

Data Path : Z:\SVOASRV\HPCHEM1\BNA F\DATA\BF102119\  
 Data File : BF117456.D  
 Acq On : 21 Oct 2019 19:21  
 Operator : JU  
 Sample : K5146-14MS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 CL-02-101819MS

Manual Integrations  
 APPROVED

mohammad  
 10/22/2019 3:29:18 PM

Quant Time: Oct 22 03:23:38 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA F\METHODS\8270-BF101819.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Oct 18 18:53:31 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.73  | 152  | 63991    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.02  | 136  | 269134   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.76  | 164  | 141394   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.25 | 188  | 236792   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 13.90 | 240  | 197192   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.33 | 264  | 182554   | 20.00 | ng    | 0.01     |

|                             |       |     |        |       |    |      |
|-----------------------------|-------|-----|--------|-------|----|------|
| System Monitoring Compounds |       |     |        |       |    |      |
| 5) 2-Fluorophenol           | 5.37  | 112 | 362322 | 84.23 | ng | 0.02 |
| 7) Phenol-d6                | 6.39  | 99  | 489680 | 84.76 | ng | 0.00 |
| 23) Nitrobenzene-d5         | 7.30  | 82  | 301288 | 55.27 | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 10.56 | 330 | 106437 | 87.00 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 9.09  | 172 | 546873 | 54.50 | ng | 0.00 |
| 79) Terphenyl-d14           | 12.83 | 244 | 614288 | 50.81 | ng | 0.00 |

|                                |      |     |        |        |    |      |
|--------------------------------|------|-----|--------|--------|----|------|
| Target Compounds               |      |     |        | Qvalue |    |      |
| 2) 1,4-Dioxane                 | 2.56 | 88  | 49690  | 27.477 | ng | # 84 |
| 3) Pyridine                    | 3.32 | 79  | 79158m | 17.881 | ng |      |
| 4) n-Nitrosodimethylamine      | 3.17 | 42  | 52301  | 32.565 | ng | 99   |
| 6) Aniline                     | 6.41 | 93  | 44019  | 6.490  | ng | # 50 |
| 8) 2-Chlorophenol              | 6.53 | 128 | 140759 | 31.012 | ng | 94   |
| 9) Benzaldehyde                | 6.29 | 77  | 70299  | 21.896 | ng | 98   |
| 10) Phenol                     | 6.40 | 94  | 176332 | 29.905 | ng | # 69 |
| 11) bis(2-Chloroethyl)ether    | 6.47 | 93  | 139023 | 31.876 | ng | 98   |
| 12) 1,3-Dichlorobenzene        | 6.67 | 146 | 143893 | 28.409 | ng | 97   |
| 13) 1,4-Dichlorobenzene        | 6.75 | 146 | 147978 | 28.799 | ng | 97   |
| 14) 1,2-Dichlorobenzene        | 6.90 | 146 | 139394 | 28.780 | ng | 97   |
| 15) Benzyl Alcohol             | 6.89 | 79  | 130704 | 31.667 | ng | 99   |
| 16) 2,2'-oxybis(1-Chloropropan | 7.01 | 45  | 133455 | 28.366 | ng | 68   |
| 17) 2-Methylphenol             | 7.00 | 107 | 120385 | 32.242 | ng | 94   |
| 18) Hexachloroethane           | 7.24 | 117 | 55020  | 27.434 | ng | 95   |
| 19) n-Nitroso-di-n-propylamine | 7.15 | 70  | 107793 | 30.552 | ng | 96   |
| 20) 3+4-Methylphenols          | 7.16 | 107 | 155909 | 31.848 | ng | # 78 |
| 22) Acetophenone               | 7.15 | 105 | 209619 | 29.332 | ng | 94   |
| 24) Nitrobenzene               | 7.32 | 77  | 159105 | 30.471 | ng | 99   |
| 25) Isophorone                 | 7.56 | 82  | 297431 | 31.538 | ng | 98   |
| 26) 2-Nitrophenol              | 7.63 | 139 | 73918  | 31.741 | ng | 93   |
| 27) 2,4-Dimethylphenol         | 7.68 | 122 | 126008 | 36.206 | ng | 97   |
| 28) bis(2-Chloroethoxy)methane | 7.76 | 93  | 174609 | 30.005 | ng | 99   |
| 29) 2,4-Dichlorophenol         | 7.89 | 162 | 116506 | 31.915 | ng | 98   |
| 30) 1,2,4-Trichlorobenzene     | 7.96 | 180 | 113112 | 28.874 | ng | 100  |
| 31) Naphthalene                | 8.03 | 128 | 407304 | 30.532 | ng | 100  |
| 32) Benzoic acid               | 7.84 | 122 | 84234  | 35.336 | ng | 95   |
| 33) 4-Chloroaniline            | 8.10 | 127 | 24650  | 4.378  | ng | # 97 |
| 34) Hexachlorobutadiene        | 8.15 | 225 | 63583  | 28.042 | ng | 97   |
| 35) Caprolactam                | 8.47 | 113 | 43566m | 37.151 | ng |      |
| 36) 4-Chloro-3-methylphenol    | 8.59 | 107 | 139763 | 33.571 | ng | 95   |
| 37) 2-Methylnaphthalene        | 8.73 | 142 | 279806 | 31.128 | ng | 98   |
| 38) 1-Methylnaphthalene        | 8.82 | 142 | 265481 | 31.430 | ng | 99   |
| 40) 1,2,4,5-Tetrachlorobenzene | 8.90 | 216 | 107008 | 28.099 | ng | 98   |

