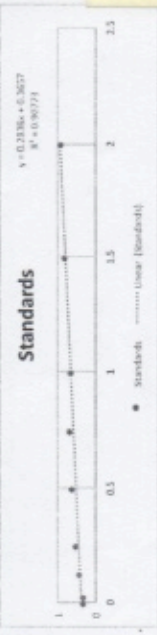


0303
Cd

Standard Curve @ 595nm

rep1	rep2	rep3	avg	conc (x)	slope (m) of equation	y-intercept (b)
a	0.952	0.849	0.858	0.899666667	2	0.2838
b	0.949	0.623	0.786	1.5		0.3657
c	0.206	0.508	0.607	1		
d	0.406	0.791	0.767	0.658666667	0.75	
e	0.656	0.557	0.602	0.605	0.5	
f	0.502	0.494	0.513	0.503	0.25	
h	0.39	0.357	0.384	0.377	0.125	
g	0.311	0.307	0.304	0.307333333	0.025	
i	0.296	0.299	0.297	0.297	0	

rep 1	rep 2	rep 3	avg	mg/ml	[y-int]/m	dilution factor	ug per ul	ul stock for 40ug	ul stock for 1ug	ul stock for 5ug	ul stock for 10ug	conc in 10ul of stock	200ul dilution	ul needed for 0.125ug	ul needed for 0.2ug
0117-20 1x	1.736	1.697	1.746	1.720333333	4.794338736	17.98097252	8.343173522	0.2085793381	0.0208579338	1.04289669	47.94338736	2.397169368	2.397169368	10.4289669	16.68634704
0117-20 10x	0.542	1.065	1.021	0.876	1.798097252	38.38148931	2.22457378	0.05614345	0.05614345	0.278071723	179.8097252	8.99486258	8.99486258	2.78071723	2.78071723
0117-20 20x	0.829	0.857	1.045	0.910333333	1.919074466	3.770143293	1.042169043	0.026042261	0.02604226	0.13027113	383.8148931	1.919074466	1.919074466	1.302711304	1.302711304
0118-22 1x	1.425	1.438	1.444	1.435666667	3.770143293	10.60967631	0.60967631	0.2652419078	0.265241908	1.326209539	37.70143293	1.885071647	1.885071647	13.26209539	21.21935263
0118-22 10x	0.705	0.803	0.77	0.759333333	1.387009631	2.883902109	0.720975527	0.072097553	0.072097553	0.360487764	138.7009631	6.935048156	6.935048156	3.604877636	3.604877636
0118-22 20x	0.511	0.526	0.5	0.512333333	0.516678412	3.870879745	0.967719936	0.483859968	0.483859968	0.967719936	103.335824	5.16678412	5.16678412	4.838599682	4.838599682
0118-25 1x	1.652	1.593	1.548	1.597666667	4.340967818	9.214535025	0.280833076	0.081282247	0.081282247	1.151816878	43.40967818	2.170483909	2.170483909	11.51816878	18.42997005
0118-25 10x	0.777	0.729	0.654	0.72	1.244414376	12.44414376	3.204064352	0.061016088	0.061016088	0.400508044	124.8414376	6.242071882	6.242071882	4.00508044	4.00508044
0118-25 20x	0.571	0.605	0.635	0.603666667	0.838501292	16.77002584	2.385208012	0.0586302	0.0586302	0.596302003	167.7002584	8.38501292	8.38501292	2.981510015	2.981510015
0118-29 1x	1.553	1.584	1.562	1.563333333	4.230561428	9.45509856	0.256375246	0.081282247	0.081282247	1.181876232	42.30561428	2.11280714	2.11280714	11.81876232	18.91001971
0118-29 10x	0.973	0.877	0.947	0.919	1.949612403	19.49612403	2.051689861	0.0512922465	0.0512922465	0.256461233	194.9612403	9.748062016	9.748062016	2.564612326	2.564612326
0118-29 20x	0.658	0.661	0.671	0.663333333	1.048744246	20.97486493	1.907044462	0.07676115	0.07676115	0.238380558	209.7486493	10.48743246	10.48743246	2.383805577	2.383805577
0118-56 1x	1.679	1.593	1.634	1.618666667	4.414963589	9.060097369	0.28602434	0.060991896	0.060991896	1.132512171	44.14963589	2.207481795	2.207481795	11.32512171	18.12019474
0118-56 10x	0.81	0.824	0.794	0.789333333	1.492717876	14.92717876	2.07987582	0.0524972253	0.0524972253	0.34959478	149.2717876	7.463589382	7.463589382	3.49594775	3.49594775
0118-56 20x	0.648	0.627	0.638	0.636	0.95241129	19.04862579	2.09889012	0.0524972253	0.0524972253	0.262486127	199.4862579	9.524312896	9.524312896	2.624861265	2.624861265
0119-1 1x	1.638	1.666	1.667	1.657	4.590035236	8.791140711	0.219786518	0.024972253	0.024972253	1.098892589	45.59035236	2.275017618	2.275017618	10.98892589	17.58228142
0119-1 10x	1.167	1.139	1.209	1.171666667	2.899910735	28.99910735	1.404040475	0.038212374	0.038212374	0.176061872	283.9910735	14.19955368	14.19955368	1.760618719	1.760618719
0119-1 20x	0.827	0.883	0.763	0.824333333	1.61044163	32.32088325	1.237589941	0.030939749	0.030939749	0.154698743	323.2088325	16.19044163	16.19044163	1.546987426	1.546987426
0119-7 1x	1.684	1.692	1.714	1.696666667	4.689805027	8.529139222	0.213228481	0.024972253	0.024972253	1.066143403	46.89805027	2.349002514	2.349002514	10.66143403	17.05827844
0119-7 10x	0.889	1.01	0.879	0.926	1.97427766	19.7427766	2.026657469	0.050651437	0.050651437	0.253257184	197.427766	9.871388302	9.871388302	2.532571837	2.532571837
0119-7 20x	0.842	0.911	1.052	0.935	2.005990134	40.11980268	0.024626735	0.024626735	0.024626735	0.240253469	401.1980268	20.05990134	20.05990134	1.246267346	1.246267346



Tit Soln
v/v 210ul

$$mg/mL = \frac{mg}{mL} \left(\frac{mL}{mL} \right) = mL$$

$$X = \frac{Y - b}{m}$$

$$X = \frac{mL}{mg/mL}$$