

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN022520\  
 Data File : VN060230.D  
 Acq On : 25 Feb 2020 13:42  
 Operator : JC/MD  
 Sample : L1670-11  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SOLID-COMP

Quant Time: Feb 25 15:47:22 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.65  | 168  | 202763   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 318422   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 301268   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 139804   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.00   | 65  | 120137   | 48.69 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.38%  |      |
| 35) Dibromofluoromethane    | 7.57   | 113 | 95873    | 48.98 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 97.96%  |      |
| 50) Toluene-d8              | 10.08  | 98  | 383705   | 49.78 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 99.56%  |      |
| 62) 4-Bromofluorobenzene    | 12.40  | 95  | 141851   | 50.08 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.16% |      |

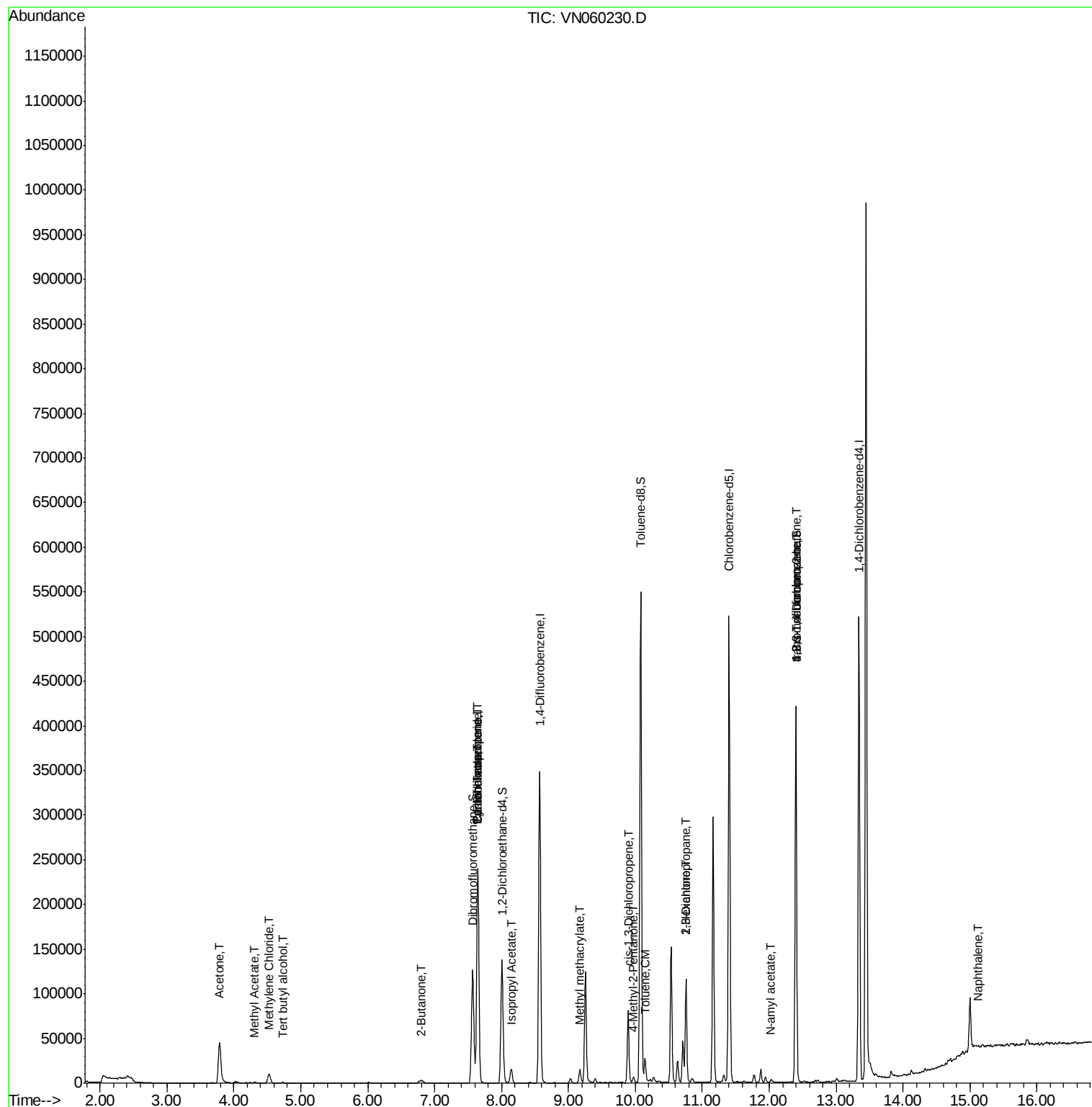
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 11) Tert butyl alcohol         | 4.74  | 59   | 871      | 2.36      | ug/l # | 72     |
| 16) Acetone                    | 3.79  | 43   | 80822    | 75.10     | ug/l   | 96     |
| 18) Methyl Acetate             | 4.30  | 43   | 951      | 0.47      | ug/l # | 50     |
| 20) Methylene Chloride         | 4.52  | 84   | 8072     | 3.76      | ug/l   | 92     |
| 25) 2-Butanone                 | 6.81  | 43   | 4197     | 3.10      | ug/l   | 96     |
| 31) Cyclohexane                | 7.64  | 56   | 4345     | 1.25      | ug/l # | 25     |
| 36) 1,1-Dichloropropene        | 7.64  | 75   | 14531    | 4.93      | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.64  | 117  | 19210    | 6.00      | ug/l # | 15     |
| 43) Isopropyl Acetate          | 8.15  | 43   | 20056    | 4.40      | ug/l # | 89     |
| 48) Methyl methacrylate        | 9.16  | 41   | 1135     | 0.56      | ug/l # | 37     |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 3362     | 1.27      | ug/l   | 93     |
| 52) Toluene                    | 10.14 | 92   | 11898    | 2.12      | ug/l   | 98     |
| 54) cis-1,3-Dichloropropene    | 9.89  | 75   | 14980    | 4.05      | ug/l # | 63     |
| 57) 1,3-Dichloropropane        | 10.76 | 76   | 1023     | 0.28      | ug/l # | 43     |
| 59) 2-Hexanone                 | 10.76 | 43   | 17568    | 8.62      | ug/l # | 56     |
| 74) N-amyl acetate             | 12.03 | 43   | 2396     | 0.64      | ug/l # | 43     |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 73646    | 27.53     | ug/l # | 100    |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 73646    | 67.42     | ug/l # | 12     |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 32       | Below Cal | #      | 1      |
| 95) Naphthalene                | 15.14 | 128  | 1561     | 0.22      | ug/l # | 79     |

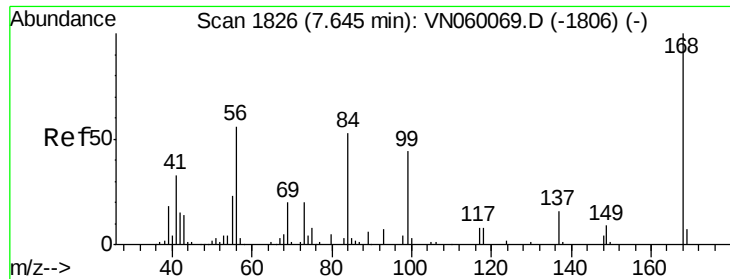
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_N\DATA\VN022520\  
Data File : VN060230.D  
Acq On : 25 Feb 2020 13:42  
Operator : JC/MD  
Sample : L1670-11  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
SOLID-COMP

Quant Time: Feb 25 15:47:22 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
Quant Title : SW846 8260  
QLast Update : Wed Feb 12 14:12:21 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.00 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

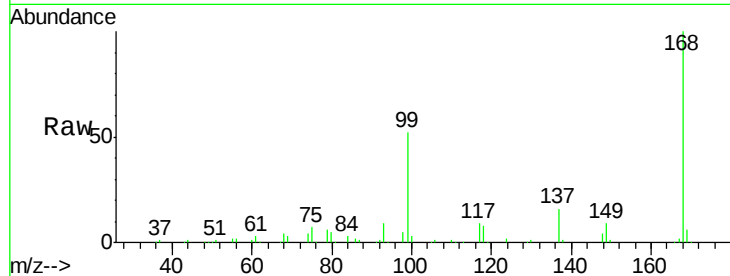
SOLID-COMP

Tgt Ion: 168 Resp: 202763

Ion Ratio Lower Upper

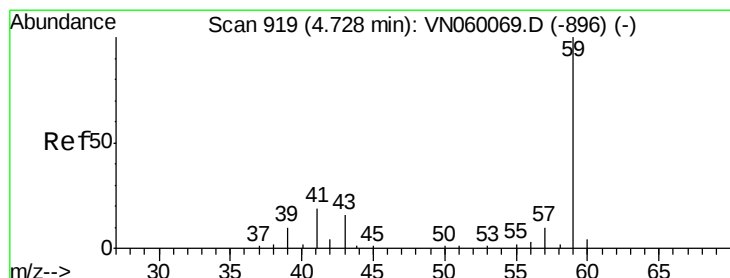
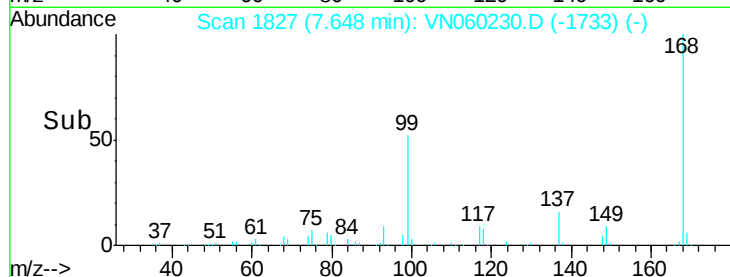
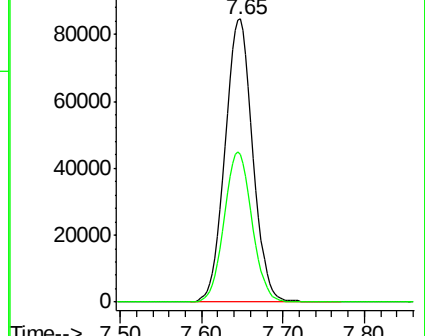
168 100

