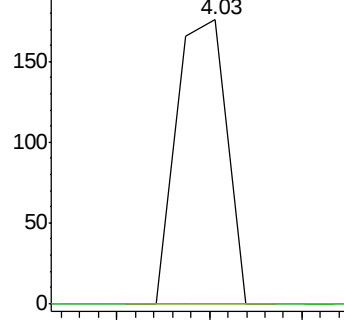
76 100

78 0.0 7.7 11.5#

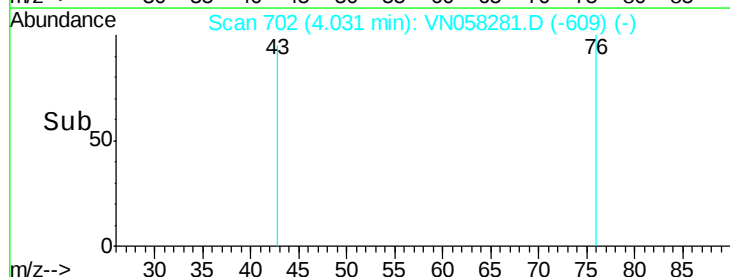


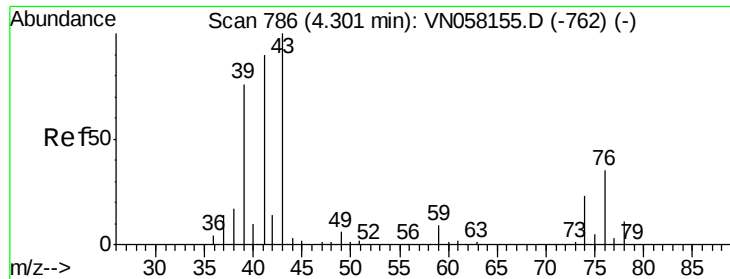
Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



Time--> 4.02 4.03 4.04

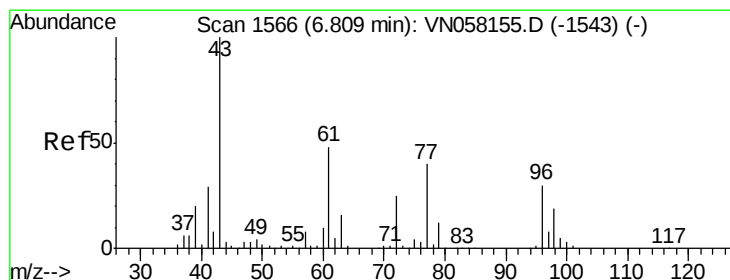
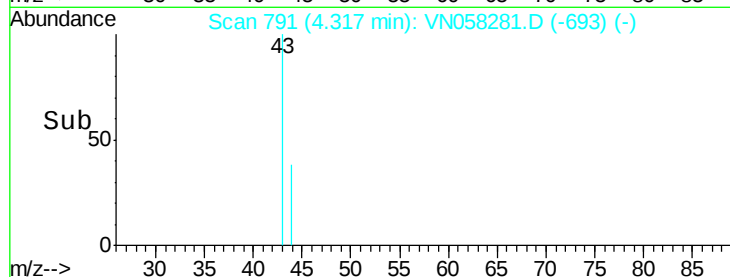
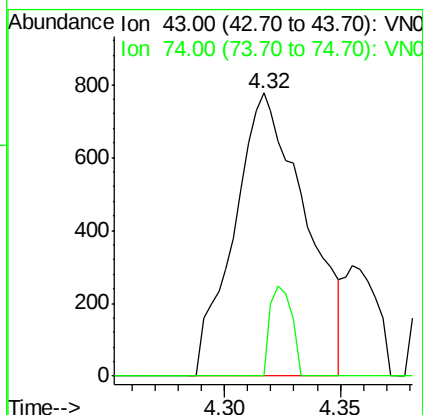
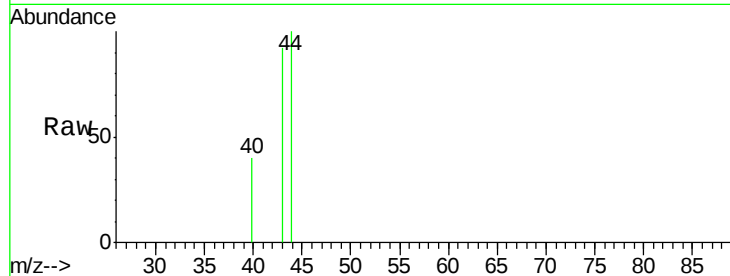




#18  
Methvl Acetate  
Concen: 0.279 ug/l  
RT: 4.32 min Scan# 791  
Delta R.T. 0.02 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

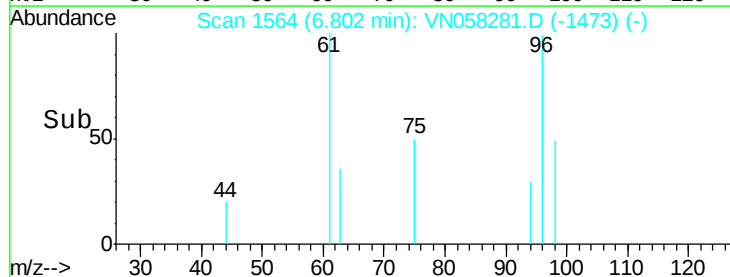
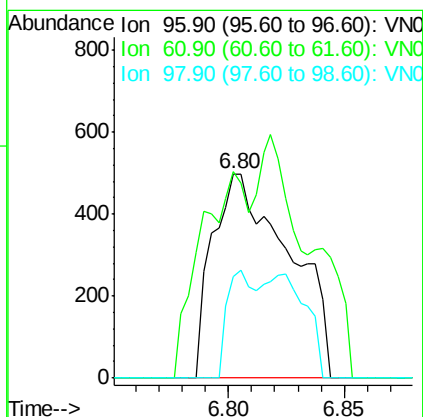
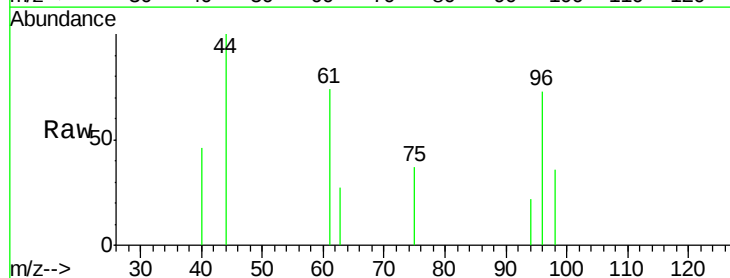
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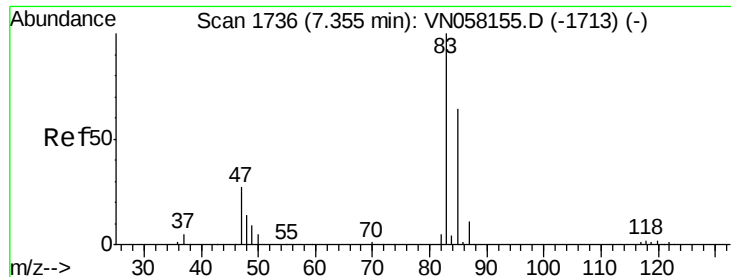
Tot Ion: 43 Resp: 1663  
Ion Ratio Lower Upper  
43 100  
74 9.6 18.0 27.0#



