

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM062119\  
 Data File : BM021076.D  
 Acq On : 21 Jun 2019 09:17  
 Operator : HP/JU  
 Sample : K2241-03  
 Misc : LOD-S-8PPM  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-MDL-SOIL-03-QT2-2019

Manual Integrations  
 APPROVED

mohammad  
 6/25/2019 3:22:51 PM

Quant Time: Jun 22 00:00:15 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM062019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jun 20 15:39:58 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.78  | 152  | 213535   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.57 | 136  | 924438   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.42 | 164  | 637050   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.17 | 188  | 1603189  | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.35 | 240  | 1720146  | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 23.62 | 264  | 1799615  | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |        |    |      |
|--------------------------|-------|-----|---------|--------|----|------|
| 5) 2-Fluorophenol        | 5.37  | 112 | 1388829 | 117.77 | ng | 0.00 |
| 7) Phenol-d6             | 6.95  | 99  | 1998062 | 116.35 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 8.94  | 82  | 1438849 | 81.12  | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 15.92 | 330 | 1659933 | 138.86 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 13.04 | 172 | 4504087 | 86.89  | ng | 0.00 |
| 79) Terphenyl-d14        | 19.79 | 244 | 8634700 | 93.76  | ng | 0.00 |

## Target Compounds

|                                |       |     |        |       |    | Qvalue |
|--------------------------------|-------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.32  | 88  | 36389  | 8.190 | ng | 96     |
| 3) Pyridine                    | 3.73  | 79  | 91770  | 7.183 | ng | 99     |
| 4) n-Nitrosodimethylamine      | 3.64  | 42  | 34724  | 7.058 | ng | # 89   |
| 6) Aniline                     | 7.12  | 93  | 158960 | 6.950 | ng | 99     |
| 8) 2-Chlorophenol              | 7.34  | 128 | 107915 | 7.435 | ng | 97     |
| 9) Benzaldehyde                | 6.93  | 77  | 102382 | 7.142 | ng | 98     |
| 10) Phenol                     | 6.97  | 94  | 128005 | 7.296 | ng | 98     |
| 11) bis(2-Chloroethyl)ether    | 7.21  | 93  | 101809 | 7.330 | ng | 98     |
| 12) 1,3-Dichlorobenzene        | 7.66  | 146 | 127352 | 7.243 | ng | 97     |
| 13) 1,4-Dichlorobenzene        | 7.82  | 146 | 127271 | 7.119 | ng | 98     |
| 14) 1,2-Dichlorobenzene        | 8.13  | 146 | 126164 | 7.201 | ng | 99     |
| 15) Benzyl Alcohol             | 8.02  | 79  | 99807  | 7.178 | ng | 99     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.31  | 45  | 137741 | 7.667 | ng | 98     |
| 17) 2-Methylphenol             | 8.22  | 107 | 88812  | 7.087 | ng | 98     |
| 18) Hexachloroethane           | 8.85  | 117 | 45831  | 7.140 | ng | 91     |
| 19) n-Nitroso-di-n-propylamine | 8.58  | 70  | 95497  | 7.641 | ng | 98     |
| 20) 3+4-Methylphenols          | 8.54  | 107 | 118667 | 6.879 | ng | 96     |
| 22) Acetophenone               | 8.60  | 105 | 194952 | 8.276 | ng | # 97   |
| 24) Nitrobenzene               | 8.98  | 77  | 144229 | 8.208 | ng | 98     |
| 25) Isophorone                 | 9.50  | 82  | 259653 | 7.823 | ng | 99     |
| 26) 2-Nitrophenol              | 9.69  | 139 | 56839  | 6.606 | ng | 91     |
| 27) 2,4-Dimethylphenol         | 9.75  | 122 | 102212 | 8.145 | ng | 99     |
| 28) bis(2-Chloroethoxy)methane | 9.99  | 93  | 158315 | 7.676 | ng | 98     |
| 29) 2,4-Dichlorophenol         | 10.22 | 162 | 112769 | 6.944 | ng | 99     |
| 30) 1,2,4-Trichlorobenzene     | 10.43 | 180 | 140153 | 7.321 | ng | 99     |
| 31) Naphthalene                | 10.62 | 128 | 384919 | 7.868 | ng | 98     |
| 32) Benzoic acid               | 9.83  | 122 | 62211m | 6.128 | ng |        |
| 33) 4-Chloroaniline            | 10.74 | 127 | 161377 | 7.266 | ng | 98     |
| 34) Hexachlorobutadiene        | 10.89 | 225 | 85698  | 7.090 | ng | 96     |
| 35) Caprolactam                | 11.53 | 113 | 35361  | 6.961 | ng | 89     |
| 36) 4-Chloro-3-methylphenol    | 11.85 | 107 | 124560 | 7.537 | ng | 100    |
| 37) 2-Methylnaphthalene        | 12.23 | 142 | 304194 | 8.081 | ng | 99     |
| 38) 1-Methylnaphthalene        | 12.45 | 142 | 290120 | 8.081 | ng | 97     |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.60 | 216 | 187030 | 7.757 | ng | 99     |

