

ASCLD/LAB INSPECTION REPORT



**NORTH CAROLINA
STATE BUREAU OF INVESTIGATION
TRIAD CRIME LABORATORY**

NOVEMBER 16, 2009

INTRODUCTION

This is a report of the ASCLD/LAB inspection of the North Carolina State Bureau of Investigation Triad Crime Laboratory. During the period of October 30 through November 10, 2009 staff inspector Edward A. Moilanen reviewed documentation which was provided by the laboratory concerning compliance with criteria for which the laboratory was found to not be fully compliant during the initial inspection.

The ASCLD/LAB inspection team consisted of the following members:

Edward A. Moilanen, Staff Inspector, ASCLD/LAB, Roscommon, Michigan

Nivanjit Gill, Contra Costa County Sheriff Department, California

Michael Gilmore, FBI, Quantico, Virginia

Patrick Davis, US Secret Service, Washington DC

The inspection was performed using the principles, standards and criteria established in the 2008 version of the ASCLD/LAB Accreditation Manual.

LABORATORY OVERVIEW

The North Carolina SBI Triad Crime Laboratory is a governmental laboratory which provides services primarily in the Greensboro area of North Carolina. The laboratory, located in the Guliford Building at 2306 West Meadowview Rd., Suite 110, Greensboro, NC, is seeking accreditation for the first time. Crime Laboratory Director Robert W. Evans reports to SBI Assistant Director Jerry Richardson. The Laboratory provides services in the disciplines of Controlled Substances, Toxicology, Digital & Multimedia Evidence (computer forensics and video analysis only) and Latent Prints. The Laboratory has a staff of ten (10) testifying analysts and three (3) support staff.

INSPECTION TEAM FINDINGS

The inspection team's scoring of each of the ASCLD/LAB Accreditation Standards and Evaluation Criteria from the 2008 Accreditation Manual follows. Each criterion for which the inspection team determined the laboratory to be in compliance is scored "Yes." Each criterion for which the inspection team found the laboratory to not be in total compliance is scored "No." Each criterion which is not applicable to the inspection of this laboratory is scored "N/A." The "Summary" portion of the report documents the basis for all non-compliance and all non-applicable findings of the Inspection Team.

STANDARDS AND CRITERIA

The laboratory should establish objectives which are relevant to the community that it serves and communicate them to all employees orally and in written form.

	Yes	No	N/A
1.1.1.1 (I) Does the laboratory have a written statement of its objectives?	<u>✓</u>	___	___
1.1.1.2 (I) Do the objectives appear to be relevant to the needs of the community serviced by the laboratory?	<u>✓</u>	___	___
1.1.1.3 (D) Does the laboratory staff understand and support the objectives?	<u>✓</u>	___	___

A laboratory or its parent agency should have a formal written budget which is consistent with the forensic services provided by it.

1.1.2.1 (I) Does the laboratory or its parent agency have a formal written budget?	<u>✓</u>	___	___
1.1.2.2 (I) Is the budget adequate to meet the written objectives?	<u>✓</u>	___	___

Clearly written and well understood procedures must exist for handling and preserving the integrity of evidence; laboratory security; preparation, storage, security and disposition of case records and reports; control of materials and supplies; maintenance and calibration of equipment and instruments; and for operation of individual characteristic databases. Clearly written and well understood documentation or procedures should also exist for job requirements and descriptions; personnel evaluations and objectives; and for employee complaints concerning the quality system.

Does clearly written and well understood documentation or procedure exist for the following:

1.1.2.3 (E) Handling and preserving the integrity of evidence?	<u>✓</u>	___	___
1.1.2.4 (E) Laboratory security?	<u>✓</u>	___	___
1.1.2.5 (E) Preparation, storage, security and disposition of case records and reports?	<u>✓</u>	___	___
1.1.2.6 (E) Control of materials and supplies?	<u>✓</u>	___	___
1.1.2.7 (E) Maintenance and calibration of equipment and instruments?	<u>✓</u>	___	___
1.1.2.8 (E) Operation of individual characteristic databases?	<u>✓</u>	___	___
1.1.2.9 (D) Job requirements and descriptions?	<u>✓</u>	___	___
1.1.2.10 (D) Personnel evaluations and objectives?	<u>✓</u>	___	___
1.1.2.11 (D) Employee complaints concerning the quality system?	<u>✓</u>	___	___

A laboratory should have a management information system which provides information which assists the laboratory in accomplishing its objectives.

	Yes	No	N/A
1.1.2.12 (I) Does the laboratory have and use a management information system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The laboratory manager should be able to relate the organizational structure to interacting variables such as those stated in the principle.

1.2.1.1 (D) Does the organizational structure group the work and personnel in a manner that allows for efficiency of operation, taking into account the interrelation of various forensic disciplines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

1.2.1.2 (D) Has the laboratory director considered and taken appropriate action to correct any discrepancies with regard to numbers of personnel when grouping work and resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

The laboratory director should have authority commensurate with the assigned responsibilities.

1.2.2.1 (I) Is the laboratory director's authority well defined?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

1.2.2.2 (I) Does the laboratory director have authority commensurate with responsibilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

Delegation of authority within the laboratory should follow the organizational process outlined in the principle.

1.2.2.3 (I) Is there sufficient delegation of authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

1.2.2.4 (I) Is authority of supervisors commensurate with their responsibilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

1.2.2.5 (I) Is each subordinate accountable to one and only one immediate supervisor per function?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

1.2.2.6 (I) Are performance expectations established and are they understood by laboratory personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

Constructive discussion should occur between supervisors and subordinates.

