

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101215\  
 Data File : BF082225.D  
 Acq On : 12 Oct 2015 17:40  
 Operator : UM/IZ  
 Sample : G3990-04MSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TE-PMW(43)MSD

Manual Integrations  
 APPROVED

MMdadoda  
 10/13/2015 1:27:40 PM

Quant Time: Oct 13 05:13:18 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF101015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 13 02:05:16 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.83  | 152  | 69741    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.13  | 136  | 271579   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.87  | 164  | 138106   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.36 | 188  | 275530   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 14.01 | 240  | 259402   | 20.00 | ng    | 0.00     |
| 86) Perylene-d12          | 15.44 | 264  | 202521   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |        |        |    |      |
|--------------------------|-------|-----|--------|--------|----|------|
| 5) 2-Fluorophenol        | 5.43  | 112 | 254162 | 73.55  | ng | 0.01 |
| 7) Phenol-d6             | 6.47  | 99  | 220290 | 48.99  | ng | 0.00 |
| 23) Nitrobenzene-d5      | 7.41  | 82  | 458296 | 113.33 | ng | 0.00 |
| 41) 2,4,6-Tribromophenol | 10.67 | 330 | 215645 | 166.50 | ng | 0.00 |
| 44) 2-Fluorobiphenyl     | 9.20  | 172 | 865526 | 103.93 | ng | 0.00 |
| 78) Terphenyl-d14        | 12.95 | 244 | 972584 | 99.35  | ng | 0.00 |

## Target Compounds

|                                |      |     |         |       |    | Qvalue |
|--------------------------------|------|-----|---------|-------|----|--------|
| 2) 1,4-Dioxane                 | 2.42 | 88  | 32537   | 18.74 | ng | 96     |
| 3) Pyridine                    | 3.15 | 79  | 60978   | 15.10 | ng | 98     |
| 4) n-Nitrosodimethylamine      | 3.09 | 42  | 33413   | 19.51 | ng | 98     |
| 6) Aniline                     | 6.49 | 93  | 119056  | 20.53 | ng | 93     |
| 8) 2-Chlorophenol              | 6.62 | 128 | 187586  | 44.47 | ng | 92     |
| 9) Benzaldehyde                | 6.38 | 77  | 129364  | 56.33 | ng | 97     |
| 10) Phenol                     | 6.48 | 94  | 90880   | 17.53 | ng | 90     |
| 11) bis(2-Chloroethyl)ether    | 6.57 | 93  | 227256  | 51.83 | ng | 95     |
| 12) 1,3-Dichlorobenzene        | 6.77 | 146 | 219241m | 44.63 | ng |        |
| 13) 1,4-Dichlorobenzene        | 6.85 | 146 | 222158  | 43.30 | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 7.01 | 146 | 231944m | 47.61 | ng |        |
| 15) Benzyl Alcohol             | 6.98 | 79  | 110958  | 35.74 | ng | 93     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.12 | 45  | 320968  | 52.57 | ng | 98     |
| 17) 2-Methylphenol             | 7.10 | 107 | 121339  | 36.37 | ng | 100    |
| 18) Hexachloroethane           | 7.35 | 117 | 74894   | 42.65 | ng | # 74   |
| 19) n-Nitroso-di-n-propylamine | 7.26 | 70  | 162934  | 51.59 | ng | 95     |
| 20) 3+4-Methylphenols          | 7.25 | 107 | 126828  | 31.91 | ng | # 32   |
| 22) Acetophenone               | 7.25 | 105 | 288699  | 53.74 | ng | 95     |
| 24) Nitrobenzene               | 7.43 | 77  | 228020  | 52.09 | ng | # 81   |
| 25) Isophorone                 | 7.66 | 82  | 421583  | 51.65 | ng | 99     |
| 26) 2-Nitrophenol              | 7.74 | 139 | 115021  | 52.62 | ng | # 87   |
| 27) 2,4-Dimethylphenol         | 7.78 | 122 | 179994  | 51.11 | ng | 96     |
| 28) bis(2-Chloroethoxy)methane | 7.87 | 93  | 262469  | 55.27 | ng | 98     |
| 29) 2,4-Dichlorophenol         | 7.98 | 162 | 182956  | 51.97 | ng | 94     |
| 30) 1,2,4-Trichlorobenzene     | 8.06 | 180 | 196604  | 48.45 | ng | 97     |
| 31) Naphthalene                | 8.15 | 128 | 616609  | 52.38 | ng | 99     |
| 32) Benzoic acid               | 7.86 | 122 | 36596   | 15.48 | ng | 95     |
| 33) 4-Chloroaniline            | 8.19 | 127 | 80401   | 16.44 | ng | 97     |
| 34) Hexachlorobutadiene        | 8.25 | 225 | 111931  | 44.27 | ng | 97     |
| 35) Caprolactam                | 8.57 | 113 | 8903    | 8.71  | ng | # 76   |
| 36) 4-Chloro-3-methylphenol    | 8.67 | 107 | 175680  | 51.03 | ng | 99     |
| 37) 2-Methylnaphthalene        | 8.83 | 142 | 431439  | 52.86 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 9.01 | 216 | 219064  | 53.33 | ng | 97     |
| 40) Hexachlorocyclopentadiene  | 8.98 | 237 | 166958  | 80.29 | ng | 97     |

Data Path : Z:\HPCHEM1\BNA F\DATA\BF101215\  
 Data File : BF082225.D  
 Acq On : 12 Oct 2015 17:40  
 Operator : UM/IZ  
 Sample : G3990-04MSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TE-PMW(43)MSD

