



# SOUTHWEST RESEARCH INSTITUTE®

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## Certificate of Calibration

0972-01

**Submitted By:** DIV20  
**Address:** B57  
**Contact:** DON BANNON  
**Manufacturer Model:** VAISALA HMP77B  
**Description:** TEMPERATURE/HUMIDITY PROBE  
**Serial No:** Y2830017  
**Asset No:** 010302  
**Procedure:** TEMPERATURE/HUMIDITY, MAY/03

**Work Order:** 303068185  
**Date Issued:** Mar 3, 2006  
**Calibration Date:** Mar 3, 2006  
**\*Calibration Due:** Mar 2, 2007  
**Calibration Location:** Bldg. 64  
**Environment:** Temp. 73.0°F Hum. 40 %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.

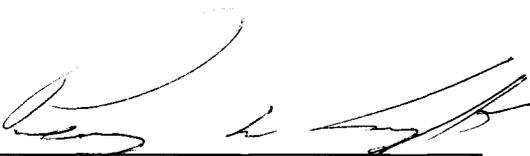
\*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. \*\*Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole 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.

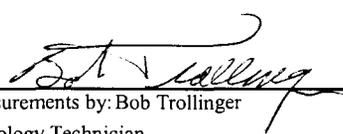
Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

**Remarks:** CALIBRATED WITH VAISALA MI70 INDICATOR S/N Y2540054, AN 010323

### Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
006404	9806123	THUNDER SCIENTIFIC	2500	HUMIDITY GENERATOR	Jun 13, 06
009414	A25788	HART SCIENTIFIC	1502A	TEMPERATURE READOUT	Aug 02, 06
010692	632656	HART SCIENTIFIC	5618	PLATINUM RTD	Aug 02, 06

  
Reviewed by: blt ( ) jrg ( ) pwc (✓) wgh ( )  
Metrology Technician

  
Measurements by: Bob Trollinger  
Metrology Technician

Southwest Research Institute  
 Calibration Laboratory  
 Measurement Report

Work Order:	303068185	Mfr:	Vaisala	Technician:	blt
Asset No:	010302	Model:	HMP77B	w- MI70 Meter	
Serial No:	Y2830017	Type:	Temp/Humidity Meter	Cal Date:	03-Mar-06
Remarks:	Calibrated with Vaisala MI70 AN 010323				

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Humidity	%RH	%RH	%RH	%RH	%RH	Result
at 25 °C	35.03	35.86	0.8	2.0	0.58	Pass
	50.09	50.99	0.9	2.0	0.58	Pass
	60.04	60.61	0.6	2.0	0.58	Pass
Temperature	°C	°C	°C	°C	°C	
at 35%RH	20.500	20.32	-0.2	0.2	0.062	Pass
	25.085	24.95	-0.1	0.2	0.062	Pass
	29.746	29.58	-0.2	0.2	0.062	Pass

END OF REPORT