

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN031119\  
 Data File : VN054149.D  
 Acq On : 11 Mar 2019 18:51  
 Operator : JC/SP  
 Sample : K1691-02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 CL-02-030819-A

Quant Time: Mar 12 03:24:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N031119W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 12 00:55:17 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 1647928  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 2677602  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 2608471  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 1073394  | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units   | Dev(Min) |
|-----------------------------|-------|------|----------|-------|---------|----------|
| 33) 1,2-Dichloroethane-d4   | 8.03  | 65   | 888239   | 50.40 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.80% |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 850759   | 49.25 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 98.50%  |          |
| 50) Toluene-d8              | 10.09 | 98   | 3258176  | 51.20 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 102.40% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 1171615  | 52.58 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 105.16% |          |

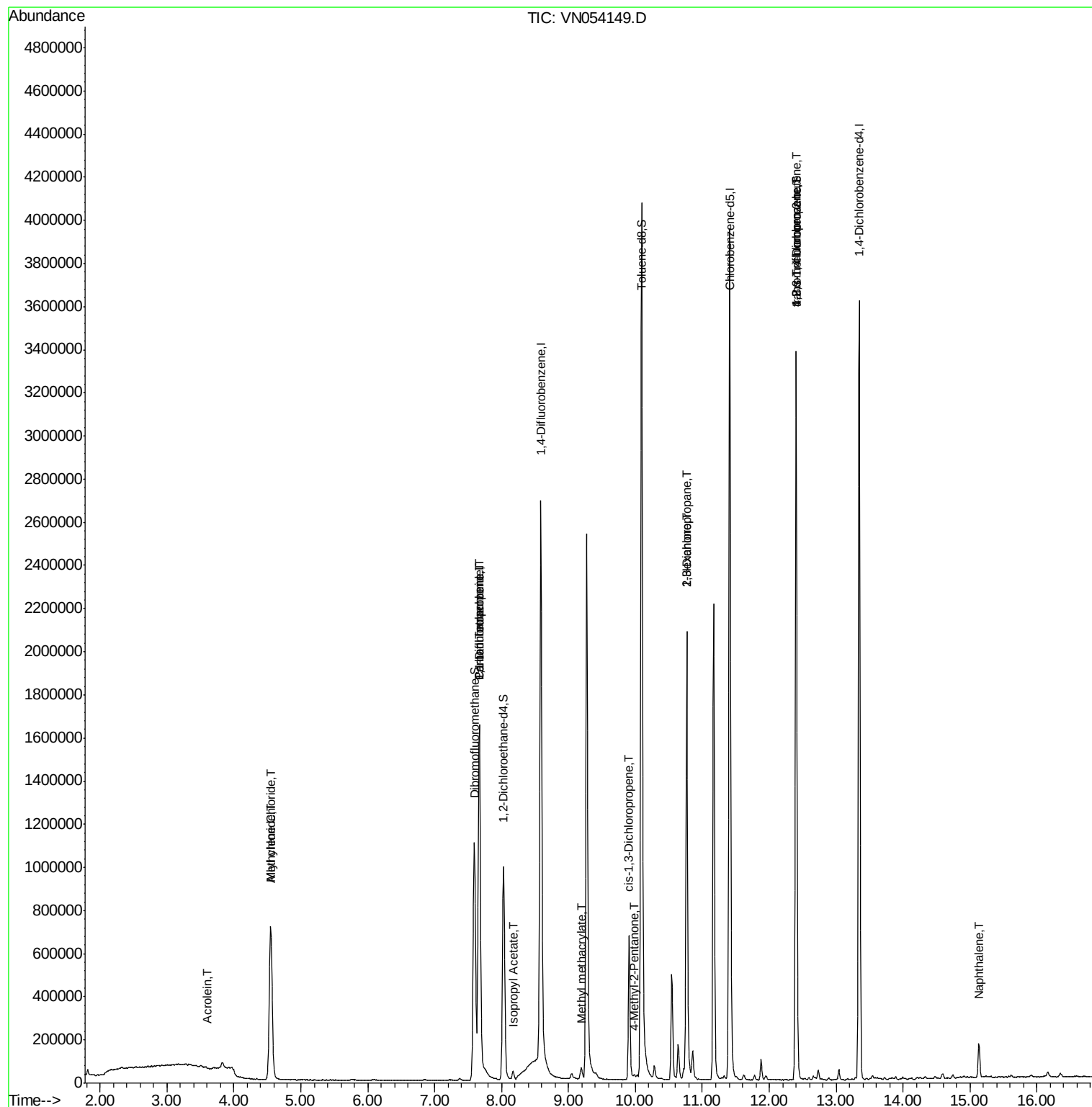
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 13) Acrolein                   | 3.61  | 56   | 1212     | 1.228     | ug/l # | 41     |
| 14) Allyl chloride             | 4.56  | 41   | 16052    | 0.709     | ug/l # | 28     |
| 16) Acetone                    | 3.82  | 43   | 45219    | Below Cal |        | 96     |
| 20) Methylene Chloride         | 4.55  | 84   | 566226   | 35.724    | ug/l   | 90     |
| 31) Cyclohexane                | 7.67  | 56   | 24793    | Below Cal | #      | 1      |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 94536    | 4.057     | ug/l # | 48     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 132369   | 5.124     | ug/l # | 15     |
| 43) Isopropyl Acetate          | 8.17  | 43   | 46629    | 1.856     | ug/l # | 87     |
| 48) Methyl methacrylate        | 9.18  | 41   | 17761    | 1.315     | ug/l # | 13     |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 13779    | 1.023     | ug/l # | 84     |
| 54) cis-1,3-Dichloropropene    | 9.91  | 75   | 130848   | 4.755     | ug/l # | 62     |
| 57) 1,3-Dichloropropane        | 10.77 | 76   | 24466    | 0.935     | ug/l # | 42     |
| 59) 2-Hexanone                 | 10.77 | 43   | 318394   | 35.607    | ug/l # | 51     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 558249   | 36.828    | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 558249   | 109.628   | ug/l # | 11     |
| 95) Naphthalene                | 15.13 | 128  | 149327   | 3.721     | ug/l   | 99     |

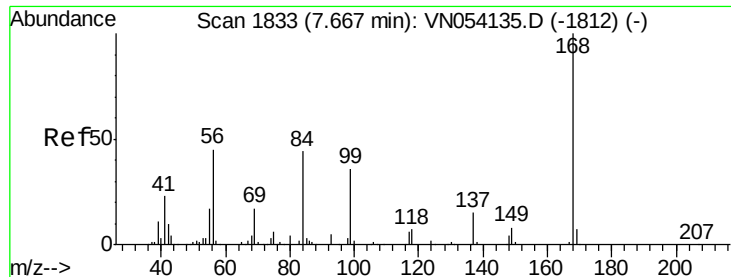
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN031119\  
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Instrument :  
MSVOA\_N  
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CL-02-030819-A

Quant Time: Mar 12 03:24:44 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N031119W.M  
Quant Title : SW846 8260  
QLast Update : Tue Mar 12 00:55:17 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

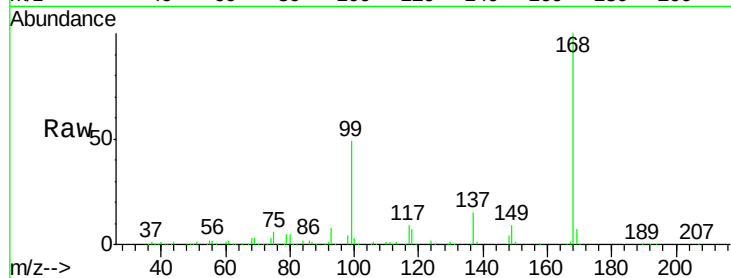
CL-02-030819-A

Tot Ion:168 Resp: 1647928

Ion Ratio Lower Upper

168 100

99 48.7 41.1 61.7



Abundance Ion 167.90 (167.60 to 168.60): VN054149.D (-1740) (-)

Ion 98.90 (98.60 to 99.60): VN054149.D (-1740) (-)

7.67

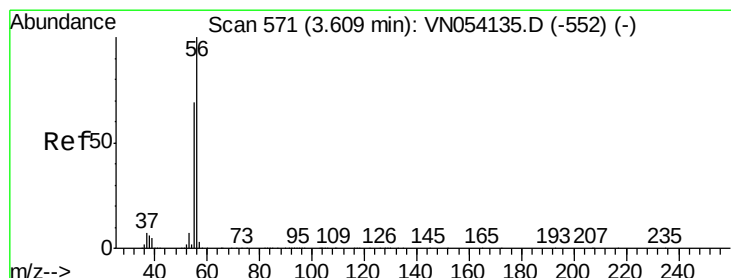
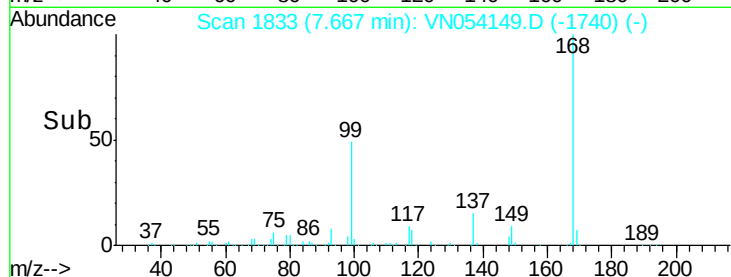
600000

