

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN122118\  
 Data File : VN053107.D  
 Acq On : 21 Dec 2018 17:34  
 Operator : MD\SY  
 Sample : J6392-08ME  
 Misc : 5.40µl/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 17 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

Quant Time: Dec 22 01:17:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.66  | 168  | 1141660  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1740519  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1605948  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 746474   | 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   | 566654   | 48.91 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 97.82%  |          |
| 35) Dibromofluoromethane    | 7.59  | 113  | 443133   | 55.73 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 111.46% |          |
| 50) Toluene-d8              | 10.09 | 98   | 2169110  | 50.82 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 101.64% |          |
| 62) 4-Bromofluorobenzene    | 12.40 | 95   | 755844   | 50.44 | ug/l    | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 100.88% |          |

| Target Compounds               | R.T.  | QIon | Response | Conc   | Units  | Qvalue |
|--------------------------------|-------|------|----------|--------|--------|--------|
| 11) Tert butyl alcohol         | 4.76  | 59   | 532      | 0.753  | ug/l # | 74     |
| 13) Acrolein                   | 3.62  | 56   | 481      | 0.750  | ug/l   | 100    |
| 14) Allyl chloride             | 4.59  | 41   | 46678    | 2.769  | ug/l # | 41     |
| 15) Acrylonitrile              | 5.04  | 53   | 2020     | 0.514  | ug/l # | 24     |
| 16) Acetone                    | 3.79  | 43   | 2174     | 0.957  | ug/l # | 43     |
| 17) Carbon Disulfide           | 4.04  | 76   | 8154     | 0.230  | ug/l # | 93     |
| 18) Methyl Acetate             | 4.34  | 43   | 8609     | 1.810  | ug/l # | 72     |
| 20) Methylene Chloride         | 4.55  | 84   | 3883     | 0.313  | ug/l # | 83     |
| 25) 2-Butanone                 | 6.82  | 43   | 2497     | 0.655  | ug/l # | 49     |
| 29) Tetrahydrofuran            | 7.23  | 42   | 3112     | 1.093  | ug/l # | 80     |
| 30) Chloroform                 | 7.32  | 83   | 6444     | 0.307  | ug/l # | 18     |
| 31) Cyclohexane                | 7.64  | 56   | 48417    | 1.393  | ug/l # | 78     |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 76000    | 4.549  | ug/l # | 49     |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 97854    | 6.390  | ug/l # | 15     |
| 39) Methylcyclohexane          | 9.05  | 83   | 23902    | 1.178  | ug/l # | 1      |
| 40) Benzene                    | 8.04  | 78   | 46909    | 0.944  | ug/l   | 99     |
| 43) Isopropyl Acetate          | 8.21  | 43   | 635621   | 34.904 | ug/l # | 53     |
| 47) Bromodichloromethane       | 9.39  | 83   | 26252    | 1.638  | ug/l # | 27     |
| 48) Methyl methacrylate        | 9.22  | 41   | 27184    | 3.004  | ug/l # | 30     |
| 51) 4-Methyl-2-Pentanone       | 10.02 | 43   | 82965    | 9.186  | ug/l # | 81     |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 111787   | 10.403 | ug/l # | 22     |
| 56) Ethyl methacrylate         | 10.43 | 69   | 6687     | 0.470  | ug/l # | 15     |
| 59) 2-Hexanone                 | 10.72 | 43   | 163780   | 26.803 | ug/l # | 29     |
| 67) Ethyl Benzene              | 11.51 | 91   | 1655475  | 27.041 | ug/l   | 100    |
| 68) m/p-Xylenes                | 11.51 | 106  | 518172   | 22.264 | ug/l # | 24     |
| 73) Isopropylbenzene           | 12.25 | 105  | 540034   | 9.246  | ug/l   | 99     |
| 74) N-amyl acetate             | 12.04 | 43   | 120244   | 7.415  | ug/l # | 53     |
| 75) 1,1,2,2-Tetrachloroethane  | 12.49 | 83   | 3423     | 0.299  | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 346208   | 27.551 | ug/l # | 100    |
| 77) Bromobenzene               | 12.55 | 156  | 79476    | 5.235  | ug/l # | 1      |
| 78) n-propylbenzene            | 12.59 | 91   | 1511511  | 22.723 | ug/l   | 100    |
| 79) 2-Chlorotoluene            | 12.73 | 91   | 147224   | 3.571  | ug/l # | 42     |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1541386  | 32.379 | ug/l   | 99     |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 346208   | 88.800 | ug/l # | 15     |

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 Sample : J6392-08ME  
 Misc : 5.40g/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 17 Sample Multiplier: 28

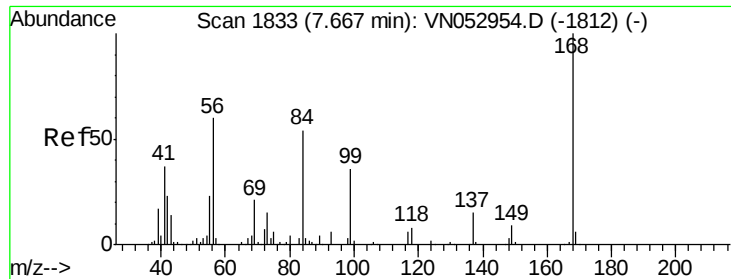
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

Quant Time: Dec 22 01:17:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N121818W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 18 13:03:37 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc      | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|--------|----------|
| 82) 4-Chlorotoluene            | 12.73 | 91   | 147224   | 3.648     | ug/l # | 43       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 31729    | 0.663     | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 166555   | 2.925     | ug/l # | 46       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 89794    | 1.825     | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 314059   | 7.419     | ug/l # | 1        |
| 90) Hexachloroethane           | 13.89 | 117  | 117367   | 15.543    | ug/l # | 4        |
| 92) 1,2-Dibromo-3-Chloropropan | 14.25 | 75   | 5788     | 2.921     | ug/l # | 10       |
| 93) 1,2,4-Trichlorobenzene     | 14.91 | 180  | 1679     | 0.720     | ug/l # | 74       |
| 94) Hexachlorobutadiene        | 15.02 | 225  | 409      | Below Cal | #      | 28       |
| 95) Naphthalene                | 15.14 | 128  | 39205    | 2.452     | ug/l # | 90       |
| 96) 1,2,3-Trichlorobenzene     | 15.32 | 180  | 935      | 0.585     | ug/l # | 1        |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

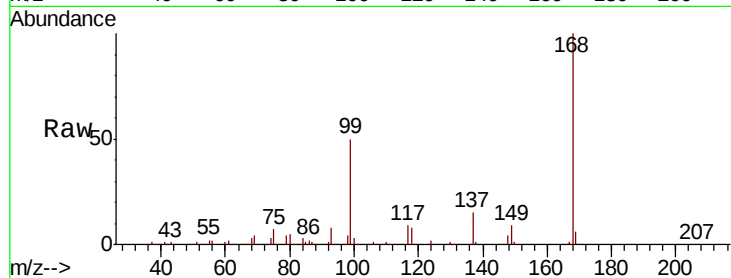
KY001SB103-121118-(25-27)ME

Tot Ion:168 Resp: 1141660

Ion Ratio Lower Upper

168 100

99 50.0 40.2 60.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

500000

400000

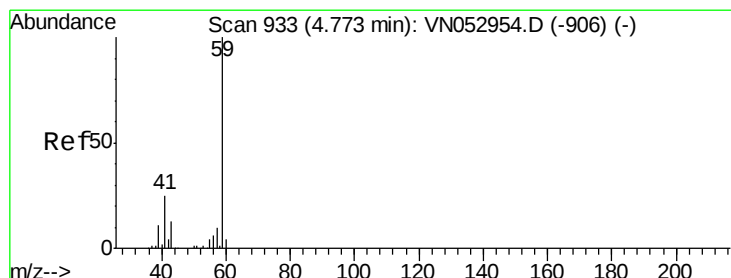
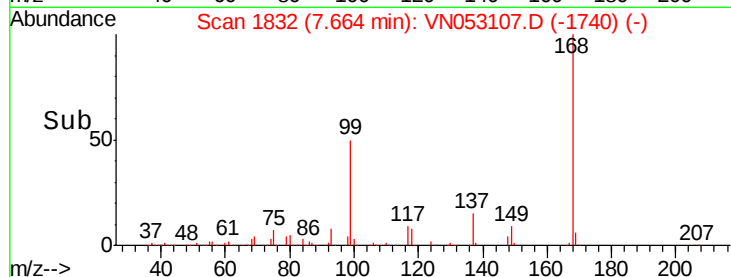
300000

200000

100000

0

Time-->



#11

Tert butyl alcohol

Concen: 0.753 ug/l

RT: 4.76 min Scan# 928

Delta R.T. -0.02 min

Lab File: VN053107.D

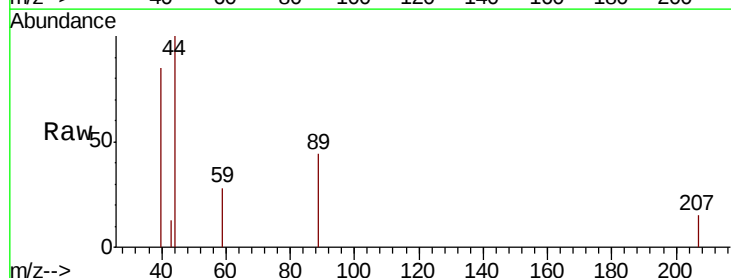
Acq: 21 Dec 2018 17:34

Tgt Ion: 59 Resp: 532

Ion Ratio Lower Upper

59 100

57 0.0 7.7 11.5#



Abundance Ion 59.00 (58.70 to 59.70): VN

Ion 57.00 (56.70 to 57.70): VN

4.76

400

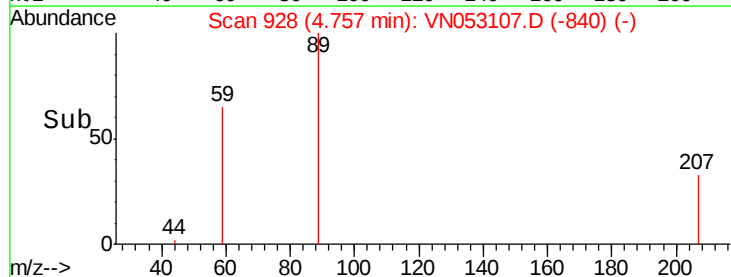
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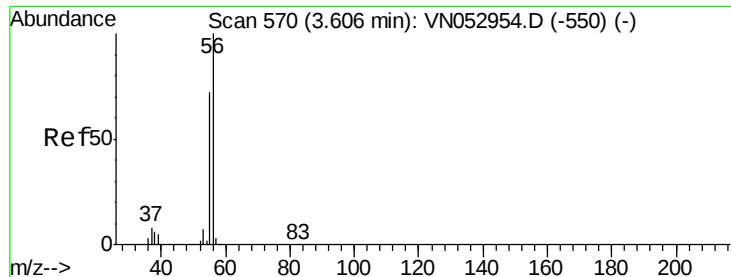
200

100

0

Time-->





#13

Acrolein

Concen: 0.750 ug/l

RT: 3.62 min Scan# 573

Delta R.T. 0.01 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

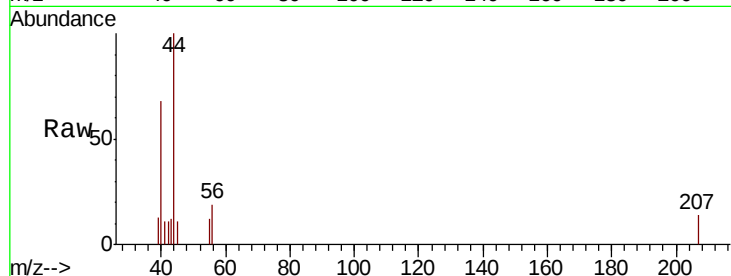
KY001SB103-121118-(25-27)ME

Tot Ion: 56 Resp: 481

Ion Ratio Lower Upper

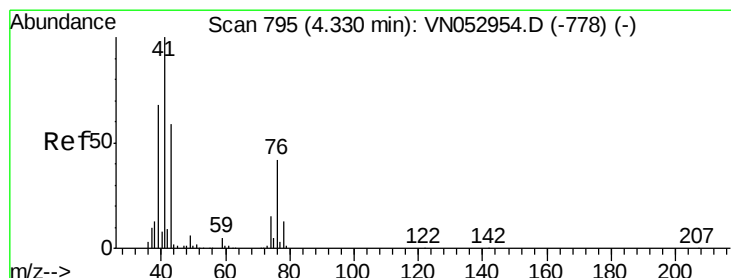
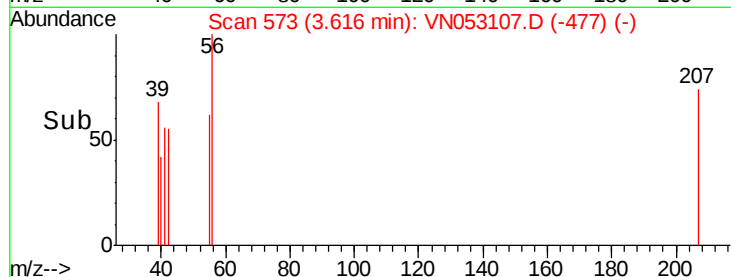
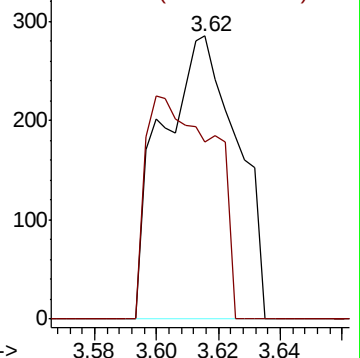
56 100

55 70.7 56.6 85.0



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#14

Allyl chloride

Concen: 2.769 ug/l

RT: 4.59 min Scan# 877

Delta R.T. 0.26 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

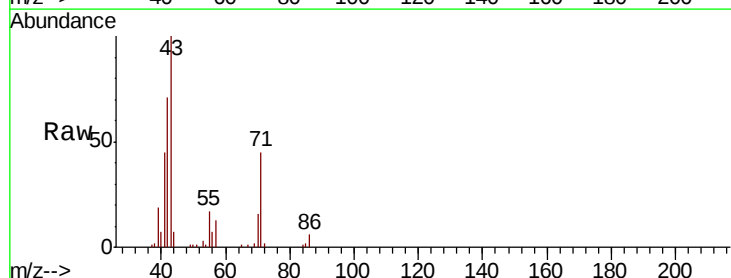
Tgt Ion: 41 Resp: 46678

Ion Ratio Lower Upper

41 100

39 22.2 54.1 81.1#

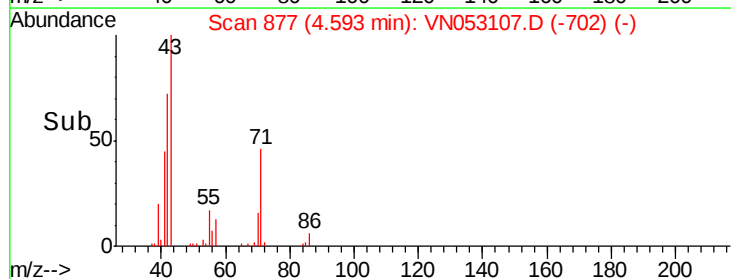
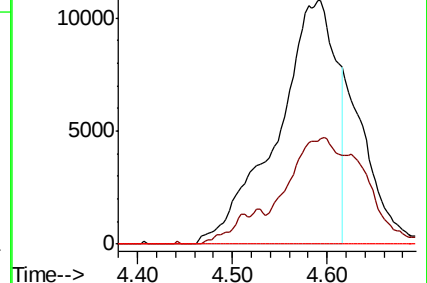
76 0.0 30.3 45.5#

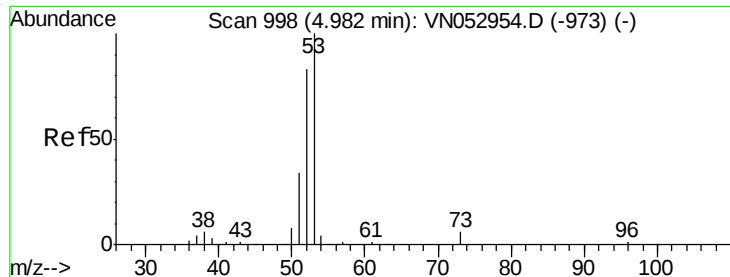


Abundance Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0

Ion 75.90 (75.60 to 76.60): VN0





#15

Acrylonitrile

Concen: 0.514 ug/l

RT: 5.04 min Scan# 1016

Delta R.T. 0.06 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

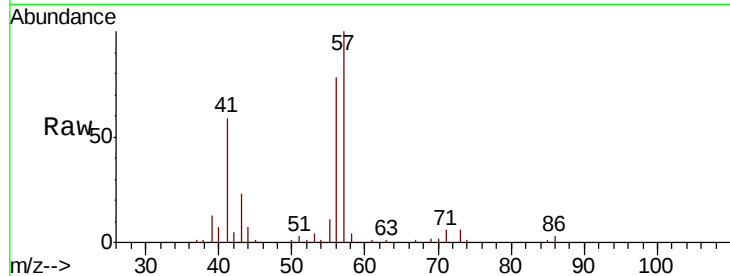
Tot Ion: 53 Resp: 2020

Ion Ratio Lower Upper

53 100

52 16.3 65.1 97.7#

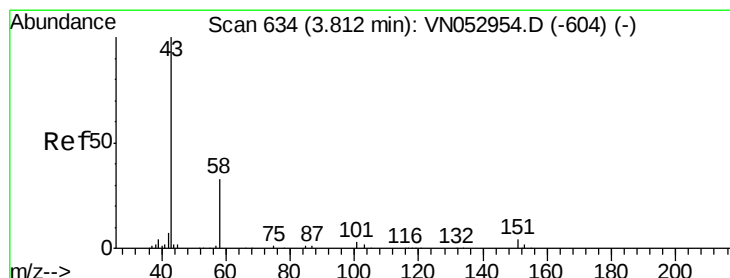
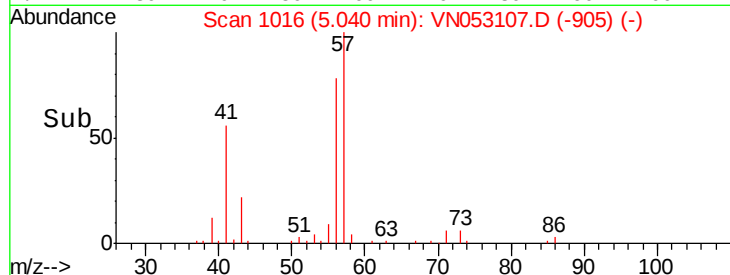
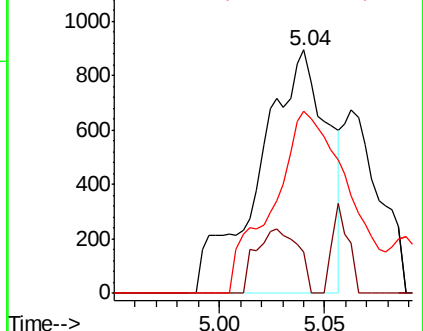
51 82.8 28.1 42.1#



