National Institute of Standards and Technology
National Voluntary Laboratory Accreditation Program (NVLAP)

SIGNATURE SHEET

Laboratory Name: CIBER, Inc.

Field(s) of Accreditation: Voting Systems

NVLAP Assessor(s):

Name	*Signature*
Daniel D. Hoolihan - Lead	_____
Steve Freeman - Technical	_____
_____	_____

On-Site Assessment Dates: 17-20 December 2007

Type of Assessment (check one): ☒ Initial ☐ Renewal ☐ Monitoring ☐ Other

Note: Please list laboratory personnel present at exit briefing on the back of this page.

Instructions for the Laboratory

Respond in writing within 30 days of the date of this report, addressing all nonconformities documented by the assessor(s). All nonconformities must be satisfactorily resolved before accreditation may be granted. See page 2 for guidance and instructions on responding to nonconformities.

The On-Site Assessment Report, the information supplied by you, and the results of any required proficiency testing will be reviewed by NVLAP with the assistance of technical experts as necessary. NVLAP is solely responsible for the content of this report and reserves the right to change the findings of the assessor(s), based on the results of this review. The final evaluation of your laboratory, for the purpose of deciding whether to approve or deny an initial or a renewal accreditation, will be conducted by NVLAP. It is the responsibility of the Authorized Representative to understand and respond with sufficient information within the required timeframe. Failure to respond may result in the suspension of your laboratory's accreditation or, in the case of a new laboratory, may delay an accreditation decision. Questions concerning this response should be directed to NVLAP.

Send your response to:
NVLAP
National Institute of Standards and Technology
100 Bureau Drive, Stop 2140
Gaithersburg, MD 20899-2140

Signed Statement

The assessor has discussed the contents of this report with members of the laboratory management who agree to respond in writing to NVLAP, regarding resolution or correction of any nonconformities noted, within 30 days of the date of this report.

Signature of Authorized Representative or designee: _____

Printed Name: Kelly Rohacek

Guidance and Instructions on Laboratory Responses

Resolving nonconformities: A laboratory's response shall include documentation that the specified nonconformities have been corrected and/or a plan of corrective actions. A corrective action plan must include a list of actions, target completion dates, and names of persons responsible for discharging those actions. All nonconformities must be satisfactorily resolved before accreditation may be granted. For accredited laboratories, this is interpreted to mean that nonconformities adversely affecting the outcome of calibrations or tests must be addressed and corrected immediately (within the 30 days). Evidence must be supplied which clearly demonstrates that actions taken fully resolve the nonconformities, thereby removing any concern as to the quality of results of the calibrations or tests conducted by the laboratory. In those cases where specified nonconformities do not directly affect the results of calibrations or tests, such as those related to record-keeping, NVLAP may accept a plan and a schedule, as previously described, as satisfactory resolution. When this occurs, laboratories are expected to submit sufficient objective evidence demonstrating that the nonconformities have, in fact, been resolved according to the schedule. All responses must be sent directly to the NVLAP office, not to the assessor(s).

Referencing nonconformities: Each nonconformity must be referenced in your response by item number as it is listed in the appropriate checklist. Cite the requirement against which the nonconformity is stated and, where more than one nonconformity was recorded against the same requirement, either restate the specific nonconformity, or indicate to which test/parameter the response is related.

Objective evidence: The laboratory may ask for clarification of a nonconformity either during the closing meeting or from the appropriate NVLAP Program Manager. It is required that objective evidence be submitted as proof that a nonconformity has been effectively resolved. Such evidence includes updated procedures, uncertainty analyses (where appropriate), corrected/updated sections of the quality documents associated with a stated nonconformity, copies of completed records, corrective action reports, etc. NVLAP reviews all responses, with the assistance of appropriate technical experts as necessary, and is solely responsible for the final decision regarding the resolution of a nonconformity and for the granting of initial or renewal accreditation.

ON-SITE ASSESSMENT NARRATIVE SUMMARY

CHANGES TO CURRENT OR REQUESTED SCOPE OF ACCREDITATION
(Additions, Deletions, Modifications)

Initial assessment of CIBER, Inc. for the Voting System Test Laboratory program.

4.1 ORGANIZATION

CIBER Local ITL is located at 7800 Madison Boulevard, Suite 206, Huntsville, Alabama 5806 and it is part of CIBER, Inc. The CIBER Corporate Office is 5251 DTC Parkway Suite 1400, Greenwood Village, Colorado 80111.

The ITL is headed by Kelly Rohacek, the Practice Director. She has Philip Loughmiller reporting to her as the Quality Assurance Manager and Clive Robinson as the Technical Project Manager.

4.2 MANAGEMENT SYSTEM

The Management System is captured in the CIBER Local Quality Practice Manual – CBR07-ADMPP-00004. It is dated 11/29/07 and is Version 1.0, Revision 1.0.

The Management system is computer-based (on the portal) and it has version control.

4.3 DOCUMENT CONTROL

Paragraph 3.2 – "Documentation Approvals and Issues" in the Quality Practice Manual covers this item. The Master List of documents is called the "Roadmap" in their terminology.

4.4 REVIEW OF REQUESTS, TENDERS AND CONTRACTS

Covered in Paragraph 4.1 (Request for Proposal) in the Quality Practice Manual.

4.5 SUBCONTRACTING OF TESTS

Paragraphs 5.2 and 5.3 of the Quality Practice Manual cover this item.