1.3.1.1 (D) Is there constructive discussion between supervisors and subordinates?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Supervisors should carefully and objectively review laboratory activities and personnel.

1.3.1.2 (I) Do supervisors carefully and objectively review laboratory activities and personnel?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Supervisory techniques should encourage creative thinking and objectivity and should recognize meritorious performance of subordinates.

	Yes	No	N/A
1.3.1.3 (D) Do the supervisory techniques encourage creative, objective thinking and recognize meritorious performance?	<u>✓</u>	___	___

Communication within the laboratory should exist for coordination of case work and to ensure wide dissemination of technical and operational information.

1.3.2.1 (D) Does an effective means of communication exist within the laboratory?	<u>✓</u>	___	___
---	----------	-----	-----

A training program to develop the technical skills of employees is essential in each applicable discipline and subdiscipline.

1.3.3.1 (E) Does the laboratory have and use a documented training program in each discipline and subdiscipline for employees who are new, untrained or in need of remedial training?	<u>✓</u>	___	___
---	----------	-----	-----

A formalized personnel development program is important to prepare employees to assume more responsible jobs.

1.3.3.2 (I) Does the laboratory have an employee development program?	<u>✓</u>	___	___
---	----------	-----	-----

The laboratory should maintain an adequate forensic library to include literature published in the applicable functional areas.

1.3.3.3 (I) Does the forensic library contain current books, journals, and other literature dealing with each functional area?	<u>✓</u>	___	___
--	----------	-----	-----

A system or procedure should exist to encourage a review of appropriate new literature by personnel.

1.3.3.4 (I) Does a system exist to encourage each examiner to review appropriate new literature?	<u>✓</u>	___	___
--	----------	-----	-----

A chain of custody record must be maintained which provides a comprehensive, documented history of each evidence transfer over which the laboratory has control.

1.4.1.1 (E) Does the laboratory have a written or secure electronic chain of custody record with all necessary data which provides for complete tracking of all evidence?	<u>✓</u>	___	___
---	----------	-----	-----

Each individual item of evidence must be marked for identification, when practical. If the item does not lend itself to marking, its proximal container or identifying tag must be marked.

1.4.1.2 (E) Is all evidence marked for identification?	<u>✓</u>	___	___
--	----------	-----	-----

Evidence seals must be designed and used to protect the integrity of the evidence.

1.4.1.3 (E) Is evidence stored under proper seal?	<u>✓</u>	___	___
---	----------	-----	-----

Procedural precautions must exist which reduce the risk of evidence loss, cross transfer, contamination and /or other deleterious change.

	Yes	No	N/A
1.4.1.4 (E) Is evidence protected from loss, cross transfer, contamination and/or deleterious change?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A secure area for overnight and/or long-term storage of evidence must be available.

1.4.1.5 (E) Is there a secure area for overnight and/or long-term storage of evidence?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

A forensic laboratory must establish whether individual characteristic database samples are treated as evidence, reference materials, or examination documentation.

1.4.1.6 (E) Has the laboratory established whether individual characteristic database samples are treated as evidence, reference materials, or examination documentation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

Each individual characteristic database sample under the control of the laboratory must be uniquely identified.

1.4.1.7 (E) Is each individual characteristic database sample under the control of the laboratory uniquely identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------

Procedural precautions must exist which reduce the risk of individual characteristic database sample loss, cross transfer, contamination and /or other deleterious change.

1.4.1.8 (E) Are individual characteristic database samples protected from loss, cross transfer, contamination and/or deleterious change?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------

Access to individual characteristic database samples under the control of the laboratory must be restricted to those persons authorized by the laboratory director.

1.4.1.9 (E) Is access to individual characteristic database samples restricted to those persons authorized by the laboratory director?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------

All elements of a laboratory's quality system must be clearly documented in a quality manual which is kept current under the responsibility of a quality manager.

1.4.2.1 (E) Does the laboratory have a comprehensive quality manual?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

A laboratory must have an individual designated as the Quality Manager.

1.4.2.2 (E) Is an individual designated as the quality manager?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

To verify that its operations continue to comply with the requirements of its quality system and the standards under which ASCLD/LAB accreditation was granted, each accredited laboratory must conduct an annual audit of its operations and submit an Annual Accreditation Audit Report (Appendix 6) to ASCLD/LAB by the anniversary of its accreditation.

		Yes	No	N/A
1.4.2.3 (E)	Did the accredited laboratory conduct and document an annual audit of its operations and submit an annual accreditation audit report to ASCLD/LAB by the required deadline?	_____	_____	<u>✓</u>

The quality system requires that laboratory management conduct a review at least once yearly to ensure the continued suitability and effectiveness of such a system.

1.4.2.4 (E)	Does the laboratory conduct and document an annual review of its quality system?	<u>✓</u>	_____	_____
-------------	--	----------	-------	-------

Procedures used must be generally accepted in the field or supported by data gathered and recorded in a scientific manner.

1.4.2.5 (E)	Are the procedures used generally accepted in the field or supported by data gathered and recorded in a scientific manner?	<u>✓</u>	_____	_____
-------------	--	----------	-------	-------

New technical procedures must be validated to prove their efficacy in examining evidence material before being implemented on casework.

1.4.2.6 (E)	Are new technical procedures scientifically validated before being used in casework and is the validation documentation available for review?	<u>✓</u>	_____	_____
-------------	---	----------	-------	-------

The laboratory must maintain written copies of appropriate technical procedures.

