

Data Path : Z:\HPCHEM1\BNA\_G\DATA\BG042315\  
 Data File : BG016661.D  
 Acq On : 23 Apr 2015 20:18  
 Operator : TP/IZ  
 Sample : PB82889BS  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleID :  
 PB82889BS

Quant Time: Apr 24 02:20:52 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG042315.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Apr 23 19:19:11 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.59  | 152  | 54419    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.38 | 136  | 220302   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 14.25 | 164  | 124677   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 16.99 | 188  | 272459   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 21.18 | 240  | 290412   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 23.39 | 264  | 261051   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |        |        |    |      |
|--------------------------|-------|-----|--------|--------|----|------|
| 5) 2-Fluorophenol        | 5.19  | 112 | 401888 | 119.84 | ng | 0.00 |
| 7) Phenol-d6             | 6.80  | 99  | 539618 | 114.70 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 8.76  | 82  | 267325 | 76.68  | ng | 0.00 |
| 41) 2,4,6-Tribromophenol | 15.75 | 330 | 114201 | 123.47 | ng | 0.00 |
| 44) 2-Fluorobiphenyl     | 12.87 | 172 | 612983 | 78.99  | ng | 0.00 |
| 78) Terphenyl-d14        | 19.63 | 244 | 898167 | 71.24  | ng | 0.00 |

## Target Compounds

|                                |       |     |        |       |    | Qvalue |
|--------------------------------|-------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.05  | 88  | 48163  | 33.15 | ng | 99     |
| 3) Pyridine                    | 3.45  | 79  | 126062 | 30.57 | ng | 99     |
| 4) n-Nitrosodimethylamine      | 3.38  | 42  | 42337  | 34.79 | ng | 88     |
| 6) Aniline                     | 6.93  | 93  | 138851 | 21.52 | ng | 99     |
| 8) 2-Chlorophenol              | 7.17  | 128 | 156149 | 37.67 | ng | 98     |
| 9) Benzaldehyde                | 6.75  | 77  | 9457   | 4.92  | ng | 89     |
| 10) Phenol                     | 6.82  | 94  | 189680 | 38.25 | ng | 99     |
| 11) bis(2-Chloroethyl)ether    | 7.03  | 93  | 133731 | 34.55 | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 7.48  | 146 | 149732 | 34.93 | ng | 99     |
| 13) 1,4-Dichlorobenzene        | 7.63  | 146 | 153184 | 34.96 | ng | 98     |
| 14) 1,2-Dichlorobenzene        | 7.95  | 146 | 146118 | 34.93 | ng | 99     |
| 15) Benzyl Alcohol             | 7.85  | 79  | 103969 | 35.22 | ng | 98     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.14  | 45  | 129942 | 35.86 | ng | 98     |
| 17) 2-Methylphenol             | 8.06  | 107 | 125751 | 37.93 | ng | 97     |
| 18) Hexachloroethane           | 8.66  | 117 | 54341  | 35.17 | ng | 98     |
| 19) n-Nitroso-di-n-propylamine | 8.40  | 70  | 94316  | 32.16 | ng | 97     |
| 20) 3+4-Methylphenols          | 8.39  | 107 | 167333 | 35.90 | ng | 98     |
| 22) Acetophenone               | 8.42  | 105 | 188846 | 39.06 | ng | # 98   |
| 24) Nitrobenzene               | 8.80  | 77  | 136073 | 37.16 | ng | 99     |
| 25) Isophorone                 | 9.32  | 82  | 255949 | 35.42 | ng | 99     |
| 26) 2-Nitrophenol              | 9.51  | 139 | 82033  | 38.61 | ng | 96     |
| 27) 2,4-Dimethylphenol         | 9.59  | 122 | 144931 | 40.85 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 9.81  | 93  | 165627 | 37.99 | ng | 98     |
| 29) 2,4-Dichlorophenol         | 10.05 | 162 | 126459 | 41.93 | ng | 99     |
| 30) 1,2,4-Trichlorobenzene     | 10.25 | 180 | 121368 | 37.98 | ng | 100    |
| 31) Naphthalene                | 10.43 | 128 | 437082 | 37.63 | ng | 99     |
| 32) Benzoic acid               | 9.74  | 122 | 53603  | 31.58 | ng | 96     |
| 33) 4-Chloroaniline            | 10.56 | 127 | 86633  | 16.19 | ng | 99     |
| 34) Hexachlorobutadiene        | 10.71 | 225 | 53545  | 37.51 | ng | 98     |
| 35) Caprolactam                | 11.32 | 113 | 28469  | 17.51 | ng | 94     |
| 36) 4-Chloro-3-methylphenol    | 11.71 | 107 | 138525 | 39.51 | ng | 100    |
| 37) 2-Methylnaphthalene        | 12.05 | 142 | 315660 | 37.63 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 12.43 | 216 | 111572 | 37.57 | ng | 98     |
| 40) Hexachlorocyclopentadiene  | 12.41 | 237 | 85809  | 75.03 | ng | 98     |

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 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