99 52.0 42.7 64.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0



#11

Tert butyl alcohol

Concen: 2.36 ug/l

RT: 4.74 min Scan# 923

Delta R.T. 0.01 min

Lab File: VN060230.D

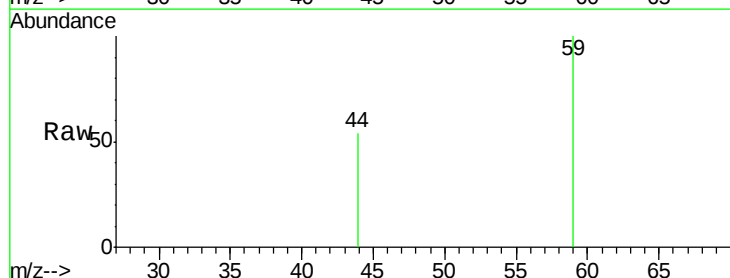
Acq: 25 Feb 2020 13:42

Tgt Ion: 59 Resp: 871

Ion Ratio Lower Upper

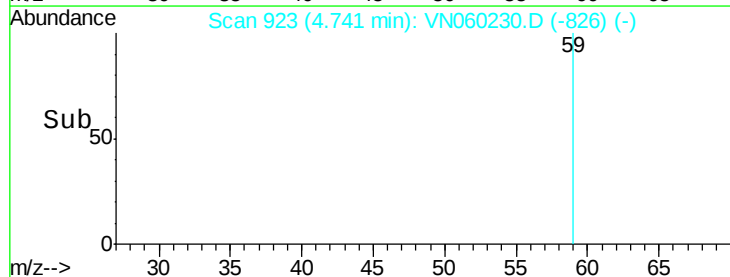
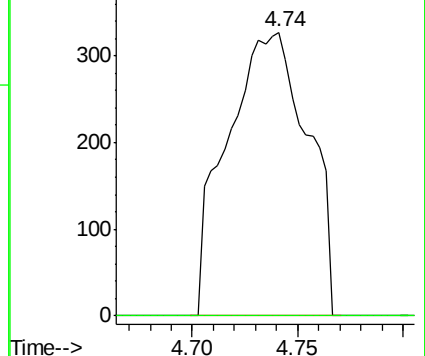
59 100

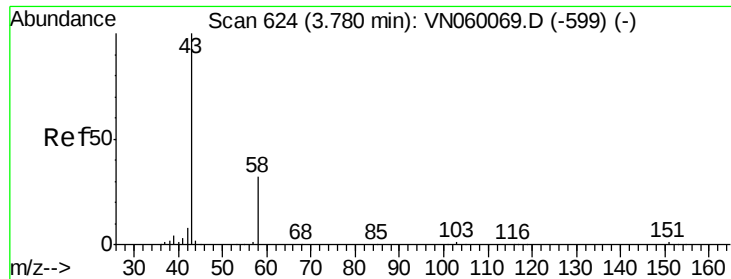
57 0.0 8.2 12.4#



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 57.00 (56.70 to 57.70): VN0





#16

Acetone

Concen: 75.10 ug/l

RT: 3.79 min Scan# 626

Delta R.T. 0.01 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

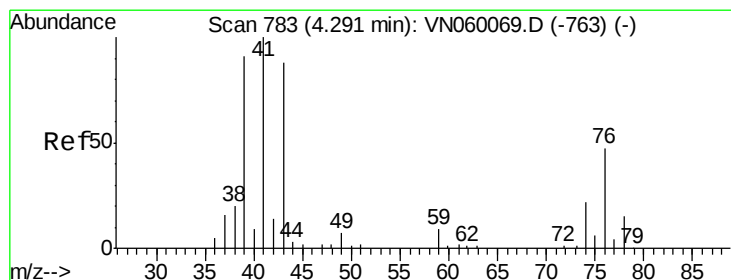
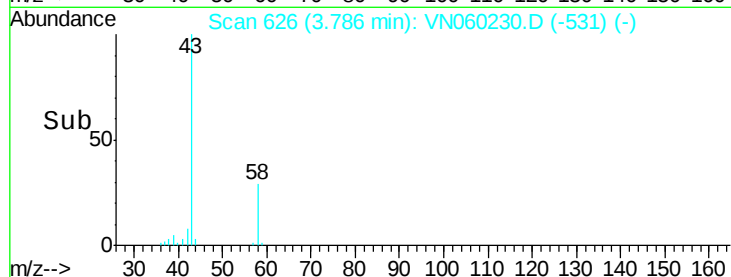
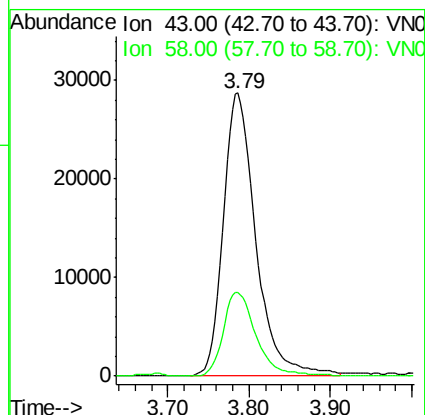
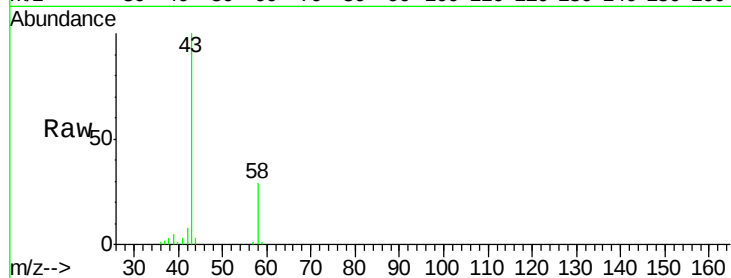
SOLID-COMP

Tgt Ion: 43 Resp: 80822

Ion Ratio Lower Upper

43 100

58 29.4 25.2 37.8



#18

Methyl Acetate

Concen: 0.47 ug/l

RT: 4.30 min Scan# 786

Delta R.T. 0.01 min

Lab File: VN060230.D

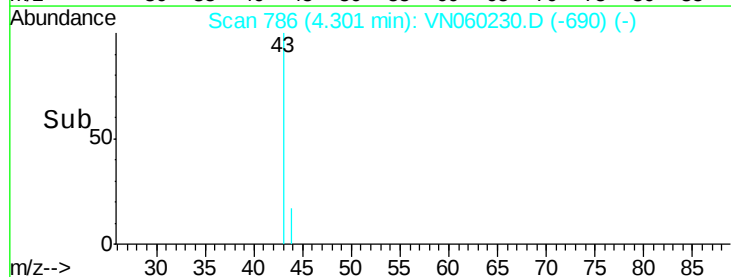
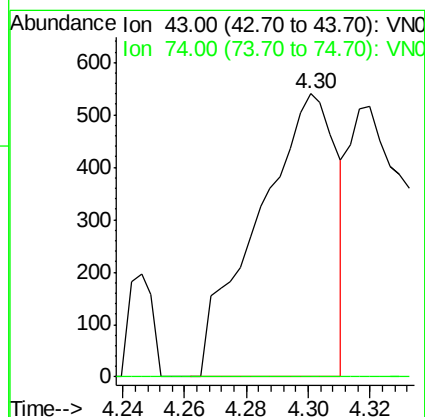
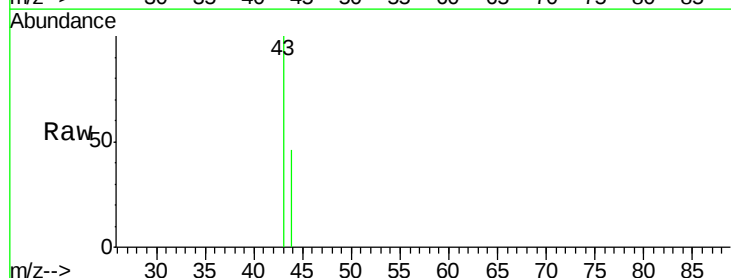
Acq: 25 Feb 2020 13:42

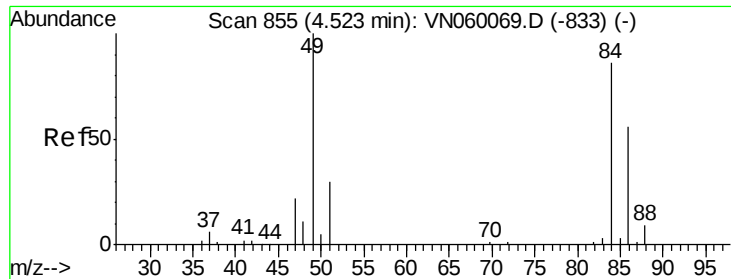
Tgt Ion: 43 Resp: 951

Ion Ratio Lower Upper

43 100

74 0.0 20.3 30.5#

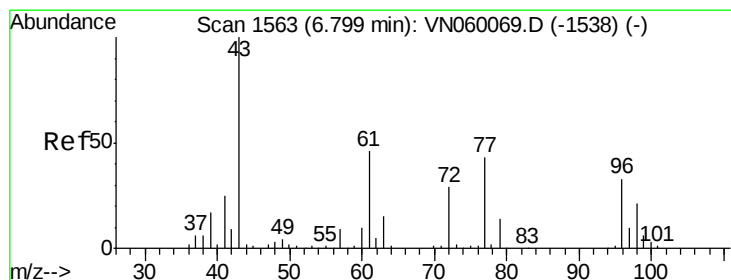
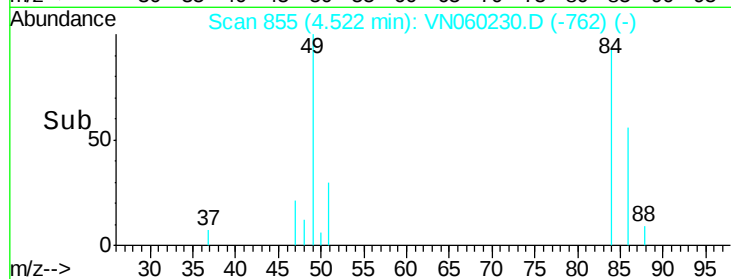
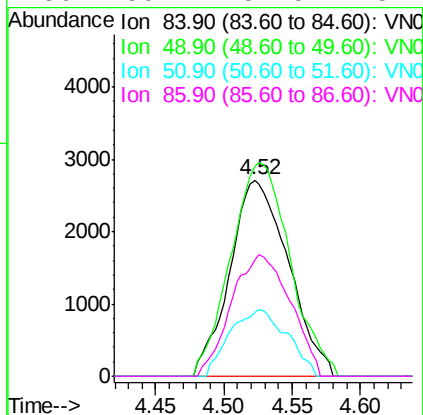
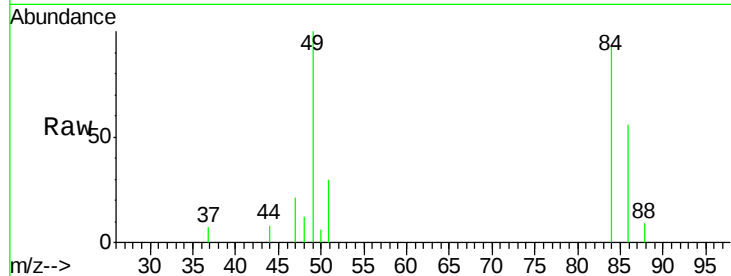




