# Rhode Island State Crime Laboratory

2025 - 17025T - Reassessment

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Data collected on 2025-03-18

ANSI National Accreditation Board

United States

# Description

This assessment report summarizes the outcome of the recent accreditation activity. A separate document, the assessment plan, provides information on the type of activity (*e.g.,* reassessment, surveillance activity, scope extension), the date(s) of the activity, the assessment team members, the requirement documents and refers to the scope of the discipline(s) assessed for each location. The assessment plan, together with this report, provide a complete picture of the accreditation activity.

The ANSI National Accreditation Board (ANAB) evaluated the competence of the laboratory and conformance with all applicable accreditation requirements for the scope of accreditation referenced in the assessment plan. Objective evidence of implementation was assessed. The results of an assessment activity are based on a sample of records, locations, and personnel that were available at the time of the activity. Witnessing is an additional technique used in most activities.

REQUIREMENTS:

ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories & ANAB Accreditation Requirements for Forensic Testing and Calibration (AR 3125) evaluated over the accreditation cycle are summarized in the following broad categories:

General requirements related to the laboratory's commitment to impartiality and confidentiality in its activities.

Structural requirements related to the range of activities, management structure, the authority, roles and responsibilities of personnel. Documented procedures which ensure a consistent application of activities and the validity of results.

Resource requirements related to the impartiality of personnel. Requirements for a training program, competency testing, authorizations, and ongoing monitoring to ensure the competence of personnel. Facility and security suitability for activities. Records and procedures for equipment to ensure proper functioning and where applicable, establishment of metrological traceability. Requirements for externally provided products and services.

Process requirements related to the handling of test and calibration items in a manner to maintain the integrity of the item. Requirements for chain-of-custody of items to be tested and appropriate methods and procedures. Ensuring the required performance of the methods along with monitoring the validity of the results. Requirements to ensure results are supported by sufficient technical records and are reported accurately, clearly, unambiguously, and objectively. Procedures for nonconforming work and a documented process for handling complaints. Requirements related to the laboratory information management system protection and integrity of data and information.

Management system requirements related to policies and objectives appropriate for the scope of activities. Requirements to control internal and external documents and records. Requirements to address risks and opportunities and timely, well-documented corrective actions. Requirements for an internal audit program and management reviews.

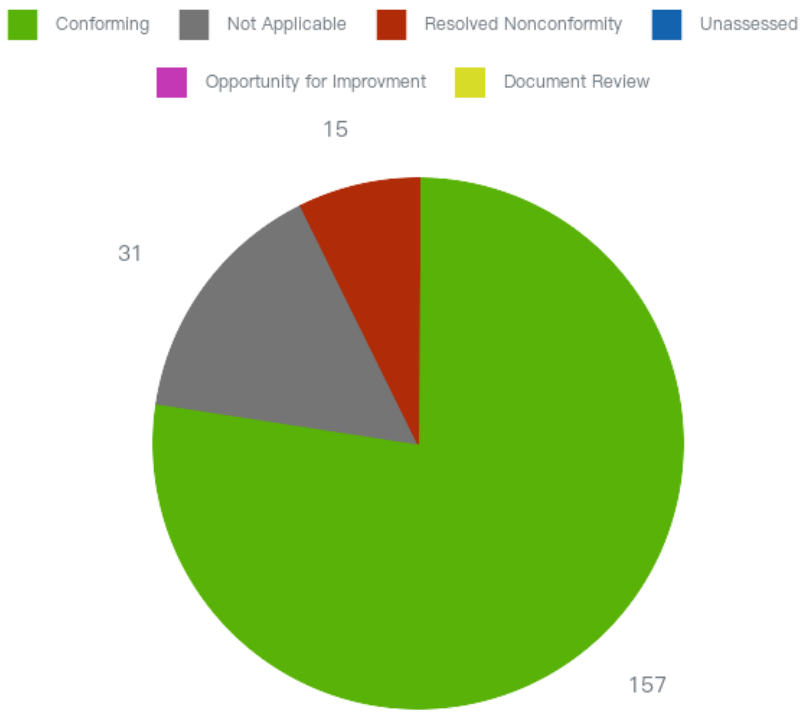
The accreditation activity also evaluates the laboratory’s conformance with their own management system requirements.

ASSESSMENT RESULT:

Based on the assessment techniques and a sample of the objective evidence reviewed during the assessment activity, the assessment team found that the laboratory demonstrated competence to operate a management system that fulfills all applicable accreditation requirements, including those specified within their management system.

Any opportunities for improvement or nonconformities identified during this assessment activity are noted below. All nonconformities will be resolved prior to an accreditation decision by ANAB and a summary provided in a subsequent assessment activity report.

