

# **ASCLD/LAB**

## **INSPECTION REPORT**

**NORTH CAROLINA STATE BUREAU OF INVESTIGATION**

**WESTERN REGIONAL CRIME LABORATORY  
ASHEVILLE, NORTH CAROLINA**

**Inspected July 15-16, 1998**

**Submitted by Inspection Team:**

**Jack Duncan**

**C. Vander Ark, Team Captain**

**Reported August 17, 1998**

## INTRODUCTION

This report details the findings of the Inspection Team assigned to assess the North Carolina State Bureau of Investigation (NCSBI) Western Regional Crime Laboratory in Asheville, North Carolina. The laboratory is located at 9B Walden Ridge Drive in Asheville, North Carolina.

The individuals comprising the team were: Jack Duncan, Laboratory Director of the Florida Dept. of Law Enforcement Tampa Crime Laboratory; and Team Captain Clifton Vander Ark, Quality Manager of the Arizona Dept. of Public Safety Forensic Laboratory System.

The Asheville Laboratory was inspected July 15-16, 1998.

## LABORATORY OVERVIEW

The laboratory in Asheville is called the Western Regional Crime Laboratory and is the only regional laboratory outside of Raleigh that is operated by the North Carolina State Bureau of Investigation. The laboratory provides services in the areas of controlled substances, latent prints and arson analysis. The Asheville Laboratory serves a population of approximately 1.5 million in the 25 western counties in North Carolina.

During the last year, the laboratory was moved into a new facility which is well designed to accommodate the existing personnel with some minimal space available for additional employees.

There are currently seven positions authorized, two of which are vacant. A Forensic Impressions Analyst (latent prints) and an Office Assistant position are vacant; however, a temporary employee is currently employed to perform clerical duties. It should be noted that the laboratory manager and the arson analyst also participate in performing controlled substance examinations.

	TOTAL AUTHORIZED	VACANCIES
Management	1	
Clerical	1	1
Evidence Technician	1	
Controlled Substances	1	
Trace Evidence (Arson)	1	
Latent Prints	2	1

It should be noted that all employees are sworn SBI agents with the exception of the clerical and evidence technician personnel.

The following report is intended to describe not only the criteria where non-compliances were found but also those areas where further improvements could be made, as well as those findings where the laboratory clearly exceed the accreditation standard.

## STANDARDS AND CRITERIA

### 1. LABORATORY MANAGEMENT AND OPERATIONS

1.1.2.2 (I) IS THE BUDGET ADEQUATE TO MEET THE WRITTEN OBJECTIVES?

Yes There does, however, appear to be a deficiency in personnel resources to analyze controlled substance cases. Each employee currently has a personal backlog of several hundred cases and lengthy turnaround times.

1.1.2.7 (D) MAINTENANCE AND CALIBRATION OF EQUIPMENT AND INSTRUMENTS.

No The written procedures do not specify a time interval between calibrations of the gas chromatograph/mass spectrometer.

1.1.2.14 (I) DOES THE LABORATORY HAVE AND USE A MANAGEMENT INFORMATION SYSTEM?

Yes The existing case registration system is not capable of providing the support necessary for the case numbers handled by the Controlled Substance analysts. It was noted that a new system with greater functionality is to be installed in the near future.

1.2.2.6 (I) ARE PERFORMANCE EXPECTATIONS ESTABLISHED AND ARE THEY UNDERSTOOD BY LABORATORY PERSONNEL?

Yes A work plan is developed each year for personnel/supervisor expectations. This seems to be very effective and is particularly appropriate and easily implemented in a small laboratory such as Asheville. Like the Raleigh Laboratory, the drug chemist analyzes more than 200 drug cases per month—about double the national average for drug cases/analyst. Even the laboratory manager analyzes nearly 100 cases per month. The laboratory could certainly use an additional drug chemist to help provide better service to user agencies.

1.3.2.3 (D) ARE STAFF MEETINGS A ROUTINE FUNCTION?

Yes Staff meetings are held on a weekly basis, which provides information the laboratory director received at the regular supervisors meeting in Raleigh.

1.3.3.2 (I) DOES THE LABORATORY HAVE AN EMPLOYEE DEVELOPMENT PROGRAM?

