

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM042219\  
 Data File : BM020011.D  
 Acq On : 22 Apr 2019 18:18  
 Operator : JU/SJ  
 Sample : K2193-08MSD  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 HR-05-041719-AMSD

Manual Integrations  
 APPROVED

Sohil  
 4/23/2019 4:13:34 PM

Quant Time: Apr 23 01:54:28 2019

Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\8270-BM041519.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Apr 19 00:56:08 2019

Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.50  | 152  | 109290   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 10.27 | 136  | 407061   | 20.00 | ng    | -0.01    |
| 39) Acenaphthene-d10      | 14.17 | 164  | 217769   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 16.93 | 188  | 436343   | 20.00 | ng    | -0.01    |
| 76) Chrysene-d12          | 21.16 | 240  | 380280   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 23.34 | 264  | 431937   | 20.00 | ng    | 0.00     |

#### System Monitoring Compounds

|                          |       |     |         |        |    |       |
|--------------------------|-------|-----|---------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.12  | 112 | 839331  | 124.46 | ng | -0.01 |
| 7) Phenol-d6             | 6.70  | 99  | 1014106 | 99.92  | ng | -0.01 |
| 23) Nitrobenzene-d5      | 8.67  | 82  | 851552  | 93.55  | ng | -0.01 |
| 42) 2,4,6-Tribromophenol | 15.68 | 330 | 447530  | 127.67 | ng | -0.01 |
| 45) 2-Fluorobiphenyl     | 12.77 | 172 | 1635058 | 93.57  | ng | -0.01 |
| 79) Terphenyl-d14        | 19.59 | 244 | 2167823 | 100.55 | ng | 0.00  |

#### Target Compounds

|                                |       |     |        |        |    | Qvalue |
|--------------------------------|-------|-----|--------|--------|----|--------|
| 2) 1,4-Dioxane                 | 3.10  | 88  | 126168 | 43.355 | ng | # 56   |
| 3) Pyridine                    | 3.50  | 79  | 281396 | 34.528 | ng | 100    |
| 4) n-Nitrosodimethylamine      | 3.42  | 42  | 117184 | 44.635 | ng | # 92   |
| 6) Aniline                     | 6.86  | 93  | 161216 | 12.299 | ng | 98     |
| 8) 2-Chlorophenol              | 7.07  | 128 | 337120 | 40.194 | ng | 99     |
| 9) Benzaldehyde                | 6.69  | 77  | 106057 | 15.053 | ng | 98     |
| 10) Phenol                     | 6.73  | 94  | 358177 | 32.302 | ng | 93     |
| 11) bis(2-Chloroethyl)ether    | 6.95  | 93  | 320081 | 39.453 | ng | 99     |
| 12) 1,3-Dichlorobenzene        | 7.39  | 146 | 338039 | 38.391 | ng | 97     |
| 13) 1,4-Dichlorobenzene        | 7.53  | 146 | 342665 | 38.356 | ng | 99     |
| 14) 1,2-Dichlorobenzene        | 7.85  | 146 | 339646 | 38.343 | ng | 99     |
| 15) Benzyl Alcohol             | 7.77  | 79  | 337763 | 36.608 | ng | 98     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.03  | 45  | 281631 | 36.415 | ng | 97     |
| 17) 2-Methylphenol             | 7.96  | 107 | 266802 | 36.355 | ng | 98     |
| 18) Hexachloroethane           | 8.55  | 117 | 130776 | 37.658 | ng | 99     |
| 19) n-Nitroso-di-n-propylamine | 8.32  | 70  | 306531 | 34.359 | ng | 100    |
| 20) 3+4-Methylphenols          | 8.30  | 107 | 343013 | 34.024 | ng | 98     |
| 22) Acetophenone               | 8.34  | 105 | 519666 | 46.871 | ng | 100    |
| 24) Nitrobenzene               | 8.72  | 77  | 449517 | 47.673 | ng | 98     |
| 25) Isophorone                 | 9.23  | 82  | 749298 | 42.289 | ng | 99     |
| 26) 2-Nitrophenol              | 9.42  | 139 | 172293 | 42.878 | ng | 95     |
| 27) 2,4-Dimethylphenol         | 9.48  | 122 | 275119 | 48.424 | ng | 97     |
| 28) bis(2-Chloroethoxy)methane | 9.72  | 93  | 429992 | 43.338 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 9.96  | 162 | 277622 | 43.025 | ng | 100    |
| 30) 1,2,4-Trichlorobenzene     | 10.14 | 180 | 326894 | 47.070 | ng | 100    |
| 31) Naphthalene                | 10.33 | 128 | 990478 | 45.365 | ng | 99     |
| 32) Benzoic acid               | 9.66  | 122 | 64610  | 15.870 | ng | 97     |
| 33) 4-Chloroaniline            | 10.50 | 127 | 42457  | 4.720  | ng | 97     |
| 34) Hexachlorobutadiene        | 10.57 | 225 | 189572 | 46.283 | ng | 97     |
| 35) Caprolactam                | 11.32 | 113 | 56642m | 23.191 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 11.61 | 107 | 317069 | 39.547 | ng | 99     |
| 37) 2-Methylnaphthalene        | 11.95 | 142 | 712601 | 44.830 | ng | 98     |
| 38) 1-Methylnaphthalene        | 12.17 | 142 | 677360 | 43.158 | ng | 100    |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.33 | 216 | 339311 | 50.507 | ng | 100    |

Data Path : Z:\SVOASRV\HPCHEM1\BNA\_M\DATA\BM042219\  
 Data File : BM020011.D  
 Acq On : 22 Apr 2019 18:18  
 Operator : JU/SJ  
 Sample : K2193-08MSD  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 HR-05-041719-AMSD

