Response Factor Report BNA_F

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF021224.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue Feb 13 02:26:13 2024
Response Via : Initial Calibration

Calibration Files
2.5 =BF137355.D 5 =BF137356.D 10 =BF137357.D 20 =BF137358.D 40 =BF137359.D 50 =BF137360.D 60 =BF137361.D 80 =BF1373
62.D

| | | Compound | 2.5 | 5 | 10 | 20 | 40 | 50 | 60 | 80 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | 1,4-Dichlorobenzen... | ---------- | ISTD | ---------- | | | | | | | |
| 2) | | 1,4-Dioxane | | 0.727 | 0.732 | 0.713 | 0.674 | 0.704 | 0.699 | 0.681 | 0.704 | 3.11 |
| 3) | | Pyridine | | 1.198 | 1.403 | 1.566 | 1.581 | 1.644 | 1.719 | 1.666 | 1.540 | 11.76 |
| 4) | | n-Nitrosodimet... | | | 0.411 | 0.533 | 0.578 | 0.651 | 0.675 | 0.665 | 0.585 | 17.38 |
| 5) | S | 2-Fluorophenol | | 1.269 | 1.424 | 1.433 | 1.333 | 1.343 | 1.312 | 1.226 | 1.334 | 5.67 |
| 6) | | Aniline | | 1.454 | 1.736 | 1.824 | 1.779 | 1.831 | 1.823 | 1.726 | 1.739 | 7.63 |
| 7) | S | Phenol-d6 | | 1.888 | 2.049 | 2.013 | 1.800 | 1.821 | 1.795 | 1.679 | 1.864 | 6.99 |
| 8) | | 2-Chlorophenol | | 1.436 | 1.509 | 1.500 | 1.360 | 1.401 | 1.351 | 1.253 | 1.401 | 6.44 |
| 9) | | Benzaldehyde | | 1.031 | 1.066 | 1.055 | 0.916 | 0.977 | 0.938 | 0.856 | 0.977 | 8.03 |
| 10) | C | Phenol | | 1.951 | 2.168 | 2.162 | 1.980 | 1.997 | 1.949 | 1.795 | 2.000 | 6.52 |
| 11) | | bis(2-Chloroet... | | 1.453 | 1.679 | 1.499 | 1.489 | 1.478 | 1.528 | 1.451 | 1.511 | 5.21 |
| 12) | | 1,3-Dichlorobe... | | 1.685 | 1.721 | 1.690 | 1.535 | 1.585 | 1.546 | 1.470 | 1.605 | 5.91 |
| 13) | C | 1,4-Dichlorobe... | | 1.755 | 1.813 | 1.757 | 1.584 | 1.606 | 1.578 | 1.477 | 1.653 | 7.44 |
| 14) | | 1,2-Dichlorobe... | | 1.678 | 1.688 | 1.636 | 1.460 | 1.440 | 1.392 | 1.281 | 1.511 | 10.44 |
| 15) | | Benzyl Alcohol | | 0.885 | 1.062 | 1.135 | 1.060 | 1.088 | 1.070 | 0.950 | 1.036 | 8.37 |
| 16) | | 2,2'-oxybis(1-... | | 2.485 | 2.481 | 2.429 | 2.202 | 2.262 | 2.204 | 2.035 | 2.300 | 7.40 |
| 17) | | 2-Methylphenol | | 1.108 | 1.251 | 1.229 | 1.171 | 1.211 | 1.221 | 1.140 | 1.190 | 4.36 |
| 18) | | Hexachloroethane | | 0.612 | 0.640 | 0.615 | 0.549 | 0.567 | 0.550 | 0.517 | 0.579 | 7.70 |
| 19) | P | n-Nitroso-di-n... | 0.986 | 1.038 | 1.117 | 1.153 | 1.027 | 1.087 | 1.068 | 1.025 | 1.063 | 5.15 |
| 20) | | 3+4-Methylphenols | | 1.353 | 1.574 | 1.559 | 1.382 | 1.379 | 1.309 | 1.164 | 1.389 | 10.25 |
| 21) | I | Naphthalene-d8 | ---------- | ISTD | ---------- | | | | | | | |
| 22) | | Acetophenone | | 0.510 | 0.529 | 0.532 | 0.465 | 0.466 | 0.464 | 0.442 | 0.487 | 7.46 |
| 23) | S | Nitrobenzene-d5 | | 0.352 | 0.385 | 0.416 | 0.388 | 0.402 | 0.399 | 0.385 | 0.390 | 5.13 |
| 24) | | Nitrobenzene | | 0.366 | 0.400 | 0.433 | 0.411 | 0.424 | 0.422 | 0.405 | 0.409 | 5.40 |
| 25) | | Isophorone | | 0.853 | 0.839 | 0.850 | 0.780 | 0.814 | 0.821 | 0.813 | 0.824 | 3.12 |
| 26) | C | 2-Nitrophenol | | 0.114 | 0.139 | 0.156 | 0.158 | 0.171 | 0.175 | 0.174 | 0.155 | 14.28 |
| 27) | | 2,4-Dimethylph... | | 0.210 | 0.213 | 0.232 | 0.221 | 0.228 | 0.232 | 0.224 | 0.223 | 3.92 |
| 28) | | bis(2-Chloroet... | | 0.454 | 0.462 | 0.501 | 0.460 | 0.472 | 0.475 | 0.458 | 0.469 | 3.39 |
| 29) | C | 2,4-Dichloroph... | | 0.262 | 0.289 | 0.303 | 0.289 | 0.293 | 0.297 | 0.285 | 0.288 | 4.53 |
| 30) | | 1,2,4-Trichlor... | | 0.350 | 0.345 | 0.348 | 0.317 | 0.326 | 0.322 | 0.313 | 0.331 | 4.69 |
| 31) | | Naphthalene | | 1.177 | 1.166 | 1.173 | 1.044 | 1.035 | 1.024 | 0.942 | 1.080 | 8.52 |
| 32) | | Benzoic acid | | | 0.108 | 0.119 | 0.147 | 0.173 | 0.184 | 0.210 | 0.157 | 25.01 |
| 33) | | 4-Chloroaniline | | 0.293 | 0.332 | 0.377 | 0.366 | 0.376 | 0.359 | 0.345 | 0.350 | 8.57 |
| 34) | C | Hexachlorobuta... | | 0.210 | 0.208 | 0.205 | 0.192 | 0.196 | 0.196 | 0.190 | 0.200 | 3.99 |
| 35) | | Caprolactam | | | 0.074 | 0.084 | 0.084 | 0.089 | 0.092 | 0.088 | 0.085 | 7.39 |
| 36) | C | 4-Chloro-3-met... | | 0.289 | 0.309 | 0.338 | 0.316 | 0.319 | 0.316 | 0.306 | 0.313 | 4.77 |
| 37) | | 2-Methylnaphth... | | 0.699 | 0.727 | 0.717 | 0.646 | 0.638 | 0.629 | 0.584 | 0.663 | 7.95 |
| 38) | | 1-Methylnaphth... | | 0.699 | 0.713 | 0.717 | 0.633 | 0.629 | 0.610 | 0.569 | 0.653 | 8.76 |

