

# SOUTHWEST RESEARCH INSTITUTE

6220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, 78228-0510 • TEL (210) 522-5215 • FAX (210) 522-369

**To:** Darrell Dunn, Div20, B57  
**From:** Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory

**Date:** Jun. 03, 2005  
**Subject:** Out-of-tolerance Notice

The purpose of this notice is to alert you of a condition, which may have caused erroneous measurements affecting safety or the quality of products or services your organization provides. The attached as-found readings are provided for your evaluation to determine if the instrument listed below had an impact and if further action is required.

When the as-found results are near the specification limit, +/- a margin less than the measurement uncertainty, it is not possible to state in-tolerance or out-of-tolerance with a 95% level of confidence. It is the Institute Calibration Laboratory policy that the client is made aware of this situation because the end-user is taking some of the risk that the instrument listed below may not meet the end-user measurement requirements.

Your review/evaluation should be conducted in accordance with your organizational quality policy and procedural requirements. If we can be of further assistance, please contact the Calibration Laboratory at 522-5215.

**Manufacturer:** Ertco      **Model:** ASTM 1C

**Description:** Thermometer      **Serial Number:** 4359

**Asset Number:** 11678      **User ID Number:**

**Last Calibration:** N/A

**Date Received for Service:** Jun. 02, 2005      **Work Order Number:** 303064475

**Service Requested:** Scheduled calibration

**Remarks:** Out of tol. See Data Sheet

## OUT OF TOLERANCE

Southwest Research Institute  
 Calibration Laboratory  
 Measurement Report

|             |                                     |       |             |            |           |
|-------------|-------------------------------------|-------|-------------|------------|-----------|
| Work Order: | 303064475                           | Mfr.  | ERTCO       | Technician | JRG       |
| Asset No.   | 011678                              | Model | ASTM 1C     |            |           |
| Serial No.  | 4359                                | Type. | THERMOMETER | Cal Date.  | 03-Jun-05 |
| Remarks:    | Accuracy Reference ANSI Z236.1-1983 |       |             |            |           |

| Function/Range | Test Point | TI Reading | Difference | +/-Limit | +/-Uncertainty | Found/Left |
|----------------|------------|------------|------------|----------|----------------|------------|
| Temperature    | °C         | °C         | °C         | °C       | °C             | Result     |
|                | -19.9      | -18.5      | 1.4        | 0.5      | 0.12           | Fail       |
|                | 0.1        | 1.8        | 1.7        | 0.5      | 0.12           | Fail       |
|                | 50.0       | 51.4       | 1.4        | 0.5      | 0.12           | Fail       |
|                | 100.0      | 101.0      | 1.0        | 0.5      | 0.12           | Fail       |
|                | 149.9      | 150.5      | 0.6        | 0.5      | 0.12           | Fail       |

END OF REPORT



# SOUTHWEST RESEARCH INSTITUTE

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**To:** Darrell Dunn, Div20, B57  
**From:** Institute Calibration Laboratory  
**Date:** June 3, 2005  
**Subject:** Returned Equipment

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The equipment described below is being return "as is" for the reason(s) indicated. The Institute Calibration Laboratory is not responsible to the customer for calibration status or condition. If we can be of further assistance, please contact the Calibration Laboratory at 522-5215.

Unit Received: June 2, 2005      Work Requested: Scheduled calibration

Manufacturer: Ertco      Model: ASTM 1C      Description: Thermometer

Serial Number: 4359      Asset Number: 11678      User ID Number:

Reason for return without calibration or repair:

- Requested by the owning organization.
- Required accessories or items listed in remarks were not provided.
- Lack of technical data.
- Parts are no longer available.
- Lack of support by manufacturer.
- Other

Remarks: Thermometer was returned to customer with as found out of tolerance data as requested.

  
Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory