

Data Path : Z:\HPCHEM1\BNA F\DATA\BF020216\  
 Data File : BF084759.D  
 Acq On : 2 Feb 2016 21:27  
 Operator : SJ/IZ  
 Sample : H1314-02MSD  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 IMPACT-PS-001MSD

Manual Integrations  
 APPROVED

MMDadoda  
 2/3/2016 6:25:38 PM

Quant Time: Feb 03 02:44:04 2016  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF020116.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Feb 01 14:55:11 2016  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.69  | 152  | 175590   | 20.00 | ng    | -0.03    |
| 21) Naphthalene-d8        | 7.98  | 136  | 697721   | 20.00 | ng    | -0.03    |
| 38) Acenaphthene-d10      | 9.74  | 164  | 348225   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10      | 11.22 | 188  | 625758   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12          | 13.85 | 240  | 416645   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12          | 15.23 | 264  | 357828   | 20.00 | ng    | -0.02    |

## System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.30  | 112 | 1493016 | 132.44 | ng | -0.01 |
| 7) Phenol-d6             | 6.36  | 99  | 1892779 | 135.44 | ng | -0.01 |
| 23) Nitrobenzene-d5      | 7.28  | 82  | 1227911 | 99.14  | ng | -0.02 |
| 41) 2,4,6-Tribromophenol | 10.53 | 330 | 479280  | 131.95 | ng | -0.02 |
| 44) 2-Fluorobiphenyl     | 9.07  | 172 | 1930337 | 98.67  | ng | -0.02 |
| 78) Terphenyl-d14        | 12.81 | 244 | 1893615 | 102.99 | ng | -0.02 |

## Target Compounds

|                                |      |     |         |       |    | Qvalue |
|--------------------------------|------|-----|---------|-------|----|--------|
| 2) 1,4-Dioxane                 | 2.26 | 88  | 183152  | 37.09 | ng | # 75   |
| 3) Pyridine                    | 2.92 | 79  | 505430  | 39.29 | ng | # 76   |
| 4) n-Nitrosodimethylamine      | 2.89 | 42  | 300210  | 45.12 | ng | 82     |
| 6) Aniline                     | 6.36 | 93  | 499279  | 29.20 | ng | # 60   |
| 8) 2-Chlorophenol              | 6.49 | 128 | 561181  | 43.98 | ng | 92     |
| 9) Benzaldehyde                | 6.24 | 77  | 215727  | 26.14 | ng | 92     |
| 10) Phenol                     | 6.37 | 94  | 777129  | 49.64 | ng | 95     |
| 11) bis(2-Chloroethyl)ether    | 6.44 | 93  | 515613m | 42.23 | ng |        |
| 12) 1,3-Dichlorobenzene        | 6.64 | 146 | 543885  | 40.34 | ng | # 93   |
| 13) 1,4-Dichlorobenzene        | 6.72 | 146 | 575554  | 42.71 | ng | 96     |
| 14) 1,2-Dichlorobenzene        | 6.88 | 146 | 514678  | 41.00 | ng | 94     |
| 15) Benzyl Alcohol             | 6.85 | 79  | 440642  | 45.66 | ng | 90     |
| 16) 2,2'-oxybis(1-Chloropropan | 6.99 | 45  | 840321  | 40.92 | ng | 88     |
| 17) 2-Methylphenol             | 6.98 | 107 | 469670  | 46.54 | ng | # 91   |
| 18) Hexachloroethane           | 7.21 | 117 | 216162  | 41.65 | ng | 93     |
| 19) n-Nitroso-di-n-propylamine | 7.13 | 70  | 381758  | 43.58 | ng | # 75   |
| 20) 3+4-Methylphenols          | 7.13 | 107 | 578840  | 46.21 | ng | # 69   |
| 22) Acetophenone               | 7.12 | 105 | 803723  | 43.71 | ng | 99     |
| 24) Nitrobenzene               | 7.29 | 77  | 532613  | 40.16 | ng | 96     |
| 25) Isophorone                 | 7.54 | 82  | 1090002 | 45.26 | ng | 97     |
| 26) 2-Nitrophenol              | 7.61 | 139 | 310339  | 47.44 | ng | # 87   |
| 27) 2,4-Dimethylphenol         | 7.66 | 122 | 492729  | 43.30 | ng | 89     |
| 28) bis(2-Chloroethoxy)methane | 7.74 | 93  | 658119  | 46.06 | ng | 100    |
| 29) 2,4-Dichlorophenol         | 7.86 | 162 | 485952  | 49.92 | ng | 95     |
| 30) 1,2,4-Trichlorobenzene     | 7.93 | 180 | 479692  | 43.62 | ng | 97     |
| 31) Naphthalene                | 8.01 | 128 | 1494397 | 42.70 | ng | 99     |
| 32) Benzoic acid               | 7.77 | 122 | 106926  | 14.69 | ng | 95     |
| 33) 4-Chloroaniline            | 8.06 | 127 | 303559  | 20.97 | ng | 96     |
| 34) Hexachlorobutadiene        | 8.13 | 225 | 283073  | 44.65 | ng | 98     |
| 35) Caprolactam                | 8.45 | 113 | 154976m | 51.65 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.57 | 107 | 552387  | 49.74 | ng | 98     |
| 37) 2-Methylnaphthalene        | 8.70 | 142 | 1147773 | 52.40 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.86 | 216 | 419046  | 37.89 | ng | 97     |
| 40) Hexachlorocyclopentadiene  | 8.85 | 237 | 425281  | 84.96 | ng | 97     |