Abundance Ion 53.00 (52.70 to 53.70): VN0

Ion 52.00 (51.70 to 52.70): VN0

Ion 51.00 (50.70 to 51.70): VN0



#16

Acetone

Concen: 0.957 ug/l

RT: 3.79 min Scan# 627

Delta R.T. -0.02 min

Lab File: VN053107.D

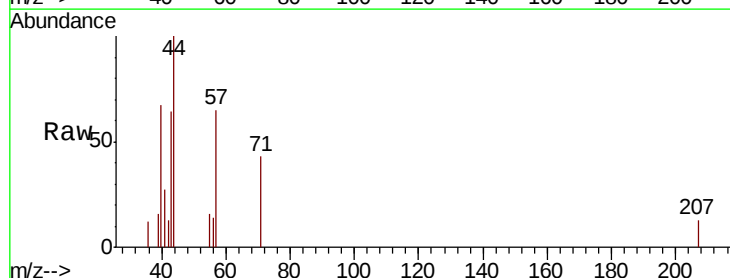
Acq: 21 Dec 2018 17:34

Tgt Ion: 43 Resp: 2174

Ion Ratio Lower Upper

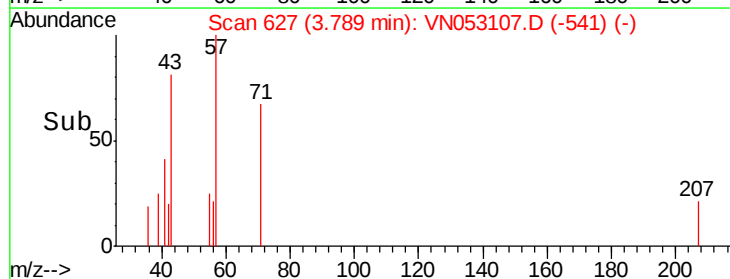
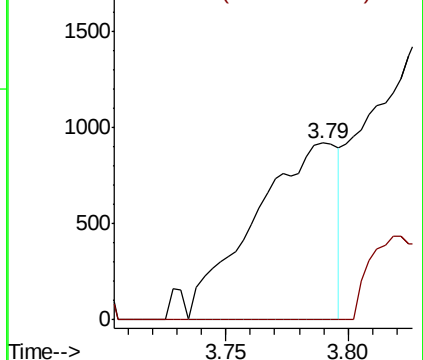
43 100

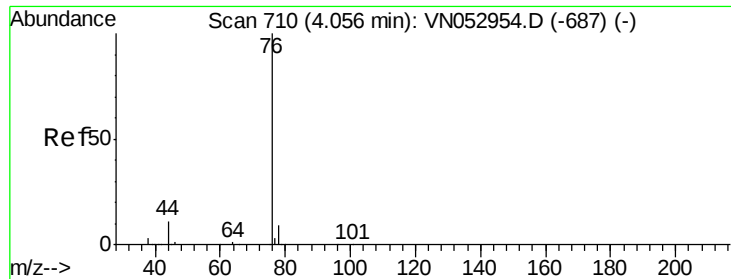
58 0.0 25.4 38.0#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#17

Carbon Disulfide

Concen: 0.230 ug/l

RT: 4.04 min Scan# 705

Delta R.T. -0.02 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

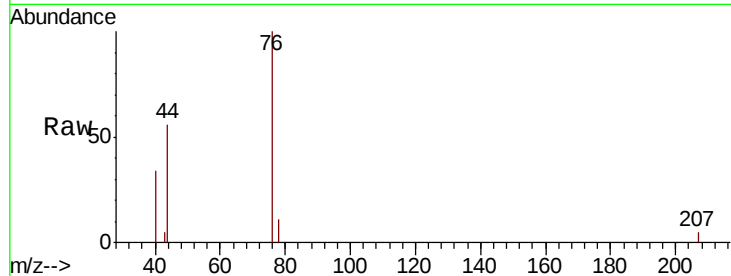
KY001SB103-121118-(25-27)ME

Tot Ion: 76 Resp: 8154

Ion Ratio Lower Upper

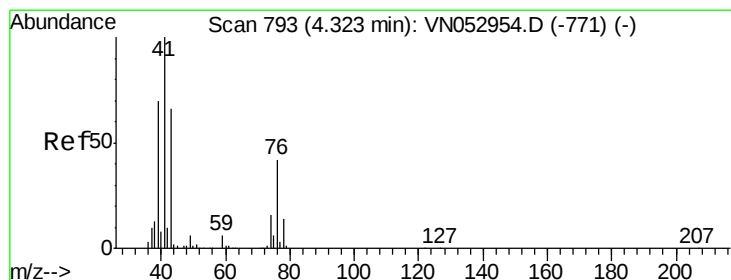
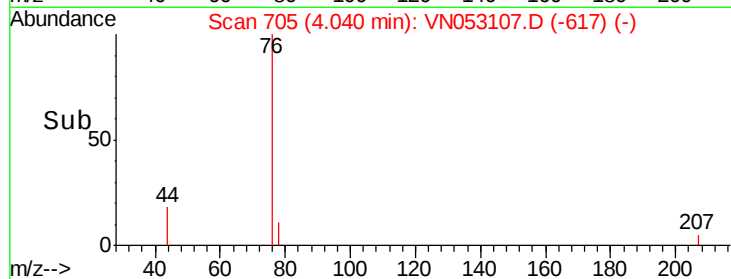
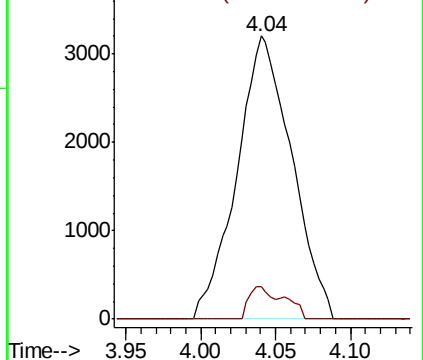
76 100

78 11.5 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#18

Methyl Acetate

Concen: 1.810 ug/l

RT: 4.34 min Scan# 797

Delta R.T. 0.01 min

Lab File: VN053107.D

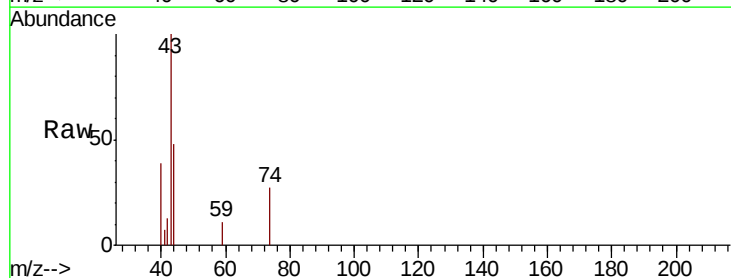
Acq: 21 Dec 2018 17:34

Tgt Ion: 43 Resp: 8609

Ion Ratio Lower Upper

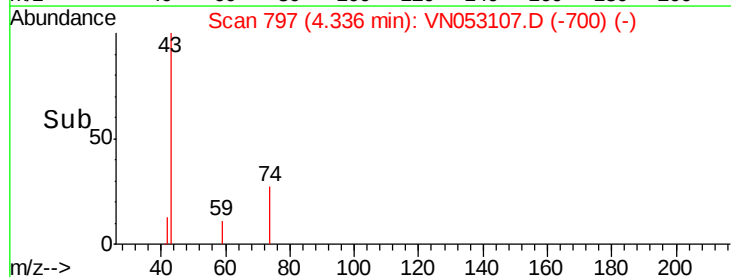
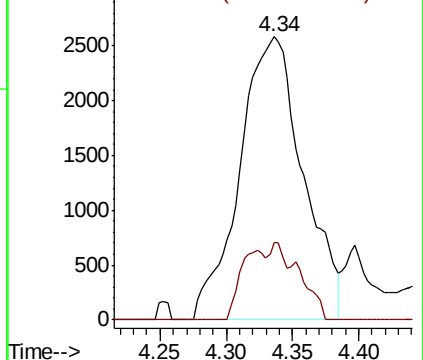
43 100

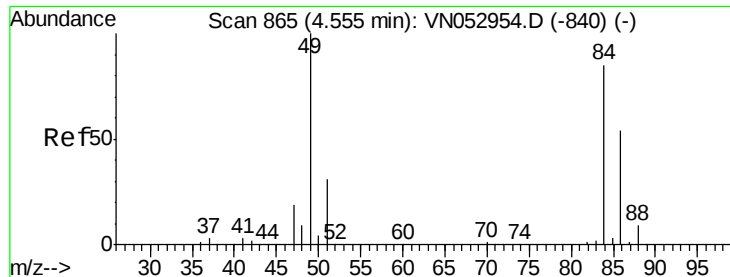
74 10.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0

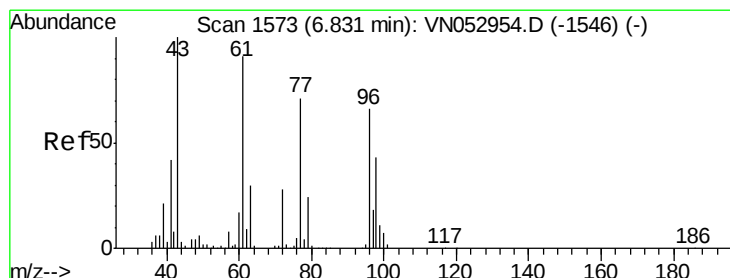
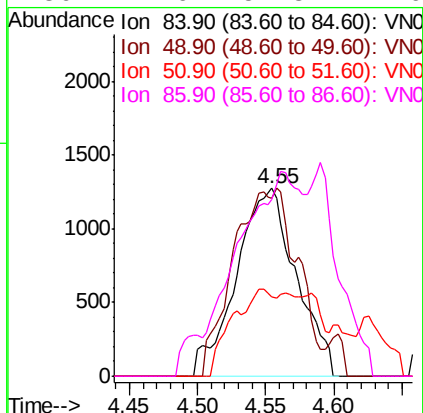
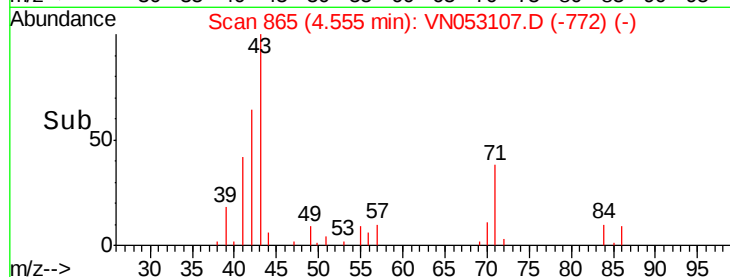
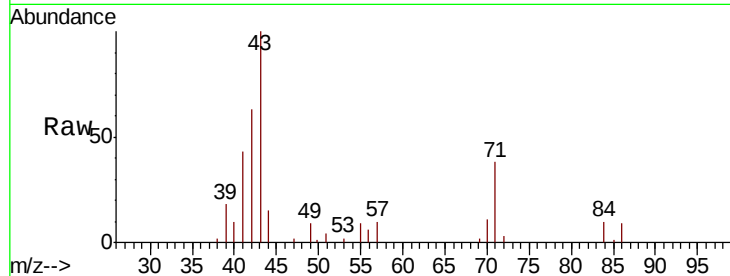




#20  
Methvlene Chloride  
Concen: 0.313 ug/l  
RT: 4.55 min Scan# 865  
Delta R.T. -0.00 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

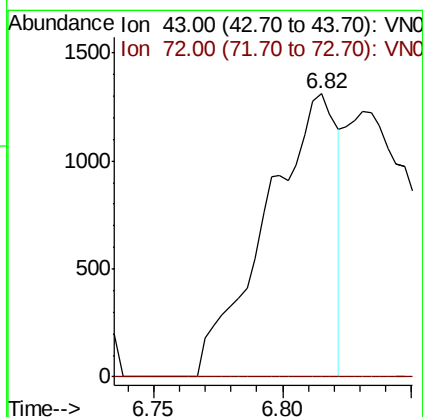
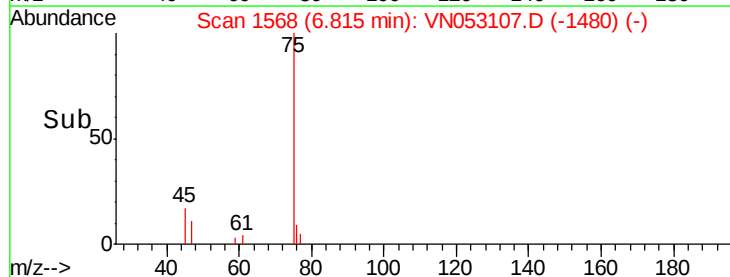
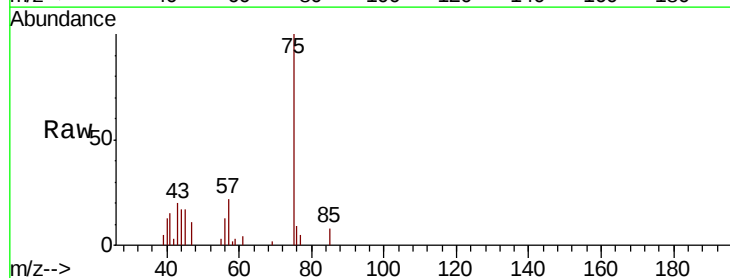
Instrument :  
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KY001SB103-121118-(25-27)ME

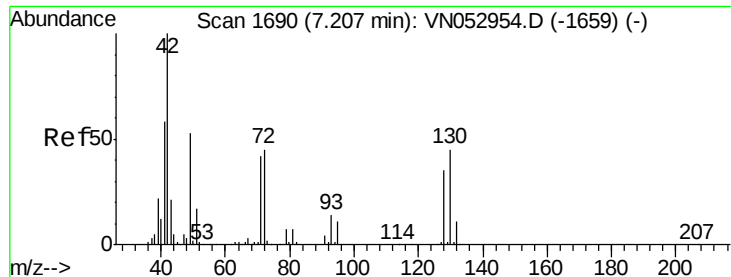
Tot Ion: 84 Resp: 3883  
Ion Ratio Lower Upper  
84 100  
49 95.0 96.8 145.2#  
51 42.0 29.9 44.9  
86 72.6 51.8 77.6



#25  
2-Butanone  
Concen: 0.655 ug/l  
RT: 6.82 min Scan# 1568  
Delta R.T. -0.02 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

Tgt Ion: 43 Resp: 2497  
Ion Ratio Lower Upper  
43 100  
72 0.0 21.0 31.6#





#29

Tetrahydrofuran

Concen: 1.093 ug/l

RT: 7.23 min Scan# 1696

Delta R.T. 0.02 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

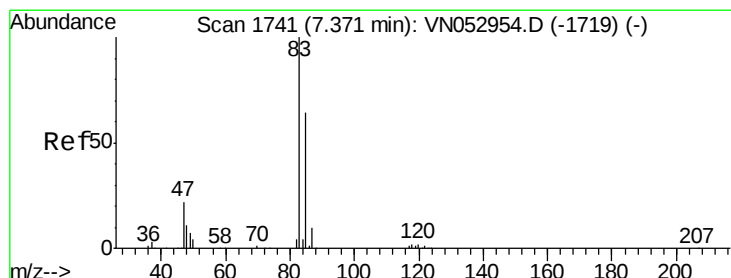
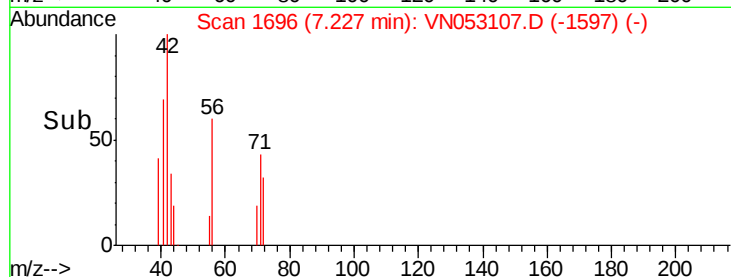
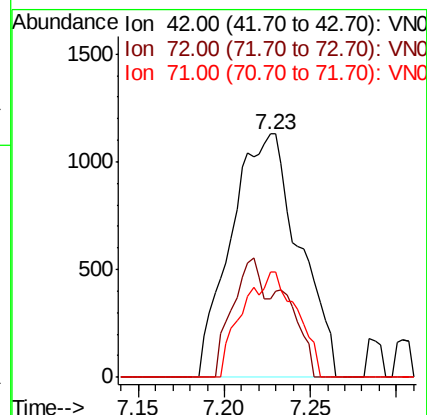
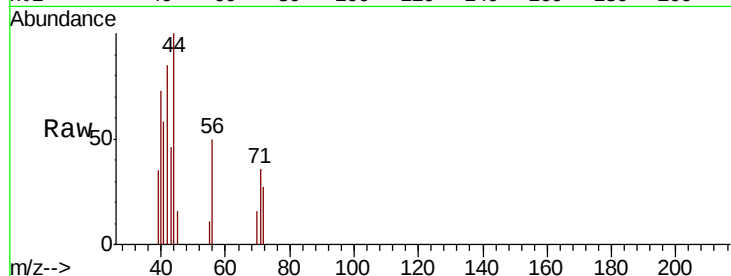
Tot Ion: 42 Resp: 3112

Ion Ratio Lower Upper

42 100

72 24.1 34.7 52.1#

71 34.2 32.3 48.5



#30

Chloroform

Concen: 0.307 ug/l

RT: 7.32 min Scan# 1725

Delta R.T. -0.05 min

Lab File: VN053107.D

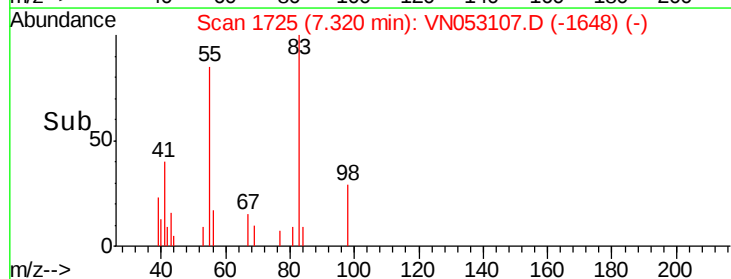
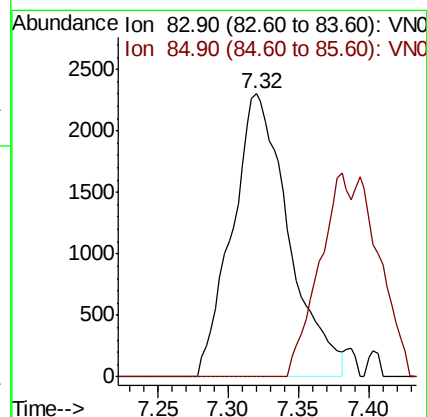
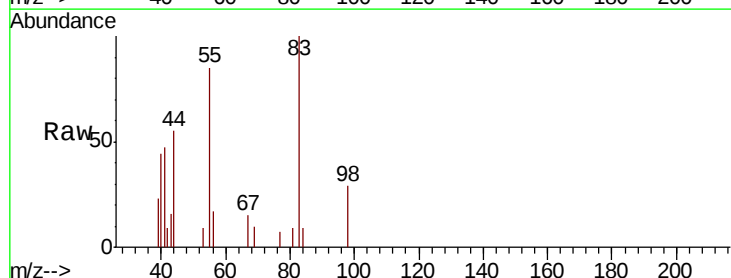
Acq: 21 Dec 2018 17:34