400000

200000

0

Time--> 7.50 7.60 7.70 7.80 7.90



#13

Acrolein

Concen: 1.228 ug/l

RT: 3.61 min Scan# 570

Delta R.T. -0.00 min

Lab File: VN054149.D

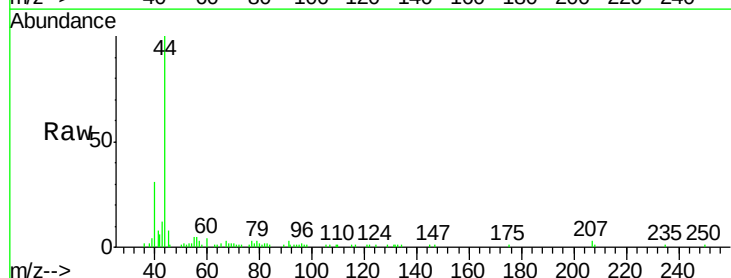
Acq: 11 Mar 2019 18:51

Tgt Ion: 56 Resp: 1212

Ion Ratio Lower Upper

56 100

55 22.4 57.1 85.7#



Abundance Ion 56.00 (55.70 to 56.70): VN054149.D (-478) (-)

Ion 55.00 (54.70 to 55.70): VN054149.D (-478) (-)

3.61

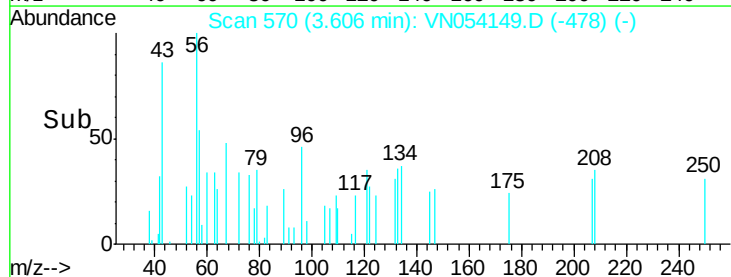
1500

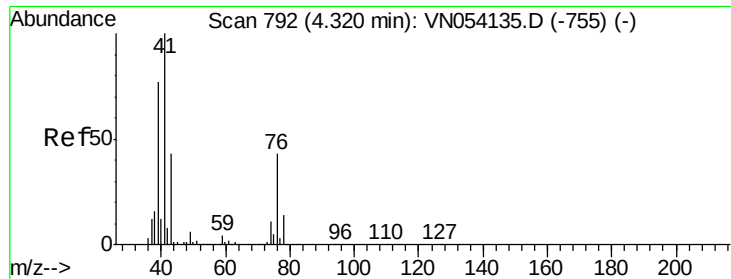
1000

500

0

Time--> 3.56 3.58 3.60 3.62 3.64





#14

Allvl chloride

Concen: 0.709 ug/l

RT: 4.56 min Scan# 867

Delta R.T. 0.24 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

CL-02-030819-A

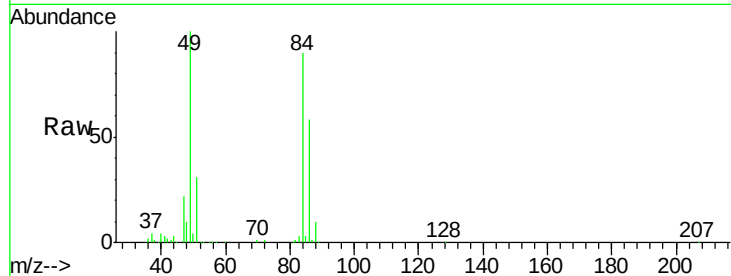
Tot Ion: 41 Resp: 16052

Ion Ratio Lower Upper

41 100

39 0.5 49.3 73.9#

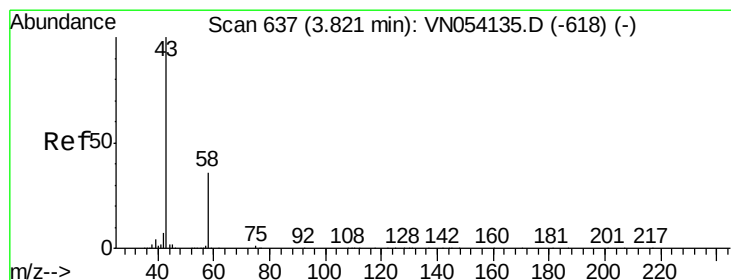
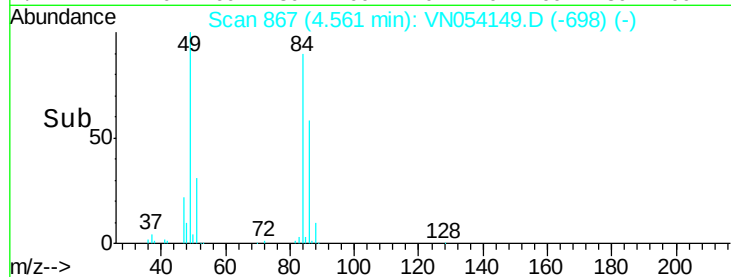
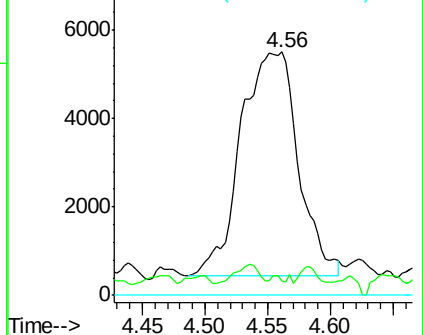
76 0.0 26.5 39.7#



Abundance Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0

Ion 75.90 (75.60 to 76.60): VN0



#16

Acetone

Concen: Below Cal

RT: 3.82 min Scan# 638

Delta R.T. 0.00 min

Lab File: VN054149.D

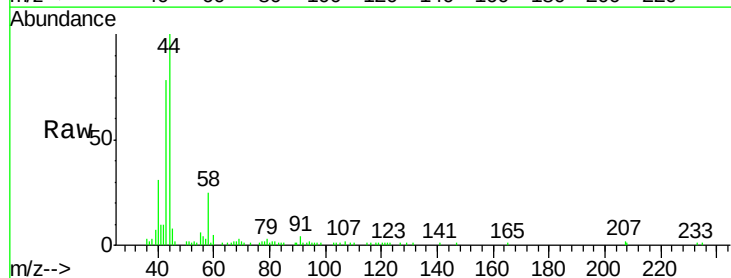
Acq: 11 Mar 2019 18:51

Tgt Ion: 43 Resp: 45219

Ion Ratio Lower Upper

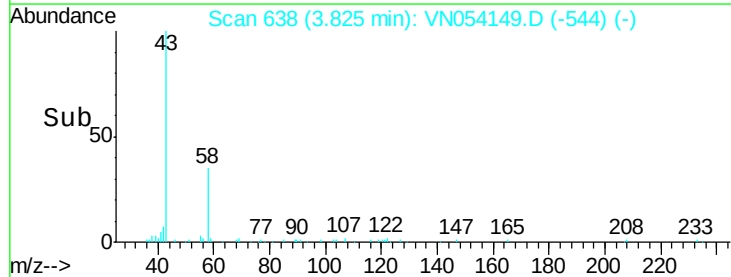
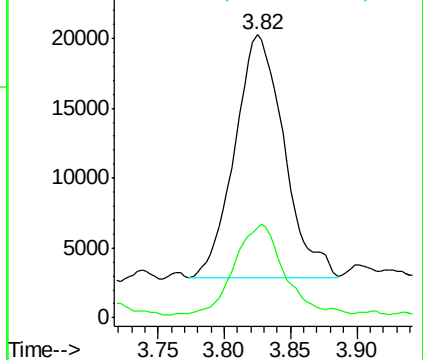
43 100