## Summary of Comments




## Audit Comments

# 5. Structural requirements

### 5.4.1 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Does the laboratory conform to requirements in PR 1018 ANAB Policy on Use of ANAB Accreditation Symbols and Claims of Accreditation Status?

**Nonconformity Resolution Workflow**

In the Materials discipline reports with claims of accreditation were issued that included the items of polymers and general unknowns. These items are not on the laboratory's scope of accreditation. A Firearms report with claims of accreditation was issued that included a trigger pull quantitative result. This is not on the laboratory's scope of accreditation.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A staff meeting was held to ensure all staff were aware of the laboratory's scope of accreditation as well as services offered that are outside of the scope of accreditation. Amended reports were issued. This nonconformity is resolved.

### 5.5 ISO/IEC 17025:2017

Resolved Nonconformity

**Requirement**

a) Does the laboratory define the organization and management structure of the laboratory, its place in any parent organization, and the relationships between management, technical operations and support services?
b) Does the laboratory specify the responsibility, authority and interrelationship of all personnel who manage, perform or verify work affecting the results of laboratory activities?
c) Does the laboratory document its procedures to the extent necessary to ensure the consistent application of its laboratory activities and the validity of the results?

ANAB NOTE c) Documenting procedures to the extent necessary to ensure the consistent application of testing and calibration and the validity of the results includes analysis and data interpretation to arrive at a result, opinion or interpretation.

**Nonconformity Resolution Workflow**

c) In the Firearms discipline procedures are not sufficiently detailed to the extent necessary to ensure consistent application of testing as well as consistency in the reporting of results between the examiners.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Revised procedure manuals and worksheets were published. Reports and technical records were reviewed demonstrating implementation of the updated procedures. This nonconformity is resolved.

# 6.4 Equipment

### 6.4.3.1 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

In addition to the procedural requirements in ISO/IEC 17025:2017, clause 6.4.3, are reagents prepared labeled with the identity of the reagent and the date of preparation or lot number? Are records retained identifying who made the reagent and the components used in preparation?

**Nonconformity Resolution Workflow**

Prepared reagents in the Friction Ridge discipline do not contain a record identifying the lot number of the components. A label containing the other required information is present but is not retained once the reagent has been consumed.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A standardized reagent labeling system was developed containing all required information. The published procedure and label templates were reviewed. A new reagent record system was created. This nonconformity is resolved.

### 6.4.3.2 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Do reference collections have each entry in the collection documented, uniquely identified and handled properly to protect the characteristic(s) of interest?

**Nonconformity Resolution Workflow**

Some weapons in the firearms reference collection are not uniquely identified.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A list of all weapons was generated.

Each weapon was assigned a unique identifier. This identifier was placed on each weapon. Photographs and the reference collection list were reviewed. This nonconformity is resolved.

**Nonconformity Resolution Workflow**

In the Materials discipline technical records contained Infrared Spectroscopy reference collection data that was not uniquely identified.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. The laboratory will no longer include educational information in the technical record. This nonconformity is resolved.

# 7.2.1 Selection and verification of methods

### 7.2.1.1 ISO/IEC 17025:2017

Resolved Nonconformity

**Requirement**

Does the laboratory use appropriate methods and procedures for all laboratory activities and, where appropriate, for evaluation of the measurement uncertainty as well as statistical techniques for analysis of data?

NOTE “Method” as used in this document can be considered synonymous with the term “measurement procedure” as defined in ISO/IEC Guide 99.

**Nonconformity Resolution Workflow**

The Materials discipline does not have procedure for the cross-sectioning of coating items. The Firearms discipline does not have a procedure for the decrypting of serial number barcodes.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. In Materials a revised document was published which includes a procedure for the cross-sectioning of coating items. In Firearms a decryption procedure was published. Two firearm examiners were authorized for performance of serial number restoration via decryption. These nonconformities are resolved.

### 7.2.1.1.1 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Does the laboratory use appropriate methods and procedures for all associated data analysis and interpretation?

**Nonconformity Resolution Workflow**

The Fire Debris discipline is reporting inconclusive results. The Reporting Trace Evidence Results manual does not include interpretation guidelines for fire debris analysis other than a reference to the ASTM E1618 method. The ASTM E1618 method does not allow the option to report inconclusive results.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Two revised documents were published. The laboratory will no longer report inconclusive results in fire debris analysis. This nonconformity is resolved.