1.4.2.7 (E)	Are the technical procedures used by the laboratory documented and are the documents available to laboratory personnel for review?	<u>✓</u>	_____	_____
-------------	--	----------	-------	-------

Controls and standard samples must be used and documented in the case record to ensure the validity of the testing parameters and, thereby, the conclusion.

1.4.2.8 (E)	Are appropriate controls and standards specified in the procedures and are they used and documented in the case record to ensure the validity of examination results?	<u>✓</u>	_____	_____
-------------	---	----------	-------	-------

The quality of the standard samples and reagents must be adequate for the procedure used.

1.4.2.9 (E)	Is the quality of the standard samples and reagents adequate for the procedure used?	<u>✓</u>	_____	_____
-------------	--	----------	-------	-------

All reagents must be routinely tested for their reliability.

1.4.2.10 (E)	Does the laboratory routinely check the reliability of its reagents?	<u>✓</u>	_____	_____
--------------	--	----------	-------	-------

Instruments/equipment should be adequate for the procedures used.

1.4.2.11 (I)	Are the instruments/equipment adequate for the procedures used?	<u>✓</u>	_____	_____
--------------	---	----------	-------	-------

Instruments/equipment should be maintained in proper working order.

	Yes	No	N/A
1.4.2.12 (I) Are the instruments/equipment in proper working order?	<u>✓</u>	___	___

Instruments/equipment must be properly calibrated and calibration records maintained for all calibrated instruments.

1.4.2.13 (E) Are the instruments/equipment properly calibrated?	<u>✓</u>	___	___
---	----------	-----	-----

The laboratory must create and maintain a uniquely identified case record for all administrative and examination documentation generated and/or received by the laboratory for each case involving the analysis of evidence.

1.4.2.14 (E) Does the laboratory create and maintain a uniquely identified case record for all examination and administrative documentation generated and/or received by the laboratory for each case involving the analysis of evidence?	<u>✓</u>	___	___
---	----------	-----	-----

The laboratory's unique case identifier must be on each page of examination documentation, and the handwritten initials (or secure electronic equivalent) of the person generating the examination documentation must be on each page generated by that person.

1.4.2.15 (E) Does the laboratory's unique case identifier appear on each page of examination documentation, and does the handwritten initials (or secure electronic equivalent) of the person generating the examination documentation appear on each page generated by that person?	<u>✓</u>	___	___
--	----------	-----	-----

Examination documentation must be sufficiently detailed to support the conclusions and opinions reported by the examiner(s) and must be such that, in the absence of the examiner(s), another competent examiner or supervisor could evaluate what was done and interpret the data. Examination documentation must be of a permanent nature and must be free of obliterations and erasures.

1.4.2.16 (E) Are conclusions and opinions in reports supported by data available in the case record, and are the examination documents sufficiently detailed such that, in the absence of the examiner(s), another competent examiner or supervisor could evaluate what was done and interpret the data?	<u>✓</u>	___	___
--	----------	-----	-----

1.4.2.17 (E) Is examination documentation of a permanent nature and is it free of obliterations and erasures?	<u>✓</u>	___	___
---	----------	-----	-----

Laboratory personnel who issue findings based on examination documentation generated by another person(s) must complete and document the review of all relevant pages of examination documentation in the case record.

1.4.2.18 (E) Has each person(s) in the laboratory who issued findings based on examination documentation generated by another person, completed a review of all relevant pages of examination documentation and documented the review in the case record?	<u>✓</u>	___	___
---	----------	-----	-----

Written reports must be generated for all analytical work performed on evidence by the laboratory and must contain the conclusions and opinions that address the purpose for which the analytical work was undertaken. The significance of associations made must be communicated clearly and qualified properly. The name of the author(s) must appear in the report.

	Yes	No	N/A
1.4.2.19 (E) Does the laboratory generate written reports for all analytical work performed on evidence, and do the reports contain the conclusions and opinions that address the purpose for which the analytical work was undertaken?	<u>✓</u>	_____	_____

1.4.2.20 (E) Where associations are made, is the significance of the association communicated clearly and qualified properly in the report?	<u>✓</u>	_____	_____
---	----------	-------	-------

1.4.2.21 (E) Does the name of the author(s) appear in the report?	<u>✓</u>	_____	_____
---	----------	-------	-------

It is essential that a representative number of reports be subjected to a technical review.

1.4.2.22 (E) Does the laboratory have, use and document a system of technical review of the reports to ensure that the conclusions of its examiners are reasonable and within the constraints of scientific knowledge?	<u>✓</u>	_____	_____
--	----------	-------	-------

Administrative reviews must be conducted to ensure the completeness and correctness of the reports issued.

1.4.2.23 (E) Does the laboratory conduct and document administrative reviews of all reports issued?	<u>✓</u>	_____	_____
---	----------	-------	-------

The laboratory must have and follow a written procedure whereby the testimony of each examiner is monitored at least once every year.

1.4.2.24 (E) Does the laboratory monitor the testimony of each examiner at least annually and is the examiner given feedback from the evaluation?	<u>✓</u>	_____	_____
---	----------	-------	-------

The laboratory must have a written procedure which it uses to initiate a review and to take corrective action when the laboratory has an indication of a significant problem with a technical procedure or the work of an analyst.

