

# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

## NONCONFORMANCE REPORT

Project No. 20.06002.01.071

NCR No. 2003-13

### PART 1: DESCRIPTION OF NONCONFORMANCE

Thermohygrometers were found out-of-tolerance upon recalibration.

S/N 21330180 (AN 9502), S/N 21189381 (AN 8788), S/N 21334995 (AN 9503), S/N 21318178 (AN 9808)

Initiated by: L. Yang

Date: 6/25/03

Action Required by: L. Yang

### PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

Response Due Date: July 9, 2003

Response Person: L. Yang

#### Disposition:

Accept as is.

#### Basis of Disposition:

No data are affected by the out-of-tolerance conditions. Readings from the hygrometers were not reliable, so they were not used since the previous calibration.

#### Action to Correct Nonconformance:

A new humidity chamber from Thunder Scientific has been purchased and will be used in future measurements

New thermohygrometers from Vaisala are being purchased.

Target date for completion: June 25, 2003

Proposed by: Lietai Yang

Date: June 25, 2003

### PART 3: APPROVAL

Element Manager: [Signature] Date: 7/1/03

Director of QA: [Signature] Date: 7/1/03

Comments/Instructions:

### PART 4: CLOSE OUT

#### Comments:

Action Complete

Verified by: [Signature]

Date: 7/1/03

#### Distribution:

Original-CNWRA QA DIRECTOR/QA Records

ORIGINATOR - L. Yang

PRINCIPAL INVESTIGATOR(S) LSB

ELEMENT MANAGERS

B. Sagar, and P. Mackin

L. Yang LSB

# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

## Memorandum

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To: SwRI Calibration Lab

From: Lietai Yang

Date: June 16, 2003



Subject: Out-of-Spec Thermo-Hygrometers

The following thermo-hygrometers need to be removed from the calibration recall list. A copy of this memorandum will be placed in Division 20 calibration records for these 3 thermo-hygrometers.

Conrol Campoany, Model 4085,	S/N 21330180	AN: 9502
Conrol Campoany, Model 4085,	S/N 21189381 *	AN: 8788
Conrol Campoany, Model 4085,	S/N 21334995	AN: 9503

\* Item #2 was purchased from Cole-Parmer

The model number by Cole-Parmer is 03313-66.

J. Yang  
6/24/03

# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

## Memorandum

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**To: SwRI Calibration Lab**

**From: Lietai Yang**

**Date: June 25, 2003**



**Subject: Out-of-Spec Thermo-Hygrometers**

Because a recent calibration for three thermo-hygrometers manufactured by Control Company has shown out-of-spec results, please remove the fourth one (see below) from the calibration recall list. A copy of this memorandum will be placed in Division 20 calibration records for this thermo-hygrometer.

**Control Company, Model 4085, S/N: 21318178, AN:9808**

**SOUTHWEST****RESEARCH****INSTITUTE**

6220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, 78228-0510 • TEL (210) 522-5215 • FAX (210) 522-3692

**To:** Darrell Dunn, Div. 20/Bldg. 57**From:** Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory**Date:** Jun. 06, 2003**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:** Control Company **Model:** 4085**Description:** Thermohygrometer **Serial Number:** 21330180**Asset Number:** 9502 **User ID Number:** None**Last Calibration:** June 27, 2002**Date Received for Service:** Jun. 02, 2003 **Work Order Number:** 444053961**Service Requested:** Scheduled calibration**Remarks:** Unit failed relative humidity tests.

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**Manufacturer:** Control Company **Model:** 4085**Description:** Thermohygrometer **Serial Number:** 21334995**Asset Number:** 9503 **User ID Number:** None**Last Calibration:** June 27, 2002**Date Received for Service:** Jun. 02, 2003 **Work Order Number:** 444053961**Service Requested:** Scheduled calibration**Remarks:** Unit failed relative humidity tests.

**To:** Darrell Dunn, Div. 20/ Bldg. 57

**From:** Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory

**Date:** Jun. 06, 2003

**Subject:** Out-of-tolerance Notice

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**Manufacturer:** Cole-Parmer **Model:** 03313-66

**Description:** Thermohygrometer **Serial Number:** 21189381

**Asset Number:** 8788 **User ID Number:** None

**Last Calibration:** June 27, 2002

**Date Received for Service:** Jun. 02, 2003 **Work Order Number:** 444053961

**Service Requested:** Scheduled calibration

**Remarks:** Unit failed relative humidity tests.