EXPERIMENT/SUBJECT

DATE

LAB PARTNER

LOCKER/DESK NO.

COURSE & SECTION NO.

% ERROR = $\frac{0.0776V - 1.0089V}{1.089} \times 100\% = 14.6\%$

of $Cu^{2+}(aq)$ is very small, we rounded this value to 2.5×10^{-6}

⑥ PART THREE Cu^{2+} to 2.5×10^{-6} M from an original

% ERROR = $\frac{(actual - theoretical)}{theoretical} \times 100\%$

proceeds as follows:

a) solve for V2, if 0.5 mL of 0.05 M $\frac{(1.0177V - 1.103V)}{1.103V}$ be diluted to

$C_1V_1 = C_2V_2$ 80%.

$(0.05M)(0.5mL) = (5 \times 10^{-4}M)(V_2)$

$V_2 = 50mL$

SOURCES OF ERROR:

Not all the values obtained seem consistent... are negative, which means that actual values were less than theoretical. Thus, reasons for error include that the temperature in the lab was not 25 °C, which was assumed in calculation. Also, it was difficult to obtain small volume solution solutions precisely with the pipette such as 0.5 mL. Those calculations wouldn't be precise.

Conclusion:

PART ONE: READING & THEORETICAL YIELD.

PART TWO: READING & THEORETICAL YIELD.

PART THREE: READING & THEORETICAL YIELD.

⑤ clean Cu(s) and Zn(s) with emery paper, and insert into respective solutions.

④ connect each metal into solution to the voltmeter.

⑤ insert salt bridge and record voltage in the voltmeter.

Cell Diagram:

$Zn(s) | Zn^{2+}(aq, 0.05M) || Cu^{2+}(aq, 2.5 \times 10^{-6}M) | Cu$

CALCULATIONS (% ERROR)

PART ONE:

% ERROR = $\frac{actual - theoretical}{theoretical} \times 100\%$

$= \frac{1.02V - 1.103V}{1.103V} \times 100\%$

$= -7.52\%$

PART TWO:

% ERROR = $\frac{actual - theoretical}{theoretical} \times 100\%$

SIGNATURE

DATE

WITNESS/TA

DATE

NOTE: INSERT DIVIDER UNDER COPY SHEET BEFORE WRITING

COPY