

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

SIGNATURE SHEET

Laboratory Name: Wyle Laboratories

Field(s) of Accreditation: Voting Systems Testing

NVLAP Assessor(s):

Name

Daniel D. Hoolihan, Lead
Steve Freeman, Technical

Signature

On-Site Assessment Dates: 23-26 July 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: Frank Padilla

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.

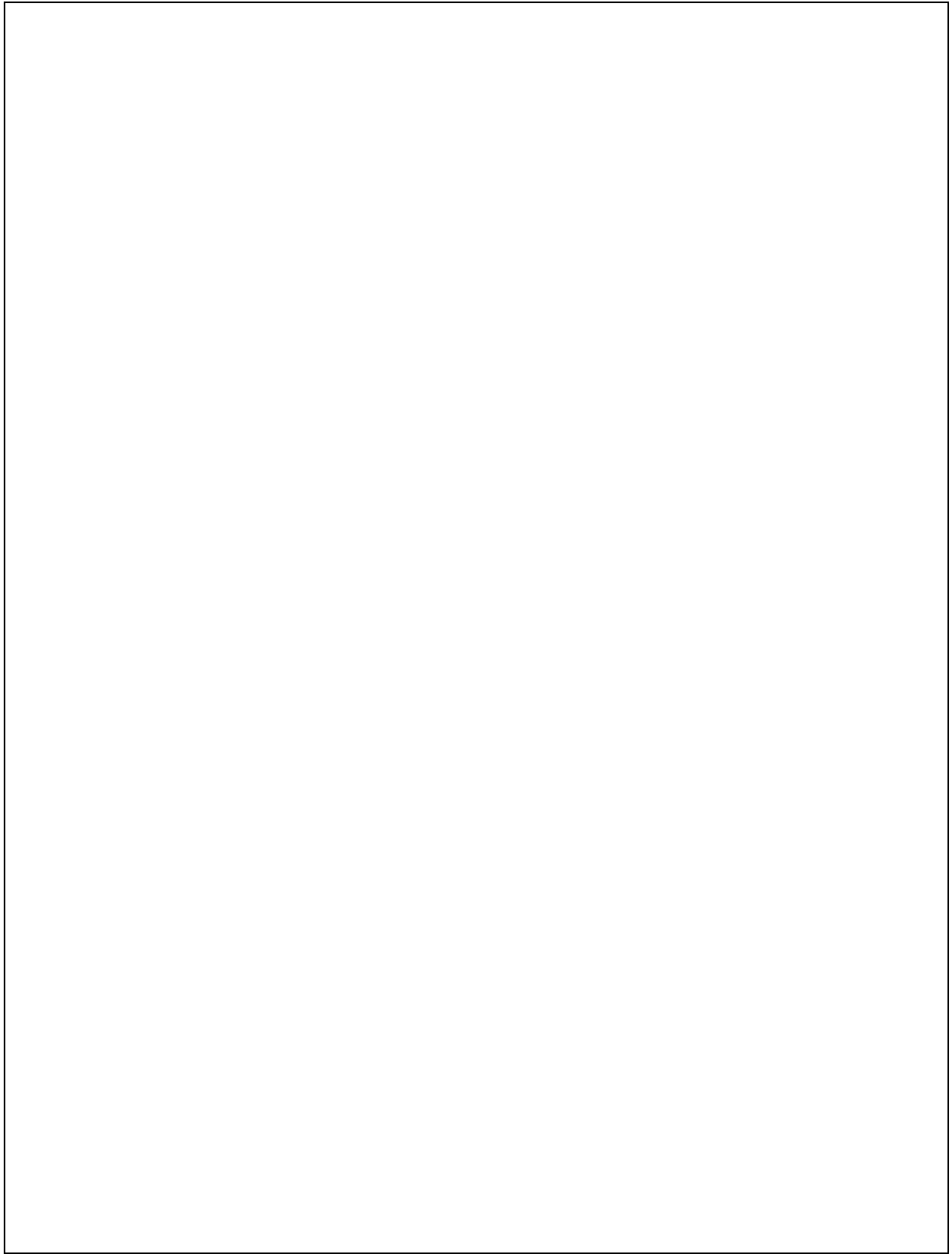
ON-SITE ASSESSMENT NARRATIVE SUMMARY

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

An opening meeting was held on Monday (July 23rd) at 1 pm at Wyle - Huntsville. Present from NIST/NVLAP were Dan Hoolihan (Lead Assessor), Steve Freeman (Technical Assessor), and Jon Crickenberger (Observer).

Present from Wyle were Frank Padilla, Jack Cobb, Shawn Southworth, Robert Hardy, Diane Gray, Raul Terceno, Joe Hazeltine and Wendy Owens.

/



4.1 ORGANIZATION

Organization charts were reviewed for Wyle. The Huntsville operations are a part of the Test and Engineering East group (Keith Wilson - General Manager) who reports to Jim Neu (SVP and General Manager of the Test, Engineering and Research Group). Jim Neu reports to George Melton, the CEO and President of Wyle Laboratories.

The Voting Systems organization chart shows Joe Hazeltine, Senior Director, of the Test and Engineering Group (East) reporting to Keith Wilson. Bobby Hardy is the Manager of EMI/EMC, Product Safety, and Voting Systems and he reports to Joe Hazeltine. Frank Padilla is the Voting Systems Program Manager and he reports to Bobby Hardy. Frank has 4 project engineers reporting to him; Wendy Owens, Diane Gray, Shawn Southworth, and Jack Cobb.

Wyle does not develop any hardware *or software products*, they are a testing and certification organization. There is sufficient separation of the testing from the development since no development of hardware is done.

4.2 MANAGEMENT SYSTEM

The management system is covered under an ISO 9001 Quality Manual and an A2LA Addendum for Quality Assurance.

The overall Quality Management System is structured with three basic levels; Level one is the Quality Assurance Manual with the Quality Policy and Objectives. The Quality Assurance Program A2LA Addendum is designed to supplement the QAM for compliance to IS)/IEC 17025.

