Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF062623.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Jun 26 23:12:04 2023
Response Via : Initial Calibration

Calibration Files
2.5 =BF133953.D 5 =BF133954.D 10 =BF133955.D 20 =BF133956.D 40 =BF133957.D 50 =BF133958.D 60 =BF133959.D 80 =BF1339
60.D

| | | Compound | 2.5 | 5 | 10 | 20 | 40 | 50 | 60 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | 1,4-Dichlorobenzen... | ----------ISTD---------- | | | | | | | | | |
| 2) | | 1,4-Dioxane | | 0.509 | 0.533 | 0.541 | 0.491 | 0.448 | 0.478 | 0.449 | 0.493 | 7.56 |
| 3) | | Pyridine | | 1.291 | 1.230 | 1.419 | 1.277 | 1.209 | 1.313 | 1.251 | 1.284 | 5.39 |
| 4) | | n-Nitrosodimet... | | 0.712 | 0.747 | 0.769 | 0.743 | 0.693 | 0.757 | 0.713 | 0.733 | 3.77 |
| 5) | S | 2-Fluorophenol | | 1.333 | 1.301 | 1.332 | 1.173 | 1.076 | 1.120 | 1.034 | 1.196 | 10.54 |
| 6) | | Aniline | | 1.914 | 1.876 | 1.956 | 1.789 | 1.688 | 1.709 | 1.592 | 1.789 | 7.45 |
| 7) | S | Phenol-d6 | | 1.666 | 1.625 | 1.588 | 1.420 | 1.341 | 1.377 | 1.275 | 1.470 | 10.47 |
| 8) | | 2-Chlorophenol | | 1.370 | 1.327 | 1.334 | 1.184 | 1.124 | 1.120 | 1.036 | 1.214 | 10.68 |
| 9) | | Benzaldehyde | | 1.029 | 1.058 | 0.971 | 0.808 | 0.730 | 0.719 | | 0.886 | 17.16 |
| 10) | C | Phenol | | 1.770 | 1.703 | 1.706 | 1.507 | 1.412 | 1.428 | 1.297 | 1.546 | 11.68 |
| 11) | | bis(2-Chloroet... | | 1.269 | 1.206 | 1.224 | 1.120 | 1.060 | 1.081 | 1.007 | 1.138 | 8.49 |
| 12) | | 1,3-Dichlorobe... | | 1.436 | 1.401 | 1.413 | 1.267 | 1.184 | 1.225 | 1.132 | 1.294 | 9.44 |
| 13) | C | 1,4-Dichlorobe... | | 1.446 | 1.420 | 1.431 | 1.293 | 1.203 | 1.231 | 1.126 | 1.307 | 9.74 |