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| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 8.88  | 237  | 65595    | 68.355 | nq    | 96       |
| 43) 2,4,6-Trichlorophenol      | 9.02  | 196  | 75029    | 31.461 | nq    | 96       |
| 44) 2,4,5-Trichlorophenol      | 9.06  | 196  | 83316    | 34.476 | nq    | 98       |
| 46) 1,1'-Biphenyl              | 9.19  | 154  | 335500   | 28.662 | nq    | 97       |
| 47) 2-Chloronaphthalene        | 9.22  | 162  | 257701   | 29.199 | nq    | 97       |
| 48) 2-Nitroaniline             | 9.32  | 65   | 86047    | 29.699 | nq    | 89       |
| 49) Acenaphthylene             | 9.63  | 152  | 402414   | 31.042 | nq    | 99       |
| 50) Dimethylphthalate          | 9.49  | 163  | 340288   | 33.759 | nq    | 100      |
| 51) 2,6-Dinitrotoluene         | 9.56  | 165  | 65489    | 31.135 | nq    | 99       |
| 52) Acenaphthene               | 9.80  | 154  | 238260   | 29.957 | nq    | 97       |
| 53) 3-Nitroaniline             | 9.73  | 138  | 39078    | 15.312 | nq    | 88       |
| 54) 2,4-Dinitrophenol          | 9.85  | 184  | 55377    | 64.560 | nq    | 98       |
| 55) Dibenzofuran               | 9.97  | 168  | 355436   | 30.846 | nq    | 99       |
| 56) 4-Nitrophenol              | 9.92  | 139  | 87628    | 74.870 | nq    | 93       |
| 57) 2,4-Dinitrotoluene         | 9.97  | 165  | 90843    | 32.484 | nq    | 96       |
| 58) Fluorene                   | 10.32 | 166  | 297948   | 31.267 | nq    | 100      |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.10 | 232  | 63805m   | 33.593 | nq    |          |
| 60) Diethylphthalate           | 10.19 | 149  | 319437   | 31.331 | nq    | 98       |
| 61) 4-Chlorophenyl-phenylether | 10.30 | 204  | 129257   | 30.234 | nq    | 95       |
| 62) 4-Nitroaniline             | 10.35 | 138  | 65984    | 27.430 | nq    | 95       |
| 63) Azobenzene                 | 10.46 | 77   | 333754   | 31.978 | nq    | 97       |
| 65) 4,6-Dinitro-2-methylphenol | 10.39 | 198  | 42045    | 34.924 | nq    | 93       |
| 66) n-Nitrosodiphenylamine     | 10.43 | 169  | 267532   | 30.905 | nq    | 98       |
| 67) 4-Bromophenyl-phenylether  | 10.79 | 248  | 74506    | 29.212 | nq    | 95       |
| 68) Hexachlorobenzene          | 10.87 | 284  | 78947    | 28.903 | nq    | 92       |
| 69) Atrazine                   | 10.96 | 200  | 79946    | 36.299 | nq    | 98       |
| 70) Pentachlorophenol          | 11.07 | 266  | 72846    | 88.962 | nq    | 99       |
| 71) Phenanthrene               | 11.27 | 178  | 429038   | 31.204 | nq    | 99       |
| 72) Anthracene                 | 11.33 | 178  | 456878   | 32.384 | nq    | 99       |
| 73) Carbazole                  | 11.49 | 167  | 417709   | 32.398 | nq    | 99       |
| 74) Di-n-butylphthalate        | 11.81 | 149  | 545457   | 31.663 | nq    | 100      |
| 75) Fluoranthene               | 12.46 | 202  | 453028   | 32.913 | nq    | 99       |
| 77) Benzidine                  | 12.59 | 184  | 10547    | Below  | Cal   | 98       |
| 78) Pyrene                     | 12.69 | 202  | 471554   | 27.840 | nq    | 100      |
| 80) Butylbenzylphthalate       | 13.30 | 149  | 244776   | 29.041 | nq    | 99       |
| 81) Benzo(a)anthracene         | 13.89 | 228  | 398180   | 29.935 | nq    | 98       |
| 82) 3,3'-Dichlorobenzidine     | 13.84 | 252  | 69369    | 16.620 | nq    | 100      |
| 83) Chrysene                   | 13.92 | 228  | 387701   | 29.740 | nq    | 99       |
| 84) Bis(2-ethylhexyl)phthalate | 13.87 | 149  | 353199   | 29.915 | nq    | 98       |
| 85) Di-n-octyl phthalate       | 14.48 | 149  | 606838   | 33.429 | nq    | 99       |
| 86) Indeno(1,2,3-cd)pyrene     | 16.74 | 276  | 307728   | 31.617 | nq    | 99       |
| 88) Benzo(b)fluoranthene       | 14.93 | 252  | 347842   | 32.267 | nq    | 98       |
| 89) Benzo(k)fluoranthene       | 14.95 | 252  | 329763   | 29.846 | nq    | 100      |
| 90) Benzo(a)pyrene             | 15.27 | 252  | 297290   | 30.332 | nq    | 97       |
| 91) Dibenzo(a,h)anthracene     | 16.74 | 278  | 264823   | 31.248 | nq    | 97       |
| 92) Benzo(g,h,i)perylene       | 17.16 | 276  | 255601   | 31.875 | nq    | 98       |

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

