

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF121819\  
 Data File : BF118269.D  
 Acq On : 18 Dec 2019 20:02  
 Operator : JU  
 Sample : K6357-01MSD  
 Misc :  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PF-01MSD

Manual Integrations  
 APPROVED

mohammad  
 12/19/2019 11:16:52 AM

Quant Time: Dec 19 03:56:24 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF120619.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 06 17:34:43 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.86  | 152  | 101298   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 8.15  | 136  | 390867   | 20.00 | ng    | -0.01    |
| 39) Acenaphthene-d10      | 9.91  | 164  | 205801   | 20.00 | ng    | -0.01    |
| 64) Phenanthrene-d10      | 11.40 | 188  | 378593   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.06 | 240  | 242516   | 20.00 | ng    | -0.01    |
| 87) Perylene-d12          | 15.54 | 264  | 244479   | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.48  | 112 | 691455  | 119.55 | ng | 0.00  |
| 7) Phenol-d6             | 6.50  | 99  | 870514  | 124.44 | ng | 0.00  |
| 23) Nitrobenzene-d5      | 7.43  | 82  | 522064  | 75.14  | ng | -0.01 |
| 42) 2,4,6-Tribromophenol | 10.71 | 330 | 289292  | 115.71 | ng | 0.00  |
| 45) 2-Fluorobiphenyl     | 9.23  | 172 | 1060190 | 78.39  | ng | -0.01 |
| 79) Terphenyl-d14        | 12.99 | 244 | 1184904 | 84.02  | ng | -0.01 |

