

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071017\  
 Data File : BF096605.D  
 Acq On : 10 Jul 2017 17:12  
 Operator : SJ/JU  
 Sample : PB100517BS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB100517BS

Manual Integrations  
 APPROVED

mohammad  
 7/11/2017 1:35:22 PM

Quant Time: Jul 11 03:20:19 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jul 07 13:02:33 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.69  | 152  | 114891   | 20.00 | ng    | -0.01    |
| 21) Naphthalene-d8        | 7.97  | 136  | 479089   | 20.00 | ng    | -0.02    |
| 38) Acenaphthene-d10      | 9.72  | 164  | 207183   | 20.00 | ng    | -0.02    |
| 63) Phenanthrene-d10      | 11.19 | 188  | 328499   | 20.00 | ng    | -0.02    |
| 75) Chrysene-d12          | 13.82 | 240  | 179154   | 20.00 | ng    | -0.02    |
| 86) Perylene-d12          | 15.22 | 264  | 181368   | 20.00 | ng    | -0.03    |

|                             |       |     |         |        |    |       |
|-----------------------------|-------|-----|---------|--------|----|-------|
| System Monitoring Compounds |       |     |         |        |    |       |
| 5) 2-Fluorophenol           | 5.30  | 112 | 880321  | 113.09 | ng | 0.00  |
| 7) Phenol-d6                | 6.33  | 99  | 1065366 | 111.33 | ng | -0.01 |
| 23) Nitrobenzene-d5         | 7.25  | 82  | 642827  | 80.63  | ng | -0.02 |
| 41) 2,4,6-Tribromophenol    | 10.50 | 330 | 214175  | 132.34 | ng | -0.02 |
| 44) 2-Fluorobiphenyl        | 9.05  | 172 | 1135548 | 93.71  | ng | -0.02 |
| 78) Terphenyl-d14           | 12.78 | 244 | 752177  | 89.72  | ng | -0.02 |

|                                |      |     |        |       |    |        |
|--------------------------------|------|-----|--------|-------|----|--------|
| Target Compounds               |      |     |        |       |    | Qvalue |
| 2) 1,4-Dioxane                 | 2.39 | 88  | 110569 | 29.96 | ng | # 76   |
| 3) Pyridine                    | 3.08 | 79  | 311974 | 30.81 | ng | # 61   |
| 4) n-Nitrosodimethylamine      | 3.02 | 42  | 186181 | 37.25 | ng | # 83   |
| 6) Aniline                     | 6.35 | 93  | 373424 | 30.19 | ng | # 86   |
| 8) 2-Chlorophenol              | 6.47 | 128 | 328390 | 39.56 | ng | 98     |
| 9) Benzaldehyde                | 6.23 | 77  | 182636 | 30.50 | ng | 100    |
| 10) Phenol                     | 6.35 | 94  | 395267 | 36.26 | ng | 83     |
| 11) bis(2-Chloroethyl)ether    | 6.43 | 93  | 319242 | 37.89 | ng | 94     |
| 12) 1,3-Dichlorobenzene        | 6.63 | 146 | 347750 | 39.95 | ng | 99     |
| 13) 1,4-Dichlorobenzene        | 6.70 | 146 | 356472 | 40.98 | ng | 96     |
| 14) 1,2-Dichlorobenzene        | 6.86 | 146 | 325857 | 40.80 | ng | 97     |
| 15) Benzyl Alcohol             | 6.83 | 79  | 268670 | 42.00 | ng | 98     |
| 16) 2,2'-oxybis(1-Chloropropan | 6.97 | 45  | 681697 | 39.80 | ng | 92     |
| 17) 2-Methylphenol             | 6.95 | 107 | 266773 | 40.33 | ng | 99     |
| 18) Hexachloroethane           | 7.20 | 117 | 127014 | 40.27 | ng | # 82   |
| 19) n-Nitroso-di-n-propylamine | 7.11 | 70  | 219428 | 38.49 | ng | # 85   |
| 20) 3+4-Methylphenols          | 7.10 | 107 | 318088 | 43.11 | ng | # 82   |
| 22) Acetophenone               | 7.10 | 105 | 435577 | 41.61 | ng | # 93   |
| 24) Nitrobenzene               | 7.27 | 77  | 330655 | 39.53 | ng | 91     |
| 25) Isophorone                 | 7.51 | 82  | 604513 | 39.11 | ng | 96     |
| 26) 2-Nitrophenol              | 7.59 | 139 | 187363 | 42.32 | ng | 91     |
| 27) 2,4-Dimethylphenol         | 7.63 | 122 | 311293 | 41.30 | ng | 97     |
| 28) bis(2-Chloroethoxy)methane | 7.72 | 93  | 414248 | 40.60 | ng | 99     |
| 29) 2,4-Dichlorophenol         | 7.83 | 162 | 275435 | 42.35 | ng | 96     |
| 30) 1,2,4-Trichlorobenzene     | 7.91 | 180 | 264262 | 43.08 | ng | 98     |
| 31) Naphthalene                | 7.99 | 128 | 958131 | 42.36 | ng | 99     |
| 32) Benzoic acid               | 7.76 | 122 | 210364 | 33.23 | ng | 94     |
| 33) 4-Chloroaniline            | 8.03 | 127 | 220218 | 23.44 | ng | 96     |
| 34) Hexachlorobutadiene        | 8.12 | 225 | 136564 | 43.40 | ng | 98     |
| 35) Caprolactam                | 8.41 | 113 | 93898m | 41.87 | ng |        |
| 36) 4-Chloro-3-methylphenol    | 8.53 | 107 | 290590 | 40.38 | ng | 87     |
| 37) 2-Methylnaphthalene        | 8.68 | 142 | 649626 | 45.12 | ng | 98     |
| 39) 1,2,4,5-Tetrachlorobenzene | 8.85 | 216 | 215864 | 40.13 | ng | 99     |
| 40) Hexachlorocyclopentadiene  | 8.84 | 237 | 239614 | 91.61 | ng | 98     |

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071017\  
 Data File : BF096605.D  
 Acq On : 10 Jul 2017 17:12  
 Operator : SJ/JU  
 Sample : PB100517BS  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_F  
 ClientSampleId :  
 PB100517BS

Manual Integrations  
 APPROVED

mohammad  
 7/11/2017 1:35:22 PM

Quant Time: Jul 11 03:20:19 2017  
 Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Jul 07 13:02:33 2017  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 42) 2,4,6-Trichlorophenol      | 8.96  | 196  | 174495   | 41.00 | nq    | 97       |
| 43) 2,4,5-Trichlorophenol      | 9.00  | 196  | 184535   | 43.86 | nq    | # 94     |
| 45) 1,1'-Biphenyl              | 9.15  | 154  | 715782   | 40.32 | nq    | 98       |
| 46) 2-Chloronaphthalene        | 9.17  | 162  | 564631   | 42.68 | nq    | 94       |
| 47) 2-Nitroaniline             | 9.26  | 65   | 196934   | 40.91 | nq    | 91       |
| 48) Acenaphthylene             | 9.58  | 152  | 885136   | 42.22 | nq    | 99       |
| 49) Dimethylphthalate          | 9.45  | 163  | 654200   | 42.30 | nq    | 98       |
| 50) 2,6-Dinitrotoluene         | 9.50  | 165  | 145709   | 42.60 | nq    | # 82     |
| 51) Acenaphthene               | 9.75  | 154  | 516145   | 39.95 | nq    | 99       |
| 52) 3-Nitroaniline             | 9.67  | 138  | 103775   | 24.33 | nq    | 93       |
| 53) 2,4-Dinitrophenol          | 9.78  | 184  | 136677   | 75.24 | nq    | # 77     |
| 54) Dibenzofuran               | 9.93  | 168  | 764071   | 44.79 | nq    | 98       |
| 55) 4-Nitrophenol              | 9.85  | 139  | 237281   | 67.11 | nq    | # 70     |
| 56) 2,4-Dinitrotoluene         | 9.91  | 165  | 185714   | 42.88 | nq    | # 81     |
| 57) Fluorene                   | 10.27 | 166  | 542256   | 45.01 | nq    | 97       |
| 58) 2,3,4,6-Tetrachlorophenol  | 10.05 | 232  | 136782   | 46.98 | nq    | 99       |
| 59) Diethylphthalate           | 10.15 | 149  | 622071   | 42.55 | nq    | 99       |
| 60) 4-Chlorophenyl-phenylether | 10.26 | 204  | 233381   | 44.52 | nq    | 96       |
| 61) 4-Nitroaniline             | 10.28 | 138  | 154470   | 39.82 | nq    | 91       |
| 62) Azobenzene                 | 10.42 | 77   | 609152   | 43.09 | nq    | 92       |
| 64) 4,6-Dinitro-2-methylphenol | 10.32 | 198  | 93745    | 41.38 | nq    | 92       |
| 65) n-Nitrosodiphenylamine     | 10.38 | 169  | 512749   | 44.49 | nq    | 97       |
| 66) 4-Bromophenyl-phenylether  | 10.75 | 248  | 149136   | 46.64 | nq    | 98       |
