



# SOUTHWEST RESEARCH INSTITUTE®

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Institute Quality Systems  
Institute Calibration Laboratory  
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## Certificate of Calibration

0972-01

**Submitted By:** DIV20  
**Address:** B57  
**Contact:** DON BANNON  
**Manufacturer Model:** SWRI 1000 OHM  
**Description:** RESISTOR BOX  
**Serial No:** 171001  
**Asset No:** 003096  
**Procedure:** DECADE RESISTOR TO 100 MOHM-STEP 21 MAR, 2006

**Work Order:** 303068998  
**Date Issued:** May 1, 2006  
**Calibration Date:** May 1, 2006  
**\*Calibration Due:** Nov 1, 2006  
**Calibration Location:** Bldg. 64  
**Environment:** Temp. 74.0°F Hum. 42 %RH  
**\*\*Data Type:** FOUND-LEFT

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, ANSI/NCCL Z540-1-1994 and relevant requirements of the ISO 9000-2000 standard. This certificate shall not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. This certificate shall not be used to claim product endorsement by Southwest Research Institute, American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government. Results of this calibration relate only to the instrument described above at the time of calibration and does not imply any long term stability of the instrument.

\*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. \*\*Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance. See Remarks or attached Measurement Report with the same Work Order number for data.

Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

**Remarks:** None

### Standards Used

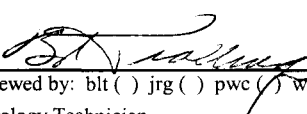
Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
012066	MY45040419	HEWLETT-PACKARD	3458A	MULTIMETER	Apr 11, 07

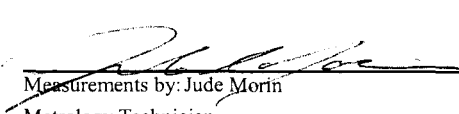
120

Instrument calibration record for SWRI  
Resistor Box, Model # 1000 Ohm, Serial #  
171001 (05/01/2006)

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Q200605160002

  
Reviewed by: blt ( ) jrg ( ) pwc ( ) wgh ( )  
Metrology Technician  
m:\a2la1.rpt Rev date August 15, 2005

  
Measurements by: Jude Morin  
Metrology Technician

Southwest Research Institute  
Calibration Laboratory  
Measurement Report

Work Order:	303068998	Mfr:	SWRI	Technician:	jim
Asset No:	3096	Model:	1000 OHM		
Serial No:	171001	Type:	Resistors	Cal Date:	01-May-06
Remarks:					

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Resistance	Ohm 1000.00	Ohm 1000.48	Ohm 0.48	Ohm 10.00	Ohm 0.021	Result Pass
END OF REPORT						