4.6 PURCHASING SERVICES AND SUPPLIES

Policy is covered in Paragraph 6 (Purchasing services and supplies) in the Quality Practice Manual. The appropriate procedure is CBR07-ADMPP-00016 – CIBER ITL Purchase Procedure.

4.7 SERVICE TO THE CUSTOMER

Covered in Paragraph 7 (Service to the Customer) in the Quality Practice Manual. Also, Paragraph 7.1 (Customer Communication) is very appropriate.

4.8 COMPLAINTS

Covered in Paragraph 8 (Complaints) in the Quality Practice Manual.

4.9 CONTROL OF NONCONFORMING TESTING WORK

Paragraph 9 (Control of Non-conforming Test Work) in the Quality Practice Manual covers this item.

4.10 IMPROVEMENT

Covered in the Quality Practice Manual; Paragraph 10(Improvement).

4.11 CORRECTIVE ACTION

The policies are covered in the CIBER Quality Management Manual – Sections 4.4.1, 4.4.2, and 6.4.1.

The procedures are CBR07-ADMPP00010 (Corrective-Preventive Action and Deviation Request Procedure) and CBR07-ADMPP-00011 (Project Corrective/Deviation Request Procedure**)**

4.12 PREVENTIVE ACTION

Covered in Paragraph 12 (Preventive Action) of the Quality Practice Manual.

Procedure CBR07-ADMPP-00010 (Corrective-Preventive Action and Deviation Request Procedure) also covers this item

4.13 CONTROL OF RECORDS

Covered in Paragraph 13 (Control of Records) in the Quality Practice Manual.

TDP documentation, CD media, and project quality records will be kept for five years after retirement of the voting system. ITL documents will be retained for six years.

4.14 INTERNAL AUDITS

Internal audits will be done by the Quality Manager as per paragraph 14 (internal audits) of the Quality Practice Manual.

4.15 MANAGEMENT REVIEWS

As part of the start-up process and responding to the NIST/NVLAP pre-assessment in August of 2007; top management has been meeting on a periodic basis covering the listed items over the last six weeks.

Minutes and action items from one of those meetings was reviewed.

A formal Management Review will be scheduled in 2008 by Kelly Rohacek as “top management.”

5.1 GENERAL

The lab is in the same physical location that it was for the pre-assessment in August of 2007.

5.2 PERSONNEL

Added two new people; Phil Loughmiller (Quality Assurance Manager) and Stephen Moltz (Test Analyst).

Clive Robinson is now the Technical Project Manager.

5.3 ACCOMMODATION AND ENVIRONMENTAL CONDITIONS

Test lab areas are locked with special locks, office areas are separated from the lab areas.

5.4 TEST AND CALIBRATION METHODS AND METHOD VALIDATION

Three members of the staff have qualified under the SQE Training Certification for Software Training, Foundation Level since the pre-assessment and have shown notable growth in knowledge of testing principles and practices. This skill is showing up under the developing Test Methods and the procedures for those test methods but the development of the actual test methods to evaluate compliance against the voting system standards and guidelines still requires additional work and time. The current implementation has provided partial drafts of less than ten test cases but significant non-compliance still exists in these in specifying and documenting the specific factors required under this standard such as:

a. Preparation [HB 150, 5.4 a)]. Some scripts indicate some of the preparation needed such as the statement to pre-calculate the expected voting results but specifics are still to be developed such as pre-defined test elections and materials; equipment setup; and pre-conditioning of the operations. Pre-defined test elections for the cases, especially, have not been developed to support economic and preparations for testing and consistent testing between test campaigns.

b. Instructions [HB 150, 5.4.b)]. No instructions on basic operations or preparations were identified. As an example, the need for a procedure to provide a clean install of software is recognized but procedures have not been prepared. Preparation for such instructions for test support hardware, software, and procedures needs to be part of the general procedures to ensure provisions are made when a requirement is identified for such instructions.

c. Validation [HB 150, 5.4.5.2 b]. The requirement to validate is recognized and some preliminary discussions show the concept is understood as a requirement but there are no provisions or procedures to document and report the validation for each test method.

Underlying all these is a basic concept that the test methods/cases need to be documented in a manner to support their repetition; recording; presentation for approval to customer and EAC; review under QM procedures; and reporting in contract negotiations, test plans, test report, and corrective action reviews as a complete process specific to the applicable requirement reflected in the Traceability Matrix.

The sample set of developing test methods/cases/procedures shows promise but is too shallow to currently cover necessary testing. Absent are test methods for security, full range of functional testing to include consideration of different types of voting devices, system integration (a sample test case for report consolidation exists but needs further work), procedures or test cases for hardware testing, telecommunication, QA, usability and accessibility (alternate languages are in development), Some older procedures are still available from prior operations as an ITA as a reference but have not been updated for current policy, procedures, and practices.

5.5 EQUIPMENT

A minimum of equipment is used for testing at this time.

5.6 MEASUREMENT TRACEABILITY

Not applicable in the classical sense of traceability.

5.7 SAMPLING

Not applicable.

5.8 HANDLING OF TEST AND CALIBRATION ITEMS

Procedures are okay.

5.9 ASSURING THE QUALITY OF TEST AND CALIBRATION RESULTS

Generally okay with the available procedures.

5.10 REPORTING THE RESULTS

Test report template was reviewed and found acceptable.

ANNEX A.
REFERENCING NVLAP ACCREDITATION

A couple of issues need to be resolved with the NVLAP symbol usage.

ANNEX B.
IMPLEMENTATION OF TRACEABILITY POLICY IN ACCREDITED LABORATORIES

Okay.