

Method Path : Z:\HPCHEM1\BNA\_M\METHODS\  
 Method File : SOM02.2-EPA-BM051215.M  
 Title : SVOA CALIBRATION  
 Last Update : Tue May 12 06:50:27 2015  
 Response Via : Initial Calibration

## Calibration Files

5 =BM001246.D 10 =BM001247.D 20 =BM001248.D  
 40 =BM001249.D 80 =BM001250.D 160 =BM001251.D

|       | Compound              | 5              | 10    | 20    | 40    | 80    | 160   | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzene-d | -----ISTD----- |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.447          | 0.448 | 0.456 | 0.458 | 0.429 |       | 0.448 | 2.54  |
| 3) S  | 1,4-Dioxane-d8        | 0.405          | 0.426 | 0.410 | 0.421 | 0.392 |       | 0.411 | 3.21  |
| 4)    | Benzaldehyde          |                | 0.905 | 1.020 | 1.023 | 0.945 | 0.720 | 0.923 | 13.43 |
| 5) S  | Phenol-d5             |                | 1.352 | 1.537 | 1.606 | 1.668 | 1.636 | 1.560 | 8.05  |
| 6)    | Phenol                |                | 1.436 | 1.623 | 1.714 | 1.736 | 1.725 | 1.647 | 7.67  |
| 7) S  | Bis-(2-Chloroethy     |                | 0.904 | 0.970 | 0.983 | 0.978 | 0.971 | 0.961 | 3.35  |
| 8)    | Bis(2-Chloroethyl     |                | 1.195 | 1.298 | 1.316 | 1.321 | 1.315 | 1.289 | 4.12  |
| 9) S  | 2-Chlorophenol-d4     | 1.119          | 1.147 | 1.257 | 1.330 | 1.360 |       | 1.243 | 8.63  |
| 10)   | 2-Chlorophenol        | 1.166          | 1.202 | 1.311 | 1.365 | 1.390 |       | 1.287 | 7.69  |
| 11)   | 2-Methylphenol        |                | 1.078 | 1.248 | 1.304 | 1.351 | 1.316 | 1.259 | 8.57  |
| 12)   | 2,2'-oxybis(1-Chl     |                | 2.241 | 2.397 | 2.406 | 2.380 | 2.305 | 2.346 | 3.02  |
| 13) S | 4-Methylphenol-d8     |                | 1.109 | 1.301 | 1.348 | 1.385 | 1.312 | 1.291 | 8.28  |
| 14)   | Acetophenone          |                | 1.875 | 2.174 | 2.193 | 2.226 | 2.119 | 2.117 | 6.66  |
| 15) P | N-Nitroso-di-n-pr     | 0.821          | 0.934 | 1.098 | 1.120 | 1.156 |       | 1.026 | 13.92 |
| 16)   | 4-Methylphenol        |                | 1.196 | 1.406 | 1.434 | 1.500 | 1.410 | 1.389 | 8.22  |
| 17)   | Hexachloroethane      | 0.492          | 0.496 | 0.538 | 0.557 | 0.555 |       | 0.528 | 5.96  |
| 18) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |
| 19) S | Nitrobenzene-d5       | 0.114          | 0.119 | 0.134 | 0.145 | 0.147 |       | 0.132 | 11.20 |
| 20)   | Nitrobenzene          | 0.323          | 0.342 | 0.368 | 0.372 | 0.374 |       | 0.356 | 6.26  |
| 21)   | Isophorone            | 0.526          | 0.558 | 0.656 | 0.668 | 0.688 |       | 0.619 | 11.67 |
| 22) S | 2-Nitrophenol-d4      | 0.124          | 0.130 | 0.152 | 0.165 | 0.172 |       | 0.149 | 14.23 |
| 23) C | 2-Nitrophenol         | 0.141          | 0.154 | 0.176 | 0.183 | 0.186 |       | 0.168 | 11.62 |
| 24)   | 2,4-Dimethylpheno     | 0.315          | 0.329 | 0.364 | 0.369 | 0.373 |       | 0.350 | 7.43  |
