

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: 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.

OUT OF TOLERANCE

Southwest Research Institute
Calibration Laboratory
Calibration Report

Work Order	444053961	Mfr	Cole-Parmer	Tech:	Mark Romero
Asset No.	008788	Model	03313-66	Cal Date:	04-Jun-03
Serial No.	21189381	Type	Thermohygrometer		
Remarks:					

Function/Range	Test Point	TI Reading	Difference	+/-Limits	+/-Uncertainty	As Found
HUMIDITY	%RH	%RH	%RH	%RH	%RH	Results
	34.99	31.66	-3.33	1.50	0.50	Fail
	50.01	44.62	-5.39	1.50	0.50	Fail
	75.21	65.83	-9.38	1.50	0.50	Fail
TEMPERATURE	Deg C	Deg C	Deg C	Deg C	Deg C	
	20.17	20.16	-0.01	0.20	0.16	Pass
	23.03	23.13	0.10	0.20	0.16	Pass
	24.94	25.10	0.16	0.20	0.16	Pass
END OF REPORT						

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

Memorandum

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
Conrol Campoany, Model 4085, S/N 21189381
Conrol Campoany, Model 4085, S/N 21334995

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) *L. Yang*

ELEMENT MANAGERS

B. Sagar, and P. Mackin

L. Yang