

Data Path : Z:\HPCHEM1\BNA F\DATA\BF042017\  
 Data File : BF094542.D  
 Acq On : 20 Apr 2017 14:05  
 Operator : SJ/MA  
 Sample : I2744-04MSD  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 SB-9(18-20)20170418MSD

Manual Integrations  
 APPROVED

mohammad  
 4/21/2017 11:36:01 AM

Quant Time: Apr 20 17:58:20 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF041717.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Apr 17 14:59:23 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 5.77  | 152  | 116899   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.26  | 136  | 472102   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.40  | 164  | 219337   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.21 | 188  | 400769   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 14.47 | 240  | 318494   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 16.08 | 264  | 250767   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 4.32  | 112 | 979421  | 139.00 | ng | 0.02 |
| 7) Phenol-d6             | 5.40  | 99  | 1211598 | 145.86 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 6.42  | 82  | 771657  | 100.93 | ng | 0.00 |
| 41) 2,4,6-Tribromophenol | 10.38 | 330 | 273407  | 159.36 | ng | 0.00 |
| 44) 2-Fluorobiphenyl     | 8.58  | 172 | 1367252 | 91.72  | ng | 0.00 |
| 78) Terphenyl-d14        | 13.19 | 244 | 1287353 | 108.04 | ng | 0.00 |

## Target Compounds

|                                |      |     |         |        |    | Qvalue |
|--------------------------------|------|-----|---------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.12 | 88  | 137755  | 33.62  | ng | 96     |
| 3) Pyridine                    | 2.65 | 79  | 359194  | 40.11  | ng | 99     |
| 4) n-Nitrosodimethylamine      | 2.59 | 42  | 171236  | 46.21  | ng | 90     |
| 6) Aniline                     | 5.40 | 93  | 348604  | 31.58  | ng | # 81   |
| 8) 2-Chlorophenol              | 5.54 | 128 | 388555  | 48.46  | ng | 97     |
| 9) Benzaldehyde                | 5.27 | 77  | 73646   | 11.65  | ng | 97     |
| 10) Phenol                     | 5.42 | 94  | 512036  | 50.18  | ng | 90     |
| 11) bis(2-Chloroethyl)ether    | 5.48 | 93  | 357472  | 47.95  | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 5.70 | 146 | 406583  | 45.77  | ng | 99     |
| 13) 1,4-Dichlorobenzene        | 5.79 | 146 | 413436  | 46.26  | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 5.96 | 146 | 384056  | 46.65  | ng | 98     |
| 15) Benzyl Alcohol             | 5.95 | 79  | 300609  | 48.78  | ng | 100    |
| 16) 2,2'-oxybis(1-Chloropropan | 6.10 | 45  | 472066  | 48.30  | ng | 72     |
| 17) 2-Methylphenol             | 6.09 | 107 | 308962  | 48.93  | ng | # 94   |
| 18) Hexachloroethane           | 6.35 | 117 | 141730  | 46.26  | ng | # 86   |
| 19) n-Nitroso-di-n-propylamine | 6.26 | 70  | 276569  | 50.25  | ng | 97     |
| 20) 3+4-Methylphenols          | 6.28 | 107 | 434460  | 50.63  | ng | # 62   |
| 22) Acetophenone               | 6.25 | 105 | 554445  | 48.30  | ng | # 85   |
| 24) Nitrobenzene               | 6.44 | 77  | 392340  | 48.73  | ng | 95     |
| 25) Isophorone                 | 6.73 | 82  | 723295  | 51.03  | ng | 95     |
| 26) 2-Nitrophenol              | 6.81 | 139 | 221604  | 51.23  | ng | 95     |
| 27) 2,4-Dimethylphenol         | 6.89 | 122 | 343228  | 48.85  | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 6.99 | 93  | 464569  | 50.67  | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.11 | 162 | 338236  | 51.75  | ng | 97     |
| 30) 1,2,4-Trichlorobenzene     | 7.20 | 180 | 322485  | 47.72  | ng | 99     |
| 31) Naphthalene                | 7.29 | 128 | 1104298 | 48.66  | ng | 100    |
| 32) Benzoic acid               | 7.01 | 122 | 19811   | 5.33   | ng | 94     |
| 33) 4-Chloroaniline            | 7.37 | 127 | 90848   | 9.62   | ng | # 91   |
| 34) Hexachlorobutadiene        | 7.44 | 225 | 162755  | 48.31  | ng | 97     |
| 35) Caprolactam                | 7.83 | 113 | 110563m | 53.85  | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.00 | 107 | 354613  | 51.77  | ng | 89     |
| 37) 2-Methylnaphthalene        | 8.13 | 142 | 763961  | 49.20  | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.34 | 216 | 296521  | 47.48  | ng | 99     |
| 40) Hexachlorocyclopentadiene  | 8.32 | 237 | 277356  | 109.77 | ng | 98     |

