## Outsourcing

The SDFL outsources certain exams to partnering laboratories. Please contact the SDFL at

(605) 773-3673 for assistance with coordinating the outsource exam, and with contacting the lab. The following is a list of examinations, of which the SDFL outsources to partnering laboratories.

#### Firearms Exams:

- GSR- Gun shot Residue
  - Analysis of GSR (primer residues) kits taken from suspect's hands or other evidence items e.g. clothing, vehicle interiors to determine whether or not an individual has discharged a firearm or were in close proximity of a discharged firearm.

#### Trace Exams:

- CHE- Chemical
  - Analysis to determine the identification of unknown substance
- GLA- Glass
  - Analysis to determine if two samples come from same source; fracture matching
- SOI- Soil
  - Analysis to determine composition of suspect soil
- PRO- Protective Coating
  - Analysis to determine the layers of a protective coating such as paint
- IGL- Ignitable Liquids
  - Analysis of liquid substance to determine if substance is flammable
- FDA- Fire Debris Analysis
  - o Analysis to determine if debris contains an accelerant
- FAB- Fabric Impression
  - Analysis of impressions formed when a fabric contacts a hard surface

## **Document Exams:**

- QD- Questioned Document
  - Analysis to answer questions about a disputed document; may involve comparison of the questioned document to a set of known standards; most common type involves potential authorship of handwriting.
- IP- Ink, Papers, Alterations, and Obliterations
  - Inks can be examined to determine if different inks were used to produce a particular document in question. Inks that have been obliterated or destroyed through fading, burning, water, overwriting, chemicals, or other means can often be recovered and made legible. Paper can be compared with known samples to determine if the document in question is similar to a known sample. Paper can sometimes be dated or traced to a particular source or manufacturer. Alterations and Obliterations exams are performed in order to detect whether a portion of a document has been altered, some portion rendered not readily visible, or some text added.
- IND- Indented Writing
  - Indented writing is an imprint which may be left on the underlying pages when the top sheet of paper is written upon. This impression of the writing is influenced by pen pressure and thickness of the paper. Indented writing is very useful as a form of connecting evidence, such as tying a robbery note to a writing pad recovered from a suspect.
- PPM- Paper Physical Match
  - Anything that is torn, cut, fractured, snapped, pulled, or ripped apart can be matched back to its congruent counterpart, e.g. matches reconstructed to their match books, shredded or torn documents, cut documents, etc. Paper that has been burned or water soaked can often be restored.

## **Digital Evidence Exams:**

- DEP- Digital Evidence Preview
  - Analysis of digital evidence to see if evidence is present; only specific type of evidence that submitter requests will be looked for (e.g. child porn, text messages). Prelog must be accompanied by Digital Evidence Request for Laboratory Examination (see Attorney General Website, <u>www.atq.sd.gov</u>; follow DCI link to Forensic Lab link). No CD report of exam is issued. No search warrant or consent forms required.
- DEA- Digital Evidence Analysis

- Full Analysis of digital evidence to include computers, cell phones, digital cameras, etc; only specific type of evidence that submitter requests will be looked for (e.g. child porn, text message). Prelog must be accompanied by Digital Evidence Request for Laboratory Examination (see Attorney General Website, <u>www.atq.sd.gov</u>; follow DCI link to Forensic Lab link). Search warrant or consent forms required.
- DEFA- Digital Evidence Field Assist
  - Request a digital evidence examiner to assist in a search warrant and/or other field activity on site.
- DEI- Digital Evidence Image
  - Request for copy of examiner's evidence files or suspect's hard drive
- DEW- Digital Evidence Wipe
  - Request for computer hard drive to be wiped completely clean; authorization form required (see Attorney General Website, <u>http://www.atg.sd.gov</u> (follow DCI link to Forensic Lab link).
- DERC- Digital Evidence Report Copy
  - The request for duplication of an FTK report for an additional distribution
- DEE- Digital Evidence Video/Audio Enhancement
  - Request to enhance media for clarity

# **Miscellaneous Exams:**

- BPI- Blood Stain Pattern Interpretation
  - Examination of the shapes, locations, and distribution of patterns of bloodstains, in order to provide an interpretation of the physical events which gave rise to their origin
- TP- Tire Print Examination
  - Analysis of either photographs or casts (preferably both) of tire tread marks to determine if patterns of two samples are the same; also to determine if specific tire made a specific print
- SHO- Shoe Print Examination
  - Analysis of either photographs or casts (preferably both) of shoe pattern to determine if patterns of two samples are the same; also to determine if specific shoe made a specific print