# 7.4 Handling of test or calibration items

### 7.4.1.1 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

For all test items received except known origin individual characteristic database samples, does the procedure:
a) address requirements for storage, packaging, and sealing of items to:
1) protect the integrity of all items? and
2) require items to be re-sealed as soon as practicable?
b) address measures to be taken to secure unattended items?
c) require chain-of-custody for:
1) all items received? and
2) items that are collected or created and preserved for future testing (e.g., ESDA lifts, test-fired ammunition, latent print lifts, trace evidence, DNA extracts)?
d) require chain-of-custody to securely and accurately identify:
1) the individual(s) or location(s) receiving or transferring the item(s)? and
2) the item(s) being transferred? and
3) the chronological order of all transfers, including the date?
e) require communication to the customer regarding the disposition of all items received; and
f) address communication to the customer regarding items collected or created and preserved for future testing?

ANAB NOTE 1 c) An item being tracked could contain multiple components and be tracked as one item.

ANAB NOTE 2 d).1 Documentation of internal transfers does not need to include use of personal storage locations.

**Nonconformity Resolution Workflow**

The Fire Debris discipline creates and retains carbon strips at the laboratory. The customer is not notified these items have been created and preserved. The Impressions discipline retains test impressions at the laboratory. The customer is not notified these items have been preserved.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A revised Evidence Submission manual was published and communicated to their customers. The laboratory will no longer retain any created evidence items. All items will be returned to the submitting agency. This nonconformity is resolved.

# 7.5 Technical records

### 7.5.1 ISO/IEC 17025:2017

Resolved Nonconformity

**Requirement**

Does the laboratory ensure that technical records for each laboratory activity contain the results, report and sufficient information to facilitate, if possible, identification of factors affecting the measurement result and its associated measurement uncertainty and enable the repetition of the laboratory activity under conditions as close as possible to the original? Do the technical records include the date and the identity of personnel responsible for each laboratory activity and for checking data and results? Are original observations, data and calculations recorded at the time they are made and identifiable with the specific task?

ANAB NOTE Options for recording observations include, but are not limited to: written notes, photography, drawing, photocopying, and scanning.

**Nonconformity Resolution Workflow**

In the Firearms discipline the detail recorded of the original observations is insufficient to enable repetition of the analysis.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Revised procedure manuals and worksheets were published. Reports and technical records were reviewed demonstrating implementation of the updated procedures. This nonconformity is resolved.

# 7.6 Evaluation of measurement uncertainty

### 7.6.3.1 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Was the measurement uncertainty evaluated, or estimated when applicable, for all reported quantitative results?

NOTE An item descriptor that includes a number is not considered a result. This difference should be clear to the reader of the report.

**Nonconformity Resolution Workflow**

The Firearms discipline does not have a current estimation of measurement uncertainty for barrel length measurements. An estimation of measurement uncertainty for overall firearm length measurements has not been performed. Both types of quantitative measurements have been reported recently.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Revised procedure manuals were published. An estimation of measurement uncertainty for overall firearm length and barrel length was performed that included the current firearm examiners. An amended report was issued. This nonconformity is resolved.

### 7.6.4 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Were the following records retained for each evaluation and estimation of measurement uncertainty:
a) statement defining the measurand?
b) statement of how traceability is established for the measurement?
c) the equipment (e.g., measuring device[s] or instrument[s]) used?
d) all uncertainty components considered?
e) all uncertainty components of significance and how they were evaluated?
f) data used to estimate repeatability, intermediate precision, and/or reproducibility?
g) all calculations performed? and
h) the combined standard uncertainty, the coverage factor, the coverage probability, and the resulting expanded uncertainty?

**Nonconformity Resolution Workflow**

The Firearms discipline does not have a current estimation of measurement uncertainty for barrel length measurements. An estimation of measurement uncertainty for overall firearm length measurements has not been performed.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Revised procedure manuals were published. An estimation of measurement uncertainty for overall firearm length and barrel length was performed that included the current firearm examiners. This nonconformity is resolved.

## 7.8.1 General

### 7.8.1.2 ISO/IEC 17025:2017

Resolved Nonconformity

**Requirement**

Are results provided accurately, clearly, unambiguously and objectively, usually in a report (e.g. a test report or a calibration certificate or report of sampling), and include all the information agreed with the customer and necessary for the interpretation of the results and all information required by the method used? Are all issued reports retained as technical records?

NOTE 1 For the purposes of this document, test reports and calibration certificates are sometimes referred to as test certificates and calibration reports, respectively.

NOTE 2 Reports can be issued as hard copies or by electronic means, provided that the requirements of this document are met.

**Nonconformity Resolution Workflow**

Firearm reports do not clearly state the results with respect to caliber that is necessary for interpretation. Additionally some results are provided under the header of "descriptions" in the "Evidence Submitted" area on the report. This can be unclear to the reader of the report.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. Revised procedure manuals, worksheets, and reporting templates were published. Reports and technical records were reviewed demonstrating implementation of the updated procedures. This nonconformity is resolved.

