

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG122618\  
 Data File : BG038835.D  
 Acq On : 26 Dec 2018 18:11  
 Operator : JU/SJ  
 Sample : J6482-04MSD  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 R20-OSMSD

Manual Integrations  
 APPROVED

Sohil  
 12/27/2018 8:23:30 AM

Quant Time: Dec 27 00:29:49 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG121218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 12 15:26:27 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.06  | 152  | 25091    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.87 | 136  | 109136   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.70 | 164  | 78059    | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.45 | 188  | 195382   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.73 | 240  | 198682   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 25.02 | 264  | 213058   | 20.00 | ng    | 0.00     |

|                             |       |     |        |        |    |      |
|-----------------------------|-------|-----|--------|--------|----|------|
| System Monitoring Compounds |       |     |        |        |    |      |
| 5) 2-Fluorophenol           | 5.61  | 112 | 191540 | 135.40 | ng | 0.00 |
| 7) Phenol-d6                | 7.22  | 99  | 252731 | 130.14 | ng | 0.01 |
| 23) Nitrobenzene-d5         | 9.24  | 82  | 184681 | 86.45  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 16.19 | 330 | 187243 | 174.05 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 13.31 | 172 | 513704 | 90.28  | ng | 0.00 |
| 79) Terphenyl-d14           | 20.04 | 244 | 936059 | 102.53 | ng | 0.00 |

|                                |       |     |        |        |        |      |
|--------------------------------|-------|-----|--------|--------|--------|------|
| Target Compounds               |       |     |        |        | Qvalue |      |
| 2) 1,4-Dioxane                 | 3.50  | 88  | 16859  | 25.606 | ng     | # 32 |
| 3) Pyridine                    | 3.91  | 79  | 37302  | 20.578 | ng     | 94   |
| 4) n-Nitrosodimethylamine      | 3.82  | 42  | 29651  | 33.383 | ng     | 90   |
| 6) Aniline                     | 7.39  | 93  | 24165  | 9.747  | ng     | 98   |
| 8) 2-Chlorophenol              | 7.62  | 128 | 72421  | 44.238 | ng     | 92   |
| 9) Benzaldehyde                | 7.20  | 77  | 39967  | 31.724 | ng     | 97   |
| 10) Phenol                     | 7.25  | 94  | 77903  | 37.758 | ng     | 97   |
| 11) bis(2-Chloroethyl)ether    | 7.47  | 93  | 59085  | 35.969 | ng     | 93   |
| 12) 1,3-Dichlorobenzene        | 7.94  | 146 | 70680  | 36.515 | ng     | 96   |
| 13) 1,4-Dichlorobenzene        | 8.09  | 146 | 72270  | 36.455 | ng     | 99   |
| 14) 1,2-Dichlorobenzene        | 8.41  | 146 | 71330  | 38.166 | ng     | 98   |
| 15) Benzyl Alcohol             | 8.30  | 79  | 67462  | 44.505 | ng     | 96   |
| 16) 2,2'-oxybis(1-Chloropropan | 8.57  | 45  | 122903 | 32.662 | ng     | 99   |
| 17) 2-Methylphenol             | 8.50  | 107 | 62583  | 45.273 | ng     | 98   |
| 18) Hexachloroethane           | 9.13  | 117 | 25908  | 35.765 | ng     | 92   |
| 19) n-Nitroso-di-n-propylamine | 8.86  | 70  | 52581  | 38.550 | ng     | 97   |
| 20) 3+4-Methylphenols          | 8.83  | 107 | 85674  | 44.877 | ng     | 95   |
| 22) Acetophenone               | 8.89  | 105 | 107883 | 39.576 | ng     | # 96 |
| 24) Nitrobenzene               | 9.28  | 77  | 81078  | 37.517 | ng     | 97   |
| 25) Isophorone                 | 9.79  | 82  | 159273 | 41.496 | ng     | 98   |
| 26) 2-Nitrophenol              | 9.99  | 139 | 43261  | 39.111 | ng     | 92   |
| 27) 2,4-Dimethylphenol         | 10.04 | 122 | 74325  | 46.886 | ng     | 99   |
| 28) bis(2-Chloroethoxy)methane | 10.27 | 93  | 86541  | 39.953 | ng     | 98   |
| 29) 2,4-Dichlorophenol         | 10.52 | 162 | 88103  | 49.958 | ng     | 97   |
| 30) 1,2,4-Trichlorobenzene     | 10.73 | 180 | 84856  | 39.835 | ng     | 96   |
| 31) Naphthalene                | 10.92 | 128 | 227928 | 42.388 | ng     | 99   |
| 32) Benzoic acid               | 10.20 | 122 | 46767  | 46.775 | ng     | 93   |
| 33) 4-Chloroaniline            | 11.05 | 127 | 7344   | 3.146  | ng     | 94   |
| 34) Hexachlorobutadiene        | 11.18 | 225 | 55572  | 38.554 | ng     | 97   |
| 35) Caprolactam                | 11.85 | 113 | 21648  | 29.662 | ng     | # 74 |
| 36) 4-Chloro-3-methylphenol    | 12.16 | 107 | 92400  | 45.913 | ng     | 93   |
| 37) 2-Methylnaphthalene        | 12.53 | 142 | 177835 | 46.357 | ng     | 98   |
| 38) 1-Methylnaphthalene        | 12.74 | 142 | 170607 | 45.831 | ng     | 99   |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.89 | 216 | 112111 | 38.423 | ng     | 98   |