1.4.2.25 (E) If the laboratory has an indication of a significant technical problem, is there a procedure in writing and in use whereby the laboratory initiates a review and takes any corrective action required?	<u>✓</u>	_____	_____
---	----------	-------	-------

Each laboratory must have a documented program of proficiency testing which measures the capability of its examiners and the reliability of its analytical results.

1.4.3.1 (E) Does the laboratory have a documented program of proficiency testing?	<u>✓</u>	_____	_____
---	----------	-------	-------

The laboratory must participate in proficiency testing programs in which samples are provided by an external test provider. ASCLD/LAB approved providers must be used where available.

	Yes	No	N/A
1.4.3.2 (E) Does the laboratory participate in proficiency testing programs conducted by approved test providers or by other external provider(s) when no approved provider is available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Each Examiner should be proficiency tested annually in each subdiscipline in which casework is performed.

1.4.3.3 (I) Was each examiner proficiency tested annually in each subdiscipline in which casework was performed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

The laboratory should conduct annual proficiency testing in each discipline using re-examination or blind techniques.

1.4.3.4 (I) Does the laboratory conduct proficiency testing using re-examination or blind techniques?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	-------------------------------------	--------------------------

Each examiner must be proficiency tested at least once, during each five-year accreditation cycle, in each subdiscipline in which the examiner performs casework examinations and issues report.

1.4.3.5 (E) Was each examiner proficiency tested at least once, during the previous five-year accreditation cycle, in every subdiscipline in which the examiner performed casework examinations and issued reports?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

MANAGEMENT

The laboratory director should have a minimum of a baccalaureate degree in a natural science, criminalistics or a closely related field. If the director lacks a scientific background, then there should be support within management by personnel with appropriate scientific background.

2.1.1 (I) Does the laboratory director possess a degree in a natural science, criminalistics or in a closely related field, or is the laboratory director supported by scientific personnel of sufficient managerial rank and authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

A laboratory director should have at least five years of forensic science experience performing casework in one of the ASCLD/LAB accredited disciplines.

2.1.2 (D) Does the laboratory director have at least five years of forensic science experience?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

Additional education in management or business administration by college course work or short training courses (or both) is recommended.

2.1.3 (D) Does the laboratory director have some formal training in management?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

The laboratory director should have at least two years of experience in management.

	Yes	No	N/A
2.1.4 (D) Does the laboratory director have at least two years of managerial experience?	<u>✓</u>	___	___

CONTROLLED SUBSTANCES

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field is required.

2.2.1 (E) Does each examiner possess a baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field and does each have experience/training commensurate with the examinations and testimony provided?	<u>✓</u>	___	___
--	----------	-----	-----

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures as applied to the tasks performed.

2.2.2 (E) Does each examiner understand the instruments, and the methods and procedures used?	<u>✓</u>	___	___
---	----------	-----	-----

Examiners must have successfully completed a competency test.

2.2.3 (E) Did each examiner successfully complete a competency test prior to assuming casework responsibility?	<u>✓</u>	___	___
--	----------	-----	-----

A proficiency test must be successfully completed by each examiner at least annually.

2.2.4 (E) Did each examiner successfully complete an annual proficiency test?	<u>✓</u>	___	___
---	----------	-----	-----

TOXICOLOGY

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate or advanced degree in a natural science, toxicology, criminalistics or in a closely related field is required.

2.3.1 (E) Does each examiner have a baccalaureate or advanced degree in a natural science, toxicology, criminalistics or in a closely related field and does each have experience/training commensurate with the examinations and testimony provided?	<u>✓</u>	___	___
---	----------	-----	-----

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.3.2 (E) Does each examiner understand the instruments, and the methods and procedures used?	<u>✓</u>	___	___
---	----------	-----	-----

Examiners must have successfully completed a competency test.

	Yes	No	N/A
2.3.3 (E) Did each examiner successfully complete a competency test prior to assuming casework responsibility?	<u>✓</u>	___	___

A proficiency test must be successfully completed by each examiner at least annually.

2.3.4 (E) Did each examiner successfully complete an annual proficiency test?	<u>✓</u>	___	___
---	----------	-----	-----

TRACE EVIDENCE

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field is required.

2.4.1 (E) Does each examiner possess a baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field and does each have experience/training commensurate with the examinations and testimony provided?	___	___	<u>✓</u>
--	-----	-----	----------

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.4.2 (E) Does each examiner understand the instruments, and the methods and procedures used?	___	___	<u>✓</u>
---	-----	-----	----------

A competency test must be successfully completed prior to working cases of each evidence type.

2.4.3 (E) Did each examiner successfully complete a competency test in each of the subdisciplines processed prior to assuming casework responsibility?	___	___	<u>✓</u>
--	-----	-----	----------

A proficiency test must be successfully completed by each examiner at least annually.

2.4.4 (E) Did each examiner successfully complete an annual proficiency test?	___	___	<u>✓</u>
---	-----	-----	----------

BIOLOGY

Examiners must have education and experience/training commensurate with the examinations and testimony provided. A baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field is required.

2.5.1 (E) Does each examiner possess a baccalaureate or advanced degree in a natural science, criminalistics or in a closely related field and does each have experience/training commensurate with the examinations and testimony provided?	___	___	<u>✓</u>
--	-----	-----	----------

		Yes	No	N/A
2.5.2 (E)	Does each examiner performing DNA analysis have education, training and experience consistent with those required by the quality assurance audit document?	___	___	<u>✓</u>

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures applied to the tasks performed.

