

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP092319\  
 Data File : BP000379.D  
 Acq On : 23 Sep 2019 22:42  
 Operator : HP/JU  
 Sample : K4980-04MSD  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 SAND-STOCKPILE-1MSD

Quant Time: Sep 24 04:24:15 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA P\METHODS\8270-BP091619.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Sep 19 14:44:51 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.79  | 152  | 256099   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.08  | 136  | 931905   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.83  | 164  | 501734   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.33 | 188  | 931526   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.00 | 240  | 745731   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.47 | 264  | 881268   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.42  | 112 | 1501818 | 101.24 | ng | 0.02 |
| 7) Phenol-d6             | 6.43  | 99  | 1920414 | 105.61 | ng | 0.01 |
| 23) Nitrobenzene-d5      | 7.35  | 82  | 1074764 | 74.41  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 10.63 | 330 | 555802  | 111.68 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 9.15  | 172 | 2228738 | 79.95  | ng | 0.00 |
| 79) Terphenyl-d14        | 12.93 | 244 | 2586386 | 72.76  | ng | 0.00 |

## Target Compounds

|                                |      |     |         |        |    | Qvalue |
|--------------------------------|------|-----|---------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.53 | 88  | 182806  | 27.307 | ng | 99     |
| 3) Pyridine                    | 3.29 | 79  | 445893  | 24.742 | ng | 99     |
| 4) n-Nitrosodimethylamine      | 3.22 | 42  | 161228  | 31.727 | ng | 99     |
| 6) Aniline                     | 6.45 | 93  | 533772  | 21.289 | ng | # 35   |
| 8) 2-Chlorophenol              | 6.58 | 128 | 573635  | 35.910 | ng | 97     |
| 9) Benzaldehyde                | 6.34 | 77  | 373475  | 37.698 | ng | 96     |
| 10) Phenol                     | 6.45 | 94  | 728646  | 35.268 | ng | 82     |
| 11) bis(2-Chloroethyl)ether    | 6.53 | 93  | 540137  | 34.140 | ng | 97     |
| 12) 1,3-Dichlorobenzene        | 6.73 | 146 | 636556  | 33.207 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 6.81 | 146 | 650893  | 34.127 | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 6.96 | 146 | 607952  | 34.797 | ng | 99     |
| 15) Benzyl Alcohol             | 6.93 | 79  | 468558  | 35.408 | ng | 97     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.07 | 45  | 484485  | 32.300 | ng | 98     |
| 17) 2-Methylphenol             | 7.05 | 107 | 477019  | 34.865 | ng | 99     |
| 18) Hexachloroethane           | 7.30 | 117 | 219920  | 31.159 | ng | 99     |
| 19) n-Nitroso-di-n-propylamine | 7.20 | 70  | 330890  | 34.416 | ng | 99     |
| 20) 3+4-Methylphenols          | 7.20 | 107 | 606484  | 36.657 | ng | # 77   |
| 22) Acetophenone               | 7.20 | 105 | 803267  | 39.775 | ng | 98     |
| 24) Nitrobenzene               | 7.37 | 77  | 549928  | 36.656 | ng | 97     |
| 25) Isophorone                 | 7.61 | 82  | 1015934 | 35.521 | ng | 100    |
| 26) 2-Nitrophenol              | 7.69 | 139 | 298550  | 37.538 | ng | 95     |
| 27) 2,4-Dimethylphenol         | 7.73 | 122 | 511665  | 40.388 | ng | 98     |
| 28) bis(2-Chloroethoxy)methane | 7.82 | 93  | 677704  | 35.627 | ng | 100    |
| 29) 2,4-Dichlorophenol         | 7.93 | 162 | 512449  | 37.741 | ng | 99     |
| 30) 1,2,4-Trichlorobenzene     | 8.02 | 180 | 558064  | 35.858 | ng | 100    |
| 31) Naphthalene                | 8.10 | 128 | 1680454 | 38.936 | ng | 99     |
| 32) Benzoic acid               | 7.83 | 122 | 210455  | 24.603 | ng | 98     |
| 33) 4-Chloroaniline            | 8.14 | 127 | 332296  | 17.012 | ng | 99     |
| 34) Hexachlorobutadiene        | 8.22 | 225 | 326980  | 35.459 | ng | 99     |
| 35) Caprolactam                | 8.49 | 113 | 166133  | 35.968 | ng | 98     |
| 36) 4-Chloro-3-methylphenol    | 8.63 | 107 | 514463  | 37.324 | ng | 99     |
| 37) 2-Methylnaphthalene        | 8.79 | 142 | 1162540 | 39.403 | ng | 100    |
| 38) 1-Methylnaphthalene        | 8.89 | 142 | 1081158 | 39.119 | ng | 100    |