Yes Although the laboratory's self-evaluation rates this criterion with a "No," the NCSBI Laboratory has well developed strategies for staff training and development within the context of the laboratory system. To document such training, the laboratory has the data to produce a remarkably sophisticated "Training/-Career Development Transcript Report."

It was noted that the staff concern in this category primarily involved a significant pay inequity between laboratory staff and field agents. This situation should be remedied to enhance lab staff morale since both field and laboratory staff are all commissioned SBI agents. There appears to be no compelling reason for a differential in compensation.

1.4.1.3 (E) IS EVIDENCE STORED UNDER PROPER SEAL?

Yes A review of seals in the evidence room revealed numerous packages that were originally received with improper seals but had since been remediated in accordance with ASCLD/LAB seal remediation guidelines.

1.4.2.2 (I) IS AN INDIVIDUAL DESIGNATED AS THE QUALITY MANAGER?

Yes The laboratory manager is the designated Quality Manager for the Asheville Laboratory. Issues involving quality are discussed and resolved in concert with the system's Quality Manager, Mark Nelson.

1.4.2.7 (E) ARE THE TECHNICAL PROCEDURES USED BY THE LABORATORY DOCUMENTED AND ARE THE DOCUMENTS AVAILABLE TO LABORATORY PERSONNEL FOR REVIEW?

No The Drug/Chemistry Technical Procedures Manual includes well-documented descriptions for all the analytical procedures used; however, written case handling protocols for drug analysis do not exist. It was noted that criteria for interpretation of results and/or acceptance of results was missing for a number of technical procedures.

1.4.2.10 (E) DOES THE LABORATORY ROUTINELY CHECK THE RELIABILITY OF ITS REAGENTS?

No Although a reagent log is available, it is not routinely used to document the preparation of every reagent as required by ASCLD/LAB standards.

1.4.2.13 (E) ARE THE INSTRUMENTS/EQUIPMENT PROPERLY CALIBRATED?

Yes Although there is not a defined interval for calibrating the GC/MS (see 1.1.2.7 comment), the GC/MS is being calibrated when used. Certificates of calibration were available for the balances; however, it is recommended a new weight set be acquired to replace the corroded set of weights used to carry out periodic performance checks.

1.4.2.14 (E) DO THE EXAMINERS GENERATE AND DOES THE LABORATORY MAINTAIN, IN A CASE RECORD, ALL THE NOTES, WORKSHEETS, PHOTOGRAPHS, SPECTRA, PRINTOUTS, CHARTS AND OTHER DATA OR RECORDS USED BY EXAMINERS TO SUPPORT THEIR CONCLUSIONS?

No Several instances were noted where corrections in case notes were improperly made by being crossed through or obliterated, not meeting the single line, initialed strike-through requirement for corrections. Some pages were found in the latent print case files that did not have a unique identifier number as required.

1.4.2.17 (E) DOES THE LABORATORY REVIEW THE REPORTS TO ENSURE THAT THE CONCLUSIONS OF ITS EXAMINERS ARE REASONABLE AND WITHIN THE CONSTRAINTS OF SCIENTIFIC KNOWLEDGE?

Yes Latent print case files are being technically reviewed and identifications verified at the Raleigh Laboratory. This will continue at least until the other latent print examiner vacancy is filled. The technical review of arson case files is also being conducted in Raleigh.

1.4.3.3 (E) DOES EACH DNA EXAMINER PARTICIPATE IN AT LEAST ONE EXTERNAL PROFICIENCY TEST FROM AN APPROVED TEST PROVIDER?

N/A DNA analysis services are not provided at the Asheville Laboratory.

## 2. PERSONNEL QUALIFICATIONS

The personnel at the Asheville Laboratory are well respected by their peers and their user agencies for the quality of work they produce in their various fields of expertise.

Since the Asheville Laboratory only provides limited service, the following criteria are not applicable:

### TOXICOLOGY

N/A 2.3.1, 2.3.2, 2.3.3, 2.3.4

SEROLOGY

N/A 1.4.2.15, 1.4.2.16, 2.5.1, 2.5.2, 2.5.3, 2.5.4

DNA

N/A 2.6.1, 2.6.2, 2.6.3, 2.6.4

FIREARMS/TOOLMARKS

N/A 2.7.1, 2.7.2, 2.7.3, 2.7.4, 2.7.5

QUESTIONED DOCUMENTS

N/A 2.8.1, 2.8.2, 2.8.3, 2.8.4, 2.8.5

TECHNICAL SUPPORT

N/A 2.10.1, 2.10.2, 2.10.3, 2.10.4

3. PHYSICAL PLANT

3.4.3 (I) IS THE HEALTH AND SAFETY PROGRAM MONITORED REGULARLY AND REVIEWED ANNUALLY TO ENSURE THAT ITS REQUIREMENTS ARE BEING MET?

