

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

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NONCONFORMANCE REPORT

Project No. 20-1402-571

NCR No. 98-07

PART 1: DESCRIPTION OF NONCONFORMANCE

Keithley electrometer model **6517** serial number **0599913** was found to be out of tolerance on 2 volt and 200 V ranges.

Initiated by: Darrell S. Dunn

Date: 6/19/98

PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

Disposition: Accept test results that used this instruments as-is

Basis of Disposition: Error on 2 V range was less than 1 mV. Required accuracy of electrochemical potential measurements is 1 mV. Electrochemical measurements are not made using the 200 V range.

Action to Correct Nonconformance: Electrometer was calibrated to manufacturers specifications.

Target date for completion: 7/2/98

Proposed by: D.S. Dunn

Date: 6/19/98

PART 3: APPROVAL

Element Manager: N. Luchka

Date: 6/19/98

Director of QA: Dunn Malenko

Date: 6/29/98

Comments/Instructions:

At the present time, CNWRA Technical staff advise against "loosening" the tolerances on this instrument. See

PART 4: CLOSE OUT

Comments: NONE

Distribution:

D. Dunn

Element managers

B. Sagan/H. Garcia

Original to NCR folder

Verified by: Dunn Malenko Date: 7/1/98



6220 Culebra Road
San Antonio, TX 78238
Department of Quality Assurance
Calibration Laboratory

ACCREDITED

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Certificate of Calibration

18 May 1998

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: KEITHLEY 6517
Description: ELECTROMETER/HIGH RESISTANCE SYSTEM
Serial Number: 0599913
Asset Number: 004313

Environmental Conditions

Temperature: 72 Deg. F

Humidity: 41 %RH

Calibration Information

Calibration was in accordance with requirements of MIL-STD-45662A and ANSI/NCCL Z540-1-1994. Measurements are traceable to the National Institute of Standards and Technology (NIST). This report may not be reproduced except in full without written approval of the originator. Inspection and test data are on file and available for inspection.

The uncertainty of the calibration was sufficient to determine that the instrument met the manufacturer's specifications.

Calibration Date: 17 May 98

Calibration Procedure: MFG

Interval: 12 months

Received: Out of Tolerance

Next Calibration Due: 17 May 99

Remarks: CALIBRATED BY ROTHE DEV., SAN ANTONIO, TX.
ROTHE CERT. #52829.

Out of Tolerance Data

The unit was found to be in an Out of Tolerance condition as indicated below. An evaluation should be made by the user to determine any adverse impact that may have occurred.

ADJUSTED TO SPECIFICATIONS: RECEIVED UNIT WITH DC VOLTAGE OUT OF TOLERANCE.
SENT TO MFG FOR ADJUSTMENT. CALIBRATED WHEN RETURNED:
DC VOLTAGE ACCURACY

RANGE	INPUT	TOL	READING	
			BEFORE	AFTER
2 V	+1.9 V	1.89949-1.90052	1.89907*	1.90015
	-1.9 V	1.89949-1.90052	-1.89905*	-1.90014
200 V	+190 V	189.883-190.117	189.824*	189.987
	-190 V	189.883-190.117	-189.822*	189.986

* INDICATES OUT OF TOLERANCE CONDITION.

OUT OF TOLERANCE