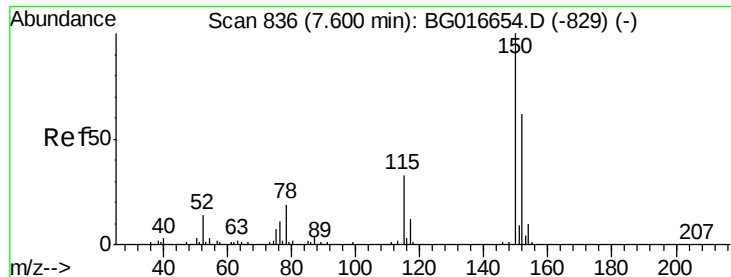
Instrument :  
 BNA\_F  
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Quant Time: Apr 24 02:20:52 2015  
 Quant Method : Z:\HPCHEM1\BNA\_G\METHODS\8270-BG042315.M  
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 QLast Update : Thu Apr 23 19:19:11 2015  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 12.68 | 196  | 86389    | 39.80 | ng    | 98       |
| 43) 2,4,5-Trichlorophenol      | 12.76 | 196  | 91840    | 39.99 | ng    | 98       |
| 45) 1,1'-Biphenyl              | 13.08 | 154  | 380955   | 38.91 | ng    | 99       |
| 46) 2-Chloronaphthalene        | 13.12 | 162  | 290259   | 38.56 | ng    | 99       |
| 47) 2-Nitroaniline             | 13.34 | 65   | 80604    | 39.26 | ng    | 98       |
| 48) Acenaphthylene             | 13.97 | 152  | 497431   | 37.73 | ng    | 99       |
| 49) Dimethylphthalate          | 13.72 | 163  | 358438   | 38.43 | ng    | 99       |
| 50) 2,6-Dinitrotoluene         | 13.84 | 165  | 88446    | 38.64 | ng    | 97       |
| 51) Acenaphthene               | 14.32 | 154  | 299932   | 37.91 | ng    | 99       |
| 52) 3-Nitroaniline             | 14.17 | 138  | 65876    | 23.81 | ng    | 96       |
| 53) 2,4-Dinitrophenol          | 14.39 | 184  | 94263    | 76.15 | ng    | 99       |
| 54) Dibenzofuran               | 14.65 | 168  | 441283   | 39.54 | ng    | 99       |
| 55) 4-Nitrophenol              | 14.52 | 139  | 186471   | 89.96 | ng    | 95       |
| 56) 2,4-Dinitrotoluene         | 14.63 | 165  | 127194   | 40.57 | ng    | 96       |
| 57) Fluorene                   | 15.30 | 166  | 384031   | 39.37 | ng    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 14.89 | 232  | 70727    | 40.70 | ng    | 99       |
| 59) Diethylphthalate           | 15.08 | 149  | 377099   | 38.80 | ng    | 99       |
| 60) 4-Chlorophenyl-phenylether | 15.30 | 204  | 158465   | 38.89 | ng    | 99       |
| 61) 4-Nitroaniline             | 15.34 | 138  | 122682   | 40.09 | ng    | 98       |
| 62) Azobenzene                 | 15.59 | 77   | 364526   | 41.06 | ng    | 99       |
| 64) 4,6-Dinitro-2-methylphenol | 15.40 | 198  | 69892    | 37.91 | ng    | 98       |
| 65) n-Nitrosodiphenylamine     | 15.51 | 169  | 346043   | 37.05 | ng    | 99       |
| 66) 4-Bromophenyl-phenylether  | 16.19 | 248  | 83745    | 36.78 | ng    | 98       |
| 67) Hexachlorobenzene          | 16.31 | 284  | 87465    | 37.35 | ng    | 94       |
| 68) Atrazine                   | 16.47 | 200  | 106303   | 42.39 | ng    | 99       |
| 69) Pentachlorophenol          | 16.66 | 266  | 99201    | 87.25 | ng    | 99       |
| 70) Phenanthrene               | 17.04 | 178  | 604435   | 38.62 | ng    | 100      |
| 71) Anthracene                 | 17.13 | 178  | 612855   | 39.36 | ng    | 99       |
| 72) Carbazole                  | 17.41 | 167  | 666882   | 42.76 | ng    | 99       |
| 73) Di-n-butylphthalate        | 17.96 | 149  | 778375   | 41.87 | ng    | 100      |
| 74) Fluoranthene               | 19.06 | 202  | 708647   | 42.73 | ng    | 99       |
| 76) Benzidine                  | 19.25 | 184  | 286065   | 28.92 | ng    | 99       |
| 77) Pyrene                     | 19.42 | 202  | 745712   | 36.55 | ng    | 99       |
| 79) Butylbenzylphthalate       | 20.33 | 149  | 394353   | 39.29 | ng    | 99       |
| 80) Benzo(a)anthracene         | 21.17 | 228  | 669341   | 38.01 | ng    | 98       |
| 81) 3,3'-Dichlorobenzidine     | 21.11 | 252  | 171354   | 29.86 | ng    | 97       |
| 82) Chrysene                   | 21.22 | 228  | 632611   | 37.47 | ng    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 21.10 | 149  | 543509   | 39.81 | ng    | 98       |
| 84) Di-n-octyl phthalate       | 21.96 | 149  | 891309   | 39.19 | ng    | 99       |
| 85) Indeno(1,2,3-cd)pyrene     | 25.63 | 276  | 679433   | 36.93 | ng    | 99       |
| 87) Benzo(b)fluoranthene       | 22.72 | 252  | 638666   | 40.28 | ng    | 99       |
| 88) Benzo(k)fluoranthene       | 22.77 | 252  | 596515   | 38.55 | ng    | 98       |
| 89) Benzo(a)pyrene             | 23.29 | 252  | 600030   | 40.16 | ng    | 98       |
| 90) Dibenzo(a,h)anthracene     | 25.64 | 278  | 568712   | 39.14 | ng    | 99       |
| 91) Benzo(g,h,i)perylene       | 26.32 | 276  | 576371   | 38.99 | ng    | 99       |

