



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
Yucca Mountain Site Characterization Office  
P.O. Box 98608  
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JAN 23 1995

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VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REQUEST (CAR) YM-94-097 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-94-09 OF SANDIA NATIONAL LABORATORIES (SCPB: N/A)

The YMQAD staff has verified the corrective action to CAR YM-94-097 and determined the results to be satisfactory. As a result, the CAR is considered closed.

If you have any questions, please contact either Robert B. Constable at (702) 794-7945 or John R. Matras at (702) 794-7197.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1797

Enclosure:  
CAR YM-94-097

cc w/encl:  
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~~D. G. Spauld~~, NRC, Washington, DC  
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**OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

8 CAR NO.: YM-94-097  
PAGE: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document QAIP 07-01, Revision 01		2 Related Report No. YMP-94-09	
3 Responsible Organization SNL		4 Discussed With R. Price	
5 Requirement: QAIP 07-01, Revision 01, Procurement Acceptance Verification, Section 4.1.1 - When procurement of services such as engineering and consulting or analysis are involved, the Delegated Representative (1) shall accept the service by one or all of the following methods:...review of objective evidence for conformance to procurement document requirements, such as reports, contractor documents, etc.			
6 Adverse Condition: Contrary to the above requirements calibration certificates were accepted by the SNL Delegated Representative when they did not conform to the procurement document requirements Amendment 6 to Contract No. 66-1662. The calibrations were on Torque, Serial No. 2814, dated 7-13-94, 662-10A-10, Serial No. 1814, dated 7-12-94, ADJ; Serial No. 0-5, dated 7-13-94. The following was missing from the calibration certificates:  <ul style="list-style-type: none"> <li>- Results of calibration and statement of acceptability.</li> <li>- Identification of the implementing document (including revision level) used in performing the calibration.</li> </ul> <p>Also, the method and interval of calibration for each device was not defined, based on the type of equipment, stability characteristics, required accuracy, intended use, and other conditions affecting measurement control.</p>			
9 Does a Significant Condition Adverse to Quality exist? Yes ___ No <u>X</u> If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E		10 Does a stop work condition exist? Yes ___ No <u>X</u> ; If Yes - Attach copy of SWO If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C	
13 Response Due Date: 20 Working Days From Issuance			
11 Required Actions: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input checked="" type="checkbox"/> Root Cause Determination			
12 Recommended Actions: Extent of deficiency should evaluate reports and contractor documents in addition to calibration certificates.			
7 Initiator John R. Matras <i>John R Matras</i> 9/12/94		14 Issuance Approved by: QADD <i>[Signature]</i> Date 9-12-94	
15 Response Accepted QAR <i>John R Matras</i> Date 10/20/94		16 Response Accepted QADD <i>[Signature]</i> Date 10-27-94	
17 Amended Response Accepted QAR Date		18 Amended Response Accepted QADD Date	
19 Corrective Actions Verified QAR <i>[Signature]</i> Date 1-20-95		20 Closure Approved by: QADD <i>[Signature]</i> Date 1-20-95	

**1. CORRECTIVE ACTION RESPONSE**

**(a) Remedial Action:**

Will perform the following actions:

- Add the identification of the implementing document (procedure) (including revision level) used in performing the calibration.
- Add quantitative statements of the gage accuracy, the tolerance limit, and the acceptance of the calibration.
- The line-outs and write-overs will be checked, initialed, and dated.

These actions will be performed on the following calibration certificates:

Load Cell, Serial No. 2814

Torque, dated 7-13-94

Axial Force, dated 7-12-94

Rotation Measurement Device ADT, Serial No. D-5, dated 7-13-94

Axial Displacement Device LVDT, Frame No. 106, dated 7-13-94

**(b) Extent of Deficiency:**

All contractor records relative to Contract No. 66-1662 that cover work performed for the YMP from June 1993 to the present will be examined. Corrective action will be taken as needed.

**(c) Preclude Recurrence:**

Will provide additional instruction to:

- MTS personnel on importance of information required by Amendment 6 of Contract No. 66-1662.
- SNL staff in Department 6117 on importance of ensuring completeness of records prior to acceptance.

**(d) Root Cause:**

Inattention to details specified in Amendment 6 of Contract No. 66-1662 by both MTS metrologist and the SNL staff responsible for acceptance of calibration records.

**2. RESPONSIBLE INDIVIDUAL and COMPLETION DATE**

Ronald H. Price is responsible for completion of above actions and actions will be completed by November 18, 1994.

**3. SIGNATURE of RESPONSIBLE INDIVIDUAL**

*Ronald H. Price*  
Signature

10/6/94  
Date

*10/13/94 LTR SHEPARD TO SPENCE*

VERIFICATION AND CLOSURE STATEMENT

CAR YM-94-097 & YM-94-098

REMEDIAL ACTION;

Actions performed on the following calibration certificates were reviewed and deemed acceptable.

- A) LOAD CELL, Serial No. 2814
  - a) Torque, dated 7-13-94
  - b) Axial Flow, dated 7-12-94
- B) ROTATION MEASURING DEVICE, ADT, S/N. D-5, dated 7-13-94
- C) AXIAL DISPLACEMENT DEVICE, LVDT, S/N, Fr.#106, dated 7-13-94

Reference to MTS manual (MTS Job # 879.20) dated July 1993, actually used to do Torque and Axial Displacement calibration, (see A above) was reviewed by R. Price (task leader) and attached to these calibration certificates. A statement attesting all errors are within tolerance and gauge accuracy is within + or - 0.5% of full scale was added to all calibration certificates, (see A,B,& C above). All write-overs and line-outs on calibration certificates have been initialled and dated, (see A,B & C above).

PRECLUDE RECURRENCE:

Memo issued (R.Price to dist.) 11/18/94 to provide additional instruction to:

- a. MTS personnel
- b. SNL staff, dept. 6117.

EXTENT OF DEFICIENCY:

All contractor records relative to contract no. 66-1662 that cover work performed for YMP from June 1993 to present were examined for completeness, any similar errors found were corrected.

Review of the above by the undersigned was made and found to be acceptable, as a result of this review this CAR is considered closed.

Signed *Robert R. ...* 1-17-95