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|--------------------------------|-------|------|----------|-------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.57 | 237  | 92451    | 6.614 | ng    | 98       |
| 43) 2,4,6-Trichlorophenol      | 12.85 | 196  | 104460   | 6.547 | ng    | 93       |
| 44) 2,4,5-Trichlorophenol      | 12.92 | 196  | 114655   | 6.939 | ng    | 99       |
| 46) 1,1'-Biphenyl              | 13.25 | 154  | 448223   | 8.221 | ng    | 98       |
| 47) 2-Chloronaphthalene        | 13.29 | 162  | 325540   | 7.351 | ng    | 97       |
| 48) 2-Nitroaniline             | 13.50 | 65   | 76168    | 6.287 | ng    | 94       |
| 49) Acenaphthylene             | 14.14 | 152  | 518369   | 7.692 | ng    | 99       |
| 50) Dimethylphthalate          | 13.88 | 163  | 441718   | 7.799 | ng    | 99       |
| 51) 2,6-Dinitrotoluene         | 14.00 | 165  | 89548    | 7.349 | ng    | 99       |
| 52) Acenaphthene               | 14.48 | 154  | 312350   | 7.682 | ng    | 100      |
| 53) 3-Nitroaniline             | 14.33 | 138  | 80467    | 6.478 | ng    | 93       |
| 54) 2,4-Dinitrophenol          | 14.54 | 184  | 34841    | 5.323 | ng    | 96       |
| 55) Dibenzofuran               | 14.82 | 168  | 524173   | 7.903 | ng    | 97       |
| 56) 4-Nitrophenol              | 14.64 | 139  | 64923    | 6.835 | ng    | 97       |
| 57) 2,4-Dinitrotoluene         | 14.79 | 165  | 118253   | 7.028 | ng    | 97       |
| 58) Fluorene                   | 15.47 | 166  | 425137   | 7.845 | ng    | 99       |
| 59) 2,3,4,6-Tetrachlorophenol  | 15.04 | 232  | 117864   | 7.466 | ng    | 97       |
| 60) Diethylphthalate           | 15.24 | 149  | 440201   | 7.891 | ng    | 99       |
| 61) 4-Chlorophenyl-phenylether | 15.46 | 204  | 232488   | 7.594 | ng    | 96       |
| 62) 4-Nitroaniline             | 15.50 | 138  | 88130    | 6.759 | ng    | 93       |
| 63) Azobenzene                 | 15.76 | 77   | 366885   | 8.018 | ng    | 96       |
| 65) 4,6-Dinitro-2-methylphenol | 15.55 | 198  | 52024    | 5.263 | ng    | 95       |
| 66) n-Nitrosodiphenylamine     | 15.68 | 169  | 374942   | 7.420 | ng    | 98       |
| 67) 4-Bromophenyl-phenylether  | 16.36 | 248  | 148150   | 6.942 | ng    | 96       |
| 68) Hexachlorobenzene          | 16.46 | 284  | 179128   | 7.026 | ng    | 94       |
| 69) Atrazine                   | 16.63 | 200  | 127664   | 7.769 | ng    | 99       |
| 70) Pentachlorophenol          | 16.82 | 266  | 85430    | 6.219 | ng    | 98       |
| 71) Phenanthrene               | 17.21 | 178  | 723303   | 7.828 | ng    | 99       |
| 72) Anthracene                 | 17.30 | 178  | 710862   | 7.767 | ng    | 99       |
| 73) Carbazole                  | 17.57 | 167  | 630078   | 7.786 | ng    | 99       |
| 74) Di-n-butylphthalate        | 18.13 | 149  | 723946   | 7.308 | ng    | 99       |
| 75) Fluoranthene               | 19.22 | 202  | 876610   | 8.216 | ng    | 99       |
| 77) Benzidine                  | 19.42 | 184  | 310194   | 6.210 | ng    | 99       |
| 78) Pyrene                     | 19.59 | 202  | 895934   | 7.182 | ng    | 99       |
| 80) Butylbenzylphthalate       | 20.49 | 149  | 328379   | 6.604 | ng    | 96       |
| 81) Benzo(a)anthracene         | 21.33 | 228  | 882149   | 7.523 | ng    | 99       |
| 82) 3,3'-Dichlorobenzidine     | 21.27 | 252  | 325051   | 7.319 | ng    | 97       |
| 83) Chrysene                   | 21.39 | 228  | 889976   | 7.967 | ng    | 100      |
| 84) Bis(2-ethylhexyl)phthalate | 21.26 | 149  | 481956   | 6.810 | ng    | 97       |
| 85) Di-n-octyl phthalate       | 22.14 | 149  | 806119   | 7.243 | ng    | 99       |
| 86) Indeno(1,2,3-cd)pyrene     | 25.92 | 276  | 895232   | 7.243 | ng    | 99       |
| 88) Benzo(b)fluoranthene       | 22.93 | 252  | 894178   | 7.365 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 22.98 | 252  | 905723   | 7.718 | ng    | 100      |
| 90) Benzo(a)pyrene             | 23.52 | 252  | 832635   | 7.601 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 25.93 | 278  | 758287   | 6.943 | ng    | 98       |
| 92) Benzo(g,h,i)perylene       | 26.62 | 276  | 724385   | 7.112 | ng    | 99       |

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