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





#1

1,4-Dichlorobenzene-d4

Concen: 20.00 ng

RT: 7.59 min Scan# 835

Delta R.T. -0.01 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

Instrument :

BNA\_F

ClientSampleId :

PB82889BS

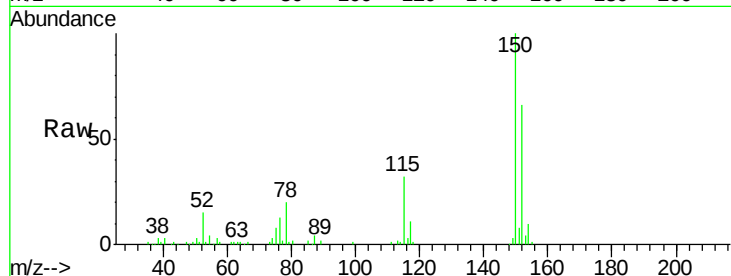
Tgt Ion:152 Resp: 54419

Ion Ratio Lower Upper

152 100

150 151.7 129.6 194.4

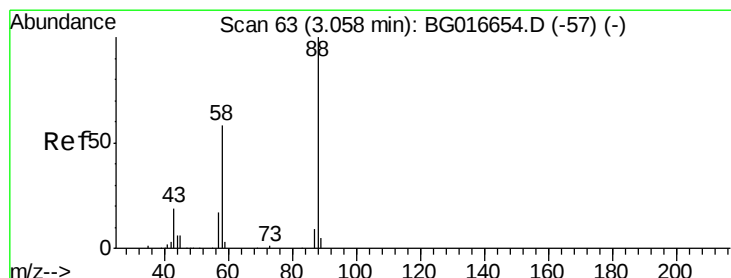
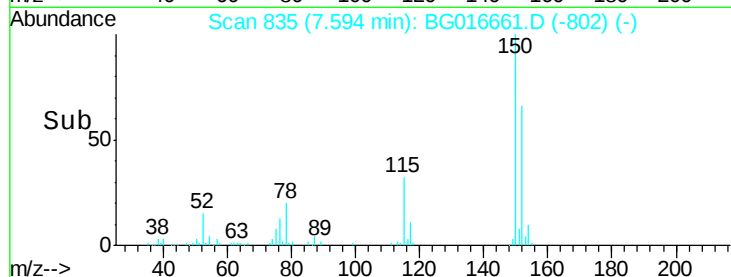
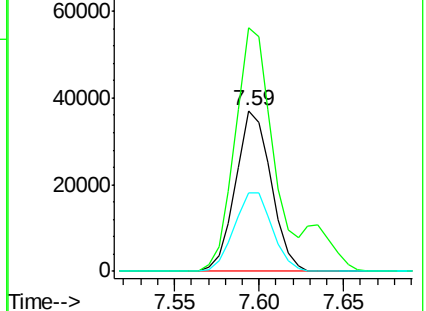
115 49.2 43.0 64.6



Abundance Ion 152.00 (151.70 to 152.70): E

Ion 150.00 (149.70 to 150.70): E

Ion 115.00 (114.70 to 115.70): E



#2

1,4-Dioxane

Concen: 33.15 ng

RT: 3.05 min Scan# 62

Delta R.T. -0.01 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

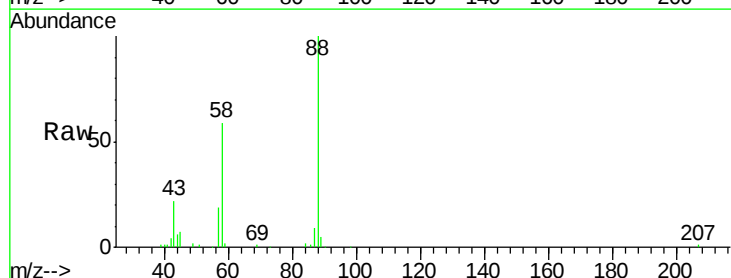
Tgt Ion: 88 Resp: 48163

Ion Ratio Lower Upper

88 100

58 58.9 46.8 70.2

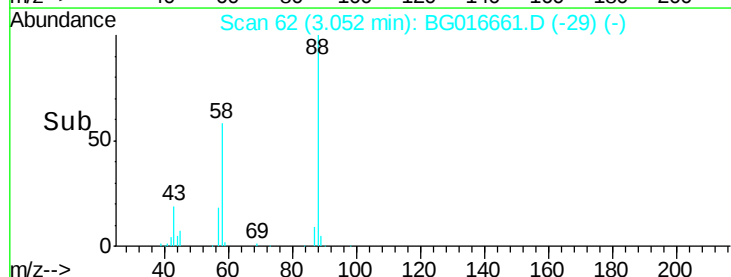
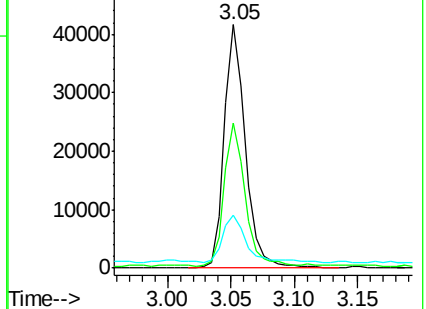
43 20.3 15.8 23.8