| 14) | | 1,2-Dichlorobe... | | 1.424 | 1.367 | 1.341 | 1.176 | 1.115 | 1.127 | 1.017 | 1.224 | 12.51 |
| 15) | | Benzyl Alcohol | | 1.209 | 1.230 | 1.250 | 1.141 | 1.039 | 1.084 | 0.981 | 1.134 | 9.08 |
| 16) | | 2,2'-oxybis(1-... | | 2.231 | 2.170 | 2.160 | 1.981 | 1.913 | 1.898 | 1.743 | 2.014 | 8.86 |
| 17) | | 2-Methylphenol | | 1.172 | 1.170 | 1.175 | 1.078 | 1.025 | 1.018 | 0.971 | 1.087 | 7.87 |
| 18) | | Hexachloroethane | | 0.532 | 0.519 | 0.520 | 0.482 | 0.449 | 0.463 | 0.427 | 0.485 | 8.29 |
| 19) | P | n-Nitroso-di-n... | 1.083 | 1.033 | 0.997 | 1.007 | 0.887 | 0.815 | 0.849 | 0.788 | 0.932 | 11.89 |
| 20) | | 3+4-Methylphenols | | 1.527 | 1.485 | 1.480 | 1.290 | 1.177 | 1.200 | 1.071 | 1.319 | 13.63 |
| 21) | I | Naphthalene-d8 | ----------ISTD---------- | | | | | | | | | |
| 22) | | Acetophenone | | 0.523 | 0.509 | 0.489 | 0.439 | 0.408 | 0.428 | 0.389 | 0.455 | 11.41 |
| 23) | S | Nitrobenzene-d5 | | 0.381 | 0.398 | 0.393 | 0.371 | 0.347 | 0.369 | 0.338 | 0.371 | 6.01 |
| 24) | | Nitrobenzene | | 0.376 | 0.400 | 0.401 | 0.379 | 0.352 | 0.375 | 0.342 | 0.375 | 5.90 |
| 25) | | Isophorone | | 0.712 | 0.715 | 0.701 | 0.661 | 0.633 | 0.667 | 0.629 | 0.674 | 5.35 |
| 26) | C | 2-Nitrophenol | | 0.173 | 0.179 | 0.193 | 0.185 | 0.176 | 0.181 | 0.173 | 0.180 | 4.09 |
| 27) | | 2,4-Dimethylph... | | 0.301 | 0.303 | 0.305 | 0.285 | 0.265 | 0.276 | 0.258 | 0.285 | 6.69 |
| 28) | | bis(2-Chloroet... | | 0.418 | 0.422 | 0.414 | 0.391 | 0.363 | 0.374 | 0.351 | 0.390 | 7.35 |
| 29) | C | 2,4-Dichloroph... | | 0.306 | 0.292 | 0.304 | 0.284 | 0.263 | 0.274 | 0.253 | 0.282 | 7.07 |
| 30) | | 1,2,4-Trichlor... | | 0.315 | 0.308 | 0.311 | 0.290 | 0.268 | 0.286 | 0.262 | 0.291 | 7.25 |