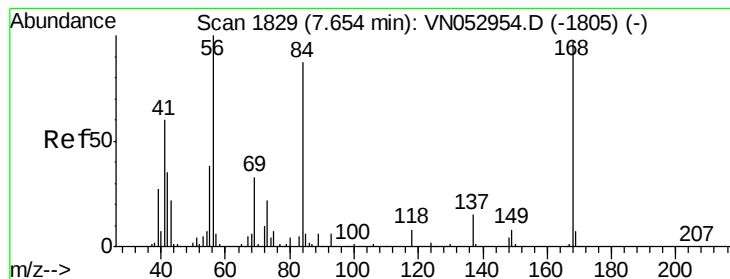
Tgt Ion: 83 Resp: 6444

Ion Ratio Lower Upper

83 100

85 0.0 52.1 78.1#





#31

Cyclohexane

Concen: 1.393 ug/l

RT: 7.64 min Scan# 1825

Delta R.T. -0.01 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

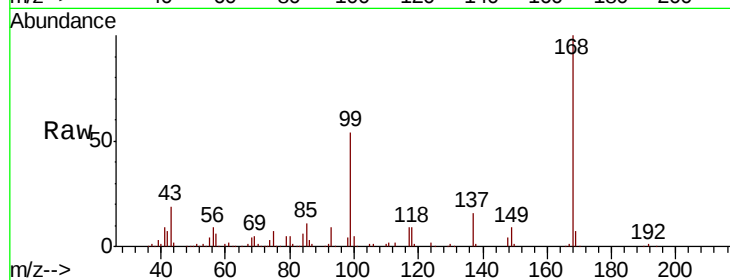
Tot Ion: 56 Resp: 48417

Ion Ratio Lower Upper

56 100

69 49.9 26.6 39.8#

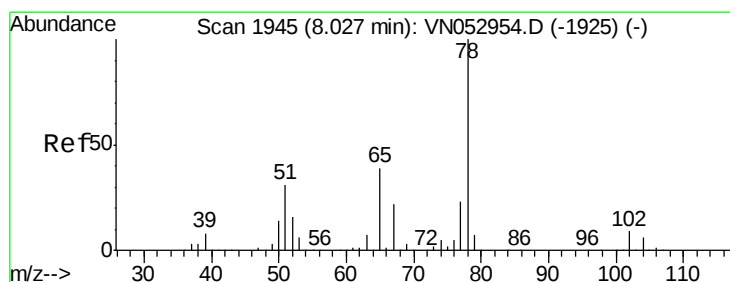
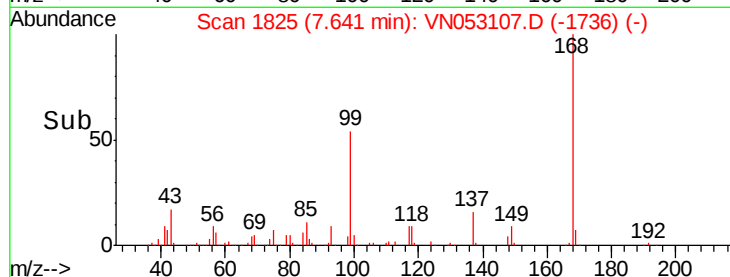
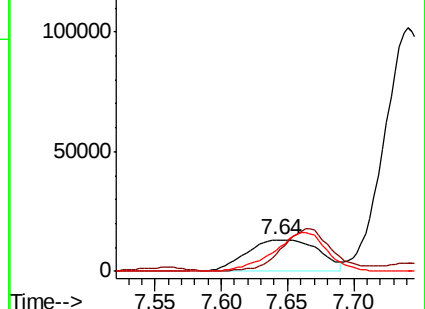
84 68.0 68.4 102.6#



Abundance Ion 56.00 (55.70 to 56.70): VN053107.D (-1736) (-)

Ion 69.00 (68.70 to 69.70): VN053107.D (-1736) (-)

Ion 84.00 (83.70 to 84.70): VN053107.D (-1736) (-)



#33

1,2-Dichloroethane-d4

Concen: Below ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN053107.D

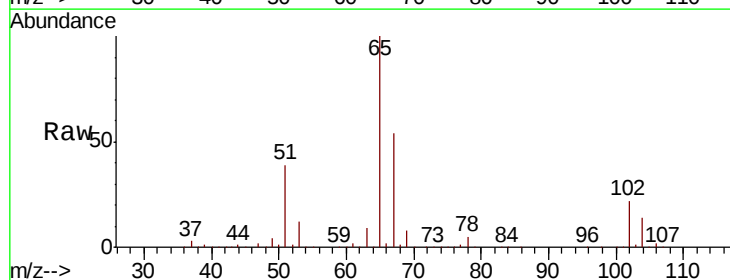
Acq: 21 Dec 2018 17:34

Tgt Ion: 65 Resp: 566654

Ion Ratio Lower Upper

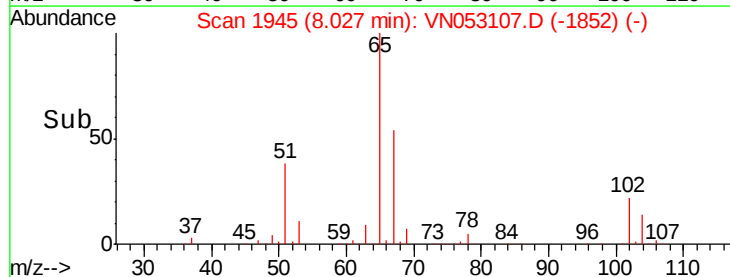
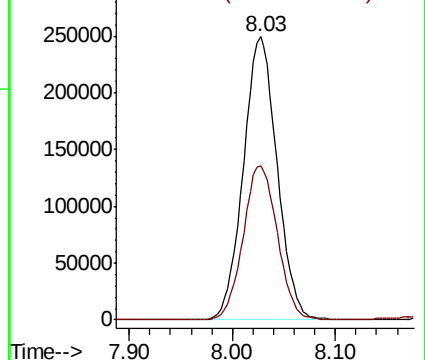
65 100

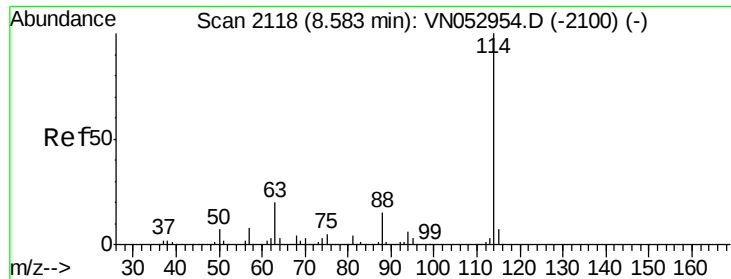
67 55.3 0.0 110.4



Abundance Ion 64.90 (64.60 to 65.60): VN053107.D (-1852) (-)

Ion 66.90 (66.60 to 67.60): VN053107.D (-1852) (-)

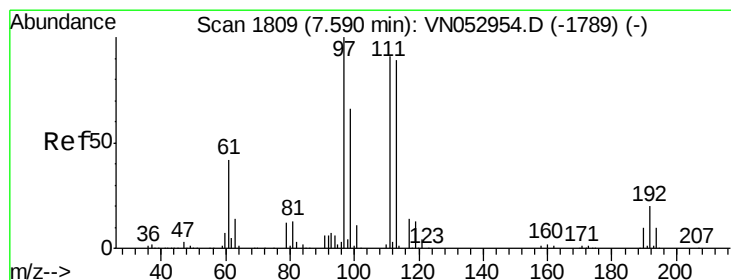
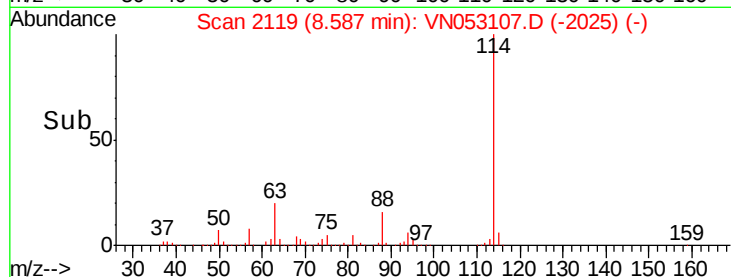
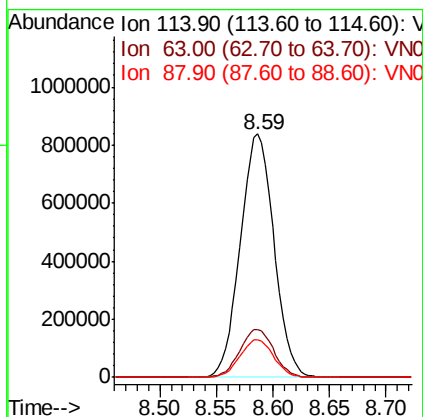
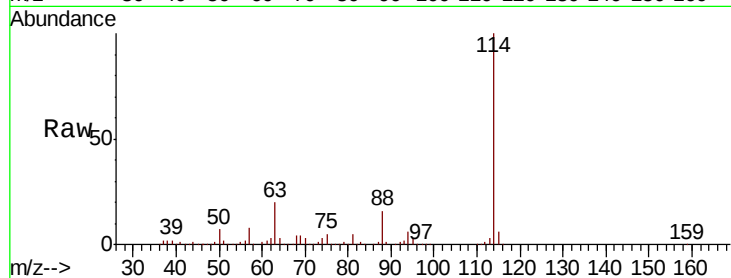




#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.59 min Scan# 2119  
 Delta R.T. 0.00 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

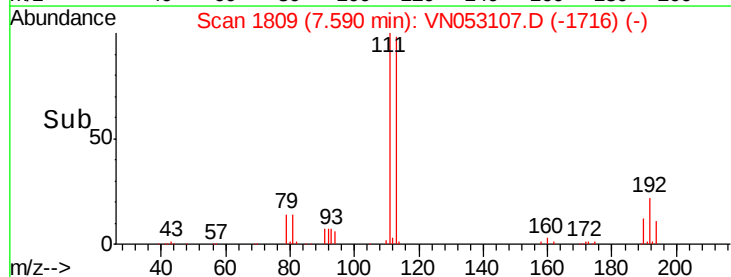
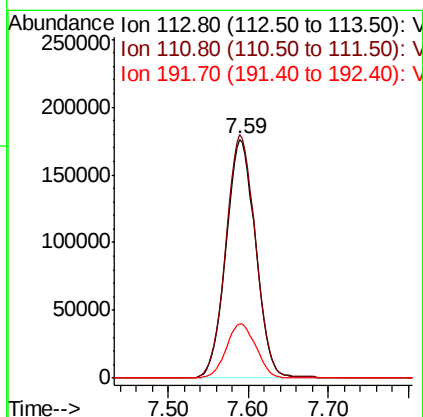
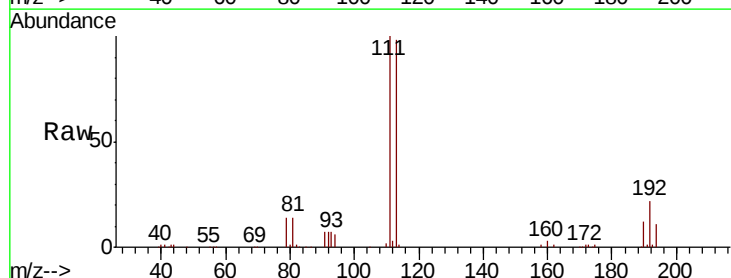
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

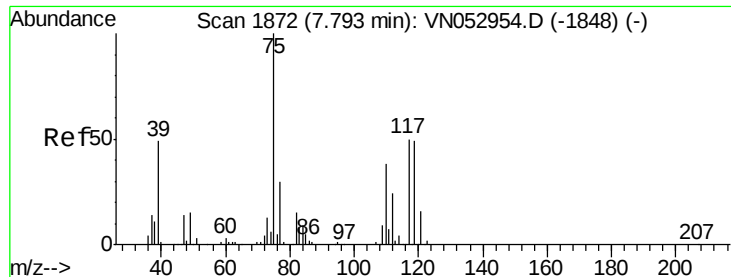
Tot Ion:114 Resp: 1740519  
 Ion Ratio Lower Upper  
 114 100  
 63 19.7 0.0 39.8  
 88 15.6 0.0 31.0



#35  
 Dibromofluoromethane  
 Concen: 50.000 ug/l  
 RT: 7.59 min Scan# 1809  
 Delta R.T. -0.00 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

Tgt Ion:113 Resp: 443133  
 Ion Ratio Lower Upper  
 113 100  
 111 101.6 83.0 124.4  
 192 22.9 17.5 26.3

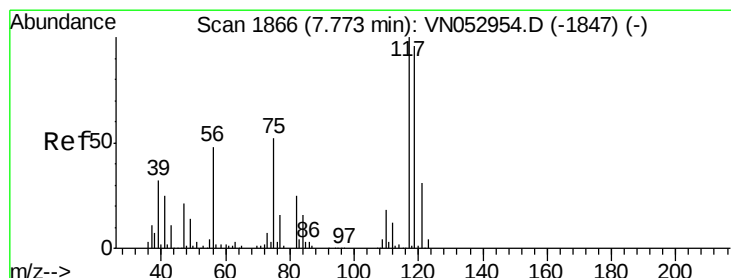
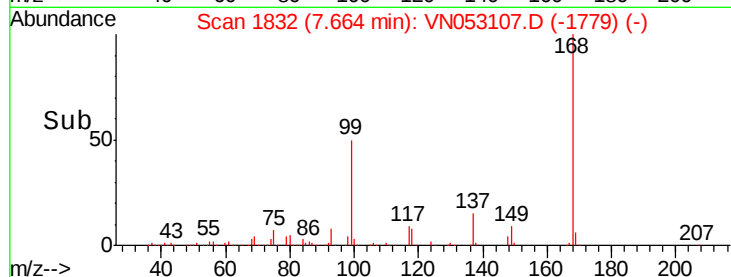
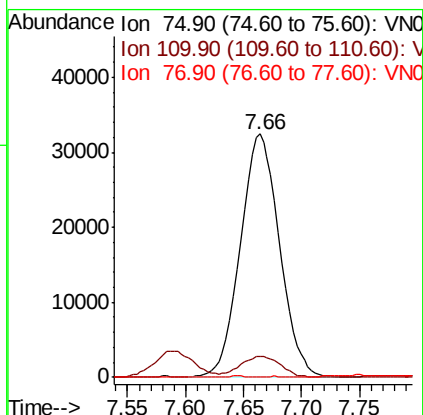
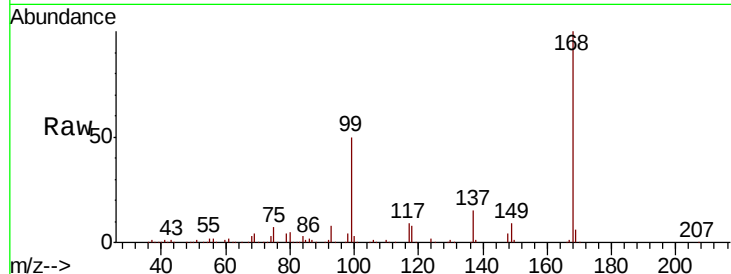




#36  
 1,1-Dichloropropene  
 Concen: 4.549 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.13 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

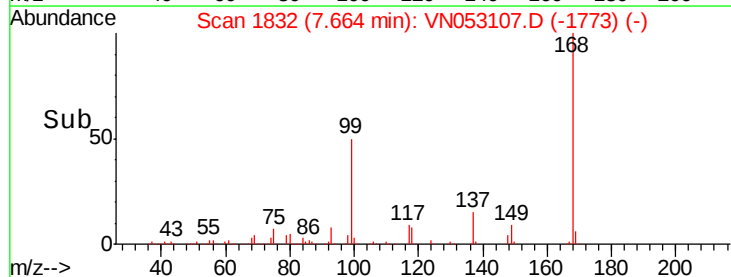
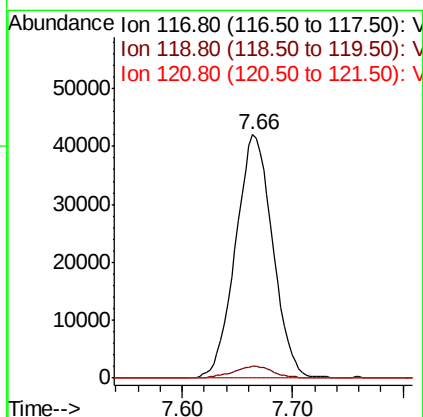
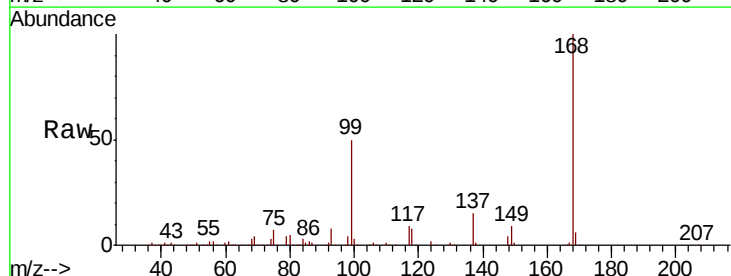
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

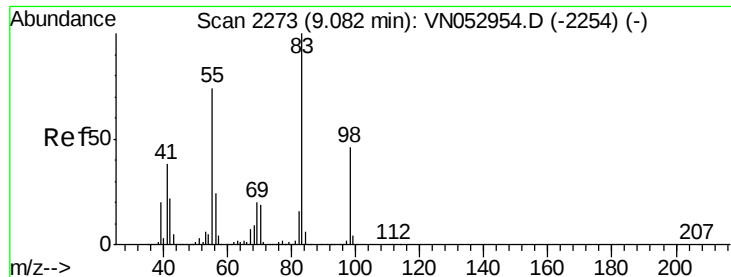
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 110     | 8.9   | 18.2  | 54.6# |
| 77      | 0.0   | 24.9  | 37.3# |



#38  
 Carbon Tetrachloride  
 Concen: 6.390 ug/l  
 RT: 7.66 min Scan# 1832  
 Delta R.T. -0.11 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 4.7   | 77.1  | 115.7# |
| 121     | 0.0   | 24.9  | 37.3#  |

