**Chemistry 6614**

**In-class exercise 2: Standard addition analysis using AAS data**

**Standard addition AAS data from 2013 class: Team 1**

Cu Ni

Team 1 324.75 nm 341.8 nm

|  |  |  |
| --- | --- | --- |
| Std add | A(Cu) | A(Ni) |
| 0 | 0.177 | 0.044 |
| 1 | 0.495 | 0.105 |
| 2 | 0.799 | 0.175 |
| 3 | 1.019 | 0.233 |
| 4 | 1.224 | 0.289 |

Concentration of Cu standard addition stock solution=25.7 ppm =Cs(Cu)

Concentration of Ni standard addition stock solution= 23.5 ppm =Cs(Ni)

Standard addition volume = 5.00 mL

Dilution factor from original 2/100=1/50

1) Find the concentration of unknown Cu and Ni in ppm in the diluted sample used in the above.

2) What is the original unknown Cu and Ni concentration in ppm and mol/L ?