

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

WORK ORDER

CERTIFICATE # 22385 ASSET # 3248 DATE 14 Aug 96

ITEM DATA:

Manufacturer Kessler Model ASTMIC 76MM
Description thermometer Serial # 115814
Accessories _____

ACTION REQUESTED cal

CUSTODIAN Danell Dunn Div 20

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
_____ Calibration interval
_____ Reliability code

ACTION TAKEN: (Calibration/Repair/Parts) Calibrated per Procedure.
SH 447
0.0°C 0°C

CAL ENVIRONMENT:
Temperature 80 °F Humidity 33 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure 41-9-30-5103
Date 8/21/96 Accuracy [Signature]
Cal Interval 12 Mths Time to complete: _____
Next Cal due 12 Aug 97 Cal 2.0 Repair _____
Standards used (Asset#) 4965

DATE COMPLETED 19 Aug 96
DATE PICKED UP 8/21/96 PICKED UP BY [Signature]

22385

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

WORK ORDER

CERTIFICATE # 26583 ASSET # 03248 DATE 15 Aug 97

ITEM DATA:

Manufacturer Kosch Model ASHA 10 70000
Description 1 No. 1000000 Serial # 115811
Accessories _____

ACTION REQUESTED MI

CUSTODIAN D. W. 70, Dan D. W.

Turned in by: _____ Phone 7070

CHARGE # 20-5108-501 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 per procedure
MI 447
0.012°C 0.5°C

26583

CAL ENVIRONMENT:
Temperature 70 °F Humidity 46 %RH

CALIBRATED/REPAIRED:
By K. [Signature] Cal Procedure WI-9-30-7703
Date 4 Sep 97 Accuracy ±.1°C
Cal Interval 12 Mos Reliability Code: 4
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 9/16/97 PICKED UP BY [Signature]

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

WORK ORDER

CERTIFICATE # 31648 ASSET # 003248 DATE 19 Oct 98

ITEM DATA:

Manufacturer Kossfor Model ASTM 10 76MM
Description Thermometer Serial # 115814
Accessories _____

ACTION REQUESTED Cal

CUSTODIAN Dr. Danell Dunn

Turned in by: _____ Phone 6090

CHARGE # 20-1402-571 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 Mues 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) Calibrated Per Procedure

CAL ENVIRONMENT:
Temperature 74 °F Humidity 58 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure ASTM E77-92
Date 20 Oct 98 Accuracy 1/24 years
Cal Interval 12 mths Reliability Code: 5
Next Cal due 20 Oct 99 Cal Time 1.0 Repair Time _____
Standards used (Asset#) 219, 328

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

31648

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

WORK ORDER

WORK ORDER # 37055 ASSET # M3218 DATE 18 Dec 99

ITEM DATA:
Manufacturer Rossler Model ASTM 10
Description Flow Meter Serial # 115214
Accessories _____

ACTION REQUESTED INT

CUSTODIAN Div 20 Daniel Dunn

Turned in by: _____ Phone 1090

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 MAD Date 18-08-99

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) CL

CAL ENVIRONMENT:
Temperature 70 °F Humidity 30 %RH

CALIBRATED/REPAIRED:
By [Signature] Cal Procedure CL-9 MAY 95
Date 12 Dec 99 Accuracy 1/1 Dec
Cal Interval 6 Reliability Code 6
Next Cal Due 10 Feb 00 Cal Time 1.3 Repair Time _____
Standards used (Asset #) 5174 5243

DATE COMPLETED 10 Dec 99
DATE PICKED UP 12/14/99 PICKED UP BY [Signature]

37055



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

Accredited



Certificate #
0972-01

Certificate of Calibration

10 December 1999

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: KESSLER ASTM 1C 76MM
Description: THERMOMETER
Serial Number: 115814
Asset Number: 003248

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: 70.0 Degrees Fahrenheit Humidity: 30 % RH

Calibration Date: 10 Dec 99 **Calibration Procedure:** CL-9 MAY 99

Condition as Received: IN TOLERANCE

Condition as Released: IN TOLERANCE

Remarks:

Approved by:

Jim Patterson, Supervisor or Walt Hill, Metrologist

Certificate # 37055

m:\a2la.rpt Rev date 10 Mar 99

Measurements performed by:

Jerry White, Technician

Page 1 of 1

SOUTHWEST RESEARCH INSTITUTE

Calibration Laboratory

WORK ORDER

Processed by RCRUZ at 3:52:24PM on 1/19/01

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Work Order **444042126**

Arrived 1/19/01

Asset No. 003248 Manufacturer KESSLER

Model ASTM 1C 76MM

Instrument Type/Class THERMOMETER

Serial No. 115814

Accessory No. Calibration Procedure CL-9, 5/99

Location B57

Div/Client DIV20

Custodian DARRELL DUNN

Mail Stop B57

Tel. 6090

Charge/Project No. 20.00751.006

Delivered By / Telephone

IN4CAL

Special Instructions _____

WORK NOTES

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

REPAIR PARTS

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

WORK SUMMARY

Failure Description _____

Repair Action _____

Calibration Procedure CL 9, 5/99 Temp 74 F Hum. 36 %

Tech U Marab Totals Cal Hours 1.0 Repair Hours _____ Parts Cost _____

Standards Used 219

Date Picked Up 1/31/2001 Picked Up By [Signature]

444042126



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

29 January 2001

Issued to: DARRELL DUNN DIV20 B57
Manufacturer/Model: KESSLER ASTM 1C 76MM
Description: THERMOMETER
Serial Number: 115814
Asset Number: 003248
Work Order Number: 444042126

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: 36 % RH

Calibration Date: 29 Jan 01 **Calibration Procedure:** CL-9,5/99

Condition as Received: IN TOLERANCE

Condition as Released: IN TOLERANCE

Remarks:

Approved by:

Walt Hill, Supervisor
Institute Calibration Laboratory

Measurements performed by:

Vince Morales, Technician