Level 2 is the Quality Procedures and Directives.

Level 3 is the specific detailed instructions and process procedures. This includes the Voting System Controlled Documentation as outlined in WHVS07.A5, Configuration Management Voting System Testing Data and Documentation.

4.3 DOCUMENT CONTROL

Documents generated by Wyle are uniquely identified.

Such identification includes the date of issue and/or revision date and revision identification, page numbering, and the total number of pages in the document.

The Voting System documentation is all electronic and controlled by a single server that has limited access.

4.4 REVIEW OF REQUESTS, TENDERS AND CONTRACTS

Procedures have been established for the review of quotation requests, tenders and contracts.

Reviewed the Internal Operating Procedure for the Contracts Department and found it acceptable as written.

4.5 SUBCONTRACTING OF TESTS AND CALIBRATIONS

Covered under paragraph 1.5 of the Quality Program A2LA Addendum dated July 9, 2007.

4.6 PURCHASING SERVICES AND SUPPLIES

Covered in paragraph 1.6 (Purchasing Services and Supplies) in the A2LA Addendum.

Also, covered in the Internal Operating Procedure for Purchasing and Subcontracting (Document No. PO96-001), Section 10.

In general, the procedure for Purchasing and Subcontracting is well-written.

4.7 SERVICE TO THE CUSTOMER

Covered in Paragraph 1.7 (Service to the Customer) in the A2LA Addendum.

“In order to enhance customer satisfaction Wyle Laboratories will seek to provide good communication, advice and guidance in technical matters, and opinions and interpretations based on results. Communication with the customers, especially in large projects, will be maintained throughout the work. When delays or anomalies are encountered, the customer shall be notified.”

This section also states that “Wyle Laboratories seeks feedback, both positive and negative, from its customers in order to improve the quality system, the services provided, and customer service. Feedback is directed to the General Manager for his review and use.

