

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

WORK ORDER

CERTIFICATE # 22443 ASSET # 004776 DATE 21 Aug 96

ITEM DATA:

Manufacturer Fisher Model 15041C
Description Thermometer Serial # 9253474
Accessories _____

ACTION REQUESTED Cal

CUSTODIAN Darrell Dugg Dv20

Turned in by: _____ Phone _____

CHARGE # 20-5708-573 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
Yes Calibration interval
_____ Reliability code

ACTION TAKEN: (Calibration/Repair/Parts) Calibrated by Procedure.

CAL ENVIRONMENT:
Temperature 78 °F Humidity 38 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure 411-9-30-7703
Date 26 Aug 96 Accuracy 1/2% Spec.
Cal Interval 6 mos Time to complete: _____
Next Cal due 26 Feb 97 Cal 2.5 Repair _____
Standards used (Asset#) 319, 328

DATE COMPLETED 26 Aug 96
DATE PICKED UP 8/27/96 PICKED UP BY [Signature]

22443

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

WORK ORDER

CERTIFICATE # 26598 ASSET # 0001996 DATE 25 Aug 97

ITEM DATA:

Manufacturer Fisher Model 15041P
Description Thermometer Serial # 9253121
Accessories _____

ACTION REQUESTED 01

CUSTODIAN DW20, Small Damm

Turned in by: _____ Phone 6090

CHARGE # 20-5708501 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 _____ Date _____

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
447 447
36.97°C 37.00°C

CAL ENVIRONMENT:
Temperature 74 °F Humidity 41 %RH

CALIBRATED/REPAIRED:
By K. Williams Cal Procedure 41-9-30 5/103
Date 4-Sep-97 Accuracy ±0.2°C
Cal Interval 6 Mo Reliability Code: 3
Next Cal due 4-Sep-98 Cal Time 1.5 Repair Time _____
Standards used (Asset#) 219, 328

DATE COMPLETED 4-Sep-97
DATE PICKED UP 9/10/97 PICKED UP BY [Signature]

26598

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

WORK ORDER

CERTIFICATE # 24344 ASSET # 004996 DATE 17 FEB. 97

ITEM DATA:
Manufacturer Fisher Model 150412
Description Thermometer Serial # 925 3474
Accessories _____

ACTION REQUESTED Cal

CUSTODIAN Div. 20, David Dunn

Turned in by: _____ Phone _____

CHARGE # 20-5708-561 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 internal
_____ Reliability code

24344

ACTION TAKEN: (Calibration/Repair/Parts)
_____ 37.00°C 37.0°C

CAL ENVIRONMENT:
Temperature 78°F Humidity 35%RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure 41-9-30-7103
Date 26 Feb 97 Accuracy ± 0.2°C
Cal Interval 6 Mo Time to complete:
Next Cal due 26 Feb AUG 97 Cal 20 Repair _____
Standards used (Asset#) 219, 328

DATE COMPLETED 26 Feb 97
DATE PICKED UP 2/26/97 PICKED UP BY [Signature]

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

WORK ORDER

CERTIFICATE # 31637 ASSET # 004996 DATE 19 OCT 98

ITEM DATA:

Manufacturer Fisher Model 15041C
Description Thermometer Serial # 9253174
Accessories _____

ACTION REQUESTED Cal

CUSTODIAN Du. 20, Darrel Dunn

Turned in by: _____ Phone 6090

CHARGE # 20-1400-571 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 AMEI Date 10-19-98

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) Collected Per Procedure

CAL ENVIRONMENT:
Temperature 75 °F Humidity 57 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure ASTM E 77-92
Date 20 Oct 98 Accuracy [Signature]
Cal Interval 6 Mos Reliability Code: 5
Next Cal due 20 Apr 99 Cal Time 1.0 Repair Time _____
Standards used (Asset#) 219, 328, 4965

DATE COMPLETED 20 Oct 98
DATE PICKED UP 10/22/98 PICKED UP BY [Signature]

31637

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

WORK ORDER

CERTIFICATE # 28934 ASSET # 001996 DATE 09 MAR 98

ITEM DATA:

Manufacturer Fisher Model 15041C
Description 1 NOR MONITOR Serial # 9153474
Accessories _____

ACTION REQUESTED MI

CUSTODIAN DV TO, Donnell Damm

Turned in by: _____ Phone 6090

CHARGE # 70-166-371 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 _____ Date _____

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) _____
Cal std with
37.00 °C 37.1 °C

CAL ENVIRONMENT: Temperature 74 °F Humidity 24 %RH

CALIBRATED/REPAIRED:
By K. H. ... Cal Procedure WI-9-30 T#03
Date 3/18/98 Accuracy ± 2 °C
Cal Interval 6 mo Reliability Code: 4
Next Cal due 3/18/99 Cal Time 1.5 Repair Time _____
Standards used (Asset#) 219 326

DATE COMPLETED 3/18/98
DATE PICKED UP 3/18/98 PICKED UP BY [Signature]

18944
16686

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

WORK ORDER

CERTIFICATE # 34372 ASSET # 004996 DATE 04 May 99

ITEM DATA:

Manufacturer Fisher Model 15011C
Description Thermometer Serial # 9253474
Accessories Lube

ACTION REQUESTED cal

CUSTODIAN Div. 20, Danell Dunn

Turned in by: _____ Phone 6096

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 me! Date 05-04-99

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 Per Procedure

CAL ENVIRONMENT:
Temperature 76 °F Humidity 33 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure T.O. 338.5-4-42-1, 14 Apr 97
Date 7/26/99 Accuracy 1/2% Span
Cal Interval 6 mths Reliability Code: 6
Next Cal due 7/26/99 Cal Time 1.5 Repair Time _____
Standards used (Asset#) 5174, 7001

DATE COMPLETED 7/26/99
DATE PICKED UP 5/18/99 PICKED UP BY [Signature]

34372

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

WORK ORDER

WORK ORDER # 36855 ASSET # 004996 DATE 17 Nov. 99

ITEM DATA:

Manufacturer Fisher Model 150410
Description Thermometer Serial # 9253474
Accessories (w/o tube)

ACTION REQUESTED Cal

CUSTODIAN Dir. Jo. Daniel 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 [Signature] Date 11-17-99

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

CONDITION RECEIVED: _____ Out of tolerance
 In tolerance
_____ Damaged (Contact customer)
_____ Contact _____ Date _____
_____ Received into system, introduced or reactivated

ACTION TAKEN: (Calibration/Repair/Parts) calibrated by [Signature]

CAL ENVIRONMENT:

Temperature 74 °F Humidity 49 %RH

CALIBRATED/REPAIRED:

By [Signature] Cal Procedure CL-9, May 99
Date 19 Nov 99 Accuracy [Signature]
Cal Interval 6 mos Reliability Code 1
Next Cal Due 19 May 00 Cal Time 2 Repair Time _____
Standards used (Asset #) 5273, 5174

DATE COMPLETED 19 Nov 99

DATE PICKED UP 11/23/99 PICKED UP BY [Signature]

36855



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

19 November 1999

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: FISHER SCIENTIFIC 15041C
Description: THERMOMETER
Serial Number: 9253474
Asset Number: 004996

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NCSL Z540-1-1994. 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 is 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: 49 % RH

Calibration Date: 19 Nov 99 **Calibration Procedure:** CL-9, MAY99

Condition as Received: IN TOLERANCE

Condition as Released: IN TOLERANCE

Remarks:

Approved by:



Jim Patterson, Supervisor of Walt Hill, Metrologist

Certificate # 36855

m:\a2la.rpt Rev date 10 Mar 99

Measurements performed by:



Ken Harp, Technician

Page 1 of 1

SOUTHWEST RESEARCH INSTITUTE

Calibration Laboratory

WORK ORDER

Processed by RCRUZ at 8:44:40AM on 10/24/00

I4213

||||| ||||| ||||| ||||| ||||| ||||| |||||

Work Order No 444041089

Arrived 10/24/00

Asset No. 004996 Manufacturer FISHER SCIENTIFIC Model 15041C

Instrument Type/Class THERMOMETER Serial No. 9253474

Accessory No. Calibration Procedure CL-9, MAY99 Location B57

Div/Client DIV20 Custodian DARRELL DUNN Mail Stop B57 Tel. 6090

Charge/Project No. 20.00751.006 Delivered By / Telephone DARRELL DUNN

IN4CAL

Special Instructions _____

WORK NOTES

Date	Hours	Remarks/Notes
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Swire Cal Lab By: lh
CAL: 10/24/00 DUE: 01/25/01
AN: 004996 SN: 9253474
| SWIRE CAL LAB 10000 SWIRE DR SUITE 1000

41089

REPAIR PARTS

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

WORK SUMMARY

Failure Description _____

Repair Action _____

Calibration Procedure CL-9 Temp 75 F Hum. 48 %

Tech [Signature] Totals Cal Hours 2 Repair Hours _____ Parts Cost _____

Standards Used D01219

Date Picked Up 12/14/2000 Picked Up By [Signature]



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

13 November 2000

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: FISHER SCIENTIFIC 15041C
Description: THERMOMETER
Serial Number: 9253474
Asset Number: 004996

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NCSL 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: 75.0 Degrees Fahrenheit Humidity: 48 % RH

Calibration Date: 13 Nov 00 **Calibration Procedure:** CL-9, MAY99

Condition as Received: IN TOLERANCE

Condition as Released: IN TOLERANCE

Remarks:

Approved by:

Jim Patterson, Supervisor, or Walt Hill, Metrologist

Certificate # 444041089

m:a2la.rpt Rev date 22 May 00

Measurements performed by:

Mack Wood, Technician



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

23 May 2001

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: FISHER SCIENTIFIC 15041C
Description: THERMOMETER
Serial Number: 9253474
Asset Number: 004996
Work Order Number: 444043744

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: 77.0 Degrees Fahrenheit Humidity: 36 % RH

Calibration Date: 23 May 01 **Calibration Procedure:** CL-9, MAY99

Condition as Received: SEE ATTACHED DATA

Condition as Released: SEE ATTACHED DATA

Remarks: SEE ATTACHED DATA SHEET FOR CORRECTION FACTORS AND TEST UNCERTAINTY.

Approved by:

Walt Hill, Supervisor
Institute Calibration Laboratory

Measurements performed by:

Roger Dykstra, Technician

SOUTHWEST RESEARCH INSTITUTE

Calibration Laboratory

WORK ORDER

Received by WHILL, 11/16/01 12:38:23PM

Arrived 11/16/01

Work Order **444046131**

Asset No. 004996 Manufacturer FISHER SCIENTIFIC

Model 15041C

Equipment Type THERMOMETER

Serial No. 9253474

Accessory No.

Interval 6 M

Calibration Procedure CL-9, MAY99

Location B57

Div/Client DIV20

Custodian DARRELL DUNN

Mail Stop B57

Tel 6090

IN4CAL

Special Instructions 20.00751.006

Notify before adjustments or repairs. () Provide data with certificate () Certificate Type _____

Charge/Project No. 00751.006.1.20

Requester / Telephone BRIAN/

This information is correct for the work requested. B. EDW

WORK NOTES

Date	Hours	Remarks/Notes
<u>11/20</u>	<u>1.0</u>	<u>Cal</u>

Date	Hours	Part Name	Part Number	Failure Description	Cost
<u>n/a</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Failure Description n/n

Repair Action n/a

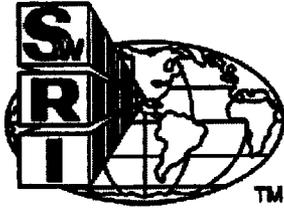
Tech RD/KSM Cal Hrs. 1.0 Repair Hrs Parts Cost Temp 76 F Hum. 29

Standards Used 000219

Date Picked Up 12/4/01

Picked Up By Darrell Dunn

444046131



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

Certificate of Calibration

20 November 2001

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: FISHER SCIENTIFIC 15041C
Description: THERMOMETER
Serial Number: 9253474
Asset Number: 004996
Work Order Number: 444046131

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NCSL Z540-1-1994. 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 is 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.

