

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF071019\  
 Data File : BF115479.D  
 Acq On : 11 Jul 2019 2:07  
 Operator : HP/JU  
 Sample : K3687-01MSD  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VNJ-206-72-12017MSD

Manual Integrations  
 APPROVED

mohammad  
 7/11/2019 5:22:35 PM

Quant Time: Jul 11 08:01:48 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF070519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 10 16:47:05 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.90  | 152  | 144618   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.18  | 136  | 551960   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 9.93  | 164  | 263623   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 11.42 | 188  | 486095   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 14.06 | 240  | 344630   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 15.54 | 264  | 440888   | 20.00 | ng    | -0.02    |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.52  | 112 | 1061851 | 113.44 | ng | 0.00 |
| 7) Phenol-d6             | 6.53  | 99  | 1398184 | 117.45 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 7.46  | 82  | 877193  | 93.90  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 10.73 | 330 | 374087  | 128.34 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 9.26  | 172 | 1459122 | 97.12  | ng | 0.00 |
| 79) Terphenyl-d14        | 13.00 | 244 | 1342606 | 79.77  | ng | 0.00 |

## Target Compounds

|                                |      |     |         |        |    | Qvalue |
|--------------------------------|------|-----|---------|--------|----|--------|
| 2) 1,4-Dioxane                 | 2.72 | 88  | 143213  | 31.193 | ng | 100    |
| 3) Pyridine                    | 3.48 | 79  | 380334  | 29.959 | ng | 100    |
| 4) n-Nitrosodimethylamine      | 3.42 | 42  | 159446  | 30.972 | ng | 97     |
| 6) Aniline                     | 6.56 | 93  | 374258  | 22.279 | ng | 99     |
| 8) 2-Chlorophenol              | 6.68 | 128 | 400300  | 37.874 | ng | 99     |
| 9) Benzaldehyde                | 6.44 | 77  | 218703  | 30.299 | ng | 98     |
| 10) Phenol                     | 6.54 | 94  | 511120  | 35.886 | ng | 99     |
| 11) bis(2-Chloroethyl)ether    | 6.63 | 93  | 376646  | 35.646 | ng | 96     |
| 12) 1,3-Dichlorobenzene        | 6.84 | 146 | 426258  | 36.812 | ng | 99     |
| 13) 1,4-Dichlorobenzene        | 6.92 | 146 | 432156  | 37.259 | ng | 99     |
| 14) 1,2-Dichlorobenzene        | 7.07 | 146 | 403762  | 37.599 | ng | 98     |
| 15) Benzyl Alcohol             | 7.03 | 79  | 358220  | 37.500 | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.17 | 45  | 493832  | 33.425 | ng | 99     |
| 17) 2-Methylphenol             | 7.15 | 107 | 339638  | 37.510 | ng | 99     |
| 18) Hexachloroethane           | 7.41 | 117 | 151395  | 35.039 | ng | 94     |
| 19) n-Nitroso-di-n-propylamine | 7.31 | 70  | 272323  | 33.813 | ng | 97     |
| 20) 3+4-Methylphenols          | 7.30 | 107 | 413204  | 38.633 | ng | # 87   |
| 22) Acetophenone               | 7.30 | 105 | 541976  | 40.978 | ng | # 96   |
| 24) Nitrobenzene               | 7.47 | 77  | 432865  | 41.028 | ng | 96     |
| 25) Isophorone                 | 7.72 | 82  | 773443  | 38.196 | ng | 99     |
| 26) 2-Nitrophenol              | 7.79 | 139 | 218180  | 50.300 | ng | 99     |
| 27) 2,4-Dimethylphenol         | 7.83 | 122 | 354221  | 42.827 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 7.92 | 93  | 472735  | 37.860 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 8.03 | 162 | 344930  | 41.871 | ng | 99     |
| 30) 1,2,4-Trichlorobenzene     | 8.12 | 180 | 374507  | 40.836 | ng | 99     |
| 31) Naphthalene                | 8.20 | 128 | 1141370 | 41.632 | ng | 99     |
| 32) Benzoic acid               | 7.93 | 122 | 185249  | 32.917 | ng | 97     |
| 33) 4-Chloroaniline            | 8.24 | 127 | 128054  | 10.468 | ng | 99     |
| 34) Hexachlorobutadiene        | 8.32 | 225 | 209448  | 40.271 | ng | 99     |
| 35) Caprolactam                | 8.61 | 113 | 111451m | 41.539 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.73 | 107 | 361514  | 41.488 | ng | 100    |
| 37) 2-Methylnaphthalene        | 8.89 | 142 | 763809  | 41.681 | ng | 98     |
| 38) 1-Methylnaphthalene        | 8.99 | 142 | 712101  | 40.728 | ng | 100    |
| 40) 1,2,4,5-Tetrachlorobenzene | 9.06 | 216 | 353116  | 46.560 | ng | 100    |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_F\DATA\BF071019\  
 Data File : BF115479.D  
 Acq On : 11 Jul 2019 2:07  
 Operator : HP/JU  
 Sample : K3687-01MSD  
 Misc :  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 VNJ-206-72-12017MSD

