**FLUORIDE ION ELECTRODE**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Course\_\_\_\_\_\_Section\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_  
Name of your lab partner\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mass of NaF Weighed Out** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Electrode Properties (mV)**

|  |  |  |
| --- | --- | --- |
| 0.00010 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 0.00035 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 0.00060 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 0.00085 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 0.001 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 0.01 M F- |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Electrode Slope, S |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Method of Standard Addition**

|  |  |
| --- | --- |
| Potential of control solution: |  |
| Potential of control solution plus standard addition |  |
| Measured concentration of F- in diluted control |  |
| Measured concentration of F- in undiluted control |  |

**Unknown Sample**

Identify the commercial product you’ve analyzed and include the reported concentration of F- from the packaging (units on bottle & M):  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unknown Sample Data Table (include units with your answers):**

|  |  |
| --- | --- |
| Potential of commercial product |  |
| Potential of commercial product plus standard addition |  |
| Measured concentration of F- in diluted commercial product |  |
| Measured concentration of F- in undiluted commercial product *(Average±Standard Devation)* |  |

*If you were unable to collect replicates, discuss the reason, ramifications, and what you would change*