Honor Code _____   Date _____

Geometry Variation – Dose Calibrator – VCU

Time the procedure was Started _____   Ended _____

Volume in mL	Measured Activity	Expected Activity	Percent Error
0.5			
1.0			
1.5			
2.0			
2.5			
3.0			

- Draw up between 1 – 10 mCi of ^{99m}Tc into a three mL syringe and expand to 0.5 mL.
- Measure and record each reading as quickly as possible.
- Background should not be an issue since that was measured with the morning QC. DC automatically subtracts it to give you net activity.
- Continue to expand you activity by 0.5mL intervals, measure it up to 3.0 mL is recorded.
- If the percent error exceeds the acceptable range, then identify that value.

$$\frac{\text{Measured - Expected}}{\text{Expected}} \times 100 = \% \text{ Error}$$

- Determine the difference between the measured and expected levels of activity for each volume
- Calculate % Error(s)

Questions
1. Is the variation acceptable?

2. If no, then what is/are the correction factors and where should it be applied?