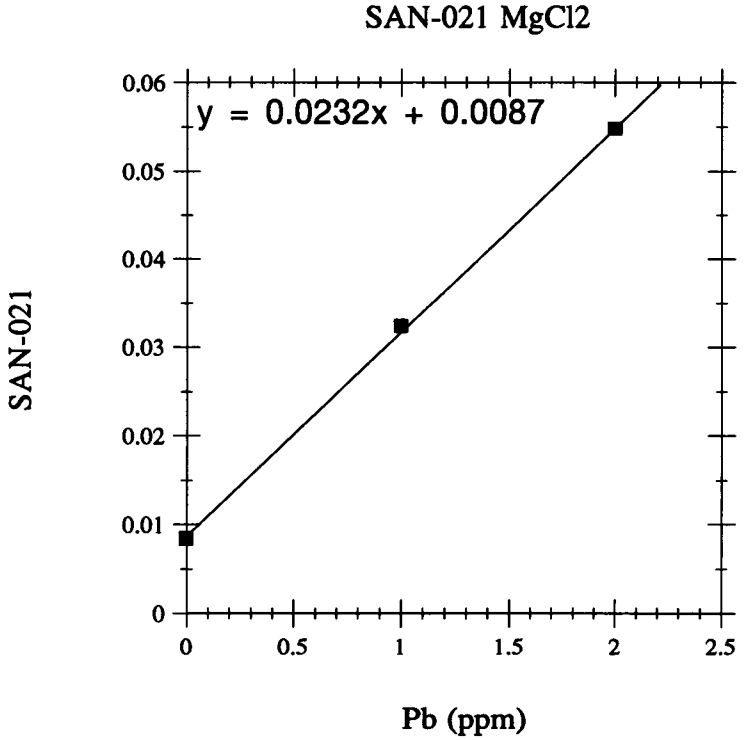
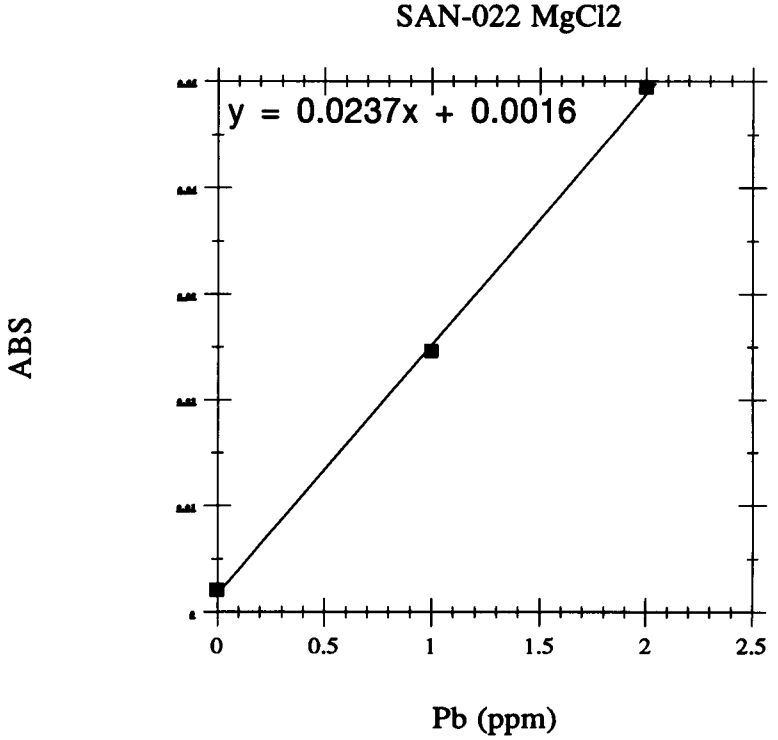
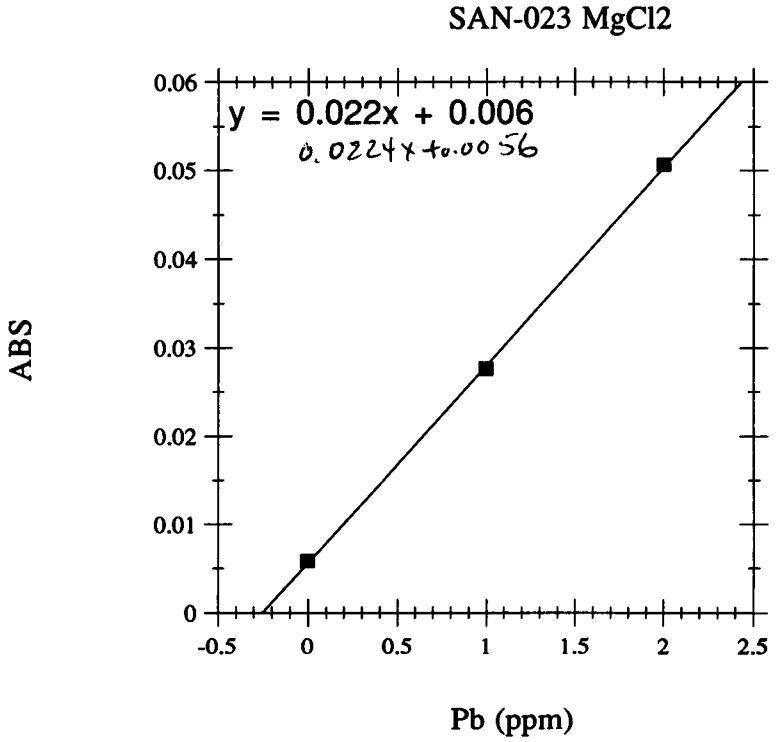


.375 x 2 = .75 x 8/1.016 = 5.906 ppm



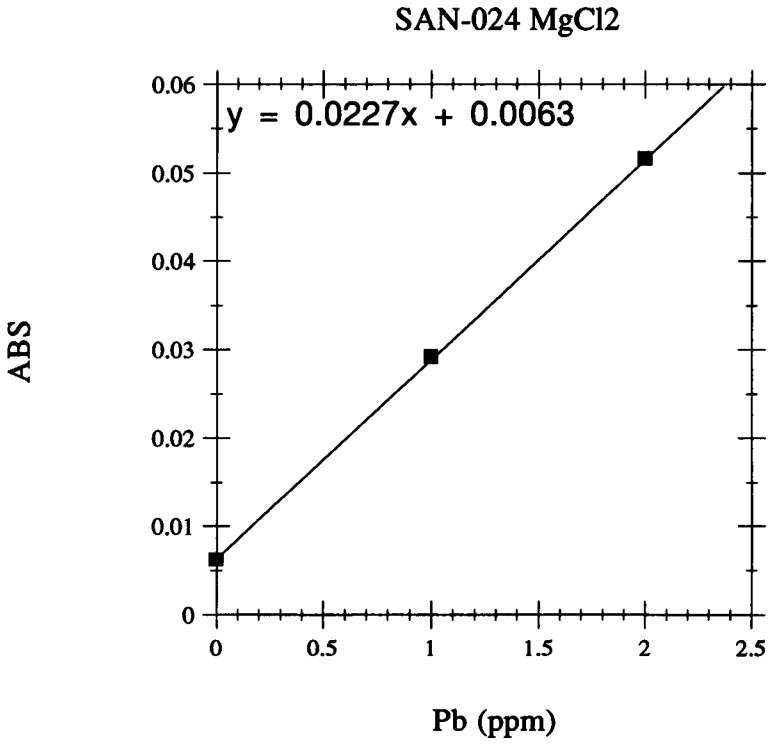
$.0675 \times 2 = .135$

$.135 \times \frac{8}{1.022} =$ ~~1.056~~ 1.057 ppm



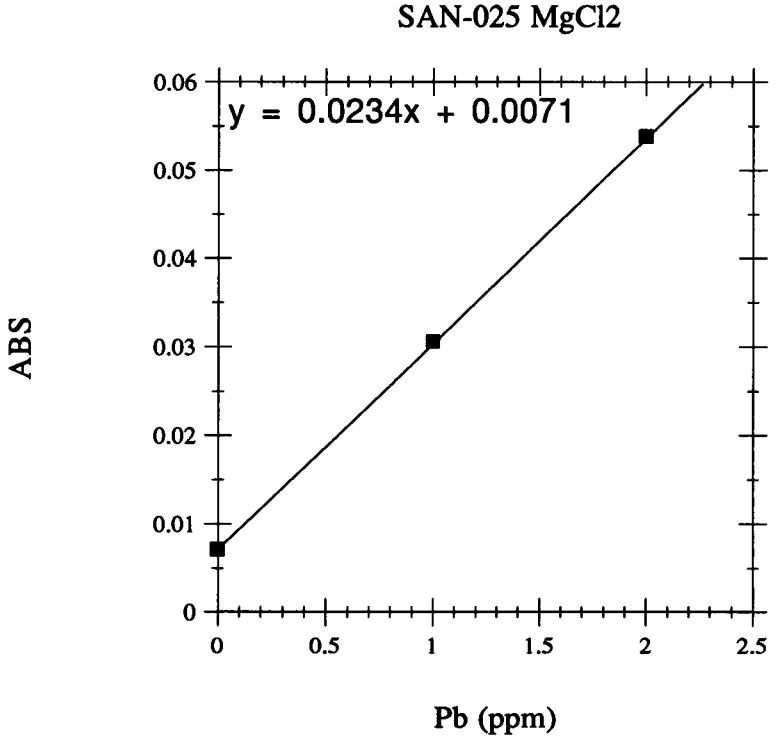
$0.25 \times 2 = 0.5$

$0.5 \times \frac{8}{1.022} = 3.914\ ppm$

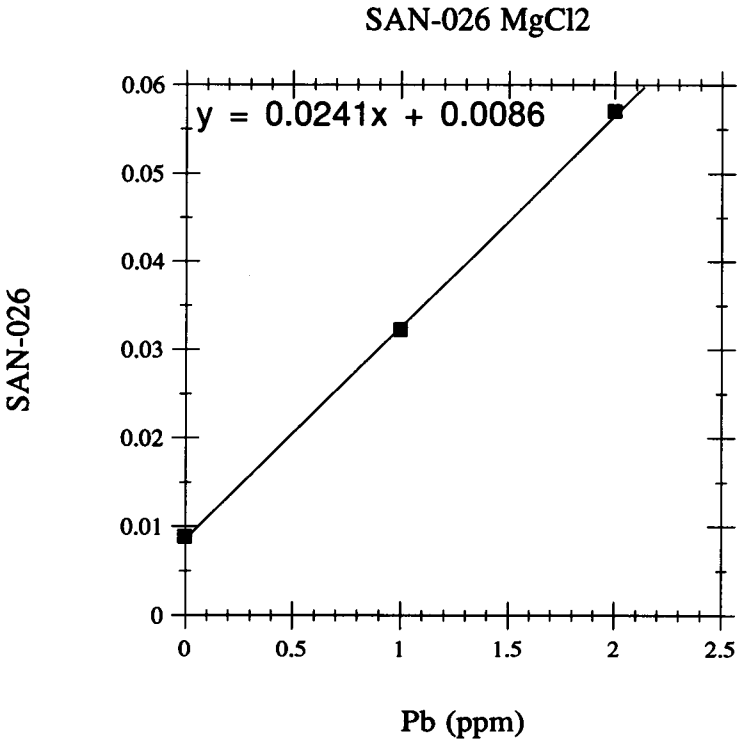


.2775 x 2 = .555

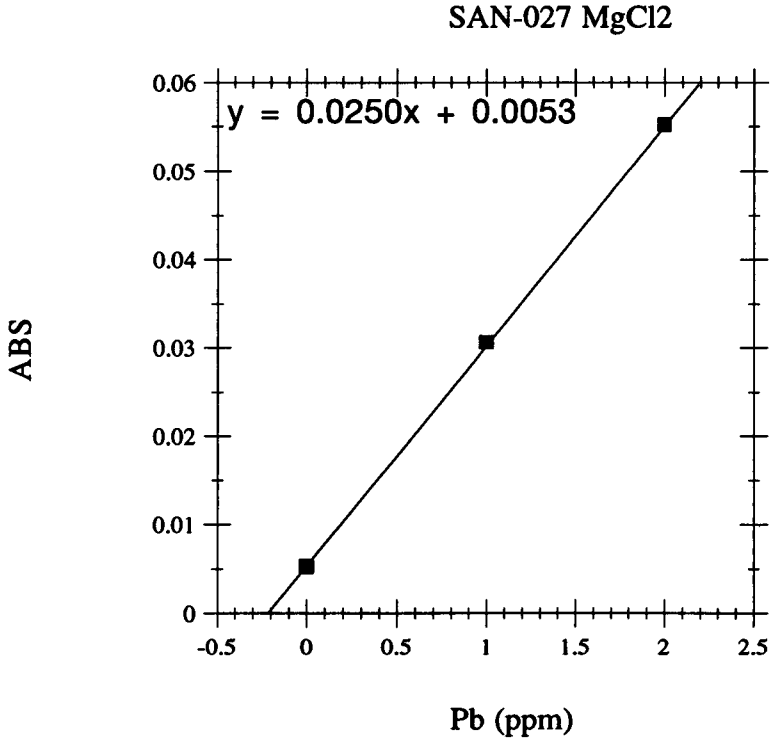
$\frac{.555 \times 8}{1.018} = 4.361$ ppm



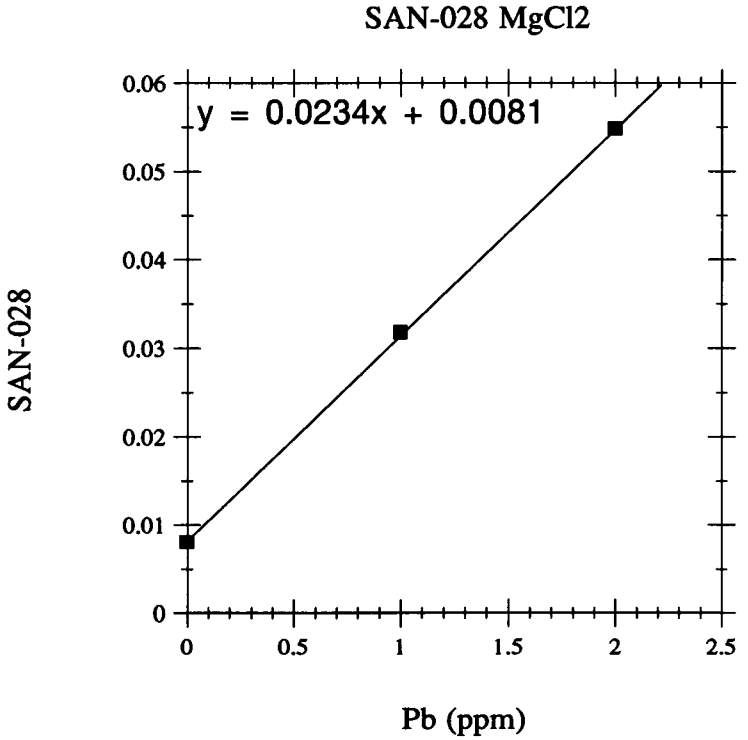
$.3034 \times 2 = .6068 \times \frac{8}{1.025} = 4.736 \text{ ppm}$



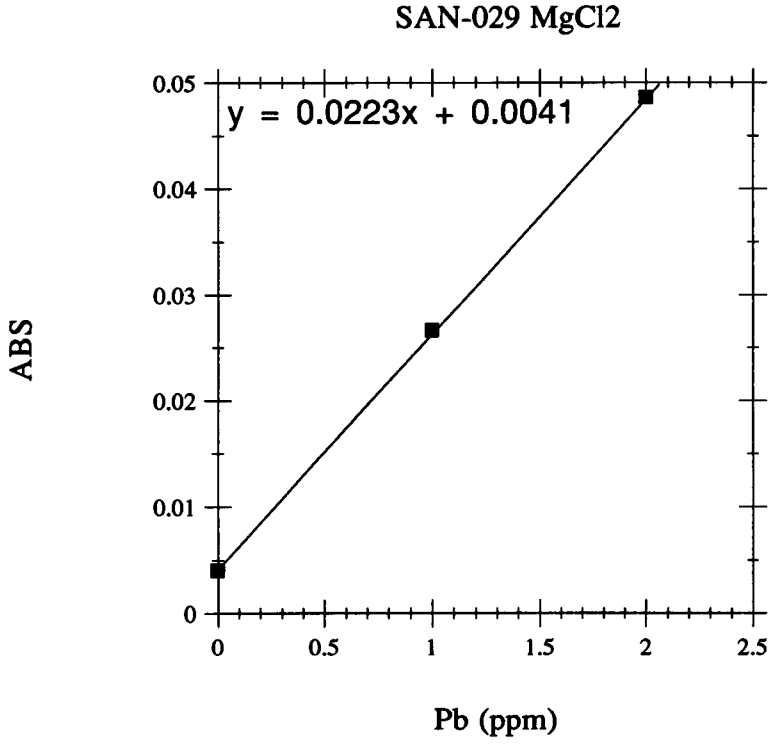
$.356842 = .7136 \times \frac{8}{1.021} = 5.591\ ppm$



.212 x 2 = .424 + 8/1.013 = 3.348 ppm

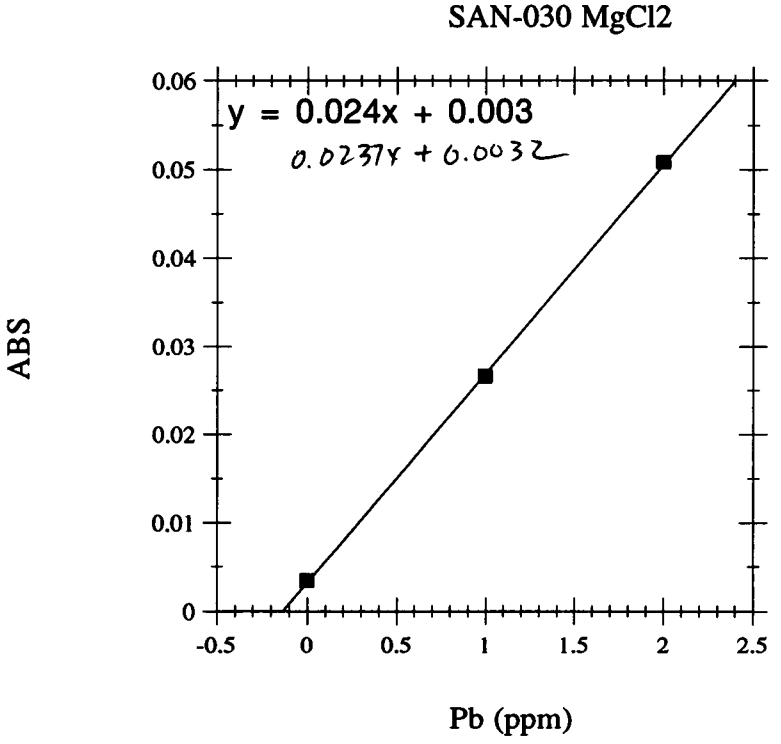


$.3461 \times 2 = .6922 \times \frac{8}{1.023} = 5.413$ ppm



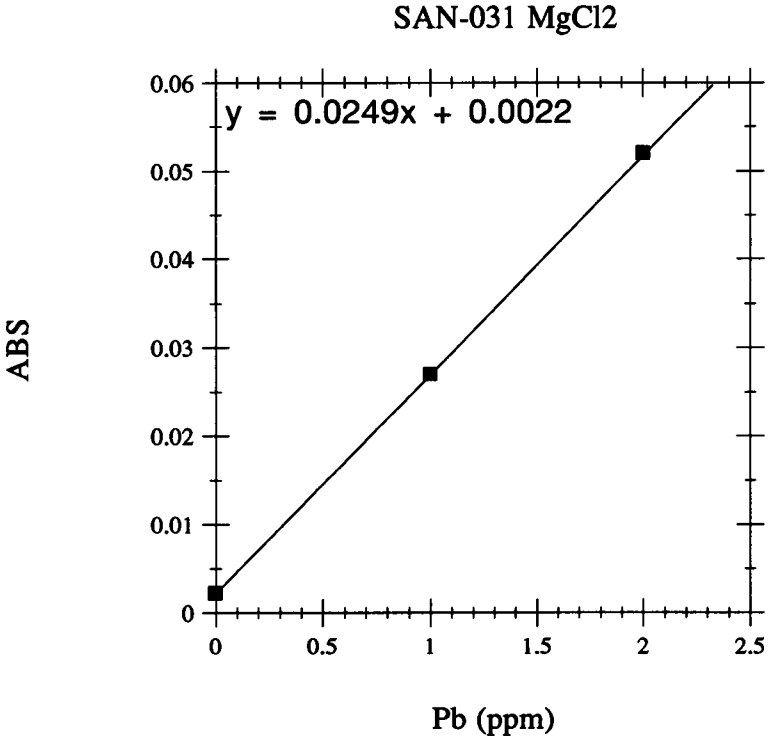
.1838 x 2 = .3676

$.3676 + \frac{8}{1.02} = 2.883\ ppm$



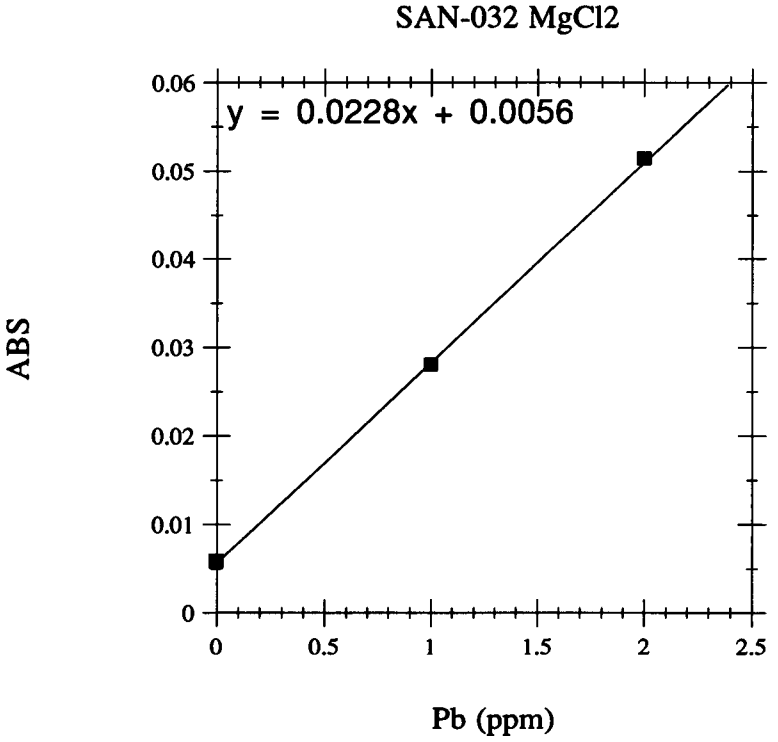
.135 x2 = .270

.270 x 8/1.022 = 2.113 ppm

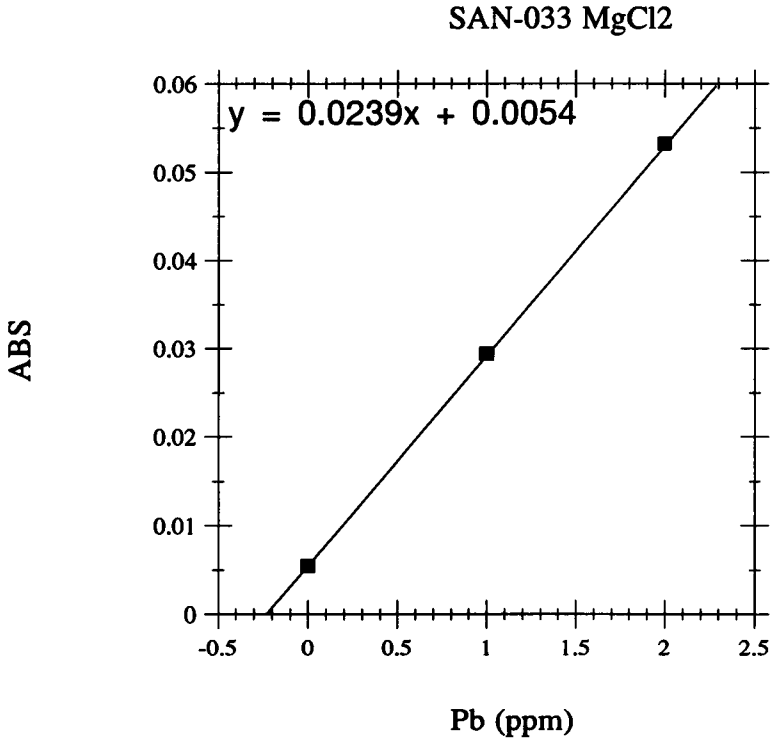


.0883 x 2 = .1766

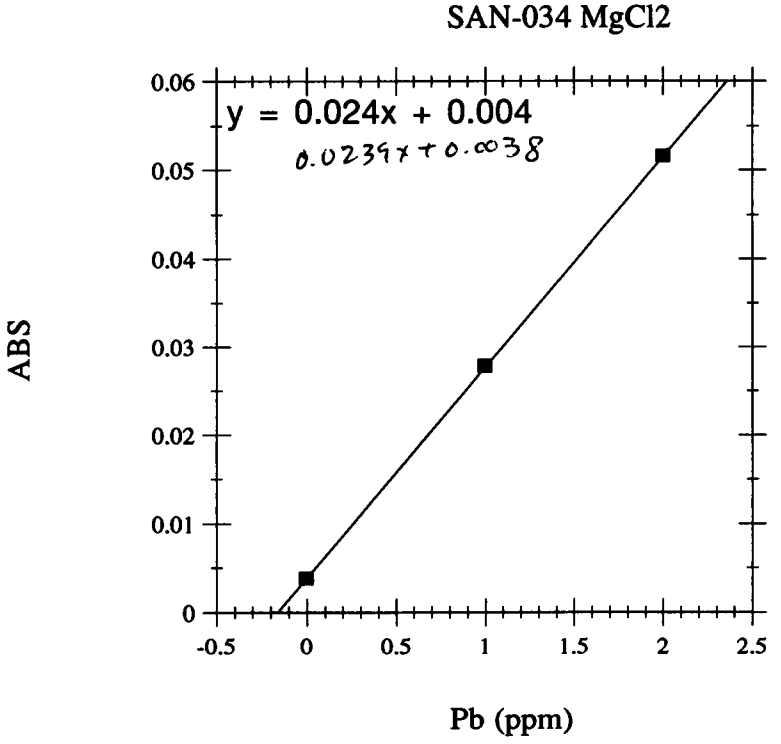
$\frac{.1766 \times 8}{1.026} = 1.377 ppm$



$.2456 \times 2 = .4912 + \frac{8}{1.017} = 3.864\ ppm$



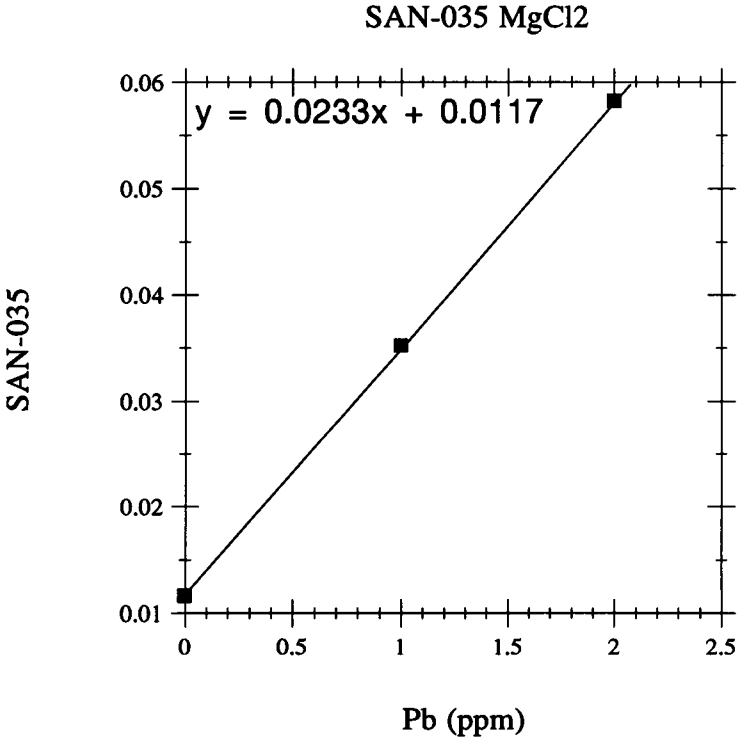
$.2259 \times 2 = .4518 \times \frac{8}{1.012} = 3.571$ ppm



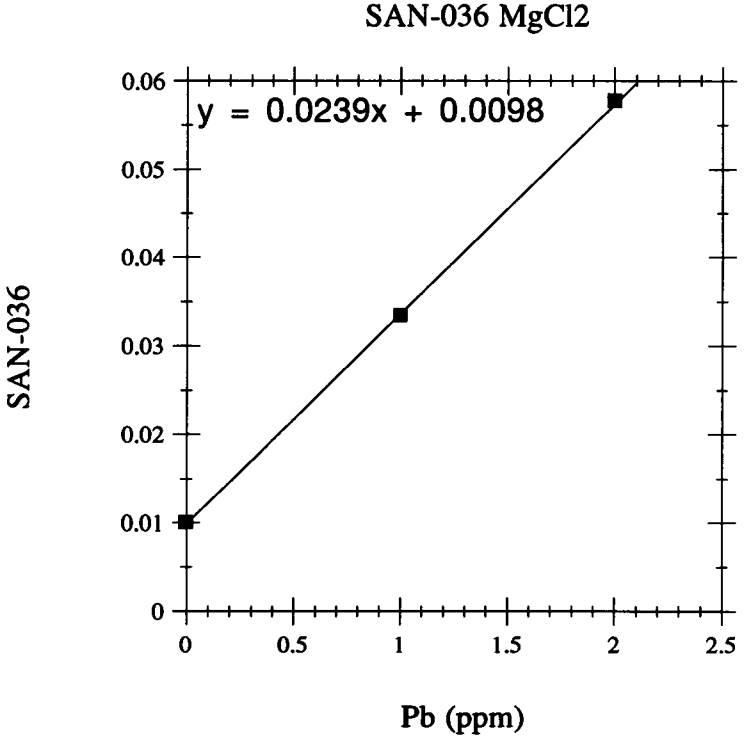
~~.158~~

.159 x 2 = .318

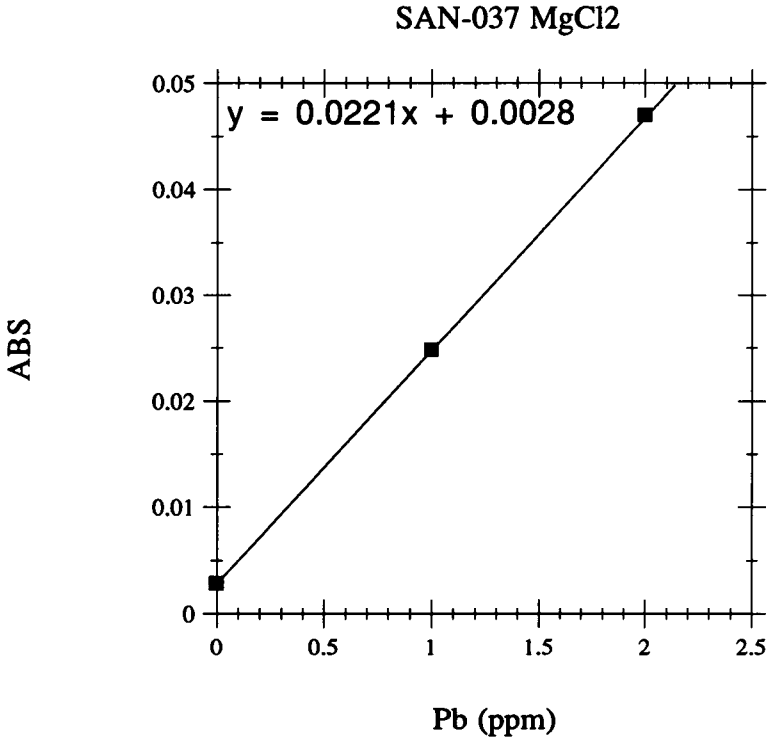
.318 x 8/1.009 = 2.521 ppm



.5021 X 2 = 1.0042 X $\frac{8}{1.02}$ = 7.876 ppm

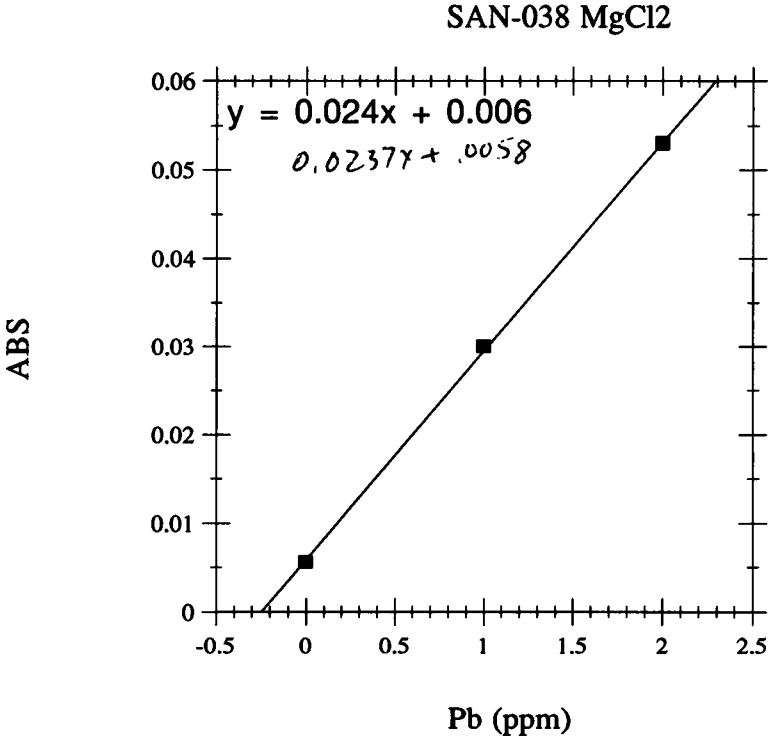


.4100 x 2 = .82 x 8 / 1.014 = 6.469 ppm



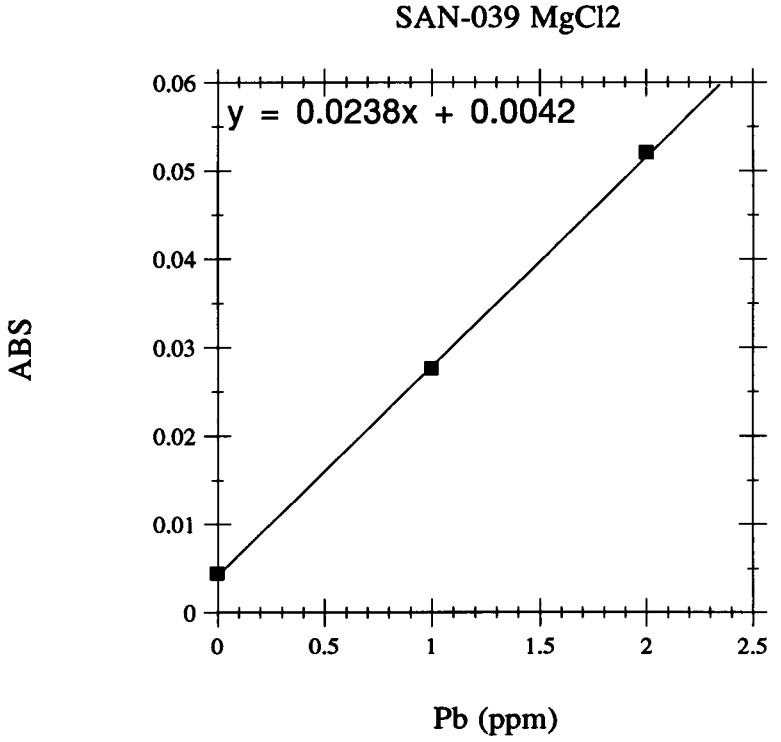
.12677 x 2 = .2534

$.2534 \times \frac{8}{1.021} = 1.985 \text{ ppm}$



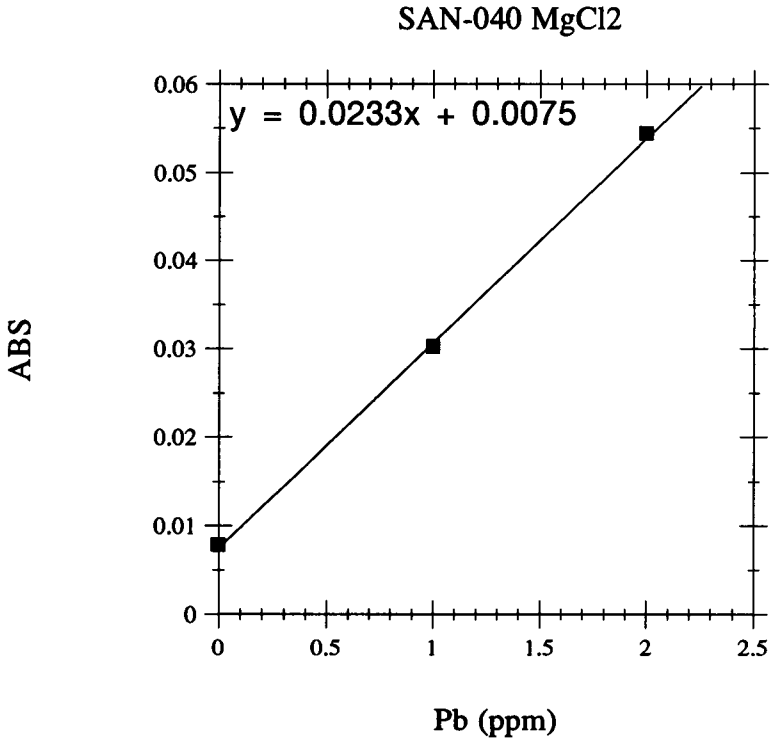
.2447 x 2 = .4894

.4894 x $\frac{8}{1.024}$ = 4.009 ppm

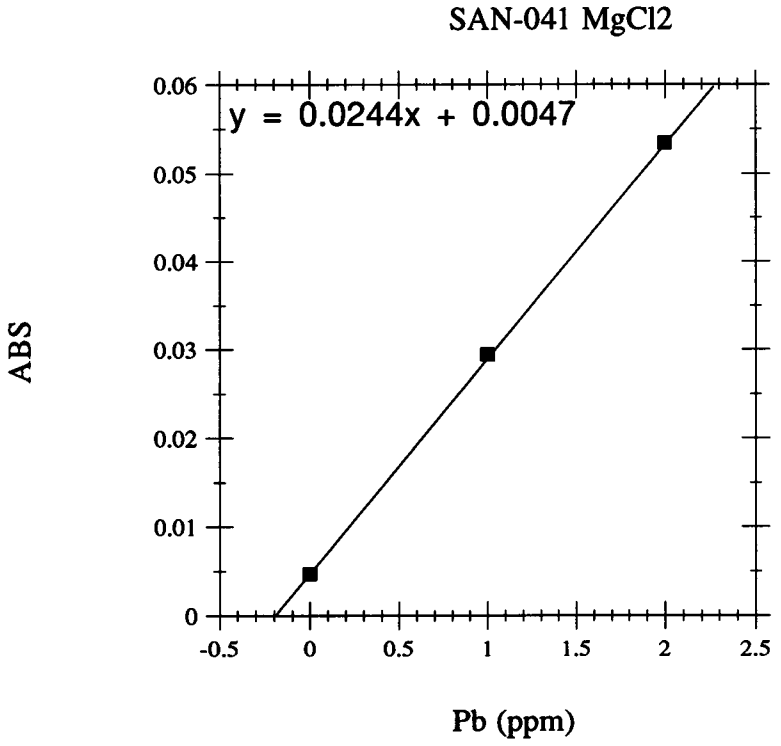


.1765 x 2 = .353

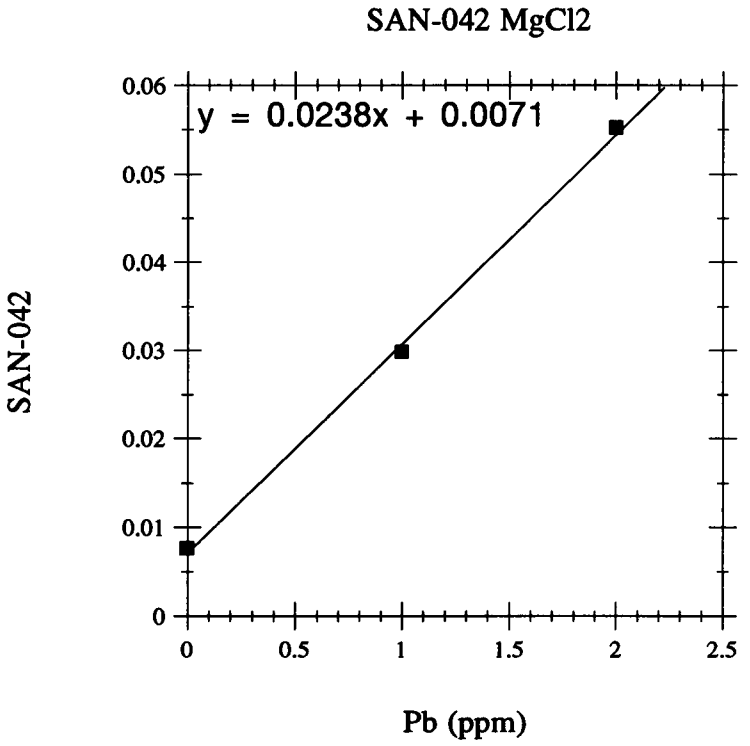
.353 x 8/1.018 = 2.774 ppm



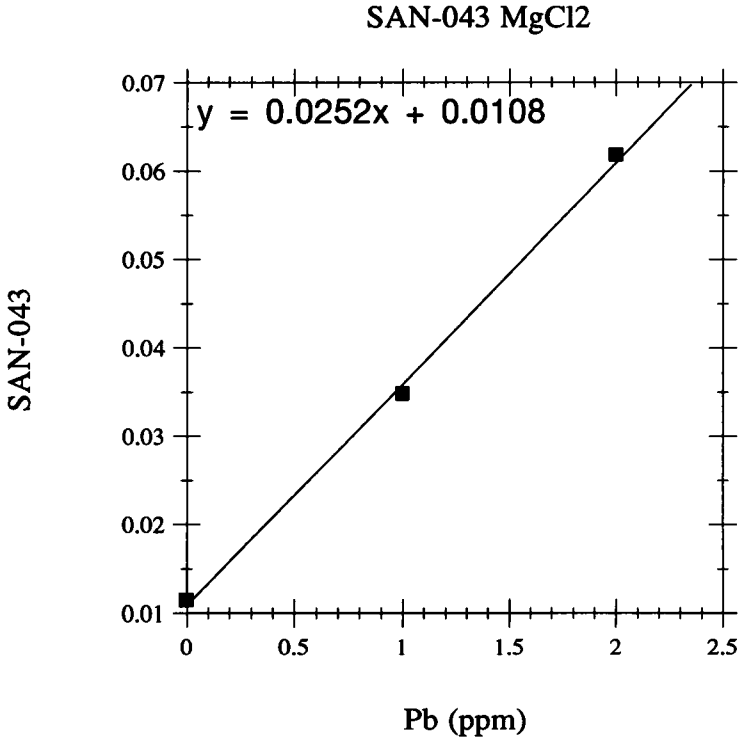
$.3219 \times 2 = .6438 \times \frac{8}{1.017} = 5.064\ ppm$



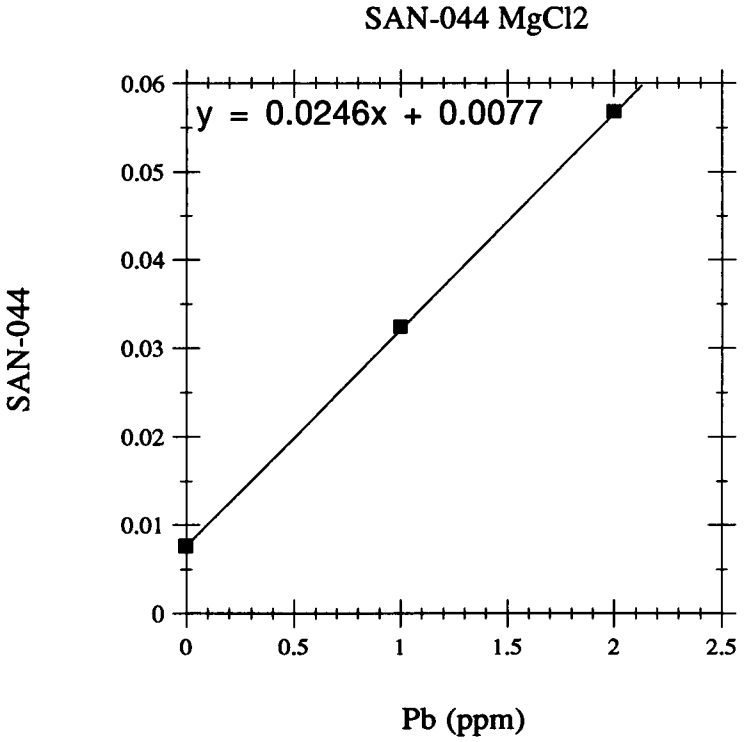
$.1926 \times 2 = .3852 \times \frac{8}{1.015} = 3.036$ ppm



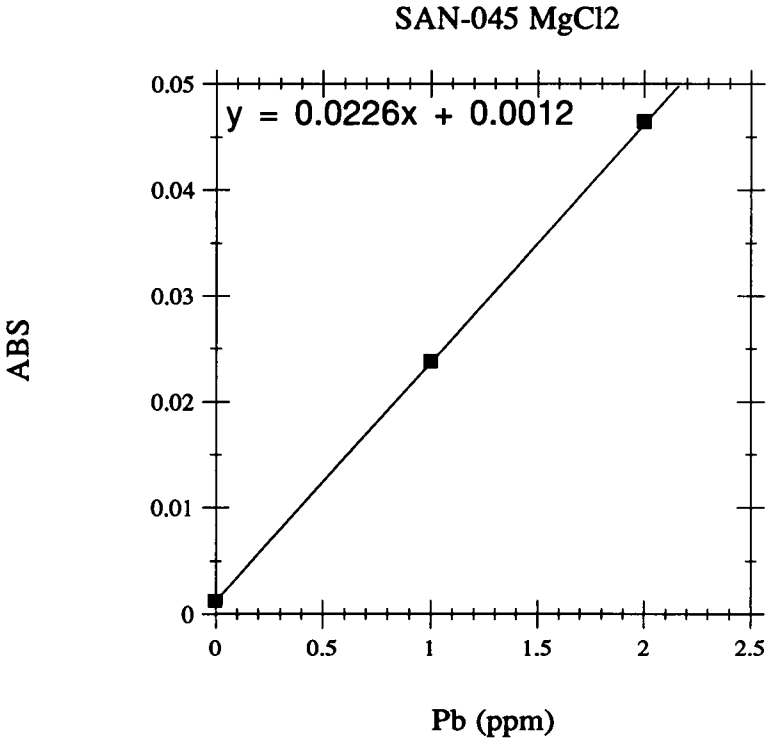
$.2983 \times 2 = .5966 \times \frac{8}{1.012} = 4.716$ ppm



$.4286 \times 2 = .8572 + 8 / 1.022 = 6.71$ ppm



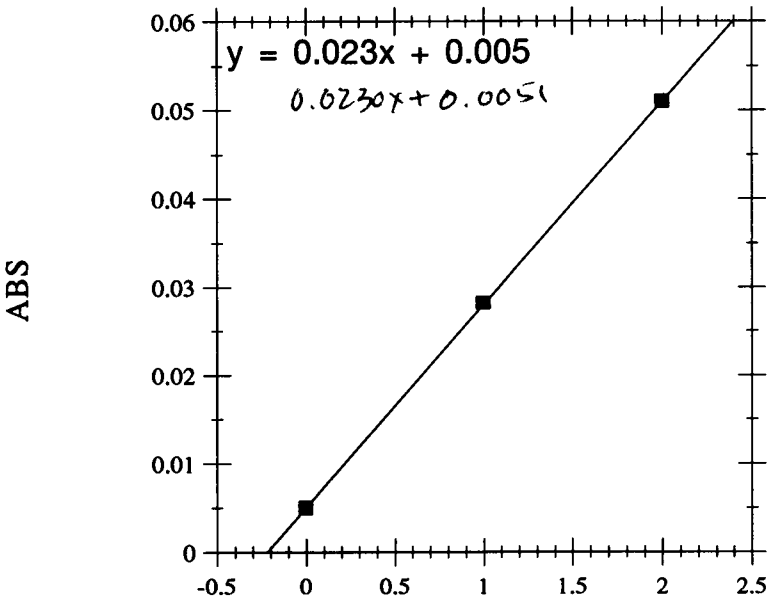
$.313 \times 2 = .626 \times \frac{8}{1.014} = 4.939 \text{ppm}$



.0531 x 2 = .1062

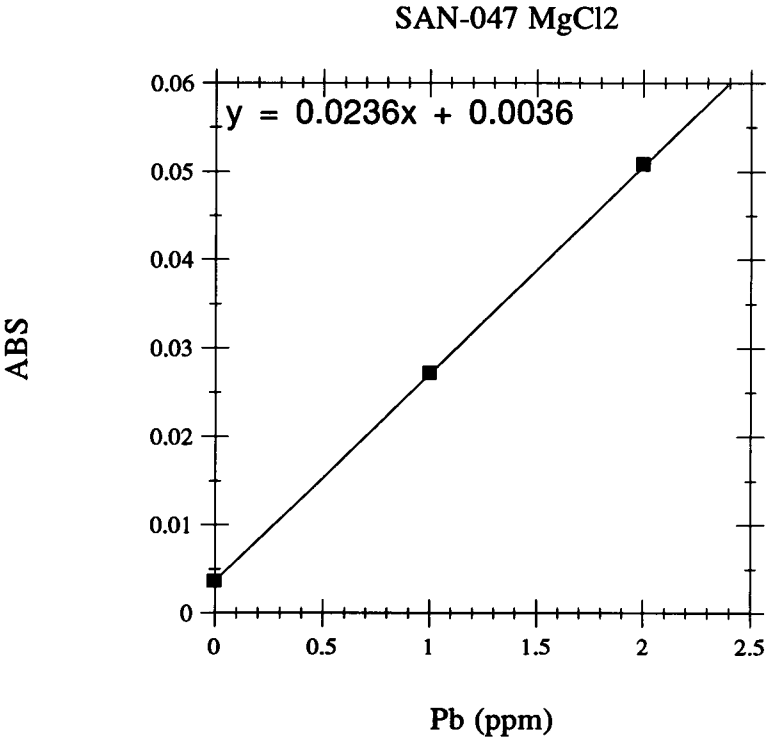
.1062 x 8 / 1.017 = .835 ppm

SAN-046 MgCl2



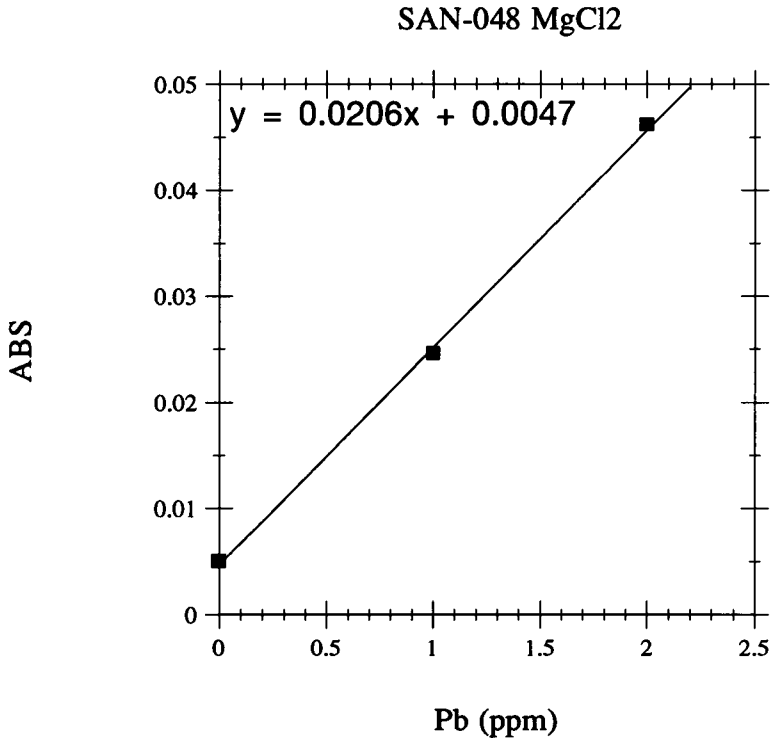
.2217 x 2 = .4434

.4434 x 8/1.022 = 3.471 ppm

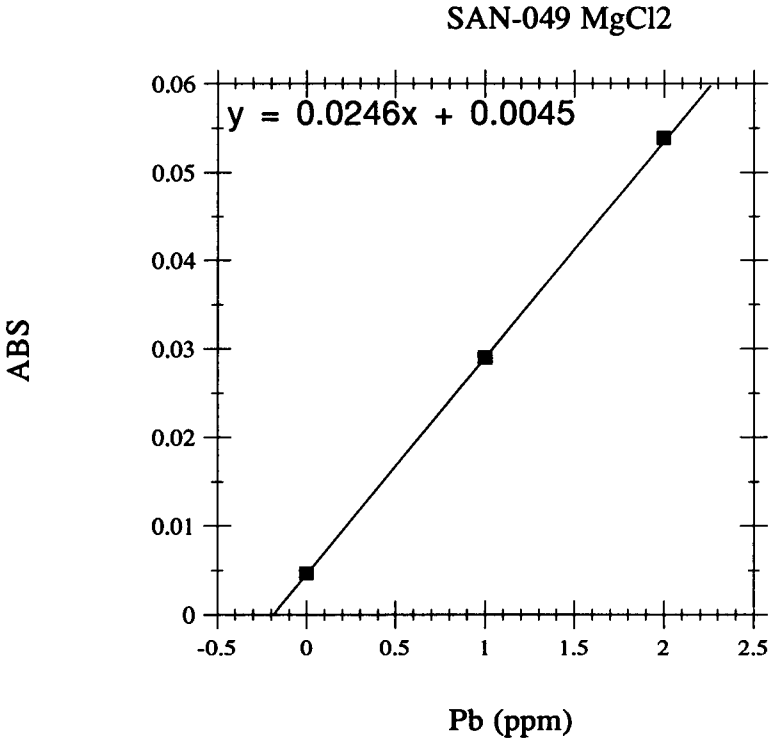


$.1525 \times 2 = .305$

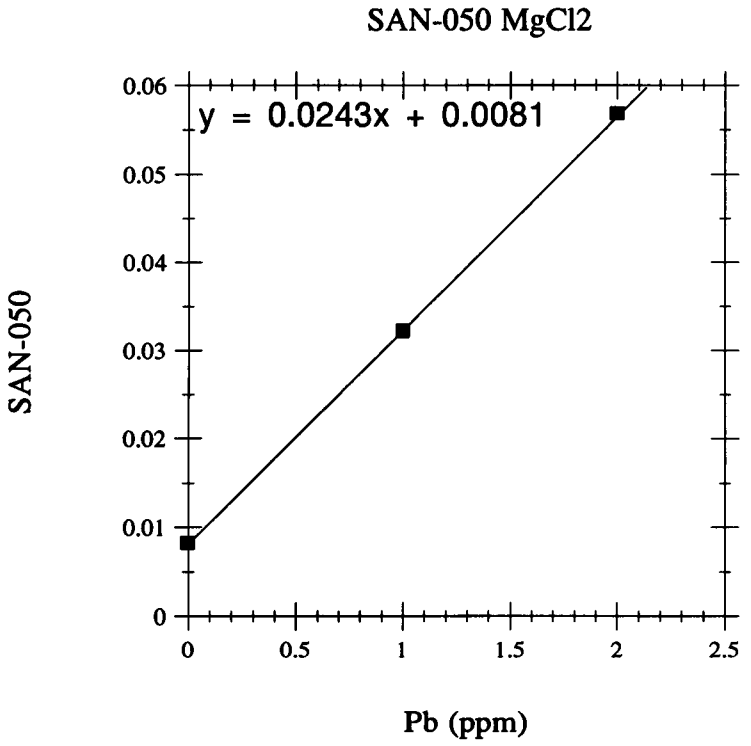
$\frac{.305 \times 8}{1.023} = 2.385 \text{ ppm}$



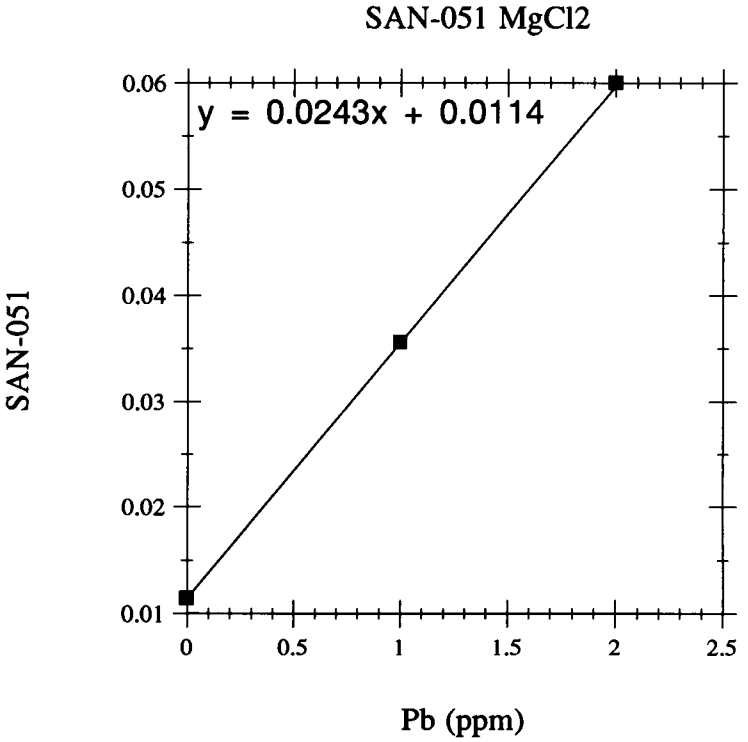
.2281 x 2 = .4562 x 8/1.022 = 3.571 ppm



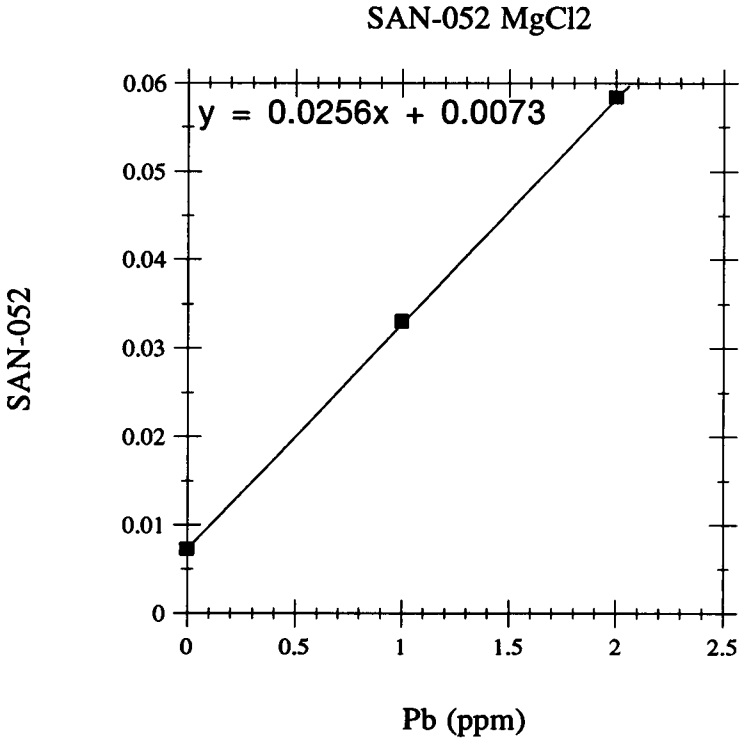
$.1829 \times 2 = .3658 + 8 / 1.017 = 2.877 ppm$



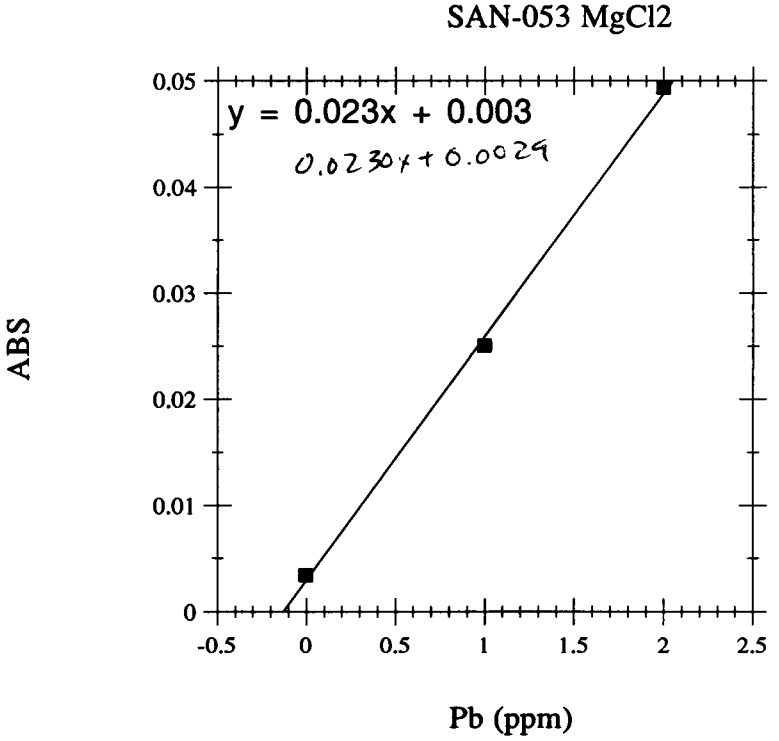
.3333 x 2 = .6666 x 8/1.016 = 5.249ppm



$.4691 \times 2 = .9382 \times \frac{8}{1.017} = 7.38 \text{ ppm}$

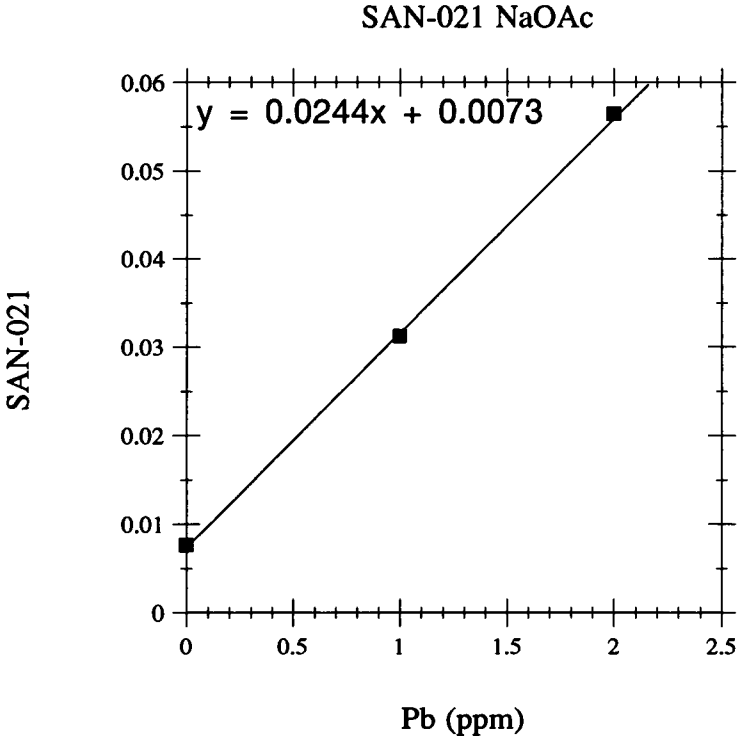


~~.254~~ .2351 x 2 = .5702 + $\frac{0}{1.02}$ = 4.472 ppm

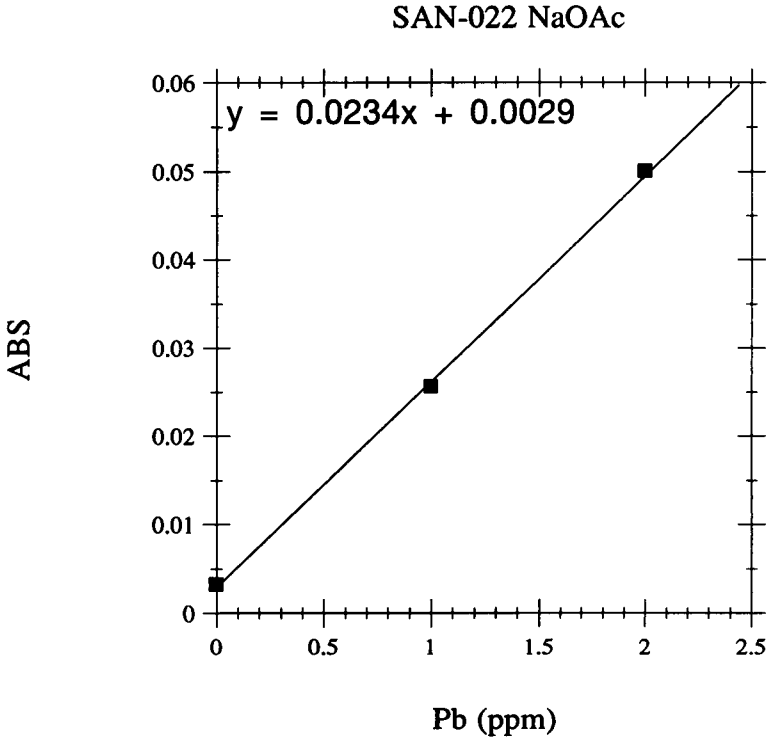


.1261 x 2 = .2522

$\frac{.2522 \times 8}{1.008} = 2.002$ ppm



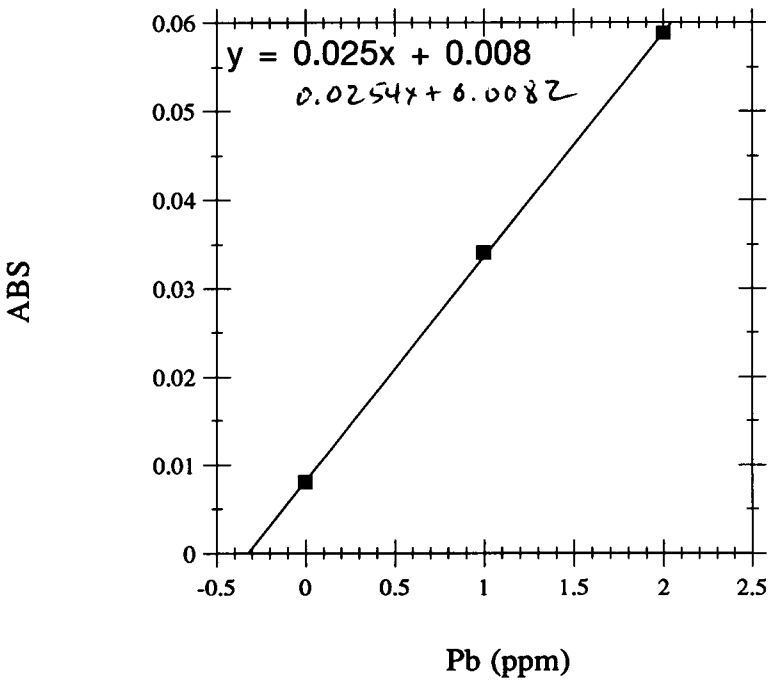
$.2992 \times 2 = .5984 \times \frac{8}{1.016} = 4.712 \text{ ppm}$



.1239 x 2 = .2478

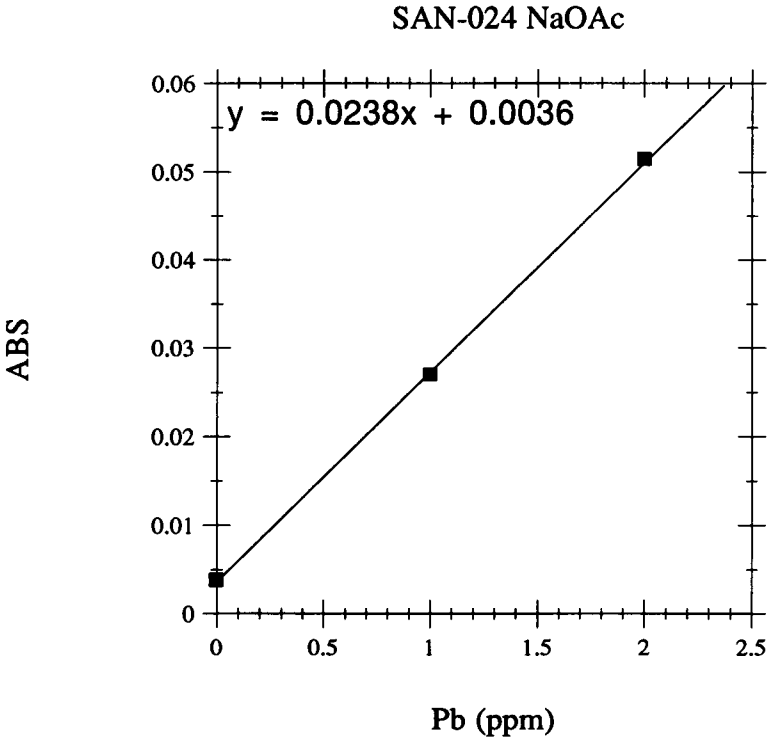
$\frac{.2478 \times 8}{1.022} = 1.939$ ppm

SAN-023 NaOAc



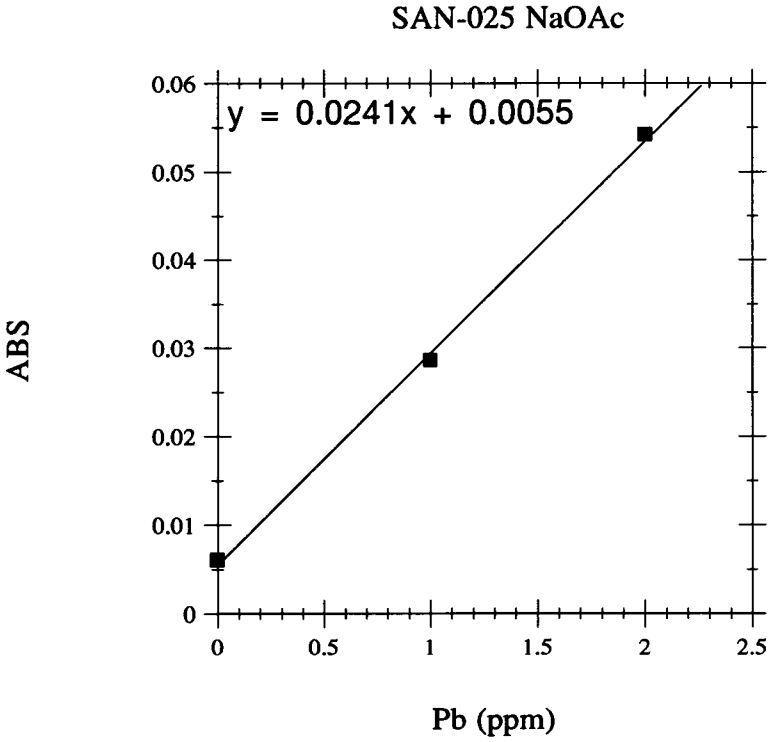
.3228 × 2 = .6456

$.6456 \times \frac{8}{1.022} = 5.054$ ppm

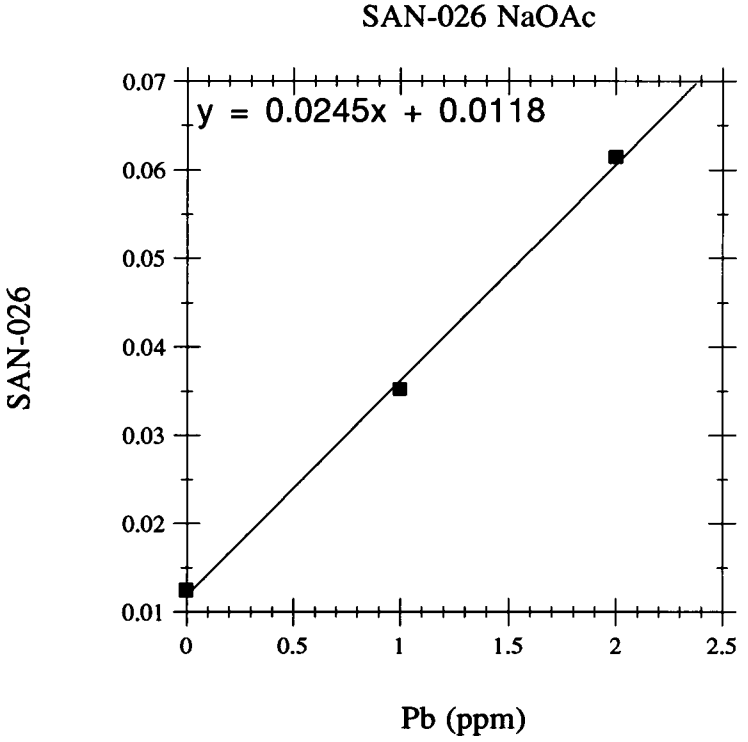


$.1513 \times 2 = .3026$

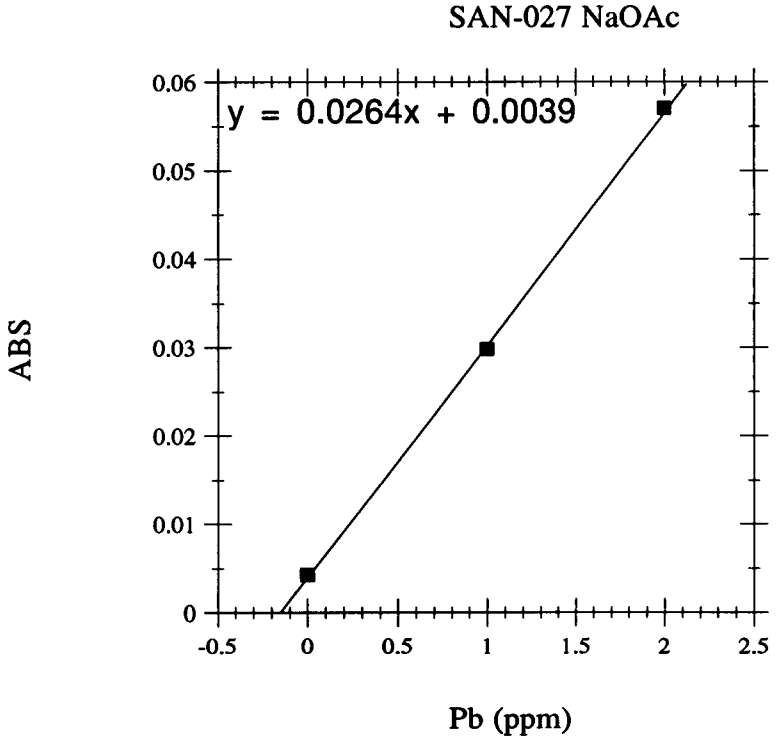
$.3026 \times \frac{8}{1.018} = 2.378 \text{ ppm}$



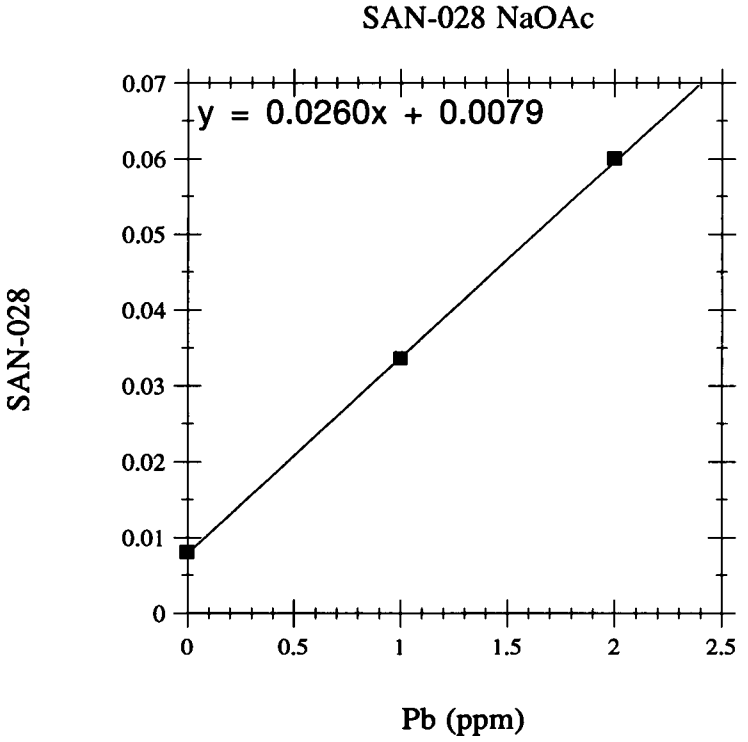
$.2282 \times 2 = .4564 \times \frac{8}{1.025} = 3.562 \text{ ppm}$



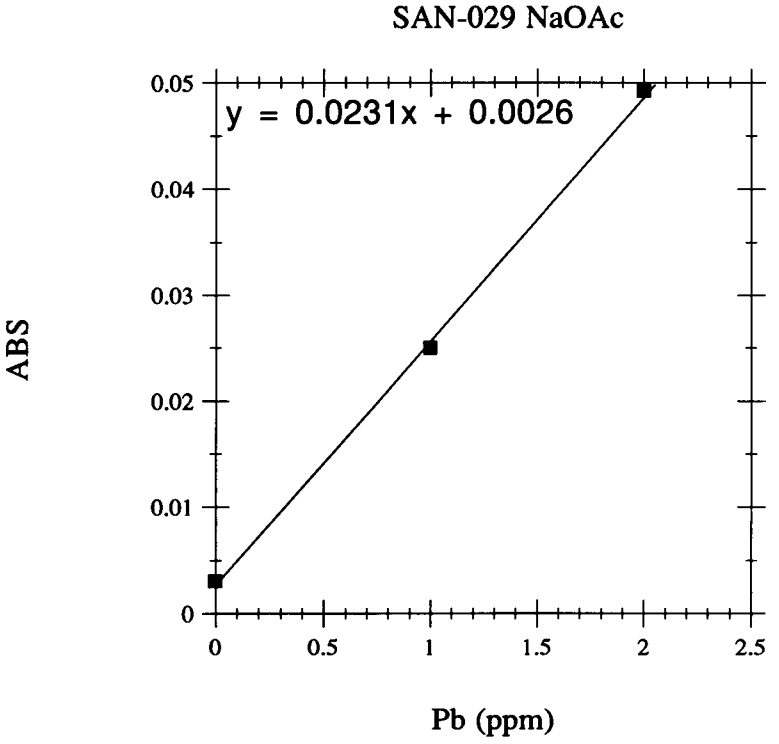
$.4816 \times 2 = .9632 \times \frac{8}{1.021} = 7.547 \text{ ppm}$



.1477 x 2 = .2954 + 8/1.013 = 2.333 ppm



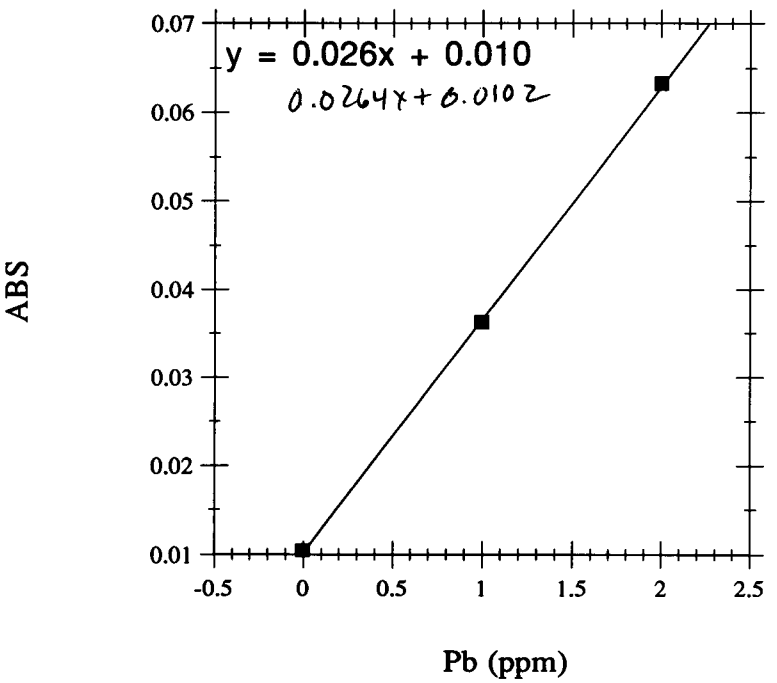
$.3038 \times 2 = .6076 \times \frac{8}{1.023} = 4.751 \text{ ppm}$



.1125 x 2 = .225

$\frac{.225 \times 8}{1.02} = 1.765$ ppm

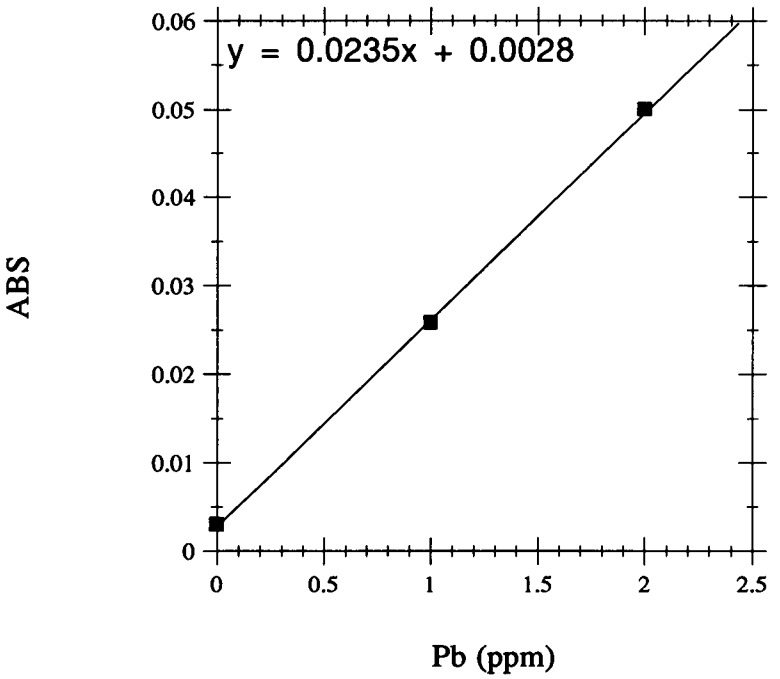
SAN-030 NaOAc



.3923 + 2 = .7846

$.7846 \times \frac{8}{1.022} = 6.142$ ppm

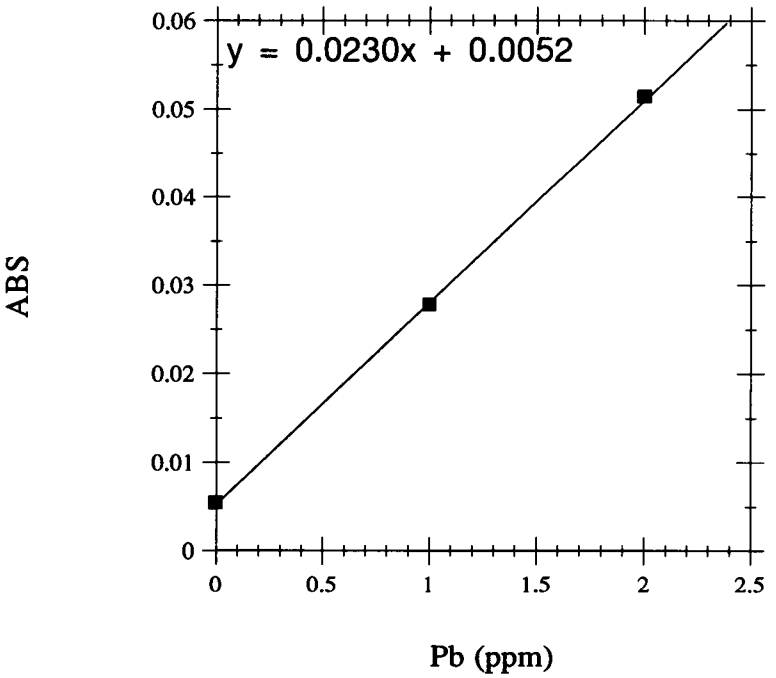
SAN-031 NaOAc



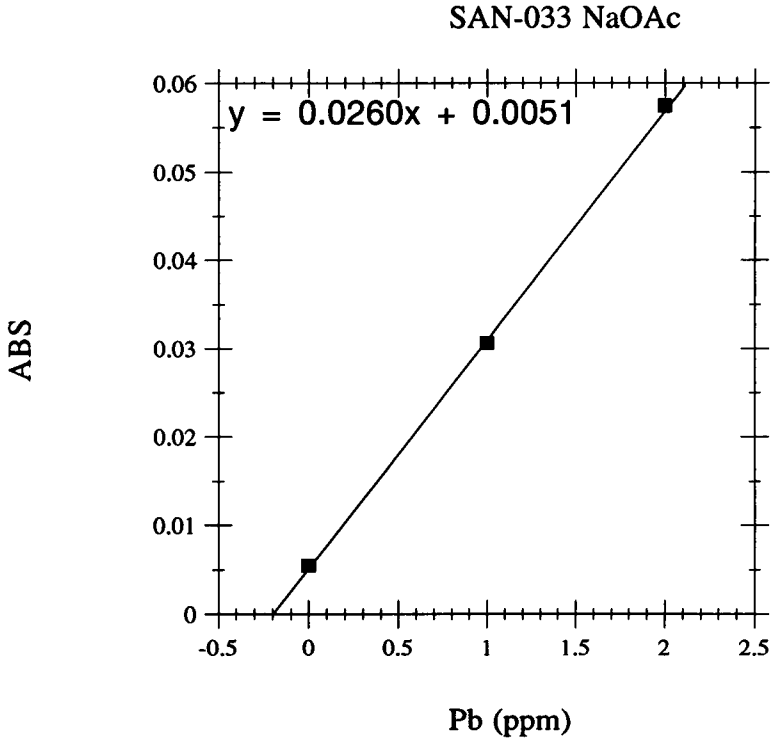
.1191 x 2 = .2382

.2382 x 8/1.026 = 1.857 ppm

SAN-032 NaOAc

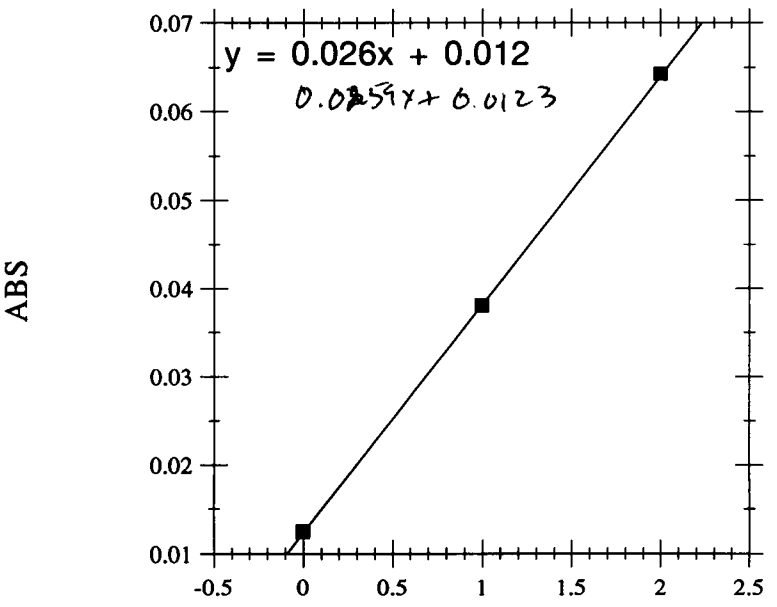


$.2261 \times 2 = .4522 \times \frac{8}{1.017} = 3.557$ ppm



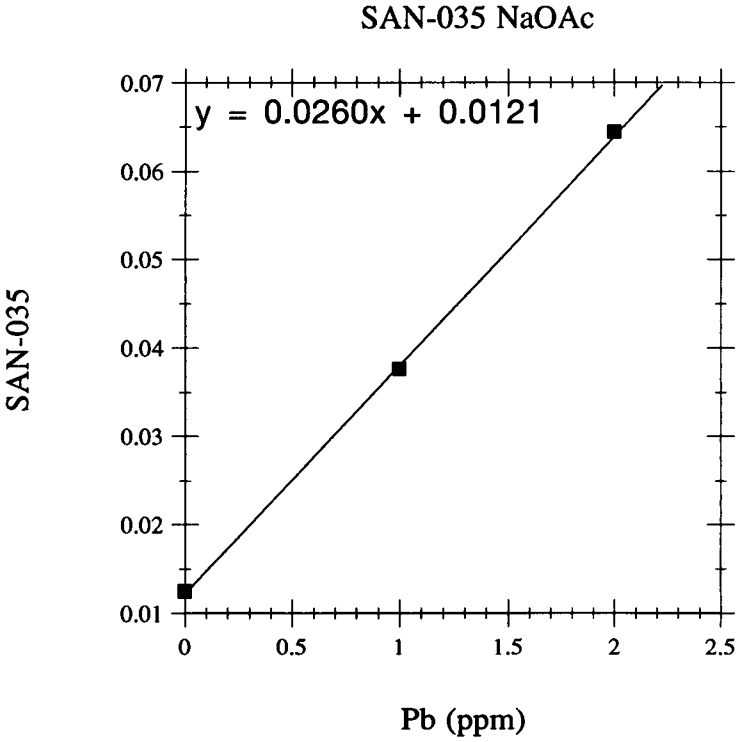
$.1961 \times 2 = .3922 + \frac{8}{1.012} = 3.100$ ppm

SAN-034 NaOAc

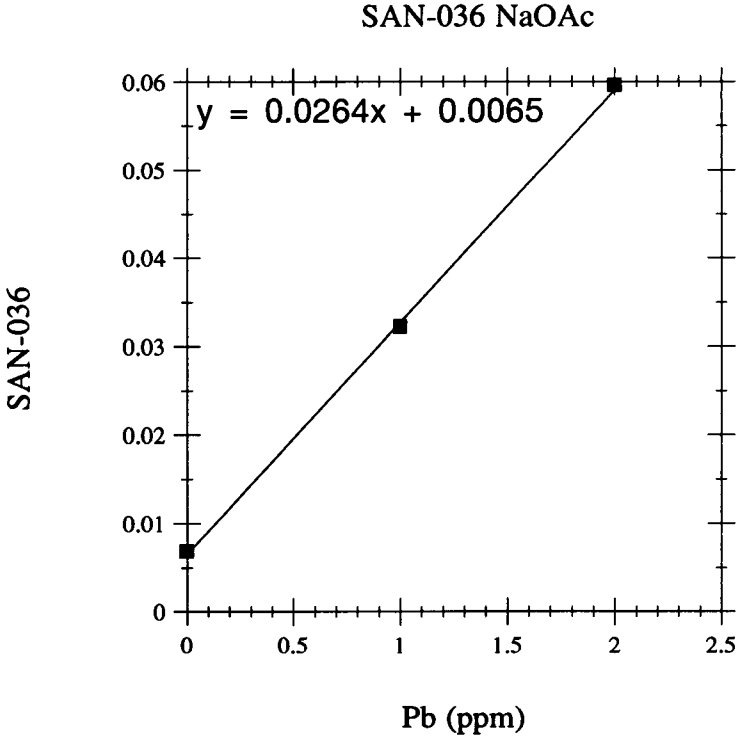


.4749 x 2 = .9498

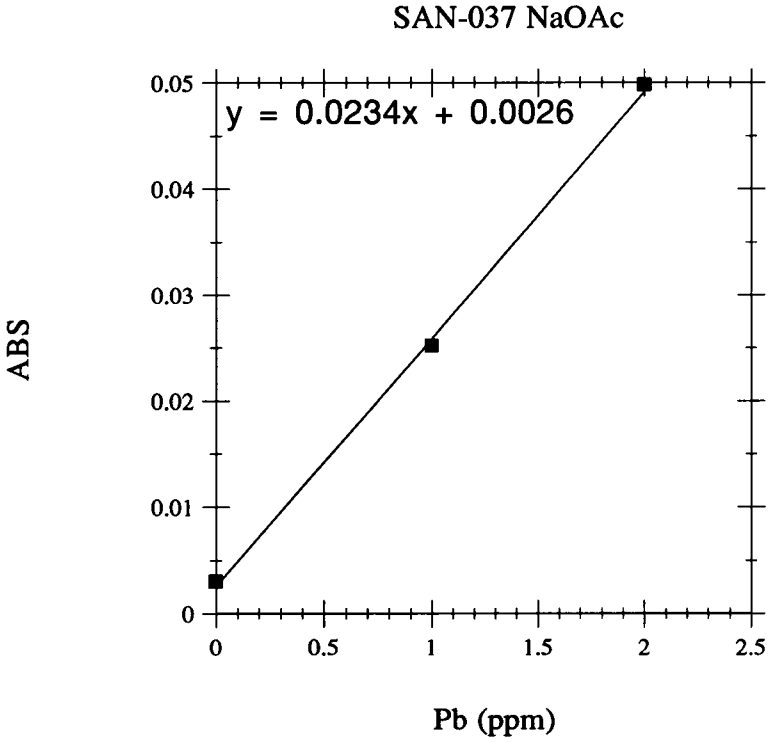
$.9498 \times \frac{8}{1.009} = 7.531 ppm$



.4654x2 = .9308 x 8/1.02 = 7.30 ppm



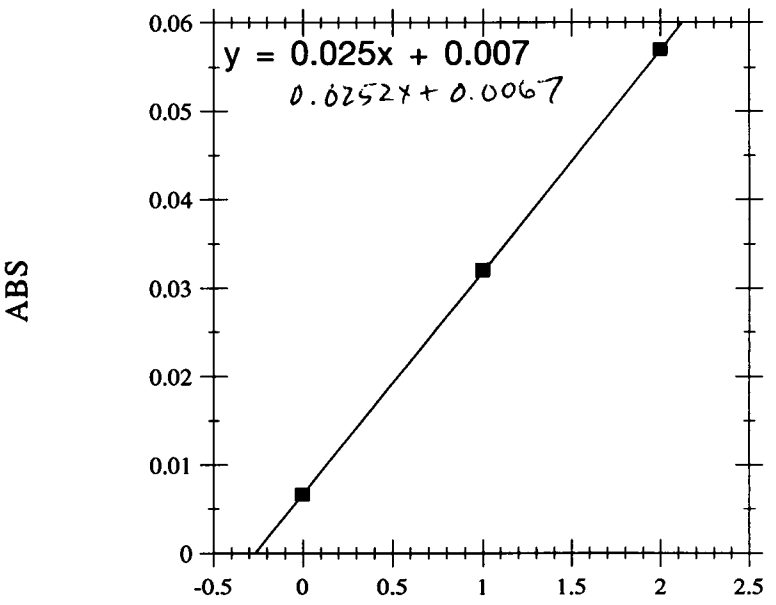
$.2462 \times 2 = .4924 \times \frac{8}{1.014} = 3.885 \text{ ppm}$



.1111 x 2 = .2222

$\frac{.2222 \times 8}{1.021} = 1.741$ ppm

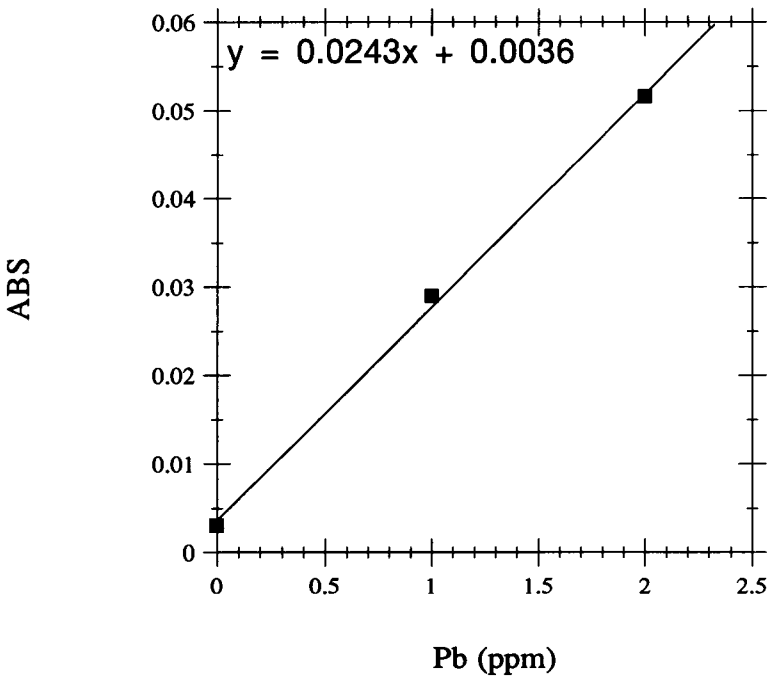
SAN-038 NaOAc



.2659 + .5318

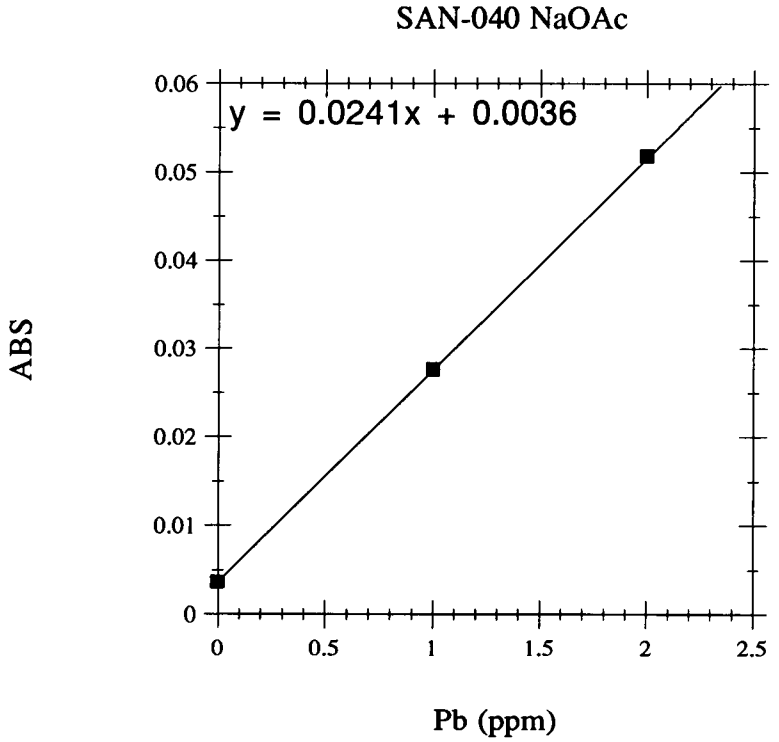
.5318 × 8/1.024 = 4.155 ppm

SAN-039 NaOAc



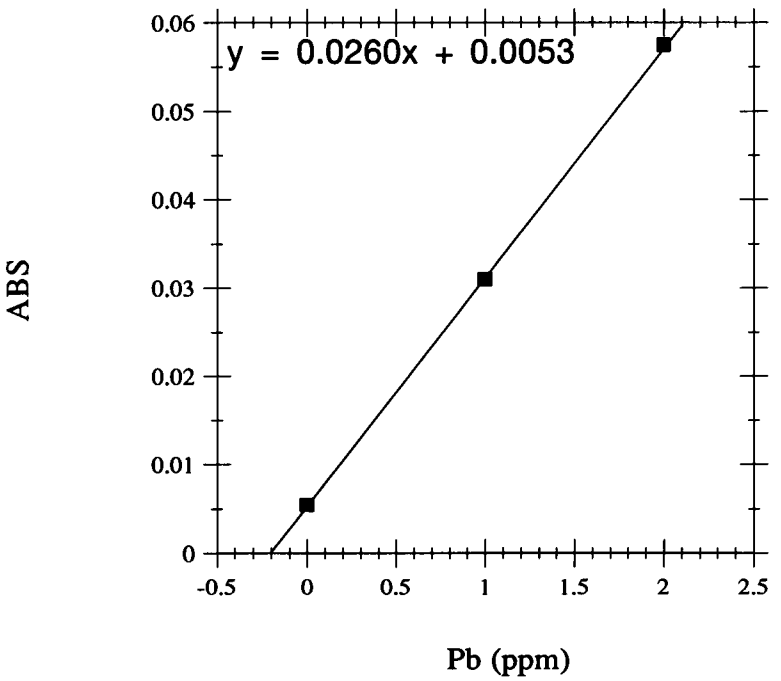
.1481 x 2 = .2962

$\frac{.2962 \times 8}{1.018} = 2.328$ ppm

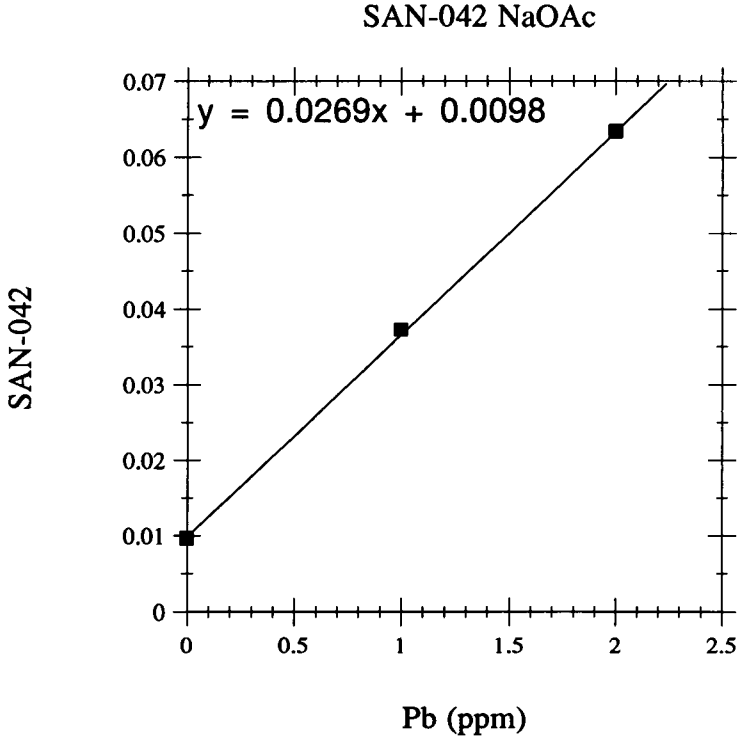


$.1494 \times 2 = .2988 \times \frac{8}{1.017} = 2.350 ppm$

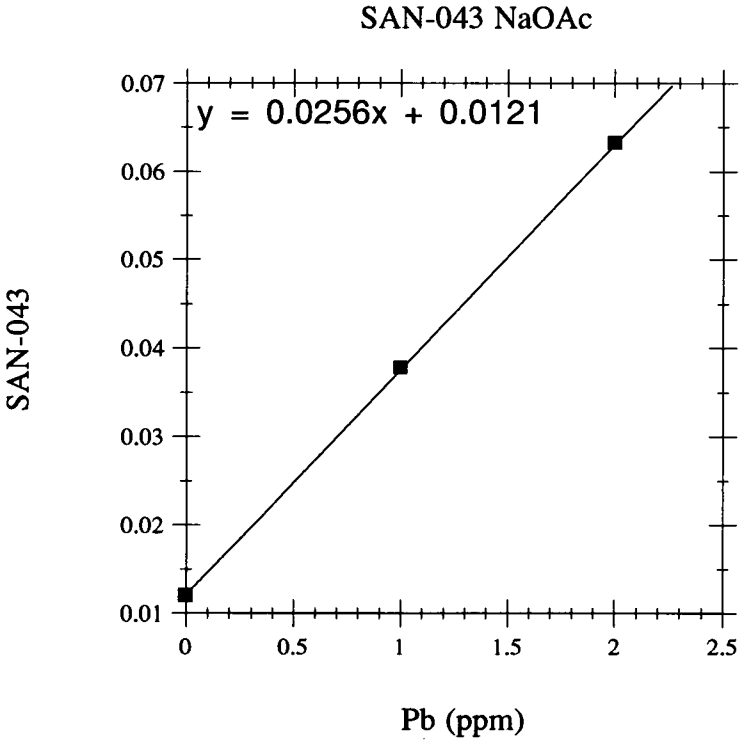
SAN-041 NaOAc



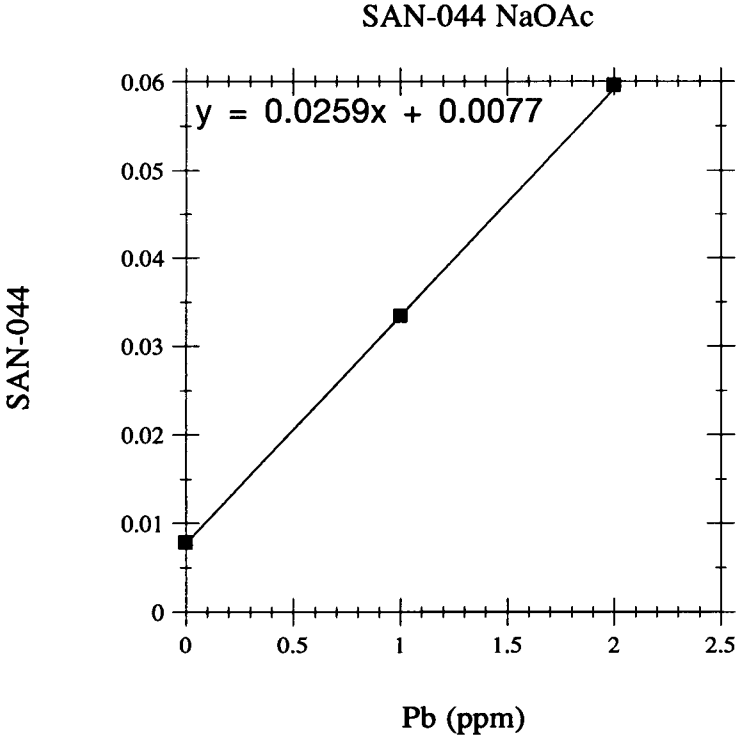
.2038 + 2 = .4076 × 8/1.015 = 3.213 ppm



$.3643 \times 2 = .7286 \times \frac{8}{1.012} = 5.759\ ppm$

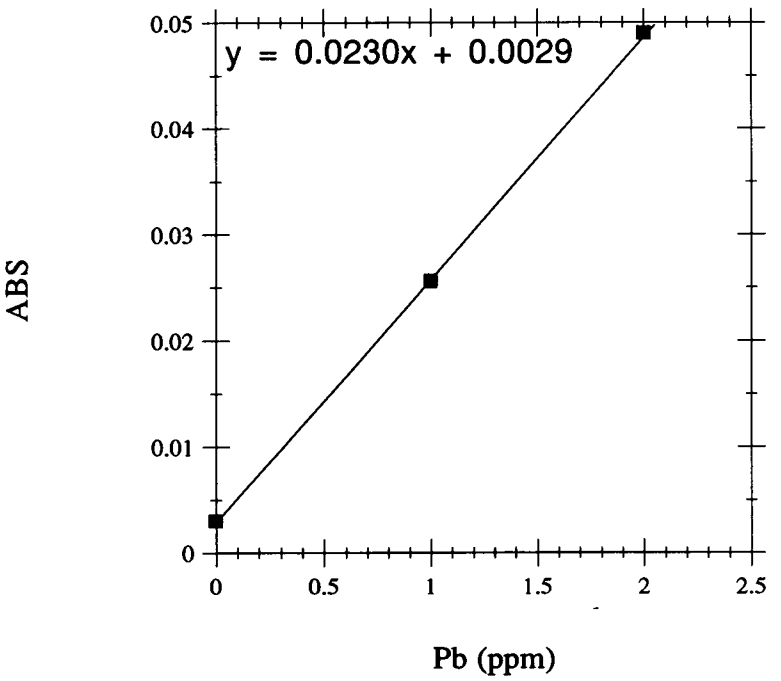


$.4726 \times 2 = .9452 \times \frac{8}{1.022} = 7.399\text{ppm}$



$.2973 \times 2 = .5946 \times \frac{8}{1.014} = 4.691 \text{ ppm}$

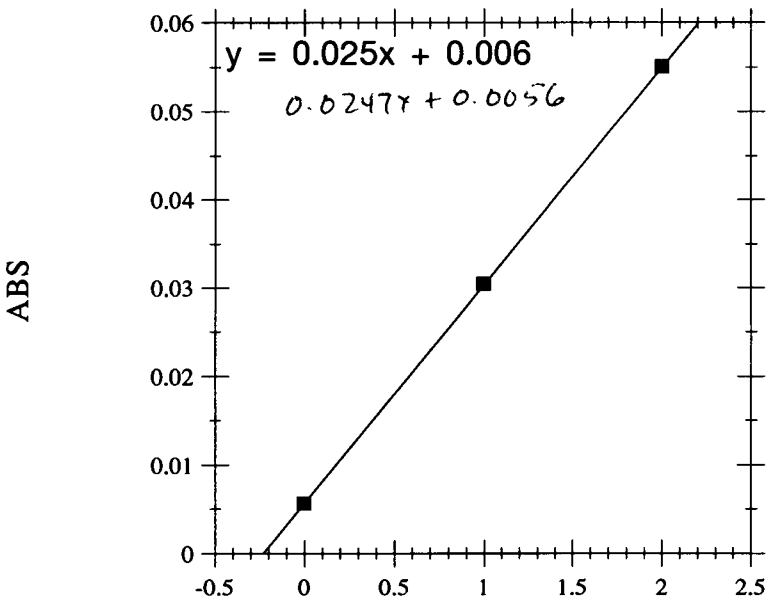
SAN-045 NaOAc



.1261 x 2 = .2522

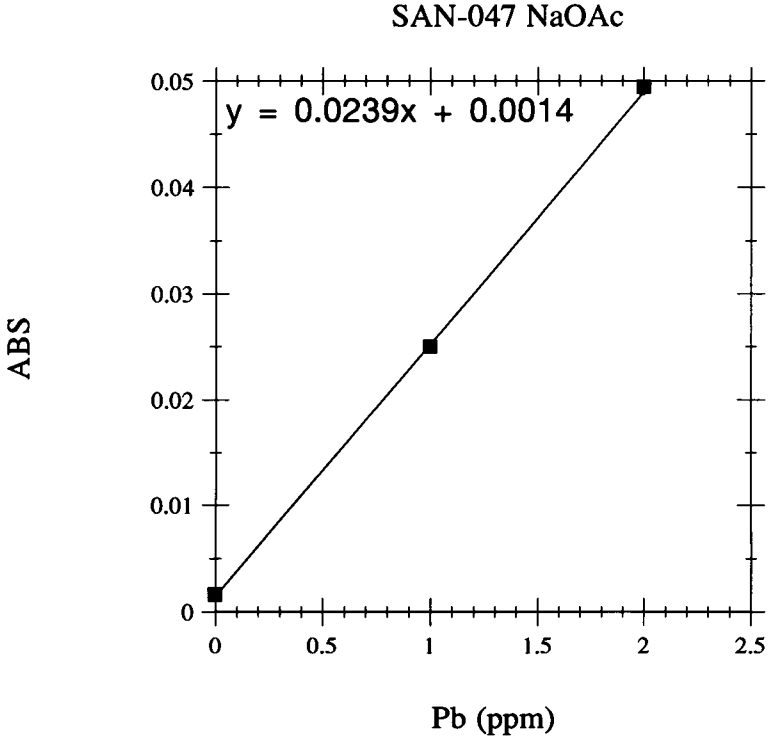
$\frac{.2522 + .8}{1.017} = 1.984 \text{ ppm}$

