

# WEIGHT TRACEABILITY CERTIFICATE

TO: Southwest Research  
6220 Culbreth CNWRALab Bldg 57

The Sartorius balances listed below have been calibrated by our  
 representative on 5-16-91

**This is to certify that the test weights used are traceable to the  
 National Institute of Standards & Technology**

Sartorius identification number of test weights used:	<u>S 30348</u>	<u>S 30208</u>
Calibrated to class:	<u>S</u>	<u>P</u>
Sartorius calibration date of test weights used:	<u>4-2-91</u>	<u>7-9-90</u>
N.I.S.T. Test Number:	<u>731/243669</u>	<u>731/243669</u>

Type and serial number of balances serviced:

<u>AE 240 # 101237</u>	<u>Pm 4600 # 20467</u>
	<u>3808 # 3903006</u>

Donald J. Foy  
 Sartorius Service Representative  
5-16-91  
 Date of Issue

**sartorius**  
 BALANCES | AND SCALES

SARTORIUS CORPORATION  
 140 Wilbur Place  
 Bohemia, Long Island  
 New York, 11716

140 Wilbur Place  
Bohemia, N.Y. 11716  
800-645-3108

# TECHNICAL SERVICES Balances and Scales SERVICE REPORT

Customer # \_\_\_\_\_ PO # \_\_\_\_\_

Customer Name: \_\_\_\_\_

Bldg/Dept.: \_\_\_\_\_

Street \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Contact \_\_\_\_\_

Phone # \_\_\_\_\_ Date: \_\_\_\_\_

Spec. Instr. \_\_\_\_\_

Work Order # \_\_\_\_\_

Service Program	Travel Zone
ROUTINE MAINTENANCE	A
HOURLY	B
EMERGENCY	C
WARRANTY	D
SHOP SERVICE	

### ROUTINE MAINTENANCE

Line #	Model/Serial #	Make	Explanation
1			
2			
3			
ADDITIONAL UNITS LISTED ON ACCOMPANYING SHEETS			
Total units serviced =		Total labor hours =	

### ITEM(S) FOR REPAIR

Line #	Model/Serial #	Make	Explanation	(in ¼ hours) Labor hours
1				.
2				.
3				.
				Total hours =

### SPARE PARTS USED FOR REPAIR

Spare Part Number	Description	Qty. Used	Qty. to Bill	Used for Line #	Cost
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .

### SERVICES PERFORMED

Service Date: / /	Tech #	Tech Name:
Travel Time = .	Comments:	
Return Time = .		
Mileage =		
Next Service Due: Mo / Yr		

Customer Signature: \_\_\_\_\_ Date: / /

FILE

=====

REPORT NAME: DIV 20 N SRIDHAR

DATE: 28-Dec-90

TIME: 09:36

=====

Manufacturer/Model METTLER AE 240 ELECTRONIC BALANCE  
Serial Number 101237  
Date Next Calibration 5 Jan 1991  
Remark

Manufacturer/Model SARTORIUS 3808 ELECTRONIC BALANCE  
Serial Number 39030006  
Date Next Calibration 5 Jan 1991  
Remark

Manufacturer/Model METTLER PM 4600 ELECTRONIC BALANCE  
Serial Number 12046  
Date Next Calibration 5 Jan 1991  
Remark  
END

# WEIGHT TRACEABILITY CERTIFICATE

TO: Southwest Research Institute  
Bldg. 57 263 AVE. D  
6220 Culebra Rd. SAN ANTONIO, TX.

