SOUTHWEST RESEARCH INSTITUTE®

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Institute Calibration Laboratory
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ACCREDITED
Certificate #
0972-01

Certificate of Calibration

Submitted By:	DIV20	**Work Order:**	303068999
Address:	B57	**Date Issued:**	May 8, 2006
Contact:	DON BANNON	**Calibration Date:**	May 8, 2006
Manufacturer Model:	DIGI-SENSE 08516-55	***Calibration Due:**	May 8, 2007
Description:	THERMOCOUPLE PROBE	**Calibration Location:**	Bldg. 64
Serial No:	12196	**Environment:**	Temp. 73.0°F Hum. 40 %RH
Asset No:	012196	****Data Type:**	FOUND-LEFT
Procedure:	THERMOCOUPLES, AUG/04		

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: Cal -20 to 200 °C

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
009137	A21208	HART SCIENTIFIC	1575	THERMOMETER	Jun 19, 06
009414	A25788	HART SCIENTIFIC	1502A	TEMPERATURE READOUT	Aug 02, 06
010281	0421	HART SCIENTIFIC	5628	SPRT	Jun 24, 08
010329	7949003	FLUKE	525A	TEMPERATURE/PRESSURE CALIBRATOR	Oct 06, 06

120 --- Q200605160021
Instrument calibration record for
Thermocouple Probe, Model # Digi-Sense
08516-55, Serial # 12196 (05/08/2006)

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

Measurements by: Bob Trollinger
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303068999	Mfr:	DIGI-SENSE	Technician:	blt
Asset No:	012196	Model:	THERMOCOUPLE PROBE		
Serial No:	12196	Type:	TYPE K	Cal Date:	08-May-06
Remarks:	Limits taken from ASTM E230-02 and are based on brand new unused thermocouples. Limited Cal - tested at -20 to 200°C				

Function/Range	Test Point	TI Read	Difference	+/-Limit	+/-Uncertainty	Found/Left
Temperature	° C	° C	° C	° C	° C	Result
	-19.877	-19.57	-0.31	2.2	0.19	Pass
	0.043	0.56	-0.52	2.2	0.30	Pass
	49.981	50.07	-0.09	2.2	0.30	Pass
	99.892	100.17	-0.28	2.2	0.30	Pass
	149.954	150.79	-0.84	2.2	0.30	Pass
	173.651	173.90	-0.25	2.2	0.93	Pass
	198.422	198.59	-0.17	2.2	0.93	Pass

END OF REPORT