SAN-046 NaOAc



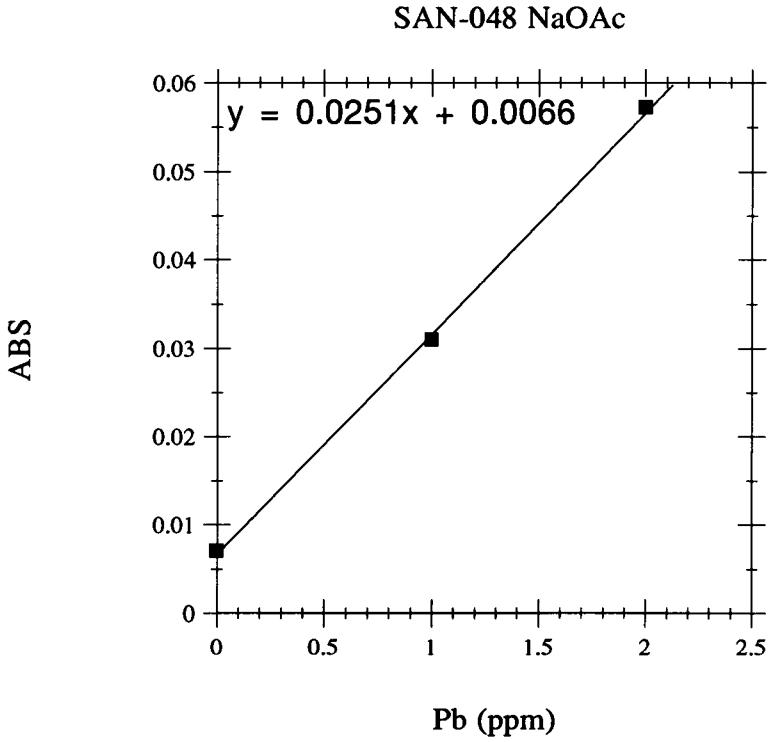
.2267 x 2 = .4534

$.4534 \times \frac{8}{1.022} = 3.549$ ppm



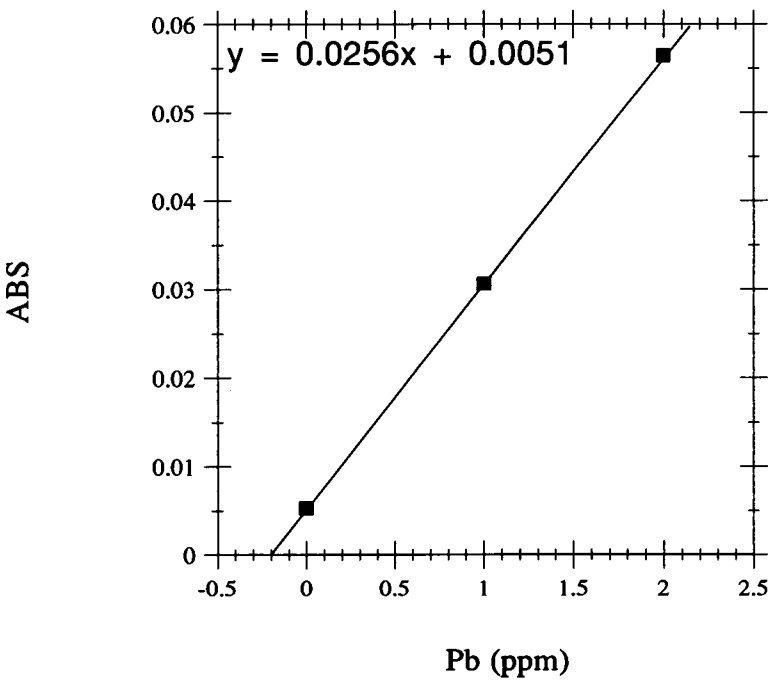
.0586 X 2 = .1172

.1172 × 8/1.023 = .916 PPM

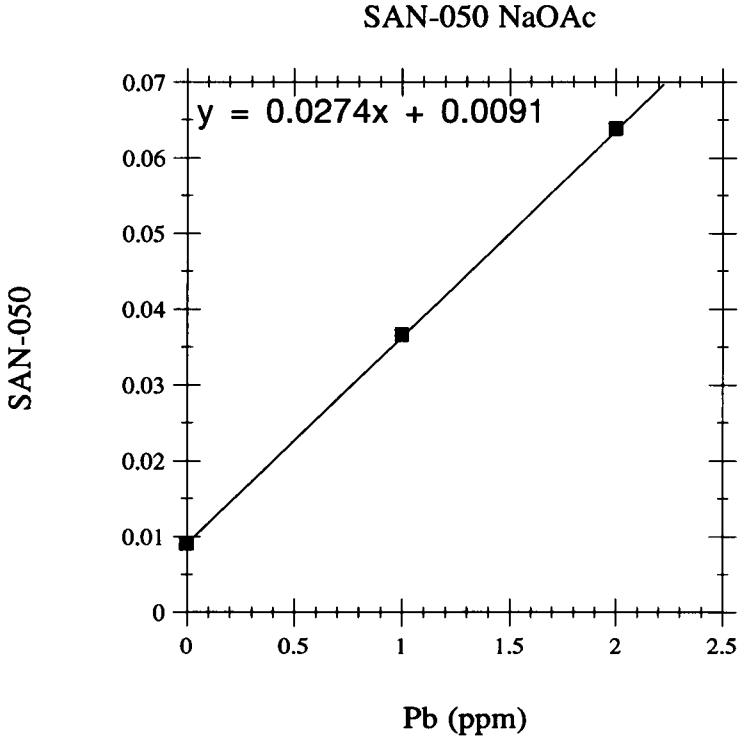


$.2629 \times 2 = .5258 \times \frac{8}{1.022} = 4.116$ ppm

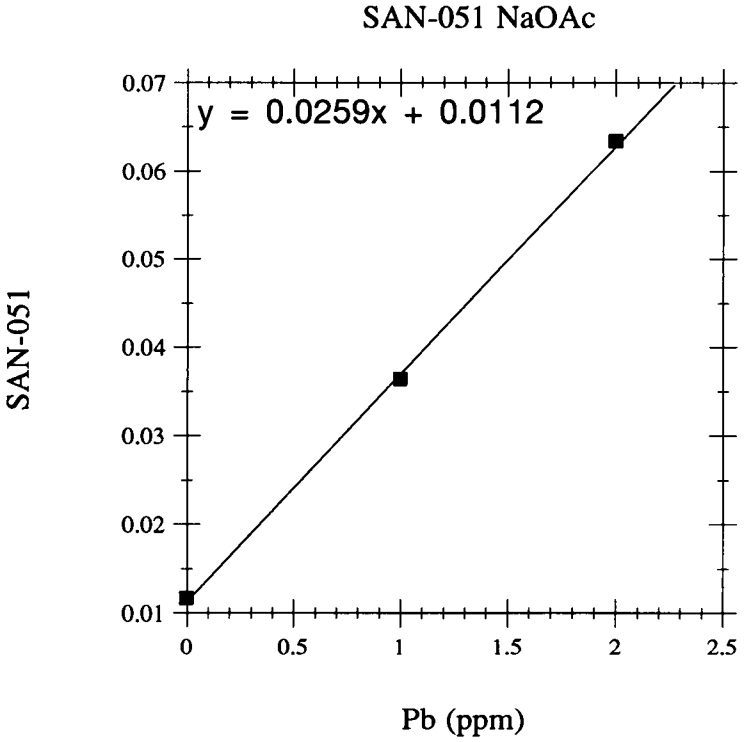
SAN-049 NaOAc



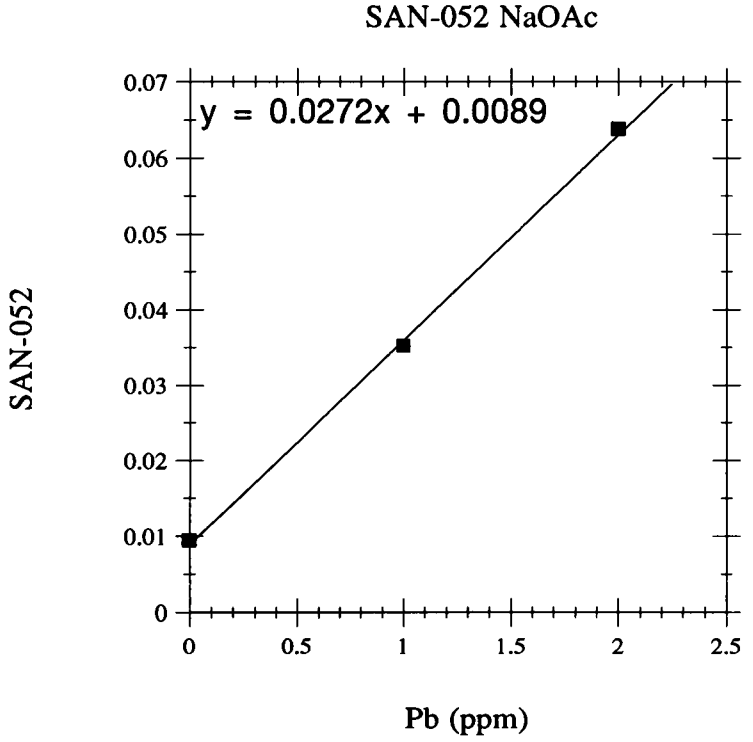
$.1992 + 2 = .3984 \times \frac{8}{1.017} = 3.134 \text{ ppm}$



$.3321 \times 2 = .6642 \times \frac{8}{1.016} = 5.229$ ppm

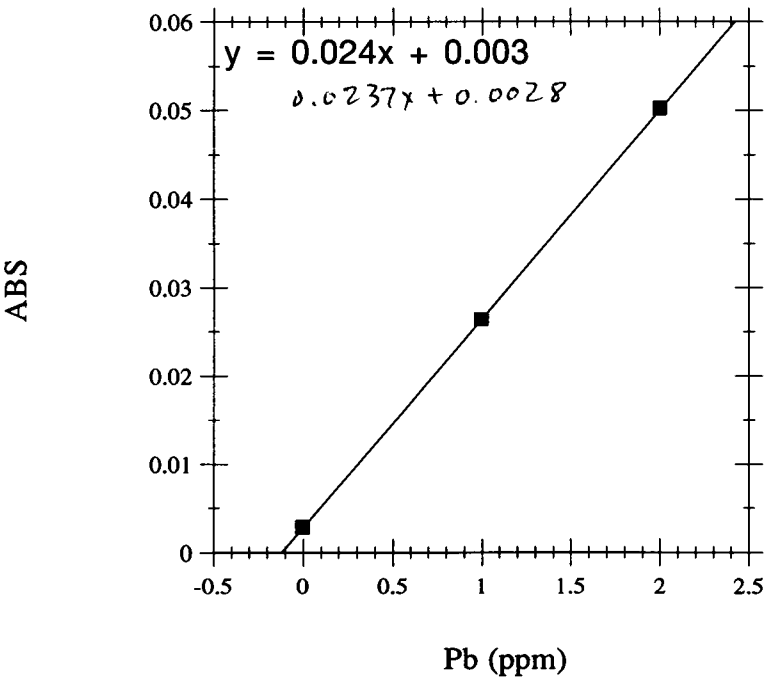


$.43242 = .8648 \times \frac{8}{1.017} = 6.803 ppm$



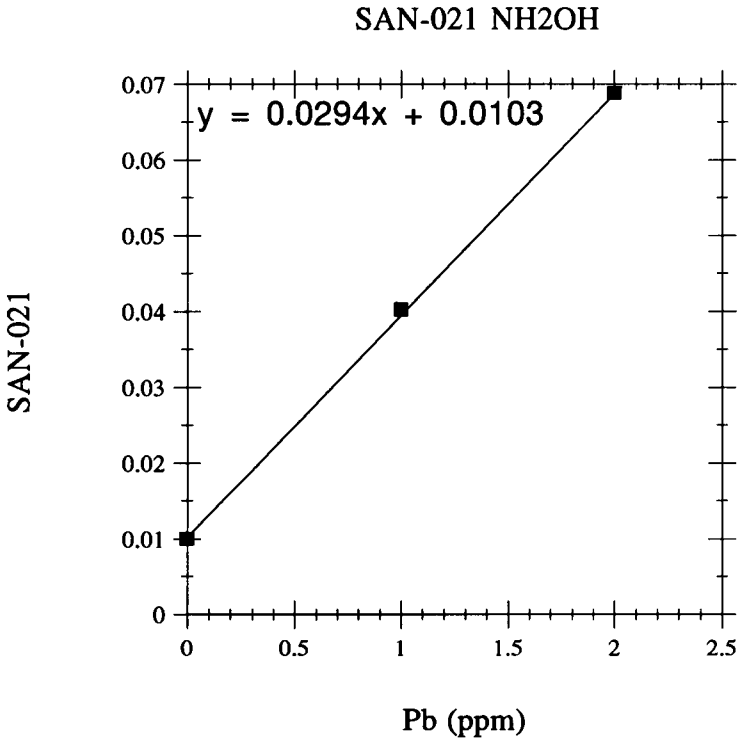
.3272 X 2 = .6544 X $\frac{D}{1.02}$ = 5.132 ppm

SAN-053 NaOAc

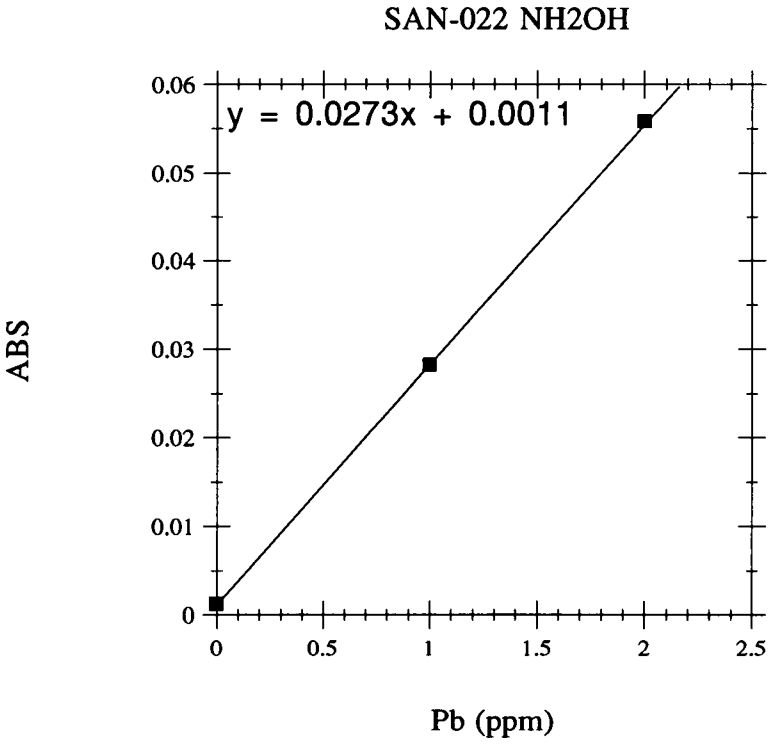


.1181 x 2 = .2362

.2362 x 8/1.008 = 1.875 ppm

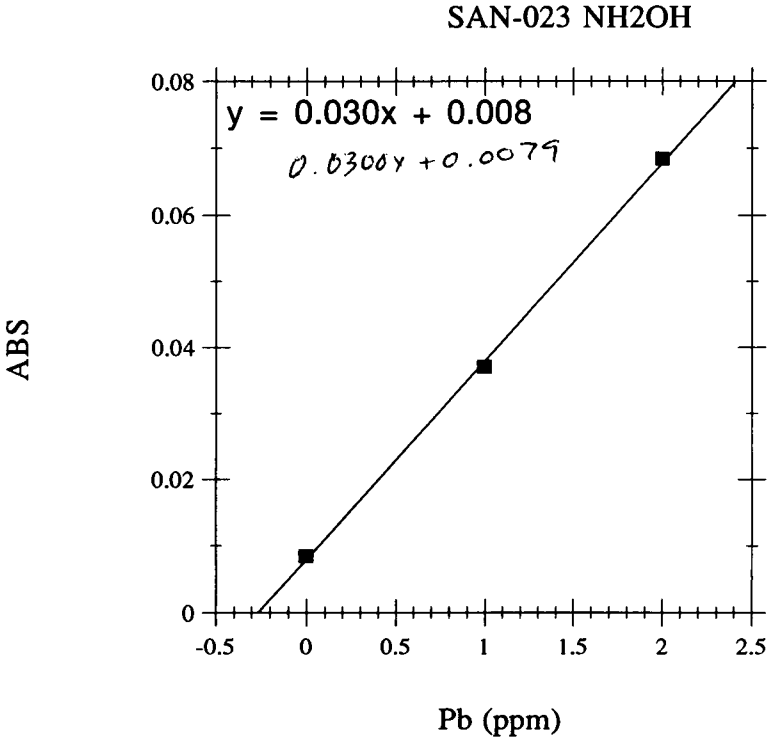


$.3503 \times 2 = .7006 \times \frac{8}{1.016} = 5.516 ppm$



.0403 x 2 = .0806

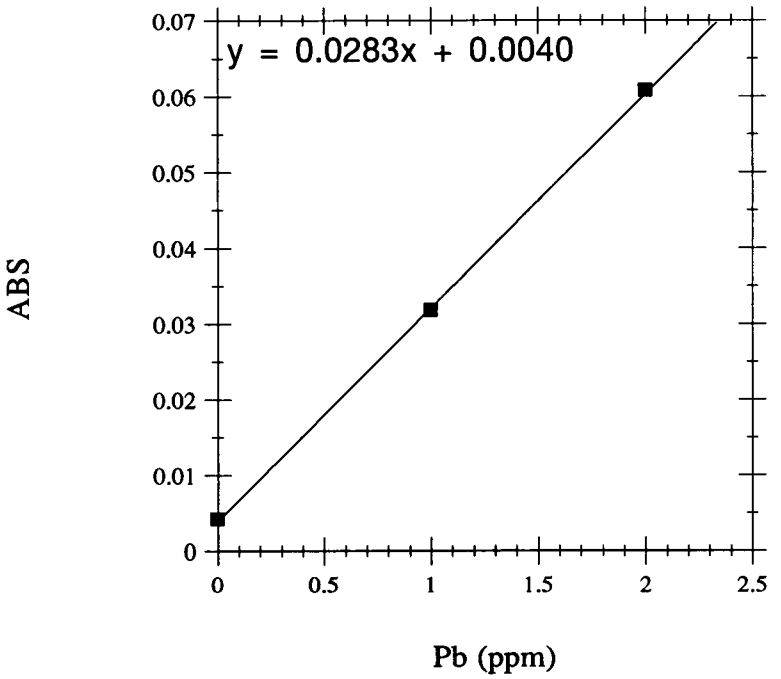
.0806 x 8 / 1.022 = .631 ppm



.2633 x 2 = .5266

$\frac{.5266 + 8}{1.022} = 4.122$ ppm

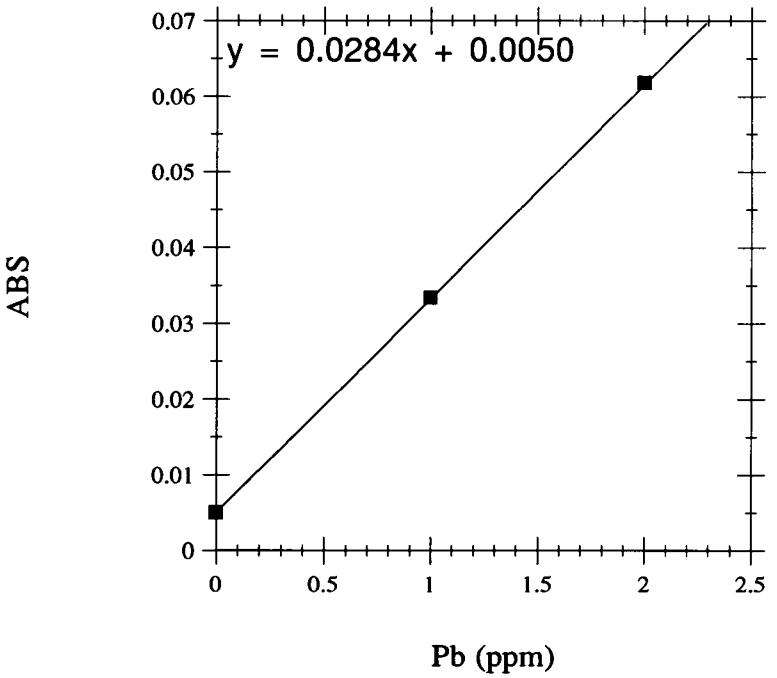
SAN-024 NH2OH



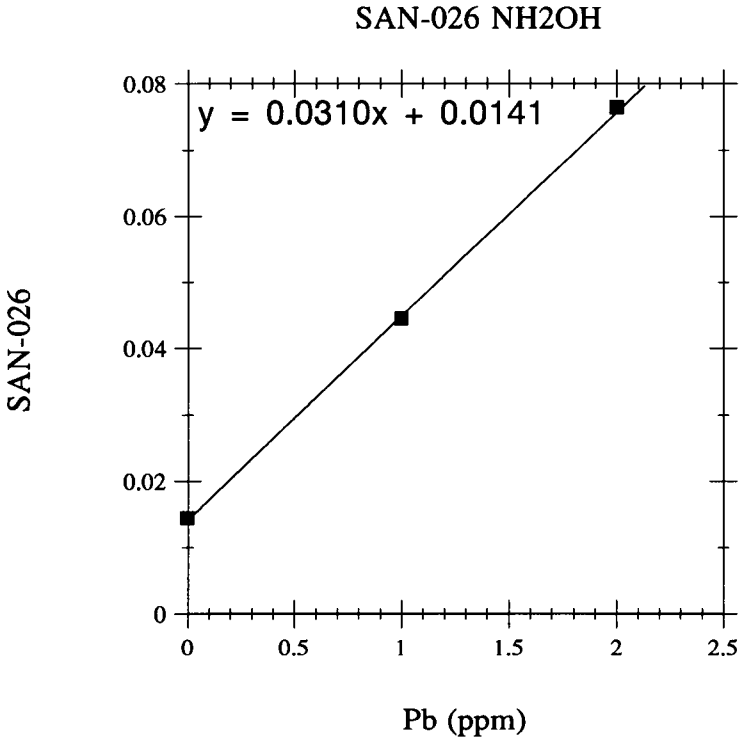
.1413 x 2 = .2826

$.2826 \times \frac{8}{1.018} = 2.22\text{ppm}$

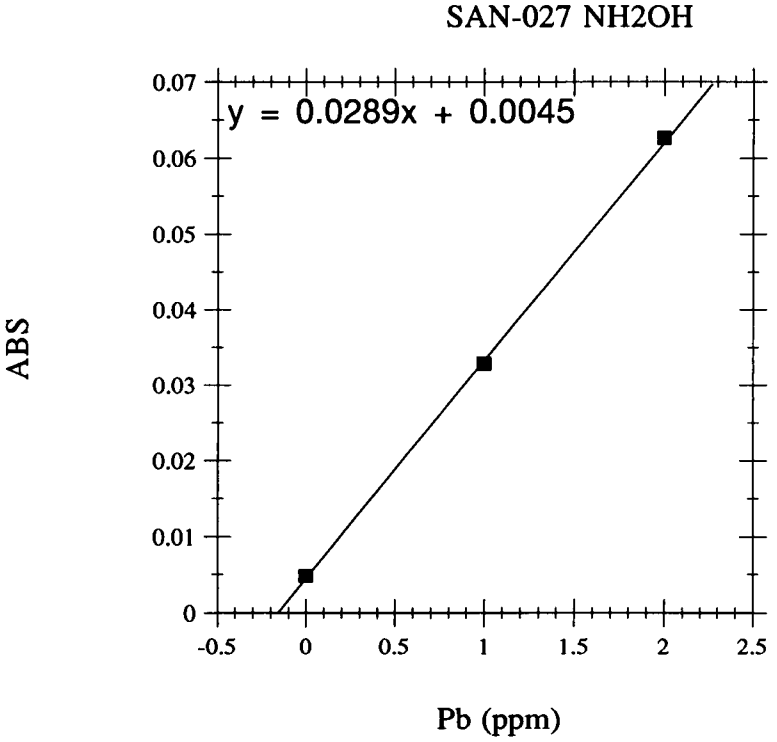
SAN-025 NH2OH



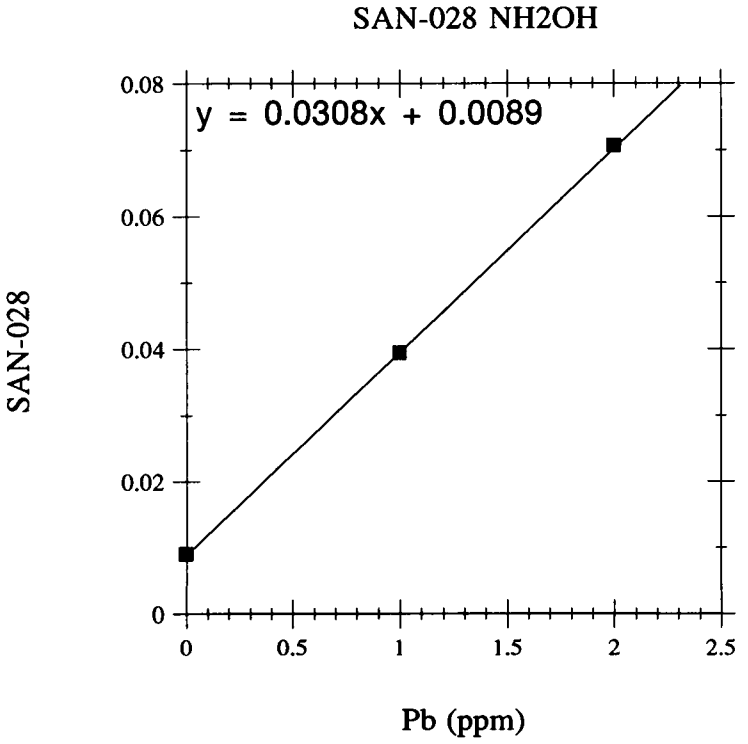
.176112 = .3522 × 8/1.025 = 2.749 ppm



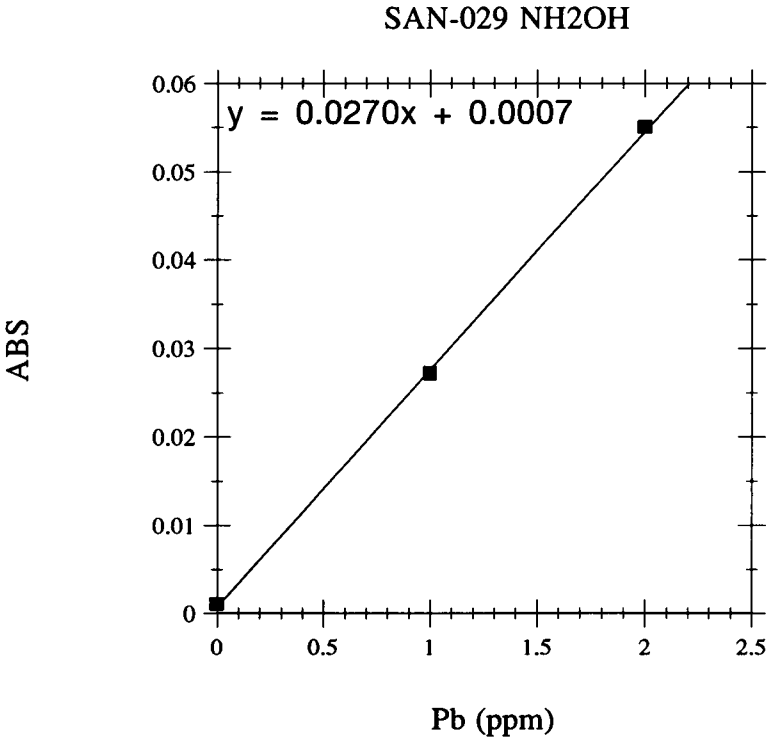
$.4548 \times 2 = .9096 \times \frac{8}{1.021} = 7.127$ ppm



.1557 x 2 = .3114 x 8/1.013 = 2.459 ppm



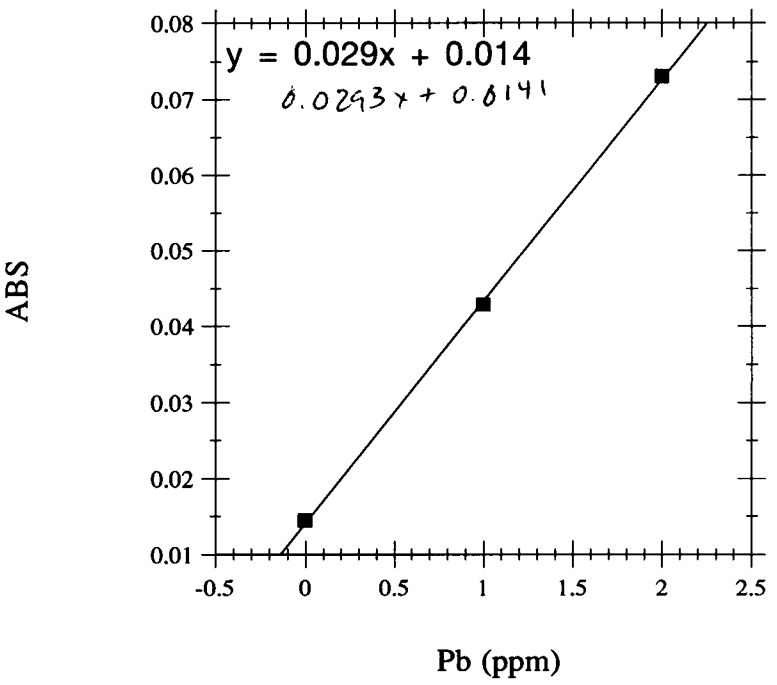
$.2890 \times 2 = \frac{.578 \times 8}{1.023} = 4.52\ ppm$



.0259 x 2 = .0518

.0518 x 8 / 1.02 = .406 ppm

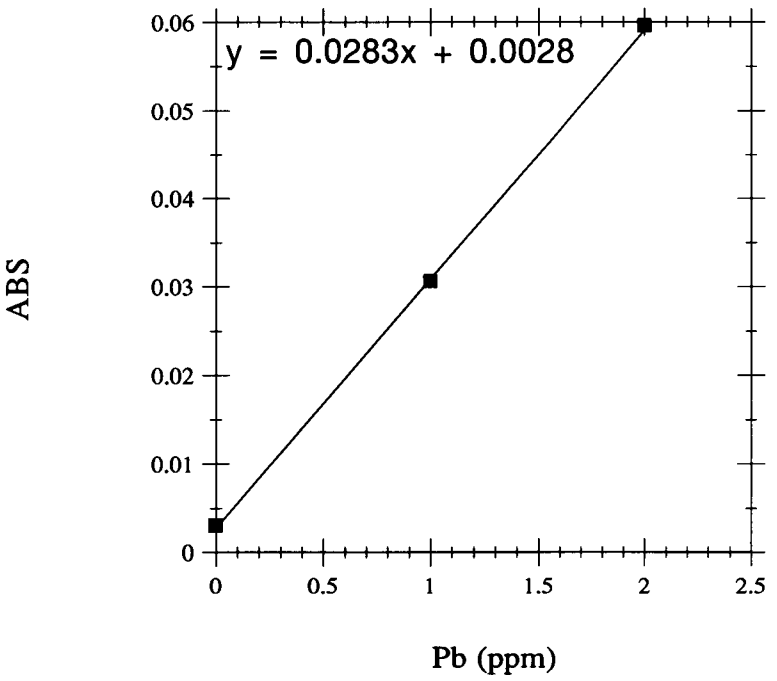
SAN-030 NH2OH



.4812 x 2 = .9624

$.9624 \times \frac{8}{1.022} = 7.533 \text{ ppm}$

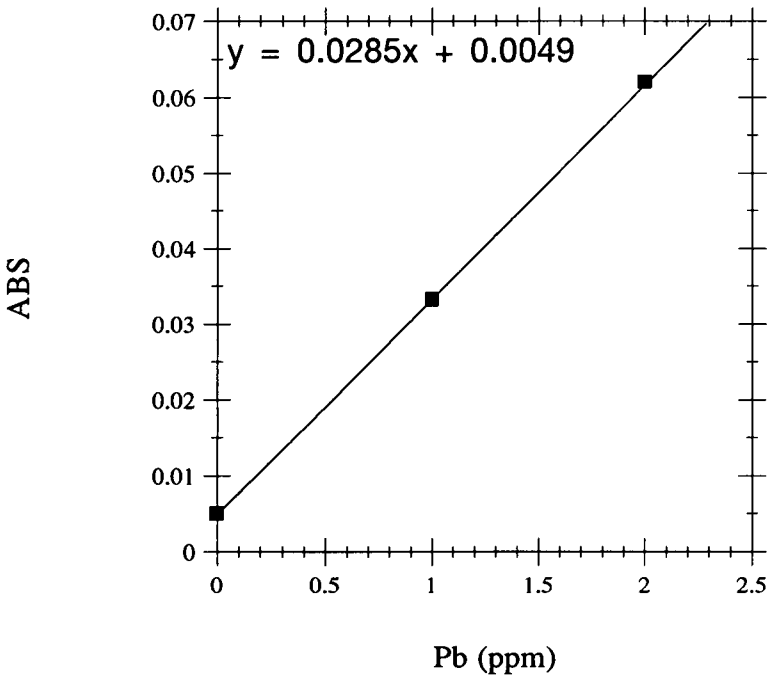
SAN-031 NH2OH



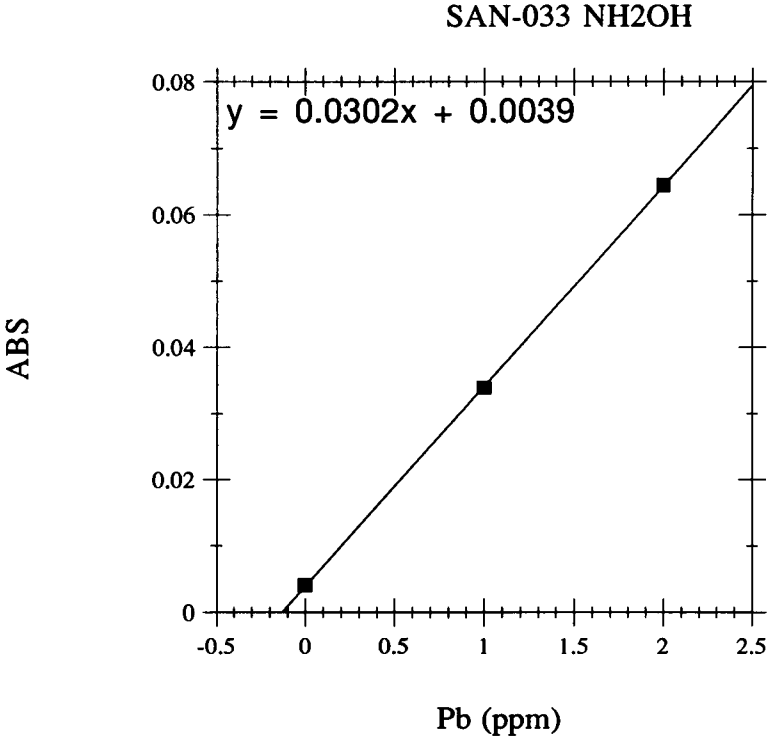
.0989 x 2 = .1978

$.1978 \times \frac{8}{1.026} = 1.542$ ppm

SAN-032 NH2OH

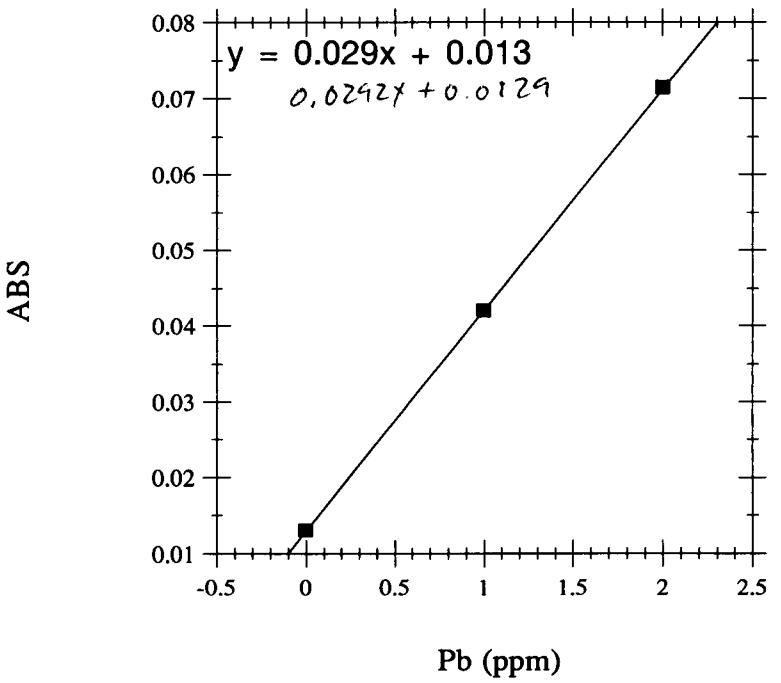


$.1719 \times 2 = .3438 \times \frac{8}{1.017} = 2.704$ ppm



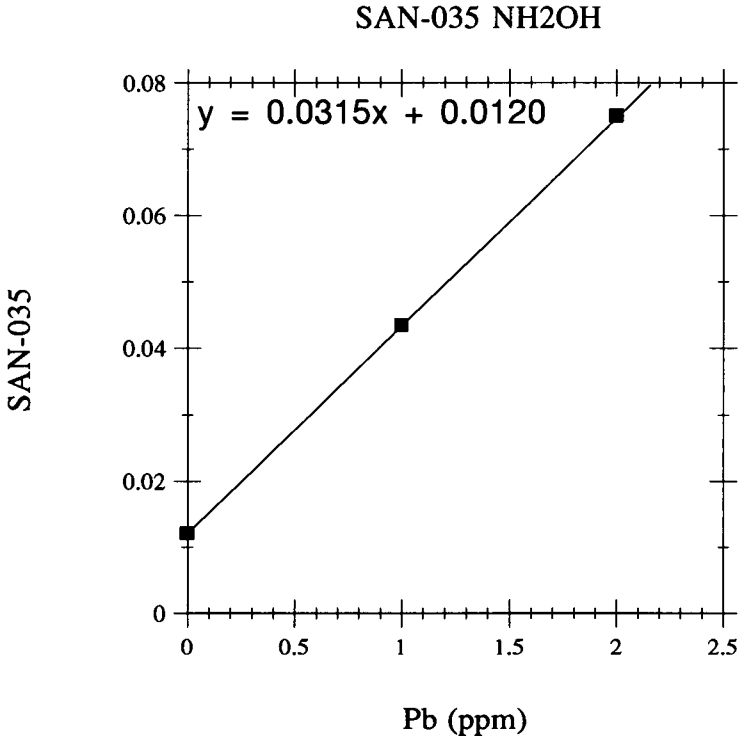
$.1291 \times 2 = .2582 \times 8 / 1.012 = 2.041$ ppm

SAN-034 NH2OH

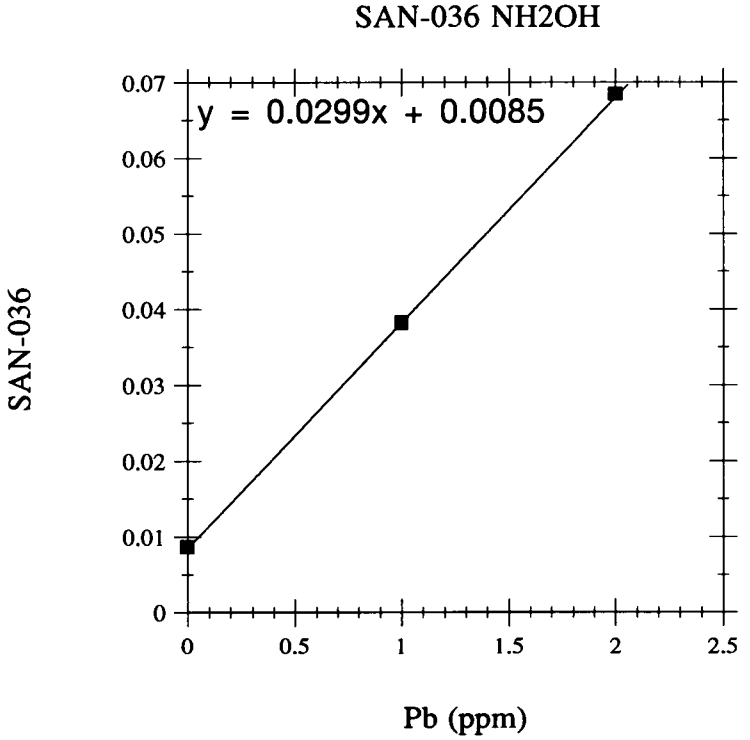


.4418 x 2 = .8836

.8836 x 8/1.009 = 7.006 ppm

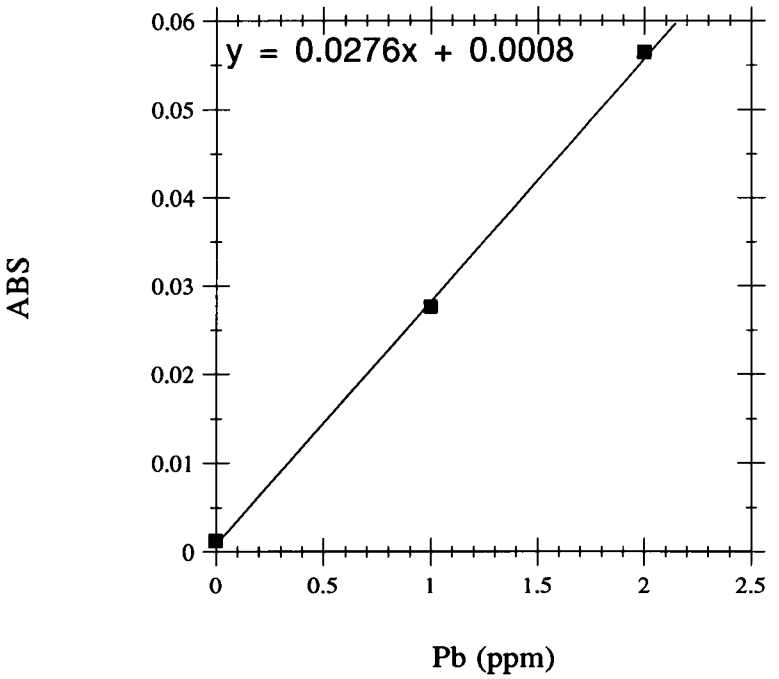


.3809 x 2 = .7618 x 8 / 1.02 = 5.975 ppm



.2843x2 = .5686 #.8 / 1.014 = 4.486ppm

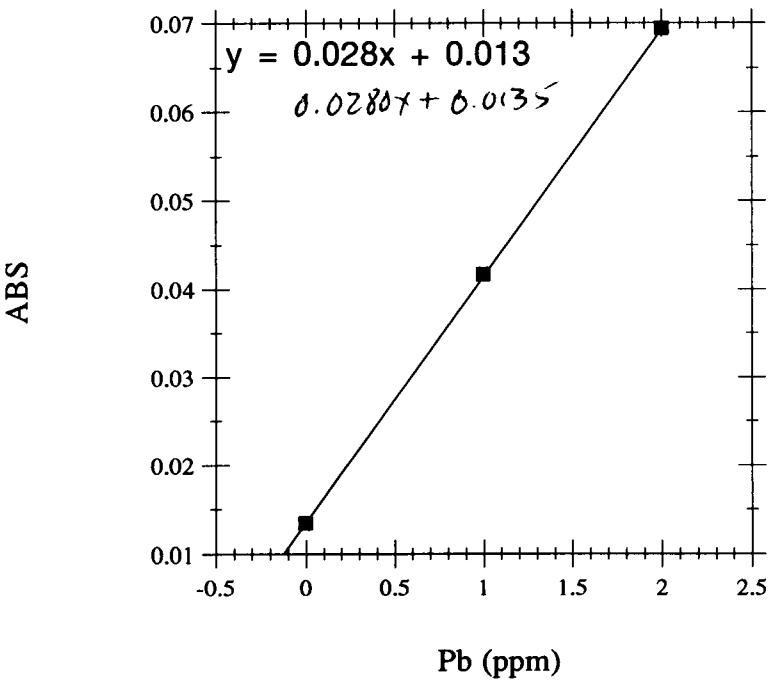
SAN-037 NH2OH



.02898 x 2 = .05796

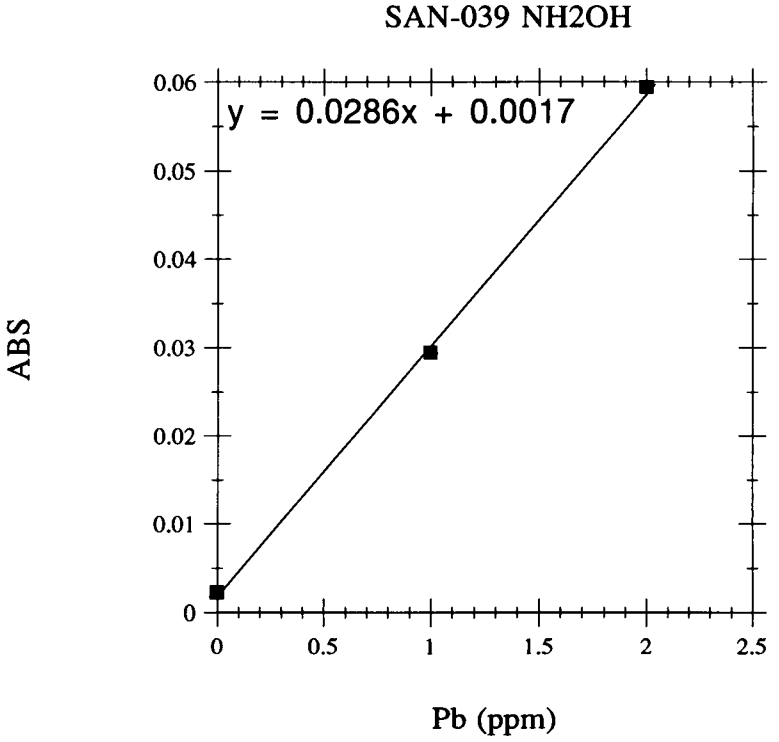
.05796 x 8 / 1.021 = .454 ppm

SAN-038 NH2OH



.4821 x z = .9642

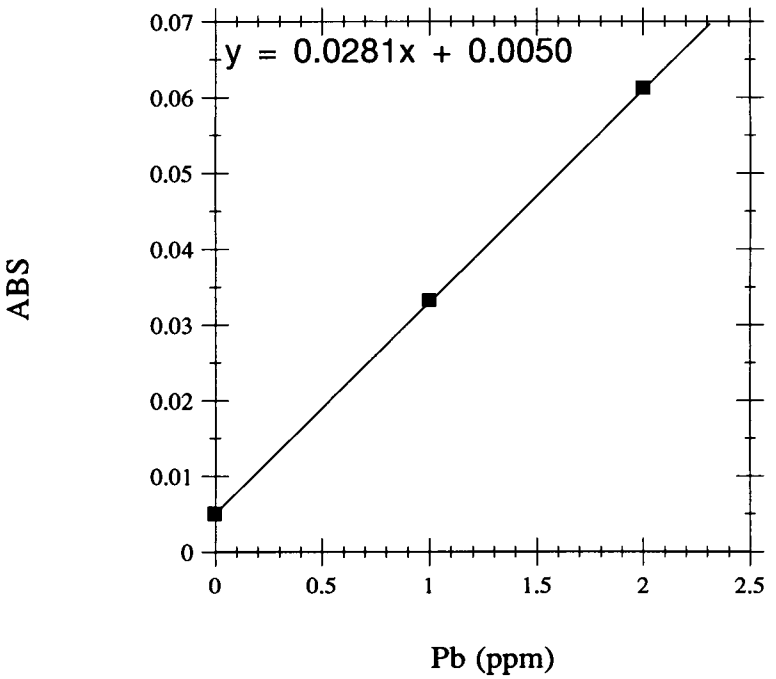
$.9642 \times \frac{8}{1.024} = 7.519 \text{ ppm}$



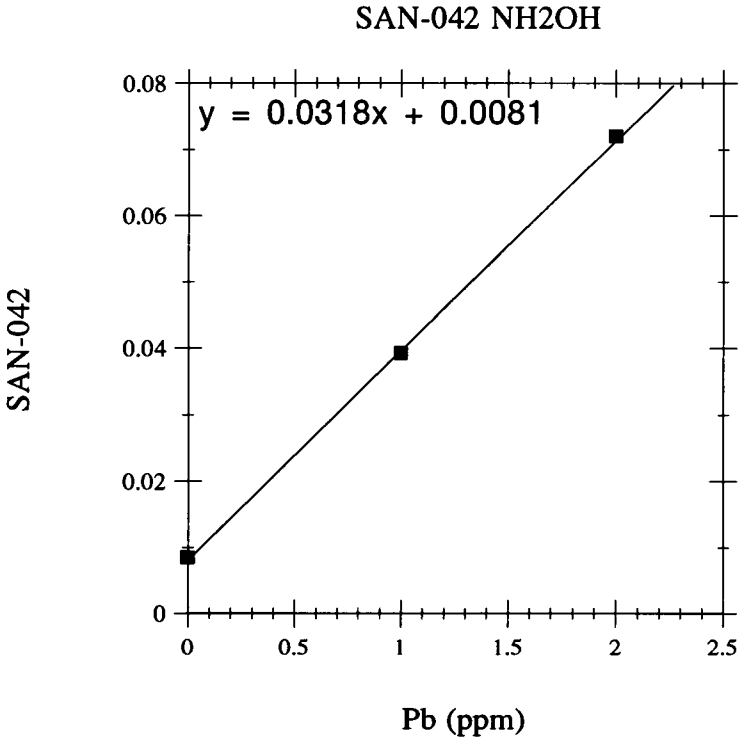
.0594 x 2 = .1188

$.1188 \times \frac{8}{1.018} = .934$ ppm

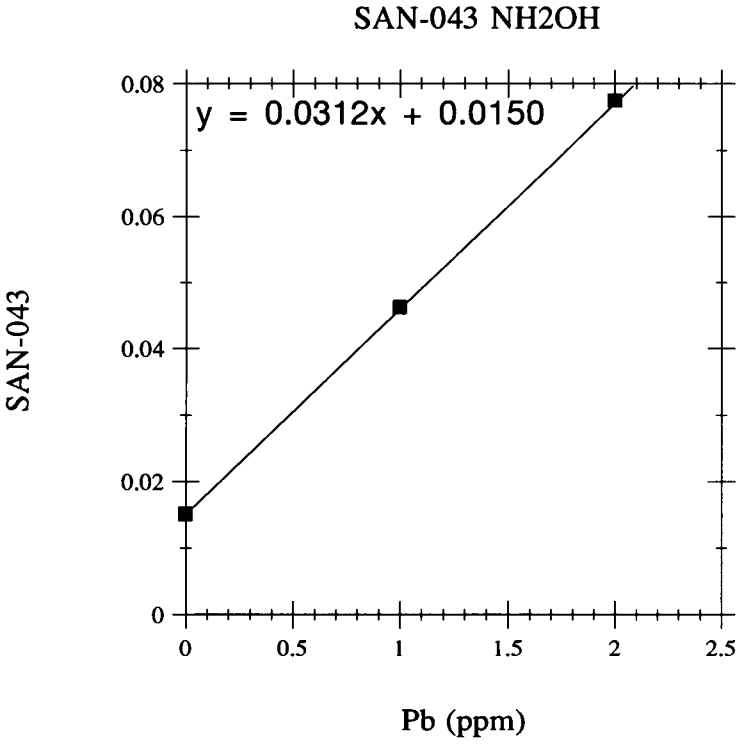
SAN-040 NH2OH



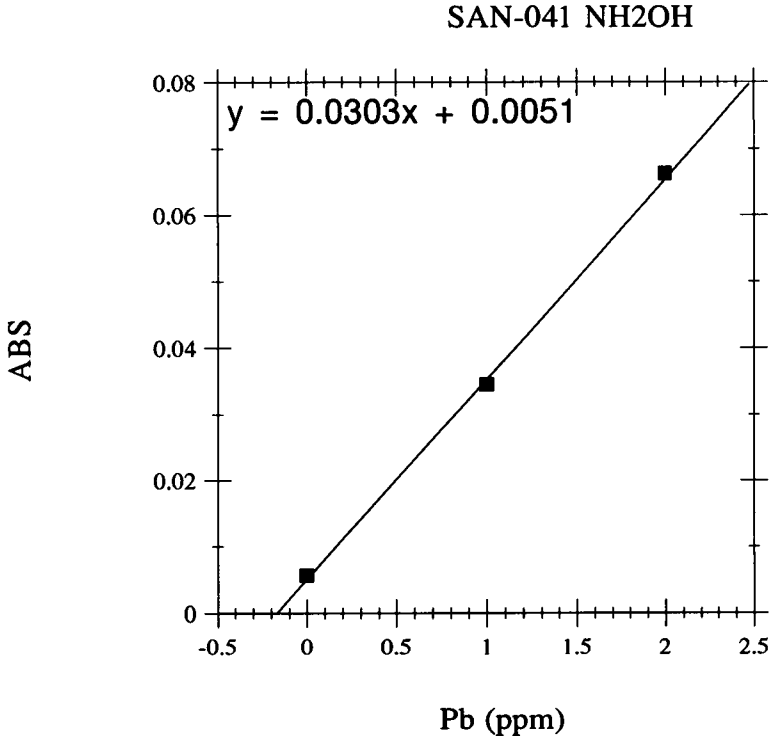
$.1779 \times 2 = .3558 \times \frac{8}{1.017} = 2.799$ ppm



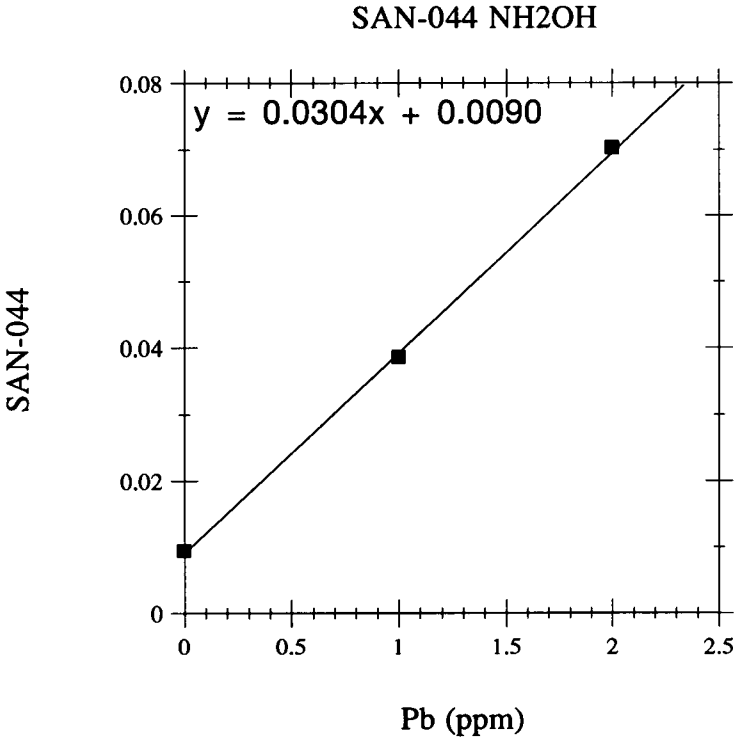
.2547x2 = .5094x8 / 1.012 = 4.027 ppm



.4808 x 2 = .9616 x 8 / 1.022 = 7.527 ppm

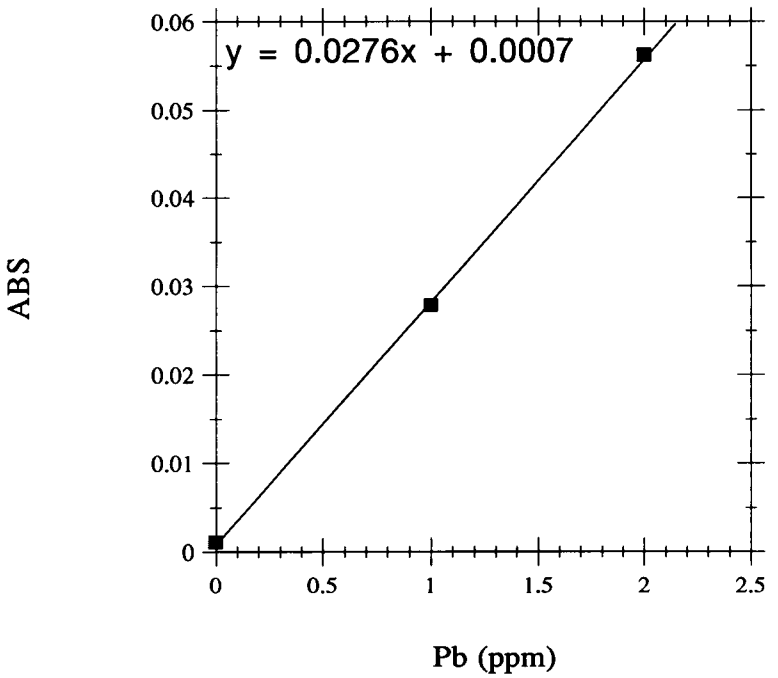


$.1683 \times 2 = .3366 \times \frac{8}{1.015} = 2.653\ ppm$



.2960 x 2 = .592 + 8 / 1.014 = 4.671 ppm

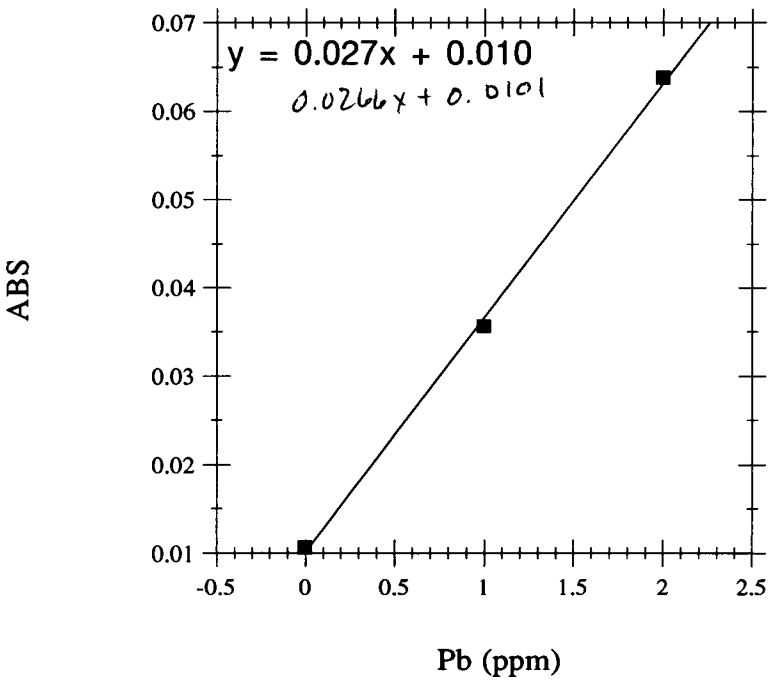
SAN-045 NH2OH



.0254 x 2 = .0508

$\frac{.0508 \times 8}{1.017} = .3996$ ppm

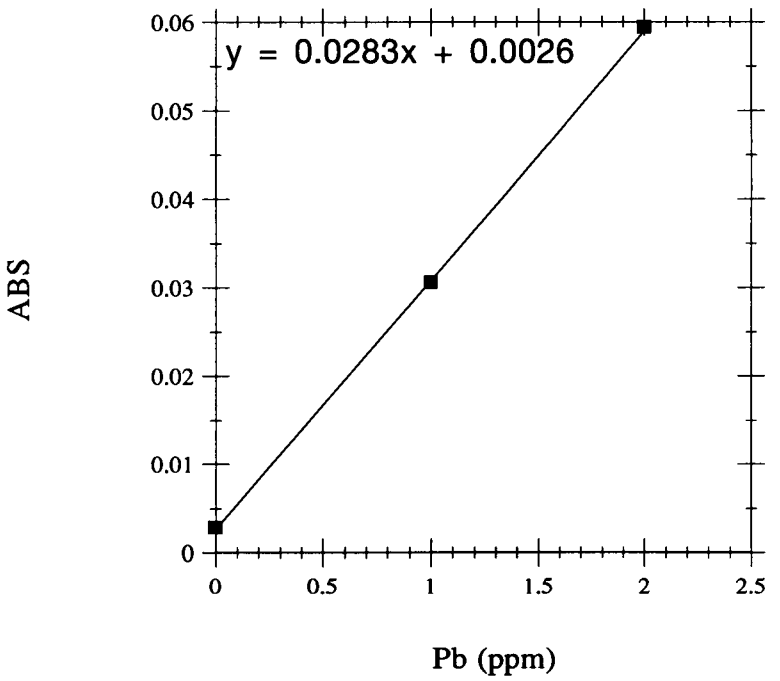
SAN-046 NH2OH



.3759 x 2 = .7518

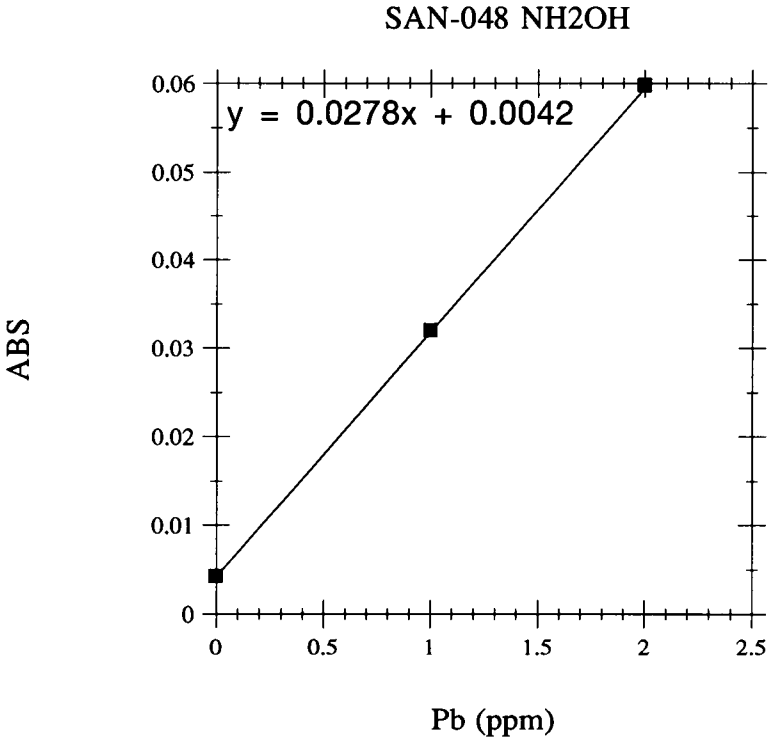
.7518 x 8/1.022 = 5.885 ppm

SAN-047 NH2OH



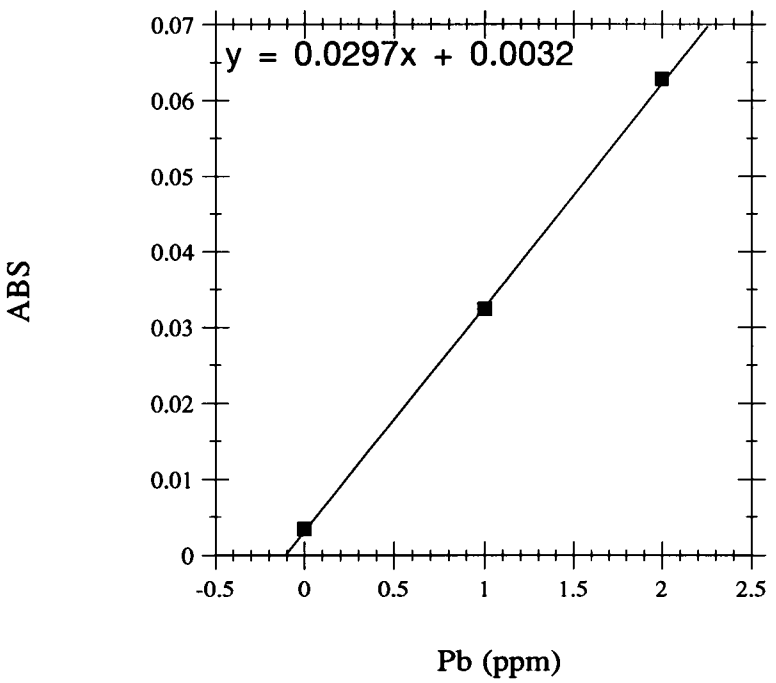
.0919 x 2 = .1838

.1838 x 8/1.023 = 1.437 ppm

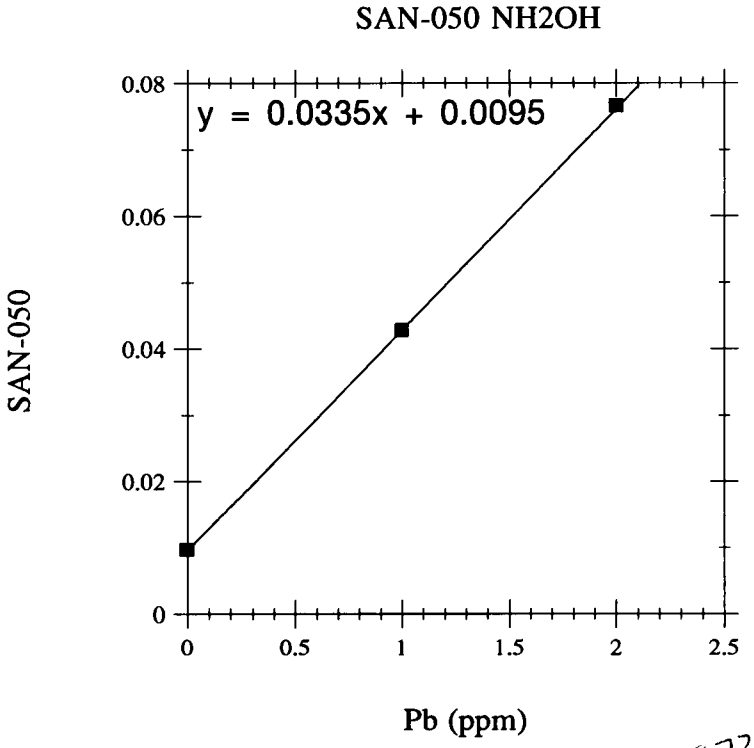


.1511 x 2 = .3022 x 8 / 1.022 = 2.365 ppm

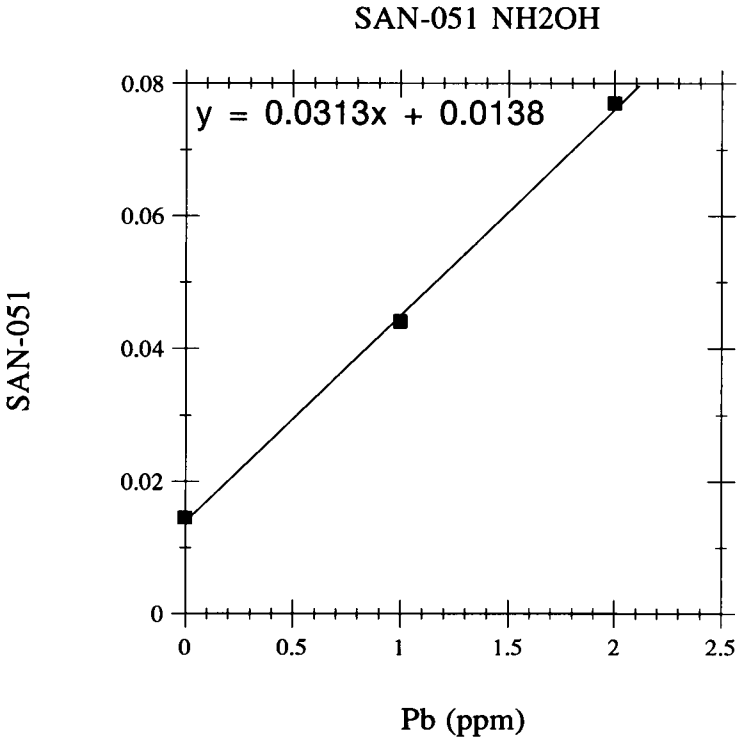
SAN-049 NH2OH



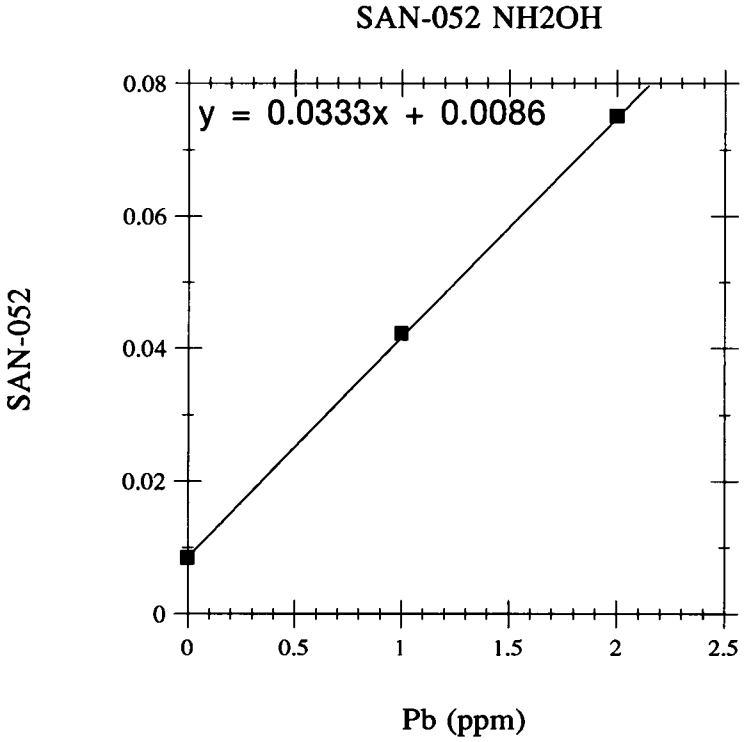
.1077 x 2 = .2154 x 8 / 1.017 = 1.694 ppm



$.2836 \times 2 = .5672 + \frac{8}{1.016} = 4.466$ ppm

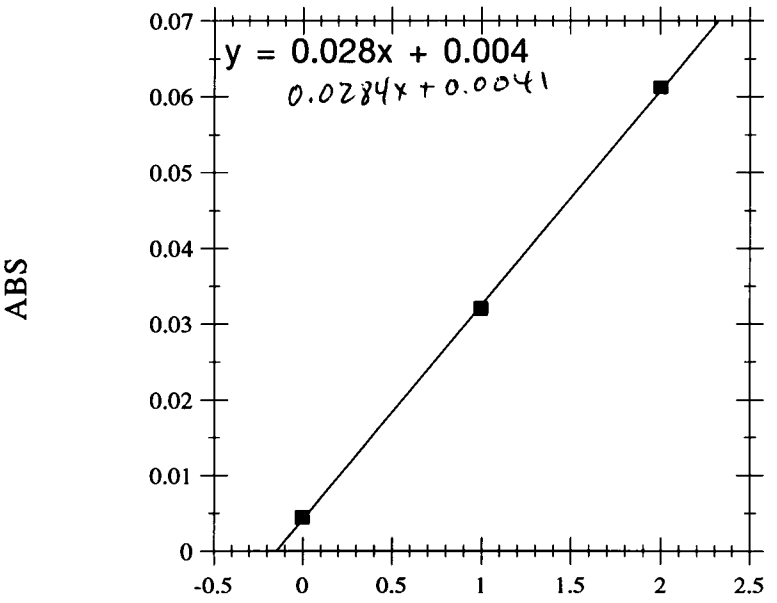


.4409Y2 = .8818 X $\frac{Y}{1.017}$ = 6.936 ppm



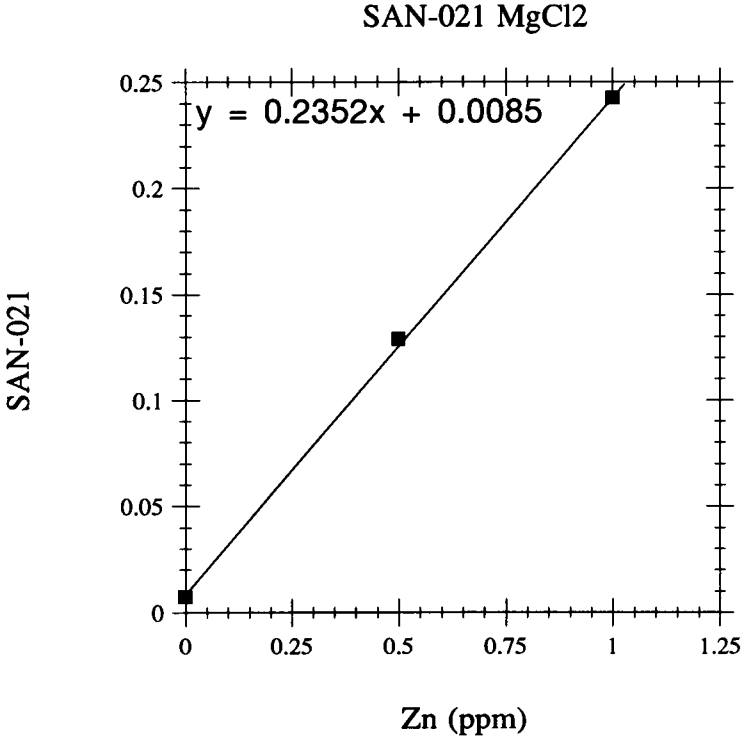
$.2583 \times 2 = .5166 \times \frac{8}{1.02} = 4.052\ ppm$

SAN-053 NH2OH

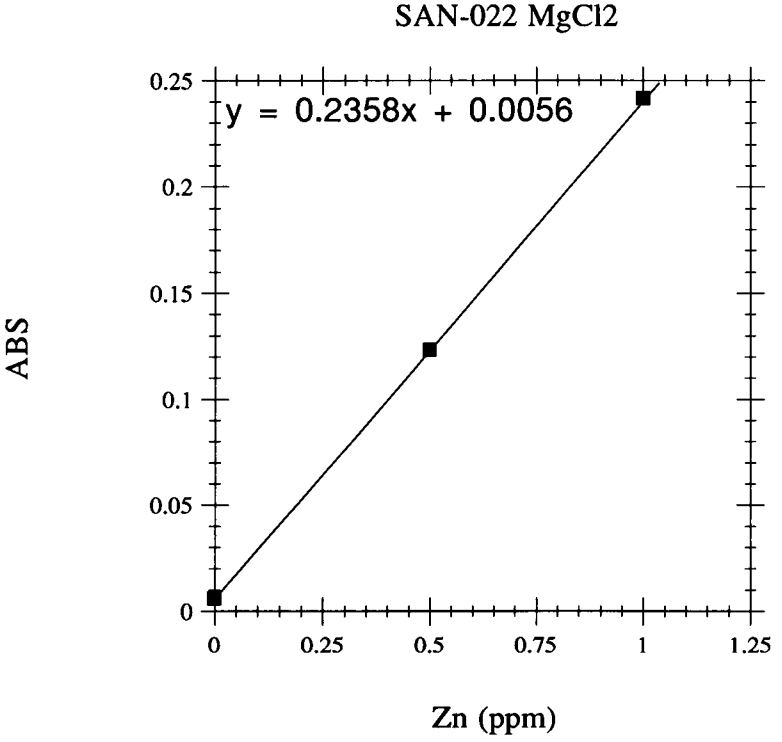


.1444 x 2 = .2888

.2888 x 8/1.008 = 2.292 ppm



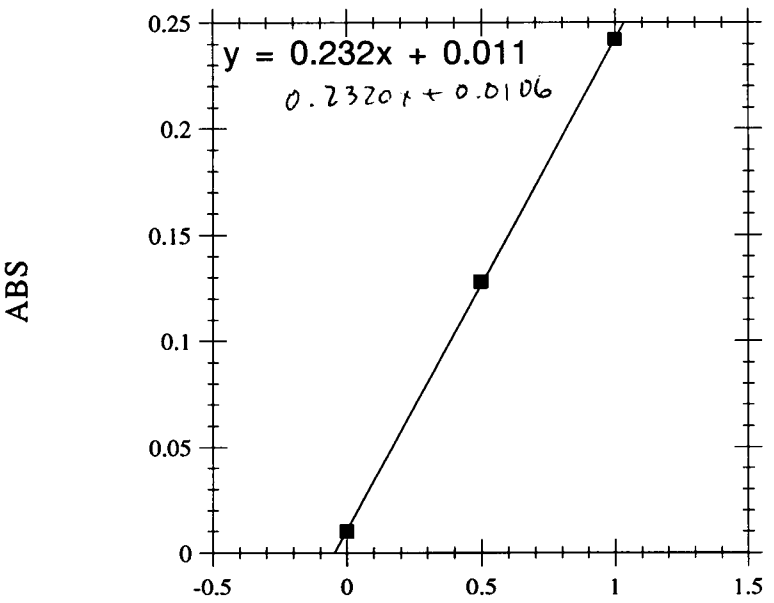
.0361 Y2 = .0722 × 8/1.016 = .568 ppm



.02375 x 2 = .0475

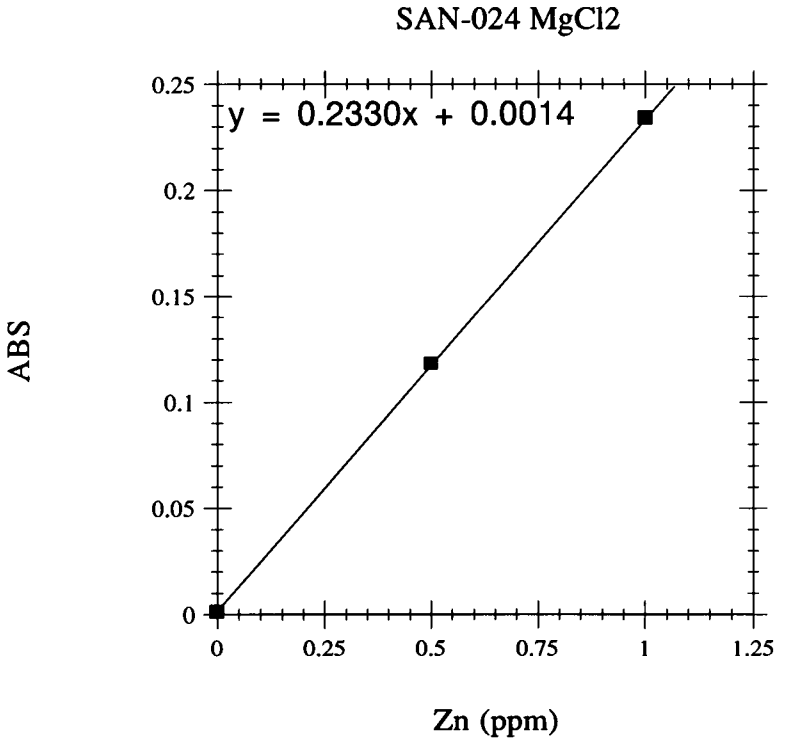
$\frac{.0475 \times 8}{1.022} = .372$ ppm

SAN-023 MgCl2



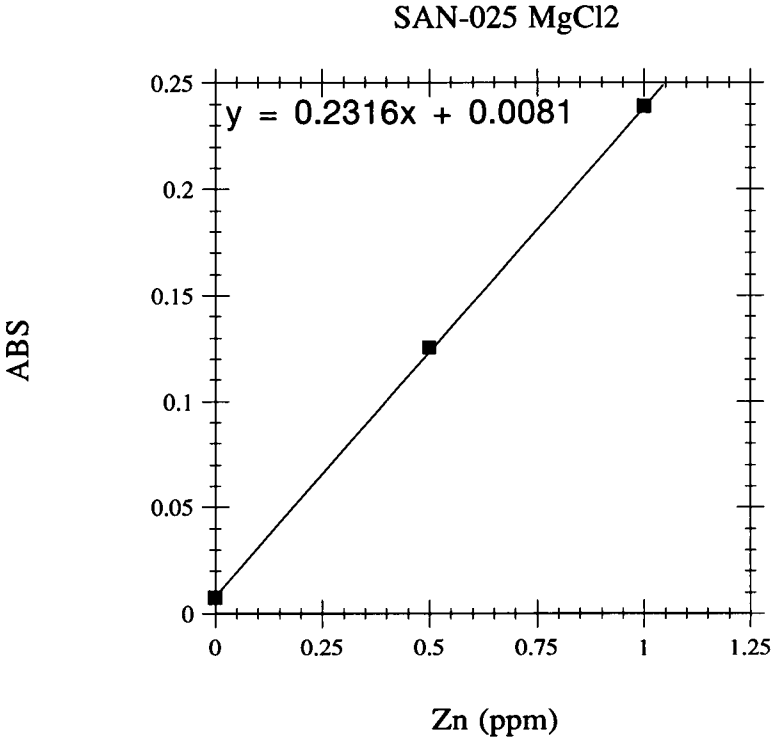
.0457 x 2 = .0914

.0914 x 8/1.022 = .715 ppm

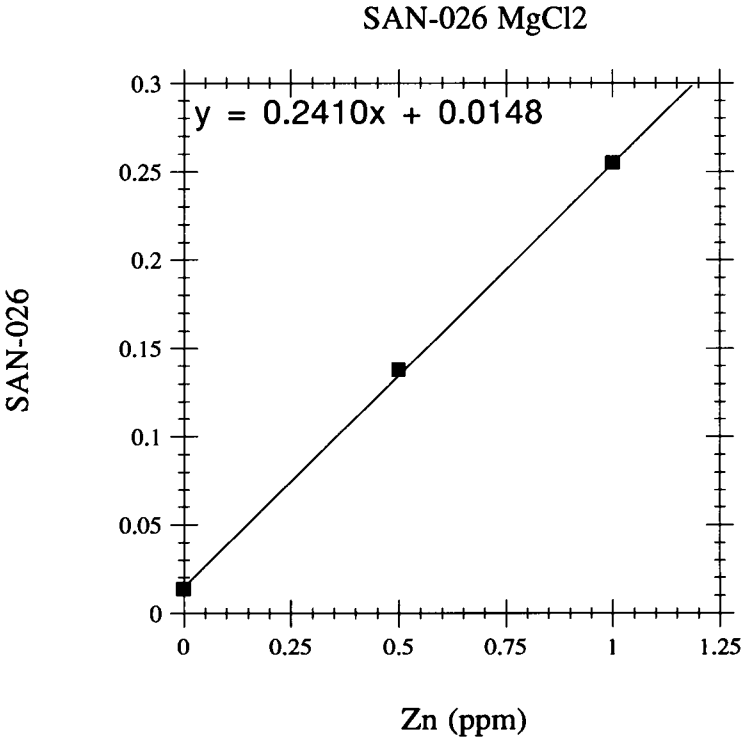


.006 x 2 = .012

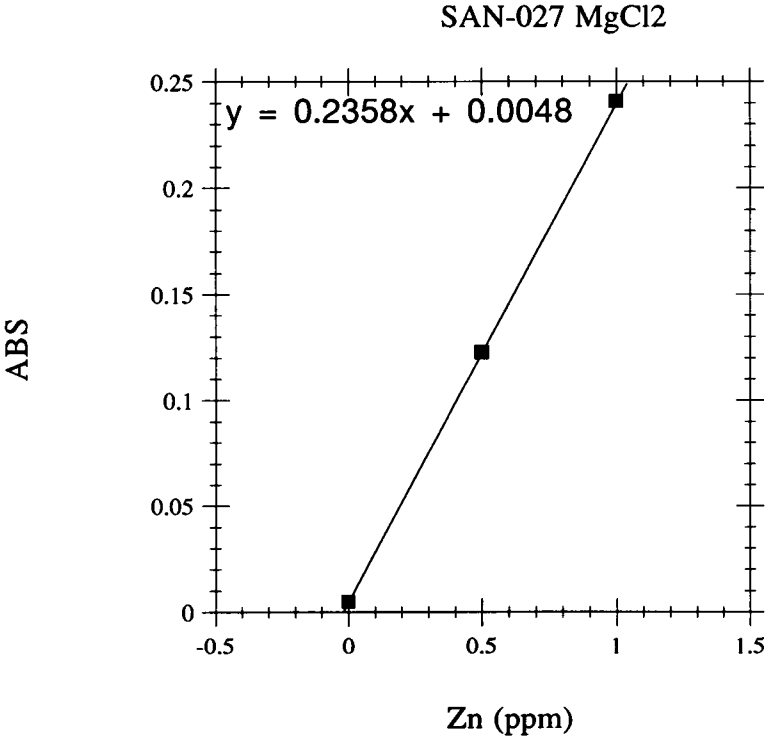
.012 x 8/1.018 = .943 ppm



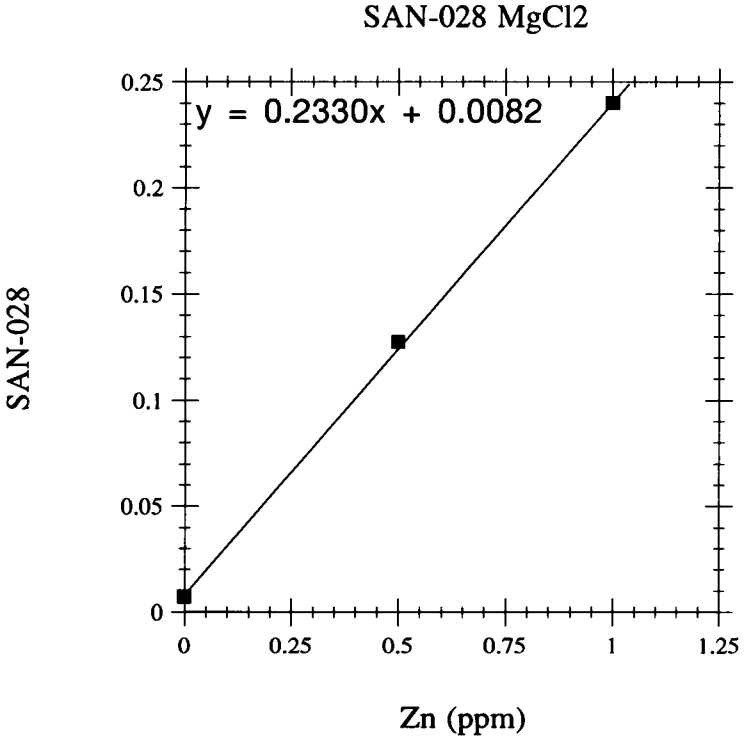
$.0350 \times 2 = .07 \times \frac{8}{1.025} = .546\ ppm$



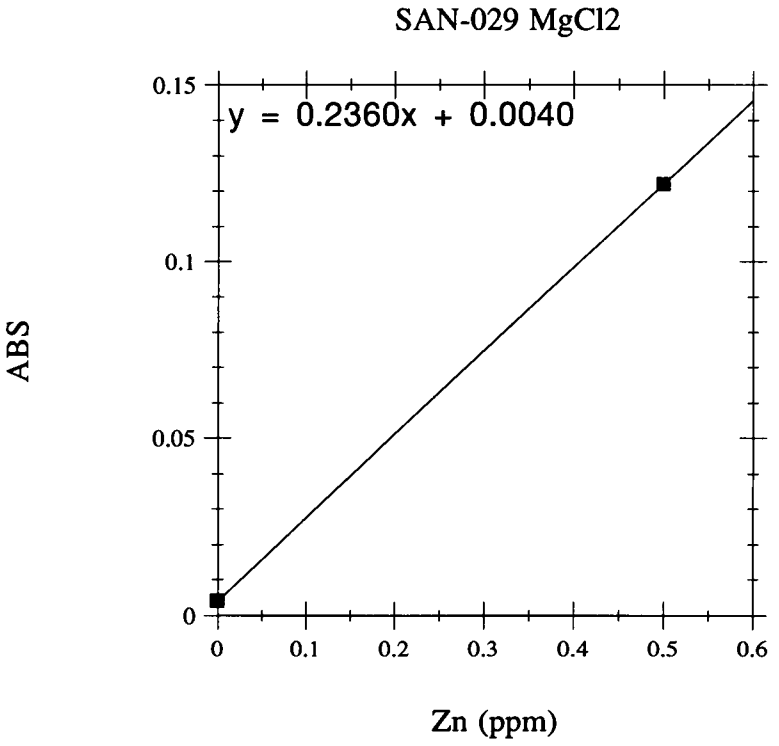
.061442 = .1228 x 8/1.021 = .962ppm



$.0203 \times 2 = .0406 \times \frac{8}{1.013} = .321 \text{ ppm}$



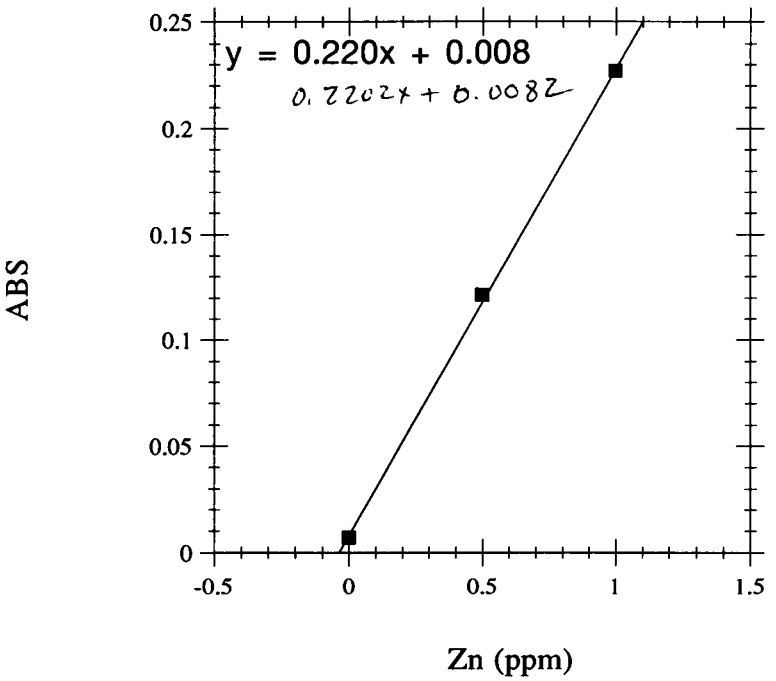
.0352 x 2 = .0704 x 8/1.023 = .55 ppm



.01695 x 2 = .0339

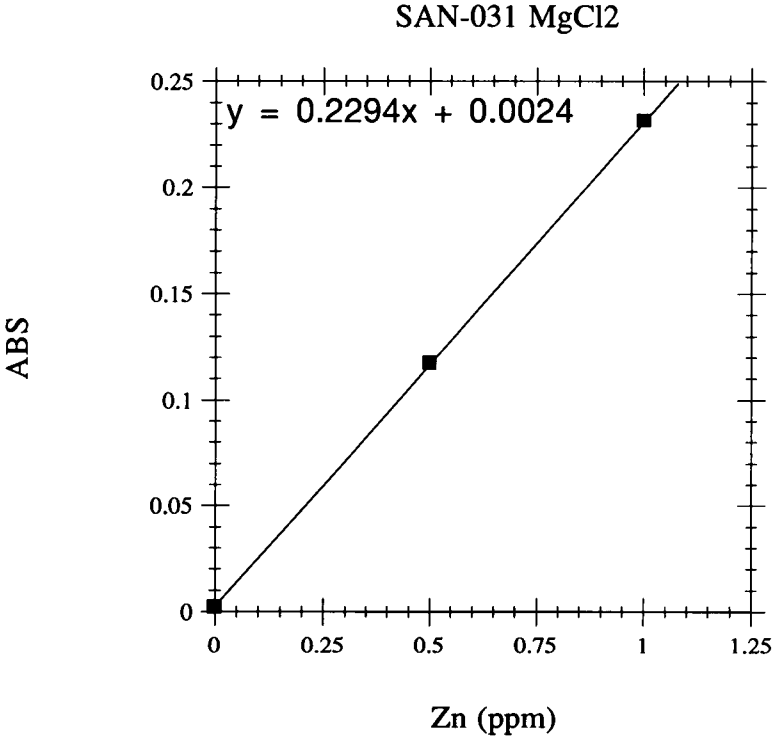
~~.05~~ .0339 x 8 / 1.02 = .266 ppm

SAN-030 MgCl2



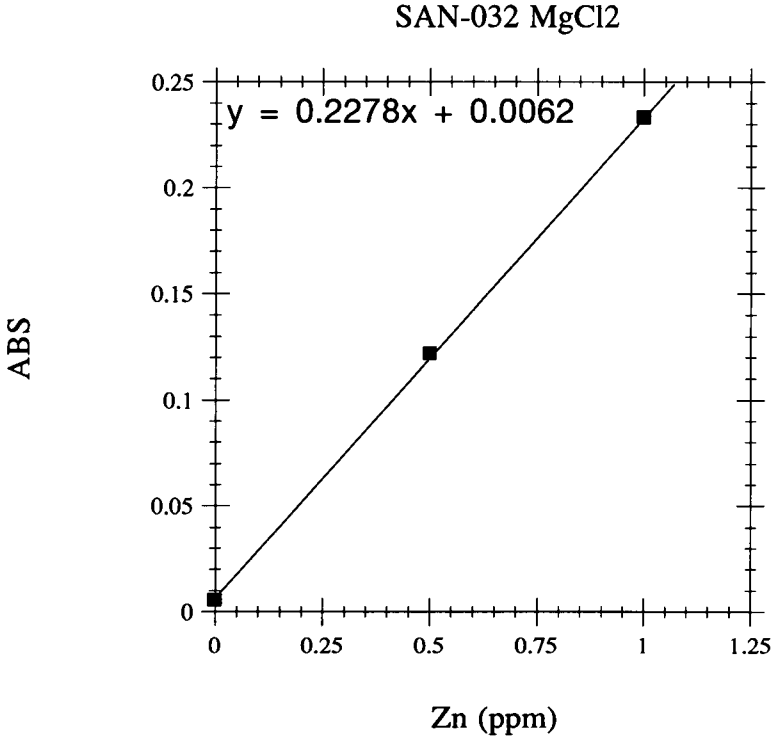
.0372 x 2 = .0744

$.0744 \times \frac{8}{1.022} = .582 ppm$

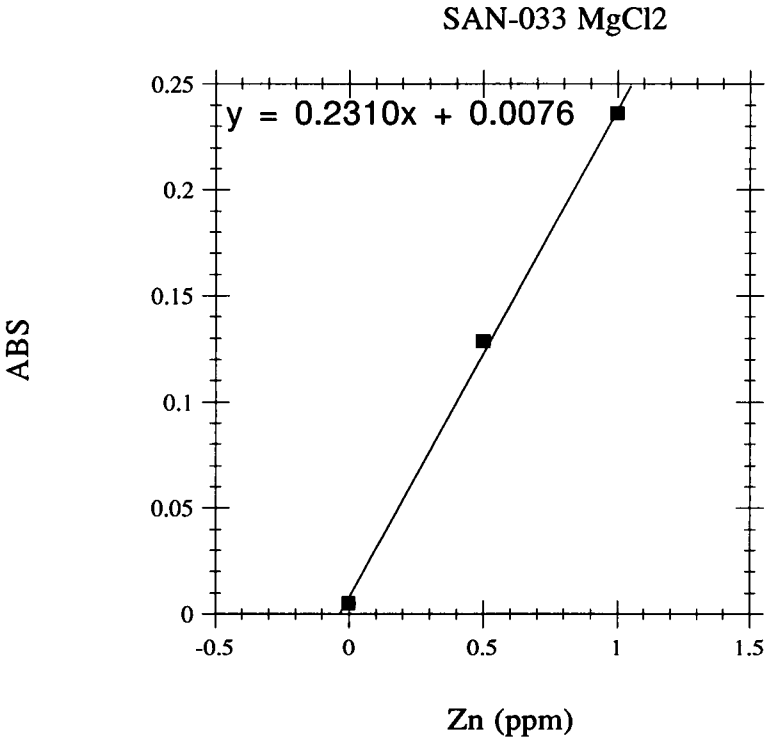


.0105 x 2 = .021

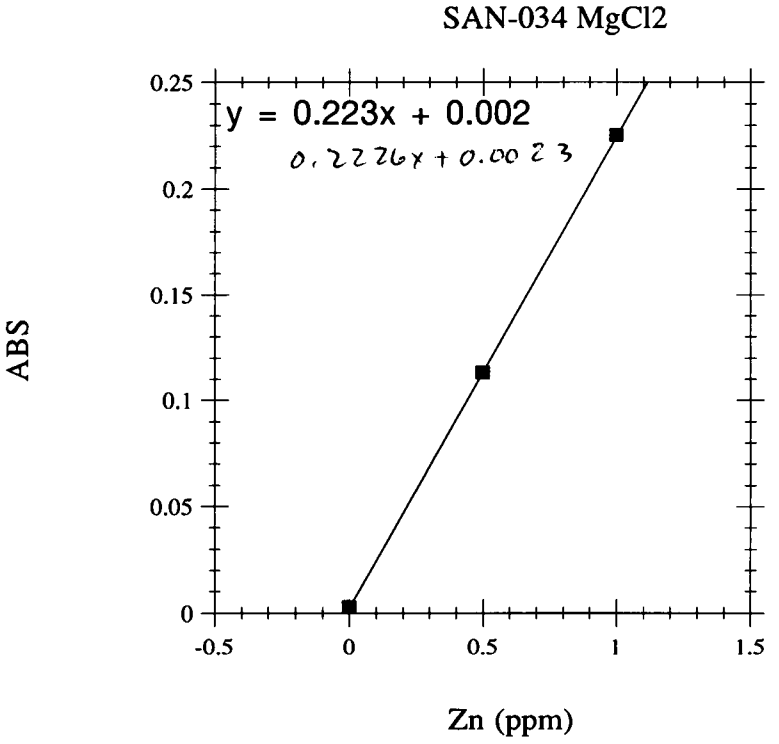
.021 x 8 / 1.026 = .164 ppm



.0272 x 2 = .05448 / 1.017 = .43 ppm

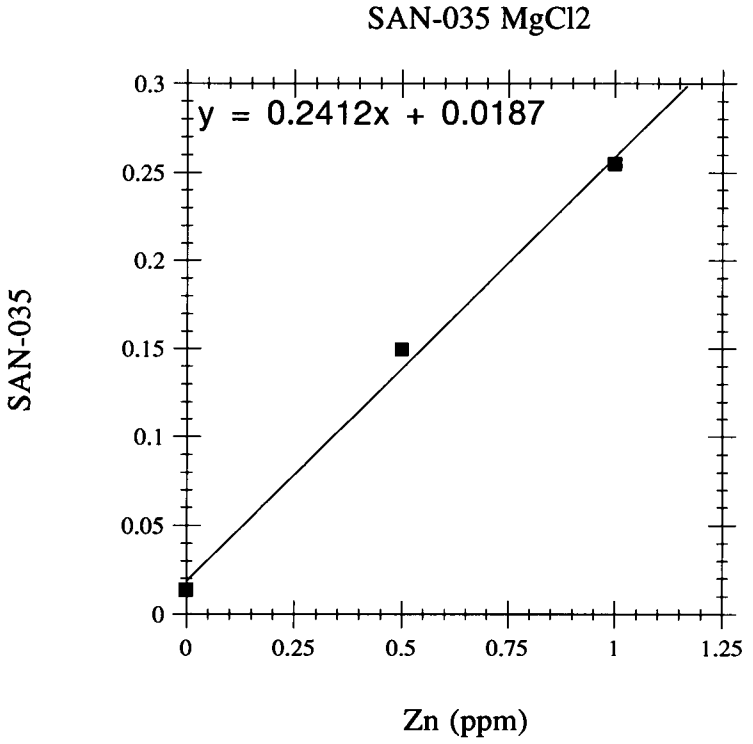


$.0329 \times 2 = .0658 \times \frac{8}{1.012} = .520 ppm$

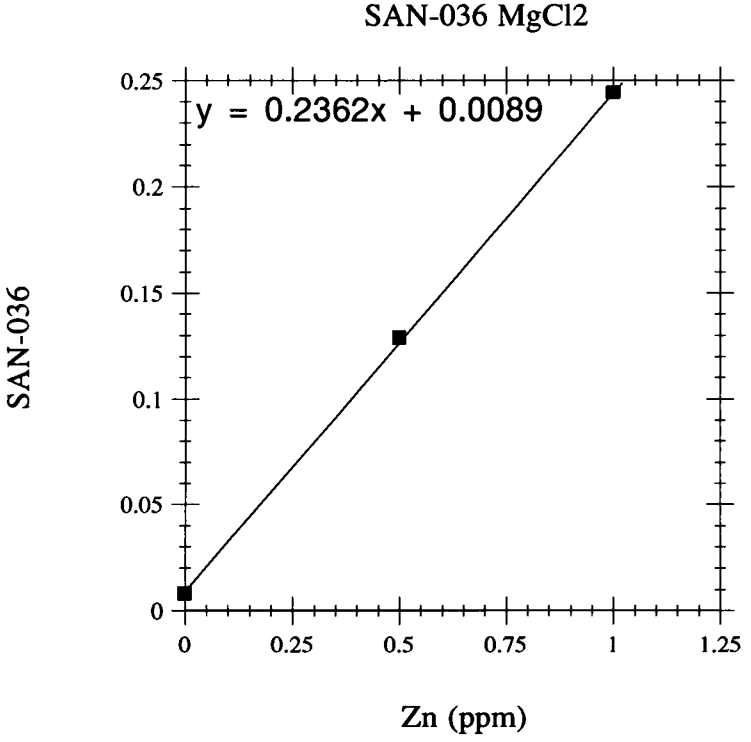


.0103 x 2 = .0206

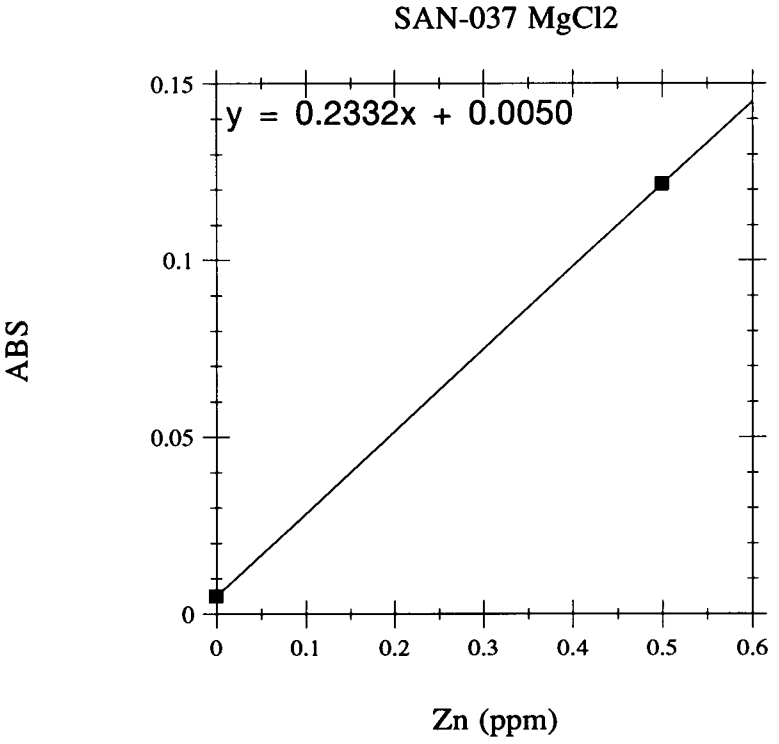
.0206 + 8/1.009 = .163ppm



$.0775 \times 2 = .155 \times \frac{8}{1.02} = 1.216$ ppm

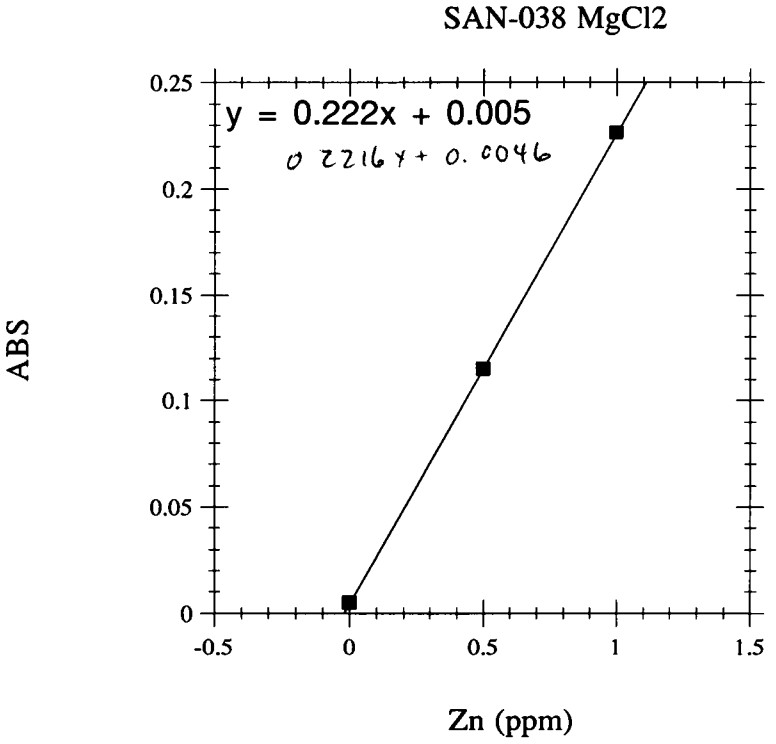


.0377 x 2 = .0754 x 8/1.014 = .593 ppm



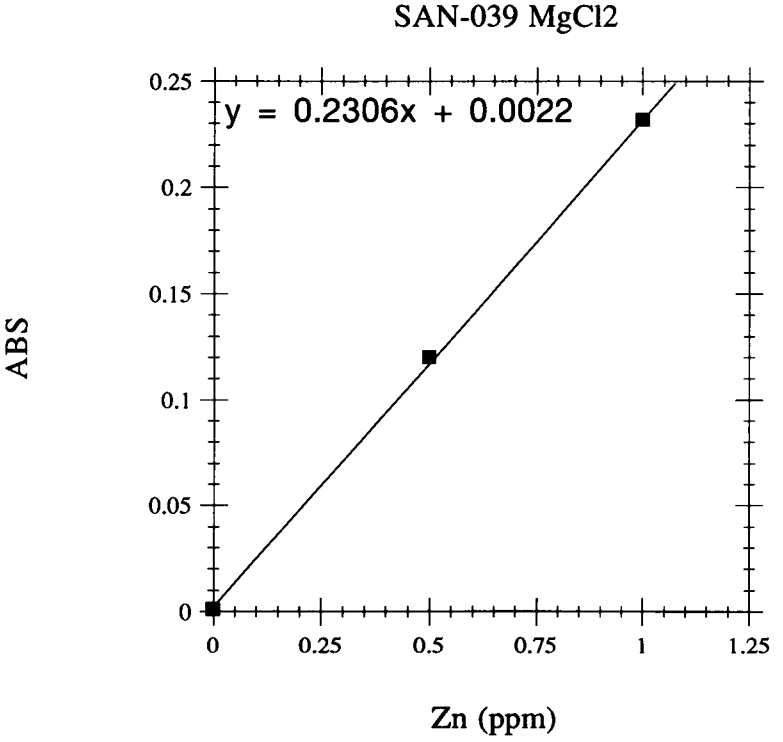
.02144 x 2 = .04288

$.04288 \times \frac{8}{1.021} = .336\ ppm$



.0208 x2 = .0416

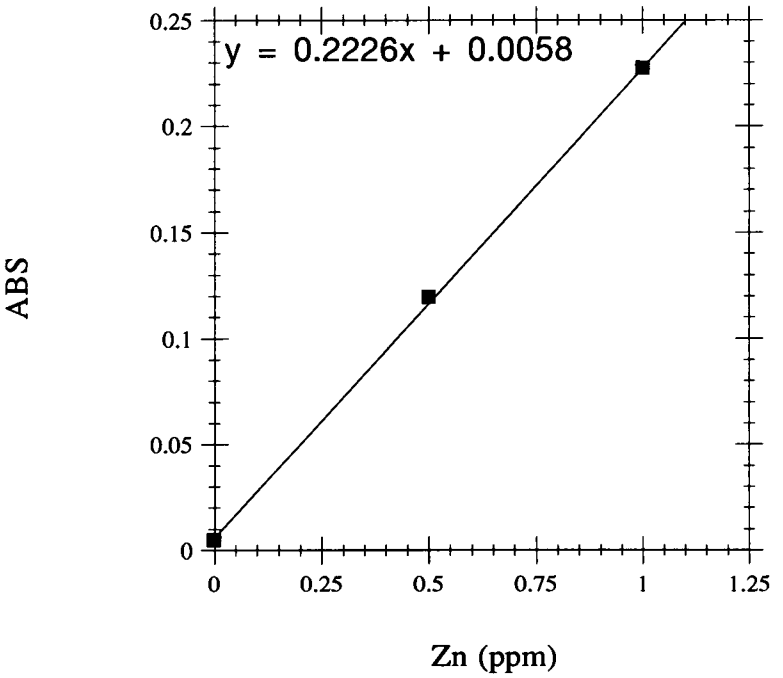
.0416 x 8/1.024 = .325ppm



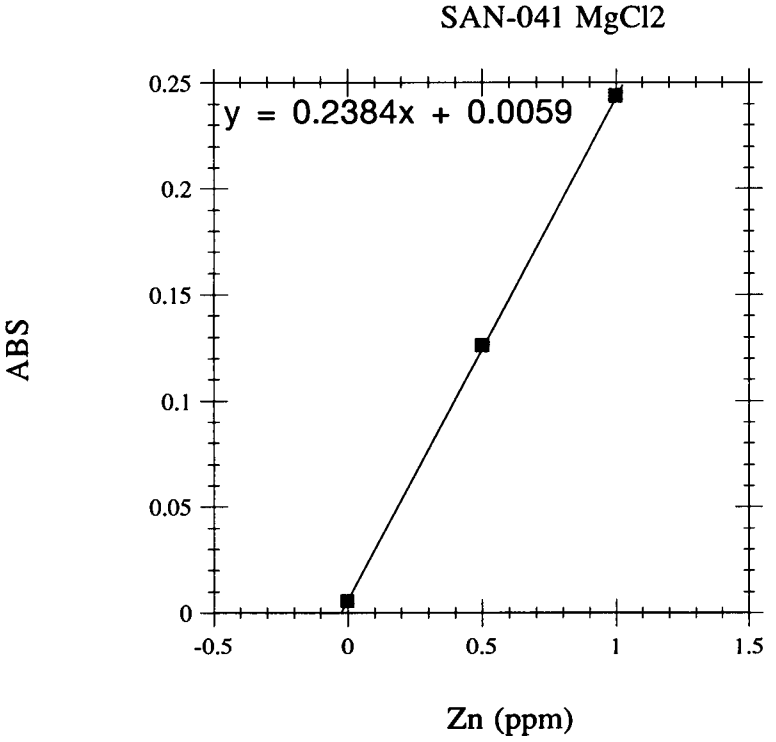
.00954 x 2 = .01908

$\frac{.01908 \times 8}{1.018} = .1499$ ppm

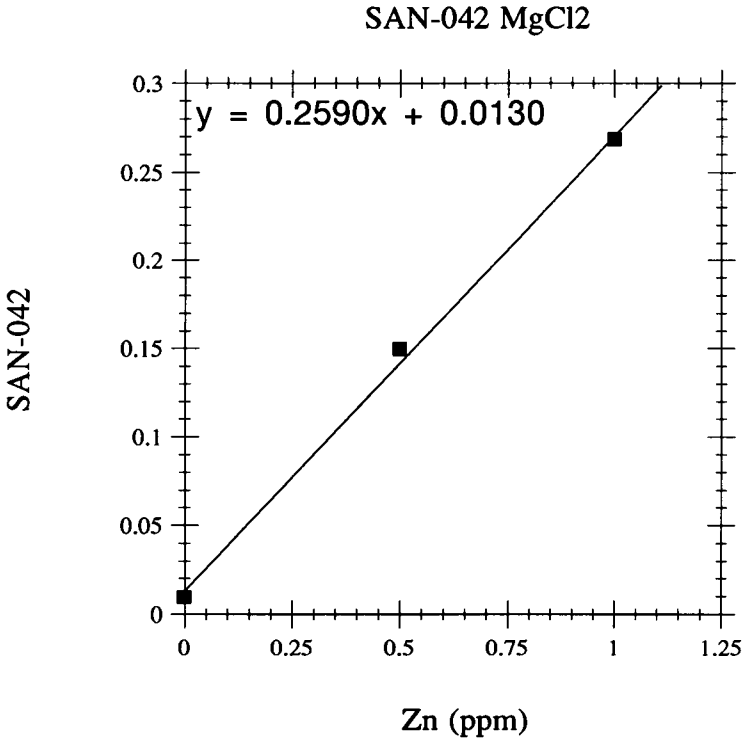
SAN-040 MgCl2



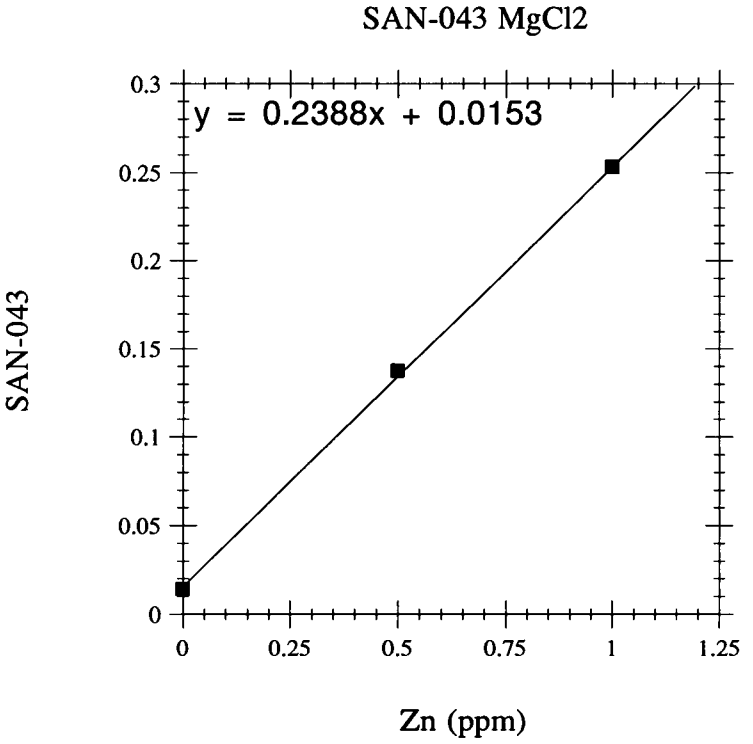
$.0261 \times 2 = .0522 \times \frac{8}{1.017} = .411 ppm$