| 25)   | Bis(2-Chloroethox     | 0.368          | 0.375 | 0.410 | 0.418 | 0.421 |       | 0.398 | 6.24  |
| 26) S | 2,4-Dichloropheno     | 0.264          | 0.269 | 0.304 | 0.316 | 0.323 |       | 0.295 | 9.12  |
| 27) C | 2,4-Dichloropheno     | 0.267          | 0.269 | 0.300 | 0.306 | 0.316 |       | 0.292 | 7.69  |
| 28)   | Naphthalene           | 1.032          | 0.976 | 1.041 | 1.046 | 1.044 |       | 1.028 | 2.86  |
| 29) S | 4-Chloroaniline-d     |                | 0.360 | 0.406 | 0.402 | 0.388 | 0.316 | 0.374 | 10.05 |
| 30)   | 4-Chloroaniline       |                | 0.362 | 0.412 | 0.405 | 0.391 | 0.328 | 0.380 | 9.15  |
| 31) C | Hexachlorobutadie     | 0.180          | 0.173 | 0.181 | 0.182 | 0.182 |       | 0.179 | 2.13  |
| 32)   | Caprolactam           |                | 0.068 | 0.094 | 0.098 | 0.103 | 0.094 | 0.091 | 14.91 |
| 33) C | 4-Chloro-3-methyl     | 0.262          | 0.280 | 0.329 | 0.332 | 0.343 |       | 0.309 | 11.58 |
| 34)   | 2-Methylnaphthale     | 0.695          | 0.688 | 0.753 | 0.755 | 0.757 |       | 0.730 | 4.78  |
| 35) I | Acenaphthene-d10      | -----ISTD----- |       |       |       |       |       |       |       |
| 36)   | 1,2,4,5-Tetrachlo     | 0.616          | 0.593 | 0.618 | 0.632 | 0.618 |       | 0.615 | 2.27  |
| 37)   | Hexachlorocyclope     |                | 0.295 | 0.329 | 0.369 | 0.374 | 0.430 | 0.359 | 14.22 |
| 38) C | 2,4,6-Trichloroph     | 0.345          | 0.353 | 0.392 | 0.416 | 0.416 |       | 0.384 | 8.82  |
| 39)   | 2,4,5-Trichloroph     | 0.380          | 0.387 | 0.432 | 0.446 | 0.447 |       | 0.418 | 7.81  |
| 40)   | 1,1'-Biphenyl         | 1.639          | 1.618 | 1.663 | 1.690 | 1.664 |       | 1.655 | 1.65  |
| 41)   | 2-Chloronaphthale     | 1.296          | 1.248 | 1.292 | 1.300 | 1.285 |       | 1.284 | 1.63  |
| 42)   | 2-Nitroaniline        | 0.252          | 0.296 | 0.377 | 0.406 | 0.418 |       | 0.350 | 20.73 |
| 43) S | Dimethylphthalate     | 1.252          | 1.286 | 1.419 | 1.411 | 1.409 |       | 1.355 | 5.88  |
| 44)   | Dimethylphthalate     | 1.425          | 1.467 | 1.602 | 1.571 | 1.580 |       | 1.529 | 5.10  |
| 45)   | 2,6-Dinitrotoluen     | 0.214          | 0.259 | 0.321 | 0.335 | 0.344 |       | 0.294 | 19.04 |
| 46) S | Acenaphthylene-d8     | 1.800          | 1.850 | 1.999 | 2.042 | 2.020 |       | 1.942 | 5.63  |
| 47)   | Acenaphthylene        | 1.960          | 1.964 | 2.123 | 2.137 | 2.130 |       | 2.063 | 4.47  |
| 48)   | 3-Nitroaniline        |                | 0.262 | 0.333 | 0.343 | 0.334 | 0.310 | 0.316 | 10.43 |
| 49) C | Acenaphthene          | 1.355          | 1.322 | 1.405 | 1.406 | 1.391 |       | 1.376 | 2.65  |
| 50)   | 2,4-Dinitrophenol     |                | 0.116 | 0.168 | 0.190 | 0.216 | 0.225 | 0.183 | 23.98 |
| 51) S | 4-Nitrophenol-d4      |                | 0.211 | 0.278 | 0.288 | 0.296 | 0.298 | 0.274 | 13.25 |