The Sartorius balances listed below have been calibrated by our  
representative on November 25, 1991

This is to certify that the test weights used are traceable to the  
National Institute of Standards & Technology

Sartorius identification number of test weights used: 770-T2

Calibrated to class: CLASS "4"

Sartorius calibration date of test weights used: 8/5/91

N.I.S.T. Test Number: 732/246308

Type and serial number of balances serviced:

<u>3808</u>	<u>3903006</u>
_____	_____
_____	_____
_____	_____
_____	_____

Zane Lynch  
Sartorius Service Representative

11/25/91  
Date of Issue

**sartorius**  
BALANCES AND SCALES

SARTORIUS CORPORATION  
140 Wilbur Place  
Bohemia, Long Island  
New York, 11716

# WEIGHT TRACEABILITY CERTIFICATE

TO: Southwest Research Inst  
Bldg 57 263 ave D  
6220 Culebra rd  
San Antonio, Tx

The Sartorius balances listed below have been calibrated by our  
representative on 11-25-91

This is to certify that the test weights used are traceable to the  
National Institute of Standards & Technology

Sartorius identification number of test weights used:	<u>S30408</u>	<u>S30442</u>
Calibrated to class:	<u>P</u>	<u>S</u>
Sartorius calibration date of test weights used:	<u>8-7-91</u>	<u>10-25-91</u>
N.I.S.T. Test Number:	<u>732/246368</u>	<u>731/243669</u>

Type and serial number of balances serviced:

Pm 4600 # 20467-      AE240# 101237

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Donald V. Jones

Sartorius Service Representative

11-25-91

Date of Issue

**sartorius**  
BALANCES AND SCALES

SARTORIUS CORPORATION  
140 Wilbur Place  
Bohemia, Long Island  
New York, 11716

International Corporation  
 40 Wilbur Place  
 Bohemia, N.Y. 11716  
 800-645-3108

**TECHNICAL SERVICES**  
**Balances and Scales**  
**SERVICE REPORT**

Customer # \_\_\_\_\_ PO # \_\_\_\_\_  
 Customer: \_\_\_\_\_  
 Bldg/Dept.: \_\_\_\_\_  
 Street \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Phone # \_\_\_\_\_ Date: \_\_\_\_\_  
 Spec. Instr. \_\_\_\_\_

Work Order # \_\_\_\_\_

Service Program		Travel Zone	
<input checked="" type="checkbox"/>	ROUTINE MAINTENANCE	<input checked="" type="checkbox"/>	A
<input type="checkbox"/>	HOURLY	<input type="checkbox"/>	B
<input type="checkbox"/>	EMERGENCY	<input type="checkbox"/>	C
<input type="checkbox"/>	WARRANTY	<input type="checkbox"/>	D
<input type="checkbox"/>	SHOP SERVICE	<input type="checkbox"/>	

**ROUTINE MAINTENANCE**

Line #	Model/Serial #	Make	Explanation
1			
2			
3			

ADDITIONAL UNITS LISTED ON ACCOMPANYING SHEETS

Total units serviced = 3	Total labor hours = .
--------------------------	-----------------------

**ITEM(S) FOR REPAIR**

Line #	Model/Serial #	Make	Explanation	(in ¼ hours) Labor hours
1				.
2				.
3				.

Total hours = .

**SPARE PARTS USED FOR REPAIR**

Spare Part Number	Description	Qty. Used	Qty. to Bill	Used for Line #	Cost
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .

**SERVICES PERFORMED**

Service Date: 11/15/11	Tech # _____ Tech Name: _____
Travel Time = .	Comments: _____
Return Time = .	
Mileage = _____	
Next Service Due: Mo / Yr	

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
**TECHNICIAN**

Sanborn Corporation  
 140 Wilbur Place  
 Bohemia, N.Y. 11716  
 800 - 645-3108

**TECHNICAL SERVICES**  
**Balances and Scales**  
**SERVICE REPORT**

Customer # \_\_\_\_\_ PO # \_\_\_\_\_

Customer: \_\_\_\_\_

Bldg/Dept.: \_\_\_\_\_

Street \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Contact \_\_\_\_\_

Phone # \_\_\_\_\_ Date: \_\_\_\_\_

Spec. Instr. \_\_\_\_\_

**Work Order #**

Service Program		Travel Zone	
<input checked="" type="checkbox"/>	ROUTINE MAINTENANCE	<input checked="" type="checkbox"/>	A
<input type="checkbox"/>	HOURLY	<input type="checkbox"/>	B
<input type="checkbox"/>	EMERGENCY	<input type="checkbox"/>	C
<input type="checkbox"/>	WARRANTY	<input type="checkbox"/>	D
<input type="checkbox"/>	SHOP SERVICE	<input type="checkbox"/>	