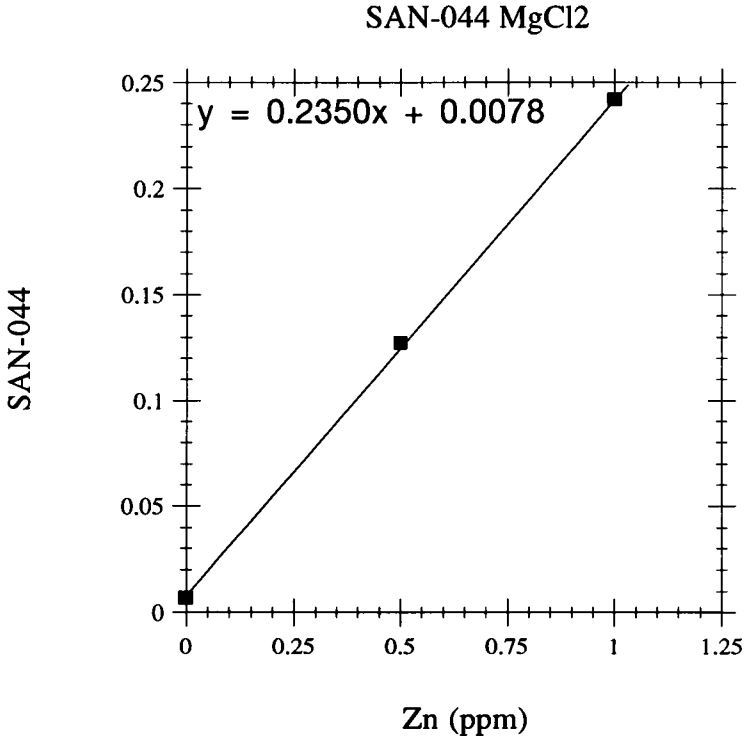
.0247 x 2 = .0494 x 8 / 1.015 = .389 ppm



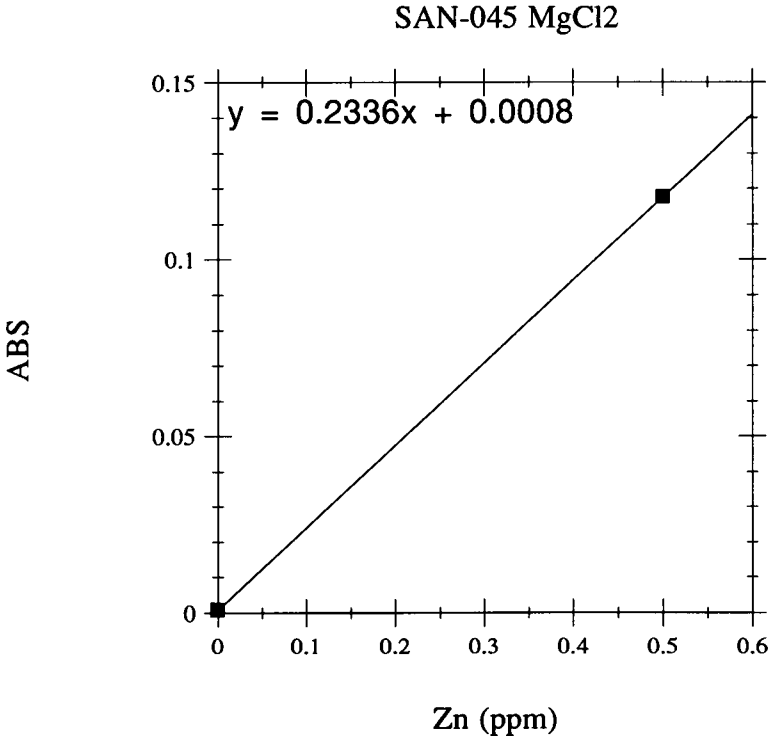
.0502 x 2 = .1004 x 8/1.012 = .794ppm



.0641 x 2 = .1282 x $\frac{8}{1.022}$ = 1.003 ppm

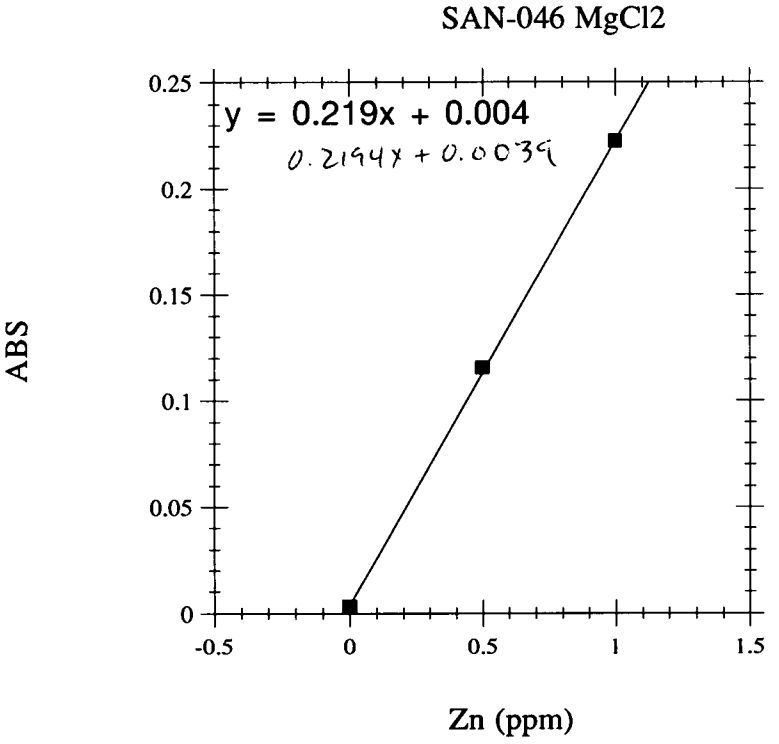


.0332 x 2 = .0664 x 8/1.014 = .524ppm



.00348 x 2 = .00684

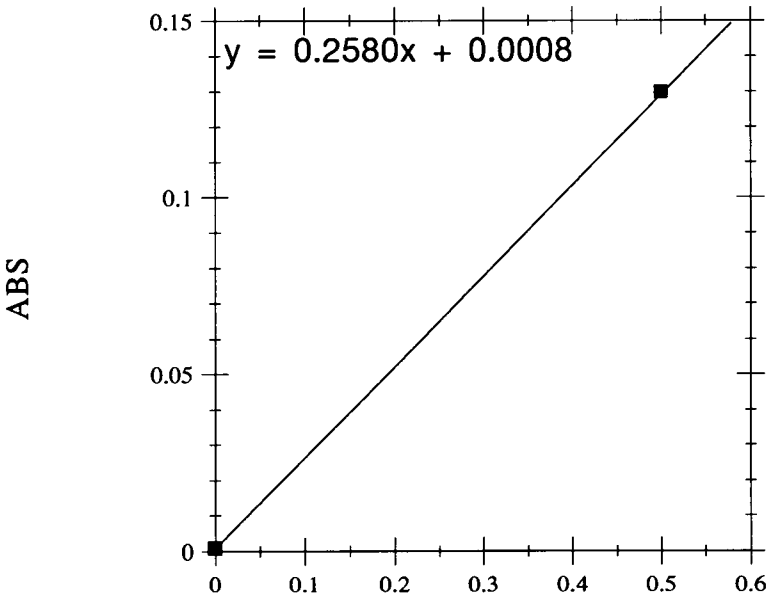
.00684 x 8/1.017 = .0538 ppm



.0178 x 2 = .0356

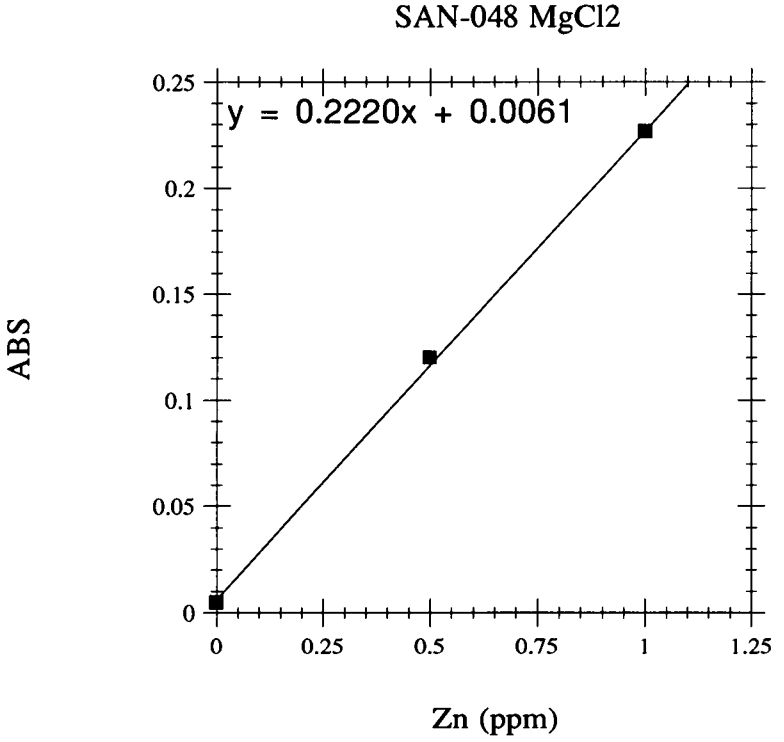
.0356 x 8 / 1.022 = .279 ppm

SAN-047 MgCl2

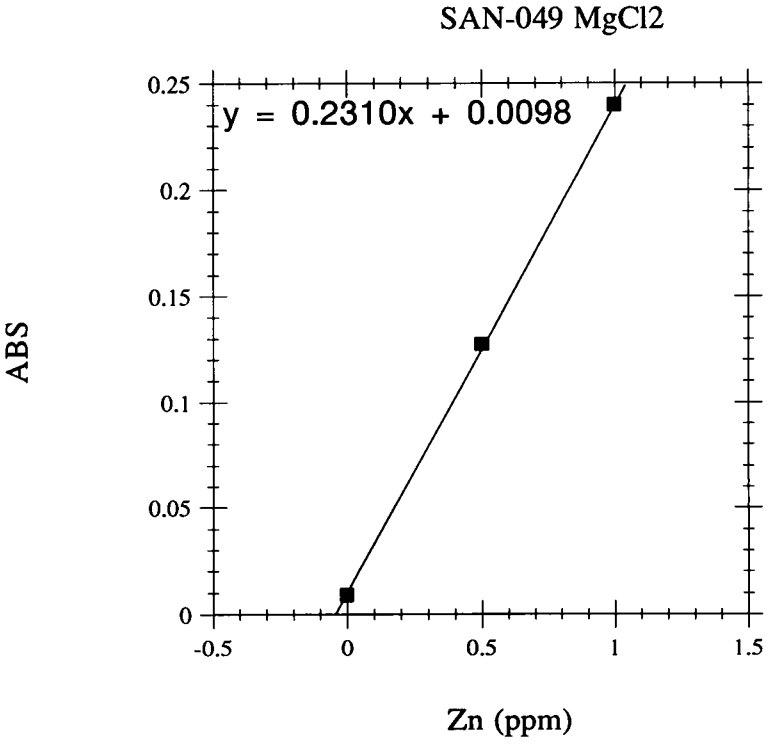


.0031 x 2 = .0062

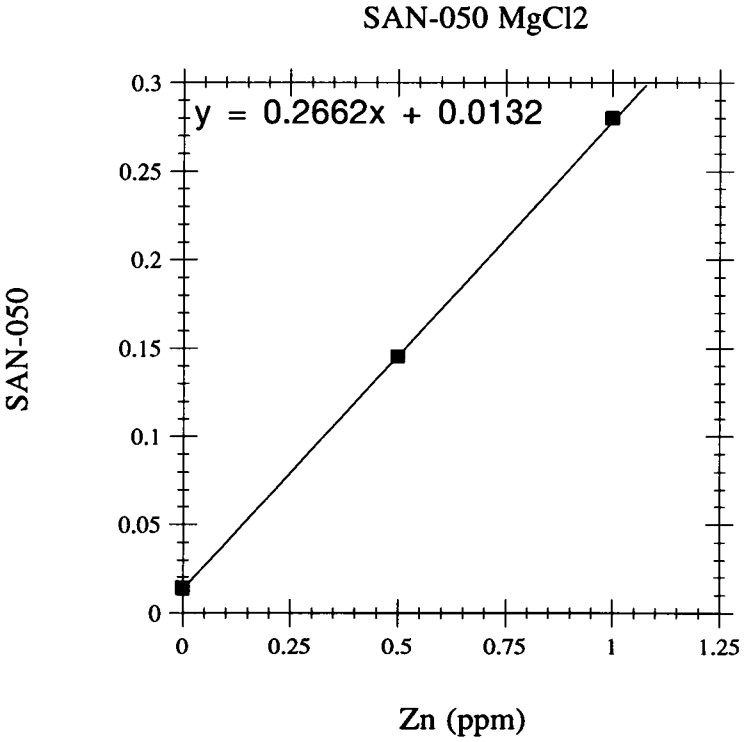
.0062 x 8/1.023 = .0485 ppm



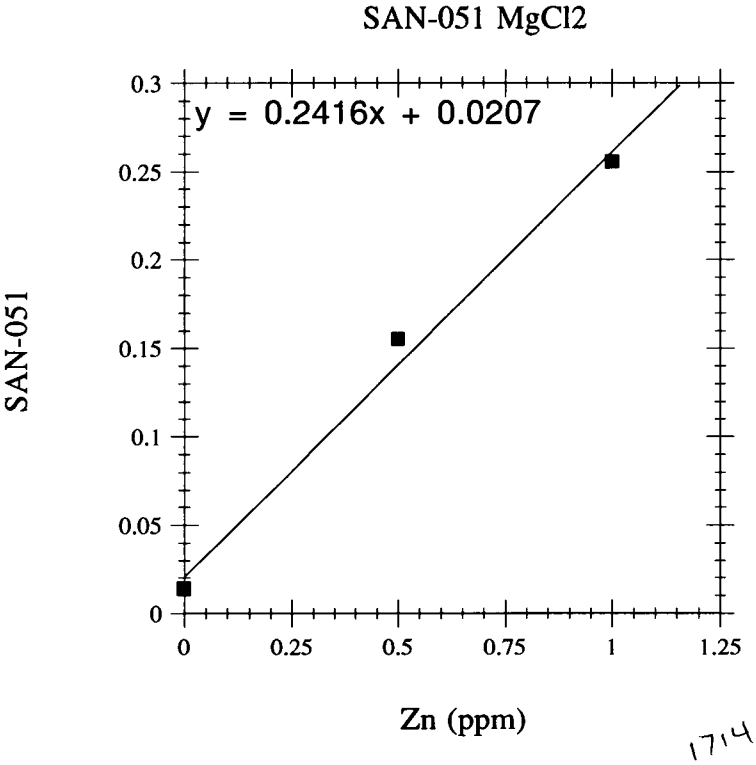
$.0275 \times 2 = .055 \times 8 / 1.022 = .43$ ppm



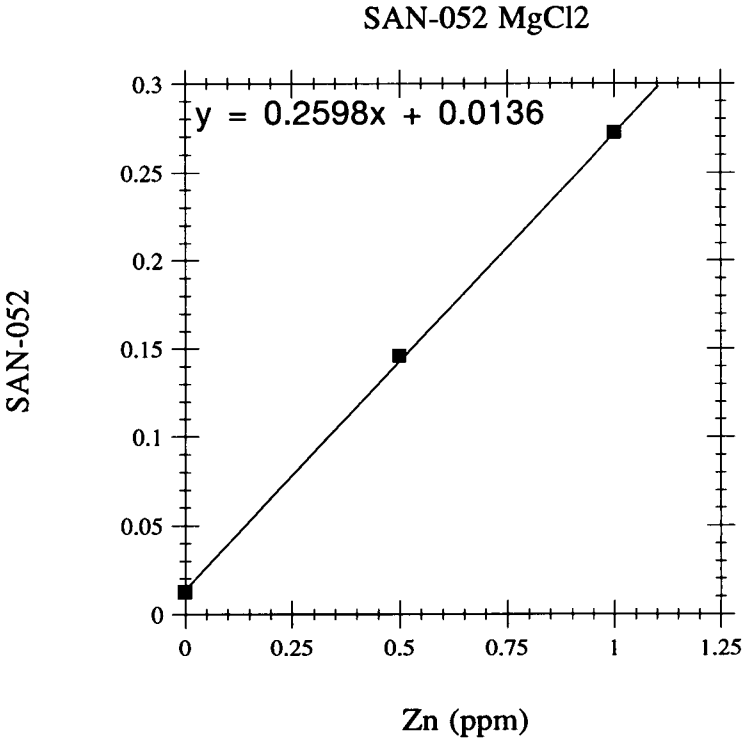
$.0424 \times 2 = .0848 \times \frac{8}{1.017} = .667$ ppm



$.0496 \times 2 = .0992 \times \frac{8}{1.016} = .781$ ppm

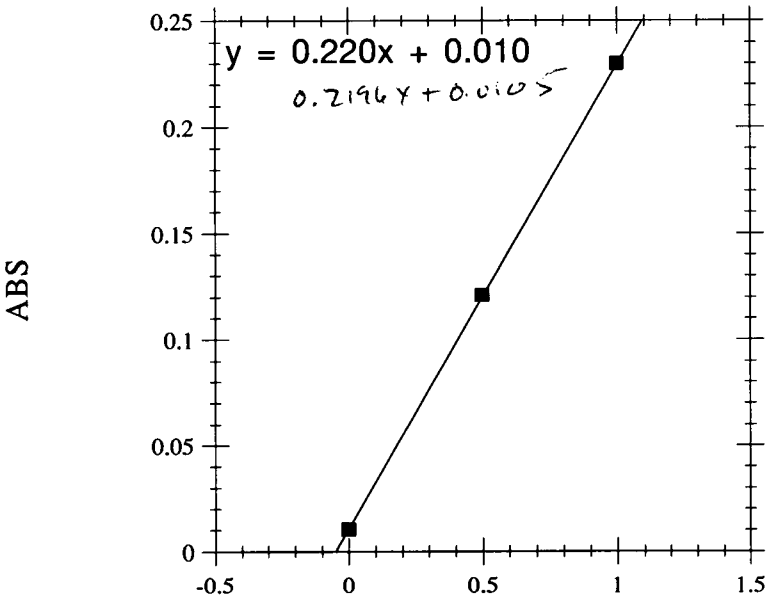


.0857 x 2 = .1714 x 8 / 1.017 = 1.348 ppm



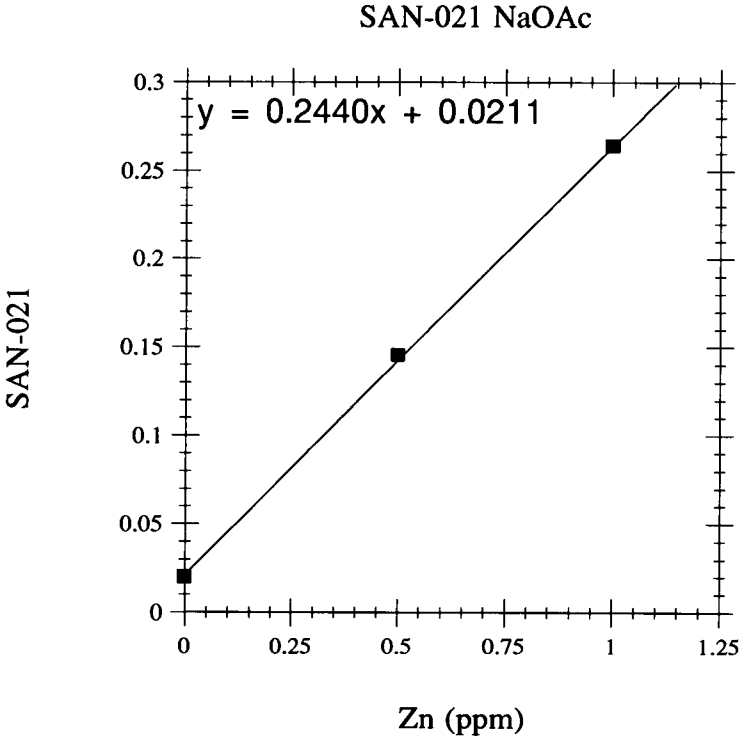
.0523x2 = .1046 x 8/1.02 = .820 ppm

SAN-053 MgCl2

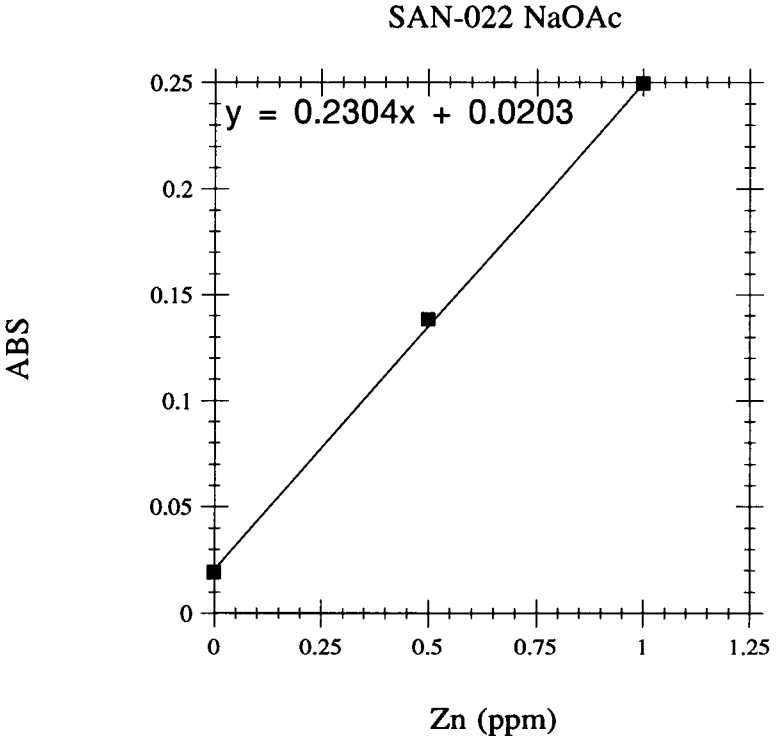


.0478 x 2 = .0956

$\frac{.0956 \times 8}{1.008} = .759 ppm$



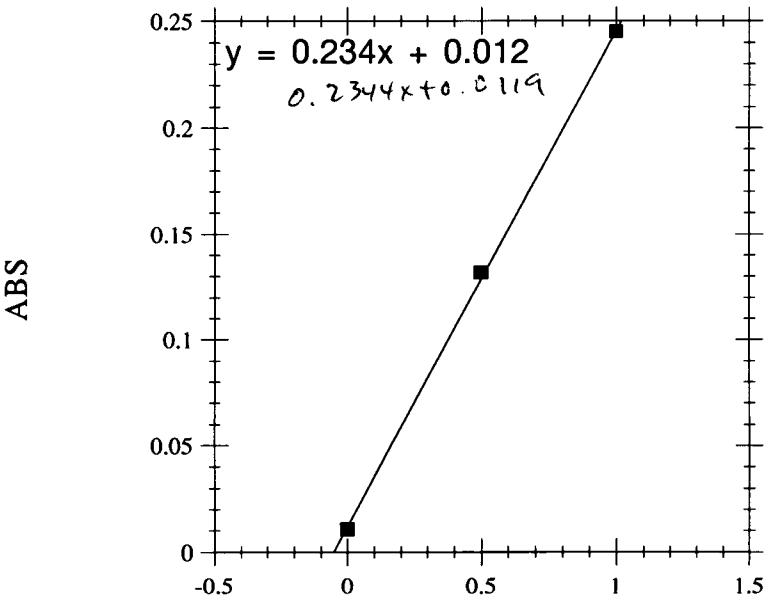
$.0865 \times 2 = .173 \times \frac{8}{1.016} = 1.362$ ppm



.0881 x 2 = .1762

.1762 x 8/1.022 = 1.379 ppm

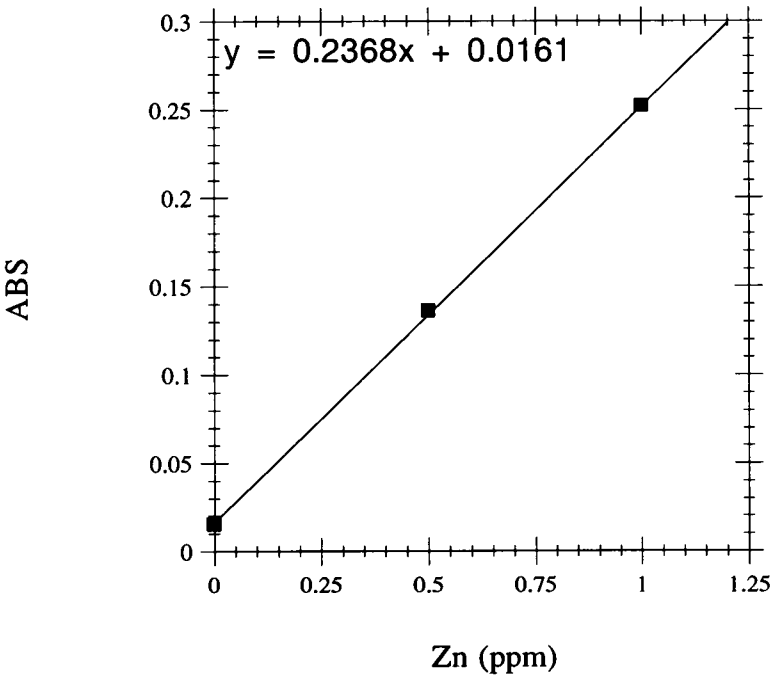
SAN-023 NaOAc



.0508 x 2 = .1016

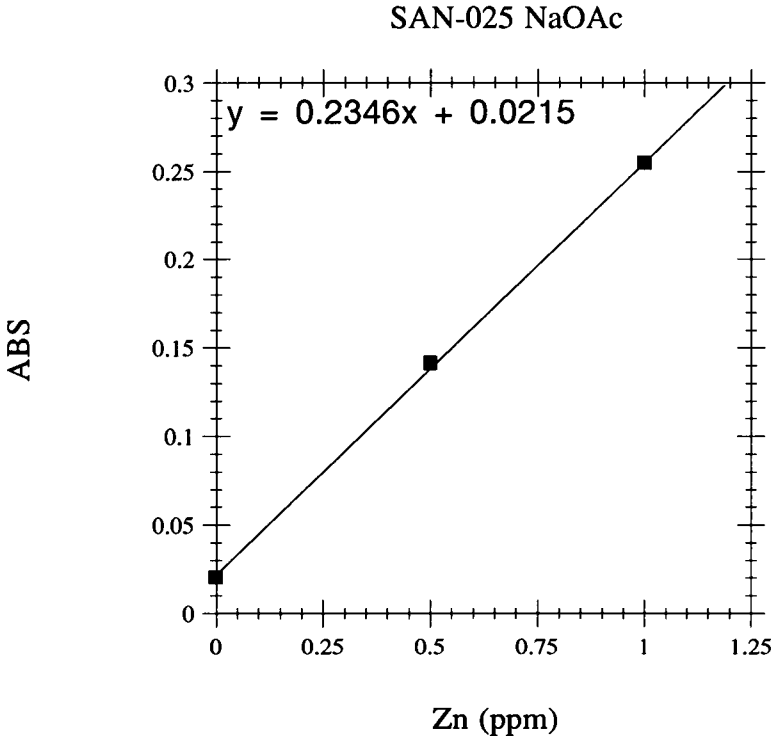
.1016 x 8/1.022 = ~~.775~~ .795 ppm

SAN-024 NaOAc

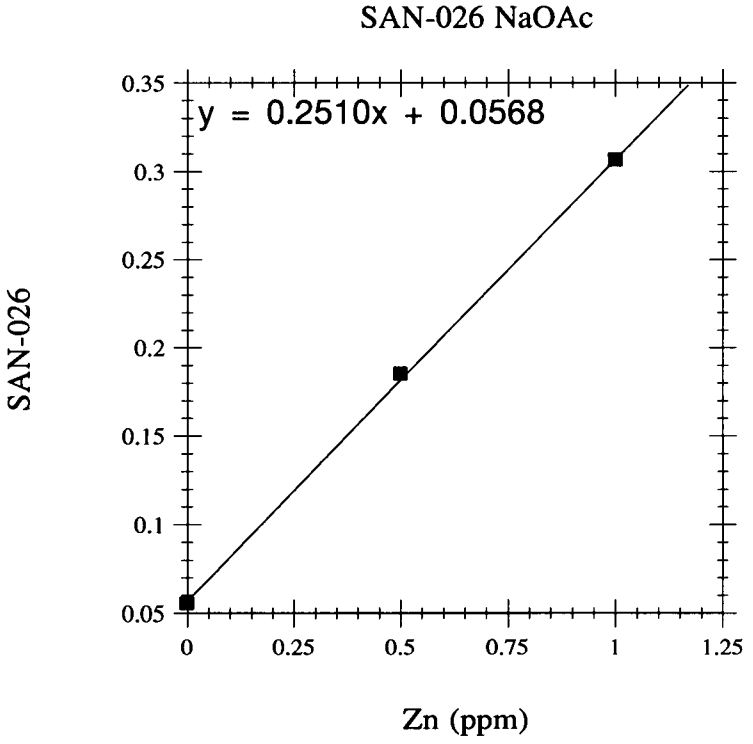


~~.0679~~ .068 x 2 = .136

.136 x 8/1.018 = 1.069 ppm

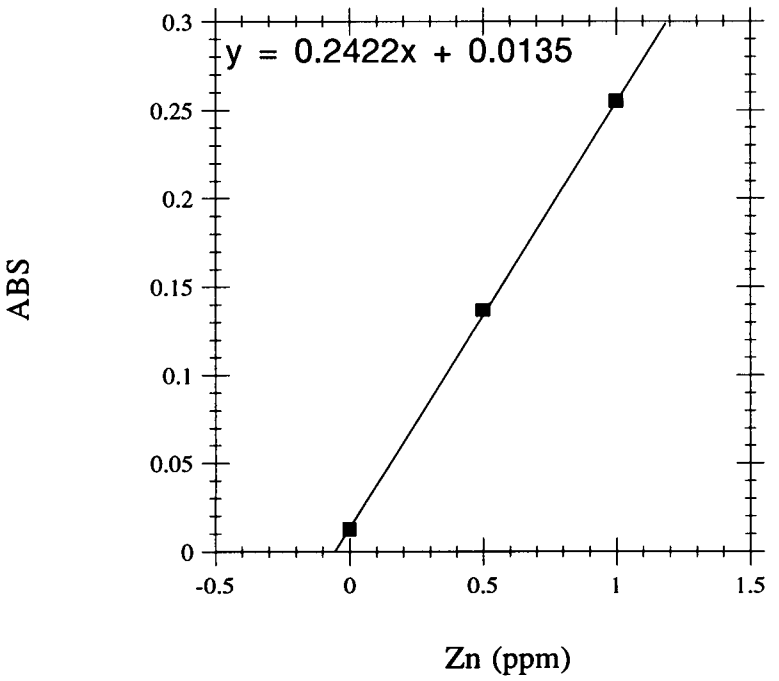


$.0916 \times 2 = .1832 \times \frac{8}{1.025} = 1.43 ppm$

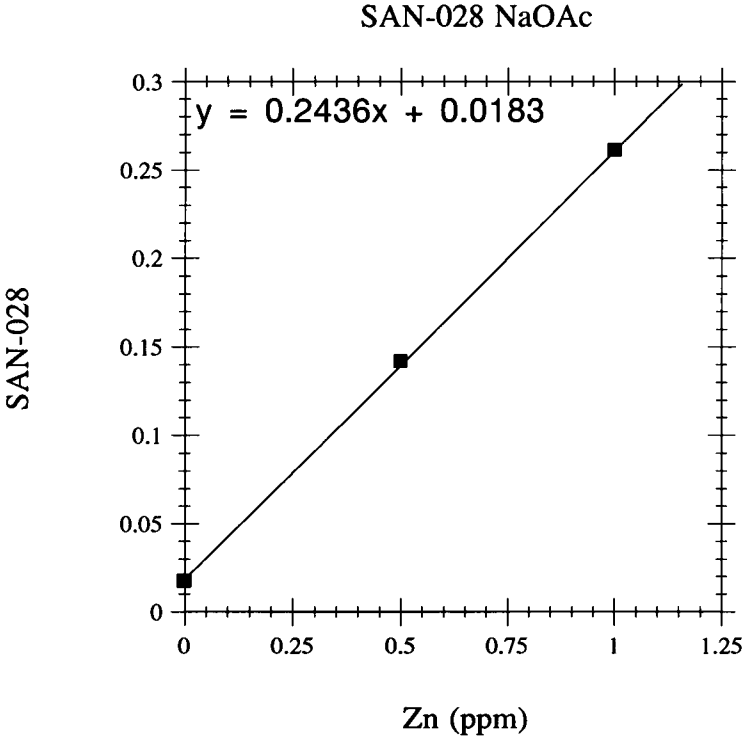


$.2263 \times 2 = .4526 \times \frac{8}{1.021} = 3.546$ ppm

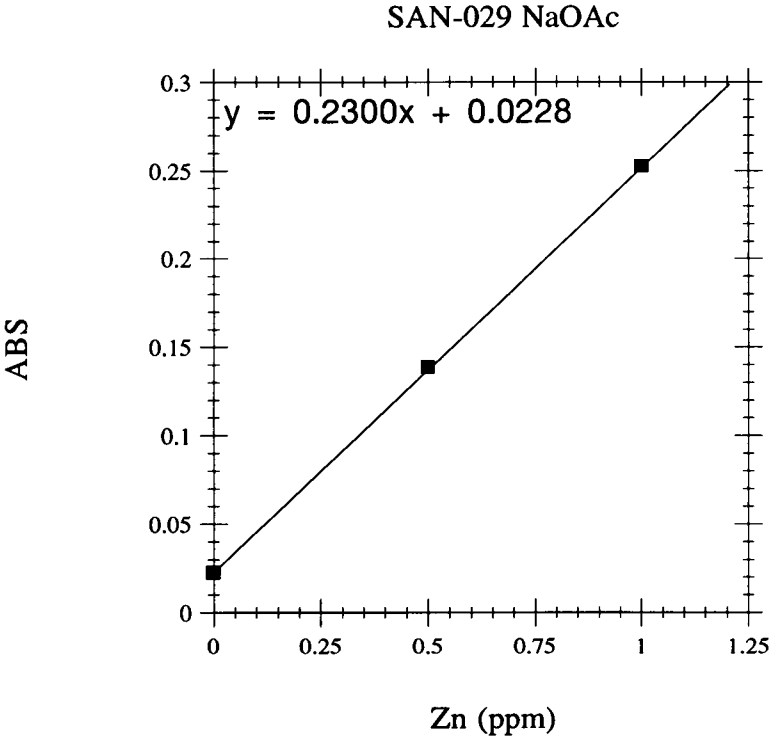
SAN-027 NaOAc



.0557 x 2 = .1114 x 8/1.013 = .879 ppm



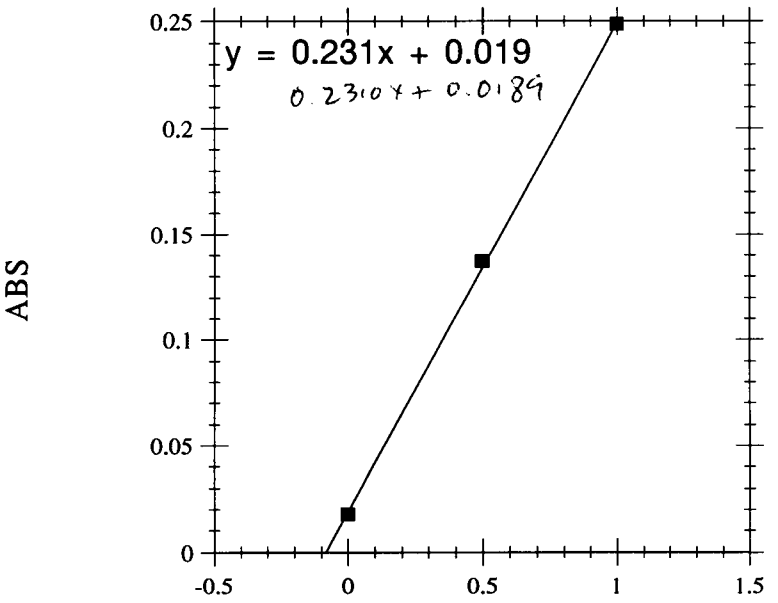
$.075142 = .1502 \times \frac{8}{1.023} = 1.175\ ppm$



.0991 x 2 = .1982

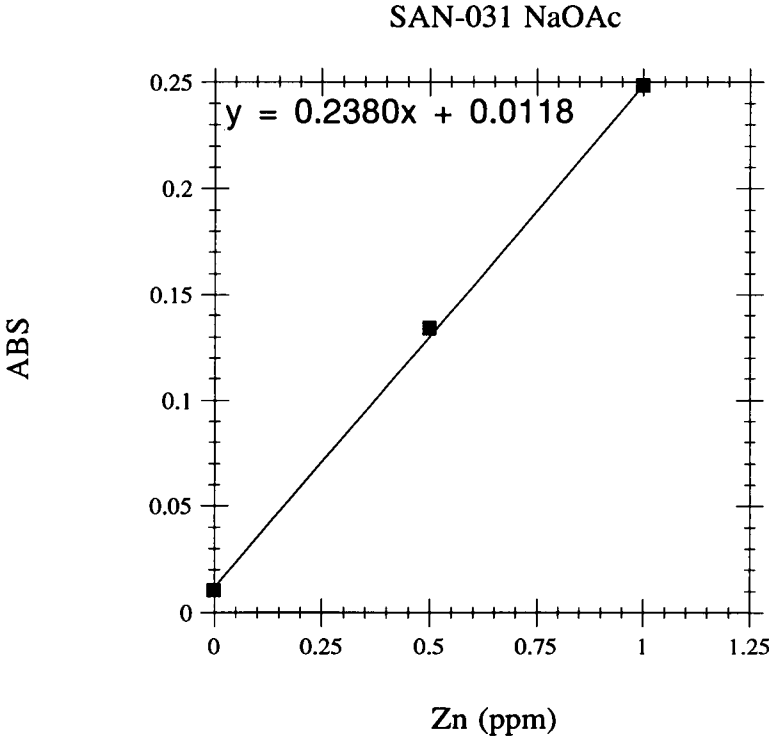
$.1982 + \frac{8}{1.02} = 1.554$ ppm

SAN-030 NaOAc



.0818 x 2 = .1636

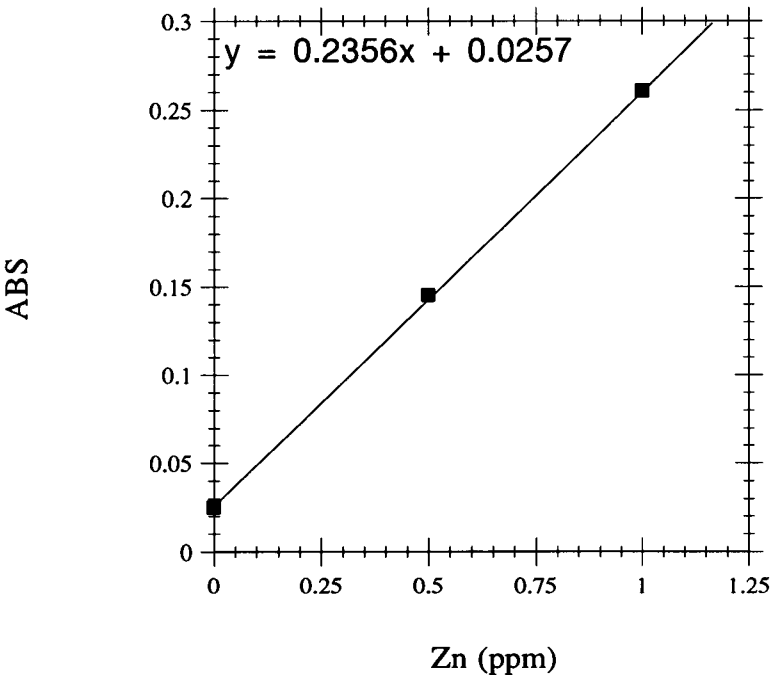
.1636 x 8/1.022 = 1.281 ppm



.0496 x 2 = .0992

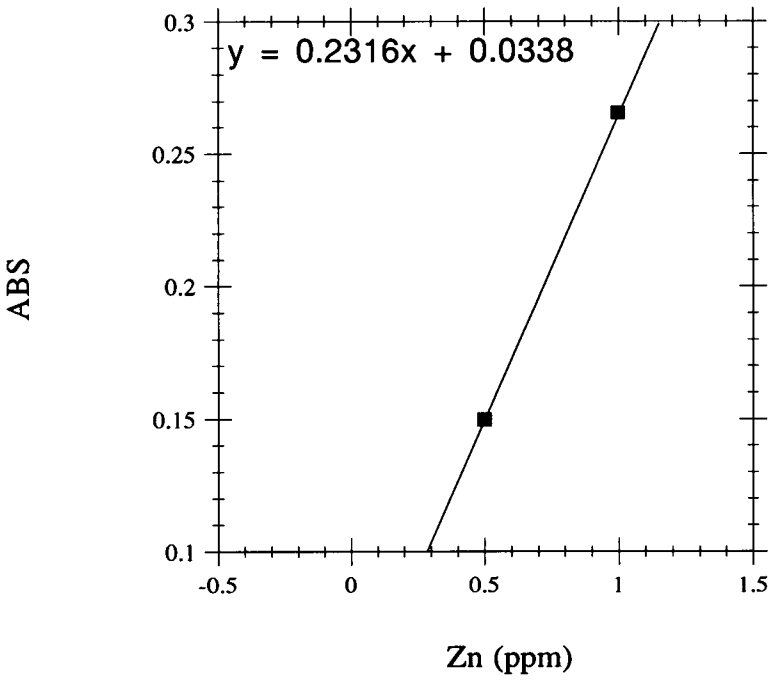
.0992 x 8/1.026 = .773 ppm

SAN-032 NaOAc



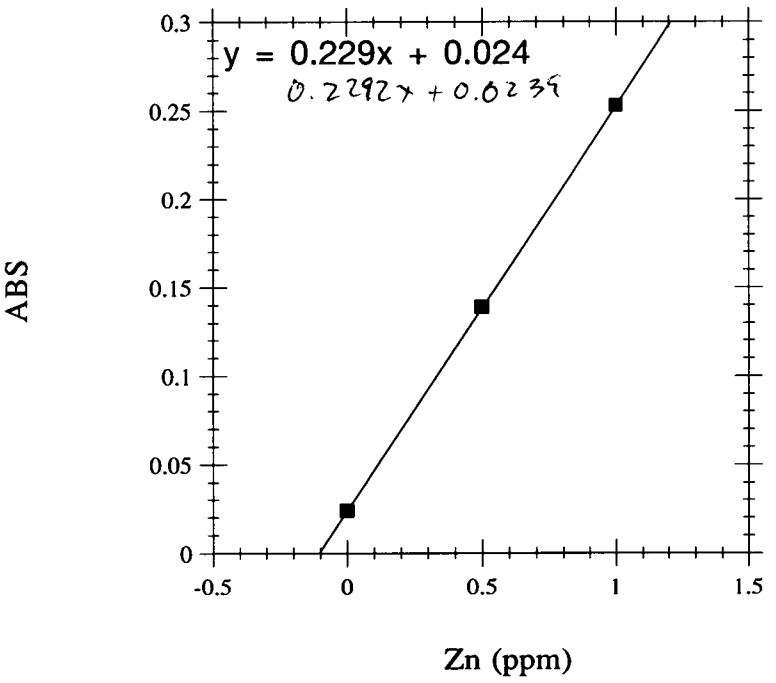
$.1091 \times 2 = .2182 \times \frac{8}{1.017} = 1.716\ ppm$

SAN-033 NaOAc



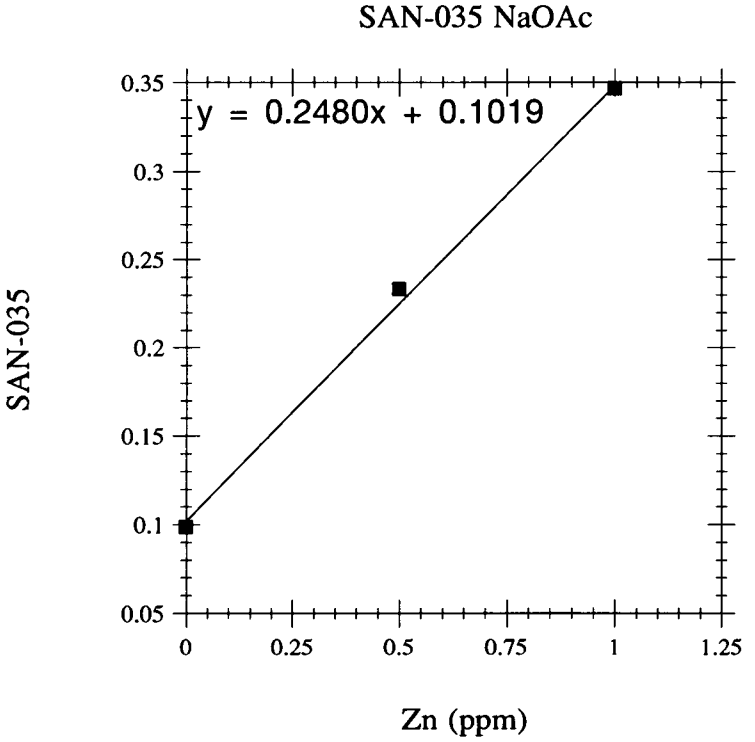
$.1459 \times 2 = .2918 \times \frac{8}{1.012} = 2.307 ppm$

SAN-034 NaOAc

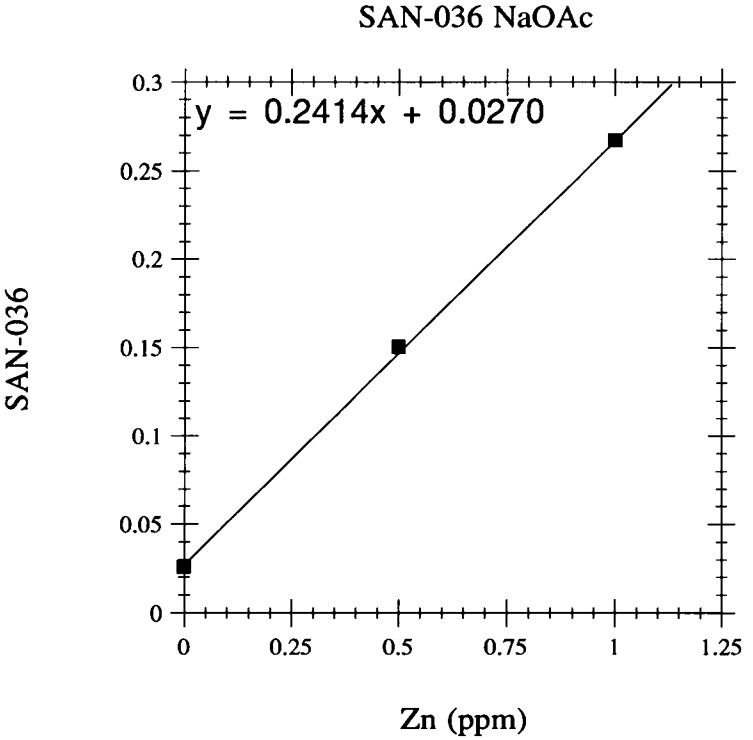


.1043 x 2 = .2086

$.2086 \times \frac{8}{1.009} = 1.654 ppm$

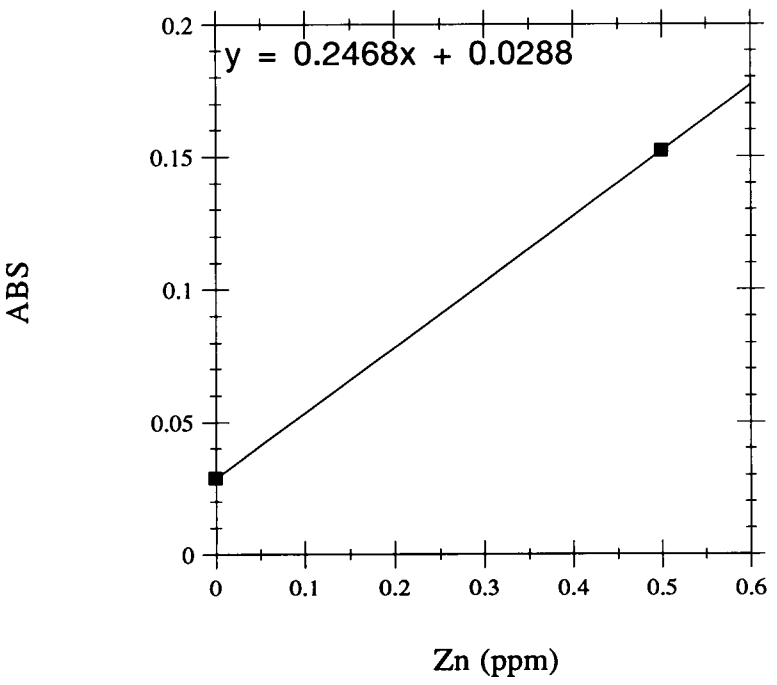


$.4109 \times 2 = .8218 \times \frac{8}{1.02} = 6.445$ ppm



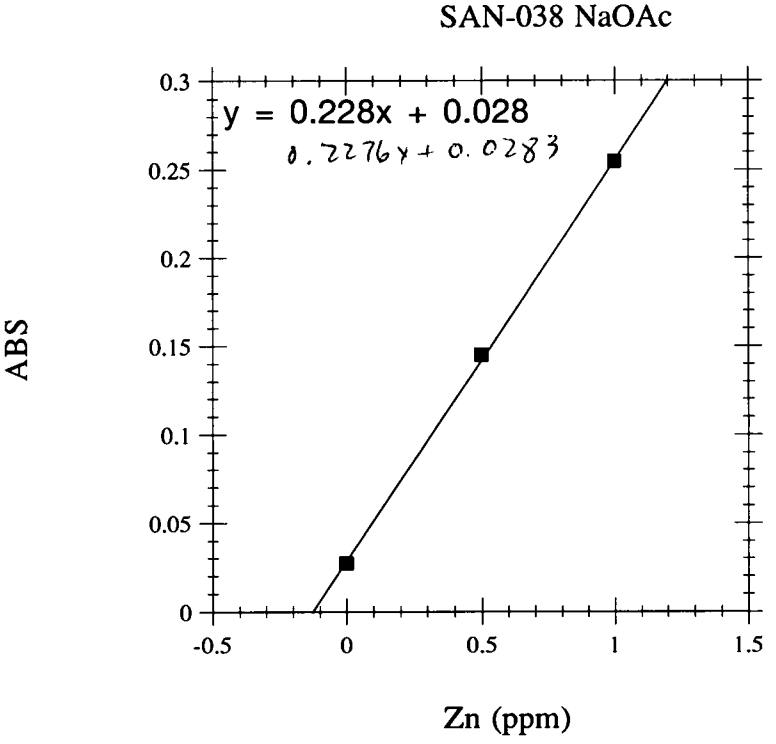
$.1118 \times 2 = .2236 \times \frac{8}{1.014} = 1.764\ ppm$

SAN-037 NaOAc



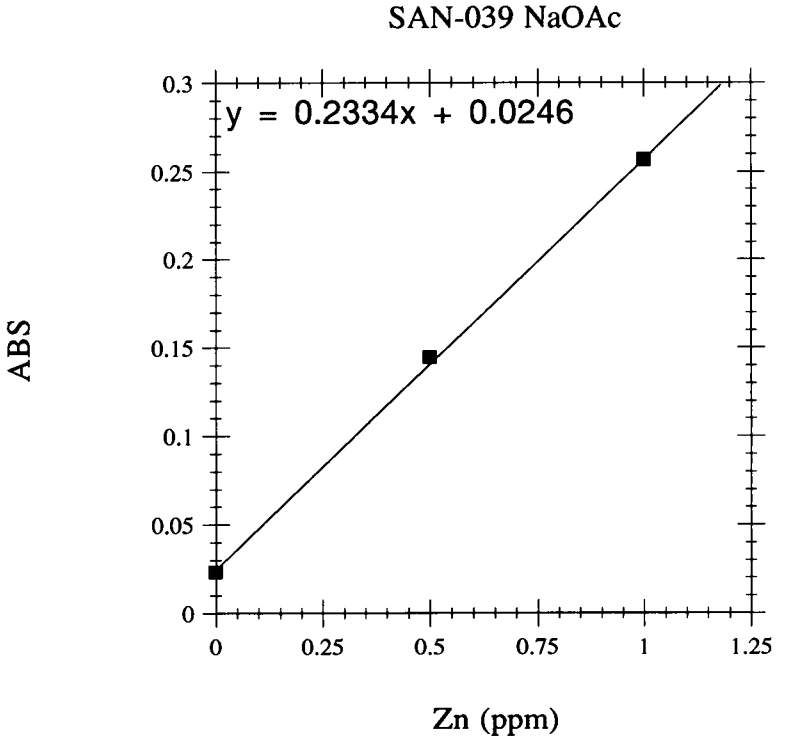
.1167 x 2 = .2334

$\frac{.2334 \times 8}{1.021} = 1.829$ ppm



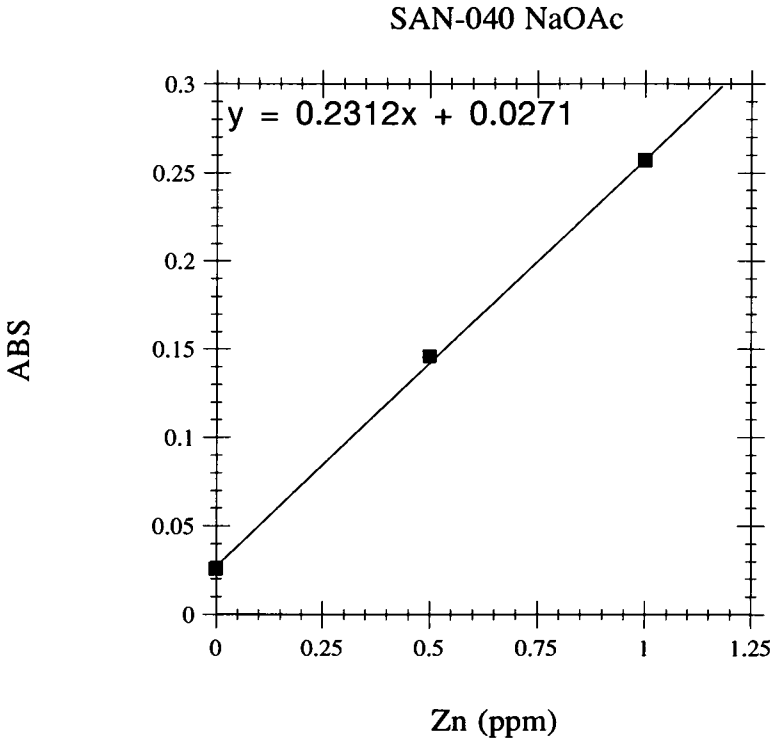
.1243 X 2 = .2486

$\frac{.2486 \times 8}{1.024} = 1.942 \text{ ppm}$



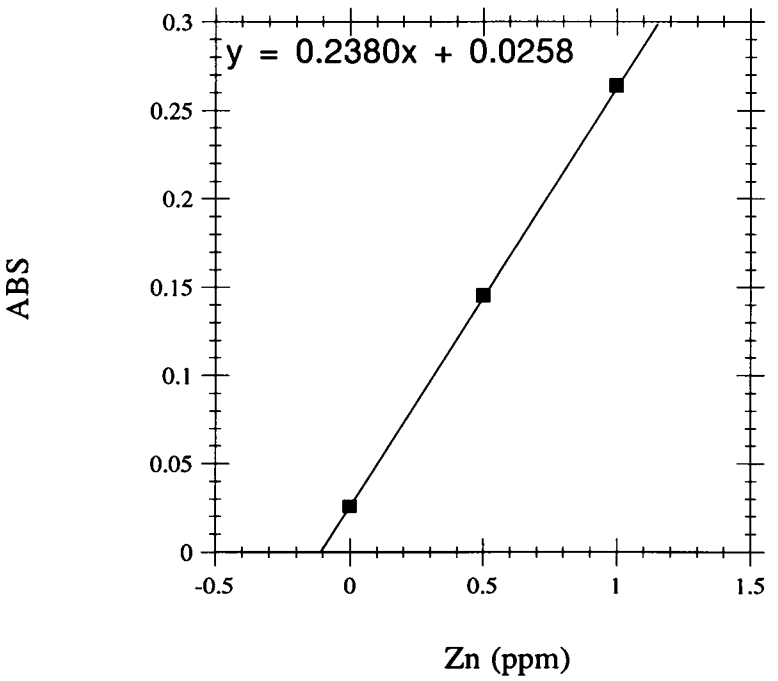
.1054 x 2 = .2108

.2108 x 8/1.018 = 1.656 ppm

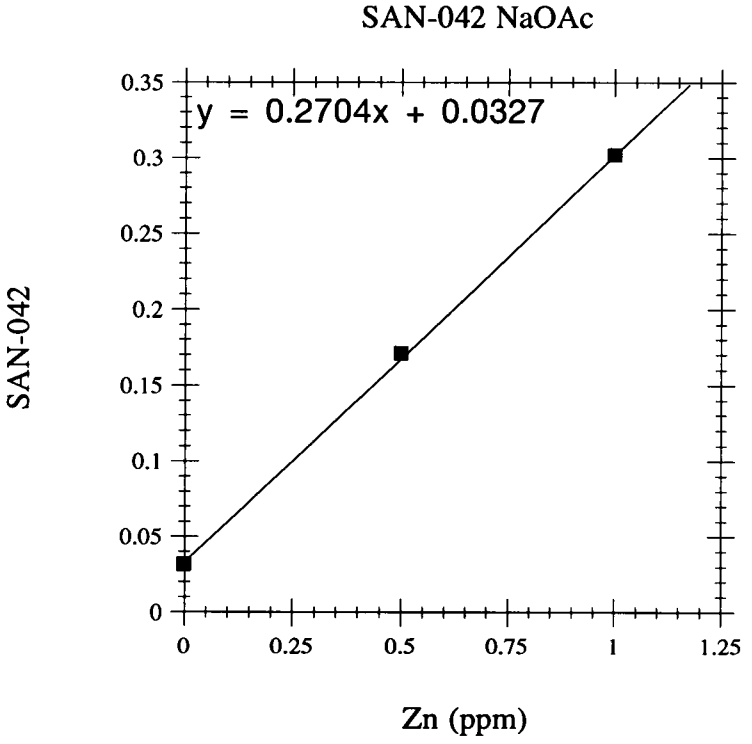


$.1172 \times 2 = .2344 \times \frac{8}{1.017} = 1.844\ ppm$

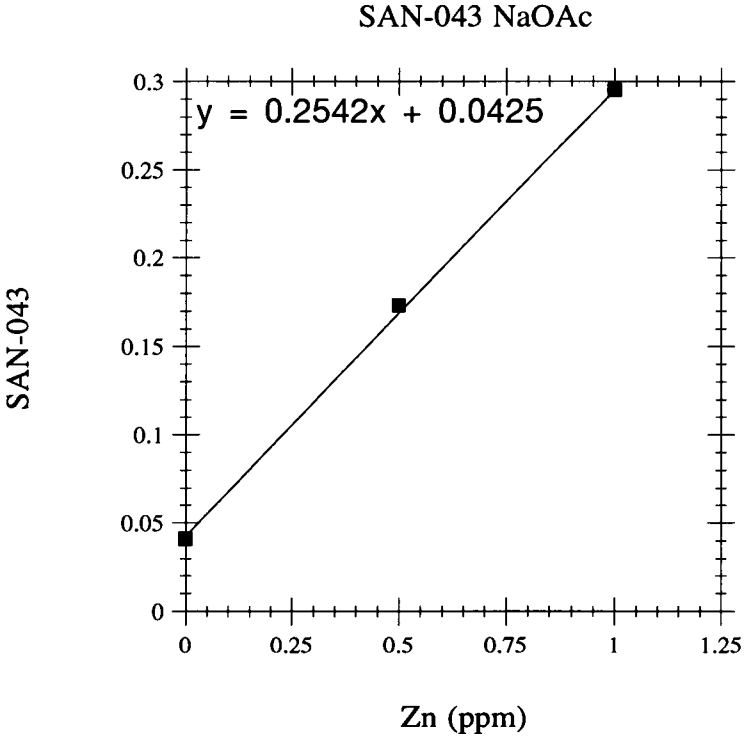
SAN-041 NaOAc



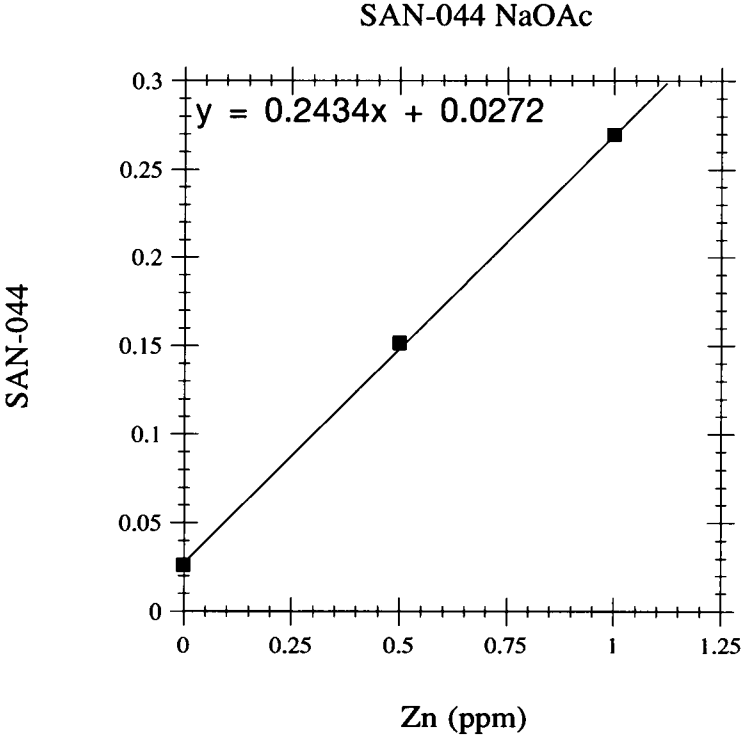
$.10847 = .2168 + \frac{8}{1.015} = 1.709\ ppm$



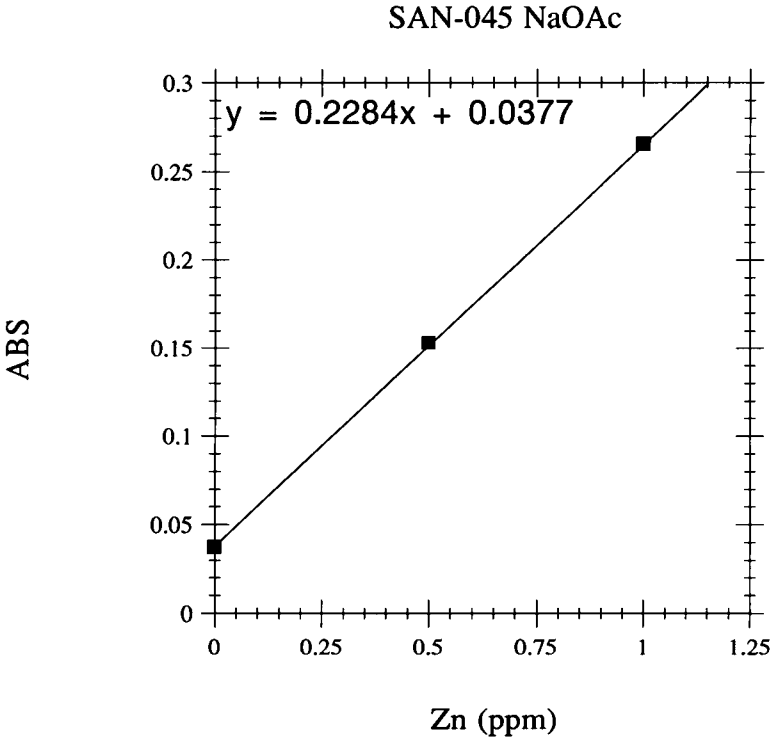
.1209 X 2 = .2418 X 8 / 1.012 = 1.911 ppm



$.1672 \times 2 = .3344 \times \frac{8}{1.022} = 2.618\ ppm$



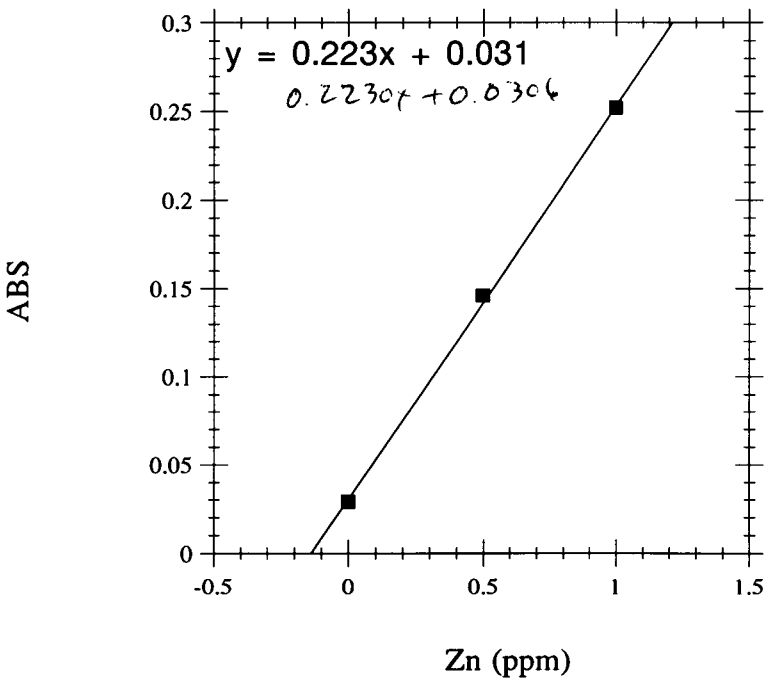
$.1118 \times 2 = .2236 \times \frac{8}{1.014} = 1.764\ ppm$



.1651 x 2 = .3302

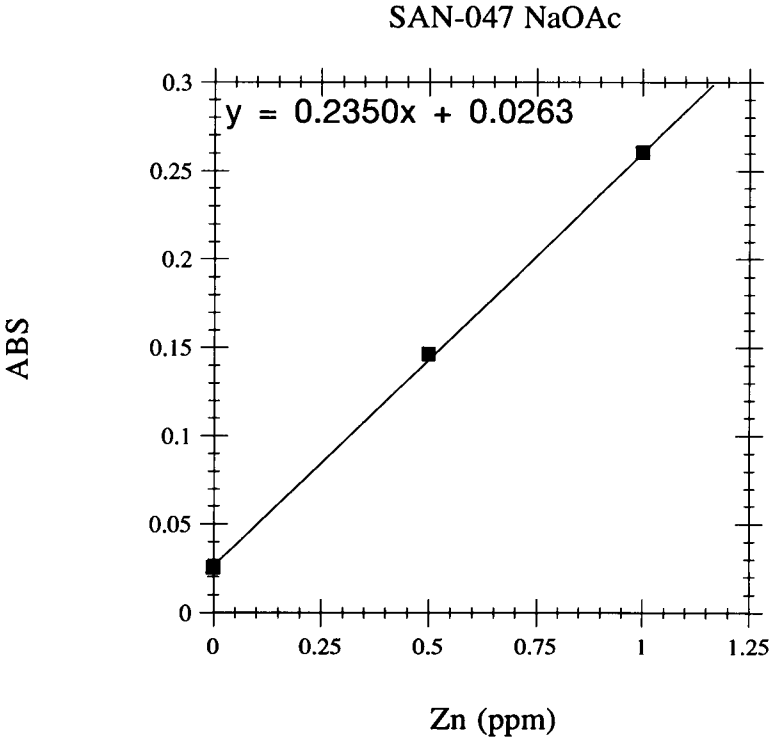
.3302 x 8/1.017 = 2.597 ppm

SAN-046 NaOAc



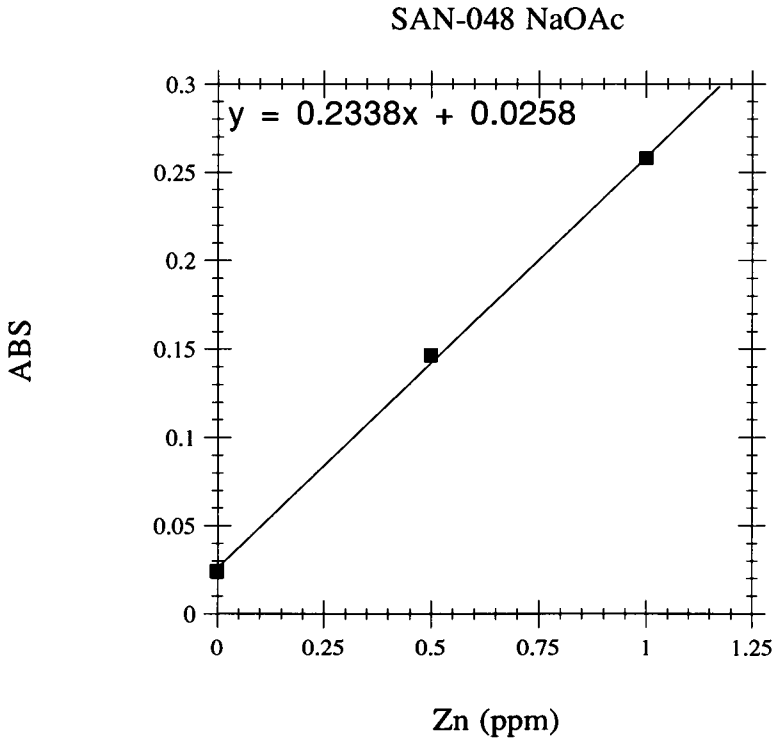
.1372 x 2 = .2744

$\frac{.2744 \times 8}{1.022} = 2.148 ppm$

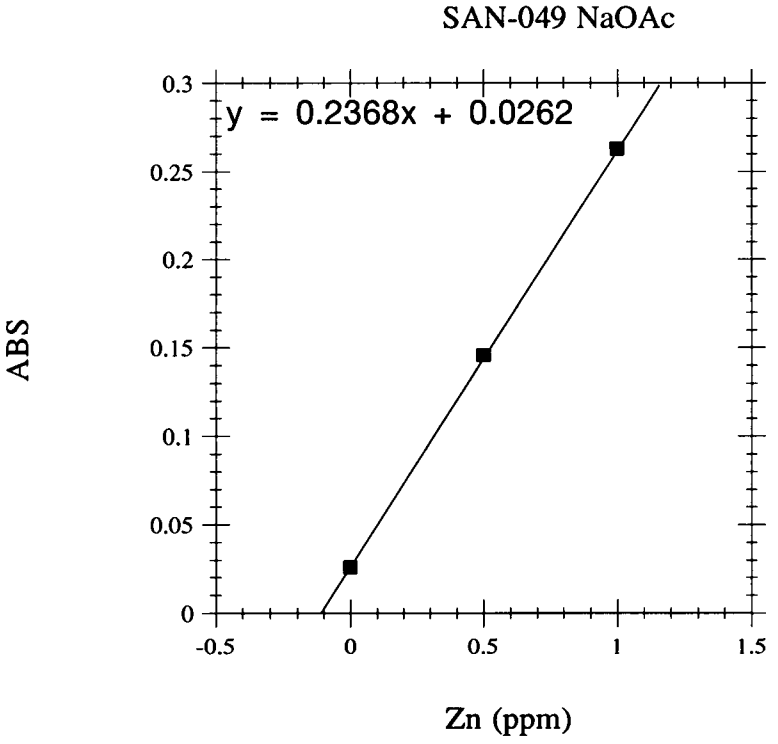


.1119 x 2 = .2238

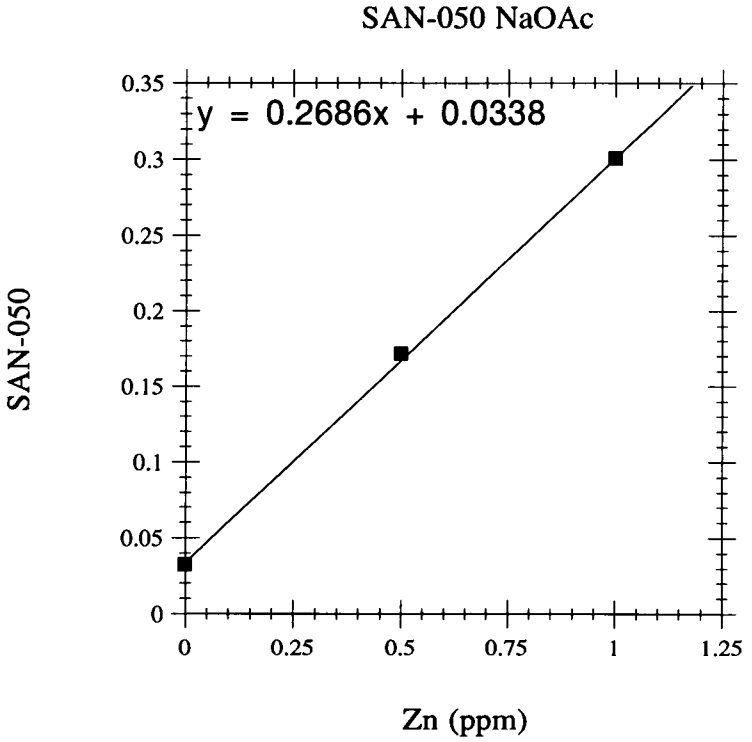
.2238 x 8 / 1.023 = 1.75 ppm



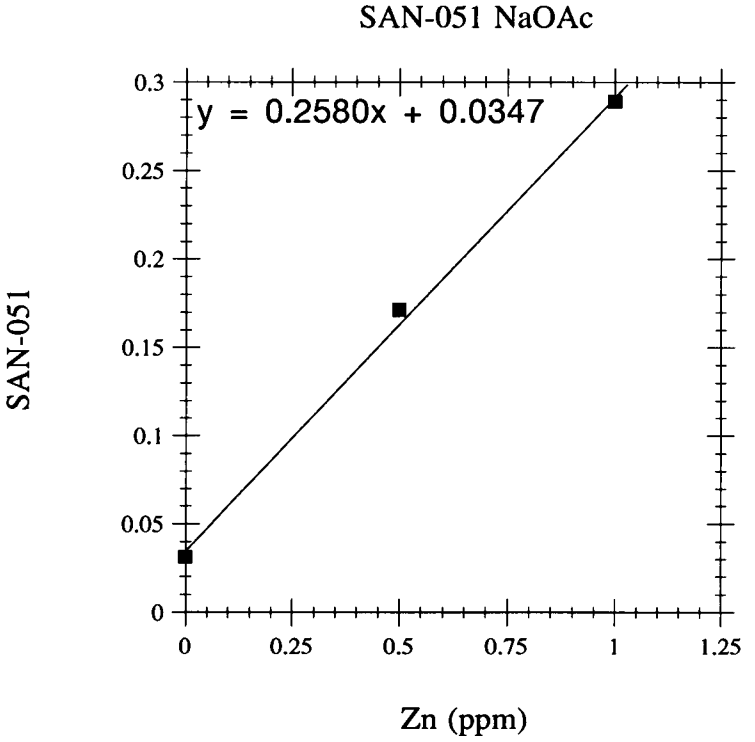
.1103×2 = .2206 × 8/1.022 = 1.727 ppm



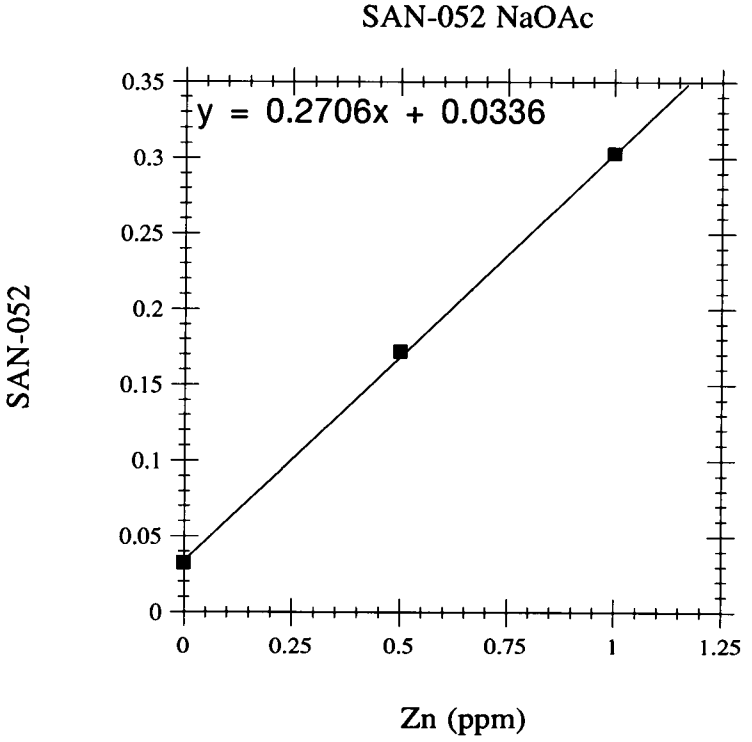
.1106 x 2 = .2212 x 8/1.017 = 1.740 ppm



.1258 x 2 = .2516 x 8 = 1.981 ppm
1.016

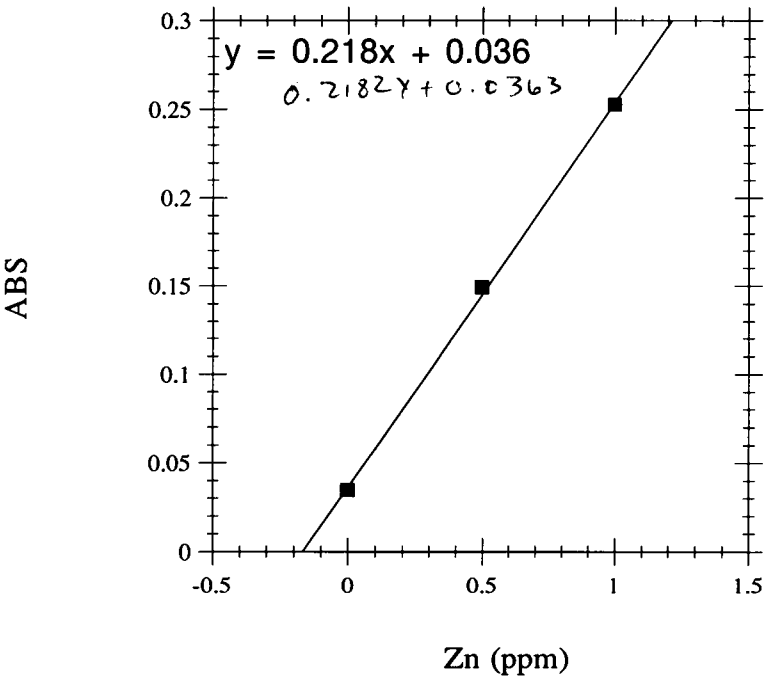


.1345 x 2 = .269 x 8/1.017 = 2.116 ppm



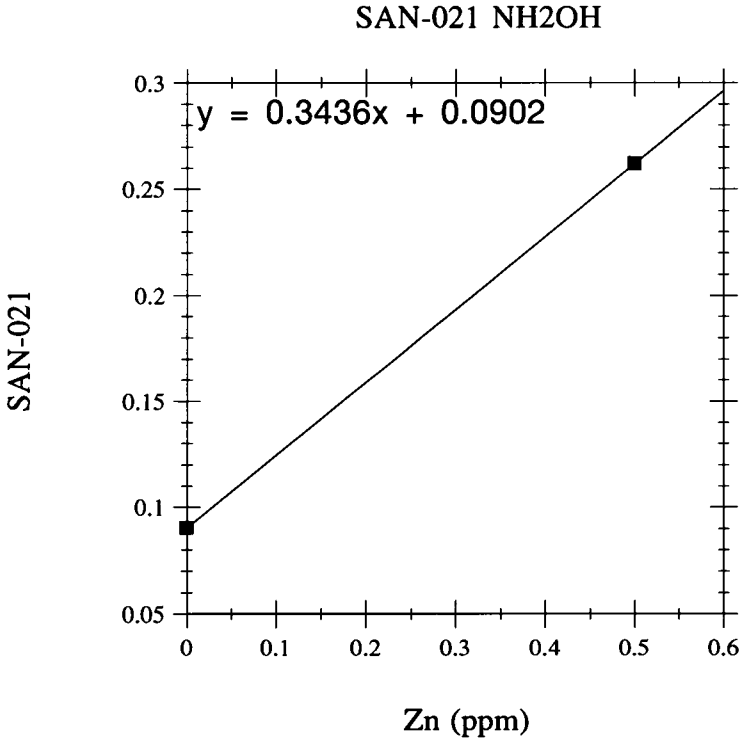
.1242 x2 = .248448 / 1.02 = 1.948 ppm

SAN-053 NaOAc



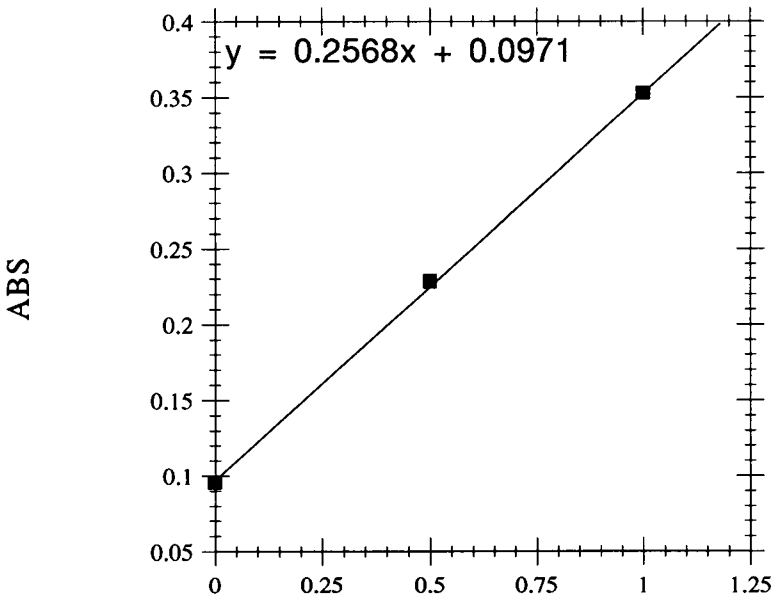
.1664 x 2 = .3328

$.3328 \times \frac{8}{1.008} = 2.641$ ppm



$.2625 \times 2 = .525 \times \frac{8}{1.016} = 4.134$ ppm

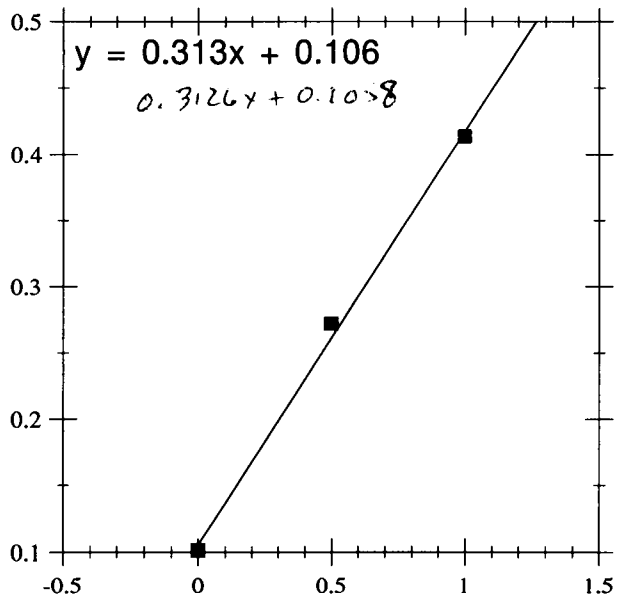
SAN-022 NH2OH



.3781 x 2 = .7562

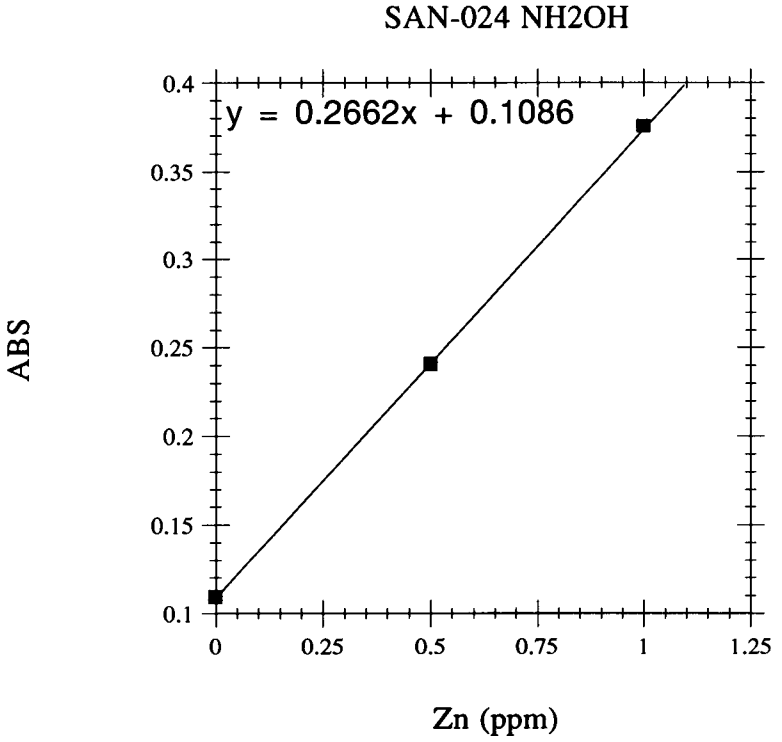
$\frac{.7562 + .8}{1.022} = 5.919$ ppm

SAN-023 NH2OH



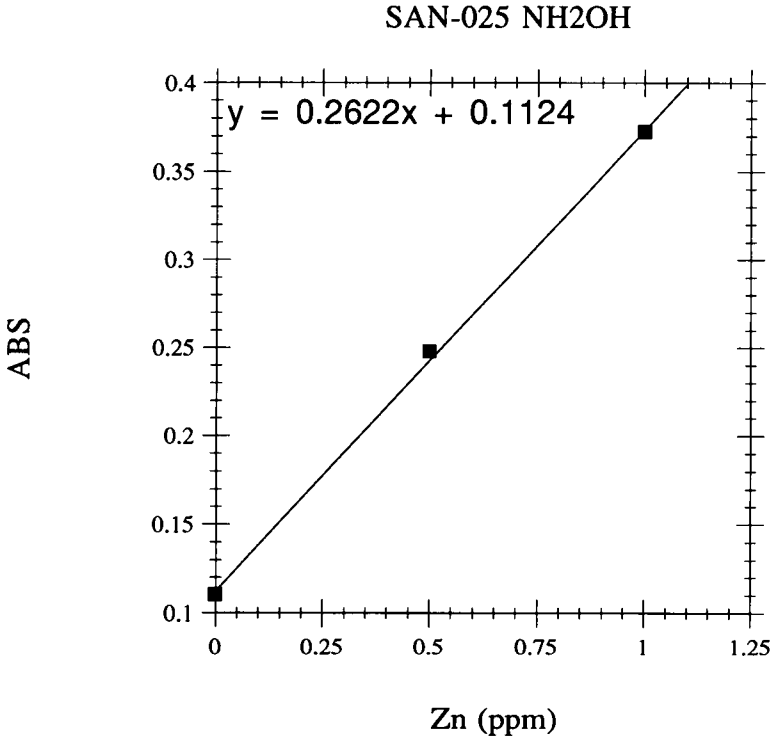
$.3384 \times 2 = .6768$

$.6768 \times \frac{8}{1.022} = 5.298\ ppm$

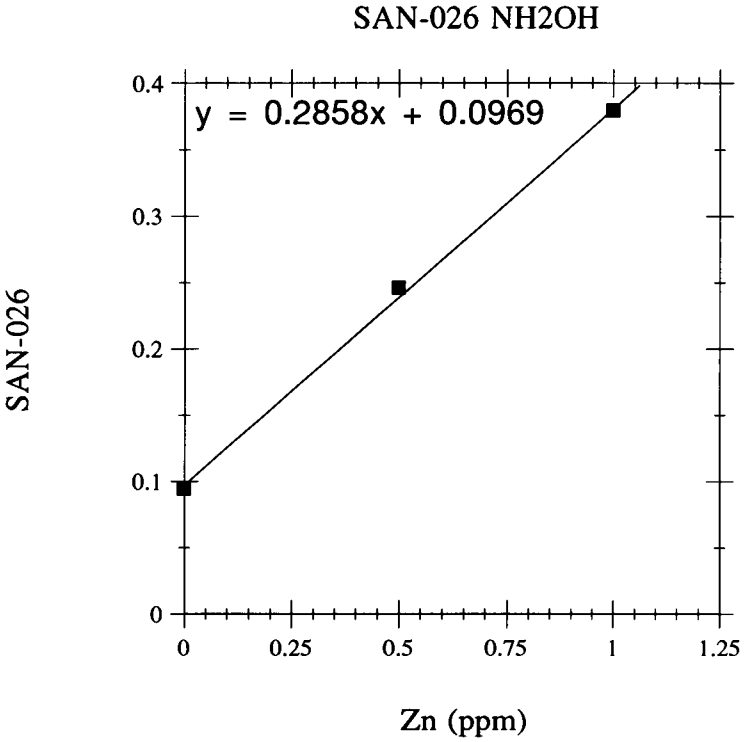


.408 x 2 = .816

.816 x 8/1.018 = 6.413 ppm

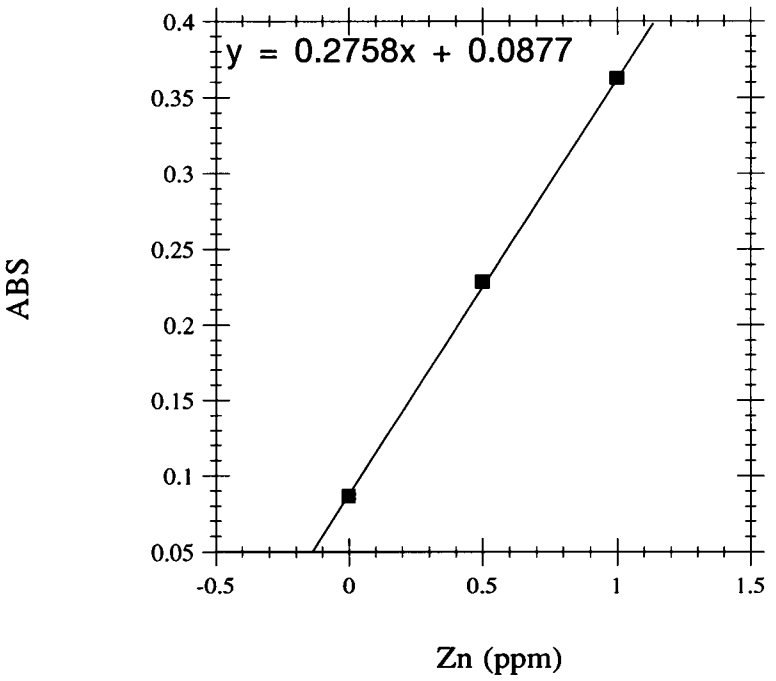


$.4287 \times 2 = .8574 + \frac{8}{1.025} = 6.692$ ppm

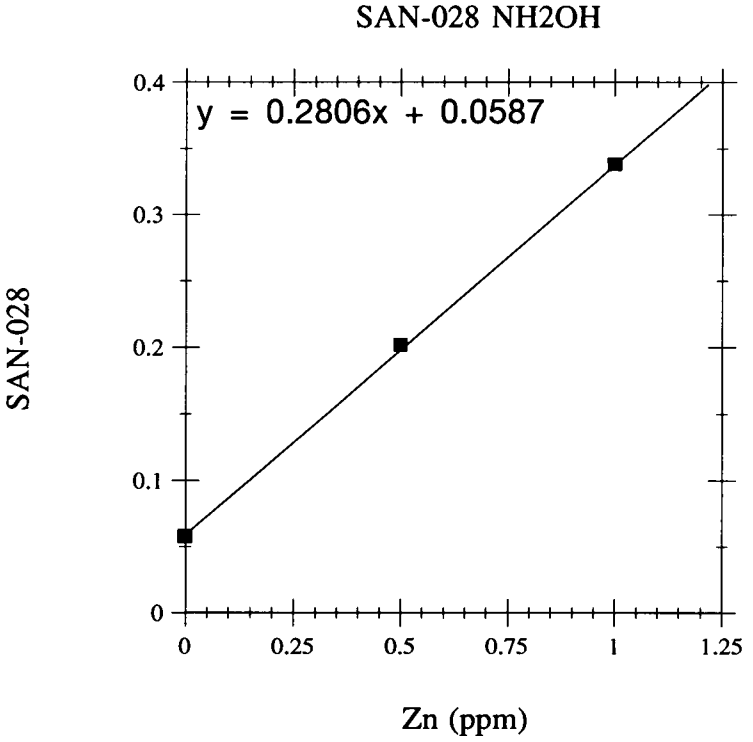


$.339 \times 2 = .678 \times \frac{8}{1.021} = 5.312$ ppm

SAN-027 NH2OH

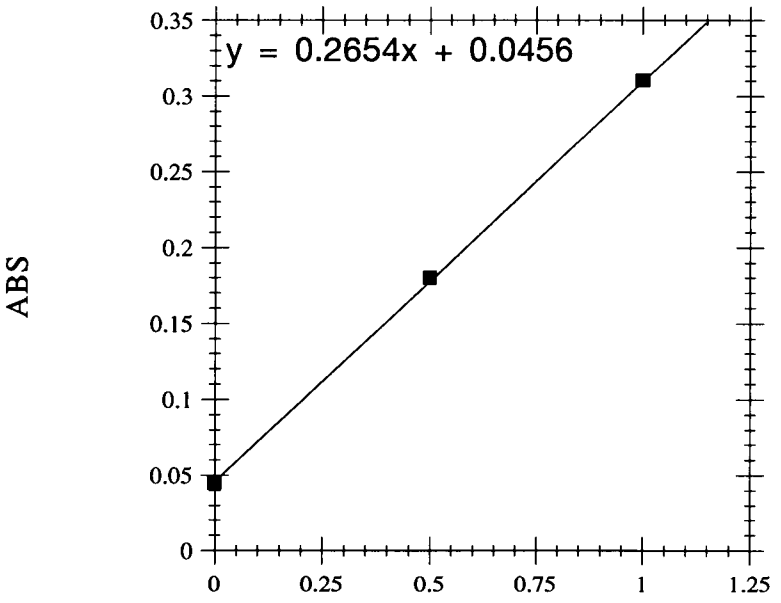


.3179 x 2 = .6358 x 8/1.013 = 5.021 ppm



$.2052 \times 2 = .4184 \times \frac{8}{1.023} = 3.272$ ppm

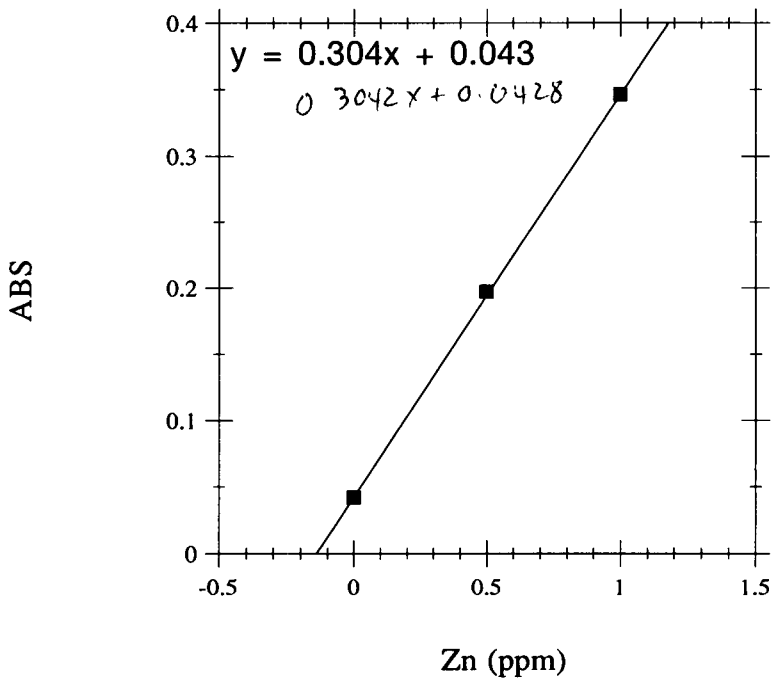
SAN-029 NH2OH



.1718 x 2 = .3436

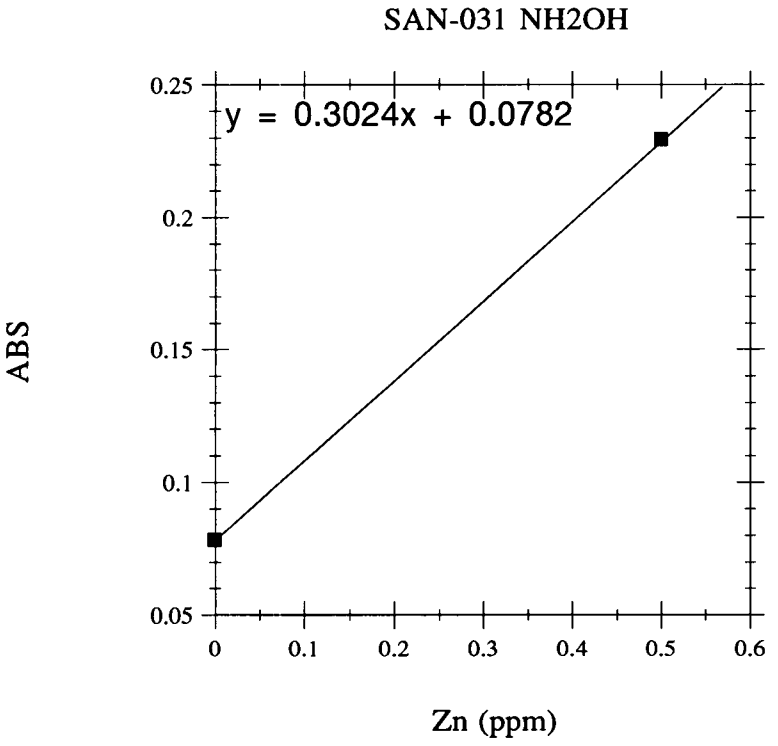
$.3436 \times \frac{8}{1.02} = 2.695\ ppm$

SAN-030 NH2OH



.1407 x 2 = .2814

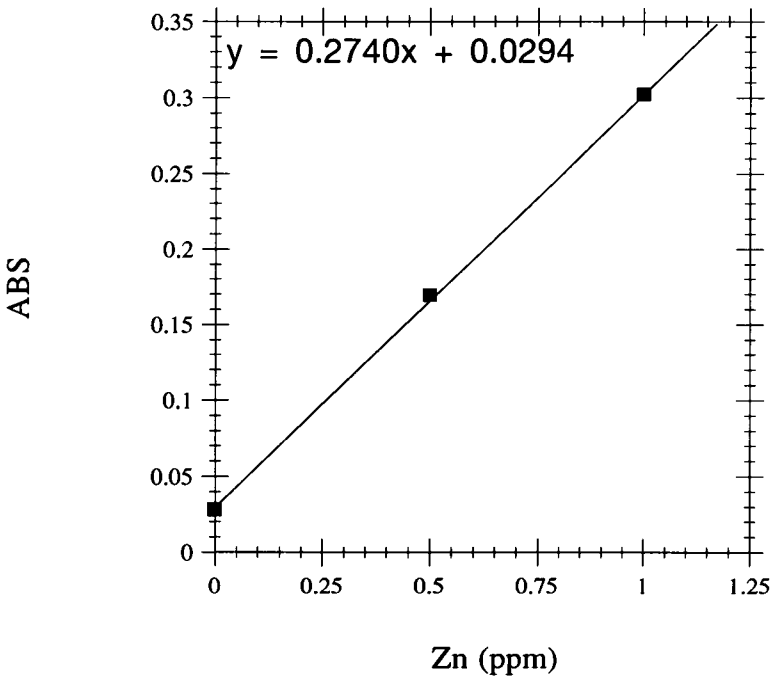
$\frac{.2814 \times 8}{1.022} = 2.203$ ppm



.2586 x 2 = .5172

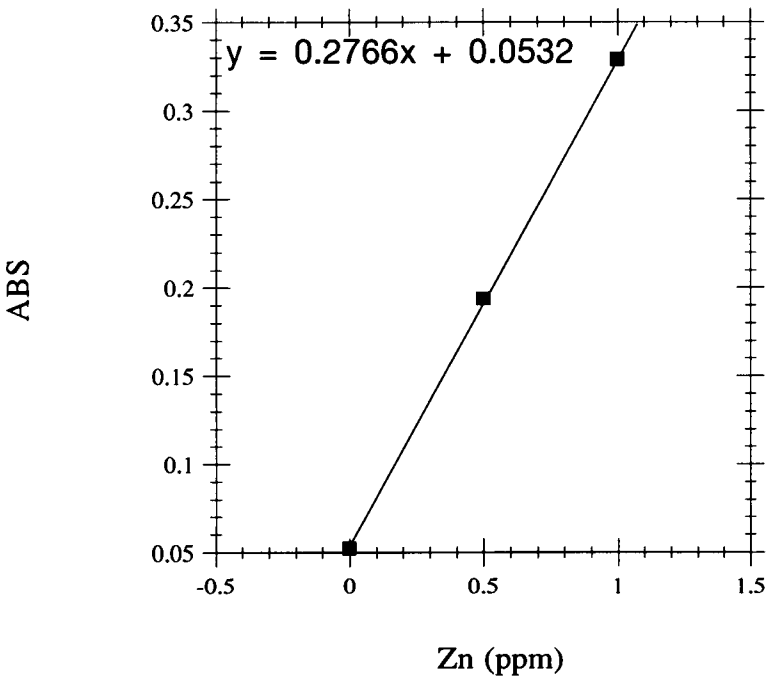
$.5172 + \frac{8}{1.026} = 4.033$ ppm

SAN-032 NH2OH



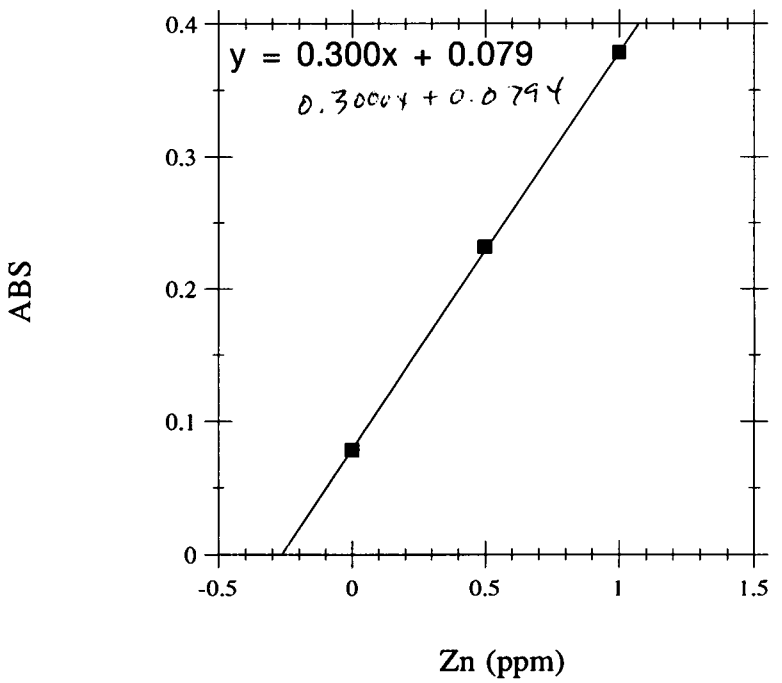
$.1073 \times 2 = .2146 \times \frac{8}{1.017} = 1.688\ ppm$

SAN-033 NH2OH



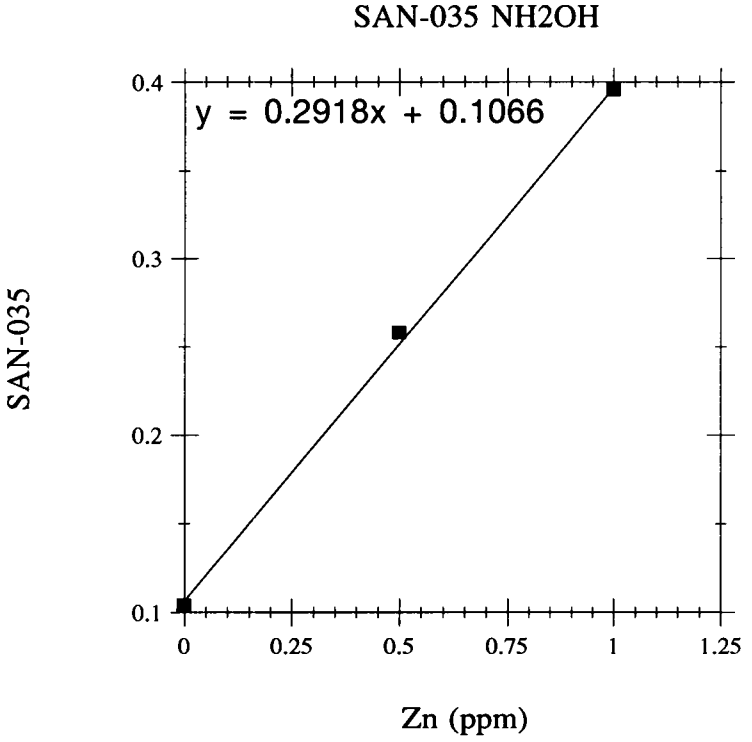
$.1923 \times 2 = \frac{.3846 + 8}{1.012} = 3.04$ ppm