#20  
Methylene Chloride  
Concen: 3.76 ug/l  
RT: 4.52 min Scan# 855  
Delta R.T. -0.00 min  
Lab File: VN060230.D  
Acq: 25 Feb 2020 13:42

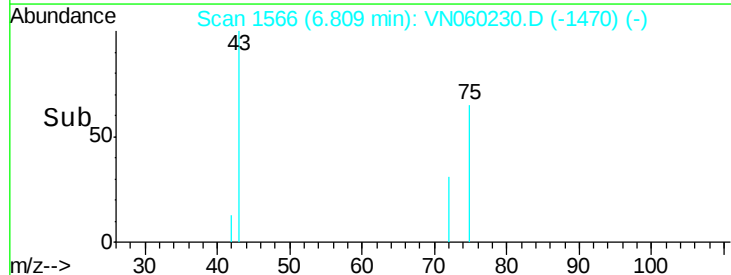
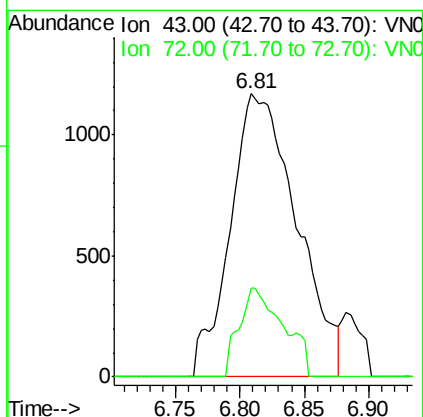
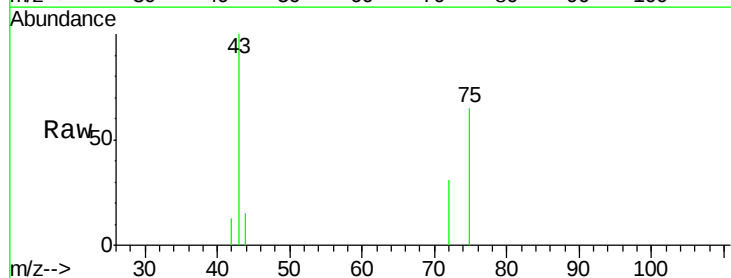
Instrument :  
MSVOA\_N  
ClientSampleId :  
SOLID-COMP

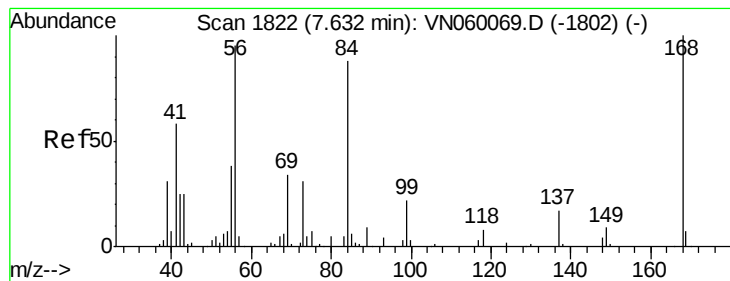
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 8072  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 107.1 | 93.4  | 140.0 |
| 51       | 32.6  | 28.4  | 42.6  |
| 86       | 59.7  | 52.5  | 78.7  |



#25  
2-Butanone  
Concen: 3.10 ug/l  
RT: 6.81 min Scan# 1566  
Delta R.T. 0.01 min  
Lab File: VN060230.D  
Acq: 25 Feb 2020 13:42

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 43    | Resp: | 4197  |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 72       | 31.2  | 23.3  | 34.9  |





#31

Cyclohexane

Concen: 1.25 ug/l

RT: 7.64 min Scan# 1826

Delta R.T. 0.01 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

SOLID-COMP

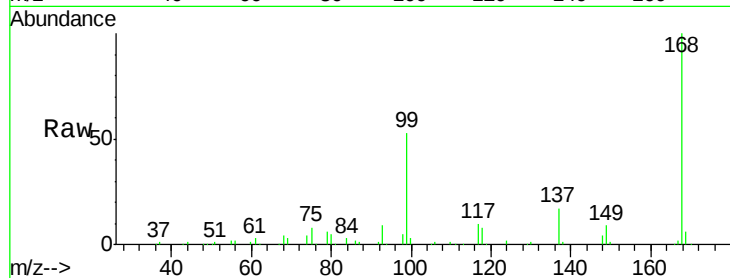
Tgt Ion: 56 Resp: 4345

Ion Ratio Lower Upper

56 100

69 147.0 28.3 42.5#

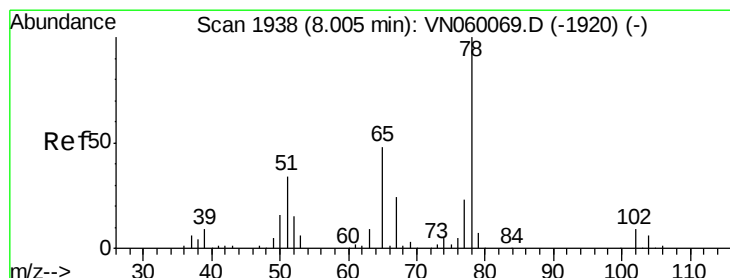
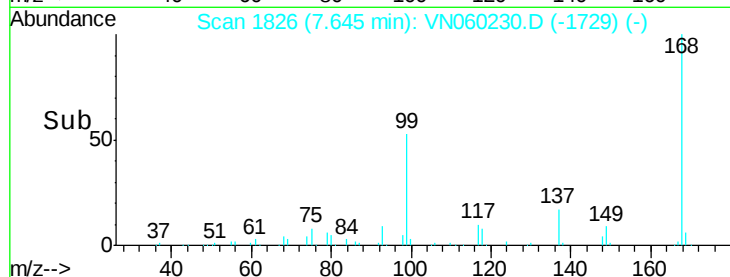
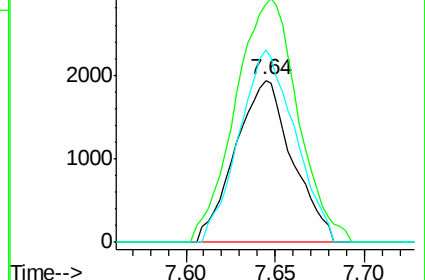
84 118.5 72.6 108.8#



Abundance Ion 56.00 (55.70 to 56.70): VN060069.D (-1802) (-)

Ion 69.00 (68.70 to 69.70): VN060069.D (-1802) (-)

Ion 84.00 (83.70 to 84.70): VN060069.D (-1802) (-)



#33

1,2-Dichloroethane-d4

Concen: 48.69 ug/l

RT: 8.00 min Scan# 1938

Delta R.T. -0.00 min

Lab File: VN060230.D

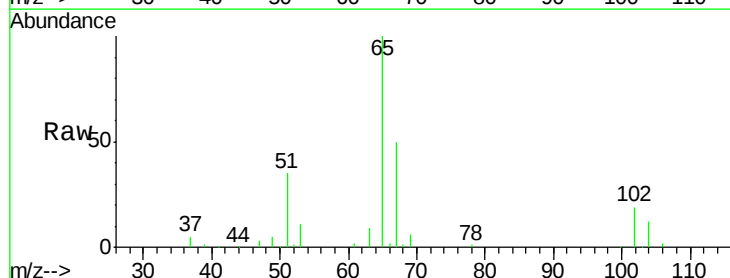
Acq: 25 Feb 2020 13:42

Tgt Ion: 65 Resp: 120137

Ion Ratio Lower Upper

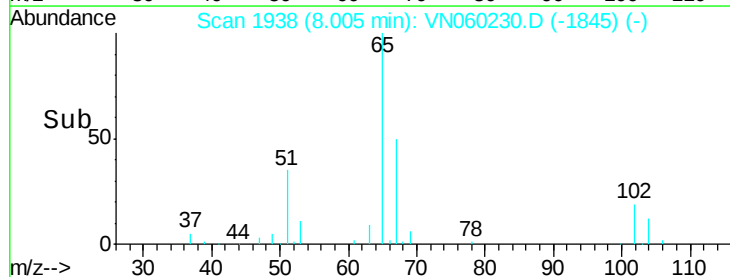
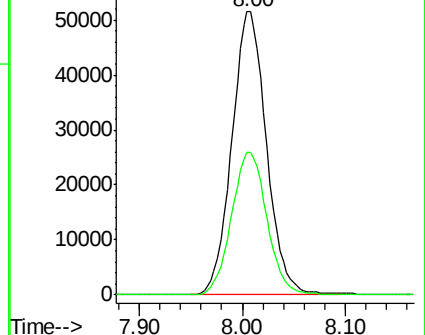
65 100

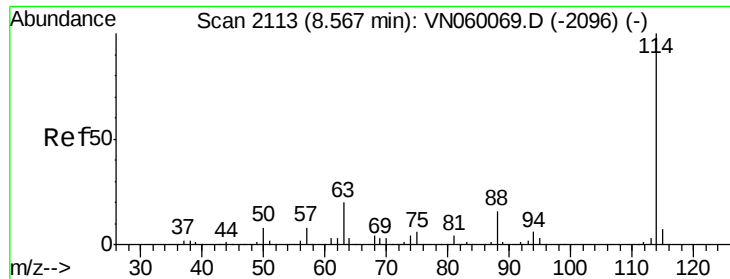
67 51.6 0.0 104.0



Abundance Ion 64.90 (64.60 to 65.60): VN060069.D (-1920) (-)

Ion 66.90 (66.60 to 67.60): VN060069.D (-1920) (-)





