

Data Path : Z:\HPCHEM1\BNA F\DATA\BF082817\  
 Data File : BF098072.D  
 Acq On : 28 Aug 2017 18:04  
 Operator : SJ/JU  
 Sample : PB101862BS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB101862BS

Quant Time: Aug 29 08:41:18 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 21 15:59:04 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.75  | 152  | 107637   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.03  | 136  | 422923   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.78  | 164  | 184894   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.26 | 188  | 355345   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.90 | 240  | 280253   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.32 | 264  | 229430   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.36  | 112 | 923912  | 130.56 | ng | 0.01  |
| 7) Phenol-d6             | 6.39  | 99  | 1252143 | 130.23 | ng | 0.00  |
| 23) Nitrobenzene-d5      | 7.31  | 82  | 766153  | 98.41  | ng | -0.01 |
| 41) 2,4,6-Tribromophenol | 10.57 | 330 | 229446  | 143.02 | ng | 0.00  |
| 44) 2-Fluorobiphenyl     | 9.10  | 172 | 1142300 | 90.77  | ng | 0.00  |
| 78) Terphenyl-d14        | 12.85 | 244 | 987945  | 73.51  | ng | 0.00  |

## Target Compounds

|                                |      |     |        |        |    | Qvalue |
|--------------------------------|------|-----|--------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.48 | 88  | 141023 | 35.734 | ng | 90     |
| 3) Pyridine                    | 3.19 | 79  | 418994 | 38.405 | ng | 87     |
| 4) n-Nitrosodimethylamine      | 3.15 | 42  | 165470 | 39.417 | ng | # 75   |
| 6) Aniline                     | 6.41 | 93  | 367573 | 27.214 | ng | 99     |
| 8) 2-Chlorophenol              | 6.53 | 128 | 321587 | 43.092 | ng | 100    |
| 9) Benzaldehyde                | 6.29 | 77  | 161231 | 26.475 | ng | 93     |
| 10) Phenol                     | 6.40 | 94  | 459696 | 40.880 | ng | 93     |
| 11) bis(2-Chloroethyl)ether    | 6.49 | 93  | 348348 | 41.043 | ng | 94     |
| 12) 1,3-Dichlorobenzene        | 6.69 | 146 | 318541 | 39.682 | ng | # 95   |
| 13) 1,4-Dichlorobenzene        | 6.76 | 146 | 320909 | 39.307 | ng | 94     |
| 14) 1,2-Dichlorobenzene        | 6.92 | 146 | 298578 | 39.663 | ng | 99     |
| 15) Benzyl Alcohol             | 6.89 | 79  | 315564 | 43.838 | ng | 98     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.02 | 45  | 448818 | 39.303 | ng | 91     |
| 17) 2-Methylphenol             | 7.00 | 107 | 289012 | 43.946 | ng | 96     |
| 18) Hexachloroethane           | 7.25 | 117 | 127363 | 39.790 | ng | # 79   |
| 19) n-Nitroso-di-n-propylamine | 7.16 | 70  | 253462 | 38.509 | ng | 89     |
| 20) 3+4-Methylphenols          | 7.16 | 107 | 346575 | 43.146 | ng | 92     |
| 22) Acetophenone               | 7.16 | 105 | 458492 | 41.037 | ng | # 90   |
| 24) Nitrobenzene               | 7.33 | 77  | 401077 | 46.270 | ng | 93     |
| 25) Isophorone                 | 7.57 | 82  | 697111 | 43.063 | ng | 96     |
| 26) 2-Nitrophenol              | 7.65 | 139 | 162719 | 51.396 | ng | # 81   |
| 27) 2,4-Dimethylphenol         | 7.69 | 122 | 291332 | 43.152 | ng | 95     |
| 28) bis(2-Chloroethoxy)methane | 7.78 | 93  | 435366 | 40.908 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.89 | 162 | 251948 | 44.957 | ng | 91     |
| 30) 1,2,4-Trichlorobenzene     | 7.97 | 180 | 251782 | 40.527 | ng | 99     |
| 31) Naphthalene                | 8.05 | 128 | 904863 | 41.212 | ng | 99     |
| 32) Benzoic acid               | 7.83 | 122 | 187716 | 39.474 | ng | 88     |
| 33) 4-Chloroaniline            | 8.10 | 127 | 206259 | 22.275 | ng | 99     |
| 34) Hexachlorobutadiene        | 8.16 | 225 | 142670 | 39.332 | ng | 97     |
| 35) Caprolactam                | 8.48 | 113 | 92537m | 48.570 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.59 | 107 | 303980 | 42.217 | ng | # 81   |
| 37) 2-Methylnaphthalene        | 8.74 | 142 | 585138 | 43.469 | ng | 97     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.91 | 216 | 229705 | 40.481 | ng | # 97   |
| 40) Hexachlorocyclopentadiene  | 8.89 | 237 | 263392 | 96.622 | ng | 99     |

Data Path : Z:\HPCHEM1\BNA F\DATA\BF082817\  
 Data File : BF098072.D  
 Acq On : 28 Aug 2017 18:04  
 Operator : SJ/JU  
 Sample : PB101862BS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB101862BS

