
Administrative Policy and Procedure for Reference Materials and Standards

1.0 Purpose – To classify and control the reference materials utilized in trace evidence examinations at the Raleigh Laboratory.

2.0 Scope – This policy applies to the below listed reference collections and reference standards maintained in the Trace Evidence Section.

3.0 Policy

3.1 Reference Collections

3.1.1 The Trace Evidence Section maintains the following reference collections:

3.1.1.1 Fire Debris

- In-house reference collection of ignitable liquids – Raleigh Laboratory

3.1.1.2 Explosives

- In-house reference collection

3.1.1.3 Fibers

- CTS Reference Collection of Synthetic Fibers
- In-house reference collection
- Textile Consultants Fabric and Fiber Kits
- McCrone Research Institute Fiber Kit

3.1.1.4 Hair

- Cargille Reference Set of Commercial Fur Hairs
- In-house reference collection

3.1.1.5 Paint

- PPG and DuPont Color Code Books
- PDQi
- CTS Paint Samples

3.1.1.6 Chemical Standards

- Purchased chemicals
- Scientific Polymer Products, Polymer Sample Kit

3.1.1.7 Instrumental Libraries

- FTIR spectral libraries, including atrpolym, crime, fluka, ncsbipolymers, ncsbimiscellaneous, ncsbifiber1, Iowa, fibers

- NIST mass spectral libraries
- In-house ignitable liquid chromatographic library

3.1.2 The reference collections maintained in the Trace Evidence Section shall not be considered evidence.

3.1.3 Prior to use in casework, the technical leader for the related discipline shall approve the materials and any data generated from the collection for use.

3.2 Reference Standards

3.2.1 The Trace Evidence Section maintains the following reference standards:

- Polystyrene film standard
- Microspectrophotometry Standards (Holmium Oxide, Didymium Oxide, Neutral Density Filters 0.1 OD, 0.5 OD, 1.0 OD)
- Copper (Cu) standard for SEM
- Manganese (Mn) standard for SEM
- Stainless Steel 316 standard for SEM
- PLANO GSR Standard for SEM
- Manganese (Mn)/Rhodium (Rh) standard for SEM
- Cobalt (Co)/Rhodium (Rh) standard for SEM
- Kevex Spectrace OFHC Copper Standard
- Locke Scientific Glass Standards

3.2.2 These reference standards are utilized for calibration and quality control checks and have certificates of traceability or equivalent documentation.

3.2.3 The associated technical procedures that utilize the reference standards state the proper use and storage.

3.2.4 All employees of the Trace Evidence Section have access to the reference standards and materials.

Revision History		
Effective Date	Version Number	Reason
06/01/2020	5	Updated header to Trace Evidence Section, issuing authority to Trace Evidence Section Forensic Scientist Manager. Removed “and the Western Regional Laboratory” from section 1.0. Edited section 2.0. Updated Trace Unit to Trace Evidence Sections in sections 3.1.1, 3.1.2, 3.2.1, 3.2.4. Removed “In-house reference collection of ignitable liquids – Western Regional Laboratory” in section 3.1.2. Edited section 3.1.1.5. Edited section 3.2.1.