

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP101319\  
 Data File : BP000679.D  
 Acq On : 12 Oct 2019 19:58  
 Operator : JU  
 Sample : K5324-01MSD  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 SOIL-PILEMSD

Manual Integrations  
 APPROVED

mohammad  
 10/16/2019 8:08:01 AM

Quant Time: Oct 14 05:40:28 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP100119.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Oct 01 18:03:42 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.75  | 152  | 280577   | 20.00 | ng    | -0.02    |
| 21) Naphthalene-d8        | 8.03  | 136  | 1025602  | 20.00 | ng    | -0.02    |
| 39) Acenaphthene-d10      | 9.80  | 164  | 561717   | 20.00 | ng    | -0.02    |
| 64) Phenanthrene-d10      | 11.30 | 188  | 1027256  | 20.00 | ng    | -0.01    |
| 76) Chrysene-d12          | 13.97 | 240  | 789154   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.45 | 264  | 916903   | 20.00 | ng    | -0.01    |

|                             |       |     |         |        |    |       |
|-----------------------------|-------|-----|---------|--------|----|-------|
| System Monitoring Compounds |       |     |         |        |    |       |
| 5) 2-Fluorophenol           | 5.38  | 112 | 1769967 | 101.40 | ng | -0.01 |
| 7) Phenol-d6                | 6.40  | 99  | 2263666 | 107.62 | ng | -0.01 |
| 23) Nitrobenzene-d5         | 7.32  | 82  | 1286844 | 76.63  | ng | -0.02 |
| 42) 2,4,6-Tribromophenol    | 10.60 | 330 | 661415  | 110.50 | ng | -0.01 |
| 45) 2-Fluorobiphenyl        | 9.12  | 172 | 2434722 | 70.13  | ng | -0.02 |
| 79) Terphenyl-d14           | 12.90 | 244 | 2672923 | 68.58  | ng | -0.01 |

|                                |      |     |         |        |    |      |
|--------------------------------|------|-----|---------|--------|----|------|
| Target Compounds               |      |     |         | Qvalue |    |      |
| 2) 1,4-Dioxane                 | 2.50 | 88  | 233057  | 33.436 | ng | 99   |
| 3) Pyridine                    | 3.23 | 79  | 586588  | 30.801 | ng | 99   |
| 4) n-Nitrosodimethylamine      | 3.17 | 42  | 195103  | 36.406 | ng | 99   |
| 6) Aniline                     | 6.41 | 93  | 680617  | 26.635 | ng | # 17 |
| 8) 2-Chlorophenol              | 6.54 | 128 | 645345  | 37.462 | ng | 98   |
| 9) Benzaldehyde                | 6.30 | 77  | 349576  | 31.907 | ng | 95   |
| 10) Phenol                     | 6.41 | 94  | 825897  | 38.350 | ng | 90   |
| 11) bis(2-Chloroethyl)ether    | 6.49 | 93  | 613893  | 37.051 | ng | 98   |
| 12) 1,3-Dichlorobenzene        | 6.69 | 146 | 731778  | 35.043 | ng | 98   |
| 13) 1,4-Dichlorobenzene        | 6.77 | 146 | 742923  | 35.356 | ng | 98   |
| 14) 1,2-Dichlorobenzene        | 6.92 | 146 | 685286  | 35.324 | ng | 99   |
| 15) Benzyl Alcohol             | 6.89 | 79  | 501611  | 36.927 | ng | 99   |
| 16) 2,2'-oxybis(1-Chloropropan | 7.03 | 45  | 552077  | 36.123 | ng | 98   |
| 17) 2-Methylphenol             | 7.01 | 107 | 537946  | 37.786 | ng | 99   |
| 18) Hexachloroethane           | 7.26 | 117 | 257830  | 34.476 | ng | 98   |
| 19) n-Nitroso-di-n-propylamine | 7.16 | 70  | 353826  | 36.495 | ng | 99   |
| 20) 3+4-Methylphenols          | 7.16 | 107 | 645240  | 38.733 | ng | # 85 |
| 22) Acetophenone               | 7.16 | 105 | 863566  | 36.440 | ng | 98   |
| 24) Nitrobenzene               | 7.33 | 77  | 615312  | 37.992 | ng | 97   |
| 25) Isophorone                 | 7.58 | 82  | 1141080 | 38.287 | ng | 100  |
| 26) 2-Nitrophenol              | 7.65 | 139 | 350046  | 41.099 | ng | 96   |
| 27) 2,4-Dimethylphenol         | 7.69 | 122 | 574674  | 44.017 | ng | 99   |
| 28) bis(2-Chloroethoxy)methane | 7.78 | 93  | 762089  | 37.627 | ng | 99   |
| 29) 2,4-Dichlorophenol         | 7.90 | 162 | 583465  | 39.525 | ng | 99   |
| 30) 1,2,4-Trichlorobenzene     | 7.98 | 180 | 637952  | 36.797 | ng | 99   |
| 31) Naphthalene                | 8.06 | 128 | 1849899 | 38.621 | ng | 99   |
| 32) Benzoic acid               | 7.82 | 122 | 307880  | 37.347 | ng | 99   |
| 33) 4-Chloroaniline            | 8.10 | 127 | 411848  | 19.583 | ng | 99   |
| 34) Hexachlorobutadiene        | 8.18 | 225 | 372984  | 35.599 | ng | 97   |
| 35) Caprolactam                | 8.47 | 113 | 190431m | 38.515 | ng |      |
| 36) 4-Chloro-3-methylphenol    | 8.60 | 107 | 576439  | 39.870 | ng | 99   |
| 37) 2-Methylnaphthalene        | 8.75 | 142 | 1448649 | 45.052 | ng | 100  |
| 38) 1-Methylnaphthalene        | 8.85 | 142 | 1307200 | 43.024 | ng | 98   |
| 40) 1,2,4,5-Tetrachlorobenzene | 8.92 | 216 | 637176  | 35.838 | ng | 99   |

