

# **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, Bld 57  
**From:** Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory

**Date:** Mar. 20, 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:** Proto **Model:** 6104

**Description:** Torque Screwdriver **Serial Number:** 918697

**Asset Number:** 10126 **User ID Number:**

**Last Calibration:** UNKNOWN

**Date Received for Service:** Mar. 20, 2003 **Work Order Number:** 444052783

**Service Requested:** Scheduled calibration

**Remarks:** All points checked on unit indicated low. Please refer to data sheet.

# Calibration Results

## SwRI Calibration Laboratory

TI: PROTO 6104  
TORQUE SCREWDRIVER  
Serial No: 918697  
Asset No. 010126

Note: All TAR's are greater than 4:1 unless noted on TAR column.

Calibration Procedure: HAND TORQUE TOOLS, NOV 2000 (0-100in.oz.)

Notes:

Result: **FAIL**

Performed on: 3/17/03 at 16:49:15

Performed by: Perry Carpenter

Environment: Temp. 68.0°F Humid. 37 %

Condition F/L: AS-FOUND

Procedure Completed:

Work Order #: 444052783

### Standards Used

Asset	Mfg	Model	Description	Cal. Date	Due Date
007010	CDI	1001-0-TTTP	TORQUE TRANSDUCER	20-Dec-02	20-Mar-03

### Test Data

STD PARAMETER	TRUE VALUE	----- READING	TEST INSTRUMENT TOLERANCE	----- TI ERROR	ERROR in (% of Tol)
20% F.S.					
20.000in/lbs		17.760	1.2in/lbs	-2.24in/lbs	187
20.000in/lbs		17.390	1.2in/lbs	-2.61in/lbs	217
20.000in/lbs		18.260	1.2in/lbs	-1.74in/lbs	145
60%F.S.					
60.000in/lbs		54.450	3.6in/lbs	-5.55in/lbs	154
60.000in/lbs		55.480	3.6in/lbs	-4.52in/lbs	126
60.000in/lbs		57.860	3.6in/lbs	-2.14in/lbs	59
100%F.S.					
100.000in/lbs		93.980	6in/lbs	-6.02in/lbs	100
100.000in/lbs		91.580	6in/lbs	-8.42in/lbs	140
100.000in/lbs		91.610	6in/lbs	-8.39in/lbs	140
Result of Operator Evaluation Clockwise					FAIL
Result of Operator Evaluation					PASS <i>Ans</i>
<del>100% FS</del>					

End of Test Data

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**To:** Darrell Dunn  
**From:** Institute Calibration Laboratory  
**Date:** March 25, 2003  
**Subject:** Returned Equipment

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The equipment described below is being return for the reason(s) indicated. If we can be of further assistance, please contact the Calibration Laboratory at 522-5215.

Unit Received: March 10, 2003    Work Requested: Scheduled calibration

Manufacturer: Proto    Model: 6104    Description: Torque Screwdriver

Serial Number: 918617    Asset Number: 10126    User ID Number:

Reason for return without calibration or repair:

- ☒ (X) 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: Unit indicates out of tolerance at all points checked. All readings were low.



Walt Hill, Metrology Group Leader  
Institute Calibration Laboratory

# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

## NONCONFORMANCE REPORT

Project No. 20.06002.01.081

NCR No. 2003-03

### PART 1: DESCRIPTION OF NONCONFORMANCE:

Proto Torque Screwdriver (Serial Number 918697, Asset number 10126) was found to be out of tolerance during initial calibration.

Initiated by: Darrell S. Dunn

Date: 3/27/2003

### PART 2: PROPOSED DISPOSITION AND CORRECTIVE ACTION

#### Disposition:

Return torque screwdriver to vendor and replace with torque screwdriver from another manufacturer. No data are affected by the out of tolerance condition

#### Basis of Disposition:

Torque screwdriver is new and should not have been received in the out of tolerance condition. Because this was an initial calibration performed immediately after the torque screwdriver was received, the torque screwdriver was not used in any tests.

#### Action to Correct Nonconformance:

Torque Screwdriver was returned to vendor.

Target date for completion: 4/4/2003

Proposed by: Darrell S. Dunn

Date: 3/27/2003

### PART 3: APPROVAL

Element Manager:

Date: 3/28/03

Director of QA:

Date: 4/1/2003

Comments/Instructions:

### PART 4: CLOSE OUT

Comments: No further action required. This was discovered during the initial certification and the screwdriver had not been used during any testing activities.

Verified by:

Date:

4/2/03

#### Distribution:

D. Dunn

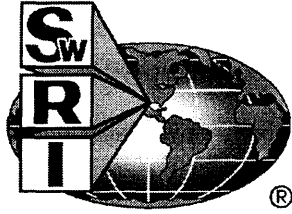
M. Ekstrom

QA Director

All Element managers

Orig To NCR Folder

B. Sagar, P. Mackin



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## MEMORANDUM

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**To:** SwRI Calibration Lab  
**From:** Darrell S. Dunn *D.S.D.*  
**Date:** April 7, 2003  
**Subject:** Removal of Equipment from the Calibration Recall List

The following equipment are no longer within tolerance and need to be removed from the calibration recall list. A copy of this memorandum will be placed in the Division 20 calibration records.

<u>Manufacturer</u>	<u>Model</u>	<u>Serial Number</u>	<u>Asset Number</u>
Unknown	25 x 0.01 mm	20-M-1	002186
Proto	6103	#2	001443
Proto	6104	918697	010126
Fisher	14-983-10B	0323004	002042

Please contact me at extension 6090 if you have any questions.