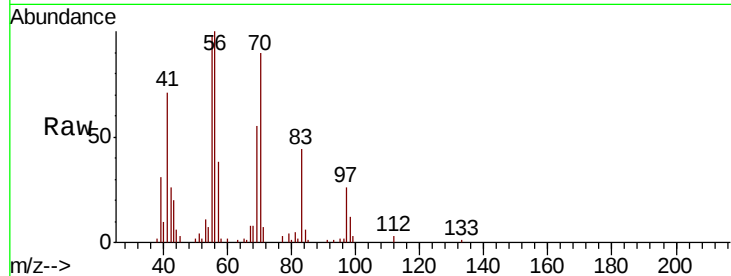




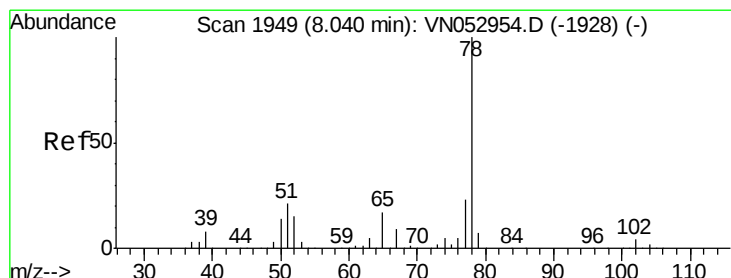
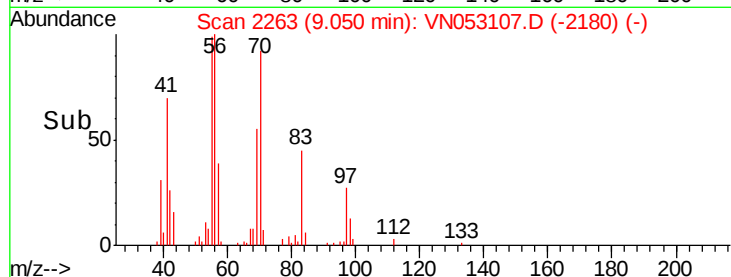
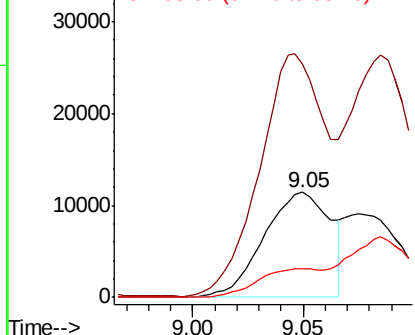
#39  
Methvlcvclohexane  
Concen: 1.178 ug/l  
RT: 9.05 min Scan# 2263  
Delta R.T. -0.03 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
KY001SB103-121118-(25-27)ME

Tot Ion: 83 Resp: 23902  
Ion Ratio Lower Upper  
83 100  
55 220.3 61.3 91.9#  
98 27.6 37.0 55.4#

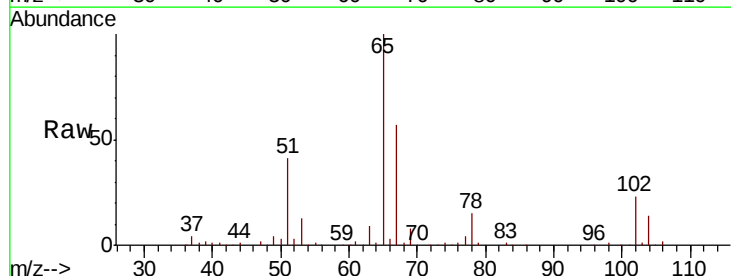


Abundance Ion 83.00 (82.70 to 83.70): VN0  
Ion 55.00 (54.70 to 55.70): VN0  
Ion 98.00 (97.70 to 98.70): VN0

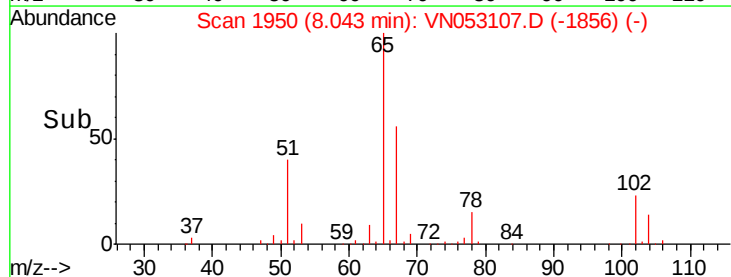
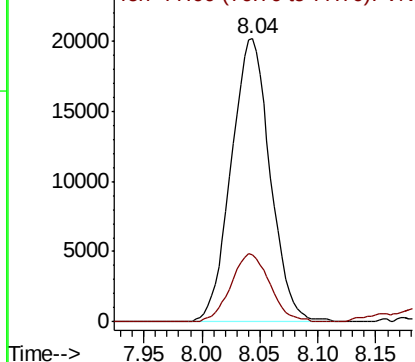


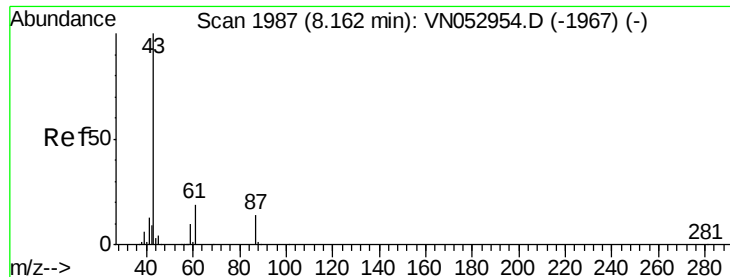
#40  
Benzene  
Concen: 0.944 ug/l  
RT: 8.04 min Scan# 1950  
Delta R.T. 0.00 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

Tgt Ion: 78 Resp: 46909  
Ion Ratio Lower Upper  
78 100  
77 23.8 18.5 27.7



Abundance Ion 78.00 (77.70 to 78.70): VN0  
Ion 77.00 (76.70 to 77.70): VN0





#43

Isopropyl Acetate

Concen: 34.904 ug/l

RT: 8.21 min Scan# 2001

Delta R.T. 0.05 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

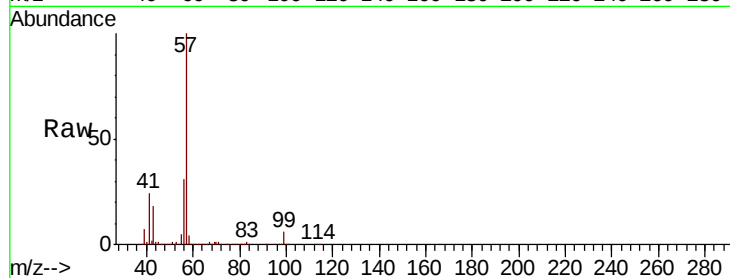
Tot Ion: 43 Resp: 635621

Ion Ratio Lower Upper

43 100

61 0.1 22.9 34.3#

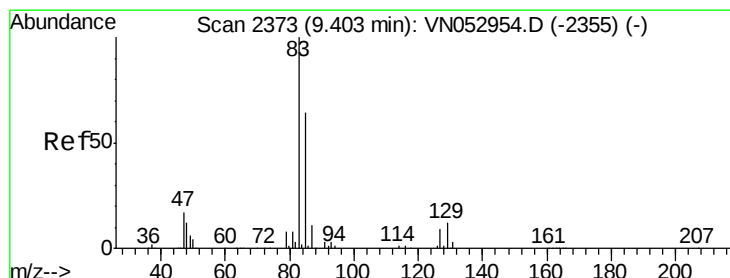
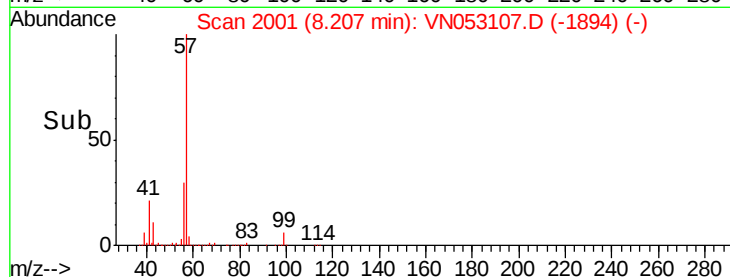
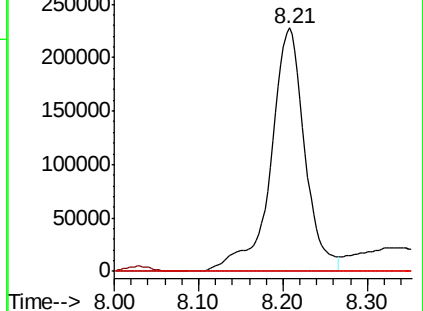
87 0.0 10.6 15.8#



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



#47

Bromodichloromethane

Concen: 1.638 ug/l

RT: 9.39 min Scan# 2368

Delta R.T. -0.02 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

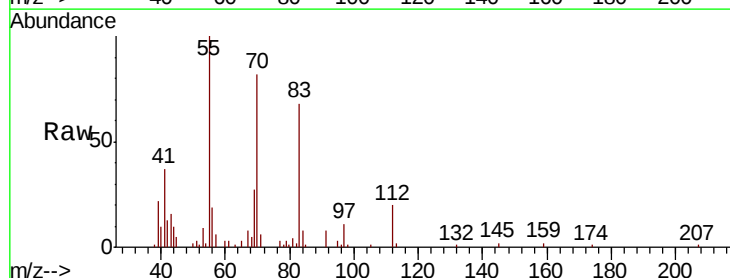
Tgt Ion: 83 Resp: 26252

Ion Ratio Lower Upper

83 100

85 1.8 51.6 77.4#

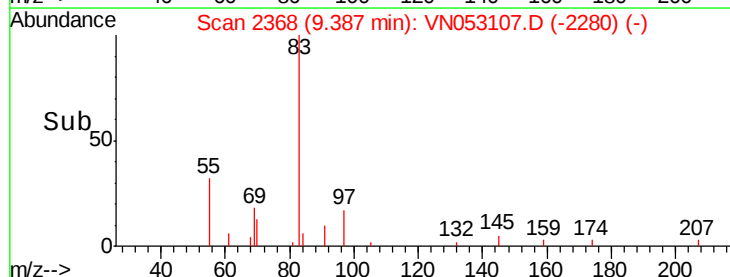
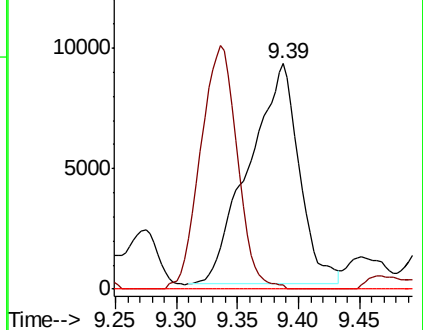
127 0.0 7.1 10.7#

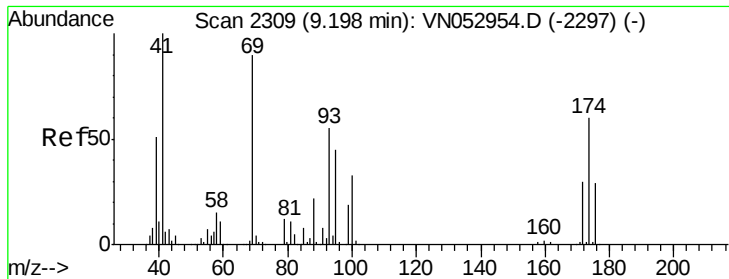


Abundance Ion 82.90 (82.60 to 83.60): VN0

Ion 84.90 (84.60 to 85.60): VN0

Ion 126.80 (126.50 to 127.50): V

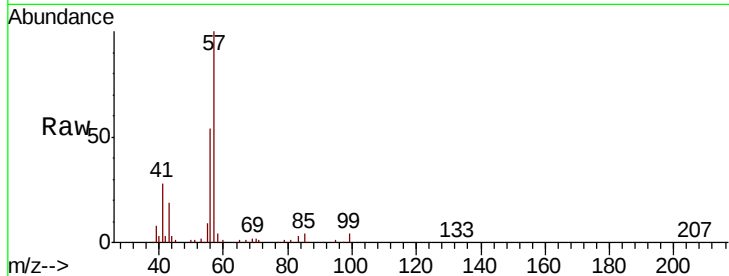




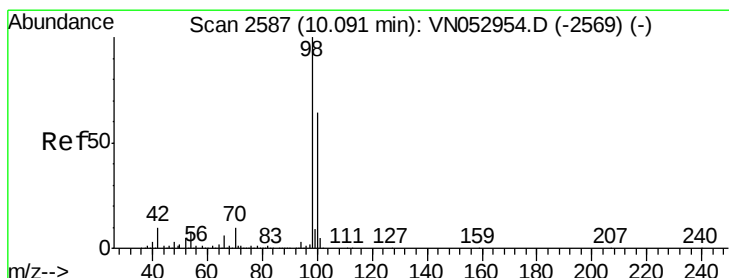
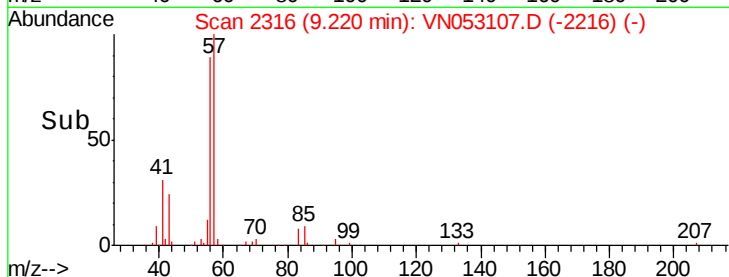
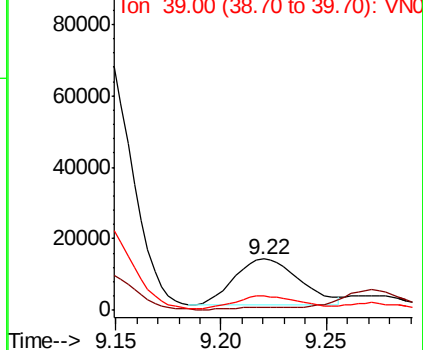
#48  
Methvl methacrylate  
Concen: 3.004 ug/l  
RT: 9.22 min Scan# 2316  
Delta R.T. 0.02 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

Instrument :  
MSVOA\_N  
ClientSampleId :  
KY001SB103-121118-(25-27)ME

Tot Ion: 41 Resp: 27184  
Ion Ratio Lower Upper  
41 100  
69 4.3 72.2 108.2#  
39 28.3 41.9 62.9#

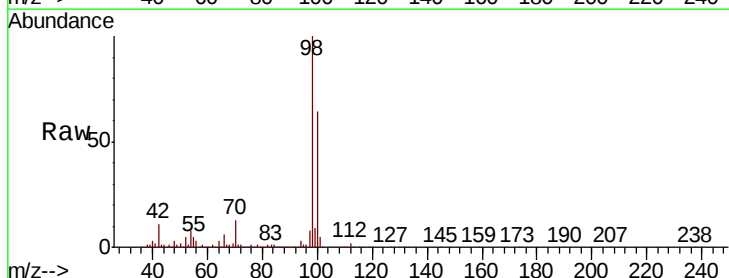


Abundance Ion 41.00 (40.70 to 41.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 39.00 (38.70 to 39.70): VN0

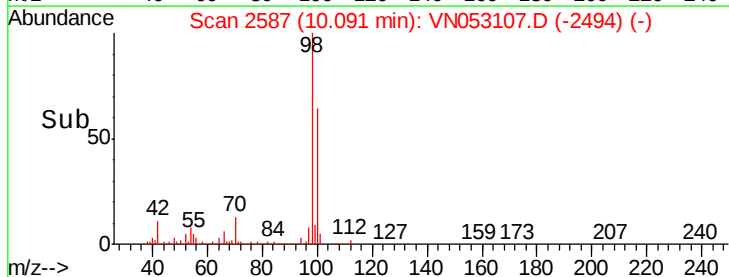
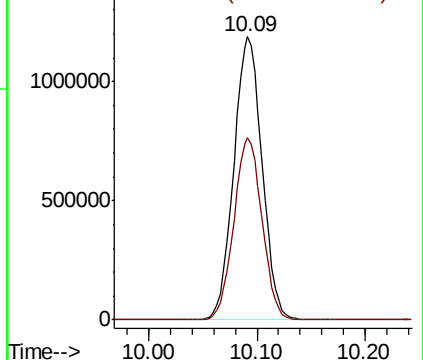


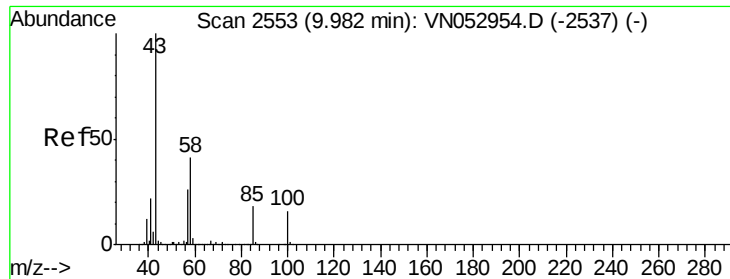
#50  
Toluene-d8  
Concen: N.D. ug/l  
RT: 10.09 min Scan# 2587  
Delta R.T. -0.00 min  
Lab File: VN053107.D  
Acq: 21 Dec 2018 17:34

Tgt Ion: 98 Resp: 2169110  
Ion Ratio Lower Upper  
98 100  
100 64.0 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VN0  
Ion 100.00 (99.70 to 100.70): VN0

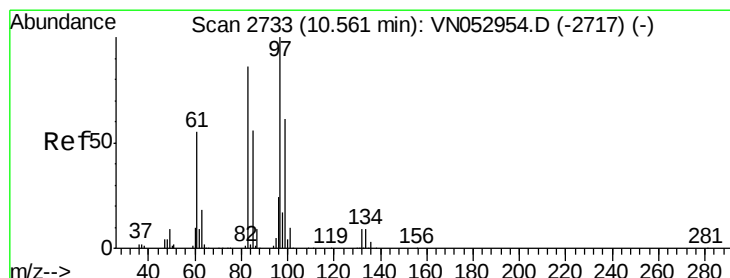
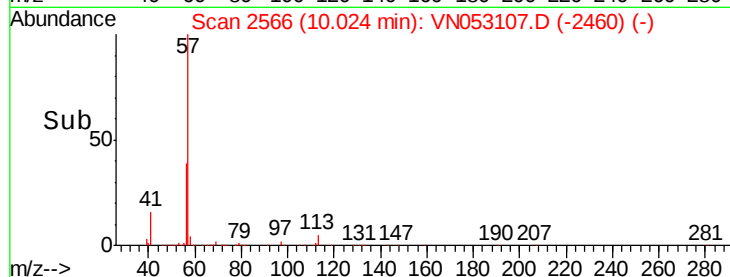
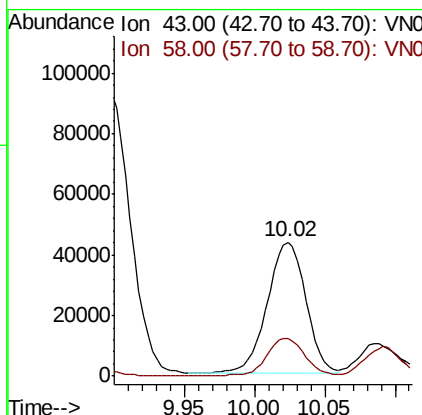
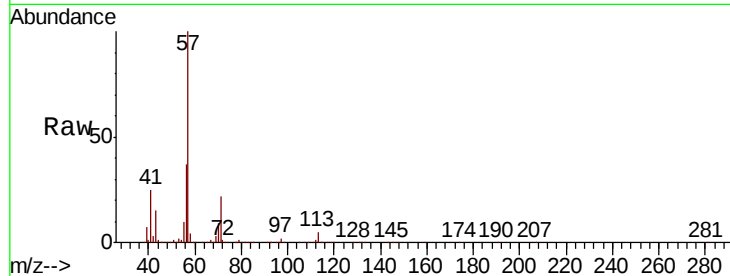