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|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 52)   | 4-Nitrophenol     |                | 0.179 | 0.229 | 0.232 | 0.241 | 0.234 | 0.223 | 11.19 |
| 53)   | Dibenzofuran      | 1.893          | 1.855 | 1.974 | 1.955 | 1.936 |       | 1.923 | 2.52  |
| 54)   | 2,4-Dinitrotoluen | 0.329          | 0.385 | 0.478 | 0.482 | 0.500 |       | 0.435 | 17.08 |
| 55)   | 2,3,4,6-Tetrachlo | 0.287          | 0.305 | 0.356 | 0.373 | 0.382 |       | 0.340 | 12.41 |
| 56)   | Diethylphthalate  | 1.382          | 1.391 | 1.633 | 1.604 | 1.612 |       | 1.524 | 8.28  |
| 57) S | Fluorene-d10      | 1.320          | 1.304 | 1.396 | 1.382 | 1.370 |       | 1.354 | 2.97  |
| 58)   | Fluorene          | 1.508          | 1.509 | 1.654 | 1.638 | 1.654 |       | 1.593 | 4.85  |
| 59)   | 4-Chlorophenyl-ph | 0.746          | 0.717 | 0.784 | 0.777 | 0.779 |       | 0.761 | 3.78  |
| 60)   | 4-Nitroaniline    |                | 0.251 | 0.336 | 0.352 | 0.355 | 0.357 | 0.330 | 13.65 |
| 61) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |
| 62) S | 4,6-Dinitro-2-met |                | 0.094 | 0.117 | 0.127 | 0.132 | 0.141 | 0.122 | 14.61 |
| 63)   | 4,6-Dinitro-2-met |                | 0.104 | 0.125 | 0.136 | 0.139 | 0.149 | 0.131 | 13.24 |
| 64)   | N-Nitrosodiphenyl | 0.566          | 0.569 | 0.613 | 0.635 | 0.628 |       | 0.602 | 5.47  |
| 65)   | 4-Bromophenyl-phe | 0.191          | 0.185 | 0.197 | 0.207 | 0.207 |       | 0.197 | 4.88  |
| 66)   | Hexachlorobenzene | 0.210          | 0.214 | 0.218 | 0.226 | 0.222 |       | 0.218 | 2.93  |
| 67)   | Atrazine          |                | 0.179 | 0.213 | 0.216 | 0.218 | 0.216 | 0.208 | 7.94  |
| 68) C | Pentachlorophenol |                | 0.094 | 0.118 | 0.130 | 0.140 | 0.149 | 0.126 | 16.89 |
| 69)   | Phenanthrene      | 1.079          | 1.061 | 1.139 | 1.147 | 1.118 |       | 1.109 | 3.39  |
| 70) S | Anthracene-d10    | 0.865          | 0.866 | 0.930 | 0.956 | 0.946 |       | 0.913 | 4.79  |
| 71)   | Anthracene        | 1.079          | 1.101 | 1.173 | 1.179 | 1.169 |       | 1.140 | 4.11  |
| 72)   | Carbazole         |                | 0.936 | 1.058 | 1.063 | 1.038 | 1.064 | 1.032 | 5.30  |
| 73)   | Di-n-butylphthala | 0.909          | 0.973 | 1.218 | 1.237 | 1.255 |       | 1.118 | 14.69 |
| 74) C | Fluoranthene      |                | 1.135 | 1.317 | 1.266 | 1.227 | 1.245 | 1.238 | 5.39  |
| 75) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |
| 76) S | Pyrene-d10        | 0.860          | 0.872 | 0.893 | 0.970 | 0.979 |       | 0.915 | 6.12  |
| 77)   | Pyrene            | 1.196          | 1.192 | 1.215 | 1.315 | 1.317 |       | 1.247 | 5.10  |
| 78)   | Butylbenzylphthal | 0.324          | 0.378 | 0.470 | 0.522 | 0.567 |       | 0.452 | 22.23 |
| 79)   | 3,3'-Dichlorobenz |                | 0.310 | 0.389 | 0.392 | 0.376 | 0.367 | 0.367 | 9.06  |
| 80)   | Benzo(a)anthracen | 1.137          | 1.142 | 1.193 | 1.205 | 1.178 |       | 1.171 | 2.59  |
| 81)   | Bis(2-ethylhexyl) | 0.494          | 0.573 | 0.739 | 0.773 | 0.821 |       | 0.680 | 20.55 |
| 82)   | Chrysene          | 1.093          | 1.080 | 1.129 | 1.129 | 1.086 |       | 1.104 | 2.16  |
| 83) I | Perylene-d12      | -----ISTD----- |       |       |       |       |       |       |       |
| 84)   | Di-n-octyl phthal |                | 1.038 | 1.291 | 1.469 | 1.600 | 1.339 | 1.347 | 15.65 |
| 85)   | Benzo(b)fluoranth | 1.119          | 1.127 | 1.216 | 1.273 | 1.298 |       | 1.207 | 6.81  |
| 86)   | Benzo(k)fluoranth | 1.073          | 1.134 | 1.196 | 1.270 | 1.222 |       | 1.179 | 6.54  |
| 87) S | Benzo(a)pyrene-d1 | 0.808          | 0.834 | 0.900 | 0.943 | 0.930 |       | 0.883 | 6.74  |
| 88) C | Benzo(a)pyrene    | 1.084          | 1.093 | 1.183 | 1.225 | 1.201 |       | 1.157 | 5.58  |
| 89)   | Indeno(1,2,3-cd)p | 1.209          | 1.172 | 1.214 | 1.263 | 1.234 |       | 1.219 | 2.74  |
| 90)   | Dibenzo(a,h)anthr | 0.996          | 0.981 | 1.027 | 1.061 | 1.046 |       | 1.022 | 3.27  |
| 91)   | Benzo(g,h,i)peryl | 1.025          | 0.978 | 1.007 | 1.038 | 1.019 |       | 1.013 | 2.27  |

(#) = Out of Range