

CHEM 116/222

DU Exp. 10.5: Ion-Exchange Separation and Spectrophotometric Determination of Ni and Co

Name: _____ Date: _____

TA's Name: _____

CALIBRATION CURVE

VOLUME STD SOLUTIONS	0.50 mL	1.00 mL	1.50 mL	2.00 mL	2.50 mL
conc Ni standard, mg/mL					
absorbance of Ni standard					
conc Co standard, mg/mL					
absorbance of Co standard					

Prepare and include two graphs of absorbance vs. mg/mL for the standard Ni and Co solutions. Do a linear regression on the data and report the regression parameters and their errors:

	m	u_m	b	u_b	s_y	r^2
Ni						
Co						

UNKNOWN #: _____**UNKNOWN ANALYSIS**

absorbance of Ni unknown	
concentration of Ni in original unknown solution	
standard uncertainty in Ni concentration (use Eq. 4-27)	
relative standard uncertainty (%)	
absorbance of Co unknown	
concentration of Co in original unknown solution	
standard uncertainty in Co concentration (use Eq. 4-27)	
relative standard uncertainty (%)	