| 31) | | Naphthalene | | 1.073 | 1.058 | 1.041 | 0.951 | 0.881 | 0.924 | 0.835 | 0.966 | 9.64 |
| 32) | | Benzoic acid | | 0.164 | 0.198 | 0.232 | 0.229 | 0.219 | 0.227 | 0.225 | 0.213 | 11.62 |
| 33) | | 4-Chloroaniline | | 0.437 | 0.441 | 0.443 | 0.414 | 0.389 | 0.401 | 0.368 | 0.413 | 6.93 |
| 34) | C | Hexachlorobuta... | | 0.195 | 0.198 | 0.195 | 0.183 | 0.172 | 0.180 | 0.163 | 0.184 | 7.07 |
| 35) | | Caprolactam | | 0.094 | 0.096 | 0.097 | 0.094 | 0.088 | 0.094 | 0.088 | 0.093 | 3.60 |
| 36) | C | 4-Chloro-3-met... | | 0.337 | 0.342 | 0.333 | 0.315 | 0.294 | 0.310 | 0.289 | 0.317 | 6.65 |
| 37) | | 2-Methylnaphth... | | 0.796 | 0.754 | 0.732 | 0.666 | 0.609 | 0.640 | 0.585 | 0.683 | 11.55 |
| 38) | | 1-Methylnaphth... | | 0.753 | 0.696 | 0.672 | 0.616 | 0.566 | 0.598 | 0.544 | 0.635 | 11.84 |

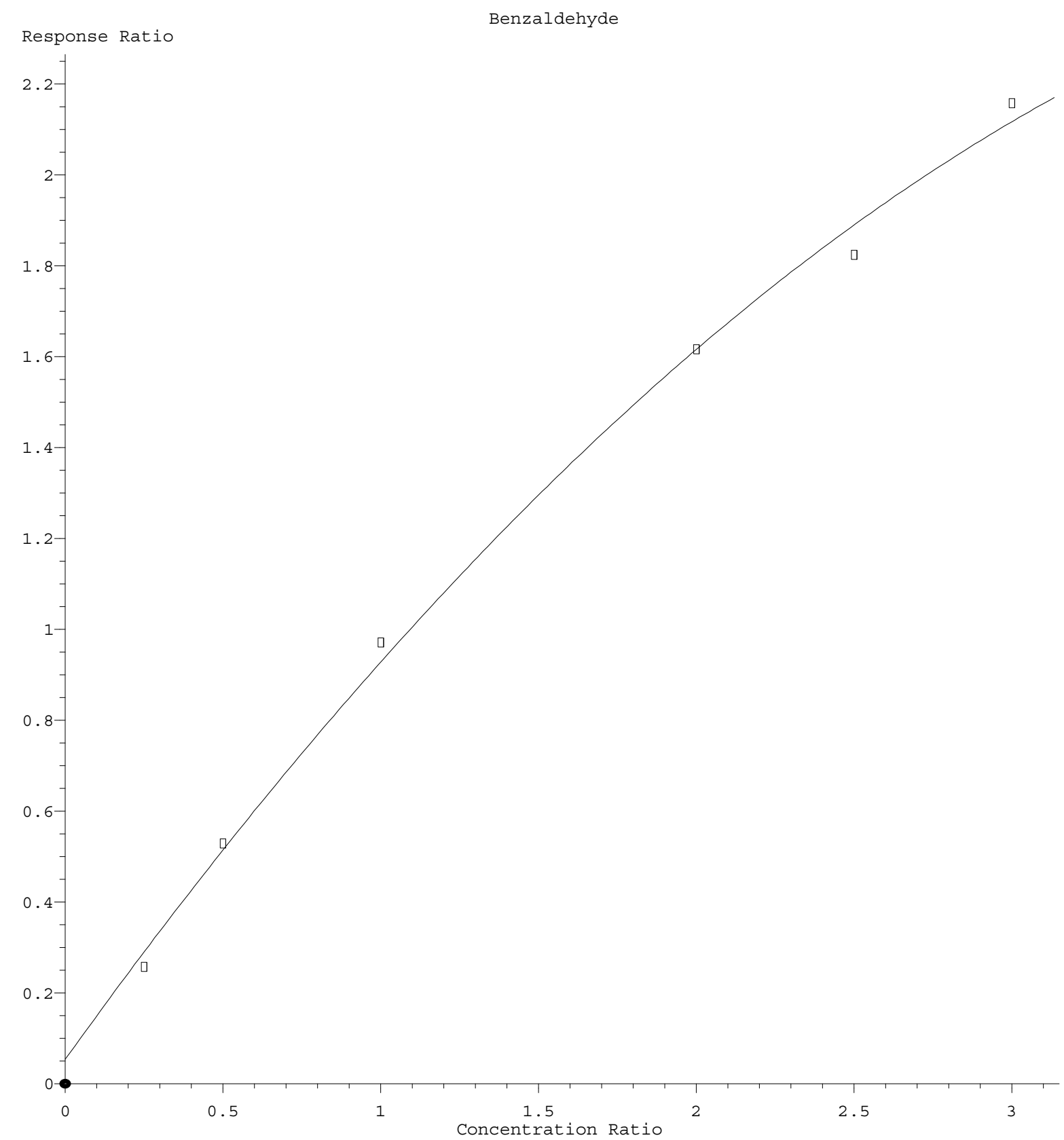
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF062623.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39) | I | Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | |
| 40) | | 1,2,4,5-Tetrac... | 0.626 | 0.639 | 0.634 | 0.585 | 0.562 | 0.574 | 0.528 | 0.593 | 7.08 |
| 41) | P | Hexachlorocycl... | | 0.214 | 0.264 | 0.295 | 0.297 | 0.310 | 0.307 | 0.281 | 12.98 |
| 42) | S | 2,4,6-Tribromo... | 0.259 | 0.274 | 0.270 | 0.248 | 0.235 | 0.243 | 0.225 | 0.251 | 7.23 |
| 43) | C | 2,4,6-Trichlor... | 0.412 | 0.433 | 0.423 | 0.404 | 0.391 | 0.394 | 0.367 | 0.403 | 5.45 |
| 44) | | 2,4,5-Trichlor... | 0.494 | 0.503 | 0.500 | 0.473 | 0.454 | 0.467 | 0.431 | 0.474 | 5.57 |
| 45) | S | 2-Fluorobiphenyl | 1.574 | 1.574 | 1.501 | 1.328 | 1.243 | 1.265 | 1.144 | 1.376 | 12.61 |
| 46) | | 1,1'-Biphenyl | 1.764 | 1.767 | 1.710 | 1.576 | 1.508 | 1.526 | 1.379 | 1.604 | 9.19 |
