

ASCLD/LAB-*International*

Final Assessment Report

North Carolina State Crime Laboratory
Raleigh, North Carolina

PART 1 – GENERAL INFORMATION

INTRODUCTION

This is the *ASCLD/LAB-International Final Assessment Report* of the North Carolina State Crime Laboratory. The on-site assessment was conducted during the period February 24-28, 2014.

The *ASCLD/LAB-International* assessment team consisted of the following members:

Lead Assessor:

P. Michael Kellett - Staff Assessor, ASCLD/LAB / Riverside, California

Technical Assessors:

Cassandra Burke - Baltimore County Police Department / Towson, Maryland
Kristen Burke - Sacramento County District Attorney / Sacramento, California
Diane Catley - Virginia Department of Forensic Science / Roanoke, Virginia
Carl Chasteen - Florida Division of State Fire Marshal / Havana, Florida
Yanet Gattorno - Broward County Sheriff's Office / Ft. Lauderdale, Florida
Anthony Goldman - Oklahoma State Bureau of Investigation / Enid, Oklahoma
Kerri Heward - Washoe County Sheriff's Office / Reno, Nevada
R. Greg Hilbig - Texas Department of Public Safety / Tyler, Texas
Warren Hull, Jr. - New York State Police (retired) / Voorheesville, New York
Dale Gene Linden - Federal Bureau of Investigation (retired) / Manassas, Virginia
Pamela Mikulcik - Texas Department of Public Safety (previous) / Naperville, Illinois
Marcus Montooth - Indiana State Police / Evansville, Indiana
Jennifer Naugle - Wisconsin Department of Justice / Madison, Wisconsin
William Newhouse - Wisconsin Department of Justice / Madison, Wisconsin
Dawn Walters - Florida Department of Law Enforcement / Tallahassee, Florida

OBJECTIVES OF ASSESSMENT

The assessment was conducted to assess the management and technical operations of the laboratory in accordance with the accreditation requirements specified below, and to report the findings of the assessment in a fair and impartial manner to the laboratory and to the ASCLD/LAB Board of Directors for the purpose of accreditation in accordance with the scope of the assessment.

ACCREDITATION REQUIREMENTS

The assessment was performed using the requirements of *ISO/IEC 17025:2005*; the *ASCLD/LAB-International Supplemental Requirements for Testing Laboratories* (2011); the *FBI Quality Assurance Standards Audit for Forensic DNA Testing Laboratories* (2011); *FBI Quality Assurance Standards Audit for DNA Databasing Laboratories* (2011) and the laboratory's own documented management system.

The assessment took into account the relatively recent accreditation of the laboratory to *ISO/IEC 17025:2005* by another signatory to the Inter-American Accreditation Cooperation (IAAC) and International Laboratory Accreditation Cooperation (ILAC) Multilateral Recognition Arrangements (IAAC MLA and ILAC MRA).

SCOPE OF ASSESSMENT

The laboratory is seeking accreditation in and was assessed in the following areas:

Field	
Forensic Science Testing	
Discipline(s)	Categories of Testing
Drug Chemistry	Controlled Substances
Toxicology	Human Performance Forensic Toxicology (blood/urine drug, blood alcohol)
Biology	DNA-Nuclear Body Fluid Identification Individual Characteristic Database
Trace Evidence	Paint Fiber and Textiles Gunshot Residue Glass Hair Explosives Fire Debris General Physical and Chemical Analysis
Firearms/Toolmarks	Firearms Toolmarks Individual Characteristic Database Serial Number Restoration

Latent Prints	Latent Print Processing Latent Print Comparisons Impression Evidence (footwear/tires)
Digital & Multimedia Evidence	Computer Forensics Video Analysis Audio Analysis

Note: The laboratory’s original application included the Quantitative Analysis category of testing in the Drug Chemistry discipline. At the request of the laboratory, this category of testing has been removed and is not included in this scope of assessment.

LABORATORY OVERVIEW

The North Carolina State Crime Laboratory is a state government laboratory that provides forensic services and assistance to law enforcement agencies throughout the state of North Carolina. The laboratory is located at 121 E. Tryon Road, Raleigh, North Carolina. At the time of the assessment, Joseph R. John, Sr. was the laboratory director and the laboratory had a staff of 106 proficiency tested personnel and 33 non-proficiency tested personnel.

ASSESSMENT TEAM FINDINGS

The laboratory was found to be in conformance with all ASCLD/LAB-*International* accreditation requirements except for those requirements cited in Part 2 of this report, or the assessment team found that the requirement was not applicable to the operations of this laboratory.