| 67) Hexachlorobenzene          | 10.82 | 284  | 155069   | 44.30 | nq    | # 90     |
| 68) Atrazine                   | 10.90 | 200  | 146379   | 44.45 | nq    | 94       |
| 69) Pentachlorophenol          | 11.01 | 266  | 156300   | 75.34 | nq    | 96       |
| 70) Phenanthrene               | 11.22 | 178  | 790107   | 44.49 | nq    | 98       |
| 71) Anthracene                 | 11.27 | 178  | 811639   | 44.85 | nq    | 99       |
| 72) Carbazole                  | 11.43 | 167  | 745193   | 40.95 | nq    | 98       |
| 73) Di-n-butylphthalate        | 11.76 | 149  | 902068   | 40.92 | nq    | 99       |
| 74) Fluoranthene               | 12.40 | 202  | 714656   | 41.05 | nq    | 99       |
| 76) Benzidine                  | 12.52 | 184  | 304832   | 35.46 | nq    | # 92     |
| 77) Pyrene                     | 12.63 | 202  | 726148   | 50.50 | nq    | 100      |
| 79) Butylbenzylphthalate       | 13.25 | 149  | 317767   | 43.65 | nq    | # 77     |
| 80) Benzo(a)anthracene         | 13.81 | 228  | 485139   | 46.76 | nq    | 99       |
| 81) 3,3'-Dichlorobenzidine     | 13.77 | 252  | 130184   | 30.55 | nq    | 98       |
| 82) Chrysene                   | 13.85 | 228  | 489435   | 45.05 | nq    | 99       |
| 83) Bis(2-ethylhexyl)phthalate | 13.82 | 149  | 357517   | 44.00 | nq    | 99       |
| 84) Di-n-octyl phthalate       | 14.43 | 149  | 653482   | 40.84 | nq    | # 94     |
| 85) Indeno(1,2,3-cd)pyrene     | 16.56 | 276  | 549528   | 64.08 | nq    | 98       |
| 87) Benzo(b)fluoranthene       | 14.83 | 252  | 461929   | 40.65 | nq    | 98       |
| 88) Benzo(k)fluoranthene       | 14.85 | 252  | 423336   | 41.64 | nq    | 98       |
| 89) Benzo(a)pyrene             | 15.16 | 252  | 453487   | 44.70 | nq    | 98       |
| 90) Dibenzo(a,h)anthracene     | 16.57 | 278  | 444538   | 55.69 | nq    | 97       |
| 91) Benzo(g,h,i)perylene       | 16.96 | 276  | 488929   | 59.11 | nq    | 99       |

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

Data Path : Z:\HPCHEM1\BNA F\DATA\BF071017\  
Data File : BF096605.D  
Acq On : 10 Jul 2017 17:12  
Operator : SJ/JU  
Sample : PB100517BS  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
BNA\_F  
**ClientSampleId :**  
PB100517BS

## Manual Integrations APPROVED

mohammad  
7/11/2017 1:35:22 PM

Quant Time: Jul 11 03:20:19 2017  
Quant Method : Z:\HPCHEM1\BNA F\METHODS\8270-BF070117.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Jul 07 13:02:33 2017  
Response via : Initial Calibration