Manual Integrations  
 APPROVED

mohammad  
 7/11/2019 5:22:35 PM

Quant Time: Jul 11 08:01:48 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_F\METHODS\8270-BF070519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Jul 10 16:47:05 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 9.05  | 237  | 173412   | 39.451 | ng    | 98       |
| 43) 2,4,6-Trichlorophenol      | 9.17  | 196  | 242709   | 43.958 | ng    | 99       |
| 44) 2,4,5-Trichlorophenol      | 9.21  | 196  | 258590   | 45.166 | ng    | 99       |
| 46) 1,1'-Biphenyl              | 9.36  | 154  | 924843   | 44.625 | ng    | 98       |
| 47) 2-Chloronaphthalene        | 9.38  | 162  | 731424   | 42.702 | ng    | 98       |
| 48) 2-Nitroaniline             | 9.47  | 65   | 220143   | 43.745 | ng    | 94       |
| 49) Acenaphthylene             | 9.80  | 152  | 1098803  | 42.370 | ng    | 99       |
| 50) Dimethylphthalate          | 9.66  | 163  | 1113337  | 56.267 | ng    | 99       |
| 51) 2,6-Dinitrotoluene         | 9.71  | 165  | 193306   | 45.046 | ng    | 95       |
| 52) Acenaphthene               | 9.97  | 154  | 691492   | 42.367 | ng    | 100      |
| 53) 3-Nitroaniline             | 9.87  | 138  | 95582    | 19.177 | ng    | 94       |
| 54) 2,4-Dinitrophenol          | 9.98  | 184  | 75785    | 45.654 | ng    | # 70     |
| 55) Dibenzofuran               | 10.14 | 168  | 990572   | 43.085 | ng    | 99       |
| 56) 4-Nitrophenol              | 10.04 | 139  | 320311   | 83.065 | ng    | 96       |
| 57) 2,4-Dinitrotoluene         | 10.12 | 165  | 251237   | 46.067 | ng    | 95       |
| 58) Fluorene                   | 10.49 | 166  | 718551   | 39.647 | ng    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 10.26 | 232  | 207281   | 41.910 | ng    | 99       |
| 60) Diethylphthalate           | 10.36 | 149  | 797222   | 40.933 | ng    | 99       |
| 61) 4-Chlorophenyl-phenylether | 10.47 | 204  | 371262   | 41.970 | ng    | 97       |
| 62) 4-Nitroaniline             | 10.49 | 138  | 164431   | 33.610 | ng    | 96       |
| 63) Azobenzene                 | 10.63 | 77   | 773122   | 38.509 | ng    | 97       |
| 65) 4,6-Dinitro-2-methylphenol | 10.52 | 198  | 65544    | 31.392 | ng    | 99       |
| 66) n-Nitrosodiphenylamine     | 10.59 | 169  | 676485   | 44.169 | ng    | 99       |
| 67) 4-Bromophenyl-phenylether  | 10.96 | 248  | 229410   | 42.060 | ng    | 94       |
| 68) Hexachlorobenzene          | 11.03 | 284  | 251701   | 41.125 | ng    | 94       |
| 69) Atrazine                   | 11.12 | 200  | 216163   | 45.604 | ng    | 99       |
| 70) Pentachlorophenol          | 11.23 | 266  | 271754   | 72.856 | ng    | 99       |
| 71) Phenanthrene               | 11.45 | 178  | 1081209  | 42.293 | ng    | 99       |
| 72) Anthracene                 | 11.50 | 178  | 1102344  | 43.000 | ng    | 99       |
| 73) Carbazole                  | 11.64 | 167  | 965381   | 41.163 | ng    | 100      |
| 74) Di-n-butylphthalate        | 11.98 | 149  | 1158511  | 40.873 | ng    | 100      |
| 75) Fluoranthene               | 12.63 | 202  | 1117583  | 41.519 | ng    | 98       |
| 77) Benzidine                  | 12.75 | 184  | 609904   | 45.382 | ng    | 97       |
| 78) Pyrene                     | 12.86 | 202  | 1115464  | 41.622 | ng    | 99       |
| 80) Butylbenzylphthalate       | 13.47 | 149  | 456943   | 39.023 | ng    | 98       |
| 81) Benzo(a)anthracene         | 14.05 | 228  | 977719   | 44.277 | ng    | 100      |
| 82) 3,3'-Dichlorobenzidine     | 14.01 | 252  | 311979   | 38.937 | ng    | 98       |
| 83) Chrysene                   | 14.09 | 228  | 991739   | 43.711 | ng    | 100      |
| 84) Bis(2-ethylhexyl)phthalate | 14.04 | 149  | 582917   | 40.198 | ng    | 99       |
| 85) Di-n-octyl phthalate       | 14.65 | 149  | 1073925  | 41.601 | ng    | 98       |
| 86) Indeno(1,2,3-cd)pyrene     | 17.03 | 276  | 1088675  | 60.634 | ng    | 100      |
| 88) Benzo(b)fluoranthene       | 15.11 | 252  | 1189689  | 41.444 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 15.14 | 252  | 1031741  | 40.414 | ng    | 99       |
| 90) Benzo(a)pyrene             | 15.48 | 252  | 1084093  | 43.786 | ng    | 98       |
| 91) Dibenzo(a,h)anthracene     | 17.04 | 278  | 920957   | 43.529 | ng    | 100      |
| 92) Benzo(g,h,i)perylene       | 17.48 | 276  | 849658   | 42.429 | ng    | 99       |

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