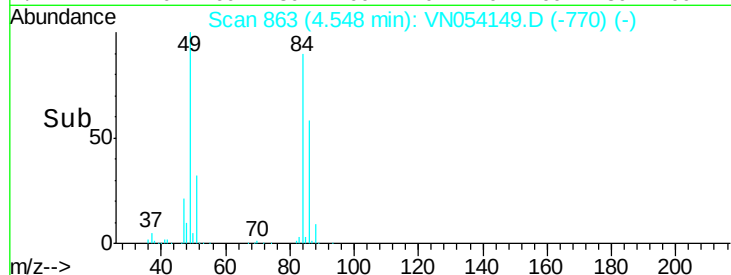
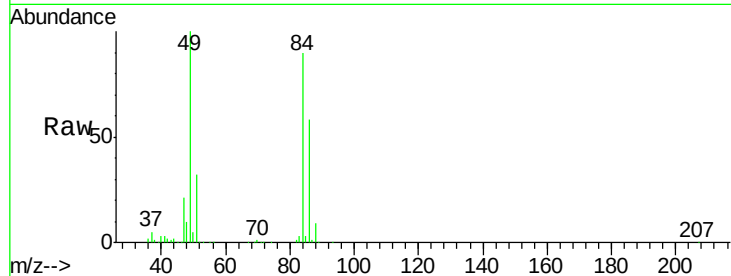
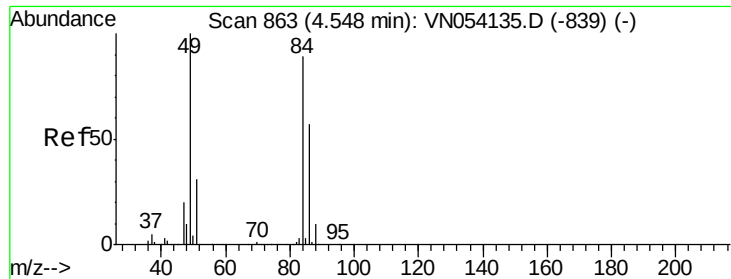
58 35.2 26.5 39.7



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

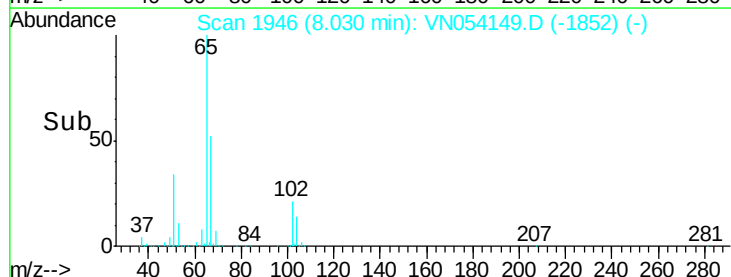
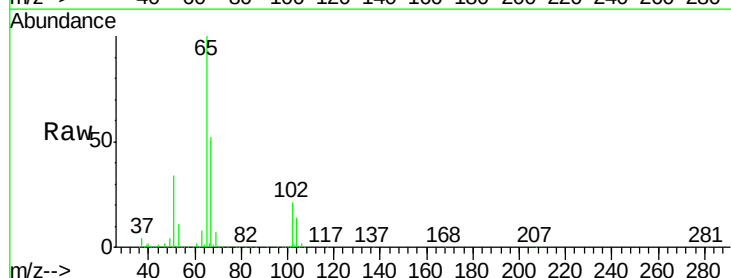
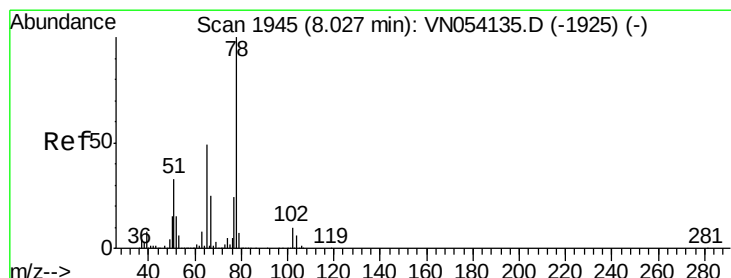
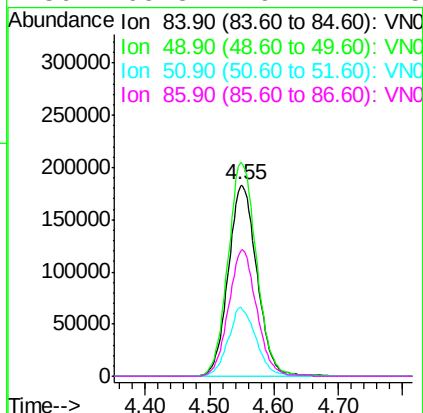




#20  
Methylene Chloride  
Concen: 35.724 ug/l  
RT: 4.55 min Scan# 863  
Delta R.T. -0.00 min  
Lab File: VN054149.D  
Acq: 11 Mar 2019 18:51

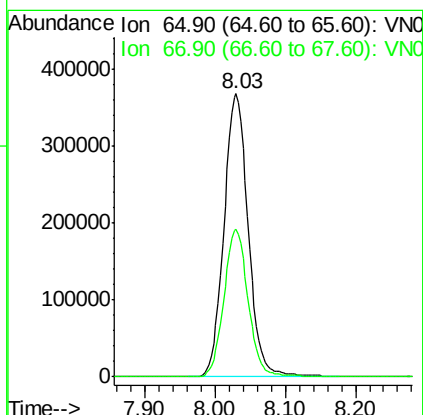
Instrument :  
MSVOA\_N  
ClientSampleId :  
CL-02-030819-A

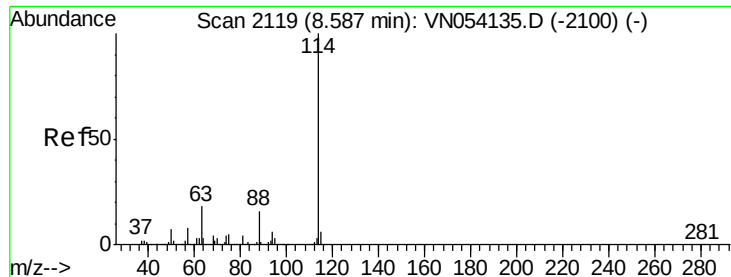
Tot Ion: 84 Resp: 566226  
Ion Ratio Lower Upper  
84 100  
49 111.7 101.8 152.8  
51 35.9 31.1 46.7  
86 65.3 49.7 74.5



#33  
1,2-Dichloroethane-d4  
Concen: 50.401 ug/l  
RT: 8.03 min Scan# 1946  
Delta R.T. 0.00 min  
Lab File: VN054149.D  
Acq: 11 Mar 2019 18:51

Tgt Ion: 65 Resp: 888239  
Ion Ratio Lower Upper  
65 100  
67 51.9 0.0 109.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

CL-02-030819-A

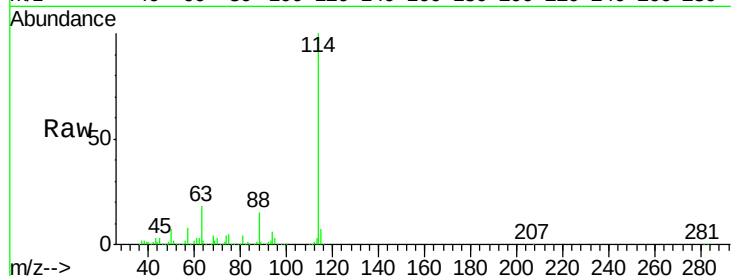
Tot Ion:114 Resp: 2677602

Ion Ratio Lower Upper

114 100

63 18.3 0.0 42.6

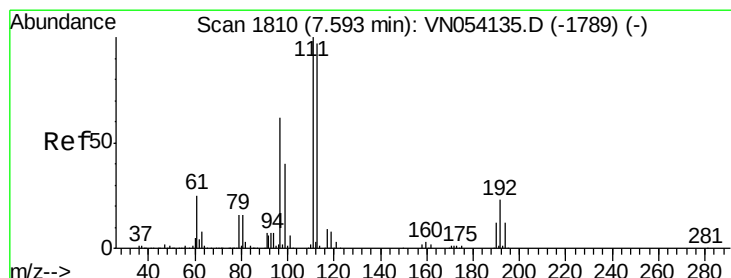
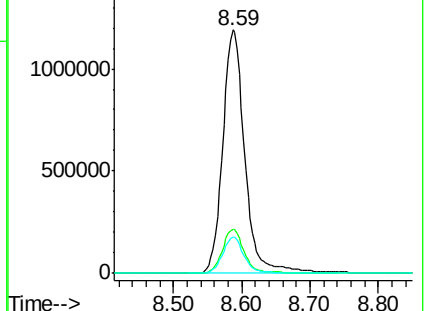
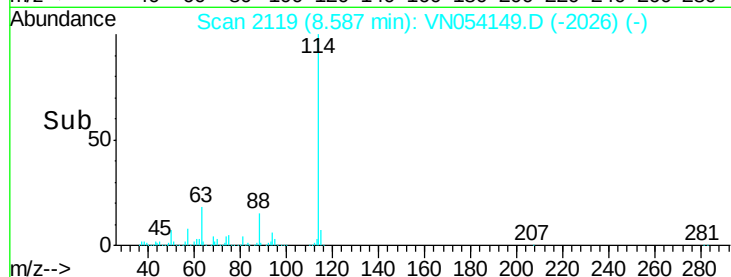
88 14.9 0.0 31.8