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF021224.M

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 39) | I | Acenaphthene-d10 | ----------ISTD---------- | | | | | | | | |
| 40) | | 1,2,4,5-Tetrac... | 0.636 | 0.634 | 0.631 | 0.574 | 0.592 | 0.583 | 0.572 | 0.603 | 4.87 |
| 41) | P | Hexachlorocycl... | | 0.142 | 0.171 | 0.189 | 0.211 | 0.219 | 0.227 | 0.193 | 16.79 |
| 42) | S | 2,4,6-Tribromo... | 0.155 | 0.184 | 0.185 | 0.182 | 0.192 | 0.196 | 0.191 | 0.184 | 7.43 |
| 43) | C | 2,4,6-Trichlor... | 0.352 | 0.385 | 0.407 | 0.383 | 0.394 | 0.395 | 0.384 | 0.386 | 4.45 |
| 44) | | 2,4,5-Trichlor... | 0.420 | 0.409 | 0.450 | 0.407 | 0.440 | 0.423 | 0.412 | 0.423 | 3.84 |
| 45) | S | 2-Fluorobiphenyl | 1.631 | 1.559 | 1.467 | 1.247 | 1.234 | 1.197 | 1.115 | 1.350 | 14.79 |
| 46) | | 1,1'-Biphenyl | 1.724 | 1.738 | 1.663 | 1.486 | 1.488 | 1.452 | 1.333 | 1.555 | 9.92 |
| 47) | | 2-Chloronaphth... | 1.339 | 1.350 | 1.326 | 1.174 | 1.206 | 1.192 | 1.124 | 1.244 | 7.37 |
| 48) | | 2-Nitroaniline | 0.123 | 0.214 | 0.263 | 0.293 | 0.329 | 0.338 | 0.334 | 0.271 | 29.16 |
| 49) | | Acenaphthylene | 1.963 | 2.005 | 1.956 | 1.751 | 1.744 | 1.711 | 1.597 | 1.818 | 8.56 |
| 50) | | Dimethylphthalate | 1.466 | 1.514 | 1.516 | 1.385 | 1.401 | 1.400 | 1.365 | 1.435 | 4.37 |
| 51) | | 2,6-Dinitrotol... | 0.218 | 0.283 | 0.299 | 0.295 | 0.305 | 0.312 | 0.298 | 0.287 | 11.03 |
| 52) | C | Acenaphthene | 1.242 | 1.240 | 1.204 | 1.067 | 1.065 | 1.046 | 0.990 | 1.122 | 9.25 |
| 53) | | 3-Nitroaniline | 0.138 | 0.215 | 0.248 | 0.266 | 0.286 | 0.294 | 0.287 | 0.248 | 22.57 |
| 54) | P | 2,4-Dinitrophenol | | 0.047 | 0.077 | 0.109 | 0.129 | 0.138 | 0.140 | 0.107 | 35.15 |
| 55) | | Dibenzofuran | 1.786 | 1.832 | 1.805 | 1.604 | 1.618 | 1.546 | 1.446 | 1.662 | 8.86 |
| 56) | P | 4-Nitrophenol | | 0.085 | 0.142 | 0.185 | 0.199 | 0.211 | 0.205 | 0.171 | 28.57 |
| 57) | | 2,4-Dinitrotol... | 0.225 | 0.322 | 0.364 | 0.366 | 0.371 | 0.378 | 0.349 | 0.339 | 15.80 |
| 58) | | Fluorene | 1.446 | 1.483 | 1.423 | 1.220 | 1.195 | 1.169 | 1.059 | 1.285 | 12.75 |
| 59) | | 2,3,4,6-Tetrac... | 0.310 | 0.356 | 0.351 | 0.335 | 0.340 | 0.341 | 0.323 | 0.337 | 4.70 |
| 60) | | Diethylphthalate | 1.357 | 1.432 | 1.427 | 1.318 | 1.331 | 1.321 | 1.257 | 1.349 | 4.65 |
| 61) | | 4-Chlorophenyl... | 0.698 | 0.719 | 0.686 | 0.608 | 0.602 | 0.593 | 0.557 | 0.637 | 9.77 |
| 62) | | 4-Nitroaniline | 0.094 | 0.134 | 0.196 | 0.223 | 0.225 | 0.240 | 0.226 | 0.191 | 29.11 |
| 63) | | Azobenzene | 1.501 | 1.617 | 1.591 | 1.445 | 1.465 | 1.450 | 1.325 | 1.485 | 6.61 |
| 64) | I | Phenanthrene-d10 | ----------ISTD---------- | | | | | | | | |
| 65) | | 4,6-Dinitro-2-... | | 0.069 | 0.089 | 0.099 | 0.112 | 0.116 | 0.117 | 0.100 | 18.80 |
| 66) | c | n-Nitrosodiphe... | 0.637 | 0.641 | 0.669 | 0.613 | 0.627 | 0.625 | 0.608 | 0.631 | 3.23 |
| 67) | | 4-Bromophenyl-... | 0.222 | 0.218 | 0.230 | 0.217 | 0.227 | 0.231 | 0.229 | 0.225 | 2.48 |
| 68) | | Hexachlorobenzene | 0.264 | 0.258 | 0.259 | 0.241 | 0.254 | 0.252 | 0.251 | 0.254 | 2.83 |
| 69) | | Atrazine | 0.127 | 0.152 | 0.162 | 0.155 | 0.145 | 0.133 | 0.118 | 0.142 | 11.44 |
| 70) | C | Pentachlorophenol | 0.101 | 0.122 | 0.142 | 0.147 | 0.152 | 0.153 | 0.149 | 0.138 | 14.05 |
| 71) | | Phenanthrene | 1.179 | 1.163 | 1.147 | 1.019 | 1.042 | 1.026 | 0.960 | 1.077 | 7.91 |
| 72) | | Anthracene | 1.090 | 1.166 | 1.156 | 1.014 | 1.059 | 1.033 | 0.983 | 1.072 | 6.50 |
| 73) | | Carbazole | 0.868 | 0.979 | 0.985 | 0.924 | 0.930 | 0.933 | 0.856 | 0.925 | 5.35 |
| 74) | | Di-n-butylphth... | 0.706 | 0.850 | 0.991 | 0.997 | 1.076 | 1.093 | 1.048 | 0.966 | 14.48 |
| 75) | C | Fluoranthene | 1.066 | 1.144 | 1.139 | 1.029 | 1.021 | 1.008 | 0.930 | 1.048 | 7.23 |
| 76) | I | Chrysene-d12 | ----------ISTD---------- | | | | | | | | |
| 77) | | Benzidine | 0.027 | 0.024 | 0.018 | 0.105 | 0.084 | 0.092 | 0.092 | 0.063 | 60.63 |
| 78) | | Pyrene | 1.888 | 1.910 | 1.870 | 1.781 | 1.840 | 1.827 | 1.724 | 1.834 | 3.53 |
| 79) | S | Terphenyl-d14 | 1.456 | 1.462 | 1.465 | 1.351 | 1.378 | 1.390 | 1.280 | 1.397 | 4.92 |
| 80) | | Butylbenzylpht... | 0.089 | 0.111 | 0.144 | 0.202 | 0.256 | 0.307 | 0.318 | 0.204 | 45.60 |
| 81) | | Benzo(a)anthra... | 1.331 | 1.406 | 1.424 | 1.374 | 1.407 | 1.408 | 1.390 | 1.391 | 2.22 |
| 82) | | 3,3'-Dichlorob... | | 0.126 | 0.195 | 0.268 | 0.312 | 0.340 | 0.346 | 0.264 | 33.25 |
| 83) | | Chrysene | 1.469 | 1.457 | 1.435 | 1.366 | 1.417 | 1.425 | 1.393 | 1.423 | 2.49 |
| 84) | | Bis(2-ethylhex... | 0.135 | 0.181 | 0.248 | 0.309 | 0.382 | 0.431 | 0.448 | 0.305 | 40.08 |
| 85) | c | Di-n-octyl pht... | | 0.286 | 0.412 | 0.558 | 0.714 | 0.838 | 0.961 | 0.628 | 40.95# |