#51  
 4-Methyl-2-Pentanone  
 Concen: 9.186 ug/l  
 RT: 10.02 min Scan# 2566  
 Delta R.T. 0.04 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

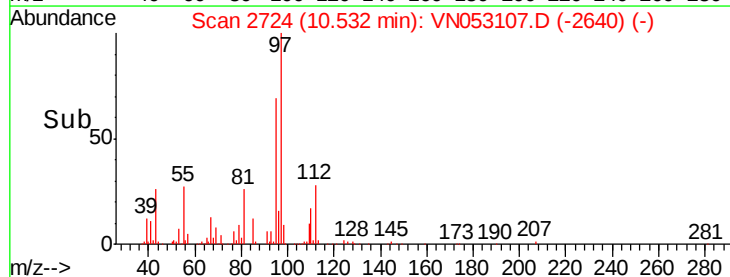
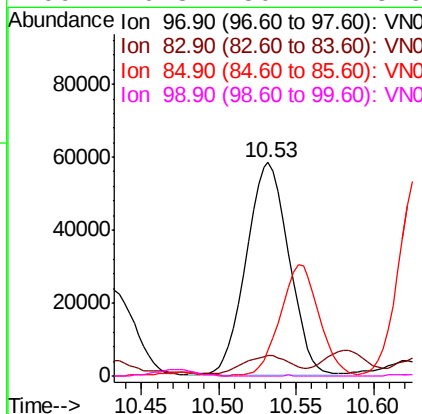
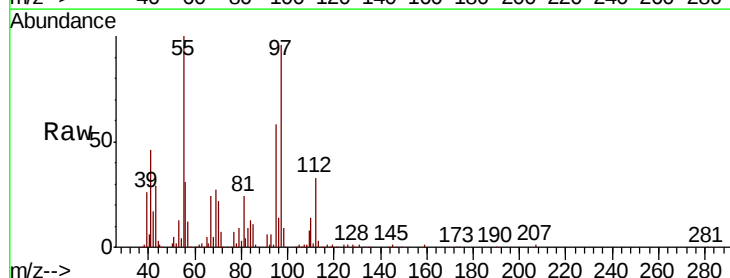
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

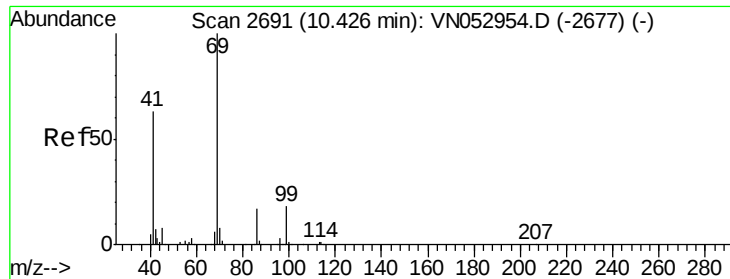
Tot Ion: 43 Resp: 82965  
 Ion Ratio Lower Upper  
 43 100  
 58 28.6 32.2 48.4#



#55  
 1,1,2-Trichloroethane  
 Concen: 10.403 ug/l  
 RT: 10.53 min Scan# 2724  
 Delta R.T. -0.03 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

Tgt Ion: 97 Resp: 111787  
 Ion Ratio Lower Upper  
 97 100  
 83 7.9 70.9 106.3#  
 85 10.4 45.4 68.2#  
 99 0.3 50.4 75.6#





#56

Ethyl methacrylate

Concen: 0.470 ug/l

RT: 10.43 min Scan# 2693

Delta R.T. 0.01 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

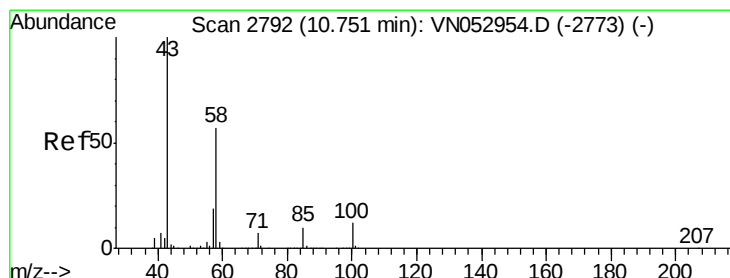
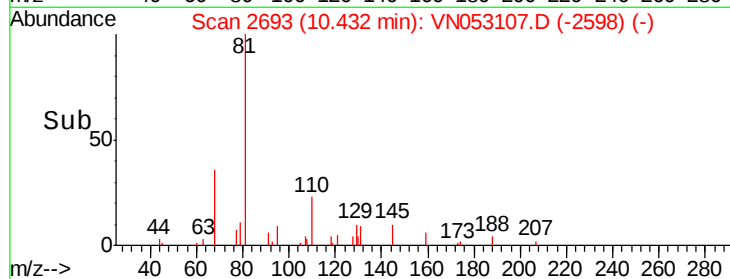
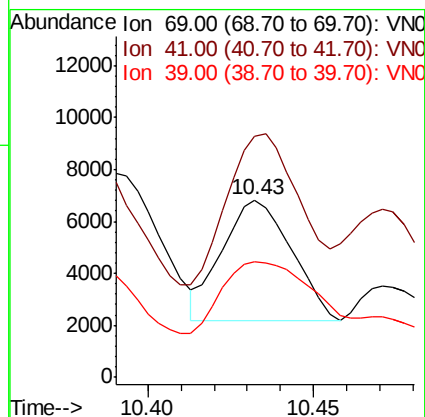
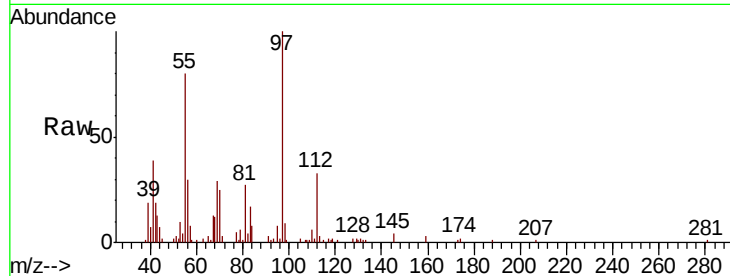
Tot Ion: 69 Resp: 6687

Ion Ratio Lower Upper

69 100

41 129.6 51.7 77.5#

39 79.5 24.6 37.0#



#59

2-Hexanone

Concen: 26.803 ug/l

RT: 10.72 min Scan# 2782

Delta R.T. -0.03 min

Lab File: VN053107.D

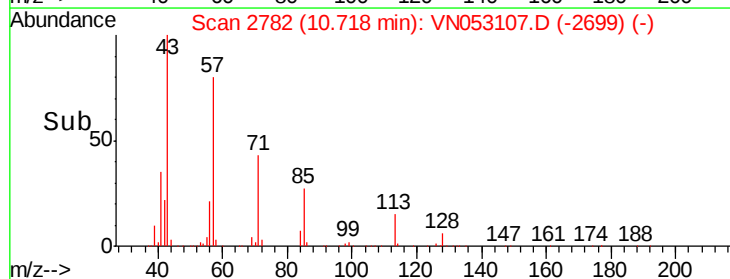
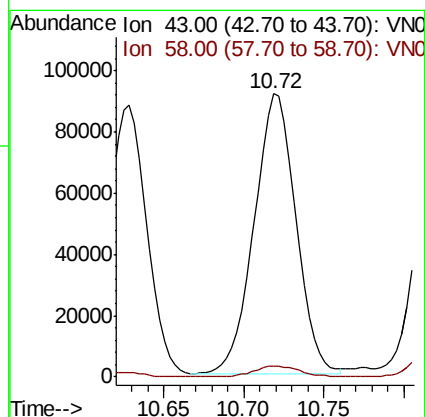
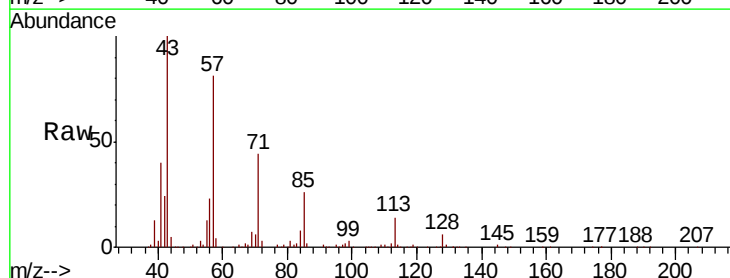
Acq: 21 Dec 2018 17:34

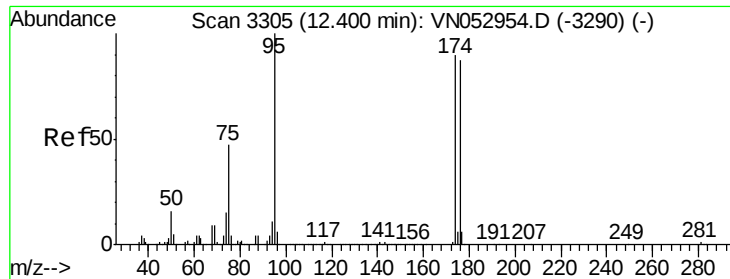
Tgt Ion: 43 Resp: 163780

Ion Ratio Lower Upper

43 100

58 4.3 28.1 84.3#





#62

4-Bromofluorobenzene

Concen: Below ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

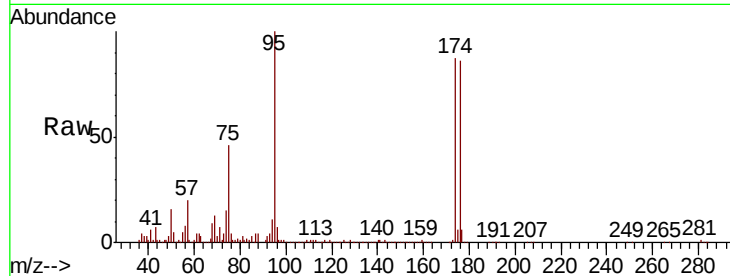
Tot Ion: 95 Resp: 755844

Ion Ratio Lower Upper

95 100

174 87.5 0.0 178.8

176 85.7 0.0 173.8



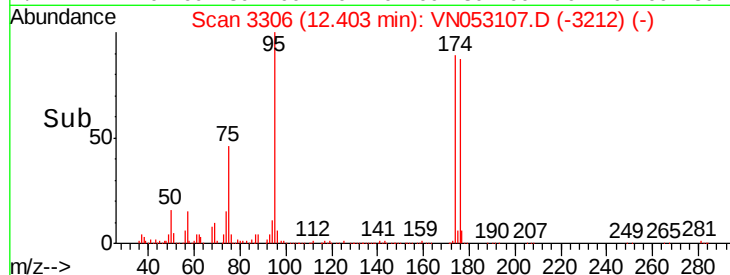
Abundance Ion 94.90 (94.60 to 95.60): VN052954.D (-3290) (-)

Ion 173.80 (173.50 to 174.50): VN052954.D (-3290) (-)

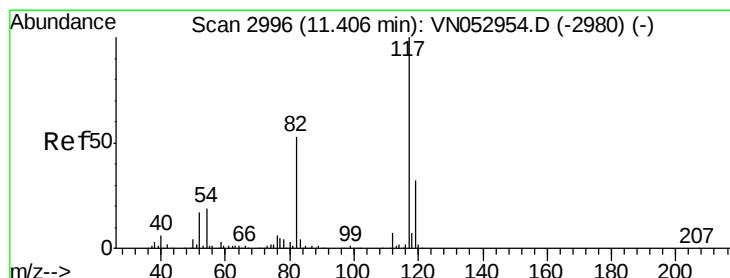
Ion 175.80 (175.50 to 176.50): VN052954.D (-3290) (-)

12.40

Time-->



Time-->



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

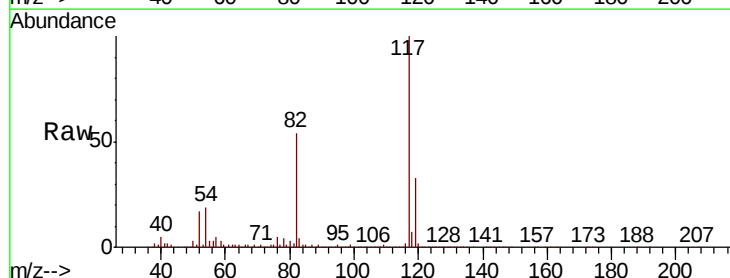
Tgt Ion: 117 Resp: 1605948

Ion Ratio Lower Upper

117 100

82 53.2 42.8 64.2

119 32.6 25.5 38.3



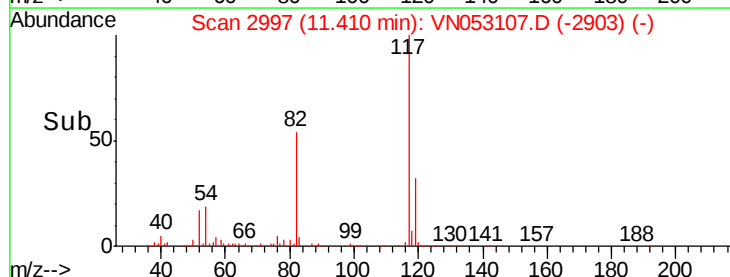
Abundance Ion 116.90 (116.60 to 117.60): VN052954.D (-2980) (-)

Ion 82.00 (81.70 to 82.70): VN052954.D (-2980) (-)

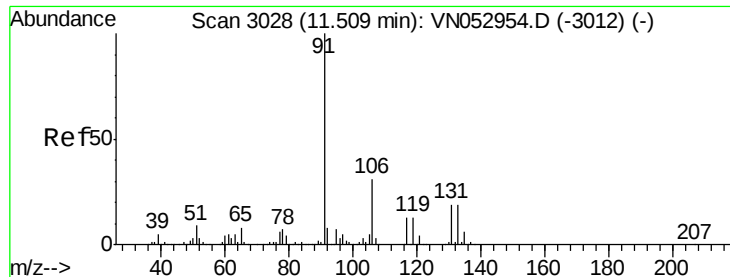
Ion 118.90 (118.60 to 119.60): VN052954.D (-2980) (-)

11.41

Time-->



Time-->



#67

Ethyl Benzene

Concen: 27.041 ug/l

RT: 11.51 min Scan# 3029

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

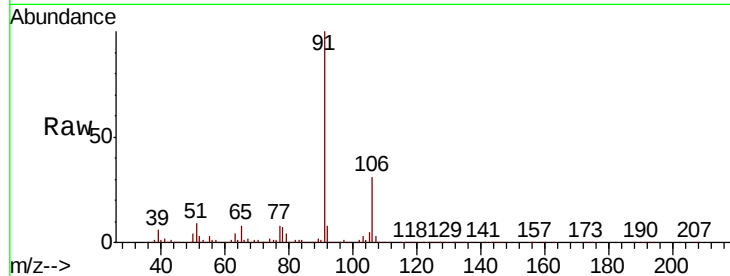
KY001SB103-121118-(25-27)ME

Tot Ion: 91 Resp: 1655475

Ion Ratio Lower Upper

91 100

106 31.3 24.9 37.3



Abundance Ion 91.00 (90.70 to 91.70): VN052954.D (-3012) (-)

Ion 106.00 (105.70 to 106.70): VN052954.D (-3012) (-)

11.51

1000000

800000

600000

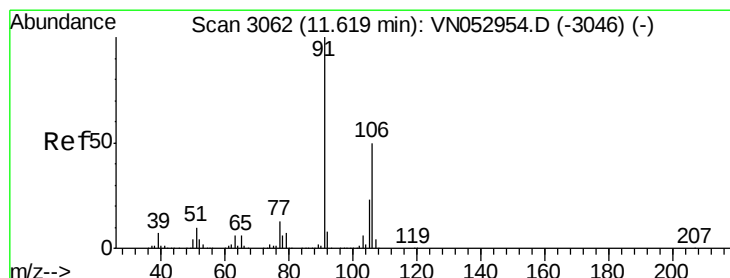
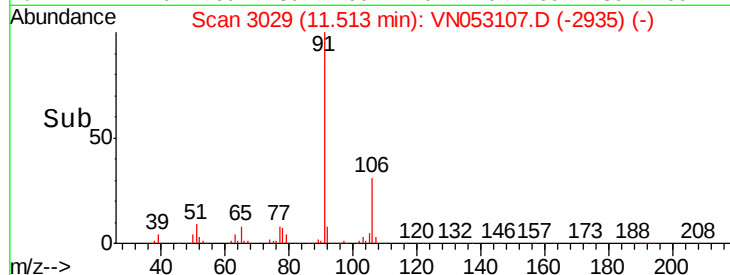
400000

200000

0

11.45 11.50 11.55 11.60

Time-->



#68

m/p-Xylenes

Concen: 22.264 ug/l

RT: 11.51 min Scan# 3029

Delta R.T. -0.11 min

Lab File: VN053107.D

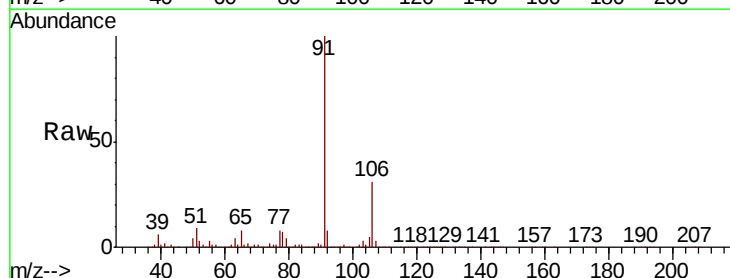
Acq: 21 Dec 2018 17:34

Tgt Ion: 106 Resp: 518172

Ion Ratio Lower Upper

106 100

91 319.5 162.2 243.4#



Abundance Ion 106.00 (105.70 to 106.70): VN052954.D (-3046) (-)

Ion 91.00 (90.70 to 91.70): VN052954.D (-3046) (-)