#27  
cis-1,2-Dichloroethene  
Concen: 0.234 ug/l  
RT: 6.80 min Scan# 1564  
Delta R.T. -0.01 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

Tgt Ion: 96 Resp: 1139  
Ion Ratio Lower Upper  
96 100  
61 62.2 0.0 319.0  
98 19.0 0.0 126.6

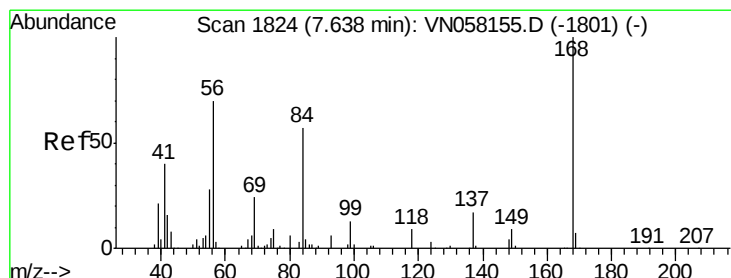
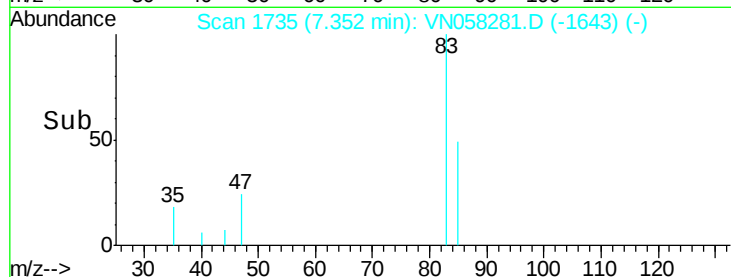
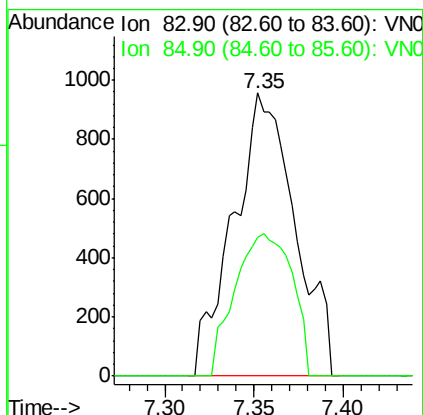
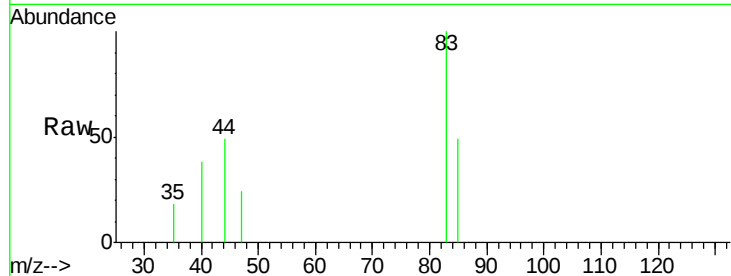




#30  
Chloroform  
Concen: 0.249 ug/l  
RT: 7.35 min Scan# 1735  
Delta R.T. -0.00 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

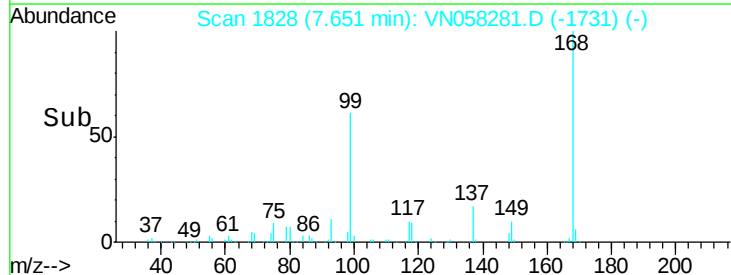
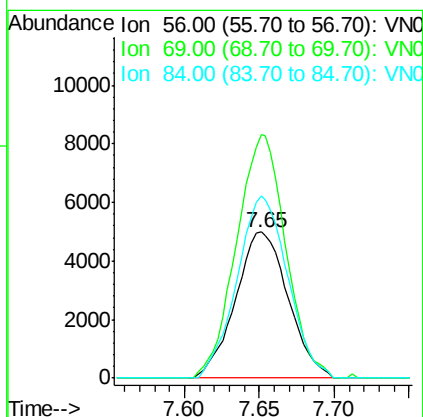
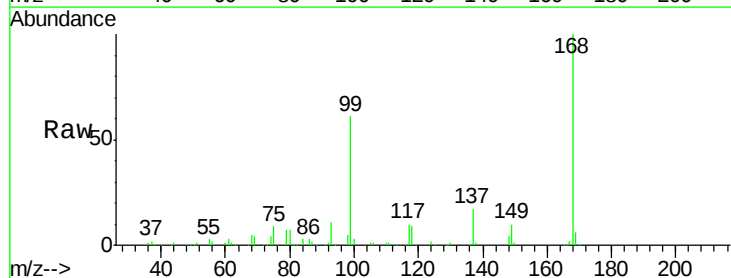
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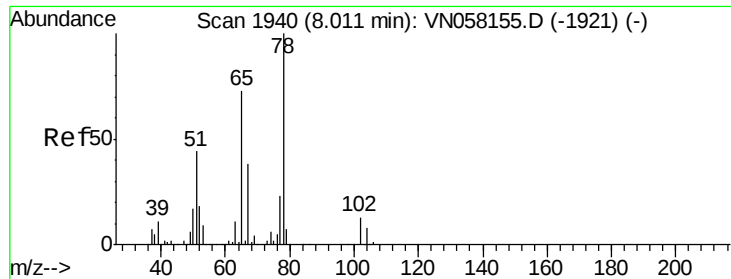
Tot Ion: 83 Resp: 2305  
Ion Ratio Lower Upper  
83 100  
85 48.8 51.4 77.2#



#31  
Cyclohexane  
Concen: Below Cal  
RT: 7.65 min Scan# 1828  
Delta R.T. 0.01 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

Tgt Ion: 56 Resp: 12185  
Ion Ratio Lower Upper  
56 100  
69 166.8 27.3 40.9#  
84 125.0 65.0 97.4#