4.8 COMPLAINTS

Covered in Paragraph 1.8 (Complaints) of the A2LA Addendum.

Also covered in sections 2.0 (Quality Policy, Objectives and Authority) and 7.2.3 (Customer Communications) in the Quality program Manual.

4.9 CONTROL OF NONCONFORMING TESTING AND/OR CALIBRATION WORK

Covered in Paragraph 1.9 (Control of Nonconforming Testing and/or Calibration Work) in the A2LA Addendum.

Also covered under Section 8.3 (Control of Nonconforming Product) in the Quality Program Manual.

4.10 IMPROVEMENT

Covered in Paragraph 1.10 (Improvement) in the A2LA Addendum.

It is also covered in the Huntsville Facility Quality Program Manual (ISO 9001 Compliance) under 2.1 (Quality Policy).

The last paragraph in 2.1 says “Wyle Laboratories is committed to good professional practices, continual improvement of the quality of all our products and services, including testing and calibration, and maintaining a position as the Quality leader in our field.”

4.11 CORRECTIVE ACTION

Covered in Paragraph 1.11 (Corrective Action) in the Quality Program A2LA Addendum, Revision – Original Issue, July 9, 2007.

This topic is also covered in Paragraph 8.5.2 of the Huntsville Facility Quality Program Manual (Revision 4, July 12, 2007).

Paragraph 8.5.2 calls out two procedures; ISO-QP-270 and ISO-QP-330.

Reviewed ISO-QP-270 (Corrective Action/Preventive Action) and ISO-QP-330 (Servicing of Customer Complaints) and they looked okay.

4.12 PREVENTIVE ACTION

Covered in Paragraph 1.12 (Preventive Action) in the A2LA Addendum.

Preventive Action is also covered in Paragraph 8.5.3 (Preventive Action) of the ISO 9001/Commercial Quality Program Manual (Revision 4, July 12, 2007).

Paragraph 8.5.3 references Quality Procedure ISO-QP-270 (Corrective Action/Preventive Action, Revision 1, January 13, 2006). The procedure references a Preventive Action Plan/Request (PAPR) Form WH-1589 and a Preventive Action Plan/Request Control Log Form WH-1590. Both the PAPR and Form WH-150 were reviewed and found to be in order.

4.13 CONTROL OF RECORDS

Covered in Paragraph 1.13 (Control of Records) in the A2LA Addendum, Original Issue, July 9, 2007.

Control of Records is also covered in Paragraph 4.2.4 (Control of Records) of the ISO 9001/Commercial Quality Program Manual (Revision 4, July 12, 2007.)

4.14 INTERNAL AUDITS

Covered in Paragraph 1.14 (Internal Audits) in the A2LA Addendum, Original Issue, July 9, 2007.

The topic of Internal Audits is also covered in Paragraph 8.2.2 (Internal Audits) of the ISO 9001/Commercial Quality Program Manual (Revision 4, July 12, 2007).

Paragraph 8.2.2 references Quality Procedures ISO-QP-300 and ISO-QP-310.

Reviewed ISO-QP-300 (Quality Audits); it was recently revised and carries an effective date of July 25, 2007.

Reviewed ISO-QP-310 (Certification of Auditors/Qualifications); it was recently revised and carries an effective date of July 9, 2007.

4.15 MANAGEMENT REVIEWS

Covered in Paragraph 1.15 (Management Reviews) in the A2LA Addendum.

Management Reviews is also covered in Paragraph 5.6 (Management Review) of the ISO 9001/Commercial Quality Program Manual.

5.1 GENERAL

Looked at the technical characteristics of the Wyle operations relative to Voting Systems.

