

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_N\DATA\BN102418\  
 Data File : BN003282.D  
 Acq On : 24 Oct 2018 21:28  
 Operator : MJ/SJ  
 Sample : J5164-03  
 Misc : MDL 5PPM  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 MDL-MDL-SOIL-03-QT4-2018

Quant Time: Oct 25 05:24:17 2018  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_N\METHODS\8270-BN102418.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Oct 24 14:21:25 2018  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.60  | 152  | 96528    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.37 | 136  | 447439   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.24 | 164  | 286356   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.00 | 188  | 681193   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.21 | 240  | 766925   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 23.41 | 264  | 798124   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.23  | 112 | 803695  | 145.02 | ng | 0.00 |
| 7) Phenol-d6             | 6.80  | 99  | 1128442 | 143.19 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 8.76  | 82  | 646699  | 82.89  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 15.75 | 330 | 559653  | 145.14 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 12.85 | 172 | 1728240 | 81.86  | ng | 0.00 |
| 79) Terphenyl-d14        | 19.64 | 244 | 2807485 | 78.29  | ng | 0.00 |

## Target Compounds

|                                |       |     |        |       |    | Qvalue |
|--------------------------------|-------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.21  | 88  | 11505  | 4.372 | ng | 88     |
| 3) Pyridine                    | 3.61  | 79  | 26544  | 4.414 | ng | 94     |
| 4) n-Nitrosodimethylamine      | 3.53  | 42  | 10631  | 4.802 | ng | # 93   |
| 6) Aniline                     | 6.95  | 93  | 44912  | 4.564 | ng | 98     |
| 8) 2-Chlorophenol              | 7.18  | 128 | 33737  | 4.942 | ng | 97     |
| 9) Benzaldehyde                | 6.77  | 77  | 23283  | 5.087 | ng | 91     |
| 10) Phenol                     | 6.82  | 94  | 43869  | 5.275 | ng | 85     |
| 11) bis(2-Chloroethyl)ether    | 7.04  | 93  | 33608  | 4.948 | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 7.49  | 146 | 37631  | 4.958 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 7.63  | 146 | 38198  | 4.888 | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 7.95  | 146 | 37688  | 4.969 | ng | 97     |
| 15) Benzyl Alcohol             | 7.86  | 79  | 20798  | 3.662 | ng | 92     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.13  | 45  | 50377  | 5.059 | ng | 93     |
| 17) 2-Methylphenol             | 8.06  | 107 | 30275  | 5.327 | ng | 97     |
| 18) Hexachloroethane           | 8.65  | 117 | 13267  | 4.846 | ng | 90     |
| 19) n-Nitroso-di-n-propylamine | 8.40  | 70  | 26652  | 4.690 | ng | 97     |
| 20) 3+4-Methylphenols          | 8.40  | 107 | 40729  | 5.045 | ng | 95     |
| 22) Acetophenone               | 8.43  | 105 | 53963  | 4.975 | ng | 96     |
| 24) Nitrobenzene               | 8.80  | 77  | 41226  | 5.178 | ng | 98     |
| 25) Isophorone                 | 9.32  | 82  | 76976  | 5.625 | ng | 98     |
| 26) 2-Nitrophenol              | 9.52  | 139 | 18582  | 4.434 | ng | 97     |
| 27) 2,4-Dimethylphenol         | 9.59  | 122 | 31280  | 5.309 | ng | 96     |
| 28) bis(2-Chloroethoxy)methane | 9.80  | 93  | 48459  | 5.256 | ng | 96     |
| 29) 2,4-Dichlorophenol         | 10.09 | 162 | 31785  | 4.727 | ng | 97     |
| 30) 1,2,4-Trichlorobenzene     | 10.25 | 180 | 37061  | 4.849 | ng | 97     |
| 31) Naphthalene                | 10.42 | 128 | 115873 | 5.299 | ng | 100    |
| 32) Benzoic acid               | 9.73  | 122 | 8465   | 6.510 | ng | # 77   |
| 33) 4-Chloroaniline            | 10.57 | 127 | 41675  | 4.314 | ng | 95     |
| 34) Hexachlorobutadiene        | 10.69 | 225 | 21078  | 4.621 | ng | 93     |
| 35) Caprolactam                | 11.32 | 113 | 10167  | 3.862 | ng | # 89   |
| 36) 4-Chloro-3-methylphenol    | 11.72 | 107 | 37234  | 4.965 | ng | 95     |
| 37) 2-Methylnaphthalene        | 12.05 | 142 | 88511  | 5.665 | ng | 99     |
| 38) 1-Methylnaphthalene        | 12.26 | 142 | 84883  | 5.562 | ng | 97     |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.43 | 216 | 43072  | 4.547 | ng | 99     |

