



SOUTHWEST RESEARCH INSTITUTE®

6220 Culebra Road, P.O. Drawer 28510
Institute Quality Systems
Institute Calibration Laboratory
Phone: 210-522-5215 Fax 210-522-4834



Certificate #

0972-01

Certificate of Calibration

Submitted By: DIV20

Address: B51

Contact: DON BANNON

Manufacturer Model: VAISALA HMP77B

Description: HUMIDITY/TEMPERATURE PROBE

Serial No: B3140005

Asset No: 012390

Procedure: HUMIDITY-DEW POINT - 19 MAY 2006

Work Order: 303070740

Date Issued: Aug 31, 2006

Calibration Date: Aug 31, 2006

***Calibration Due:** Aug 31, 2007

Calibration Location: Bldg. 64

Environment: Temp. 74.0°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/NC SL 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.

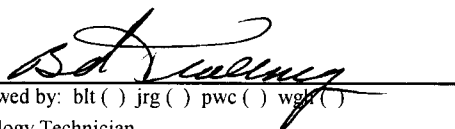
*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. **Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The client has sole responsibility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

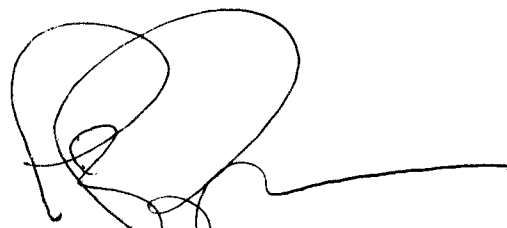
Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

Remarks: Calibrated with Display M170 Sn. B3050048. Temperature Calibrated to within +/- 3°C.

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
009414	A25788	HART SCIENTIFIC	1502A	TEMPERATURE READOUT	Jan 14, 07
002079	44595	RUSKA	6200	PRESSURE GAGE	Oct 06, 06
010692	632656	HART SCIENTIFIC	5618	PLATINUM RTD	Jan 14, 07


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


Measurements by: Paul Depmore
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303070740	Mfr:	Vaisala	Technician:	PRD
Asset No:	012390	Model:	HMP77B w- MI70 Meter	Cal Date:	31-Aug-06
Serial No:	B3140005	Type:	Temp/Humidity Meter		
Remarks: Calibrated with Vaisala MI70 SN B3050048- Temperature Calibrated at +/- 3°C					

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Humidity	%RH	%RH	%RH	%RH	%RH	Result
at 23 °C	24.99	24.34	-0.6	1.2	0.58	Pass
	50.10	50.05	-0.1	1.4	0.58	Pass
	75.12	74.57	-0.6	1.6	0.58	Pass
	94.92	94.68	-0.2	1.8	0.58	Pass
Temperature	° C	° C	° C	° C	° C	
	40.107	39.80	-0.31	3.00	0.58	Pass
	60.162	59.70	-0.46	3.00	0.58	Pass
	79.816	79.39	-0.43	3.00	0.58	Pass
	119.729	119.86	0.13	3.00	0.58	Pass

END OF REPORT