SAN-034 NH2OH

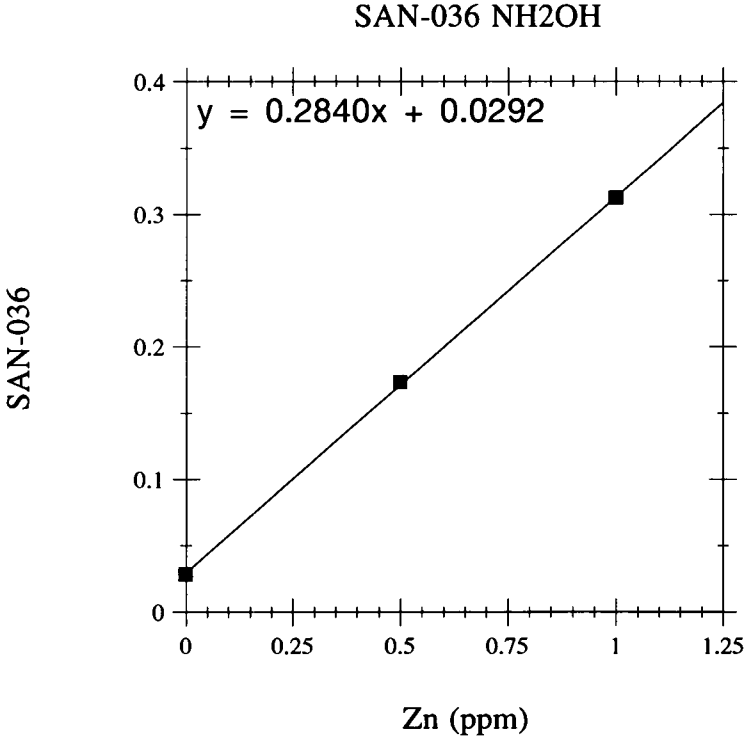


.2647 x 2 = .5294

$.5294 \times \frac{8}{1.009} = 4.197\ ppm$

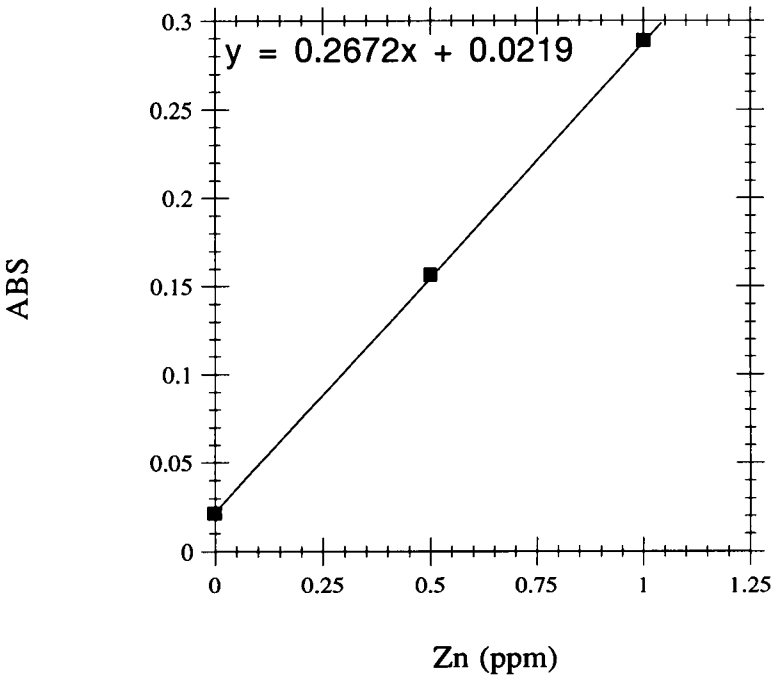


$.3653 \times 2 = .7306 \times \frac{8}{1.02} = 5.73 ppm$



.1028 x 2 = .2056 x 8/1.014 = 1.622 ppm

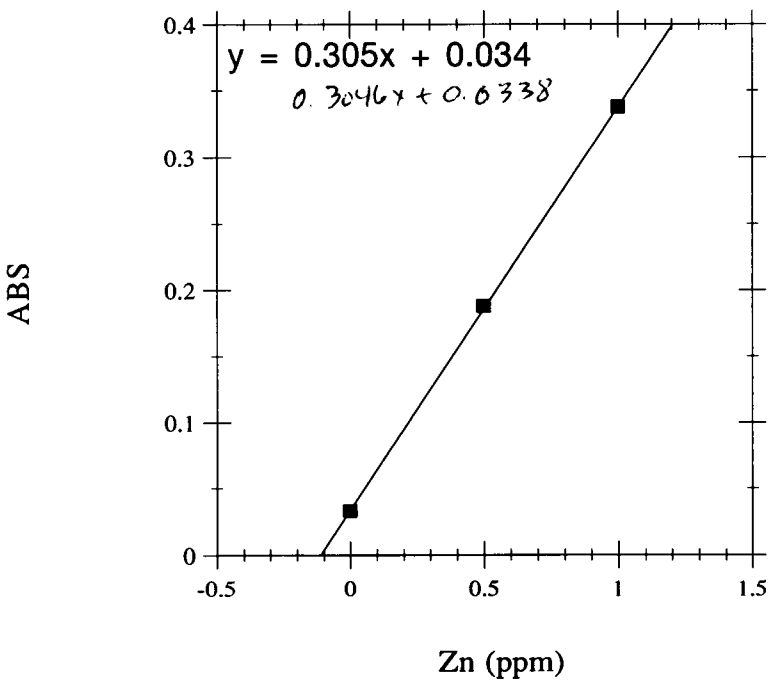
SAN-037 NH2OH



.0819 x 2 = .1638

$\frac{.1638 \times 8}{1.021} = 1.283 ppm$

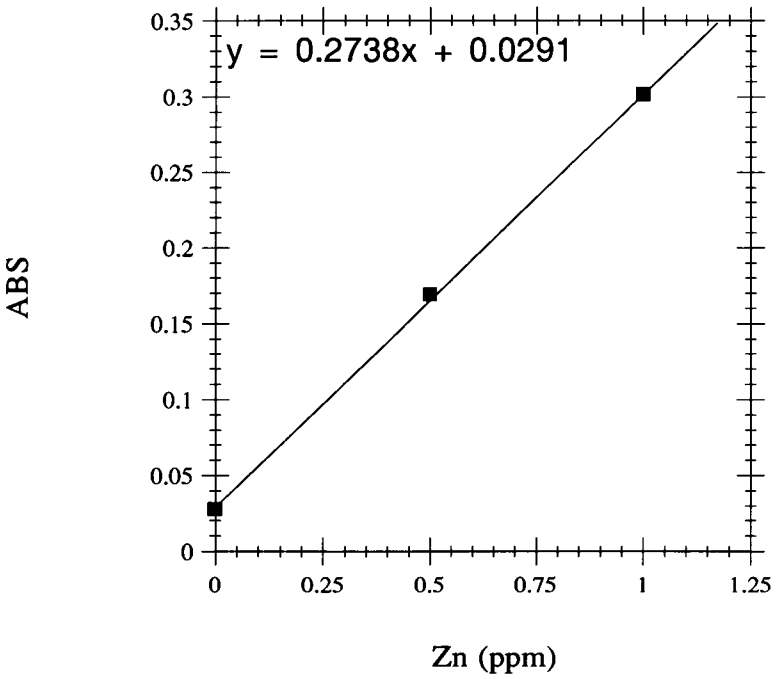
SAN-038 NH2OH



.1109 x 2 = .2218

.2218 x 8/1.024 = 1.733 ppm

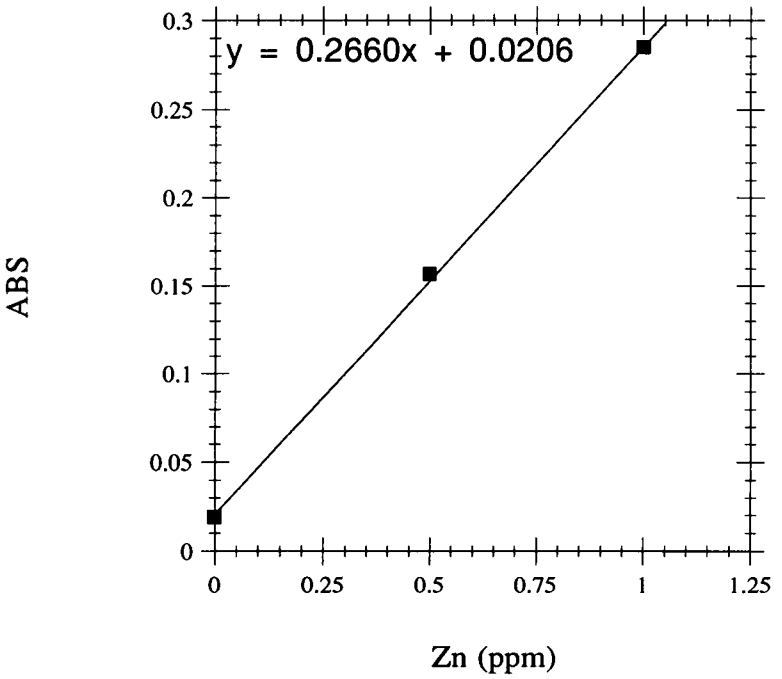
SAN-039 NH2OH



.1063 x 2 = .2126

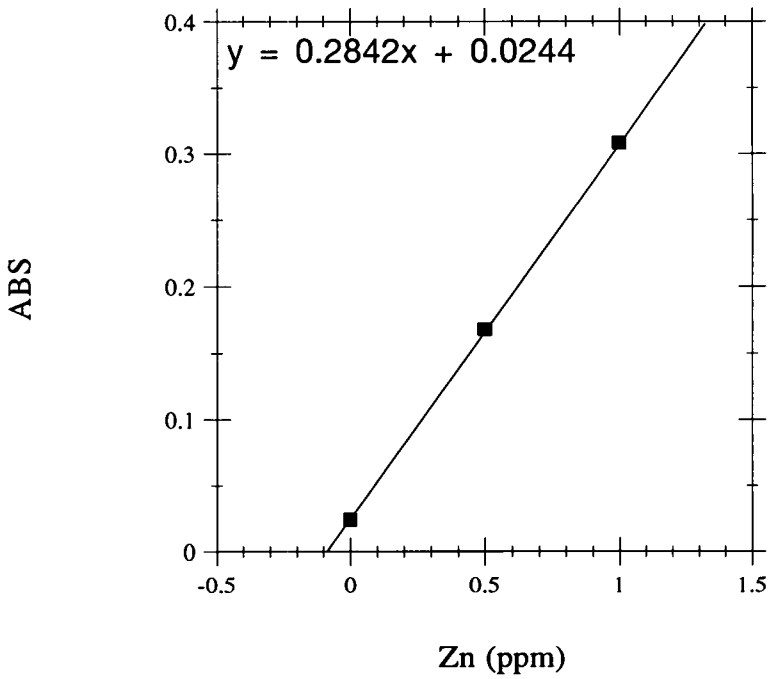
.2126 + 8/1.018 = 1.671 ppm

SAN-040 NH2OH

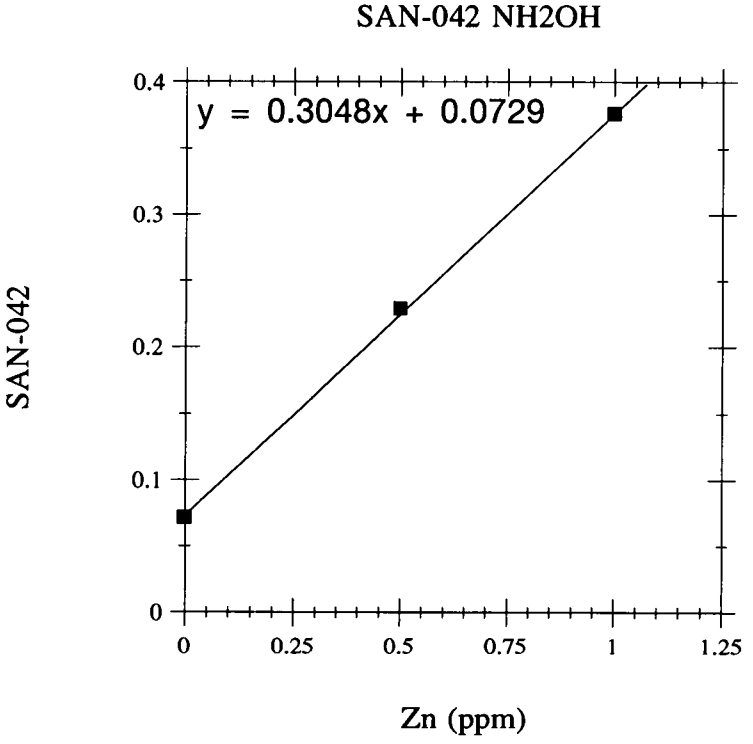


$.6774 \times 2 = .1548 \times \frac{8}{1.017} = 1.218$ ppm

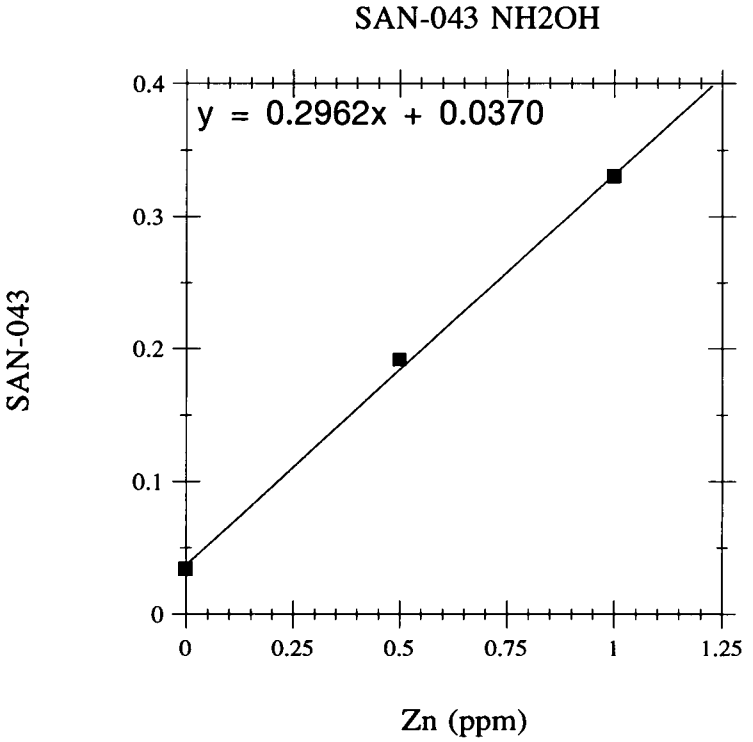
SAN-041 NH2OH



.0858 +2 = .1716 +8 / 1.015 = 1.352 ppm

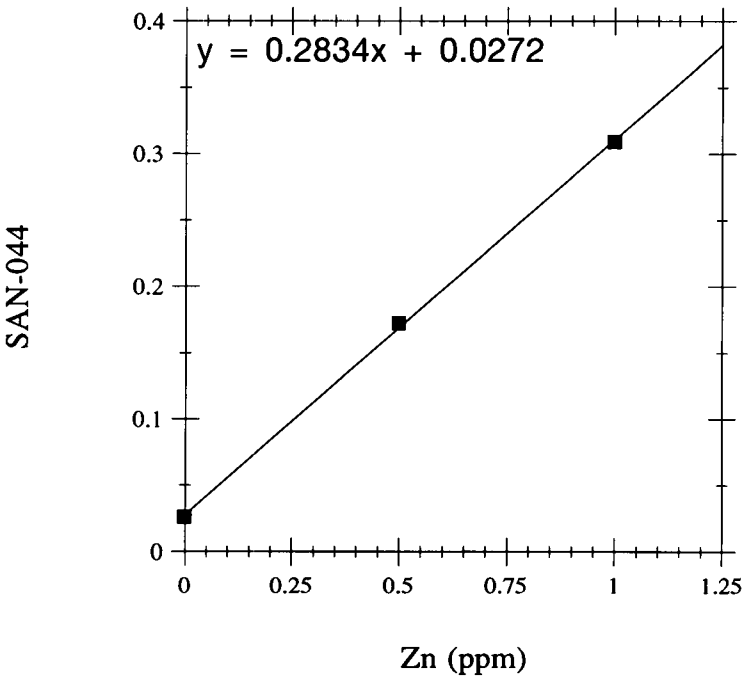


$.2352 \times 2 = .4784 \times \frac{8}{1.012} = 3.782 \text{ ppm}$



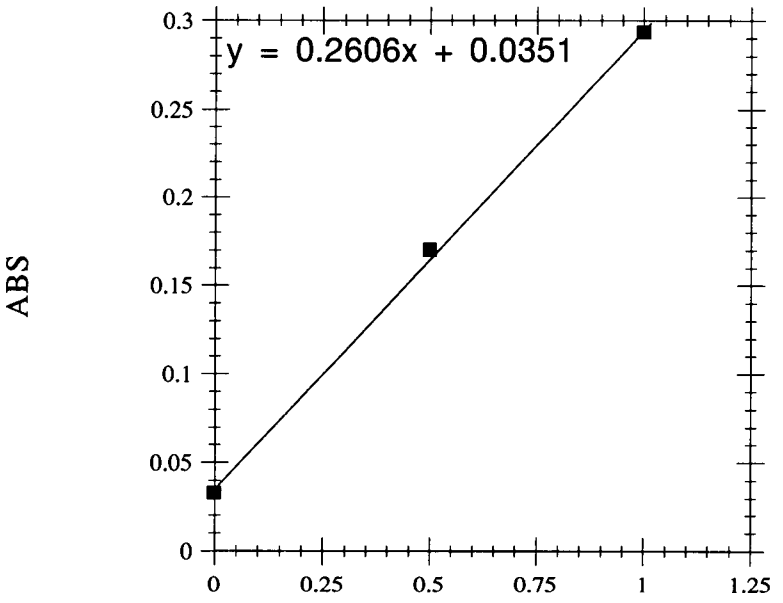
$.1249 \times 2 = .2498 \times \frac{8}{1.02} = 1.95$ ppm

SAN-044 NH2OH



$.0957 \times 2 = .1914 \times \frac{8}{1.014} = 1.51 \text{ ppm}$

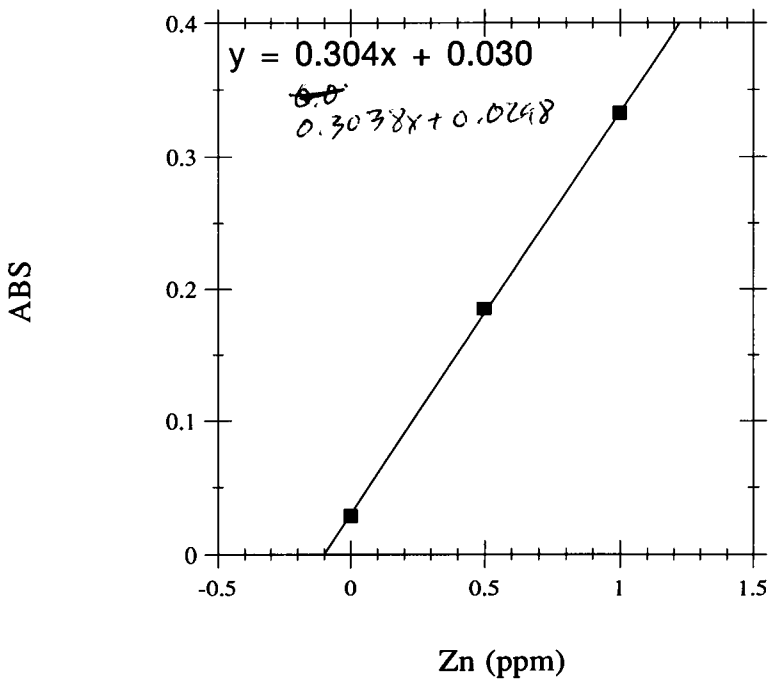
SAN-045 NH2OH



.1347 x 2 = .2694

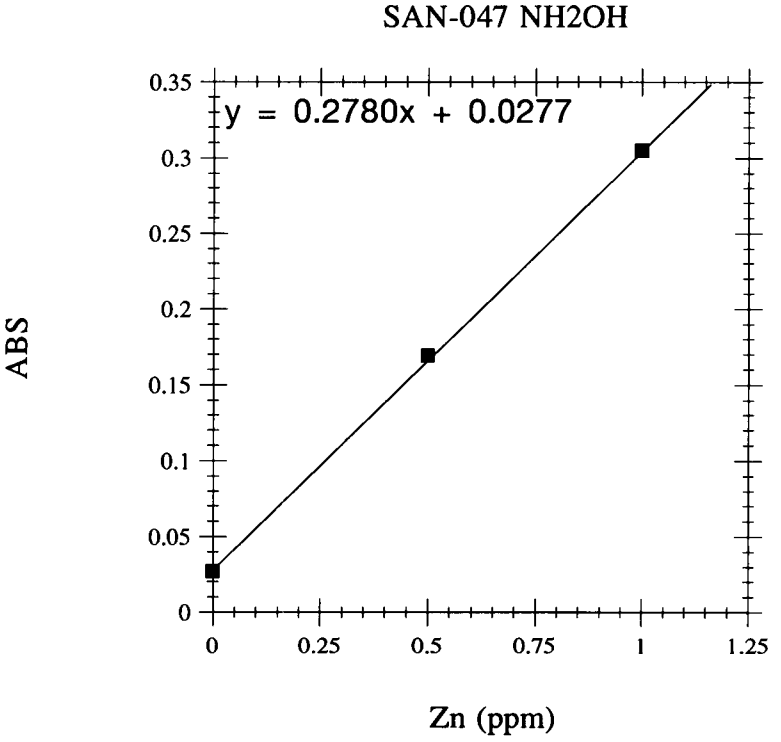
$\frac{.2694 \times 8}{1.017}$ = 2.119 ppm

SAN-046 NH2OH



.0981 x 2 = .1962

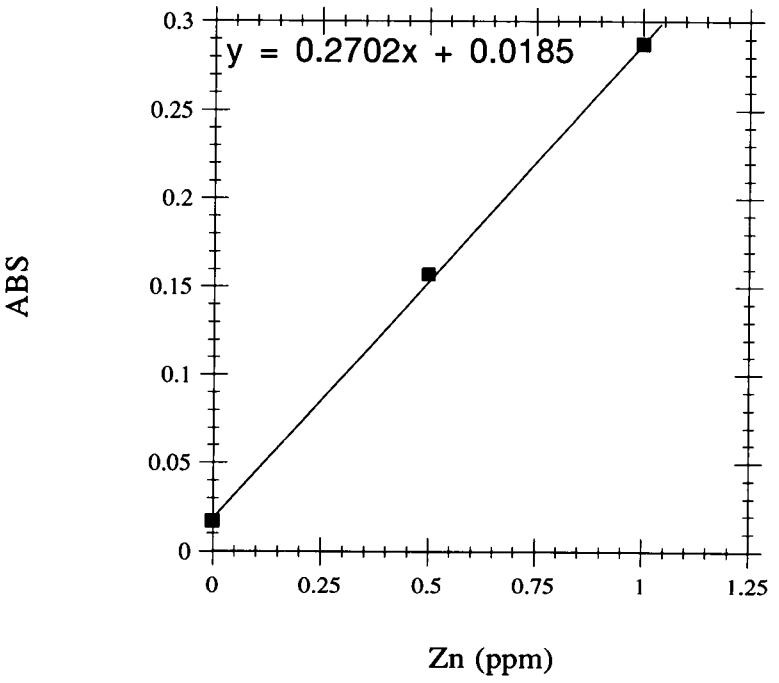
.1962 x 8 / 1.022 = 1.536 ppm



.0996 x 2 = .1992

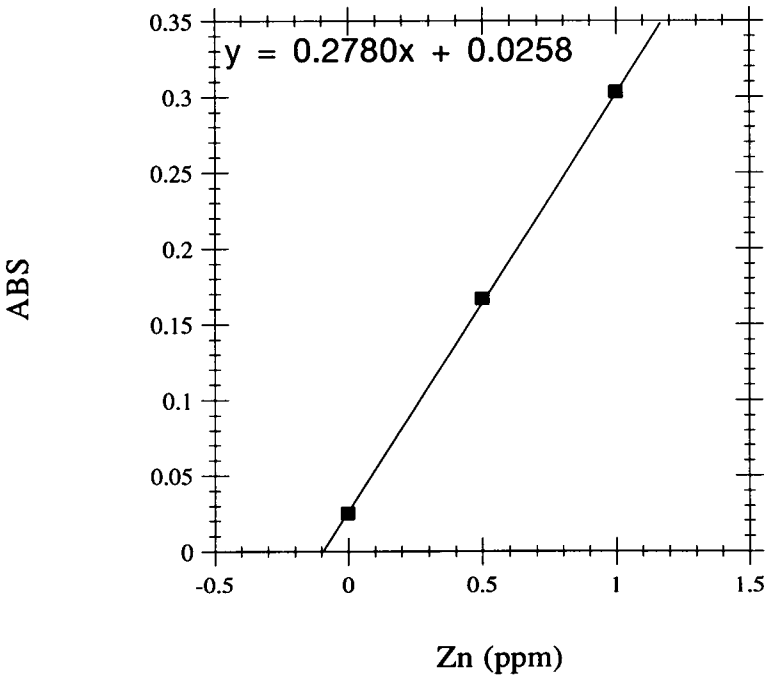
$\frac{.1992 \times 8}{1.023} = 1.558 \text{ ppm}$

SAN-048 NH2OH

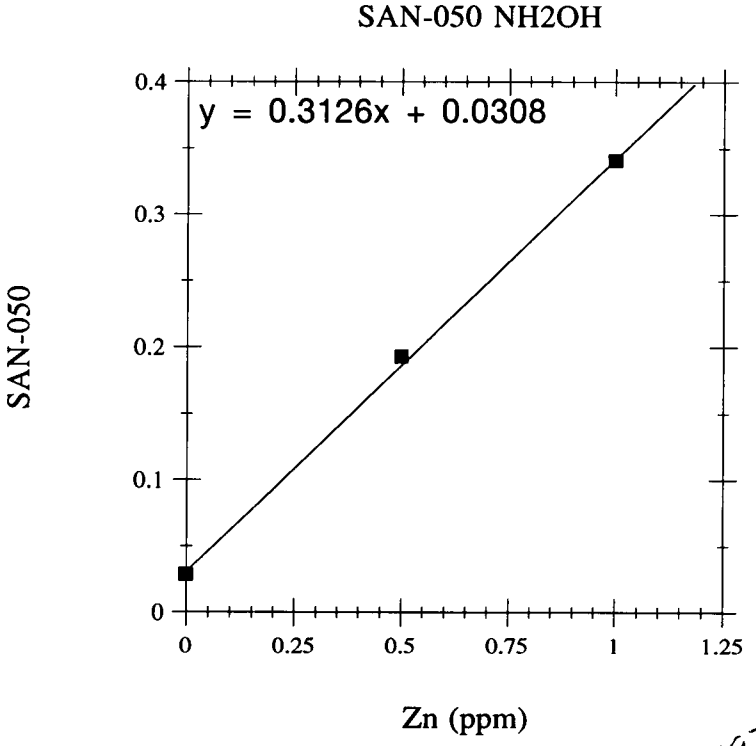


$.0685 \times 2 = \frac{.137 \times 8}{1.022} = 1.072 ppm$

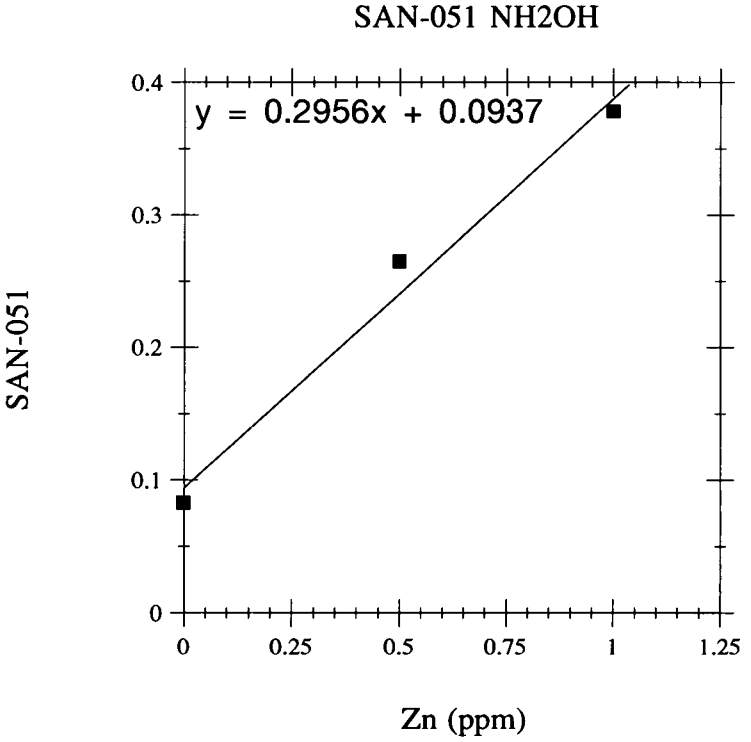
SAN-049 NH2OH



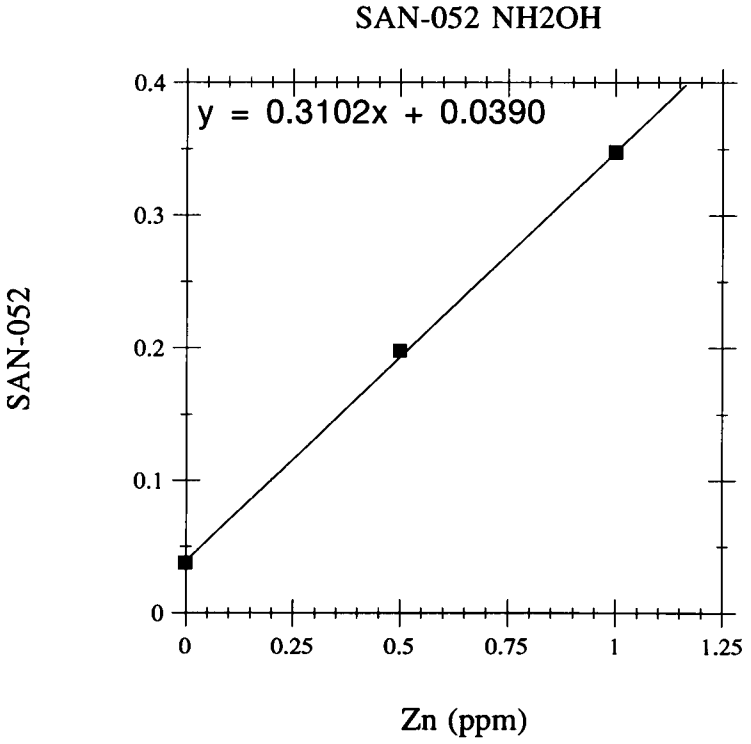
$.0928 \times 2 = .1856 \times \frac{8}{1.017} = 1.46$ ppm



.0985 x 2 = .197 x 8 / 1.016 = 1.551 ppm

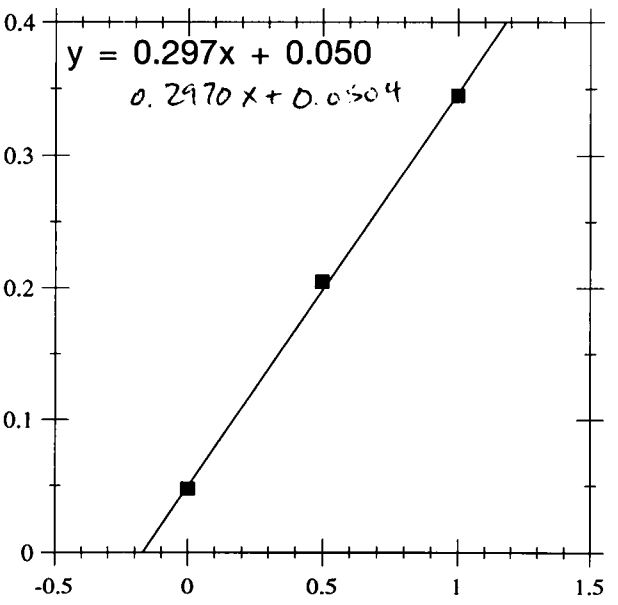


$.317 \times 2 = .634 \times \frac{8}{1.017} = 4.987 \text{ ppm}$



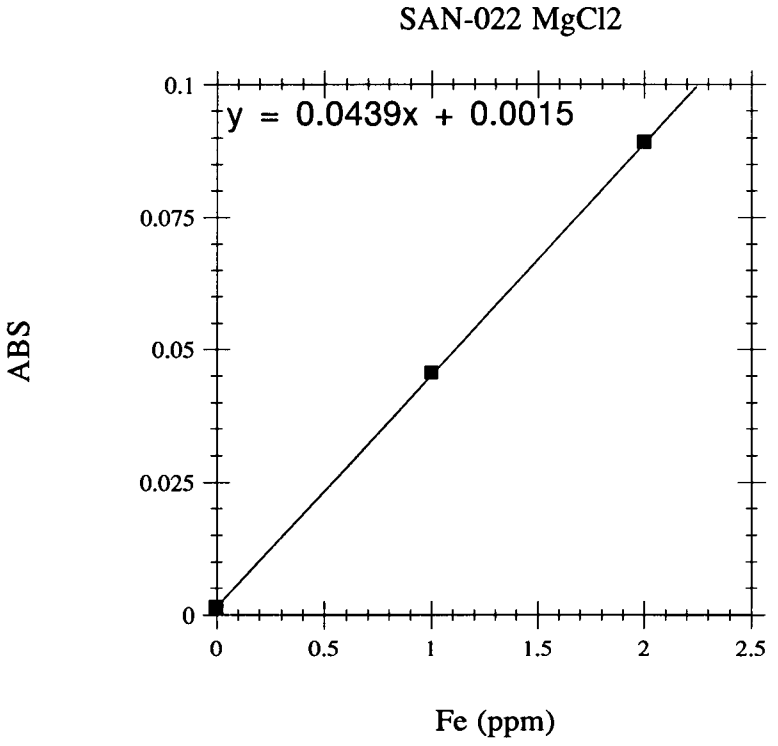
$.1257 \times 2 = .2514 \times \frac{8}{1.02} = 1.972$ ppm

SAN-053 NH2OH



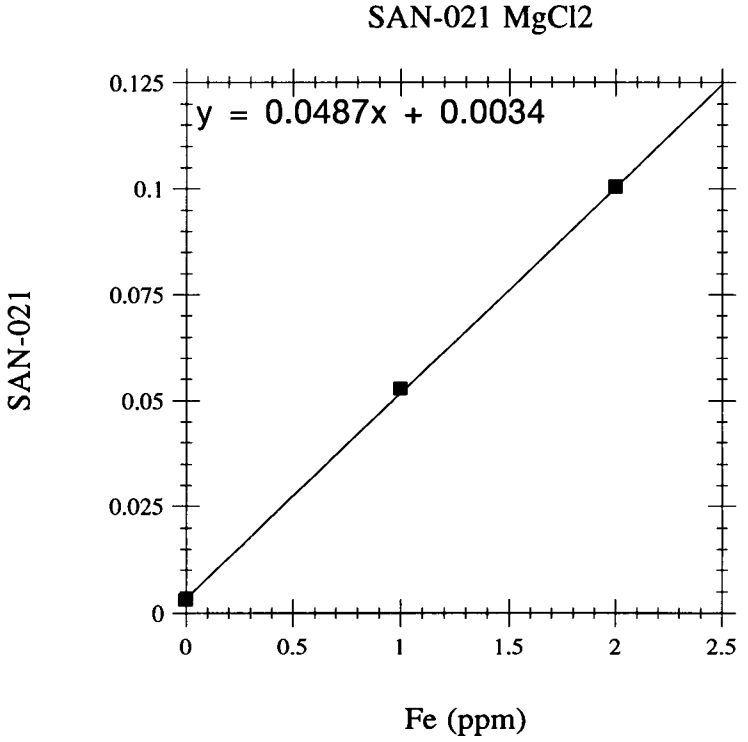
.1697 x 2 = .3394

.3394 x 8/1.008 = 2.694 ppm

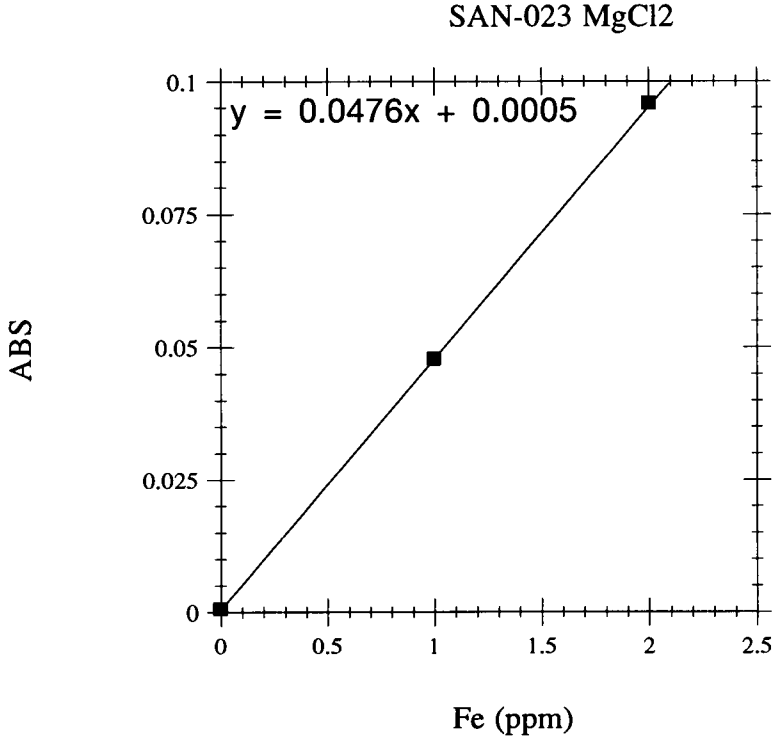


.0342 x 10 = .342

.342 x 8/1.022 = 2.677 ppm

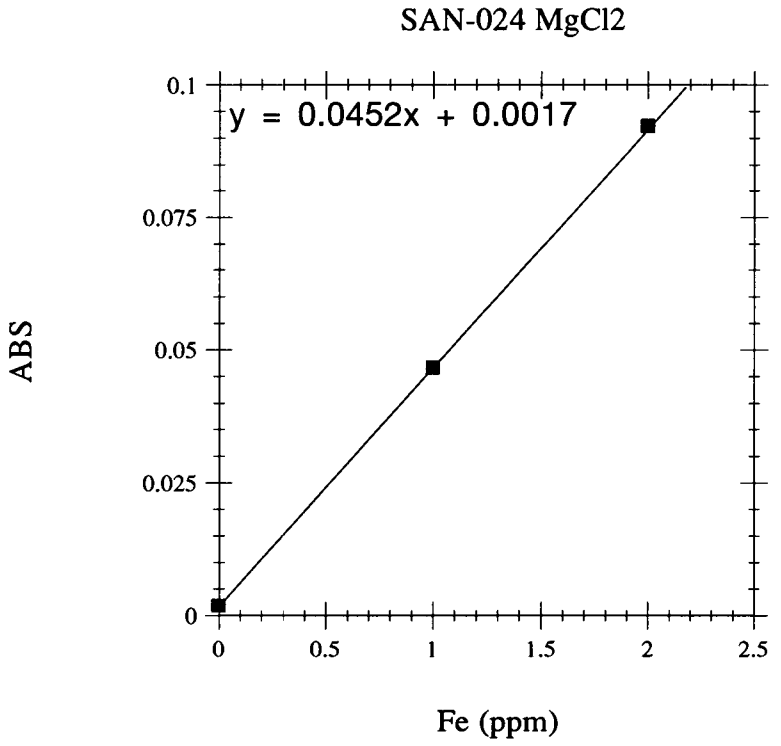


$.0698 \times 10 = .698 \times \frac{8}{1.016} = 5.496\,ppm$



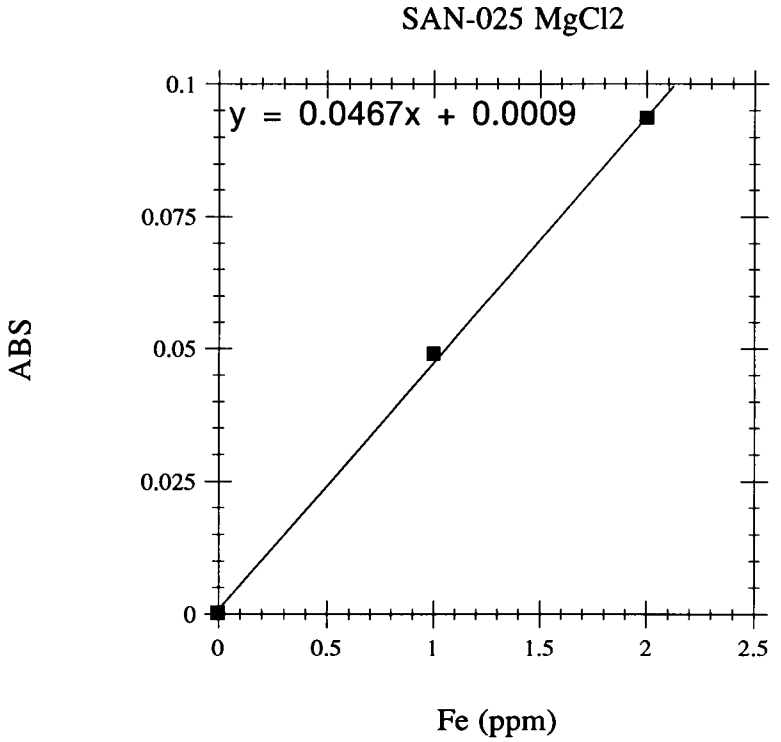
.0105 x 10 = .105

.105 x 8/1.022 = .845 ppm



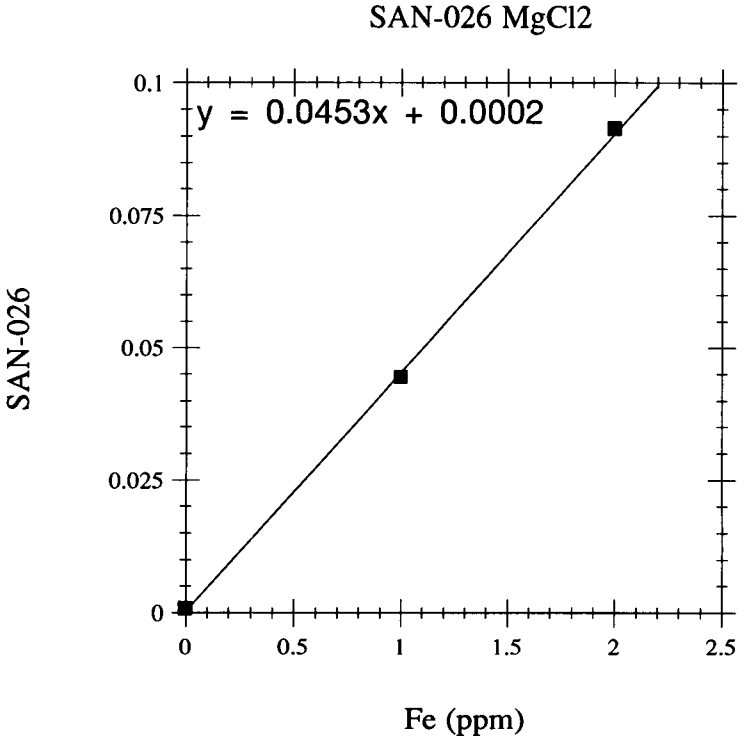
.0376 x 10 = .376

$.376 \times \frac{8}{1.018} = 2.955 ppm$

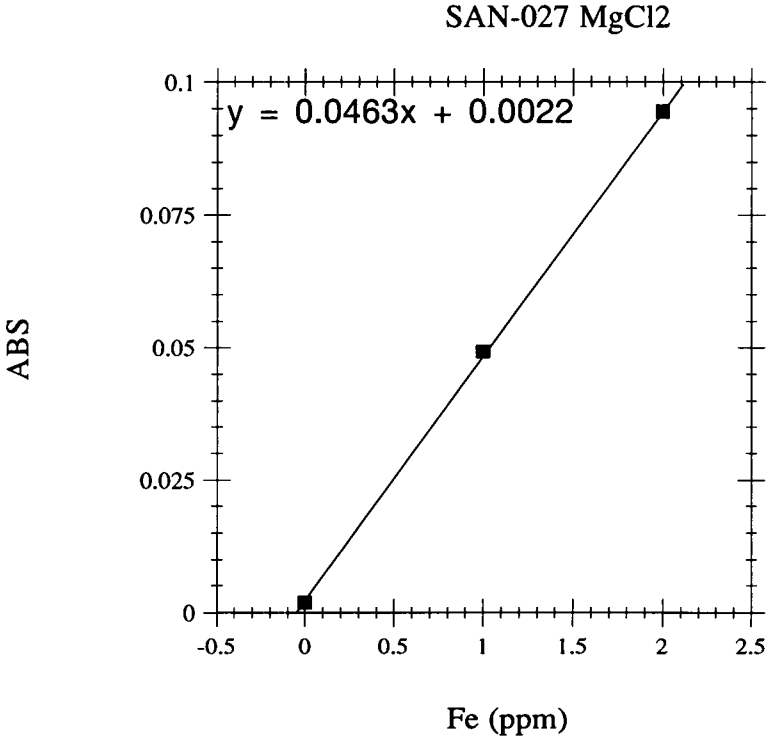


$\therefore .0193 \times 2 = .0386 \times \frac{8}{1.025} = .301\ ppm$

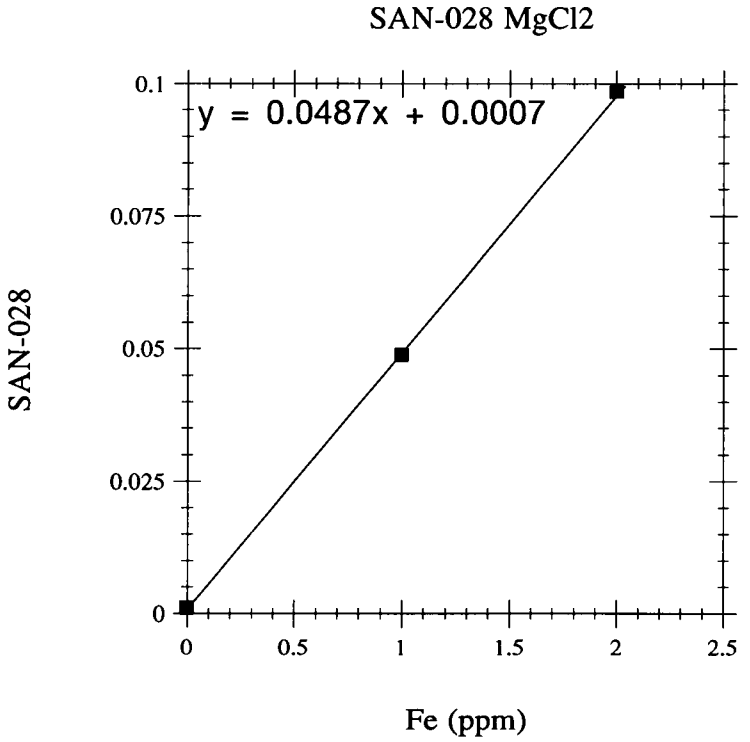
$.0193 \times 10 = .193 \times \frac{8}{1.025} = 1.506\ ppm$



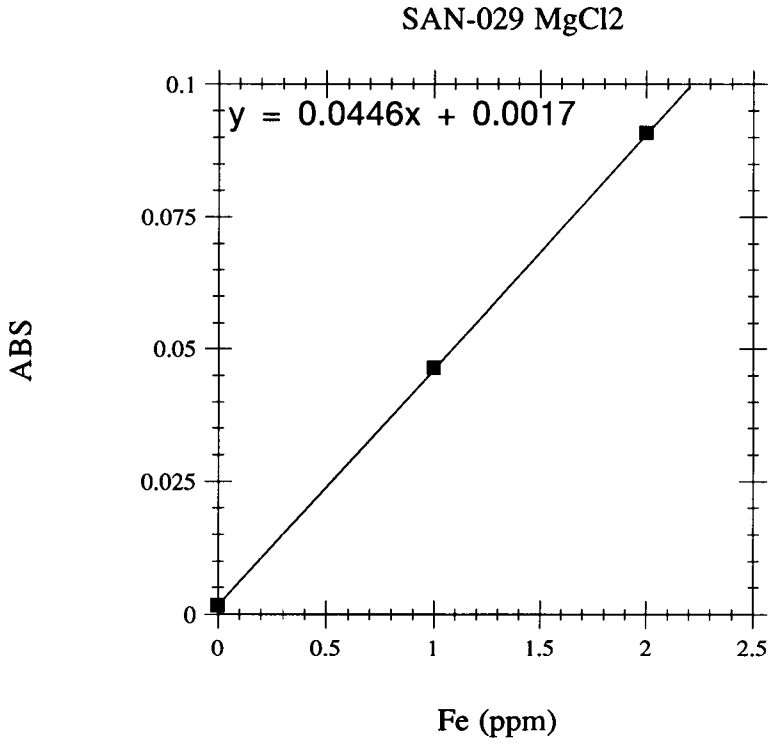
$.0644 \times 10 = .044 \times \frac{8}{1.021} = .345$ ppm



.0475 x 10 = .475 x 8/1.013 = 3.751 ppm

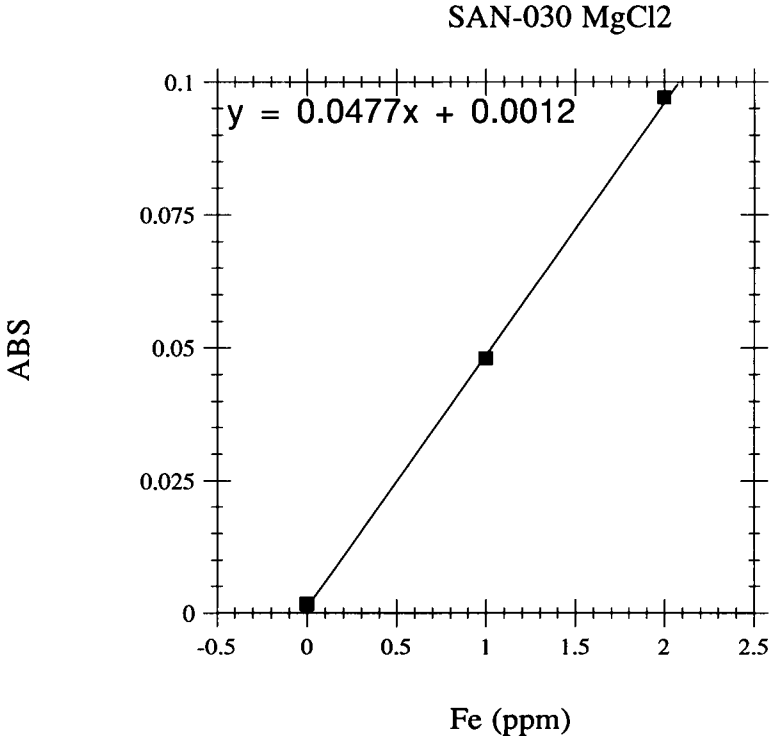


$.0144 \times 10 = 144 \times \frac{8}{1.023} = 1.126$ ppm



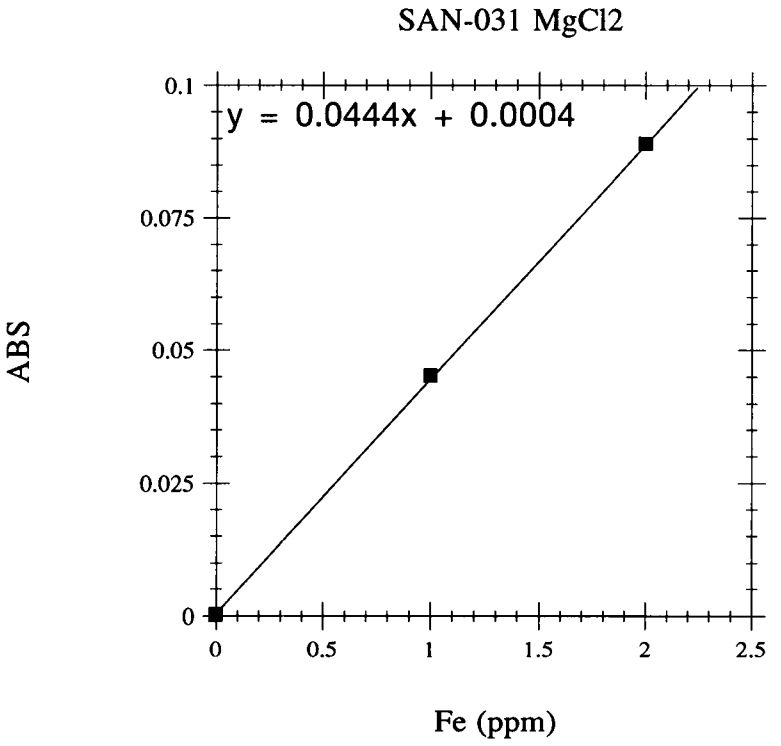
.0381 x 10 = .381

.381 x $\frac{8}{1.02}$ = 2.988 ppm



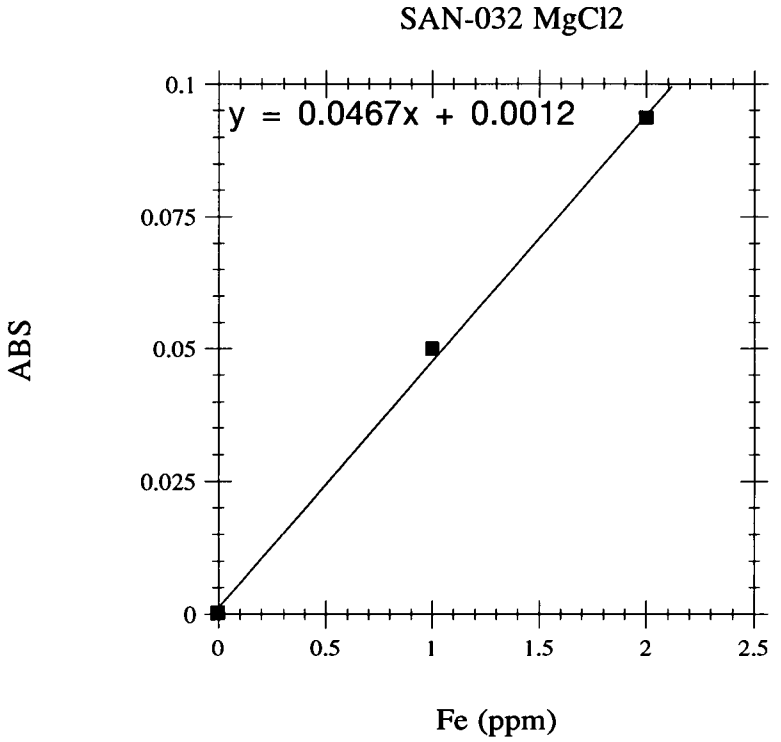
.0251 x 10 = .251

.251 x 8/1.022 = 1.965 ppm



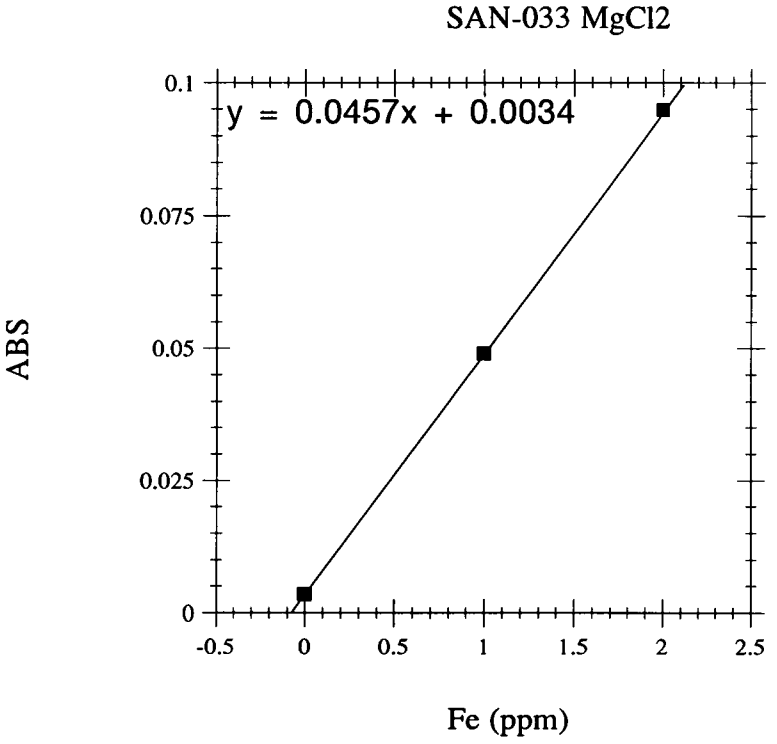
.009 x 10 = .09

.09 x 8/1.026 = .702ppm

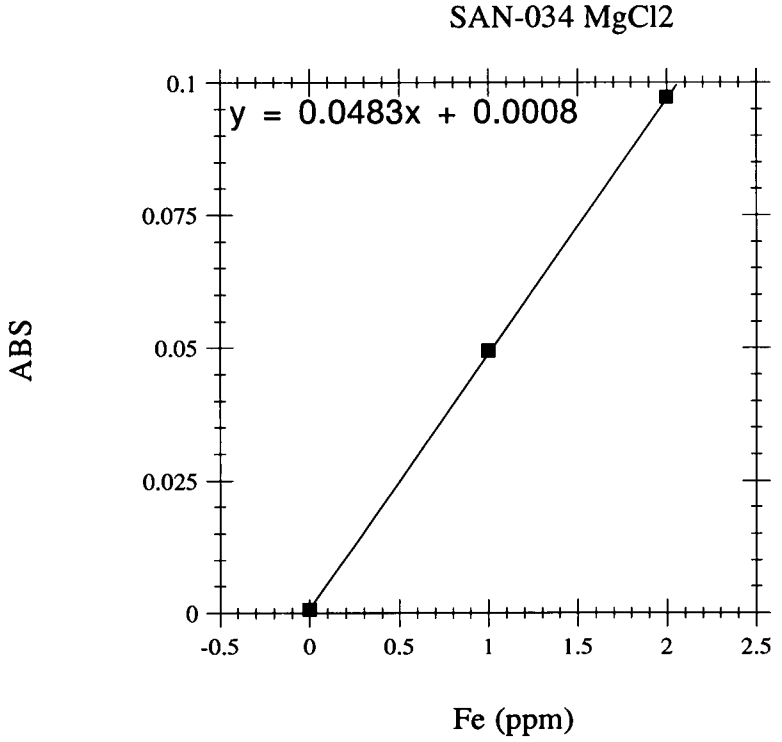


$.0257 \times 10 = .257 + \frac{8}{1.017} = .404\,ppm$

$.0257 \times 10 = .257 + \frac{8}{1.017} = 2.022\,ppm$

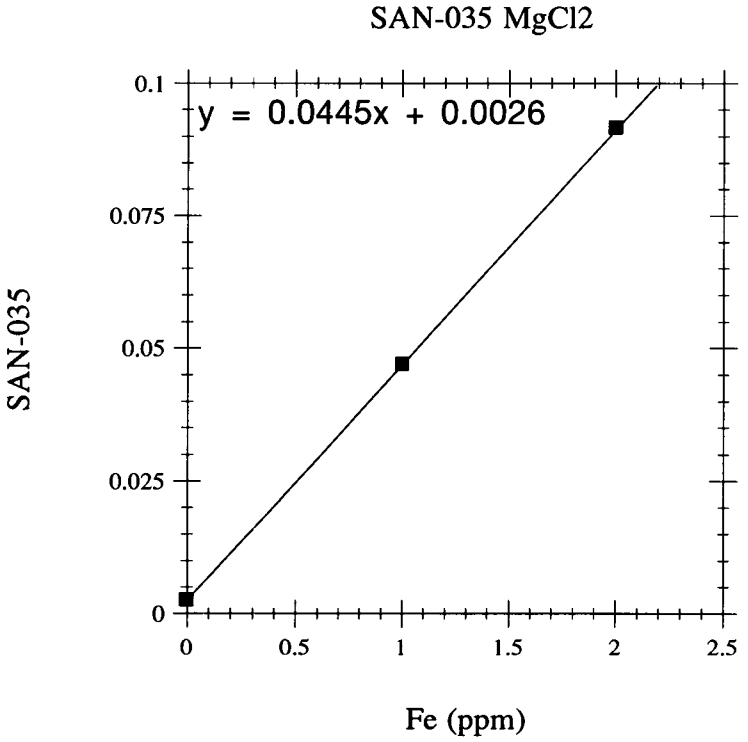


.0744 x 10 = .744 x 8 / 1.012 = 5.881 ppm

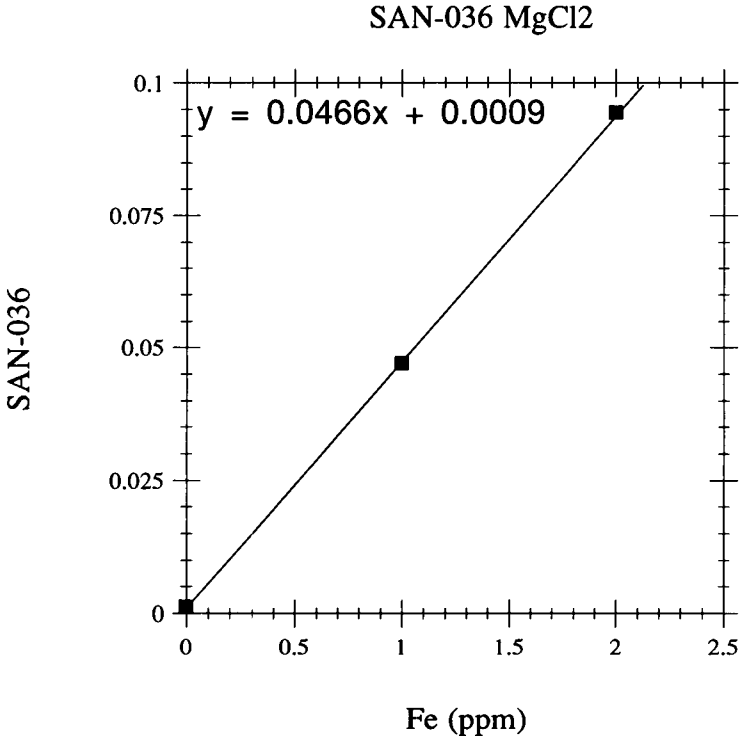


.0166 x 10 = .166

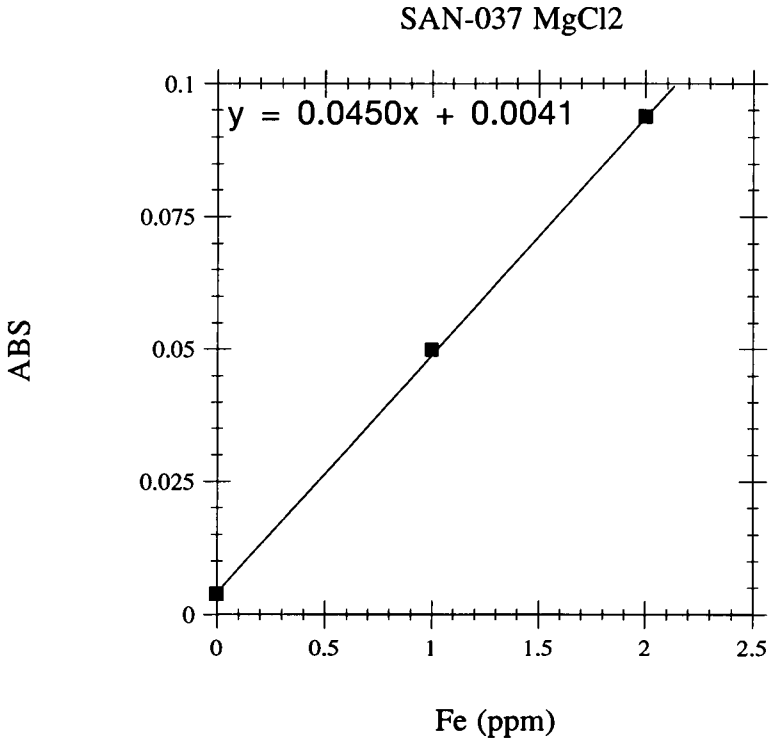
.166 x 8/1.009 = 1.316 ppm



.0584 x 10 = .5848 / 1.02 = 4.58 ppm

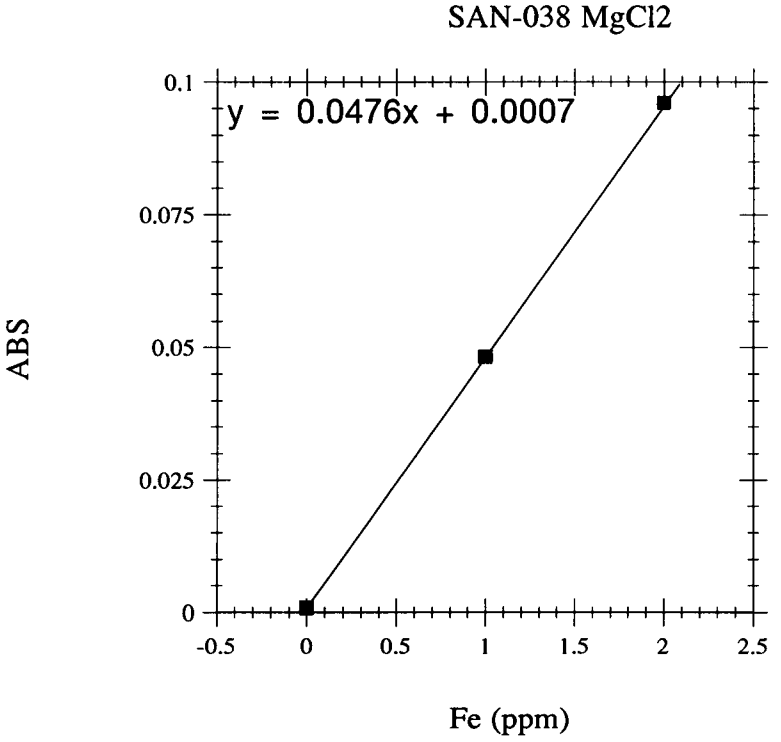


$.0193 \times 10 = .193 \times \frac{8}{1.014} = 1.523 ppm$



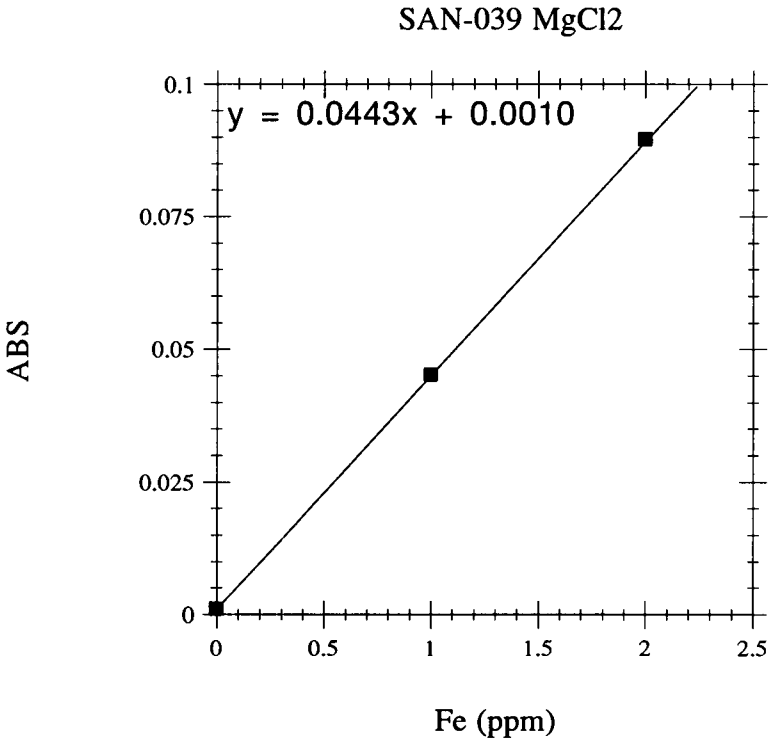
.0911 x10 = .911

.911 x8 / 1.021 = 7.138 ppm



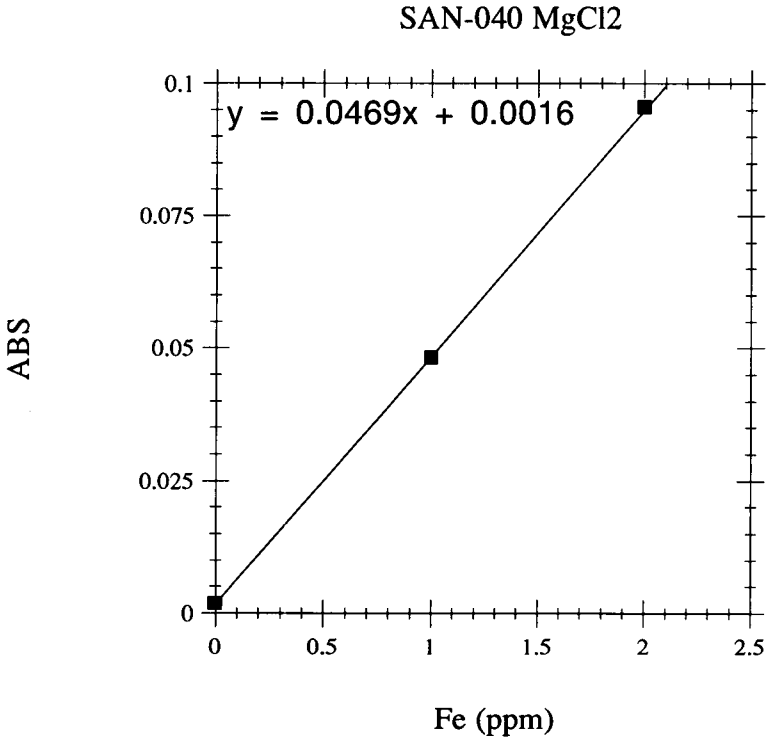
.0147 x 10 = .147

$.147 \times \frac{8}{1.024} = 1.148$ ppm



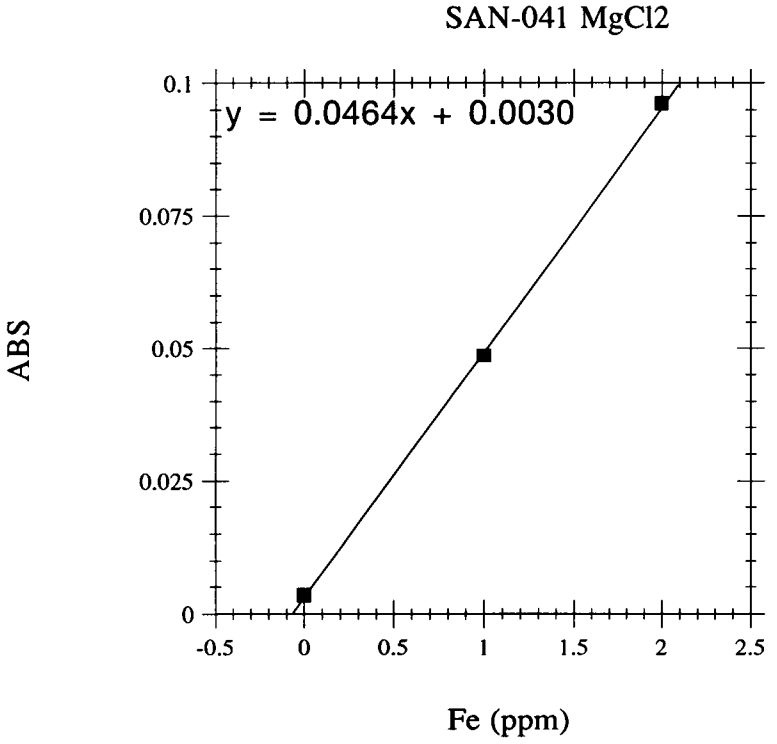
.0226 x 10 = .226

.226 x $\frac{8}{1.018}$ = 1.776 ppm

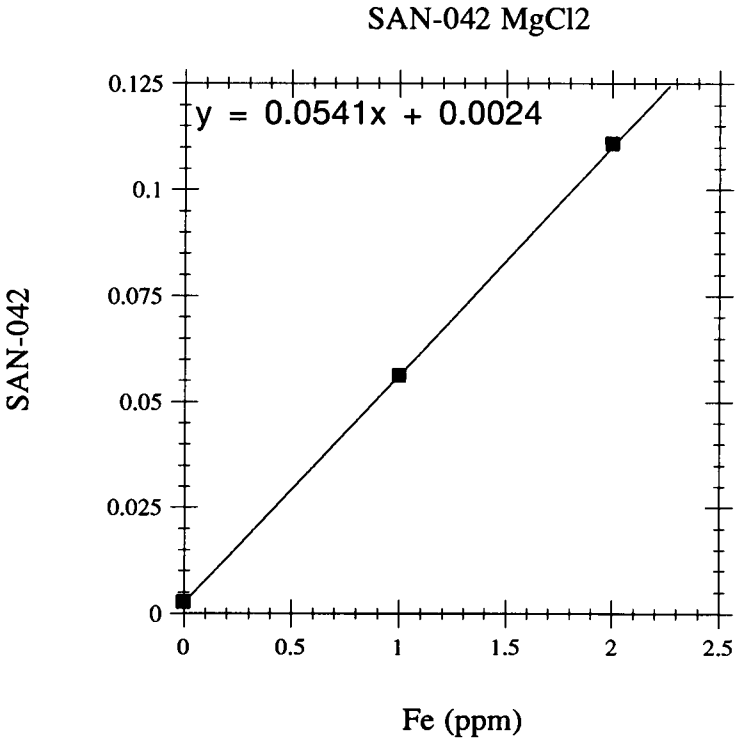


.6341 x 2 = .0682 x 8 / 1.017 = .536 ppm

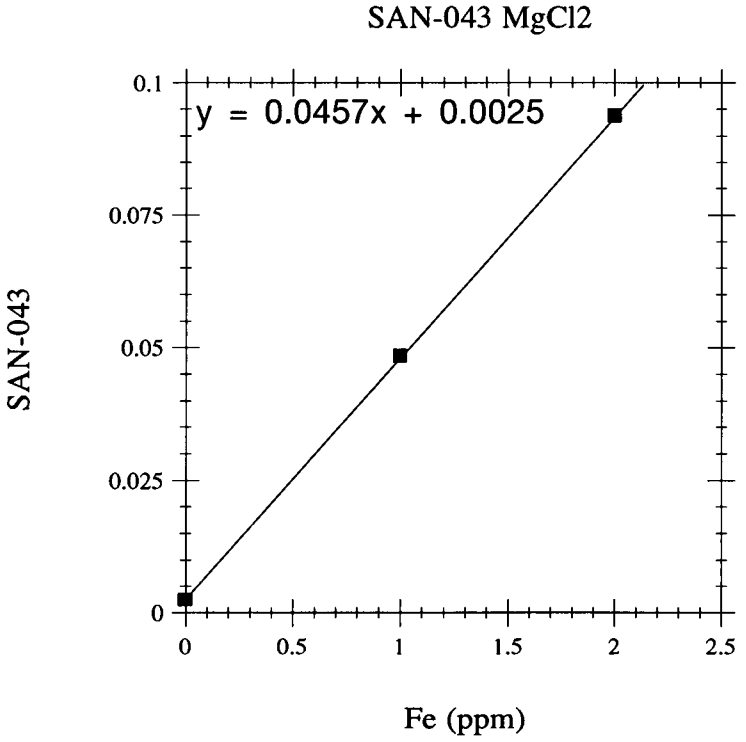
.0341 x 10 = .341 x 8 / 1.017 = 2.68 ppm



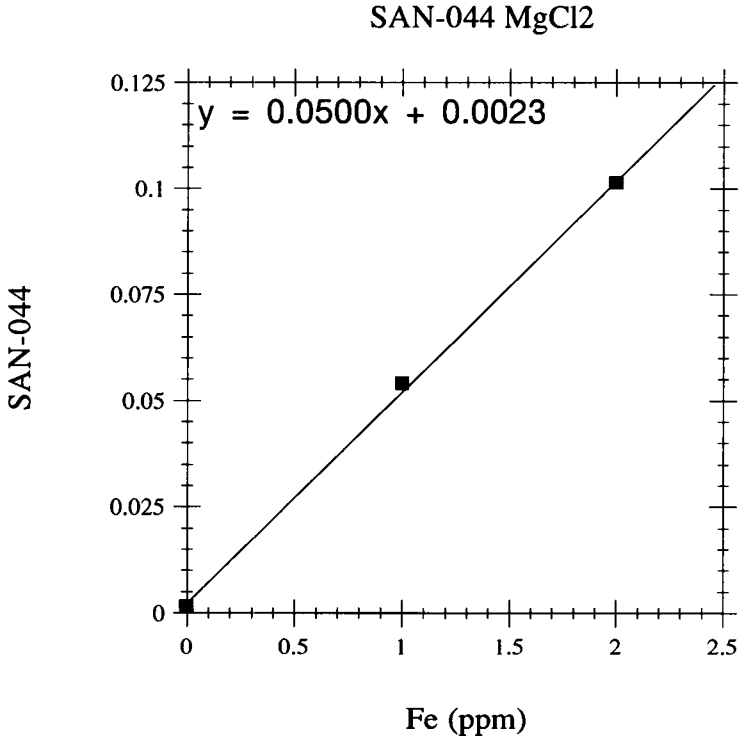
.0646 x 10 = .646 $\frac{x8}{1.015}$ = 5.092 ppm



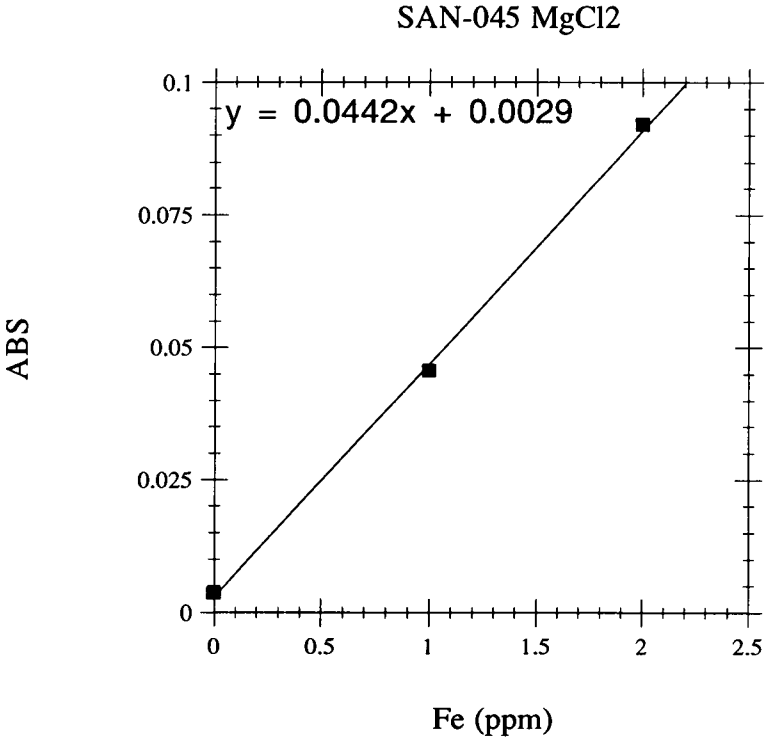
$.0444 \times 10 = 444 \times \frac{8}{1.012} = 351$ ppm



.0547 x 10 = .547 x 1.022 = 4.282 ppm
8

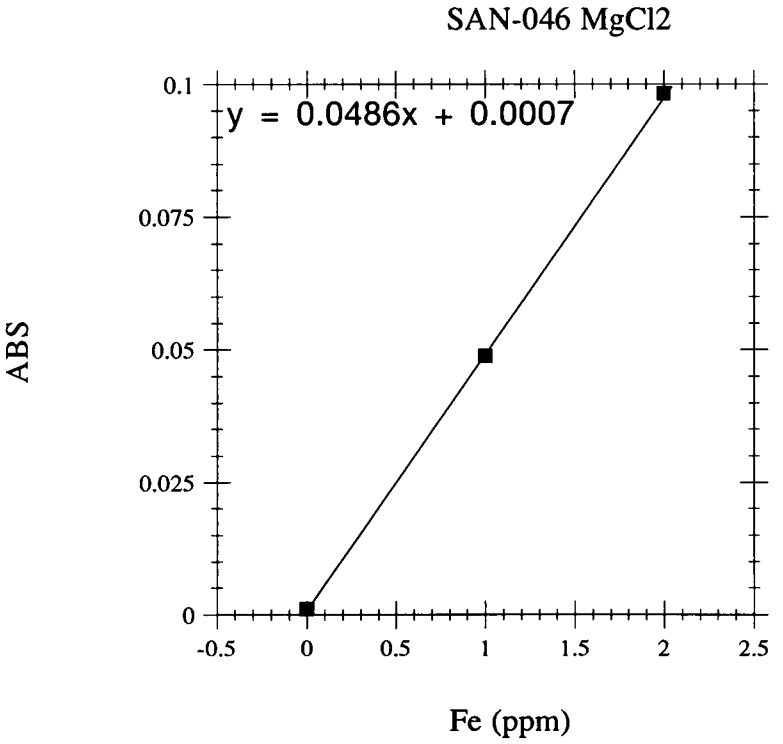


.046 x 10 = 46 x 8/1.014 = 3.629 ppm



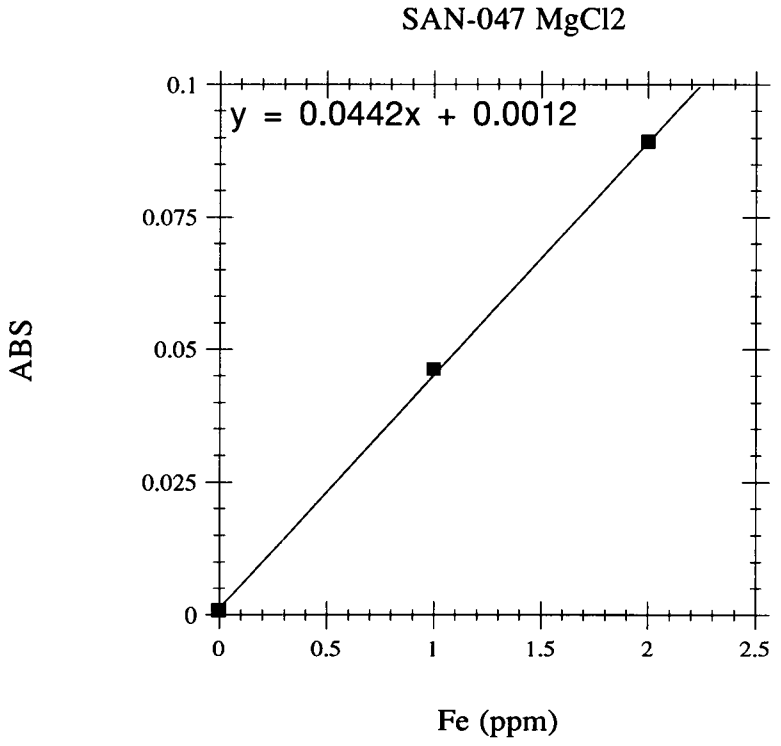
.0656 x 10 = .656

.656 x 8 / 1.017 = 5.160 ppm



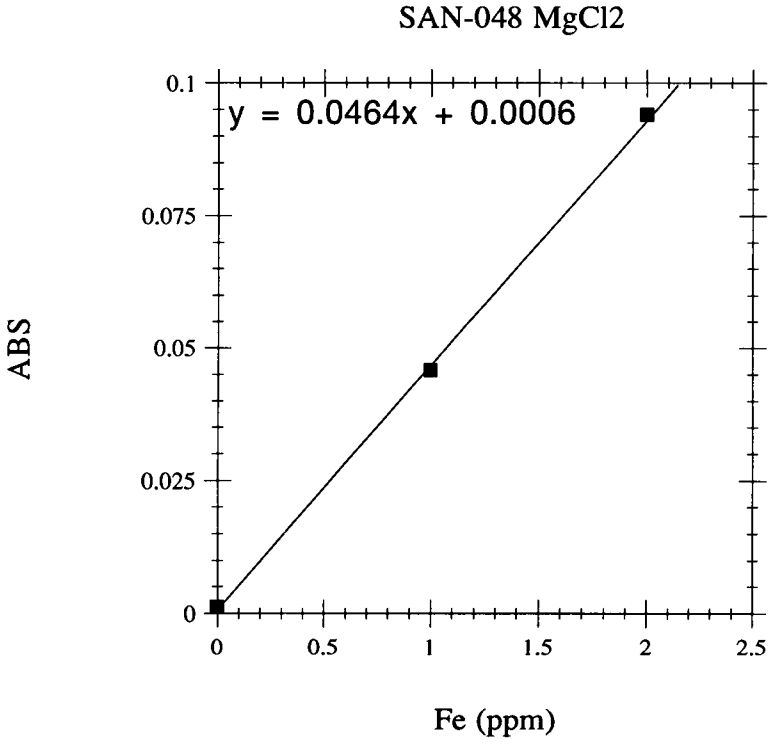
.0144 x 10 = .144

.144 x 8/1.022 = 1.127 ppm



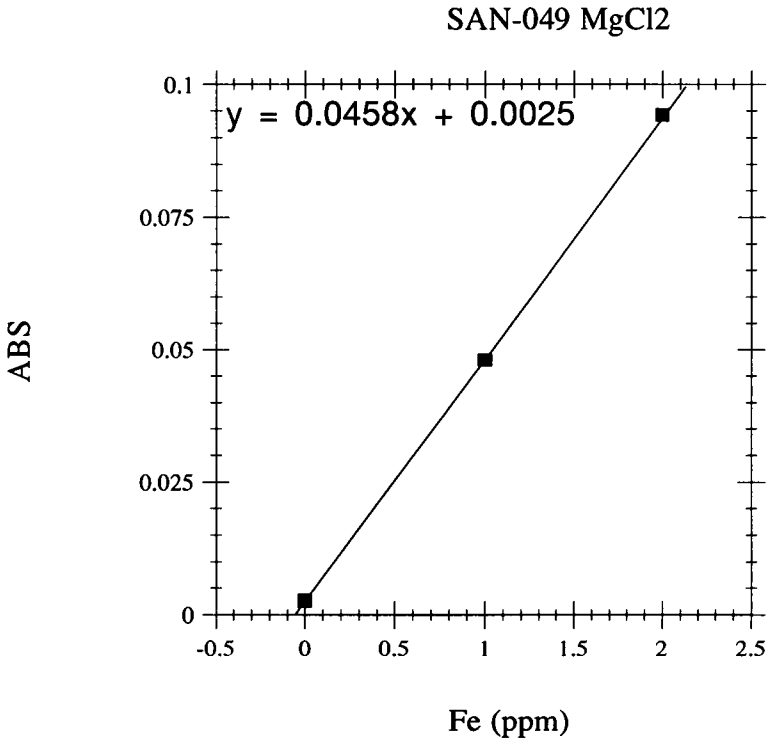
.0271 x 10 = .271

$\frac{.271 \times 8}{1.023} = 2.119$ ppm

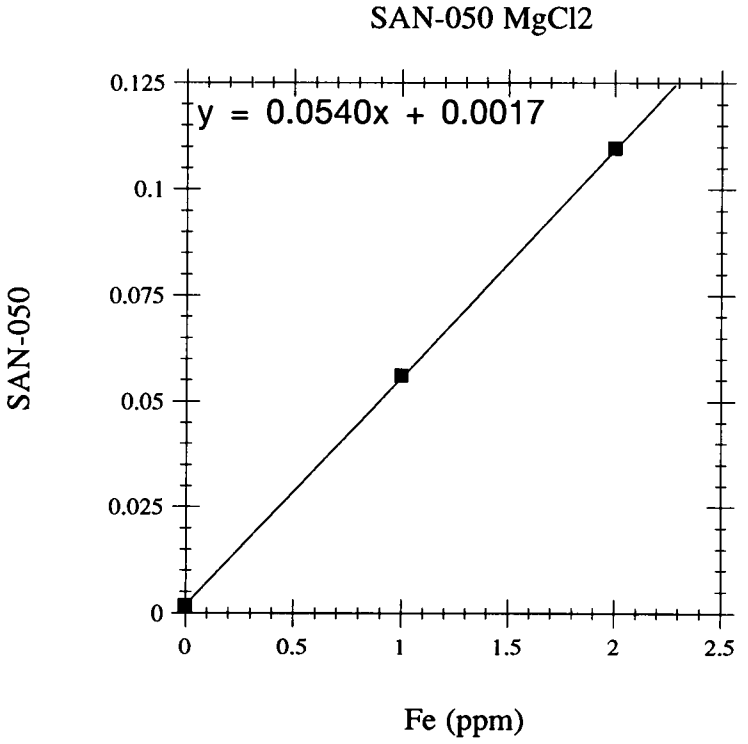


.0129 x 2 = .0258 x 8 / 1.022 = .202 ppm

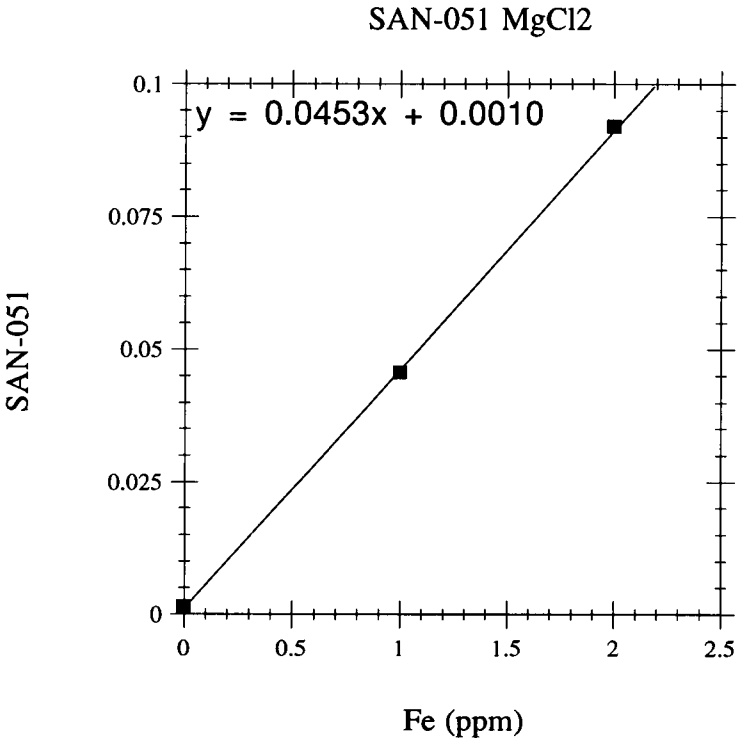
.0129 x 10 = .129 x 8 / 1.022 = 1.01 ppm



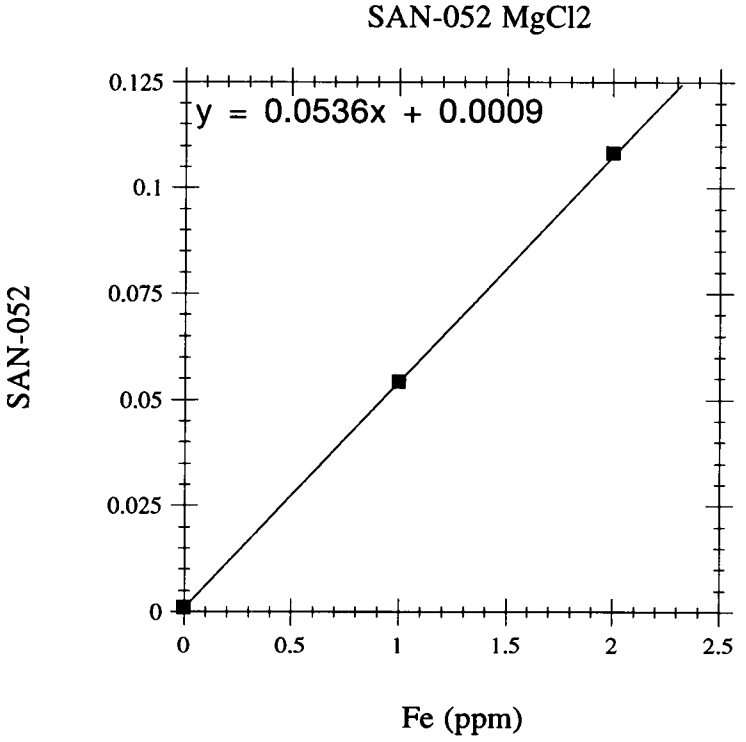
$.0546 \times 10 = .546 \times \frac{8}{1.017} = 4.295\ ppm$



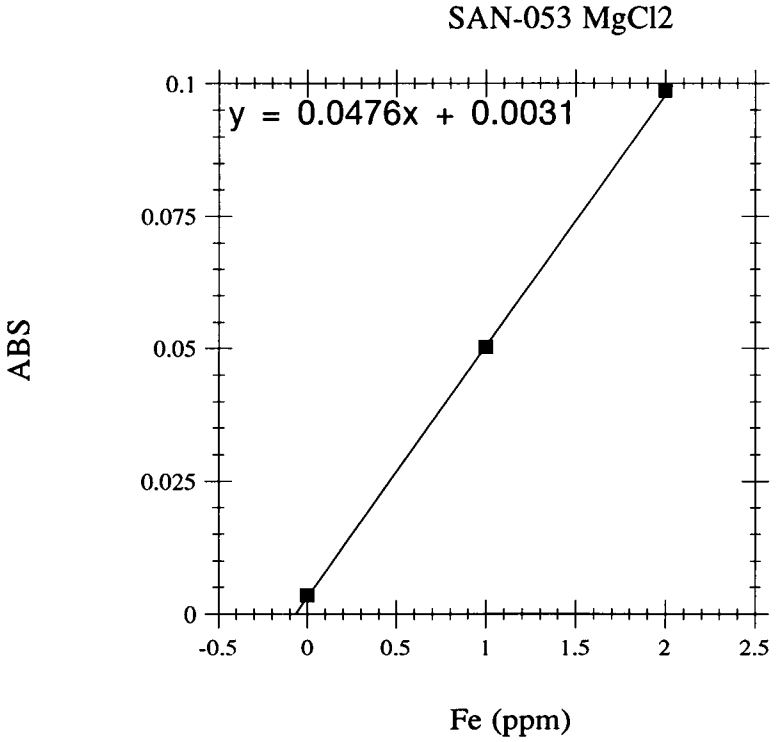
$.0315 \times 10 = .315 \times \frac{8}{1.016} = 2.48\ ppm$



.0221 x 10 = .221 x 8 / 1.017 = 1.738 ppm

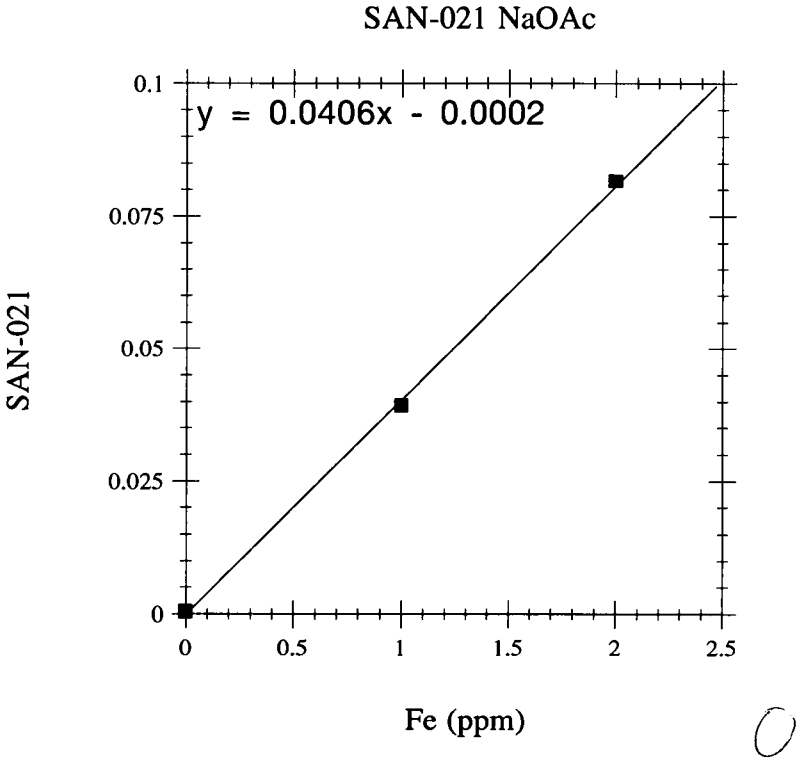


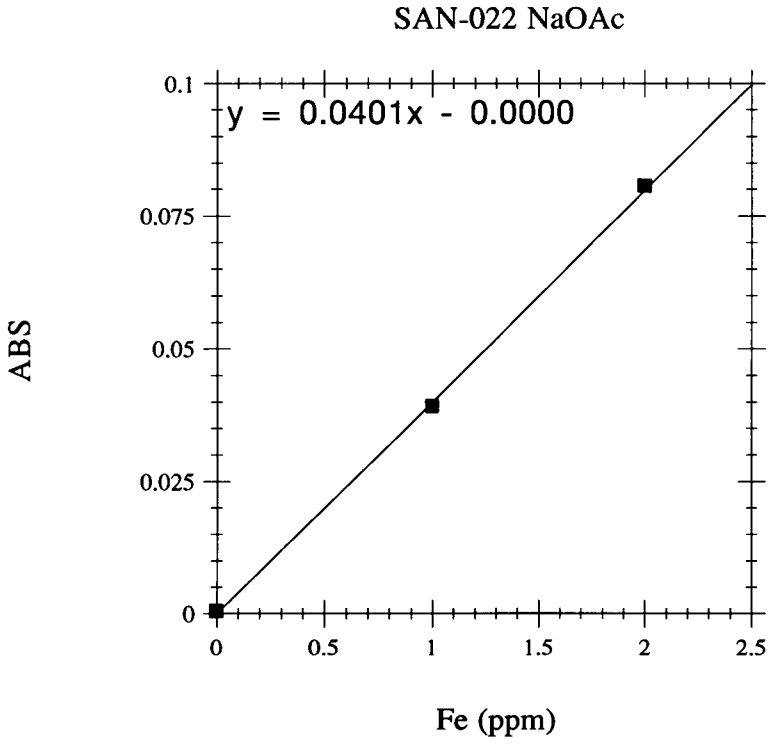
$.0168 \times 10 = .168 \times \frac{8}{102} = 1.32$ ppm



.0651 x 10 = .651

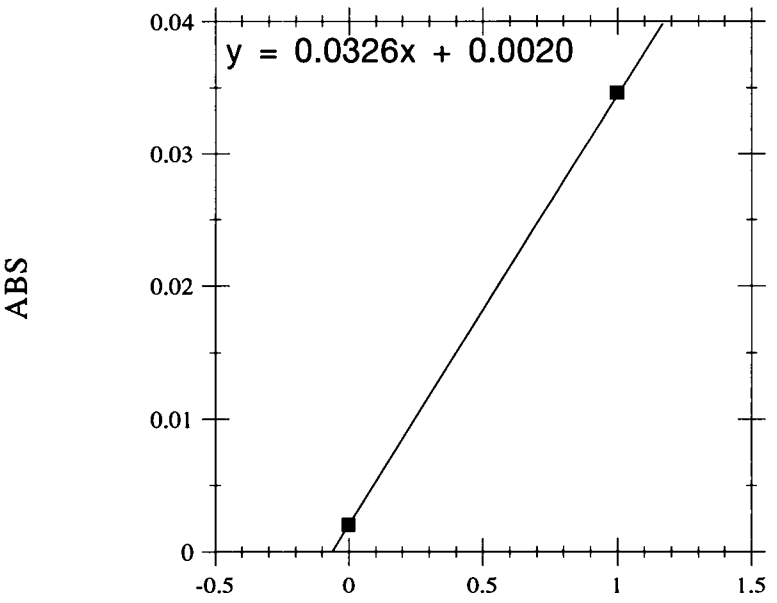
$\frac{.651 \times 8}{1.008} = 5.167 \text{ ppm}$


SAN-021 NaOAc
y = 0.0406x - 0.0002
0.1
0.075
0.05
0.025
0
SAN-021
0
0.5
1
1.5
2
2.5
Fe (ppm)


SAN-022 NaOAc
y = 0.0401x - 0.0000
ABS
0.1
0.075
0.05
0.025
0
0
0.5
1
1.5
2
2.5
Fe (ppm)

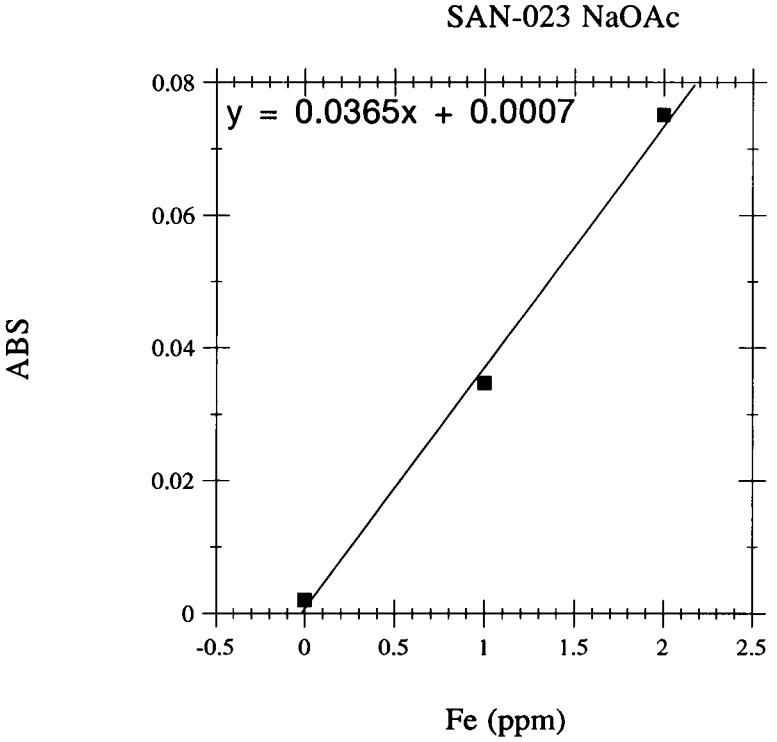
0 ppm

SAN-023 NaOAc



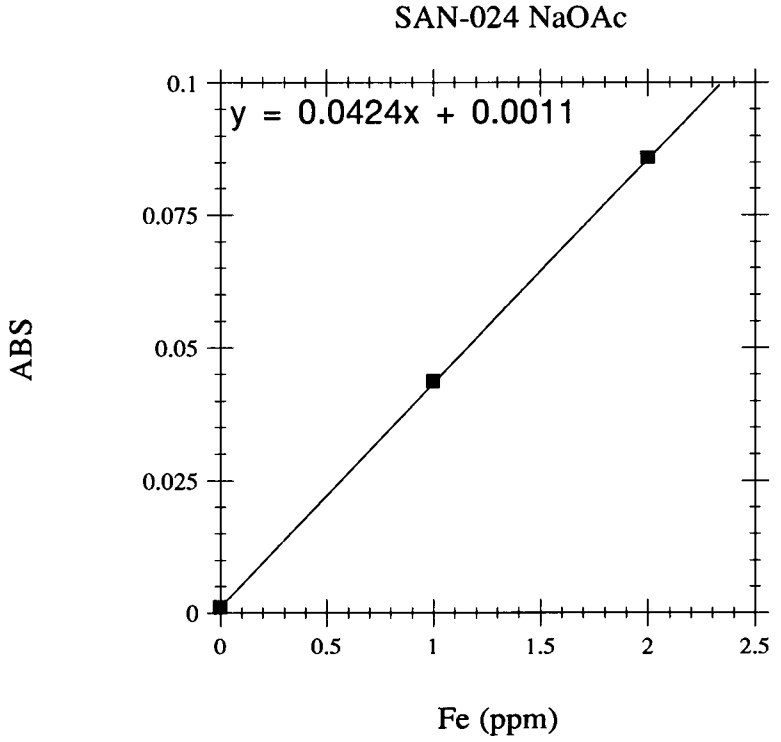
.0613 x 10 = .613

$\frac{.613 \times 8}{1.022} = 4.798$ ppm



.0192 x 10 = .192

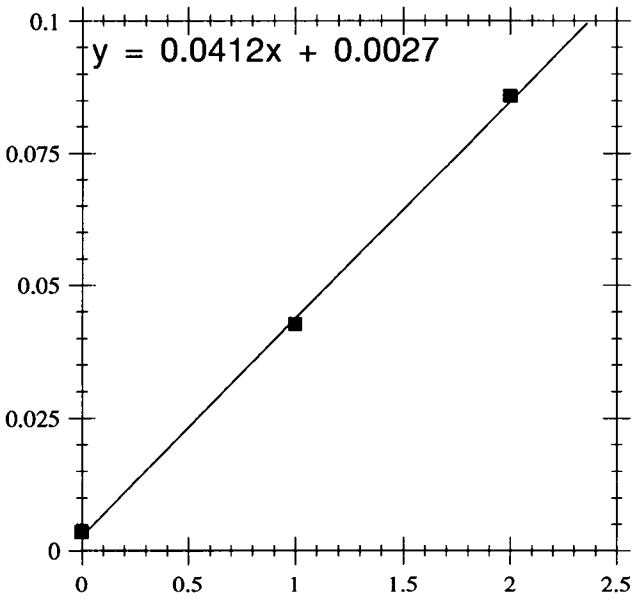
.192 + .8 / 1.022 = 1.503ppm



$.0259 \times 10 = .259$

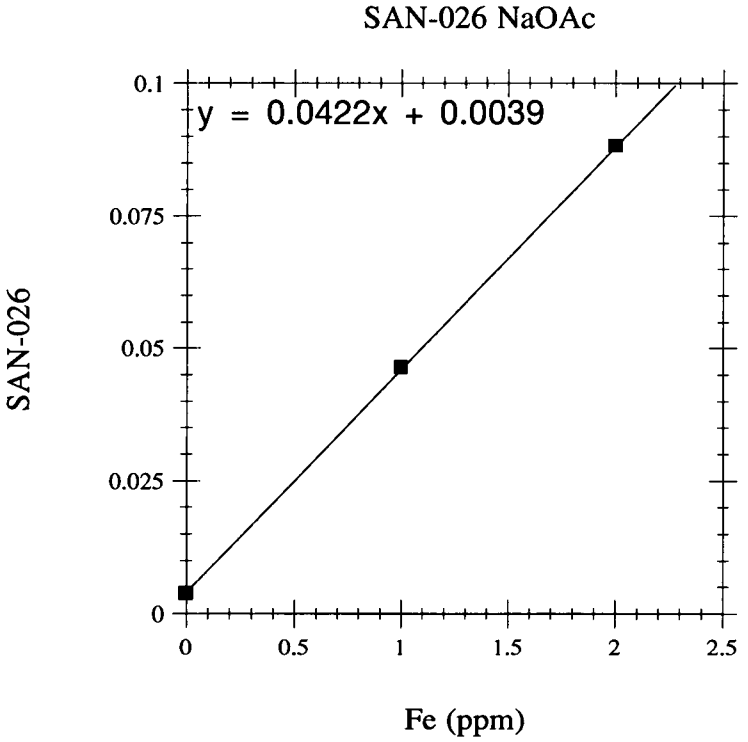
$.259 \times \frac{8}{1.018} = 2.035 \text{ ppm}$

SAN-025 NaOAc



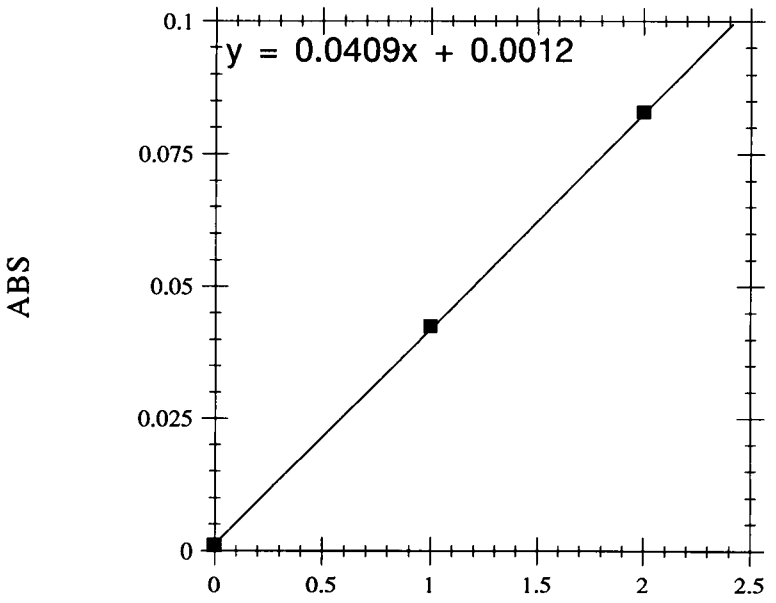
.0625Y2 = .131 × 8/1.025 = 1.022 ppm

.0655 × 10 = .655 × 8/1.025 = 5.11 ppm

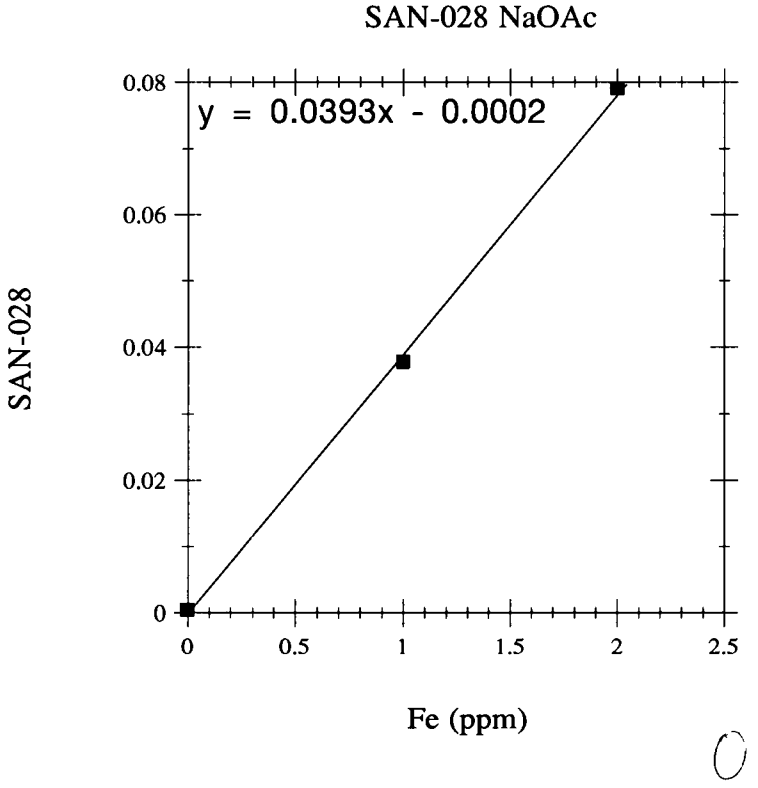


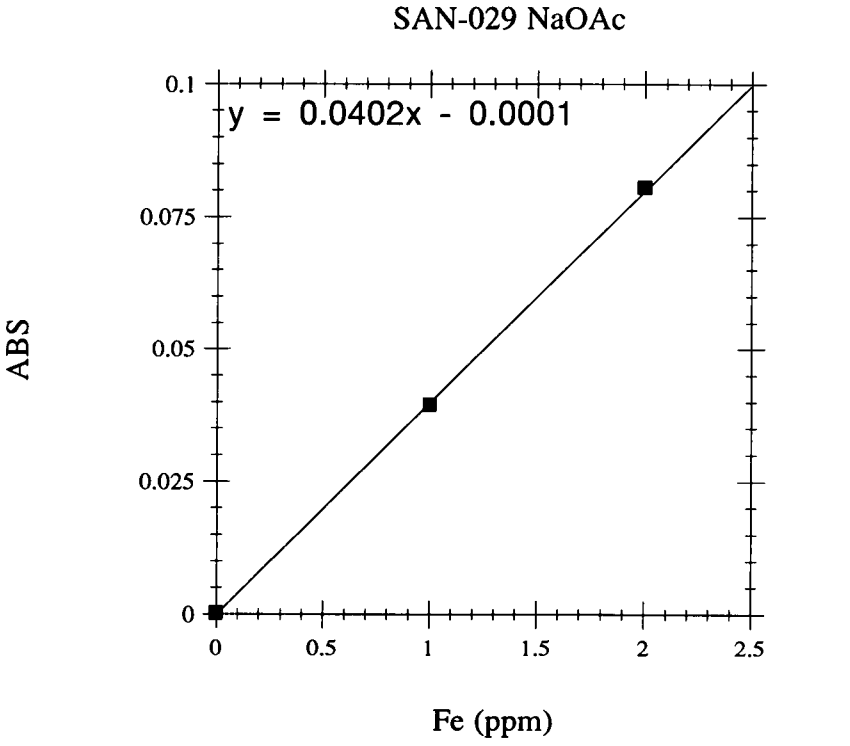
$.0924 \times 10 = .924 \times \frac{8}{1.021} = 7.239$ ppm

