

Data Path : Z:\HPCHEM1\BNA\_F\DATA\BF071315\  
 Data File : BF080452.D  
 Acq On : 14 Jul 2015 7:07  
 Operator : TP/UM  
 Sample : G2945-23MSD  
 Misc :  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 TE-PMW-11MSD

Manual Integrations  
 APPROVED

apatel  
 7/15/2015 8:28:08 AM

Quant Time: Jul 14 07:39:19 2015  
 Quant Method : Z:\HPCHEM1\BNA\_F\METHODS\8270-BF071015.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 14 00:52:37 2015  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.14  | 152  | 13325    | 20.00 | ng    | 0.00     |
| 21) Naphthalene-d8        | 8.42  | 136  | 57058    | 20.00 | ng    | 0.00     |
| 38) Acenaphthene-d10      | 10.18 | 164  | 30484    | 20.00 | ng    | 0.00     |
| 63) Phenanthrene-d10      | 11.68 | 188  | 58308    | 20.00 | ng    | -0.01    |
| 75) Chrysene-d12          | 14.57 | 240  | 82690    | 20.00 | ng    | -0.15    |
| 86) Perylene-d12          | 16.34 | 264  | 98162    | 20.00 | ng    | -0.25    |

## System Monitoring Compounds

|                          |       |     |        |        |    |       |
|--------------------------|-------|-----|--------|--------|----|-------|
| 5) 2-Fluorophenol        | 5.77  | 112 | 53989  | 69.43  | ng | 0.00  |
| 7) Phenol-d6             | 6.78  | 99  | 41951  | 40.49  | ng | 0.01  |
| 23) Nitrobenzene-d5      | 7.70  | 82  | 92537  | 92.50  | ng | 0.00  |
| 41) 2,4,6-Tribromophenol | 10.97 | 330 | 32874  | 110.49 | ng | -0.01 |
| 44) 2-Fluorobiphenyl     | 9.49  | 172 | 197065 | 87.07  | ng | 0.00  |
| 78) Terphenyl-d14        | 13.32 | 244 | 204661 | 53.75  | ng | -0.08 |

## Target Compounds

|                                |      |     |        |       |    | Qvalue |
|--------------------------------|------|-----|--------|-------|----|--------|
| 2) 1,4-Dioxane                 | 2.89 | 88  | 5821   | 15.55 | ng | # 77   |
| 3) Pyridine                    | 4.01 | 79  | 6231m  | 7.50  | ng |        |
| 4) n-Nitrosodimethylamine      | 3.74 | 42  | 7794   | 17.10 | ng | # 92   |
| 6) Aniline                     | 6.81 | 93  | 19869  | 15.38 | ng | # 84   |
| 8) 2-Chlorophenol              | 6.93 | 128 | 30117  | 32.15 | ng | 94     |
| 9) Benzaldehyde                | 6.69 | 77  | 14104  | 24.61 | ng | 88     |
| 10) Phenol                     | 6.80 | 94  | 17165  | 14.99 | ng | 88     |
| 11) bis(2-Chloroethyl)ether    | 6.85 | 93  | 35002  | 37.14 | ng | 92     |
| 12) 1,3-Dichlorobenzene        | 7.07 | 146 | 38520  | 36.36 | ng | 96     |
| 13) 1,4-Dichlorobenzene        | 7.15 | 146 | 42062  | 35.21 | ng | 98     |
| 14) 1,2-Dichlorobenzene        | 7.31 | 146 | 37883  | 33.47 | ng | 100    |
| 15) Benzyl Alcohol             | 7.29 | 79  | 21992  | 25.79 | ng | 96     |
| 16) 2,2'-oxybis(1-Chloropropan | 7.40 | 45  | 63803  | 46.94 | ng | # 53   |
| 17) 2-Methylphenol             | 7.40 | 107 | 20927  | 25.70 | ng | # 88   |
| 18) Hexachloroethane           | 7.65 | 117 | 11355  | 30.81 | ng | 90     |
| 19) n-Nitroso-di-n-propylamine | 7.54 | 70  | 27163  | 38.31 | ng | 96     |
| 20) 3+4-Methylphenols          | 7.55 | 107 | 27915  | 27.28 | ng | # 46   |
| 22) Acetophenone               | 7.54 | 105 | 57474  | 42.03 | ng | 97     |
| 24) Nitrobenzene               | 7.72 | 77  | 40860  | 36.91 | ng | 91     |
| 25) Isophorone                 | 7.95 | 82  | 83149  | 46.38 | ng | # 94   |
| 26) 2-Nitrophenol              | 8.04 | 139 | 18545  | 34.91 | ng | 93     |
| 27) 2,4-Dimethylphenol         | 8.08 | 122 | 34565  | 41.33 | ng | 96     |
| 28) bis(2-Chloroethoxy)methane | 8.16 | 93  | 51566  | 47.53 | ng | 97     |
| 29) 2,4-Dichlorophenol         | 8.28 | 162 | 31836  | 41.23 | ng | 86     |
| 30) 1,2,4-Trichlorobenzene     | 8.36 | 180 | 33230  | 32.54 | ng | 99     |
| 31) Naphthalene                | 8.44 | 128 | 119519 | 38.30 | ng | 99     |
| 32) Benzoic acid               | 8.16 | 122 | 5959   | 10.14 | ng | 89     |
| 33) 4-Chloroaniline            | 8.50 | 127 | 24308  | 22.98 | ng | 98     |
| 34) Hexachlorobutadiene        | 8.56 | 225 | 19316  | 32.58 | ng | 98     |
| 35) Caprolactam                | 8.85 | 113 | 1320   | 5.98  | ng | # 80   |
| 36) 4-Chloro-3-methylphenol    | 8.98 | 107 | 33851  | 41.40 | ng | 89     |
| 37) 2-Methylnaphthalene        | 9.14 | 142 | 74709  | 36.28 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 9.30 | 216 | 37475  | 36.74 | ng | 95     |
| 40) Hexachlorocyclopentadiene  | 9.29 | 237 | 40145  | 75.44 | ng | 99     |