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



#35

Dibromofluoromethane

Concen: 49.247 ug/l

RT: 7.59 min Scan# 1810

Delta R.T. -0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

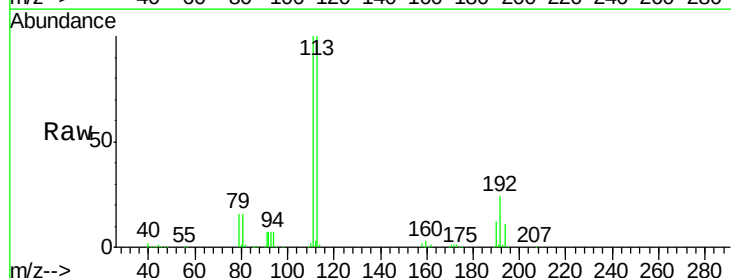
Tgt Ion:113 Resp: 850759

Ion Ratio Lower Upper

113 100

111 101.7 82.1 123.1

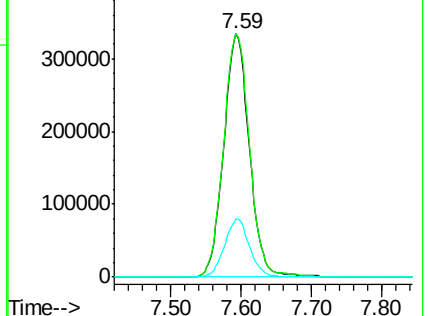
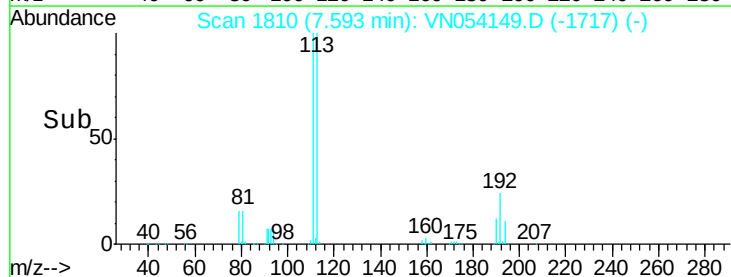
192 23.5 17.4 26.0

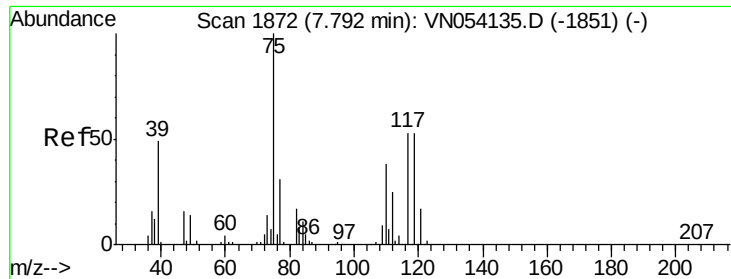


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

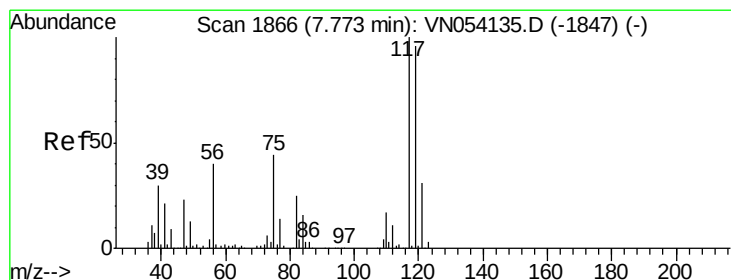
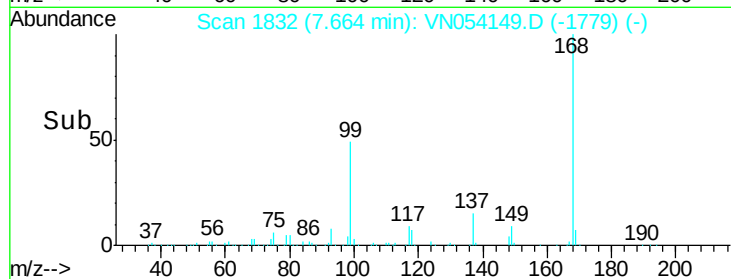
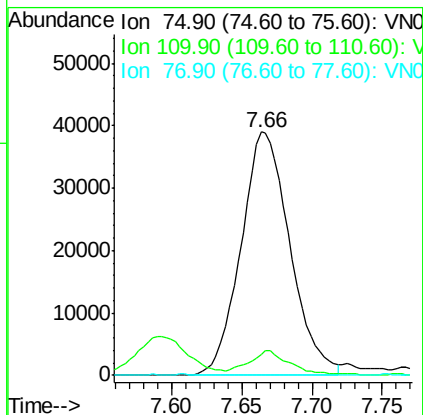
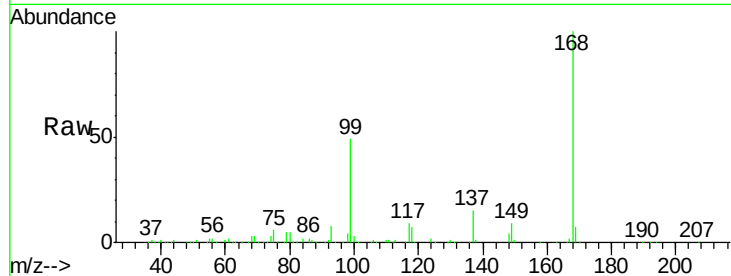




#36  
 1,1-Dichloropropene  
 Concen: 4.057 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN054149.D  
 Acq: 11 Mar 2019 18:51

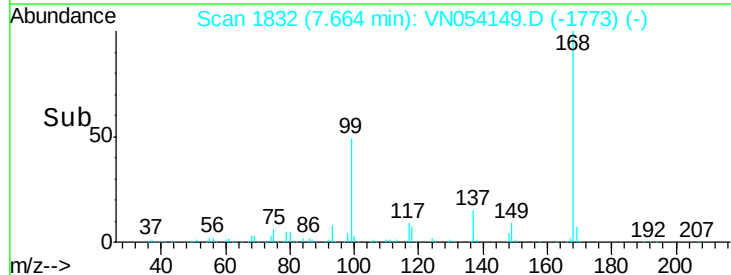
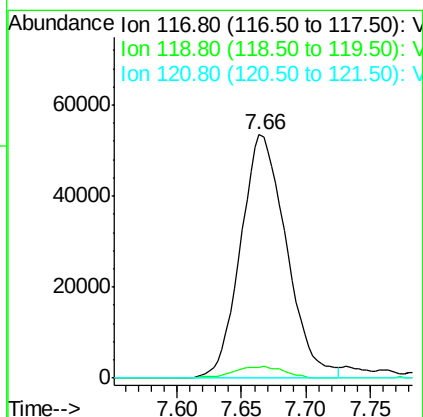
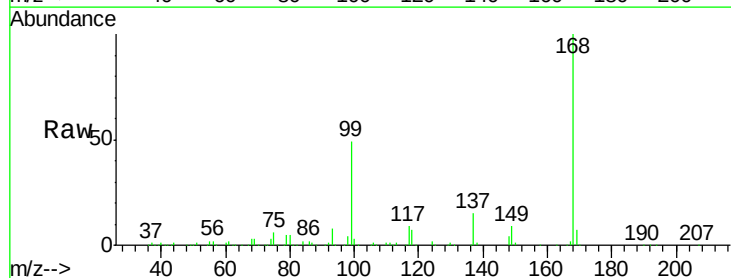
Instrument :  
 MSVOA\_N  
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 CL-02-030819-A

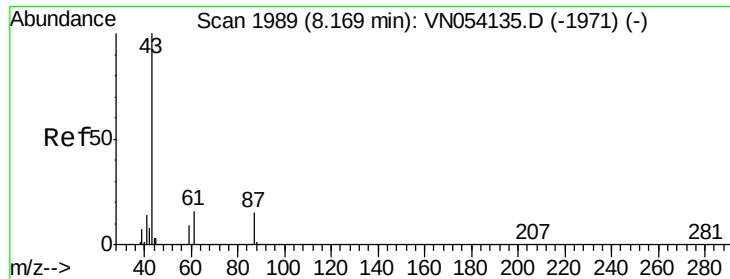
| Tot Ion   | 75  | Resp  | 94536 |
|-----------|-----|-------|-------|
| Ion Ratio | 100 | Lower | Upper |
| 75        | 100 |       |       |
| 110       | 7.8 | 18.0  | 54.0# |
| 77        | 0.0 | 25.3  | 37.9# |



#38  
 Carbon Tetrachloride  
 Concen: 5.124 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.11 min  
 Lab File: VN054149.D  
 Acq: 11 Mar 2019 18:51

| Tgt Ion   | 117 | Resp  | 132369 |
|-----------|-----|-------|--------|
| Ion Ratio | 100 | Lower | Upper  |
| 117       | 100 |       |        |
| 119       | 4.6 | 77.0  | 115.6# |
| 121       | 0.0 | 24.3  | 36.5#  |