## Target Compounds

|                                |      |     |        |        |    | Qvalue |
|--------------------------------|------|-----|--------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.64 | 88  | 90763  | 37.218 | ng | 99     |
| 3) Pyridine                    | 3.40 | 79  | 219619 | 34.906 | ng | 98     |
| 4) n-Nitrosodimethylamine      | 3.35 | 42  | 115327 | 42.608 | ng | 96     |
| 6) Aniline                     | 6.52 | 93  | 274610 | 30.688 | ng | 96     |
| 8) 2-Chlorophenol              | 6.65 | 128 | 303460 | 46.532 | ng | 99     |
| 9) Benzaldehyde                | 6.41 | 77  | 184475 | 57.615 | ng | 96     |
| 10) Phenol                     | 6.51 | 94  | 378474 | 47.441 | ng | 97     |
| 11) bis(2-Chloroethyl)ether    | 6.60 | 93  | 260454 | 45.140 | ng | 93     |
| 12) 1,3-Dichlorobenzene        | 6.80 | 146 | 333399 | 43.763 | ng | 96     |
| 13) 1,4-Dichlorobenzene        | 6.88 | 146 | 332396 | 43.330 | ng | 97     |
| 14) 1,2-Dichlorobenzene        | 7.03 | 146 | 320950 | 44.551 | ng | 99     |
| 15) Benzyl Alcohol             | 7.00 | 79  | 247192 | 45.268 | ng | 100    |
| 16) 2,2'-oxybis(1-Chloropropan | 7.13 | 45  | 294428 | 42.440 | ng | 94     |
| 17) 2-Methylphenol             | 7.12 | 107 | 233108 | 44.942 | ng | 99     |
| 18) Hexachloroethane           | 7.37 | 117 | 120451 | 42.612 | ng | 99     |
| 19) n-Nitroso-di-n-propylamine | 7.27 | 70  | 191929 | 45.151 | ng | 99     |
| 20) 3+4-Methylphenols          | 7.27 | 107 | 307413 | 47.184 | ng | 92     |
| 22) Acetophenone               | 7.27 | 105 | 402510 | 42.864 | ng | 98     |
| 24) Nitrobenzene               | 7.45 | 77  | 296656 | 43.459 | ng | 100    |
| 25) Isophorone                 | 7.69 | 82  | 523068 | 44.411 | ng | 100    |
| 26) 2-Nitrophenol              | 7.76 | 139 | 164900 | 45.197 | ng | 93     |
| 27) 2,4-Dimethylphenol         | 7.80 | 122 | 257972 | 53.008 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 7.89 | 93  | 325683 | 42.318 | ng | 100    |
| 29) 2,4-Dichlorophenol         | 8.01 | 162 | 250240 | 44.107 | ng | 98     |
| 30) 1,2,4-Trichlorobenzene     | 8.09 | 180 | 283322 | 42.731 | ng | 100    |
| 31) Naphthalene                | 8.17 | 128 | 876663 | 44.659 | ng | 99     |
| 32) Benzoic acid               | 7.93 | 122 | 160623 | 36.554 | ng | 99     |
| 33) 4-Chloroaniline            | 8.22 | 127 | 106694 | 12.588 | ng | 97     |
| 34) Hexachlorobutadiene        | 8.29 | 225 | 164901 | 41.476 | ng | 99     |
| 35) Caprolactam                | 8.59 | 113 | 77625m | 44.367 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.71 | 107 | 266033 | 44.558 | ng | 100    |
| 37) 2-Methylnaphthalene        | 8.86 | 142 | 606418 | 45.631 | ng | 99     |
| 38) 1-Methylnaphthalene        | 8.96 | 142 | 567620 | 45.488 | ng | 98     |
| 40) 1,2,4,5-Tetrachlorobenzene | 9.03 | 216 | 262851 | 42.161 | ng | 99     |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 9.02  | 237  | 267040   | 95.599 | nq    | 99       |
| 43) 2,4,6-Trichlorophenol      | 9.15  | 196  | 178345   | 42.844 | nq    | 97       |
| 44) 2,4,5-Trichlorophenol      | 9.19  | 196  | 186427   | 43.228 | nq    | 96       |
| 46) 1,1'-Biphenyl              | 9.33  | 154  | 712457   | 43.894 | nq    | 100      |
| 47) 2-Chloronaphthalene        | 9.36  | 162  | 557463   | 42.696 | nq    | 99       |
| 48) 2-Nitroaniline             | 9.45  | 65   | 151603   | 40.716 | nq    | 96       |
| 49) Acenaphthylene             | 9.77  | 152  | 887798   | 46.101 | nq    | 99       |
| 50) Dimethylphthalate          | 9.63  | 163  | 741642   | 48.788 | nq    | 98       |
| 51) 2,6-Dinitrotoluene         | 9.70  | 165  | 146491   | 44.318 | nq    | 90       |
| 52) Acenaphthene               | 9.95  | 154  | 510796   | 43.456 | nq    | 97       |
| 53) 3-Nitroaniline             | 9.87  | 138  | 70523    | 18.129 | nq    | 92       |
| 54) 2,4-Dinitrophenol          | 9.98  | 184  | 133176   | 80.983 | nq    | 97       |
| 55) Dibenzofuran               | 10.12 | 168  | 773766   | 44.926 | nq    | 99       |
| 56) 4-Nitrophenol              | 10.04 | 139  | 212322   | 78.649 | nq    | 99       |
| 57) 2,4-Dinitrotoluene         | 10.10 | 165  | 195595   | 44.334 | nq    | 98       |
| 58) Fluorene                   | 10.46 | 166  | 609700   | 44.545 | nq    | 98       |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.24 | 232  | 157391   | 44.236 | nq    | 99       |
| 60) Diethylphthalate           | 10.33 | 149  | 660528   | 44.102 | nq    | 99       |
| 61) 4-Chlorophenyl-phenylether | 10.45 | 204  | 302866   | 43.978 | nq    | 98       |
| 62) 4-Nitroaniline             | 10.49 | 138  | 152427   | 37.570 | nq    | 98       |
| 63) Azobenzene                 | 10.62 | 77   | 566171   | 44.282 | nq    | 94       |
| 65) 4,6-Dinitro-2-methylphenol | 10.52 | 198  | 96438    | 46.125 | nq    | 93       |
| 66) n-Nitrosodiphenylamine     | 10.57 | 169  | 541276   | 45.782 | nq    | 100      |
| 67) 4-Bromophenyl-phenylether  | 10.94 | 248  | 189182   | 43.775 | nq    | 97       |
| 68) Hexachlorobenzene          | 11.02 | 284  | 216696   | 42.600 | nq    | 95       |
| 70) Pentachlorophenol          | 11.22 | 266  | 205839   | 86.047 | nq    | 99       |
| 71) Phenanthrene               | 11.43 | 178  | 896589   | 44.550 | nq    | 100      |
| 72) Anthracene                 | 11.48 | 178  | 930334   | 46.339 | nq    | 99       |
| 73) Carbazole                  | 11.64 | 167  | 794073   | 44.083 | nq    | 100      |
| 74) Di-n-butylphthalate        | 11.96 | 149  | 1021149  | 45.296 | nq    | 99       |
| 75) Fluoranthene               | 12.62 | 202  | 902547   | 43.863 | nq    | 97       |
| 77) Benzidine                  | 12.74 | 184  | 356807   | 55.888 | nq    | 99       |
| 78) Pyrene                     | 12.86 | 202  | 899056   | 47.043 | nq    | 98       |
| 80) Butylbenzylphthalate       | 13.47 | 149  | 394857   | 45.621 | nq    | 93       |
| 81) Benzo(a)anthracene         | 14.05 | 228  | 753614   | 44.940 | nq    | 99       |
| 82) 3,3'-Dichlorobenzidine     | 14.01 | 252  | 141734   | 25.735 | nq    | 98       |
| 83) Chrysene                   | 14.09 | 228  | 714204   | 44.587 | nq    | 99       |
| 84) Bis(2-ethylhexyl)phthalate | 14.03 | 149  | 546659   | 47.899 | nq    | 99       |
| 85) Di-n-octyl phthalate       | 14.64 | 149  | 848550   | 49.082 | nq    | 100      |
| 86) Indeno(1,2,3-cd)pyrene     | 17.07 | 276  | 811366   | 60.199 | nq    | 100      |
| 88) Benzo(b)fluoranthene       | 15.11 | 252  | 706389   | 43.688 | nq    | 98       |
| 89) Benzo(k)fluoranthene       | 15.14 | 252  | 646814   | 41.641 | nq    | # 98     |
| 90) Benzo(a)pyrene             | 15.49 | 252  | 612359   | 42.881 | nq    | 99       |
| 91) Dibenzo(a,h)anthracene     | 17.08 | 278  | 676168   | 55.205 | nq    | 99       |
| 92) Benzo(g,h,i)perylene       | 17.52 | 276  | 692378   | 58.826 | nq    | 98       |

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