| 47) | | 2-Chloronaphth... | 1.283 | 1.285 | 1.236 | 1.154 | 1.106 | 1.123 | 1.030 | 1.174 | 8.26 |
| 48) | | 2-Nitroaniline | 0.407 | 0.444 | 0.452 | 0.431 | 0.422 | 0.432 | 0.406 | 0.428 | 4.05 |
| 49) | | Acenaphthylene | 2.169 | 2.206 | 2.171 | 1.979 | 1.901 | 1.909 | 1.703 | 2.005 | 9.26 |
| 50) | | Dimethylphthalate | 1.544 | 1.581 | 1.522 | 1.425 | 1.374 | 1.408 | 1.308 | 1.452 | 6.85 |
| 51) | | 2,6-Dinitrotol... | 0.316 | 0.323 | 0.329 | 0.318 | 0.303 | 0.315 | 0.285 | 0.313 | 4.69 |
| 52) | C | Acenaphthene | 1.242 | 1.279 | 1.252 | 1.143 | 1.089 | 1.122 | 1.018 | 1.164 | 8.33 |
| 53) | | 3-Nitroaniline | 0.377 | 0.389 | 0.404 | 0.375 | 0.356 | 0.374 | 0.350 | 0.375 | 4.92 |
| 54) | P | 2,4-Dinitrophenol | | 0.122 | 0.147 | 0.168 | 0.169 | 0.192 | 0.176 | 0.162 | 15.11 |
| 55) | | Dibenzofuran | 2.044 | 2.015 | 1.960 | 1.802 | 1.692 | 1.701 | 1.514 | 1.818 | 10.82 |
| 56) | P | 4-Nitrophenol | 0.236 | 0.262 | 0.280 | 0.269 | 0.265 | 0.272 | 0.253 | 0.262 | 5.43 |
| 57) | | 2,4-Dinitrotol... | 0.417 | 0.439 | 0.450 | 0.417 | 0.396 | 0.407 | 0.364 | 0.413 | 6.84 |
| 58) | | Fluorene | 1.585 | 1.611 | 1.541 | 1.373 | 1.289 | 1.319 | 1.185 | 1.415 | 11.65 |
| 59) | | 2,3,4,6-Tetrac... | 0.392 | 0.401 | 0.390 | 0.368 | 0.357 | 0.372 | 0.339 | 0.374 | 5.81 |
| 60) | | Diethylphthalate | 1.631 | 1.692 | 1.612 | 1.489 | 1.415 | 1.448 | 1.303 | 1.513 | 9.12 |
| 61) | | 4-Chlorophenyl... | 0.773 | 0.767 | 0.733 | 0.667 | 0.623 | 0.638 | 0.572 | 0.682 | 11.35 |
| 62) | | 4-Nitroaniline | 0.380 | 0.396 | 0.402 | 0.377 | 0.370 | 0.378 | 0.343 | 0.378 | 5.03 |
| 63) | | Azobenzene | 1.531 | 1.554 | 1.512 | 1.408 | 1.358 | 1.374 | 1.279 | 1.431 | 7.21 |