#43

Isopropyl Acetate

Concen: 1.856 ug/l

RT: 8.17 min Scan# 1990

Delta R.T. 0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

CL-02-030819-A

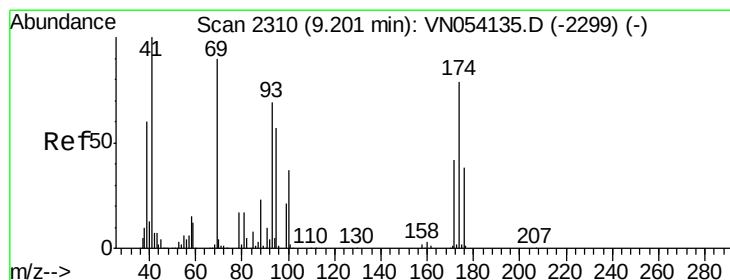
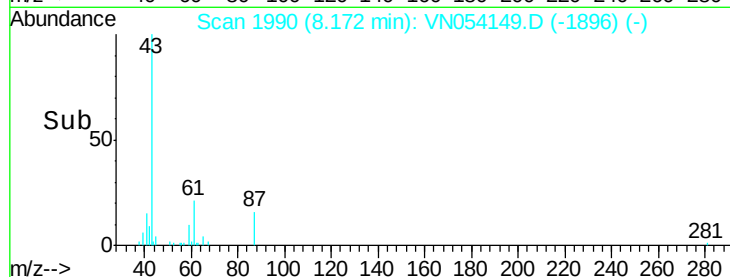
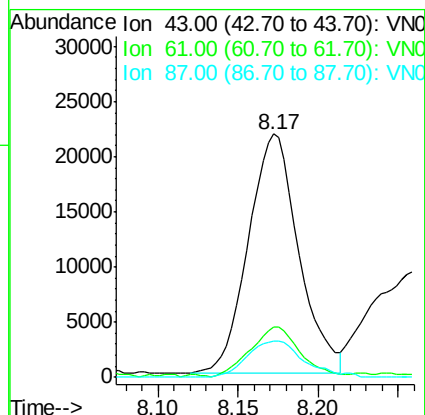
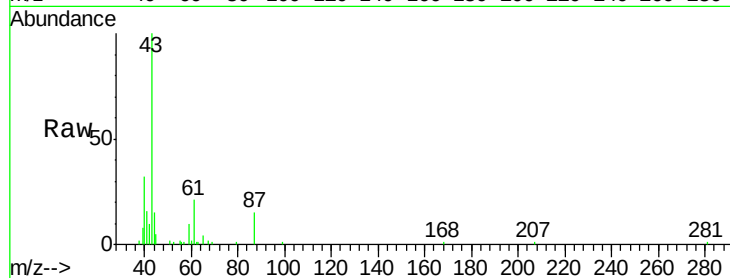
Tot Ion: 43 Resp: 46629

Ion Ratio Lower Upper

43 100

61 21.2 22.5 33.7#

87 17.0 10.1 15.1#



#48

Methyl methacrylate

Concen: 1.315 ug/l

RT: 9.18 min Scan# 2305

Delta R.T. -0.02 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

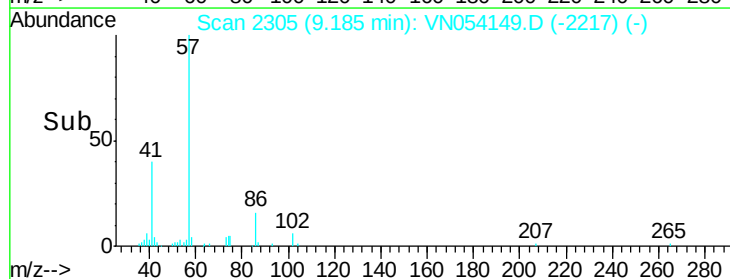
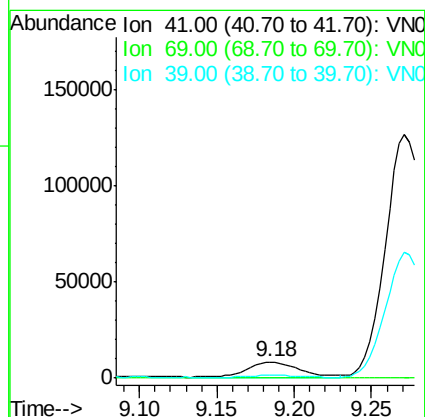
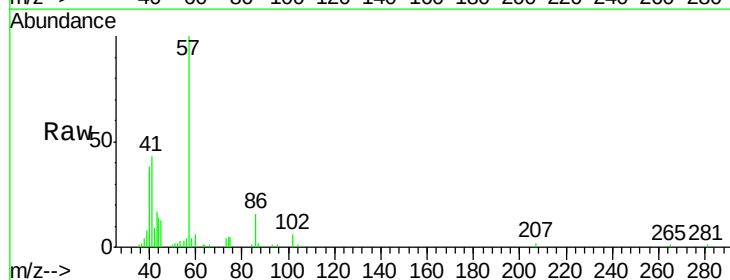
Tgt Ion: 41 Resp: 17761

Ion Ratio Lower Upper

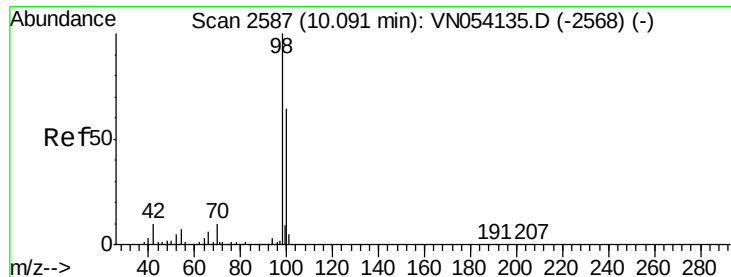
41 100

69 0.5 71.0 106.4#

39 0.0 43.7 65.5#







#50

Toluene-d8

Concen: 51.195 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

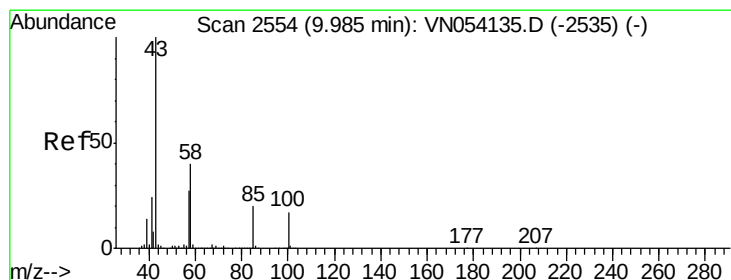
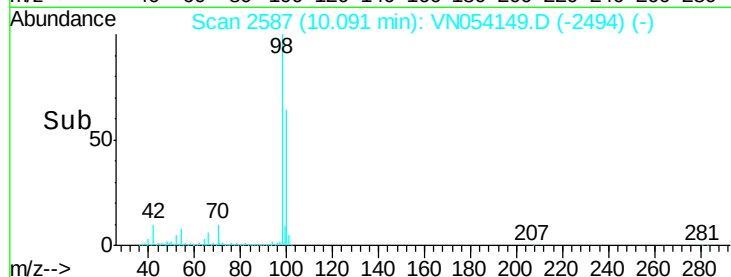
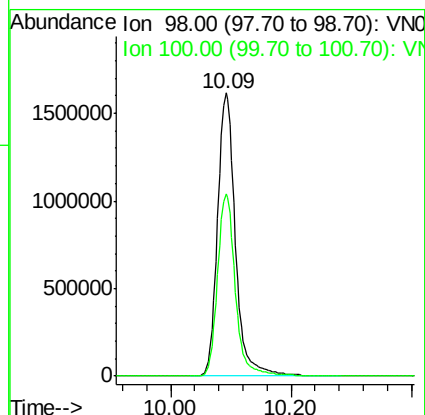
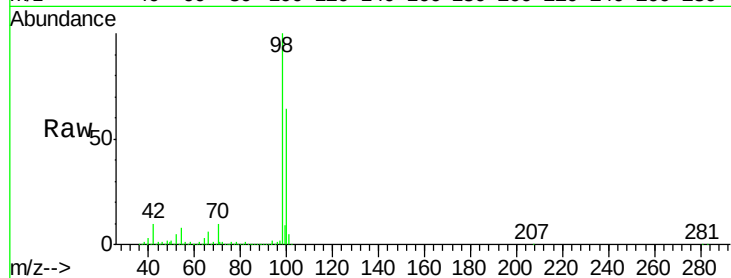
CL-02-030819-A