Abundance Ion 88.00 (87.70 to 88.70): BGC

Ion 58.00 (57.70 to 58.70): BGC

Ion 43.00 (42.70 to 43.70): BGC





#3

Pyridine

Concen: 30.57 ng

RT: 3.45 min Scan# 130

Delta R.T. -0.01 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

Instrument :

BNA\_F

ClientSampleId :

PB82889BS

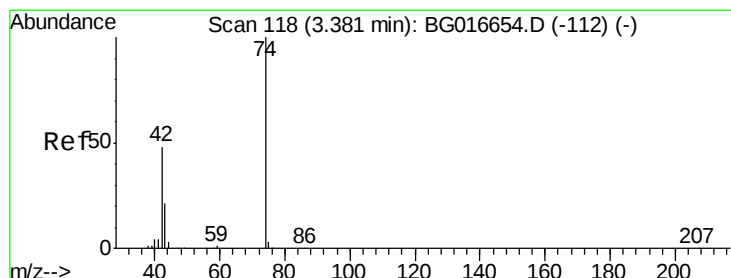
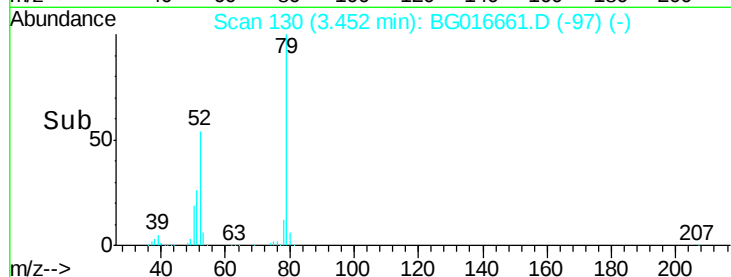
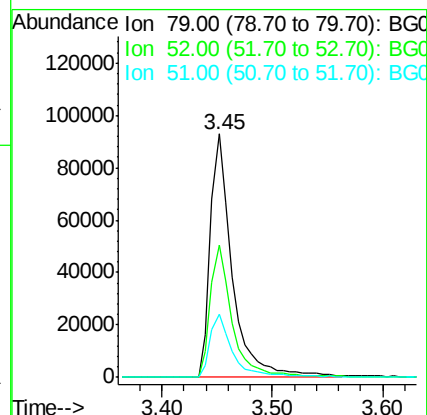
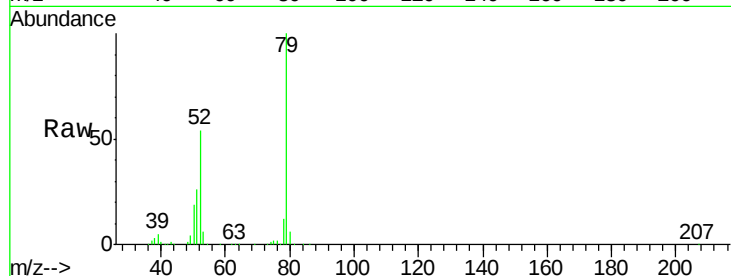
Tgt Ion: 79 Resp: 126062

Ion Ratio Lower Upper

79 100

52 54.3 42.7 64.1

51 26.1 20.5 30.7



#4

n-Nitrosodimethylamine

Concen: 34.79 ng

RT: 3.38 min Scan# 117

Delta R.T. -0.01 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

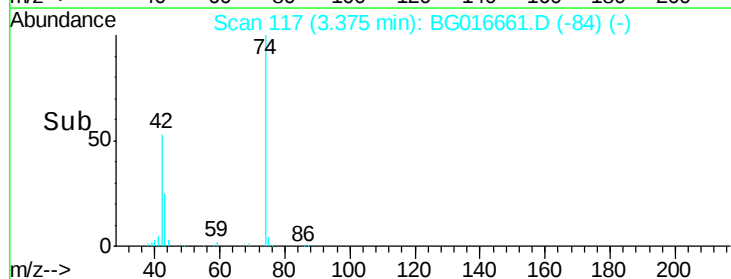
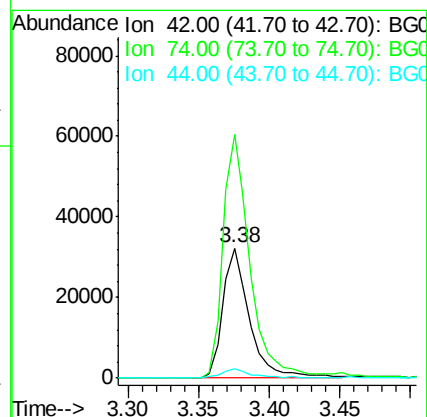
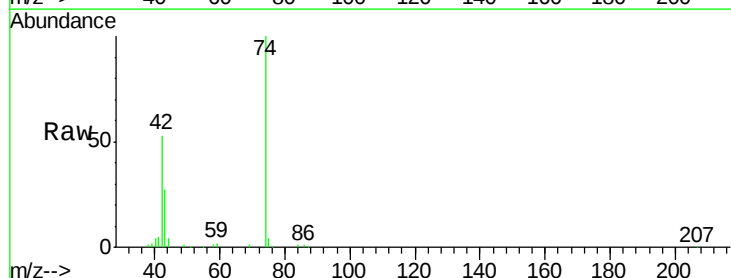
Tgt Ion: 42 Resp: 42337