**ROUTINE MAINTENANCE**

Line #	Model/Serial #	Make	Explanation
1			
2			
3			

**ADDITIONAL UNITS LISTED ON ACCOMPANYING SHEETS**

Total units serviced =	Total labor hours =
------------------------	---------------------

**ITEM(S) FOR REPAIR**

Line #	Model/Serial #	Make	Explanation	(in ¼ hours) Labor hours
1				.
2				.
3				.

Total hours = .

**SPARE PARTS USED FOR REPAIR**

Spare Part Number	Description	Qty. Used	Qty. to Bill	Used for Line #	Cost
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .

**SERVICES PERFORMED**

Service Date: 5/1/78	Tech # _____	Tech Name: _____
Travel Time = .	Comments: _____	
Return Time = .		
Mileage =		
Next Service Due: Mo / Yr		

Customer Signature: \_\_\_\_\_ Date: 5/1/78

**TECHNICIAN**

# WEIGHT TRACEABILITY CERTIFICATE

TO: Southwest Research Inst,  
6220 Culebra Rd Bldg 57 (NWRALab)  
San Antonio, Tx

The Sartorius balances listed below have been calibrated by our  
representative on 4-30-92

This is to certify that the test weights used are traceable to the  
National Institute of Standards & Technology

Sartorius identification number of test weights used:	<u>530442</u>	<u>530408</u>
Calibrated to class:	<u>S</u>	<u>P</u>
Sartorius calibration date of test weights used:	<u>10-25-91</u>	<u>8-7-91</u>
N.I.S.T. Test Number:	<u>731/243664</u>	<u>732/246368</u>

Type and serial number of balances serviced:

RC 210P# 10704379

3808 # 3903006

AE 240# 101237

PM 240# 101237

Donald J. Jones  
Sartorius Service Representative

4-30-92

Date of Issue

**sartorius**  
BALANCES AND SCALES

SARTORIUS CORPORATION  
140 Wilbur Place  
Bohemia, Long Island  
New York, 11716



Sartorius Corporation  
 140 Wilbur Place  
 Bohemia, NY 11716  
 800-648-3108

TECHNICAL SERVICES  
 Balances and Scales  
**SERVICE REPORT**

Customer # \_\_\_\_\_ PO # M 3154  
 Customer Southern Research Inst  
 Bldg/Dept Bldg 57 CNWRA Lab.  
 Street 6220 Cullen Rd  
 City, State, Zip San Antonio Tx  
 Contact J. Prikyl  
 Phone # \_\_\_\_\_ Date: \_\_\_\_\_  
 Spec. Instr. \_\_\_\_\_

Work Order # \_\_\_\_\_

Service Program	Travel Zone
<input checked="" type="checkbox"/> ROUTINE MAINTENANCE	<input checked="" type="checkbox"/> A
<input type="checkbox"/> HOURLY	<input type="checkbox"/> B
<input type="checkbox"/> EMERGENCY	<input type="checkbox"/> C
<input type="checkbox"/> WARRANTY	<input type="checkbox"/> D
<input type="checkbox"/> SHOP SERVICE	

**ROUTINE MAINTENANCE**

Line #	Model/Serial #	Make	Explanation
1	3808 # 3903006	Sartorius	Cal (2000.2)
2	RO110P # 10704315	Sartorius	Cal (99.9996g)
3	101 # 101239	Mettler	Cal (100.0000g)

ADDITIONAL UNITS LISTED ON ACCOMPANYING SHEETS

Total units serviced = \_\_\_\_\_ Total labor hours = \_\_\_\_\_

**TERMINATED REPAIR**

Line #	Model/Serial #	Make	Explanation	(in 1/4 hours) Labor hours
4	PM4600 # 20467	Mettler	Cal (1999.9)	.
5				.
6				.