| 64) | I | Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | |
| 65) | | 4,6-Dinitro-2-... | 0.084 | 0.102 | 0.113 | 0.117 | 0.112 | 0.119 | 0.115 | 0.109 | 11.21 |
| 66) | c | n-Nitrosodiphe... | 0.718 | 0.680 | 0.685 | 0.628 | 0.586 | 0.603 | 0.572 | 0.639 | 8.76 |
| 67) | | 4-Bromophenyl-... | 0.227 | 0.222 | 0.228 | 0.213 | 0.199 | 0.203 | 0.196 | 0.213 | 6.33 |
| 68) | | Hexachlorobenzene | 0.241 | 0.236 | 0.242 | 0.221 | 0.211 | 0.222 | 0.207 | 0.226 | 6.33 |
| 69) | | Atrazine | 0.194 | 0.201 | 0.195 | 0.167 | 0.161 | 0.167 | 0.152 | 0.177 | 10.94 |
| 70) | C | Pentachlorophenol | 0.119 | 0.135 | 0.144 | 0.141 | 0.134 | 0.137 | 0.135 | 0.135 | 5.81 |
| 71) | | Phenanthrene | 1.119 | 1.105 | 1.087 | 0.981 | 0.929 | 0.951 | 0.876 | 1.007 | 9.57 |
| 72) | | Anthracene | 1.184 | 1.145 | 1.149 | 1.015 | 0.951 | 0.988 | 0.898 | 1.047 | 10.64 |
| 73) | | Carbazole | 1.087 | 1.066 | 1.056 | 0.950 | 0.814 | 0.902 | 0.835 | 0.959 | 11.81 |
| 74) | | Di-n-butylphth... | 1.265 | 1.264 | 1.254 | 1.141 | 0.982 | 1.084 | 0.989 | 1.140 | 11.04 |
| 75) | C | Fluoranthene | 1.284 | 1.246 | 1.207 | 1.054 | 0.919 | 1.012 | 0.897 | 1.088 | 14.52 |
| 76) | I | Chrysene-d12 | ----------ISTD---------- | | | | | | | | |
| 77) | | Benzidine | | 0.583 | 0.479 | 0.512 | 0.452 | 0.410 | 0.418 | 0.476 | 13.66 |
| 78) | | Pyrene | 1.804 | 1.790 | 1.865 | 1.963 | 1.871 | 1.934 | 1.802 | 1.861 | 3.65 |
| 79) | S | Terphenyl-d14 | 1.283 | 1.241 | 1.284 | 1.267 | 1.214 | 1.253 | 1.156 | 1.243 | 3.64 |
| 80) | | Butylbenzylpht... | 0.668 | 0.702 | 0.723 | 0.721 | 0.685 | 0.720 | 0.666 | 0.698 | 3.58 |
| 81) | | Benzo(a)anthra... | 1.500 | 1.462 | 1.433 | 1.379 | 1.312 | 1.356 | 1.267 | 1.387 | 6.01 |
