Plasma Sample	Lead Concentration in Blood (mg/L)
Plasma 1	26.85
Plasma 2	26.02
Plasma 3	27.26
Mean	26.71
Reference Standard	9.68

Table 5. Lead concentrations in the plasma samples calculated using the quadratic equation in Figure 1.

Accuracy and Precision Calculations:

Accuracy= 100- [((Expected Results – Actual Results) / Actual Results) x 100]

= 100- [((10-9.68) / 9.68) x 100]

= 96.7% (3sf)

Precision= 100- [(Standard Deviation/Mean) x 100)]

= 100- [((0.63174/26.71) x 100)]

= 100-2.37 = 97.6% (3sf)

Compound	Molar Concentration (mol/L)	Intensity (a.u)
Fluorescein	2.66 x 10^{-9}	15.46
Fluorescein	1.33 x 10^{-9}	15.56
Fluorescein	2.66 x 10^{-8}	29.06
Fluorescein	6.64 x 10^{-8}	195.97
Fluorescein	1.33 x 10^{-7}	202.43
Eosin	1.45 x 10^{-9}	10.7
Eosin	7.23 x 10^{-9}	16.67
Eosin	2.45 x 10^{-8}	36.3
Eosin	3.61 x 10^{-8}	52.27
Eosin	7.28 x 10^{-8}	160.64

Table 8. Intensity readings of Fluorescence for Fluorescein and Eosin using the Van Cary Eclipse Fluoremeter with excitation at 501.94nm and emission at 520.34nm.

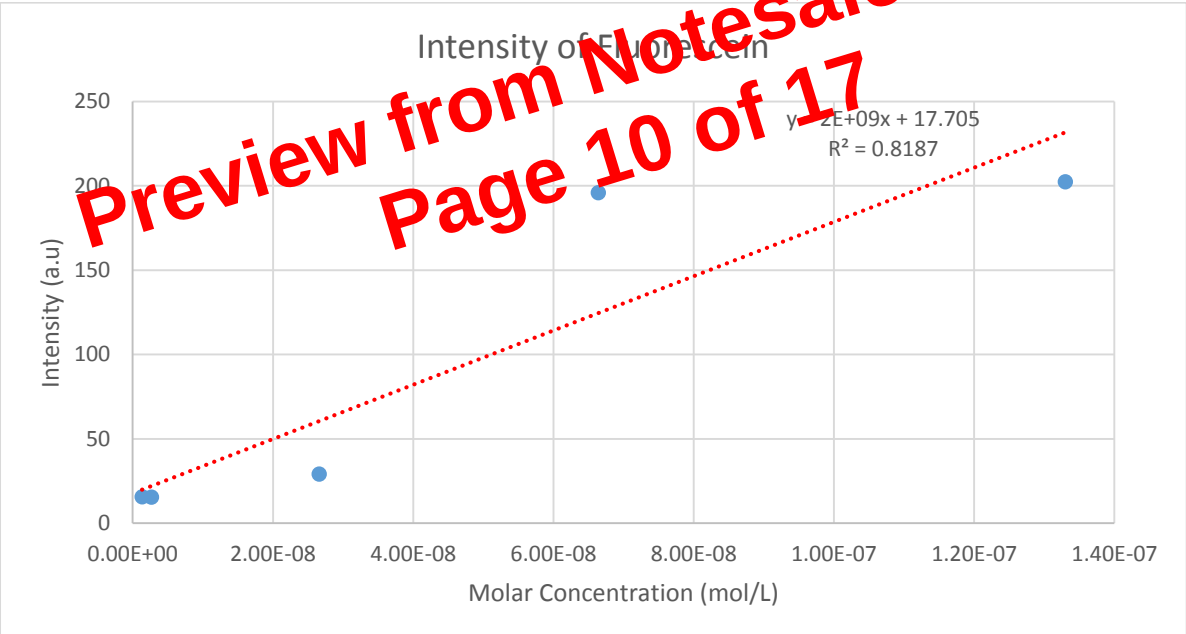

Figure 2. Intensity of fluorescence versus concentration in mol/L for Fluorescein. A strong positive, linear correlation is shown whereby as concentration of Fluroescein increases, so does the intensity. The R^2 value is 0.8187 which means that the data is reliable.