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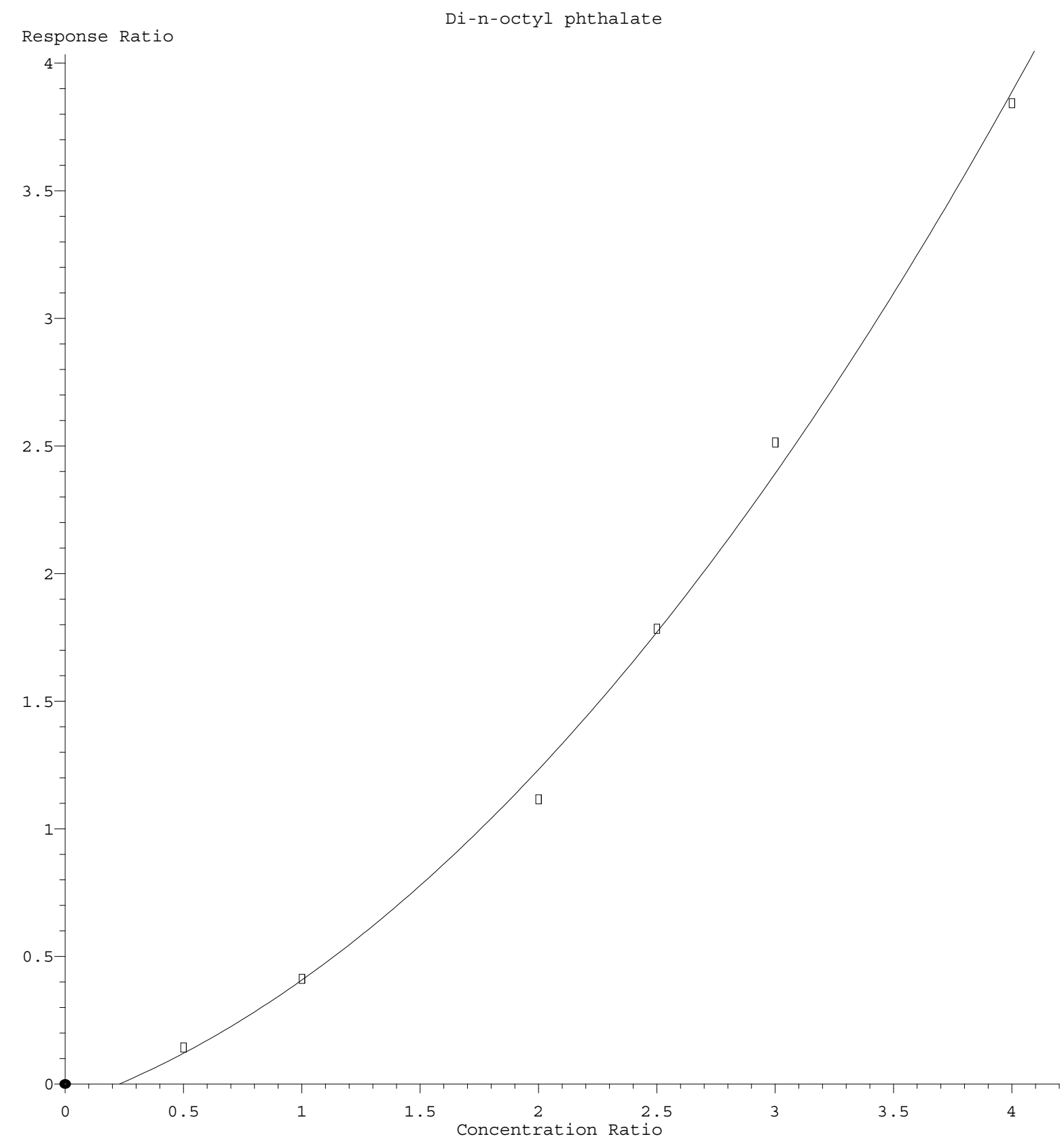
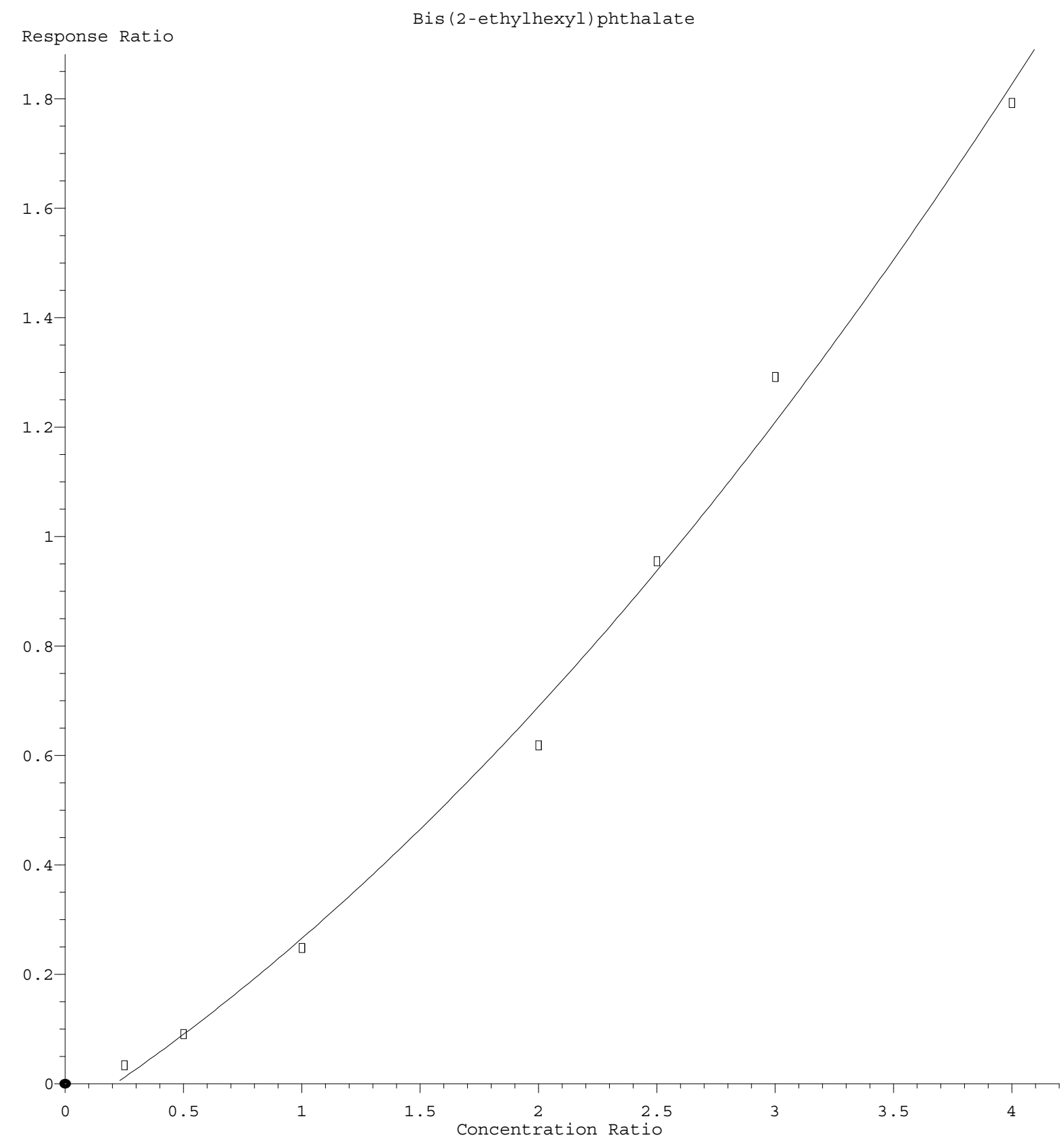
Method File : 8270-BF021224.M

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 86) | I | Perylene-d12 | ----------ISTD---------- | | | | | | | |
| 87) | | Indeno(1,2,3-c... | 1.040 | 1.055 | 1.188 | 1.199 | 1.274 | 1.305 | 1.305 | 1.195 | 9.29 |
| 88) | | Benzo(b)fluora... | 1.220 | 1.402 | 1.388 | 1.229 | 1.308 | 1.311 | 1.314 | 1.310 | 5.34 |
| 89) | | Benzo(k)fluora... | 1.278 | 1.278 | 1.331 | 1.263 | 1.208 | 1.223 | 1.146 | 1.247 | 4.82 |
| 90) | C | Benzo(a)pyrene | 1.002 | 1.082 | 1.130 | 1.093 | 1.115 | 1.133 | 1.109 | 1.095 | 4.10 |
| 91) | | Dibenzo(a,h)an... | 0.773 | 0.827 | 0.970 | 0.975 | 1.022 | 1.062 | 1.052 | 0.954 | 11.74 |
| 92) | | Benzo(g,h,i)pe... | 0.912 | 0.881 | 1.000 | 0.990 | 1.041 | 1.089 | 1.097 | 1.001 | 8.27 |