#33

1,2-Dichloroethane-d4

Concen: 53.906 ug/l

RT: 8.01 min Scan# 1941

Delta R.T. 0.00 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

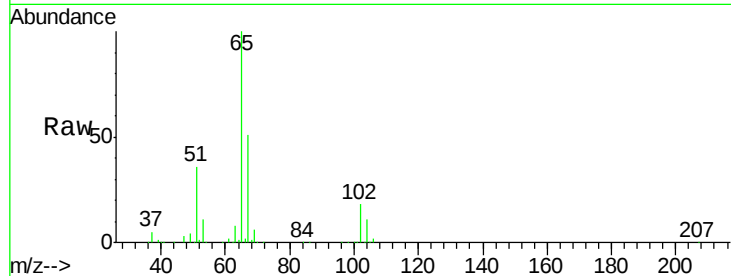
RE108D2-20190918

Tot Ion: 65 Resp: 360034

Ion Ratio Lower Upper

65 100

67 50.7 0.0 103.4



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

8.01

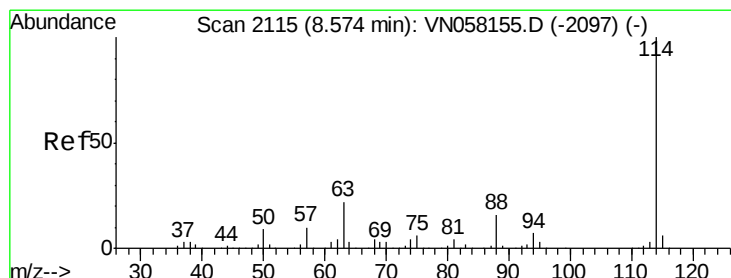
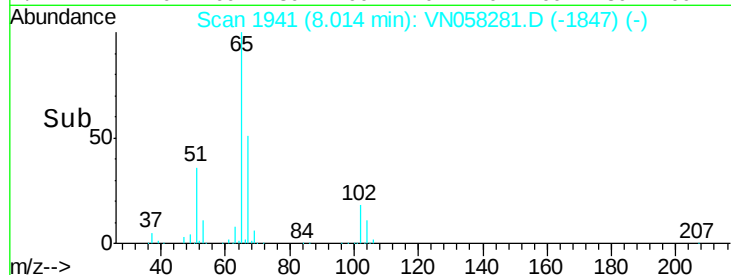
150000

100000

50000

0

Time--> 7.90 8.00 8.10



#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. 0.00 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

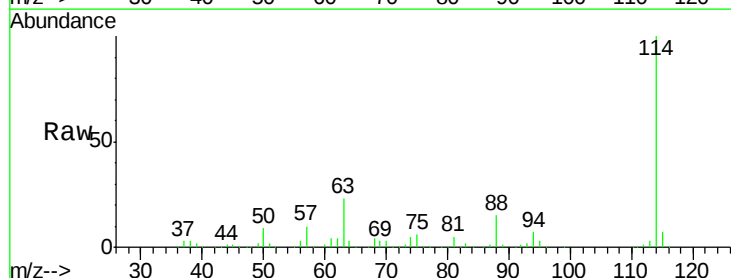
Tgt Ion: 114 Resp: 787699

Ion Ratio Lower Upper

114 100

63 22.9 0.0 44.2

88 15.3 0.0 31.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN0

Ion 87.90 (87.60 to 88.60): VN0

8.57

500000

400000

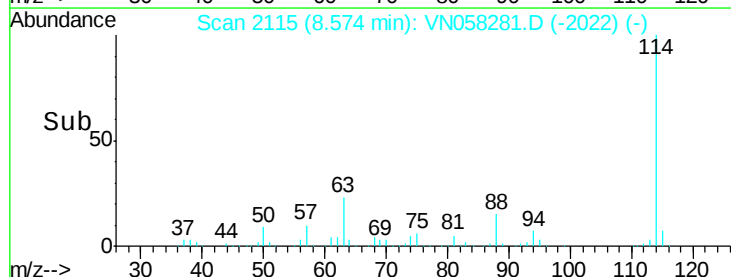
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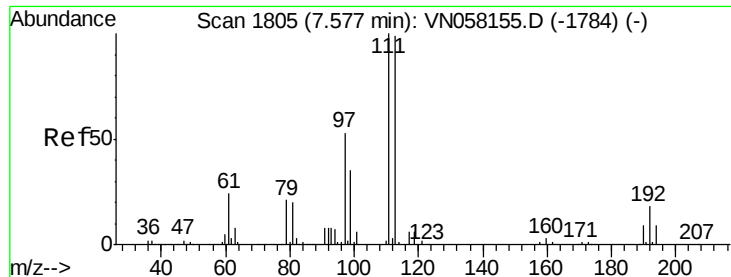
200000

100000

0

Time--> 8.50 8.60 8.70 8.80

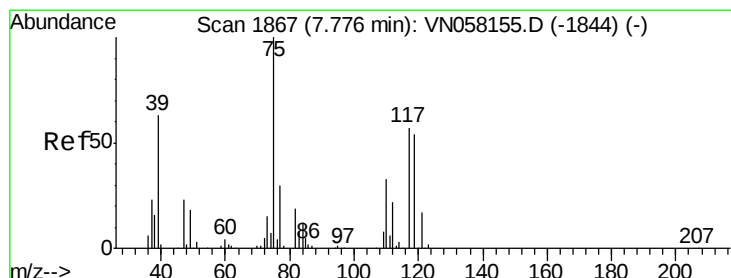
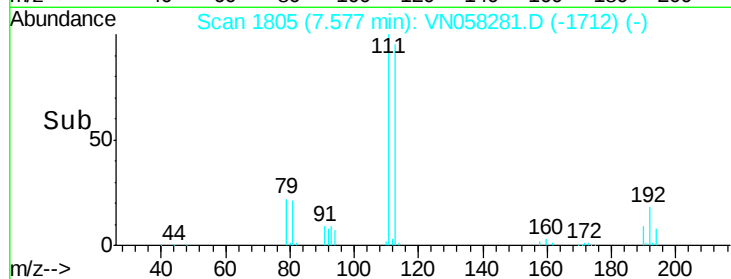
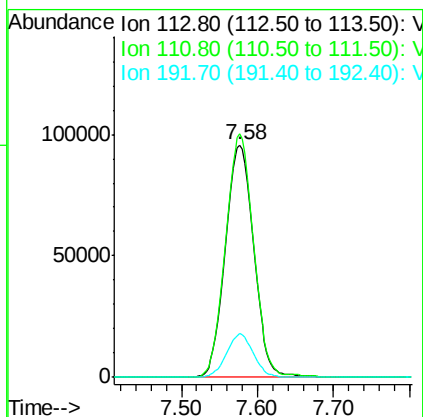
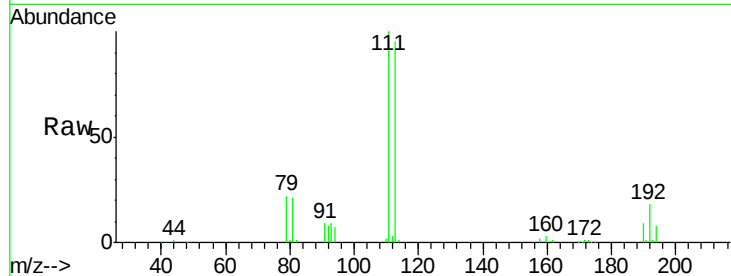