SAN-027 NaOAc



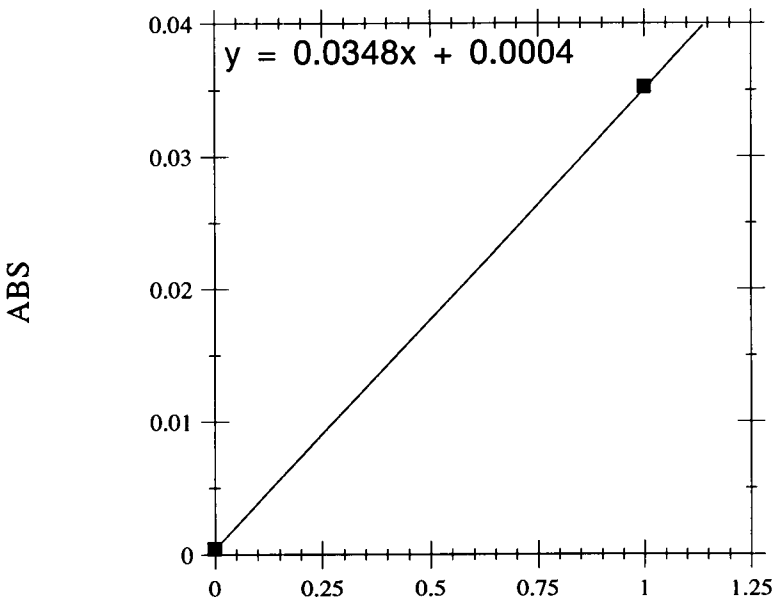
.0293 x 10 = .293 x 8 / 1.013 = 2.314 ppm


SAN-028 NaOAc
y = 0.0393x - 0.0002
SAN-028
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5
Fe (ppm)


SAN-029 NaOAc
y = 0.0402x - 0.0001
ABS
0.1
0.075
0.05
0.025
0
0
0.5
1
1.5
2
2.5
Fe (ppm)

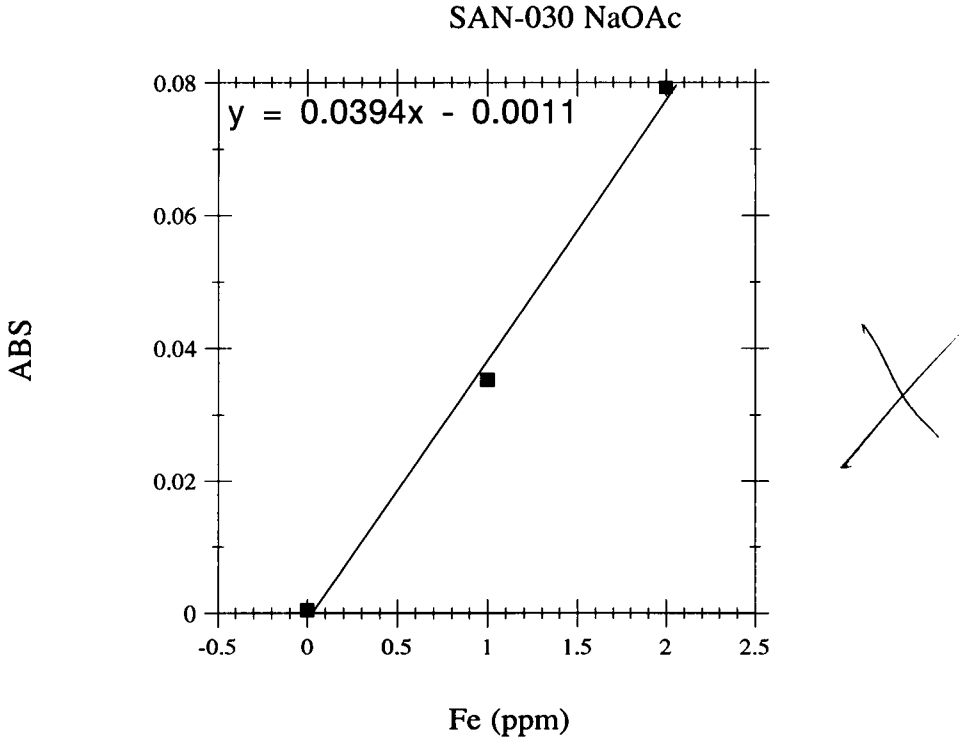
0 ppm

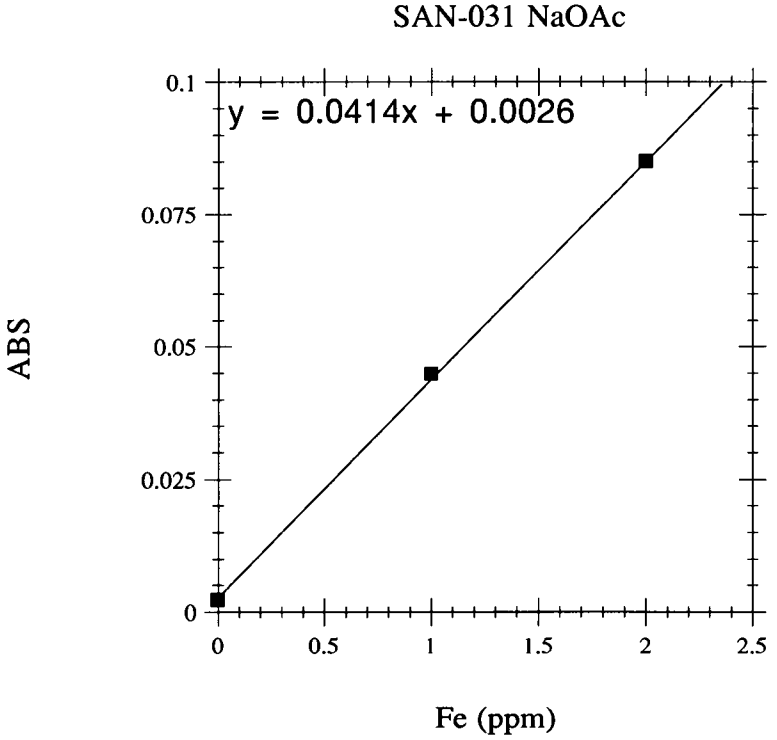
SAN-030 NaOAc



.0115 x 10 = .115

.115 x 8/1.027 = .900 ppm

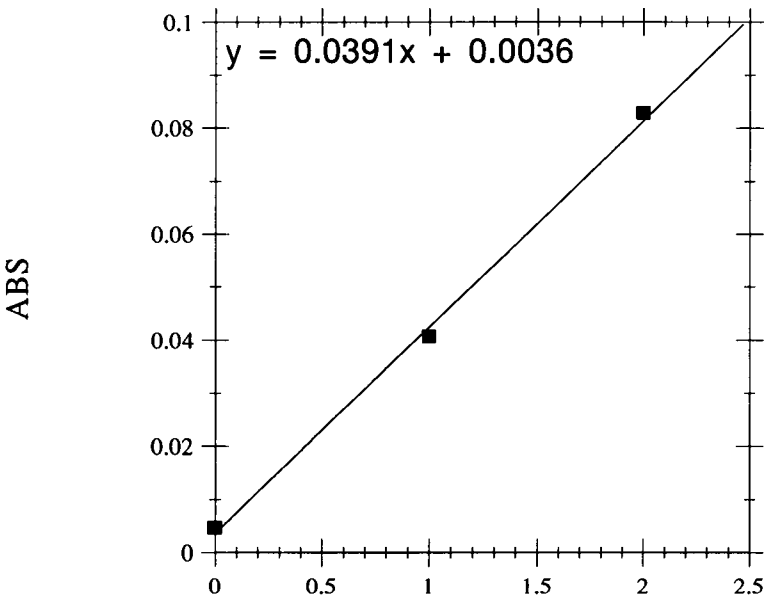

SAN-030 NaOAc
y = 0.0394x - 0.0011
ABS
0.08
0.06
0.04
0.02
0
-0.5
0
0.5
1
1.5
2
2.5
Fe (ppm)



.0628 x 10 = .628

$\frac{.628 \times 8}{1.026} = 4.897$ ppm

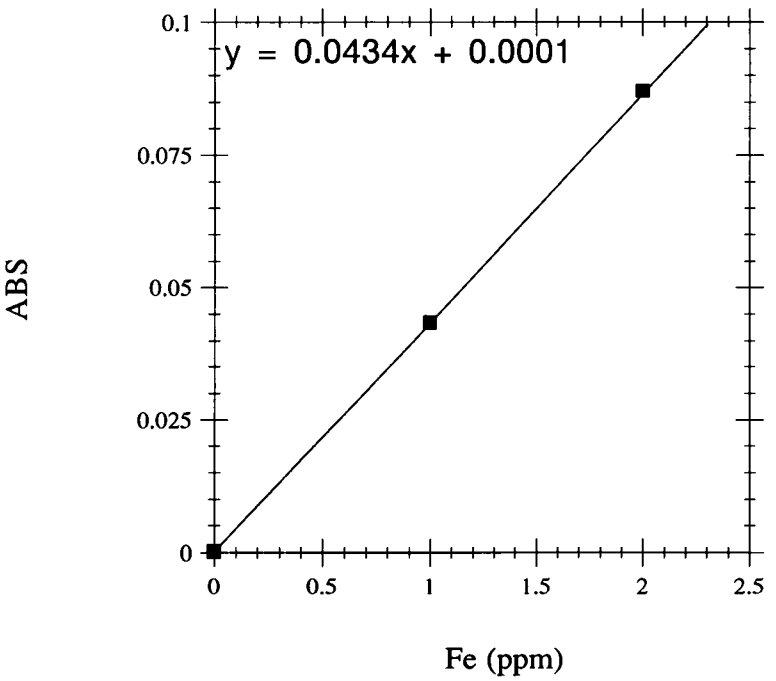
SAN-032 NaOAc



$.0921 \times 2 = .1842 \times \frac{8}{1.017} = 1.449\ ppm$

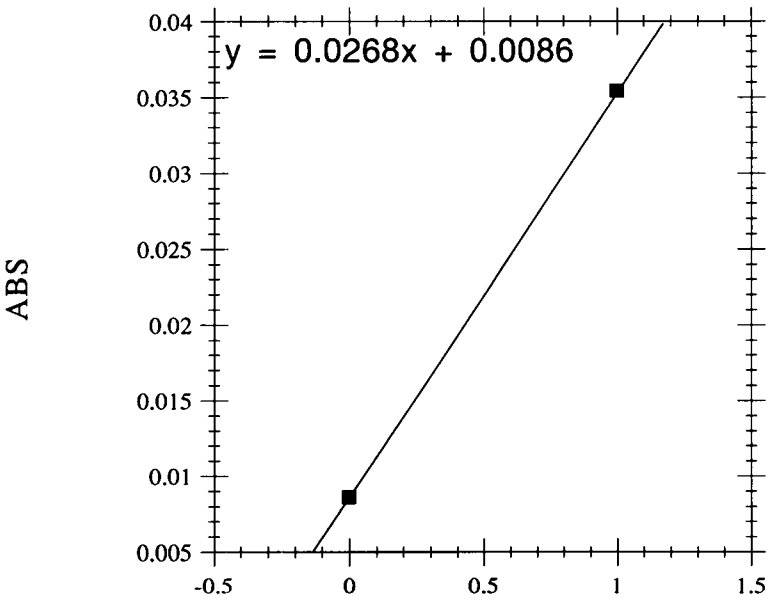
$.0921 \times 10 = .921 \times \frac{8}{1.017} = 7.245\ ppm$

SAN-033 NaOAc



.0023 x 10 = .023 x 8 / 1.012 = .182 ppm

SAN-034 NaOAc

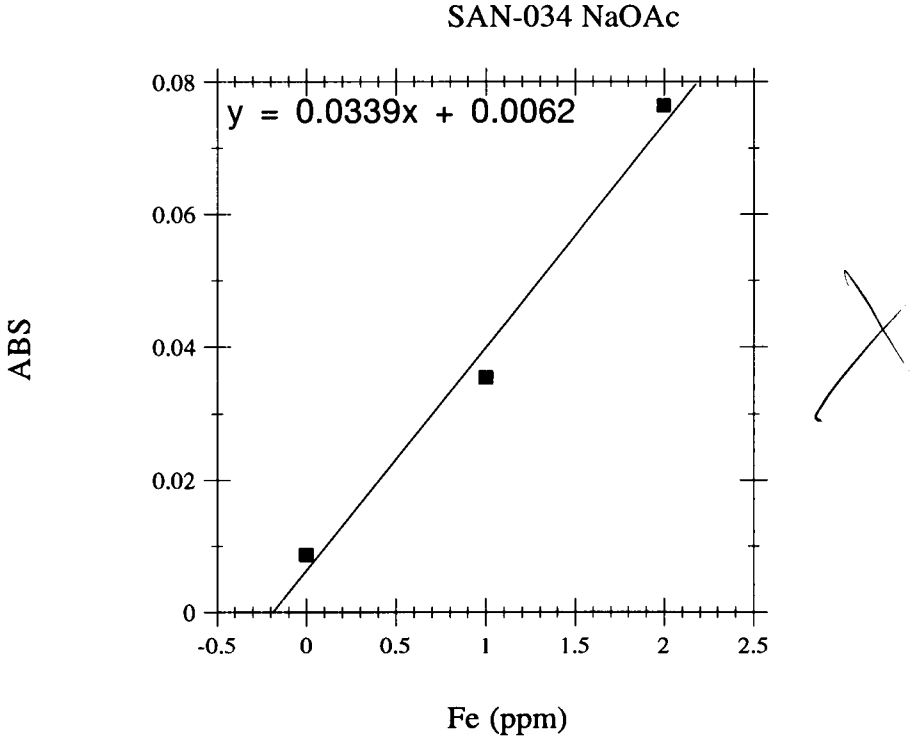


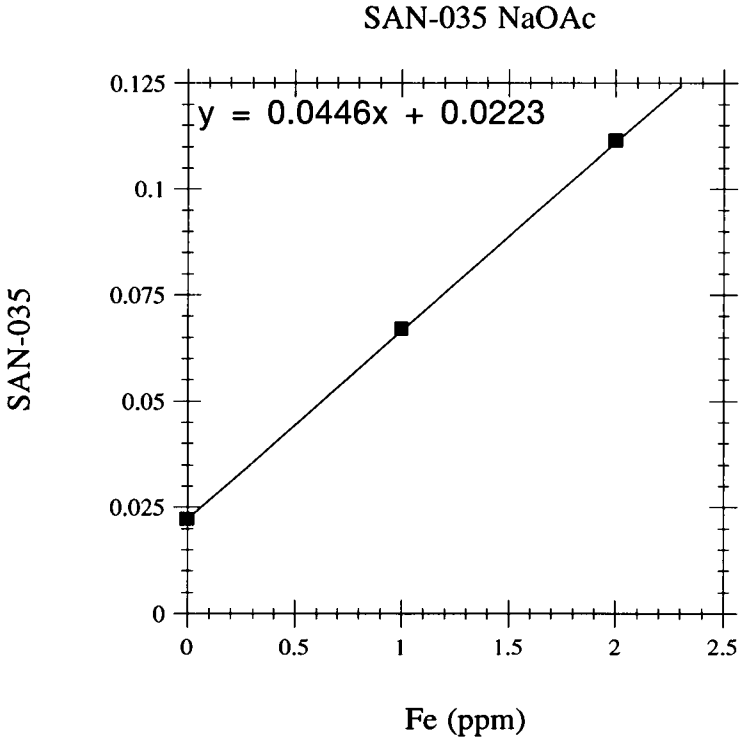
.3209 x 10 = 3.209

3.209 + 8 / 1.009 = 25.44 ppm

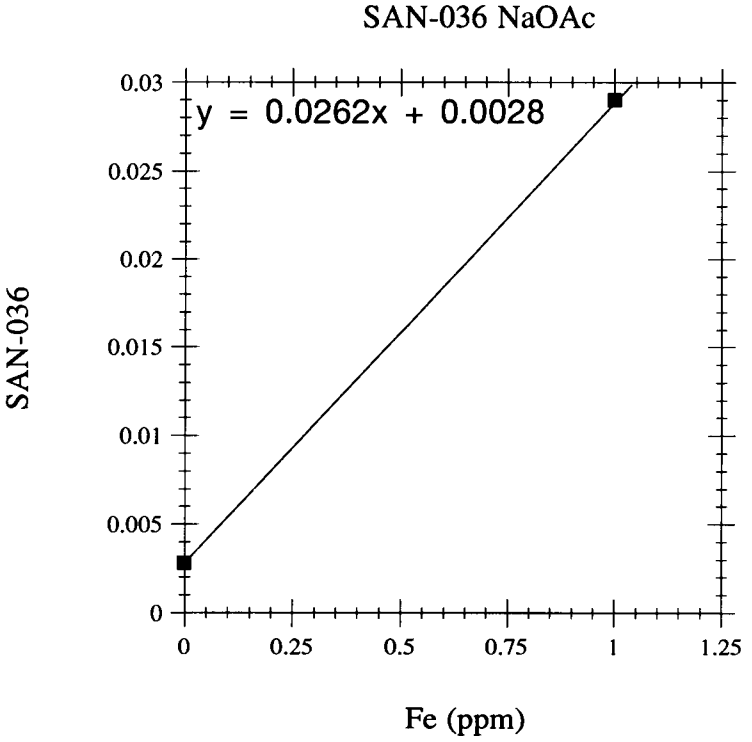
1.364 x 10 = 13.64

13.64 + 8 / 1.009 = 108.15 ppm

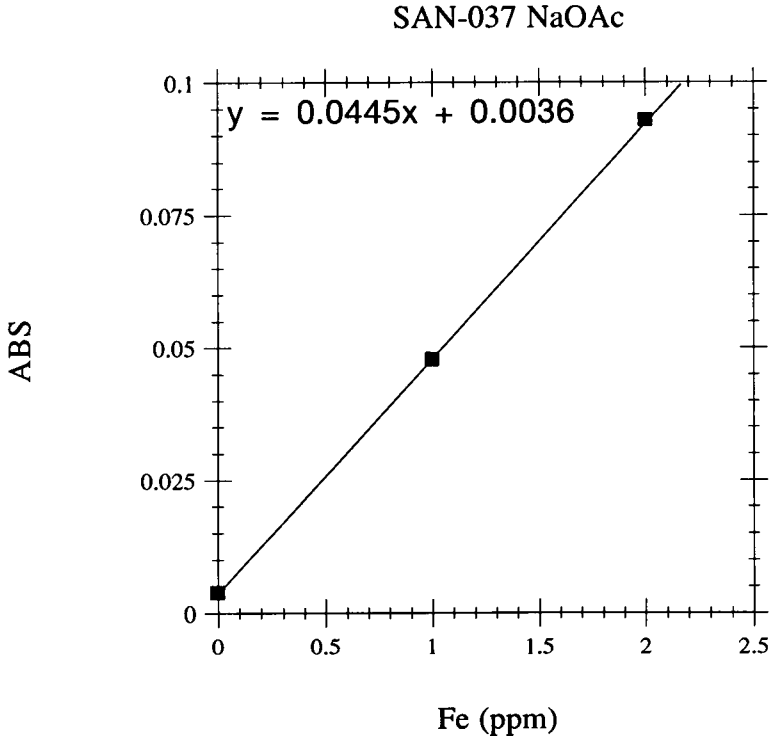

SAN-034 NaOAc
y = 0.0339x + 0.0062
ABS
Fe (ppm)
0.08
0.06
0.04
0.02
0
-0.5
0
0.5
1
1.5
2
2.5



$.5 \times 10 = 5 \times \frac{8}{1.02} = 39.22 \text{ ppm}$

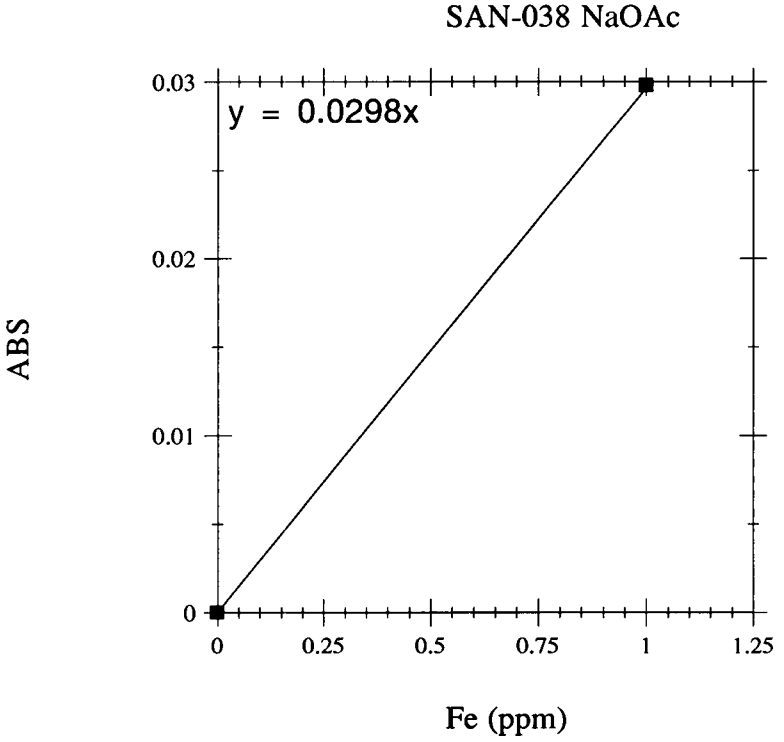


$.1069 \times 10 = 1.069 \times \frac{8}{1.04} = 8.434$ ppm

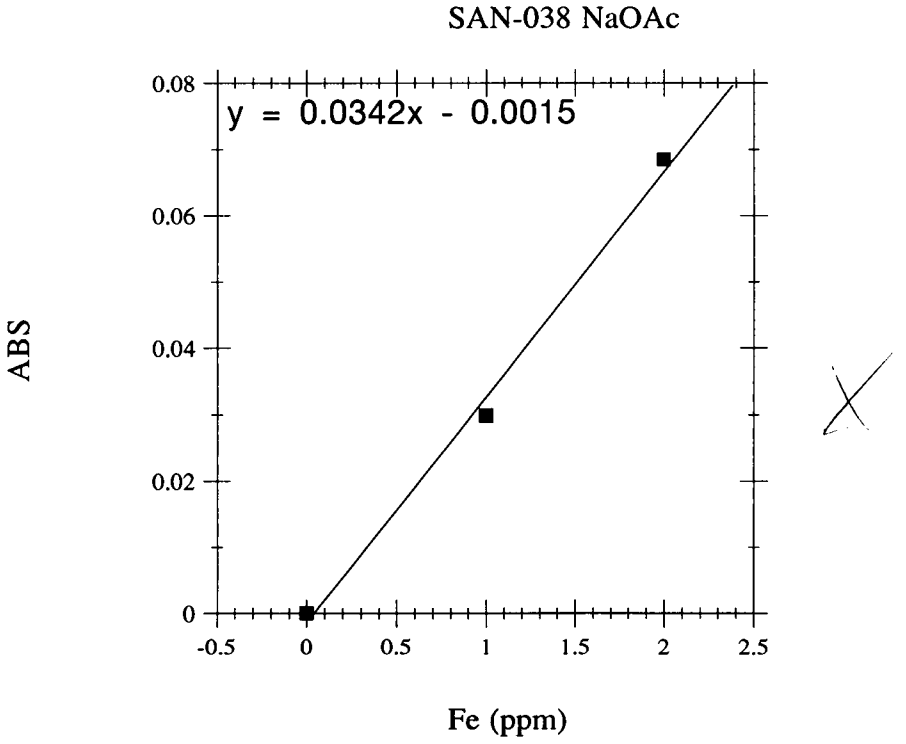


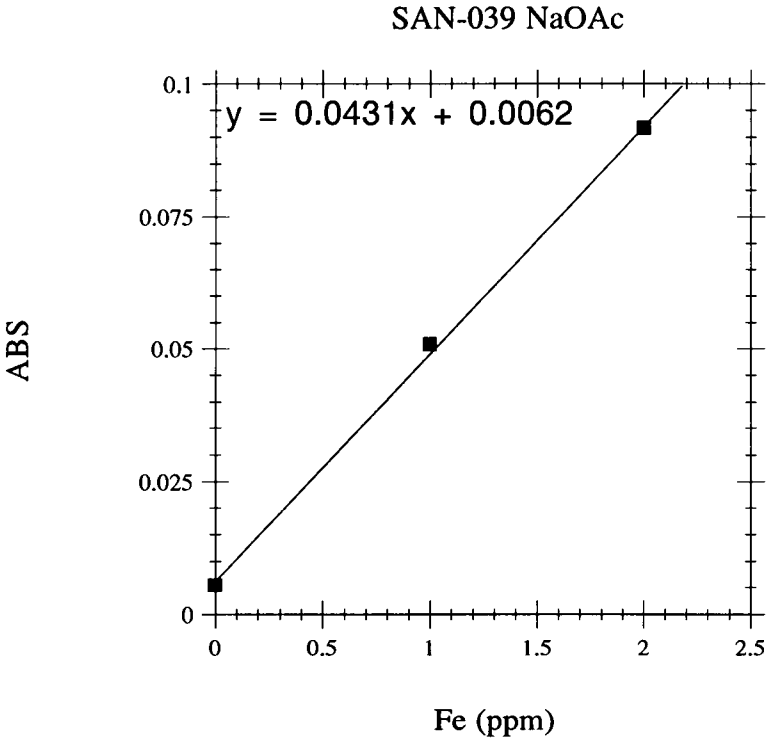
$.0809 \times 10 = .809$

$\frac{.809 \times 8}{1.021} = 6.338 \text{ ppm}$



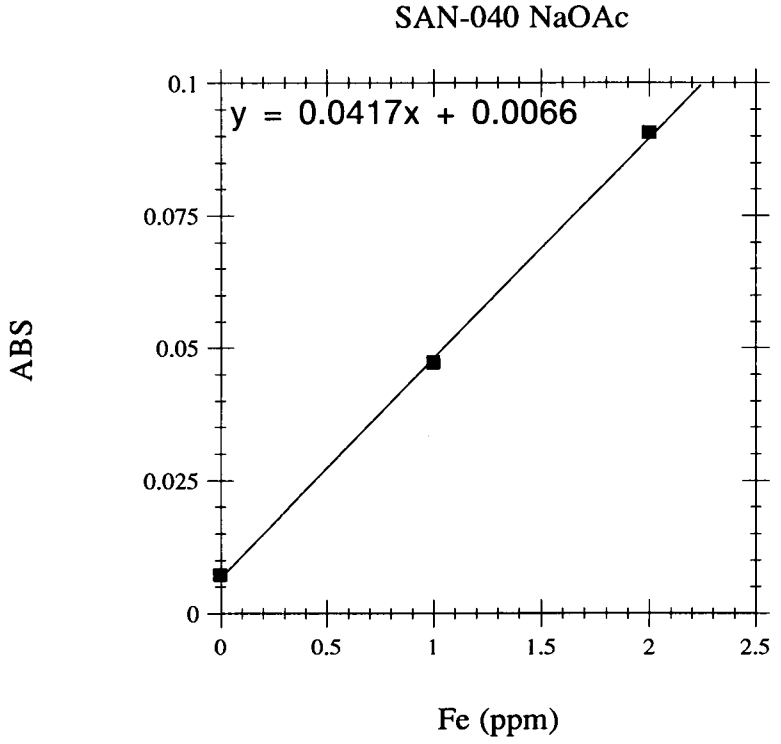
0 ppm


SAN-038 NaOAc
y = 0.0342x - 0.0015
0.08
0.06
0.04
0.02
0
-0.5
0
0.5
1
1.5
2
2.5
ABS
Fe (ppm)



$.1438 \times 10 = 1.438$

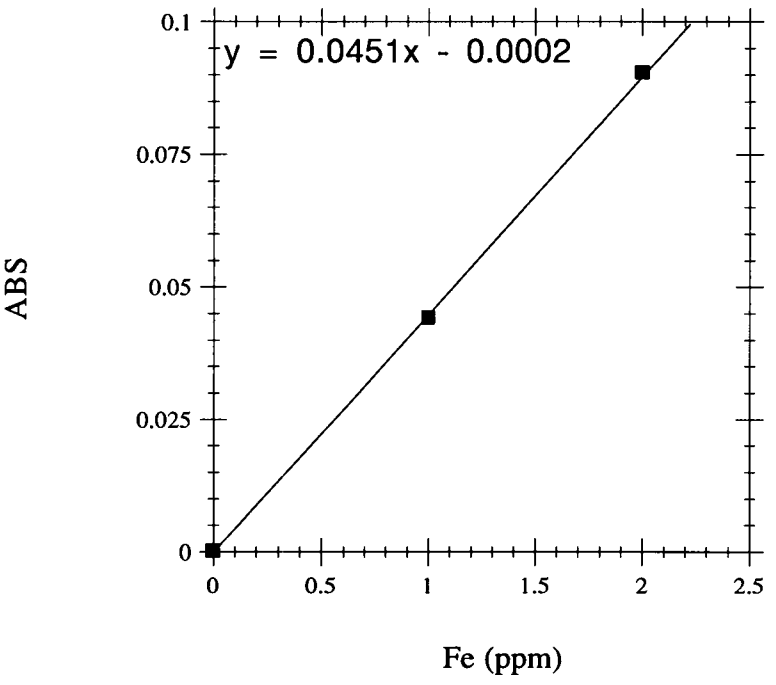
$1.438 \times \frac{8}{1.018} = 11.30 \text{ ppm}$



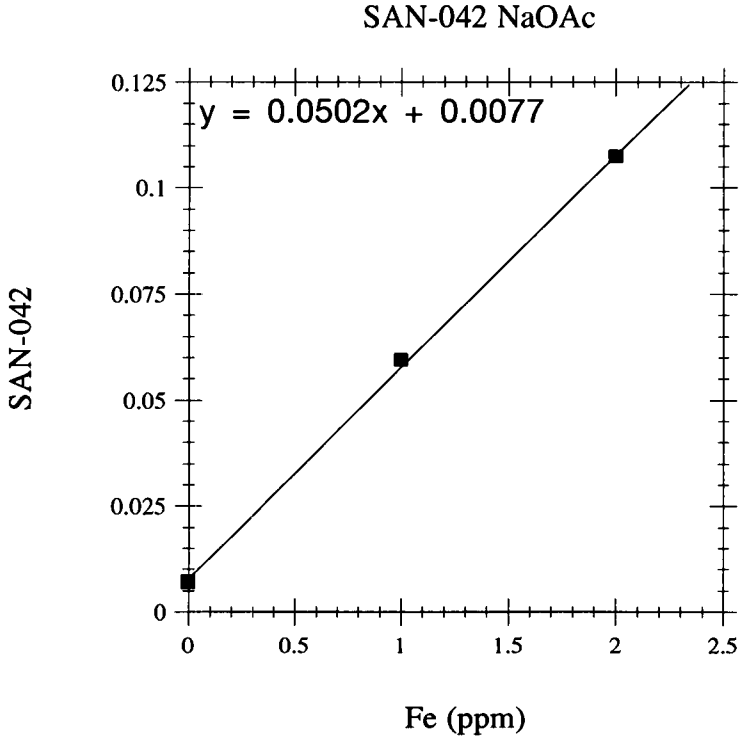
.1583x7 = .316 x 8 / .017 = 2.49ppm

.1583x10 = 1.583 x 8 / 1.017 = 12.45ppm

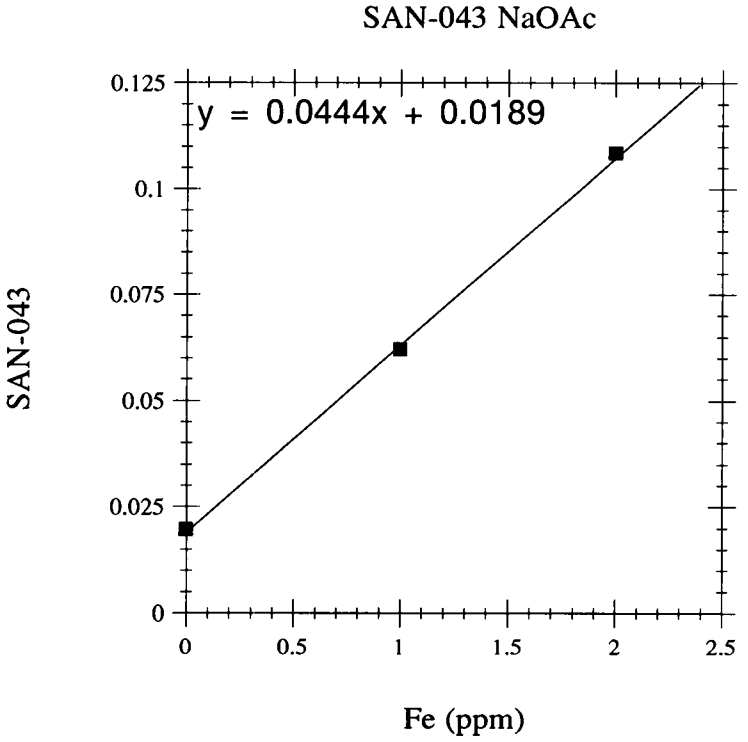
SAN-041 NaOAc



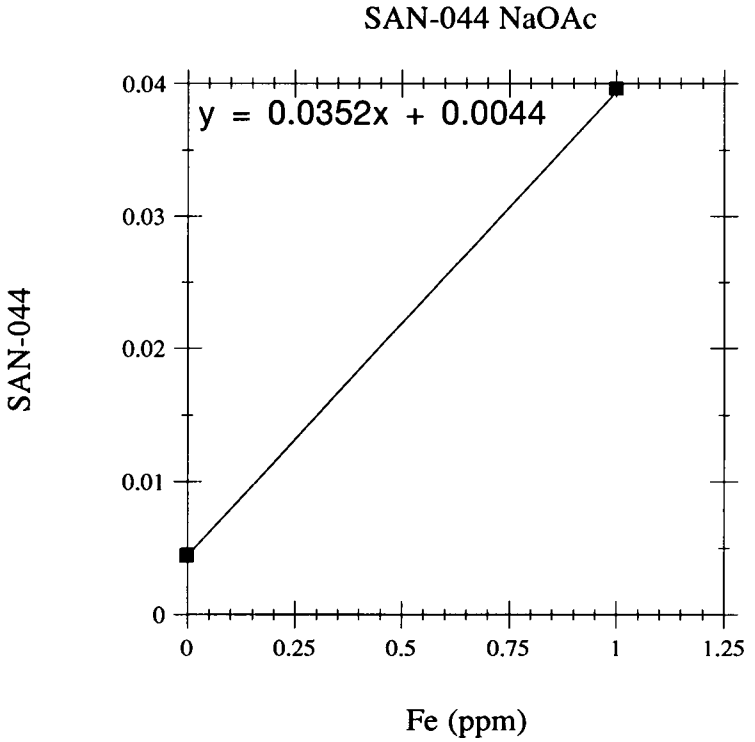
0 ppm



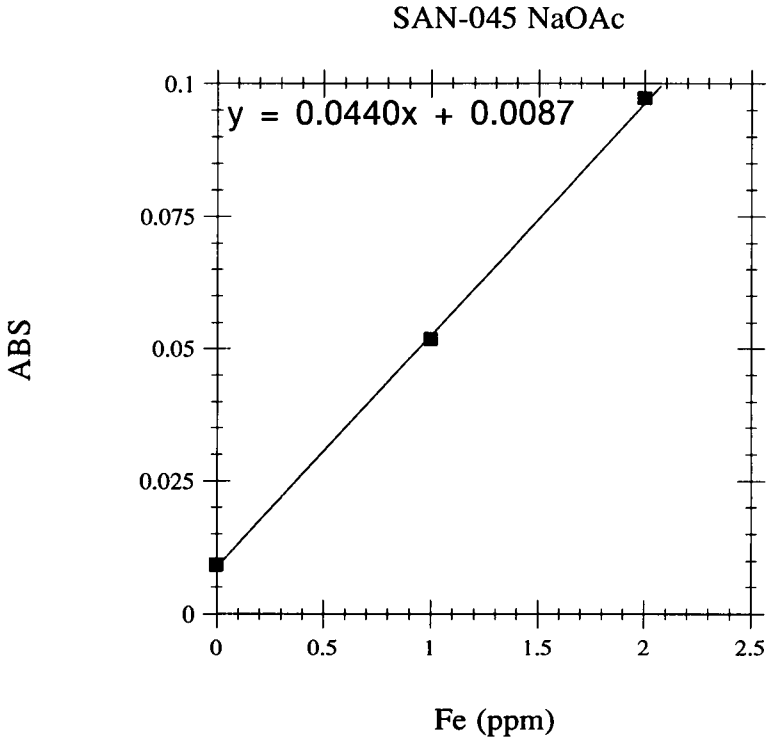
$.1534 \times 10 = 1.534 \times \frac{8}{1.012} = 12.126 \text{ ppm}$



$.4257 \times 10 = 4.257 \times \frac{8}{1.022} = 33.323 ppm$



$12.5 \times 10 = 1.257 \times \frac{8}{1.014} = 9.862\ ppm$

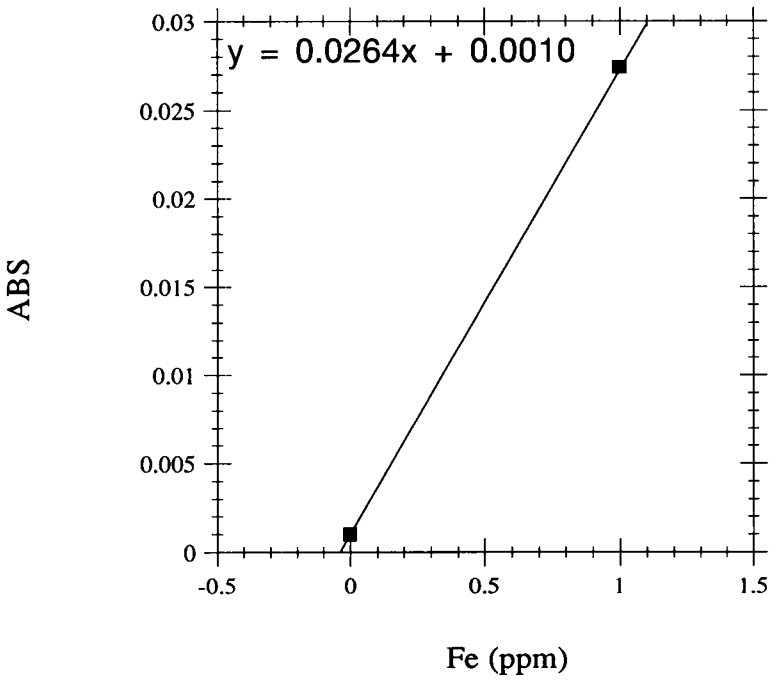


$.1977 \times 10 = 1.977$

$\frac{1.977 \times 8}{1.017} = 15.552 \text{ ppm}$

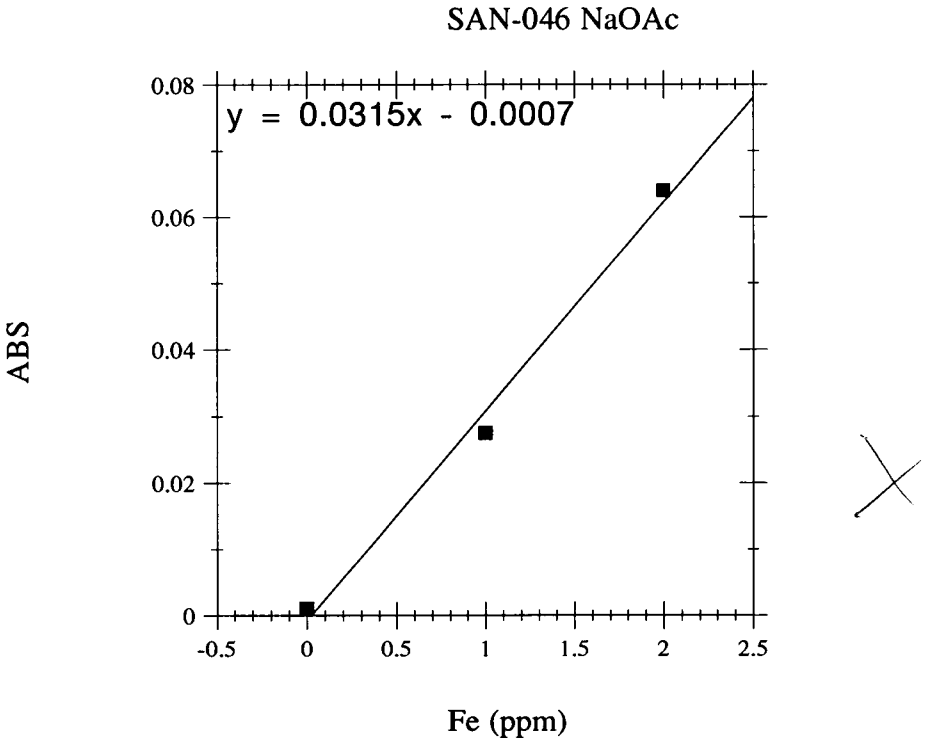
Na Ac

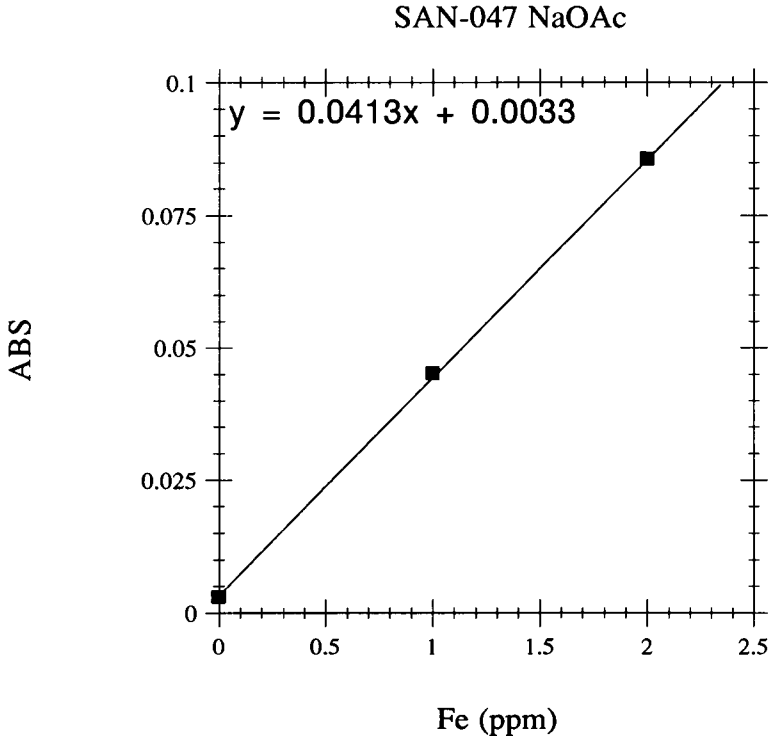
SAN-046 ~~NH2OH~~



.0379 x 10 = .379

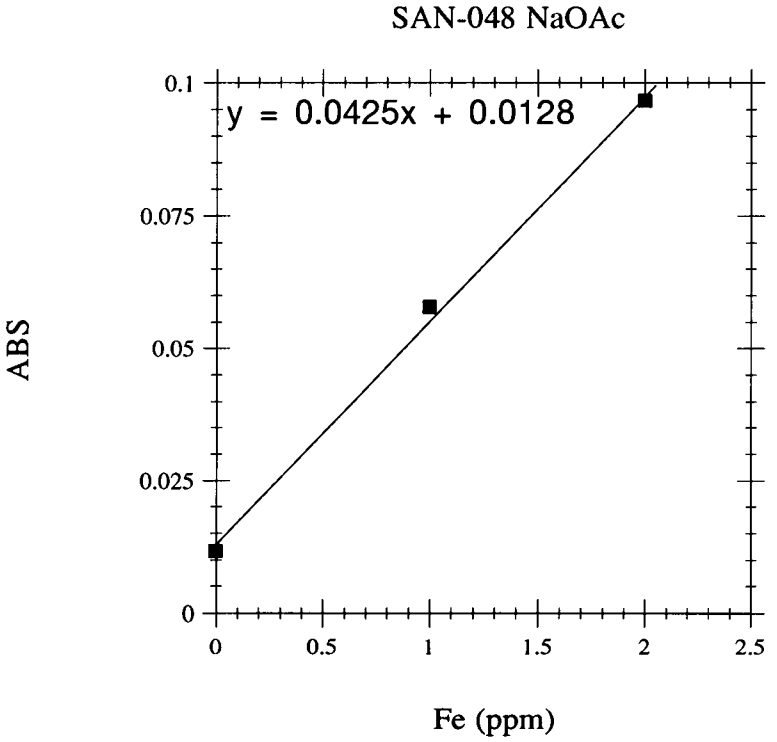
$\frac{.379 \times 8}{1.022} = 2.967$ ppm


SAN-046 NaOAc
y = 0.0315x - 0.0007
0.08
0.06
0.04
0.02
0
ABS
-0.5
0
0.5
1
1.5
2
2.5
Fe (ppm)



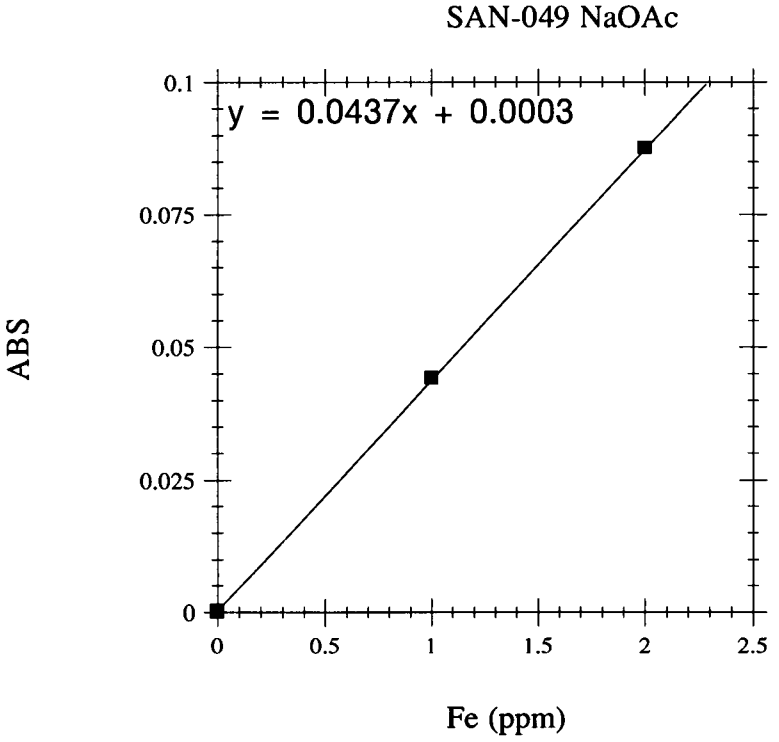
.0799 x 10 = .799

$\frac{.799 \times 8}{1.023} = 6.248 \text{ ppm}$

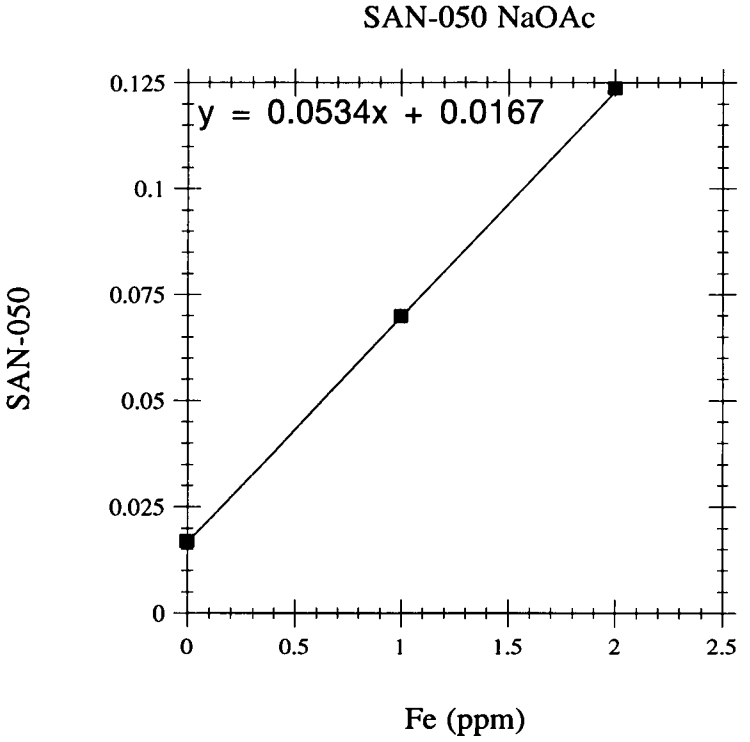


.3012 x 2 = .6024 x 8/1.022 = 4.715ppm

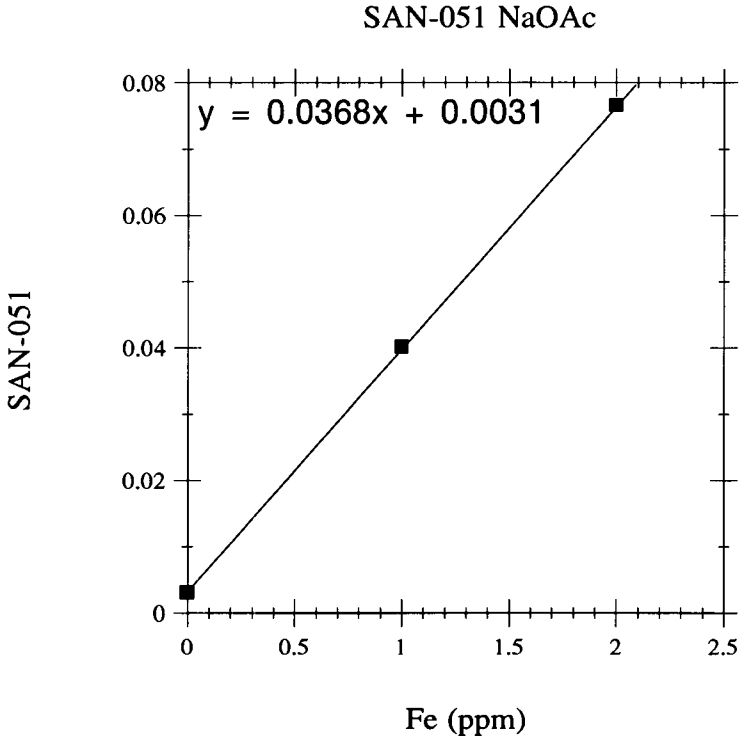
.3012 x 10 = 3.012 x 8/1.022 = 23.577ppm



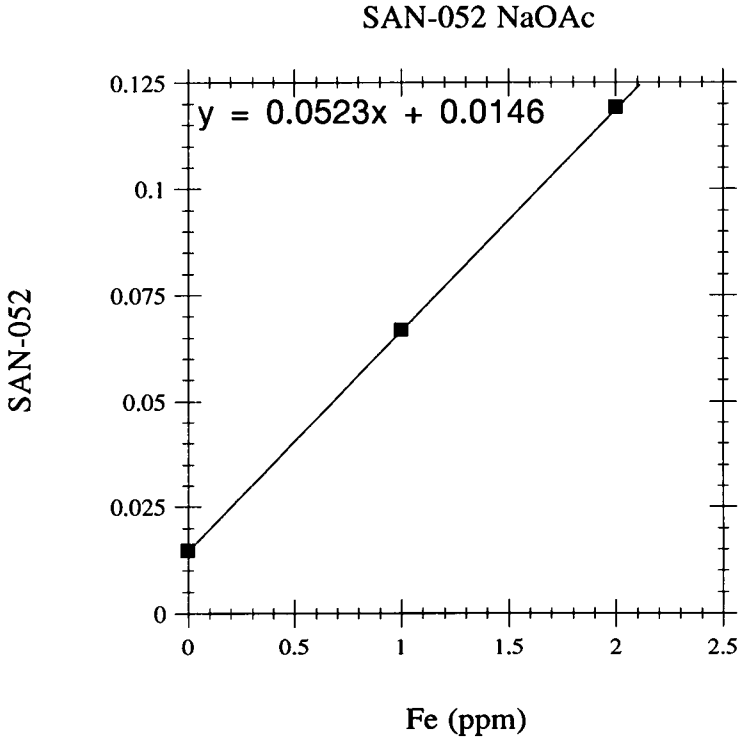
$.0068 \times 10 = .068 \times \frac{5}{1.017} = .535 ppm$



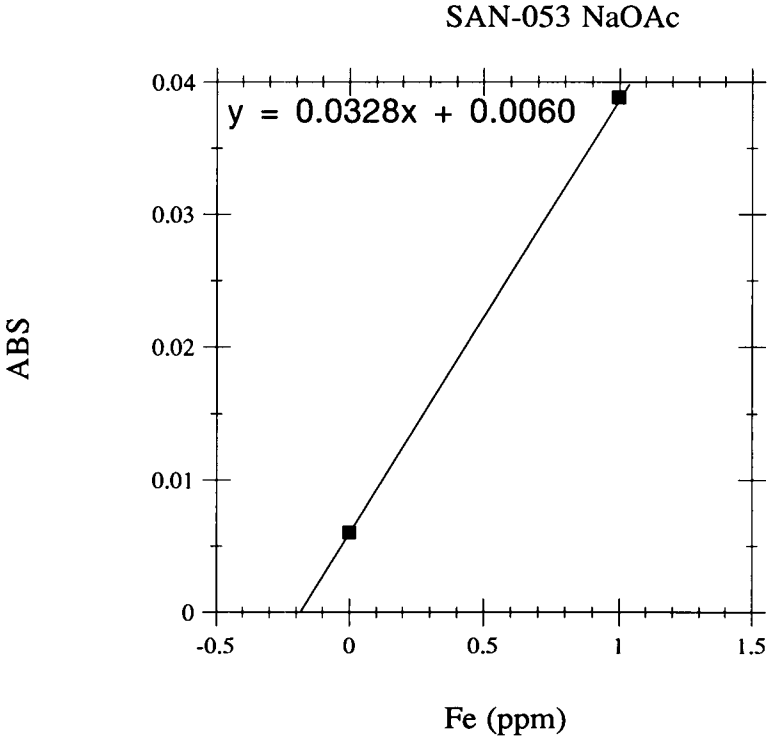
$.3127 \times 10 = 3.127 \times \frac{8}{1.016} = 24.622\ ppm$



$.0842 \times 10 = .842 \times \frac{8}{1.017} = 6.623\text{ppm}$

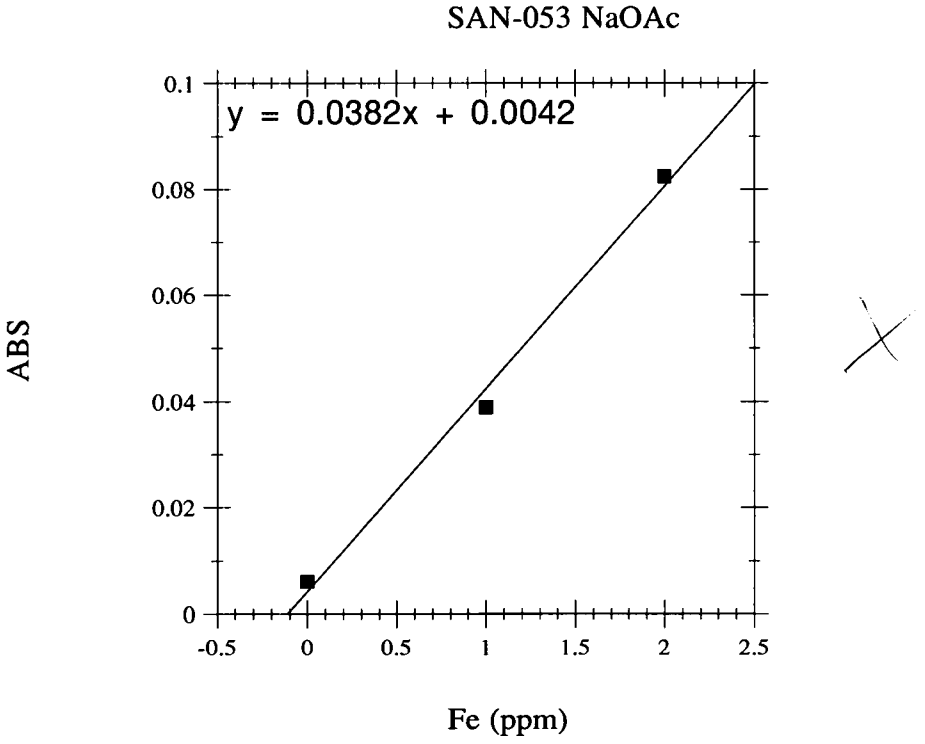


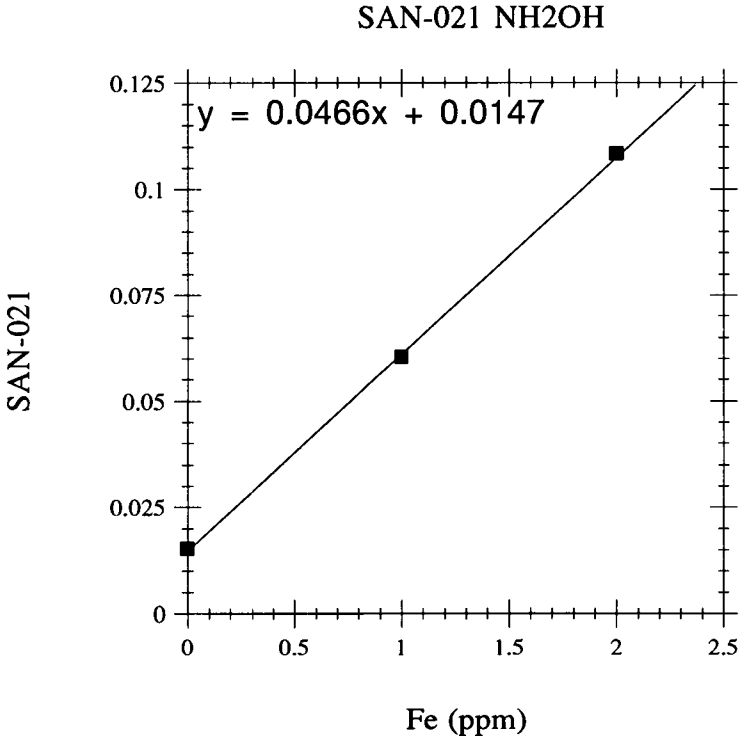
$.2792 \times 10 = 2.792 \times \frac{8}{1.02} = 21.898\,ppm$



.1829 x 10 = 1.829

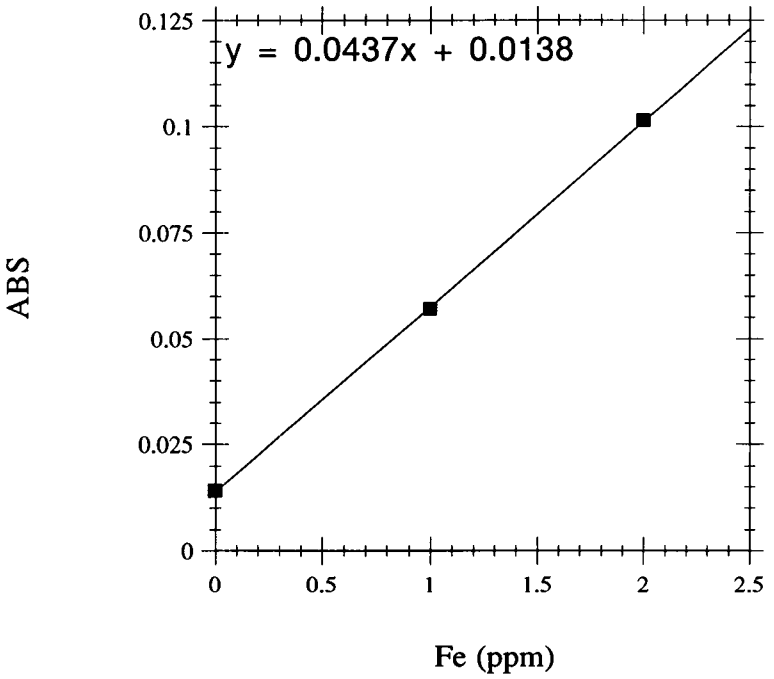
$1.829 \times \frac{8}{1.008} = 14.516$ ppm


SAN-053 NaOAc
y = 0.0382x + 0.0042
ABS
0.1
0.08
0.06
0.04
0.02
0
-0.5
0
0.5
1
1.5
2
2.5
Fe (ppm)



$.3154 \times 25 = 7.885 \times \frac{8}{1.016} = 62.087 ppm$

SAN-022 NH2OH



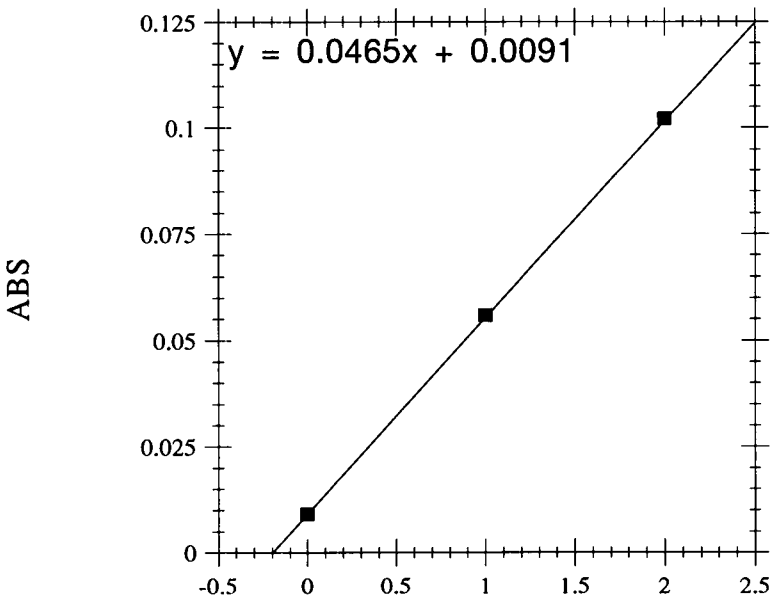
25 = 7.895

.3158 x 10 = 3.158

3.1588 / 1.022 = 24.720 ppm

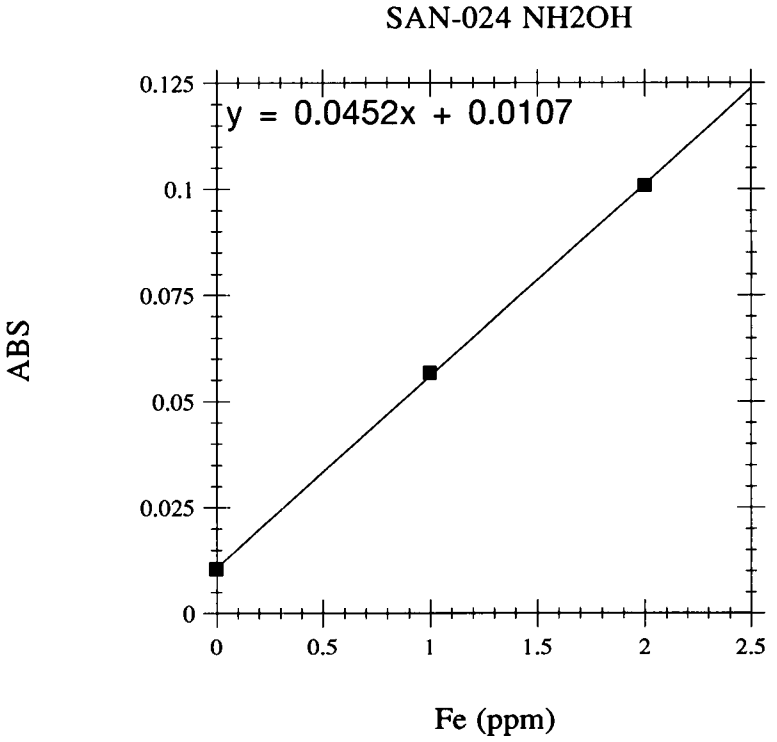
7.895 x 8 / 1.022 = 61.80 ppm

SAN-023 NH2OH



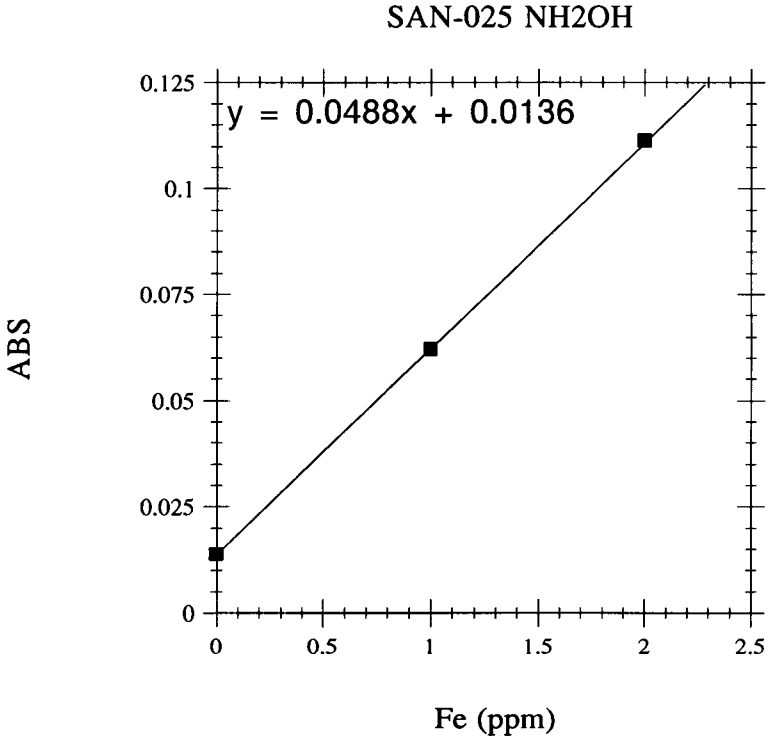
.1996 × 2.5 = 4.99

4.99 × 8/1.022 = 39.06 ppm



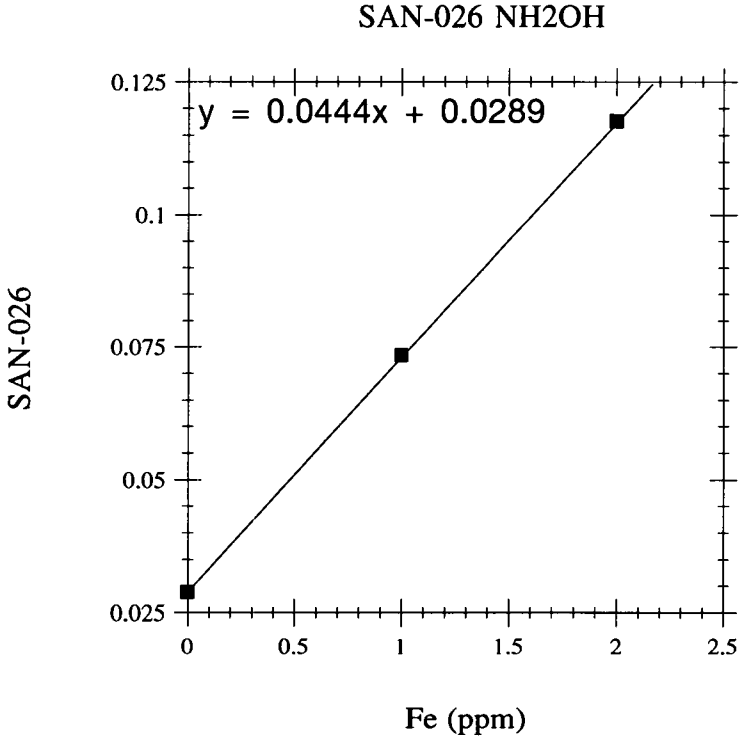
.2367 x 25 = 5.9175

5.9175 x 8/1.018 = 46.503 ppm



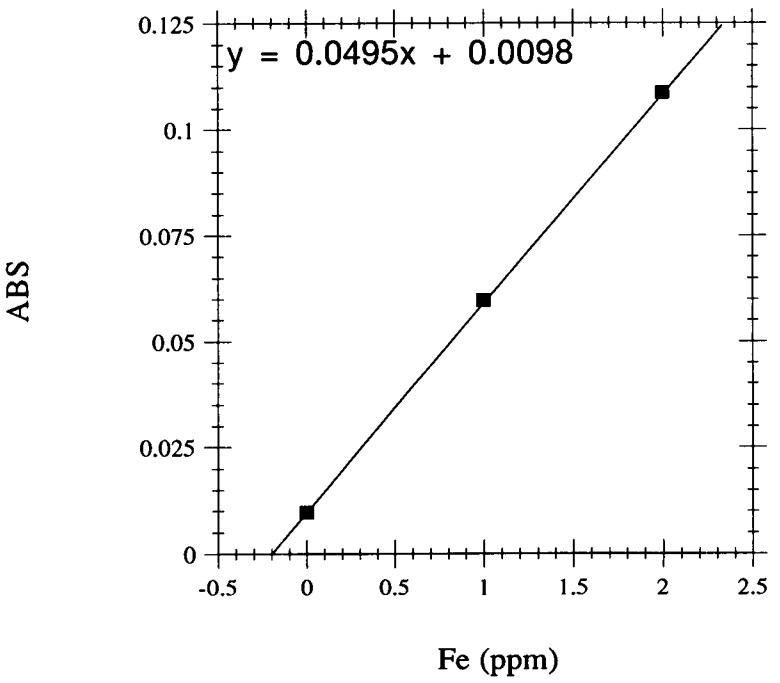
.2787 x 2 = .5574 x 8 / 1.025 = 4.35 ppm

.2787 x 25 = 6.9675 x 8 / 1.025 = 54.38 ppm

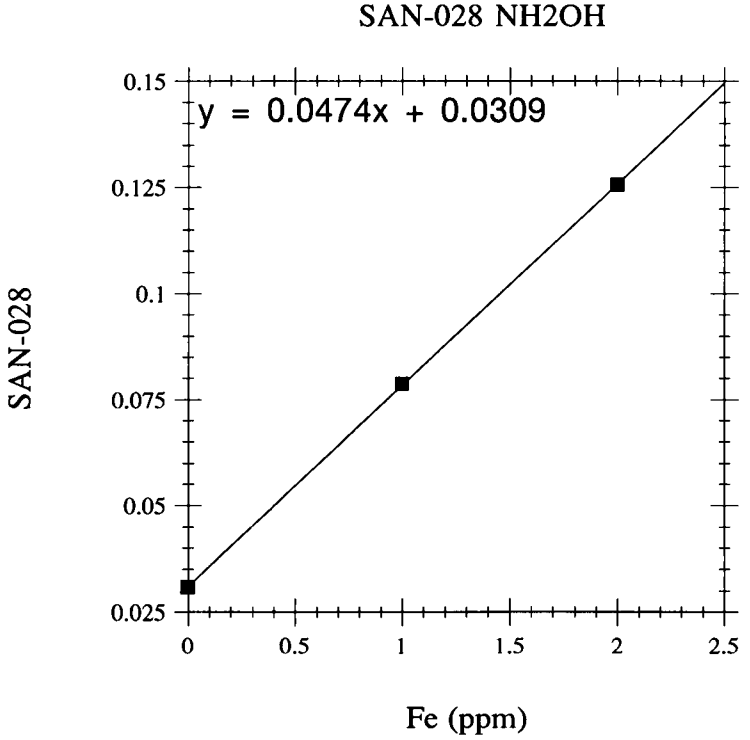


.6509 x 25 = 16.2725 x 8 / 1.021 = 127.50 ppm

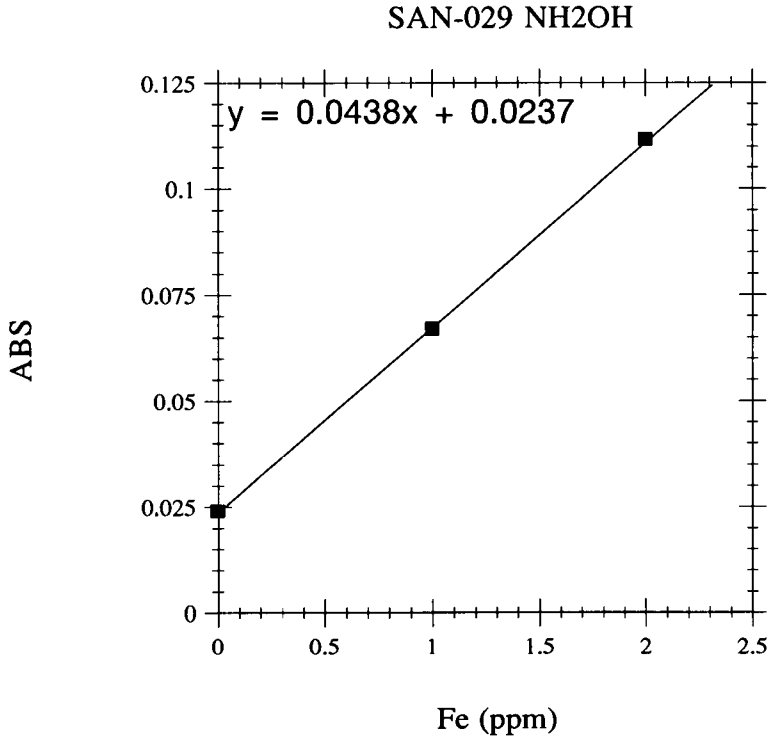
SAN-027 NH2OH



.1980 x 25 = 4.95 x 8 / 1.013 = 39.092 ppm



$.6519 \times 25 = 16.2975 \times \frac{8}{1.023} = 127.449 \text{ppm}$

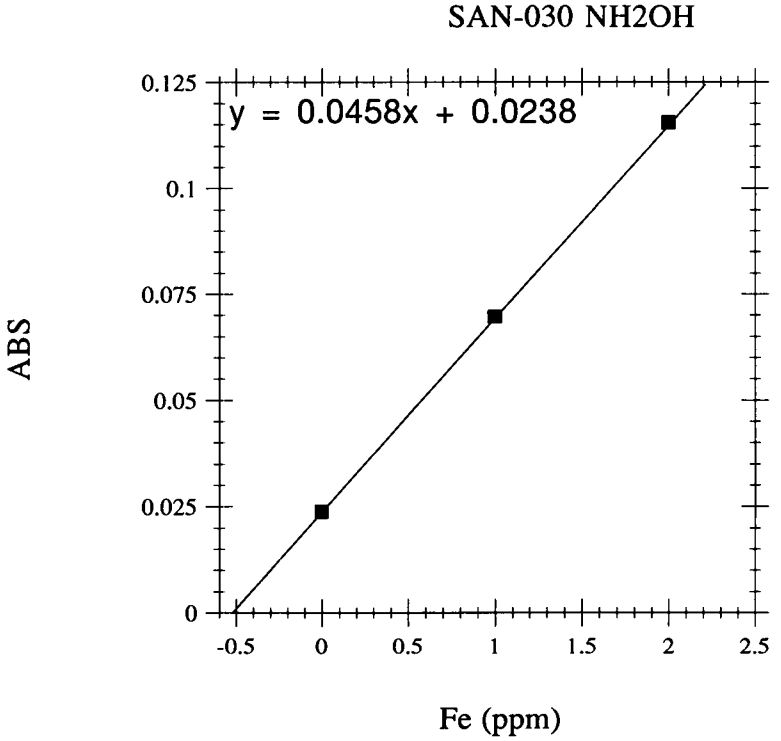


.5411 x 10 = 5.411

25 = 13.527

~~5.411 + 8 / 1.02 = 42.451 ppm~~

13.527 + 8 / 1.02 = 106.10 ppm

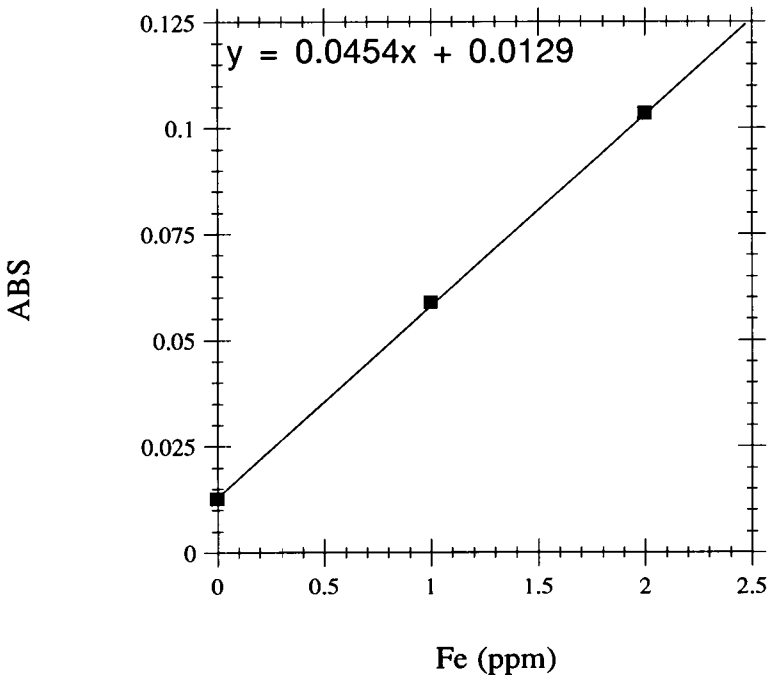


~~.5196 x 10 = 5.196~~

.5196 x 25 = 12.99

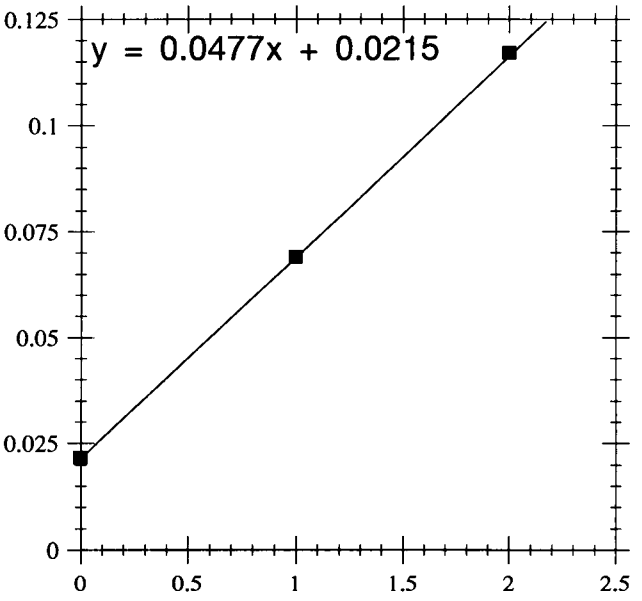
12.99 x 8 / 1.022 = 101.68 ppm

SAN-031 NH2OH



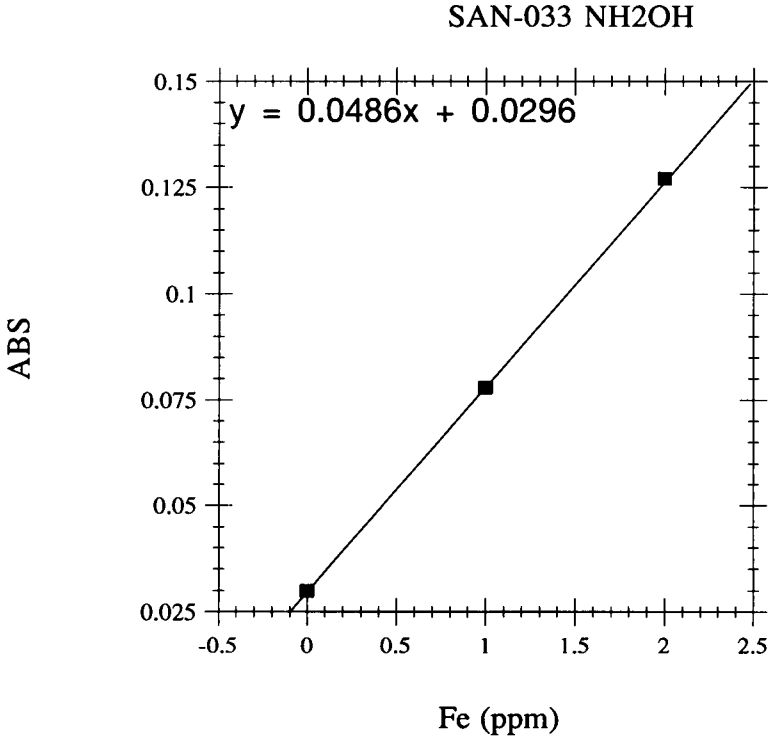
.2841 x 25 = 7.1025 + 8/1.026 = 55.38 ppm

SAN-032 NH2OH

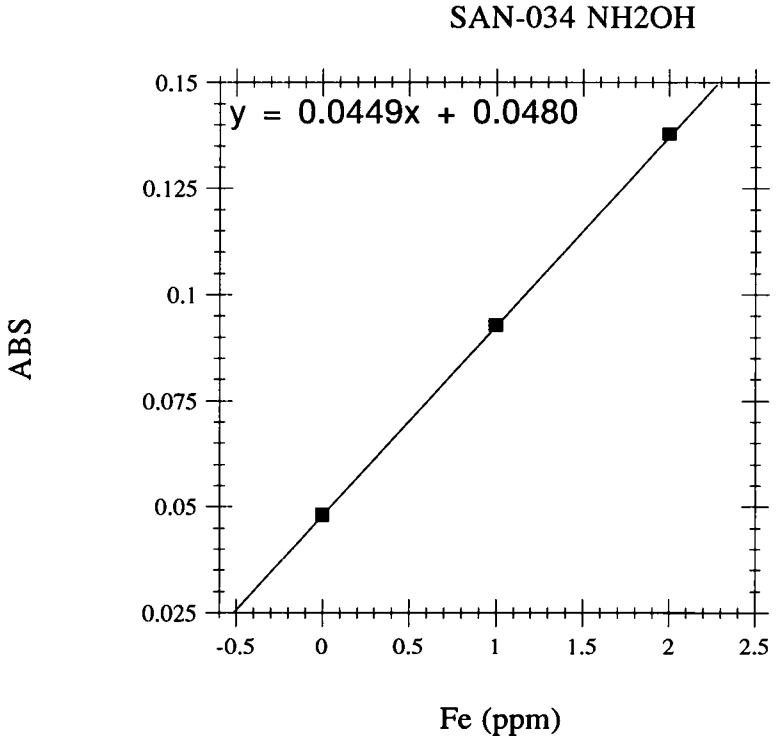


$.4507 \times 2 = .9014 \times \frac{8}{1.017} = 7.091\ ppm$

$.4507 \times 25 = 11.2675 \times \frac{8}{1.017} = 88.63\ ppm$

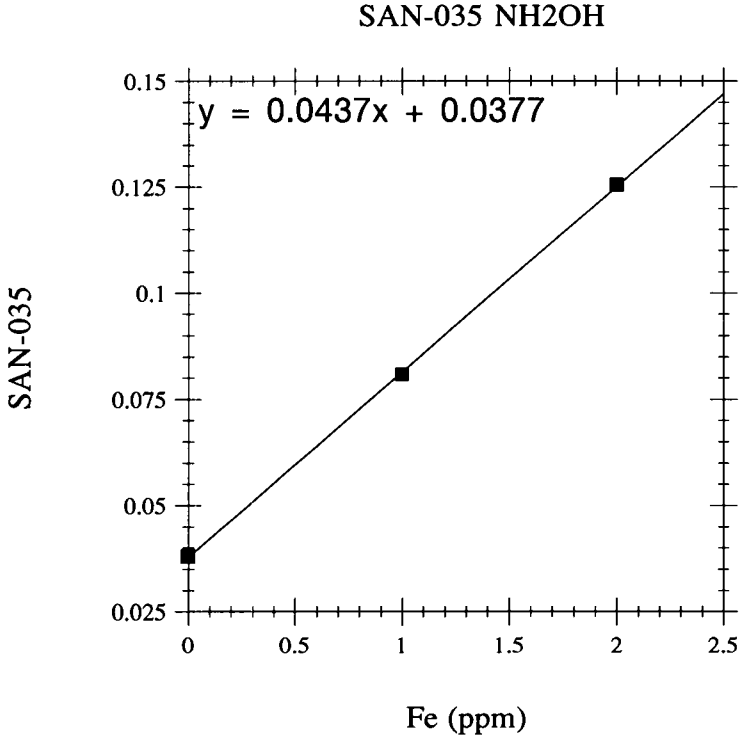


.609 x 25 = 15.225 x 8 / 1.012 = 120.356 ppm

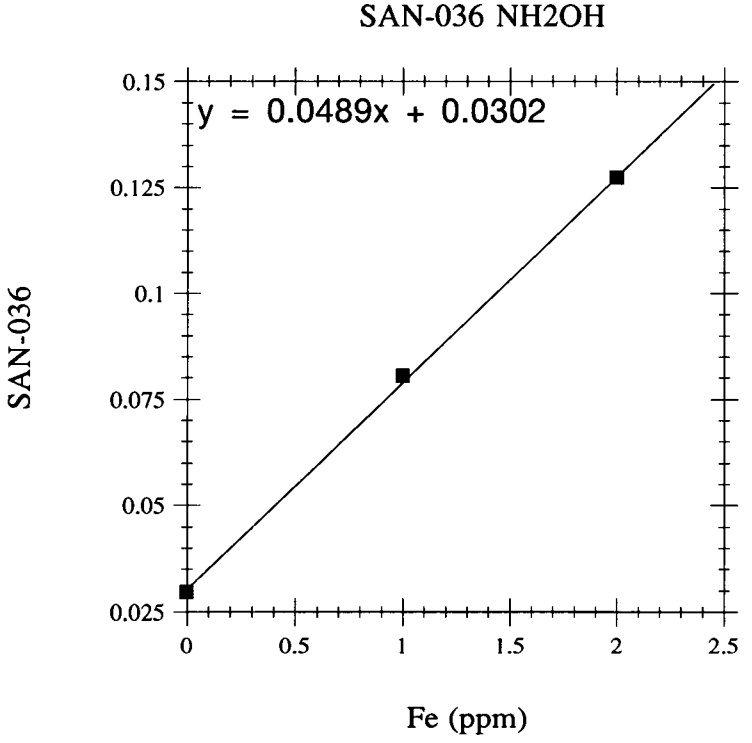


$1.069 \times 25 = 26.725$

$26.725 \times \frac{8}{1.009} = 211.89$ ppm

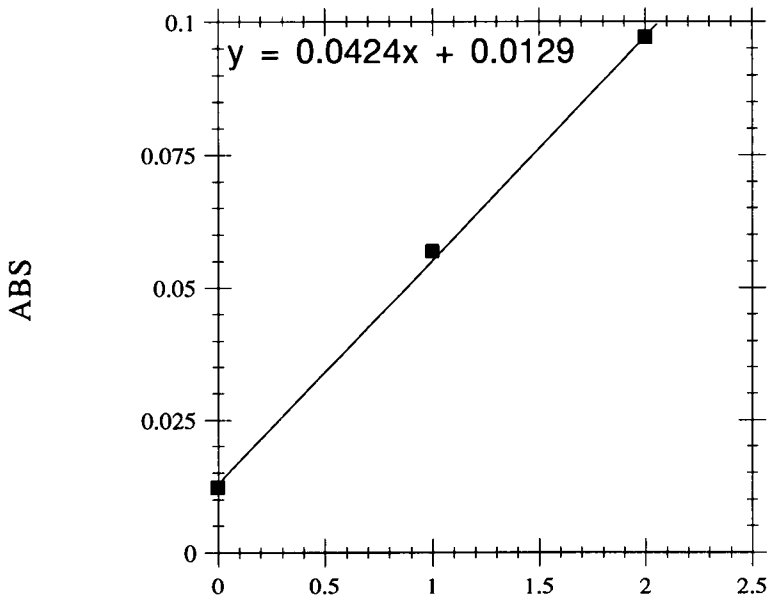


.8627 x 25 = 21.5675 x 8 / 1.02 = 169.157 ppm



$.6176 \times 25 = 15.44 \times \frac{8}{1.014} = 121.815 \text{ ppm}$

SAN-037 NH2OH

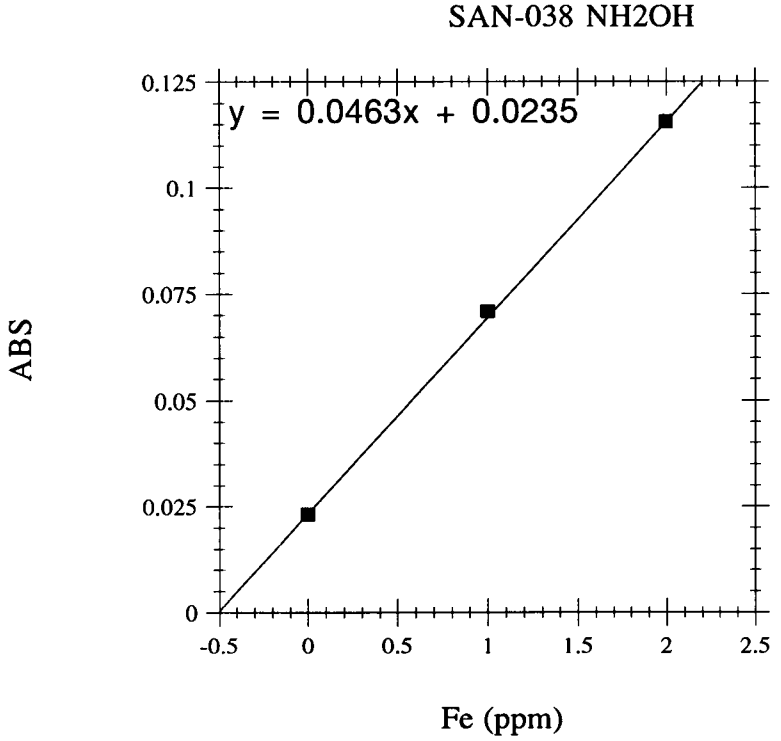


25 = 7.605

.3042 x 10 = 3.042

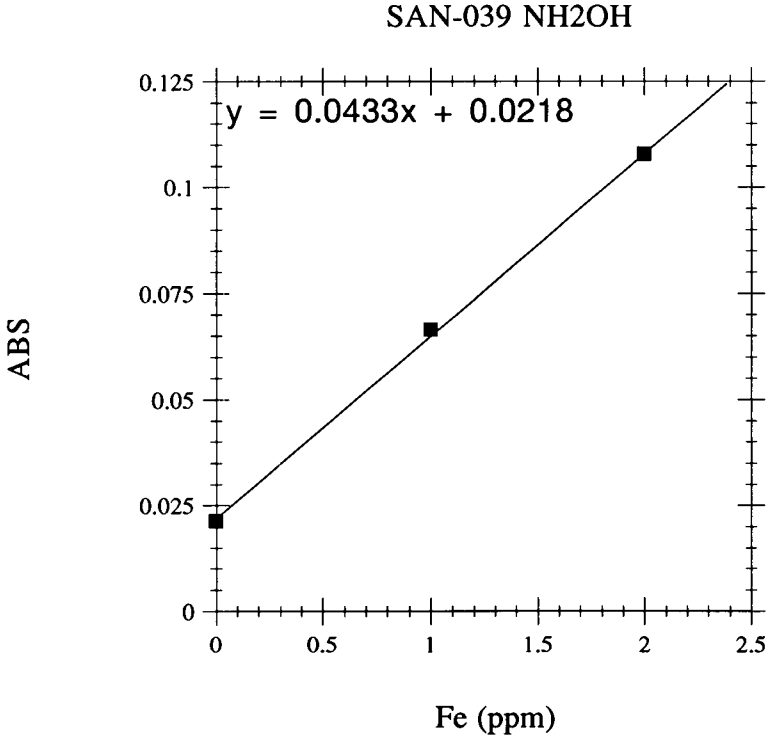
~~3.042 x 8 / 1.021 = 23.83 ppm~~

7.605 x 8 / 1.021 = 59.588 ppm

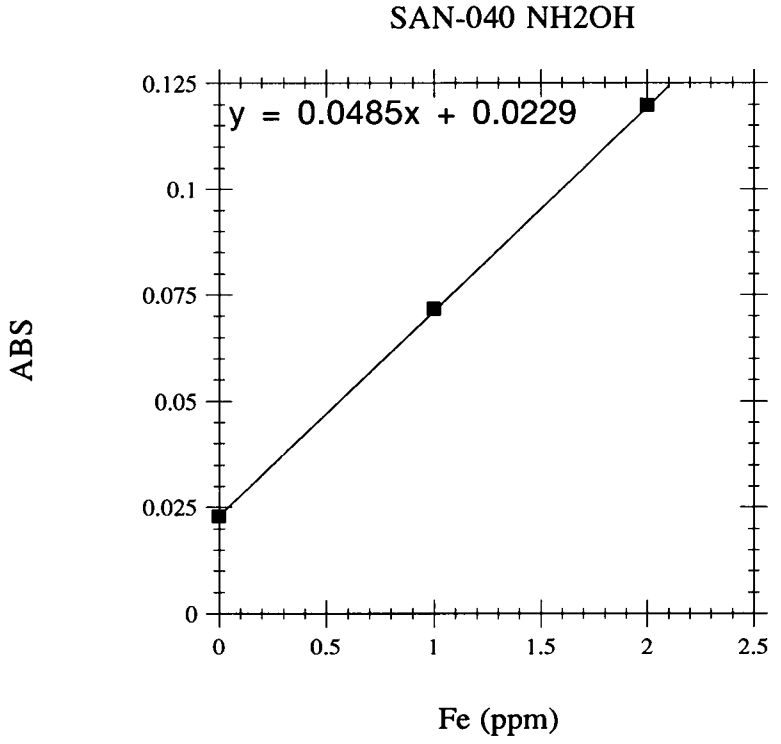


.5076 x 25 = 12.69

12.69 x 8 / 1.024 = 99.14ppm

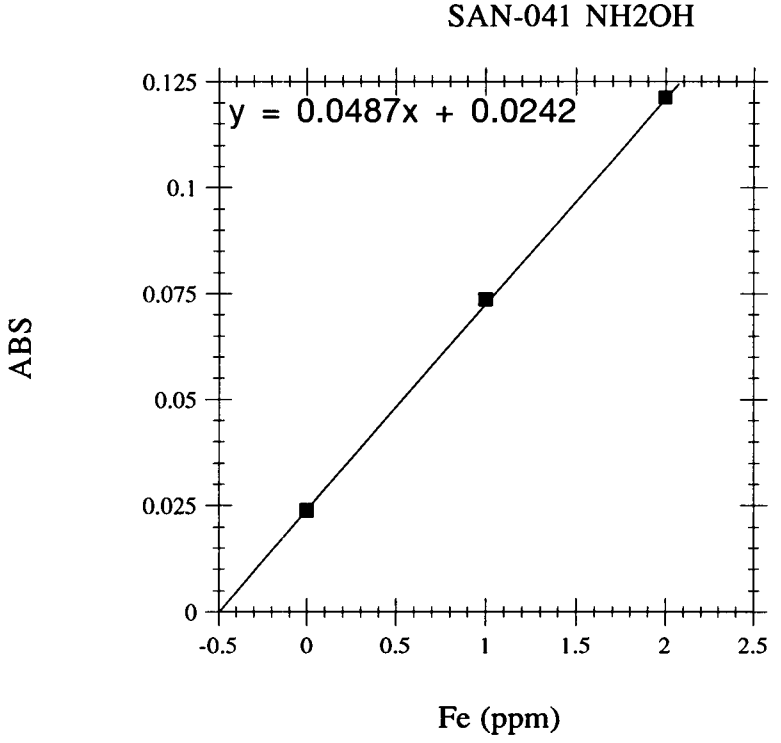


.5035 x 25 = 12.5875 x 8 / 1.018 = 98.919 ppm

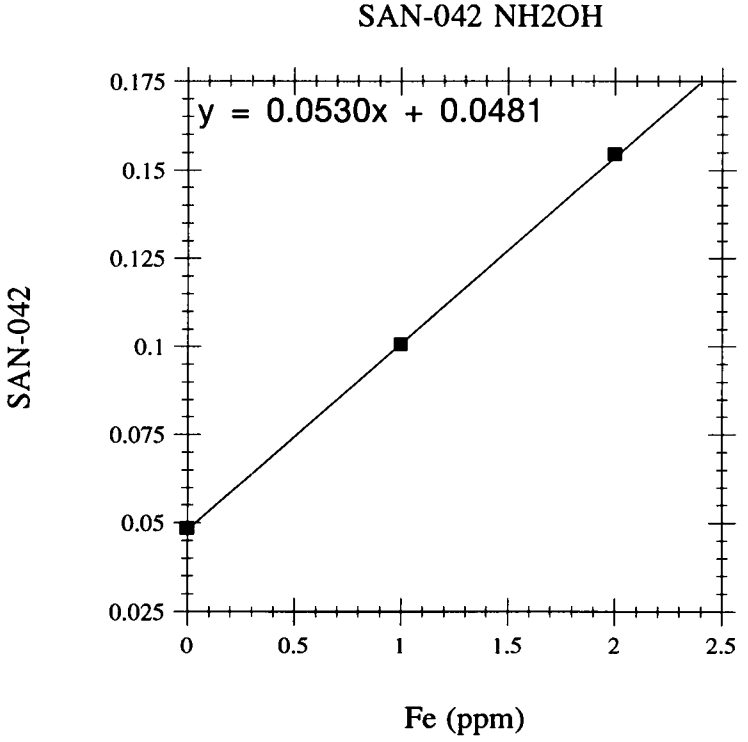


.4721 x 2 = .9442 x 8 / 1.017 = 7.427 ppm

.4721 x 25 = 11.8025 x 8 / 1.017 = 92.84 ppm

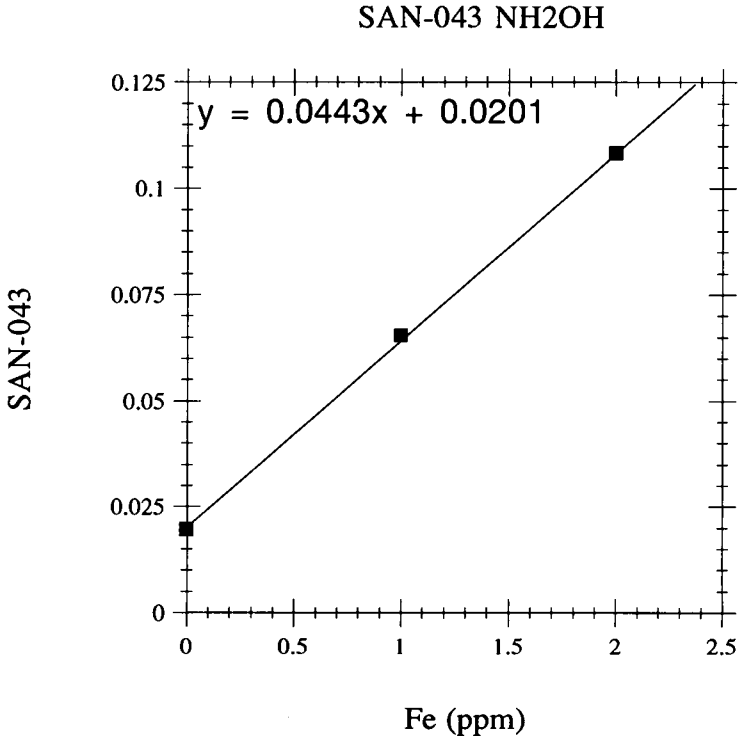


.4969 × 25 = 12.422 × 8/1.015 = 100.87 ppm

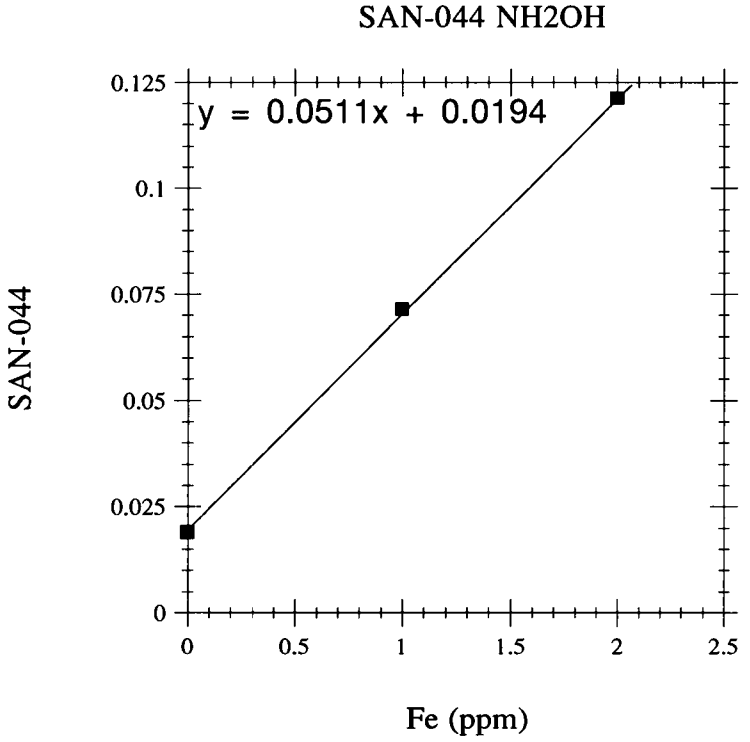


$.9075 \times 10 = \frac{9.075 \times 8}{1.012} = 71.74\text{ppm}$

$.9075 \times 25 = \frac{22.6875 \times 8}{1.012} = 179.35\text{ppm}$

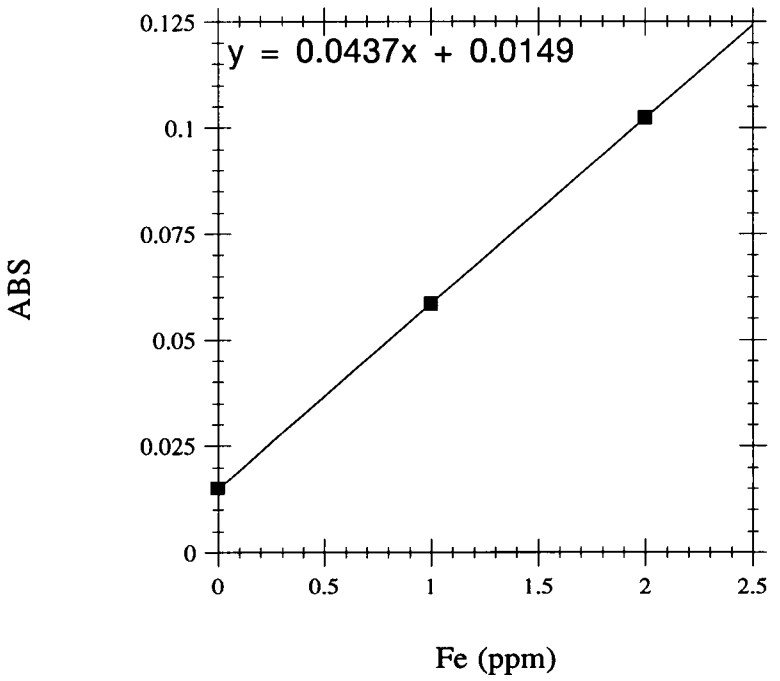


.4537 x 25 = 11.342 5 x 8 / 1.022 = 8.787 ppm



.3796 x 25 = 9.49 x 8 / 1.014 = 74.877 ppm

SAN-045 NH2OH

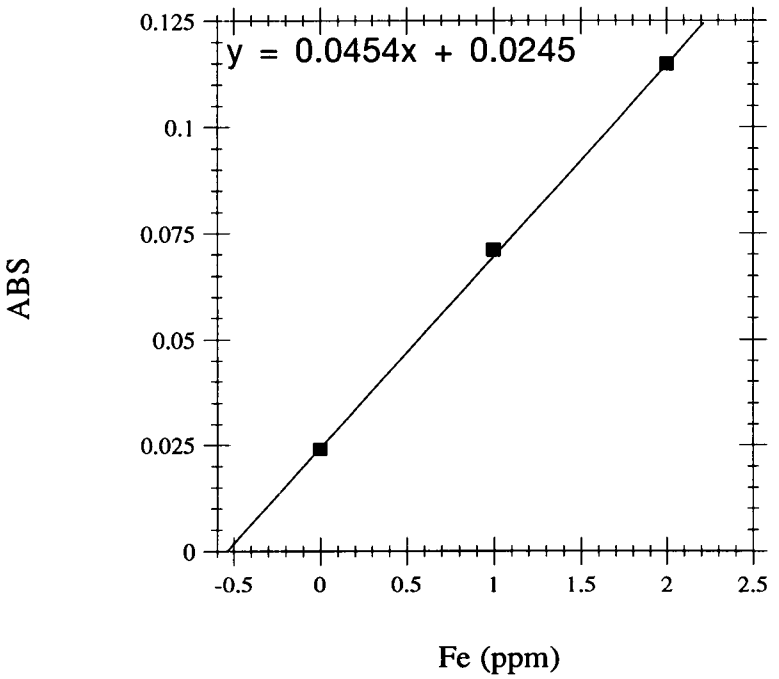


.3409 ~~x 10 = 3.409~~ 25 = 8.522

~~3.409 x 8 / 1.017 = 26.816 ppm~~

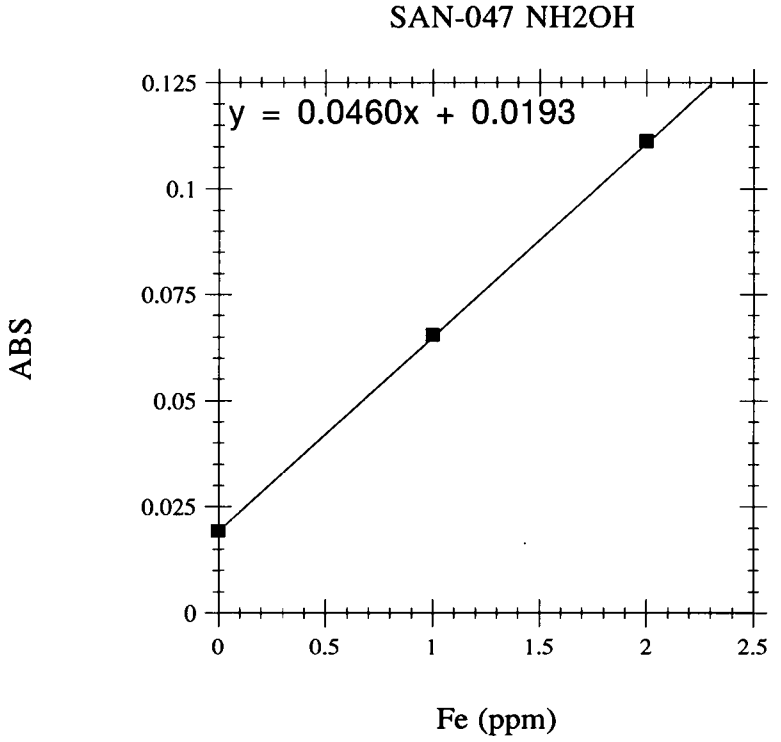
8.522 x 8 / 1.017 = 67.036 ppm

SAN-046 NH2OH



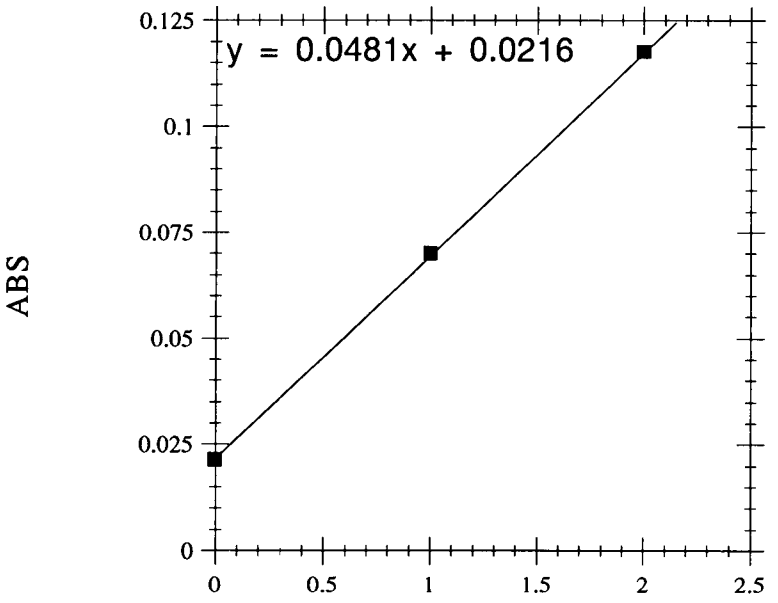
.5396 x 25 = 13.49

13.49 x 8/1.022 = 105.597ppm



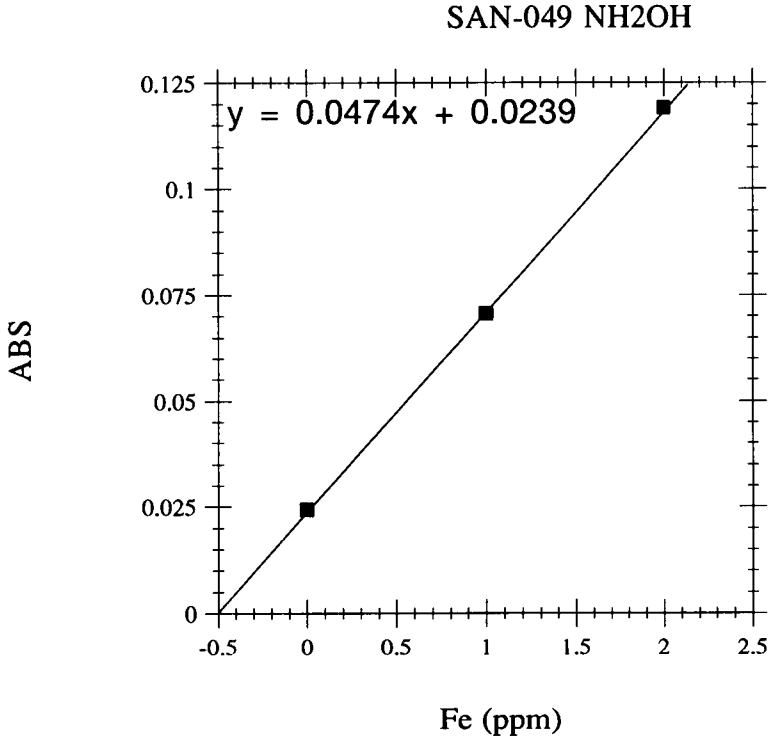
$.4196 \times 25 = 10.49 \times \frac{8}{1.023} = 82.033 \text{ ppm}$