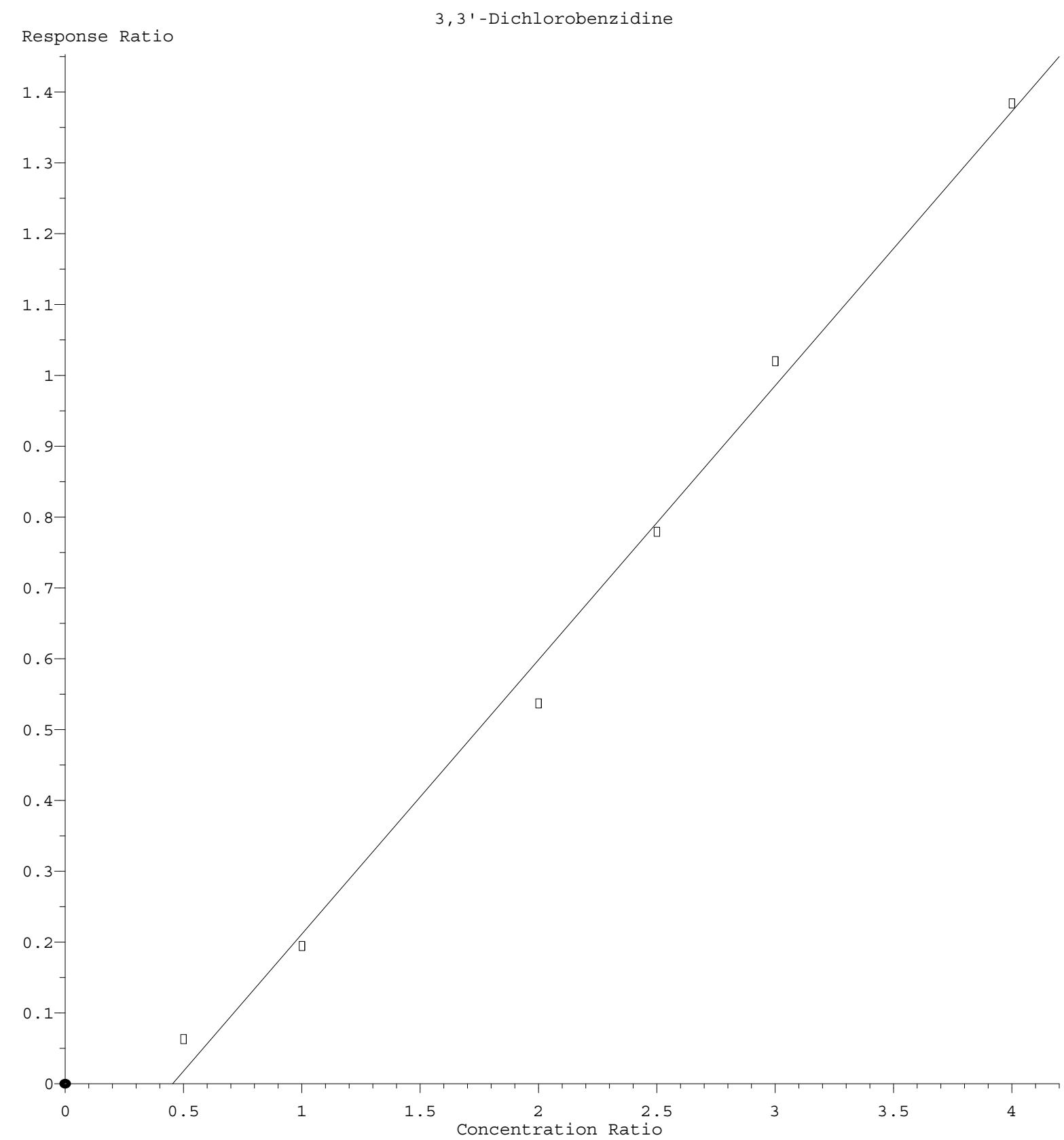
(#) = Out of Range



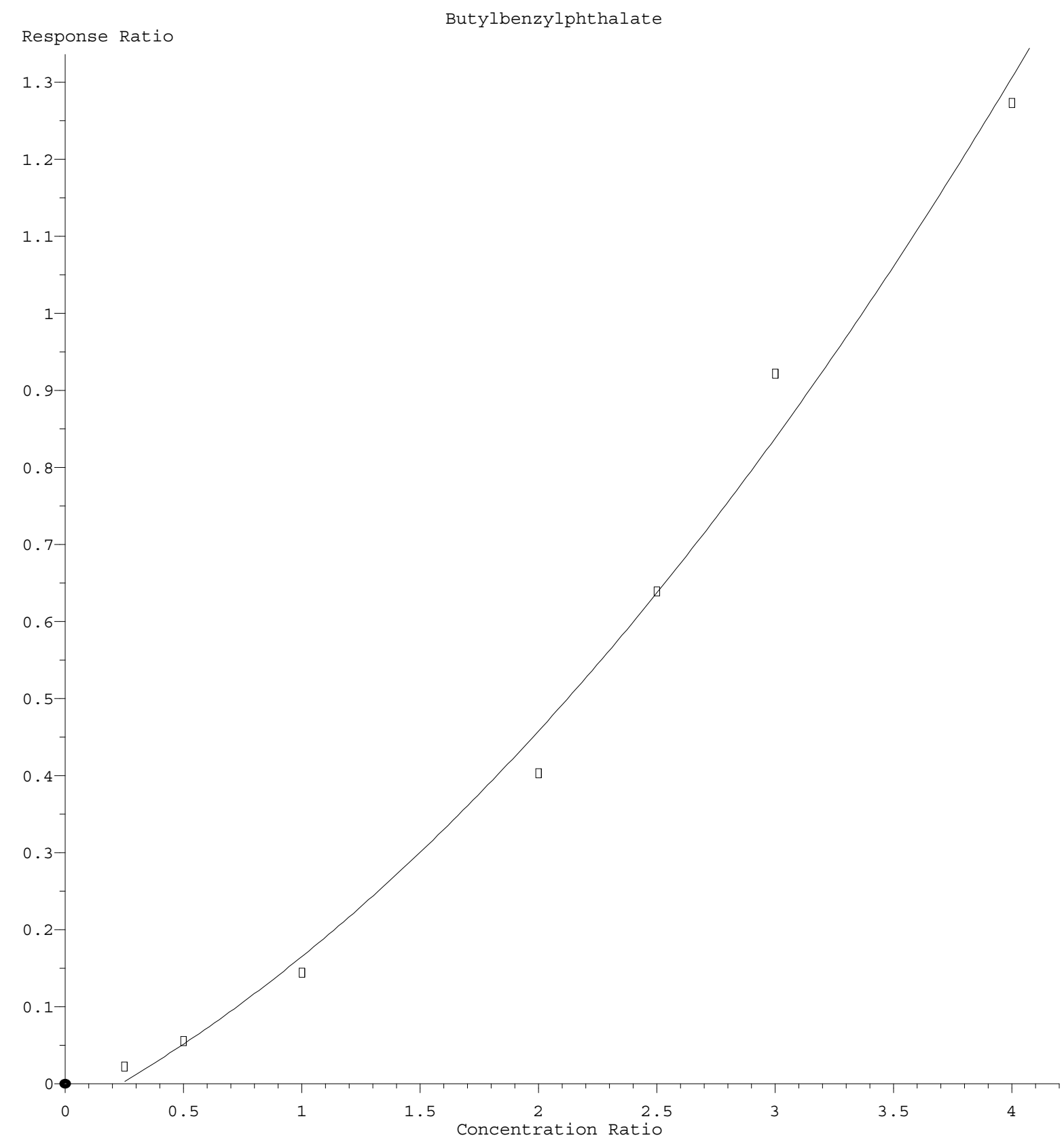

R = 1.675e-001 A*A + 3.225e-001 A - 8.254e-002
Coef of Det (r^2) = 0.996781  Curve Fit: Quadratic
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




R = 4.845e-002 A*A + 2.781e-001 A - 6.094e-002
Coef of Det (r^2) = 0.994663  Curve Fit: Quadratic
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




Response = 3.870e-001 * Amt - 1.757e-001
Coef of Det (r^2) = 0.993960  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




