

# A Notice to Our Customers

When submitting evidence to the Johnson County Sheriff's Office Criminalistics Laboratory, you agree to allow us to select the most appropriate method for the examination.

Below you will find a summarized list of the methods utilized in our laboratory:

## **Biology/DNA:**

- Presumptive tests for biological materials (full list available upon request)
- Alternate light source
- DNA extraction (Maxwell 16 – DNA IQ Extraction)
- DNA quantification (human and male)
- PCR DNA analysis including STRs (Fusion 6C) and Y-STRs (Yfiler Plus)
- ABI Prism 3500 Genetic Analyzer
- DNA data analysis (GeneMapper ID-X, Lab Retriever, STRmix)
- CODIS
- Paternity and kinship analysis (popstats)

## **Crime Scene Investigation & Bloodstain Pattern Analysis:**

- Evidence collection (including entomology and primer gunshot residue)
- Photography (digital, ultraviolet, and infrared)
- Computer diagramming, GPS data collection, and 3D laser scanning (Leica ScanStation PS40 and RTC360)
- Presumptive chemical development/processing methods for biological materials (full list available upon request)
- Fingerprint processing methods including powder, chemical, and skin processing (full list available upon request)
- Alternate light source
- Metal detector
- Death investigation
- Persons processing (deceased and living)
- Shooting incident documentation and reconstruction

## **Controlled Substances:**

- Color tests (full list available upon request)
- Microscopy
- Gas Chromatography/Mass Spectrometry
- Fourier Transform Infrared Spectroscopy

### **Digital/Multimedia Evidence:**

- Data preservation (write blockers, hashing, secure storage)
- Video analysis (onsite acquisition, extraction, playback optimization, capture, clarification)
- Computer forensics (extraction, analysis)
- Vehicle analysis (extraction, analysis)
- Portable/mobile media devices (acquisition, extraction, analysis, unlocking)
- A full list of currently validated tools and software is available upon request

### **Firearms/Toolmarks:**

- Firearm functionality/operability testing
- Barrel/overall length measurement
- Microscopy (examination and comparison of ammunition/toolmarked items)
- National Integrated Ballistics Information Network (entry and correlation to the State of Kansas, Kansas City, and Missouri region; manual correlations to additional regions upon request)
- Muzzle-to-object gunshot residue distance determination
- Serial/VIN number restoration (full list of reagents available upon request)

### **Latent Prints & Footwear/Tire Tracks (Impression Evidence):**

- Known collection (fingerprints and footwear/tire track)
- Fingerprint processing methods including powder, superglue, and chemical (full list available upon request)
- Alternate light source
- Digital image collection and processing
- AFIS (Kansas and Missouri)
- Next Generation Identification (formerly IAFIS)

### **Toxicology:**

- Gas Chromatography/Flame Ionization Detector
- Gas Chromatography/Mass Spectrometry
- Enzyme-Linked Immunosorbent Assay (ELISA)

### **Trace Evidence:**

- Examination methods: hair, fiber, fabric/cordage, paint, tape, fire debris, physical fit, general chemical unknown
- Photography
- Chemical tests (full list available upon request)
- Physical property measurements (full list available upon request)
- Microscopy (brightfield, polarized light, fluorescence, phase contrast, stereoscopic, comparison)
- Alternate light source
- Gas Chromatography/Mass Spectrometry
- Pyrolysis Gas Chromatography/Mass Spectrometry
- Fourier Transform Infrared Spectroscopy
- Microspectrophotometry
- X-Ray Fluorescence Spectrometry
- Scanning Electron Microscopy-Energy Dispersive Spectroscopy