Each requirement for which the assessment team found the laboratory to not be in total conformance was initially marked “No.” For each requirement marked “No,” the laboratory was provided with a Corrective Action Request (CAR) following the on-site assessment. A copy of each CAR provided to the laboratory is included in Part 2 of this report.

As reflected on the CAR documents in Part 2 of this report, the laboratory has now completed appropriate corrective actions for all CARs issued.

COMMENTS

Comments include recommendations, suggestions, or other observations documented by the assessment team that are not supported by sufficient objective evidence of non-compliance. The laboratory is not required to respond to comments. The following comment(s) were documented by the assessment team during the on-site assessment:

- The laboratory recently began providing an extensive discovery packet (“Forensic Advantage Discovery Packet”) with each test report. Description of evidence and results of examination information appears on or about page one of this packet. The coverage factor associated with measurement uncertainties that are reported appears further down in this packet. In the Latent Print and Digital & Multimedia disciplines instances were observed in which neither the description of evidence nor the results of examination areas clearly stated the items that were tested. Specific information describing the items tested does appear further down in the discovery packet. The assessment team recommends that the laboratory evaluate the appropriateness of the current placement of this information within the discovery packet.

OTHER CONSIDERATIONS

Other Considerations may include any topic, issue or information of which the ASCLD/LAB Board of Directors needs to be aware in order to make a more fully informed decision regarding the accreditation decision.

In accordance with ASCLD/LAB policy and procedures the following information was provided by the ASCLD/LAB headquarters office immediately prior to the accreditation decision:

Proficiency Testing

On-site the assessment team found the laboratory to be in conformance with all applicable proficiency testing requirements. A follow-up check with the ASCLD/LAB Proficiency Program Manager immediately prior to this final report, reveals that the laboratory is currently in conformance with all applicable, ASCLD/LAB external proficiency testing requirements.

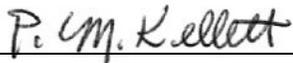
Complaints against the Laboratory

No pending complaints known to ASCLD/LAB

REPORT AUTHORIZATION

This *Final Assessment Report* of the North Carolina State Crime Laboratory is issued by Lead Assessor Michael Kellett. As Lead Assessor, Mr. Kellett has reviewed the contents of this report and affirms that the report represents a true and accurate accounting of the findings of the ASCLD/LAB-*International* assessment team.

Lead Assessor Michael Kellett



Signature

May 22, 2014
Date

DISTRIBUTION LIST

John Byrd, Laboratory Director
Chuck McClelland, Quality Manager
John K. Neuner, ASCLD/LAB Executive Director
Pamela L. Bordner, ASCLD/LAB Accreditation Program Manager
Troy Hamlin, ASCLD/LAB Accreditation Program Manager

PART 2 – CORRECTIVE ACTION REQUESTS**CORRECTIVE ACTION REQUEST (CAR) Number 1 of 4**

Laboratory Name: North Carolina State Crime Laboratory
 Laboratory Location: Raleigh
 Laboratory Contact Name: Chuck McClelland
 Contact Number: 919-662-4509 x1210
 Summation Conference Date: February 28, 2014

FINDING

Clause No.:	5.4.5.2; 5.4.5.3	Source:	ISO/IEC 17025:2005	Level:	1
Requirement:	<p>5.4.5.2: The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use. The validation shall be as extensive as is necessary to meet the needs of the given application or field of application. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use.</p> <p>5.4.5.3: The range and accuracy of the values obtainable from validated methods (e.g. the uncertainty of the results, detection limit, selectivity of the method, linearity, limit of repeatability and/or reproducibility, robustness against external influences and/or cross-sensitivity against interference from the matrix of the sample/test object), as assessed for the intended use, shall be relevant to the customers' needs.</p>				
Finding:	<p>The laboratory does not have validation or performance check data that confirms toxicology procedures for acid, neutral and basic drug testing are capable of detecting or identifying all of the drugs on the laboratory's target list. The laboratory does have detection limit data for a limited number of the drugs on the laboratory's target list.</p>				
Corrective Action Due By:	September 8, 2014				

CORRECTIVE ACTION

Lab Response:	<p>The laboratory will determine limit of detection for each drug on its target list and verify its ability to detect and identify these drugs.</p>
Supporting Documentation Provided by Laboratory:	<p>The laboratory revised its target list of drugs. The laboratory provided analytical data used for determining limit of detection for each drug on its new target list. This data confirms the laboratory's ability to detect and identify the drugs on its target list.</p> <p>The laboratory is now compliant.</p>