#34

1,4-Difluorobenzene

Concen: 50.00 ug/l

RT: 8.57 min Scan# 2114

Delta R.T. 0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

SOLID-COMP

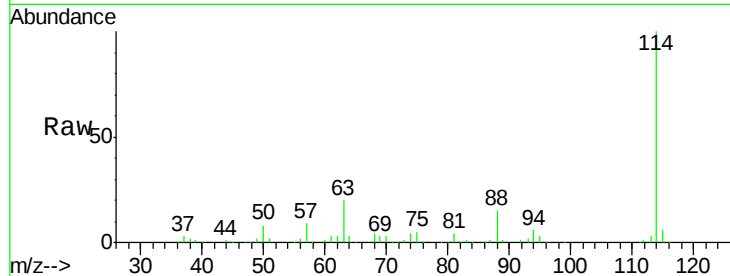
Tgt Ion:114 Resp: 318422

Ion Ratio Lower Upper

114 100

63 20.3 0.0 40.0

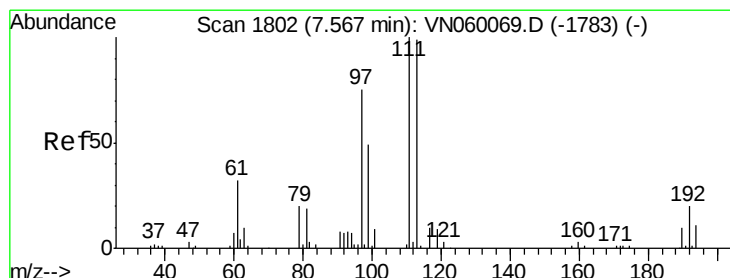
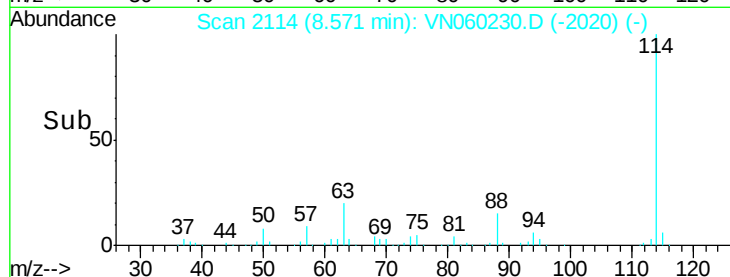
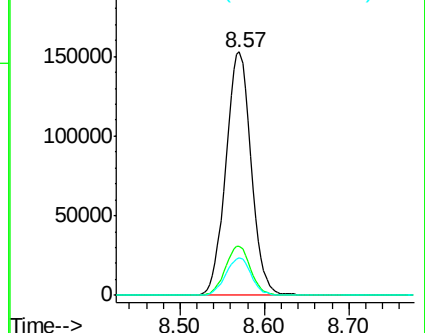
88 15.3 0.0 31.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN

Ion 87.90 (87.60 to 88.60): VN



#35

Dibromofluoromethane

Concen: 48.98 ug/l

RT: 7.57 min Scan# 1803

Delta R.T. 0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

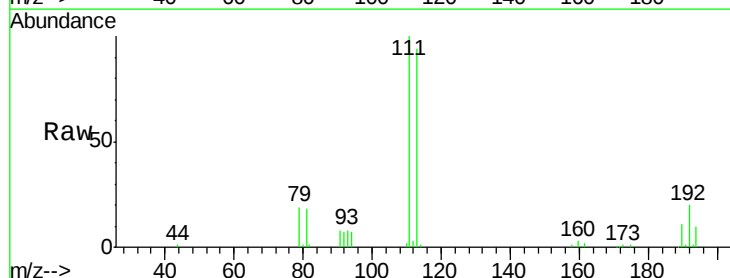
Tgt Ion:113 Resp: 95873

Ion Ratio Lower Upper

113 100

111 103.9 81.4 122.2

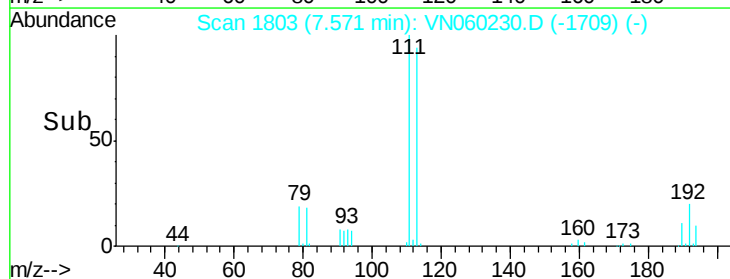
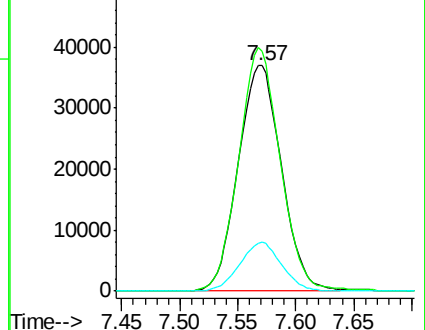
192 20.9 16.2 24.2

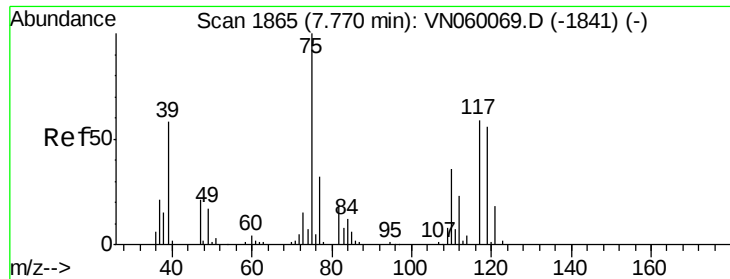


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

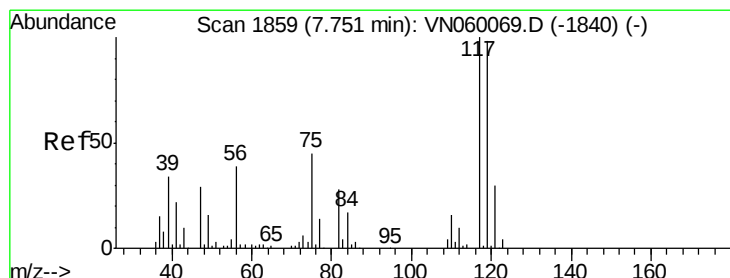
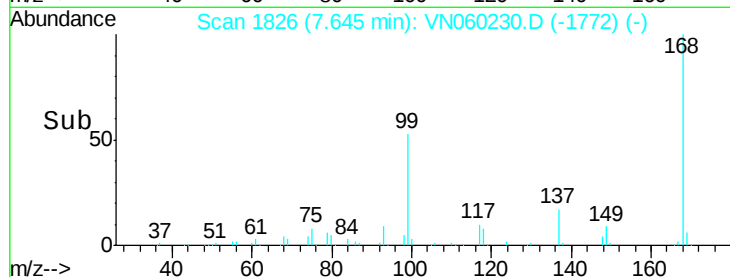
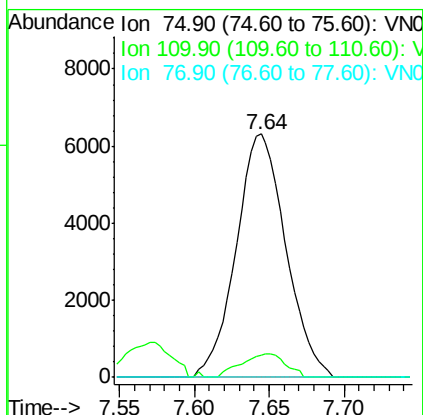
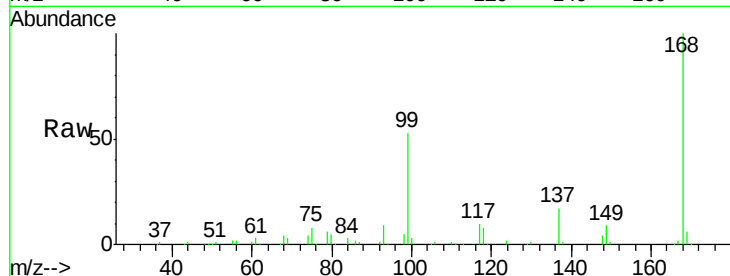




#36  
 1,1-Dichloropropene  
 Concen: 4.93 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.13 min  
 Lab File: VN060230.D  
 Acq: 25 Feb 2020 13:42

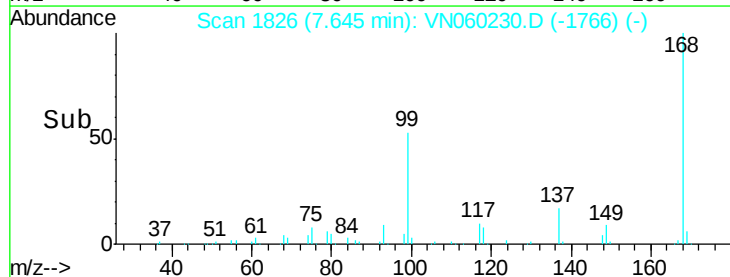
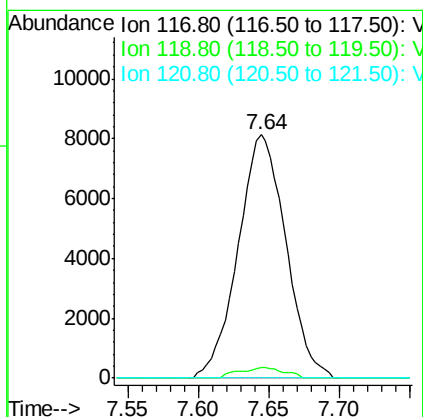
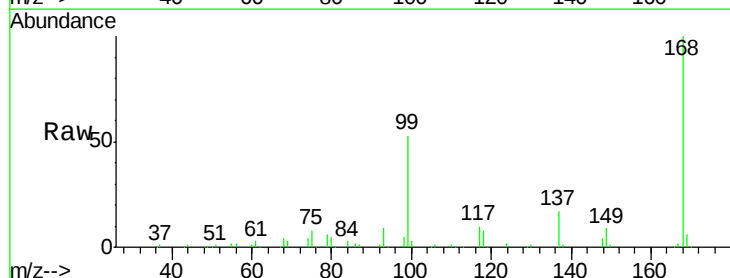
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SOLID-COMP

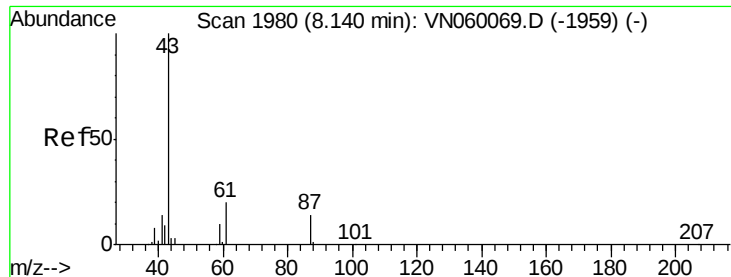
Tgt Ion: 75 Resp: 14531  
 Ion Ratio Lower Upper  
 75 100  
 110 8.7 18.1 54.3#  
 77 0.0 25.1 37.7#



#38  
 Carbon Tetrachloride  
 Concen: 6.00 ug/l  
 RT: 7.64 min Scan# 1826  
 Delta R.T. -0.11 min  
 Lab File: VN060230.D  
 Acq: 25 Feb 2020 13:42

Tgt Ion: 117 Resp: 19210  
 Ion Ratio Lower Upper  
 117 100  
 119 4.3 78.2 117.4#  
 121 0.0 24.2 36.2#





#43

Isopropyl Acetate

Concen: 4.40 ug/l

RT: 8.15 min Scan# 1982

Delta R.T. 0.01 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampled :

SOLID-COMP

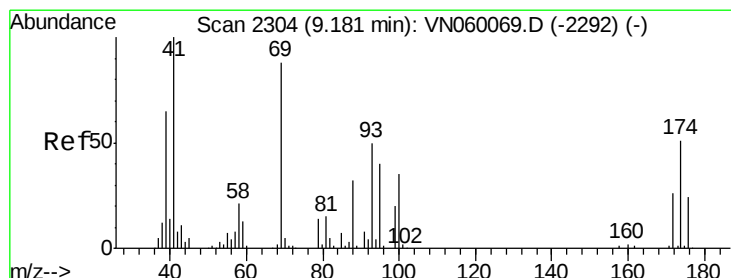
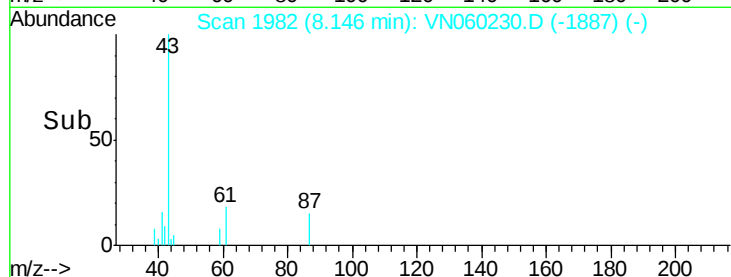
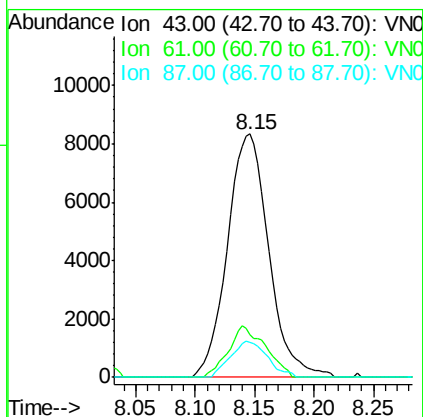
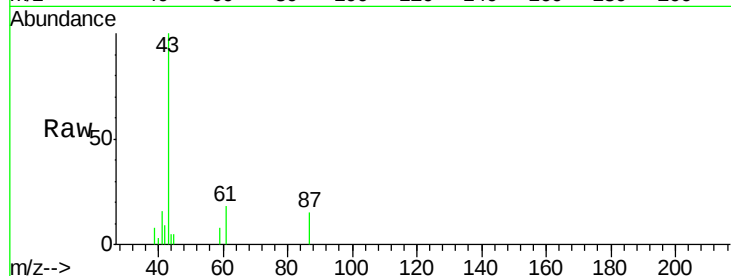
Tgt Ion: 43 Resp: 20056

Ion Ratio Lower Upper

43 100

61 19.0 21.8 32.6#

87 13.2 11.4 17.2



#48

Methyl methacrylate

Concen: 0.56 ug/l

RT: 9.16 min Scan# 2297

Delta R.T. -0.02 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

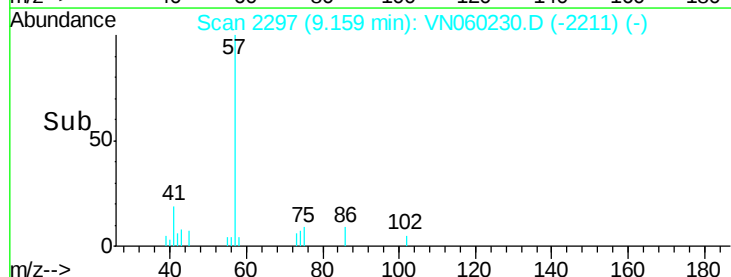
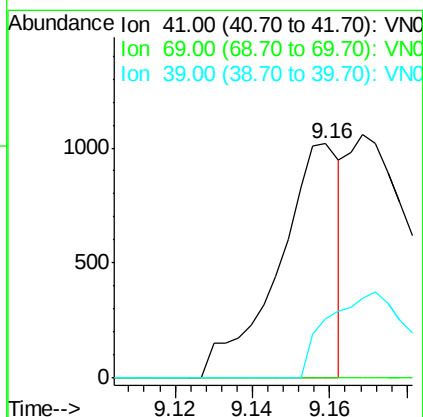
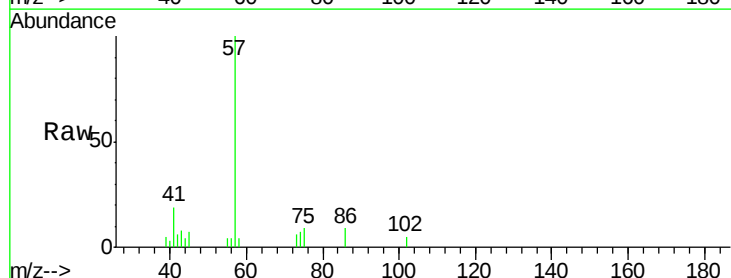
Tgt Ion: 41 Resp: 1135

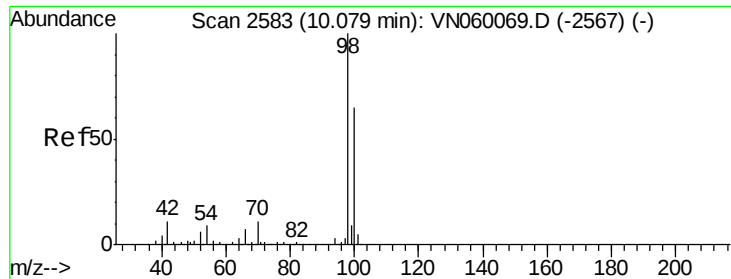
Ion Ratio Lower Upper

41 100

69 0.0 72.0 108.0#

39 51.5 54.1 81.1#





#50

Toluene-d8

Concen: 49.78 ug/l

RT: 10.08 min Scan# 2583

Delta R.T. -0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

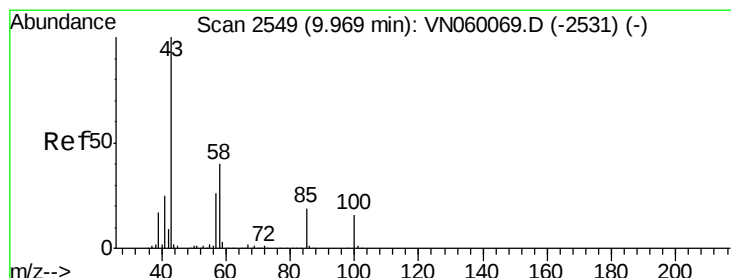
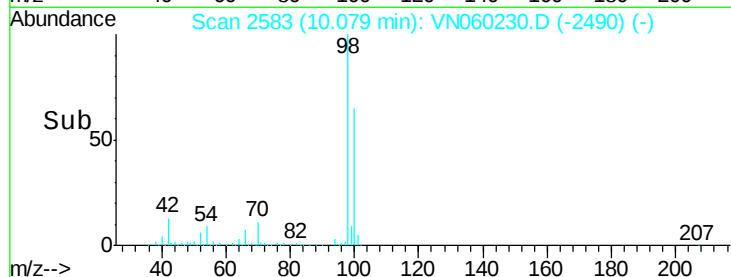
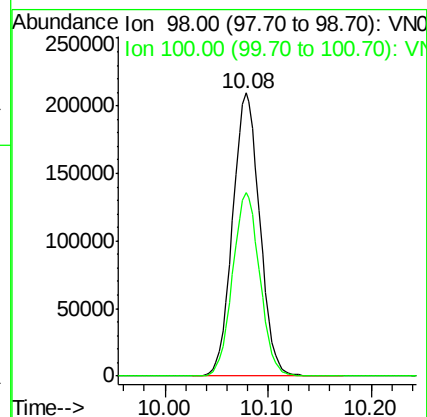
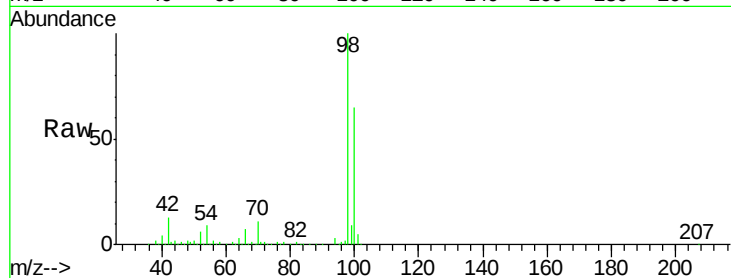
SOLID-COMP

Tgt Ion: 98 Resp: 383705

Ion Ratio Lower Upper

98 100

100 64.9 51.7 77.5



#51

4-Methyl-2-Pentanone

Concen: 1.27 ug/l

RT: 9.97 min Scan# 2550

Delta R.T. 0.00 min

Lab File: VN060230.D

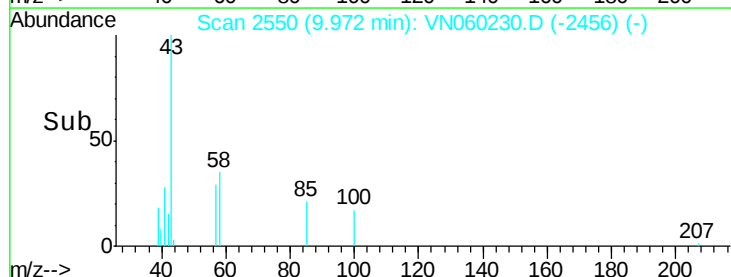
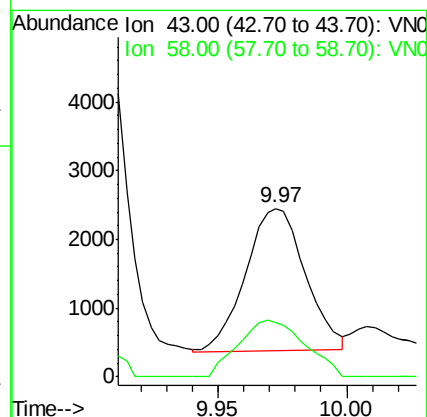
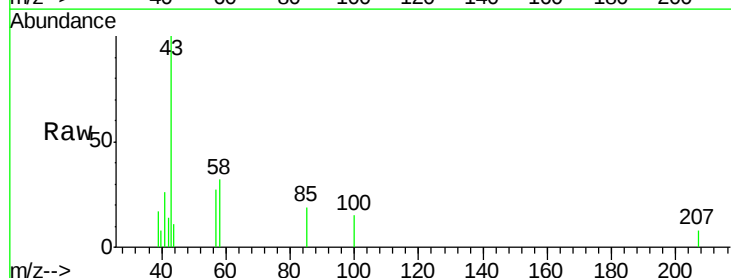
Acq: 25 Feb 2020 13:42