#35  
 Dibromofluoromethane  
 Concen: 52.304 ug/l  
 RT: 7.58 min Scan# 1805  
 Delta R.T. 0.00 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

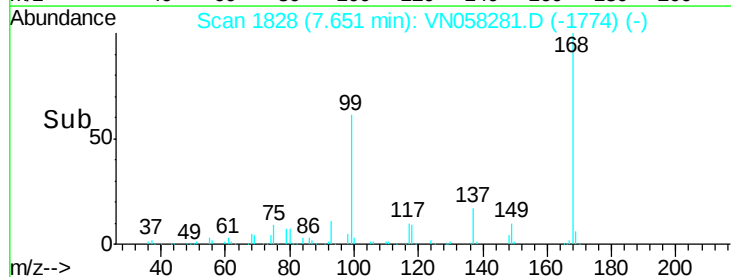
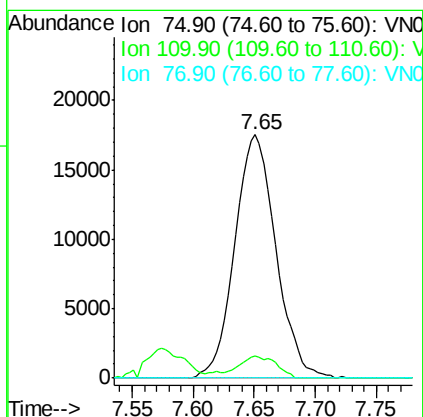
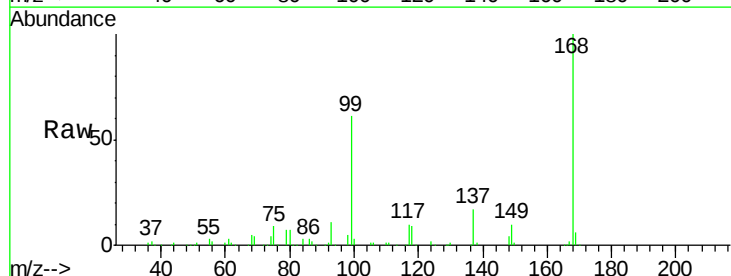
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE108D2-20190918

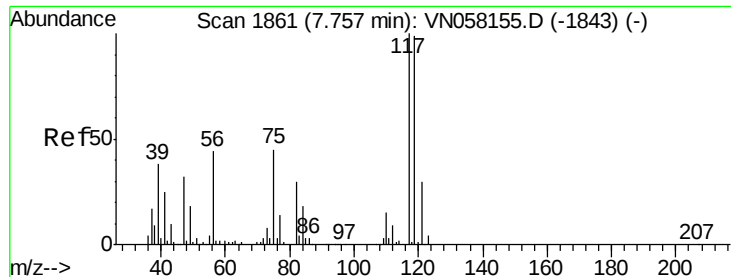
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 113     | 100   |       |       |
| 111     | 102.2 | 81.8  | 122.6 |
| 192     | 17.7  | 14.5  | 21.7  |



#36  
 1,1-Dichloropropene  
 Concen: 7.194 ug/l  
 RT: 7.65 min Scan# 1828  
 Delta R.T. -0.13 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.1   | 16.6  | 49.7# |
| 77      | 0.0   | 24.3  | 36.5# |





#38

Carbon Tetrachloride

Concen: 8.496 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. -0.11 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

RE108D2-20190918

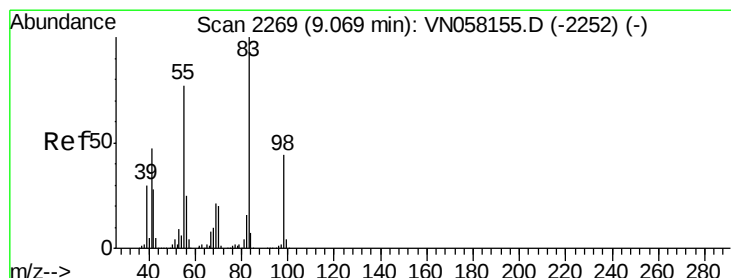
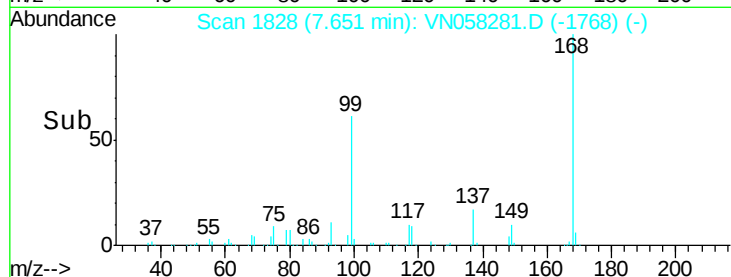
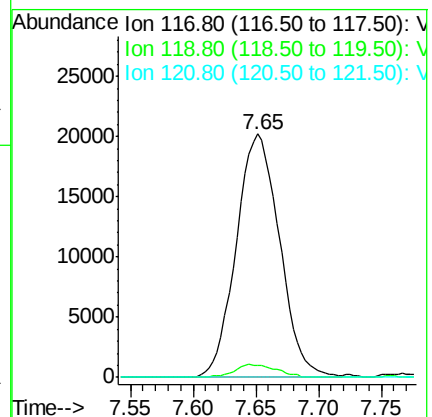
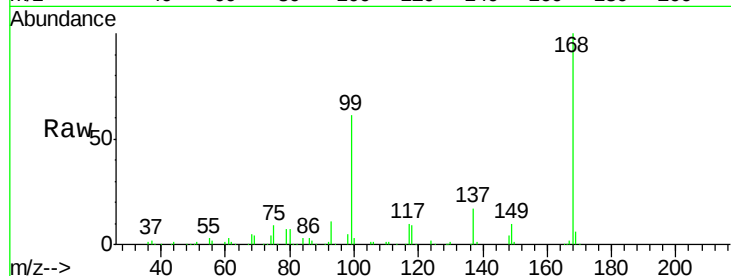
Tot Ion:117 Resp: 48514