Total hours = \_\_\_\_\_

**SPARE PARTS USED FOR REPAIR**

Spare Part Number	Description	Qty. Used	Qty. to Bill	Used for Line #	Cost
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .
					\$ .

**SERVICES PERFORMED**

Service Date: \_\_\_\_\_ Tech # \_\_\_\_\_ Tech Name: Jon Long  
 Travel Time = \_\_\_\_\_ Comments: \_\_\_\_\_  
 Return Time = \_\_\_\_\_ Balance Cleaned + Calib to Manu.  
 Mileage = \_\_\_\_\_ Specs.  
 Next Service Due: \_\_\_\_\_

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
**TECHNICIAN**

SOUTHWEST RESEARCH INSTITUTE  
Department of Quality Assurance  
Calibration Laboratory • 522-5215

**WORK ORDER**

CERTIFICATE # 25037 ASSET # 00245 DATE 07 Apr 97

ITEM DATA:

Manufacturer Tektronix Model 121-985-105  
Description 121-985-105 Serial # 038507  
Accessories \_\_\_\_\_

ACTION REQUESTED 101

CUSTODIAN DW W, D W D

Turned in by: \_\_\_\_\_ Phone 800

CHARGE # 205100501 Date Required \_\_\_\_\_

INSTRUMENT USED ON:  NUCLEAR  DOD  NASA  GLP  SPPE  
 OTHER \_\_\_\_\_

COPY OF CALIBRATION CERTIFICATE  Yes  No

CONDITION RECEIVED: \_\_\_\_\_ Out of tolerance, repaired to specifications  
\_\_\_\_\_ In tolerance, minor adjustments/repairs made  
 In tolerance, no adjustments/repairs  
\_\_\_\_\_ Out of tolerance, adjusted to specifications  
\_\_\_\_\_ Received into system, introduced or reactivated  
\_\_\_\_\_ Calibration interval  
\_\_\_\_\_ Reliability code

ACTION TAKEN: (Calibration/Repair/Parts) Calibrated by procedure  
std out  
-6.02°C 0.0°C

25037

CAL ENVIRONMENT:  
Temperature 77 °F Humidity 27 %RH

CALIBRATED/REPAIRED:  
By [Signature] Cal Procedure 411-9-30-5403  
Date 15 APR 97 Accuracy +/- 1°C  
Cal Interval 12 mo Time to complete:  
Next Cal due 15 APR 98 Cal 2.0 Repair \_\_\_\_\_  
Standards used (Asset#) 106, 5174

DATE COMPLETED 15 APR 97  
DATE PICKED UP 4/17/97 PICKED UP BY [Signature]

SOUTHWEST RESEARCH INSTITUTE  
Department of Quality Assurance  
Calibration Laboratory • 522-5215

WORK ORDER

CERTIFICATE # 29650 ASSET # 002015 DATE 08 May 98

ITEM DATA:  
Manufacturer Fisherbrand Model M. 983-102  
Description Thermometer Serial # 0383007  
Accessories \_\_\_\_\_

ACTION REQUESTED cal

CUSTODIAN Dr. W. Drell

Turned in by: \_\_\_\_\_ Phone 6090

CHARGE # 70-1462511 Date Required \_\_\_\_\_

INSTRUMENT USED ON:  (DOD/NASA)  (NUCLEAR)  (GLP)  (SPPE)  (ISO)  
 OTHER \_\_\_\_\_

COPY OF CALIBRATION CERTIFICATE  (Yes)  (No)

NEW WORK  Yes  No If yes, an evaluation shall be made to verify capabilities.

