

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.