

Data Path : Z:\HPCHEM1\BNA F\DATA\BF080217\  
 Data File : BF097282.D  
 Acq On : 2 Aug 2017 19:20  
 Operator : SJ/JU  
 Sample : I4534-01MSD  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11938MSD

Manual Integrations  
 APPROVED

Sohil  
 8/3/2017 6:08:08 PM

Quant Time: Aug 02 23:33:02 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 25 14:11:51 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.45  | 152  | 117482   | 20.00 | ng    | -0.05    |
| 21) Naphthalene-d8        | 7.73  | 136  | 502734   | 20.00 | ng    | -0.05    |
| 38) Acenaphthene-d10      | 9.48  | 164  | 221107   | 20.00 | ng    | -0.05    |
| 63) Phenanthrene-d10      | 10.95 | 188  | 366104   | 20.00 | ng    | -0.05    |
| 75) Chrysene-d12          | 13.57 | 240  | 223101   | 20.00 | ng    | -0.05    |
| 86) Perylene-d12          | 14.92 | 264  | 201364   | 20.00 | ng    | -0.06    |

## System Monitoring Compounds

|                          |       |     |        |        |    |       |
|--------------------------|-------|-----|--------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.06  | 112 | 759049 | 97.40  | ng | -0.04 |
| 7) Phenol-d6             | 6.13  | 99  | 892153 | 100.28 | ng | -0.04 |
| 23) Nitrobenzene-d5      | 7.03  | 82  | 575528 | 67.16  | ng | -0.05 |
| 41) 2,4,6-Tribromophenol | 10.27 | 330 | 196233 | 112.33 | ng | -0.05 |
| 44) 2-Fluorobiphenyl     | 8.82  | 172 | 887614 | 68.13  | ng | -0.05 |
| 78) Terphenyl-d14        | 12.53 | 244 | 725256 | 66.28  | ng | -0.05 |

## Target Compounds

|                                |      |     |        |        |    | Qvalue |
|--------------------------------|------|-----|--------|--------|----|--------|
| 2) 1,4-Dioxane                 | 1.98 | 88  | 94936  | 29.191 | ng | # 71   |
| 3) Pyridine                    | 2.59 | 79  | 267189 | 26.830 | ng | # 62   |
| 4) n-Nitrosodimethylamine      | 2.54 | 42  | 177614 | 32.194 | ng | # 78   |
| 6) Aniline                     | 6.12 | 93  | 353801 | 31.601 | ng | 92     |
| 8) 2-Chlorophenol              | 6.25 | 128 | 285717 | 34.287 | ng | 98     |
| 9) Benzaldehyde                | 5.99 | 77  | 163427 | 31.034 | ng | 96     |
| 10) Phenol                     | 6.14 | 94  | 372214 | 35.271 | ng | 95     |
| 11) bis(2-Chloroethyl)ether    | 6.20 | 93  | 270325 | 32.388 | ng | 90     |
| 12) 1,3-Dichlorobenzene        | 6.39 | 146 | 287166 | 31.977 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 6.47 | 146 | 328621 | 36.925 | ng | 95     |
| 14) 1,2-Dichlorobenzene        | 6.62 | 146 | 280263 | 36.067 | ng | 99     |
| 15) Benzyl Alcohol             | 6.62 | 79  | 245205 | 43.531 | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 6.75 | 45  | 634028 | 37.873 | ng | 61     |
| 17) 2-Methylphenol             | 6.74 | 107 | 251713 | 39.138 | ng | # 89   |
| 18) Hexachloroethane           | 6.96 | 117 | 107407 | 32.988 | ng | # 80   |
| 19) n-Nitroso-di-n-propylamine | 6.89 | 70  | 209280 | 35.736 | ng | # 82   |
| 20) 3+4-Methylphenols          | 6.90 | 107 | 325888 | 38.797 | ng | # 63   |
| 22) Acetophenone               | 6.87 | 105 | 410690 | 34.017 | ng | 97     |
| 24) Nitrobenzene               | 7.05 | 77  | 302582 | 33.902 | ng | 91     |
| 25) Isophorone                 | 7.29 | 82  | 615542 | 36.677 | ng | 99     |
| 26) 2-Nitrophenol              | 7.36 | 139 | 164247 | 34.015 | ng | 91     |
| 27) 2,4-Dimethylphenol         | 7.42 | 122 | 264255 | 33.175 | ng | 96     |
| 28) bis(2-Chloroethoxy)methane | 7.50 | 93  | 386608 | 35.300 | ng | 98     |
| 29) 2,4-Dichlorophenol         | 7.61 | 162 | 269594 | 39.288 | ng | 94     |
| 30) 1,2,4-Trichlorobenzene     | 7.68 | 180 | 237484 | 36.309 | ng | 97     |
| 31) Naphthalene                | 7.76 | 128 | 891576 | 37.622 | ng | 99     |
| 32) Benzoic acid               | 7.54 | 122 | 38142  | 6.413  | ng | # 78   |
| 33) 4-Chloroaniline            | 7.82 | 127 | 339339 | 35.191 | ng | 99     |
| 34) Hexachlorobutadiene        | 7.88 | 225 | 117191 | 33.797 | ng | 97     |
| 35) Caprolactam                | 8.19 | 113 | 92534m | 42.054 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.33 | 107 | 282210 | 37.697 | ng | 90     |
| 37) 2-Methylnaphthalene        | 8.45 | 142 | 548817 | 36.577 | ng | 99     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.62 | 216 | 206608 | 35.020 | ng | 99     |
| 40) Hexachlorocyclopentadiene  | 8.60 | 237 | 113102 | 56.897 | ng | 100    |