Manual Integrations  
 APPROVED

Sohil  
 4/23/2019 4:13:34 PM

Quant Time: Apr 23 01:54:28 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_M\METHODS\8270-BM041519.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 19 00:56:08 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.28 | 237  | 216776   | 89.517 | ng    | 98       |
| 43) 2,4,6-Trichlorophenol      | 12.59 | 196  | 220928   | 48.506 | ng    | 99       |
| 44) 2,4,5-Trichlorophenol      | 12.68 | 196  | 218107   | 46.010 | ng    | 97       |
| 46) 1,1'-Biphenyl              | 12.99 | 154  | 910403   | 48.268 | ng    | 100      |
| 47) 2-Chloronaphthalene        | 13.03 | 162  | 699261   | 48.603 | ng    | 99       |
| 48) 2-Nitroaniline             | 13.28 | 65   | 224645   | 43.319 | ng    | 93       |
| 49) Acenaphthylene             | 13.89 | 152  | 1099496  | 43.923 | ng    | 99       |
| 50) Dimethylphthalate          | 13.65 | 163  | 865730   | 45.070 | ng    | 100      |
| 51) 2,6-Dinitrotoluene         | 13.79 | 165  | 183760   | 43.262 | ng    | 88       |
| 52) Acenaphthene               | 14.23 | 154  | 643822   | 46.386 | ng    | 98       |
| 53) 3-Nitroaniline             | 14.14 | 138  | 46502    | 10.964 | ng    | 98       |
| 54) 2,4-Dinitrophenol          | 14.36 | 184  | 111964   | 47.494 | ng    | 88       |
| 55) Dibenzofuran               | 14.57 | 168  | 1027972  | 45.292 | ng    | 96       |
| 56) 4-Nitrophenol              | 14.47 | 139  | 179686   | 55.618 | ng    | 91       |
| 57) 2,4-Dinitrotoluene         | 14.59 | 165  | 254775   | 41.728 | ng    | 96       |
| 58) Fluorene                   | 15.23 | 166  | 843313   | 43.850 | ng    | 100      |
| 59) 2,3,4,6-Tetrachlorophenol  | 14.82 | 232  | 198633   | 45.923 | ng    | 99       |
| 60) Diethylphthalate           | 15.02 | 149  | 889793   | 44.539 | ng    | 100      |
| 61) 4-Chlorophenyl-phenylether | 15.23 | 204  | 419331   | 45.286 | ng    | 97       |
| 62) 4-Nitroaniline             | 15.31 | 138  | 136080   | 32.565 | ng    | 90       |
| 63) Azobenzene                 | 15.52 | 77   | 979295   | 45.864 | ng    | 99       |
| 65) 4,6-Dinitro-2-methylphenol | 15.36 | 198  | 89238    | 32.054 | ng    | 96       |
| 66) n-Nitrosodiphenylamine     | 15.45 | 169  | 698272   | 48.949 | ng    | 100      |
| 67) 4-Bromophenyl-phenylether  | 16.12 | 248  | 241259   | 48.091 | ng    | 98       |
| 68) Hexachlorobenzene          | 16.23 | 284  | 289686   | 48.125 | ng    | 98       |
| 69) Atrazine                   | 16.42 | 200  | 234098   | 48.341 | ng    | 98       |
| 70) Pentachlorophenol          | 16.59 | 266  | 257287   | 83.654 | ng    | 99       |
| 71) Phenanthrene               | 16.98 | 178  | 1204008  | 46.498 | ng    | 99       |
| 72) Anthracene                 | 17.07 | 178  | 1211771  | 47.012 | ng    | 100      |
| 73) Carbazole                  | 17.36 | 167  | 1050438  | 43.650 | ng    | 99       |
| 74) Di-n-butylphthalate        | 17.90 | 149  | 1463136  | 46.295 | ng    | 99       |
| 75) Fluoranthene               | 19.02 | 202  | 1305556  | 43.812 | ng    | 99       |
| 77) Benzidine                  | 19.24 | 184  | 129669   | 12.358 | ng    | 98       |
| 78) Pyrene                     | 19.38 | 202  | 1343116  | 53.334 | ng    | 99       |
| 80) Butylbenzylphthalate       | 20.29 | 149  | 637185   | 52.189 | ng    | 96       |
| 81) Benzo(a)anthracene         | 21.14 | 228  | 1196082  | 49.651 | ng    | 100      |
| 82) 3,3'-Dichlorobenzidine     | 21.09 | 252  | 196352   | 21.908 | ng    | 97       |
| 83) Chrysene                   | 21.20 | 228  | 1188804  | 51.458 | ng    | 100      |
| 84) Bis(2-ethylhexyl)phthalate | 21.06 | 149  | 935509   | 51.468 | ng    | 100      |
| 85) Di-n-octyl phthalate       | 21.92 | 149  | 1620216  | 54.935 | ng    | 100      |
| 86) Indeno(1,2,3-cd)pyrene     | 25.54 | 276  | 1761017  | 77.488 | ng    | 99       |
| 88) Benzo(b)fluoranthene       | 22.69 | 252  | 1318995  | 45.988 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 22.73 | 252  | 1336175  | 49.485 | ng    | 98       |
| 90) Benzo(a)pyrene             | 23.25 | 252  | 1267008  | 49.856 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 25.54 | 278  | 1502294  | 61.314 | ng    | 98       |
| 92) Benzo(g,h,i)perylene       | 26.21 | 276  | 1426330  | 64.272 | ng    | 99       |

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

