

Data Path : Z:\HPCHEM1\BNA F\DATA\BF122316\  
 Data File : BF091927.D  
 Acq On : 23 Dec 2016 16:50  
 Operator : UM/SJ  
 Sample : H6156-25MSD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :

Quant Time: Dec 26 10:10:29 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF122116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 26 10:05:29 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.74  | 152  | 186501   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 8.03  | 136  | 749140   | 20.00 | ng    | -0.01    |
| 38) Acenaphthene-d10      | 9.78  | 164  | 425300   | 20.00 | ng    | -0.01    |
| 63) Phenanthrene-d10      | 11.26 | 188  | 709624   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.89 | 240  | 507833   | 20.00 | ng    | -0.01    |
| 86) Perylene-d12          | 15.29 | 264  | 403764   | 20.00 | ng    | -0.01    |

|                             |       |     |         |        |    |       |
|-----------------------------|-------|-----|---------|--------|----|-------|
| System Monitoring Compounds |       |     |         |        |    |       |
| 5) 2-Fluorophenol           | 5.39  | 112 | 1490446 | 133.44 | ng | 0.05  |
| 7) Phenol-d6                | 6.44  | 99  | 1786010 | 130.97 | ng | 0.03  |
| 23) Nitrobenzene-d5         | 7.31  | 82  | 1397009 | 103.69 | ng | -0.01 |
| 41) 2,4,6-Tribromophenol    | 10.58 | 330 | 544295  | 154.64 | ng | 0.00  |
| 44) 2-Fluorobiphenyl        | 9.10  | 172 | 2178609 | 108.53 | ng | -0.01 |
| 78) Terphenyl-d14           | 12.84 | 244 | 2026483 | 96.78  | ng | -0.01 |

|                                |      |     |         |        |    |        |
|--------------------------------|------|-----|---------|--------|----|--------|
| Target Compounds               |      |     |         |        |    | Qvalue |
| 2) 1,4-Dioxane                 | 2.34 | 88  | 215566  | 39.20  | ng | 99     |
| 3) Pyridine                    | 3.01 | 79  | 577308  | 30.08  | ng | 98     |
| 4) n-Nitrosodimethylamine      | 2.98 | 42  | 343729  | 47.48  | ng | 99     |
| 6) Aniline                     | 6.41 | 93  | 301919  | 17.05  | ng | # 45   |
| 8) 2-Chlorophenol              | 6.54 | 128 | 572642  | 45.07  | ng | 97     |
| 9) Benzaldehyde                | 6.28 | 77  | 79184   | 7.74   | ng | 96     |
| 10) Phenol                     | 6.45 | 94  | 760096  | 48.91  | ng | # 71   |
| 11) bis(2-Chloroethyl)ether    | 6.49 | 93  | 672311  | 54.38  | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 6.68 | 146 | 610197  | 44.99  | ng | # 95   |
| 13) 1,4-Dichlorobenzene        | 6.76 | 146 | 624421  | 45.23  | ng | 95     |
| 14) 1,2-Dichlorobenzene        | 6.91 | 146 | 499271  | 41.68  | ng | 95     |
| 15) Benzyl Alcohol             | 6.91 | 79  | 571397  | 53.93  | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.02 | 45  | 877856  | 47.68  | ng | 93     |
| 17) 2-Methylphenol             | 7.05 | 107 | 518064  | 50.70  | ng | 98     |
| 18) Hexachloroethane           | 7.25 | 117 | 236455  | 46.20  | ng | 98     |
| 19) n-Nitroso-di-n-propylamine | 7.17 | 70  | 517092  | 57.00  | ng | # 90   |
| 20) 3+4-Methylphenols          | 7.21 | 107 | 718683  | 58.97  | ng | # 72   |
| 22) Acetophenone               | 7.16 | 105 | 977608  | 52.91  | ng | # 91   |
| 24) Nitrobenzene               | 7.33 | 77  | 755377  | 52.64  | ng | 97     |
| 25) Isophorone                 | 7.57 | 82  | 1250017 | 50.29  | ng | 95     |
| 26) 2-Nitrophenol              | 7.65 | 139 | 366994  | 51.86  | ng | # 87   |
| 27) 2,4-Dimethylphenol         | 7.72 | 122 | 568968  | 48.48  | ng | 96     |
| 28) bis(2-Chloroethoxy)methane | 7.79 | 93  | 790138  | 52.42  | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.92 | 162 | 546195  | 54.96  | ng | 94     |
| 30) 1,2,4-Trichlorobenzene     | 7.97 | 180 | 541719  | 49.74  | ng | # 96   |
| 31) Naphthalene                | 8.06 | 128 | 7012922 | 204.54 | ng | 97     |
| 32) Benzoic acid               | 7.88 | 122 | 362222m | 41.61  | ng |        |
| 33) 4-Chloroaniline            | 8.11 | 127 | 212625  | 13.75  | ng | 99     |
| 34) Hexachlorobutadiene        | 8.17 | 225 | 279941  | 48.70  | ng | 99     |
| 35) Caprolactam                | 8.49 | 113 | 120887m | 37.02  | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.62 | 107 | 593508  | 51.90  | ng | 100    |
| 37) 2-Methylnaphthalene        | 8.74 | 142 | 1427635 | 60.72  | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.91 | 216 | 514150  | 47.85  | ng | 97     |
| 40) Hexachlorocyclopentadiene  | 8.90 | 237 | 405578  | 84.52  | ng | 99     |