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|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.39 | 237  | 6285     | 10.288 | ng    | 98       |
| 43) 2,4,6-Trichlorophenol      | 12.69 | 196  | 26982    | 4.508  | ng    | 96       |
| 44) 2,4,5-Trichlorophenol      | 12.79 | 196  | 29962    | 4.799  | ng    | 95       |
| 46) 1,1'-Biphenyl              | 13.07 | 154  | 118559   | 4.717  | ng    | 98       |
| 47) 2-Chloronaphthalene        | 13.12 | 162  | 88378    | 4.767  | ng    | 98       |
| 48) 2-Nitroaniline             | 13.35 | 65   | 22630    | 4.155  | ng    | 97       |
| 49) Acenaphthylene             | 13.96 | 152  | 149708   | 5.276  | ng    | 99       |
| 50) Dimethylphthalate          | 13.71 | 163  | 118686   | 5.126  | ng    | 100      |
| 51) 2,6-Dinitrotoluene         | 13.84 | 165  | 25367    | 4.827  | ng    | 91       |
| 52) Acenaphthene               | 14.30 | 154  | 88104    | 5.124  | ng    | 96       |
| 53) 3-Nitroaniline             | 14.19 | 138  | 21724    | 3.867  | ng    | # 95     |
| 54) 2,4-Dinitrophenol          | 14.47 | 184  | 5416     | 8.110  | ng    | 91       |
| 55) Dibenzofuran               | 14.65 | 168  | 143143   | 5.118  | ng    | 99       |
| 56) 4-Nitrophenol              | 14.60 | 139  | 5005     | 6.572  | ng    | 92       |
| 57) 2,4-Dinitrotoluene         | 14.66 | 165  | 33769    | 4.739  | ng    | 96       |
| 58) Fluorene                   | 15.30 | 166  | 118806   | 5.504  | ng    | 96       |
| 59) 2,3,4,6-Tetrachlorophenol  | 14.90 | 232  | 27773    | 5.066  | ng    | # 95     |
| 60) Diethylphthalate           | 15.07 | 149  | 120000   | 5.107  | ng    | 98       |
| 61) 4-Chlorophenyl-phenylether | 15.29 | 204  | 60239    | 5.023  | ng    | 98       |
| 62) 4-Nitroaniline             | 15.37 | 138  | 21943    | 3.998  | ng    | 96       |
| 63) Azobenzene                 | 15.59 | 77   | 110635   | 5.095  | ng    | 99       |
| 65) 4,6-Dinitro-2-methylphenol | 15.45 | 198  | 15445    | 3.249  | ng    | 97       |
| 66) n-Nitrosodiphenylamine     | 15.52 | 169  | 105497   | 4.947  | ng    | 99       |
| 67) 4-Bromophenyl-phenylether  | 16.19 | 248  | 37977    | 4.950  | ng    | 98       |
| 68) Hexachlorobenzene          | 16.32 | 284  | 42217    | 4.830  | ng    | 96       |
| 69) Atrazine                   | 16.47 | 200  | 36581    | 4.840  | ng    | 98       |
| 70) Pentachlorophenol          | 16.69 | 266  | 8892     | 8.382  | ng    | 97       |
| 71) Phenanthrene               | 17.05 | 178  | 192270   | 5.369  | ng    | 98       |
| 72) Anthracene                 | 17.14 | 178  | 191665   | 5.363  | ng    | 99       |
| 73) Carbazole                  | 17.43 | 167  | 176123   | 4.759  | ng    | 100      |
| 74) Di-n-butylphthalate        | 17.97 | 149  | 202834   | 4.699  | ng    | 99       |
| 75) Fluoranthene               | 19.07 | 202  | 224506   | 5.321  | ng    | 99       |
| 77) Benzidine                  | 19.27 | 184  | 21043    | 0.937  | ng    | 99       |
| 78) Pyrene                     | 19.44 | 202  | 231846   | 5.144  | ng    | 99       |
| 80) Butylbenzylphthalate       | 20.34 | 149  | 96601    | 4.616  | ng    | 99       |
| 81) Benzo(a)anthracene         | 21.19 | 228  | 241588   | 5.409  | ng    | 99       |
| 82) 3,3'-Dichlorobenzidine     | 21.13 | 252  | 75088    | 4.063  | ng    | 94       |
| 83) Chrysene                   | 21.25 | 228  | 227537   | 5.300  | ng    | 98       |
| 84) Bis(2-ethylhexyl)phthalate | 21.12 | 149  | 145829   | 4.698  | ng    | 100      |
| 85) Di-n-octyl phthalate       | 21.99 | 149  | 256749   | 4.820  | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene     | 25.62 | 276  | 258732   | 5.258  | ng    | 99       |
| 88) Benzo(b)fluoranthene       | 22.76 | 252  | 238374   | 5.424  | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 22.80 | 252  | 238085   | 5.524  | ng    | 99       |
| 90) Benzo(a)pyrene             | 23.32 | 252  | 232436   | 5.550  | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 25.62 | 278  | 216580   | 5.225  | ng    | 99       |
| 92) Benzo(g,h,i)perylene       | 26.30 | 276  | 210959   | 5.301  | ng    | 99       |

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

