

Idaho State Police Service Since 1939



Colonel Kedrick R. Wills Director

Brad Little Governor

Ensuring Quality Work Product in the ISPFS Chemistry Section

<u>Hiring:</u>

- Candidates are selected through rigorous criteria such as education, experience, and knowledge
- Candidates are asked questions about integrity, ethics, and application based decision making
- Candidates are screened through a thorough background and polygraph process

Training:

- The analyst completes a comprehensive training program, the length of time to complete the program varies depending on experience
- The analyst studies the background of the drugs, instrumentation, and extraction chemistry
- The analyst works with a journey level analyst performing the analysis with constant observation
- The analyst is trained to competency on each piece of equipment and each instrument they use
- The analyst completes written and sample analysis tests
- The analyst takes a competency test, which includes a wide variety of positive and negative samples
- The competency test is completed without assistance from other analysts and graded for accuracy
- The competency test process includes the whole process from checking the samples out, note taking, analysis, interpretation, documentation, and creating a report
- The analyst is trained in court process, procedure, and proceedings
- The analyst completes mock court where they must present evidence and their report
- Upon successful completion of all steps, the discipline lead reviews their training work
- The Quality Manager provides documentation that everything has been successfully completed and approves the analyst to perform casework
- Once the analyst is signed off, they perform supervised casework for a specified number of cases
- After the analyst has been performing casework for a time period, they train in technical review
- The analyst is evaluated regarding their ability to technical review cases over a period of time
- The analyst is evaluated at least annually with a proficiency test where results are unknown to them

Analysis:

- There is a quality manual for the lab system that must be followed (posted online)
- There are analytical methods for all processes in casework that must be followed (posted online)
- The laboratory is internally audited annually, and regularly externally evaluated by qualified analysts
- All case documentation and reports are evaluated by a second qualified analyst before released
- Cases from each analyst are reviewed annually as part of the quality management process

700 S. Stratford Drive • Meridian, Idaho 83642-6202

- When issues are discovered in casework, a defined quality process is implemented, this process includes evaluation the impact on past casework, determining root cause, and corrective actions to be taken.
- Analysts are required to perform quality checks on the instruments and equipment they use

General:

- Each analyst has court testimony monitored at least annually
- Each analyst goes to training at least annually to ensure they are updated on developments
- Each analyst is required to be certified by the American Board of Criminalistics within three years of being a senior examiner, which includes written testing, continuing education, and proficiency tests
- Each analyst receives annual refresher training for ethical behavior and conduct.
- The laboratory system has a full-time quality manager to look into any potential quality issues
- The laboratory and ISP in general have robust policies related to ethics and professional standards
- The laboratory makes referrals to and relies on the ISP Office of Professional Standards (OPS) to investigate allegations of unethical behavior
- ISPFS casework is regularly evaluated by auditors, assessors, defense experts, and other stakeholders

Testing Process:

- The lab receives evidence by courier or in person. The request for analysis is done by the agency using our prelog system. The agency provides information about the case, the subject, the item of evidence, and what type of testing they are requesting.
- A printout from the prelog system accompanies each submission. The forensic evidence specialist (FES) reviews the prelog form and confirms it is a test we perform, the FES confirms the item does in fact go with that form, and checks the integrity of the packaging, making sure it is properly packaged and sealed. If there are any problems, they are remediated or the evidence is returned to the agency.
- The lab assigns the evidence a unique lab case number, and each item is assigned a number and logged into the system. The FES signs the chain of custody and stores the evidence in an evidence vault. The lab tracks the items in the lab with an electronic chain of custody. When items are transferred to or from a person it is accepted by the transferring individuals with their secure password.
- When the analyst is ready to start analysis he or she checks the evidence out from the FES. The analyst wears personal protective equipment and engineering controls such as fume hoods to protect the sample and prevent exposure during the analysis.
- The first step in analysis is for the analyst to document the packaging and seals for the item. The analyst then opens the item and describes the contents. If the item lends itself to weighing, the item is weighed (this weight does not include packaging). The item is typically weighed on a balance that has been tared with a disposable weigh dish or paper. Results of weighing are documented in the analyst's notes. The analyst then samples items for testing.

- If a presumptive chemical test is done, the results of that test are noted at the time of testing. The analyst prepares the sample for instrumental analysis following the appropriate analytical method. Depending on the nature of the sample and the instrumentation used, the sample may be run neat, simply dissolved and diluted in a solvent, or a more complex chemical extraction may need to be employed. The analyst will document the sample prep in their notes.
- If the sample is dissolved in a solvent or undergoes an extraction, a control or a blank is also collected to be run on the instrumentation to confirm that the chemicals used are not contaminated. The analyst will weigh the item after all sampling has occurred and document that weight. The analyst will document, at a minimum, the lab case and item number, and sign or initial the item or its proximal container. The analyst will place the item back in the evidence package and seal it. The seal will have, at a minimum, the analyst signature or initials and the date the seal was placed on the item.
- Prior to running the instrumentation, the analyst confirms any required checks on the instrument have been run and provided satisfactory results. The analyst will run the sample on the instrumentation following the analytical method. When the sample is done running, and the analyst is ready to evaluate and document the results, the analyst will evaluate the results and print documentation of the instrumental results. The analyst will attach the documentation to their notes and enter the results of their analysis into their notes.
- The analyst will create a report. The analyst reviews the report and saves it. The analyst then creates a note packet that contains documentation of all their observations and testing. The analyst reviews the note packet. If the note packet is complete, the analyst then submits the case for review.
- A second qualified analyst reviews the report and notes. The reviewer confirms that the conclusion is consistent with the data. The reviewer confirms that, based on the notes, the analytical method was followed. The reviewer also confirms that the notes meet quality requirements of being initialed, page numbered, and have a case number on each page. The reviewer confirms the packaging and seals are described for all items, looks for any significant differences in the agency description for what was received by the lab, that uncertainty of measurement is reported when applicable, and that the conclusions and descriptions meet the requirements of the method. The reviewer also has access to review the instrumental data.
- If a correction needs to be made, it is documented and the case is sent back to the analyst. Once the analyst has made the correction, it is sent back to review. Administrative corrections are things such as a strike out in the notes being initialed, each page having a case number, an abbreviation being used that is not on the list of approved abbreviations. Technical corrections might be that the molecular ion is not showing up on GCMS print out, or the comparison library used on the FTIR is not the library created from lab standards.
- If there is concern during the analysis or review process that there is a problem with the method or instrumentation, the lab institutes a quality review. Depending on the type of concern, casework may be halted until the concern is investigated and evaluated. Whenever the lab halts casework, it cannot be resumed without authorization from the quality manager to confirm the issue was fully investigated and resolved.

• Once the review is complete, the reviewer electronically approves using a secure password/code, and the report is published and made available to our customers.

Martie Jametto

Matthew Gamette Idaho State Police Forensic Services Laboratory System Director