Tot Ion: 98 Resp: 3258176

Ion Ratio Lower Upper

98 100

100 64.3 51.7 77.5



#51

4-Methyl-2-Pentanone

Concen: 1.023 ug/l

RT: 9.99 min Scan# 2555

Delta R.T. 0.00 min

Lab File: VN054149.D

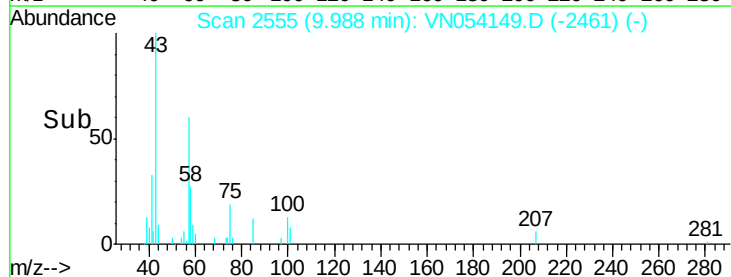
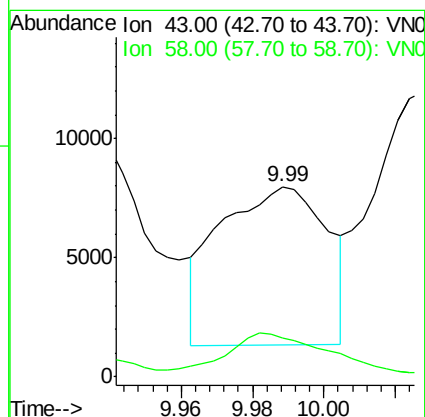
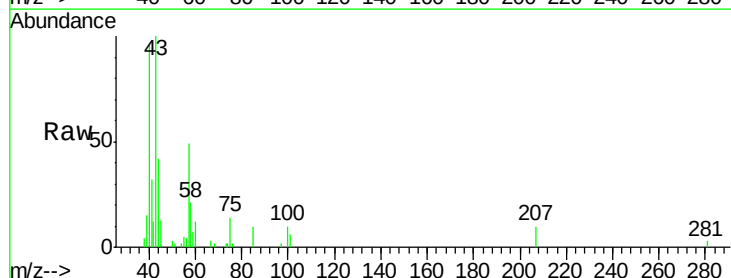
Acq: 11 Mar 2019 18:51

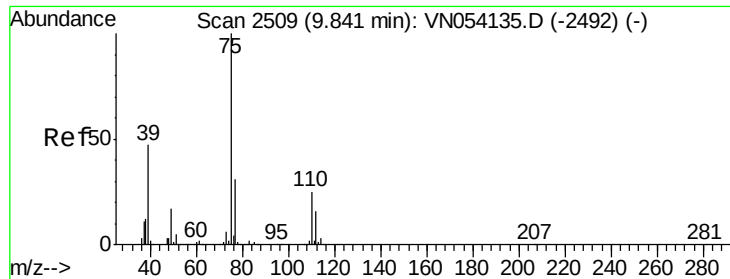
Tgt Ion: 43 Resp: 13779

Ion Ratio Lower Upper

43 100

58 28.6 30.8 46.2#





#54

cis-1,3-Dichloropropene

Concen: 4.755 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

CL-02-030819-A

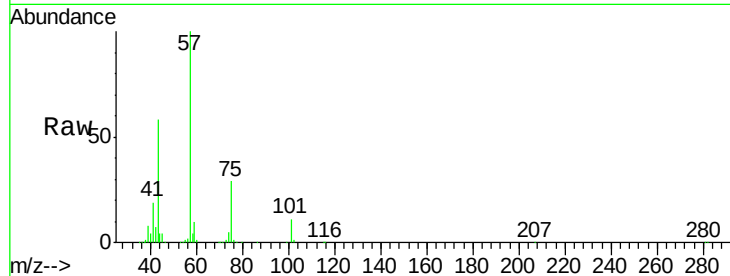
Tot Ion: 75 Resp: 130848

Ion Ratio Lower Upper

75 100

77 0.8 25.4 38.0#

39 28.2 36.2 54.2#

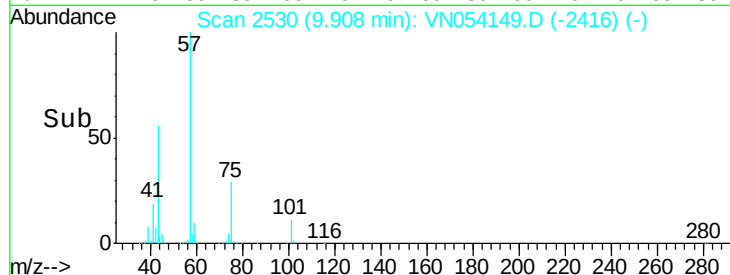


Abundance Ion 74.90 (74.60 to 75.60): VN054149.D (-2416) (-)

Ion 76.90 (76.60 to 77.60): VN054149.D (-2416) (-)

Ion 39.00 (38.70 to 39.70): VN054149.D (-2416) (-)

Time-->



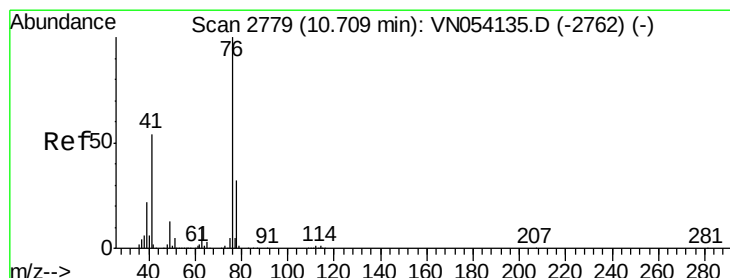
Abundance

Ion 74.90 (74.60 to 75.60): VN054149.D (-2416) (-)

Ion 76.90 (76.60 to 77.60): VN054149.D (-2416) (-)

Ion 39.00 (38.70 to 39.70): VN054149.D (-2416) (-)

Time-->



#57

1,3-Dichloropropane

Concen: 0.935 ug/l

RT: 10.77 min Scan# 2797

Delta R.T. 0.06 min

Lab File: VN054149.D

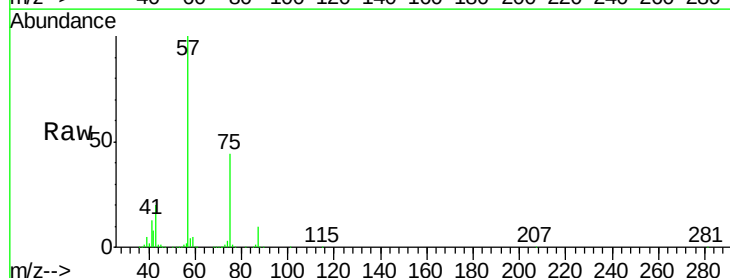
Acq: 11 Mar 2019 18:51

Tgt Ion: 76 Resp: 24466

Ion Ratio Lower Upper

76 100

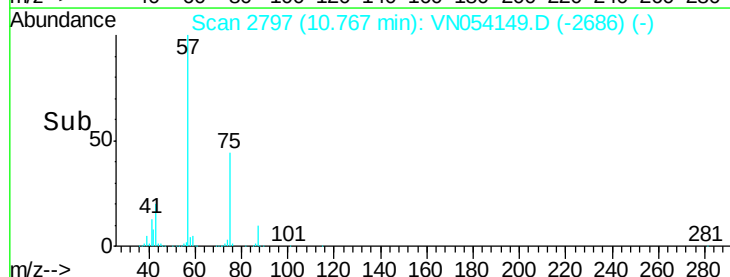
78 0.1 25.9 38.9#



Abundance Ion 75.90 (75.60 to 76.60): VN054149.D (-2686) (-)

Ion 77.90 (77.60 to 78.60): VN054149.D (-2686) (-)

Time-->

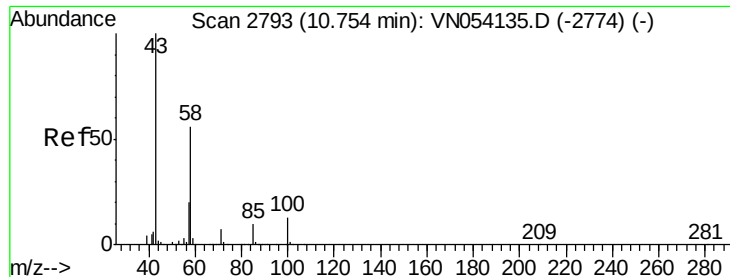


Abundance

Ion 75.90 (75.60 to 76.60): VN054149.D (-2686) (-)

Ion 77.90 (77.60 to 78.60): VN054149.D (-2686) (-)

