

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG053119\  
 Data File : BG041001.D  
 Acq On : 1 Jun 2019 7:17  
 Operator : HP/JU  
 Sample : K3037-08MSD  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 MW2-R1-1MSD

Manual Integrations  
 APPROVED

mohammad  
 6/3/2019 8:50:31 AM

Quant Time: Jun 03 01:56:21 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG052919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 29 18:39:57 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 8.12  | 152  | 60786    | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 10.94 | 136  | 241364   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.75 | 164  | 175480   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.50 | 188  | 428798   | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.78 | 240  | 412455   | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 25.11 | 264  | 448743   | 20.00 | ng    | -0.02    |

|                             |       |     |         |        |    |      |
|-----------------------------|-------|-----|---------|--------|----|------|
| System Monitoring Compounds |       |     |         |        |    |      |
| 5) 2-Fluorophenol           | 5.66  | 112 | 187897  | 55.74  | ng | 0.00 |
| 7) Phenol-d6                | 7.26  | 99  | 173516  | 33.33  | ng | 0.00 |
| 23) Nitrobenzene-d5         | 9.30  | 82  | 421301  | 77.49  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol    | 16.24 | 330 | 299287  | 114.88 | ng | 0.00 |
| 45) 2-Fluorobiphenyl        | 13.38 | 172 | 912518  | 74.89  | ng | 0.00 |
| 79) Terphenyl-d14           | 20.09 | 244 | 1466082 | 75.44  | ng | 0.00 |

|                                |       |     |         |        |    |      |
|--------------------------------|-------|-----|---------|--------|----|------|
| Target Compounds               |       |     |         | Qvalue |    |      |
| 2) 1,4-Dioxane                 | 3.52  | 88  | 23582   | 15.416 | ng | # 73 |
| 3) Pyridine                    | 3.93  | 79  | 64462   | 14.242 | ng | 96   |
| 4) n-Nitrosodimethylamine      | 3.85  | 42  | 36497   | 17.374 | ng | # 88 |
| 6) Aniline                     | 7.44  | 93  | 80432   | 11.574 | ng | 94   |
| 8) 2-Chlorophenol              | 7.68  | 128 | 125932  | 31.335 | ng | 98   |
| 9) Benzaldehyde                | 7.26  | 77  | 74346   | 23.939 | ng | 89   |
| 10) Phenol                     | 7.29  | 94  | 65184   | 11.677 | ng | 96   |
| 11) bis(2-Chloroethyl)ether    | 7.54  | 93  | 144394  | 35.657 | ng | 99   |
| 12) 1,3-Dichlorobenzene        | 8.01  | 146 | 142629  | 29.715 | ng | 97   |
| 13) 1,4-Dichlorobenzene        | 8.15  | 146 | 144128  | 29.664 | ng | 98   |
| 14) 1,2-Dichlorobenzene        | 8.48  | 146 | 141458  | 29.986 | ng | 97   |
| 15) Benzyl Alcohol             | 8.36  | 79  | 118010  | 24.504 | ng | 94   |
| 16) 2,2'-oxybis(1-Chloropropan | 8.64  | 45  | 229896  | 34.743 | ng | 99   |
| 17) 2-Methylphenol             | 8.55  | 107 | 100299  | 24.816 | ng | 98   |
| 18) Hexachloroethane           | 9.21  | 117 | 53668   | 28.660 | ng | 95   |
| 19) n-Nitroso-di-n-propylamine | 8.92  | 70  | 141862  | 35.409 | ng | 98   |
| 20) 3+4-Methylphenols          | 8.88  | 107 | 119759  | 21.391 | ng | 98   |
| 22) Acetophenone               | 8.95  | 105 | 262397  | 38.755 | ng | # 99 |
| 24) Nitrobenzene               | 9.34  | 77  | 237280  | 42.825 | ng | 98   |
| 25) Isophorone                 | 9.86  | 82  | 400146  | 38.673 | ng | 98   |
| 26) 2-Nitrophenol              | 10.05 | 139 | 89351   | 39.118 | ng | 90   |
| 27) 2,4-Dimethylphenol         | 10.09 | 122 | 139515  | 36.983 | ng | 96   |
| 28) bis(2-Chloroethoxy)methane | 10.34 | 93  | 212456  | 38.044 | ng | 98   |
| 29) 2,4-Dichlorophenol         | 10.58 | 162 | 172822  | 36.076 | ng | 95   |
| 30) 1,2,4-Trichlorobenzene     | 10.80 | 180 | 179386  | 32.917 | ng | 98   |
| 31) Naphthalene                | 11.00 | 128 | 465636  | 35.931 | ng | 99   |
| 32) Benzoic acid               | 10.18 | 122 | 33042   | 17.487 | ng | 98   |
| 33) 4-Chloroaniline            | 11.10 | 127 | 69649   | 11.583 | ng | 93   |
| 34) Hexachlorobutadiene        | 11.26 | 225 | 124639  | 29.891 | ng | 98   |
| 35) Caprolactam                | 11.90 | 113 | 10345   | 6.539  | ng | # 87 |
| 36) 4-Chloro-3-methylphenol    | 12.20 | 107 | 181127  | 33.106 | ng | 95   |
| 37) 2-Methylnaphthalene        | 12.59 | 142 | 358260  | 35.895 | ng | 95   |
| 38) 1-Methylnaphthalene        | 12.81 | 142 | 342101m | 36.373 | ng |      |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.95 | 216 | 260291  | 36.802 | ng | 99   |