2.5.3 (E)	Does each examiner understand the instruments, and the methods and procedures used?	___	___	<u>✓</u>
-----------	---	-----	-----	----------

Examiners must have successfully completed a competency test.

2.5.4 (E)	Did each examiner successfully complete a competency test prior to assuming casework responsibility?	___	___	<u>✓</u>
-----------	--	-----	-----	----------

A proficiency test must be successfully completed by each examiner at least annually?

2.5.5 (E)	Did each examiner successfully complete an annual proficiency test?	___	___	<u>✓</u>
-----------	---	-----	-----	----------

Two proficiency tests must be successfully completed by each DNA examiner annually.

2.5.6 (E)	Did each examiner performing DNA analysis successfully complete two annual proficiency tests from an approved test provider?	___	___	<u>✓</u>
-----------	--	-----	-----	----------

FIREARMS/TOOLMARKS

Firearms/toolmarks examiners should have a baccalaureate degree with science courses.

2.6.1 (I)	Does each examiner possess a baccalaureate degree with science courses?	___	___	<u>✓</u>
-----------	---	-----	-----	----------

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

2.6.2 (E)	Does each examiner understand the instruments, and the methods and procedures used?	___	___	<u>✓</u>
-----------	---	-----	-----	----------

Examiners must have education and experience/training commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.6.3 (E)	Did each examiner have extensive training from a qualified examiner and does each have experience commensurate with the examinations and testimony provided?	___	___	<u>✓</u>
-----------	--	-----	-----	----------

Examiners must successfully complete a competency test.

	Yes	No	N/A
2.6.4 (E) Did each examiner successfully complete a competency test prior to assuming case work responsibility?	___	___	✓ ___

A proficiency test must be successfully completed by each examiner at least annually.

2.6.5 (E) Did each examiner successfully complete an annual proficiency test?	___	___	✓ ___
---	-----	-----	----------

QUESTIONED DOCUMENTS

Questioned document examiners should have a baccalaureate degree with science courses.

2.7.1 (I) Does each examiner possess a baccalaureate degree with science courses?	___	___	✓ ___
---	-----	-----	----------

Examiners must have a good understanding of the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

2.7.2 (E) Does each examiner understand the instruments, and the methods and procedures used?	___	___	✓ ___
---	-----	-----	----------

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified document examiner has been completed.

2.7.3 (E) Did each examiner have extensive training from a qualified examiner and does each have experience commensurate with the examinations and testimony provided?	___	___	✓ ___
--	-----	-----	----------

Examiners must have successfully completed a competency test.

2.7.4 (E) Did each examiner successfully complete a competency test prior to assuming case work responsibility?	___	___	✓ ___
---	-----	-----	----------

A proficiency test must be successfully completed by each examiner at least annually.

2.7.5 (E) Did each examiner successfully complete an annual proficiency test?	___	___	✓ ___
---	-----	-----	----------

LATENT PRINTS

Latent print examiners should have a baccalaureate degree with science courses.

2.8.1 (I) Does each examiner possess a baccalaureate degree with science courses?	✓ ___	___	___
---	----------	-----	-----

Examiners must have a good understanding of the concept of individualization and the principles, uses and limitations of the instruments, and the methods and procedures used as applied to the tasks performed.

		Yes	No	N/A
2.8.2 (E)	Does each examiner understand the instruments, and the methods and procedures used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified latent print examiner has been completed.

2.8.3 (E)	Did each examiner have extensive training from a qualified examiner and does each have experience commensurate with the examinations and testimony provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----------	--	-------------------------------------	--------------------------	--------------------------

Examiners must have successfully completed a competency test.

2.8.4 (E)	Did each examiner successfully complete a competency test prior to assuming casework responsibility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----------	--	-------------------------------------	--------------------------	--------------------------

A proficiency test must be successfully completed by each examiner at least annually.

2.8.5 (E)	Did each examiner successfully complete an annual proficiency test?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-----------	---	-------------------------------------	--------------------------	--------------------------

TECHNICAL SUPPORT

The individual must meet the specification of the job description.

2.9.1 (E)	Do technical support personnel meet the requirements of their job descriptions?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------	---	--------------------------	--------------------------	-------------------------------------

The job description and the duties performed must be in agreement.

2.9.2 (E)	Are the job descriptions and the duties performed in agreement?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------	---	--------------------------	--------------------------	-------------------------------------

Technical support staff must have successfully completed an appropriate competency test.

2.9.3 (E)	Did each member of the technical support staff successfully complete an appropriate competency test prior to assuming casework responsibility?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------	--	--------------------------	--------------------------	-------------------------------------

Technical support personnel must successfully complete an appropriate proficiency test annually.

2.9.4 (E)	Did all technical support personnel successfully complete an appropriate proficiency test, annually?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
-----------	--	--------------------------	--------------------------	-------------------------------------

Two proficiency tests must be successfully completed annually by all technical support personnel performing DNA analysis.

	Yes	No	N/A
2.9.5 (E) Did all technical support personnel performing DNA analysis successfully complete two annual proficiency tests from an approved test provider?	___	___	<u>✓</u>

CRIME SCENE

The examiner must meet the requirements of the job description.

2.10.1 (E) Do examiners meet the requirements of their job descriptions?	___	___	<u>✓</u>
--	-----	-----	----------

Examiners must have a good understanding of the concept and theory of scene security and integrity, and the uses and limitations of the equipment, methods and procedures used to document and process crime scenes, as applied to the tasks performed.

