

Data Path : Z:\SVOASRV\HPCHEM1\BNA M\DATA\BM092319\  
 Data File : BM022746.D  
 Acq On : 23 Sep 2019 18:24  
 Operator : HP/JU  
 Sample : K3591-03  
 Misc : MDL-S-8PPM  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 MDL-MDL-SOIL-03-QT3-2019

Quant Time: Sep 24 07:08:55 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA M\METHODS\8270-BM092019.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Sep 24 07:00:32 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.82  | 152  | 169994   | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 10.62 | 136  | 746896   | 20.00 | ng    | 0.00     |
| 39) Acenaphthene-d10      | 14.46 | 164  | 476602   | 20.00 | ng    | 0.00     |
| 64) Phenanthrene-d10      | 17.20 | 188  | 1006289  | 20.00 | ng    | 0.00     |
| 76) Chrysene-d12          | 21.37 | 240  | 1105404  | 20.00 | ng    | 0.00     |
| 87) Perylene-d12          | 23.65 | 264  | 1271286  | 20.00 | ng    | 0.00     |

## System Monitoring Compounds

|                          |       |     |         |       |    |      |
|--------------------------|-------|-----|---------|-------|----|------|
| 5) 2-Fluorophenol        | 5.40  | 112 | 1012492 | 94.46 | ng | 0.00 |
| 7) Phenol-d6             | 6.99  | 99  | 1367784 | 99.35 | ng | 0.00 |
| 23) Nitrobenzene-d5      | 8.97  | 82  | 1012786 | 75.27 | ng | 0.00 |
| 42) 2,4,6-Tribromophenol | 15.94 | 330 | 588534  | 98.92 | ng | 0.00 |
| 45) 2-Fluorobiphenyl     | 13.08 | 172 | 2563699 | 74.07 | ng | 0.00 |
| 79) Terphenyl-d14        | 19.82 | 244 | 4228271 | 74.07 | ng | 0.00 |

## Target Compounds

|                                |       |     |        |       |    | Qvalue |
|--------------------------------|-------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 3.32  | 88  | 35301  | 8.185 | ng | # 100  |
| 3) Pyridine                    | 3.74  | 79  | 78013  | 6.862 | ng | 96     |
| 4) n-Nitrosodimethylamine      | 3.64  | 42  | 32416  | 7.833 | ng | # 95   |
| 6) Aniline                     | 7.15  | 93  | 134656 | 8.157 | ng | 99     |
| 8) 2-Chlorophenol              | 7.39  | 128 | 90093  | 8.250 | ng | 97     |
| 9) Benzaldehyde                | 6.96  | 77  | 76024  | 9.698 | ng | 98     |
| 10) Phenol                     | 7.01  | 94  | 110538 | 8.529 | ng | 96     |
| 11) bis(2-Chloroethyl)ether    | 7.25  | 93  | 83269  | 8.177 | ng | 98     |
| 12) 1,3-Dichlorobenzene        | 7.72  | 146 | 99687  | 7.637 | ng | 98     |
| 13) 1,4-Dichlorobenzene        | 7.86  | 146 | 102559 | 7.761 | ng | 98     |
| 14) 1,2-Dichlorobenzene        | 8.17  | 146 | 96494  | 7.660 | ng | 99     |
| 15) Benzyl Alcohol             | 8.06  | 79  | 72354  | 8.399 | ng | 97     |
| 16) 2,2'-oxybis(1-Chloropropan | 8.36  | 45  | 126926 | 8.581 | ng | 99     |
| 17) 2-Methylphenol             | 8.26  | 107 | 68948  | 8.037 | ng | 97     |
| 18) Hexachloroethane           | 8.90  | 117 | 34233  | 7.063 | ng | 95     |
| 19) n-Nitroso-di-n-propylamine | 8.63  | 70  | 65122  | 8.471 | ng | 97     |
| 20) 3+4-Methylphenols          | 8.59  | 107 | 92547  | 8.099 | ng | 99     |
| 22) Acetophenone               | 8.65  | 105 | 137713 | 7.470 | ng | # 99   |
| 24) Nitrobenzene               | 9.02  | 77  | 105235 | 8.174 | ng | 98     |
| 25) Isophorone                 | 9.55  | 82  | 169058 | 7.642 | ng | 98     |
| 26) 2-Nitrophenol              | 9.73  | 139 | 32146  | 5.784 | ng | 97     |
| 27) 2,4-Dimethylphenol         | 9.79  | 122 | 70471  | 7.574 | ng | 97     |
| 28) bis(2-Chloroethoxy)methane | 10.03 | 93  | 120023 | 7.840 | ng | 100    |
| 29) 2,4-Dichlorophenol         | 10.26 | 162 | 75055  | 7.135 | ng | 98     |
| 30) 1,2,4-Trichlorobenzene     | 10.48 | 180 | 93133  | 7.196 | ng | 100    |
| 31) Naphthalene                | 10.66 | 128 | 293569 | 7.955 | ng | 99     |
| 32) Benzoic acid               | 9.85  | 122 | 22724  | 3.795 | ng | 99     |
| 33) 4-Chloroaniline            | 10.77 | 127 | 125498 | 7.832 | ng | 98     |
| 34) Hexachlorobutadiene        | 10.96 | 225 | 51710  | 6.703 | ng | 96     |
| 35) Caprolactam                | 11.54 | 113 | 21206  | 6.800 | ng | 99     |
| 36) 4-Chloro-3-methylphenol    | 11.89 | 107 | 81528  | 7.944 | ng | 99     |
| 37) 2-Methylnaphthalene        | 12.28 | 142 | 207298 | 8.070 | ng | 100    |
| 38) 1-Methylnaphthalene        | 12.50 | 142 | 195060 | 7.999 | ng | 99     |
| 40) 1,2,4,5-Tetrachlorobenzene | 12.65 | 216 | 103390 | 6.402 | ng | 99     |

