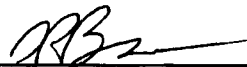


Asset No **002469**

Work Order No. **303072186**

1 000011 000111 000011 000111 000011 000111 000011 000111

Manufacturer: FISHER SCIENTIFIC	Charge/Project No. OHD20.131 1.20
Description: THERMOMETER, GLASS	Div/Client DIV20
Model: 14-983-10B	Contact DON BANNON
Serial No. 183303	Mail Stop B57
Div ID/Loc.	Phone 5118
Interval: 6 M	
Cal. Procedure: THERMOMETERS, GLASS - 11 SEP 2006	
Cal. Data Sheet:	

Special Instructions	
Requested by:	
DON BANNON	

**Policy on service to our customers**

The Institute Calibration Laboratory (Laboratory) seeks the customer's cooperation to clarify work requests before or during work. Customers may witness calibrations with prior arrangement. Calibration Recall interval is determined by the customer. Adjustments or repairs, less than 50 percent of the instrument replacement cost or less than \$500, are made unless otherwise instructed in Special Instructions above. As-found/As-left measurements are recorded and provided to the customer. The customer is responsible for providing the manufacturer manual/information or other proposed method/procedure if not available in the Laboratory. The Laboratory notifies the customer if the proposed method/procedure is inappropriate or out-dated. Deviations from calibration methods/procedures, where technically justified, shall be approved by the customer before release, and documented on the instrument calibration

**ENTERED**  
DEC 18 2006

Date Picked Up



Picked Up By

**Work Summary**

Date	Emp.	Hours	Remarks
			-20 STP -19.85 TI -19
			0 0.0774 0.5
			50 \$0.016 50.5
			100 99.944 100.9 Total Sandulmir
			150
			9137 10281



# 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 of Calibration

0972-01

Submitted By: DIV20

Address: B57

Contact: DON BANNON

Manufacturer / Model: FISHER SCIENTIFIC / 14-983-10B

Description: THERMOMETER, GLASS

Serial No: 183303

Asset No: 002469

Procedure: THERMOMETERS, GLASS - 11 SEP 2006

Work Order: 303072186

Date Issued: Dec 14, 2006

Calibration Date: Dec 14, 2006

\*Calibration Due: Jun 14, 2007

Calibration Location: Bldg. 64

Environment: Temp. 73.0°F Hum. 40 %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: None

### Standards Used

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
009137	A21208	HART SCIENTIFIC	1575	SUPER THERMOMETER	Dec 22, 06
010281	0421	HART SCIENTIFIC	5628	SPRT	Jun 24, 08

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

m:\a2\1.rpt Rev date August 15, 2005

Measurements by: Bob Trolinger  
Metrology Technician

Southwest Research Institute  
Calibration Laboratory  
Measurement Report

Work Order:	303072186	Mfr.	Fisher-Scientific	Technician	blt
Asset No.	002469	Model	14-983-10B	Cal Date.	14-Dec-06
Serial No.	183303	Type.	THERMOMETER		
Remarks: No accuracy is provided by manufacturer. +/- 1 Degree C resolution is used as the accuracy specification.					
TOTAL IMMERSION					

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Temperature	°C	°C	°C	°C	°C	Result
	-19.85	-19.0	0.9	1.0	0.58	Pass
	0.08	0.5	0.4	1.0	0.58	Pass
	50.02	50.5	0.5	1.0	0.58	Pass
	99.94	100.9	1.0	1.0	0.58	Pass
END OF REPORT						