Quant Time: Aug 29 08:41:18 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Aug 21 15:59:04 2017  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 9.02  | 196  | 169051   | 44.375 | nq    | 100      |
| 43) 2,4,5-Trichlorophenol      | 9.06  | 196  | 174086   | 46.062 | nq    | 95       |
| 45) 1,1'-Biphenyl              | 9.20  | 154  | 677218   | 40.166 | nq    | 97       |
| 46) 2-Chloronaphthalene        | 9.23  | 162  | 505917   | 40.610 | nq    | # 91     |
| 47) 2-Nitroaniline             | 9.33  | 65   | 203826   | 48.804 | nq    | 96       |
| 48) Acenaphthylene             | 9.65  | 152  | 832282   | 42.543 | nq    | 99       |
| 49) Dimethylphthalate          | 9.51  | 163  | 589596   | 43.625 | nq    | 99       |
| 50) 2,6-Dinitrotoluene         | 9.57  | 165  | 130009   | 48.191 | nq    | # 56     |
| 51) Acenaphthene               | 9.82  | 154  | 489518   | 39.675 | nq    | 99       |
| 52) 3-Nitroaniline             | 9.73  | 138  | 103949   | 29.865 | nq    | 82       |
| 53) 2,4-Dinitrophenol          | 9.85  | 184  | 123353   | 94.079 | nq    | # 77     |
| 54) Dibenzofuran               | 9.99  | 168  | 733227   | 44.341 | nq    | 99       |
| 55) 4-Nitrophenol              | 9.91  | 139  | 240311   | 86.550 | nq    | # 40     |
| 56) 2,4-Dinitrotoluene         | 9.97  | 165  | 169162   | 49.965 | nq    | # 51     |
| 57) Fluorene                   | 10.33 | 166  | 553351   | 43.282 | nq    | 95       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.11 | 232  | 143439   | 49.020 | nq    | 94       |
| 59) Diethylphthalate           | 10.21 | 149  | 601226   | 42.539 | nq    | 99       |
| 60) 4-Chlorophenyl-phenylether | 10.32 | 204  | 252000   | 42.428 | nq    | 88       |
| 61) 4-Nitroaniline             | 10.35 | 138  | 150916   | 45.620 | nq    | # 71     |
| 62) Azobenzene                 | 10.48 | 77   | 729797   | 43.471 | nq    | 92       |
| 64) 4,6-Dinitro-2-methylphenol | 10.39 | 198  | 82421    | 49.010 | nq    | # 77     |
| 65) n-Nitrosodiphenylamine     | 10.45 | 169  | 502213   | 41.503 | nq    | 98       |
| 66) 4-Bromophenyl-phenylether  | 10.81 | 248  | 155734   | 42.204 | nq    | 98       |
| 67) Hexachlorobenzene          | 10.87 | 284  | 151768   | 40.352 | nq    | # 82     |
| 68) Atrazine                   | 10.97 | 200  | 147374   | 45.924 | nq    | 98       |
| 69) Pentachlorophenol          | 11.07 | 266  | 165747   | 75.582 | nq    | 99       |
| 70) Phenanthrene               | 11.29 | 178  | 807562   | 42.648 | nq    | 99       |
| 71) Anthracene                 | 11.34 | 178  | 835974   | 43.528 | nq    | 100      |
| 72) Carbazole                  | 11.50 | 167  | 792358   | 43.464 | nq    | 99       |
| 73) Di-n-butylphthalate        | 11.83 | 149  | 925884   | 44.093 | nq    | 99       |
| 74) Fluoranthene               | 12.47 | 202  | 876232   | 44.335 | nq    | 98       |
| 76) Benzidine                  | 12.60 | 184  | 256529   | 27.917 | nq    | # 90     |
| 77) Pyrene                     | 12.70 | 202  | 898895   | 39.216 | nq    | 99       |
| 79) Butylbenzylphthalate       | 13.32 | 149  | 396742   | 45.145 | nq    | # 70     |
| 80) Benzo(a)anthracene         | 13.89 | 228  | 689557   | 41.053 | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.85 | 252  | 185353   | 32.702 | nq    | # 96     |
| 82) Chrysene                   | 13.93 | 228  | 667844   | 39.969 | nq    | 98       |
| 83) Bis(2-ethylhexyl)phthalate | 13.88 | 149  | 457749   | 47.005 | nq    | 98       |
| 84) Di-n-octyl phthalate       | 14.49 | 149  | 806561   | 47.601 | nq    | 98       |
| 85) Indeno(1,2,3-cd)pyrene     | 16.71 | 276  | 605129   | 49.231 | nq    | 94       |
| 87) Benzo(b)fluoranthene       | 14.92 | 252  | 611075   | 42.255 | nq    | 97       |
| 88) Benzo(k)fluoranthene       | 14.94 | 252  | 583033   | 42.912 | nq    | # 94     |
| 89) Benzo(a)pyrene             | 15.26 | 252  | 576066   | 44.996 | nq    | 99       |
| 90) Dibenzo(a,h)anthracene     | 16.72 | 278  | 488930   | 46.910 | nq    | 99       |
| 91) Benzo(g,h,i)perylene       | 17.13 | 276  | 520698   | 47.879 | nq    | 93       |

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

```
Data Path : Z:\HPCHEM1\BNA F\DATA\BF082817\
Data File : BF098072.D
Acq On    : 28 Aug 2017  18:04
Operator  : SJ/JU
Sample    : PB101862BS
Misc      :
ALS Vial  : 3      Sample Multiplier: 1
```

**Instrument :**  
BNA\_F  
**ClientSampleId :**  
PB101862BS

Quant Time: Aug 29 08:41:18 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF081517.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Aug 21 15:59:04 2017  
Response via : Initial Calibration

