SOUTHWEST RESEARCH INSTITUTE™

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Institute Quality Systems
Institute Calibration Laboratory
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ACCREDITED
Certificate #
0972-01

Certificate of Calibration

Submitted By:	DIV20	**Work Order:**	444062575
Address:	B51	**Date Issued:**	Jan 25, 2005
Contact:	DON BANNON	**Calibration Date:**	Jan 25, 2005
Manufacturer Model:	TCC S102C	****Calibration Due:**	Jul 25, 2005
Description:	RESISTOR	**Calibration Location:**	Bldg. 64
Serial No:	4	**Environment:**	Temp. 73.0°F Hum. 46 %RH
Asset No:	011357	***As Found:**	IN TOLERANCE
Procedure:	Resistors, Jun-04	***As Left:**	IN TOLERANCE

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 1999 and ANSI/NCSL Z540-1-1994 which are equivalent to relevant requirements of the ISO 9000-1994 series of standards. This certificate may not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. The results of this calibration relate only to the individual instrument described above. This certificate shall not be used to claim product endorsement by the American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government.

Uncertainty evaluation includes the item under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor of k=2 to approximate a 95% confidence level. See Remarks or attached Calibration Report with the same Work Order number for calibration data.

*The client has sole responsibility for determination of in/out of tolerance or compliance/noncompliance. An in/out of tolerance opinion is provided for your convenience based only on the Test Instrument (TI) reading(s) and limits as reported. The reported uncertainty relates only to the results at the time of calibration and does not imply any short or long term stability of the TI.

**Calibration interval is determined by the client and does not assure the instrument will remain within tolerance until this date. Any number of factors may cause the instrument to be out of tolerance before the next calibration date.

Remarks: Unit reads 250.0089 ohms: Uncertainty of measurement is 0.0043 ohms

Standards Used

Asset	Manufacturer	Model	Description	Cal Due
001505	HEWLETT-PACKARD	3458A/OPT-002	MULTIMETER	Mar 19, 05

Approved by: Walt Hill
Metrology Group Leader
m:\a2la1.rpt Rev date 11, May 04

Measurements by: Curtis Laurence
Metrology Technician