11.51

1000000

800000

600000

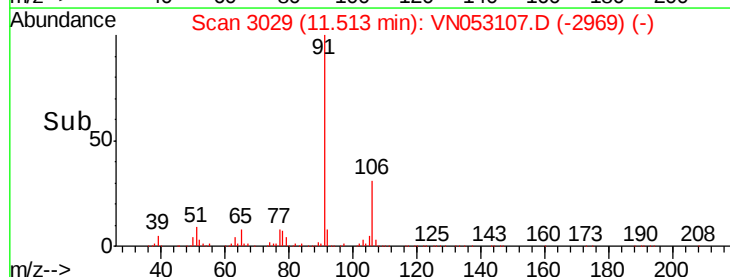
400000

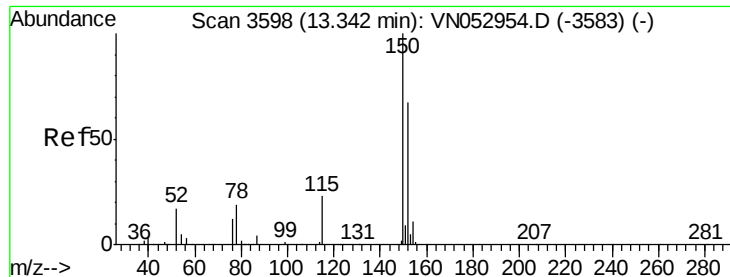
200000

0

11.50 11.55 11.60

Time-->





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

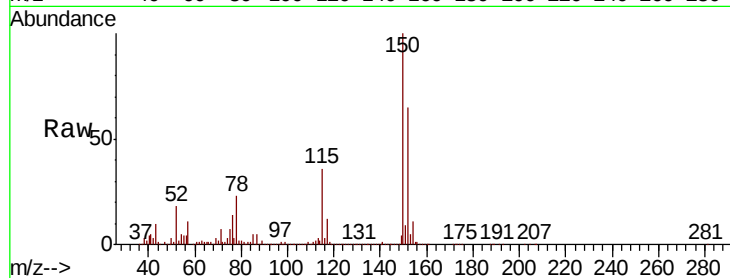
Tot Ion:152 Resp: 746474

Ion Ratio Lower Upper

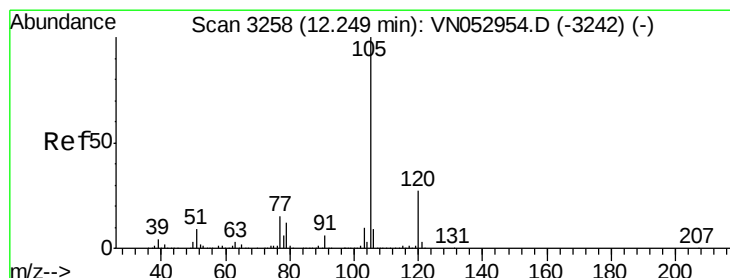
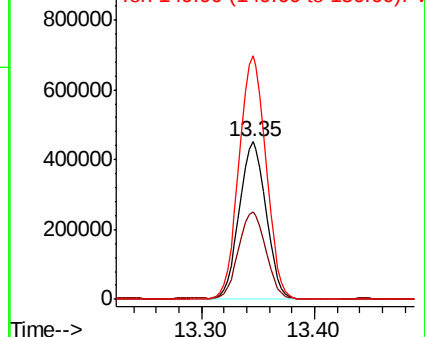
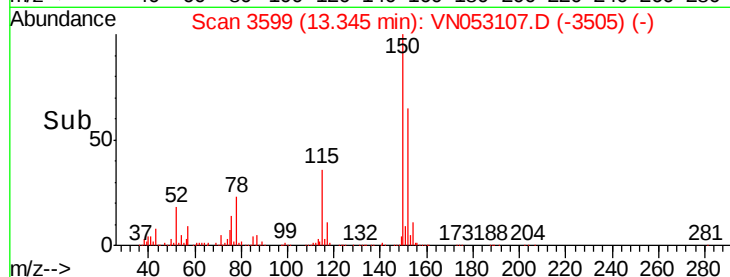
152 100

115 56.0 28.3 85.0

150 155.8 0.0 347.8



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



#73

Isopropylbenzene

Concen: 9.246 ug/l

RT: 12.25 min Scan# 3258

Delta R.T. -0.00 min

Lab File: VN053107.D

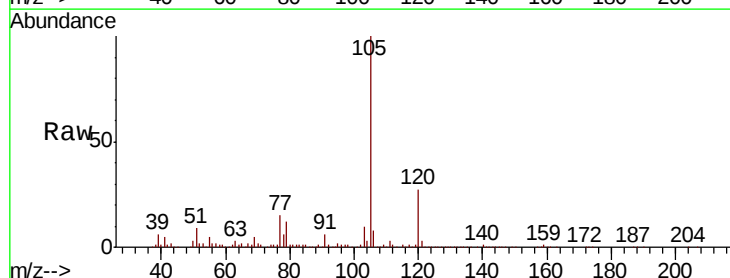
Acq: 21 Dec 2018 17:34

Tgt Ion:105 Resp: 540034

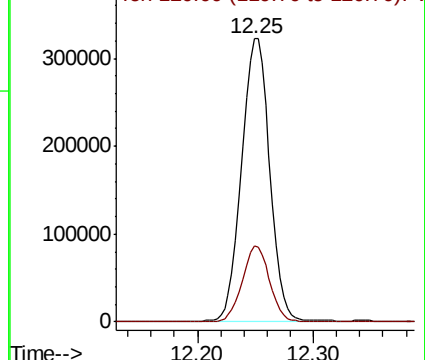
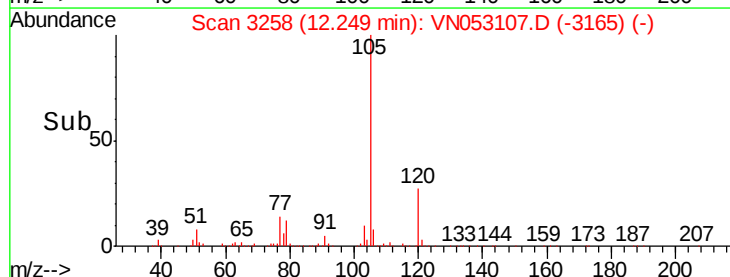
Ion Ratio Lower Upper

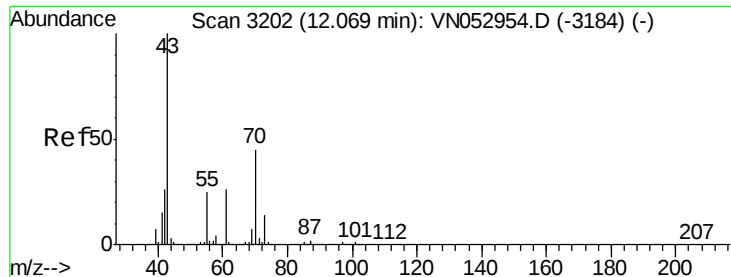
105 100

120 26.0 13.3 39.9



Abundance Ion 105.00 (104.70 to 105.70): V  
Ion 120.00 (119.70 to 120.70): V





#74

N-amvl acetate

Concen: 7.415 ug/l

RT: 12.04 min Scan# 3194

Delta R.T. -0.03 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

KY001SB103-121118-(25-27)ME

Tot Ion: 43 Resp: 120244

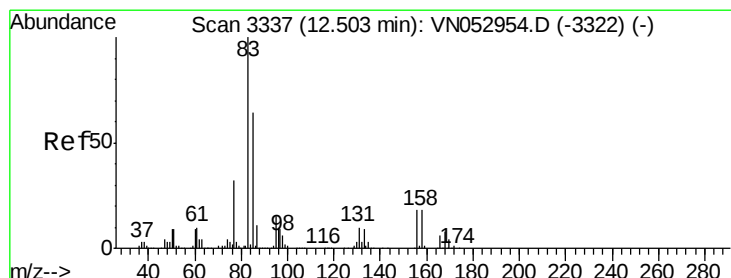
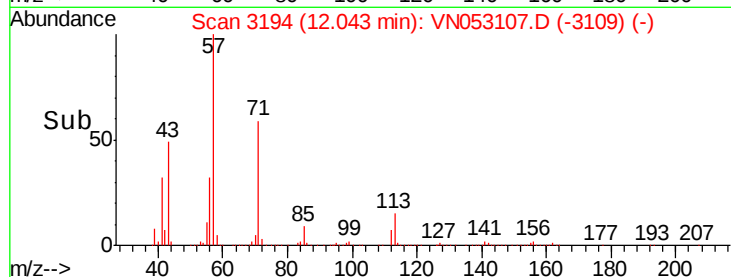
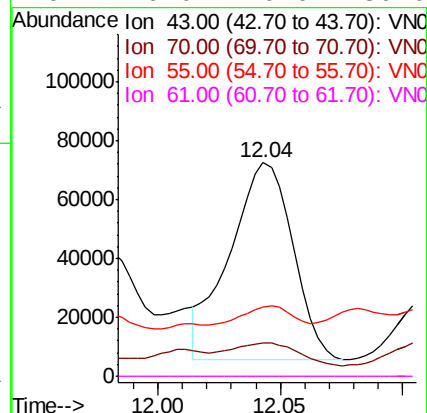
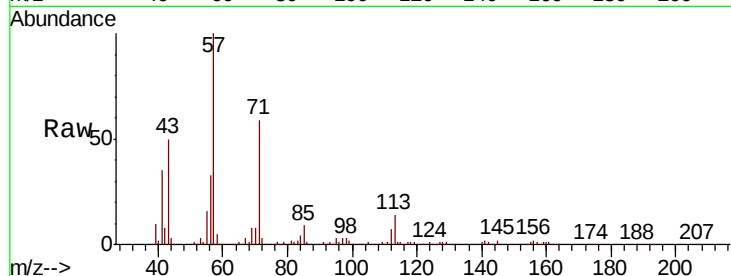
Ion Ratio Lower Upper

43 100

70 11.7 34.2 51.4#

55 5.4 20.3 30.5#

61 0.0 20.0 30.0#



#75

1,1,2,2-Tetrachloroethane

Concen: 0.299 ug/l

RT: 12.49 min Scan# 3334

Delta R.T. -0.01 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

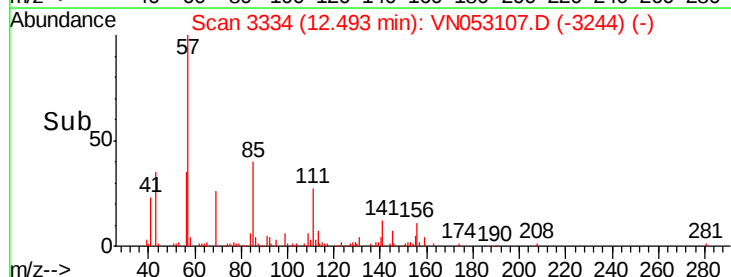
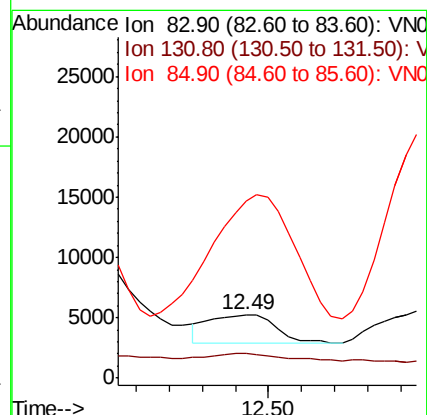
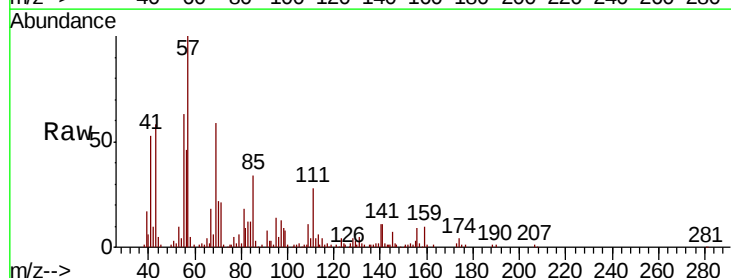
Tgt Ion: 83 Resp: 3423

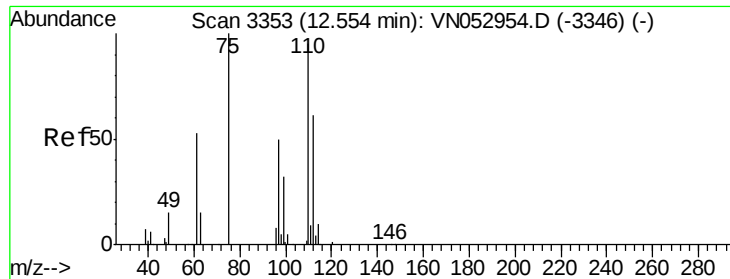
Ion Ratio Lower Upper

83 100

131 0.0 5.2 15.6#

85 861.9 32.4 97.0#





#76

1,2,3-Trichloropropane

Concen: 27.551 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

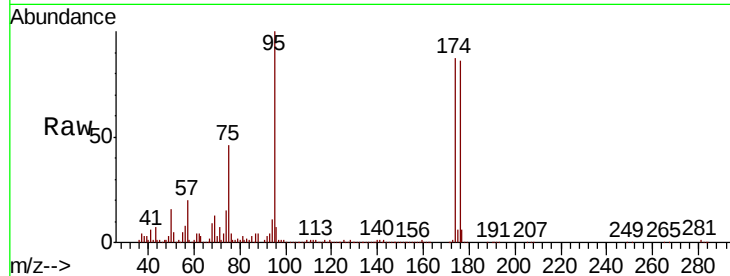
KY001SB103-121118-(25-27)ME

Tot Ion: 75 Resp: 346208

Ion Ratio Lower Upper

75 100

77 2.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

12.40

200000

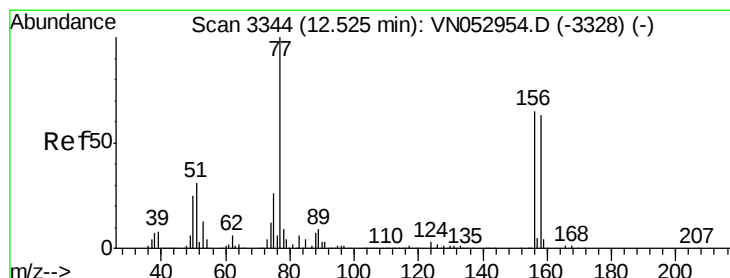
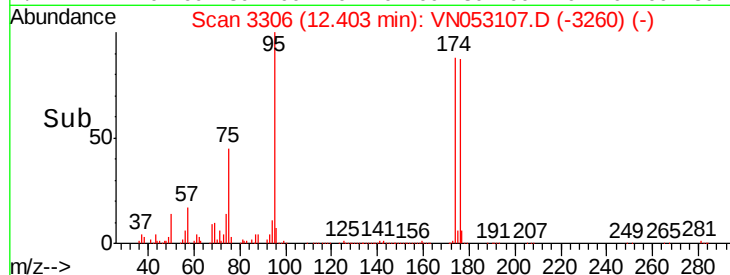
150000

100000

50000

0

Time--> 12.30 12.40 12.50



#77

Bromobenzene

Concen: 5.235 ug/l

RT: 12.55 min Scan# 3353

Delta R.T. 0.03 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

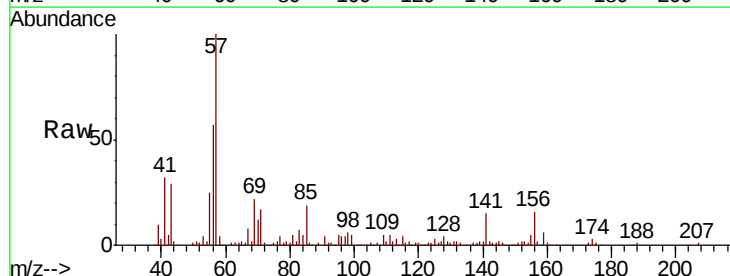
Tgt Ion: 156 Resp: 79476

Ion Ratio Lower Upper

156 100

77 0.0 91.3 273.8#

158 0.0 49.0 147.2#



Abundance Ion 155.80 (155.50 to 156.50): V

Ion 77.00 (76.70 to 77.70): VN0

Ion 157.80 (157.50 to 158.50): V

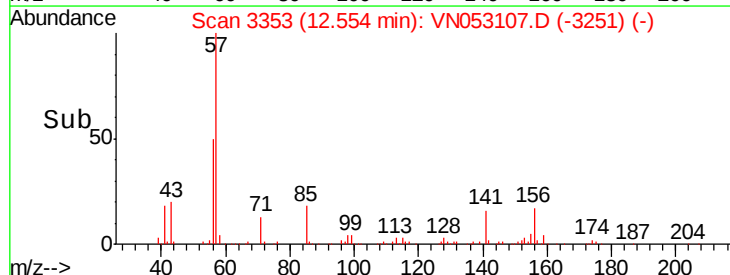
150000

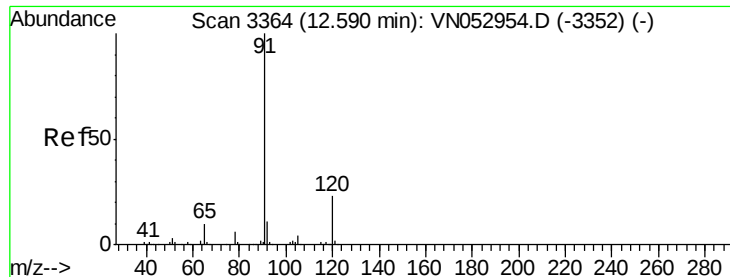
100000

50000

0

Time--> 12.40 12.50 12.60 12.70





#78

n-propylbenzene

Concen: 22.723 ug/l

RT: 12.59 min Scan# 3365

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

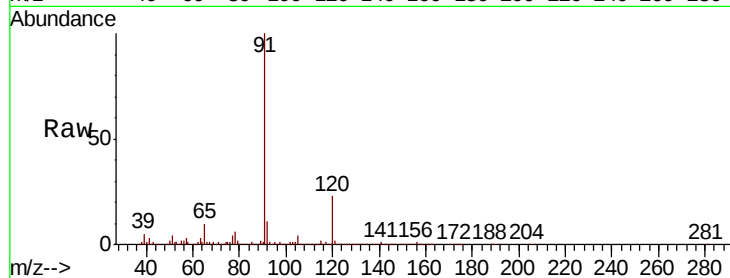
KY001SB103-121118-(25-27)ME

Tot Ion: 91 Resp: 1511511

Ion Ratio Lower Upper

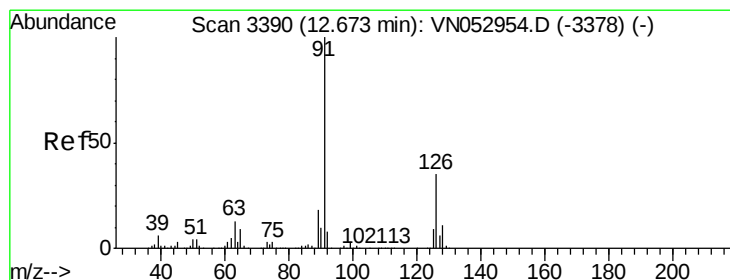
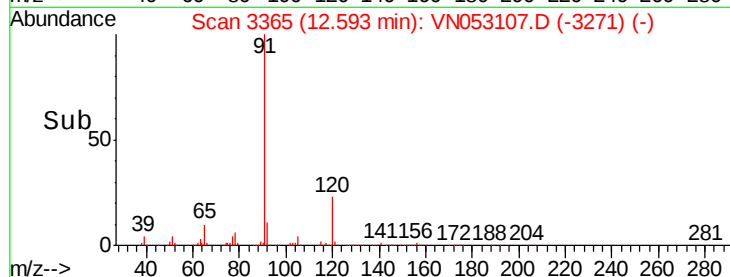
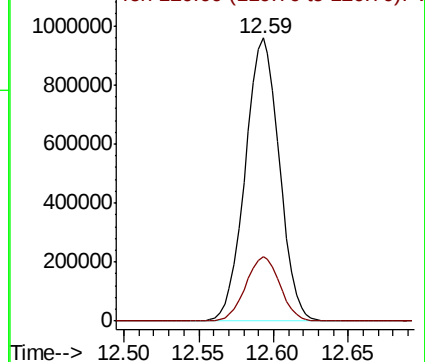
91 100

