Listed below is a summary of stated validation. Additional information can be provided upon request.

**Validation Study/Research Project Number:** 18-002-V  
**Testing Laboratory Section:** Drug Chemistry  
**Title:** Validation of the Thermo Fisher Gemini Handheld FT-IR & Raman Spectrometer  

**PART 1: Proposal:**

1. **Scope of project:**

   The scope of the project is fourfold:
   (1) To develop routine quality assurance practices and operating conditions to ensure accurate and reproducible instrument usage.
   (2) To build a user-defined library of controlled and non-controlled substance spectra to aid in the identification of unknown samples.
   (3) To evaluate different types of packaging (glass vials, plastic bags, etc.) and to determine if any have adverse effects on the ability to correctly identify a sample (Raman only).
   (4) To analyze Drug Chemistry section training samples, mixtures and anonymized casework samples to evaluate accuracy and identify any potential limitations of the instrument.