By MAJ Date 05-08-98

Work involves proprietary/confidential information or equipment  (Yes)  (No)

CONDITION RECEIVED: \_\_\_\_\_ (F) Out of tolerance, repaired to specifications  
\_\_\_\_\_ (G) In tolerance, minor adjustments/repairs made  
 (J) In tolerance, no adjustments/repairs  
\_\_\_\_\_ (K) Out of tolerance, adjusted to specifications  
\_\_\_\_\_ (S) Received into system, introduced or reactivated

ACTION TAKEN: (Calibration/Repair/Parts) Calibrated by procedure

445  
-0.05°C 0.0°C

CAL ENVIRONMENT:  
Temperature 80 °F Humidity 32 %RH

CALIBRATED/REPAIRED:  
By K. [Signature] Cal Procedure E77-89  
Date 11 May 98 Accuracy 1/2% span  
Cal Interval 12 mths Reliability Code: 5  
Next Cal due 11 May 99 Cal Time 1.5 Repair Time \_\_\_\_\_  
Standards used (Asset#) 219, 328

DATE COMPLETED 11 May 98  
DATE PICKED UP 5/13/98 PICKED UP BY [Signature]

29650

SOUTHWEST RESEARCH INSTITUTE  
Department of Quality Assurance  
Calibration Laboratory • 522-5215

WORK ORDER

CERTIFICATE # 34396 ASSET # 002045 DATE 05 May 99

ITEM DATA:

Manufacturer Fisherbrand Model 14-983 106  
Description thermometer Serial # 0323207  
Accessories tupe

ACTION REQUESTED cal

CUSTODIAN Dr. D. Carroll Dunn

Turned in by: \_\_\_\_\_ Phone 6090

CHARGE # 20-04 Date Required \_\_\_\_\_

INSTRUMENT USED ON:  (DOD/NASA)  (NUCLEAR)  (GLP)  (SPPE)  (ISO)  
 OTHER \_\_\_\_\_

COPY OF CALIBRATION CERTIFICATE  (Yes)  (No)

NEW WORK  Yes  No If yes, an evaluation shall be made to verify capabilities.

By MAI Date 05/05/99

Work involves proprietary/confidential information or equipment  (Yes)  (No)

CONDITION RECEIVED: \_\_\_\_\_ (F) Out of tolerance, repaired to specifications  
\_\_\_\_\_ (G) In tolerance, minor adjustments/repairs made  
 (J) In tolerance, no adjustments/repairs  
\_\_\_\_\_ (K) Out of tolerance, adjusted to specifications  
\_\_\_\_\_ (S) Received into system, introduced or reactivated

ACTION TAKEN: (Calibration/Repair/Parts) calibrated for accuracy

CAL ENVIRONMENT:

Temperature 72 °F Humidity 50 %RH

CALIBRATED/REPAIRED:

By [Signature] Cal Procedure 5.0.3315-4-42-1

Date 11 May 99 Accuracy [Signature]

Cal Interval 12 Months Reliability Code: 6

Next Cal due 11 May 00 Cal Time 1.5 Repair Time \_\_\_\_\_

Standards used (Asset#) 5174, 7001

DATE COMPLETED 11 May 99

DATE PICKED UP 5/15/99 PICKED UP BY [Signature]

34396

**CALIBRATION CHECK FORM**

Date Calibrated 11/14/97 Work Order 34396  
 Technician 82/6 Calibration Procedure T.O. 3915-K-42-1, Apr 97  
 Unit Under Test THERMISTOR  
 Manufacturer FISHER SENSORS Model H-983-00 SN 0923007 ASN 2045

STEP	FUNCTION OR RANGE	APPLIED	TOLERANCE		MEASURED VALUES		P/F
			MIN	MAX	AS FOUND	RELEASED	
	<u>RANGE: -20°C TO 110°C</u>	<u>°C</u>			<u>°C</u>		
				<u>4-1°C</u>			
		<u>-18.0</u>			<u>-18</u>		<u>P</u>
		<u>6.0</u>			<u>6</u>		<u>P</u>
		<u>32.0</u>			<u>32</u>		<u>P</u>
		<u>58.0</u>			<u>58</u>		<u>P</u>
		<u>84.0</u>			<u>84</u>		<u>P</u>
		<u>105.0</u>			<u>105</u>		<u>P</u>