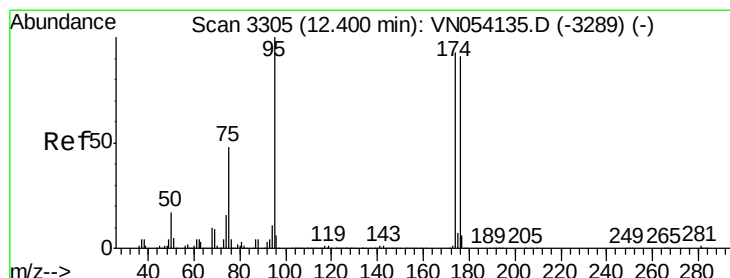
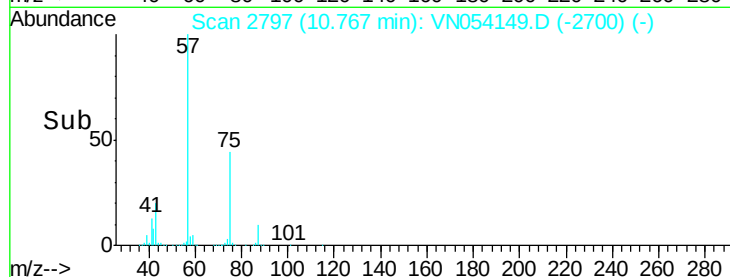
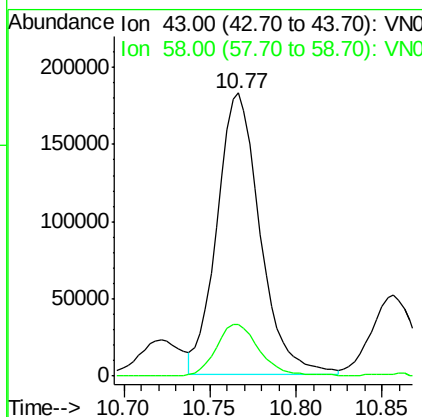
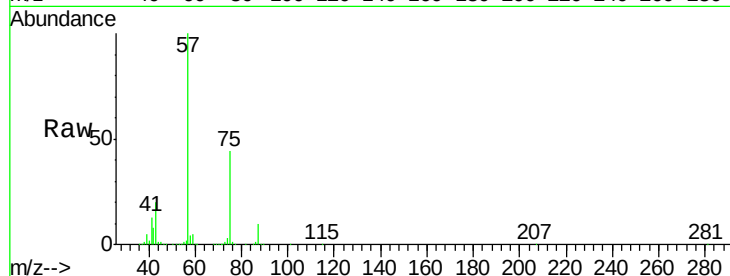
Time-->



#59  
2-Hexanone  
Concen: 35.607 ug/l  
RT: 10.77 min Scan# 2797  
Delta R.T. 0.01 min  
Lab File: VN054149.D  
Acq: 11 Mar 2019 18:51

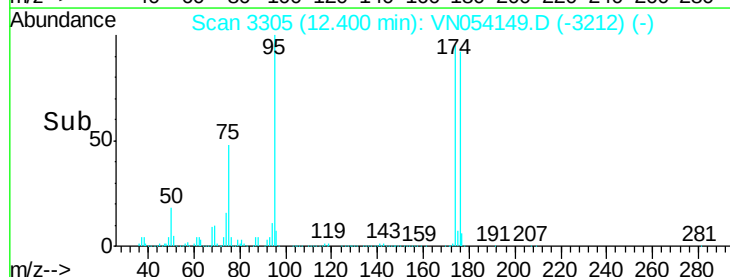
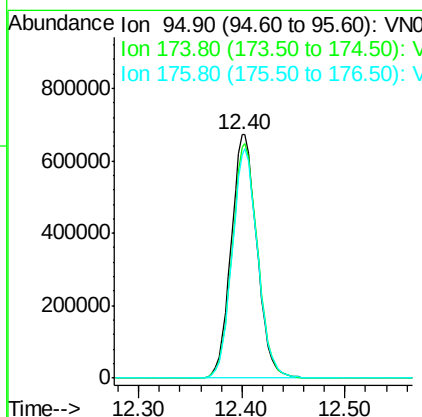
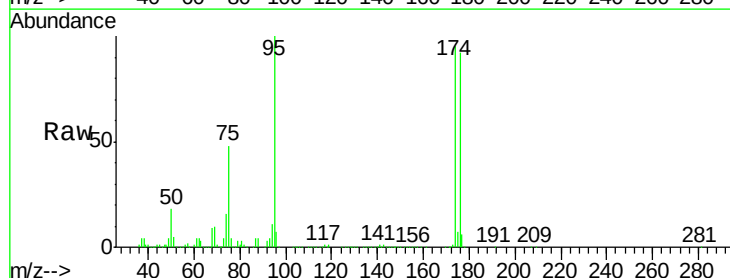
Instrument :  
MSVOA\_N  
ClientSampleId :  
CL-02-030819-A

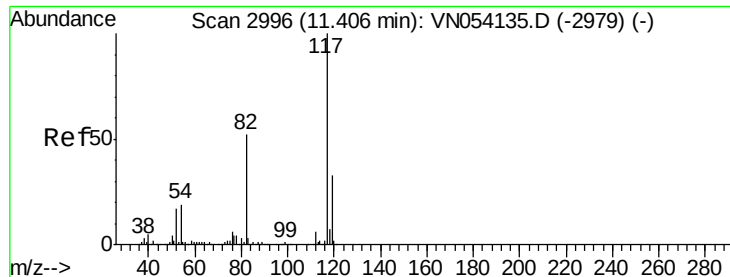
Tot Ion: 43 Resp: 318394  
Ion Ratio Lower Upper  
43 100  
58 18.8 27.0 81.0#



#62  
4-Bromofluorobenzene  
Concen: 52.584 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. -0.00 min  
Lab File: VN054149.D  
Acq: 11 Mar 2019 18:51

Tgt Ion: 95 Resp: 1171615  
Ion Ratio Lower Upper  
95 100  
174 95.6 0.0 173.2  
176 93.3 0.0 168.8





#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

CL-02-030819-A

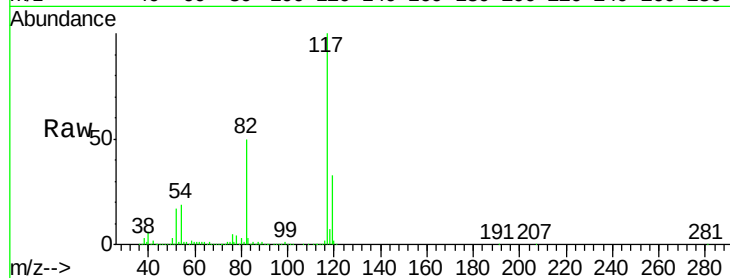
Tot Ion:117 Resp: 2608471

Ion Ratio Lower Upper

117 100

82 50.3 43.4 65.2

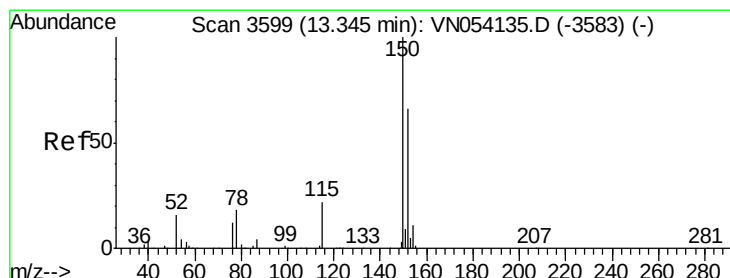
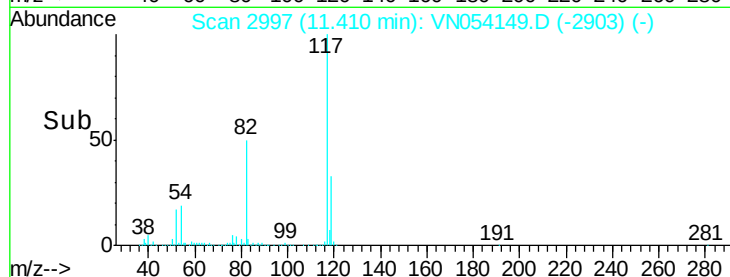
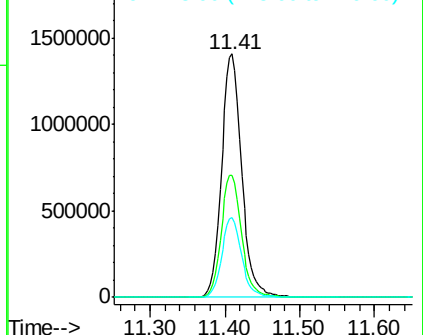
119 32.6 26.0 39.0



Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V



#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. -0.00 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

