**Silver Electrode Study of Equilibria**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Course\_\_\_\_\_\_Section\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_

Temperature of solution \_\_\_\_\_\_\_\_\_\_\_\_ OC

Corresponding Nernst Constant \_\_\_\_\_\_\_\_\_\_\_\_

Calculated value of K \_\_\_\_\_\_\_\_\_\_\_\_

Calculated Eref electrode \_\_\_\_\_\_\_\_\_\_\_\_

**Experimental Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Condition | Total Volume | Equilibrium Molarity  of Ligand | Ecell(mV) | “Y” | Log[NH3] |
| Start |  | --------------- |  | -------- | --------------- |
| Cl- added |  |  |  | -------- | --------------- |
| NH3 added |  |  |  |  |  |
| NH3 added |  |  |  |  |  |
| NH3 added |  |  |  |  |  |
| I- added |  |  |  | -------- | --------------- |

Volume of HCl Titrated \_\_\_\_\_\_\_\_\_\_\_\_ Molarity of HCl Provided \_\_\_\_\_\_\_\_\_\_\_\_Calculated Molarity of Stock NH3 \_\_\_\_\_\_\_\_\_\_\_\_

**Calculated Constants**

Ksp for AgCl \_\_\_\_\_\_\_\_\_\_\_\_

Kf for Ag(NH3)+p \_\_\_\_\_\_\_\_\_\_\_\_ p for Ag(NH3)+p \_\_\_\_\_\_\_\_\_\_\_\_

Ksp for AgI \_\_\_\_\_\_\_\_\_\_\_\_ EO for Ag(NH3)+p\_\_\_\_\_\_\_\_\_\_\_\_

EO for AgCl \_\_\_\_\_\_\_\_\_\_\_\_ EO for AgI \_\_\_\_\_\_\_\_\_\_\_\_