Ion Ratio Lower Upper

117 100

119 4.9 78.6 117.8#

121 0.0 24.1 36.1#



#39

Methylcyclohexane

Concen: 1.499 ug/l

RT: 8.82 min Scan# 2193

Delta R.T. -0.24 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

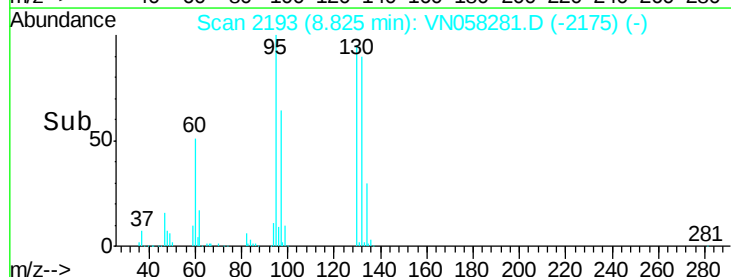
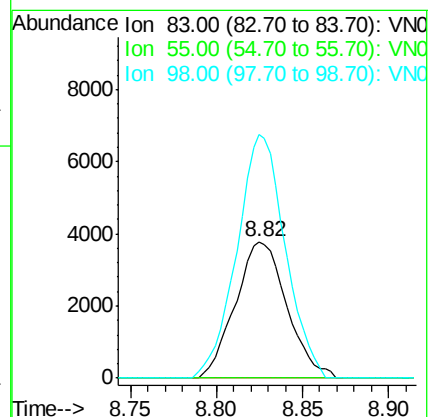
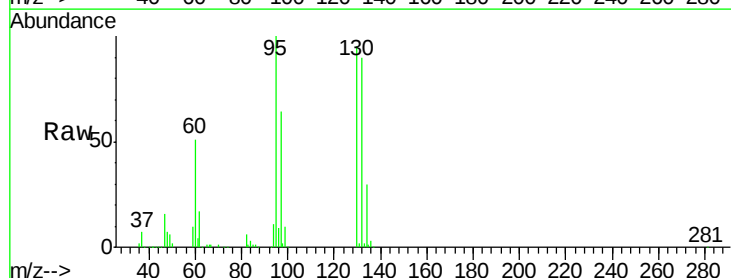
Tgt Ion: 83 Resp: 7857

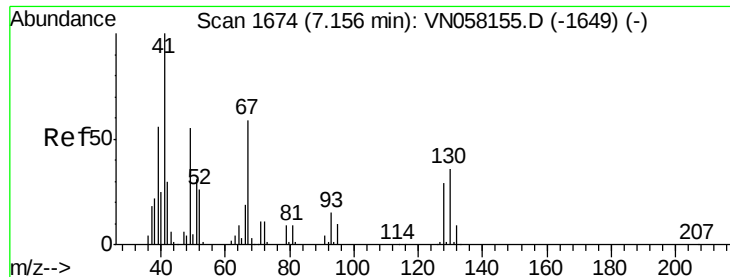
Ion Ratio Lower Upper

83 100

55 0.0 61.9 92.9#

98 178.6 35.4 53.2#

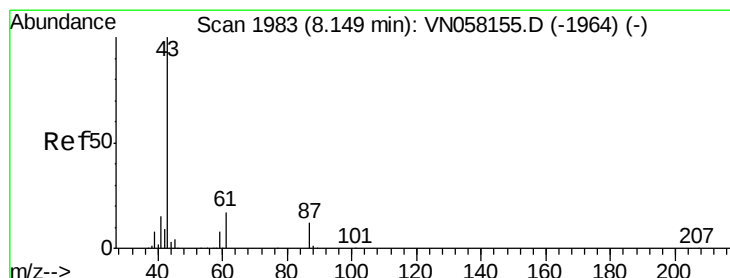
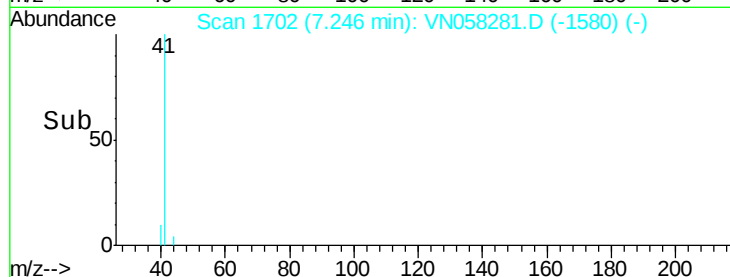
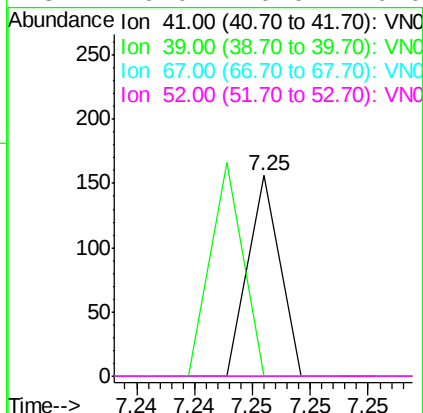
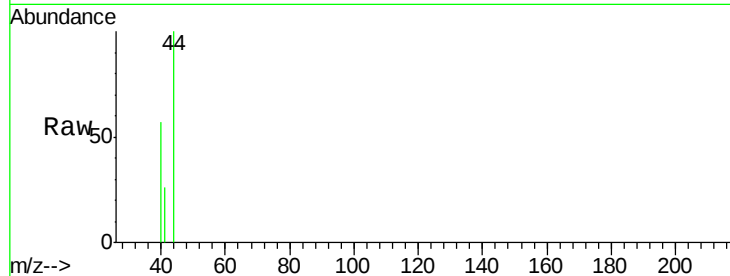




#41  
Methacrylonitrile  
Concen: 0.921 ug/l  
RT: 7.25 min Scan# 1702  
Delta R.T. 0.09 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

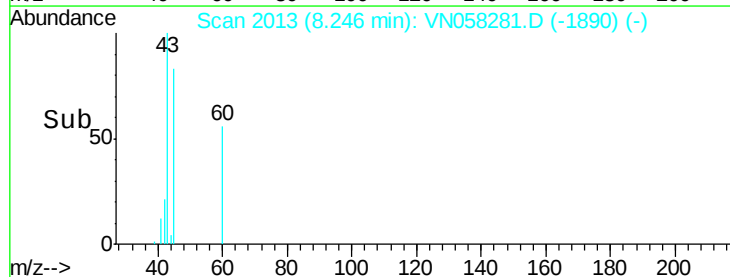
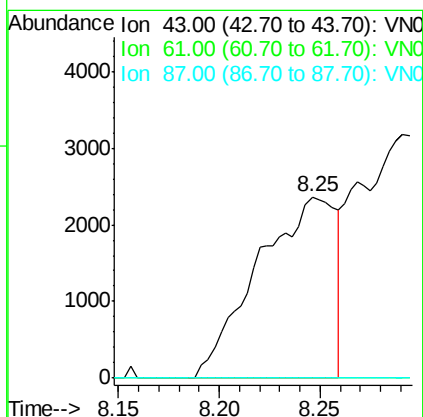
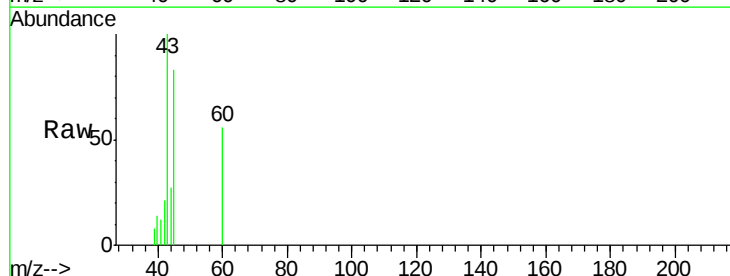
Instrument :  
MSVOA\_N  
ClientSampleId :  
RE108D2-20190918