### 7.8.1.2.2 ANAB Accreditation Requirement

Resolved Nonconformity

**Requirement**

Is there a procedure for reporting of results that:
a) identifies what will be reported for all items received, including items on which no work was performed, items collected or created and preserved for future testing, and for partial work performed?
b) requires qualifying the significance of associations in the report whether by a statistic or a qualitative statement?
c) requires communicating the reason(s) in the report when the reported results are inconclusive? and
d) requires reporting of the initial database entry (e.g., DNA profiles, friction ridge, ballistics, biometrics)?

NOTE b) Associations for multiple results may be qualified by a single statistic or qualitative statement if the statistics are identical or, where applicable, meet or exceed a defined minimum threshold.

**Nonconformity Resolution Workflow**

a) Laboratory procedures do not contain specific details for the reporting of items collected or created and preserved for future testing.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A revised Evidence Submission manual was published and communicated to their customers. The laboratory will no longer retain any created evidence items. All items will be returned to the submitting agency. All reports will include details on the items created and state the items are being returned to the agency. This nonconformity is resolved.

## 7.8.2 Common requirements for reports (test, calibration or sampling)

### 7.8.2.1 ISO/IEC 17025:2017

Resolved Nonconformity

**Requirement**

Does each report include at least the following information, unless the laboratory has valid reasons for not doing so, thereby minimizing any possibility of misunderstanding or misuse:
a) a title (e.g. “Test Report”, “Calibration Certificate” or “Report of Sampling”)?
b) the name and address of the laboratory?
c) the location of performance of the laboratory activities, including when performed at a customer facility or at sites away from the laboratory’s permanent facilities, or in associated temporary or mobile facilities?
d) unique identification that all its components are recognized as a portion of a complete report and a clear identification of the end?
e) the name and contact information of the customer?
f) identification of the method used?
g) a description, unambiguous identification, and, when necessary, the condition of the item?
h) the date of receipt of the test or calibration item(s), and the date of sampling, where this is critical to the validity and application of the results?
i) the date(s) of performance of the laboratory activity?
j) the date of issue of the report?
k) reference to the sampling plan and sampling method used by the laboratory or other bodies where these are relevant to the validity or application of the results?
l) a statement to the effect that the results relate only to the items tested, calibrated or sampled?
m) the results with, where appropriate, the units of measurement?

n) additions to, deviations, or exclusions from the method?
o) identification of the person(s) authorizing the report?
p) clear identification when results are from external providers?

NOTE Including a statement specifying that the report shall not be reproduced except in full without approval of the laboratory can provide assurance that parts of a report are not taken out of context.

ANAB NOTE 2 A legal requirement that dictates the information to be included in a report is a valid reason to not include one or more listed report elements.

ANAB NOTE 3 i) Date(s) may be reflected as a range of dates or the date of each test or calibration.

ANAB NOTE 4 o) Authorization of the report does not have to be performed by the same person(s) who authorized the results. (see ISO/IEC 17025:2017 7.8.1.1).

**Nonconformity Resolution Workflow**

f) Reports issued in the Friction Ridge discipline do not contain the level of detail required when reporting the methods utilized.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. The laboratory revised the reporting procedure and modified reporting language to add the enhancement method(s) utilized. This nonconformity is resolved.

# 8.1.1 General

8.1.1 ISO/IEC 17025:2017 — Resolved Nonconformity

**Requirement**

Does the laboratory establish, document, implement and maintain a management system that is capable of supporting and demonstrating the consistent achievement of the requirements of this document and assuring the quality of the laboratory results? In addition to meeting the requirements of Clauses 4 to 7, does the laboratory implement a management system in accordance with Option A or Option B?

NOTE See Annex B for more information.

**Nonconformity Resolution Workflow**

The Firearms reporting procedure specifies information to be recorded in the technical record on inconclusive results. This information is not captured in the technical records with sufficient detail to support the reported results.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A revised procedure was published. Reports and technical records were reviewed demonstrating implementation of the updated procedure. This nonconformity is resolved.

# 8.4 Control of records (Option A)

8.4.1 ISO/IEC 17025:2017 — Resolved Nonconformity

**Requirement**

Does the laboratory establish and retain legible records to demonstrate fulfilment of the requirements in this document?

**Nonconformity Resolution Workflow**

Reagents in the Friction Ridge discipline are verified at the time of preparation. This information is not documented as required in 6.4.4.

Corrective Action Closure Note: The laboratory performed cause analysis and evaluated impact. A standardized reagent labeling system was developed containing all required information. The published procedure and label templates were reviewed. A new reagent record system was created. This nonconformity is resolved.