SOUTHWEST RESEARCH INSTITUTE®

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Institute Quality Systems
Institute Calibration Laboratory
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ACCREDITED
Certificate #
0972-01

Certificate of Calibration

Submitted By: DIV20
Address: B57
Contact: DON BANNON
Manufacturer Model: OMEGA Type K
Description: THERMOCOUPLE
Serial No: 11118
Asset No: 011118
Procedure: TEMPERATURE PROBES - 5 JUNE, 2006

Work Order: 303070142
Date Issued: Jul 7, 2006
Calibration Date: Jul 7, 2006
***Calibration Due:** Jan 7, 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: Cal'd at 900,1000,and1100 °C

Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
010814	A44625	HART SCIENTIFIC	1529	THERMOCOUPLE THERMOMETER	Oct 26, 06
010813	9287	HART SCIENTIFIC	5650	THERMOCOUPLE	Sep 28, 06

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

Measurements by: Bob Trollinger
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order	303070142	Mfr	OMEGA	Tech:	BLT
Asset No.	011118	Model	TYPE K		
Serial No.	11118	Type	THERMOCOUPLE	Cal Date:	07-Jul-06

Remarks:
Reading are without PASS or FAIL determination.
The user must determine if the instrument meets their requirements.

Function/Range	Test Point	TI Reading	Difference	+/-Uncertainty
TEMPERATURE	°C	°C	°C	°C
900 °C	899.590	898.45	-1.14	1.6
1000 °C	1000.161	998.78	-1.38	1.6
1100 °C	1100.091	1097.03	-3.06	1.6

END OF REPORT