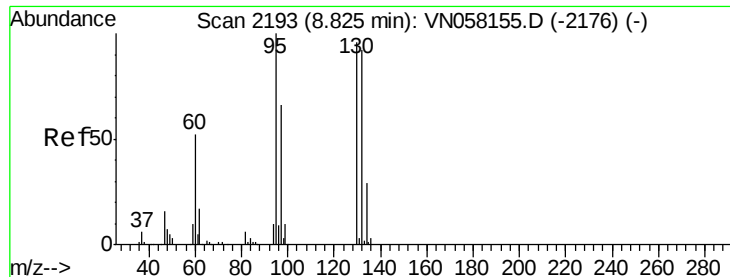
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 41    | Resp: | 30    |
| Ion      | Ratio | Lower | Upper |
| 41       | 100   |       |       |
| 39       | 106.7 | 0.0   | 0.0#  |
| 67       | 0.0   | 0.0   | 0.0   |
| 52       | 0.0   | 0.0   | 0.0   |



#43  
Isopropyl Acetate  
Concen: 0.577 ug/l  
RT: 8.25 min Scan# 2013  
Delta R.T. 0.10 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 6357  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 61       | 0.0   | 19.7  | 29.5# |
| 87       | 0.0   | 9.4   | 14.2# |





#44

Trichloroethene

Concen: 128.309 ug/l

RT: 8.82 min Scan# 2193

Delta R.T. 0.00 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

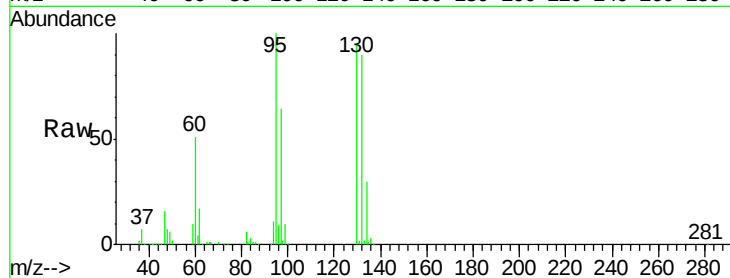
RE108D2-20190918

Tot Ion:130 Resp: 544775

Ion Ratio Lower Upper

130 100

95 105.3 0.0 207.8



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VN

8.82

300000

250000

200000

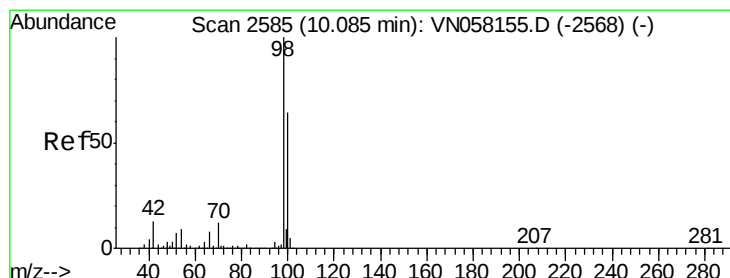
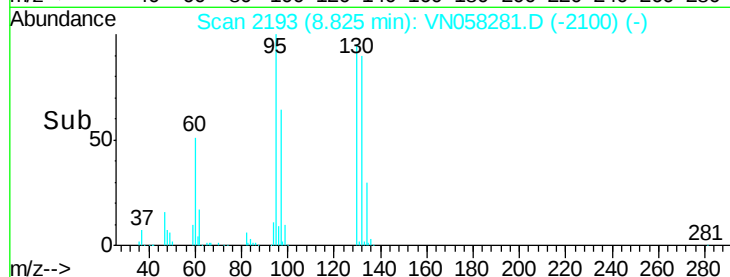
150000

100000

50000

0

Time--> 8.70 8.80 8.90



#50

Toluene-d8

Concen: 53.554 ug/l

RT: 10.09 min Scan# 2585

Delta R.T. 0.00 min

Lab File: VN058281.D

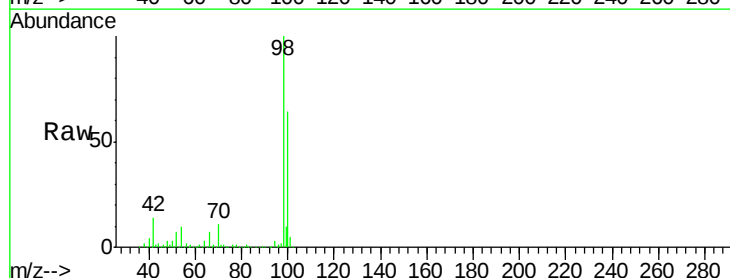
Acq: 23 Sep 2019 11:06

Tgt Ion: 98 Resp: 999162

Ion Ratio Lower Upper

98 100

100 63.6 51.1 76.7



Abundance Ion 98.00 (97.70 to 98.70): VN

Ion 100.00 (99.70 to 100.70): VN

10.09

600000

500000

400000

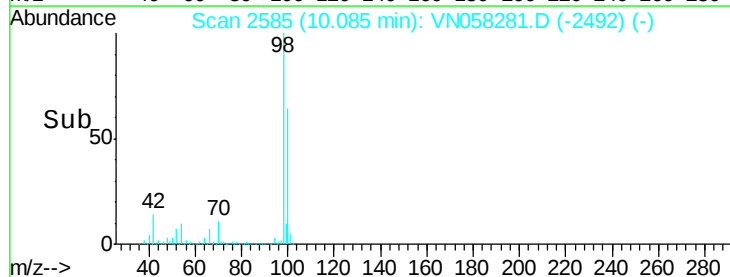
300000

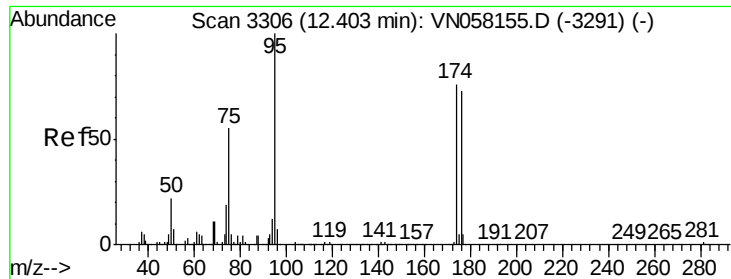
200000

100000

0

Time--> 10.00 10.10 10.20





#62

4-Bromofluorobenzene

Concen: 44.924 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058281.D

Acq: 23 Sep 2019 11:06

Instrument :

MSVOA\_N

ClientSampleId :