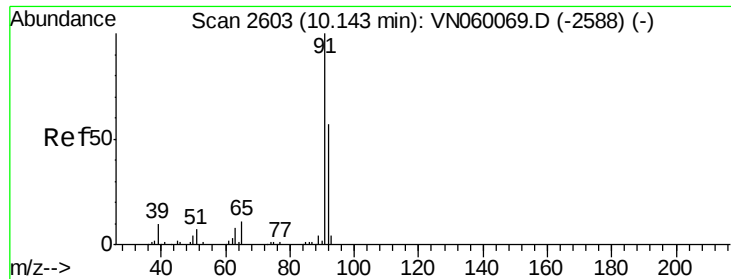
Tgt Ion: 43 Resp: 3362

Ion Ratio Lower Upper

43 100

58 44.1 31.8 47.8





#52

Toluene

Concen: 2.12 ug/l

RT: 10.14 min Scan# 2603

Delta R.T. -0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

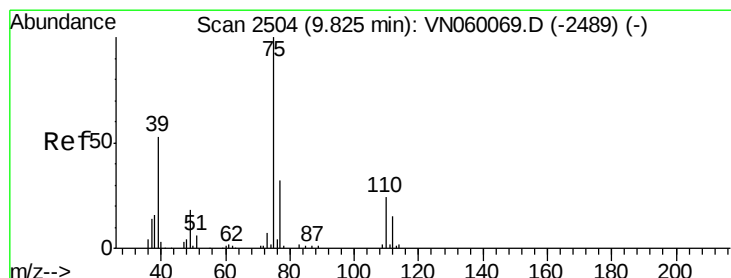
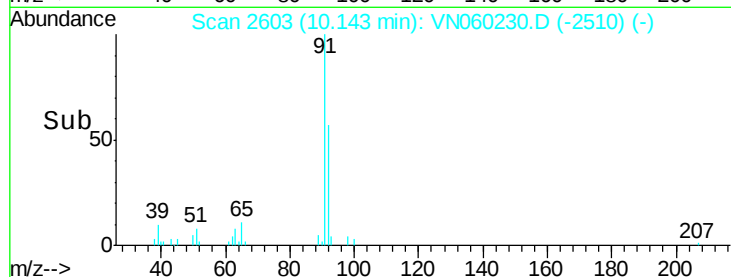
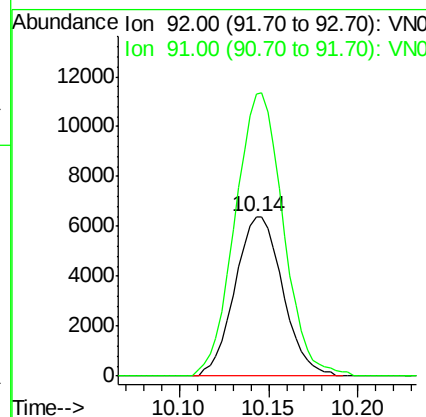
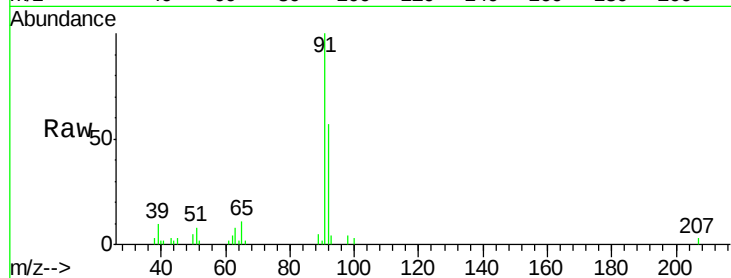
SOLID-COMP

Tgt Ion: 92 Resp: 11898

Ion Ratio Lower Upper

92 100

91 179.4 140.9 211.3



#54

cis-1,3-Dichloropropene

Concen: 4.05 ug/l

RT: 9.89 min Scan# 2525

Delta R.T. 0.07 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

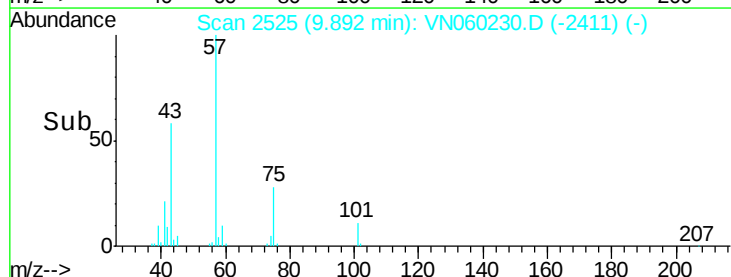
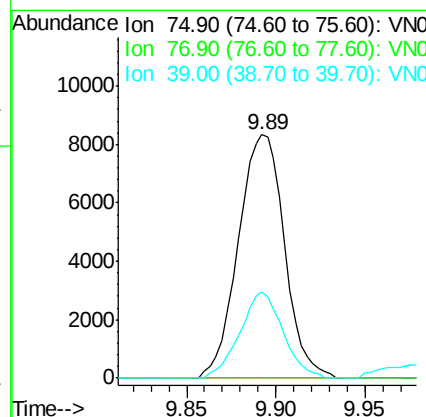
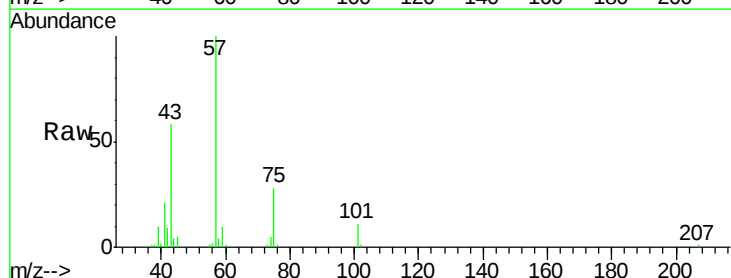
Tgt Ion: 75 Resp: 14980

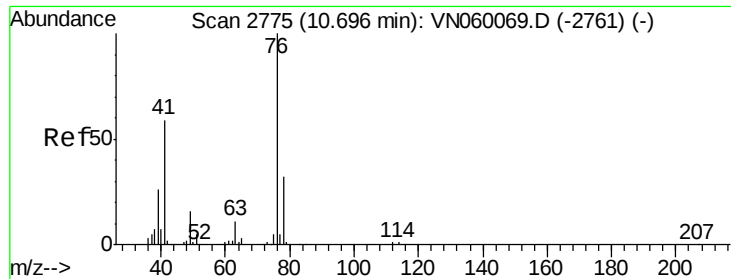
Ion Ratio Lower Upper

75 100

77 0.0 25.6 38.4#

39 35.4 42.2 63.4#





#57

1,3-Dichloropropane

Concen: 0.28 ug/l

RT: 10.76 min Scan# 2794

Delta R.T. 0.06 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

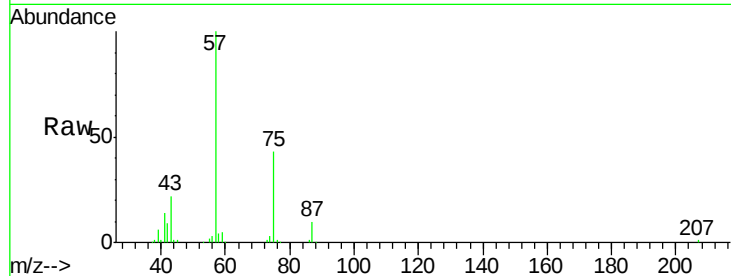
SOLID-COMP

Tgt Ion: 76 Resp: 1023

Ion Ratio Lower Upper

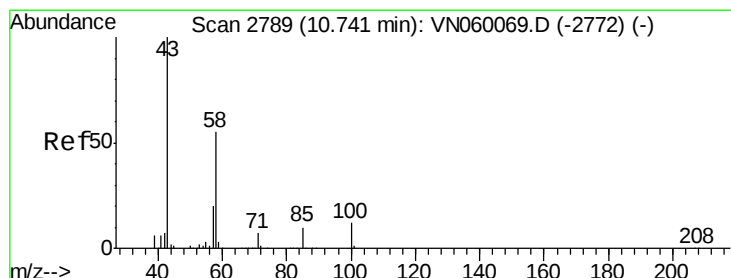
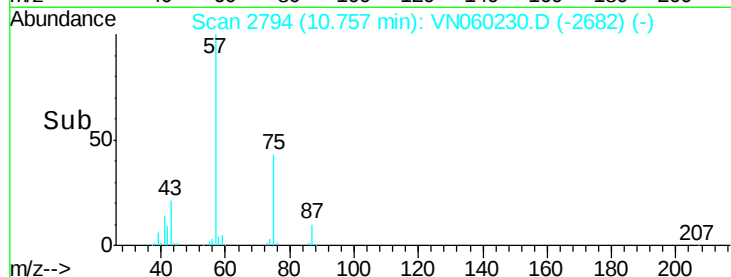
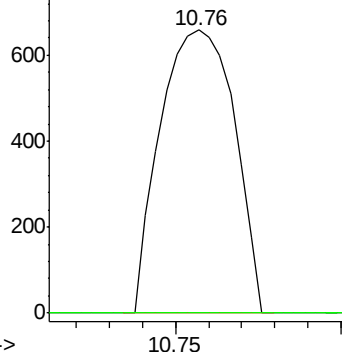
76 100

78 0.0 25.7 38.5#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#59

2-Hexanone

Concen: 8.62 ug/l

RT: 10.76 min Scan# 2794

Delta R.T. 0.02 min

Lab File: VN060230.D

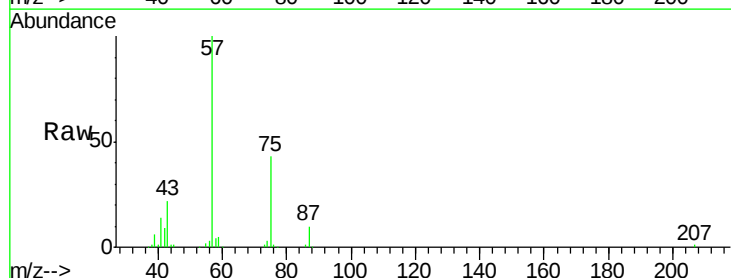
Acq: 25 Feb 2020 13:42

Tgt Ion: 43 Resp: 17568

Ion Ratio Lower Upper

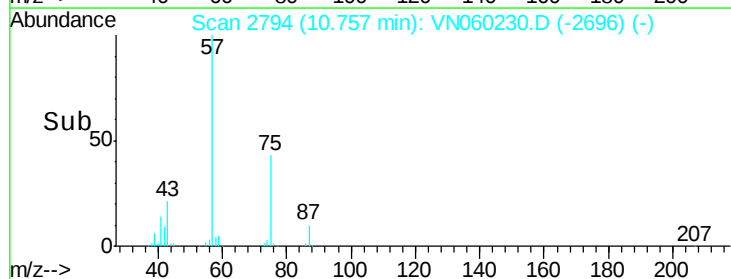
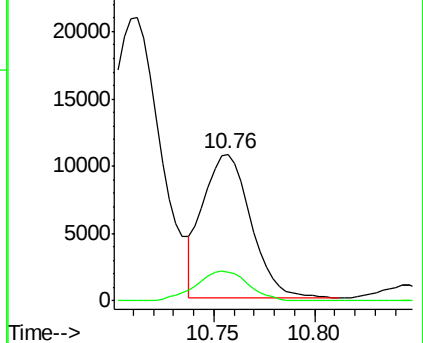
43 100