Ion Ratio Lower Upper

42 100

74 187.5 165.6 248.4

44 6.7 5.0 7.6





#5

2-Fluorophenol

Concen: 119.84 ng

RT: 5.19 min Scan# 426

Delta R.T. -0.00 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

Instrument :

BNA\_F

ClientSampleId :

PB82889BS

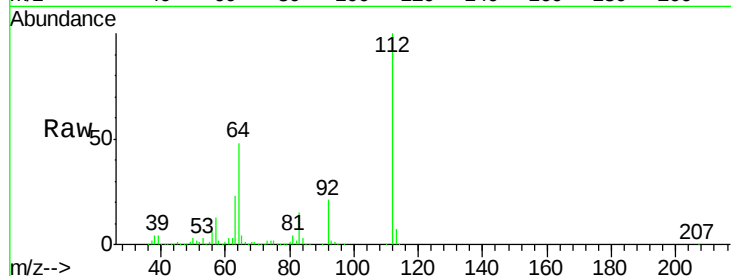
Tgt Ion: 112 Resp: 401888

Ion Ratio Lower Upper

112 100

64 47.9 38.3 57.5

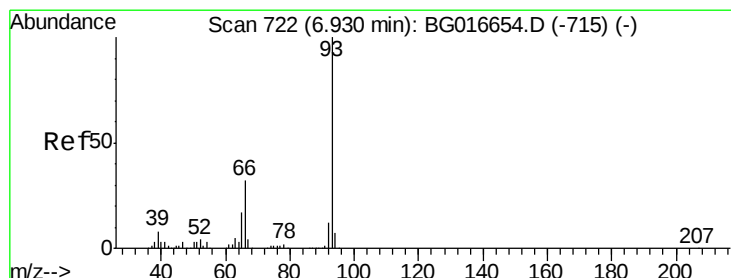
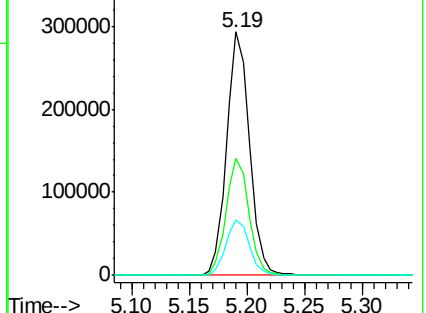
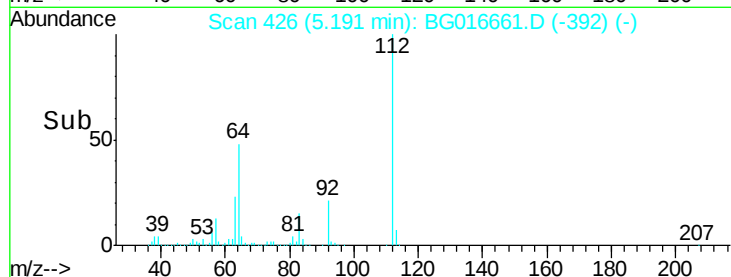
63 22.9 18.9 28.3



Abundance Ion 112.00 (111.70 to 112.70): BGC

Ion 64.00 (63.70 to 64.70): BGC

Ion 63.00 (62.70 to 63.70): BGC



#6

Aniline

Concen: 21.52 ng

RT: 6.93 min Scan# 722

Delta R.T. -0.00 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

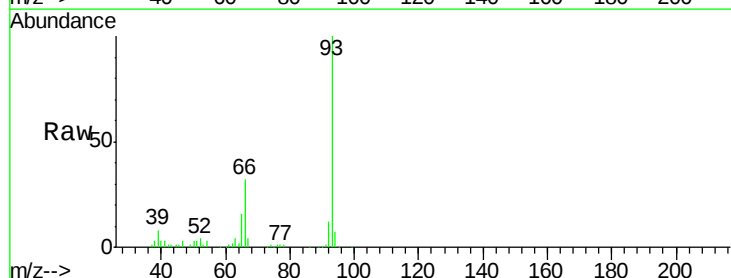
Tgt Ion: 93 Resp: 138851

Ion Ratio Lower Upper

93 100

66 31.7 25.4 38.2

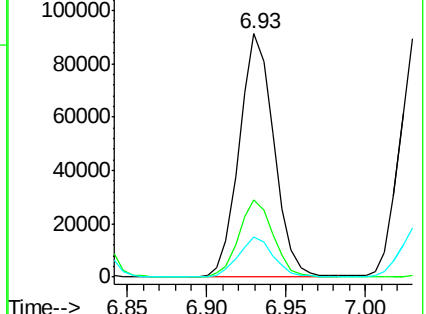
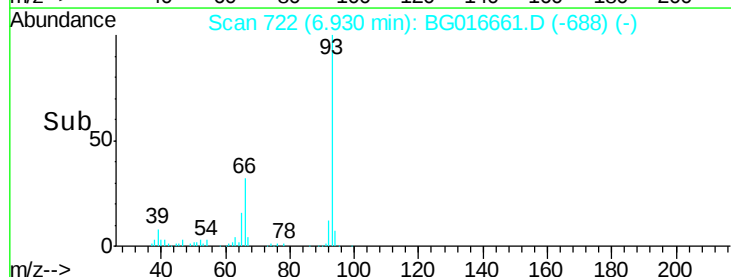
65 16.2 13.8 20.6