SAN-048 NH2OH

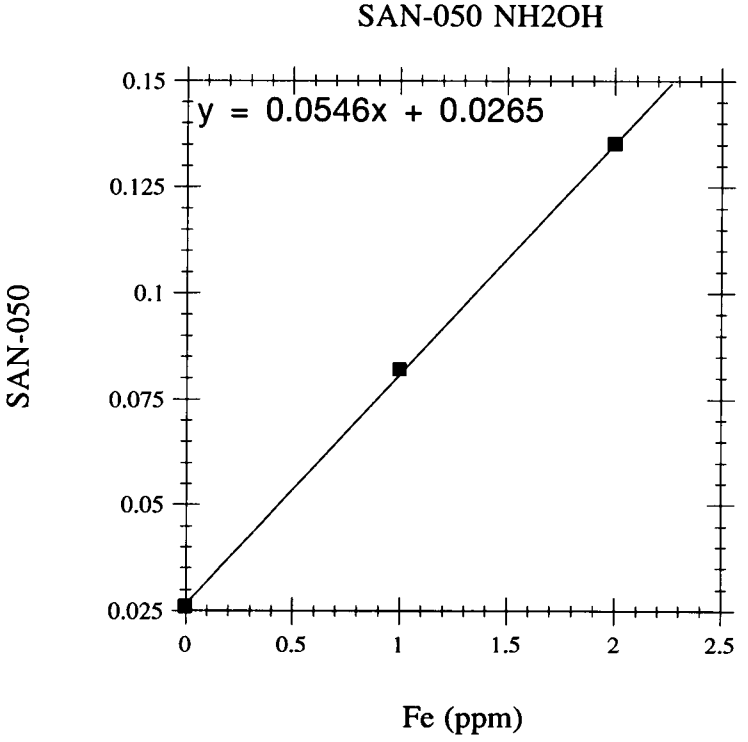


.4491x2 = .8982 x 8 / 1.022 = 7.031 ppm

.4491x25 = 11.2275 x 8 / 1.022 = 87.89 ppm

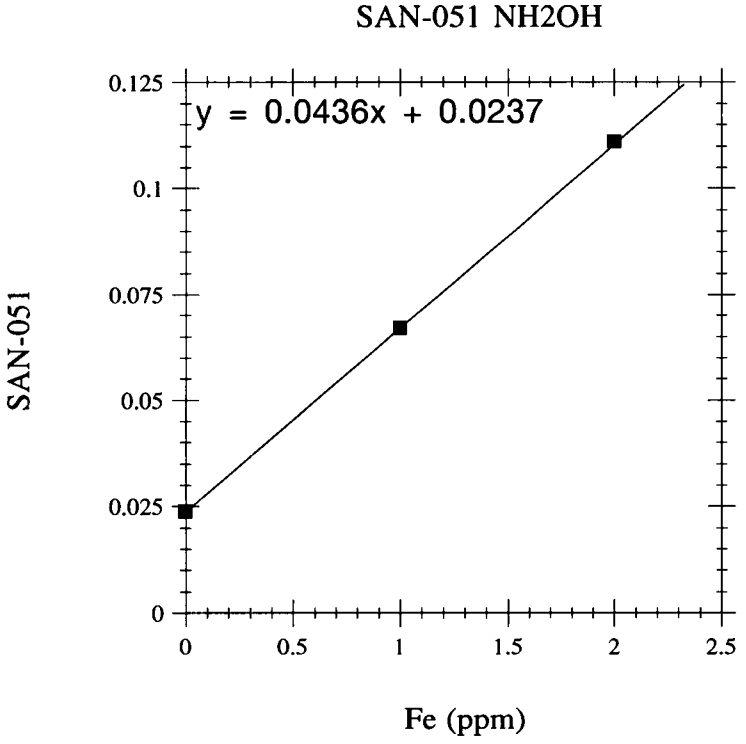


.5042 + 2.5 = 12.605 + 8 / 1.017 = 99.15 ppm

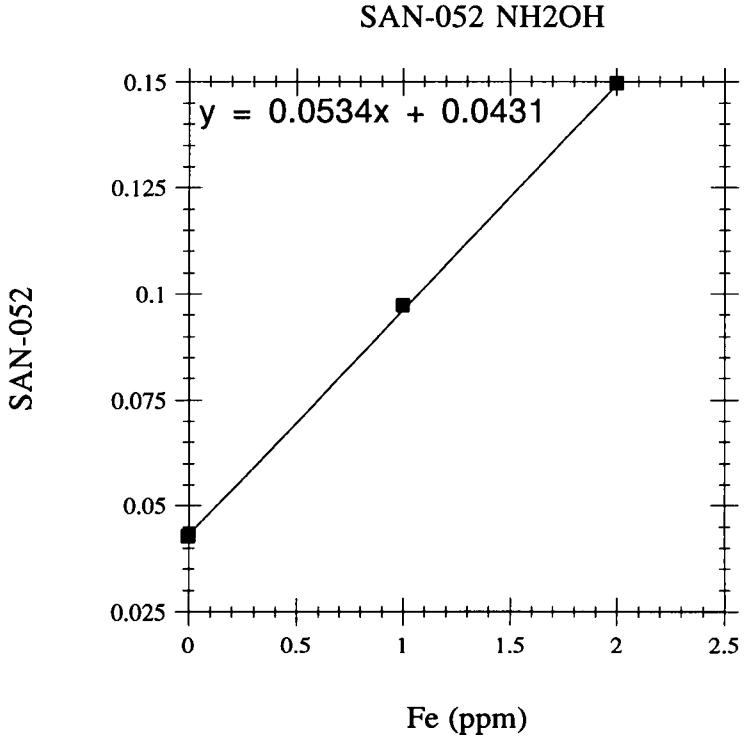


.4853 X10 = 4.853 X 8 / 1.016 = 38.212 ppm

.4853 X 25 = 12.1325 X 8 / 1.016 = 95.53 ppm

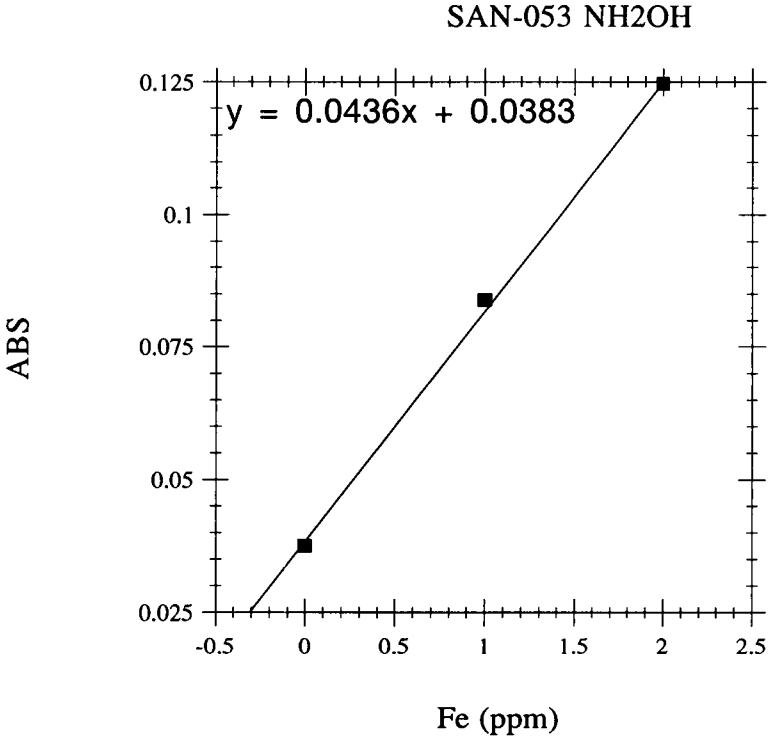


$.5436 \times 25 = 13.59 \times \frac{8}{1.017} = 106.903 \text{ppm}$



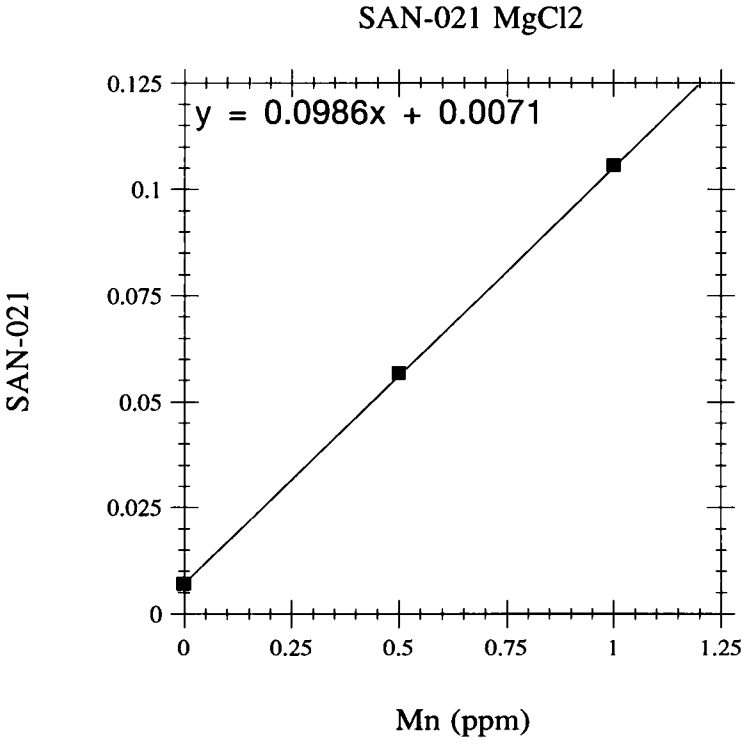
.8071 x 10 = 8.071 x 8 / 1.02 = 63.30 ppm

.8071 x 25 = 20.1775 x 8 / 1.02 = 158.255

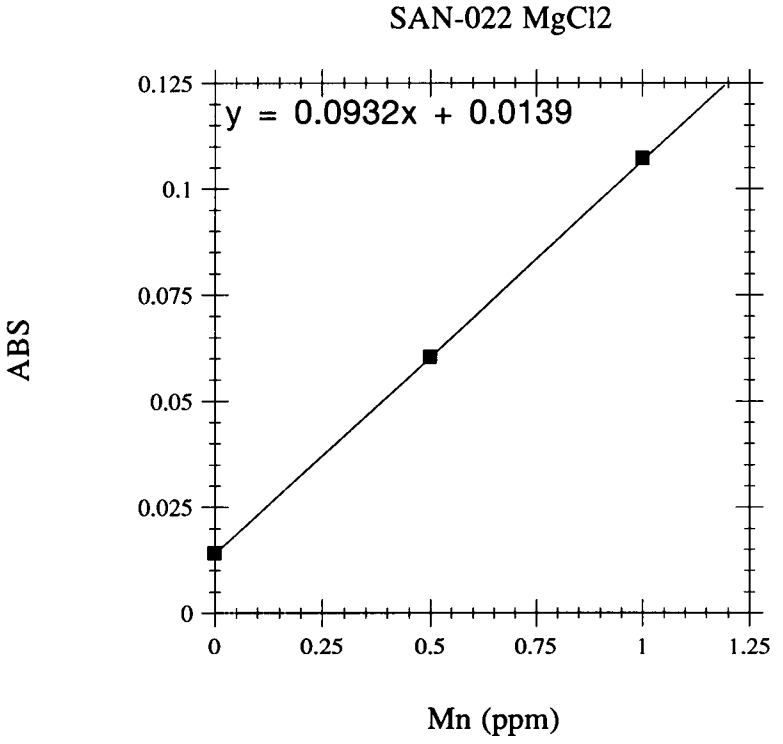


.8784 x 25 = 21.96

$21.96 \times \frac{8}{1.008} = 174.286$ ppm

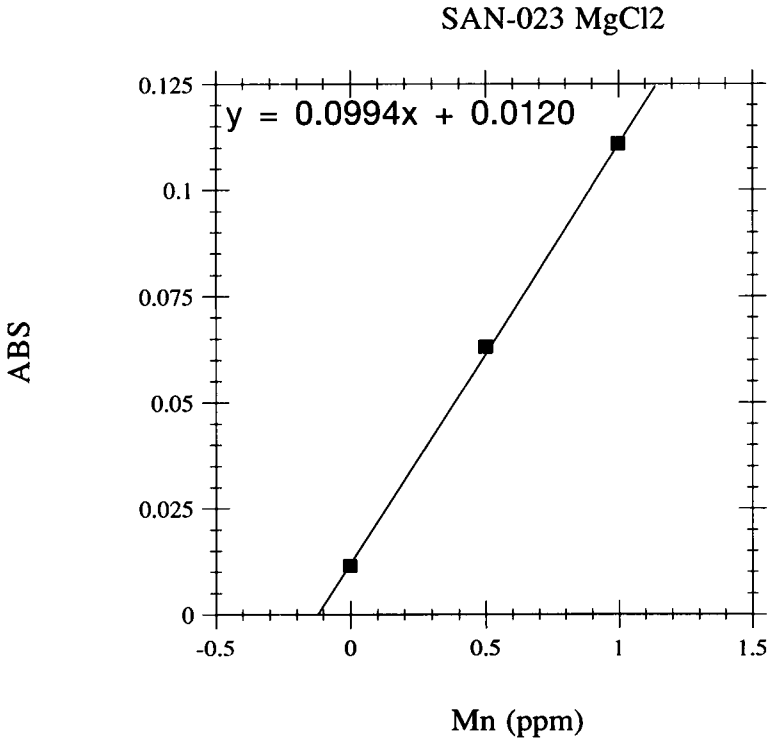


.0720 x 10 - .72 x 8/1.016 = 5.669 ppm



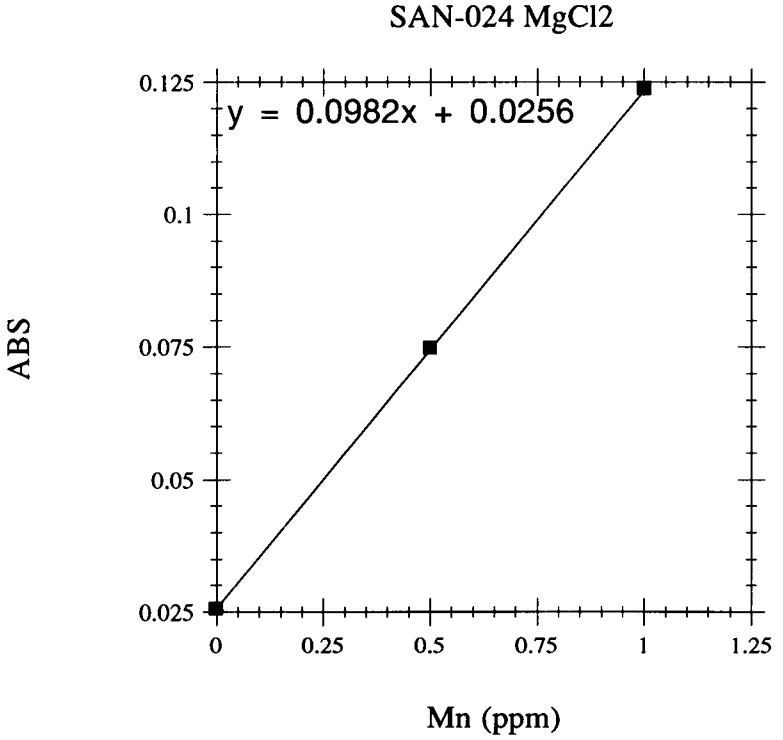
.1491 X 10 = 1.491

1.491 X 8 / 1.022 = 11.671 ppm



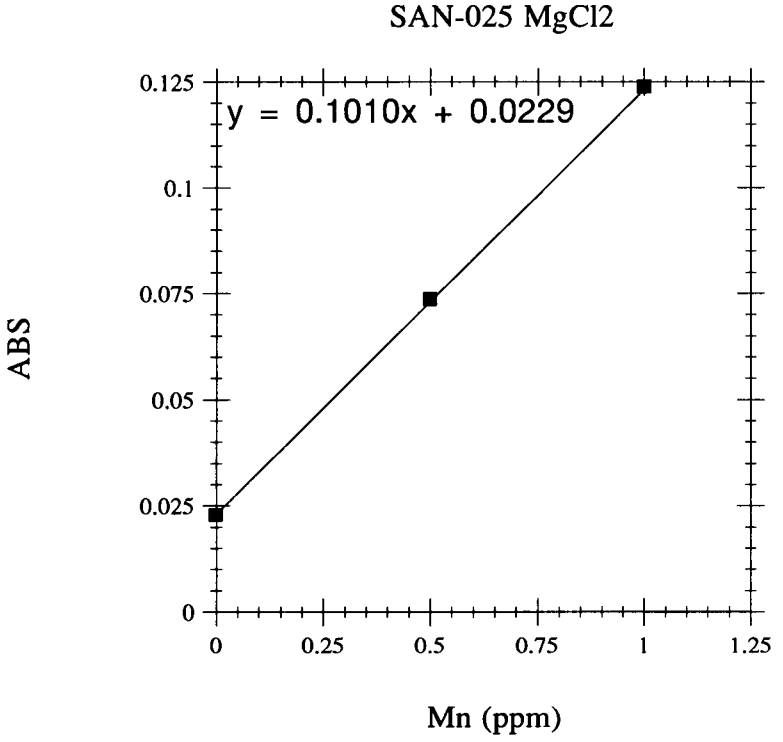
.1207 ÷ 10 = 1.207

$1.207 \times \frac{8}{1.002} = 9.637\ ppm$

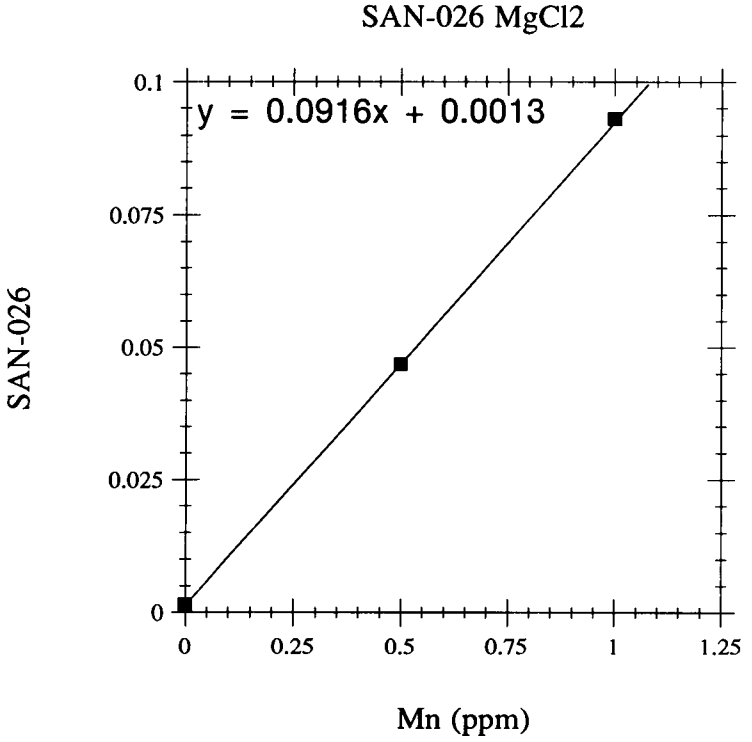


.2607 x 10 = 2.607

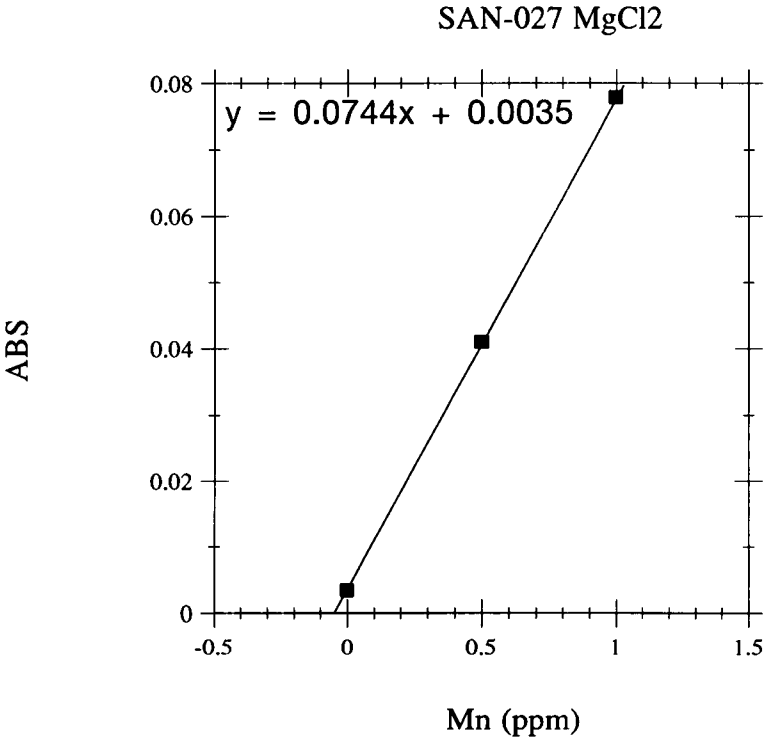
2.607 x 8/1.018 = 20.487 ppm



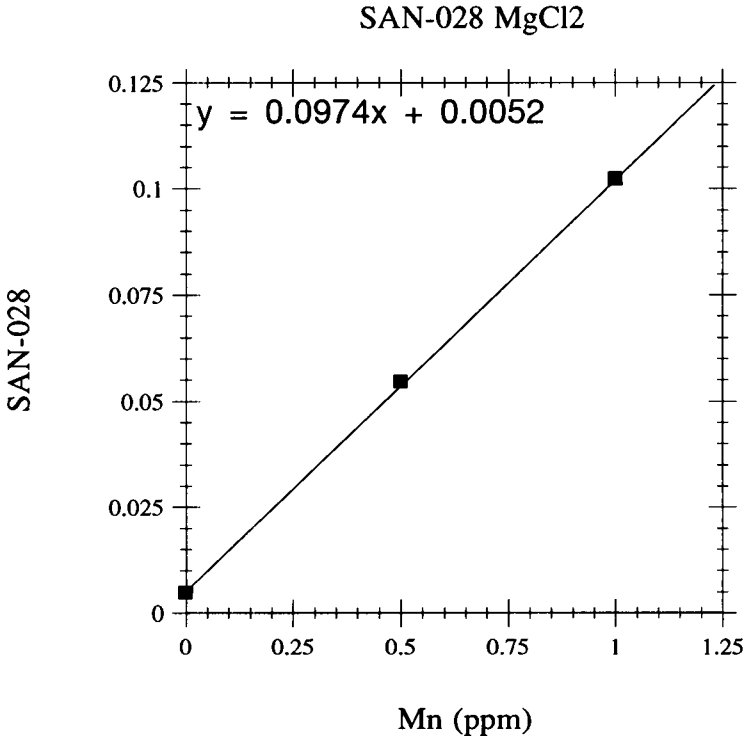
.2267 x 10 = 2.267 x 8/1.025 = 17.693 ppm



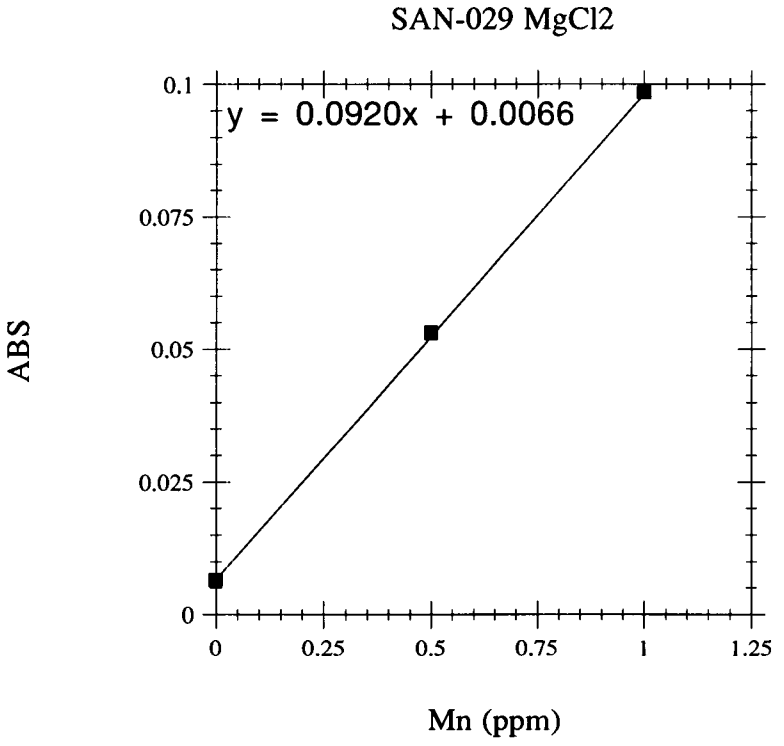
$.6142 \times 10 = .142 \times \frac{8}{1.021} = 1.113\ ppm$



.047 X 10 = .47 x 8/1.013 = 3.712 ppm

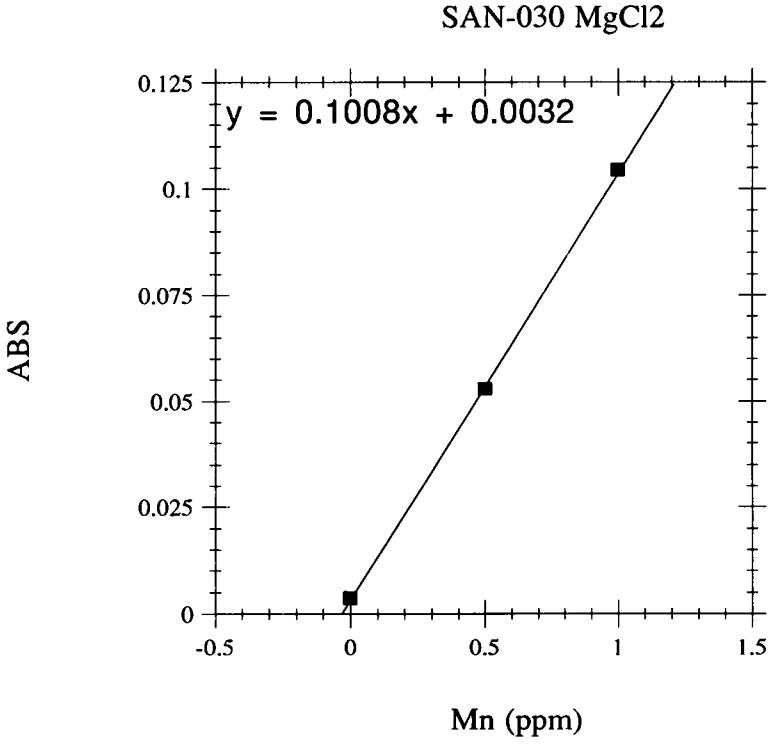


.0534 x 10 = .534 x 8 / 1.023 = 4.246 ppm



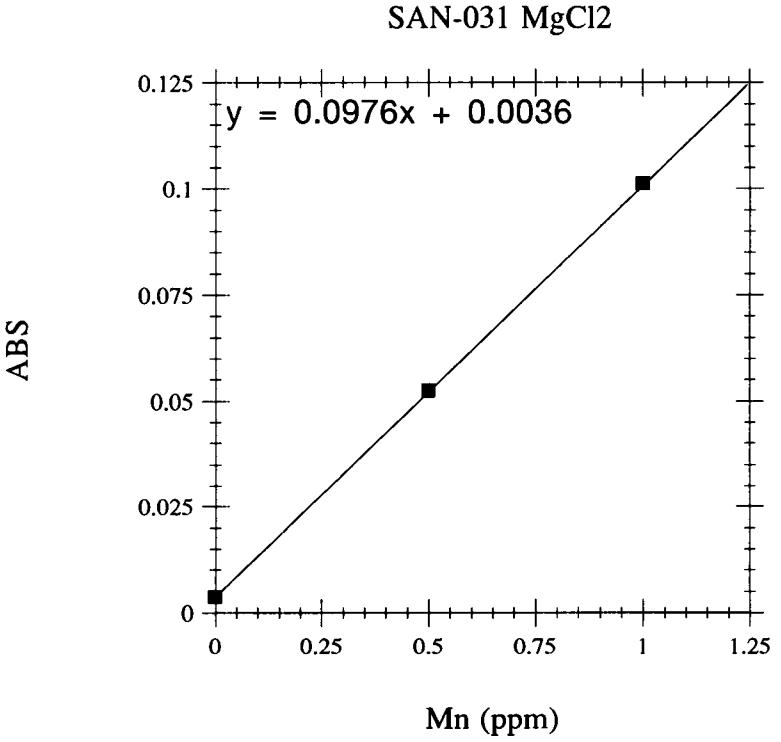
.6717 x 10 = .717

$.717 \times \frac{8}{1.02} = 5.623$ ppm



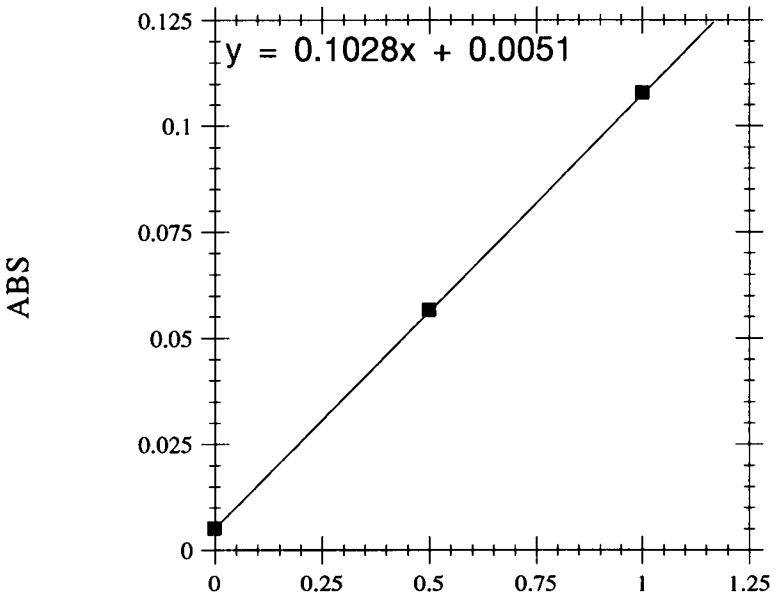
.0317 x 10 = .317

.317 x 8/1.022 = 2.48 ppm

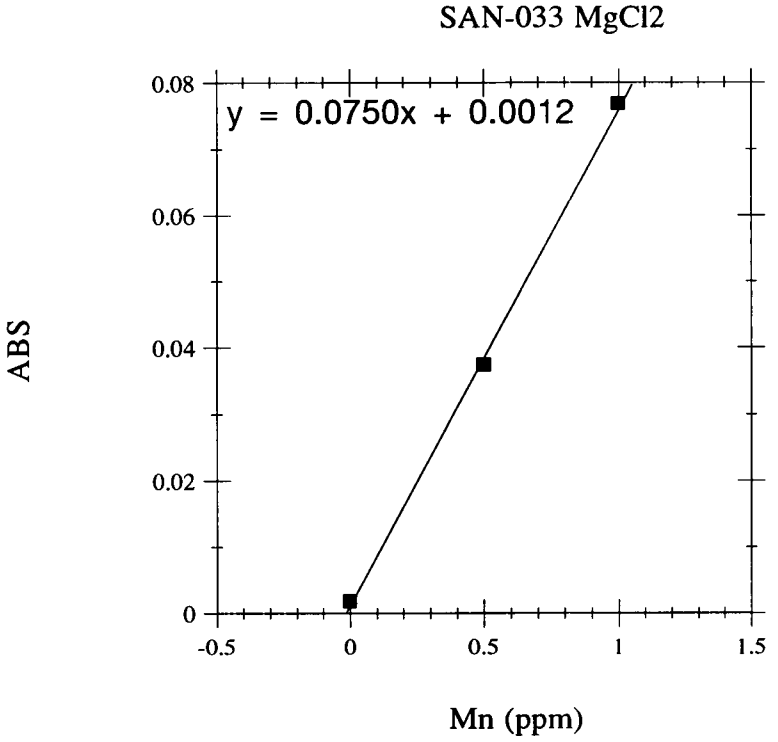


$.0369 \times 10 = .369 \times \frac{8}{1.026} = 2.877\ ppm$

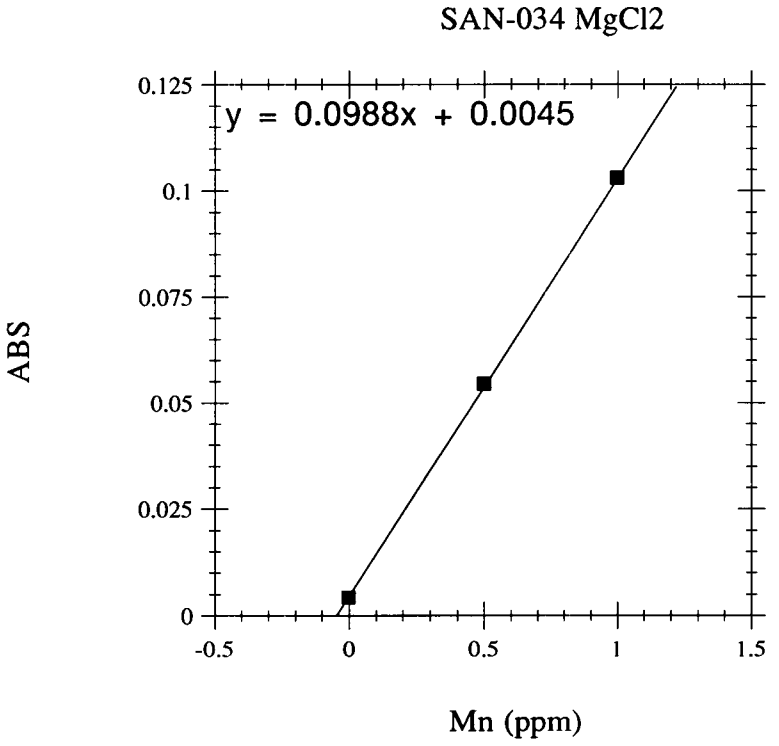
SAN-032 MgCl2



$.0496 \times 10 = .496 \times \frac{8}{1.017} = 3.902 \text{ ppm}$

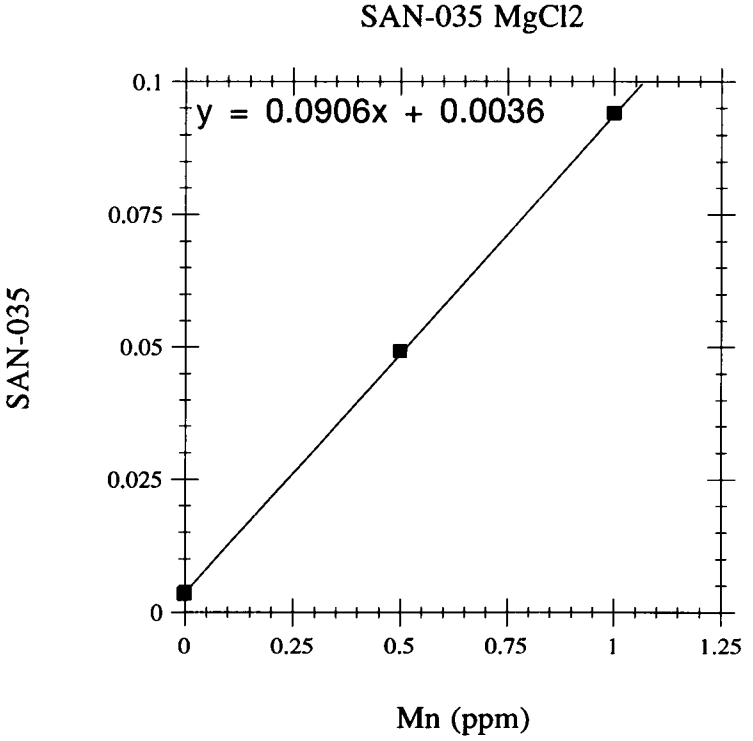


.016 X 10 = 16 x 8/1.012 = 1.265 ppm

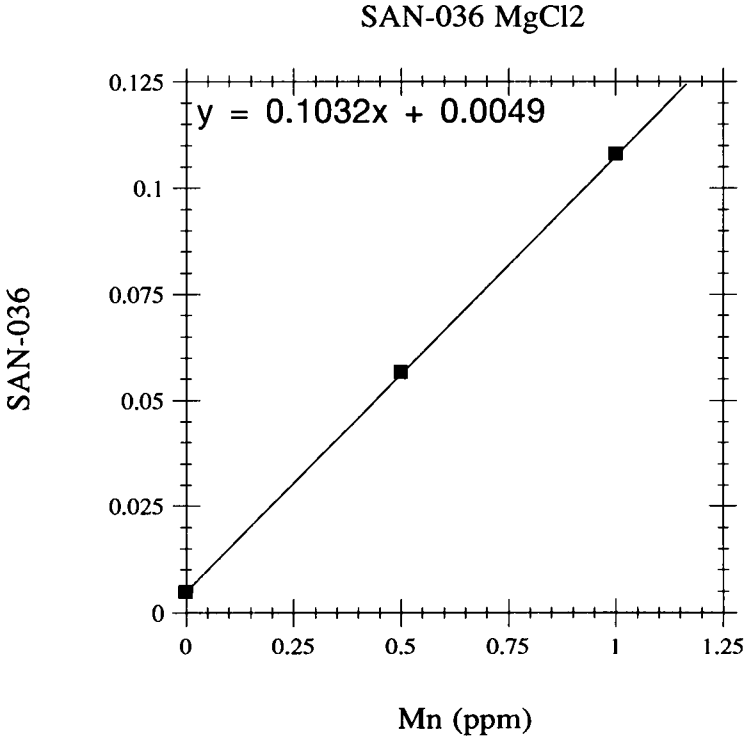


.0455 x 10 = .455

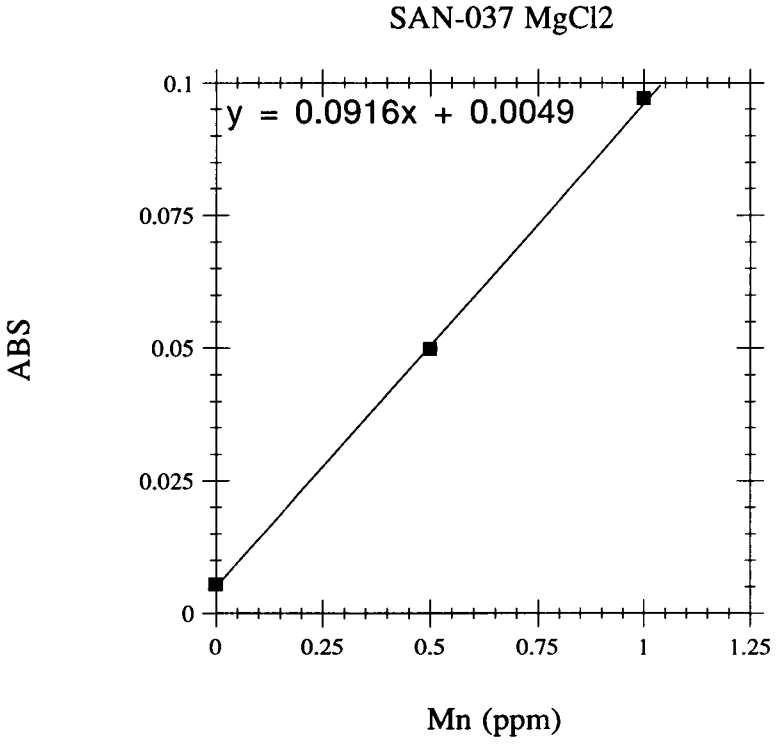
.455 x 8/1.009 = 3.607ppm



$.0397 \times 10 = .397 \times \frac{8}{1.02} = 3.114$ ppm

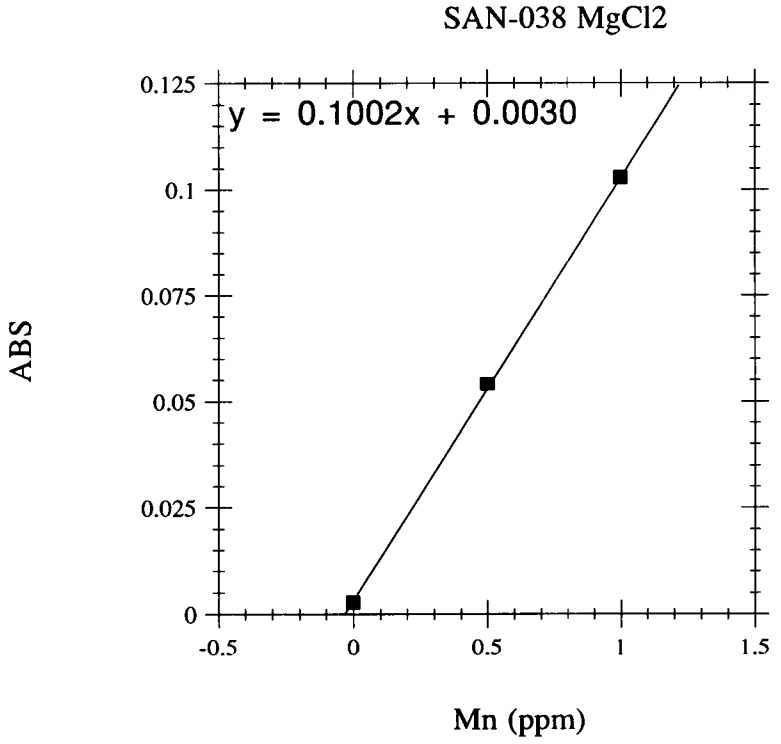


.0475 x 10 = .475 x 8 / 1.014 = 3.747 ppm



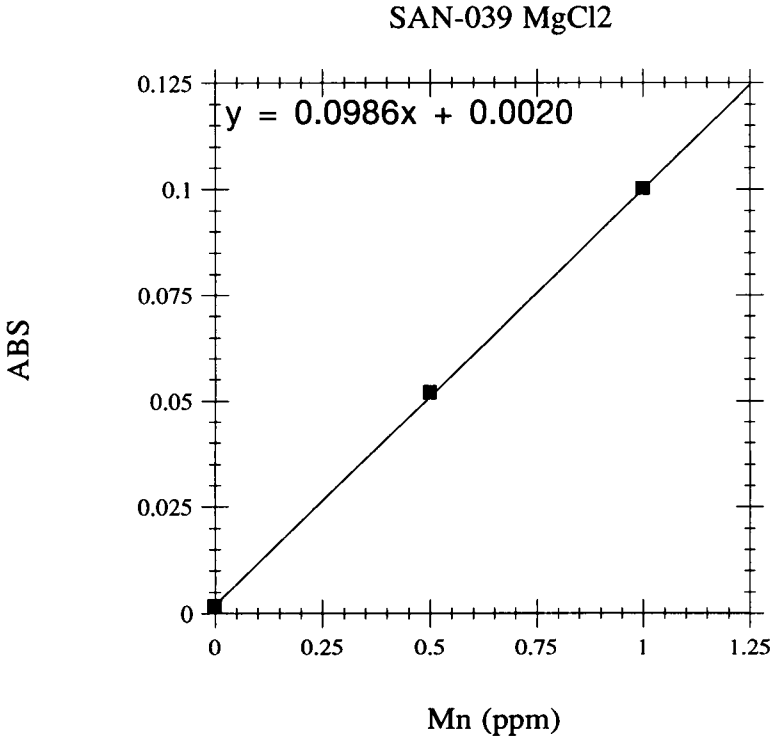
.0535 x 10 = .535

.535 x 8/1.021 = 4.192 ppm

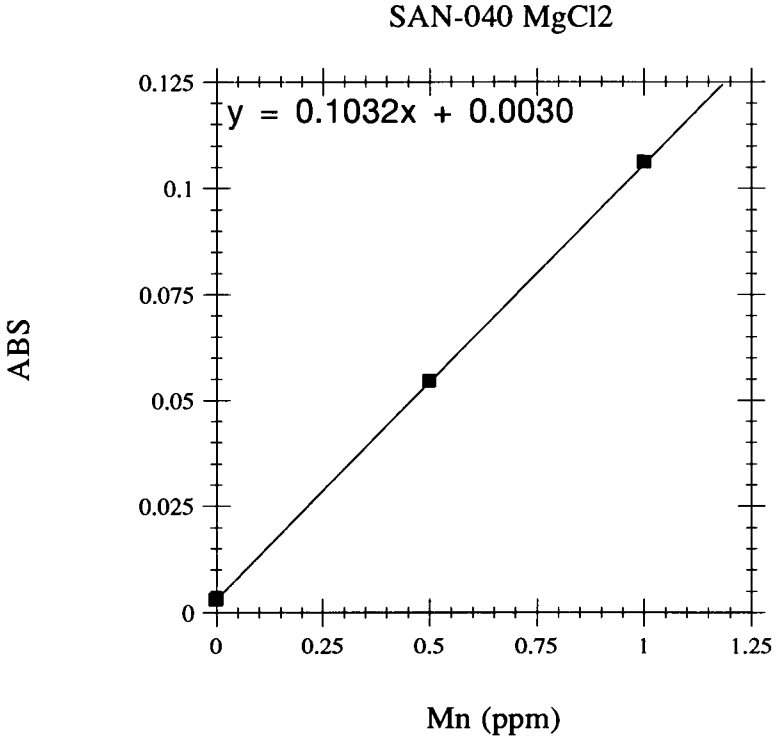


.0299 x10 = .299

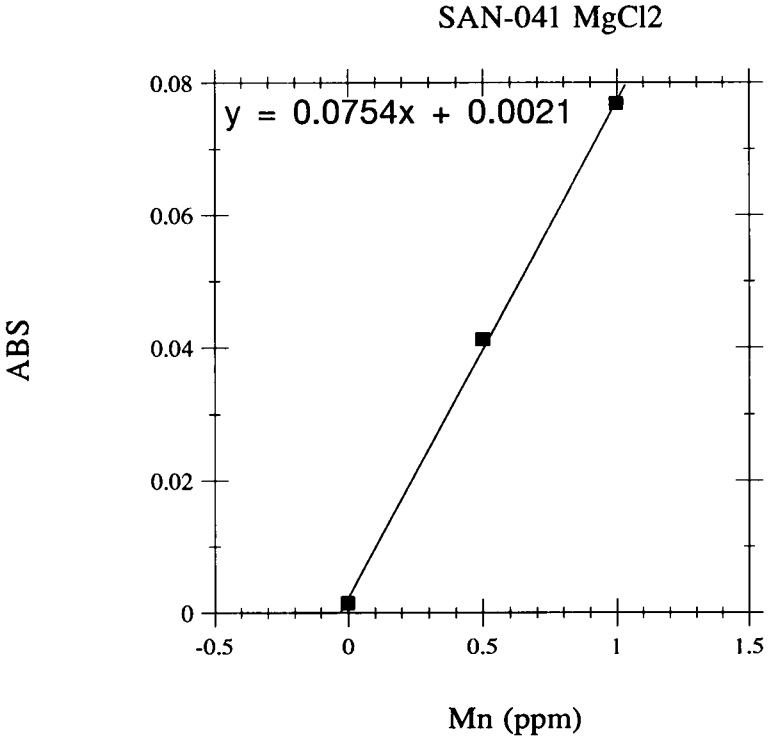
$\frac{.299 \times 8}{1.024} = 2,336$ ppm



$.0203 \times 10 = .203 \times \frac{8}{1.018} = 1.595\ ppm$

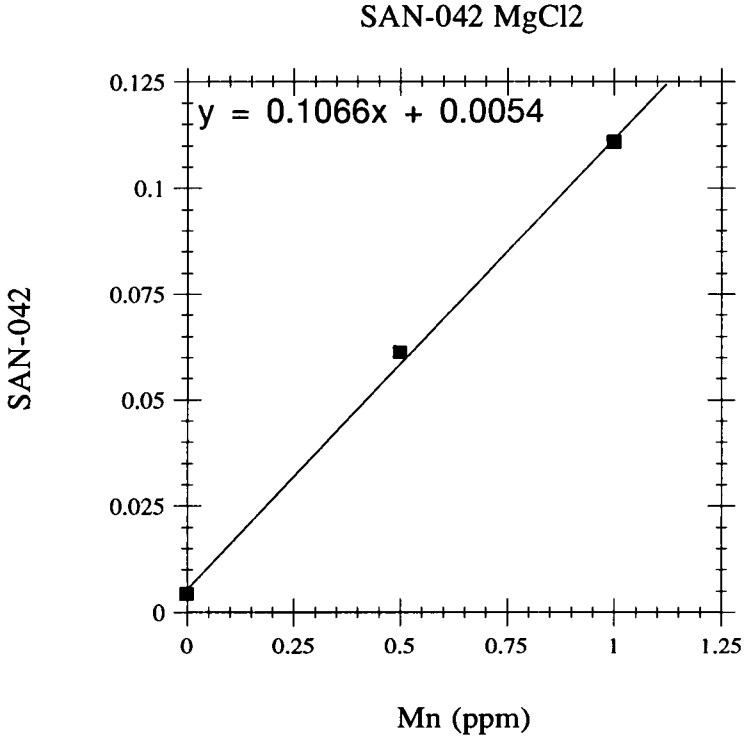


$.0291 \times 10 = .291 \times \frac{8}{1.017} = 2.29\text{ppm}$

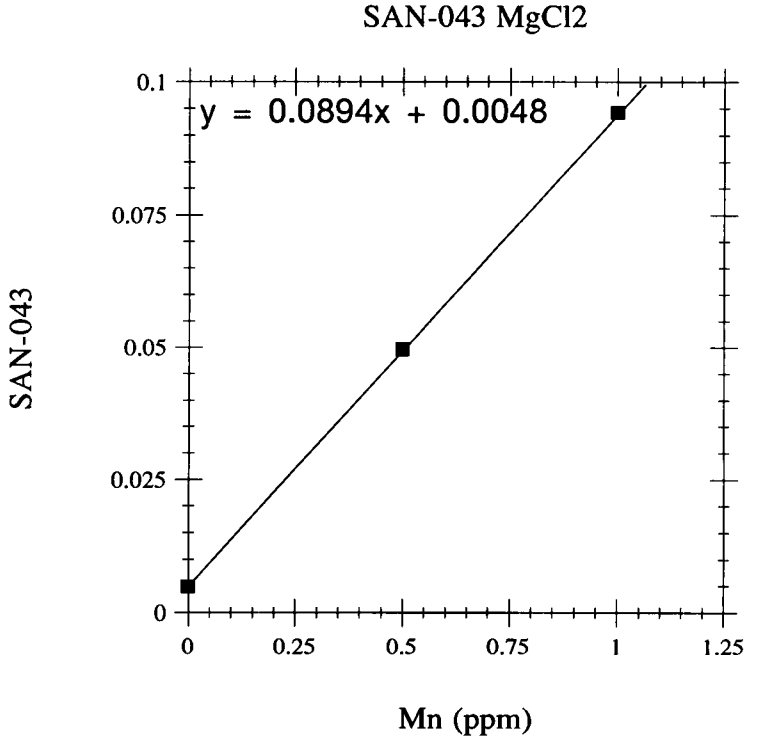


$.0278 \times 10 = .278 + 8$

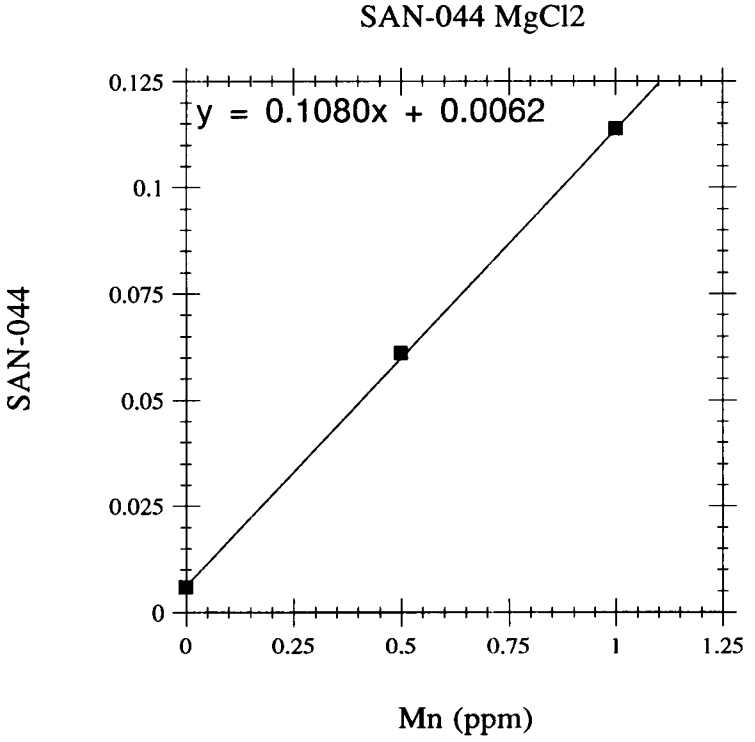
$1.015 = 2.191$ ppm



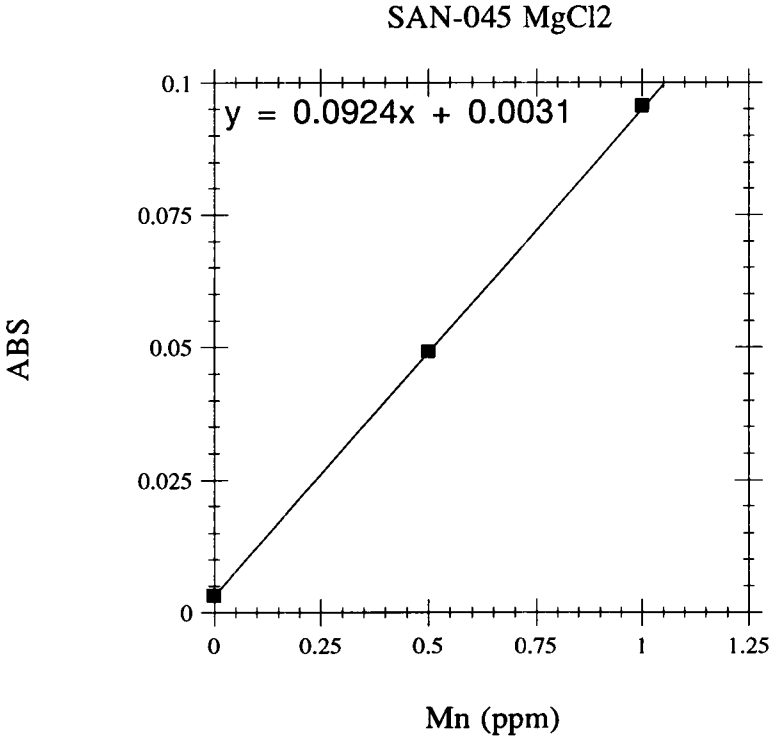
$.0507 \times 10 = .507 \times \frac{8}{1.012} = 4.008 \text{ ppm}$



$.0537 \times 10 = .537 \times \frac{8}{1.022} = 4.204$ ppm

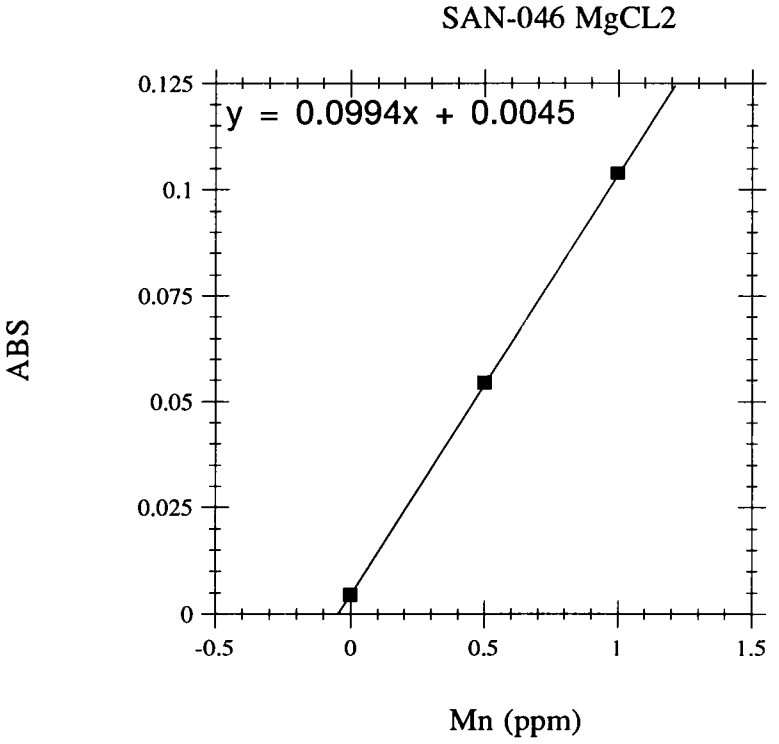


.0574 x 10 = .574 x 8 / 1.014 = 4.529 ppm



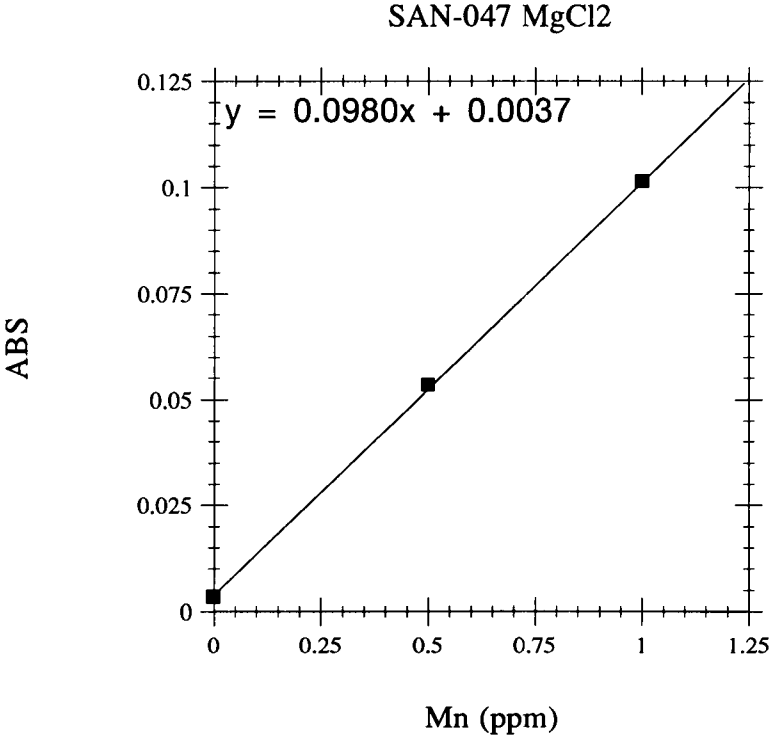
.0335 x 10 = .335

.335 x 8/1.017 = 2.635 ppm



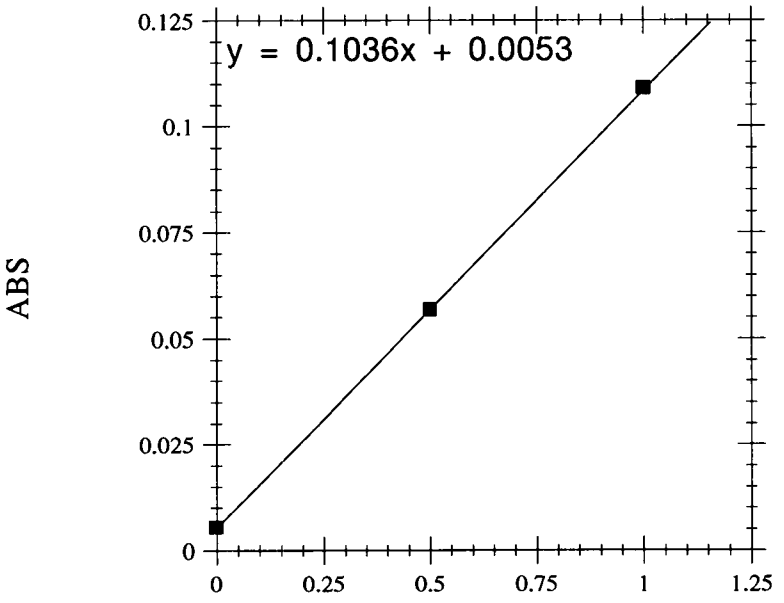
.04527 x 10 = .453

.453 x 8/1.022 = 3.546 ppm

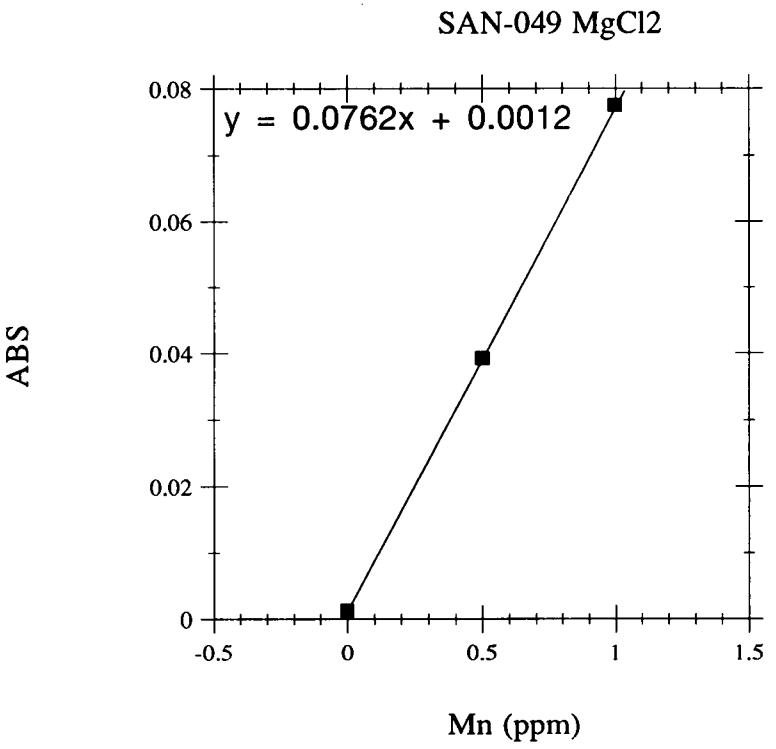


$.0378 \times 10 = .378 \times \frac{8}{1.023} = 2.956\ ppm$

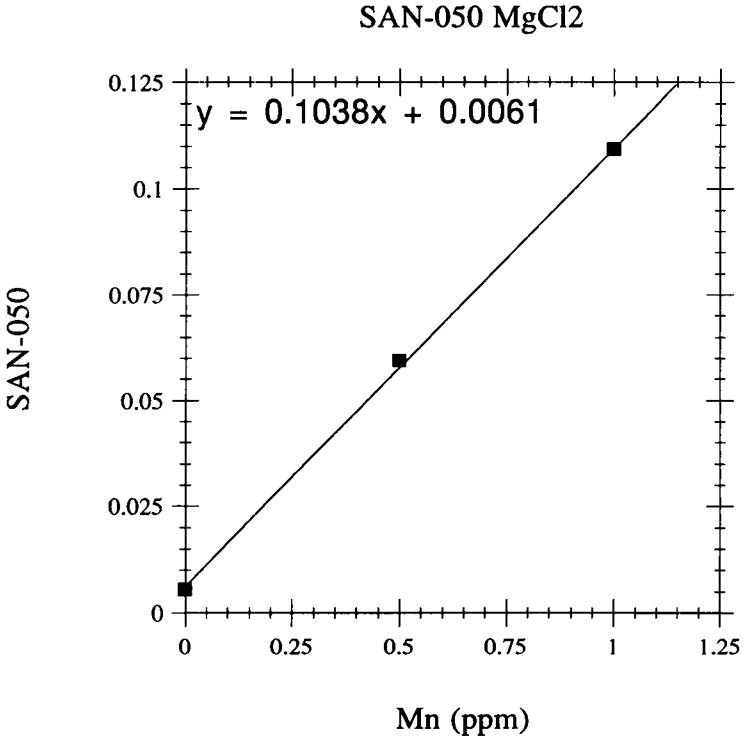
SAN-048 MgCl2



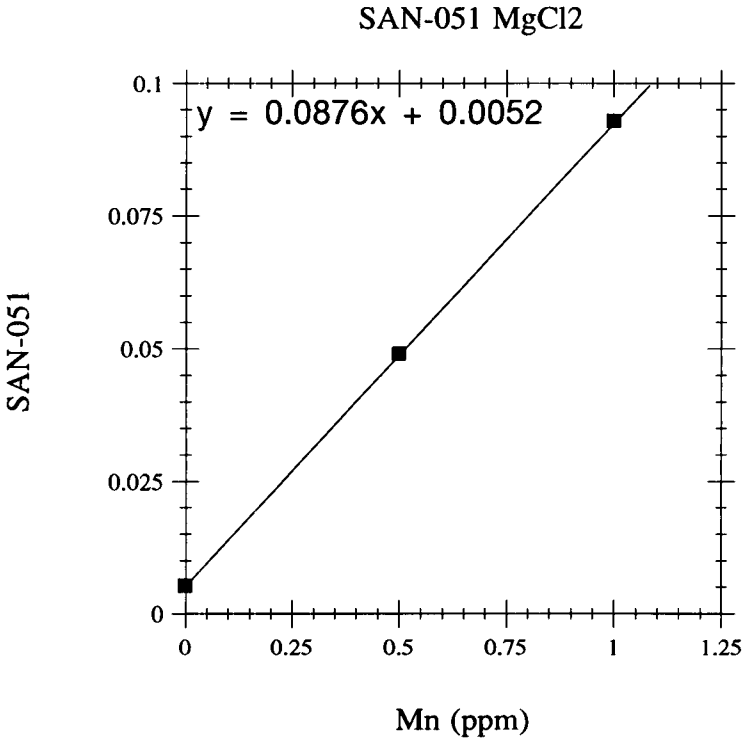
$.0511 \times 10 = .511 \times \frac{8}{1.022} = 4.00\ ppm$



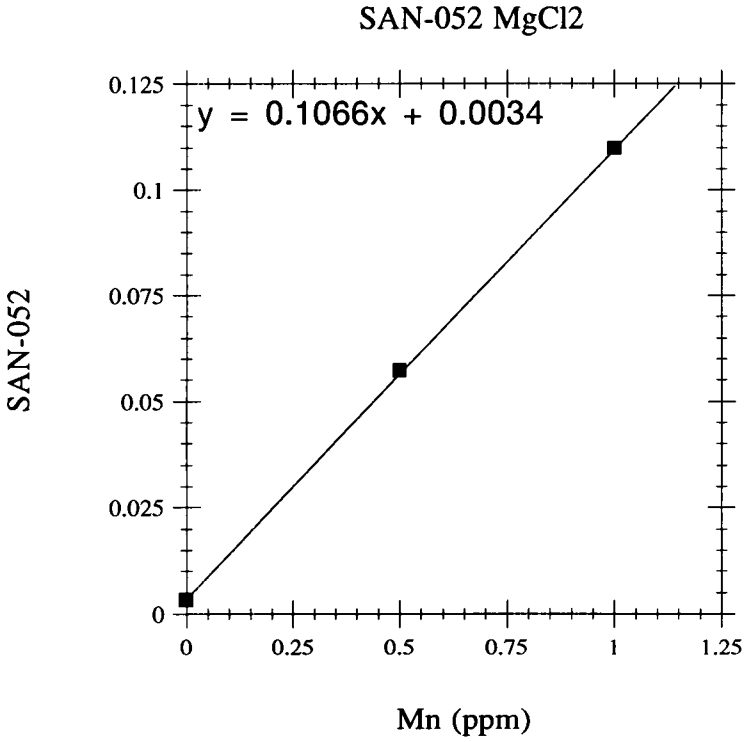
$.0157 \times 10 - .157 + \frac{8}{1.017} = 1.235 \text{ppm}$



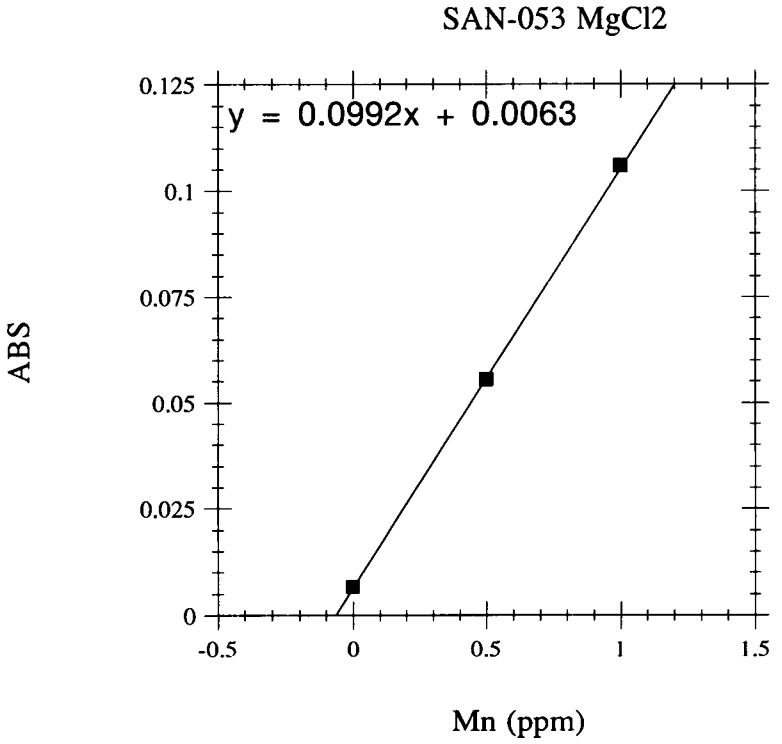
$.0588 \times 10 - 588 \times \frac{8}{1.016} = 4.629 \text{ ppm}$



.6594 x10 = .5948 / 1.017 = 4.673ppm

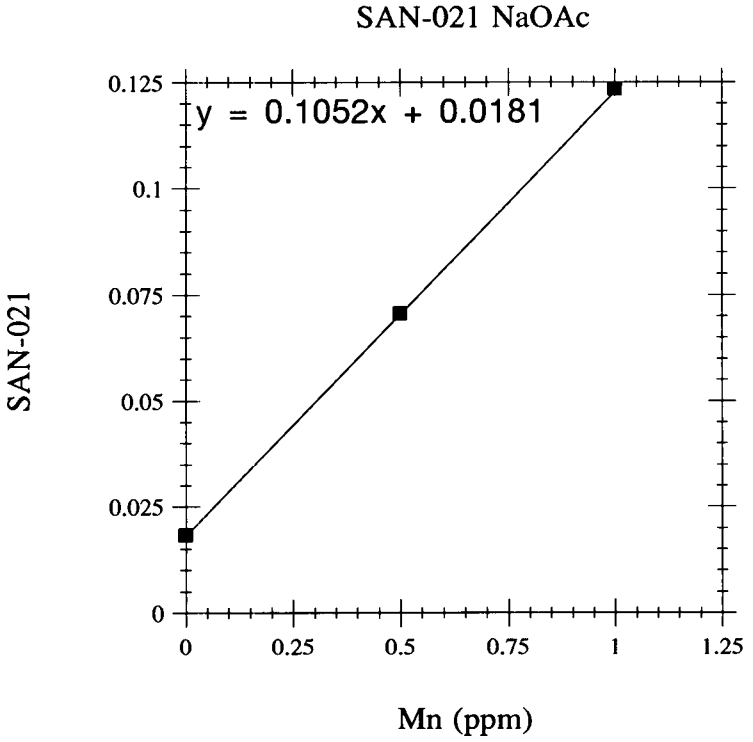


$.0319 \times 10 = .319 \times \frac{8}{1.02} = 2.502$ ppm



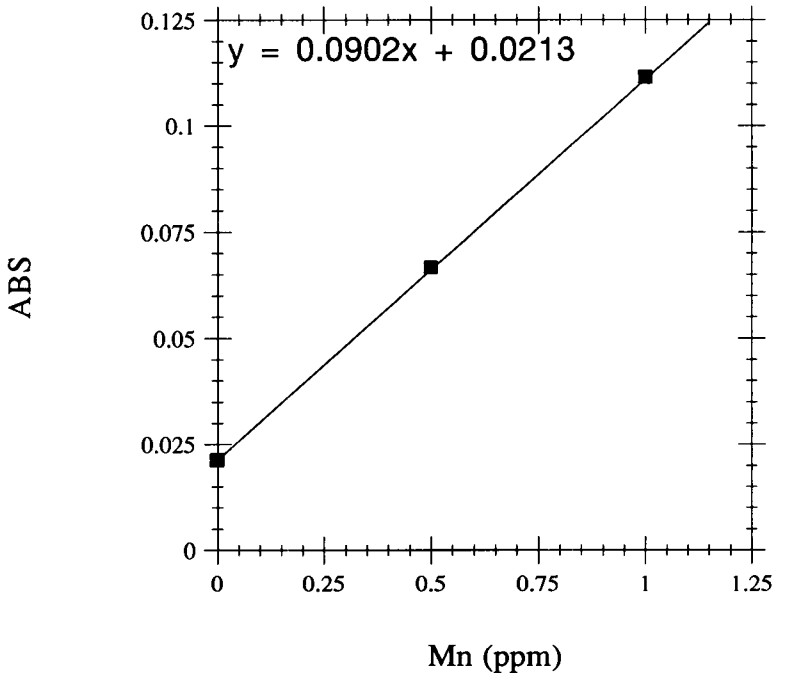
.0635 x 10 = .635

$\frac{.635 \times 8}{1.008} = 5.039$ ppm



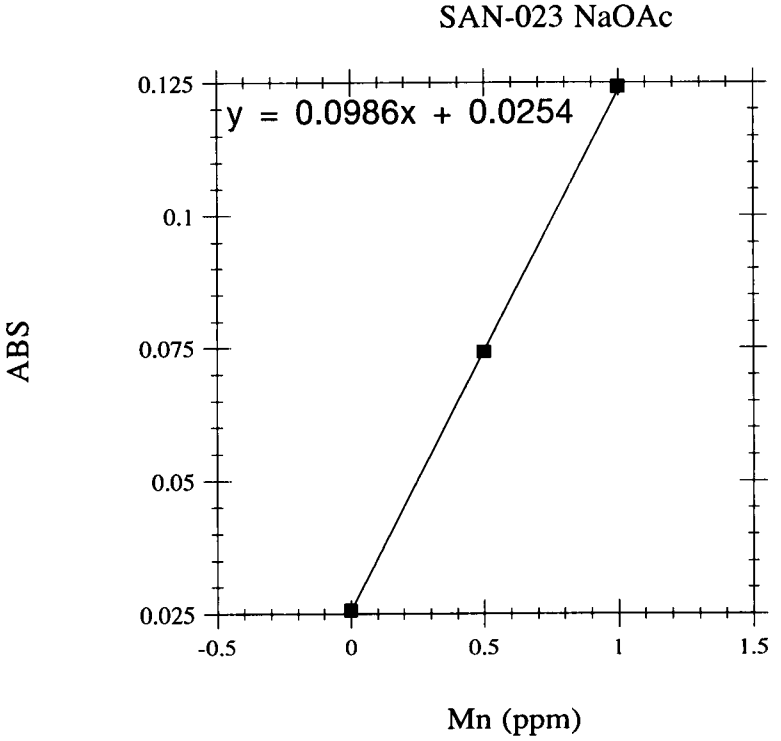
.1721 x 10 = 1.721 + 8 / .016 = 13.551 ppm

SAN-022 NaOAc



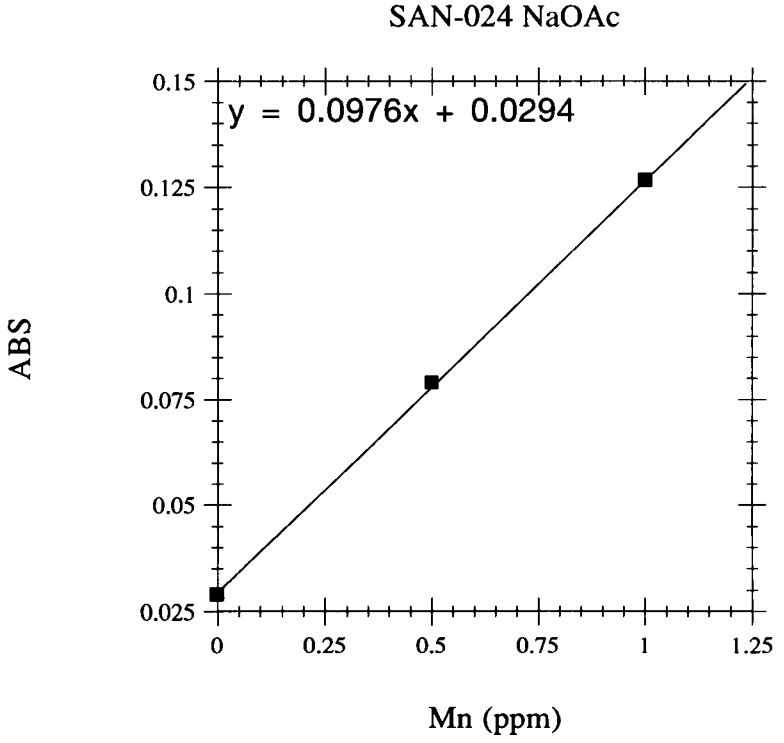
.2361 x 10 = 2.361

2.361 x 8/1.022 = 18.48 ppm

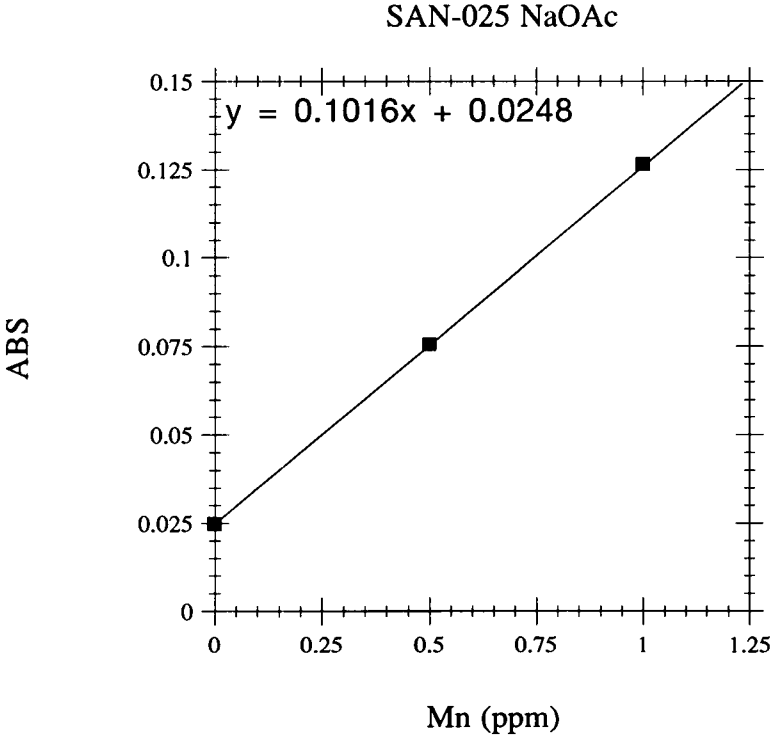


.2576 x 10 = 2.576

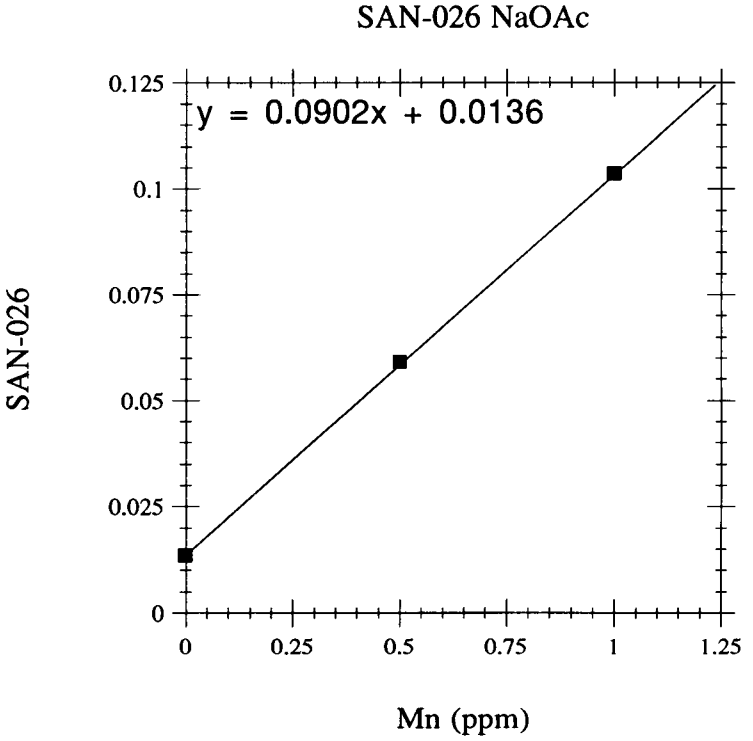
2.576 x 8 / 1.022 = 20.16 ppm



$.3012 \times 10 = 3.012 \times \frac{8}{1.018} = 23.669$ ppm

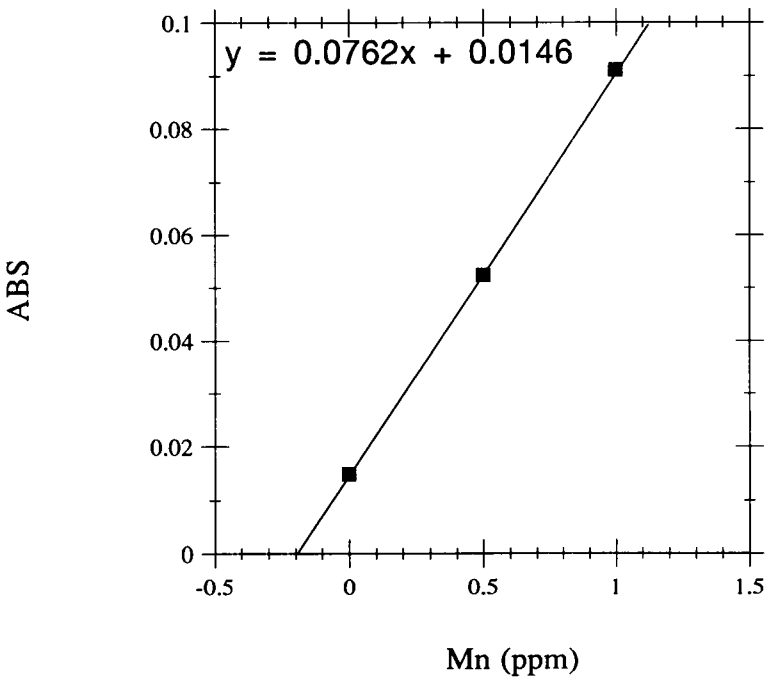


.2441 X10 = 2.441X $\frac{8}{1.025}$ = 19.052ppm

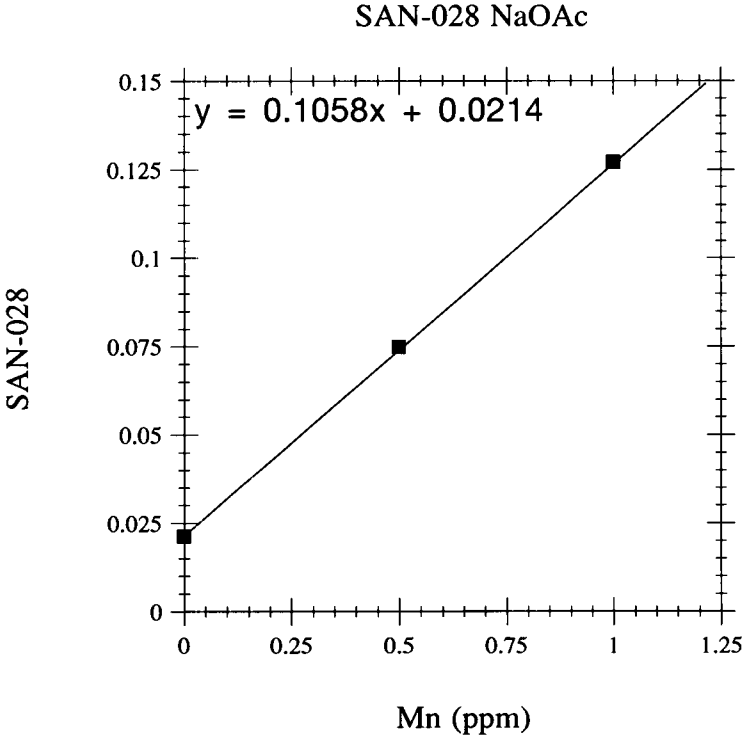


.1568 x 10 = 1.508 x 8/.1021 = 11.816 ppm

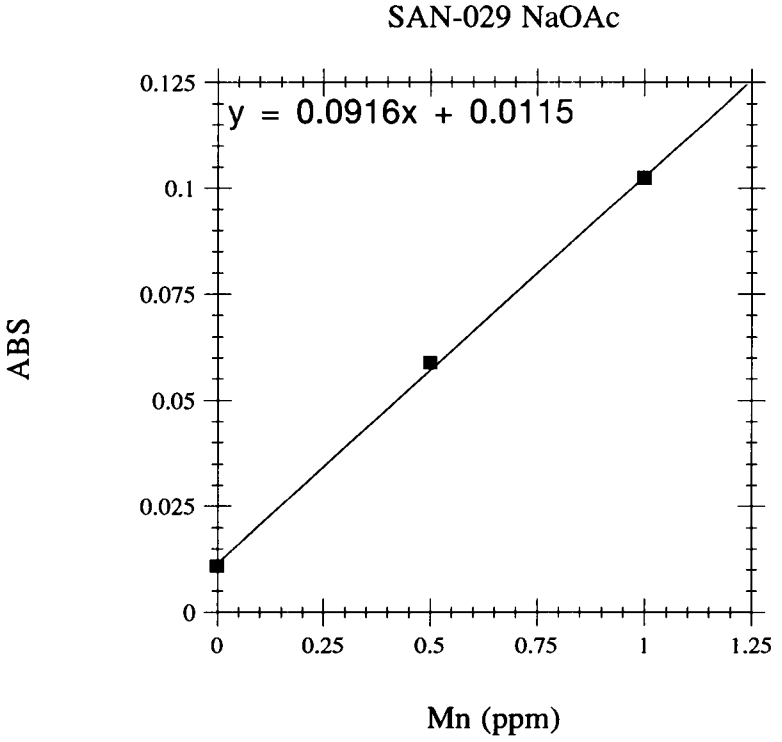
SAN-027 NaOAc



$.1916 \times 10 = 1.916 \times \frac{8}{1.013} = 15.13 \text{ ppm}$

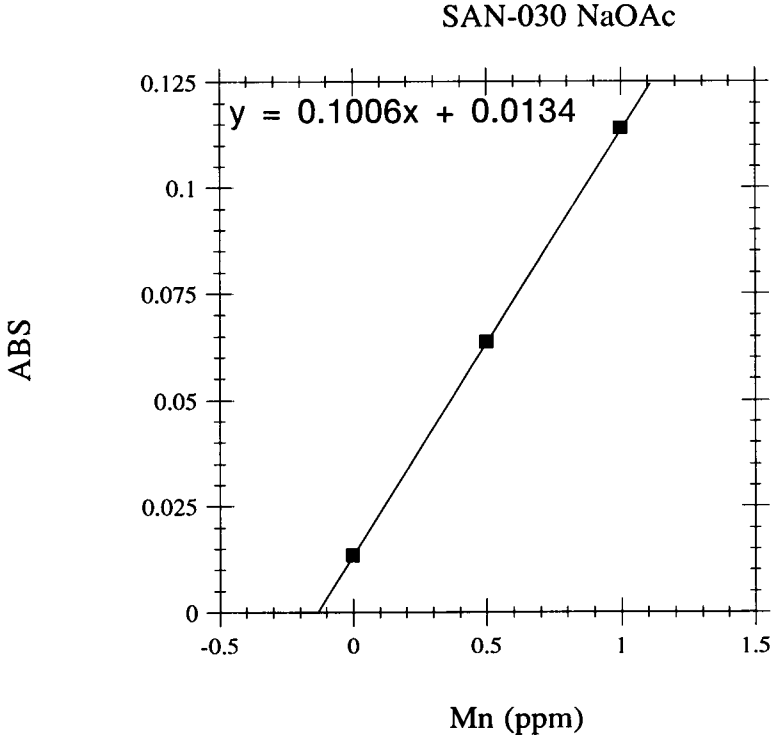


$.2023 \times 10 - 2.023 + 8 / 1.023 = 15.82$ ppm



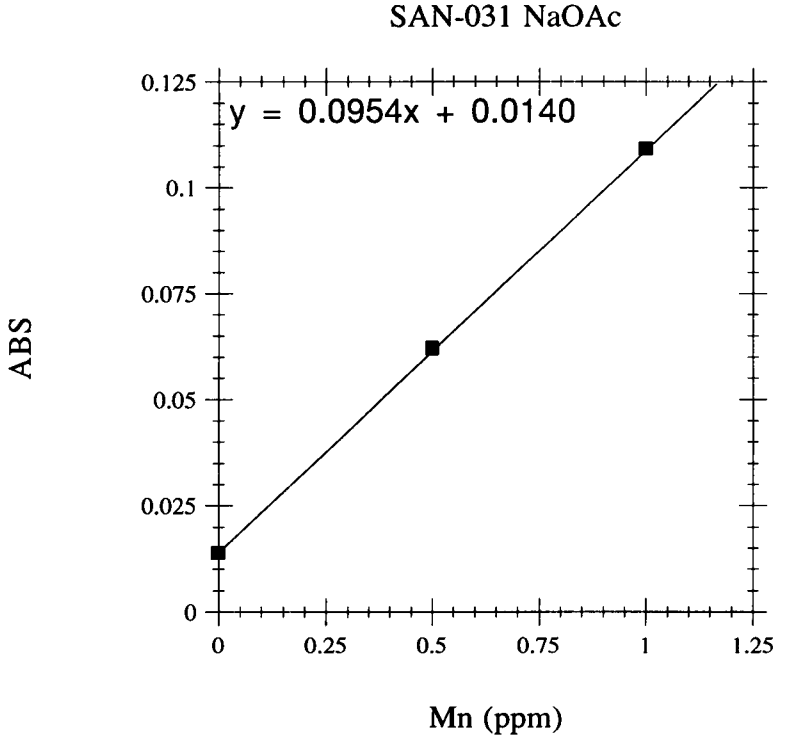
.1255 x 10 = 1.255

$\frac{1.255 \times 8}{1.02} = 9.843$ ppm

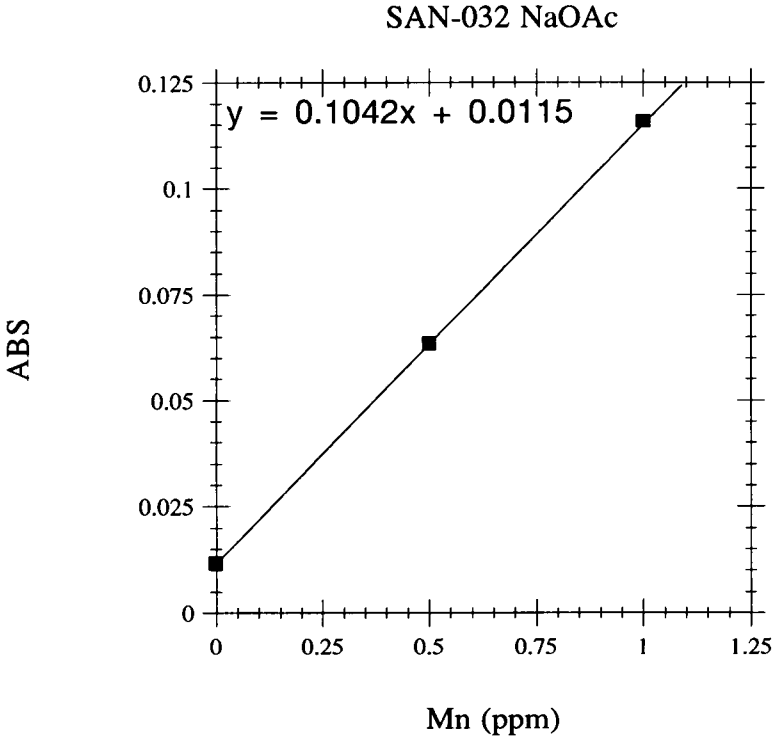


1.332 x 10 = 1.332

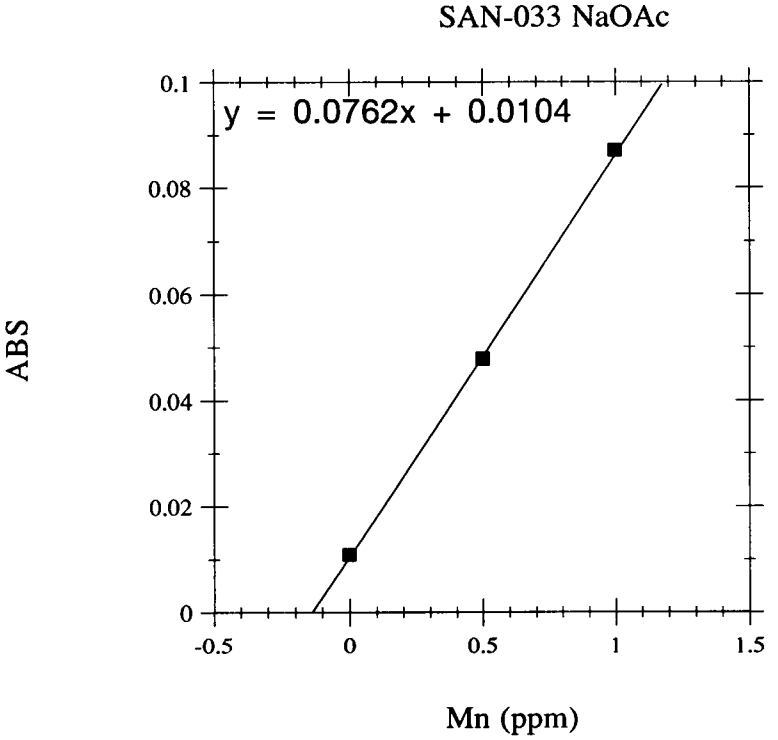
1.332 x 8 / 1.022 = 10.427 ppm



$.1467 \times 10 = 1.467 \times \frac{8}{1.026} = 11.438 ppm$

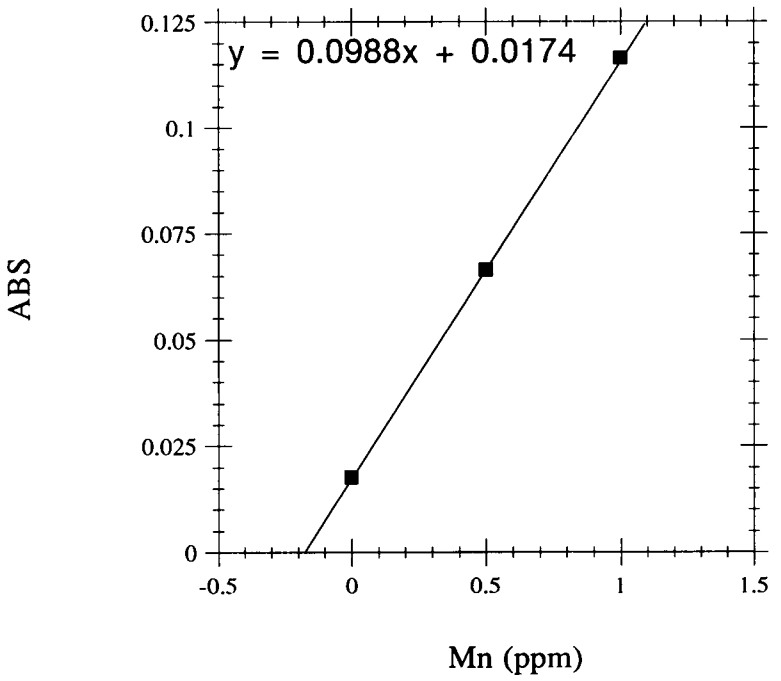


$.1104 \times 10 = 1.104 \times \frac{8}{1.017} = 8.68\ ppm$



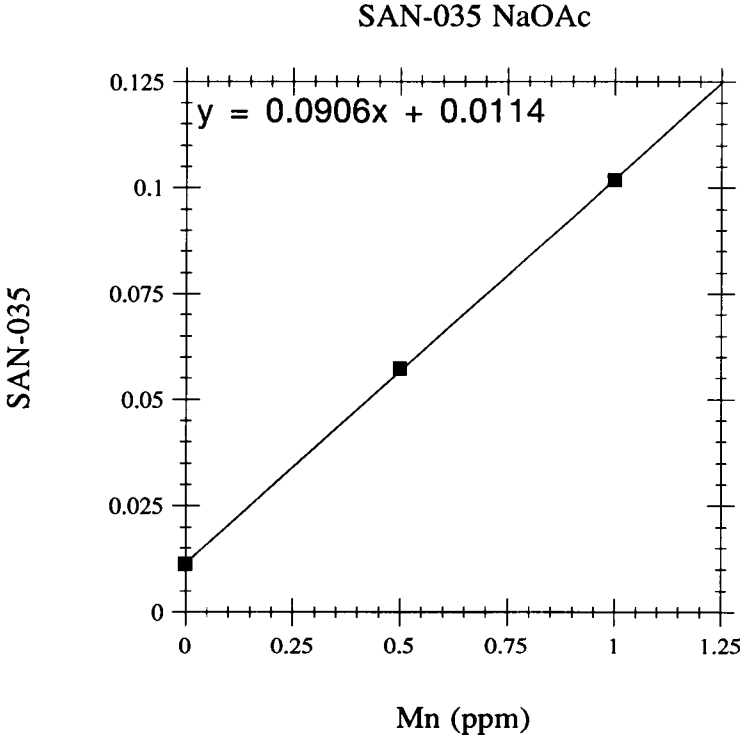
$.1365 \times 10 = 1.365 \times \frac{8}{1.012} = 10.79 \text{ ppm}$

SAN-034 NaOAc

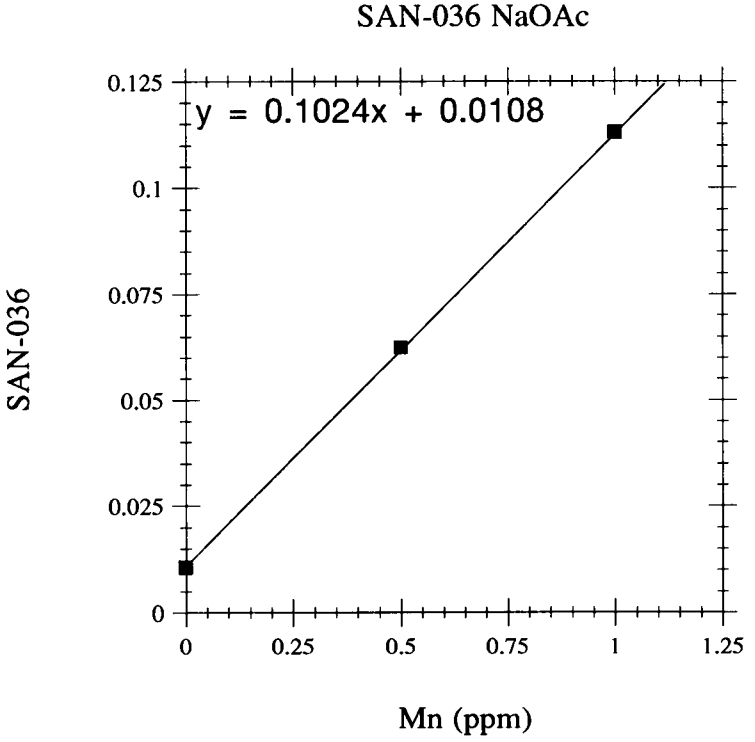


.1761 x 10 = 1.761

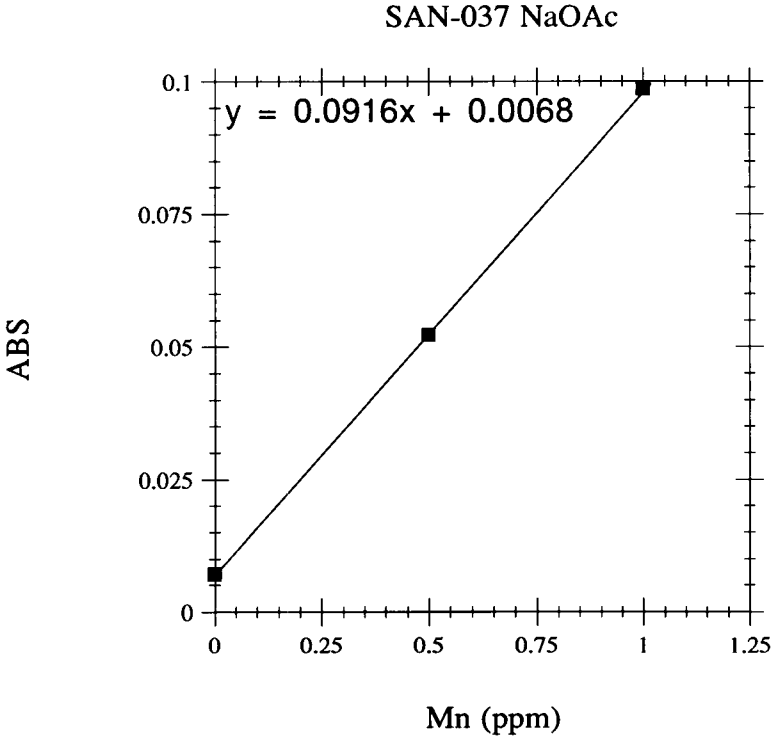
1.761 x 8 / 1.009 = 13962 ppm



$.1258 \times 10 = 1.258 \times \frac{8}{1.02} = 9.8667$ ppm



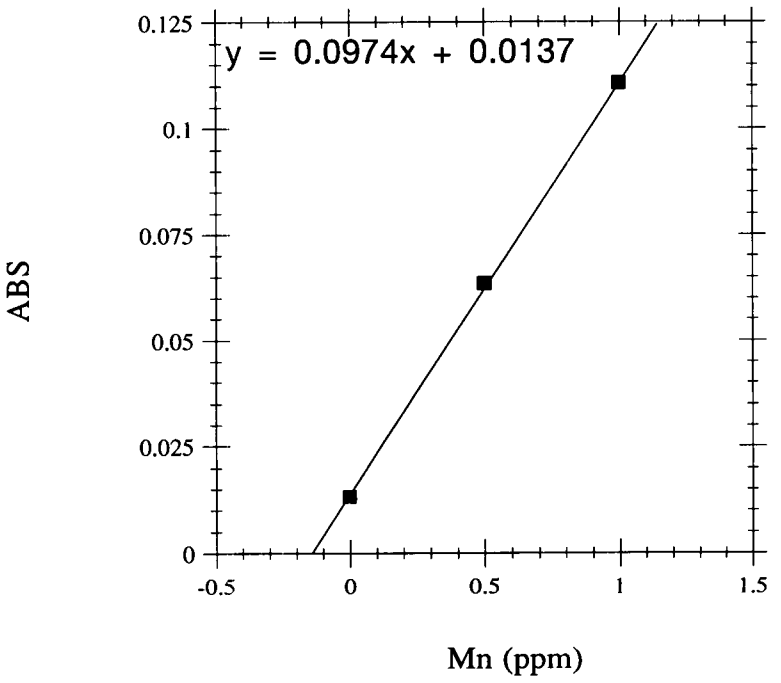
.1055 x 10 = 1.055 x 8/1.014 = 8.323 ppm



.0742 x 10 = .742

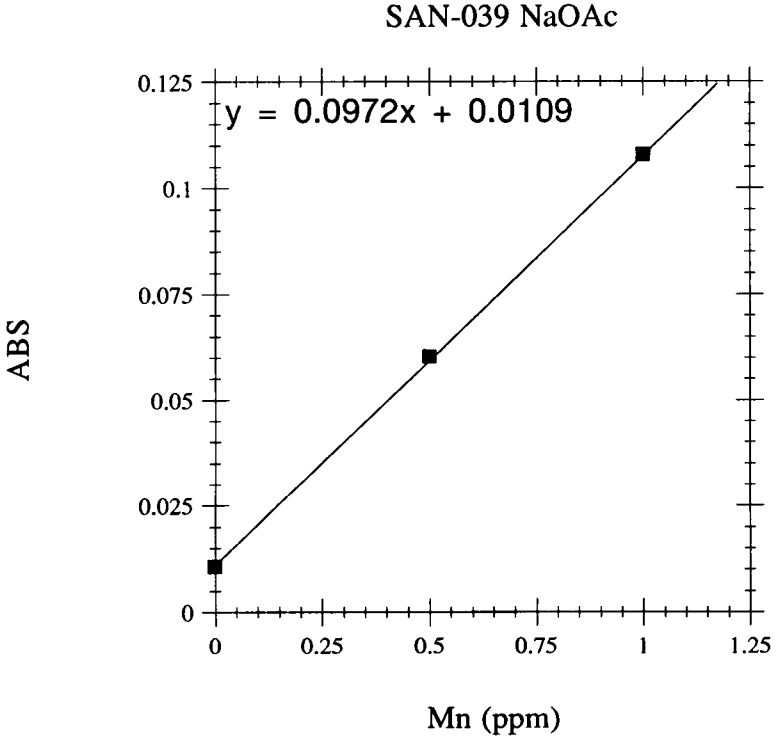
$.742 + \frac{8}{1.021} = 5.814$ ppm

SAN-038 NaOAc

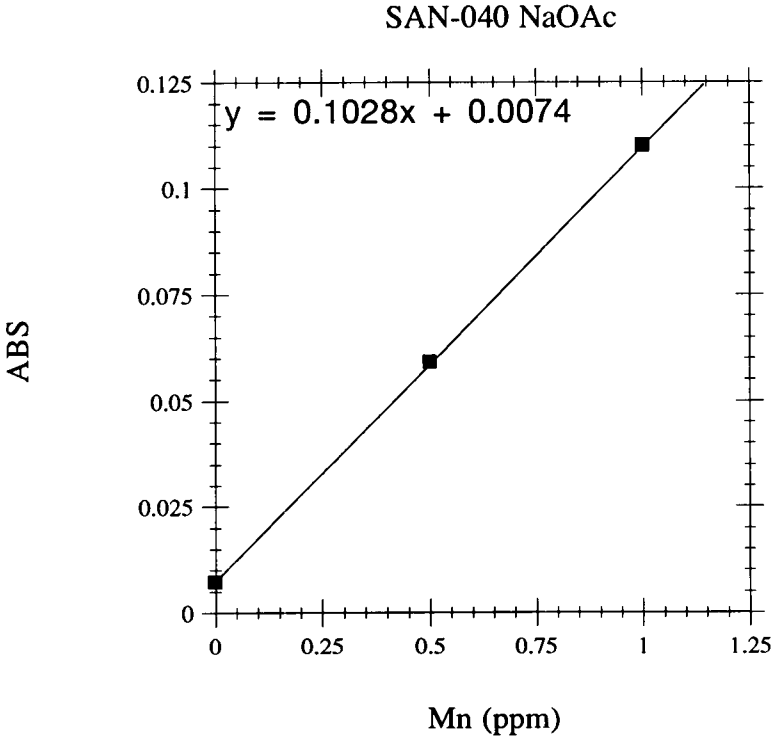


.1406 x 10 = 1.406

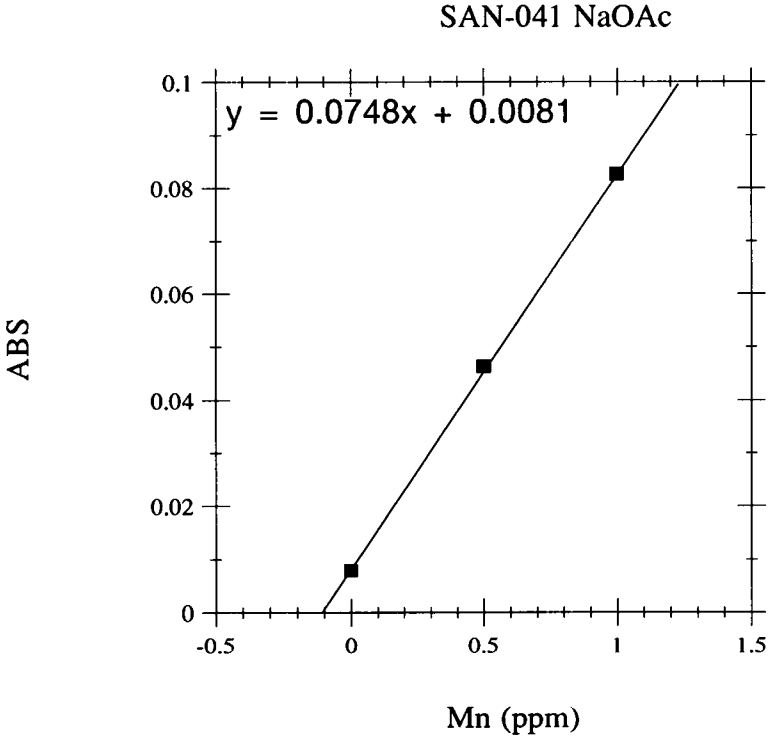
1.406 x 8 / 1.024 = 10.984 ppm



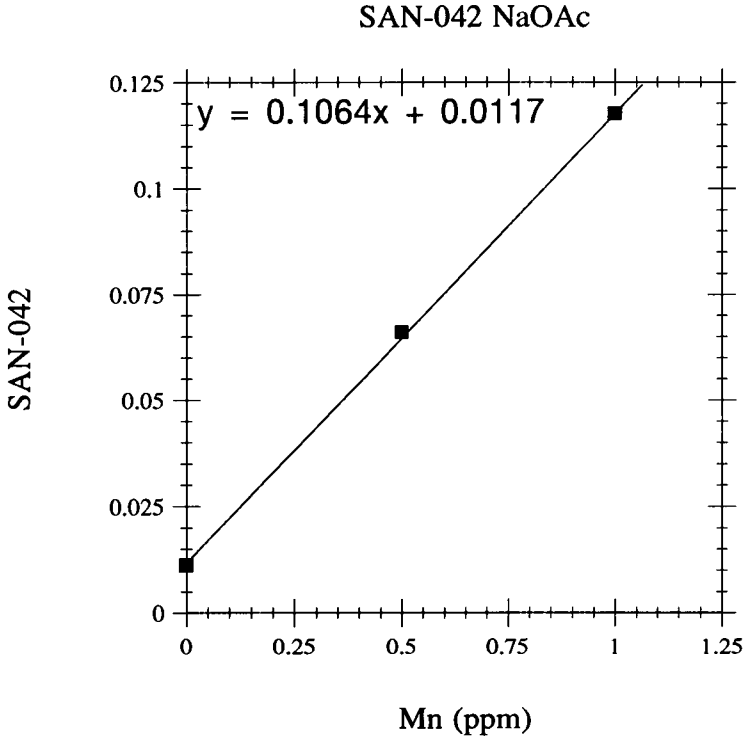
$.1121 \times 10 = 1.121 \times \frac{8}{1.018} = 8.809\,ppm$



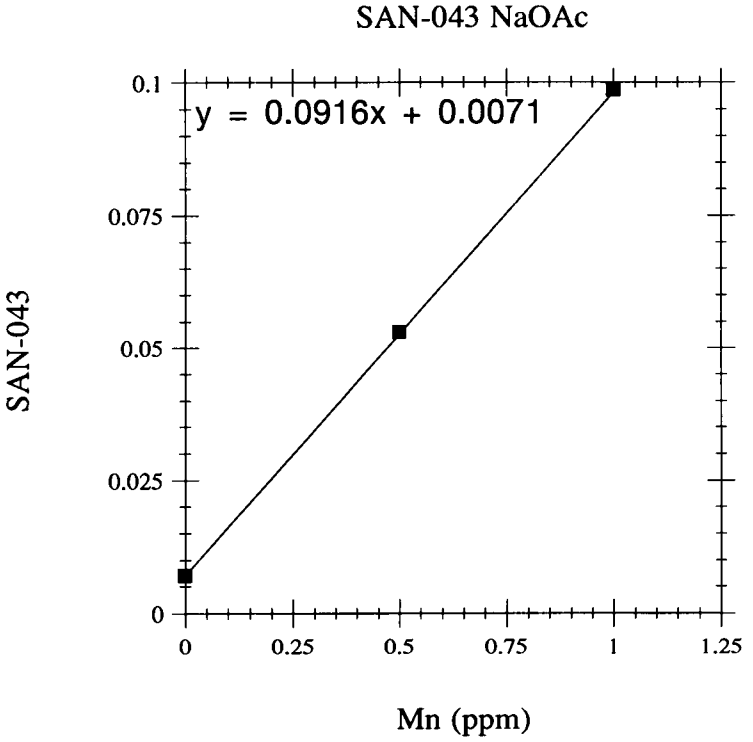
$.072 \times 10 = .72 + \frac{8}{1.017} = 5.664 ppm$