RE108D2-20190918

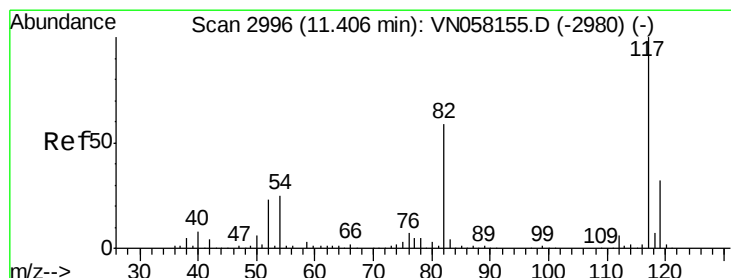
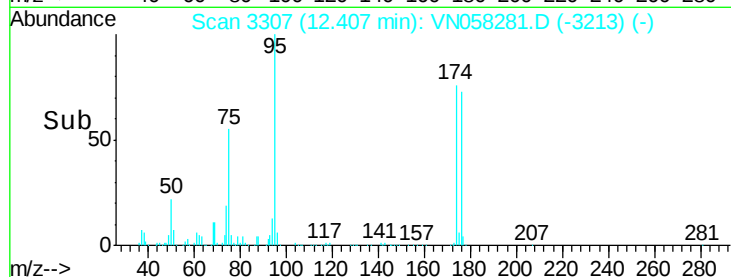
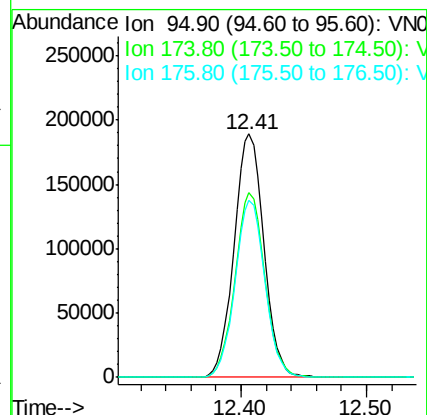
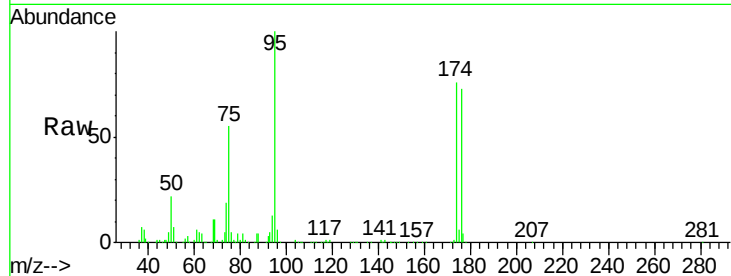
Tot Ion: 95 Resp: 311345

Ion Ratio Lower Upper

95 100

174 75.9 0.0 152.2

176 72.9 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: VN058281.D

Acq: 23 Sep 2019 11:06

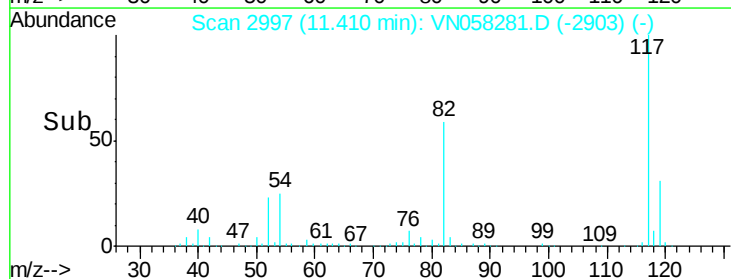
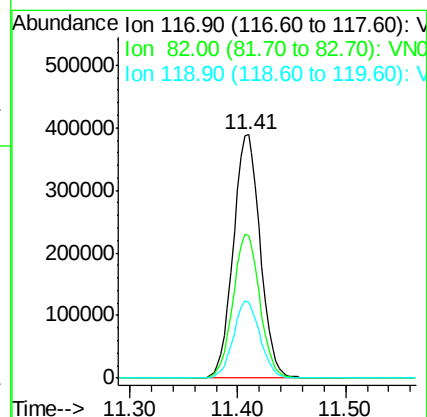
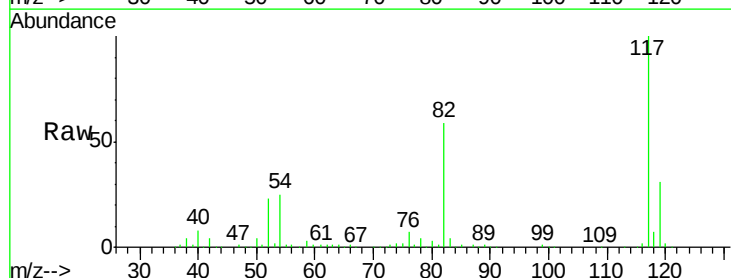
Tgt Ion: 117 Resp: 674144

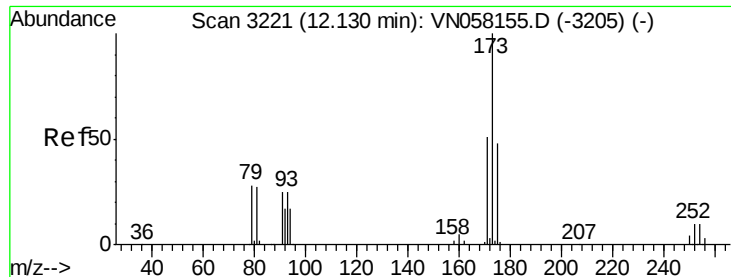
Ion Ratio Lower Upper

117 100

82 58.8 46.9 70.3

119 31.1 25.3 37.9

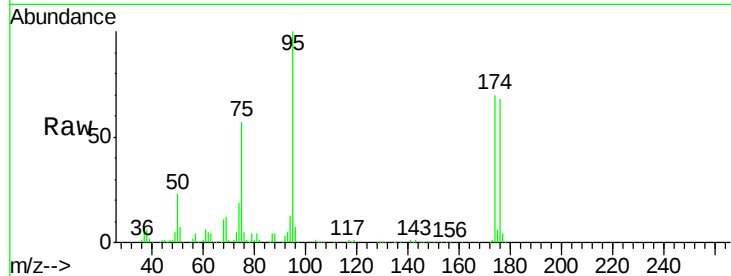




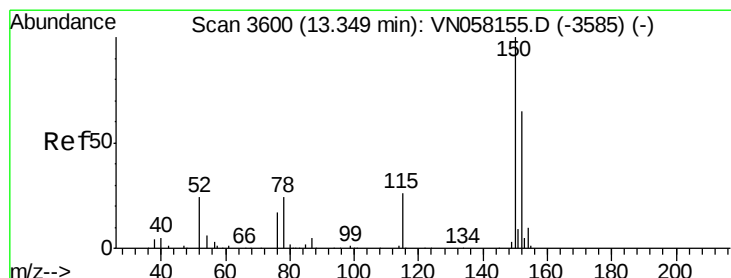
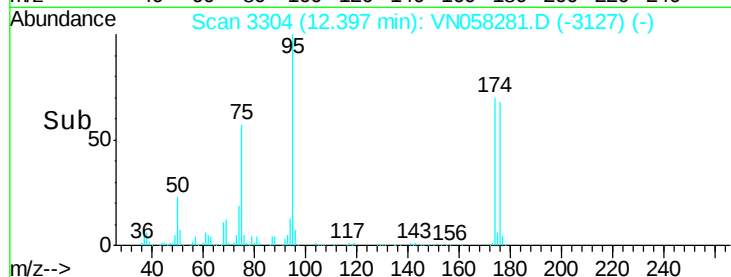
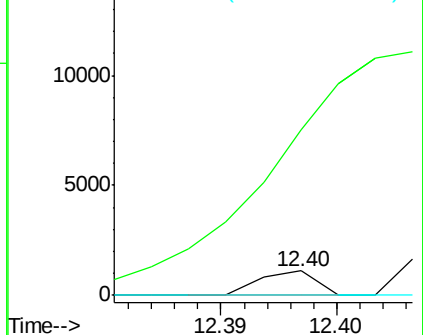
#71  
Bromoform  
Concen: 3.704 ug/l  
RT: 12.40 min Scan# 3304  
Delta R.T. 0.27 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE108D2-20190918