The Voting Systems specific level two directive is the WHVS07, Test Procedure for Compliance Tests and System Evaluation of Voting Systems and is supplemented with specific procedures and templates indicated by a numerical suffix to WHVS07. For example, WHVS07.11 is the TDP Review Matrix
WHVS07.13 is the Master Test Plan (draft)

Below the WHSV07 and supplements are a number of Wyle Operating Procedures (WOP) that encapsulates the actual performance and steps. This level, the WOP is expected to perform the role of the Test Methods required under NIST/NVLAP HB 150 and HB 150-22.

The quality management documents specific to the Voting Systems for the technical section support quality procedures that address factors which can effect the quality of the testing results.

5.2 PERSONNEL

Interviewed two people for their skill sets. Diane Gray and Shawn Southworth.

Wyle maintains a matrix recording the training and qualifications of the Project Engineers who are responsible for planning and performing the actual tests of the Voting System. The training requirements include a minimum set of trainings for all employees in the department combined with a set of training modules for the core requirement testing and designated Voting Specific trainings for the Project Engineers tasked to perform those specific areas. The training modules are identified under the WHVS07, Test Procedure for Compliance Tests and System Evaluation of Voting Systems, with a suffix of Txx where 'xx' is a unique number.

System level testing and source code requirements are new to Wyle and several of the current Voting System Project Engineers are considered qualified based on the training and experience so they can prepare and develop procedures and training for those that follow.

Non-compliant items were corrected on site are:

5.2.4 ii. Test planning responsibilities were not included in the Job Descriptions for the Project Engineers but were shown elsewhere. Corrected on site

5.2.6 (HB 150=22) Annual reviews did not include requirement to review competency for the assigned test methods for the Project Engineers. Corrected on-site

5.3 ACCOMMODATION AND ENVIRONMENTAL CONDITIONS

Covered in Paragraph 2.3 (Accommodation and Environmental Conditions) in the A2LA Addendum.

The major accommodation and environmental conditions are covered under the scope of accreditation for non-core tests and are not a factor for this assessment.

In the physical walkthrough to look at the security of the server supporting the voting system testing, it was noted that the front door of the Annex was not locked and no one was in the area to see who came in even though the area was supposed to be limited access. The server room was locked with a cyber lock and when we passed by an office that was manned, we were quickly checked who we were there and confirmed that we had an escort.

5.4 TEST AND CALIBRATION METHODS AND METHOD VALIDATION

The A2LA Addendum includes statements for the ISO 17025 requirements.

The WOPs which record the test methods used are strong part of the testing culture. We checked that the included consideration for the factors required by ISO 17025 and found all were present in one or more of the documented test set. The procedures for the WOPs were difficult to find and consisted largely of the design of the WOPs themselves. Many of the WOPS were incomplete and did not show all the factors. Others were detailed copies of the procedures for standard requirements or standard test methods adopted but may not have had details showing local adaptations because the Project Engineers responsible were following the modifications but did not notice the practices they were familiar with were not included. As Wyle becomes involved in performing actual testing against these test methods, we expect that these WOPs will be updated and addressed as the procedures are validated by use.

Non-compliance items: The major areas of non-compliance was in the formal, planned validation of new or modified test methods and the documentation of the validation. Most of this is corrected on site but should followed in the first year review.

5.4.5.2 A procedure to see the validation was recorded and included in the formal test report was not available, Corrected on-site

5.4.4. (150-22) A cross-reference matrix had been developed to show which test method(s) covered voting system requirements but was not included in documented procedures Corrected.

5.5 EQUIPMENT

Covered in Paragraph 2.5 (Equipment) in the A2LA Addendum.

Also, in Paragraph 2.5, the statement is made that “where calibrations give rise to a set of correction factors, if there are copies in software, those copies will be correctly updated.” There is no reference to a procedure to do that and in a formal assessment the assessor would be looking for a verifiable procedure to accomplish the above action.

The topic of Equipment is also covered in Paragraph 7.6 (Control of Monitoring and Measuring Devices) of the ISO 9001/Commercial Quality Program Manual.

Paragraph 7.6 references Quality Procedure ISO-QP-230 (Control of Measuring and Test Equipment). ISO-QP-230 was recently revised and carries an effective date of July 9, 2007.