ACCEPTANCE

Was a revisit required? No Yes

P. M. Kellett
Lead Assessor Signature

May 16, 2014
Date Accepted

CORRECTIVE ACTION REQUEST (CAR) Number 2 of 4

Laboratory Name: North Carolina State Crime Laboratory
 Laboratory Location: Raleigh
 Laboratory Contact Name: Chuck McClelland
 Contact Number: 919-662-4509 x1210
 Summation Conference Date: February 28, 2014

FINDING

Clause No.:	5.9.1.1	Source:	2011 Supplemental-Testing	Level:	1
Requirement:	Appropriate controls and standards shall be specified in the methods and their use recorded in the case record.				
Finding:	Toxicology procedures for acid, neutral and basic drug testing do not specify use of appropriate controls and standards and appropriate controls and standards are not used. Procedures do not specify and the laboratory does not use any external standards (positive controls) at any time interval. Procedures do specify and the laboratory does use an appropriate internal standard containing prazepam.				
Corrective Action Due By:	September 8, 2014				

CORRECTIVE ACTION

Lab Response:	The laboratory will revise procedures so that appropriate controls are required. In addition, the laboratory will provide records of implementation of procedures.
Supporting Documentation Provided by Laboratory:	The laboratory provided copies of procedures that require use of appropriate controls. Copies of records of implementation of these procedures in casework were provided. The laboratory is now compliant.

ACCEPTANCE

Was a revisit required? No Yes

P. M. Kellett
 Lead Assessor Signature

May 19, 2014
 Date Accepted

CORRECTIVE ACTION REQUEST (CAR) Number 3 of 4

Laboratory Name: North Carolina State Crime Laboratory
 Laboratory Location: Raleigh
 Laboratory Contact Name: Chuck McClelland
 Contact Number: 919-662-4509 x1210
 Summation Conference Date: February 28, 2014

FINDING

Clause No.:	5.10.3.6	Source:	2011 Supplemental-Testing	Level:	1
Requirement:	When comparative examinations result in the elimination of an individual or object, the test report shall clearly communicate the elimination.				
Finding:	When latent print comparisons result in the elimination of an individual the report does not clearly communicate the elimination.				
Corrective Action Due By:	September 8, 2014				

CORRECTIVE ACTION

Lab Response:	The laboratory initiated a change to procedure (see CAR-14-R-9). This change was reviewed and approved by the technical assessors while on-site. The laboratory provided a copy of records concerning training and notification of latent print examiners.
Supporting Documentation Provided by Laboratory:	The laboratory provided a copy of the revised procedure and a copy of a training record dated March 7, 2014. In addition, copies of three reports were provided. The reports clearly communicate the elimination. The laboratory is now compliant.

ACCEPTANCE

Was a revisit required? No Yes

P. M. Kellett
 Lead Assessor Signature

April 7, 2014
 Date Accepted

CORRECTIVE ACTION REQUEST (CAR) Number 4 of 4

Laboratory Name: North Carolina State Crime Laboratory
 Laboratory Location: Raleigh
 Laboratory Contact Name: Chuck McClelland
 Contact Number: 919-662-4509 x1210
 Summation Conference Date: February 28, 2014

FINDING

Clause No.:	5.5.5g 10.3a	Source:	ISO/IEC 17025:2005 FBI QAS - Testing	Level:	1
Requirement:	5.5.5g: Records shall be maintained of each item of equipment and its software significant to the tests and/or calibrations performed. The records shall include at least the following: g) the maintenance plan, where appropriate, and maintenance carried out to date; 10.3: Does the laboratory have a schedule and follow a documented program to ensure that instruments and equipment are maintained properly? a) Has documentation been retained for maintenance, service, and/or calibration?				
Finding:	In the Biology discipline the laboratory has and follows a schedule and documented program to ensure that instruments and equipment are maintained properly. However, complete records of weekly maintenance of the laboratory's EZ1 Advanced XL BioRobot and QIAgility have not been retained.				
Corrective Action Due By:	September 8, 2014				

CORRECTIVE ACTION

Lab Response:	During the on-site assessment the laboratory developed two forms to document the weekly maintenance that was being performed but not recorded. Effective date requiring use of these forms was March 7, 2014.
Supporting Documentation Provided by Laboratory:	The laboratory provided records for the weekly maintenance of the laboratory's EZ1 (first two weeks of March 2014) and QIAgility (last week in February and first two weeks in March 2014) robots. The laboratory is now compliant.

ACCEPTANCE

Was a revisit required? No Yes

P. M. Kellett
 Lead Assessor Signature

March 25, 2014
 Date Accepted