SOUTHWEST RESEARCH INSTITUTE® 6220 Culebra Road, P.O. Drawer 28510 Institute Quality Systems Institute Calibration Laboratory Phone: 210-522-5215 Fax 210-522-4834 Calibration Laboratory **Certificate of Calibration** Certificate #0972-01 Work Order: 303074748 Submitted By: DIV20 Date Issued: Jun 5, 2007 Address: B57 Calibration Date: Jun 5, 2007 Contact: DON BANNON Manufacturer / Model: OAKTON / 35629-20 *Calibration Due: Jun 5, 2008 Calibration Location: Bldg. 64 **Description: INFRARED THERMOMETER** Serial No: 2332580201-0007

Asset No: 010864 Procedure: IR THERMOMETERS - 30 AUG 2006

Environment: Temp. 74.0°F Hum. 51 %RH **Data Type: FOUND-LEFT DivID/Location: N/A

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, 2005, 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: READINGS ARE WITHOUT PASS OR FAIL DETERMINATION PER CUSTOMER REQUEST.

Standards Used

Asset N	. Serial No.	Manufacturer	Model	Description	Cal Due
009414	A25788	HART SCIENTIFIC	1502A	TEMPERATURE READOUT	Oct 05, 07
010447	A38235	HART SCIENTIFIC	9132	INFRARED CALIBRATOR	
010692	632656	HART SCIENTIFIC	5618	RTD (385)	Oct 05, 07

Reviewed by: () wgh (Metrology Technician m:\a2la1.rpt Rev date August 15, 2005

Measurements by: Joe G Metrology Technicia Page 1 of 1

Southwest Research Institute Calibration Laboratory Measurement Report

Work Order:	303074748	Mfr.	Oakton		Technician	JRG	
Asset No.	010864	Model	35629-20				
Serial No.	2332580201-0007	Type.	IR THERMOM	ETER	Cal Date.	5-Jun-07	
Remarks:	Reading are without PASS or FAIL determination per customer request.						
	Function/Range	Hart	TI Reading	Difference	+/-Uncertaint	y	
	Set Point	<u></u>	°C	°C	°C		

Set Point	°C	°C	°C	°C	
50°C	50.4	50.4	0.0	0.54	
100°C	100.1	99.7	-0.4	0.54	
200°C	200.1	199.4	-0.7	0.54	
230°C	230.1	229.2	-0.9	0.54	
240°C	240.2	239.4	-0.8	0.54	
	END OF	REPORT			

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