2.10.2 (E) Does each examiner understand the equipment, methods and procedures used?	___	___	<u>✓</u>
--	-----	-----	----------

Examiners must have training and experience commensurate with the examinations, documentation and testimony provided, as applied to the tasks performed. Independent examinations and documentation at crime scenes must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.10.3 (E) Did each examiner have extensive training from a qualified examiner and does each have experience commensurate with the examinations/documentation and testimony provided?	___	___	<u>✓</u>
---	-----	-----	----------

Examiners must have successfully completed a competency test(s) as applied to the task(s) performed.

2.10.4 (E) Did each examiner successfully complete a competency test(s) prior to primary responsibility for the examination, documentation and processing of a crime scene?	___	___	<u>✓</u>
---	-----	-----	----------

A proficiency test must be completed by each person conducting crime scene examinations at least annually. The proficiency test should reflect the types of procedures, methods and equipment as applied to the typical task(s) performed.

2.10.5 (E) Did each examiner successfully complete an annual proficiency test?	___	___	<u>✓</u>
--	-----	-----	----------

DIGITAL & MULTIMEDIA EVIDENCE

Digital and multimedia evidence examiners should have a baccalaureate degree with science courses.

2.11.1 (I) Does each examiner possess a baccalaureate degree with science courses?	<u>✓</u>	___	___
--	----------	-----	-----

Examiners must have a good understanding of the principles, uses and limitations of the hardware, software, and the methods and procedures as applied to the tasks performed.

	Yes	No	N/A
2.11.2 (E) Does each examiner understand the equipment, programs, methods and procedures used?	<u>✓</u>	___	___

Examiners must have education and training/experience commensurate with the examinations and testimony provided. Independent case examinations must not be undertaken until extensive instruction from a qualified examiner has been completed.

2.11.3 (E) Does each examiner have experience commensurate with the examinations/documentation and testimony provided?	<u>✓</u>	___	___
--	----------	-----	-----

Examiners must have successfully completed a competency test.

2.11.4 (E) Did each examiner successfully complete a competency test in each subdiscipline prior to assuming casework responsibility?	<u>✓</u>	___	___
---	----------	-----	-----

A proficiency test must be successfully completed by each examiner at least annually.

2.11.5 (E) Did each examiner successfully complete an annual proficiency test?	<u>✓</u>	___	___
--	----------	-----	-----

Each employee should have adequate work space to accomplish assigned tasks.

3.1.1 (I) Does each employee have adequate work space to accomplish assigned tasks?	<u>✓</u>	___	___
---	----------	-----	-----

Sufficient space should be provided for storage of supplies, equipment and tools.

3.1.2 (D) Is there sufficient space provided for storage of supplies, equipment and tools?	<u>✓</u>	___	___
--	----------	-----	-----

Examiners should have space available for writing reports and other official communications.

3.1.3 (I) Is there adequate space available for examiners for writing reports and other official communications?	<u>✓</u>	___	___
--	----------	-----	-----

Adequate and appropriate space should exist for records and reference materials.

3.1.4 (I) Is there adequate and appropriate space available for records, reference works and other necessary documents?	<u>✓</u>	___	___
---	----------	-----	-----

Sufficient space should be available for instrumentation/equipment to facilitate its operation.

3.1.5 (I) Is adequate space available for instrumentation/equipment to facilitate its operation?	<u>✓</u>	___	___
--	----------	-----	-----

Accessories should be stored near instrumentation/equipment to facilitate its use and operation.

	Yes	No	N/A
3.1.6 (D) Are accessories stored near instrumentation/equipment to facilitate its use and operation?	<u>✓</u>	___	___

The physical design should permit the efficient flow of evidence from the time of its acceptance until its proper disposal.

3.2.1 (I) Does the physical design permit the efficient flow of evidence from the time of its acceptance until its proper disposal?	<u>✓</u>	___	___
---	----------	-----	-----

The relative locations of functional areas should facilitate the use of equipment and instruments.

3.2.2 (D) Do the relative locations of functional areas facilitate the use of equipment and instruments?	<u>✓</u>	___	___
--	----------	-----	-----

Adequate and proper lighting should be available for personnel to carry out assigned tasks.

3.2.3 (I) Is there adequate and proper lighting available for personnel to carry out assigned tasks?	<u>✓</u>	___	___
--	----------	-----	-----

Adequate and proper plumbing and wiring should be available and accessible to carry out assigned tasks.

3.2.4 (I) Is there adequate and proper plumbing and wiring available and accessible to carry out assigned tasks?	<u>✓</u>	___	___
--	----------	-----	-----

The laboratory should have proper general ventilation.

3.2.5 (I) Does the laboratory have proper general ventilation?	<u>✓</u>	___	___
--	----------	-----	-----

There should be adequate heating, cooling and humidity control in the laboratory.

3.2.6 (I) Is the heating, cooling and humidity control in the laboratory adequate?	<u>✓</u>	___	___
--	----------	-----	-----

Access to the operational area of the laboratory must be controllable and limited to those individuals who are assigned to routinely work in the area or to those individuals designated by the laboratory director to have access.

3.3.1 (E) Is access to the operational area of the laboratory controllable and limited?	<u>✓</u>	___	___
---	----------	-----	-----

All exterior entrance/exit points require adequate security control.

3.3.2 (E) Do all exterior entrance/exit points have adequate security control?	<u>✓</u>	___	___
--	----------	-----	-----

Internal areas requiring limited/controlled access must have a lock system.