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|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 8.49  | 196  | 227409   | 51.85  | nq    | 97       |
| 43) 2,4,5-Trichlorophenol      | 8.55  | 196  | 228805   | 50.80  | nq    | 92       |
| 45) 1,1'-Biphenyl              | 8.70  | 154  | 819574   | 45.73  | nq    | 97       |
| 46) 2-Chloronaphthalene        | 8.72  | 162  | 682326   | 47.88  | nq    | 96       |
| 47) 2-Nitroaniline             | 8.86  | 65   | 207013   | 50.50  | nq    | # 79     |
| 48) Acenaphthylene             | 9.22  | 152  | 1077648  | 48.51  | nq    | 99       |
| 49) Dimethylphthalate          | 9.10  | 163  | 1004335  | 61.44  | nq    | 99       |
| 50) 2,6-Dinitrotoluene         | 9.17  | 165  | 190943   | 52.04  | nq    | 91       |
| 51) Acenaphthene               | 9.44  | 154  | 653918   | 49.15  | nq    | 99       |
| 52) 3-Nitroaniline             | 9.37  | 138  | 106936   | 25.19  | nq    | 88       |
| 53) 2,4-Dinitrophenol          | 9.51  | 184  | 118977   | 61.22  | nq    | # 68     |
| 54) Dibenzofuran               | 9.65  | 168  | 962476   | 49.77  | nq    | 99       |
| 55) 4-Nitrophenol              | 9.63  | 139  | 359394m  | 119.84 | nq    |          |
| 56) 2,4-Dinitrotoluene         | 9.66  | 165  | 249830   | 55.49  | nq    | # 80     |
| 57) Fluorene                   | 10.07 | 166  | 758685   | 50.38  | nq    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 9.82  | 232  | 177424   | 54.96  | nq    | 98       |
| 59) Diethylphthalate           | 9.97  | 149  | 839166   | 54.41  | nq    | 98       |
| 60) 4-Chlorophenyl-phenylether | 10.08 | 204  | 331393   | 52.88  | nq    | 96       |
| 61) 4-Nitroaniline             | 10.12 | 138  | 202532   | 46.93  | nq    | 97       |
| 62) Azobenzene                 | 10.28 | 77   | 821222   | 54.84  | nq    | 94       |
| 64) 4,6-Dinitro-2-methylphenol | 10.17 | 198  | 132168   | 50.33  | nq    | # 72     |
| 65) n-Nitrosodiphenylamine     | 10.23 | 169  | 729004   | 52.30  | nq    | 98       |
| 66) 4-Bromophenyl-phenylether  | 10.68 | 248  | 210541   | 52.91  | nq    | 98       |
| 67) Hexachlorobenzene          | 10.75 | 284  | 207838   | 51.82  | nq    | # 84     |
| 68) Atrazine                   | 10.91 | 200  | 215840   | 51.76  | nq    | 98       |
| 69) Pentachlorophenol          | 11.00 | 266  | 192139   | 120.66 | nq    | 97       |
| 70) Phenanthrene               | 11.25 | 178  | 1098264  | 48.66  | nq    | 98       |
| 71) Anthracene                 | 11.31 | 178  | 1141863  | 48.91  | nq    | 98       |
| 72) Carbazole                  | 11.52 | 167  | 1107615  | 50.55  | nq    | 99       |
| 73) Di-n-butylphthalate        | 11.97 | 149  | 1343637  | 55.69  | nq    | 98       |
| 74) Fluoranthene               | 12.71 | 202  | 1174502  | 50.21  | nq    | 100      |
| 76) Benzidine                  | 12.88 | 184  | 329213   | 25.53  | nq    | # 92     |
| 77) Pyrene                     | 12.98 | 202  | 1155690  | 51.94  | nq    | 100      |
| 79) Butylbenzylphthalate       | 13.81 | 149  | 571883   | 58.64  | nq    | 89       |
| 80) Benzo(a)anthracene         | 14.45 | 228  | 936627   | 50.60  | nq    | 100      |
| 81) 3,3'-Dichlorobenzidine     | 14.43 | 252  | 203564   | 31.06  | nq    | # 96     |
| 82) Chrysene                   | 14.50 | 228  | 851302   | 50.32  | nq    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 14.52 | 149  | 829753   | 63.37  | nq    | # 98     |
| 84) Di-n-octyl phthalate       | 15.27 | 149  | 1233289  | 56.15  | nq    | 97       |
| 85) Indeno(1,2,3-cd)pyrene     | 17.37 | 276  | 782314   | 48.60  | nq    | 99       |
| 87) Benzo(b)fluoranthene       | 15.69 | 252  | 741620   | 48.35  | nq    | 98       |
| 88) Benzo(k)fluoranthene       | 15.72 | 252  | 734097   | 50.57  | nq    | 96       |
| 89) Benzo(a)pyrene             | 16.03 | 252  | 714533   | 50.07  | nq    | 97       |
| 90) Dibenzo(a,h)anthracene     | 17.38 | 278  | 639779   | 53.99  | nq    | 98       |
| 91) Benzo(g,h,i)perylene       | 17.74 | 276  | 661008   | 54.79  | nq    | 98       |

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