Tot Ion:173 Resp: 373  
Ion Ratio Lower Upper  
173 100  
175 0.0 24.2 72.6#  
254 0.0 0.1 0.1#

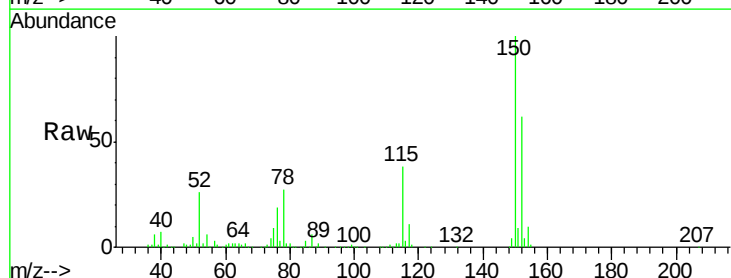


Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V

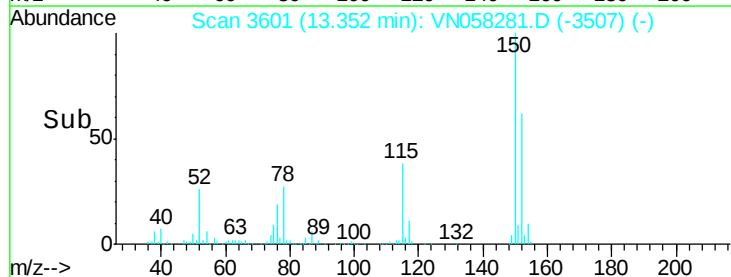
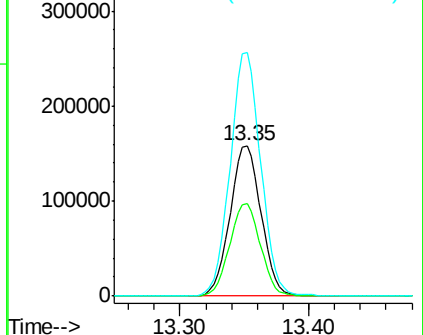


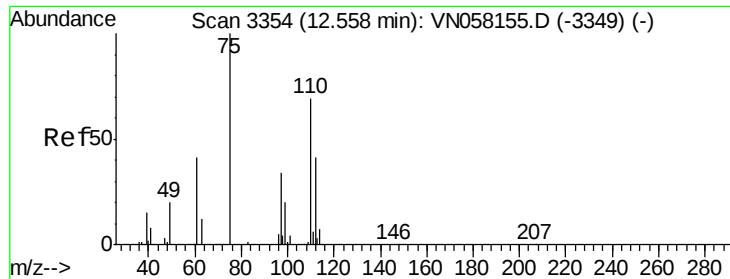
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.35 min Scan# 3601  
Delta R.T. 0.00 min  
Lab File: VN058281.D  
Acq: 23 Sep 2019 11:06

Tgt Ion:152 Resp: 264433  
Ion Ratio Lower Upper  
152 100  
115 61.1 30.1 90.3  
150 159.3 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

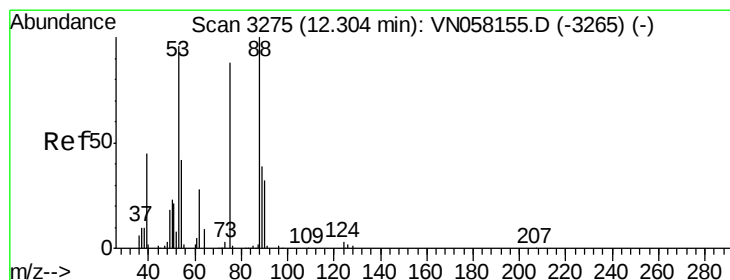
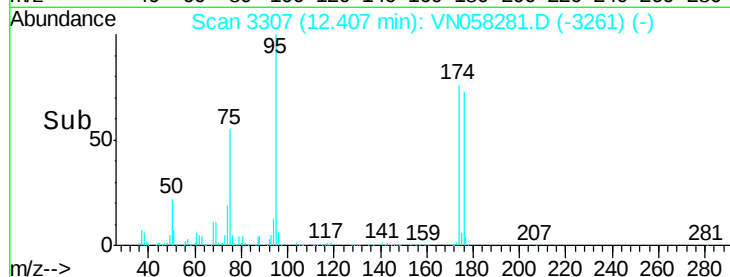
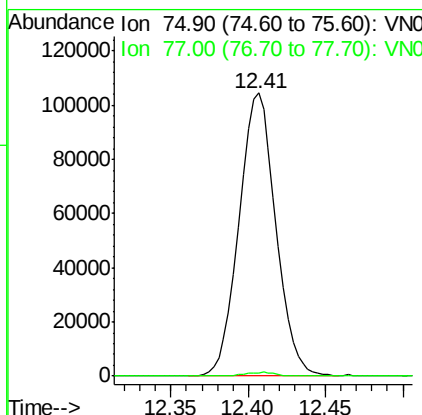
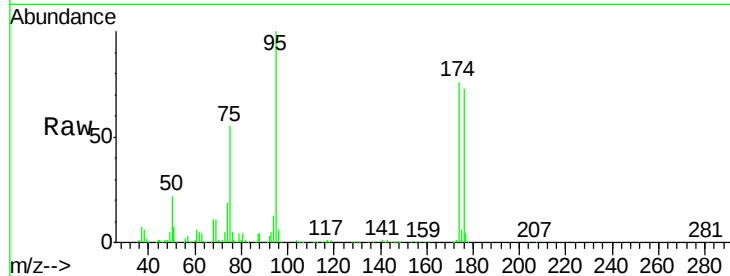




#76  
 1,2,3-Trichloropropane  
 Concen: 36.549 ug/l  
 RT: 12.41 min Scan# 3307  
 Delta R.T. -0.15 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE108D2-20190918

Tot Ion: 75 Resp: 172970  
 Ion Ratio Lower Upper  
 75 100  
 77 1.1 0.0 0.0#



#81  
 trans-1,4-Dichloro-2-butene  
 Concen: 101.985 ug/l  
 RT: 12.41 min Scan# 3307  
 Delta R.T. 0.10 min  
 Lab File: VN058281.D  
 Acq: 23 Sep 2019 11:06

Tgt Ion: 75 Resp: 172970  
 Ion Ratio Lower Upper  
 75 100  
 53 0.0 90.1 135.1#  
 89 0.0 36.2 54.2#

