

Data Path : \\74.0.250.170\SV0ASRV\HPCHEM1\BNA\_F\DATA\BF013118\  
 Data File : BF102677.D  
 Acq On : 1 Feb 2018 1:29  
 Operator : SJ/JU  
 Sample : J1010-11MS  
 Misc :  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 BU-02-013018MS

Manual Integrations  
 APPROVED

Quant Time: Feb 01 03:44:11 2018  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF012218.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jan 31 18:38:00 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.71  | 152  | 165548   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 7.99  | 136  | 584231   | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 9.75  | 164  | 202311   | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.23 | 188  | 316264   | 20.00 | ng    | 0.00     |
| 75) Chrysene-d12          | 13.88 | 240  | 272132   | 20.00 | ng    | 0.01     |
| 86) Perylene-d12          | 15.30 | 264  | 199828   | 20.00 | ng    | 0.02     |

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## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.36  | 112 | 1231200 | 112.77 | ng | 0.05 |
| 7) Phenol-d6             | 6.39  | 99  | 1361105 | 103.41 | ng | 0.03 |
| 23) Nitrobenzene-d5      | 7.29  | 82  | 941205  | 92.58  | ng | 0.00 |
| 41) 2,4,6-Tribromophenol | 10.55 | 330 | 212078  | 105.80 | ng | 0.01 |
| 44) 2-Fluorobiphenyl     | 9.07  | 172 | 1317499 | 95.75  | ng | 0.00 |
| 78) Terphenyl-d14        | 12.82 | 244 | 1115272 | 92.39  | ng | 0.00 |