R = 4.372e-002 A*A + 1.616e-001 A - 4.026e-002
Coef of Det (r^2) = 0.991234  Curve Fit: Quadratic
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
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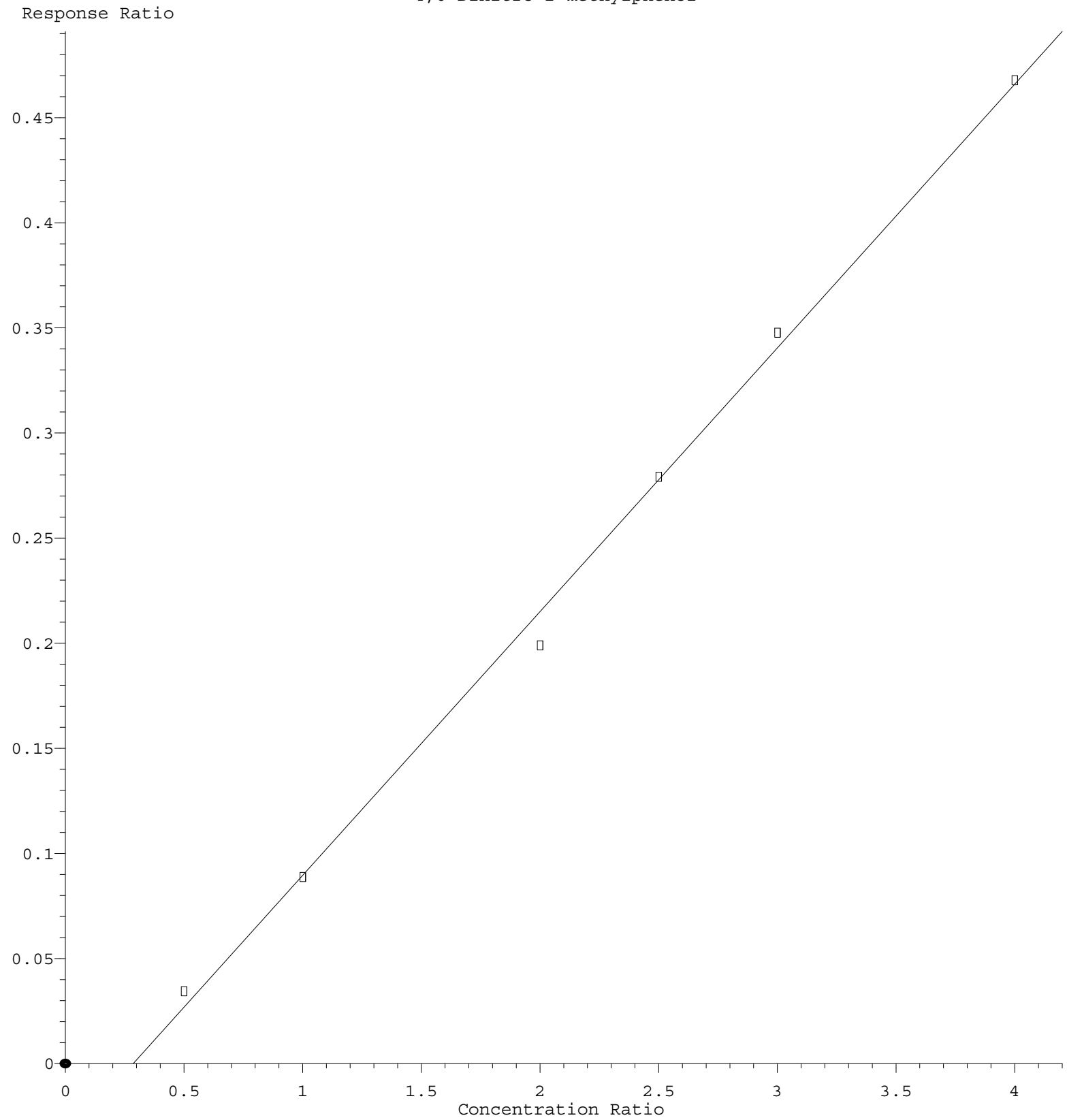
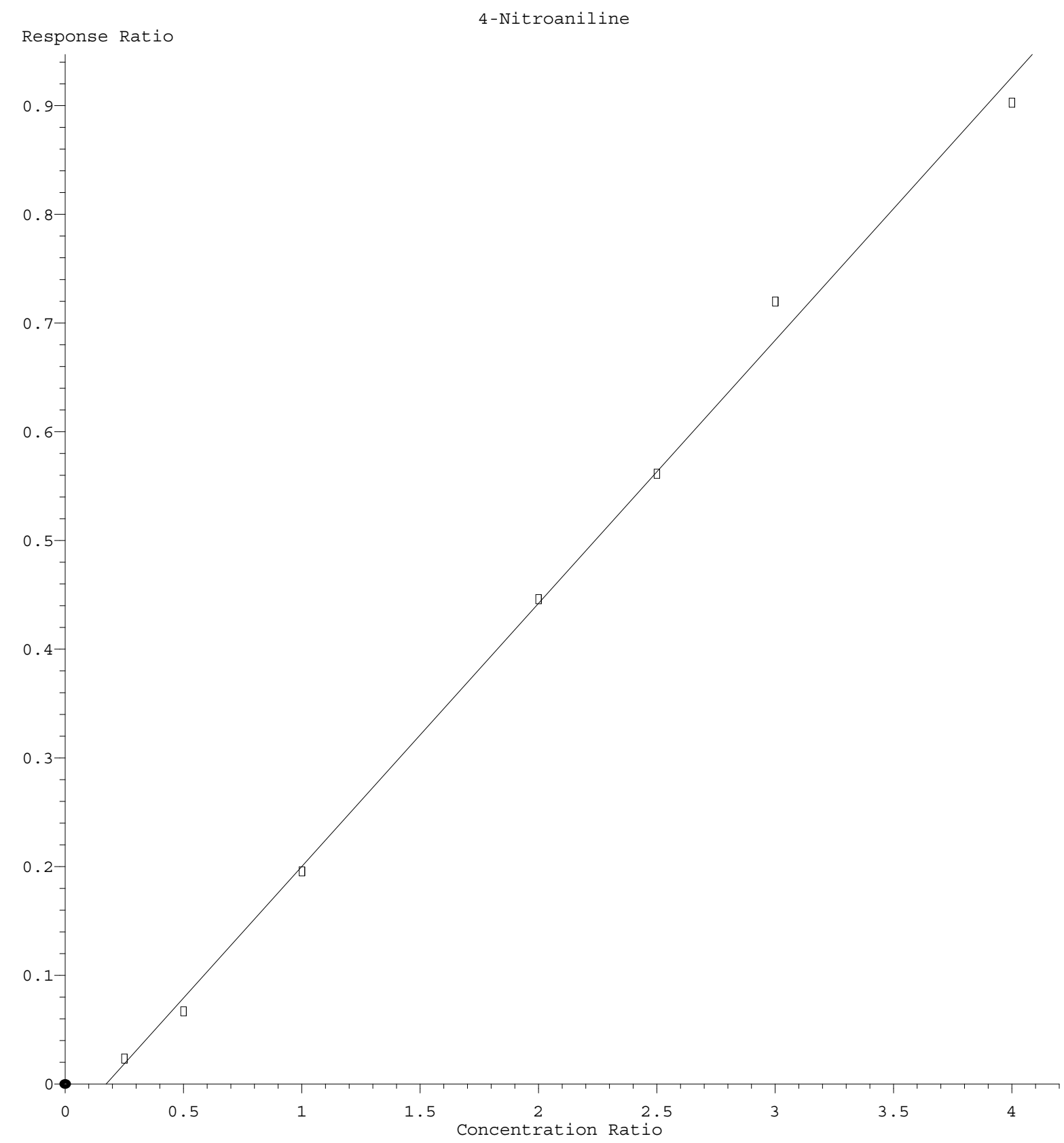
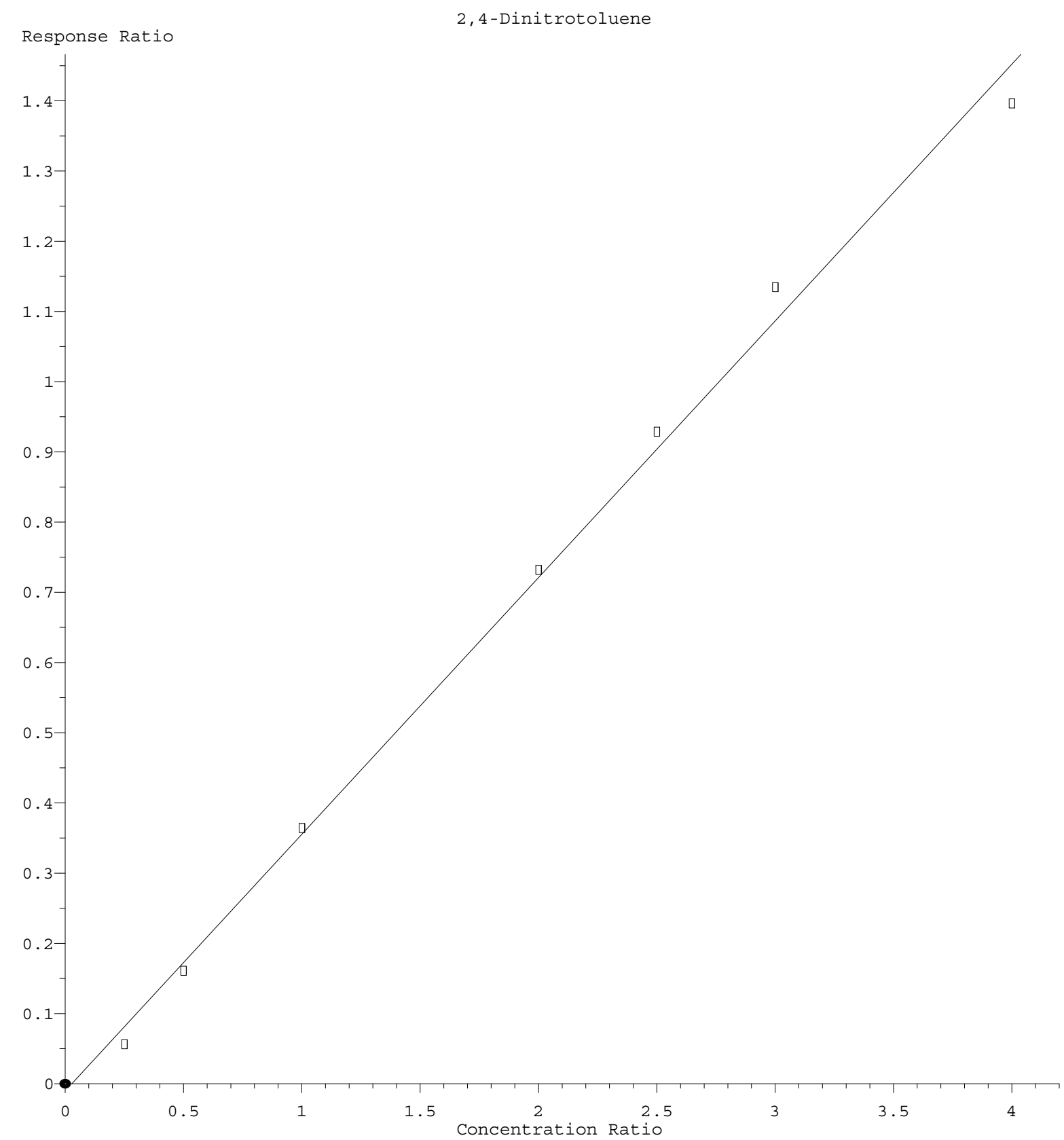
4,6-Dinitro-2-methylphenol