120 23.0 11.5 34.5



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 120.00 (119.70 to 120.70): V



#79

2-Chlorotoluene

Concen: 3.571 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. 0.06 min

Lab File: VN053107.D

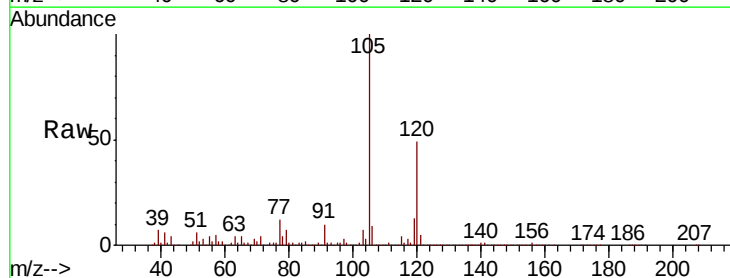
Acq: 21 Dec 2018 17:34

Tgt Ion: 91 Resp: 147224

Ion Ratio Lower Upper

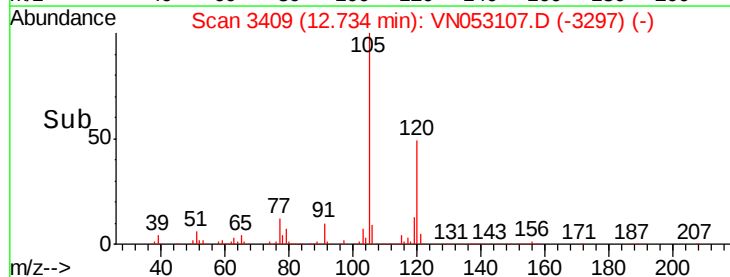
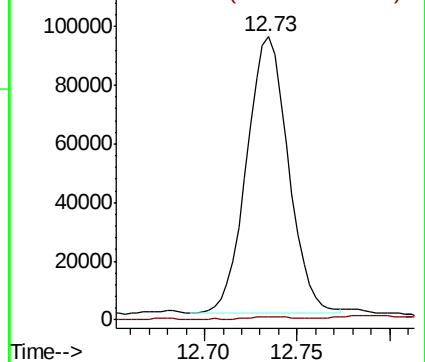
91 100

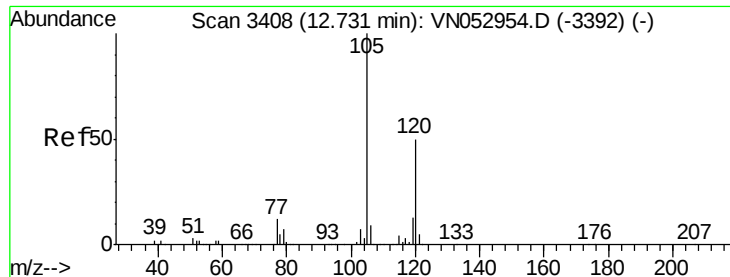
126 1.2 17.4 52.3#



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): V





#80

1,3,5-Trimethylbenzene

Concen: 32.379 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

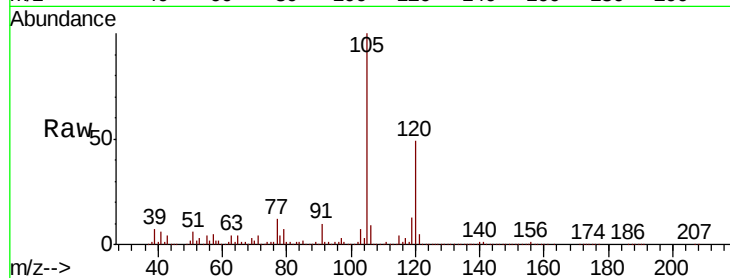
KY001SB103-121118-(25-27)ME

Tot Ion:105 Resp: 1541386

Ion Ratio Lower Upper

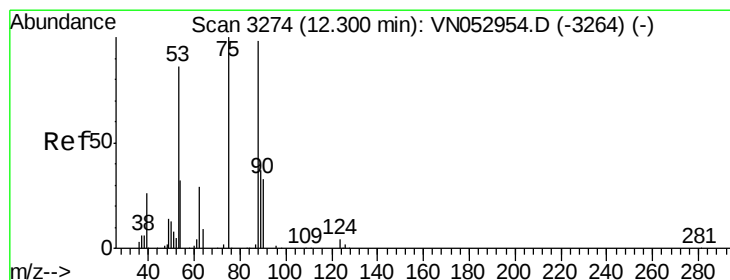
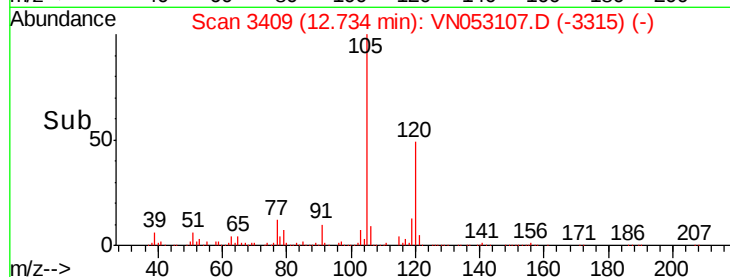
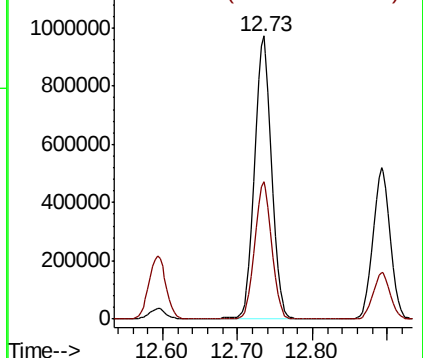
105 100

120 48.2 24.4 73.2



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#81

trans-1,4-Dichloro-2-butene

Concen: 88.800 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

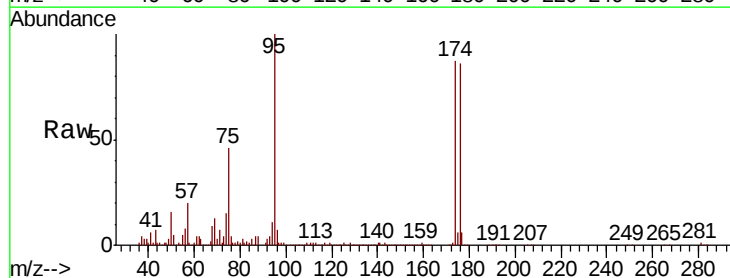
Tgt Ion: 75 Resp: 346208

Ion Ratio Lower Upper

75 100

53 3.8 74.7 112.1#

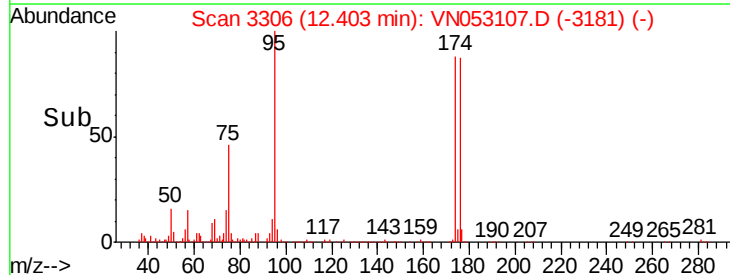
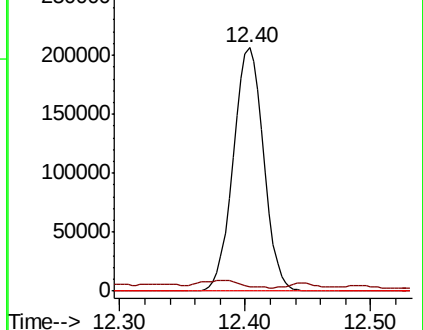
89 0.0 36.1 54.1#

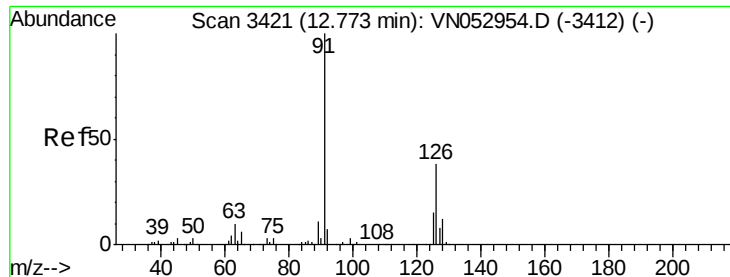


Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO





#82

4-Chlorotoluene

Concen: 3.648 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. -0.04 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

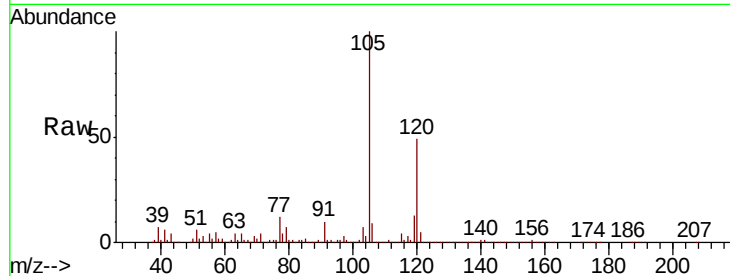
KY001SB103-121118-(25-27)ME

Tot Ion: 91 Resp: 147224

Ion Ratio Lower Upper

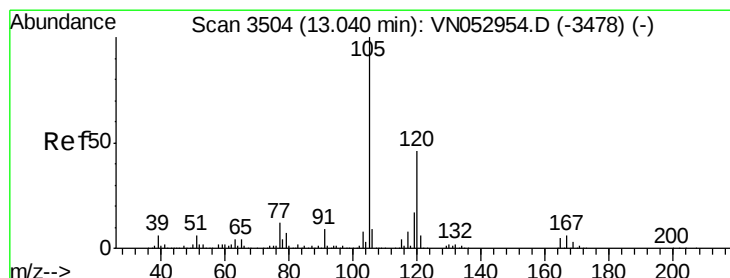
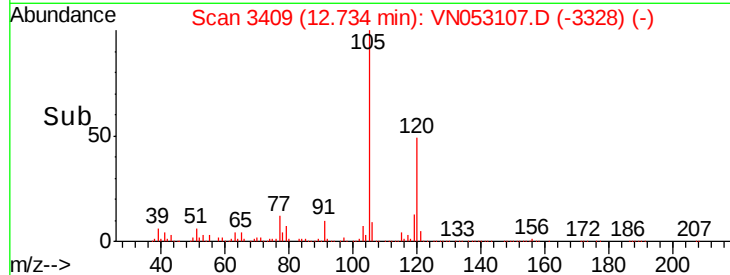
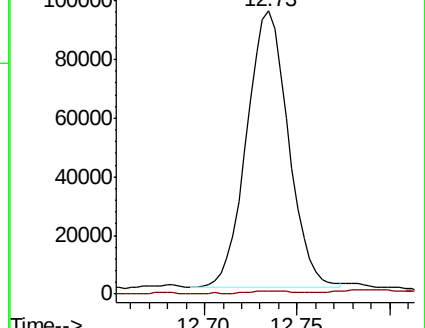
91 100

126 1.4 17.3 51.7#



Abundance Ion 91.00 (90.70 to 91.70): VN053107.D (-3412) (-)

Ion 125.90 (125.60 to 126.60): VN053107.D (-3412) (-)



#84

1,2,4-Trimethylbenzene

Concen: 0.663 ug/l

RT: 13.04 min Scan# 3504

Delta R.T. -0.00 min

Lab File: VN053107.D

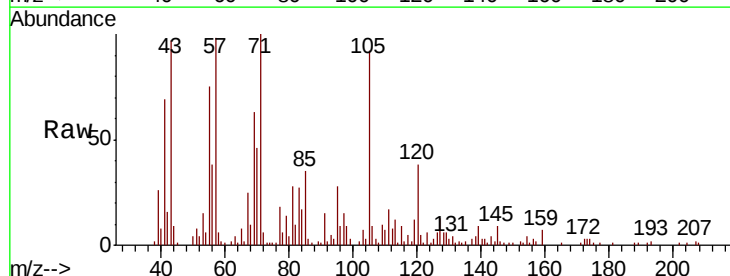
Acq: 21 Dec 2018 17:34

Tgt Ion: 105 Resp: 31729

Ion Ratio Lower Upper

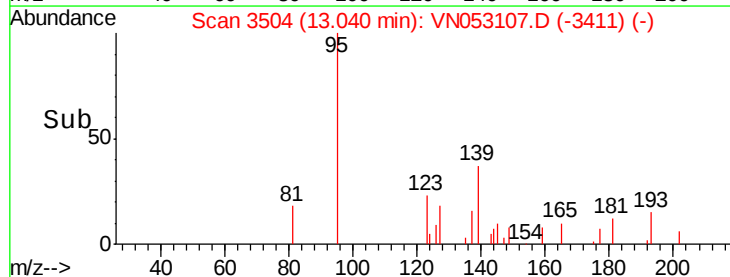
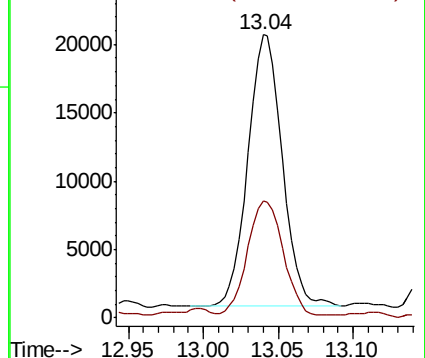
105 100

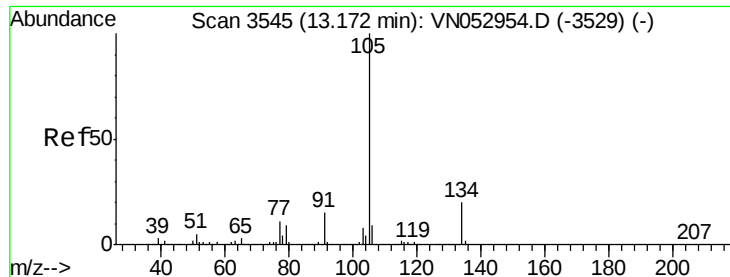
120 43.7 22.9 68.8



Abundance Ion 105.00 (104.70 to 105.70): VN053107.D (-3411) (-)

Ion 120.00 (119.70 to 120.70): VN053107.D (-3411) (-)





#85

sec-Butylbenzene

Concen: 2.925 ug/l

RT: 13.17 min Scan# 3546

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

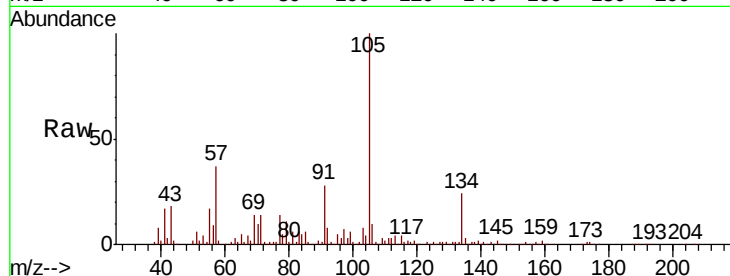
KY001SB103-121118-(25-27)ME

Tot Ion:105 Resp: 166555

Ion Ratio Lower Upper

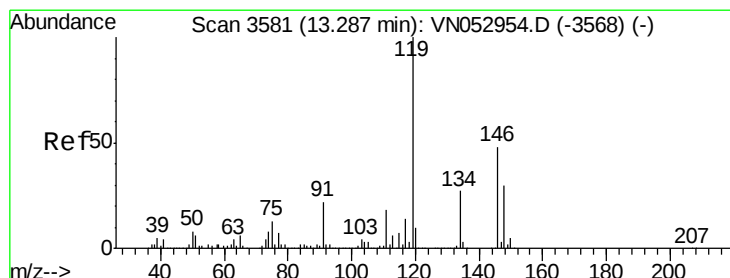
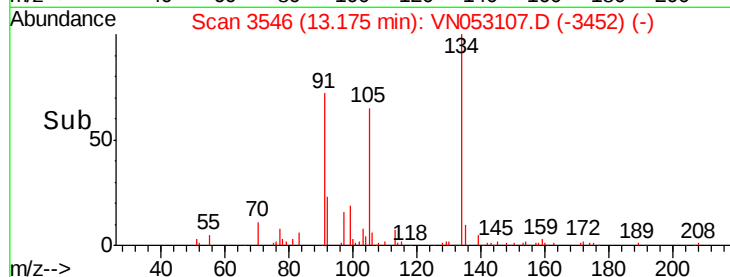
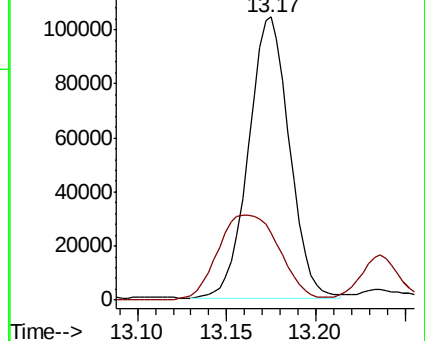
105 100

134 45.3 10.1 30.3#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 134.00 (133.70 to 134.70): V



#86

p-Isopropyltoluene

Concen: 1.825 ug/l

RT: 13.29 min Scan# 3582

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

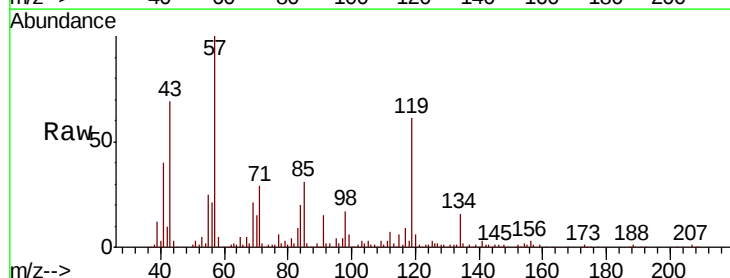
Tgt Ion:119 Resp: 89794

Ion Ratio Lower Upper

119 100

134 25.5 13.4 40.2

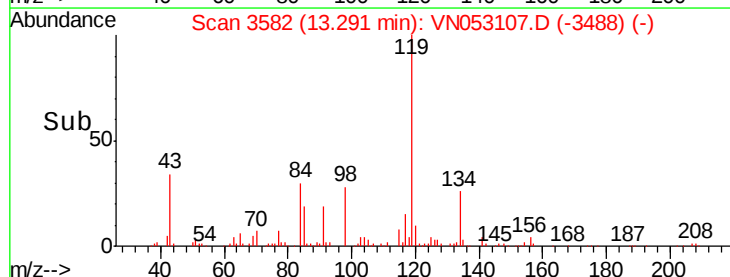
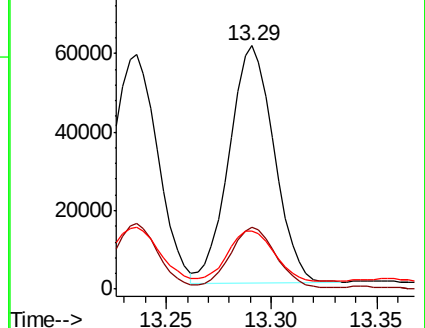
91 22.2 11.1 33.3