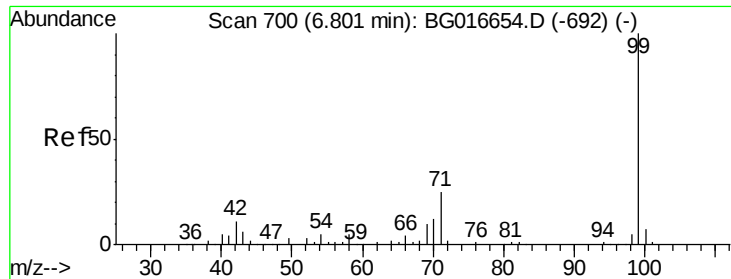


Abundance Ion 93.00 (92.70 to 93.70): BGC

Ion 66.00 (65.70 to 66.70): BGC

Ion 65.00 (64.70 to 65.70): BGC





#7

Phenol-d6

Concen: 114.70 ng

RT: 6.80 min Scan# 700

Delta R.T. -0.00 min

Lab File: BG016661.D

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ClientSampleId :

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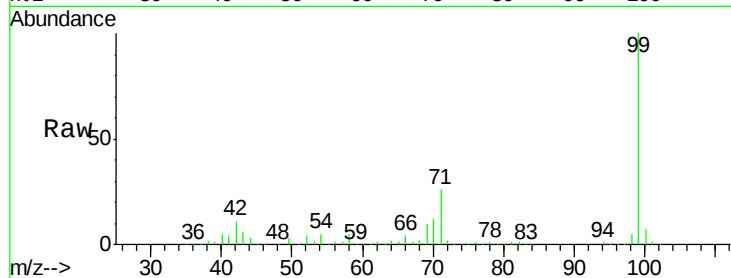
Tgt Ion: 99 Resp: 539618

Ion Ratio Lower Upper

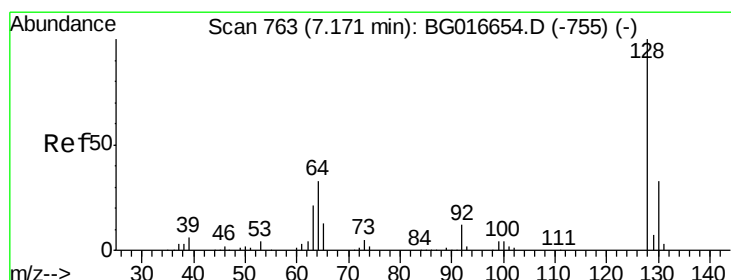
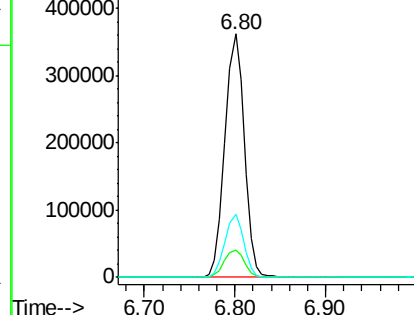
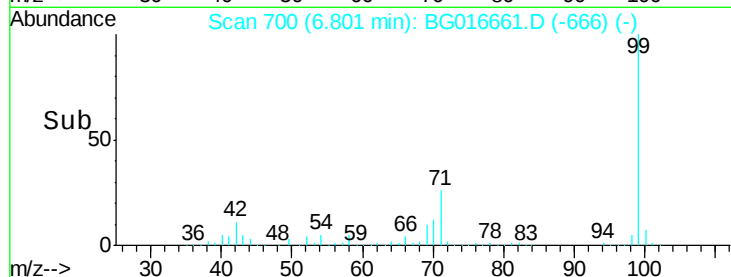
99 100

42 11.4 8.8 13.2

71 26.0 19.9 29.9



Abundance Ion 99.00 (98.70 to 99.70): BGC  
Ion 42.00 (41.70 to 42.70): BGC  
Ion 71.00 (70.70 to 71.70): BGC



#8

2-Chlorophenol

Concen: 37.67 ng

RT: 7.17 min Scan# 763

Delta R.T. -0.00 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

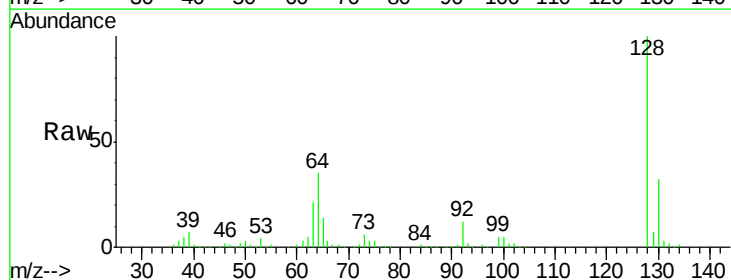
Tgt Ion: 128 Resp: 156149

Ion Ratio Lower Upper

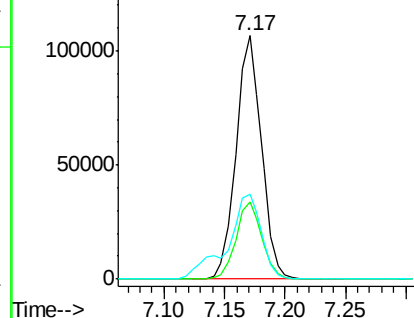
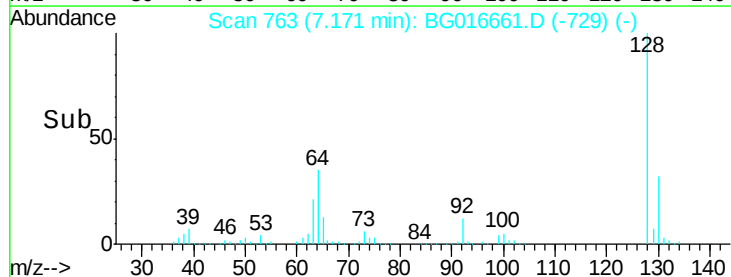
128 100