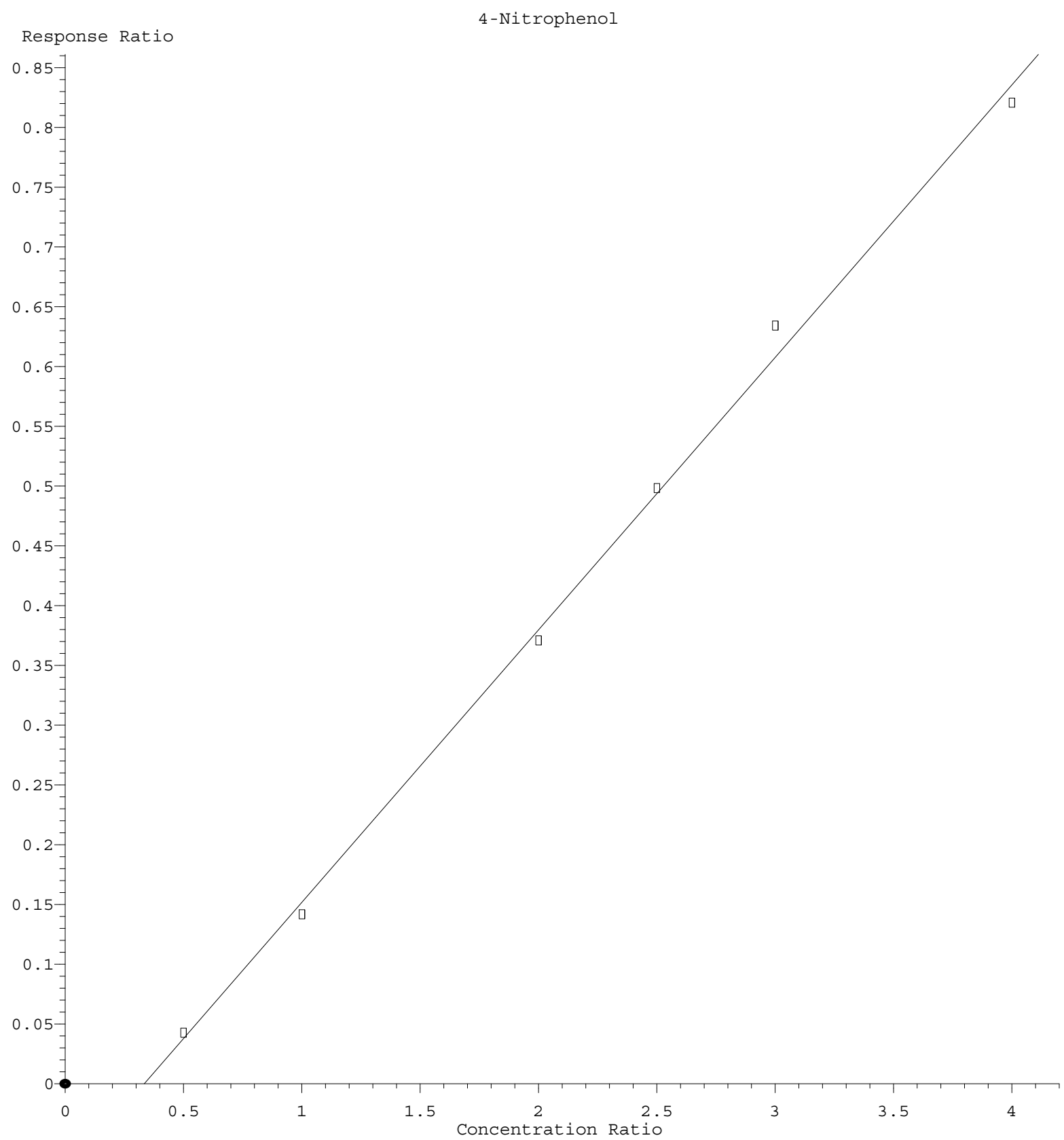

Response = 1.256e-001 * Amt - 3.593e-002
Coef of Det (r^2) = 0.997171  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



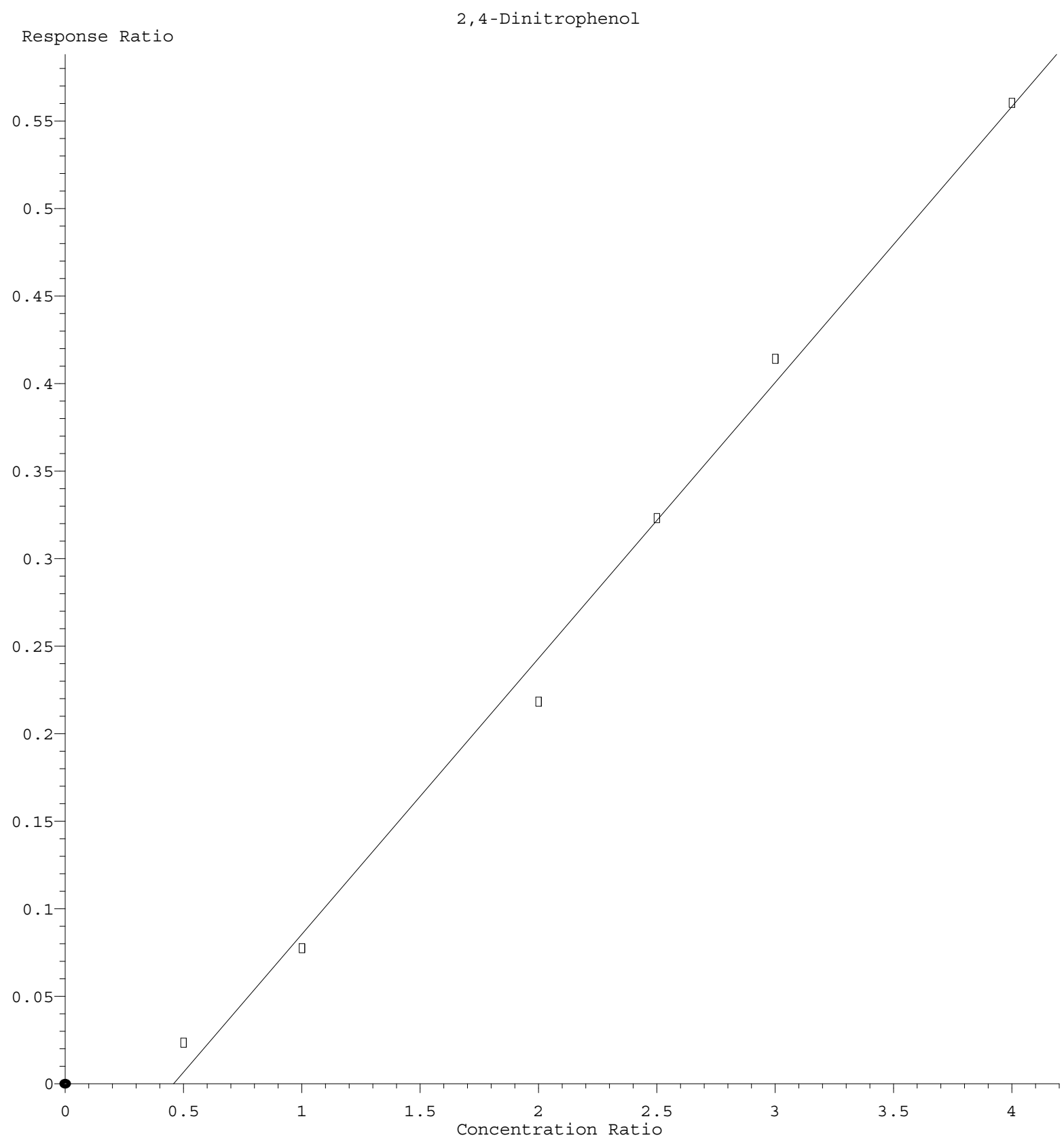

Response = 2.422e-001 * Amt - 4.200e-002
Coef of Det (r^2) = 0.996988  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



