

U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE

SUPPLIER AUDIT REPORT

OF

CAMPBELL SCIENTIFIC, INC.

LOGAN, UTAH

REPORT NUMBER OQA-SA-96-009  
JANUARY 29 THROUGH 30, 1996

Prepared by: *Richard L. Maudlin* Date: 02-08-96

Richard L. Maudlin  
Audit Team Leader  
Yucca Mountain Quality  
Assurance Division

Approved by: *Donald G. Horton* Date: 2/12/96

Donald G. Horton  
Director  
Office of Quality Assurance

## 1.0 EXECUTIVE SUMMARY

The results of the supplier audit of Campbell Scientific, Inc. revealed unsatisfactory conditions resulting in the issuance of one Deficiency Report (DR) to the U.S. Geological Survey (USGS) for action which relates to the Quality Assurance (QA) program for the Office of Civilian Radioactive Waste Management (OCRWM) activities. The DR relates to a failure by Campbell Scientific, Inc. in issuing implementing procedures which implement the Campbell Scientific QA Manual. In practice, calibrations are being performed to Campbell technical requirements. Any compliance with the QA Manual or associated implementing procedures is by default and not by purpose. As a result of the above, the implementation of the QA Program is considered ineffective until such time as the implementing procedures are issued and personnel are trained to the requirements of the procedures. Since Campbell Scientific, Inc. personnel are doing the calibrations to technical procedures, previous calibrations may be technically acceptable, but in the absence of the QA controls and documentation that supports implementation, USGS management needs to evaluate previous calibrations and associated records for acceptability.

The unsatisfactory conditions identified during the audit were discussed with the QA Manager and President of Campbell Scientific, Inc. who agreed to resolve the unsatisfactory conditions upon receipt of the reported conditions adverse to quality. Until USGS completes its evaluation of previous calibrations by Campbell Scientific, Inc., impact on the activities associated with Campbell Scientific, Inc.'s scope of work is indeterminate.

In discussions with Campbell Scientific, Inc. Management, an agreement was reached that the QA implementing procedures would be issued and management would endorse full support of implementation. Subsequent to issuance of the implementing procedures, a follow-up audit will be performed to verify satisfactory compliance with all applicable elements of the QA program.

## 2.0 SCOPE

The supplier audit was conducted to evaluate the adequacy, implementation, and effectiveness of Campbell Scientific, Inc.'s quality program. This was accomplished by determining if Campbell Scientific, Inc.'s program satisfies the QA requirements specified in the USGS procurement document 1434-CR-96-SA-00200, implementation of the Campbell Scientific, Inc.'s QA Manual, Revision 01, dated May 12, 1995, as accepted by the USGS, and the OCRWM Quality Assurance and Requirements Description (QARD) for the scope of work. The QA program elements determined to be applicable are: Organization; QA Program; Procurement Document Control; Implementing Documents; Document Control; Control of Purchased Items and Services; Measuring and Test Equipment, Nonconformance Control; Corrective Action; QA Records; Audits; and Control of Software.

### 3.0 AUDIT TEAM AND OBSERVERS

Richard L. Maudlin, Audit Team Leader, Office of Quality Assurance (OQA), Yucca Mountain Quality Assurance Division (YMQAD)

### 4.0 PERSONNEL CONTACTED DURING FACILITY AUDIT

P. Campbell, President, Campbell Scientific, Inc  
W. Campbell, Design Engineer, Campbell Scientific, Inc.  
T. Davenport, Test Engineer, Campbell Scientific, Inc.  
M. Fryer, Document Control Clerk, Campbell Scientific, Inc.  
C. Howell, Quality Assurance Manager, Campbell Scientific, Inc.  
G. Olson, Purchasing Manager, Campbell Scientific, Inc.  
T. Sterr, Repair Department Supervisor, Campbell Scientific, Inc.

### 5.0 SUMMARY OF AUDIT RESULTS

Campbell Scientific, Inc.'s QA Manual, Revision 01, dated May 12, 1995, addresses the applicable elements of the USGS procurement document No. 1434-CR-96-SA-00200 and the applicable elements of the OCRWM QARD for the intended scope of work. Implementation of the QA Program was considered ineffective due to implementing procedures not being issued and no evidence of personnel training to QA Program requirements. Specifics of the unsatisfactory conditions are described in Section 6.0 of this report "Deficiencies/ Recommendations."

The details of the audit, along with the objective evidence reviewed, are contained within the audit checklist which is available from the OQA's supplier evaluation files.

### 6.0 DEFICIENCIES/RECOMMENDATIONS

The unsatisfactory conditions have been documented on the respective corrective action document and submitted to USGS for resolution. There were no recommendations.

#### DEFICIENCIES

DR No. YMQAD-96-D-035 - The OCRWM QARD, Section 5.0, requires that work shall be performed in accordance with controlled implementing documents. The Campbell Scientific QA Manual, Subsection 4.2.1 requires, the QA Manager to prepare a documented quality system, procedures, and instructions. Contrary to the above, implementing procedures which implement the Campbell Scientific, Inc.

QA Manual are not complete and have not been issued for implementation by Campbell Scientific, Inc. personnel. Subsequently, requirements as stated in the Campbell Scientific, Inc. QA Manual have not been implemented in all instances. Examples include: (1) no evidence of management annual reviews of quality audits; (2) no evidence of implementing procedures for Measuring & Test Equipment; (3) no evidence of qualification, indoctrination and training of personnel; (4) no evidence of supplier qualification; (5) calibration certifications with erroneous serial number and no evidence of calibration of standard referenced by certification; (6) unable to locate a procurement deficiency document; (7) calibration data not stored to protect from fire; and (8) no evidence of audits of all levels of quality levels being performed within a one year period.

#### RECOMMENDATIONS

None