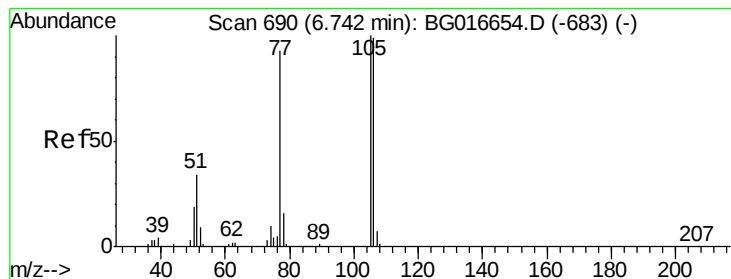
130 31.9 13.5 53.5

64 34.9 15.8 55.8



Abundance Ion 128.00 (127.70 to 128.70): BGC  
Ion 130.00 (129.70 to 130.70): BGC  
Ion 64.00 (63.70 to 64.70): BGC





#9

Benzaldehyde

Concen: 4.92 ng

RT: 6.75 min Scan# 691

Delta R.T. 0.01 min

Lab File: BG016661.D

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Instrument :

BNA\_F

ClientSampleId :

PB82889BS

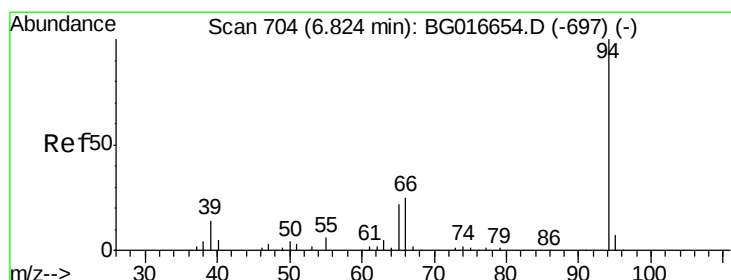
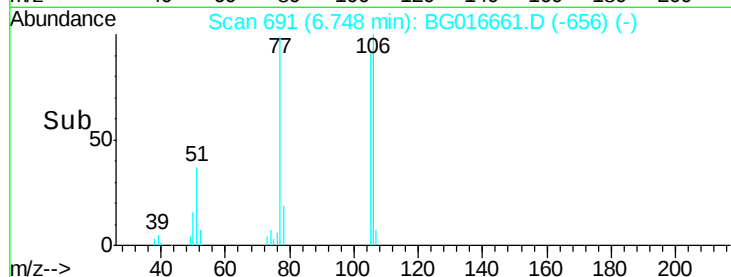
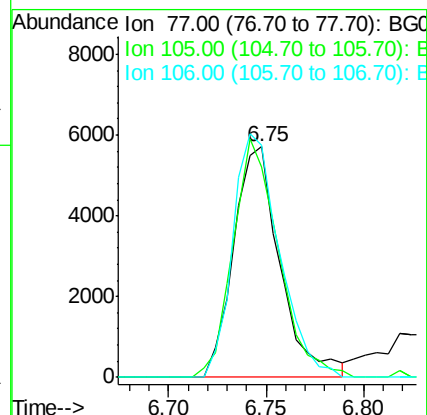
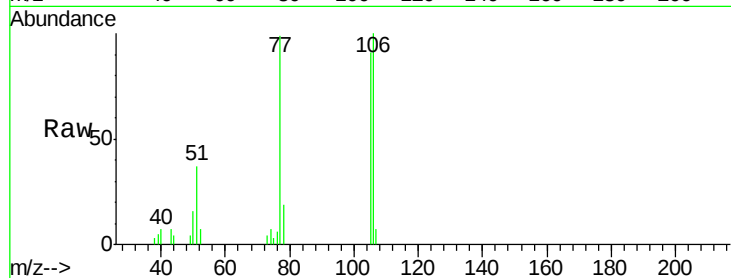
Tgt Ion: 77 Resp: 9457