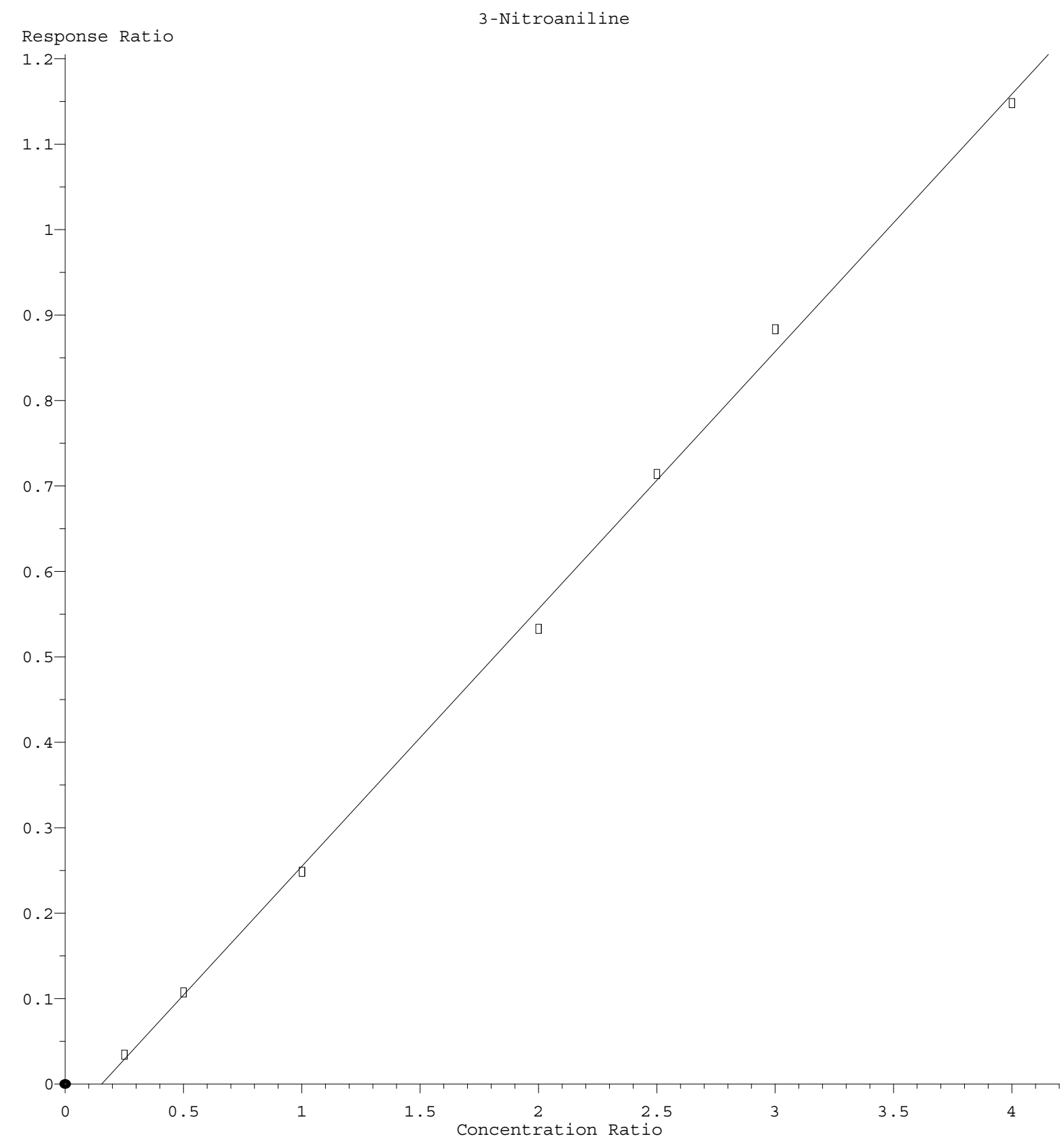

Response = 3.657e-001 * Amt - 1.035e-002
Coef of Det (r^2) = 0.995468  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



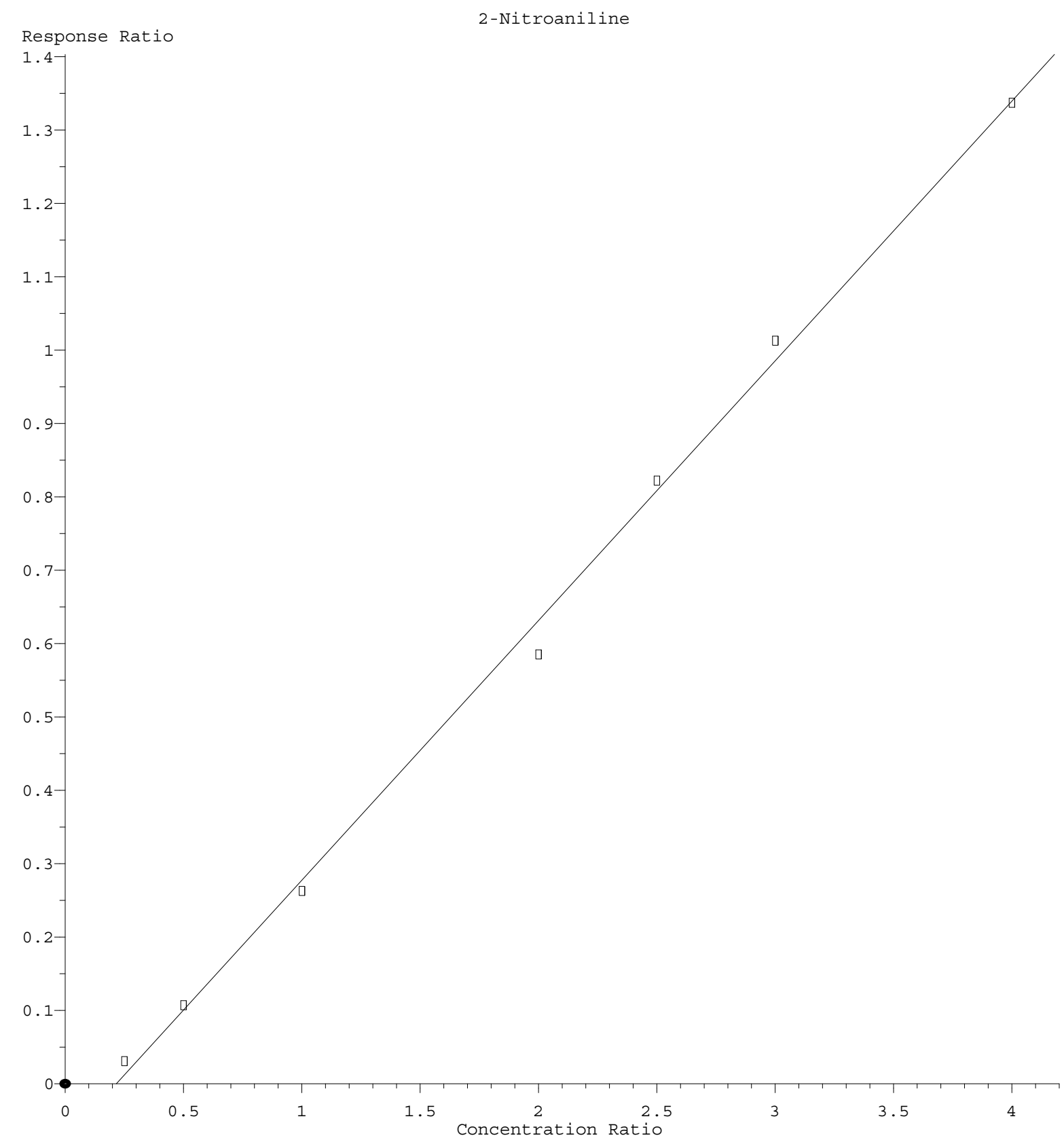

Response = 2.281e-001 * Amt - 7.614e-002
Coef of Det (r^2) = 0.997355  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



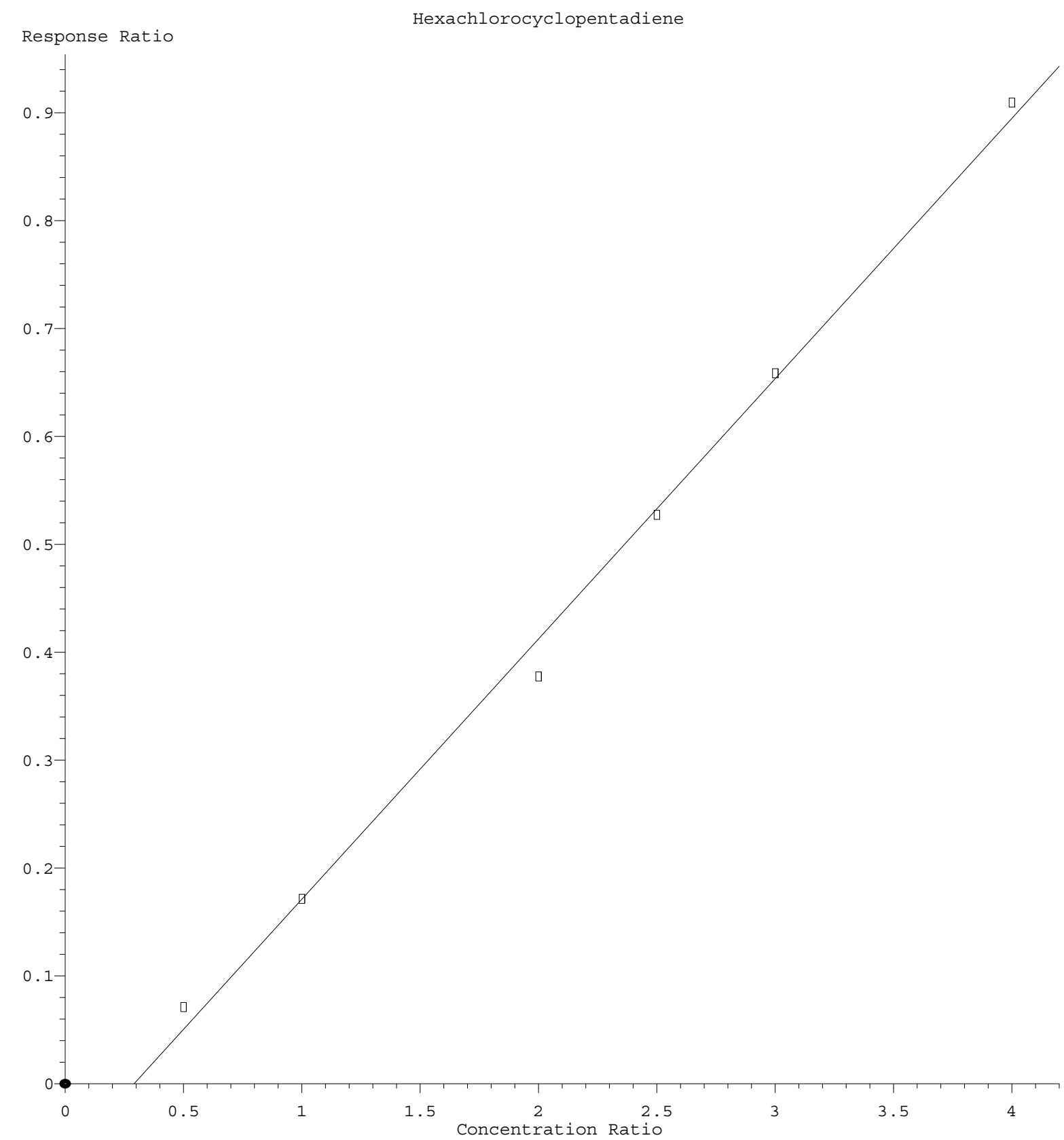

Response = 1.577e-001 * Amt - 7.226e-002
Coef of Det (r^2) = 0.994498  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