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|--------------------------------|-------|------|----------|-------|-------|----------|
| 41) Hexachlorocyclopentadiene  | 12.63 | 237  | 48246    | 5.476 | ng    | 99       |
| 43) 2,4,6-Trichlorophenol      | 12.89 | 196  | 58837    | 6.312 | ng    | 100      |
| 44) 2,4,5-Trichlorophenol      | 12.96 | 196  | 67405    | 6.940 | ng    | 99       |
| 46) 1,1'-Biphenyl              | 13.29 | 154  | 278557   | 7.062 | ng    | 99       |
| 47) 2-Chloronaphthalene        | 13.33 | 162  | 214879   | 7.309 | ng    | 99       |
| 48) 2-Nitroaniline             | 13.53 | 65   | 45655    | 5.964 | ng    | 93       |
| 49) Acenaphthylene             | 14.18 | 152  | 324119   | 7.445 | ng    | 99       |
| 50) Dimethylphthalate          | 13.91 | 163  | 261775   | 7.600 | ng    | 100      |
| 51) 2,6-Dinitrotoluene         | 14.02 | 165  | 48567    | 6.741 | ng    | # 88     |
| 52) Acenaphthene               | 14.52 | 154  | 213866   | 7.509 | ng    | 98       |
| 53) 3-Nitroaniline             | 14.35 | 138  | 50079    | 6.038 | ng    | # 94     |
| 54) 2,4-Dinitrophenol          | 14.56 | 184  | 17443    | 5.128 | ng    | 99       |
| 55) Dibenzofuran               | 14.86 | 168  | 337836   | 8.124 | ng    | 99       |
| 56) 4-Nitrophenol              | 14.65 | 139  | 42325    | 6.639 | ng    | 95       |
| 57) 2,4-Dinitrotoluene         | 14.81 | 165  | 58465    | 6.194 | ng    | 89       |
| 58) Fluorene                   | 15.50 | 166  | 267376   | 7.913 | ng    | 100      |
| 59) 2,3,4,6-Tetrachlorophenol  | 15.08 | 232  | 58130    | 6.862 | ng    | 97       |
| 60) Diethylphthalate           | 15.28 | 149  | 252660   | 7.544 | ng    | 98       |
| 61) 4-Chlorophenyl-phenylether | 15.50 | 204  | 132639   | 7.640 | ng    | 97       |
| 62) 4-Nitroaniline             | 15.51 | 138  | 57304    | 6.590 | ng    | 99       |
| 63) Azobenzene                 | 15.79 | 77   | 234826   | 7.764 | ng    | 98       |
| 65) 4,6-Dinitro-2-methylphenol | 15.57 | 198  | 26881    | 5.704 | ng    | 98       |
| 66) n-Nitrosodiphenylamine     | 15.71 | 169  | 227613   | 7.404 | ng    | 99       |
| 67) 4-Bromophenyl-phenylether  | 16.39 | 248  | 75339    | 6.731 | ng    | 98       |
| 68) Hexachlorobenzene          | 16.51 | 284  | 89941    | 6.891 | ng    | 98       |
| 69) Atrazine                   | 16.66 | 200  | 67055    | 6.710 | ng    | 98       |
| 70) Pentachlorophenol          | 16.84 | 266  | 42125    | 6.052 | ng    | 98       |
| 71) Phenanthrene               | 17.24 | 178  | 434820   | 7.658 | ng    | 100      |
| 72) Anthracene                 | 17.33 | 178  | 408230   | 7.418 | ng    | 99       |
| 73) Carbazole                  | 17.59 | 167  | 390993   | 7.635 | ng    | 99       |
| 74) Di-n-butylphthalate        | 18.16 | 149  | 378666   | 6.522 | ng    | 99       |
| 75) Fluoranthene               | 19.25 | 202  | 487824   | 7.614 | ng    | 99       |
| 77) Benzidine                  | 19.43 | 184  | 198175   | 6.535 | ng    | 100      |
| 78) Pyrene                     | 19.61 | 202  | 514749   | 7.106 | ng    | 99       |
| 80) Butylbenzylphthalate       | 20.52 | 149  | 160305   | 5.823 | ng    | 94       |
| 81) Benzo(a)anthracene         | 21.36 | 228  | 534186   | 7.456 | ng    | 99       |
| 82) 3,3'-Dichlorobenzidine     | 21.29 | 252  | 180003   | 7.085 | ng    | # 99     |
| 83) Chrysene                   | 21.41 | 228  | 529018   | 7.617 | ng    | 99       |
| 84) Bis(2-ethylhexyl)phthalate | 21.29 | 149  | 253827   | 6.222 | ng    | 98       |
| 85) Di-n-octyl phthalate       | 22.18 | 149  | 399859   | 6.150 | ng    | 97       |
| 86) Indeno(1,2,3-cd)pyrene     | 25.95 | 276  | 677300   | 8.170 | ng    | # 100    |
| 88) Benzo(b)fluoranthene       | 22.96 | 252  | 571745   | 7.428 | ng    | 99       |
| 89) Benzo(k)fluoranthene       | 23.00 | 252  | 537817   | 7.042 | ng    | 99       |
| 90) Benzo(a)pyrene             | 23.54 | 252  | 529575   | 7.466 | ng    | 99       |
| 91) Dibenzo(a,h)anthracene     | 25.97 | 278  | 575225   | 7.753 | ng    | 98       |
| 92) Benzo(g,h,i)perylene       | 26.66 | 276  | 555029   | 7.877 | ng    | 99       |

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