| 82) | | 3,3'-Dichlorob... | 0.487 | 0.486 | 0.465 | 0.430 | 0.412 | 0.412 | 0.384 | 0.439 | 9.12 |
| 83) | | Chrysene | 1.472 | 1.404 | 1.400 | 1.329 | 1.260 | 1.306 | 1.234 | 1.343 | 6.39 |
| 84) | | Bis(2-ethylhex... | 0.753 | 0.832 | 0.832 | 0.821 | 0.785 | 0.822 | 0.770 | 0.802 | 4.02 |
| 85) | c | Di-n-octyl pht... | 1.061 | 1.124 | 1.137 | 1.199 | 1.189 | 1.264 | 1.277 | 1.179 | 6.56 |

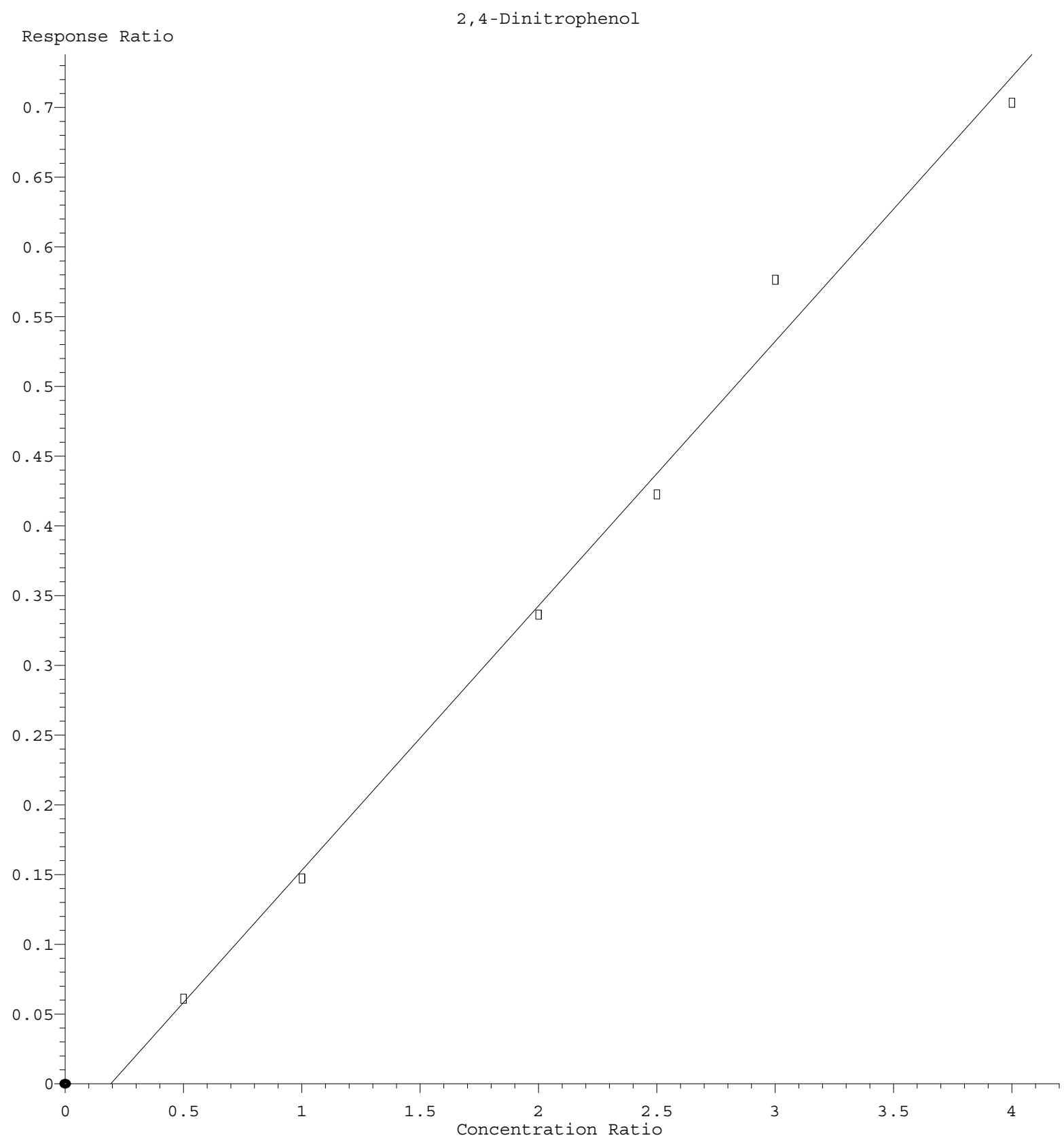
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF062623.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 86) | I | Perylene-d12 | ----------ISTD---------- | | | | | | | |
| 87) | | Indeno(1,2,3-c... | 1.095 | 1.182 | 1.435 | 1.520 | 1.545 | 1.488 | 1.449 | 1.388 | 12.71 |
| 88) | | Benzo(b)fluora... | 1.188 | 1.314 | 1.268 | 1.181 | 1.070 | 1.114 | 1.097 | 1.176 | 7.68 |
| 89) | | Benzo(k)fluora... | 1.276 | 1.365 | 1.306 | 1.161 | 1.093 | 1.156 | 1.025 | 1.197 | 10.23 |
| 90) | C | Benzo(a)pyrene | 1.167 | 1.199 | 1.199 | 1.137 | 1.072 | 1.123 | 1.064 | 1.137 | 4.86 |
| 91) | | Dibenzo(a,h)an... | 0.911 | 0.995 | 1.181 | 1.240 | 1.255 | 1.200 | 1.153 | 1.134 | 11.50 |
| 92) | | Benzo(g,h,i)pe... | 0.965 | 0.979 | 1.212 | 1.269 | 1.296 | 1.247 | 1.214 | 1.169 | 11.79 |

(#) = Out of Range




R = -9.331e-002 A*A + 9.677e-001 A + 5.376e-002
Coef of Det (r^2) = 0.996830  Curve Fit: Quadratic
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF062623.M
Calibration Table Last Updated: Mon Jun 26 23:12:04 2023




Response = 1.897e-001 * Amt - 3.666e-002
Coef of Det (r^2) = 0.991398  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF062623.M
Calibration Table Last Updated: Mon Jun 26 23:12:04 2023