No The storage of volatile and highly dangerous materials in an unvented, room-temperature cabinet is very unsafe and does not meet the safety requirements of the NCSBI or other laboratories concerned about safety, e.g., among other hazardous volatile chemicals were two separate 1 liter bulging cans of ethyl ether being stored under these conditions.

3.4.7 (I) ARE SUFFICIENT EXHAUST HOODS AVAILABLE TO MAINTAIN A SAFE WORK ENVIRONMENT?

No The hood for use by the latent print examiner had not yet been installed. In the interim, the Drug/Chemistry hood was being used for superglue, powder and chemical processing for latent prints. Consequently, drug analysis spot tests, using numerous, unhealthful, volatile chemicals, were being conducted without the benefit of any exhaust mechanism.

3.4.10 (I) IS APPROPRIATE SPACE PROVIDED FOR SAFE STORAGE OF VOLATILE, FLAMMABLE AND EXPLOSIVE MATERIALS?

No The comments made in criterion 3.4.3 above also apply specifically to this criterion.

## SUMMATION OF CRITERIA RATINGS

	Total Possible	Total Yes	Total No
Essential	37	34	3
Important	46	43	3
Desirable	25	24	1

Percent Essential - 92%

Percent Important - 93%

Percent Desirable - 96%

## SUMMARY AND RECOMMENDATIONS

The Inspection Team would like to thank Lab Director Glenn Parham for the courtesies extended to the inspectors. It was a pleasure to be guests in a small laboratory where there is a real sense of "family," an atmosphere that seems the most attainable with a small staff. Mr. Parham's quiet, caring demeanor has cultivated this warm environment to the greatest extent and he is to be commended.

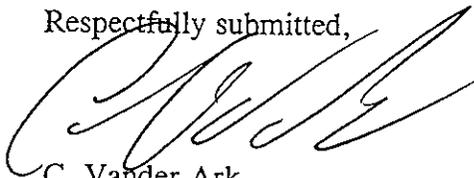
The inspectors are also grateful for the kindness and cordiality of each of the laboratory staff members during the course of the inspection. The excellent lodging and meal accommodations were very much appreciated as well.

The Inspection Team does not recommend accreditation of the Asheville Laboratory by the ASCLD/LAB Board of Directors until all Essential criteria have been met.

Areas sought for accreditation are:

Controlled Substances  
Trace Evidence (Arson only)  
Latent Prints

Respectfully submitted,



C. Vander Ark  
Team Captain

CVA/dkr

**SUGGESTED RESOLUTIONS FOR ESSENTIAL CRITERIA  
NOT MET IN THE  
NCSBI ASHEVILLE LABORATORY**

- 1.4.2.7 ARE THE TECHNICAL PROCEDURES USED BY THE LABORATORY DOCUMENTED AND ARE THE DOCUMENTS AVAILABLE TO LABORATORY PERSONNEL FOR REVIEW?

*already provided*

Written case handling protocols need to be produced for the analysis of all drugs. This should include descriptions for the interpretation and/or acceptance of results.

- 1.4.2.10 DOES THE LABORATORY ROUTINELY CHECK THE RELIABILITY OF ITS REAGENTS?

*documented when they arrive*

Information on the preparation and checking of all reagents need to be included in the reagent log(s) as required by ASCLD/LAB as promulgated in the 11/95 Newsletter.

- 1.4.2.14 DO THE EXAMINERS GENERATE AND DOES THE LABORATORY MAINTAIN, IN A CASE RECORD, ALL THE NOTES, WORKSHEETS, PHOTOGRAPHS, SPECTRA, PRINTOUTS, CHARTS AND OTHER DATA OR RECORDS USED BY EXAMINERS TO SUPPORT THEIR CONCLUSIONS?

The laboratory needs to demonstrate compliance with the proper means of making corrections and also placing the unique identifier number and examiner initials on each page of case files as required by this standard.