Manual Integrations  
 APPROVED

MMdadoda  
 10/13/2015 1:27:40 PM

Quant Time: Oct 13 05:13:18 2015  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF101015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 13 02:05:16 2015  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 9.12  | 196  | 141266   | 51.78  | nq    | 99       |
| 43) 2,4,5-Trichlorophenol      | 9.15  | 196  | 161230   | 54.55  | nq    | # 93     |
| 45) 1,1'-Biphenyl              | 9.30  | 154  | 579976   | 55.07  | nq    | 97       |
| 46) 2-Chloronaphthalene        | 9.33  | 162  | 438832   | 52.93  | nq    | 96       |
| 47) 2-Nitroaniline             | 9.43  | 65   | 134678   | 59.17  | nq    | # 86     |
| 48) Acenaphthylene             | 9.74  | 152  | 665901   | 51.56  | nq    | 99       |
| 49) Dimethylphthalate          | 9.61  | 163  | 618648   | 63.61  | nq    | 99       |
| 50) 2,6-Dinitrotoluene         | 9.67  | 165  | 108449   | 52.85  | nq    | # 67     |
| 51) Acenaphthene               | 9.91  | 154  | 404479   | 52.17  | nq    | 99       |
| 52) 3-Nitroaniline             | 9.84  | 138  | 47266    | 20.39  | nq    | 94       |
| 53) 2,4-Dinitrophenol          | 9.95  | 184  | 131135   | 111.62 | nq    | 92       |
| 54) Dibenzofuran               | 10.09 | 168  | 615800   | 57.85  | nq    | 93       |
| 55) 4-Nitrophenol              | 10.01 | 139  | 54808    | 42.09  | nq    | 99       |
| 56) 2,4-Dinitrotoluene         | 10.08 | 165  | 170150   | 66.34  | nq    | 89       |
| 57) Fluorene                   | 10.43 | 166  | 484190   | 55.38  | nq    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.21 | 232  | 144250   | 59.73  | nq    | 96       |
| 59) Diethylphthalate           | 10.31 | 149  | 544914   | 60.11  | nq    | 97       |
| 60) 4-Chlorophenyl-phenylether | 10.42 | 204  | 238155   | 59.47  | nq    | # 87     |
| 61) 4-Nitroaniline             | 10.46 | 138  | 111883   | 49.76  | nq    | 94       |
| 62) Azobenzene                 | 10.58 | 77   | 529716   | 59.71  | nq    | 92       |
| 64) 4,6-Dinitro-2-methylphenol | 10.48 | 198  | 84189    | 54.45  | nq    | # 56     |
| 65) n-Nitrosodiphenylamine     | 10.55 | 169  | 444425   | 53.87  | nq    | 99       |
| 66) 4-Bromophenyl-phenylether  | 10.91 | 248  | 151935   | 55.10  | nq    | # 86     |
| 67) Hexachlorobenzene          | 10.97 | 284  | 149723   | 50.21  | nq    | # 71     |
| 68) Atrazine                   | 11.07 | 200  | 145664   | 55.73  | nq    | 98       |
| 69) Pentachlorophenol          | 11.18 | 266  | 182368   | 118.84 | nq    | 100      |
| 70) Phenanthrene               | 11.39 | 178  | 802188   | 59.40  | nq    | 99       |
| 71) Anthracene                 | 11.44 | 178  | 773245   | 55.56  | nq    | 99       |
| 72) Carbazole                  | 11.60 | 167  | 700328   | 55.16  | nq    | 99       |
| 73) Di-n-butylphthalate        | 11.93 | 149  | 903253   | 57.67  | nq    | 99       |
| 74) Fluoranthene               | 12.58 | 202  | 869570   | 59.95  | nq    | 98       |
| 76) Benzidine                  | 12.71 | 184  | 55353    | 7.36   | nq    | 98       |
| 77) Pyrene                     | 12.81 | 202  | 905270   | 58.81  | nq    | 99       |
| 79) Butylbenzylphthalate       | 13.43 | 149  | 398606   | 56.74  | nq    | 92       |
| 80) Benzo(a)anthracene         | 14.00 | 228  | 746058   | 55.28  | nq    | 100      |
| 81) 3,3'-Dichlorobenzidine     | 13.97 | 252  | 98215    | 19.17  | nq    | # 96     |
| 82) Chrysene                   | 14.04 | 228  | 696605m  | 48.98  | nq    |          |
| 83) Bis(2-ethylhexyl)phthalate | 13.98 | 149  | 501759   | 50.06  | nq    | # 95     |
| 84) Di-n-octyl phthalate       | 14.60 | 149  | 790541   | 45.93  | nq    | 99       |
| 85) Indeno(1,2,3-cd)pyrene     | 16.86 | 276  | 599405   | 53.03  | nq    | 100      |
| 87) Benzo(b)fluoranthene       | 15.03 | 252  | 619310   | 50.26  | nq    | 99       |
| 88) Benzo(k)fluoranthene       | 15.06 | 252  | 662771m  | 64.00  | nq    |          |
| 89) Benzo(a)pyrene             | 15.38 | 252  | 586035   | 55.34  | nq    | 99       |
| 90) Dibenzo(a,h)anthracene     | 16.87 | 278  | 489614   | 56.42  | nq    | 99       |
| 91) Benzo(g,h,i)perylene       | 17.28 | 276  | 509454   | 60.43  | nq    | 99       |

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