Data Path : Z:\SVOASRV\HPCHEM1\BNA G\DATA\BG053119\  
 Data File : BG041001.D  
 Acq On : 1 Jun 2019 7:17  
 Operator : HP/JU  
 Sample : K3037-08MSD  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 BNA\_G  
 ClientSampleId :  
 MW2-R1-1MSD

Manual Integrations  
 APPROVED

mohammad  
 6/3/2019 8:50:31 AM

Quant Time: Jun 03 01:56:21 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA G\METHODS\8270-BG052919.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed May 29 18:39:57 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.92 | 237  | 303438   | 79.830 | nq    | 95       |
| 43) 2,4,6-Trichlorophenol      | 13.18 | 196  | 170593   | 37.284 | nq    | 98       |
| 44) 2,4,5-Trichlorophenol      | 13.25 | 196  | 178813   | 37.056 | nq    | 97       |
| 46) 1,1'-Biphenyl              | 13.59 | 154  | 494556   | 38.074 | nq    | 99       |
| 47) 2-Chloronaphthalene        | 13.64 | 162  | 405183   | 36.335 | nq    | 98       |
| 48) 2-Nitroaniline             | 13.84 | 65   | 131721   | 32.926 | nq    | 98       |
| 49) Acenaphthylene             | 14.48 | 152  | 627486   | 37.388 | nq    | 99       |
| 50) Dimethylphthalate          | 14.20 | 163  | 636388   | 42.842 | nq    | 99       |
| 51) 2,6-Dinitrotoluene         | 14.33 | 165  | 121906   | 38.063 | nq    | 100      |
| 52) Acenaphthene               | 14.82 | 154  | 364250   | 35.826 | nq    | 97       |
| 53) 3-Nitroaniline             | 14.66 | 138  | 43376    | 13.544 | nq    | 95       |
| 54) 2,4-Dinitrophenol          | 14.86 | 184  | 159018   | 90.262 | nq    | 94       |
| 55) Dibenzofuran               | 15.15 | 168  | 644934   | 37.698 | nq    | 100      |
| 56) 4-Nitrophenol              | 14.95 | 139  | 67185    | 30.584 | nq    | 90       |
| 57) 2,4-Dinitrotoluene         | 15.11 | 165  | 171570   | 37.923 | nq    | 99       |
| 58) Fluorene                   | 15.80 | 166  | 507678   | 37.263 | nq    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 15.37 | 232  | 184491   | 38.904 | nq    | 99       |
| 60) Diethylphthalate           | 15.55 | 149  | 561810   | 37.060 | nq    | 98       |
| 61) 4-Chlorophenyl-phenylether | 15.78 | 204  | 325040   | 36.704 | nq    | 97       |
| 62) 4-Nitroaniline             | 15.82 | 138  | 83295    | 24.567 | nq    | 95       |
| 63) Azobenzene                 | 16.07 | 77   | 518262   | 37.615 | nq    | 100      |
| 65) 4,6-Dinitro-2-methylphenol | 15.87 | 198  | 102770   | 45.312 | nq    | 97       |
| 66) n-Nitrosodiphenylamine     | 16.00 | 169  | 465469   | 38.615 | nq    | 99       |
| 67) 4-Bromophenyl-phenylether  | 16.68 | 248  | 213284   | 36.857 | nq    | 95       |
| 68) Hexachlorobenzene          | 16.79 | 284  | 217795   | 35.345 | nq    | 99       |
| 69) Atrazine                   | 16.94 | 200  | 191595   | 41.193 | nq    | 96       |
| 70) Pentachlorophenol          | 17.14 | 266  | 273045   | 82.571 | nq    | 96       |
| 71) Phenanthrene               | 17.54 | 178  | 850364   | 38.072 | nq    | 99       |
| 72) Anthracene                 | 17.63 | 178  | 867256   | 39.369 | nq    | 100      |
| 73) Carbazole                  | 17.90 | 167  | 750227   | 39.691 | nq    | 99       |
| 74) Di-n-butylphthalate        | 18.43 | 149  | 890390   | 37.901 | nq    | 99       |
| 75) Fluoranthene               | 19.54 | 202  | 1077404  | 39.053 | nq    | 97       |
| 78) Pyrene                     | 19.90 | 202  | 1080294  | 40.291 | nq    | 100      |
| 80) Butylbenzylphthalate       | 20.77 | 149  | 408789   | 39.178 | nq    | 99       |
| 81) Benzo(a)anthracene         | 21.76 | 228  | 1040343  | 37.892 | nq    | 100      |
| 82) 3,3'-Dichlorobenzidine     | 21.67 | 252  | 58339    | 6.041  | nq    | # 91     |
| 83) Chrysene                   | 21.83 | 228  | 1020310  | 38.834 | nq    | 98       |
| 84) Bis(2-ethylhexyl)phthalate | 21.63 | 149  | 565885   | 38.526 | nq    | 99       |
| 85) Di-n-octyl phthalate       | 22.87 | 149  | 945966   | 38.670 | nq    | 100      |
| 86) Indeno(1,2,3-cd)pyrene     | 28.95 | 276  | 1224946  | 38.060 | nq    | # 99     |
| 88) Benzo(b)fluoranthene       | 24.04 | 252  | 1068078  | 39.242 | nq    | 98       |
| 89) Benzo(k)fluoranthene       | 24.12 | 252  | 1007808  | 37.418 | nq    | 98       |
| 90) Benzo(a)pyrene             | 24.96 | 252  | 1011165  | 38.939 | nq    | 99       |
| 91) Dibenzo(a,h)anthracene     | 29.02 | 278  | 1001413  | 38.594 | nq    | 97       |
| 92) Benzo(g,h,i)perylene       | 30.17 | 276  | 1034277  | 41.029 | nq    | 97       |

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