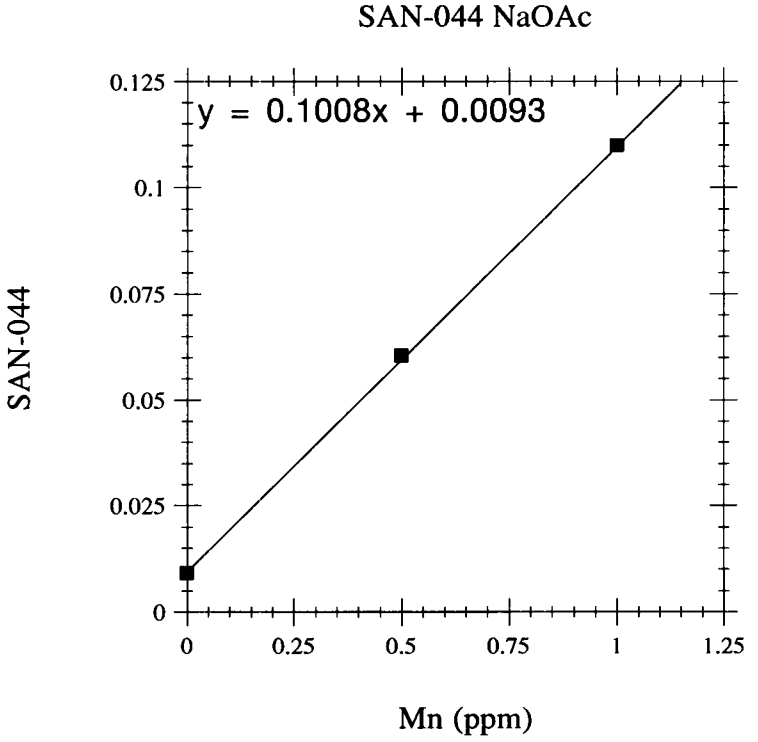
.1083 x 10 = 1.083 x 8 / .015 = 8.536 ppm



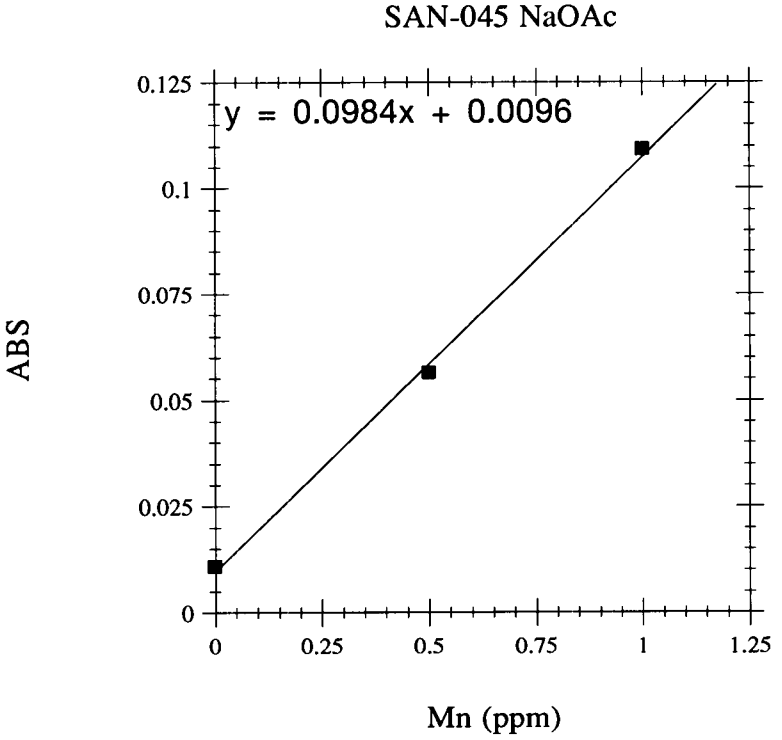
$.1099 \times 10 = 1.099 \times \frac{8}{1.012} = 8.688\ ppm$



.0775 X 10 = .7754 / 1.022 = 6.066 ppm



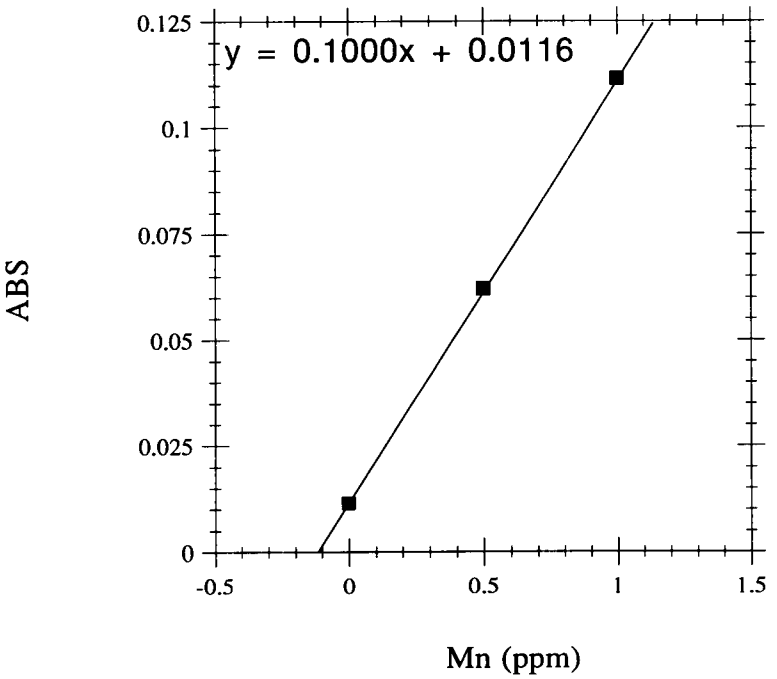
$.0923 \times 10 = .923 \times \frac{8}{1.014} = 7.282\ ppm$



.0976 x 10 = .976

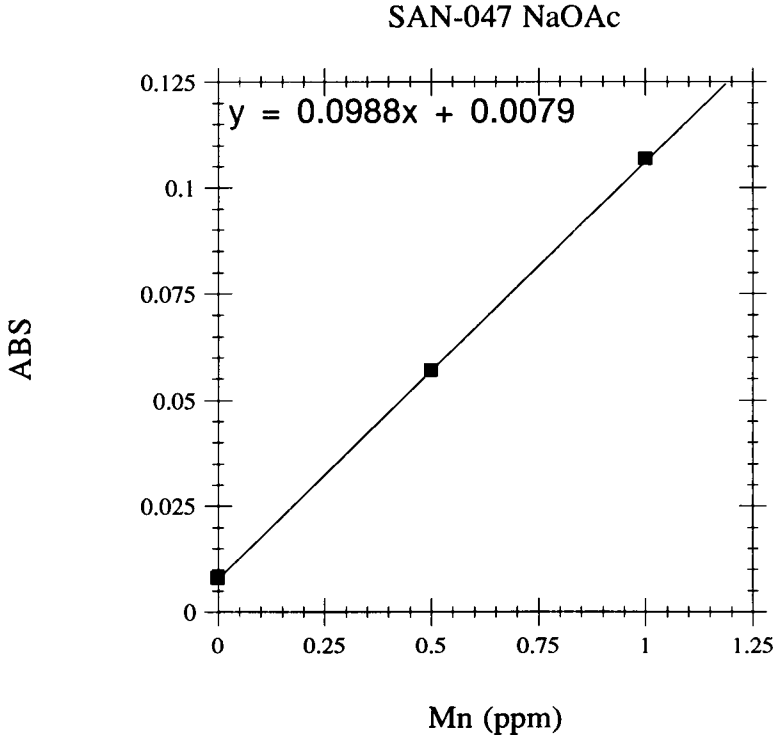
$.976 \times \frac{8}{1.017} = 7.677\ ppm$

SAN-046 NaOAc

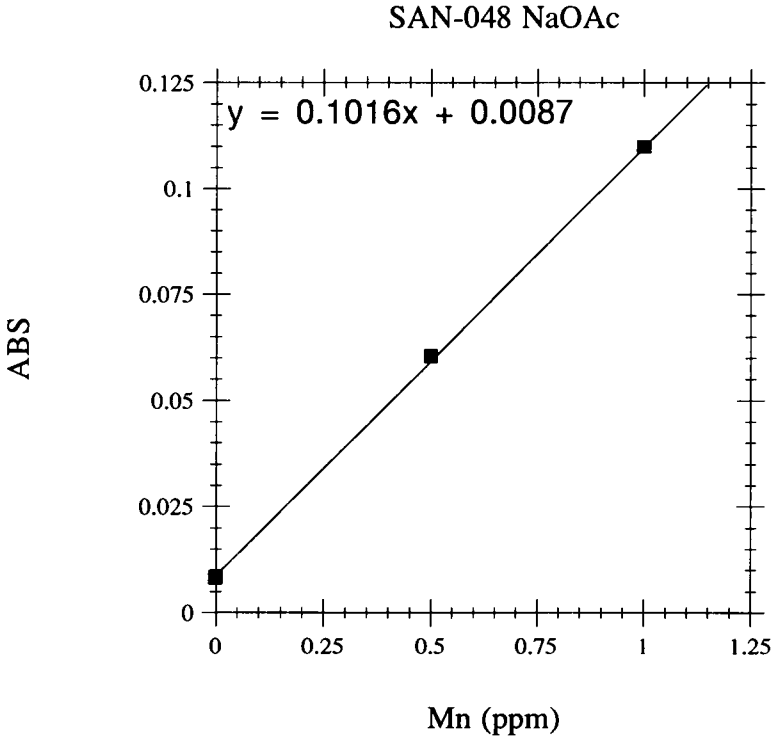


.116 x 10 = 1.16

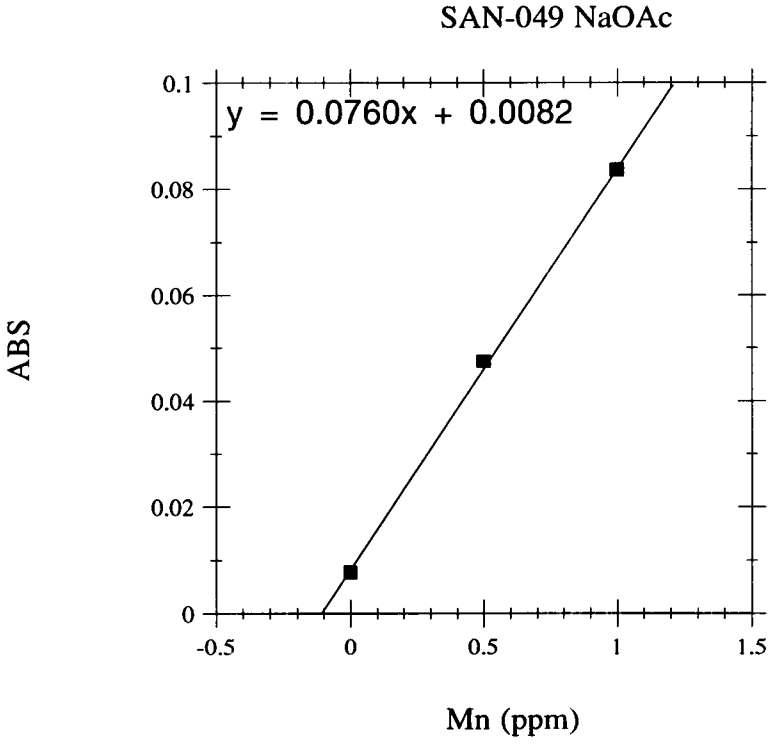
1.16 x 8 / 1.022 = 9,080 ppm



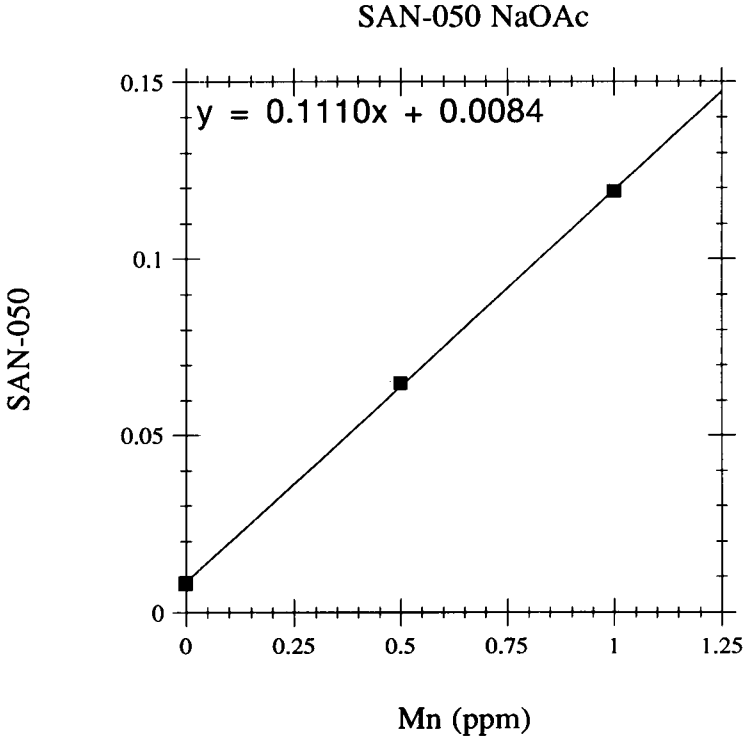
$.0799 \times 10 = .799 \times \frac{8}{1.023} = 6.248\,ppm$



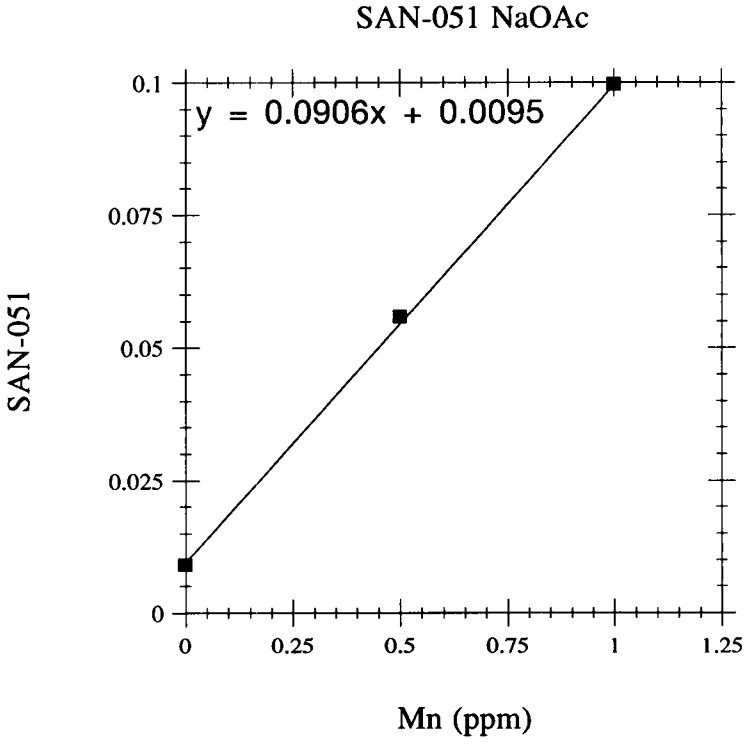
$.0856 \times 10 = .856 \times \frac{8}{1.022} = 6.70\,ppm$



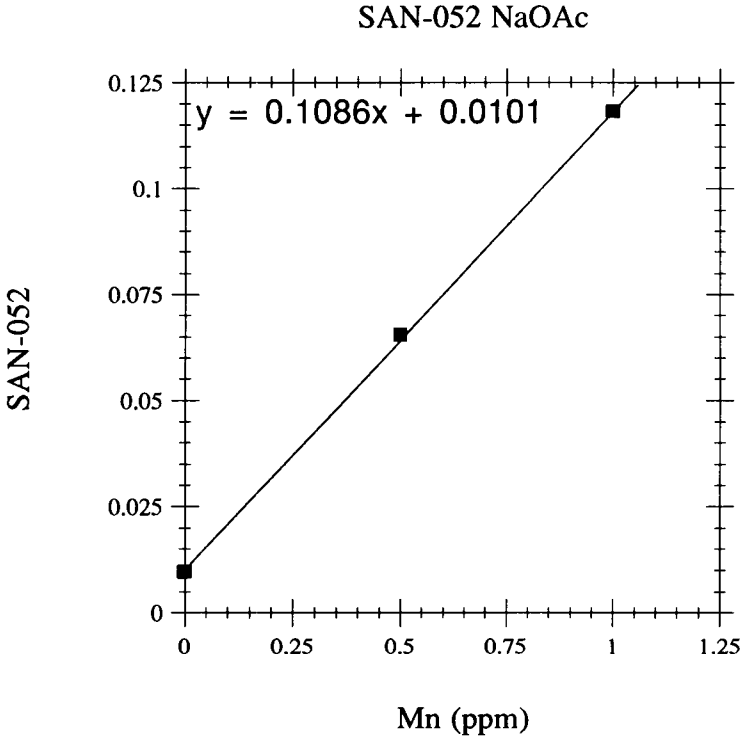
$1.079 \times 10 = \frac{1.079 \times 8}{1.017} = 8.488\ ppm$



$.0757 \times 10 = .757 \times \frac{8}{1.016} = 5.961 ppm$

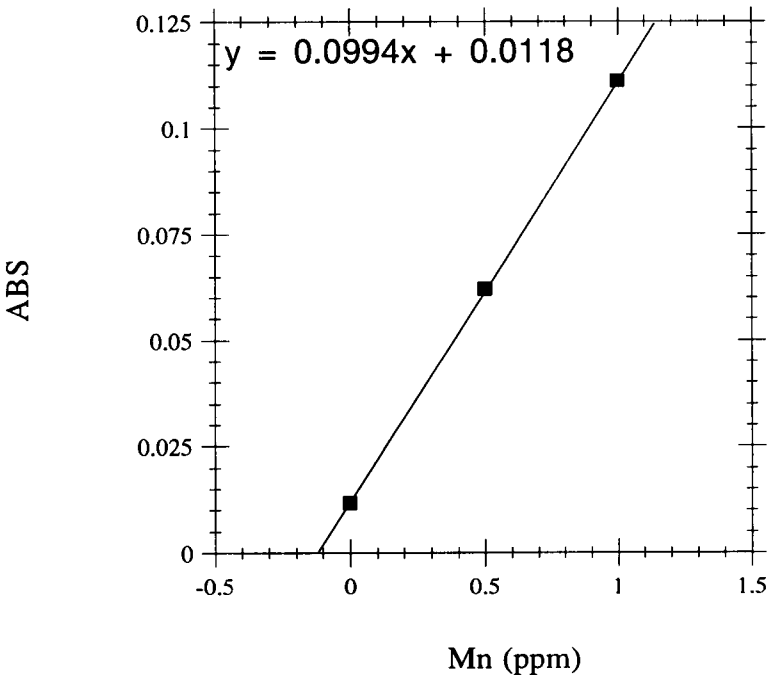


$.1048 \times 10 = 1.048 \times \frac{8}{1.017} = 8.244\ ppm$



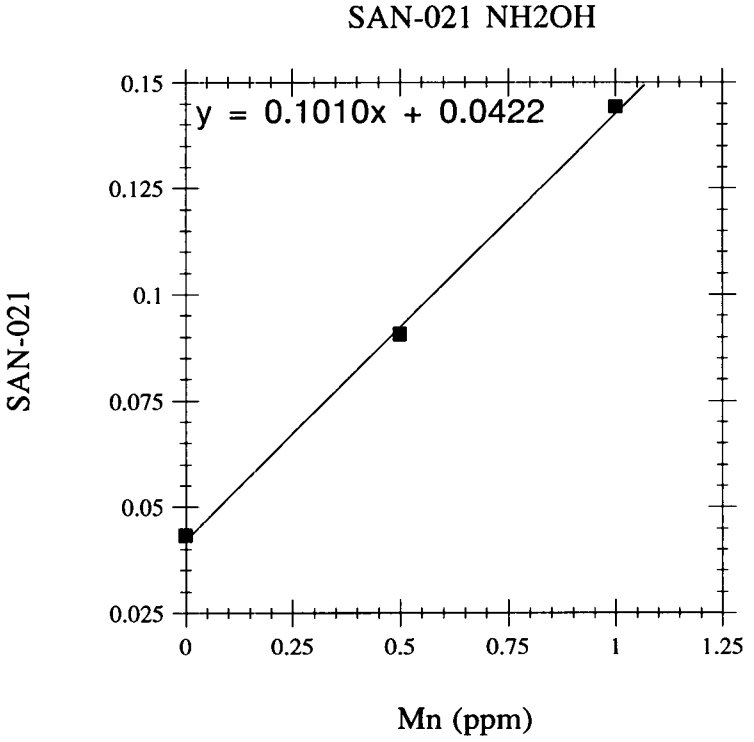
$.093 \times 10 = \frac{.93 \times 8}{1.02} = 7.294 \text{ ppm}$

SAN-053 NaOAc



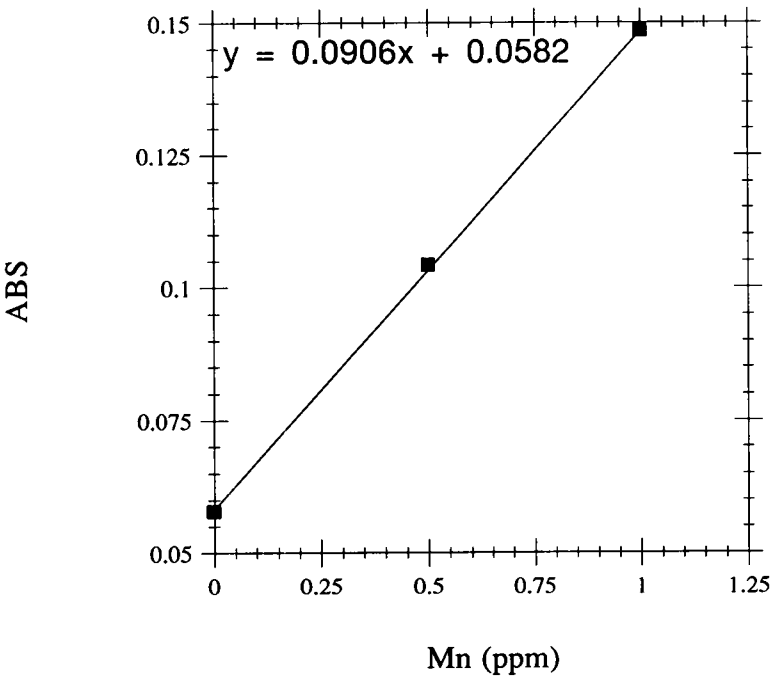
.1187 x 10 = 1.187

1.187 x 8 / 1.008 = 9.421 ppm



.4178 x 25 = 10.445 + 8 / 1.016 = 82.323 ppm

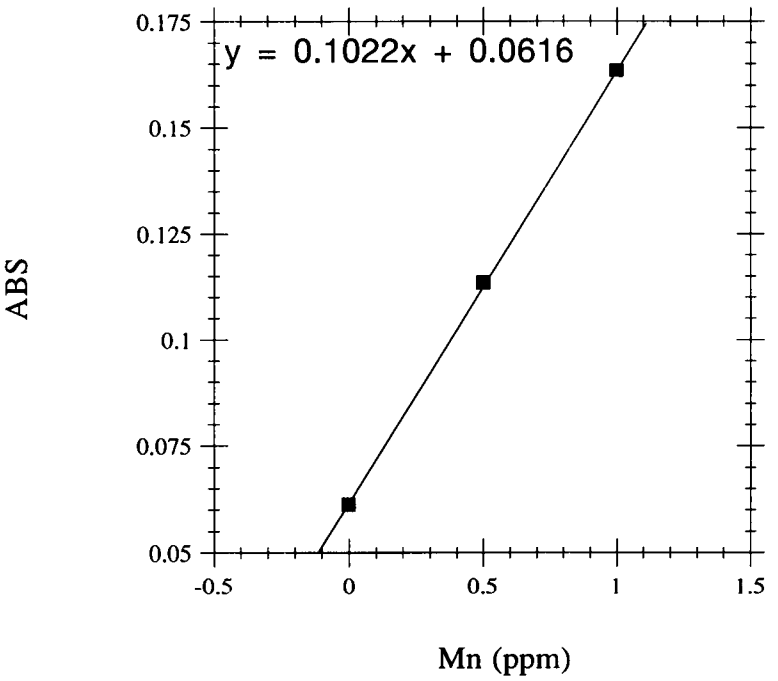
SAN-022 NH2OH



.6424 x 25 = 16.06

16.06 x 8 / 1.022 = 125.71 ppm

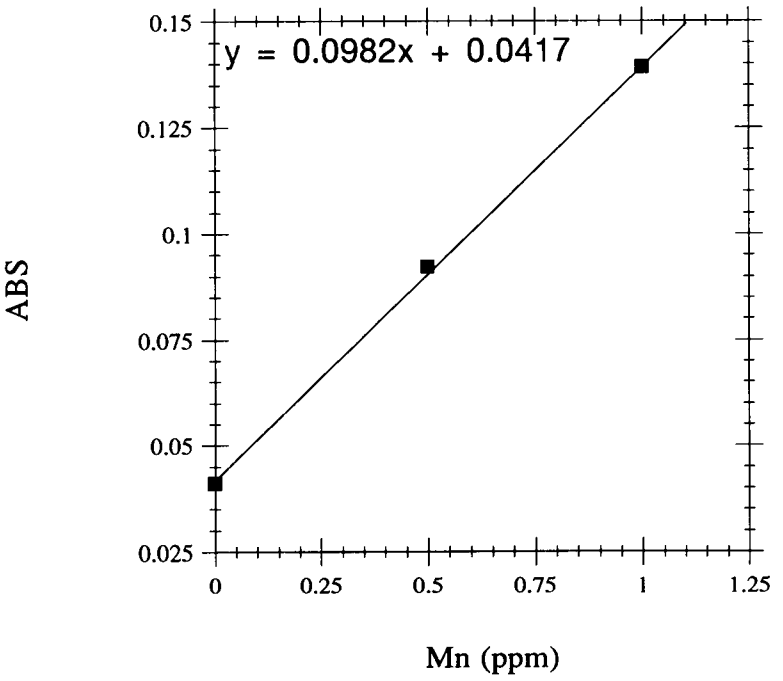
SAN-023 NH2OH



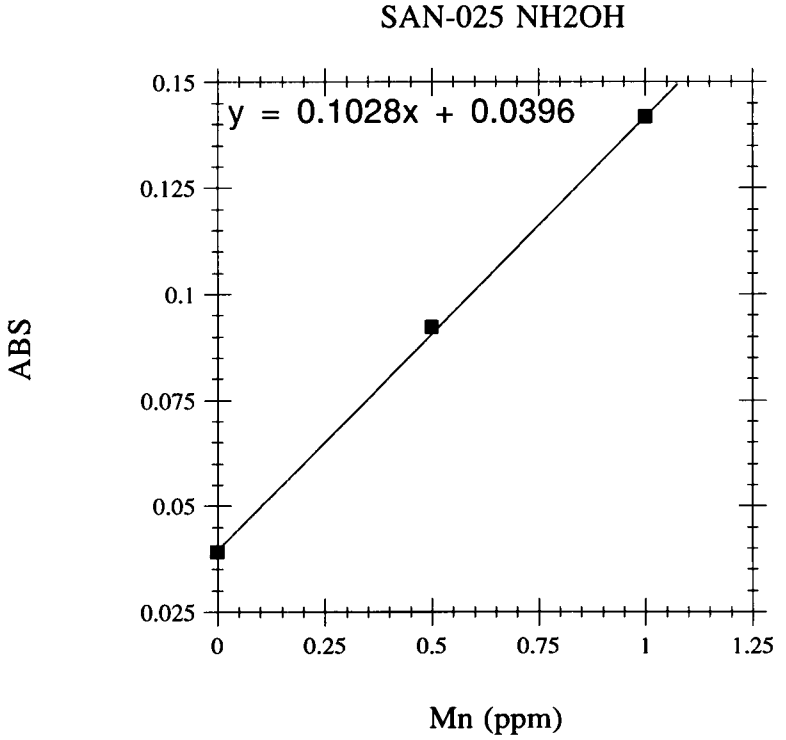
.6027 x 25 = 15.0675

15.0675 x 8/1.022 = 117.94 ppm

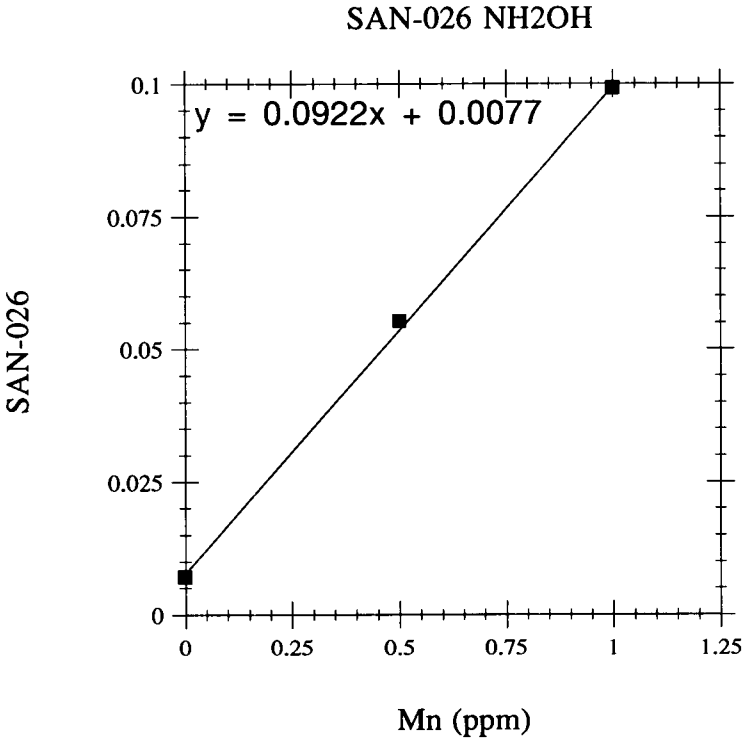
SAN-024 NH2OH



$.4246 \times 25 = 10.615 \times \frac{8}{1.018} = 83.418 ppm$

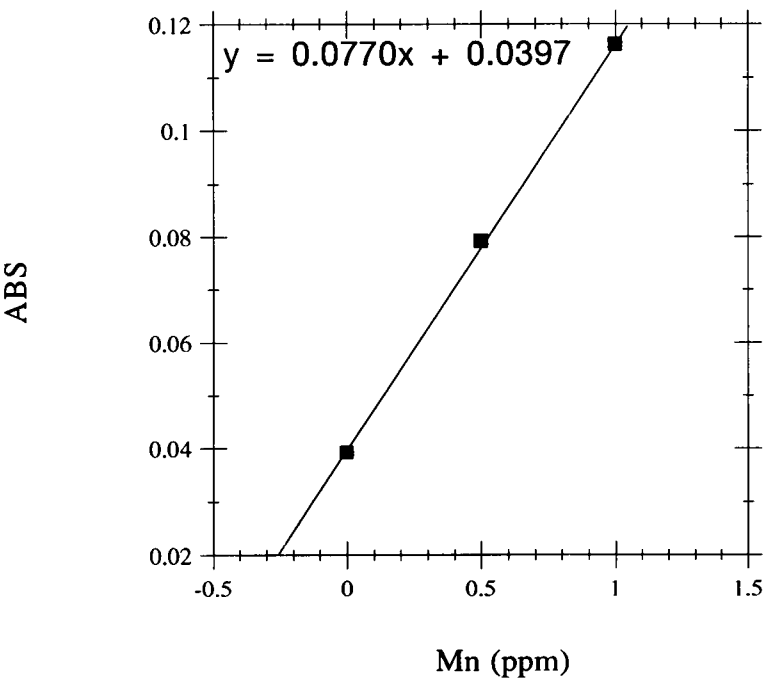


$.3852 \times 25 = 9.63 \times \frac{8}{1.025} = 75.161\ ppm$



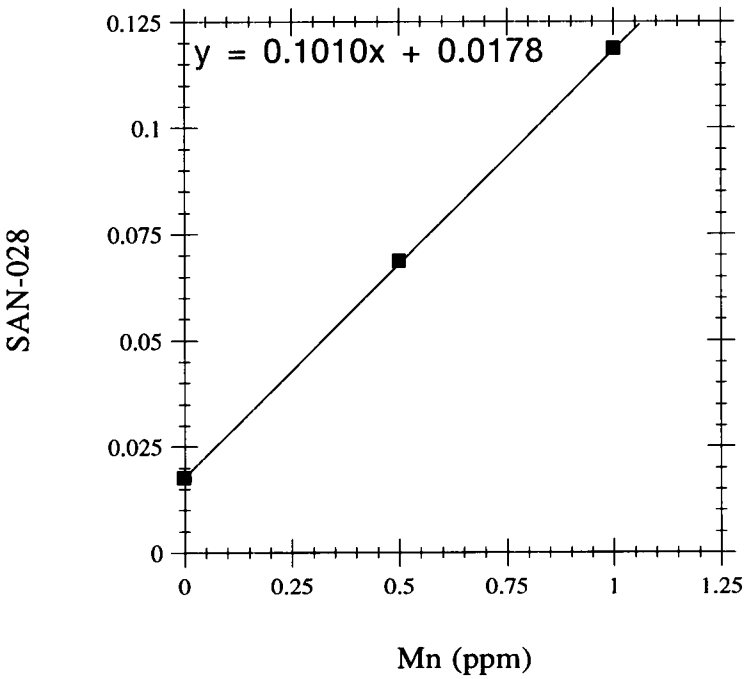
.0835 x 25 = 2.0875 x 8 / 1.021 = 16.356 ppm

SAN-027 NH2OH



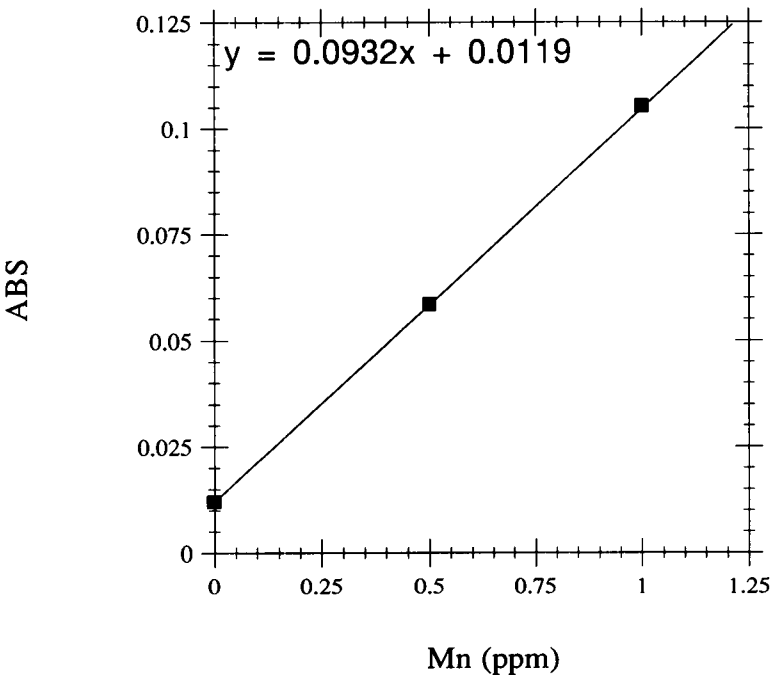
$.5156 \times 25 = 12.89 + \frac{8}{1.013} = 101.79$ ppm

SAN-028 NH2OH



.1762 x 25 = 4.405 x 8/1.023 = 34.448 ppm

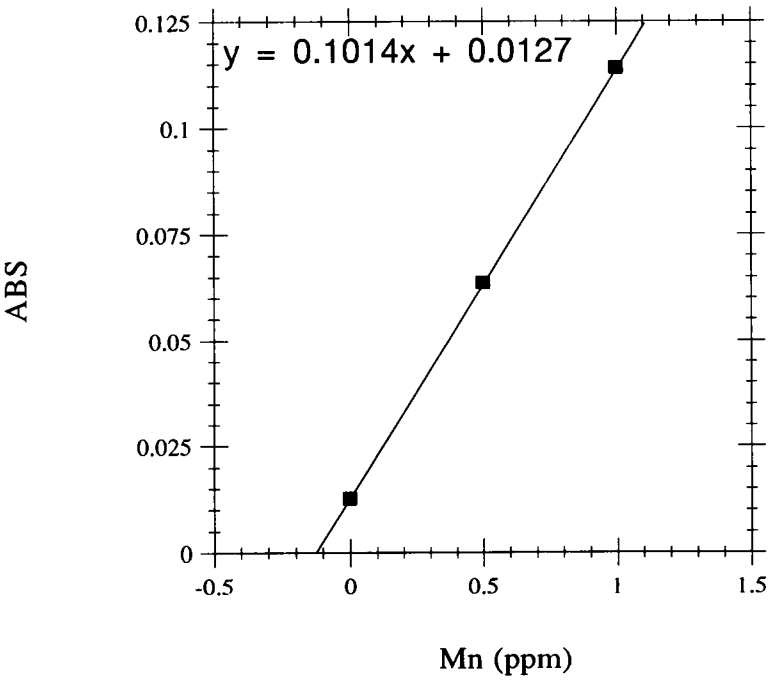
SAN-029 NH2OH



.1277 x 25 = 3.1925

3.1925 x 8 / 1.02 = 25.04 ppm

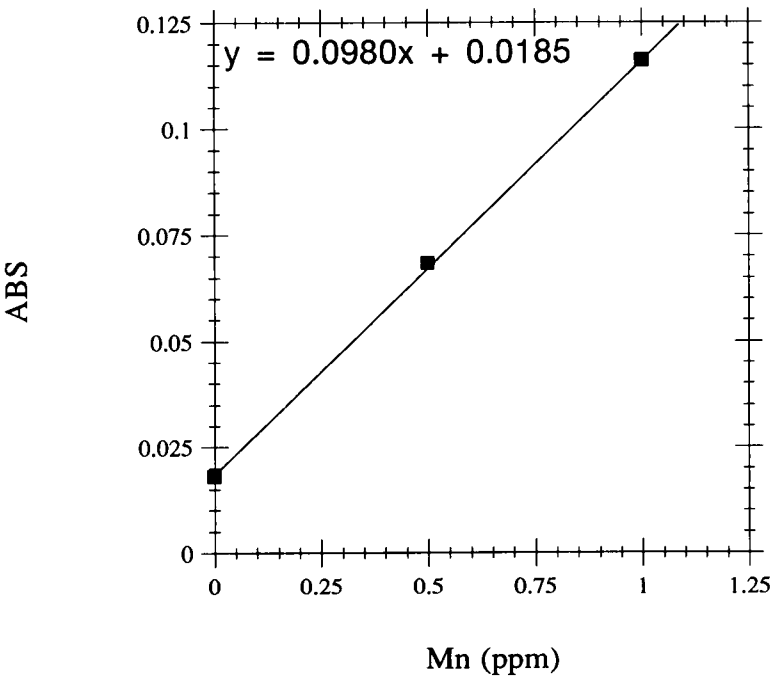
SAN-030 NH2OH



.1252 x 25 = 3.13

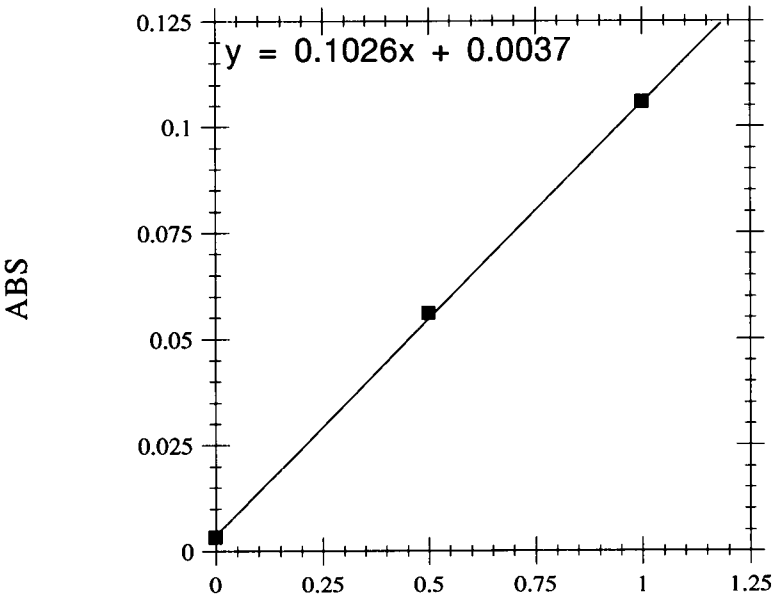
$\frac{3.13 + 8}{1.022} = 24.501 \text{ ppm}$

SAN-031 NH2OH



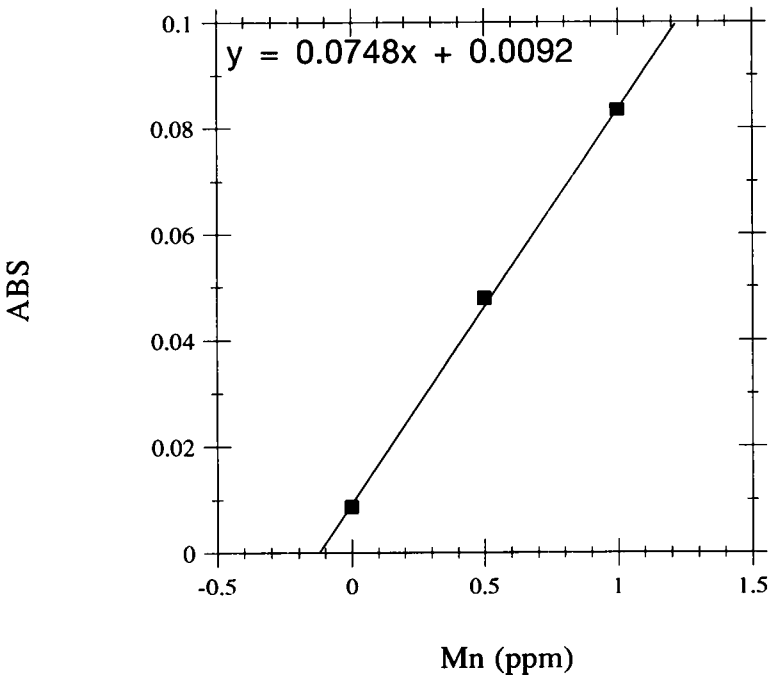
$.1888 \times 25 = 4.72 \times \frac{8}{1.026} = 36.803\,ppm$

SAN-032 NH2OH



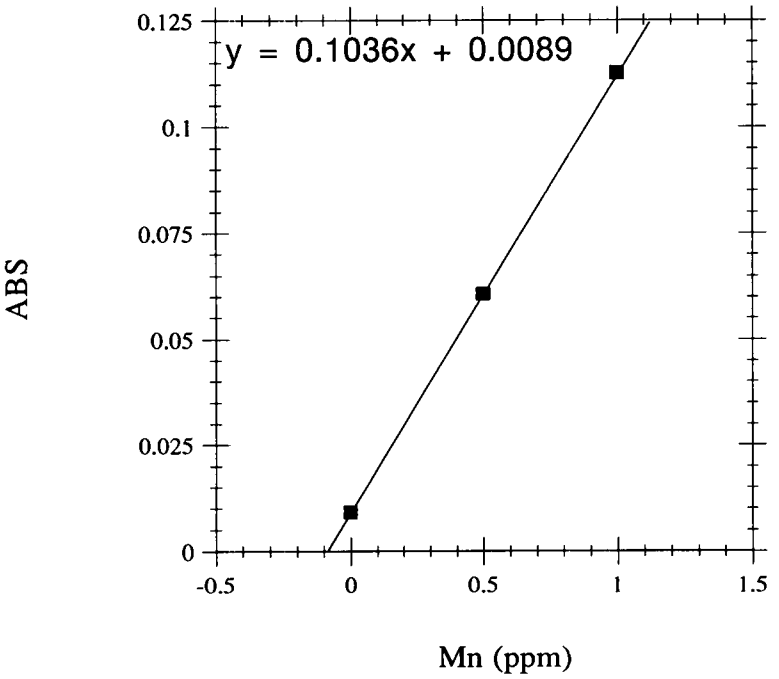
.0361 x 25 = .9025 x 8 / 1.017 = 7.099 ppm

SAN-033 NH2OH



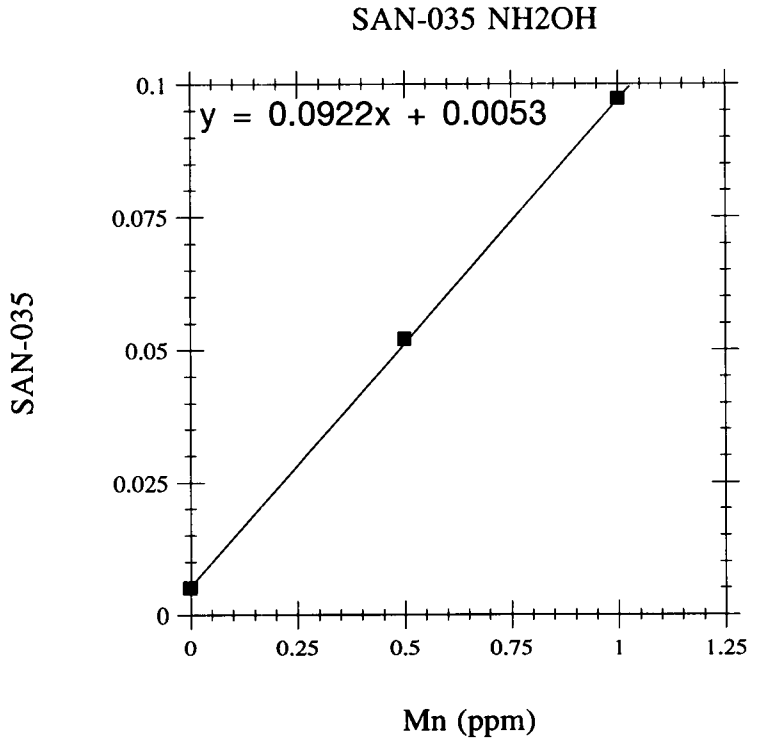
$.123 \times 25 - 3.075 \times \frac{8}{1.012} = 24.308$ ppm

SAN-034 NH2OH

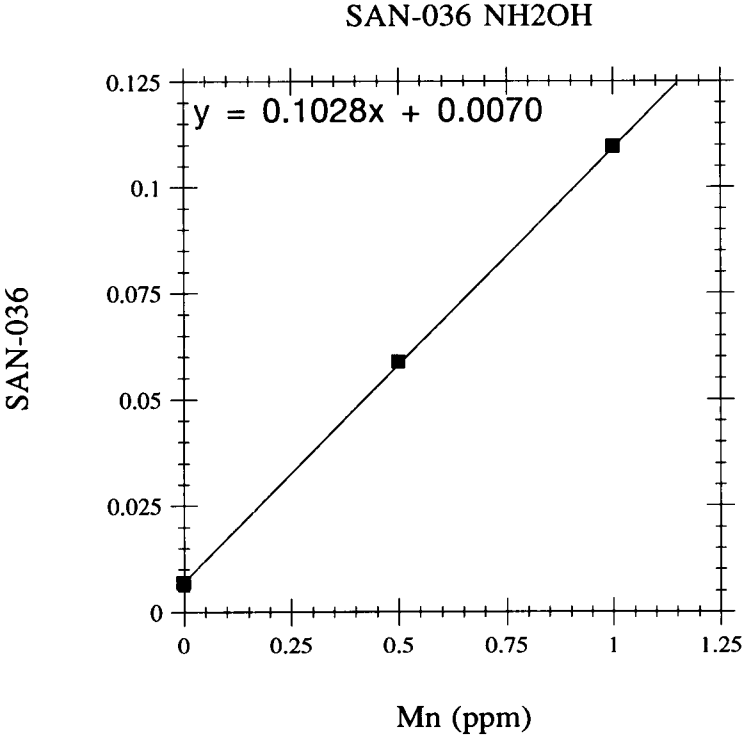


.0859 x 25 = 2.1475

2.1475 x 8/1.009 = 17.027 ppm

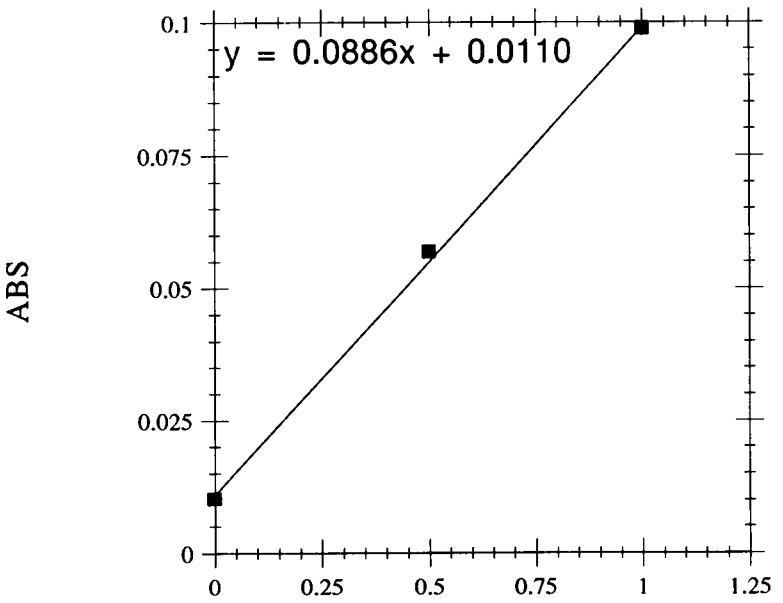


$.0575 \times 25 = 1.4375 \times \frac{8}{1.02} = 11.274$ ppm



$.0681 \times 25 = 1.7025 \times \frac{8}{1.0.4} = 13.432\text{ppm}$

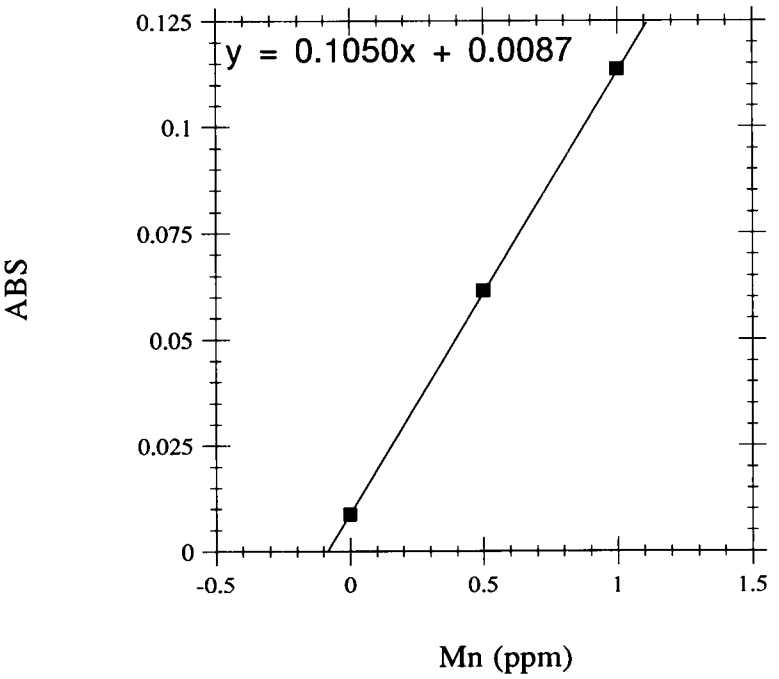
SAN-037 NH2OH



$.1241 \times 25 = 3.1025$

$3.1025 \times \frac{8}{1.021} = 24.31\ ppm$

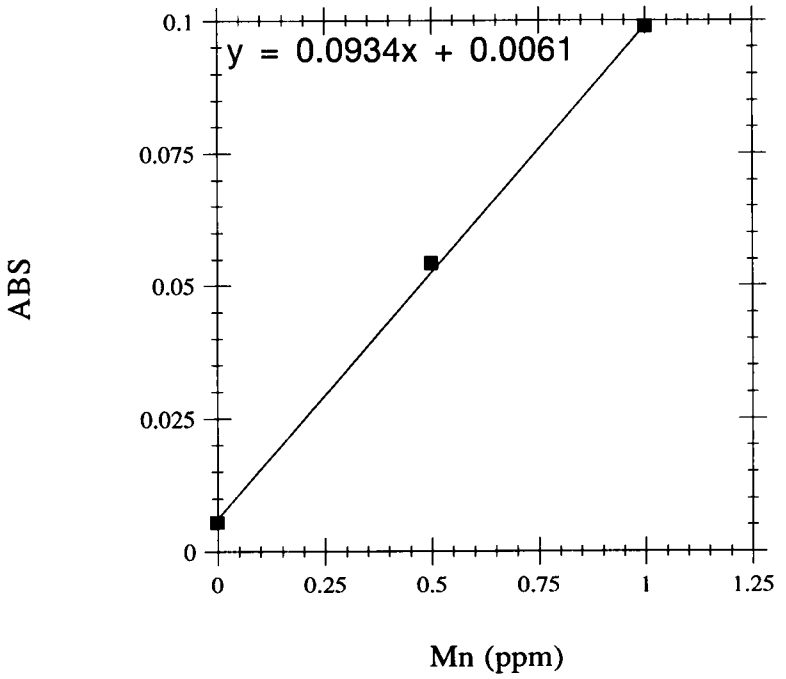
SAN-038 NH2OH



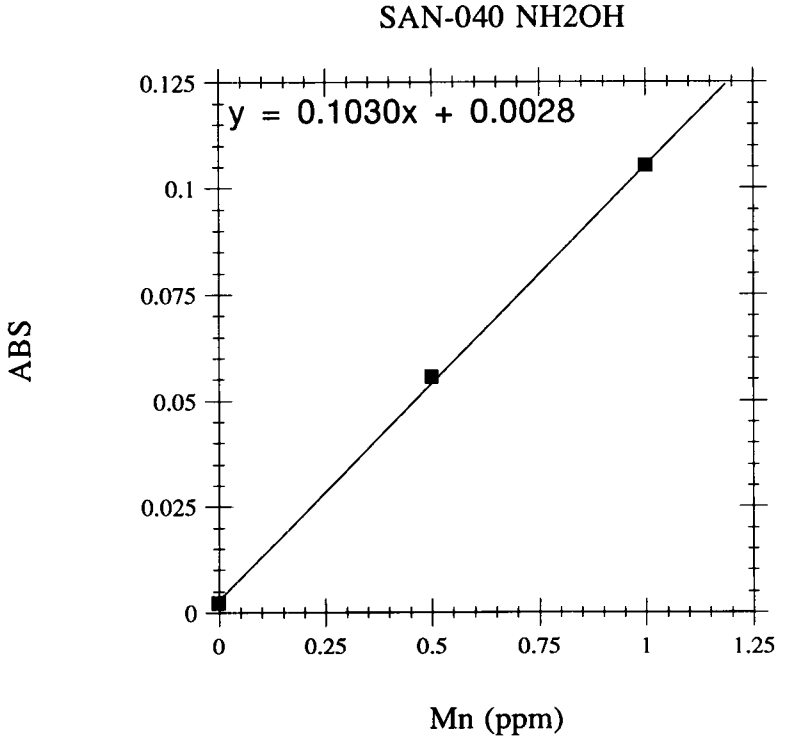
.0828 × 25 = 2.07

$\frac{2.07 \times 8}{1.024} = 16.172$ ppm

SAN-039 NH2OH

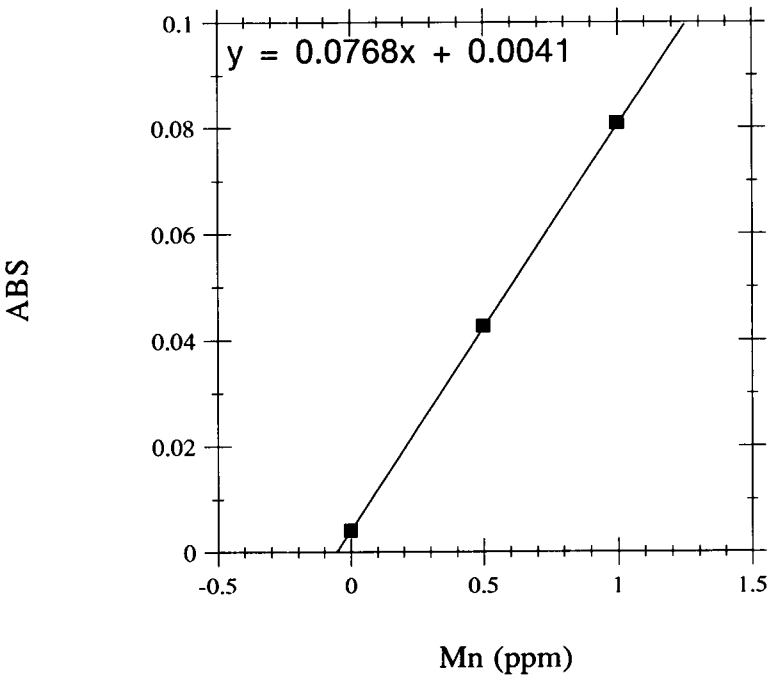


$.0653 \times 25 = \frac{1.6325 \times 8}{1.018} = 12.829 ppm$

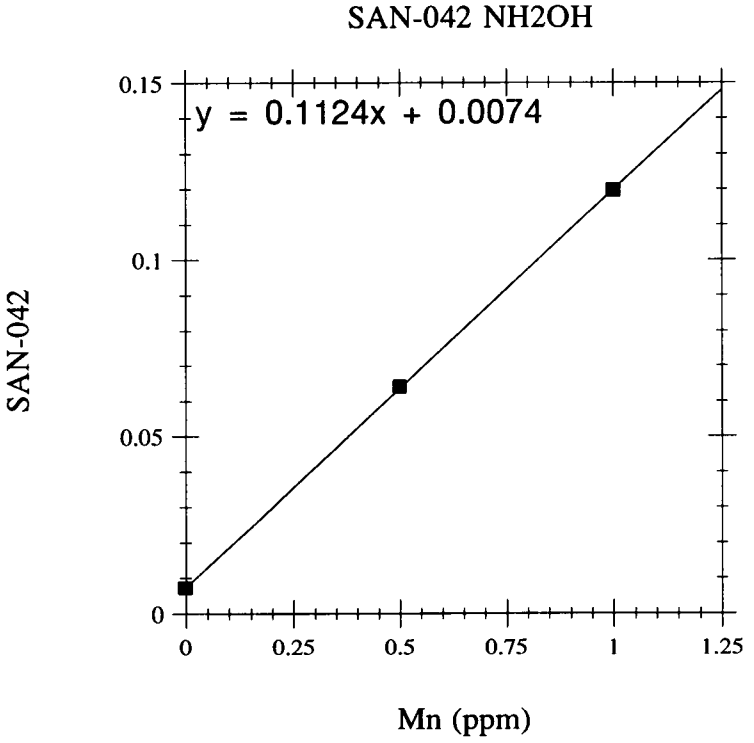


$.0272 \times 25 = .68 \times \frac{8}{1.017} = 5.35 ppm$

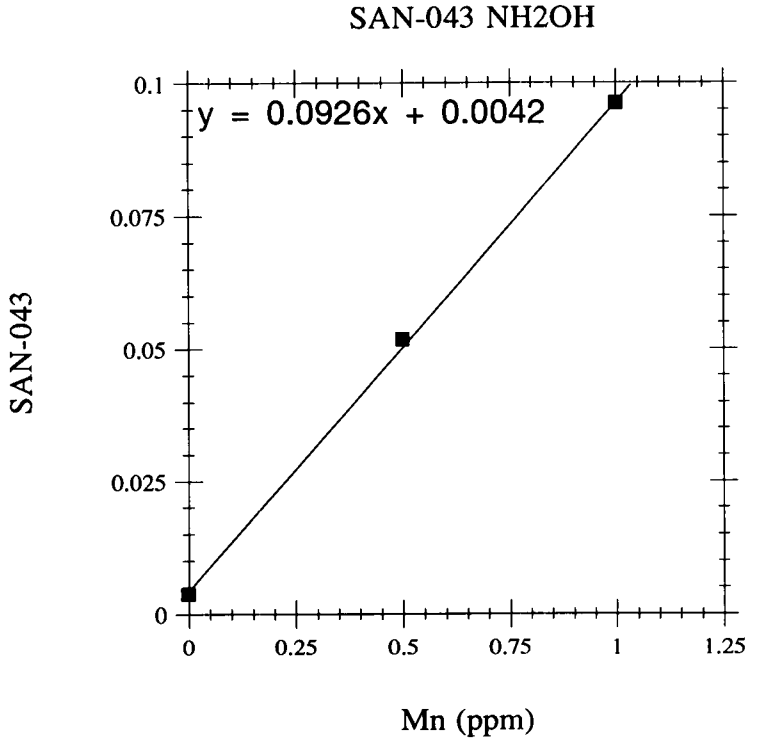
SAN-041 NH2OH



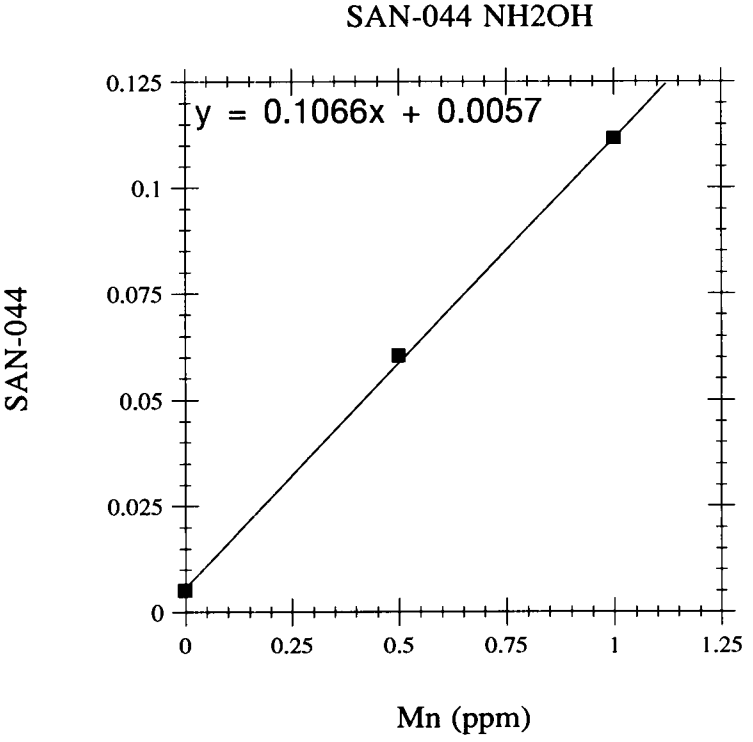
.0534 x 25 = 1.335 x 8 / 1.015 = 10.522 ppm



.0658 X 25 = 1.645 x 8/1.012 = 13.004 ppm

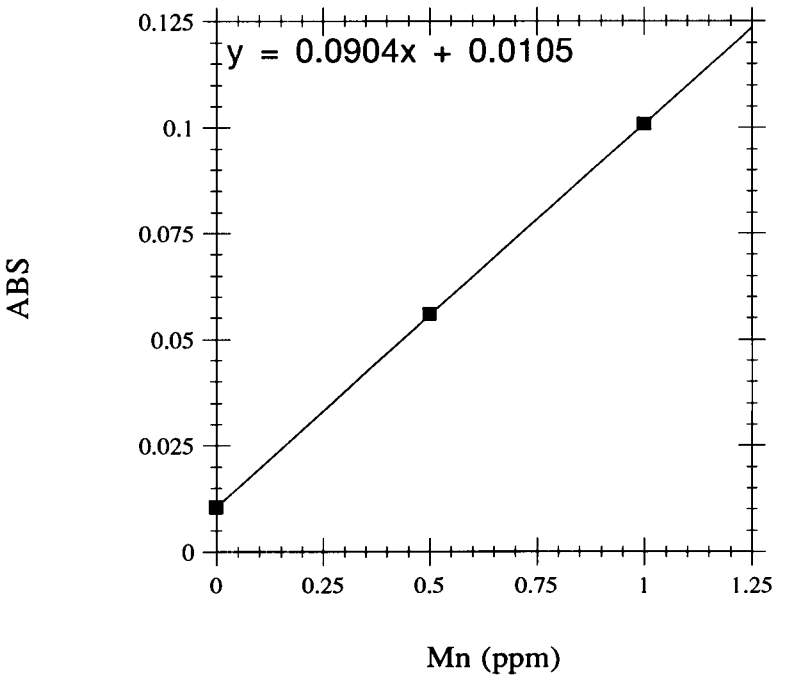


$.0454 \times 25 = 1.135 \times \frac{8}{1.022} = 8.884\ ppm$



.0535 X 25 = 1.3375 + 9 / 1.014 = 10.552 ppm

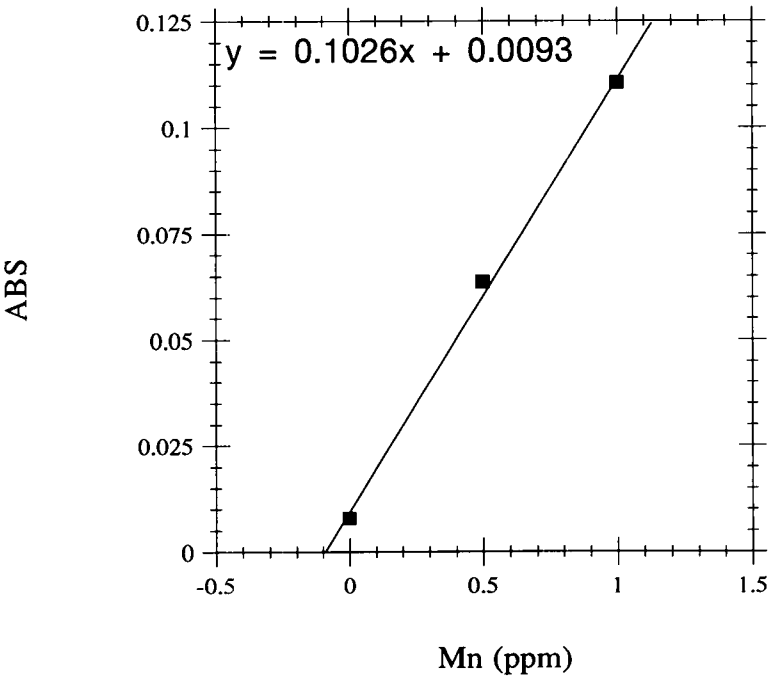
SAN-045 NH2OH



.1161 x 25 = 2.9025

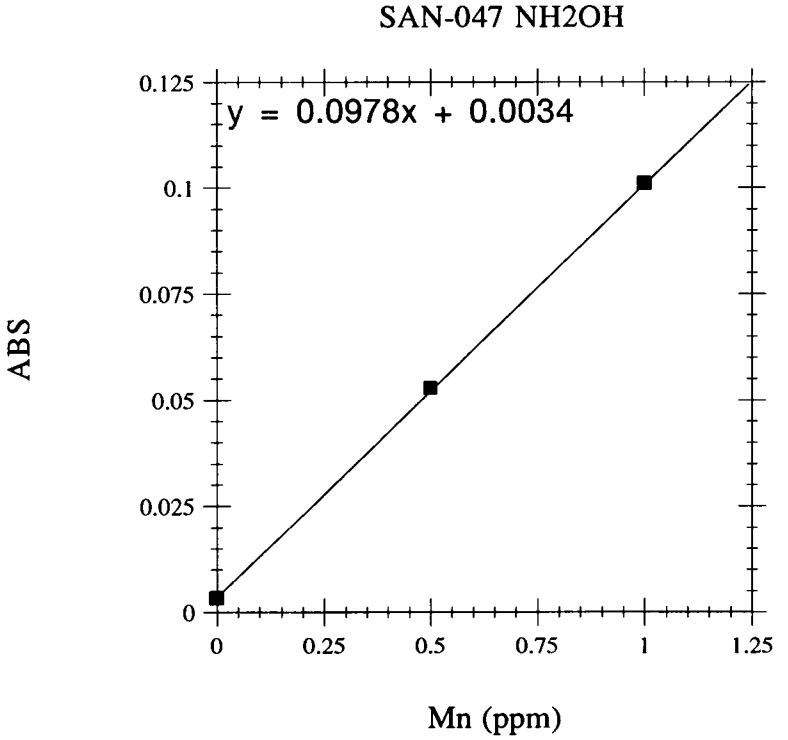
$2.9025 \times \frac{8}{1.017} = 22.832 \text{ ppm}$

SAN-046 NH2OH

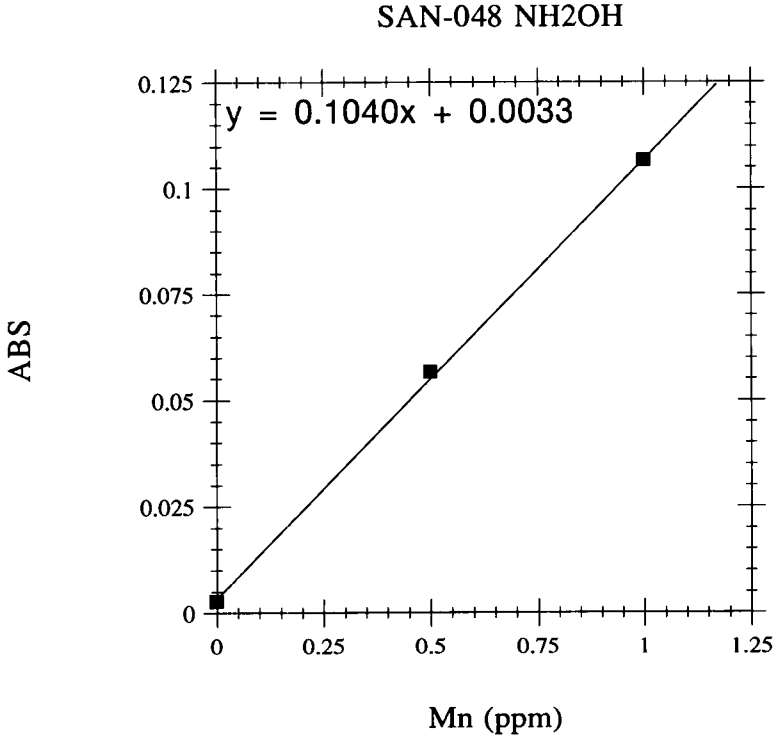


.09064 x 25 = 2.266

2.266 + 8/1.022 = 17.738 ppm

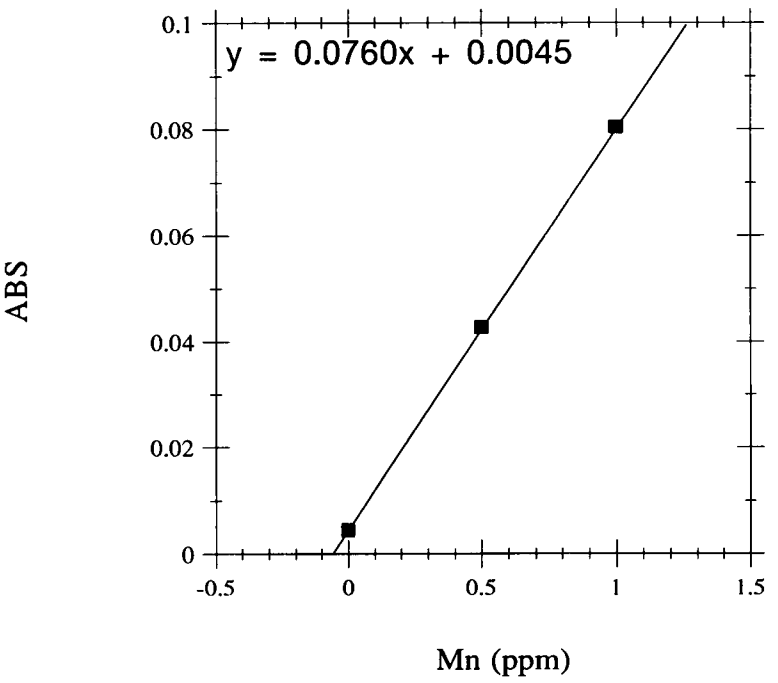


$.0348 \times 25 = .87 \times \frac{8}{1.023} = 6.804\ ppm$

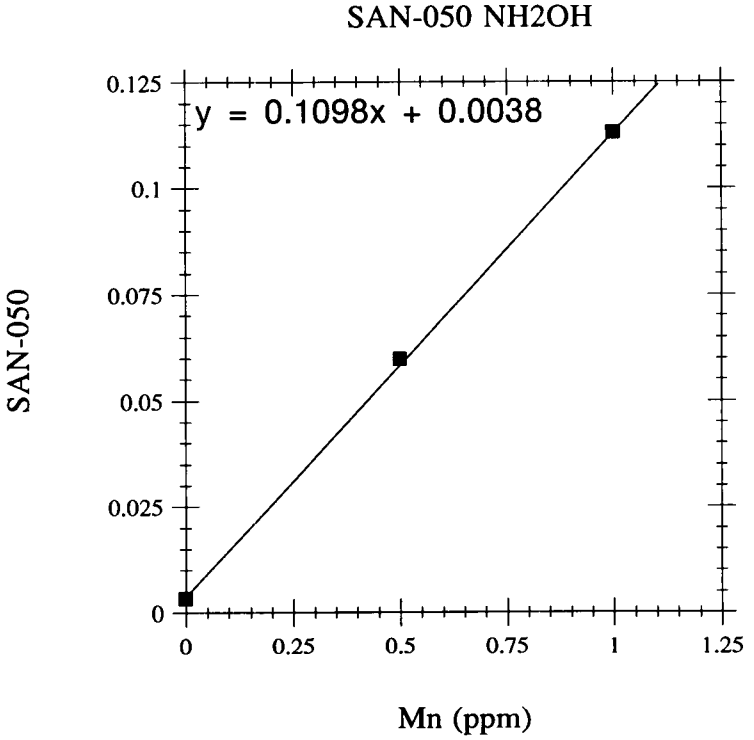


$.0317 \times 25 = .7925 \times \frac{8}{1.022} = 6.203 ppm$

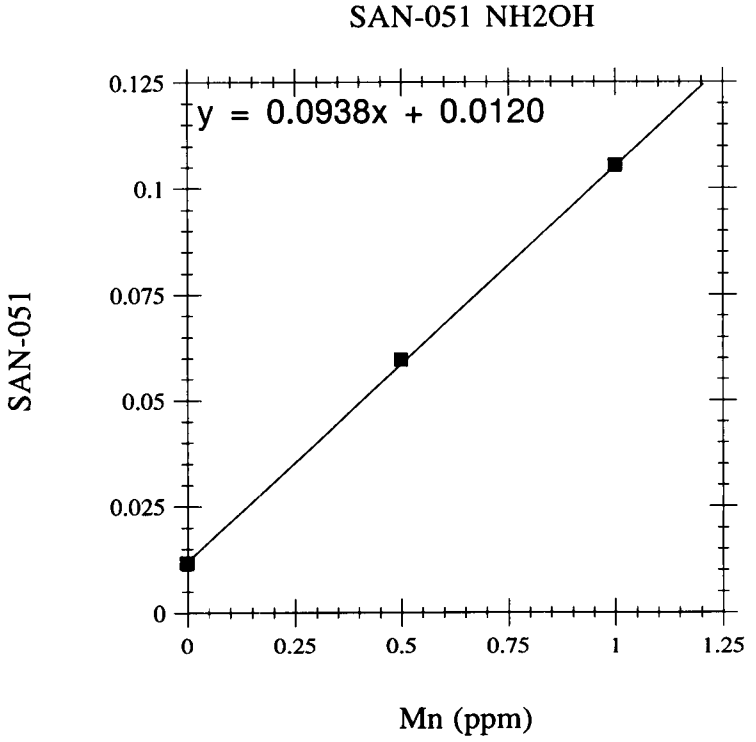
SAN-049 NH2OH



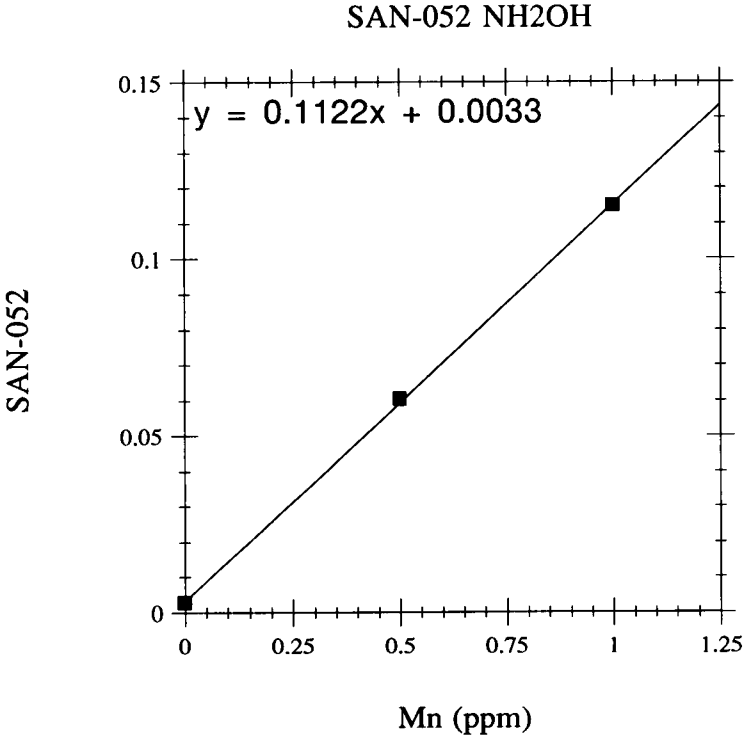
.0592 x 25 = 1.48 x 8 / 1.017 = 11.642 ppm



.0346 x 25 = .865 x 8 / 1.016 = 6.811 ppm

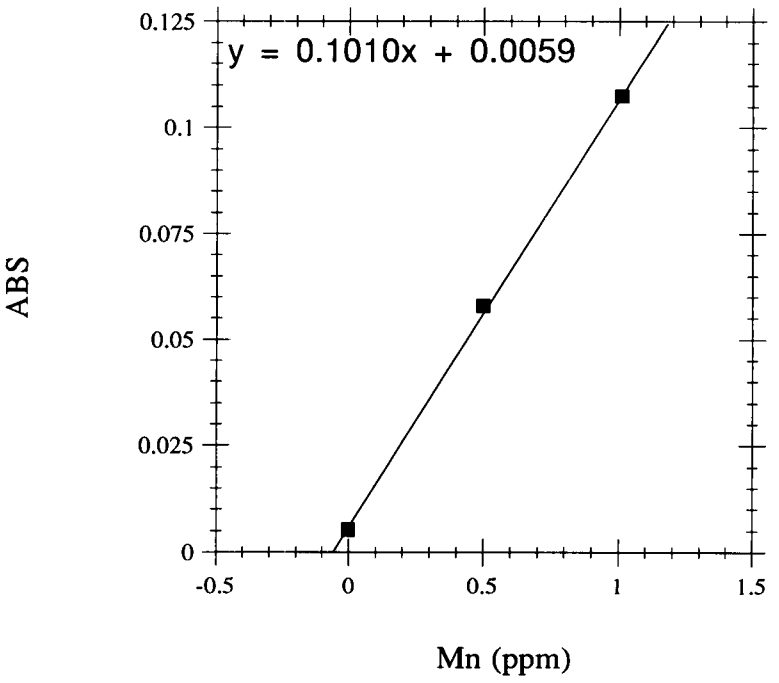


$.1279 \times 25 = 3.1975 \times \frac{8}{1.017} = 25.152\ ppm$



$.0294 \times 25 = .735 \times \frac{8}{1.02} = 5.765\ ppm$

SAN-053 NH2OH



.0584 x 25 = 1.46

1.46 x 8 / 1.008 = 11.587 ppm

		$MgCl_2$		$NaAc$		NH_2O^-	
		C	D	C	D	C	D
A	Cu	34 35 35 34 35	18 18 18 19 18	37 37 37 37 37	18 18 18 18 18	~~35 35 36 36 36~~ 38 38 37 37 37	18 19 18 19 18
	Ag	43 43 43 43 43	26 26 25 25 25	46 45 46 45 45	25 25 25 25 25	37 38 38 38 37	19 19 19 19 18
	Co	~~4 4 4 4 4~~	28 28 29 ~~28~~ 28	48 47 47 47 46	28 27 27 26 27	48 50 49 49 48	26 27 26 27 26
	Pb	37 36 ~~38 36~~ 37	25 24 24 24 25	39 39 41 39 40	27 26 24 25 24	43 41 42 42 44	28 28 ~~3~~ 28 27
	ZN	261 262 262 262 ~~263~~	137 143 140 139 140	285 280 279 280 279	146 150 144 147 146	314 319 ~~3~~77 319 320	175 171 175 171 172
B	Cu	97 97 97 97 98	81 81 81 80 79	102 102 102 103 103	82 82 83 82 83	~~108 107 109 108 108~~ ~~110~~ 110 111 112 110	93 92 94 94 93
	Ag	116 116 116 116 116	98 99 98 99 99	121 123 122 123 122	102 102 103 101 101	112 111 111 111 112	95 95 96 96 97
	Co	83 82 81 80 80	65 66 63 65 64	81 82 81 81 82	62 61 61 61 63	92 91 90 91 90	71 71 72 70 72
	Pb	5~~8 62 61 58~~ 59	46 48 49 47 48	68 68 68 67 68	53 51 53 51 52	72 74 73 73 73	59 58 56 57 57
	ZN	389 390 391 394 392	264 267 260 263 265	405 407 409 406 404	284 284 286 285 286	460 463 461 457 462	332 327 325 326 325
C	Cu	157 157 157 157 156	141 142 142 141 141	167 166 165 166 165	147 147 147 148 148	~~180 182 180 181 182~~ 184 185 185 184 185	164 167 167 165 164
	Ag	186 187 186 186 187	170 172 171 170 170	199 198 201 200 198	179 181 180 180 179	179 180 177 179 178	165 164 166 167 163
	Co	115 116 116 115 114	101 102 102 102 99	114 115 115 114 115	98 97 99 98 99	132 132 133 133 134	113 113 113 112 112
	Pb	~~79 79 77 80 81~~ 86 86 84 83 85	~~74~~ 71 72 73 72	92 95 95 93 93	78 80 78 80 80	102 104 103 104 104	88 86 87 88 87
	ZN	491 490 492 494 488	383 384 379 378 383	521 520 521 518 518	401 403 403 404 403	589 587 590 585 588	462 459 466 457 464

Analytical Error of Santorini Leachate Analyses

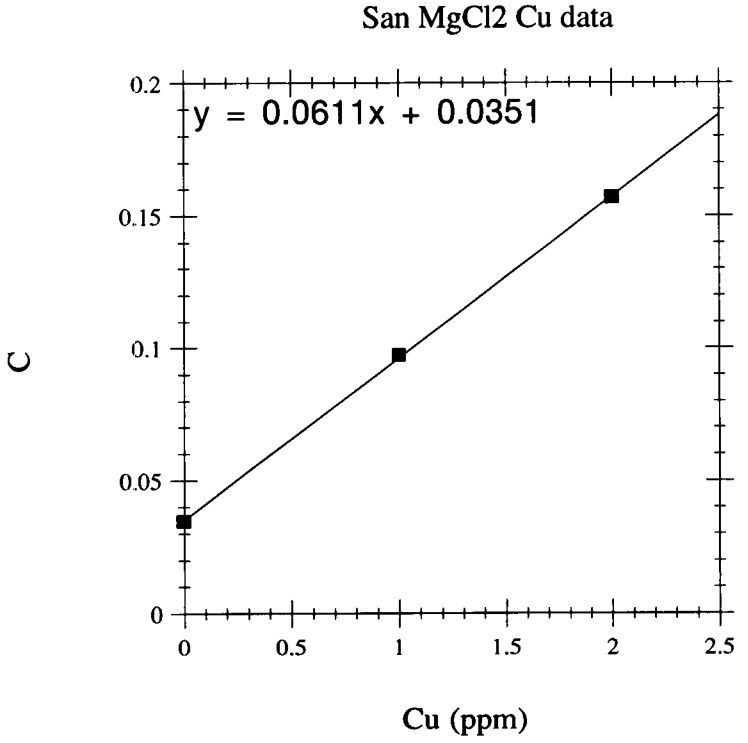
$MgCl_2$				
Cu	12.96%	16.24%	12.25%	21.75%
Ag	17.35%	29.1%	~~32.15%~~ 30.7	~~15.75~~ 10.6
Co	20.6%	35%	24.7	47
Pb	34.4%	50%	50	50
Zn	0%	11.5%	13.5	2.4
Fe			19.35	11.8
Mn			13.7	15
$NaOAc$				
Cu	13.64%	9.58%	32.15%	15.75%
Ag	15.25%	21.99%	10%	15.4
Co	28.3%	33%	23	56
Pb	32.4%	46%	~~50~~ 40	40
Zn	9.5%	5.6%	16.6	14.89
Fe			2.3	27.3
Mn			1.76	14%
NH_2OH				
Cu	1.58%	2.34%	42.3	37.2
Ag	8.67%	9.09%	49	36.
Co	13.79%	20%	8.3	11.5
Pb	28.05%	48.4%	40	40
Zn	9.9%	10.7%	26.15	5.6
Fe			27%	20%
Mn			3.8	22%

	A (50 ml)	B (50 ml)
Cu	.05/1 .1/.2	.025/.5 .05/1
Ag	.05/1 .1/.2	.025/.5 .05/1
Co	.05/1 .1/.2	.025/.5 .05/1
Pb	.05/1 .1/.2	.025/.5 .05/1
Zn	~~.025/.5~~ .1/.2	~~.025/.5~~ .05/1

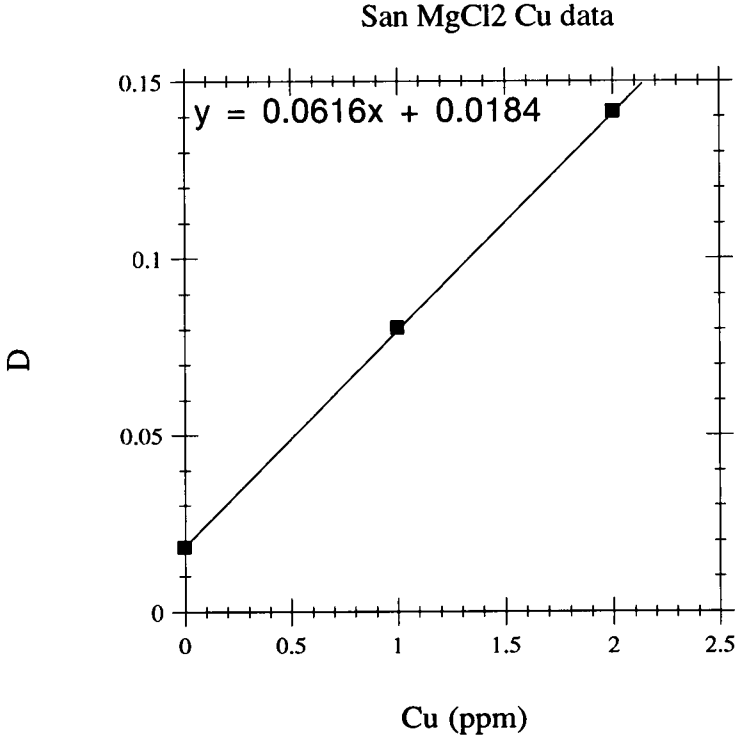
Fe	.1/.2	.05/1
Mn	.1/.2	.05/1

Cu	.5/1/~~2~~	.25/.5/~~1~~
Ag	1/2	.5/1
Co	1/2	.5/1
Pb	1/2	.5/1
Zn	1/2	.5/1
Fe	1/2	.5/1
Mn	1/2	.5/1

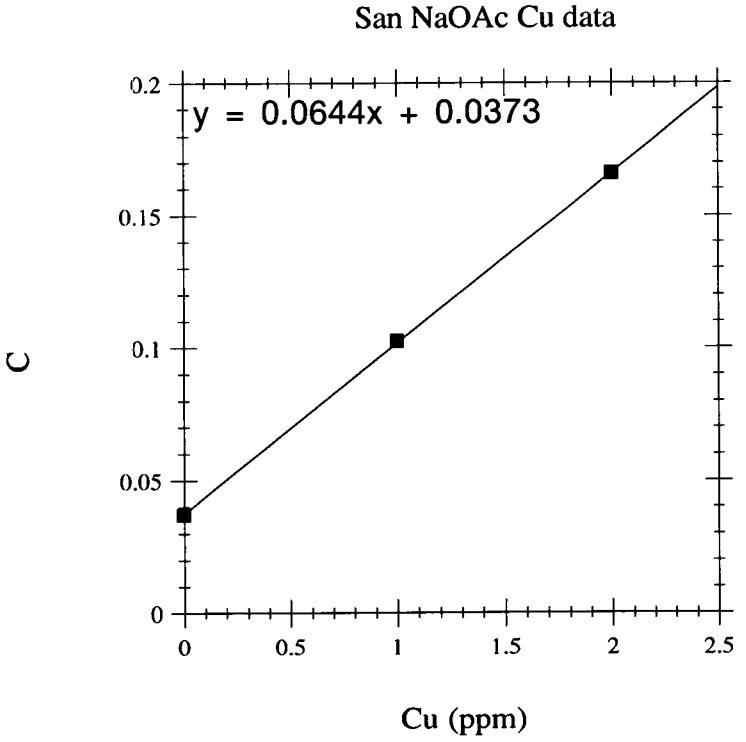
Cu	.5/1/2	.25/.5/1
Ag	.5/1/2	.25/.5/1
Co	1/2/4	.5/1/2
Pb	1/2/4	.5/1/2
Zn	1/2/4	.5/1/2
Fe	.5/1/10/25	.25/.5/5/12.5
Mn	.5/1/10/25	.25/.5/5/12.5


San MgCl2 Cu data
y = 0.0611x + 0.0351
0.2
0.15
0.1
0.05
0
C
0
0.5
1
1.5
2
2.5
Cu (ppm)

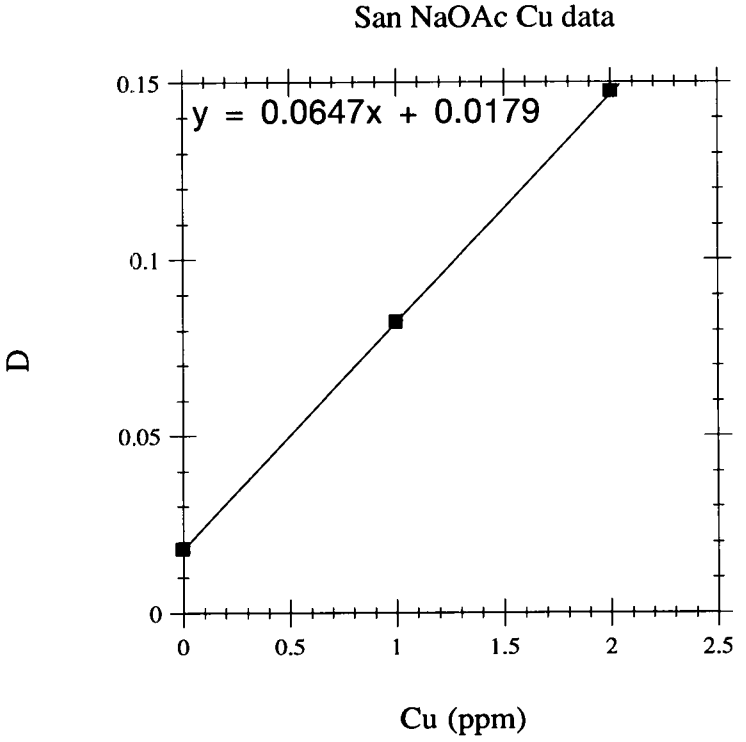
1.149 ppm


San MgCl2 Cu data
y = 0.0616x + 0.0184
0.15
0.1
0.05
0
D
0
0.5
1
1.5
2
2.5
Cu (ppm)

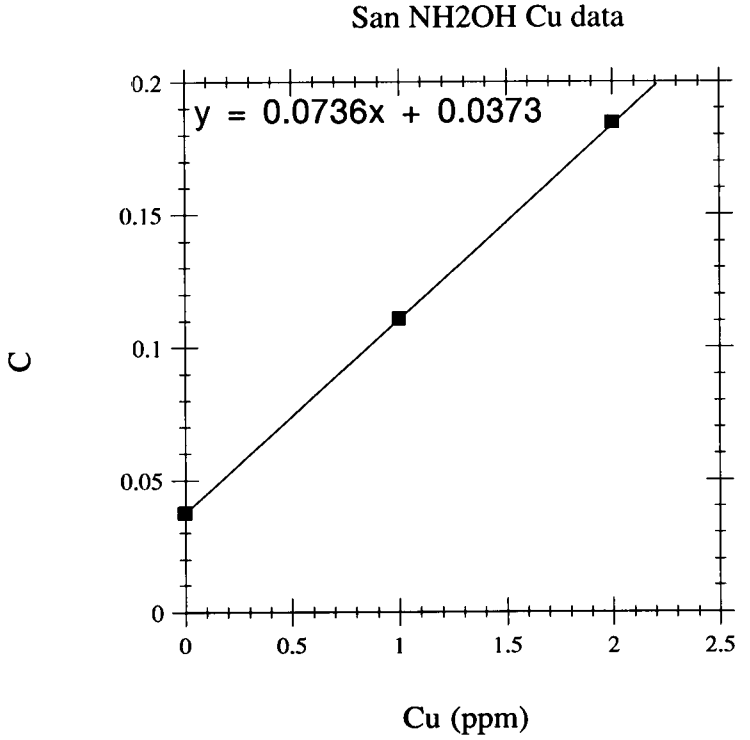
.597 ppm


San NaOAc Cu data
y = 0.0644x + 0.0373
C
Cu (ppm)
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5

1.158 ppm

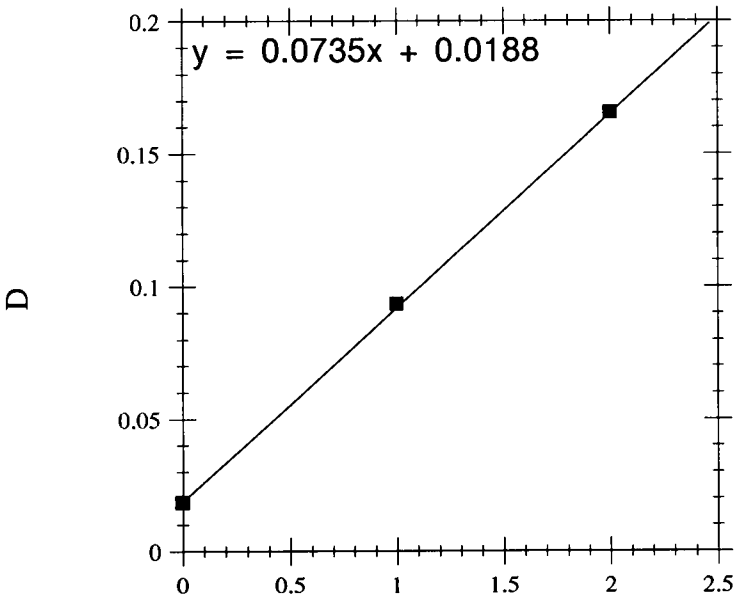

San NaOAc Cu data
y = 0.0647x + 0.0179
0.15
0.1
0.05
0
D
0
0.5
1
1.5
2
2.5
Cu (ppm)

.553 ppm

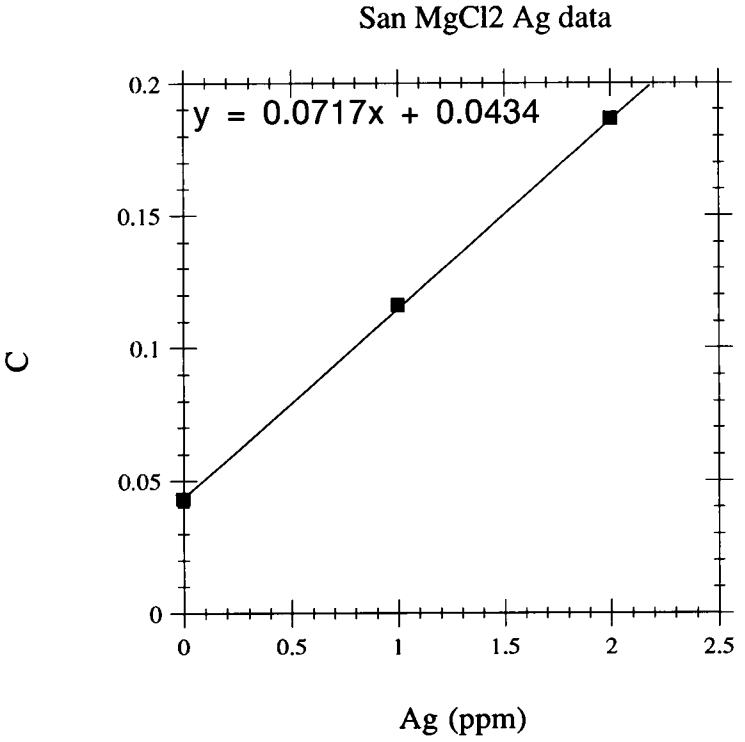

San NH2OH Cu data
y = 0.0736x + 0.0373
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
C
Cu (ppm)

1.016 ppm

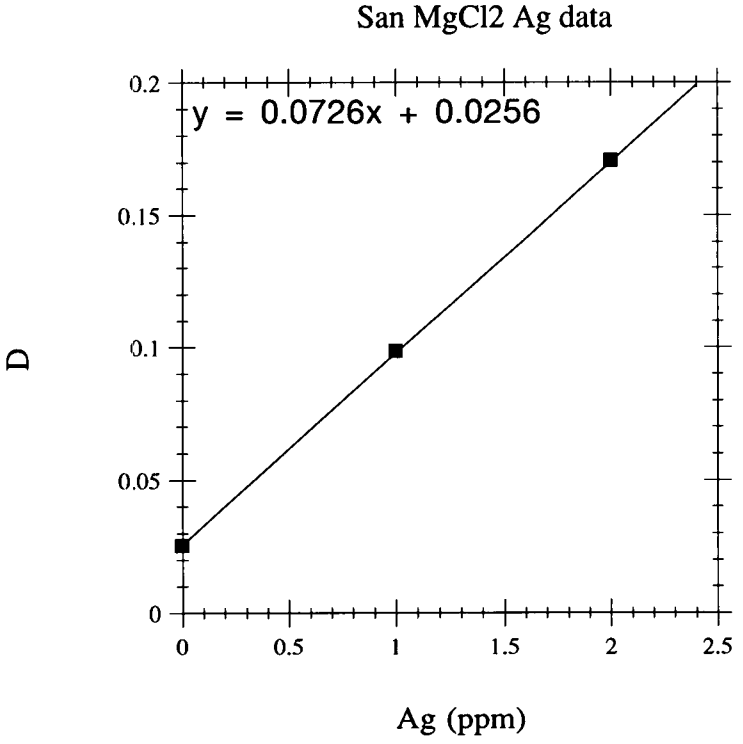
San NH2OH Cu data



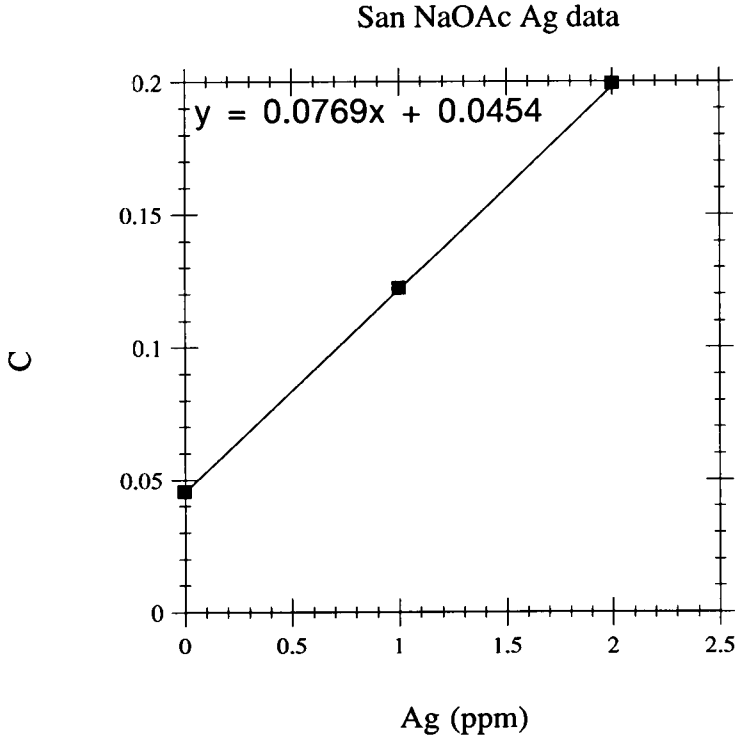
.517 ppm


San MgCl2 Ag data
y = 0.0717x + 0.0434
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
C
Ag (ppm)

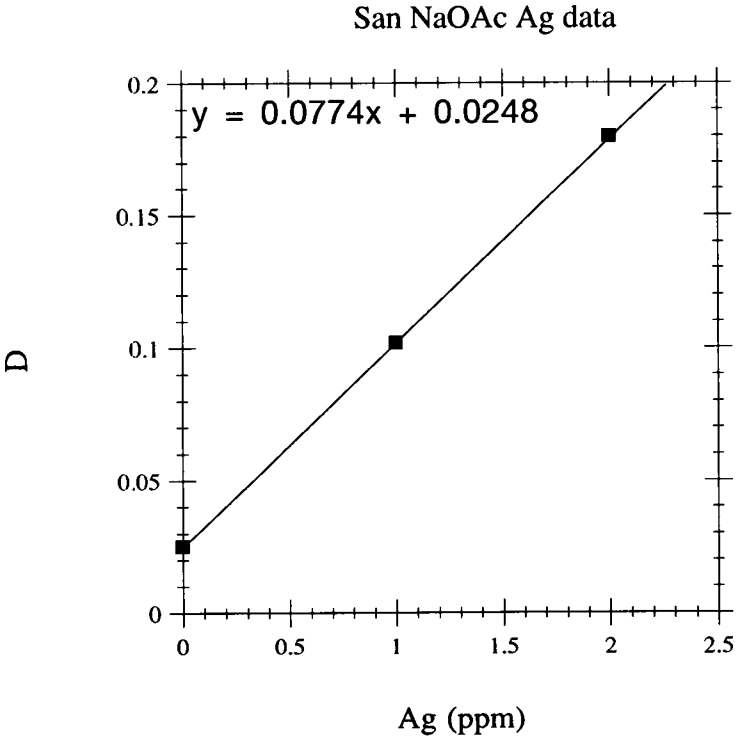
1.21 ppm


San MgCl2 Ag data
y = 0.0726x + 0.0256
D
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
Ag (ppm)

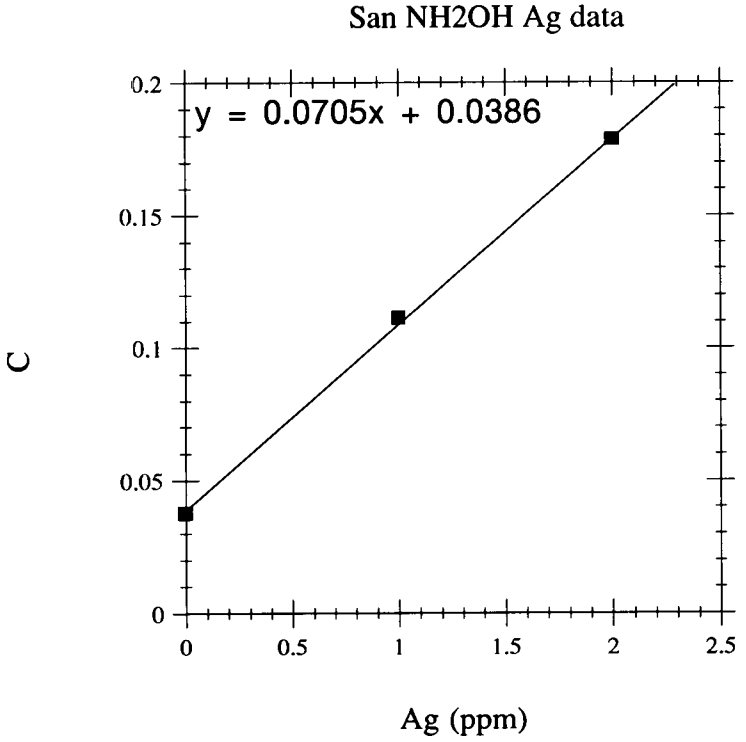
.705 ppm


San NaOAc Ag data
y = 0.0769x + 0.0454
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
C
Ag (ppm)

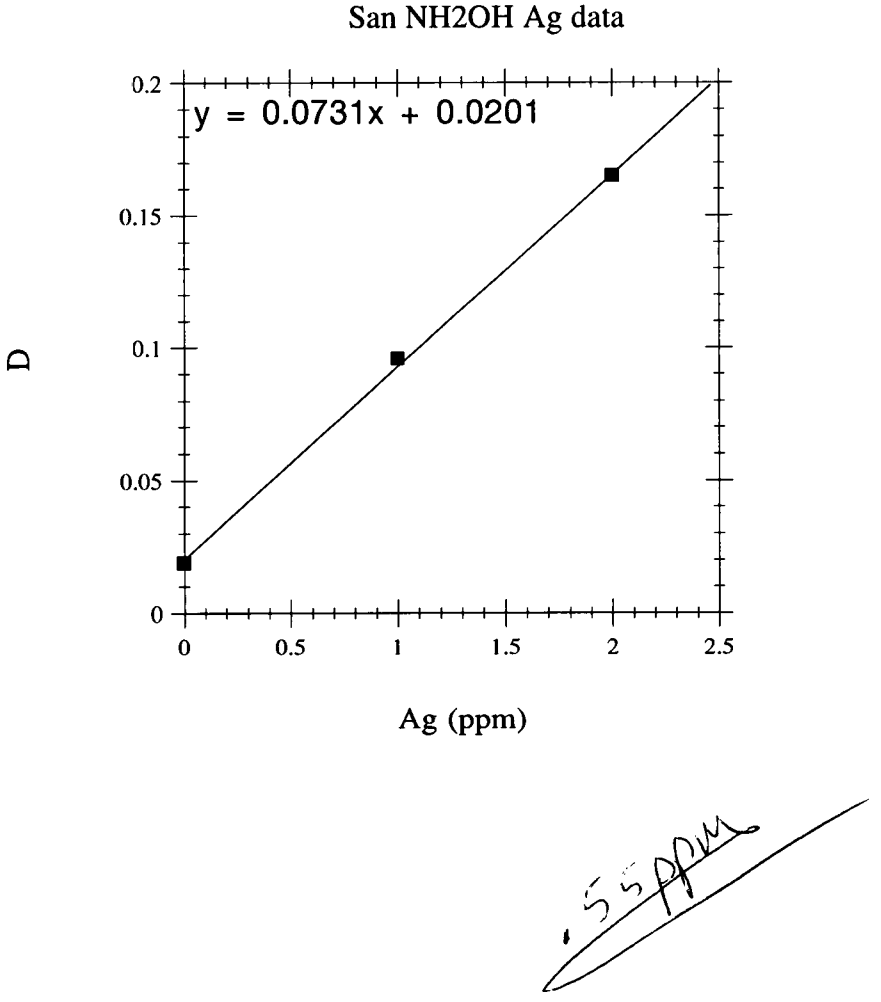
1.181 ppm


San NaOAc Ag data
y = 0.0774x + 0.0248
D
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
Ag (ppm)

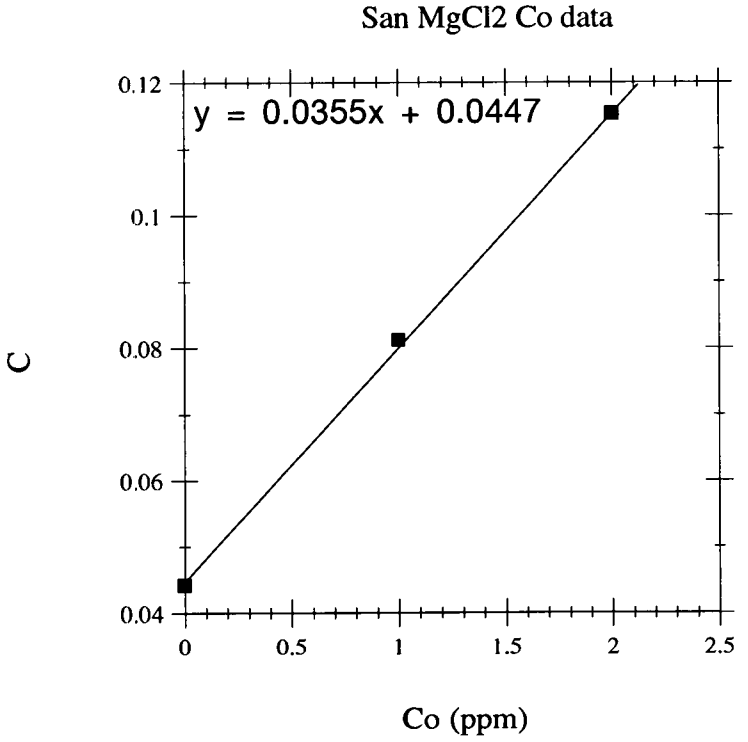
.641 ppm


San NH2OH Ag data
y = 0.0705x + 0.0386
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
C
Ag (ppm)

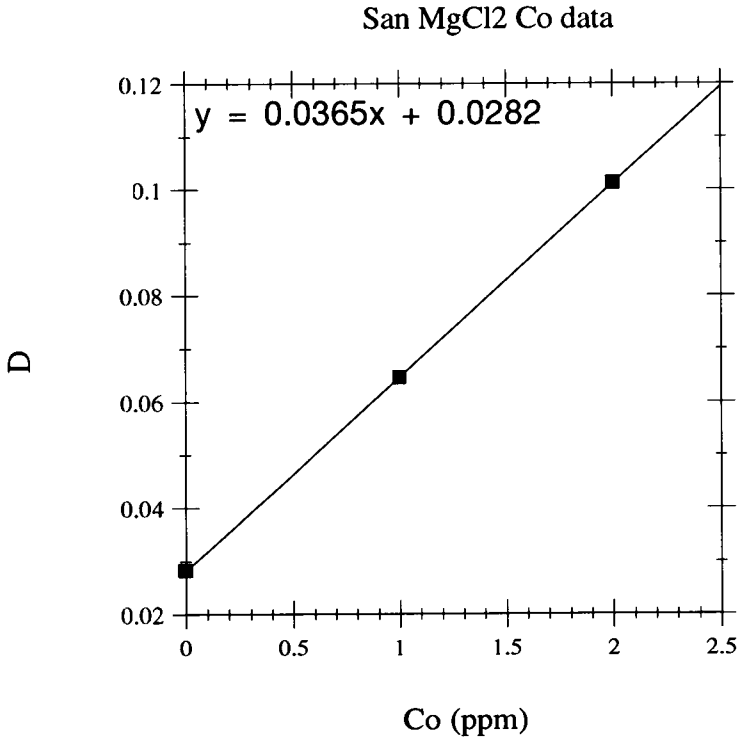
1.095


San NH2OH Ag data
y = 0.0731x + 0.0201
D
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
Ag (ppm)