Data Path : Z:\HPCHEM1\BNA F\DATA\BF080217\  
 Data File : BF097282.D  
 Acq On : 2 Aug 2017 19:20  
 Operator : SJ/JU  
 Sample : I4534-01MSD  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 72-11938MSD

Manual Integrations  
 APPROVED

Sohil  
 8/3/2017 6:08:08 PM

Quant Time: Aug 02 23:33:02 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF072517.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 25 14:11:51 2017  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 8.74  | 196  | 142722   | 33.383 | nq    | 98       |
| 43) 2,4,5-Trichlorophenol      | 8.79  | 196  | 152127   | 35.550 | nq    | 97       |
| 45) 1,1'-Biphenyl              | 8.91  | 154  | 619526   | 32.804 | nq    | 98       |
| 46) 2-Chloronaphthalene        | 8.93  | 162  | 473230   | 34.051 | nq    | 94       |
| 47) 2-Nitroaniline             | 9.04  | 65   | 213468   | 42.324 | nq    | 97       |
| 48) Acenaphthylene             | 9.34  | 152  | 718070   | 33.662 | nq    | 99       |
| 49) Dimethylphthalate          | 9.23  | 163  | 760832   | 45.313 | nq    | 99       |
| 50) 2,6-Dinitrotoluene         | 9.29  | 165  | 131123   | 36.820 | nq #  | 85       |
| 51) Acenaphthene               | 9.52  | 154  | 462544   | 36.811 | nq    | 98       |
| 52) 3-Nitroaniline             | 9.45  | 138  | 162243   | 36.705 | nq    | 96       |
| 53) 2,4-Dinitrophenol          | 9.57  | 184  | 69317    | 42.810 | nq #  | 75       |
| 54) Dibenzofuran               | 9.69  | 168  | 646508   | 38.628 | nq    | 97       |
| 55) 4-Nitrophenol              | 9.65  | 139  | 154280   | 58.692 | nq #  | 69       |
| 56) 2,4-Dinitrotoluene         | 9.69  | 165  | 167839   | 40.998 | nq #  | 73       |
| 57) Fluorene                   | 10.03 | 166  | 486519   | 38.677 | nq    | 100      |
| 58) 2,3,4,6-Tetrachlorophenol  | 9.82  | 232  | 123456   | 41.783 | nq    | 98       |
| 59) Diethylphthalate           | 9.92  | 149  | 583755   | 37.896 | nq    | 99       |
| 60) 4-Chlorophenyl-phenylether | 10.02 | 204  | 200324   | 38.565 | nq    | 97       |
| 61) 4-Nitroaniline             | 10.07 | 138  | 159520   | 37.980 | nq    | 93       |
| 62) Azobenzene                 | 10.18 | 77   | 651821   | 45.613 | nq    | 92       |
| 64) 4,6-Dinitro-2-methylphenol | 10.10 | 198  | 94781    | 41.663 | nq    | 90       |
| 65) n-Nitrosodiphenylamine     | 10.15 | 169  | 499666   | 39.226 | nq    | 96       |
| 66) 4-Bromophenyl-phenylether  | 10.50 | 248  | 141387   | 38.698 | nq    | 93       |
| 67) Hexachlorobenzene          | 10.57 | 284  | 146669   | 35.798 | nq #  | 89       |
| 68) Atrazine                   | 10.68 | 200  | 151248   | 41.407 | nq    | 93       |
| 69) Pentachlorophenol          | 10.77 | 266  | 111229   | 65.613 | nq    | 99       |
| 70) Phenanthrene               | 10.98 | 178  | 756202   | 38.550 | nq    | 98       |
| 71) Anthracene                 | 11.03 | 178  | 771136   | 38.382 | nq    | 99       |
| 72) Carbazole                  | 11.19 | 167  | 763605   | 38.646 | nq    | 99       |
| 73) Di-n-butylphthalate        | 11.53 | 149  | 929827   | 38.070 | nq    | 98       |
| 74) Fluoranthene               | 12.16 | 202  | 812185   | 42.264 | nq    | 98       |
| 76) Benzidine                  | 12.29 | 184  | 441860   | 53.377 | nq #  | 93       |
| 77) Pyrene                     | 12.38 | 202  | 780715   | 42.745 | nq    | 99       |
| 79) Butylbenzylphthalate       | 13.02 | 149  | 430818   | 46.371 | nq #  | 81       |
| 80) Benzo(a)anthracene         | 13.56 | 228  | 552878   | 38.300 | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.53 | 252  | 159650   | 29.327 | nq #  | 97       |
| 82) Chrysene                   | 13.60 | 228  | 542673   | 38.499 | nq    | 100      |
| 83) Bis(2-ethylhexyl)phthalate | 13.58 | 149  | 495341   | 40.834 | nq    | 98       |
| 84) Di-n-octyl phthalate       | 14.19 | 149  | 871795   | 39.162 | nq #  | 93       |
| 85) Indeno(1,2,3-cd)pyrene     | 16.13 | 276  | 430912   | 35.651 | nq    | 98       |
| 87) Benzo(b)fluoranthene       | 14.56 | 252  | 471626   | 38.963 | nq    | 97       |
| 88) Benzo(k)fluoranthene       | 14.59 | 252  | 419484   | 36.368 | nq    | 98       |
| 89) Benzo(a)pyrene             | 14.87 | 252  | 420874   | 37.991 | nq    | 98       |
| 90) Dibenzo(a,h)anthracene     | 16.13 | 278  | 350551   | 38.587 | nq #  | 95       |
| 91) Benzo(g,h,i)perylene       | 16.48 | 276  | 385549   | 40.470 | nq    | 99       |

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