	Yes	No	N/A
3.3.3 (E) Do all internal areas requiring limited/controlled access have a lock system?	<u>✓</u>	___	___

Accountability of all keys, magnetic cards, etc., must be documented and their distribution limited to those individuals designated by the laboratory director to have access.

3.3.4 (E) Is distribution of all keys, magnetic cards, etc., documented and is distribution limited to those individuals designated by the laboratory director to have access?	<u>✓</u>	___	___
--	----------	-----	-----

The laboratory must be monitored during vacant hours by an intrusion alarm or by security personnel.

3.3.5 (E) Is the laboratory secured during vacant hours by means of an intrusion alarm or by security personnel?	<u>✓</u>	___	___
--	----------	-----	-----

The laboratory should have a fire detection system.

3.3.6 (I) Does the laboratory have a fire detection system?	<u>✓</u>	___	___
---	----------	-----	-----

All elements of a laboratory's health and safety program must be clearly documented in a manual. The program should be monitored and the manual kept current by a health and safety manager.

3.4.1 (I) Does the laboratory have an effective health and safety program documented in a manual?	<u>✓</u>	___	___
3.4.2 (I) Is an individual designated as the health and safety manager?	<u>✓</u>	___	___
3.4.3 (I) Is the health and safety program monitored regularly and reviewed annually to ensure that its requirements are being met?	<u>✓</u>	___	___

The laboratory should have available and encourage the use of safety devices (particularly those required in its health and safety manual). Examples of such devices are goggles, face protectors, ear protectors, gloves and fire extinguishers.

3.4.4 (I) Does the laboratory have available and encourage the use of safety devices, particularly those required by its health and safety manual?	<u>✓</u>	___	___
--	----------	-----	-----

Proper equipment and material should be available for the handling of carcinogenic, toxic and/or other dangerous material spills.

3.4.5 (I) Does the laboratory have proper equipment and material available for the handling of carcinogenic, toxic and/or other dangerous material spills?	<u>✓</u>	___	___
--	----------	-----	-----

The laboratory should have safety shower and eye wash equipment in appropriate locations and in good working condition.

		Yes	No	N/A
3.4.6 (I)	Does the laboratory have safety shower and eye wash equipment in appropriate locations and in good working condition?	<u>✓</u>	___	___

Exhaust hoods must be available to maintain a safe work environment.

3.4.7 (I)	Are sufficient exhaust hoods available to maintain a safe work environment?	<u>✓</u>	___	___
-----------	---	----------	-----	-----

Sufficient first-aid kits should be available and strategically located.

3.4.8 (I)	Are sufficient first-aid kits available and strategically located?	<u>✓</u>	___	___
-----------	--	----------	-----	-----

An adequate number of personnel should hold current certification in first-aid.

3.4.9 (I)	Does the laboratory have an adequate number of personnel holding current certification in first-aid?	<u>✓</u>	___	___
-----------	--	----------	-----	-----

Space should be provided for safe storage of volatile, flammable, explosive and other hazardous materials.

3.4.10 (I)	Is appropriate space provided for safe storage of volatile, flammable, explosive and other hazardous materials?	<u>✓</u>	___	___
------------	---	----------	-----	-----

Emergency exits from the laboratory should be in compliance with safe working requirements.

3.4.11 (I)	Are the emergency exits from the laboratory adequate for safe exit in an emergency?	<u>✓</u>	___	___
------------	---	----------	-----	-----

General cleanliness and good-housekeeping should be apparent.

3.4.12 (D)	Is there general cleanliness and apparent good-housekeeping in the laboratory?	<u>✓</u>	___	___
------------	--	----------	-----	-----

SUMMARY

The following summarizes the criteria for which the Inspection Team determined the laboratory to not be in compliance at the time of the initial inspection and documents the basis for the findings under the heading of Original inspection finding. The report also documents, as Supplemental findings, the laboratory's compliance with those criteria since the initial inspection.

- 1.4.2.7 (E) Are the technical procedures used by the laboratory documented and are the documents available to laboratory personnel for review?

Original inspection finding:

Toxicology procedure J-5, Extraction Procedure for Base Drugs, dated July 1, 2008, as documented in the official electronic procedure manual is not consistent with the working copy of procedure J-5, dated June 11, 2008, being used by analysts. The working copy has handwritten notations changing the ingredient amounts used to prepare phosphate buffer and internal standard solutions. These changes are not reflected in the official electronic copy.

Supplemental finding:

Toxicology procedure J-5 has been updated effective September 29, 2009. The measured ingredient amounts for the phosphate buffer and internal standard are now correctly reflected in both the electronic and working copies of the procedure. An example was added for the preparation of methylene chloride: isopropyl alcohol (4:1) with 2% ammonium hydroxide.

Original inspection finding:

Drug Chemistry Section Policy and Procedure Manual requires that clan lab evidence be destroyed sixty days after the report of analysis is issued unless otherwise requested. A review of the only two clan lab reports completed (one completed in June 2009 and one completed in December 2008) revealed this policy is not being followed. Evidence from these two clan lab cases was stored in the laboratory.

Supplemental finding:

The laboratory director issued Administrative Order No. 09-01, effective October 14, 2009 which states, "Clandestine laboratory evidence in drug chemistry cases can be destroyed after being retained for at least sixty days. The Triad Regional Crime Laboratory will still consider this to be evidence until it is destroyed." Administrative Orders are effective pending formal modification of the Drug Chemistry Section Policy and Procedure Manual. An electronic copy of the Administrative Order was received and reviewed.