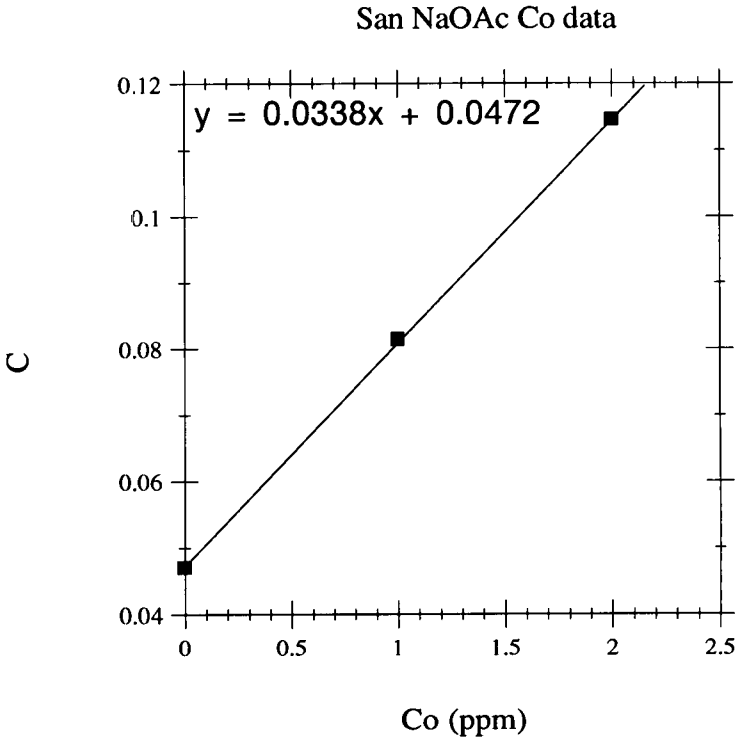
.55 ppm


San MgCl2 Co data
y = 0.0355x + 0.0447
0.12
0.1
0.08
0.06
0.04
C
0
0.5
1
1.5
2
2.5
Co (ppm)

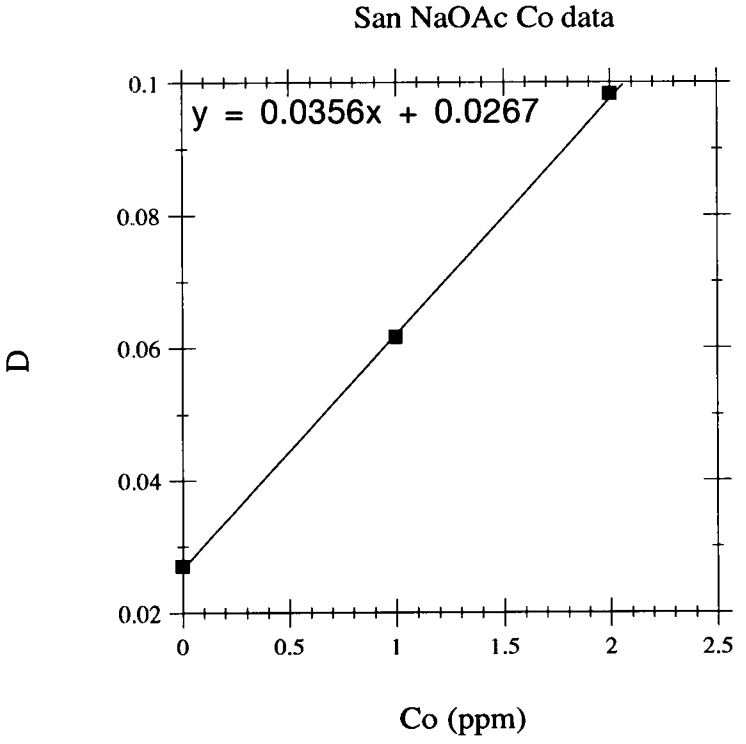
2.519 ppm


San MgCl2 Co data
y = 0.0365x + 0.0282
D
0.12
0.1
0.08
0.06
0.04
0.02
0
0.5
1
1.5
2
2.5
Co (ppm)

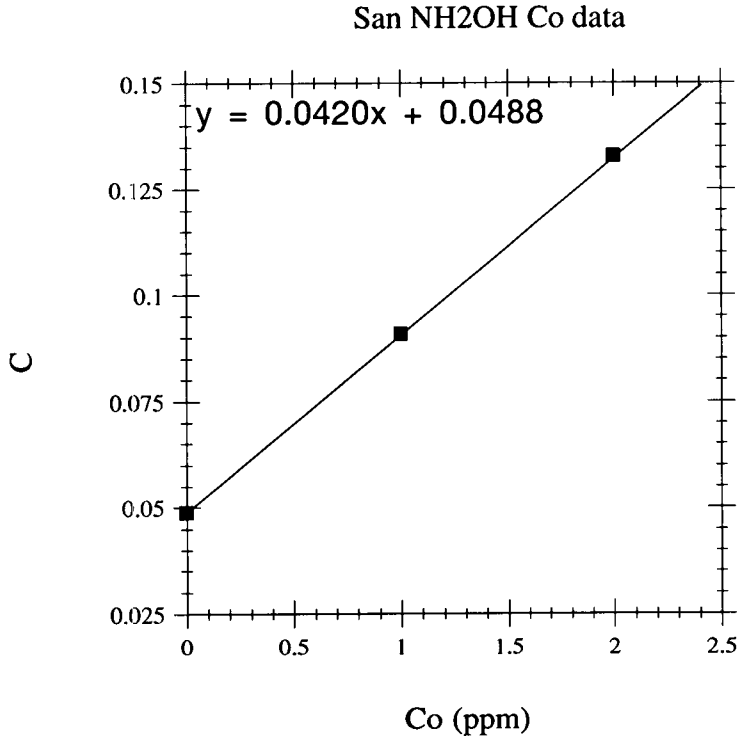
1.545


San NaOAc Co data
y = 0.0338x + 0.0472
0.12
0.1
0.08
0.06
0.04
C
0
0.5
1
1.5
2
2.5
Co (ppm)

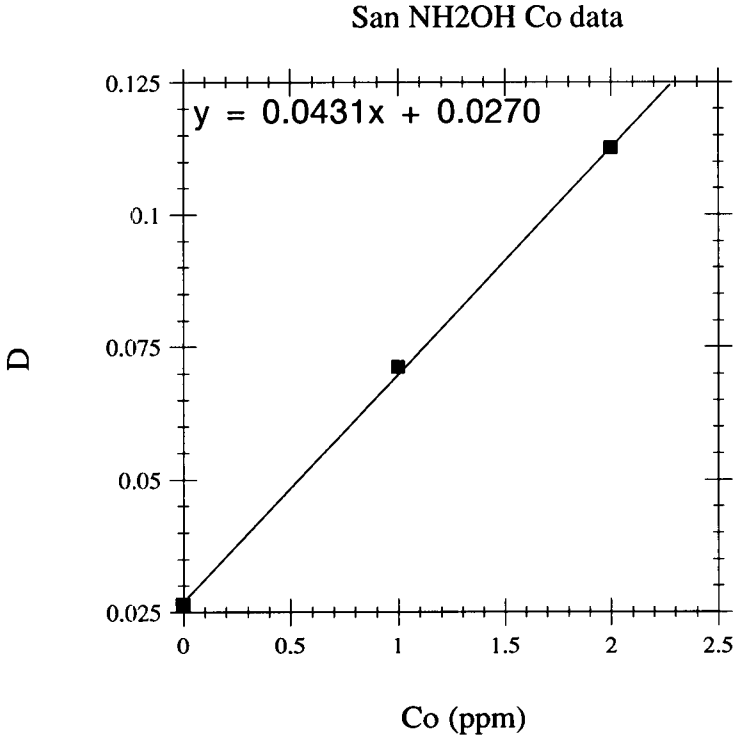
2.79


San NaOAc Co data
y = 0.0356x + 0.0267
D
0.1
0.08
0.06
0.04
0.02
0
0.5
1
1.5
2
2.5
Co (ppm)

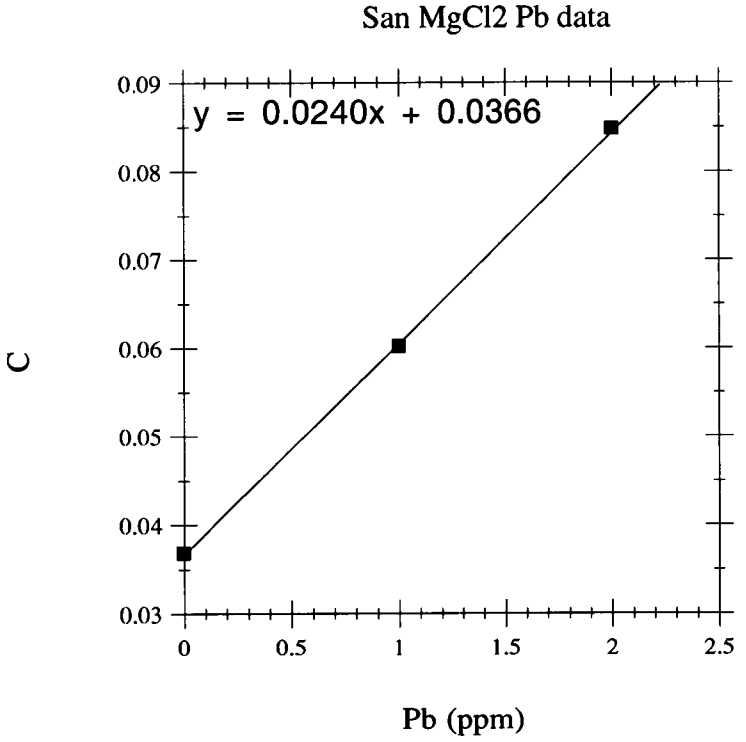
1.5


San NH2OH Co data
y = 0.0420x + 0.0488
0.15
0.125
0.1
0.075
0.05
0.025
C
0
0.5
1
1.5
2
2.5
Co (ppm)

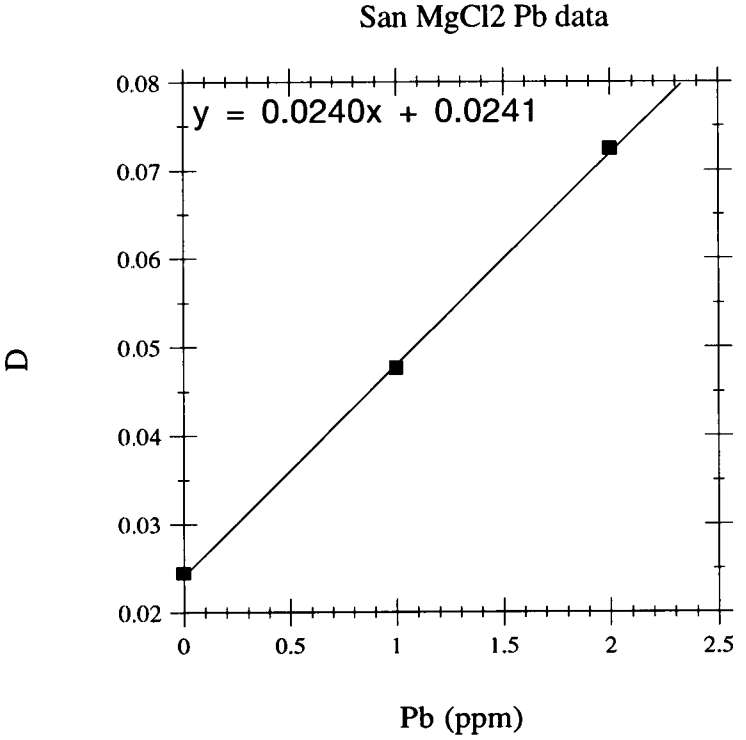
2.32


San NH2OH Co data
y = 0.0431x + 0.0270
0.125
0.1
0.075
0.05
0.025
D
0
0.5
1
1.5
2
2.5
Co (ppm)

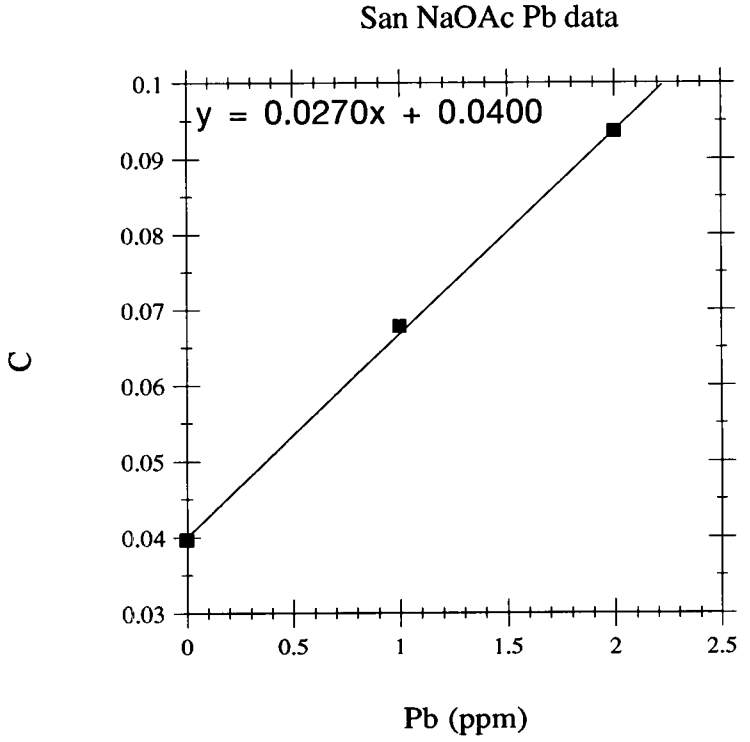
1.25 ppm


San MgCl2 Pb data
y = 0.0240x + 0.0366
0.09
0.08
0.07
0.06
0.05
0.04
0.03
C
0
0.5
1
1.5
2
2.5
Pb (ppm)

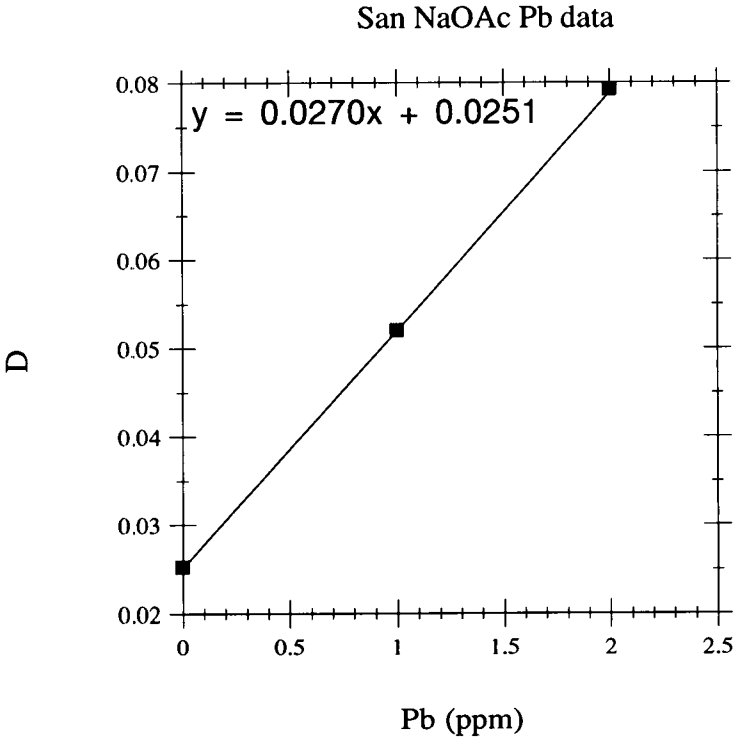
3.05


San MgCl2 Pb data
y = 0.0240x + 0.0241
D
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0
0.5
1
1.5
2
2.5
Pb (ppm)

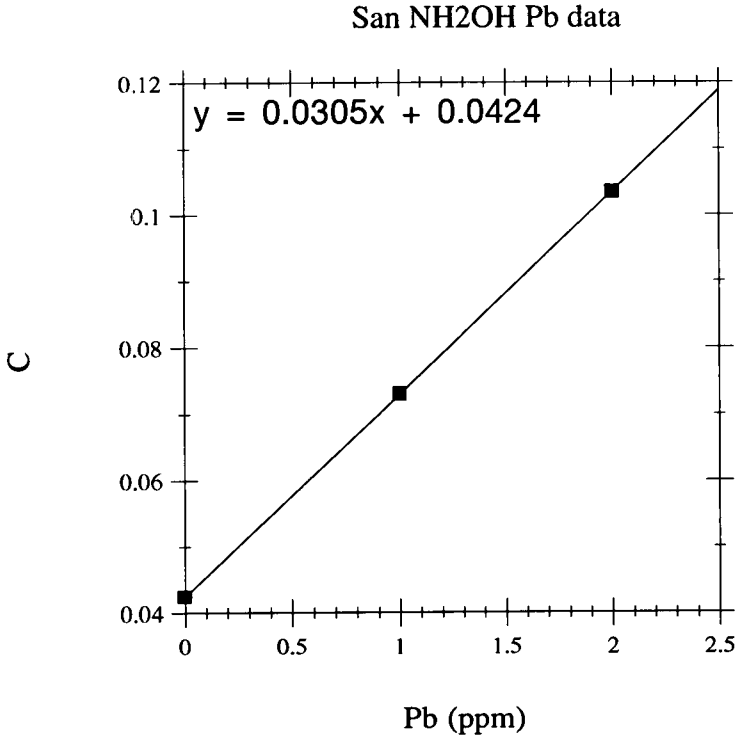
2.00


San NaOAc Pb data
y = 0.0270x + 0.0400
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0
0.5
1
1.5
2
2.5
C
Pb (ppm)

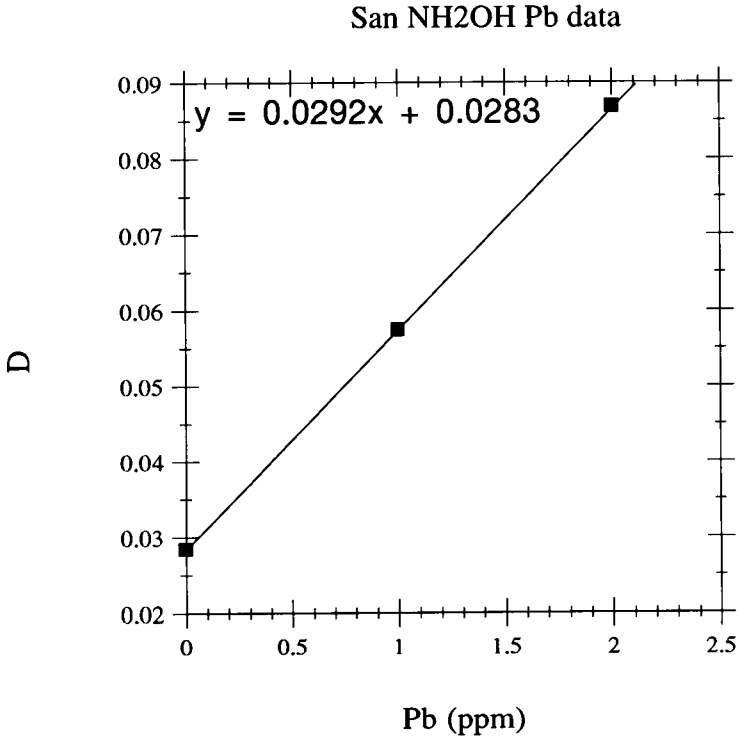
2.96


San NaOAc Pb data
y = 0.0270x + 0.0251
0.08
0.07
0.06
0.05
0.04
0.03
0.02
D
0
0.5
1
1.5
2
2.5
Pb (ppm)

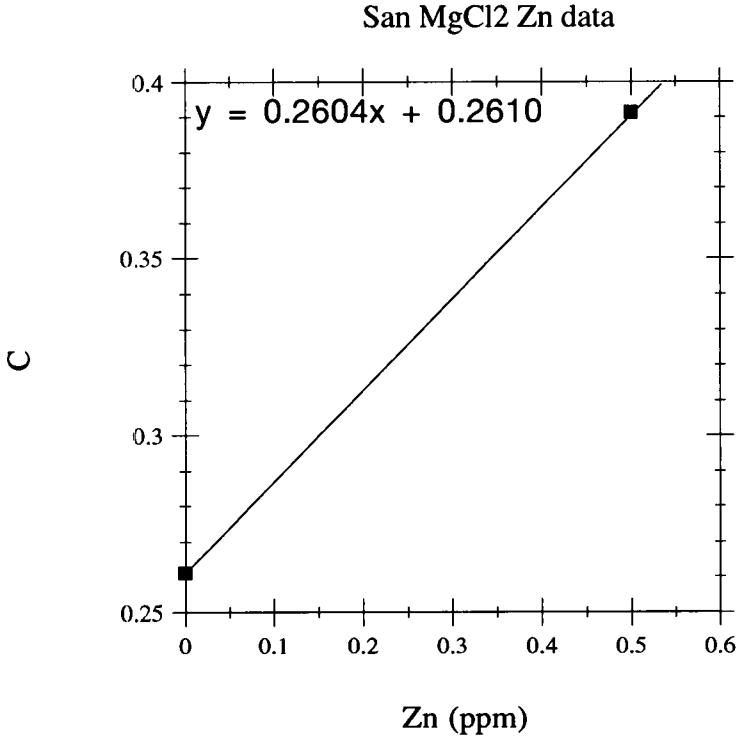
11853


San NH2OH Pb data
y = 0.0305x + 0.0424
0.12
0.1
0.08
0.06
0.04
0
0.5
1
1.5
2
2.5
C
Pb (ppm)

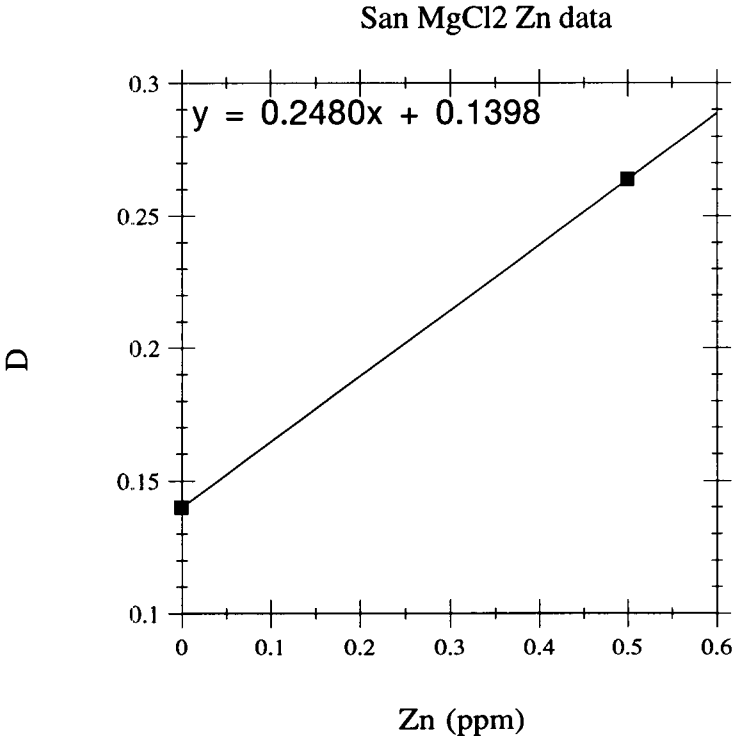
2.78


San NH2OH Pb data
y = 0.0292x + 0.0283
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
D
0
0.5
1
1.5
2
2.5
Pb (ppm)

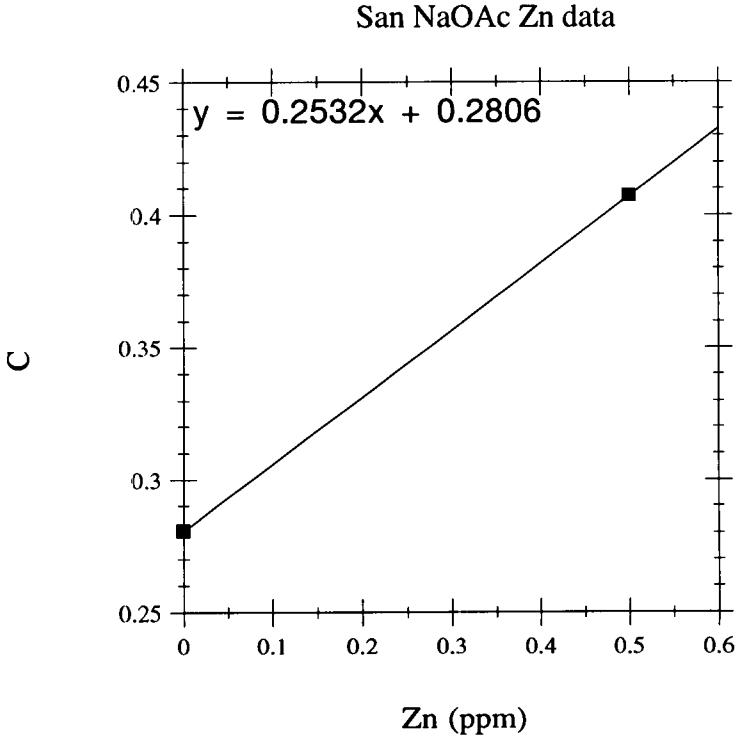
1.938


San MgCl2 Zn data
y = 0.2604x + 0.2610
0.4
0.35
0.3
0.25
0
0.1
0.2
0.3
0.4
0.5
0.6
C
Zn (ppm)

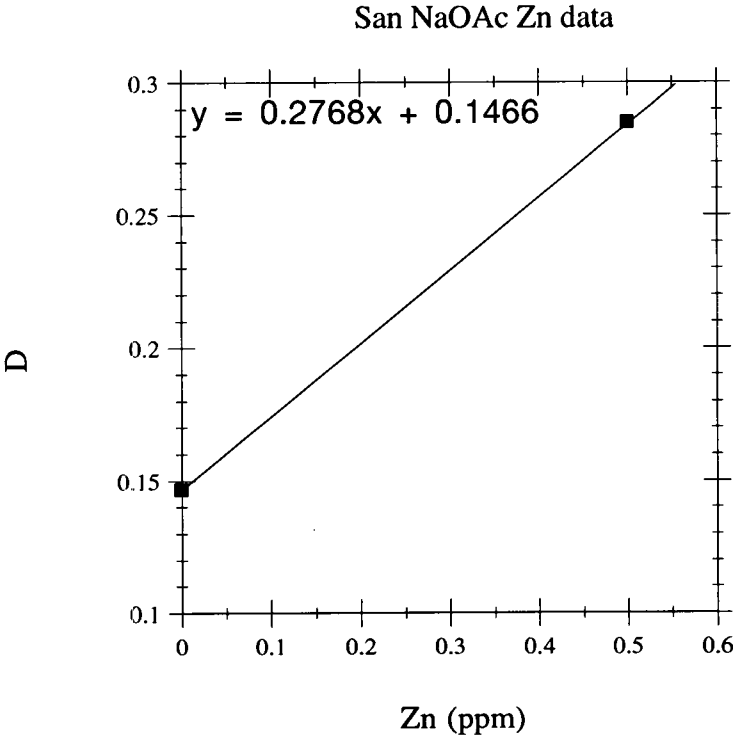
2.00


San MgCl2 Zn data
y = 0.2480x + 0.1398
D
Zn (ppm)
0.3
0.25
0.2
0.15
0.1
0
0.1
0.2
0.3
0.4
0.5
0.6

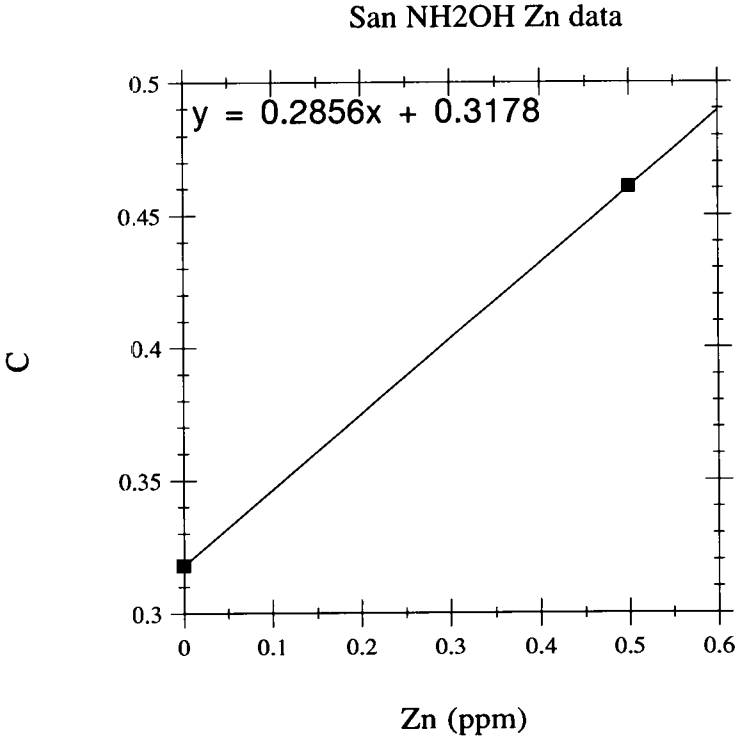
1.127


San NaOAc Zn data
y = 0.2532x + 0.2806
0.45
0.4
0.35
0.3
0.25
0
0.1
0.2
0.3
0.4
0.5
0.6
C
Zn (ppm)

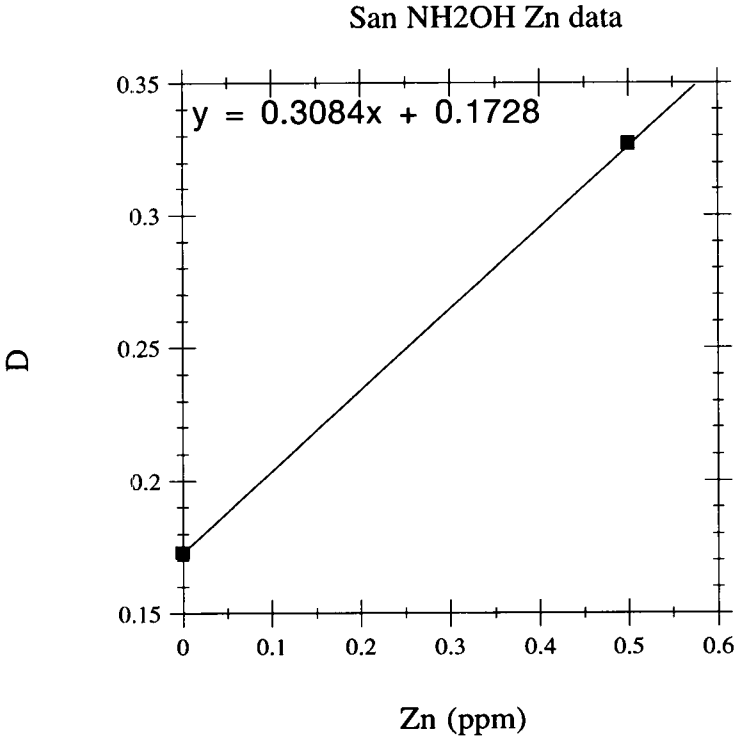
2.21


San NaOAc Zn data
y = 0.2768x + 0.1466
0.3
0.25
0.2
0.15
0.1
D
0
0.1
0.2
0.3
0.4
0.5
0.6
Zn (ppm)

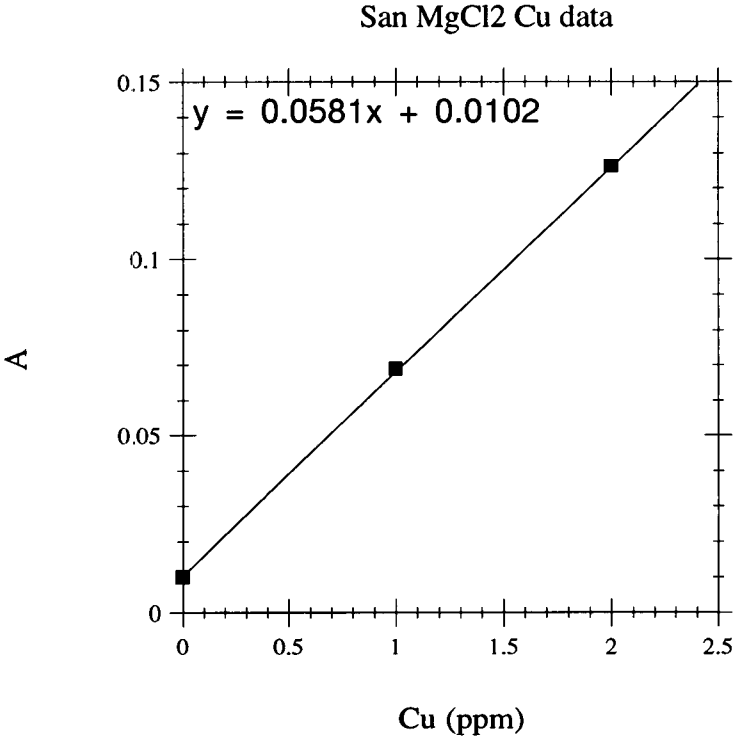
1.0259


San NH2OH Zn data
y = 0.2856x + 0.3178
0.5
0.45
0.4
0.35
0.3
C
0
0.1
0.2
0.3
0.4
0.5
0.6
Zn (ppm)

2.22

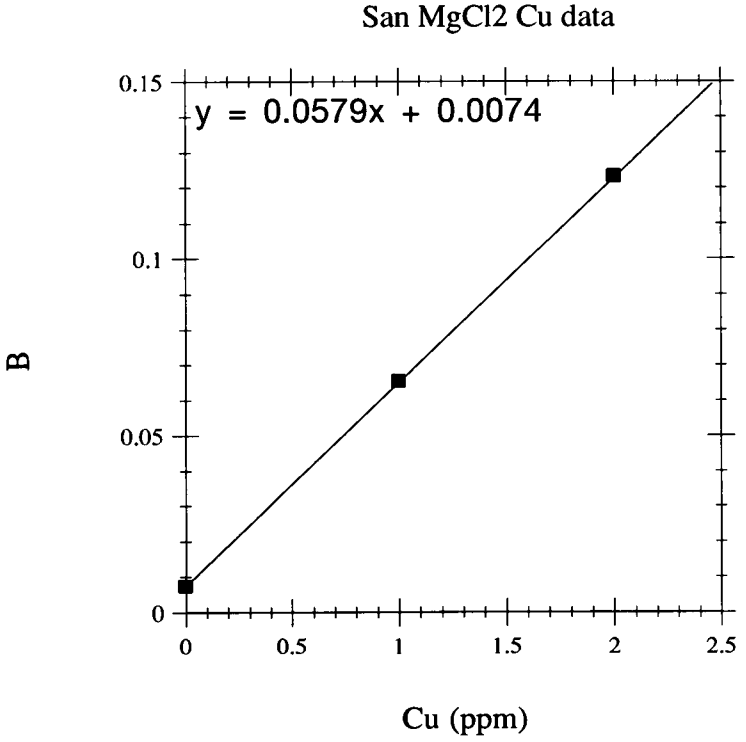

San NH2OH Zn data
y = 0.3084x + 0.1728
D
0.35
0.3
0.25
0.2
0.15
0
0.1
0.2
0.3
0.4
0.5
0.6
Zn (ppm)

1.12



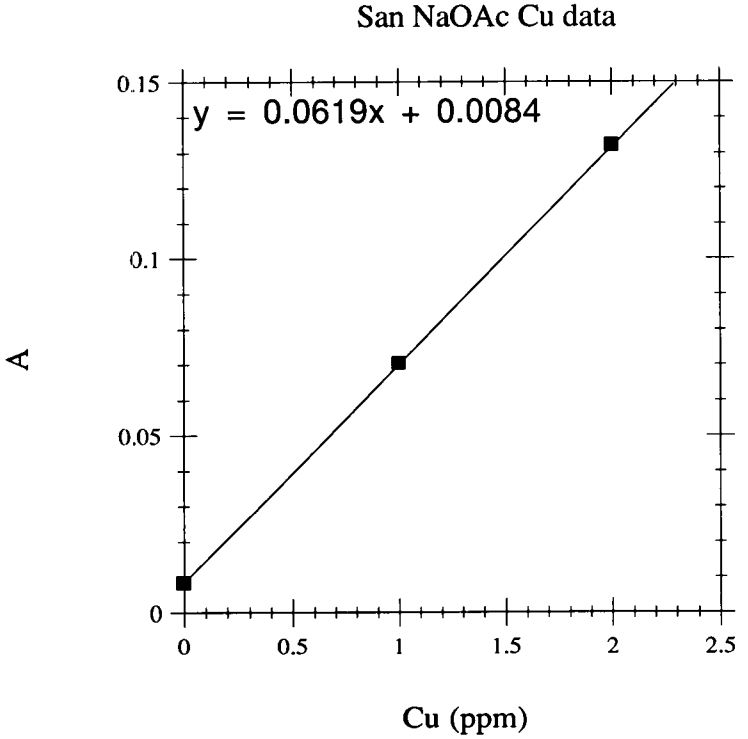
.1755x2 = .351

12.25%



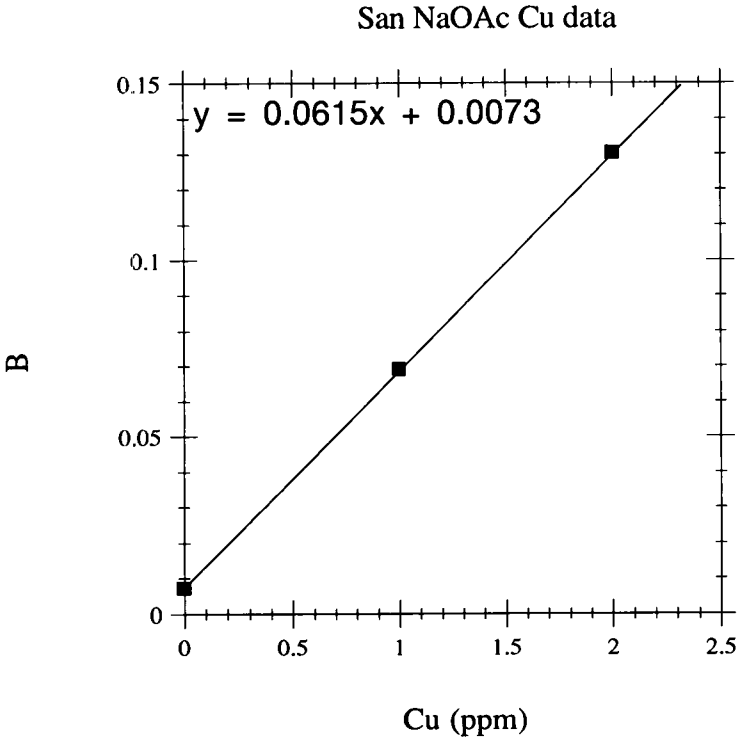
.1278 x 2 = .2556

21.75%



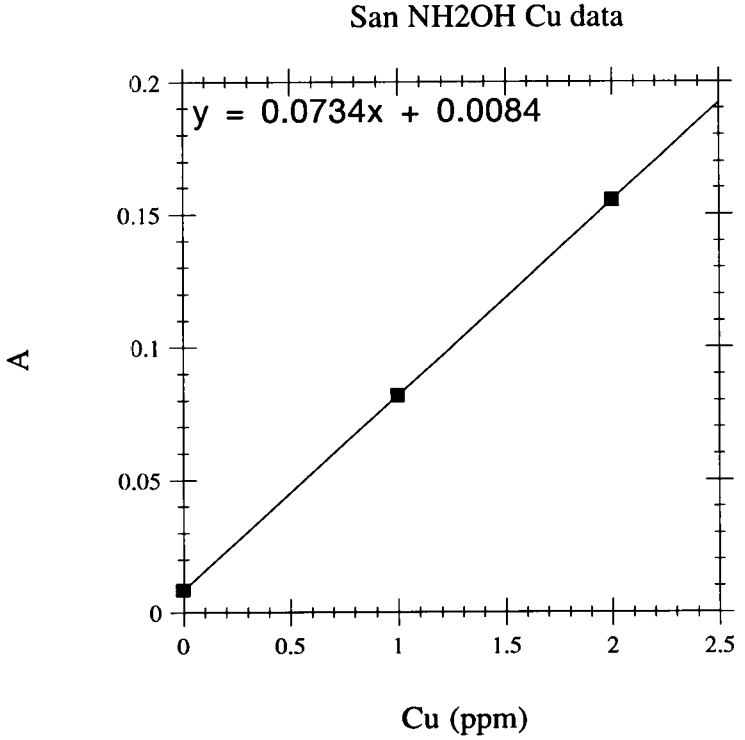
.1357 x 2 = .2714 ppm

32.15%



.118742 = .2374

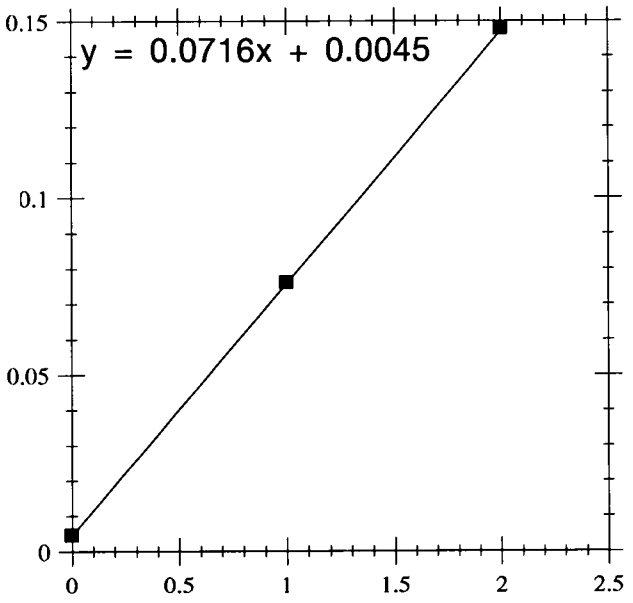
15.75%



.1144 x 2 = .2288

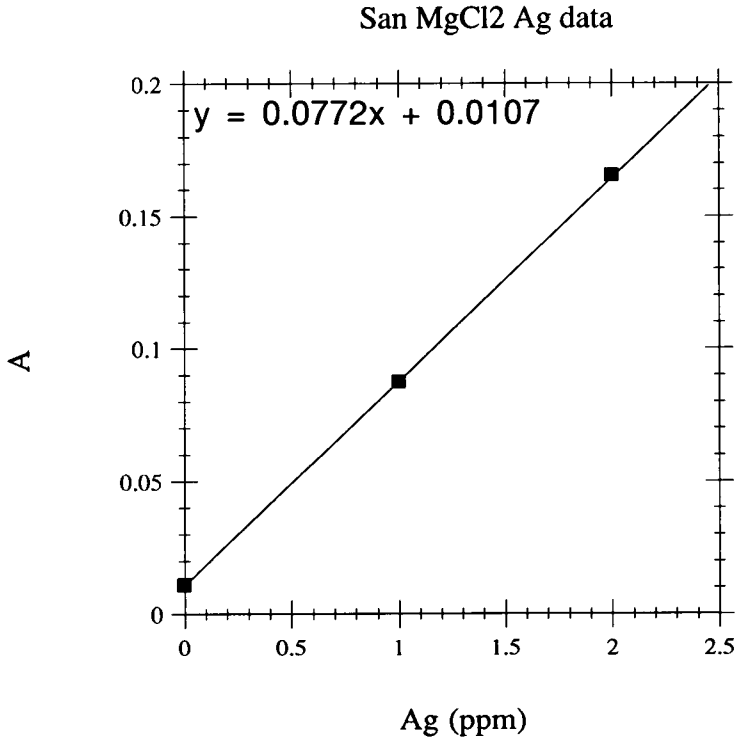
47.8%

San NH2OH Cu data

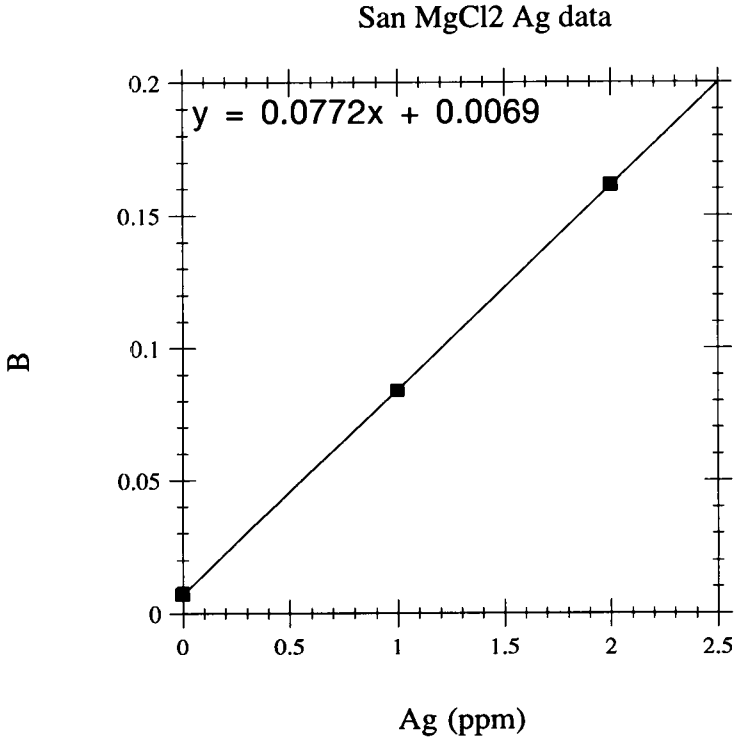


.0628 x 2 = .1256

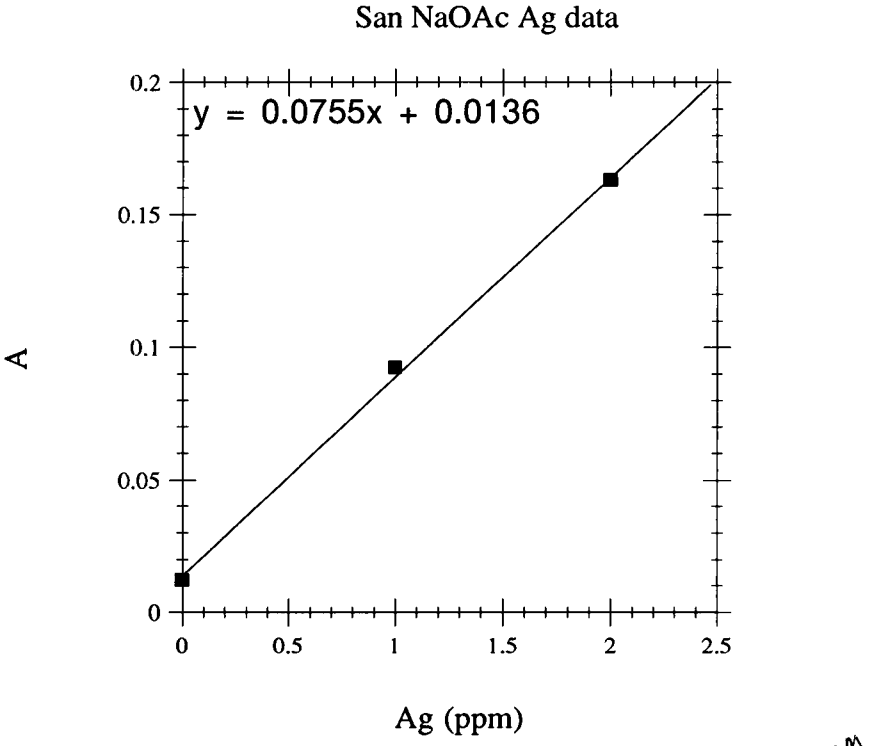
37.2%



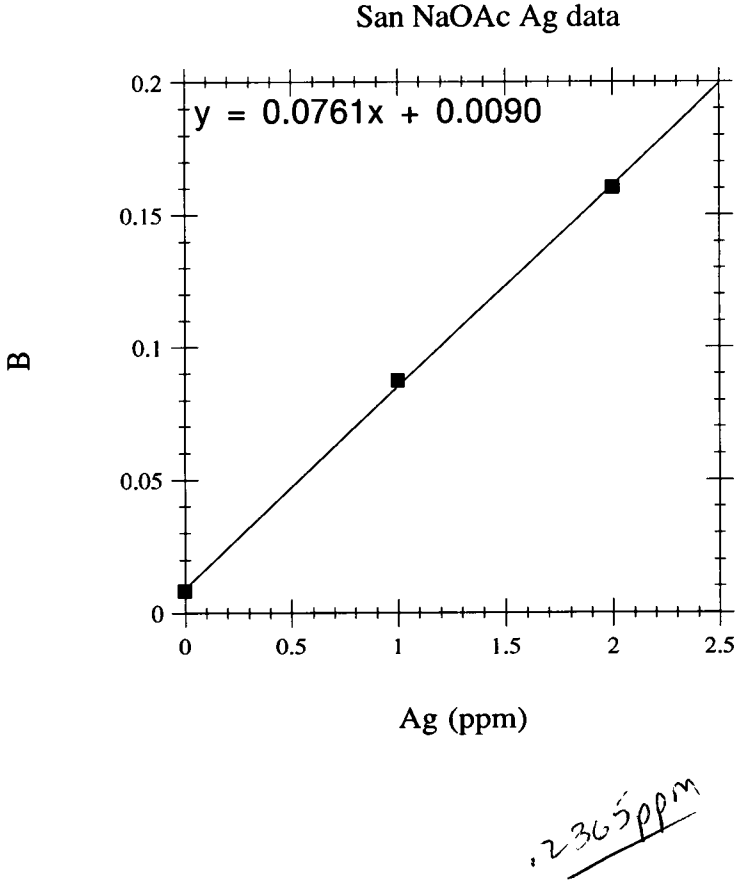
.1386 x 2 = .2772 ppm



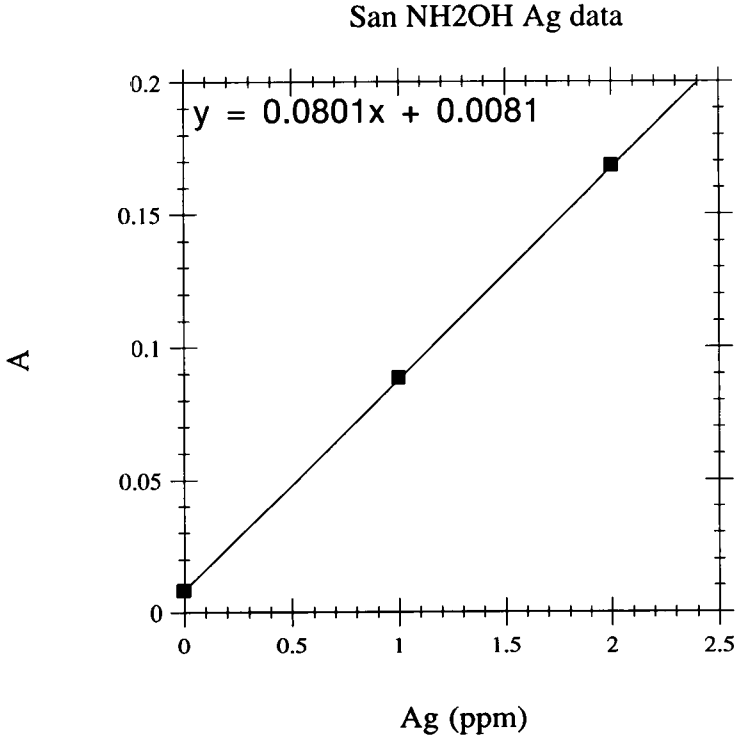
.0894x2 = .1788 ppm



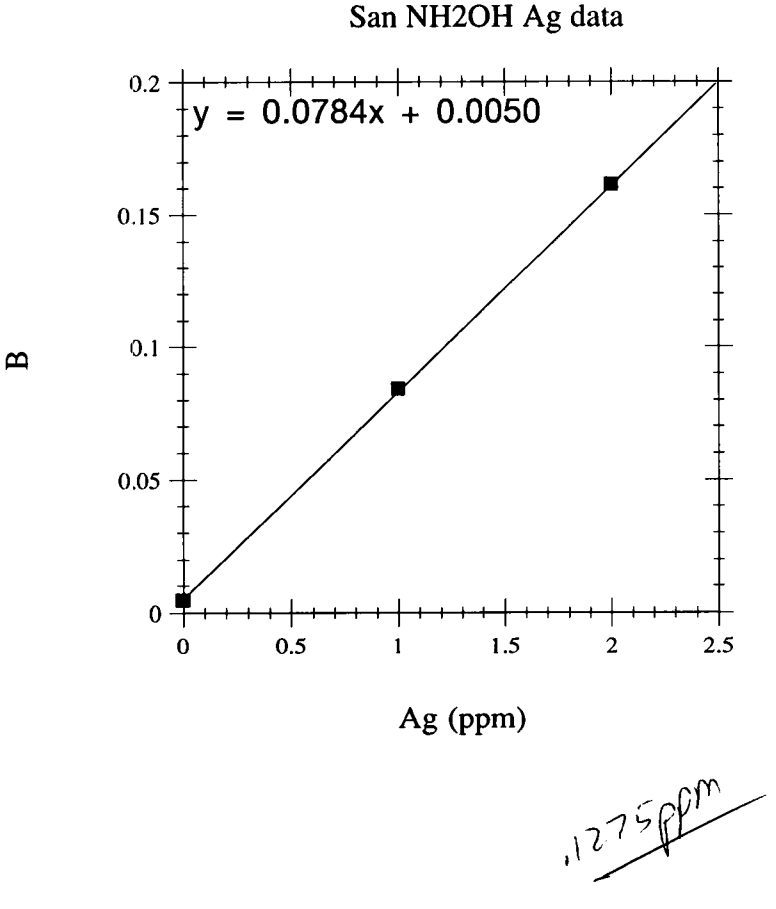
.1801 x 2 = .3602 ppm


San NaOAc Ag data
y = 0.0761x + 0.0090
B
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5
Ag (ppm)

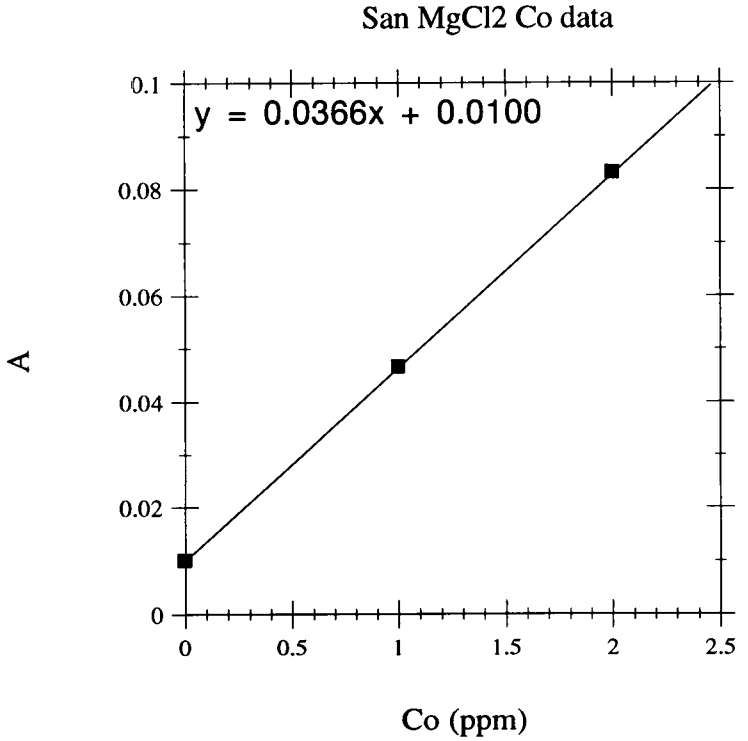
.2365 ppm


San NH2OH Ag data
y = 0.0801x + 0.0081
A
Ag (ppm)
0.2
0.15
0.1
0.05
0
0
0.5
1
1.5
2
2.5

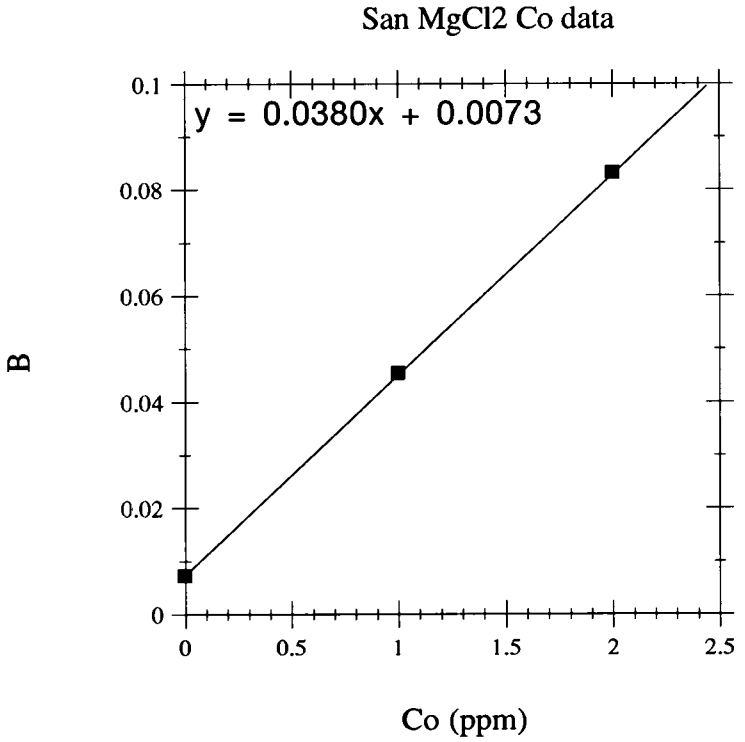
.2022 ppm


San NH2OH Ag data
y = 0.0784x + 0.0050
0.2
0.15
0.1
0.05
0
B
0
0.5
1
1.5
2
2.5
Ag (ppm)

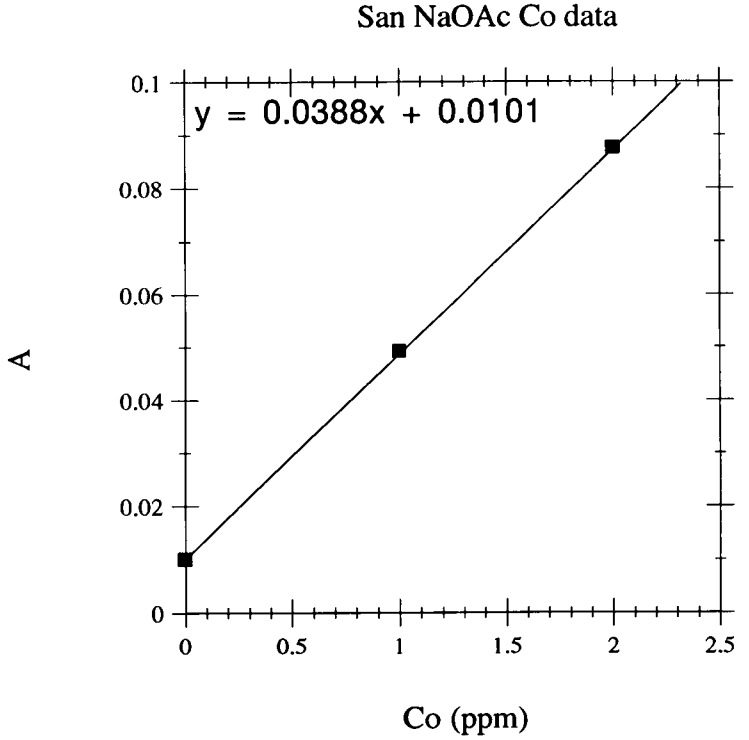
.1275 ppm



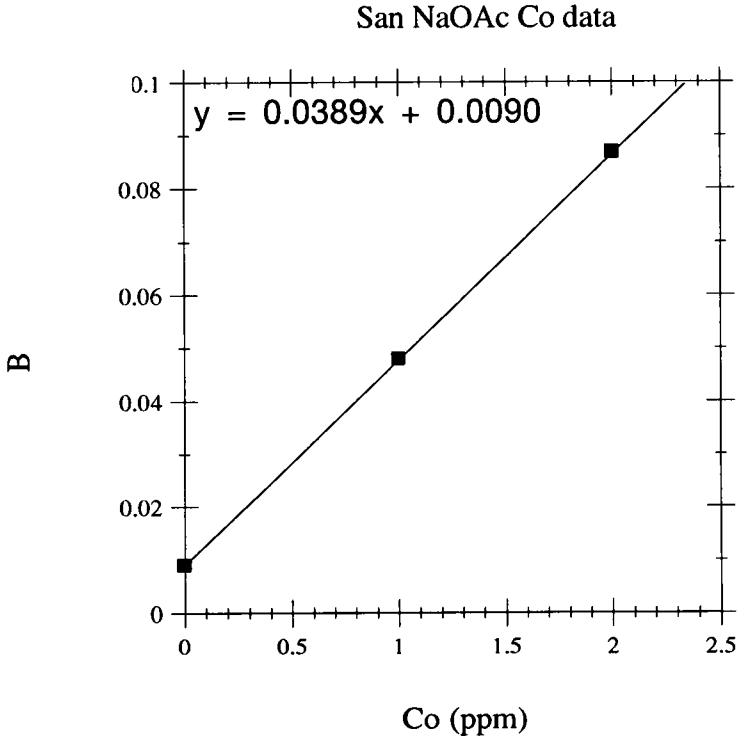
.2732 x 2 = .5464 ppm


San MgCl2 Co data
y = 0.0380x + 0.0073
B
Co (ppm)
0.1
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5

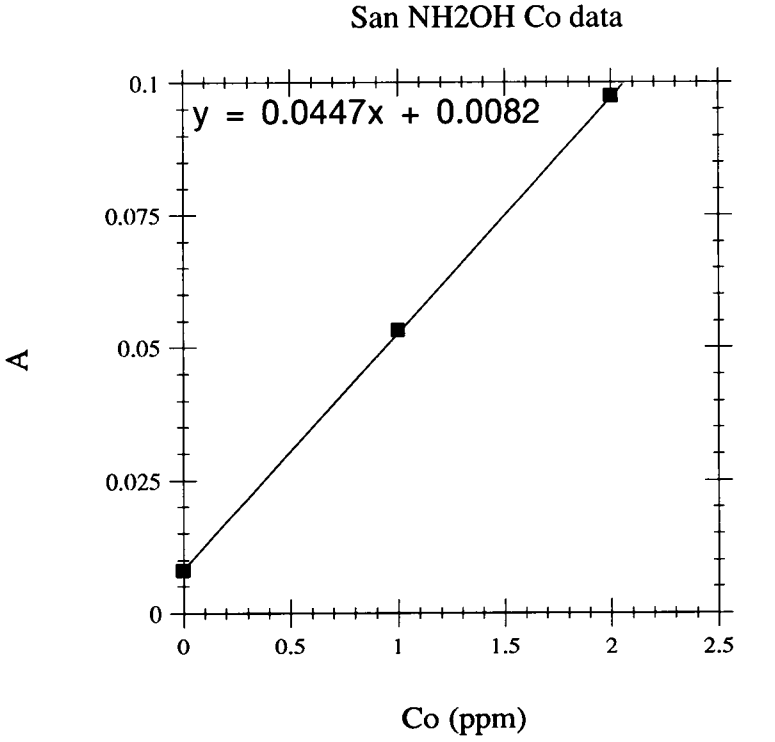
.3842 ppm


San NaOAc Co data
y = 0.0388x + 0.0101
A
Co (ppm)
0.1
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5

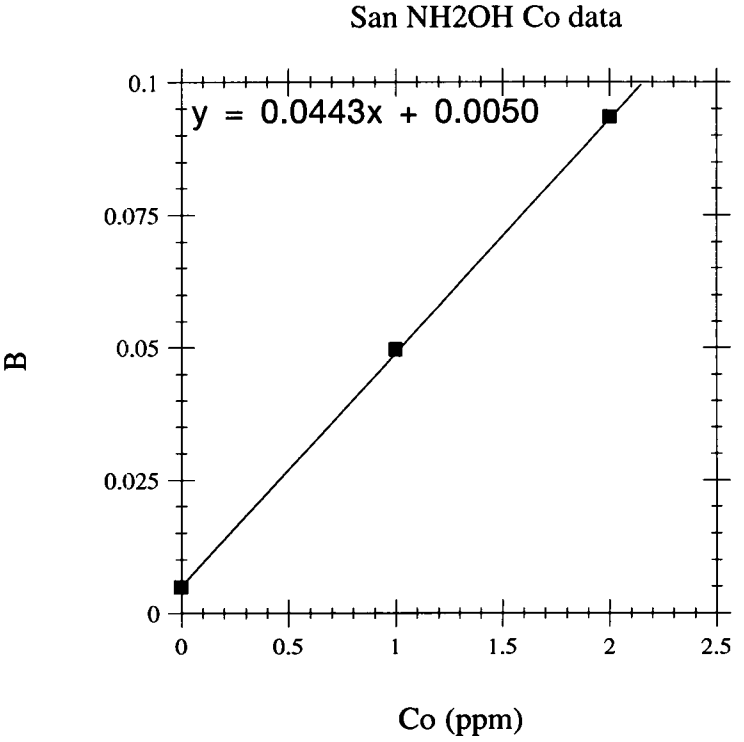
.5206 ppm


San NaOAc Co data
y = 0.0389x + 0.0090
B
Co (ppm)
0.1
0.08
0.06
0.04
0.02
0
0
0.5
1
1.5
2
2.5

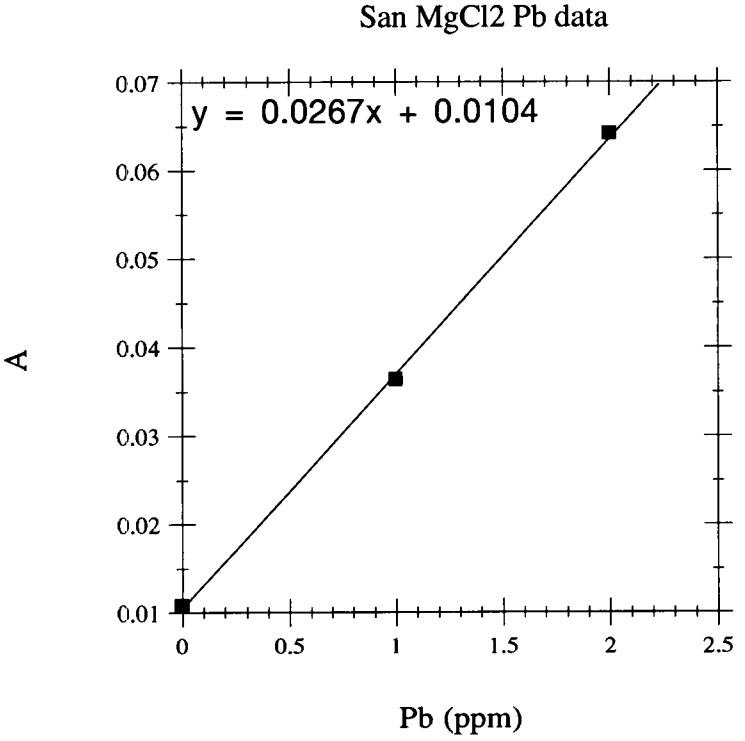
.463 ppm


San NH2OH Co data
y = 0.0447x + 0.0082
0.1
0.075
0.05
0.025
0
A
0
0.5
1
1.5
2
2.5
Co (ppm)

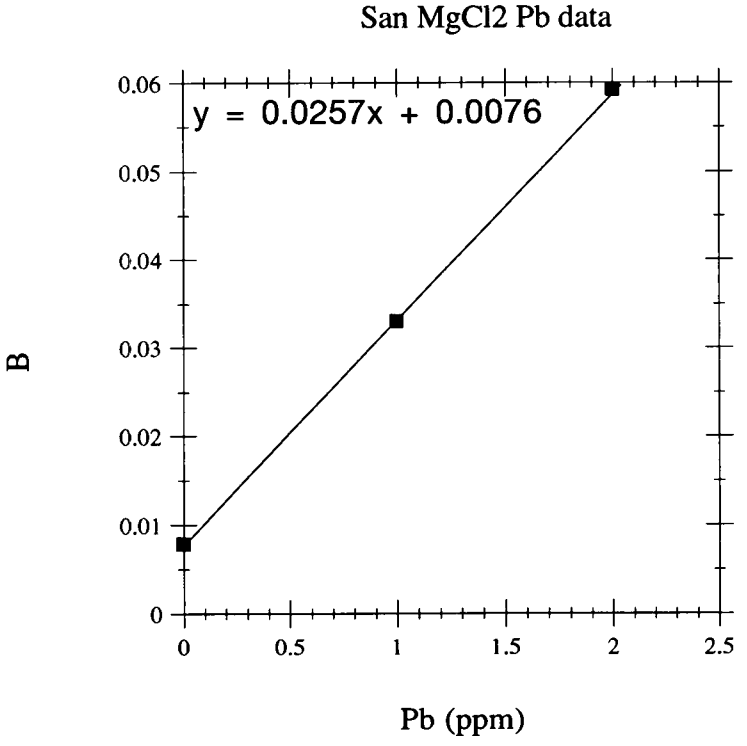
.3668 ppm


San NH2OH Co data
y = 0.0443x + 0.0050
B
Co (ppm)
0.1
0.075
0.05
0.025
0
0
0.5
1
1.5
2
2.5

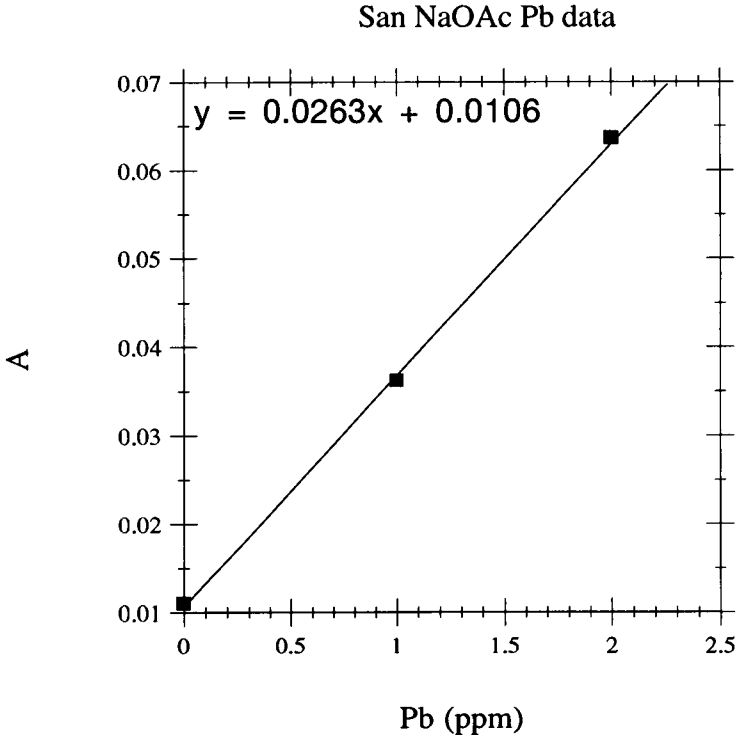
.226 ppm


San MgCl2 Pb data
y = 0.0267x + 0.0104
0.07
0.06
0.05
0.04
0.03
0.02
0.01
A
0
0.5
1
1.5
2
2.5
Pb (ppm)

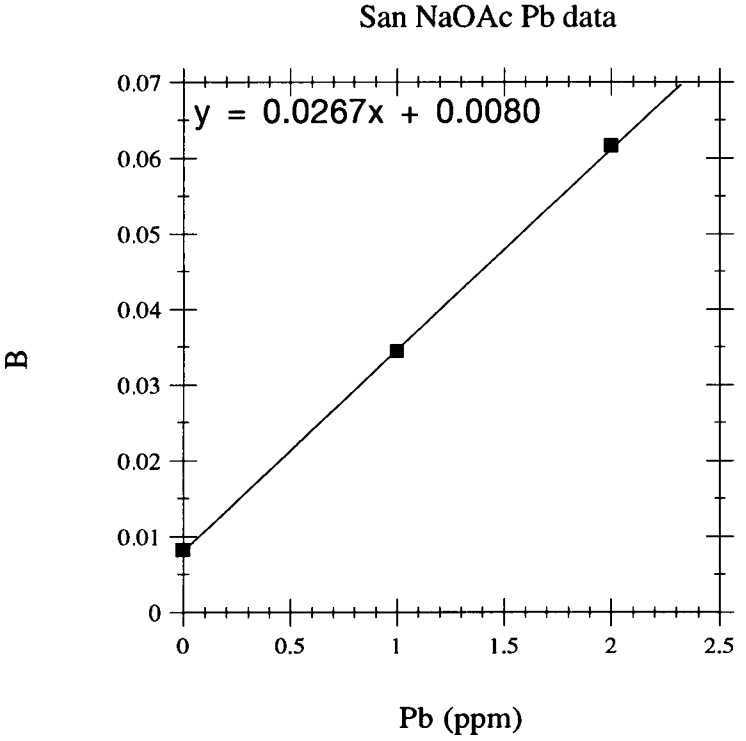
.779 ppm


San MgCl2 Pb data
y = 0.0257x + 0.0076
B
Pb (ppm)
0.06
0.05
0.04
0.03
0.02
0.01
0
0
0.5
1
1.5
2
2.5

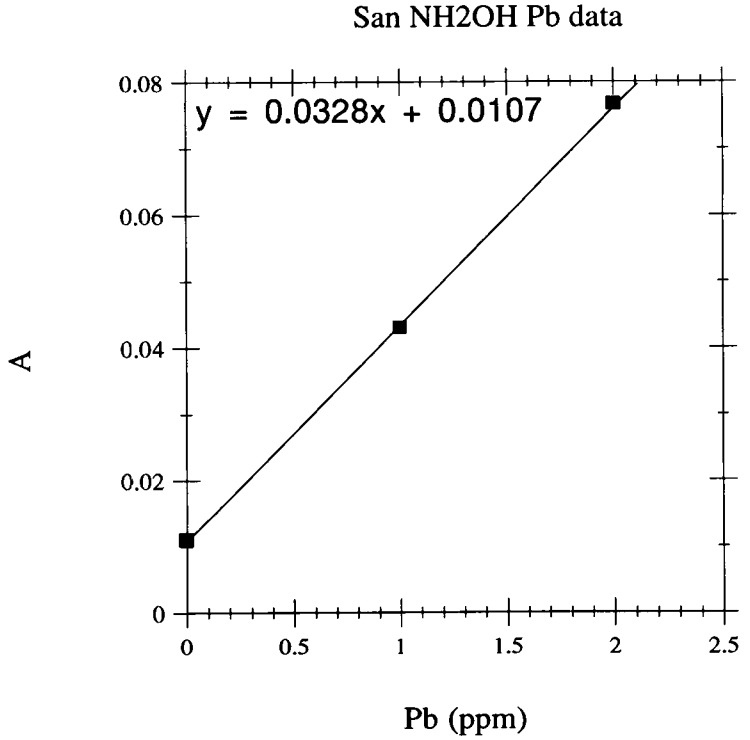
.591 ppm



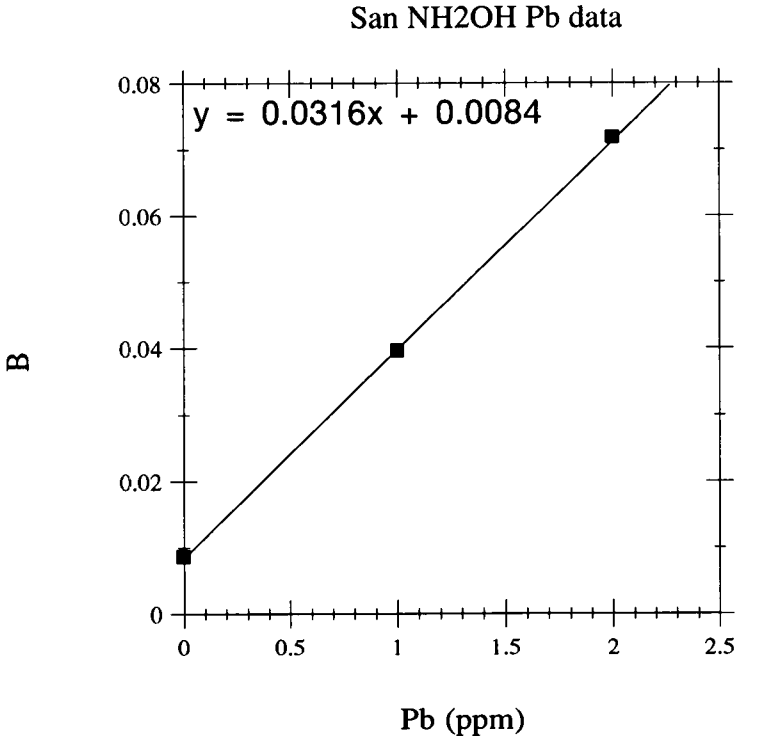
.403 x 2 = .806 ppm


San NaOAc Pb data
y = 0.0267x + 0.0080
B
Pb (ppm)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
0.5
1
1.5
2
2.5

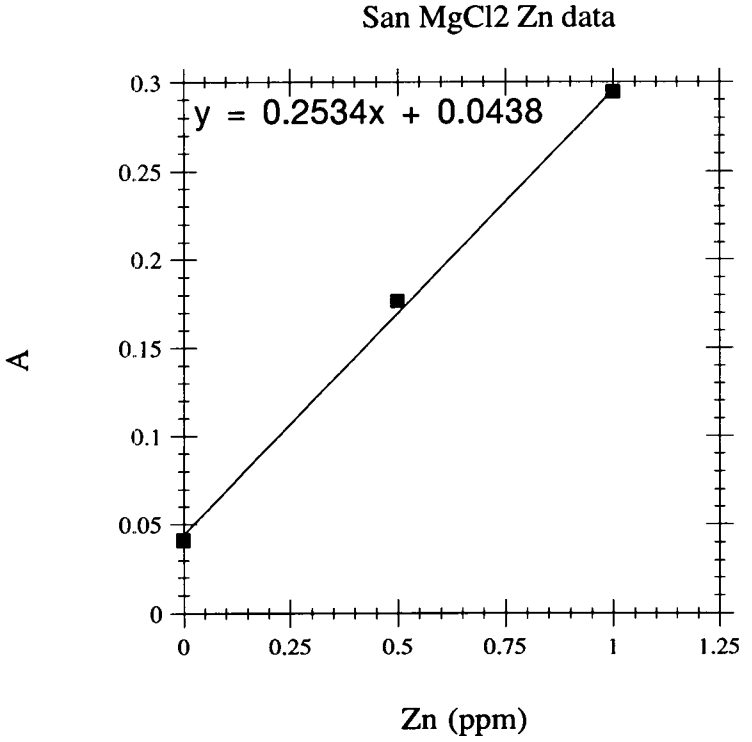
.5649 ppm


San NH2OH Pb data
y = 0.0328x + 0.0107
0.08
0.06
0.04
0.02
0
A
0
0.5
1
1.5
2
2.5
Pb (ppm)

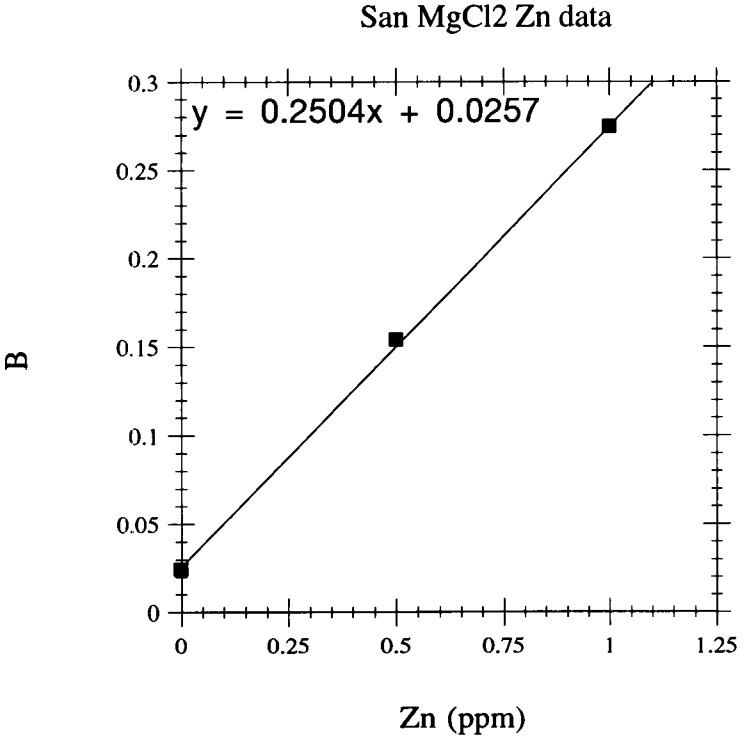
.652 ppm


San NH2OH Pb data
y = 0.0316x + 0.0084
0.08
0.06
0.04
0.02
0
B
0
0.5
1
1.5
2
2.5
Pb (ppm)

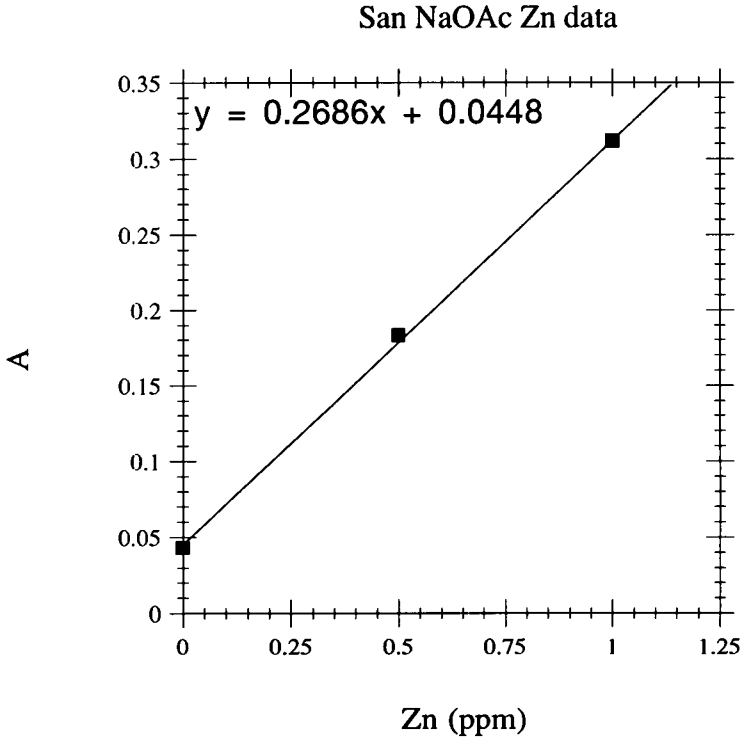
.5316 ppm


San MgCl2 Zn data
y = 0.2534x + 0.0438
A
Zn (ppm)
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.25
0.5
0.75
1
1.25

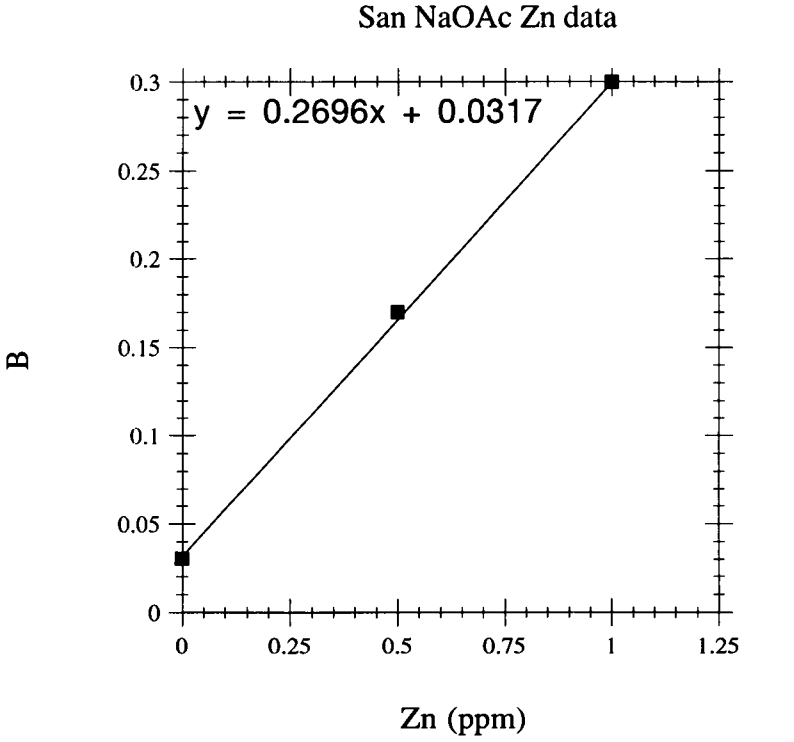
.3457 ppm


San MgCl2 Zn data
y = 0.2504x + 0.0257
B
Zn (ppm)
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.25
0.5
0.75
1
1.25

.1253ppm

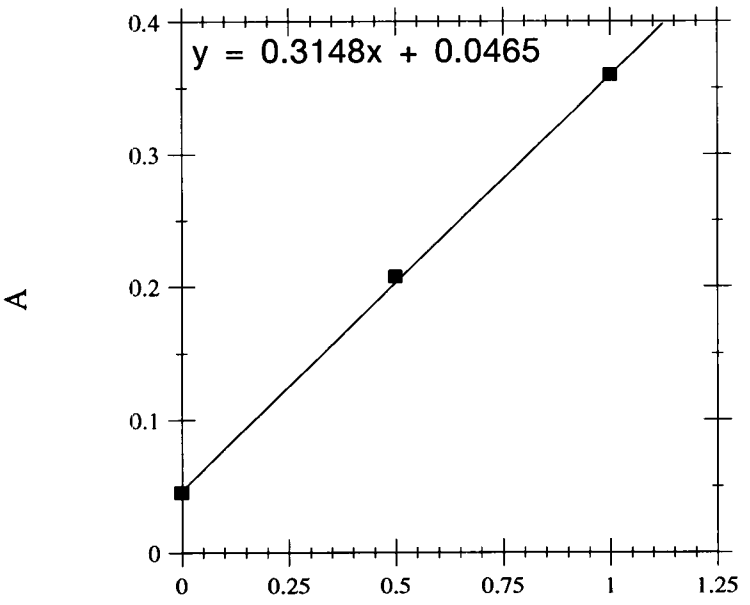

San NaOAc Zn data
y = 0.2686x + 0.0448
A
Zn (ppm)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.25
0.5
0.75
1
1.25

.3336 ppm

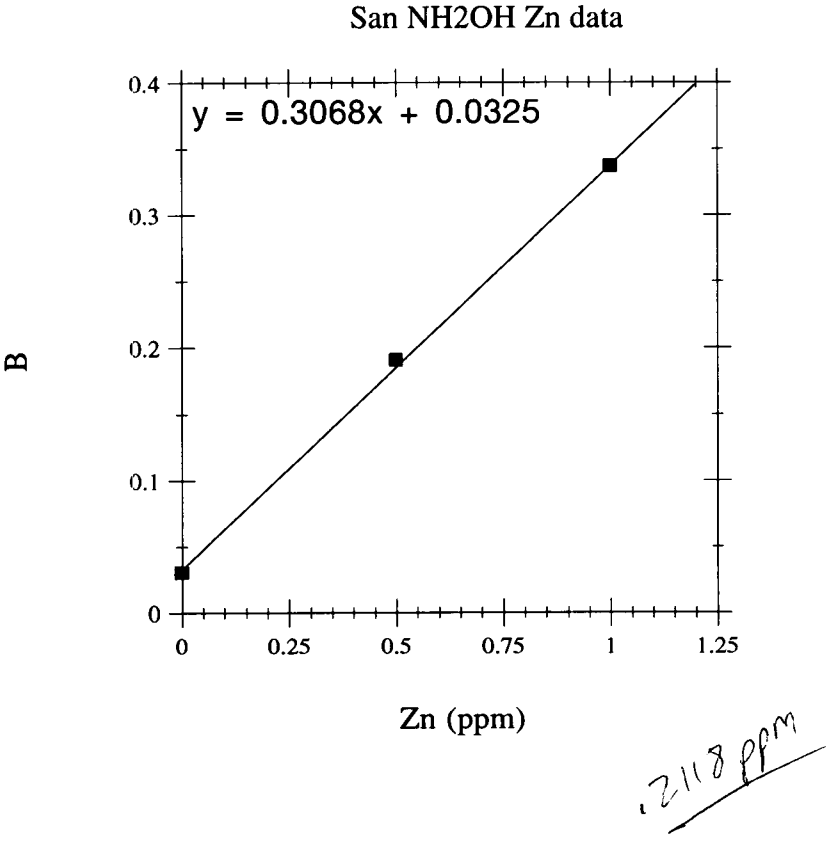

San NaOAc Zn data
y = 0.2696x + 0.0317
B
Zn (ppm)
0.3
0.25
0.2
0.15
0.1
0.05
0
0
0.25
0.5
0.75
1
1.25

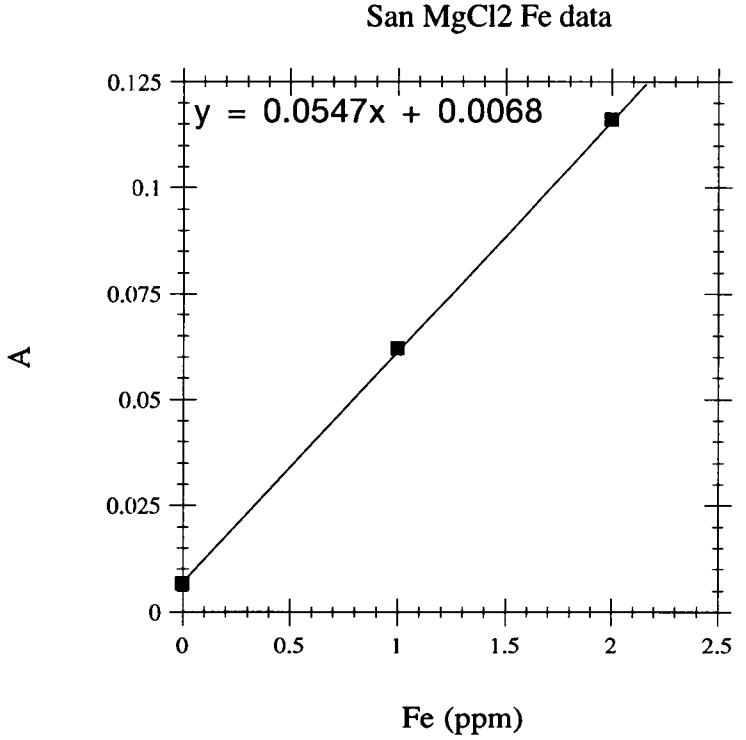
.2352 ppm

San NH2OH Zn data

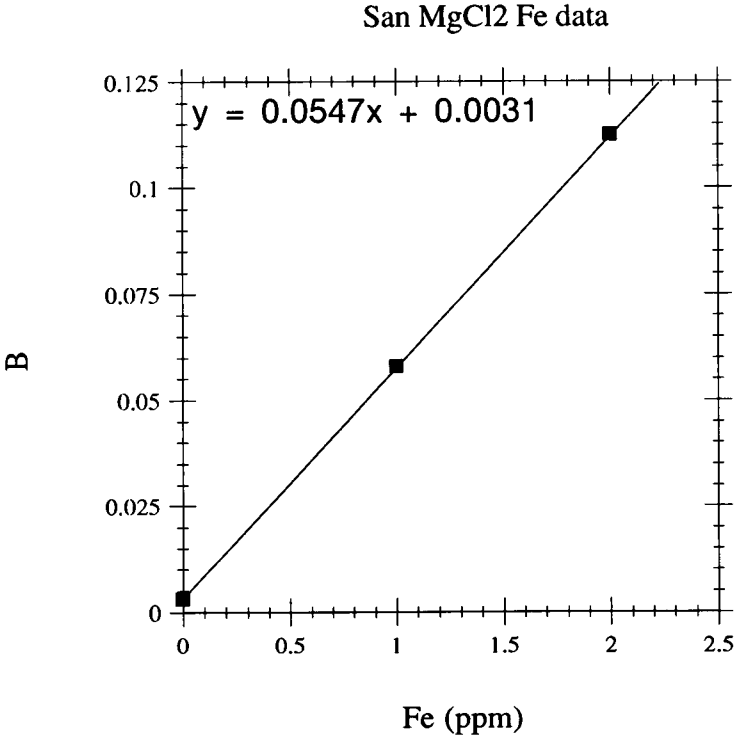


.2954 ppm

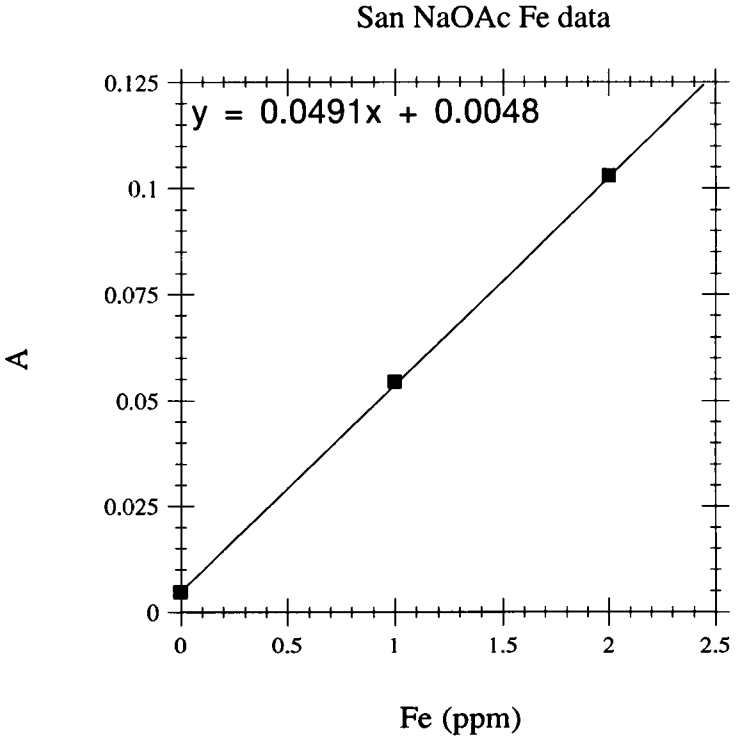

San NH2OH Zn data
y = 0.3068x + 0.0325
B
0.4
0.3
0.2
0.1
0
0
0.25
0.5
0.75
1
1.25
Zn (ppm)
.2118 ppm


San MgCl2 Fe data
y = 0.0547x + 0.0068
0.125
0.1
0.075
0.05
0.025
0
A
0
0.5
1
1.5
2
2.5
Fe (ppm)

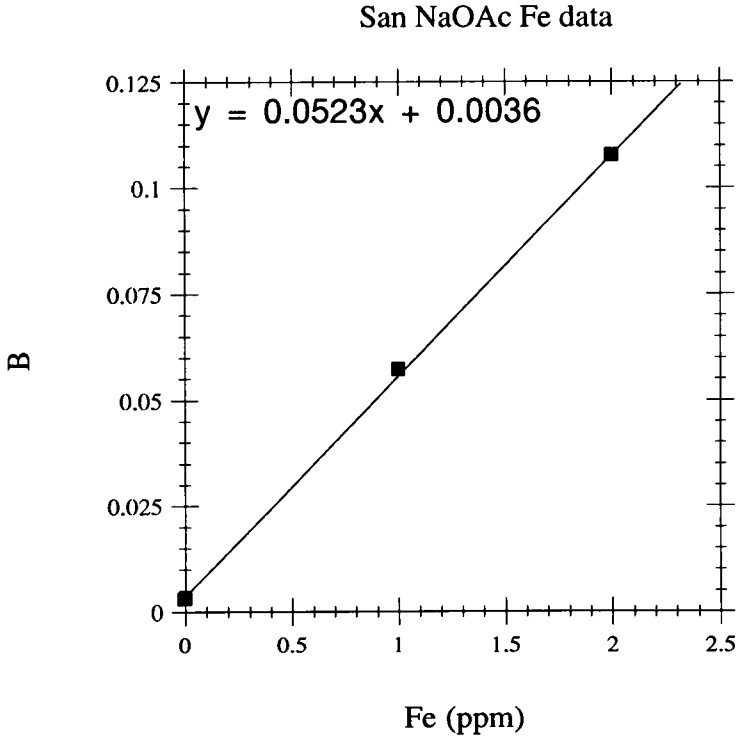
1.245 ppm


San MgCl2 Fe data
y = 0.0547x + 0.0031
0.125
0.1
0.075
0.05
0.025
0
B
0
0.5
1
1.5
2
2.5
Fe (ppm)

.567 ppm

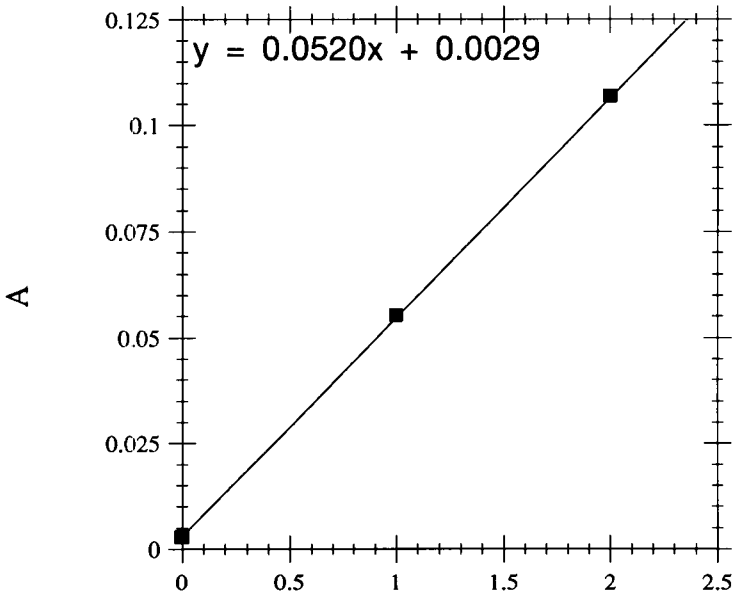

San NaOAc Fe data
y = 0.0491x + 0.0048
0.125
0.1
0.075
0.05
0.025
0
A
0
0.5
1
1.5
2
2.5
Fe (ppm)

.977 ppm


San NaOAc Fe data
y = 0.0523x + 0.0036
B
Fe (ppm)
0.125
0.1
0.075
0.05
0.025
0
0
0.5
1
1.5
2
2.5

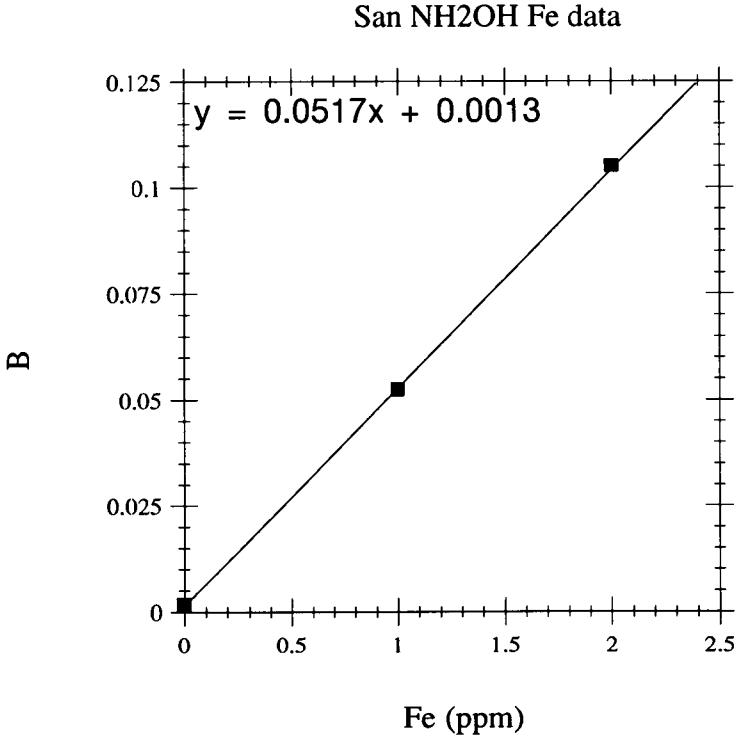
.678 ppm

San NH2OH Fe data



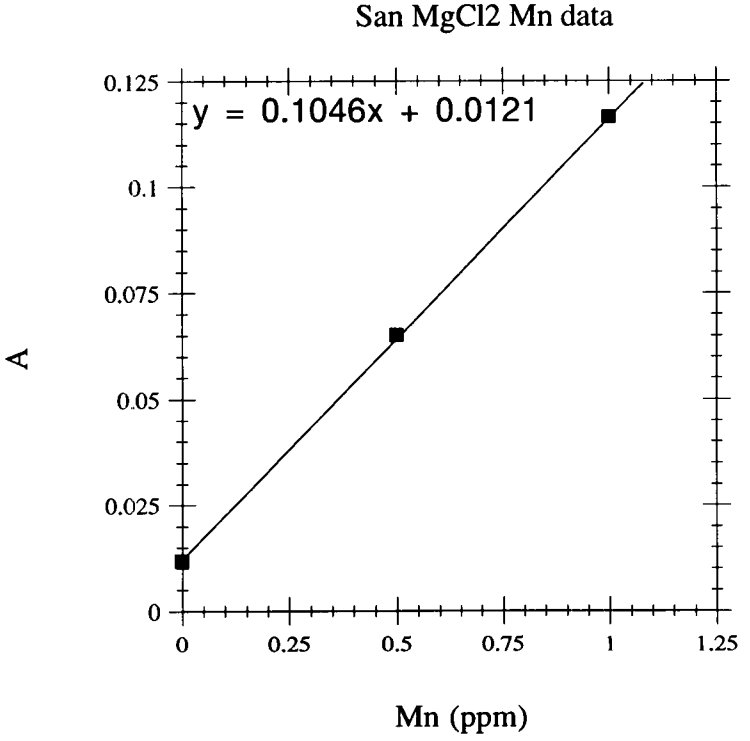
.5517 ppm

1.394 ppm

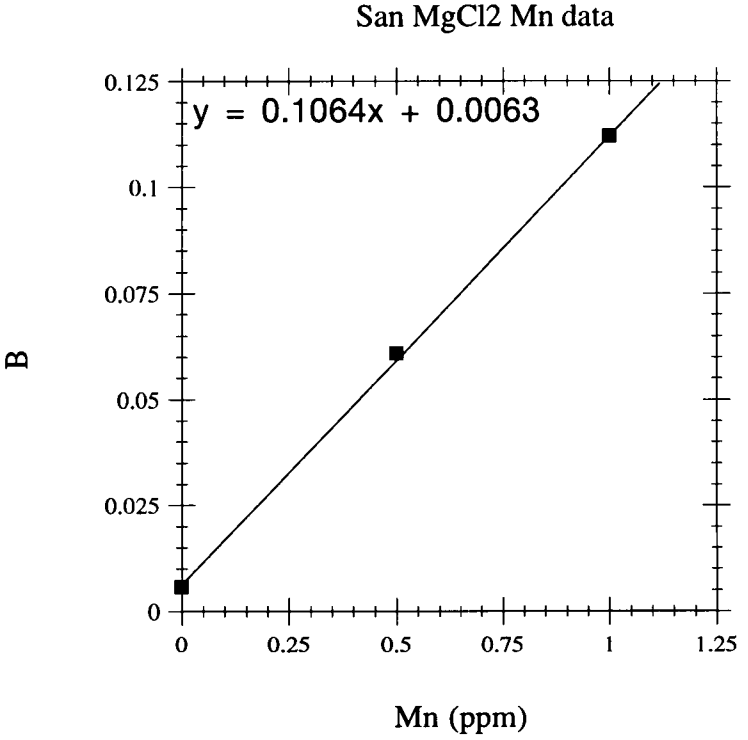


.254 ppm

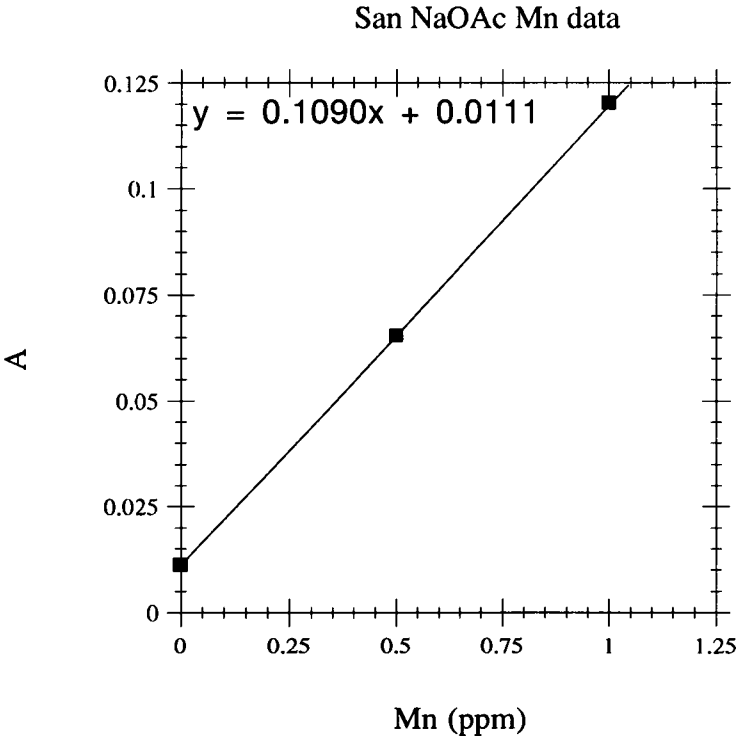
.628 ppm


San MgCl2 Mn data
y = 0.1046x + 0.0121
0.125
0.1
0.075
0.05
0.025
0
A
0
0.25
0.5
0.75
1
1.25
Mn (ppm)

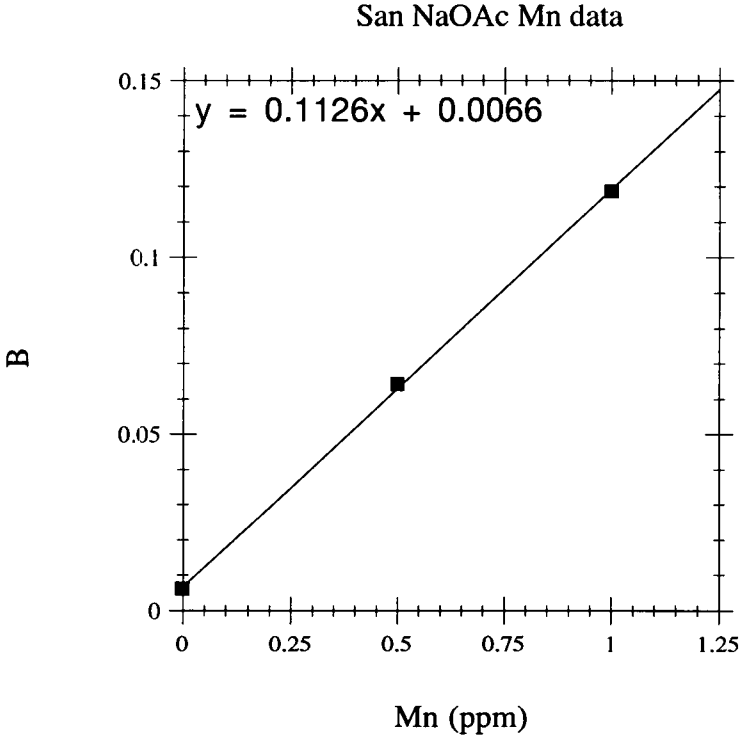
1.157ppm


San MgCl2 Mn data
y = 0.1064x + 0.0063
0.125
0.1
0.075
0.05
0.025
0
B
0
0.25
0.5
0.75
1
1.25
Mn (ppm)

.592 ppm

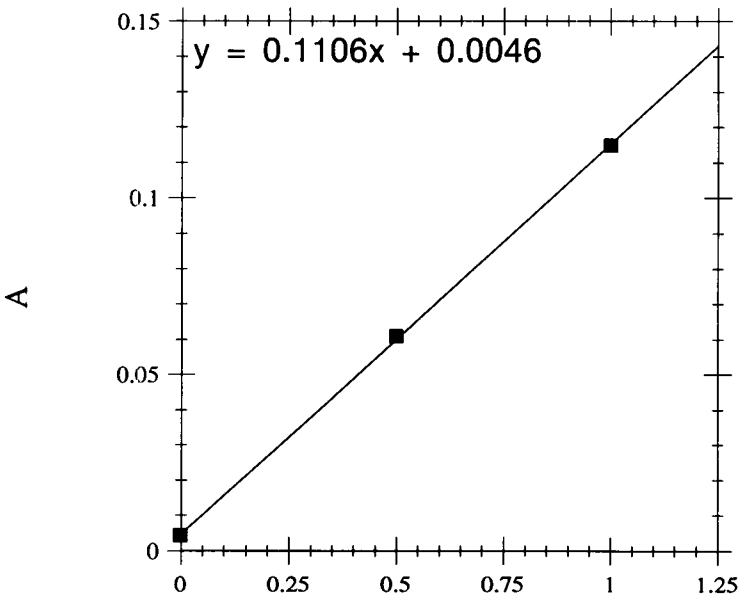

San NaOAc Mn data
y = 0.1090x + 0.0111
0.125
0.1
0.075
0.05
0.025
0
A
0
0.25
0.5
0.75
1
1.25
Mn (ppm)

1.018 ppm

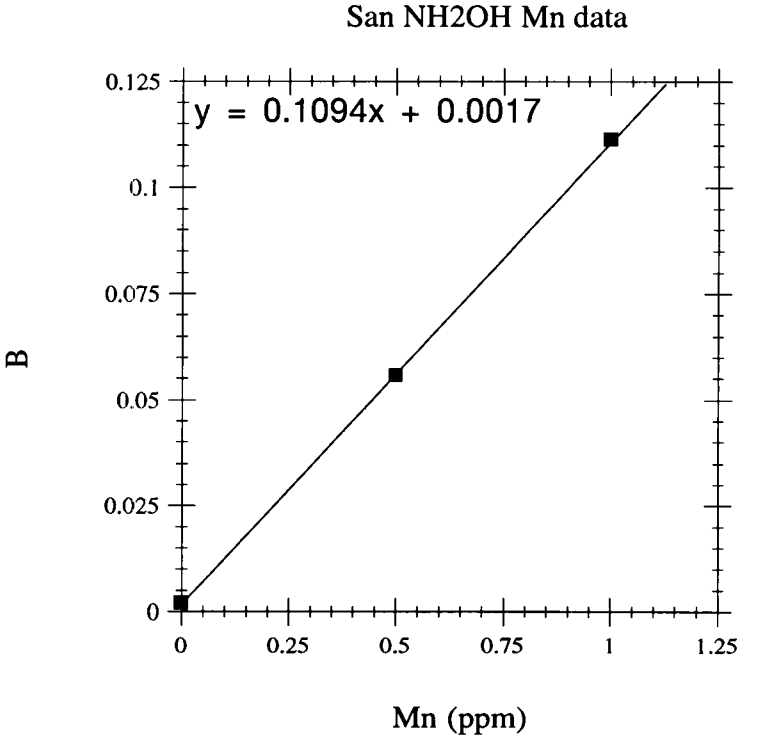

San NaOAc Mn data
y = 0.1126x + 0.0066
0.15
0.1
0.05
0
B
0
0.25
0.5
0.75
1
1.25
Mn (ppm)

.586 ppm

San NH2OH Mn data



1.04 ppm


San NH2OH Mn data
y = 0.1094x + 0.0017
0.125
0.1
0.075
0.05
0.025
0
B
0
0.25
0.5
0.75
1
1.25
Mn (ppm)

.388 ppm