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| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 9.41  | 196  | 22668    | 38.59 | ng    | 95       |
| 43) 2,4,5-Trichlorophenol      | 9.46  | 196  | 26605    | 42.20 | ng #  | 88       |
| 45) 1,1'-Biphenyl              | 9.60  | 154  | 109159   | 41.08 | ng    | 99       |
| 46) 2-Chloronaphthalene        | 9.62  | 162  | 71815    | 36.62 | ng #  | 89       |
| 47) 2-Nitroaniline             | 9.73  | 65   | 21131    | 35.31 | ng #  | 82       |
| 48) Acenaphthylene             | 10.04 | 152  | 133793   | 39.88 | ng    | 99       |
| 49) Dimethylphthalate          | 9.89  | 163  | 119345   | 51.79 | ng    | 98       |
| 50) 2,6-Dinitrotoluene         | 9.96  | 165  | 18161    | 35.11 | ng #  | 71       |
| 51) Acenaphthene               | 10.21 | 154  | 91359    | 42.84 | ng    | 98       |
| 52) 3-Nitroaniline             | 10.14 | 138  | 13550    | 26.84 | ng    | 81       |
| 53) 2,4-Dinitrophenol          | 10.24 | 184  | 20805    | 85.61 | ng #  | 70       |
| 54) Dibenzofuran               | 10.38 | 168  | 128223   | 45.41 | ng    | 94       |
| 55) 4-Nitrophenol              | 10.32 | 139  | 13046    | 34.89 | ng    | 84       |
| 56) 2,4-Dinitrotoluene         | 10.36 | 165  | 29672    | 49.07 | ng #  | 69       |
| 57) Fluorene                   | 10.73 | 166  | 100393   | 42.20 | ng    | 99       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.51 | 232  | 22652    | 40.96 | ng #  | 94       |
| 59) Diethylphthalate           | 10.59 | 149  | 92649    | 41.07 | ng #  | 93       |
| 60) 4-Chlorophenyl-phenylether | 10.72 | 204  | 44362    | 38.71 | ng #  | 85       |
| 61) 4-Nitroaniline             | 10.75 | 138  | 19595    | 38.78 | ng    | 96       |
| 62) Azobenzene                 | 10.88 | 77   | 97389    | 39.99 | ng    | 90       |
| 64) 4,6-Dinitro-2-methylphenol | 10.77 | 198  | 12909    | 40.19 | ng #  | 67       |
| 65) n-Nitrosodiphenylamine     | 10.83 | 169  | 83411    | 45.89 | ng    | 99       |
| 66) 4-Bromophenyl-phenylether  | 11.21 | 248  | 26321    | 42.35 | ng #  | 77       |
| 67) Hexachlorobenzene          | 11.28 | 284  | 26068    | 41.78 | ng #  | 63       |
| 68) Atrazine                   | 11.36 | 200  | 27037    | 47.84 | ng    | 98       |
| 69) Pentachlorophenol          | 11.48 | 266  | 31165    | 87.46 | ng    | 98       |
| 70) Phenanthrene               | 11.70 | 178  | 151307   | 43.19 | ng    | 99       |
| 71) Anthracene                 | 11.74 | 178  | 151865   | 46.81 | ng    | 98       |
| 72) Carbazole                  | 11.90 | 167  | 138501   | 46.26 | ng    | 98       |
| 73) Di-n-butylphthalate        | 12.22 | 149  | 159188   | 50.29 | ng    | 98       |
| 74) Fluoranthene               | 12.93 | 202  | 174923   | 48.15 | ng    | 99       |
| 77) Pyrene                     | 13.18 | 202  | 184020   | 34.74 | ng    | 99       |
| 79) Butylbenzylphthalate       | 13.86 | 149  | 78605    | 39.14 | ng    | 98       |
| 80) Benzo(a)anthracene         | 14.56 | 228  | 204732   | 39.29 | ng    | 98       |
| 81) 3,3'-Dichlorobenzidine     | 14.51 | 252  | 34302    | 22.02 | ng    | 100      |
| 82) Chrysene                   | 14.60 | 228  | 193203   | 40.26 | ng    | 98       |
| 83) Bis(2-ethylhexyl)phthalate | 14.52 | 149  | 120700   | 38.30 | ng #  | 95       |
| 84) Di-n-octyl phthalate       | 15.30 | 149  | 212288   | 38.24 | ng    | 99       |
| 85) Indeno(1,2,3-cd)pyrene     | 18.00 | 276  | 334147   | 56.06 | ng    | 98       |
| 87) Benzo(b)fluoranthene       | 15.86 | 252  | 231174   | 33.90 | ng    | 97       |
| 88) Benzo(k)fluoranthene       | 15.89 | 252  | 224296m  | 40.23 | ng    |          |
| 89) Benzo(a)pyrene             | 16.27 | 252  | 240703   | 40.29 | ng #  | 98       |
| 90) Dibenzo(a,h)anthracene     | 18.01 | 278  | 276595   | 46.74 | ng #  | 96       |
| 91) Benzo(g,h,i)perylene       | 18.50 | 276  | 287385   | 48.88 | ng    | 99       |

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