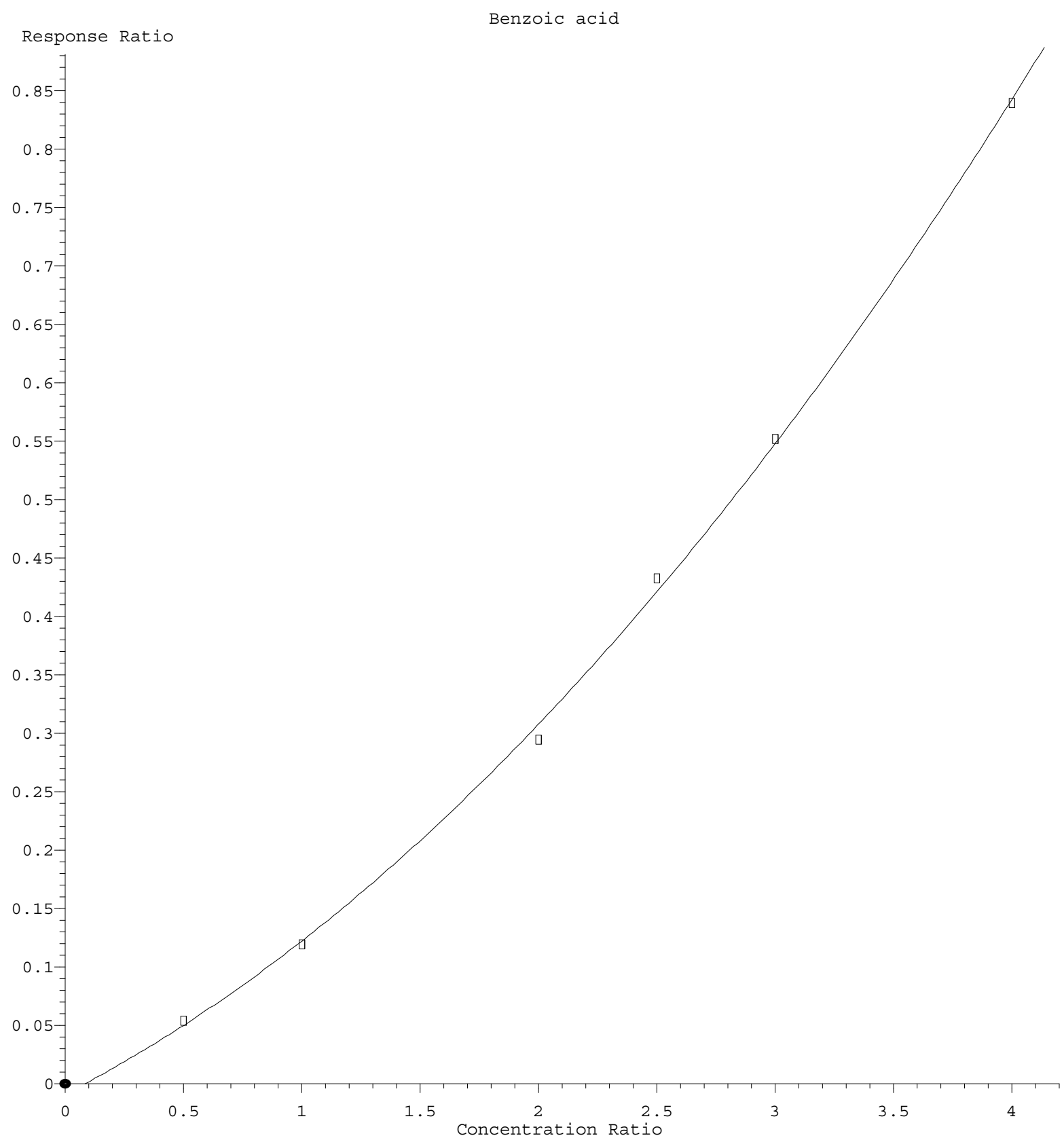

Response = 3.013e-001 * Amt - 4.639e-002
Coef of Det (r^2) = 0.998597  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024



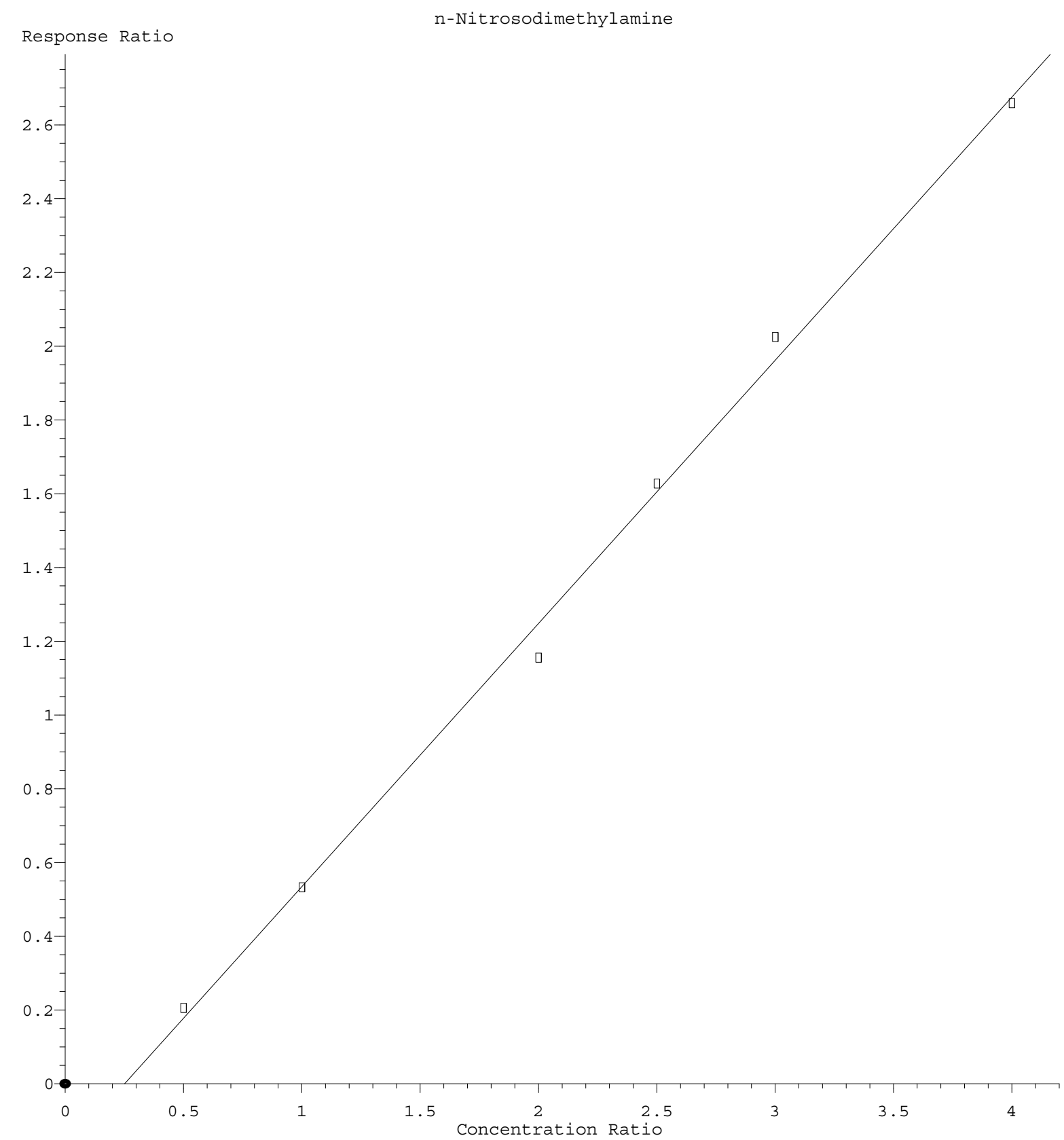

Response = 3.541e-001 * Amt - 7.635e-002
Coef of Det (r^2) = 0.997435  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




Response = 2.413e-001 * Amt - 7.020e-002
Coef of Det (r^2) = 0.996070  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




R = 2.731e-002 A*A + 1.036e-001 A - 8.705e-003
Coef of Det (r^2) = 0.999153  Curve Fit: Quadratic
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024




Response = 7.137e-001 * Amt - 1.790e-001
Coef of Det (r^2) = 0.996674  Curve Fit: Linear
Method Name:  Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF021224.M
Calibration Table Last Updated: Tue Feb 13 02:26:13 2024