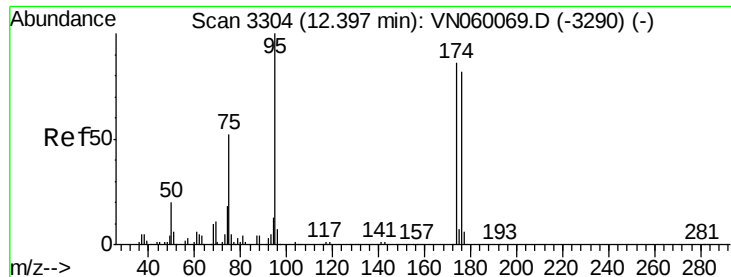
58 22.8 27.5 82.4#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#62

4-Bromofluorobenzene

Concen: 50.08 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

SOLID-COMP

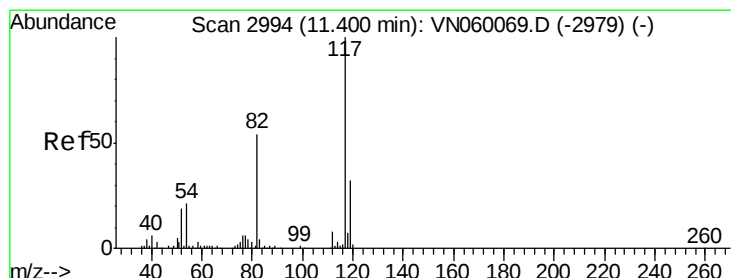
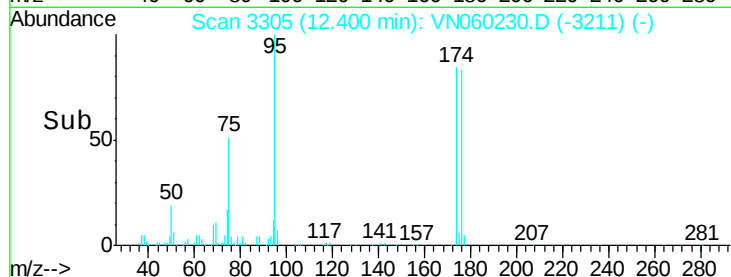
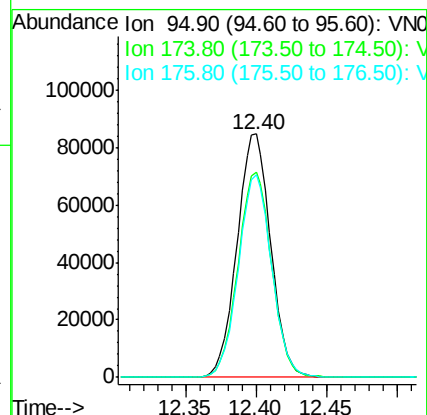
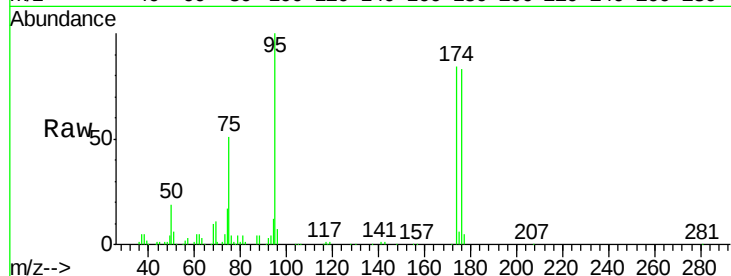
Tgt Ion: 95 Resp: 141851

Ion Ratio Lower Upper

95 100

174 84.1 0.0 169.8

176 82.3 0.0 164.8



#63

Chlorobenzene-d5

Concen: 50.00 ug/l

RT: 11.40 min Scan# 2994

Delta R.T. -0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

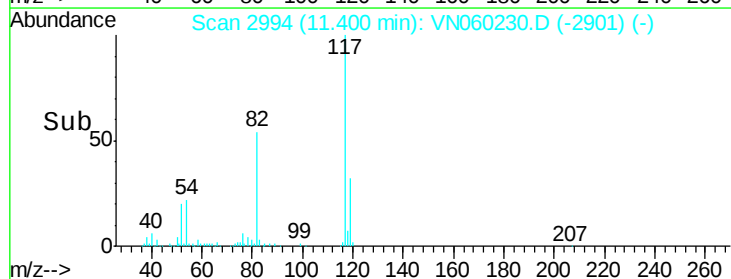
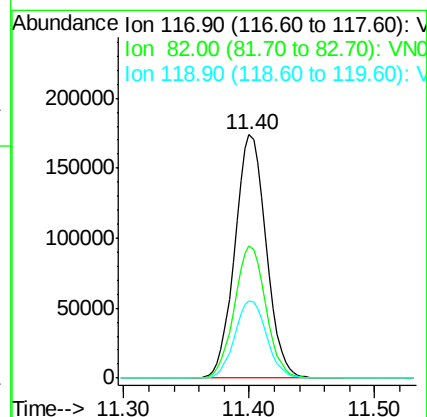
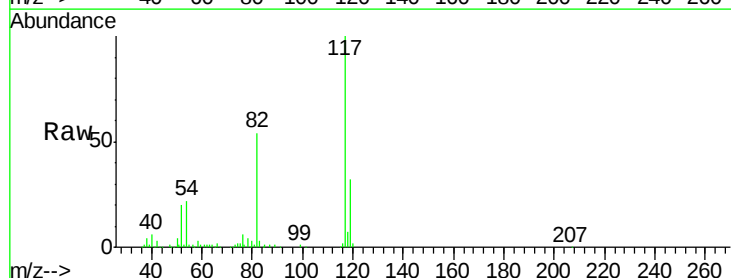
Tgt Ion: 117 Resp: 301268

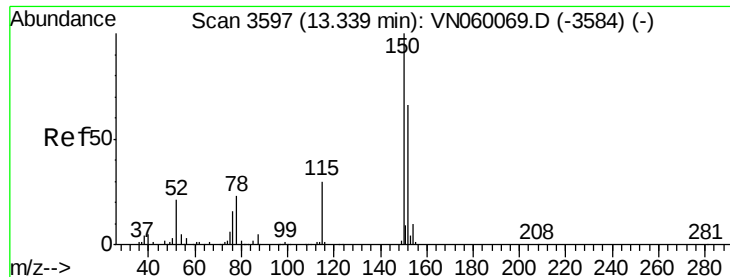
Ion Ratio Lower Upper

117 100

82 54.2 43.4 65.0

119 31.9 25.8 38.6





#72

1,4-Dichlorobenzene-d4

Concen: 50.00 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. 0.00 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

SOLID-COMP

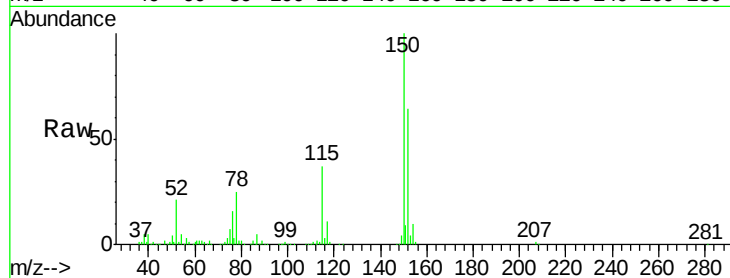
Tgt Ion:152 Resp: 139804

Ion Ratio Lower Upper

152 100

115 57.8 28.9 86.8

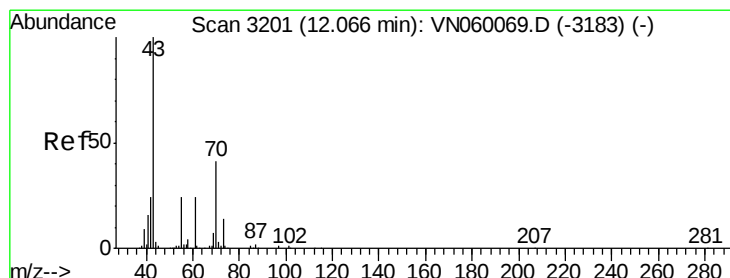
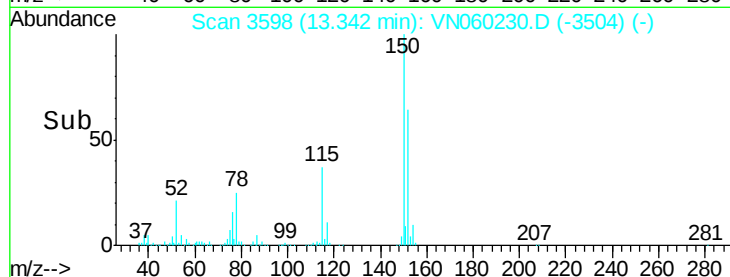
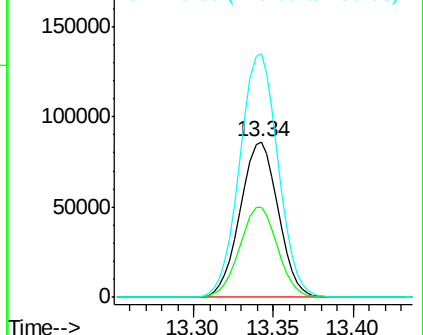
150 158.1 0.0 342.4



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



#74

N-ethyl acetate

Concen: 0.64 ug/l

RT: 12.03 min Scan# 3189

Delta R.T. -0.04 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Tgt Ion: 43 Resp: 2396

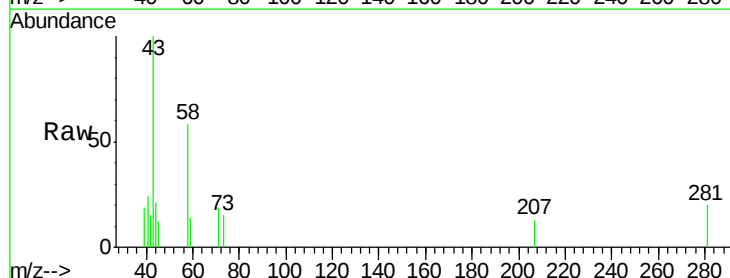
Ion Ratio Lower Upper

43 100

70 0.0 33.4 50.0#

55 0.0 18.8 28.2#

61 0.0 19.2 28.8#

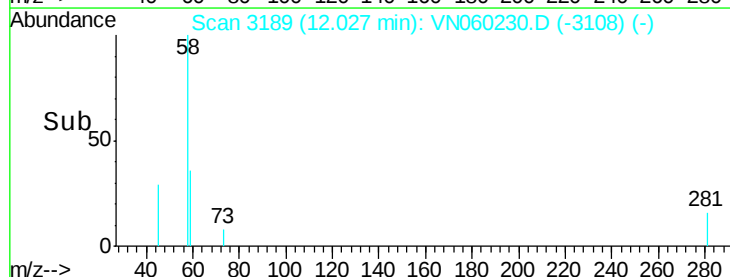
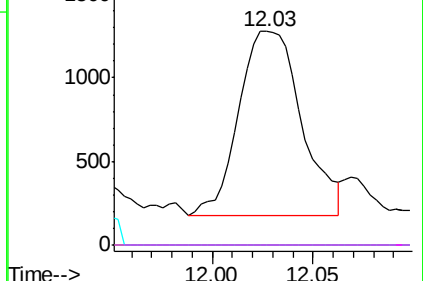


