

Data Path : Z:\HPCHEM1\BNA F\Data\BF080417\  
 Data File : BF097369.D  
 Acq On : 4 Aug 2017 21:31  
 Operator : SJ/JU  
 Sample : I4591-04MSD  
 Misc :  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 GRAVEL-PILEMSD

Manual Integrations  
 APPROVED

Sohil  
 8/7/2017 6:10:02 PM

Quant Time: Aug 07 11:59:09 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Aug 04 01:17:22 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.44  | 152  | 118959   | 20.00 | ng    | -0.06    |
| 21) Naphthalene-d8        | 7.72  | 136  | 500722   | 20.00 | ng    | -0.06    |
| 38) Acenaphthene-d10      | 9.46  | 164  | 196788   | 20.00 | ng    | -0.07    |
| 63) Phenanthrene-d10      | 10.93 | 188  | 291718   | 20.00 | ng    | -0.07    |
| 75) Chrysene-d12          | 13.56 | 240  | 183062   | 20.00 | ng    | -0.07    |
| 86) Perylene-d12          | 14.90 | 264  | 188624   | 20.00 | ng    | -0.08    |

## System Monitoring Compounds

|                          |       |     |        |       |    |       |
|--------------------------|-------|-----|--------|-------|----|-------|
| 5) 2-Fluorophenol        | 5.05  | 112 | 725635 | 91.95 | ng | -0.05 |
| 7) Phenol-d6             | 6.12  | 99  | 879705 | 97.65 | ng | -0.05 |
| 23) Nitrobenzene-d5      | 7.02  | 82  | 523482 | 61.33 | ng | -0.06 |
| 41) 2,4,6-Tribromophenol | 10.25 | 330 | 121153 | 77.92 | ng | -0.07 |
| 44) 2-Fluorobiphenyl     | 8.80  | 172 | 597527 | 51.53 | ng | -0.07 |
| 78) Terphenyl-d14        | 12.51 | 244 | 426304 | 47.48 | ng | -0.08 |

## Target Compounds

|                                |      |     |        |        |    | Qvalue |
|--------------------------------|------|-----|--------|--------|----|--------|
| 2) 1,4-Dioxane                 | 1.99 | 88  | 94557  | 28.714 | ng | # 74   |
| 3) Pyridine                    | 2.60 | 79  | 302023 | 29.951 | ng | # 65   |
| 4) n-Nitrosodimethylamine      | 2.55 | 42  | 180752 | 32.356 | ng | 83     |
| 6) Aniline                     | 6.10 | 93  | 275345 | 24.288 | ng | 96     |
| 8) 2-Chlorophenol              | 6.23 | 128 | 262980 | 31.166 | ng | 95     |
| 9) Benzaldehyde                | 5.98 | 77  | 146535 | 27.480 | ng | 94     |
| 10) Phenol                     | 6.13 | 94  | 392925 | 36.771 | ng | 95     |
| 11) bis(2-Chloroethyl)ether    | 6.19 | 93  | 236448 | 27.977 | ng | 93     |
| 12) 1,3-Dichlorobenzene        | 6.37 | 146 | 263991 | 29.031 | ng | 97     |
| 13) 1,4-Dichlorobenzene        | 6.46 | 146 | 275540 | 30.576 | ng | 95     |
| 14) 1,2-Dichlorobenzene        | 6.61 | 146 | 238641 | 30.329 | ng | 97     |
| 15) Benzyl Alcohol             | 6.60 | 79  | 214946 | 37.686 | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 6.73 | 45  | 546531 | 32.241 | ng | 95     |
| 17) 2-Methylphenol             | 6.74 | 107 | 209265 | 32.134 | ng | # 90   |
| 18) Hexachloroethane           | 6.95 | 117 | 96276  | 29.203 | ng | # 79   |
| 19) n-Nitroso-di-n-propylamine | 6.87 | 70  | 221473 | 37.349 | ng | # 82   |
| 20) 3+4-Methylphenols          | 6.90 | 107 | 323510 | 38.035 | ng | # 61   |
| 22) Acetophenone               | 6.86 | 105 | 413463 | 34.385 | ng | # 96   |
| 24) Nitrobenzene               | 7.03 | 77  | 294155 | 33.090 | ng | 93     |
| 25) Isophorone                 | 7.27 | 82  | 492816 | 29.482 | ng | 98     |
| 26) 2-Nitrophenol              | 7.35 | 139 | 119107 | 24.766 | ng | # 89   |
| 27) 2,4-Dimethylphenol         | 7.41 | 122 | 225810 | 28.463 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 7.49 | 93  | 333993 | 30.618 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.61 | 162 | 220641 | 32.283 | ng | 96     |
| 30) 1,2,4-Trichlorobenzene     | 7.67 | 180 | 185477 | 28.471 | ng | 97     |
| 31) Naphthalene                | 7.75 | 128 | 751935 | 31.857 | ng | 100    |
| 33) 4-Chloroaniline            | 7.81 | 127 | 201439 | 20.974 | ng | 97     |
| 34) Hexachlorobutadiene        | 7.87 | 225 | 96183  | 27.850 | ng | 96     |
| 35) Caprolactam                | 8.17 | 113 | 71791  | 32.758 | ng | # 39   |
| 36) 4-Chloro-3-methylphenol    | 8.32 | 107 | 221123 | 29.656 | ng | 88     |
| 37) 2-Methylnaphthalene        | 8.43 | 142 | 456168 | 30.524 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.60 | 216 | 156031 | 29.716 | ng | 100    |
| 40) Hexachlorocyclopentadiene  | 8.59 | 237 | 13447  | 13.312 | ng | 97     |
| 42) 2,4,6-Trichlorophenol      | 8.73 | 196 | 110133 | 28.943 | ng | 97     |