Ion Ratio Lower Upper

77 100

105 91.2 88.0 128.0

106 100.6 86.6 126.6



#10

Phenol

Concen: 38.25 ng

RT: 6.82 min Scan# 704

Delta R.T. -0.00 min

Lab File: BG016661.D

Acq: 23 Apr 2015 20:18

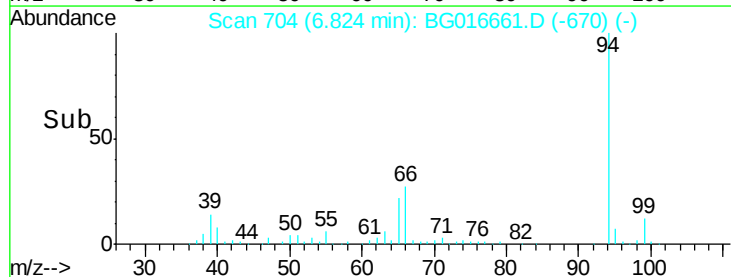
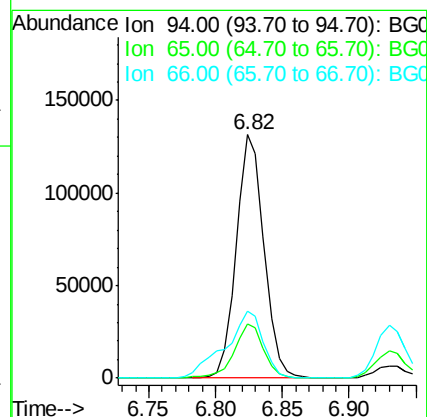
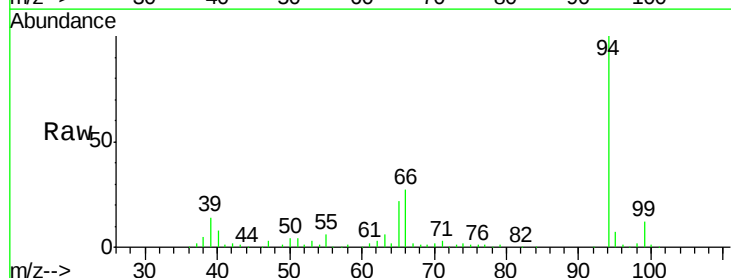
Tgt Ion: 94 Resp: 189680

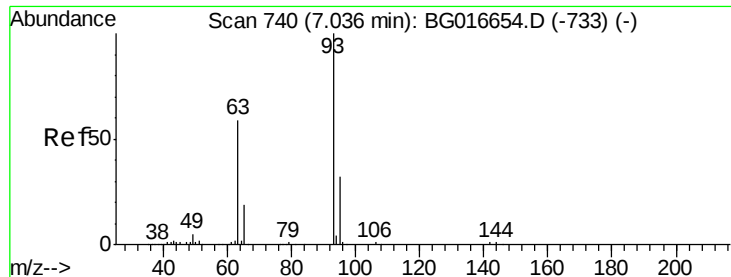
Ion Ratio Lower Upper

94 100

65 22.4 2.6 42.6

66 27.4 7.0 47.0

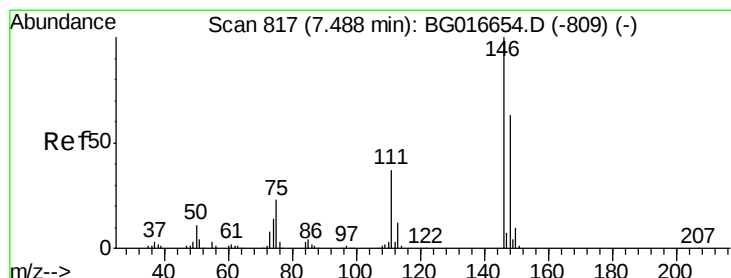
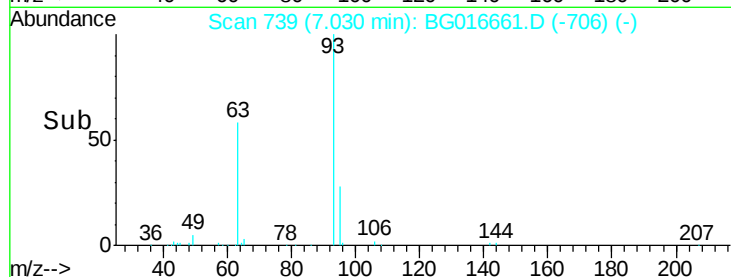
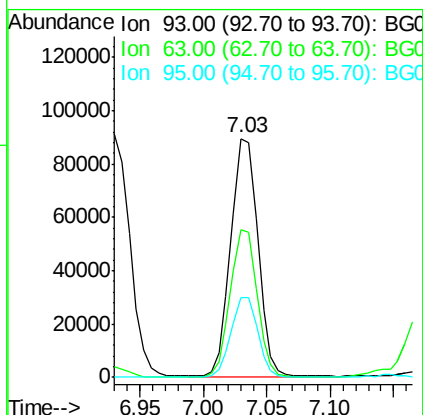
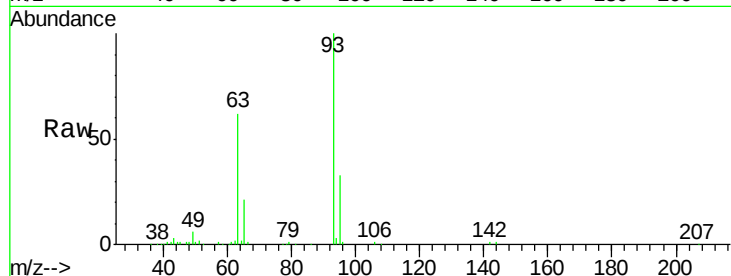




#11  
bis(2-Chloroethyl)ether  
Concen: 34.55 ng  
RT: 7.03 min Scan# 739  
Delta R.T. -0.01 min  
Lab File: BG016661.D  
Acq: 23 Apr 2015 20:18

Instrument :  
BNA\_F  
ClientSampleId :  
PB82889BS

Tgt Ion: 93 Resp: 133731  
Ion Ratio Lower Upper  
93 100  
63 62.0 39.2 79.2  
95 33.1 11.9 51.9



#12  
1,3-Dichlorobenzene  
Concen: 34.93 ng  
RT: 7.48 min Scan# 816  
Delta R.T. -0.01 min  
Lab File: BG016661.D  
Acq: 23 Apr 2015 20:18

Tgt Ion: 146 Resp: 149732  
Ion Ratio Lower Upper  
146 100  
148 61.9 50.2 75.4  
75 24.1 18.4 27.6

