



**Department of Energy**  
 Office of Civilian Radioactive Waste Management    QA: L  
 Yucca Mountain Site Characterization Office  
 P.O. Box 98608  
 Las Vegas, NV 89193-8608

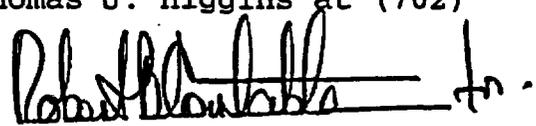
OCT 03 1994

Julie A. Canepa  
 Technical Project Officer  
 for Yucca Mountain  
 Site Characterization Project  
 Los Alamos National Laboratory  
 University of California  
 EES-13, Mail Stop J521  
 P.O. Box 1663  
 Los Alamos, NM 87545

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR)  
 YM-94-079 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE  
 DIVISION (YMQAD) AUDIT YMP-94-08 OF LOS ALAMOS NATIONAL  
 LABORATORY (SCPB: N/A)

The YMQAD staff has evaluated the response to CAR YM-94-079. The response has been determined to be satisfactory. Verification of completion of the corrective action will be performed after the effective date provided. Any extension to this date must be requested in writing, with appropriate justification, prior to the date. Please send a copy of extension requests to Deborah Sult, YMQAD/QATSS, 101 Convention Center Drive, Suite 640, Las Vegas, Nevada 89109.

If you have any questions, please contact either Robert B. Constable at (702) 794-7945 or Thomas J. Higgins at (702) 794-7173.



Richard E. Spence, Acting Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-5257

Enclosure:  
 CAR YM-94-079

- cc w/encl:  
 J. B. Tillman, LAAO  
 J. H. Hines, OOD, AL  
~~R. L. Johnson~~, NRC, Washington, DC  
 S. W. Zimmerman, NWPO, Carson City, NV  
 N. Z. Elkins, LANL, Las Vegas, NV  
 S. L. Bolivar, LANL, Los Alamos, NM

- cc w/o encl:  
 W. L. Belke, NRC, Las Vegas, NV  
 D. G. Sult, YMQAD/QATSS, Las Vegas, NV

*NH03-11  
 WM-11  
 10/2/94*

YMP-5

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PDR WASTE	
WM-11	PDR

**OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

8 CAR NO.: YM-94-079  
PAGE: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document LANL-INC-DP-35, REVISION 2	2 Related Report No. YMP-94-08
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3 Responsible Organization LANL-YMP	4 Discussed With C. Drew/C. Tait
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5 Requirement:  
INC-DP-35, Revision 2, Paragraph 6.22, third sentence requires at least two buffers that have Ph values surrounding the expected Ph of the solution to be measured, be selected for calibration of the Ph meter.

6 Adverse Condition:  
Contrary to the above requirement, buffers of Ph 7 and Ph 10 were always selected regardless of the expected Ph. Five examples of this condition were noted in scientific notebook TWS-INC-01-93-12, Pages 10, 13, 14, 21, and 88, where the actual Ph value was notably outside of the 7 to 10 Ph range.

9 Does a Significant Condition Adverse to Quality exist? Yes <u>No</u> 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 <u>No</u> 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
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11 Required Actions:  Remedial  Extent of Deficiency  Preclude Recurrence  Root Cause Determination

12 Recommended Actions:  
1) Change procedure to more clearly specify buffers to be used.

7 Initiator Paul L. Cloke <i>Paul L. Cloke</i> 8/23/94	14 Issuance Approved by: QADD <i>[Signature]</i> for Date 8.24.94
15 Response Accepted QAR <i>[Signature]</i> Date 9/28/94	16 Response Accepted QADD <i>[Signature]</i> for Date 9.29.94
17 Amended Response Accepted QAR _____ Date _____	18 Amended Response Accepted QADD _____ Date _____
19 Corrective Actions Verified QAR _____ Date _____	20 Closure Approved by: QADD _____ Date _____

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WASHINGTON, D.C.

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PAGE \_\_\_\_\_ OF \_\_\_\_\_  
QA

**CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)**

CORRECTIVE ACTION RESPONSE FOR CAR NO. YM-94-079: Page 1 of 1

**A. Remedial Action:**

**NOTE:** 1. Equipment and Hardware/Software Section 6.2.2 is more restrictive than Section 6.5.1 of LANL-INC-DP-35, R2.

2. Standards are not available at the upper and lower end of the pH scale thus making implementation of Section 6.2.2 not possible for samples at either end of the pH scale.

1. The impact in notebook TWS-INC-01-93-12 of sample pH measurements not encompassed by pH standards will be evaluated and documented.

2. LANL-INC-DP-35, R2 will be revised to facilitate implementation and correct discrepancy between Section 6.2.2 & 6.5.1 requirements of pH standards used with sample measurements to permit documented:

a) measurement beyond range of available standards (e.g., ends of the pH scale)

b) limited extrapolation beyond standards used (e.g., +/- 2 pH units)

**Responsible Individual:**

C. D. Tait

**Anticipated Completion Date:**

November 15, 1994

**B. Extent of the Deficiency:**

Not required for this Corrective Action Request per block 11, page 1 of CAR-079.

**C. Root Cause Determination:**

Not required for this Corrective Action Request per block 11, page 1 of CAR-079.

**D. Corrective Action to Preclude Recurrence:**

Not required for this Corrective Action Request per block 11, page 1 of CAR-079.

Responsible Individual:

C. D. Tait

C. D. Tait

Response Approved:

S. L. Bolivar

S. L. Bolivar, LANL QAPL

Date: 09/15/94

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RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

CAR NO. \_\_\_\_\_  
PAGE \_\_\_\_\_ OF \_\_\_\_\_  
QA \_\_\_\_\_

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Responsible Individual:

C. Drew Tait  
C. D. Tait

Response Approved:

S. L. Bolivar  
S. L. Bolivar, LANL QAPL

Date: 09/15/94