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|--------------------------------|-------|------|----------|--------|-------|----------|
| 43) 2,4,5-Trichlorophenol      | 8.78  | 196  | 106311   | 27.913 | nq    | 97       |
| 45) 1,1'-Biphenyl              | 8.90  | 154  | 512251   | 30.476 | nq    | 97       |
| 46) 2-Chloronaphthalene        | 8.92  | 162  | 393088   | 31.780 | nq    | # 92     |
| 47) 2-Nitroaniline             | 9.03  | 65   | 164615   | 36.671 | nq    | 98       |
| 48) Acenaphthylene             | 9.33  | 152  | 563225   | 29.666 | nq    | 97       |
| 49) Dimethylphthalate          | 9.20  | 163  | 651371   | 43.588 | nq    | 99       |
| 50) 2,6-Dinitrotoluene         | 9.27  | 165  | 100311   | 31.649 | nq    | # 74     |
| 51) Acenaphthene               | 9.50  | 154  | 324176   | 28.988 | nq    | 99       |
| 52) 3-Nitroaniline             | 9.44  | 138  | 110568   | 28.105 | nq    | 83       |
| 54) Dibenzofuran               | 9.67  | 168  | 462041   | 31.018 | nq    | 96       |
| 55) 4-Nitrophenol              | 9.64  | 139  | 71328m   | 30.488 | nq    |          |
| 56) 2,4-Dinitrotoluene         | 9.67  | 165  | 114106   | 31.317 | nq    | # 65     |
| 57) Fluorene                   | 10.01 | 166  | 349387   | 31.208 | nq    | 96       |
| 58) 2,3,4,6-Tetrachlorophenol  | 9.80  | 232  | 74447    | 28.310 | nq    | 99       |
| 59) Diethylphthalate           | 9.90  | 149  | 425391   | 31.028 | nq    | 99       |
| 60) 4-Chlorophenyl-phenylether | 10.00 | 204  | 144433   | 31.241 | nq    | 98       |
| 61) 4-Nitroaniline             | 10.05 | 138  | 111253   | 29.762 | nq    | 91       |
| 62) Azobenzene                 | 10.16 | 77   | 400663   | 31.502 | nq    | 91       |
| 64) 4,6-Dinitro-2-methylphenol | 10.10 | 198  | 5274     | 2.909  | nq    | 89       |
| 65) n-Nitrosodiphenylamine     | 10.13 | 169  | 343507   | 33.843 | nq    | 97       |
| 66) 4-Bromophenyl-phenylether  | 10.49 | 248  | 95419    | 32.776 | nq    | 95       |
| 67) Hexachlorobenzene          | 10.56 | 284  | 93327    | 28.587 | nq    | # 88     |
| 68) Atrazine                   | 10.66 | 200  | 97592    | 33.530 | nq    | 96       |
| 69) Pentachlorophenol          | 10.76 | 266  | 48815    | 36.138 | nq    | 94       |
| 70) Phenanthrene               | 10.96 | 178  | 514927   | 32.944 | nq    | 99       |
| 71) Anthracene                 | 11.01 | 178  | 480204   | 29.996 | nq    | 99       |
| 72) Carbazole                  | 11.17 | 167  | 483009   | 30.678 | nq    | 98       |
| 73) Di-n-butylphthalate        | 11.52 | 149  | 635269   | 32.642 | nq    | 98       |
| 74) Fluoranthene               | 12.14 | 202  | 524094   | 34.227 | nq    | 98       |
| 76) Benzidine                  | 12.27 | 184  | 94304    | 13.884 | nq    | # 93     |
| 77) Pyrene                     | 12.36 | 202  | 512770   | 34.215 | nq    | 99       |
| 79) Butylbenzylphthalate       | 12.99 | 149  | 222515   | 29.189 | nq    | # 80     |
| 80) Benzo(a)anthracene         | 13.54 | 228  | 370138   | 31.249 | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.52 | 252  | 104680   | 23.435 | nq    | # 96     |
| 82) Chrysene                   | 13.58 | 228  | 354594   | 30.658 | nq    | 98       |
| 83) Bis(2-ethylhexyl)phthalate | 13.56 | 149  | 285384   | 28.672 | nq    | 100      |
| 84) Di-n-octyl phthalate       | 14.16 | 149  | 498357   | 27.283 | nq    | # 89     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.10 | 276  | 250950   | 25.303 | nq    | 98       |
| 87) Benzo(b)fluoranthene       | 14.54 | 252  | 373994   | 32.984 | nq    | # 95     |
| 88) Benzo(k)fluoranthene       | 14.57 | 252  | 318351   | 29.464 | nq    | 99       |
| 89) Benzo(a)pyrene             | 14.84 | 252  | 323935   | 31.216 | nq    | # 96     |
| 90) Dibenzo(a,h)anthracene     | 16.10 | 278  | 203716   | 23.939 | nq    | 95       |
| 91) Benzo(g,h,i)perylene       | 16.45 | 276  | 208197   | 23.330 | nq    | 98       |

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