| 40) 1,2,4,5-Tetrachlorobenzene | 8.96 | 216 | 561807  | 39.163 | ng | 99     |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 8.95  | 237  | 260579   | 31.633 | ng    | 99       |
| 43) 2,4,6-Trichlorophenol      | 9.07  | 196  | 372135   | 37.489 | ng    | 100      |
| 44) 2,4,5-Trichlorophenol      | 9.12  | 196  | 397664   | 39.124 | ng    | 99       |
| 46) 1,1'-Biphenyl              | 9.25  | 154  | 1401852  | 40.389 | ng    | 99       |
| 47) 2-Chloronaphthalene        | 9.28  | 162  | 1083588  | 37.216 | ng    | 99       |
| 48) 2-Nitroaniline             | 9.37  | 65   | 262455   | 35.496 | ng    | 96       |
| 49) Acenaphthylene             | 9.69  | 152  | 1835556  | 41.940 | ng    | 100      |
| 50) Dimethylphthalate          | 9.55  | 163  | 1533612  | 44.864 | ng    | 100      |
| 51) 2,6-Dinitrotoluene         | 9.61  | 165  | 287828   | 38.294 | ng    | 99       |
| 52) Acenaphthene               | 9.87  | 154  | 1010119  | 36.573 | ng    | 100      |
| 53) 3-Nitroaniline             | 9.78  | 138  | 195043   | 22.356 | ng    | 97       |
| 54) 2,4-Dinitrophenol          | 9.89  | 184  | 91459    | 27.542 | ng    | 97       |
| 55) Dibenzofuran               | 10.04 | 168  | 1538510  | 39.405 | ng    | 100      |
| 56) 4-Nitrophenol              | 9.96  | 139  | 462246   | 71.236 | ng    | 95       |
| 57) 2,4-Dinitrotoluene         | 10.02 | 165  | 375881   | 38.254 | ng    | 98       |
| 58) Fluorene                   | 10.39 | 166  | 1219695  | 40.445 | ng    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.16 | 232  | 325441   | 38.911 | ng    | 98       |
| 60) Diethylphthalate           | 10.26 | 149  | 1232562  | 37.482 | ng    | 99       |
| 61) 4-Chlorophenyl-phenylether | 10.37 | 204  | 601880   | 38.881 | ng    | 98       |
| 62) 4-Nitroaniline             | 10.39 | 138  | 265046   | 30.887 | ng    | 98       |
| 63) Azobenzene                 | 10.53 | 77   | 1055745  | 37.895 | ng    | 95       |
| 65) 4,6-Dinitro-2-methylphenol | 10.43 | 198  | 83080    | 18.968 | ng    | 99       |
| 66) n-Nitrosodiphenylamine     | 10.49 | 169  | 1065000  | 37.978 | ng    | 99       |
| 67) 4-Bromophenyl-phenylether  | 10.87 | 248  | 380913   | 36.161 | ng    | 97       |
| 68) Hexachlorobenzene          | 10.95 | 284  | 398912   | 34.640 | ng    | 98       |
| 69) Atrazine                   | 11.03 | 200  | 327127   | 55.415 | ng    | 98       |
| 70) Pentachlorophenol          | 11.14 | 266  | 410365   | 65.428 | ng    | 99       |
| 71) Phenanthrene               | 11.35 | 178  | 2001220  | 42.870 | ng    | 100      |
| 72) Anthracene                 | 11.40 | 178  | 1909057  | 39.731 | ng    | 100      |
| 73) Carbazole                  | 11.56 | 167  | 1671181  | 38.620 | ng    | 99       |
| 74) Di-n-butylphthalate        | 11.90 | 149  | 1994400  | 36.413 | ng    | 100      |
| 75) Fluoranthene               | 12.55 | 202  | 2191325  | 43.717 | ng    | 98       |
| 77) Benzidine                  | 12.67 | 184  | 1397036  | 52.455 | ng    | 97       |
| 78) Pyrene                     | 12.79 | 202  | 2418733  | 43.352 | ng    | 100      |
| 80) Butylbenzylphthalate       | 13.41 | 149  | 872073   | 34.017 | ng    | 99       |
| 81) Benzo(a)anthracene         | 13.99 | 228  | 1947286  | 41.338 | ng    | 98       |
| 82) 3,3'-Dichlorobenzidine     | 13.95 | 252  | 699755   | 36.963 | ng    | 99       |
| 83) Chrysene                   | 14.02 | 228  | 1842516  | 39.837 | ng    | 100      |
| 84) Bis(2-ethylhexyl)phthalate | 13.98 | 149  | 1174740  | 38.172 | ng    | 99       |
| 85) Di-n-octyl phthalate       | 14.60 | 149  | 2070565  | 36.302 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene     | 16.97 | 276  | 2249236  | 39.897 | ng    | 98       |
| 88) Benzo(b)fluoranthene       | 15.05 | 252  | 2171125  | 41.297 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 15.07 | 252  | 1732022  | 37.768 | ng    | 99       |
| 90) Benzo(a)pyrene             | 15.42 | 252  | 2008154  | 41.979 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 16.99 | 278  | 1758205  | 39.421 | ng    | 98       |
| 92) Benzo(g,h,i)perylene       | 17.42 | 276  | 1886071  | 41.141 | ng    | 98       |

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