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| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.85 | 237  | 126190   | 78.719  | nq    | 91       |
| 43) 2,4,6-Trichlorophenol      | 13.13 | 196  | 83882    | 46.755  | nq    | 99       |
| 44) 2,4,5-Trichlorophenol      | 13.21 | 196  | 93557    | 49.253  | nq    | 97       |
| 46) 1,1'-Biphenyl              | 13.53 | 154  | 246941   | 37.736  | nq    | 99       |
| 47) 2-Chloronaphthalene        | 13.57 | 162  | 200385   | 39.643  | nq    | 98       |
| 48) 2-Nitroaniline             | 13.79 | 65   | 63832    | 39.645  | nq    | 92       |
| 49) Acenaphthylene             | 14.42 | 152  | 327238   | 43.304  | nq    | 100      |
| 50) Dimethylphthalate          | 14.14 | 163  | 276133   | 43.318  | nq    | 99       |
| 51) 2,6-Dinitrotoluene         | 14.28 | 165  | 62206    | 43.062  | nq    | 93       |
| 52) Acenaphthene               | 14.76 | 154  | 186149   | 41.196  | nq    | 98       |
| 53) 3-Nitroaniline             | 14.62 | 138  | 15296    | 10.387  | nq    | 87       |
| 54) 2,4-Dinitrophenol          | 14.82 | 184  | 89676    | 102.755 | nq    | 97       |
| 55) Dibenzofuran               | 15.10 | 168  | 324202   | 41.856  | nq    | 98       |
| 56) 4-Nitrophenol              | 14.93 | 139  | 87603    | 78.417  | nq    | 97       |
| 57) 2,4-Dinitrotoluene         | 15.07 | 165  | 87833    | 43.169  | nq    | 94       |
| 58) Fluorene                   | 15.74 | 166  | 259298   | 45.185  | nq    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 15.32 | 232  | 85930    | 50.282  | nq    | 95       |
| 60) Diethylphthalate           | 15.50 | 149  | 277902   | 39.712  | nq    | 98       |
| 61) 4-Chlorophenyl-phenylether | 15.72 | 204  | 150904   | 42.146  | nq    | 99       |
| 62) 4-Nitroaniline             | 15.78 | 138  | 51405    | 33.907  | nq    | 94       |
| 63) Azobenzene                 | 16.02 | 77   | 218286   | 37.340  | nq    | 97       |
| 65) 4,6-Dinitro-2-methylphenol | 15.82 | 198  | 60268    | 43.241  | nq    | 92       |
| 66) n-Nitrosodiphenylamine     | 15.95 | 169  | 241565   | 42.079  | nq    | 97       |
| 67) 4-Bromophenyl-phenylether  | 16.62 | 248  | 99709    | 41.786  | nq    | 95       |
| 68) Hexachlorobenzene          | 16.74 | 284  | 104496   | 42.246  | nq    | 97       |
| 69) Atrazine                   | 16.89 | 200  | 94970    | 44.577  | nq    | 97       |
| 70) Pentachlorophenol          | 17.09 | 266  | 133460   | 91.219  | nq    | 97       |
| 71) Phenanthrene               | 17.49 | 178  | 441722   | 43.597  | nq    | 100      |
| 72) Anthracene                 | 17.58 | 178  | 444223   | 44.412  | nq    | 98       |
| 73) Carbazole                  | 17.86 | 167  | 395238   | 39.955  | nq    | 98       |
| 74) Di-n-butylphthalate        | 18.38 | 149  | 452384   | 39.855  | nq    | 100      |
| 75) Fluoranthene               | 19.50 | 202  | 530014   | 42.280  | nq    | 97       |
| 77) Benzidine                  | 19.78 | 184  | 787      | 0.134   | nq    | # 1      |
| 78) Pyrene                     | 19.86 | 202  | 529955   | 40.376  | nq    | 99       |
| 80) Butylbenzylphthalate       | 20.72 | 149  | 198082   | 38.628  | nq    | 99       |
| 81) Benzo(a)anthracene         | 21.70 | 228  | 532374   | 43.974  | nq    | 98       |
| 82) 3,3'-Dichlorobenzidine     | 21.62 | 252  | 360      | 0.075   | nq    | # 59     |
| 83) Chrysene                   | 21.78 | 228  | 497168   | 42.635  | nq    | 100      |
| 84) Bis(2-ethylhexyl)phthalate | 21.57 | 149  | 275584   | 37.892  | nq    | 96       |
| 85) Di-n-octyl phthalate       | 22.79 | 149  | 472610   | 38.801  | nq    | 98       |
| 86) Indeno(1,2,3-cd)pyrene     | 28.82 | 276  | 635257   | 46.337  | nq    | # 74     |
| 88) Benzo(b)fluoranthene       | 23.97 | 252  | 517243   | 44.217  | nq    | 99       |
| 89) Benzo(k)fluoranthene       | 24.04 | 252  | 529750m  | 45.478  | nq    |          |
| 90) Benzo(a)pyrene             | 24.87 | 252  | 507329   | 44.955  | nq    | # 96     |
| 91) Dibenzo(a,h)anthracene     | 28.87 | 278  | 533513   | 47.480  | nq    | 98       |
| 92) Benzo(g,h,i)perylene       | 30.01 | 276  | 529390   | 47.807  | nq    | # 97     |

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