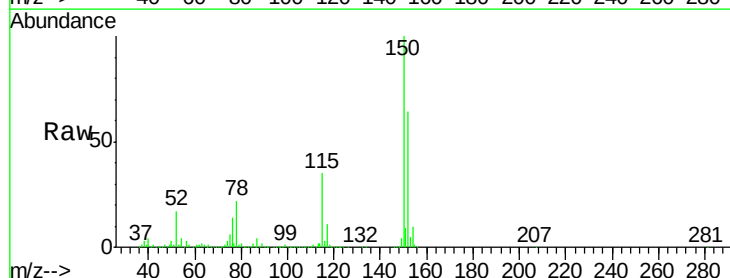
Tgt Ion:152 Resp: 1073394

Ion Ratio Lower Upper

152 100

115 54.8 28.5 85.6

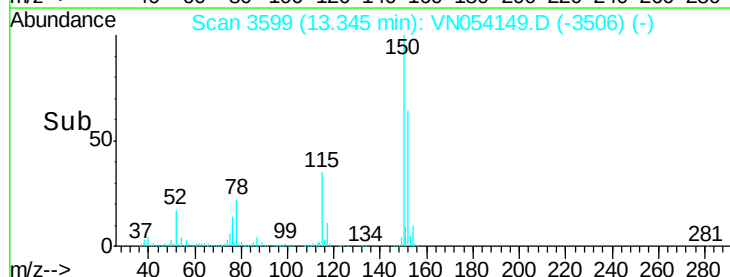
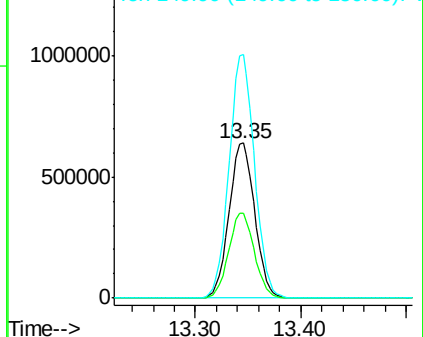
150 155.6 0.0 343.2

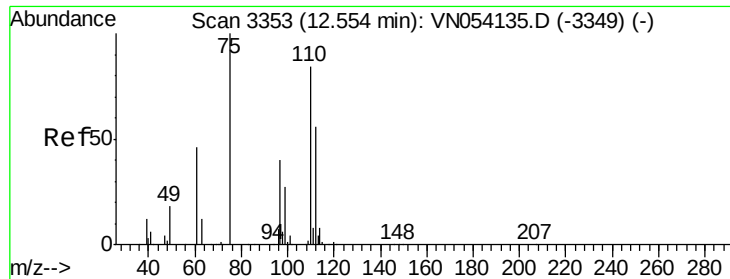


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#76

1,2,3-Trichloropropane

Concen: 36.828 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

Instrument :

MSVOA\_N

ClientSampleId :

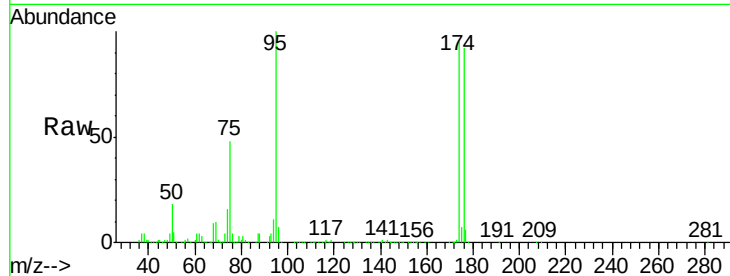
CL-02-030819-A

Tot Ion: 75 Resp: 558249

Ion Ratio Lower Upper

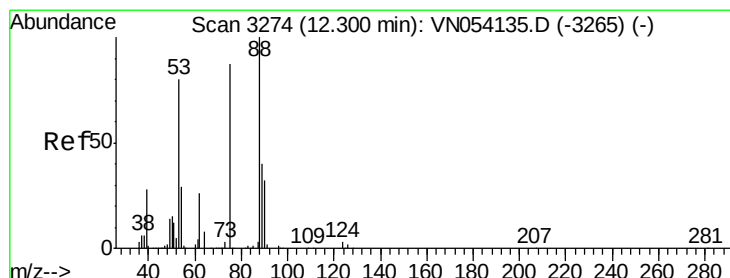
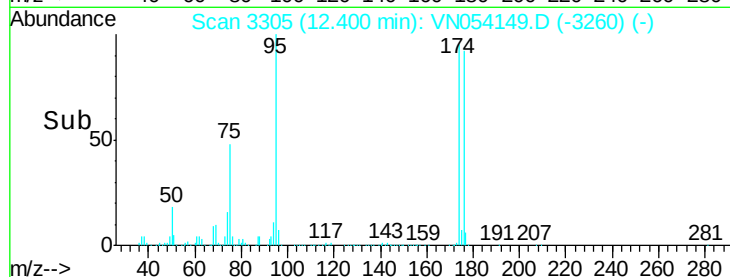
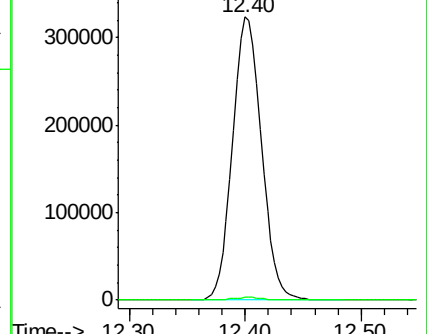
75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 77.00 (76.70 to 77.70): VNO



#81

trans-1,4-Dichloro-2-butene

Concen: 109.628 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054149.D

Acq: 11 Mar 2019 18:51

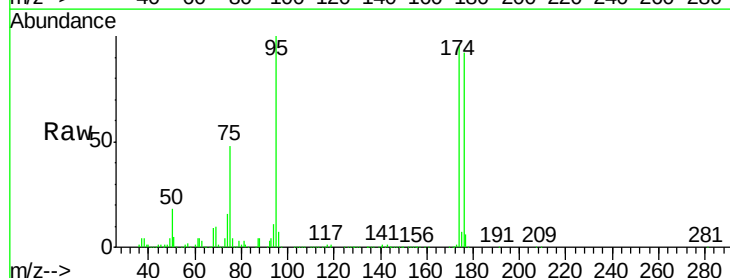
Tgt Ion: 75 Resp: 558249

Ion Ratio Lower Upper

75 100

53 0.0 76.4 114.6#

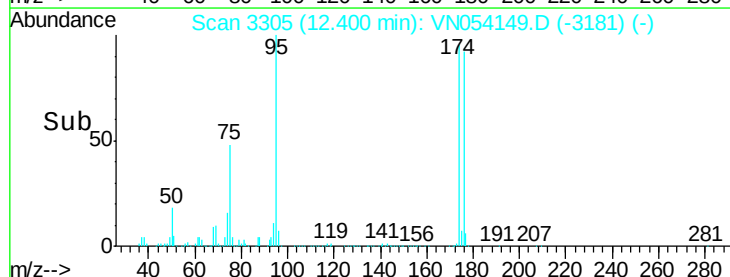
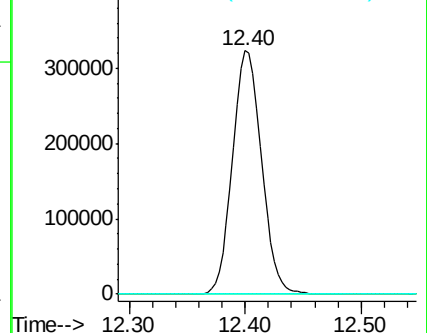
89 0.0 35.3 52.9#

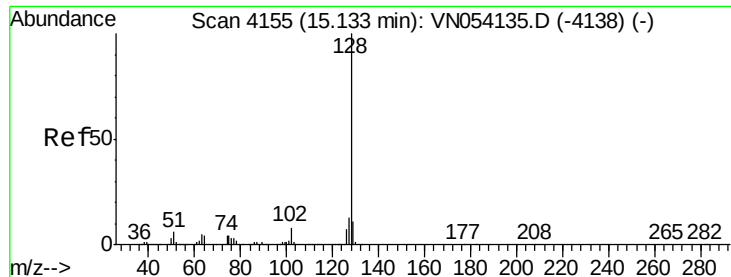


Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

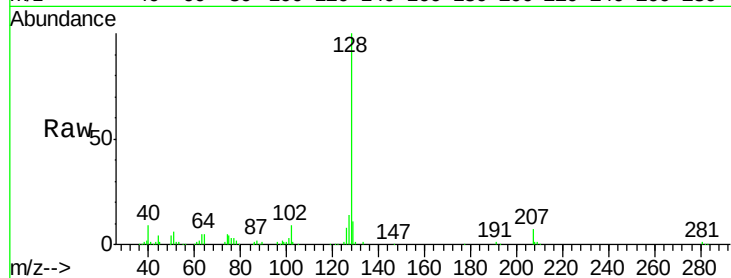




#95  
Naphthalene  
Concen: 3.721 ug/l  
RT: 15.13 min Scan# 4155  
Delta R.T. 0.00 min  
Lab File: VN054149.D  
Acq: 11 Mar 2019 18:51

Instrument :  
MSVOA\_N  
ClientSampleId :  
CL-02-030819-A

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 127     | 13.4  | 10.4  | 15.6  |
| 129     | 10.9  | 8.6   | 12.8  |



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