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: 29 % RH

Calibration Date: 20 Nov 01 **Calibration Procedure:** CL-9, MAY99

Condition as Received: IN TOLERANCE

Condition as Received: IN TOLERANCE

Remarks:

Approved by:

Walt Hill, Supervisor
Institute Calibration Laboratory

Measurements performed by:

Roger Dykstra, Technician

SOUTHWEST RESEARCH INSTITUTE

Calibration Laboratory

WORK ORDER

Received by AANDERSON, 6/6/02 9:11:09AM

Arrived 6/6/02

Work Order **444048918**

Asset No. 004996 Manufacturer FISHER SCIENTIFIC

Model 15041C

Equipment Type THERMOMETER

Serial No. 9253474

Accessory No.

Interval 6 M

Calibration Procedure CL-9, MAY99

Location B57

Div/Client DIV20

Custodian DARRELL DUNN

Mail Stop B57

Tel 6090

IN LINE

Special Instructions 20.00751.006

Notify before adjustments or repairs. () Provide data with certificate () Certificate Typ. _____

Charge/Project No. 00751.006 1.20

Requester/ Telephone

DARRELL DUNN

This information is correct for the work requested.

WORK NOTES

Date	Hours	Remarks/Notes
<u>6/12/02</u>	<u>.5</u>	<u>and</u>
<u>6/13/02</u>	<u>.5</u>	<u>and</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

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

WORK SUMMARY

Failure Description n/a

Repair Action n/a

Tech RD Jensen Cal Hrs. 1.0 Repair Hrs _____ Parts Cost _____ Temp 74 F Hum. 54 %

Standards Used SA 9137, 8920

Date Picked Up 6/24/02

Picked Up By Darrell Dunn

48998

-10

-9.932

-9.4

57

56.99

58

125

124.93

123.6

193

210.67

210.2

260

250.31

251.4

27787

Southwest Research Institute
Calibration Laboratory
Calibration Data Sheet

Workorder 444048918
Asset #. 004996
Serial #. 9253474

Mfr. Fisher Scientific
Model 15041C
Type Thermometer

Technician R Dykstra
Procedure CL-9, 5/99
Cal Date 6/13/02

Ambient Conditions:

Temperature 74 Degree F
Humidity 56 % R.H.
Baro. Pressure N/A PSIA

Data sheet Revision:

Revision 0 2/21/02

Standards used:

Asset #	Due Date	Nomenclature
009137	12/06/02	Hart Super thermometer
008920	02/07/02	RTD probe

Is statement of compliance to a specification requested. Yes
(if statement is required, print yes otherwise leave blank)

Tolerance 2.00 Degree C Range -10 to 260 Degree C
(if not required leave blank)

Degree C	Degree C	Degree C	Degree C	Degree C	
	As Found				
Std Reading	TI Reading	Error	Test Limits	Uncertainty	Results
-9.93	-9.4	0.53	2	0.23	Pass
56.99	58.0	1.01	2	0.23	Pass
124.93	123.6	-1.33	2	0.23	Pass
210.07	210.2	0.13	2	0.23	Pass
250.31	251.4	1.09	2	0.23	Pass

Remarks:

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, which provides a level of confidence of approximately 95%.

If compliance testing to a specification is requested. The results can be pass, fail, or if blank "Not determinable". If results are not determinable it is to end user to determine if results meet their needs.

If compliance testing to a specification is not requested, only data and uncertainty will be given on data sheet.



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

Certificate of Calibration

13 June 2002

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: FISHER SCIENTIFIC 15041C
Description: THERMOMETER
Serial Number: 9253474
Asset Number: 004996
Work Order Number: 444048918

This certifies the above item was calibrated in compliance with MIL-STD-45662A and ANSI/NCSL Z540-1-1994. 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 is 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.

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: 13 Jun 02 **Calibration Procedure:** CL-9, MAY99

Condition as Received: IN TOLERANCE

Condition as Returned: IN TOLERANCE

Remarks:

Approved by:


Walt Hill, Metrology Group Leader
Institute Calibration Laboratory

Measurements performed by:


Roger Dykstra, Technician