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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Dec 26 10:05:29 2016  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 9.04  | 196  | 356623   | 47.46  | nq    | 97       |
| 43) 2,4,5-Trichlorophenol      | 9.08  | 196  | 343958   | 44.48  | nq    | 92       |
| 45) 1,1'-Biphenyl              | 9.21  | 154  | 1520325  | 52.21  | nq    | 98       |
| 46) 2-Chloronaphthalene        | 9.23  | 162  | 1097857  | 47.61  | nq    | 95       |
| 47) 2-Nitroaniline             | 9.33  | 65   | 332786   | 40.53  | nq    | 96       |
| 48) Acenaphthylene             | 9.64  | 152  | 1652789  | 46.60  | nq    | 99       |
| 49) Dimethylphthalate          | 9.52  | 163  | 1299707  | 47.78  | nq    | 98       |
| 50) 2,6-Dinitrotoluene         | 9.57  | 165  | 290695   | 48.83  | nq    | # 61     |
| 51) Acenaphthene               | 9.81  | 154  | 1025024  | 42.63  | nq    | 99       |
| 52) 3-Nitroaniline             | 9.74  | 138  | 148239   | 20.12  | nq    | 95       |
| 53) 2,4-Dinitrophenol          | 9.86  | 184  | 327402   | 98.83  | nq    | # 68     |
| 54) Dibenzofuran               | 9.98  | 168  | 1382056  | 42.56  | nq    | 96       |
| 55) 4-Nitrophenol              | 9.96  | 139  | 525731   | 105.09 | nq    | # 71     |
| 56) 2,4-Dinitrotoluene         | 9.98  | 165  | 405417   | 54.25  | nq    | 94       |
| 57) Fluorene                   | 10.33 | 166  | 1117185  | 47.29  | nq    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.12 | 232  | 306829   | 50.16  | nq    | 98       |
| 59) Diethylphthalate           | 10.21 | 149  | 1274812  | 48.26  | nq    | 99       |
| 60) 4-Chlorophenyl-phenylether | 10.33 | 204  | 536156   | 51.83  | nq    | # 78     |
| 61) 4-Nitroaniline             | 10.36 | 138  | 242560   | 31.77  | nq    | 94       |
| 62) Azobenzene                 | 10.48 | 77   | 1463651  | 50.32  | nq    | 97       |
| 64) 4,6-Dinitro-2-methylphenol | 10.40 | 198  | 220061   | 51.28  | nq    | 86       |
| 65) n-Nitrosodiphenylamine     | 10.44 | 169  | 1059492  | 50.32  | nq    | 99       |
| 66) 4-Bromophenyl-phenylether  | 10.81 | 248  | 343133   | 46.48  | nq    | 97       |
| 67) Hexachlorobenzene          | 10.88 | 284  | 371463   | 47.08  | nq    | # 94     |
| 68) Atrazine                   | 10.98 | 200  | 308675   | 45.44  | nq    | 97       |
| 69) Pentachlorophenol          | 11.08 | 266  | 372124   | 96.12  | nq    | 98       |
| 70) Phenanthrene               | 11.29 | 178  | 1831422  | 47.60  | nq    | 99       |
| 71) Anthracene                 | 11.33 | 178  | 1772043  | 57.22  | nq    | 99       |
| 72) Carbazole                  | 11.50 | 167  | 1756162  | 49.26  | nq    | 98       |
| 73) Di-n-butylphthalate        | 11.82 | 149  | 1917159  | 53.34  | nq    | 99       |
| 74) Fluoranthene               | 12.46 | 202  | 1760249  | 52.81  | nq    | 98       |
| 76) Benzidine                  | 12.59 | 184  | 160734   | 8.98   | nq    | 95       |
| 77) Pyrene                     | 12.69 | 202  | 1690187  | 45.36  | nq    | 100      |
| 79) Butylbenzylphthalate       | 13.32 | 149  | 861659   | 50.85  | nq    | 94       |
| 80) Benzo(a)anthracene         | 13.88 | 228  | 1347359  | 47.00  | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.85 | 252  | 227138   | 20.90  | nq    | 98       |
| 82) Chrysene                   | 13.92 | 228  | 1243518  | 43.25  | nq    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 13.88 | 149  | 1026793  | 51.45  | nq    | # 100    |
| 84) Di-n-octyl phthalate       | 14.49 | 149  | 1798460  | 48.65  | nq    | 100      |
| 85) Indeno(1,2,3-cd)pyrene     | 16.63 | 276  | 1157692  | 46.47  | nq    | 99       |
| 87) Benzo(b)fluoranthene       | 14.90 | 252  | 1308680m | 52.06  | nq    |          |
| 88) Benzo(k)fluoranthene       | 14.92 | 252  | 962714m  | 44.91  | nq    |          |
| 89) Benzo(a)pyrene             | 15.23 | 252  | 1088864  | 48.80  | nq    | 98       |
| 90) Dibenzo(a,h)anthracene     | 16.64 | 278  | 956164   | 52.14  | nq    | 97       |
| 91) Benzo(g,h,i)perylene       | 17.03 | 276  | 1004237  | 52.66  | nq    | 98       |

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

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