A. PURPOSE:

To outline a method of analysis /examination to use as a resource for items of evidence not specifically listed in the Trace Manual of Standard Operating Procedures.

B. RESPONSIBILITY:

Trace Section Forensic Science Examiner

C. SAFETY:

1. The examiner will exercise caution when using sharp blades or similarly sharp instruments.
2. All evidence associated with a biological material will be handled using the appropriate precautions.
3. All sharps, glassware or similar material will be disposed of in the appropriate containers.
4. The proper protection will be utilized when using a chemical, such as a mounting media, which may be classified as an irritant to the skin, eyes or respiratory system.
5. The Examiner may reference a specific MSDS for each chemical used in the Trace Section for specific precautionary issues.

D. PROCEDURE: Set up

1. The examiner will use his / her discretion to assess the probative value of the evidence; as well as, determine the types and extent of the examinations conducted.
2. On occasion items of evidence will be submitted to the laboratory, which are not outlined in the procedures of the Trace Section. Good lab practice will be used to determine the analysis / examination scheme, which will be used. The examiner will assess the evidence submitted and the examinations requested by the submitting agency; and will determine the method of analysis, which will be used.
3. The evidence may be documented via sketching or photographing.
4. The item of evidence may be described in narrative form on the appropriate Quality Record Worksheet.
5. Dimensions, appearance or gross characteristics may be used as a means for identification or comparison.
6. Macroscopic examination will be utilized first for analysis.

7. Microscopic examination may be used for analysis.
8. Various forms of analytical or instrumental tests may be used for identification or comparison.
   a. Methods of examination may include: FT-IR, Microscpectrophotometery, Polarized light microscopy and SEM / EDAX.
      ** If a sample will be examined via SEM / EDAX, an examiner from the Chemistry Section of the Forensic Science Laboratory may perform the analysis needed and provide the data/ results/ images to the Trace Evidence Examiner. The data / results / images provided will be properly documented and included in the case jacket.
   b. If instrumentation is utilized a hard copy of the data will be included in the case file.
   c. If an instrumental reference collection is used, a hard copy of the reference data should be included in the case file.
9. Reference collections may be utilized for identification or comparison.
10. If any changes were made to the evidence prior to its return to the submitting agency, notes should be made in the case file.
11. The examiner will document the methods of analysis in the case file.

E. PROCEDURE: Report Writing

1. A report will be generate. The report will reflect the analysis conducted and the results obtained.
2. Photographs may be included in a report to illustrate results.

The examiner will consult with the co-signer to draft a report, which best reflects the results obtained.