# WORK ORDER 39214

Date Received 5/25/00

Asset No. 002045 Manufacturer FISHER SCIENTIFIC Model 14-983-10B  
Description THERMOMETER Serial Number 0323007  
Accessory Received/Required NONE  
Div/CC ID NONE Accessory to Asset No. N/A  
Div/CC DIV20 Location B57 Custodian DARRELL DUNN Tel. 6090  
Charge/Project No. 20.00751.006 Proprietary/Confidential N Date Required ROUTINE  
Work Requested CALIBRATION  
Receiving Inspection O.K.  
Delivered By DARRELL DUNN Tel. 6090

### WORK HISTORY

Date	Start Time	Stop Time	Notes

### PARTS

Part Name	Part Number	Cost	Failure Description

39214

### WORK SUMMARY

Failure Description \_\_\_\_\_

Repair Action \_\_\_\_\_

Cal Procedure CL-9 May 99 Temp 76 F Hum 47 %

Tech JW Cal Hrs. .7 Repair Hrs. \_\_\_\_\_ Part Cost \_\_\_\_\_

Action Taken OK

Standards Used 219 5174

Date Cal JUN 2000 Int. 12 Mo. Date Due JUN 1 Dec 2000 Reliability Code 7

Date Picked Up 6/2/00 Picked Up By [Signature]

4

## CALIBRATION CHECK FORM

Date Calibrated 1 JUN 2000

Work Order 39214

Cal By JW

Procedure No./Date : CL-9, May99 Unit Under Test Thermometer

Mfg. 175 HEN Model 14.913-100 SN 0323007 AN 2045

STEP	FUNCTION OR RANGE	APPLIED	TOLERANCE		MEASURED VALUES		P/F
			MIN	MAX	AS FOUND	RELEASED	
4.1	Temperatre Calibration						
	Lowest value of Range + 2 Div.		1294		19.4		
	20% Range	4.89			5.0		
	40% Range	30.12			30.0		
	60% Range	54.94			55.0		
	80% Range	80.08			80.2		
	Highest value of Range -2 Div.	107.05			110.0		
		25.0			25.0		



Southwest Research Institute  
6220 Culebra Road  
San Antonio, TX 78238  
(210) 522-5215  
Department of Quality Assurance  
Calibration Laboratory



Certificate #  
0972-01

## Certificate of Calibration

1 June 2000

**Issued to:** DARRELL DUNN DIV20 B57  
**Manufacturer/Model:** FISHER SCIENTIFIC 14-983-10B  
**Description:** THERMOMETER  
**Serial Number:** 0323007  
**Asset Number:** 002045

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NC SL Z540-1-1994. The results of this calibration relate only to the individual item as described above. Standards used in this calibration, described in the referenced calibration procedure with associated uncertainties or tolerances, are traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and available for examination upon request. This certificate is not to be reproduced, except in full, without the written approval of the Southwest Research Institute Department of Quality Assurance Calibration Laboratory.

This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA) and the results of this calibration certificate were determined in accordance with the terms of accreditation unless stated otherwise below.

The uncertainty of the calibration was sufficient to determine that the item met the manufacturer's published specifications unless stated otherwise below.