5.6 MEASUREMENT TRACEABILITY

Covered in Paragraph 2.6 (Measurement Traceability) in the A2LA Addendum.

The topic of Measurement Traceability is also covered in Paragraph 7.6 (Control of Monitoring and Measuring Devices) of the ISO 9001/Commercial Quality Program Manual. It states that “Where necessary to ensure valid results, measuring equipment is calibrated or verified at specific intervals or prior to use, against measurement standards **traceable** to national or international standards.”

Again, Paragraph 7.6 references Quality Procedure ISO-QP-230 (Control of Measuring and Test Equipment). .

5.7 SAMPLING

Covered in Paragraph 2.7 (Sampling) of the A2LA Addendum. Sampling is not currently considered as a need in the Voting System core testing but Wyle has language in several places to begin to setup procedures if required.

5.8 HANDLING OF TEST AND CALIBRATION ITEMS

Covered in Paragraph 2.8 (Handling of Test and Calibration Items) in the A2LA Addendum.

Also covered in Paragraph 7.5.3 (Identification and Traceability), 7.5.4 (Customer Property), and 7.5.5 (Preservation of Product) of the ISO 9001/Commercial Quality Program Manual.

Paragraph 7.5.3 references ISO-QP-180 (Control of Customer-Furnished Material), ISO-QP-190 (Test Specimen and Product Traceability), and ISO-QP-250 (Nonconforming Material). These Quality Procedures were reviewed briefly; they were all recently updated to reflect the new version of ISO 9001.

Paragraph 7.5.3 also references ISO-QP-210 (Inspection and Test Status) still has a 1996 date on it and should be updated.

Paragraph 7.5.4 references ISO-QP-180; as above.

Paragraph 7.5.5 references ISO-QP-280 (Handling, Storage, Packaging, Preservation and Shipping).

5.9 ASSURING THE QUALITY OF TEST AND CALIBRATION RESULTS

Covered in the A2LA Addendum , Paragraph 2.9 (Assuring the Quality of Test and Calibration Results).

Also covered in Paragraph 8.4 (Analysis of Data) in the ISO 9001/Commercial Quality Program Manual.

Paragraph 8.4 references Quality Procedure ISO-QP-010 (Organization and Responsibilities). In ISO-QP-010, Paragraph 5.5 (Quality Assurance Manager) covers the responsibilities of the QAM which include “develop and approve quality procedures to carry out the policies described in the Quality Program Manual.”

5.10 REPORTING THE RESULTS

The A2LA Addendum covers this topic in Paragraph 2.10 (Reporting the Results). Also, the “Test Procedure Outline for Compliance Tests and System Evaluation of Voting Machines - Procedure No. WHVS07 - 05/11/07” has a section entitled “Test Reporting Procedure and Conditions” that is appropriate.

The sample National Certification Test Report was reviewed against the HB 150 and HB 150-22. Wyle has been using the basic format and structure for other programs and it is well defined. The sample report was also reviewed against the VVSG requirements for the report and required components are addressed within the sample. Since no actual report was available, some areas of the sample report describes the content in general terms rather showing how it will be reported.

The format identifies that 2005 VVSG Functional Requirements Matrix will be used in an appendix which is supports the HB 150-22, 5.10.1 requirement for reporting to allow state certification officials to verify what testing is completed against specific requirements versus requirements that may not be tested because of various reasons (non-applicable or previous tests accepted and not Retested as examples).

Non-compliance items:

5.10.2.f. The test report did not include the condition of the equipment delivered for testing. Corrected on site.

5.10.9.c A new report is not allowed to replace an earlier report as the earlier reports are considered to be valid configuration until otherwise decertified. (labeled as comment)

ANNEX A.
REFERENCING NVLAP ACCREDITATION

Acceptable.

ANNEX B.
IMPLEMENTATION OF TRACEABILITY POLICY IN ACCREDITED LABORATORIES

Not applicable.