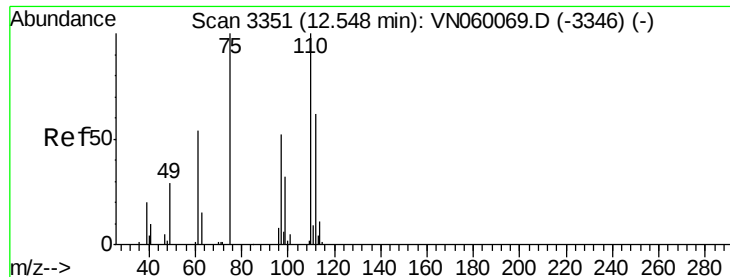
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 61.00 (60.70 to 61.70): V





#76

1,2,3-Trichloropropane

Concen: 27.53 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

Instrument :

MSVOA\_N

ClientSampleId :

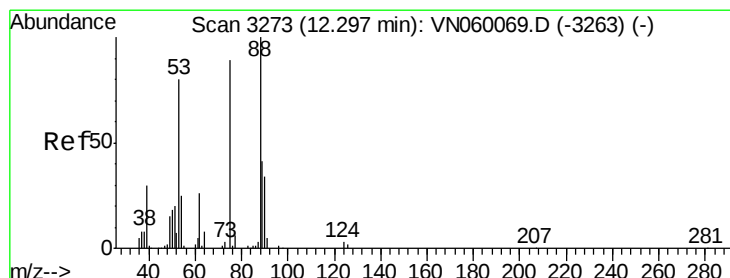
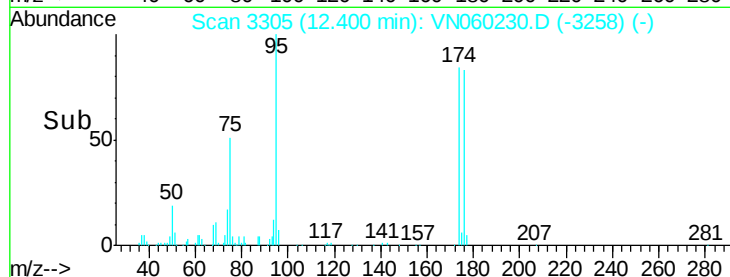
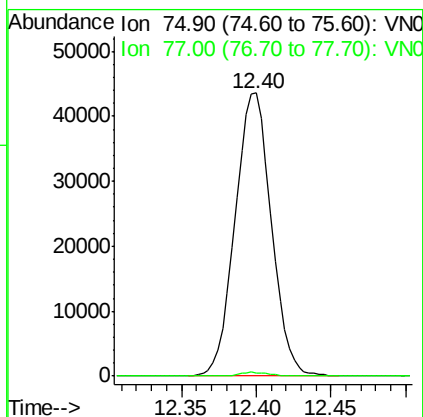
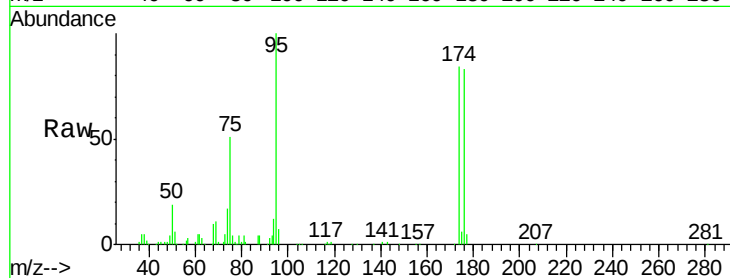
SOLID-COMP

Tgt Ion: 75 Resp: 73646

Ion Ratio Lower Upper

75 100

77 1.0 0.0 0.0#



#81

trans-1,4-Dichloro-2-butene

Concen: 67.42 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN060230.D

Acq: 25 Feb 2020 13:42

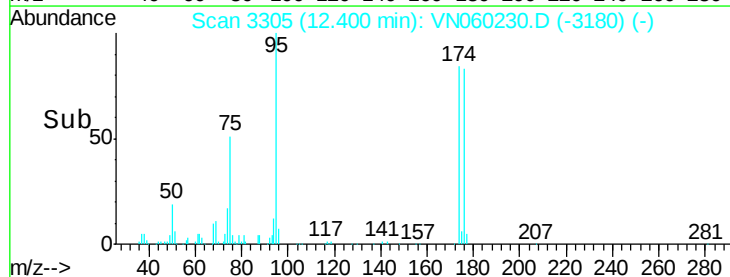
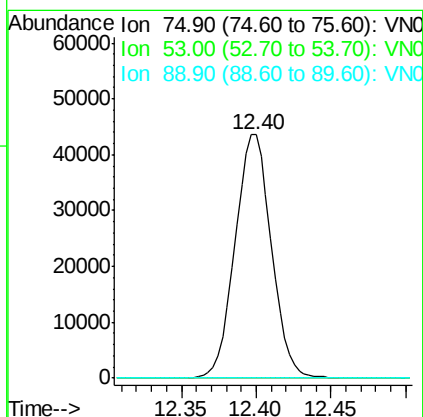
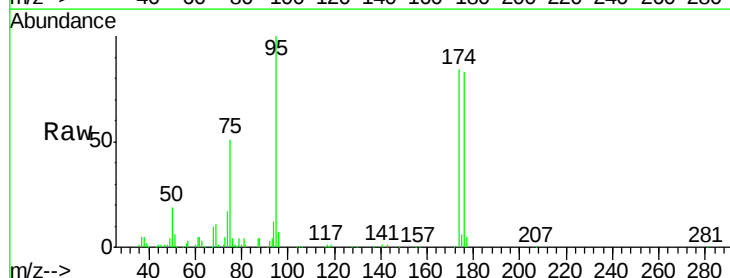
Tgt Ion: 75 Resp: 73646

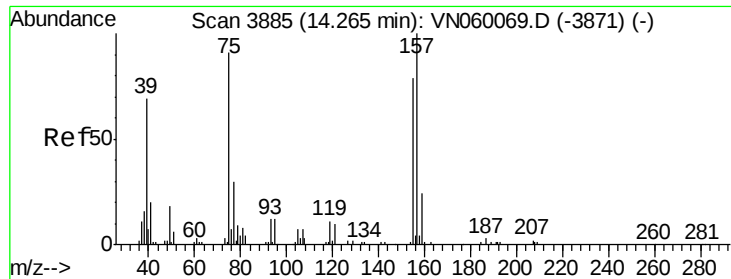
Ion Ratio Lower Upper

75 100

53 0.0 73.9 110.9#

89 0.0 37.0 55.4#

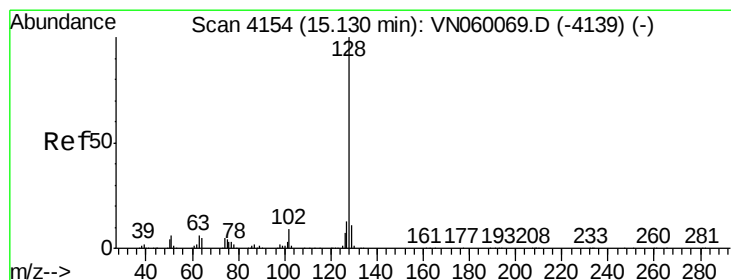
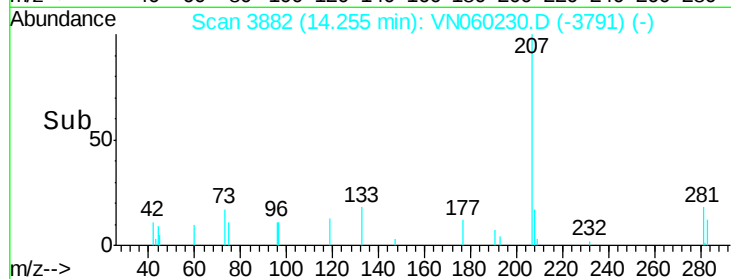
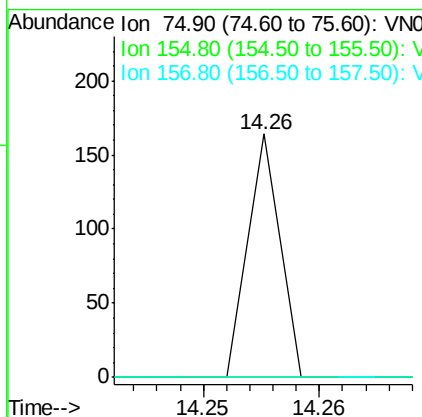
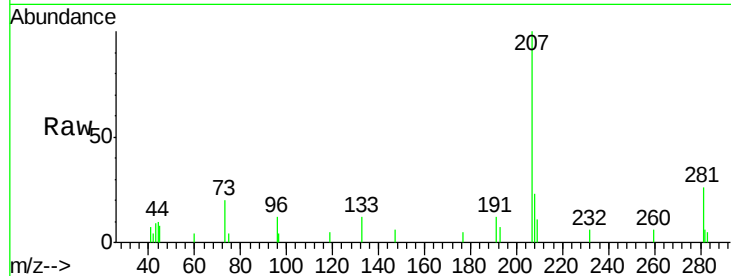




#92  
 1,2-Dibromo-3-Chloropropane  
 Concen: Below Cal  
 RT: 14.26 min Scan# 3882  
 Delta R.T. -0.01 min  
 Lab File: VN060230.D  
 Acq: 25 Feb 2020 13:42

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 SOLID-COMP

Tgt Ion: 75 Resp: 32  
 Ion Ratio Lower Upper  
 75 100  
 155 0.0 43.0 129.0#  
 157 0.0 54.9 164.5#



#95  
 Naphthalene  
 Concen: 0.22 ug/l  
 RT: 15.14 min Scan# 4156  
 Delta R.T. 0.01 min  
 Lab File: VN060230.D  
 Acq: 25 Feb 2020 13:42

Tgt Ion: 128 Resp: 1561  
 Ion Ratio Lower Upper  
 128 100  
 127 6.9 10.3 15.5#  
 129 0.0 8.6 13.0#