**Ambient Conditions:** Temperature: 76.0 Degrees Fahrenheit Humidity: 47 % RH

**Calibration Date:** 1 Jun 00 **Calibration Procedure:** CL-9 5/99

**Condition as Received:** In Tolerance

**Remarks:**

**Approved by:**

Jim Patterson, Supervisor, or Walt Hill, Metrologist

Certificate # 39214

m:\a2la.rpt Rev date 22 May 00

**Measurements performed by:**

Jerry White, Technician

Page 1 of 1



# SOUTHWEST RESEARCH INSTITUTE

## Calibration Laboratory

### WORK ORDER

Received by RCRUZ, 9/4/01 10:12:59AM

1 0000 0000 0000 0000 0000 0000 0000

Arrived 9/4/01

Work Order **444045055**

Asset No. 002045 Manufacturer FISHER SCIENTIFIC

Model 14-983-10B

Instrument Type/Class THERMOMETER

Serial No. 0323007

Accessory No. Calibration Procedure CL-9 5/99

Location B57

Div/Client DIV20

Custodian DARRELL DUNN

Mail Stop B57

Tel. 6090

**IN4CAL**

Special Instructions \_\_\_\_\_

Notify before making adjustments or repairs.  Provide measurement readings

Charge/Project No. 00751.006 1.20

Requested By / Telephone

The above is correct for the work requested.

Darrell Dunn 6090

### WORK NOTES

Date	Hours	Remarks/Notes
<u>9/10</u>	<u>1.0</u>	<u>Cal</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SwRI Cal-Lab	By: jaw
CAL: 609100 DUE: 609101	
AN:002045 SN:0323007	

Date	Hours	Part Name	Part Number	Failure Description	Cost
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

### WORK SUMMARY

Failure Description n/a

Repair Action n/a

Calibration Procedure CL-9 5/99 Temp 74 F Hum. 54 %

Tech R Dykster Totals Cal Hours 1.0 Repair Hours \_\_\_\_\_ Parts Cost \_\_\_\_\_

Standards Used S243, S174

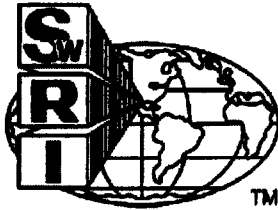
Date Picked Up 9/21/01

Picked Up By Darrell Dunn

45055

	STD	TI	
	0.033 °C	6.0 °C	
	-19.877 °C	-19.4 °C	39214
50	<del>48.993</del> °C	50.00 °C	34394 1/1
100			29650
	10.062 °C	10.0 °C	
	30.028 °C	29.8 °C	
	74.971	80.2 °C	
	118.940	110.0 °C	

42022



Southwest Research Institute  
6220 Culebra Road  
San Antonio, TX 78238  
(210) 522-5215  
Department of Quality Assurance  
Calibration Laboratory



## Certificate of Calibration

11 September 2001

**Issued to:** DARRELL DUNN DIV20 B57  
**Manufacturer/Model:** FISHER SCIENTIFIC 14-983-10B  
**Description:** THERMOMETER  
**Serial Number:** 0323007  
**Asset Number:** 002045  
**Work Order Number:** 444045055

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NC SL Z540-1-1994. The results of this calibration relate only to the individual item as described above. Standards used in this calibration, described in the referenced calibration procedure with associated uncertainties or tolerances, are traceable to the National Institute of Standards and Technology (NIST). Supporting documentation relative to traceability is on file and available for examination upon request. This certificate is not to be reproduced, except in full, without the written approval of the Southwest Research Institute Department of Quality Assurance Calibration Laboratory.

This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA) and the results of this calibration certificate were determined in accordance with the terms of accreditation unless stated otherwise below.

The uncertainty of the calibration was sufficient to determine that the item met the manufacturer's published specifications unless stated otherwise below.

**Ambient Conditions:** Temperature: 74.0 Degrees Fahrenheit Humidity: 54 % RH

**Calibration Date:** 11 Sep 01 **Calibration Procedure:** CL-9 5/99

**Condition as Received:** SEE ATTACHED DATA

**Condition as Released:** SEE ATTACHED DATA

**Remarks:**

**Approved by:**

Walt Hill, Supervisor  
Institute Calibration Laboratory

**Measurements performed by:**

Roger Dykstra, Technician