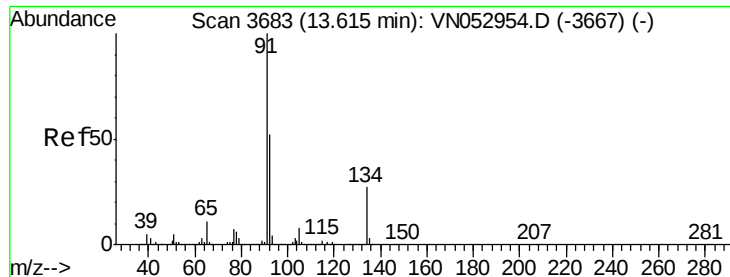


Abundance Ion 119.00 (118.70 to 119.70): V

Ion 134.00 (133.70 to 134.70): V

Ion 91.00 (90.70 to 91.70): V





#89

n-Butylbenzene

Concen: 7.419 ug/l

RT: 13.59 min Scan# 3674

Delta R.T. -0.03 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

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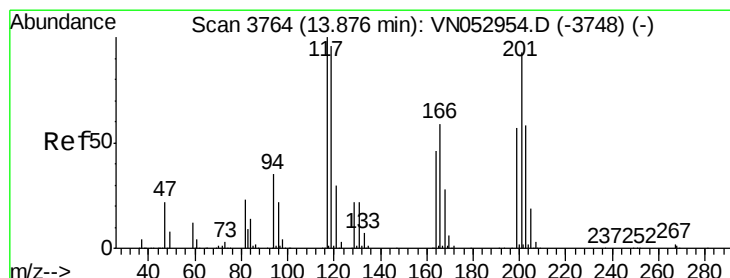
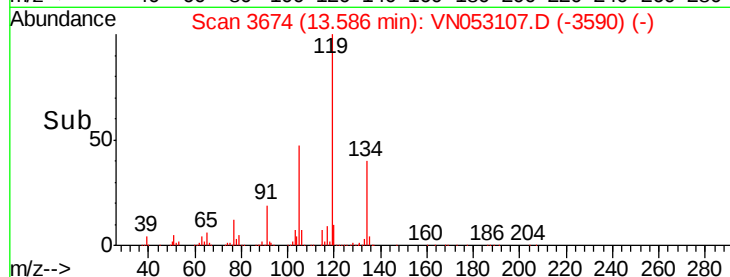
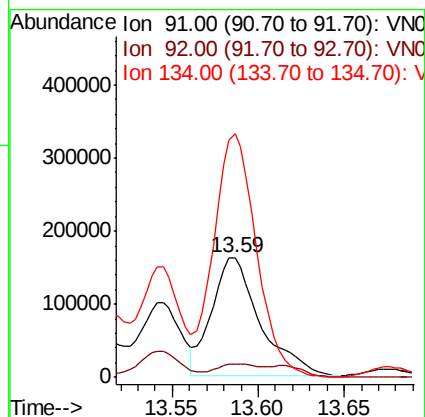
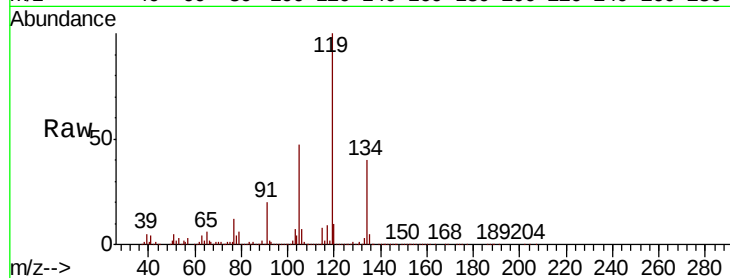
Tot Ion: 91 Resp: 314059

Ion Ratio Lower Upper

91 100

92 5.3 26.3 78.9#

134 183.7 13.3 39.8#



#90

Hexachloroethane

Concen: 15.543 ug/l

RT: 13.89 min Scan# 3769

Delta R.T. 0.02 min

Lab File: VN053107.D

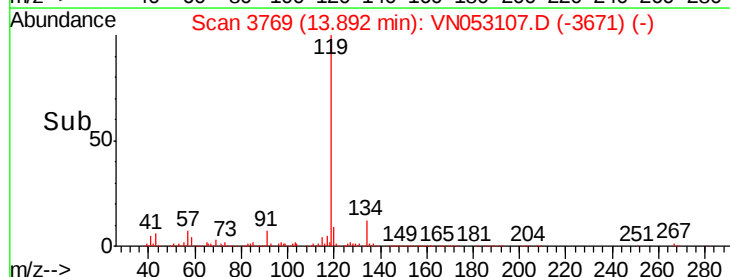
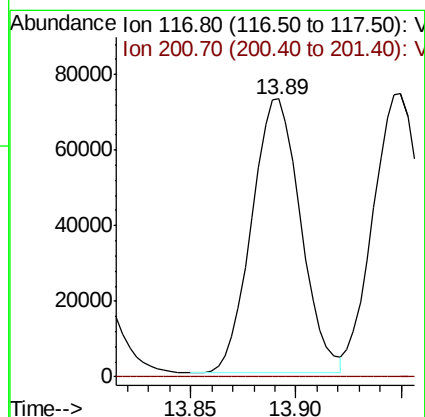
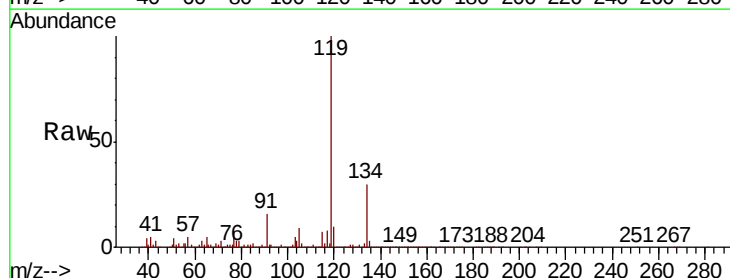
Acq: 21 Dec 2018 17:34

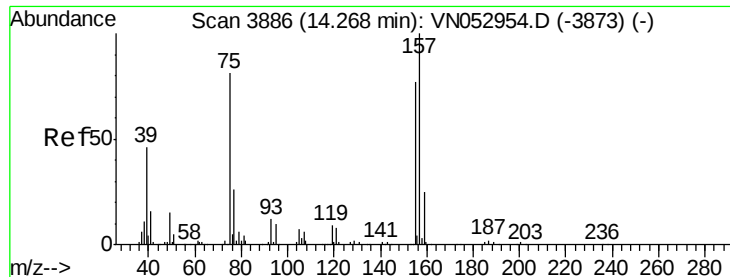
Tgt Ion: 117 Resp: 117367

Ion Ratio Lower Upper

117 100

201 0.0 45.7 137.1#





#92

1,2-Dibromo-3-Chloropropane

Concen: 2.921 ug/l

RT: 14.25 min Scan# 3880

Delta R.T. -0.02 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

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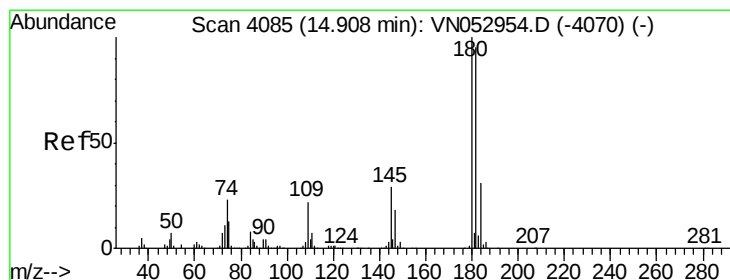
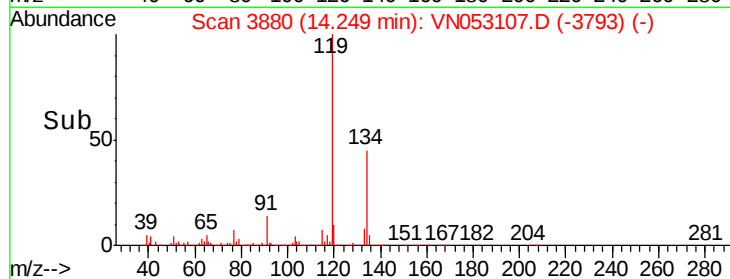
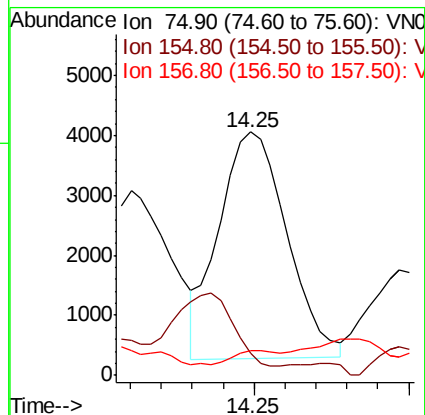
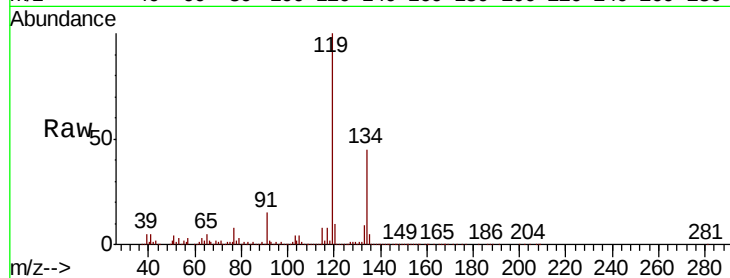
Tot Ion: 75 Resp: 5788

Ion Ratio Lower Upper

75 100

155 27.2 48.2 144.6#

157 3.9 61.2 183.5#



#93

1,2,4-Trichlorobenzene

Concen: 0.720 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

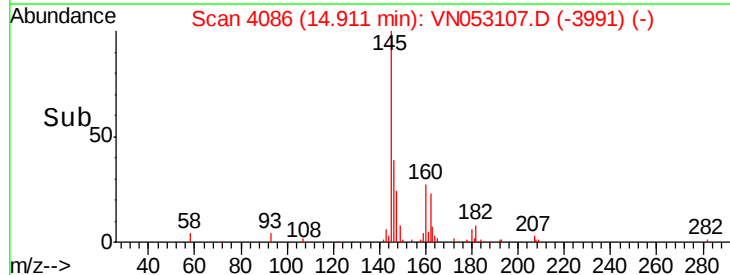
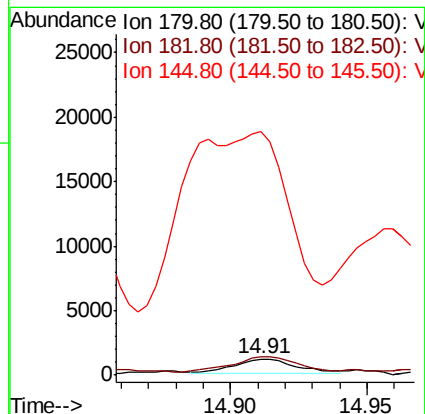
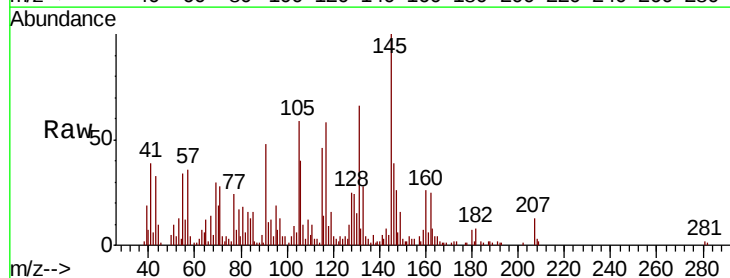
Tgt Ion: 180 Resp: 1679

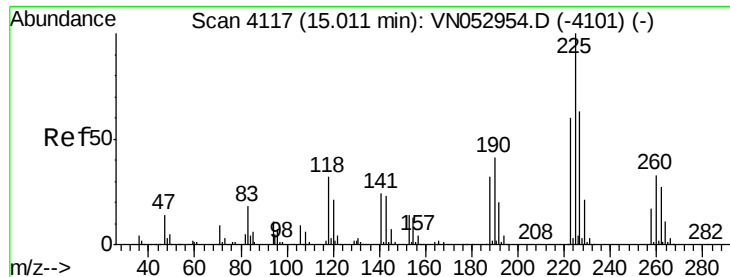
Ion Ratio Lower Upper

180 100

182 112.3 47.8 143.3

145 0.0 14.2 42.6#





#94

Hexachlorobutadiene

Concen: Below Cal

RT: 15.02 min Scan# 4119

Delta R.T. 0.01 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

Instrument :

MSVOA\_N

ClientSampleId :

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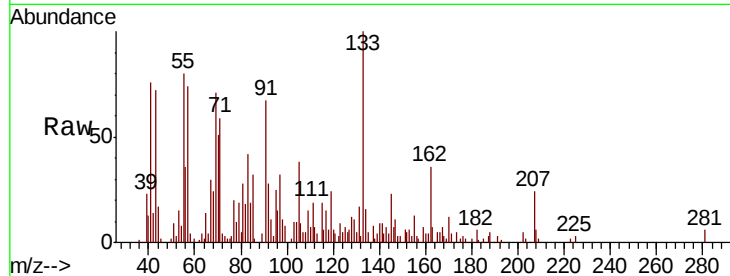
Tot Ion:225 Resp: 409

Ion Ratio Lower Upper

225 100

223 0.0 31.5 94.5#

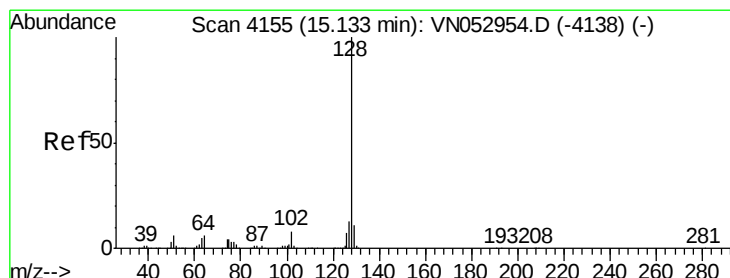
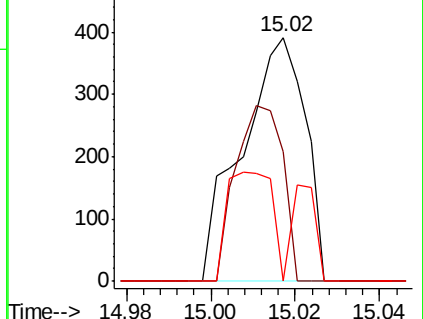
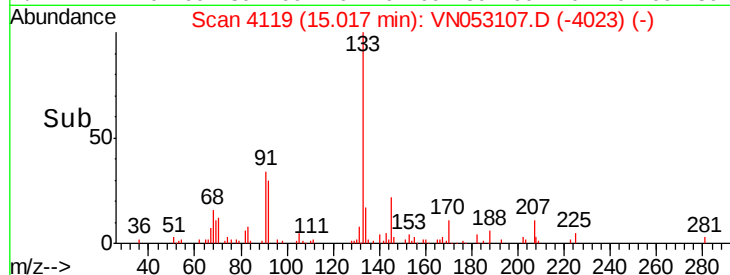
227 14.4 31.9 95.7#



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 2.452 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.00 min

Lab File: VN053107.D

Acq: 21 Dec 2018 17:34

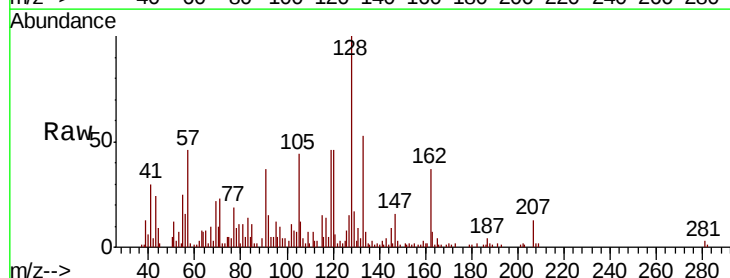
Tgt Ion:128 Resp: 39205

Ion Ratio Lower Upper

128 100

127 15.4 10.2 15.4#

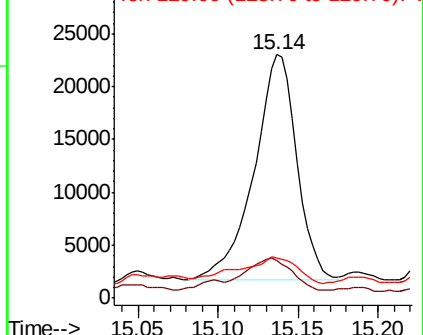
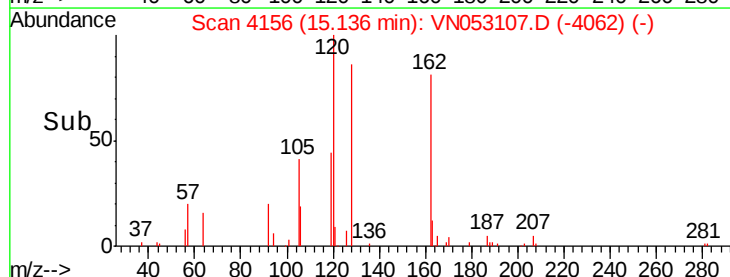
129 16.1 8.6 13.0#

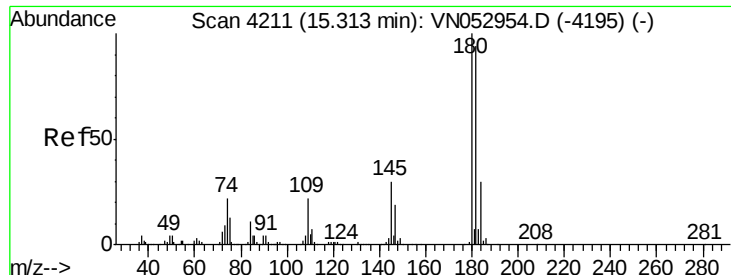


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V





#96  
 1,2,3-Trichlorobenzene  
 Concen: 0.585 ug/l  
 RT: 15.32 min Scan# 4213  
 Delta R.T. 0.01 min  
 Lab File: VN053107.D  
 Acq: 21 Dec 2018 17:34

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 KY001SB103-121118-(25-27)ME

| Tot Ion | Ratio  | Lower | Upper  |
|---------|--------|-------|--------|
| 180     | 100    |       |        |
| 182     | 159.3  | 47.9  | 143.7# |
| 145     | 2648.3 | 15.0  | 45.0#  |