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|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 8.91  | 237  | 453666   | 65.230 | nq    | 99       |
| 43) 2,4,6-Trichlorophenol      | 9.03  | 196  | 409644   | 37.429 | nq    | 97       |
| 44) 2,4,5-Trichlorophenol      | 9.08  | 196  | 442311   | 39.143 | nq    | 96       |
| 46) 1,1'-Biphenyl              | 9.22  | 154  | 1648810  | 38.887 | nq    | 98       |
| 47) 2-Chloronaphthalene        | 9.25  | 162  | 1221501  | 37.257 | nq    | 99       |
| 48) 2-Nitroaniline             | 9.34  | 65   | 294031   | 37.043 | nq    | 89       |
| 49) Acenaphthylene             | 9.66  | 152  | 1923260  | 38.882 | nq    | 99       |
| 50) Dimethylphthalate          | 9.52  | 163  | 1807641  | 46.313 | nq    | 99       |
| 51) 2,6-Dinitrotoluene         | 9.59  | 165  | 330087   | 38.781 | nq    | 94       |
| 52) Acenaphthene               | 9.83  | 154  | 1542816  | 51.418 | nq    | 99       |
| 53) 3-Nitroaniline             | 9.75  | 138  | 214291   | 21.972 | nq    | 93       |
| 54) 2,4-Dinitrophenol          | 9.87  | 184  | 232101   | 81.721 | nq    | # 92     |
| 55) Dibenzofuran               | 10.01 | 168  | 2260129  | 50.390 | nq    | 100      |
| 56) 4-Nitrophenol              | 9.93  | 139  | 462830   | 74.332 | nq    | 99       |
| 57) 2,4-Dinitrotoluene         | 9.99  | 165  | 431004   | 38.191 | nq    | 97       |
| 58) Fluorene                   | 10.36 | 166  | 1816134  | 56.812 | nq    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.13 | 232  | 370642   | 38.801 | nq    | 97       |
| 60) Diethylphthalate           | 10.23 | 149  | 1366966  | 36.894 | nq    | 99       |
| 61) 4-Chlorophenyl-phenylether | 10.35 | 204  | 656006   | 38.162 | nq    | 97       |
| 62) 4-Nitroaniline             | 10.37 | 138  | 344437   | 36.721 | nq    | 100      |
| 63) Azobenzene                 | 10.50 | 77   | 1152226  | 40.506 | nq    | 96       |
| 65) 4,6-Dinitro-2-methylphenol | 10.41 | 198  | 188732   | 41.445 | nq    | 91       |
| 66) n-Nitrosodiphenylamine     | 10.46 | 169  | 1201685  | 40.165 | nq    | 98       |
| 67) 4-Bromophenyl-phenylether  | 10.84 | 248  | 439824   | 38.036 | nq    | 98       |
| 68) Hexachlorobenzene          | 10.91 | 284  | 460858   | 35.071 | nq    | 95       |
| 69) Atrazine                   | 11.00 | 200  | 375022   | 38.196 | nq    | 99       |
| 70) Pentachlorophenol          | 11.11 | 266  | 415448   | 78.716 | nq    | 97       |
| 71) Phenanthrene               | 11.33 | 178  | 3844640  | 74.521 | nq    | 96       |
| 72) Anthracene                 | 11.38 | 178  | 2247334  | 43.932 | nq    | 99       |
| 73) Carbazole                  | 11.53 | 167  | 1931754  | 40.738 | nq    | 99       |
| 74) Di-n-butylphthalate        | 11.87 | 149  | 2178619  | 37.715 | nq    | 99       |
| 75) Fluoranthene               | 12.53 | 202  | 3777868  | 65.200 | nq    | 98       |
| 77) Benzidine                  | 12.65 | 184  | 1259692  | 55.124 | nq    | 99       |
| 78) Pyrene                     | 12.76 | 202  | 3299900  | 60.629 | nq    | 99       |
| 80) Butylbenzylphthalate       | 13.39 | 149  | 949100   | 40.017 | nq    | 98       |
| 81) Benzo(a)anthracene         | 13.96 | 228  | 2153678  | 44.729 | nq    | 97       |
| 82) 3,3'-Dichlorobenzidine     | 13.92 | 252  | 521571   | 27.271 | nq    | 97       |
| 83) Chrysene                   | 14.00 | 228  | 2032320  | 43.004 | nq    | 99       |
| 84) Bis(2-ethylhexyl)phthalate | 13.96 | 149  | 1175240  | 39.400 | nq    | 99       |
| 85) Di-n-octyl phthalate       | 14.57 | 149  | 2202108  | 40.730 | nq    | 100      |
| 86) Indeno(1,2,3-cd)pyrene     | 16.92 | 276  | 2265560  | 38.378 | nq    | 100      |
| 88) Benzo(b)fluoranthene       | 15.02 | 252  | 2117495  | 40.707 | nq    | 98       |
| 89) Benzo(k)fluoranthene       | 15.05 | 252  | 1960555  | 39.588 | nq    | 99       |
| 90) Benzo(a)pyrene             | 15.39 | 252  | 2012340  | 41.499 | nq    | 98       |
| 91) Dibenzo(a,h)anthracene     | 16.94 | 278  | 1825137  | 38.808 | nq    | 98       |
| 92) Benzo(g,h,i)perylene       | 17.36 | 276  | 1900713  | 39.773 | nq    | 99       |

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

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