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| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 8.99  | 196  | 323430   | 45.39 | nq    | 94       |
| 43) 2,4,5-Trichlorophenol      | 9.04  | 196  | 330415   | 45.64 | nq    | 95       |
| 45) 1,1'-Biphenyl              | 9.17  | 154  | 1284194  | 41.29 | nq    | 94       |
| 46) 2-Chloronaphthalene        | 9.18  | 162  | 949227   | 41.44 | nq    | 97       |
| 47) 2-Nitroaniline             | 9.29  | 65   | 302718   | 41.74 | nq    | 98       |
| 48) Acenaphthylene             | 9.61  | 152  | 1528454  | 43.97 | nq    | 99       |
| 49) Dimethylphthalate          | 9.48  | 163  | 1379053  | 52.00 | nq    | # 91     |
| 50) 2,6-Dinitrotoluene         | 9.54  | 165  | 269748   | 46.56 | nq    | # 70     |
| 51) Acenaphthene               | 9.78  | 154  | 986813   | 43.64 | nq    | 97       |
| 52) 3-Nitroaniline             | 9.70  | 138  | 165902   | 25.48 | nq    | 99       |
| 53) 2,4-Dinitrophenol          | 9.81  | 184  | 220206   | 82.18 | nq    | # 83     |
| 54) Dibenzofuran               | 9.95  | 168  | 1378961  | 49.89 | nq    | 97       |
| 55) 4-Nitrophenol              | 9.89  | 139  | 408860   | 85.45 | nq    | 85       |
| 56) 2,4-Dinitrotoluene         | 9.94  | 165  | 295711   | 40.01 | nq    | # 75     |
| 57) Fluorene                   | 10.29 | 166  | 1039148  | 45.02 | nq    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.06 | 232  | 249322   | 45.24 | nq    | 92       |
| 59) Diethylphthalate           | 10.18 | 149  | 1199901  | 46.33 | nq    | 98       |
| 60) 4-Chlorophenyl-phenylether | 10.28 | 204  | 436130   | 44.97 | nq    | 93       |
| 61) 4-Nitroaniline             | 10.32 | 138  | 270345   | 42.61 | nq    | 93       |
| 62) Azobenzene                 | 10.44 | 77   | 1180195  | 47.39 | nq    | 90       |
| 64) 4,6-Dinitro-2-methylphenol | 10.35 | 198  | 201755   | 52.24 | nq    | 97       |
| 65) n-Nitrosodiphenylamine     | 10.41 | 169  | 947369   | 47.68 | nq    | 99       |
| 66) 4-Bromophenyl-phenylether  | 10.77 | 248  | 329924   | 47.74 | nq    | 95       |
| 67) Hexachlorobenzene          | 10.83 | 284  | 308069   | 40.91 | nq    | # 83     |
| 68) Atrazine                   | 10.94 | 200  | 308279   | 49.13 | nq    | 90       |
| 69) Pentachlorophenol          | 11.04 | 266  | 344036   | 97.21 | nq    | 98       |
| 70) Phenanthrene               | 11.24 | 178  | 1401438  | 40.38 | nq    | 97       |
| 71) Anthracene                 | 11.30 | 178  | 1668007  | 47.70 | nq    | 99       |
| 72) Carbazole                  | 11.46 | 167  | 1504150  | 49.32 | nq    | 98       |
| 73) Di-n-butylphthalate        | 11.79 | 149  | 1604651  | 41.33 | nq    | # 96     |
| 74) Fluoranthene               | 12.43 | 202  | 1660277  | 47.26 | nq    | 94       |
| 76) Benzidine                  | 12.56 | 184  | 556363   | 37.79 | nq    | 98       |
| 77) Pyrene                     | 12.66 | 202  | 1644680  | 51.56 | nq    | 100      |
| 79) Butylbenzylphthalate       | 13.29 | 149  | 744986   | 51.48 | nq    | # 88     |
| 80) Benzo(a)anthracene         | 13.84 | 228  | 1177844  | 45.55 | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.80 | 252  | 196295   | 21.44 | nq    | # 94     |
| 82) Chrysene                   | 13.88 | 228  | 1151640  | 45.93 | nq    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 13.85 | 149  | 872662   | 48.46 | nq    | # 97     |
| 84) Di-n-octyl phthalate       | 14.45 | 149  | 1302960  | 43.85 | nq    | # 88     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.53 | 276  | 987107   | 50.01 | nq    | 99       |
| 87) Benzo(b)fluoranthene       | 14.84 | 252  | 1233286m | 51.30 | nq    |          |
| 88) Benzo(k)fluoranthene       | 14.88 | 252  | 727607m  | 36.60 | nq    |          |
| 89) Benzo(a)pyrene             | 15.17 | 252  | 912571   | 44.55 | nq    | 98       |
| 90) Dibenzo(a,h)anthracene     | 16.55 | 278  | 814926   | 47.26 | nq    | # 93     |
| 91) Benzo(g,h,i)perylene       | 16.92 | 276  | 852564   | 49.08 | nq    | 96       |

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