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## Target Compounds

|                                |      |     |         |        |    | Qvalue |
|--------------------------------|------|-----|---------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.53 | 88  | 193446  | 37.290 | ng | # 82   |
| 3) Pyridine                    | 3.24 | 79  | 250430  | 18.473 | ng | 98     |
| 4) n-Nitrosodimethylamine      | 3.17 | 42  | 249242  | 46.896 | ng | 96     |
| 6) Aniline                     | 6.39 | 93  | 67955   | 3.903  | ng | # 1    |
| 8) 2-Chlorophenol              | 6.51 | 128 | 473304  | 41.354 | ng | 99     |
| 9) Benzaldehyde                | 6.27 | 77  | 86916   | 9.524  | ng | 98     |
| 10) Phenol                     | 6.40 | 94  | 499326  | 34.747 | ng | 96     |
| 11) bis(2-Chloroethyl)ether    | 6.46 | 93  | 509421  | 46.609 | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 6.65 | 146 | 536359  | 39.404 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 6.73 | 146 | 529980  | 38.869 | ng | 99     |
| 14) 1,2-Dichlorobenzene        | 6.88 | 146 | 444578  | 35.646 | ng | 99     |
| 15) Benzyl Alcohol             | 6.87 | 79  | 282845  | 30.455 | ng | 97     |
| 16) 2,2'-oxybis(1-Chloropropan | 6.99 | 45  | 708300  | 38.640 | ng | 86     |
| 17) 2-Methylphenol             | 7.00 | 107 | 354093  | 35.623 | ng | # 92   |
| 18) Hexachloroethane           | 7.22 | 117 | 147343  | 31.011 | ng | 95     |
| 19) n-Nitroso-di-n-propylamine | 7.14 | 70  | 353381  | 43.869 | ng | 98     |
| 20) 3+4-Methylphenols          | 7.16 | 107 | 509584  | 43.590 | ng | 93     |
| 22) Acetophenone               | 7.13 | 105 | 680160  | 48.837 | ng | # 98   |
| 24) Nitrobenzene               | 7.30 | 77  | 504791  | 48.519 | ng | 100    |
| 25) Isophorone                 | 7.55 | 82  | 817613  | 45.112 | ng | 99     |
| 26) 2-Nitrophenol              | 7.62 | 139 | 239569  | 43.751 | ng | 98     |
| 27) 2,4-Dimethylphenol         | 7.67 | 122 | 376934  | 47.407 | ng | 97     |
| 28) bis(2-Chloroethoxy)methane | 7.75 | 93  | 532626  | 47.573 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.87 | 162 | 368362  | 45.482 | ng | 99     |
| 30) 1,2,4-Trichlorobenzene     | 7.94 | 180 | 373931  | 43.070 | ng | 99     |
| 31) Naphthalene                | 8.02 | 128 | 1263839 | 43.327 | ng | 100    |
| 32) Benzoic acid               | 7.82 | 122 | 164739  | 24.730 | ng | 97     |
| 33) 4-Chloroaniline            | 8.08 | 127 | 50490   | 4.116  | ng | 95     |
| 34) Hexachlorobutadiene        | 8.12 | 225 | 196827  | 42.447 | ng | 98     |
| 35) Caprolactam                | 8.46 | 113 | 83139   | 31.082 | ng | 96     |
| 36) 4-Chloro-3-methylphenol    | 8.58 | 107 | 361702  | 42.368 | ng | 99     |
| 37) 2-Methylnaphthalene        | 8.71 | 142 | 826105  | 42.525 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.87 | 216 | 288383  | 47.379 | ng | 98     |
| 40) Hexachlorocyclopentadiene  | 8.85 | 237 | 8363    | 3.070  | ng | 96     |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |                      |
|--------------------------------|-------|------|----------|--------|-------|----------|----------------------|
| 42) 2,4,6-Trichlorophenol      | 9.00  | 196  | 181272   | 44.488 | ng    | 99       |                      |
| 43) 2,4,5-Trichlorophenol      | 9.05  | 196  | 173159   | 37.744 | ng    | 98       |                      |
| 45) 1,1'-Biphenyl              | 9.17  | 154  | 832240   | 46.006 | ng    | 99       |                      |
| 46) 2-Chloronaphthalene        | 9.20  | 162  | 619330   | 44.046 | ng    | 98       |                      |
| 47) 2-Nitroaniline             | 9.31  | 65   | 206377   | 47.078 | ng    | 99       |                      |
| 48) Acenaphthylene             | 9.61  | 152  | 902523   | 41.199 | ng    | 100      |                      |
| 49) Dimethylphthalate          | 9.47  | 163  | 718553   | 42.970 | ng    | 99       | Sohil                |
| 50) 2,6-Dinitrotoluene         | 9.55  | 165  | 144272   | 40.016 | ng    | 86       |                      |
| 51) Acenaphthene               | 9.78  | 154  | 532297   | 41.606 | ng    | 99       |                      |
| 52) 3-Nitroaniline             | 9.72  | 138  | 82107    | 19.251 | ng    | 94       |                      |
| 53) 2,4-Dinitrophenol          | 9.85  | 184  | 10981    | 10.170 | ng    | # 23     |                      |
| 54) Dibenzofuran               | 9.95  | 168  | 770780   | 44.515 | ng    | 96       | 2/1/2018 12:14:35 PM |
| 55) 4-Nitrophenol              | 9.92  | 139  | 113285   | 40.238 | ng    | 92       |                      |
| 56) 2,4-Dinitrotoluene         | 9.96  | 165  | 167224   | 37.717 | ng    | # 85     |                      |
| 57) Fluorene                   | 10.30 | 166  | 607950   | 44.310 | ng    | 99       |                      |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.09 | 232  | 127962   | 39.065 | ng    | 96       |                      |
| 59) Diethylphthalate           | 10.17 | 149  | 688265   | 42.355 | ng    | 99       |                      |
| 60) 4-Chlorophenyl-phenylether | 10.29 | 204  | 269803   | 45.356 | ng    | 98       |                      |
| 61) 4-Nitroaniline             | 10.34 | 138  | 145596   | 34.210 | ng    | 90       |                      |
| 62) Azobenzene                 | 10.45 | 77   | 621377   | 41.765 | ng    | 98       |                      |
| 64) 4,6-Dinitro-2-methylphenol | 10.37 | 198  | 13385    | 6.344  | ng    | 96       |                      |
| 65) n-Nitrosodiphenylamine     | 10.41 | 169  | 525532   | 45.273 | ng    | 99       |                      |
| 66) 4-Bromophenyl-phenylether  | 10.77 | 248  | 154888   | 45.494 | ng    | 98       |                      |
| 67) Hexachlorobenzene          | 10.85 | 284  | 155110   | 40.737 | ng    | 94       |                      |
| 68) Atrazine                   | 10.95 | 200  | 144929   | 42.273 | ng    | 99       |                      |
| 69) Pentachlorophenol          | 11.05 | 266  | 99054    | 49.522 | ng    | 99       |                      |
| 70) Phenanthrene               | 11.26 | 178  | 825372   | 44.786 | ng    | 99       |                      |
| 71) Anthracene                 | 11.31 | 178  | 866837   | 46.082 | ng    | 99       |                      |
| 72) Carbazole                  | 11.47 | 167  | 842915   | 45.932 | ng    | 100      |                      |
| 73) Di-n-butylphthalate        | 11.79 | 149  | 1014580  | 44.230 | ng    | 99       |                      |
| 74) Fluoranthene               | 12.45 | 202  | 879334   | 46.789 | ng    | 98       |                      |
| 76) Benzidine                  | 12.58 | 184  | 19101m   | 2.089  | ng    |          |                      |
| 77) Pyrene                     | 12.68 | 202  | 913171   | 43.401 | ng    | 99       |                      |
| 79) Butylbenzylphthalate       | 13.29 | 149  | 460047   | 43.936 | ng    | 97       |                      |
| 80) Benzo(a)anthracene         | 13.87 | 228  | 802787   | 47.915 | ng    | 99       |                      |
| 81) 3,3'-Dichlorobenzidine     | 13.83 | 252  | 131568   | 21.407 | ng    | 98       |                      |
| 82) Chrysene                   | 13.90 | 228  | 753098   | 44.264 | ng    | 100      |                      |
| 83) Bis(2-ethylhexyl)phthalate | 13.84 | 149  | 641866   | 45.614 | ng    | # 99     |                      |
| 84) Di-n-octyl phthalate       | 14.45 | 149  | 1112685  | 48.623 | ng    | 100      |                      |
| 85) Indeno(1,2,3-cd)pyrene     | 16.72 | 276  | 503451   | 35.830 | ng    | 96       |                      |
| 87) Benzo(b)fluoranthene       | 14.90 | 252  | 619691   | 47.846 | ng    | 98       |                      |
| 88) Benzo(k)fluoranthene       | 14.93 | 252  | 594901   | 48.616 | ng    | 98       |                      |
| 89) Benzo(a)pyrene             | 15.25 | 252  | 547202   | 46.845 | ng    | 99       |                      |
| 90) Dibenzo(a,h)anthracene     | 16.72 | 278  | 422244   | 44.624 | ng    | 98       |                      |
| 91) Benzo(g,h,i)perylene       | 17.14 | 276  | 413462   | 44.254 | ng    | 97       |                      |

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