- 1.4.2.9 (E) Is the quality of the standard samples and reagents adequate for the procedure used?

Original inspection finding:

Controlled substance standard containers are labeled with the name of the standard and lot number. There is no documentation for the majority of drug standards in this laboratory that the identity of the standard is confirmed or that the standard conforms to the requirements of Controlled Substances Technical Procedure M-01. The procedure requirements include: (1) the standard be tested with infrared or mass spectroscopy to confirm its identity with the resulting spectrum being added to the instrumental library, (2) all data collected and/or received will be

filed in the "Certified Standards" notebook in the section library, (3) the certifying chemist is required to initial and date the standard container.

Supplemental finding:

New controlled substance standards have been ordered to replace the samples that did not have documentation and/or labeling that complied with laboratory policy. Electronically transmitted images of spectra and photographs of the containers for five new drug standards were received and reviewed.

- 1.4.2.16 (E) Are conclusions and opinions in reports supported by data available in the case record, and are the examination documents sufficiently detailed such that, in the absence of the examiner(s), another competent examiner or supervisor could evaluate what was done and interpret the data?

Original inspection finding:

Controlled substances examination documentation for marijuana identifications is not sufficiently detailed such that another competent examiner could evaluate what was done and interpret the data. Documentation for marijuana examinations has no reviewable description of what was observed. Leaves and stems are checked as being observed however there is no reference in the procedures as to the characteristics of the leaves and stems necessary for a positive identification.

Supplemental finding:

The Drug Chemistry Section Technical Procedure Manual was revised to add and reference descriptions which document the exact microscopic and macroscopic characteristics observed when identifying marijuana. An electronic copy of procedure was received and reviewed.

Original inspection finding:

Controlled substances examination documentation for cocaine identification using polarized light microscopy does not describe the structure and habit of crystals observed. The only documentation is that "cocaine crystals-crosses" were observed. There is no reference in the procedures as to the characteristics of the crystals necessary for a positive identification.

Supplemental finding:

Drug Chemistry Section Technical Procedure B-04 was modified to include the term "cross" or "feathered cross-shaped" crystal and references which document the characteristics observed when identifying cocaine. An electronic copy of modified procedure was received and reviewed.

- 3.4.1 (I) Does the laboratory have an effective health and safety program documented in a manual?

Original inspection finding:

The laboratory safety manual requires employees to be trained in the details of the Chemical Hygiene Plan and shall include: (1) the location and availability of the chemical Hygiene Plan. Six of seven analysts asked, did not know where the chemical hygiene plan was located.

Supplemental finding:

A copy of the Crime Laboratory Safety Manual has been distributed to each employee and the manual is available electronically. A training record has been signed and dated by each

employee as they acknowledge having reviewed the Chemical Hygiene Plan and location in the manual. An electronic copy of the training record, signed and dated by laboratory employees, was received and reviewed.

3.4.3 (I) Is the health and safety program monitored regularly and reviewed annually to ensure that its requirements are being met?

Original inspection finding:

The health and safety program is monitored annually however not all the requirements are being met. Laboratory safety policy requires hazardous material containers to be labeled with the appropriate chemical hazard category. Reagent containers in Controlled Substances and Toxicology are not labeled with the hazard category. Laboratory safety policy requires "highly toxic chemicals shall be stored in unbreakable secondary containers". Acid bottles in the chemical storage room are stored in an acid resistant cabinet but not in unbreakable secondary containers.

Supplemental finding:

The Laboratory Safety Manual has been revised. The requirement for labeling hazardous material containers with the appropriate hazard category has been removed from the safety manual. The requirement for storing highly toxic chemicals in unbreakable secondary containers has been removed from the manual. An electronic copy of the Safety Manual with the revisions was received and reviewed.

The inspection team was not presented with documentation of compliance for the following important criterion which was scored NO during the initial inspection:

1.4.3.4 (I) Does the laboratory conduct proficiency testing using re-examination or blind techniques?

Original inspection finding:

The laboratory does not conduct proficiency testing using re-examination or blind techniques.

Criteria 1.4.1.6, 1.4.1.7, 1.4.1.8 and 1.4.1.9 were scored N/A because the laboratory does not accept, input or store individual characteristic database samples.

Criterion 1.4.2.3 was scored N/A because the laboratory is applying for accreditation for the first time.

All criteria for sections 2.4 Trace Evidence, 2.5 Biology, 2.6 Firearms/Toolmarks, 2.7 Questioned Documents, were scored N/A because the laboratory does not perform work in the disciplines.

All criteria for section 2.9, Technical Support, were scored N/A because the laboratory does not employ technical support personnel

All criteria for section 2.10, Crime Scene, were scored N/A because the laboratory elected to not apply for accreditation in the Crime Scene discipline.

SUMMATION OF CRITERIA RATINGS

	Total Possible	Total Yes	Total No	Total N/A	Total Number Yes/No
Essential	91	58	0	33	58
Important	45	42	1	2	43
Desirable	16	16	0	0	16

Percent Essential: 100%

Percent Important: 98%

Percent Desirable: 100%

Areas sought for accreditation are as follows:

Controlled Substances

Toxicology

Digital & Multimedia Evidence (computer forensics and video analysis only)

Latent Prints

Prepared by: Edward A. Moilanen, ASCLD/LAB Staff Inspector

Ralph M. Keaton

Ralph M. Keaton, Executive Director