



SOUTHWEST RESEARCH INSTITUTE®

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Institute Calibration Laboratory
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Certificate #

0972-01

Certificate of Calibration

Submitted By: DIV20

Address: B57

Contact: DON BANNON

Manufacturer Model: BLUE M ELECTRIC BM711100000011

Description: CHART RECORDER

Serial No: 91E34523

Asset No: 004828

Procedure: TEMPERATURE PROBES - 5 JUNE, 2006

Work Order: 303070652

Date Issued: Sep 1, 2006

Calibration Date: Aug 22, 2006

*Calibration Due: Feb 22, 2007

Calibration Location: Bldg. 64

Environment: Temp. 75.0°F Hum. 45 %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/NCSL 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: Chart Not Calibrated

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
009137	A21208	HART SCIENTIFIC	1575	THERMOMETER	Dec 22, 06
010281	0421	HART SCIENTIFIC	5628	SPRT	Jun 24, 08

Reviewed by: blt () jrg () pwc () wgh ()

Metrology Technician

m:\a2la1.rpt Rev date August 15, 2005

Measurements by: Paul Depmore

Metrology Technician

Southwest Research Institute
Calibration laboratory
Measurement Report

Work Order:	303070652	Mfr:	BLUE M ELECTRIC	Technician:	PRD
Asset No:	004828	Model:	BM711100000011		
Serial No:	91E34523	Type:	CHART RECORDER	Cal Date:	22-Aug-06
Remarks:					
LIMITED CAL - CHART NOT CALIBRATED					

Function/Range	Test Point	TI Reading	Difference	+/-Limits	+/-Uncertainty	Found/Left
RTD	°C	°C	°C	°C	°C	Result
	0.1	0	0	1	1.2	Pass
	10.1	10	0	1	1.2	Pass
	20.0	20	0	1	1.2	Pass
	30.0	30	0	1	1.2	Pass
	40.0	40	0	1	1.2	Pass
	50.0	50	0	1	1.2	Pass
	0.1	0	0	1	1.2	Pass
	10.1	10	0	1	1.2	Pass
	20.0	19	-1	1	1.2	Pass
	30.0	29	-1	1	1.2	Pass
	40.0	39	-1	1	1.2	Pass
	50.0	49	-1	1	1.2	Pass

END OF REPORT