

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION  
QUALITY ASSURANCE SURVEILLANCE REPORT OF  
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE  
AND RAYTHEON SERVICES NEVADA  
AT THE NEVADA TEST SITE  
SURVEILLANCE YMP-SR-93-003  
CONDUCTED NOVEMBER 17 THROUGH DECEMBER 10, 1992

ACTIVITIES SURVEILLED:

DOCUMENTATION GENERATED AS A RESULT OF  
IMPLEMENTATION OF PROCEDURES APPLICABLE TO  
JOB PACKAGE JP-91-09 AND NEUTRON ACCESS BOREHOLES

Prepared by: Richard L. Weeks Date: 12/31/92  
Richard L. Weeks  
Quality Assurance Specialist  
Surveillance Team Leader  
Yucca Mountain Quality Assurance Division

Prepared by: Richard L. Weeks for Date: 12/31/92  
Cynthia H. Prater  
Quality Assurance Specialist  
Yucca Mountain Quality Assurance Division

Approved by: D.G. Horton For Date: 12/31/92  
Donald G. Horton  
Director  
Office of Quality Assurance

## 1.0 EXECUTIVE SUMMARY

This report contains the results of the Office of Civilian Radioactive Waste Management Quality Assurance (QA) Surveillance YMP-SR-93-003 of the Yucca Mountain Site Characterization Project Office (YMPO) Drilling Support and Sample Management Department, and Raytheon Services Nevada (RSN) Surveying Department located in Area 25 of the Nevada Test Site that was performed from November 17 through December 10, 1992. The surveillance was conducted to determine if participants that support drilling of neutron access boreholes have accurately completed required documentation. The surveillance included the review of in-process records relating to Job Package (JP)-91-09. The implementation of the procedures listed in Section 2 of this report were considered adequate. No Corrective Action Requests were generated as a result of this surveillance.

## 2.0 SCOPE

Surveillance YMP-SR-93-003 was performed from November 17 through December 10, 1992 to assess the status of documentation generated as a result of procedures applicable to Job Package JP-91-09 and neutron access boreholes. The following YMPO Branch Technical Procedures (BTPs) for the Sample Management Facility (SMF) and RSN Project Procedures (PPs) govern the implementing of the activities surveilled:

BTP-SMF-002, Revision 3, "Transport, Receipt, Admittance, and Processing of Borehole Samples for the SMF"

BTP-SMF-013, Revision 1, "Staging, Packaging, and Documenting Neutron-Access Borehole Samples"

PP-01-03, Revision 0, "Survey Department Work Functions"

PP-01-04, Revision 0, "Survey Department Document Control and Distribution"

PP-10-01, Revision 0, "Field Drilling Engineer Support Activities"

PP-10-02, Revision 0, "Field Logging Operations"

## 3.0 SURVEILLANCE TEAM

Cynthia H. Prater, Quality Assurance Specialist, Yucca Mountain Quality Assurance Division (YMQAD)

Richard L. Weeks, Quality Assurance Specialist, Surveillance Team Leader, YMQAD

The Surveillance Team members cooperated on all aspects of the surveillance. There was no specialization by the team members.

#### 4.0 PERSONNEL CONTACTED

The following personnel were contacted during the course of the surveillance:

Henry W. Booth, Chief, Configuration Management, RSN  
Walter L. Candalaria, Project Coordinator, RSN  
J. Earl Ferguson, Records Coordinator, RSN  
Sidney H. Gibson, Senior Engineer, RSN  
Christopher Lewis, Sample Management Facility Curator, Science Applications  
International Corporation  
Curtis M. McClaskey, Manager, Quality Control, RSN  
Randolph L. Shreiner, Manager, System Engineering, RSN  
Brent R. Woolsey, Manager, Field Survey, RSN

#### 5.0 SURVEILLANCE RESULTS

Several neutron access boreholes identified in JP-91-09 were selected to determine compliance to the documentation requirements in the RSN and YMPO governing procedures which are listed in Section 2.0 of this report. The boreholes selected were USW UZN-27, -33, -37, -53, -54, -55, and -63. These records are currently being retained in the vault at the Document Records Center in the Field Operations Center of the Yucca Mountain Site Office.

##### 1. YMPO Procedures

The applicable in-process documentation for the boreholes listed above was examined for compliance to BTP-SMF-002, Revision 3, "Transport, Receipt, Admittance, and Processing of Borehole Samples for SMF" and BTP-SMF-013, Revision 1, "Staging, Packaging, and Documenting Neutron-Access Borehole Samples." The following records were examined and found to be complete.

##### BTP-SMF-002:

- Field Container Summary and Transmittal Document
- Confirmation Checklist
- Cuttings Processing Checklist (as applicable)
- Core Processing Checklist

##### BTP-SMF-013:

- Sample/Specimen Log
- Shift Drilling

2. RSN Procedures

The applicable in-process documentation for the boreholes listed above was examined for compliance to PP-01-03, Revision 0, "Survey Department Work Functions," PP-01-04, Revision 0, "Survey Department Document Control and Distribution," PP-10-01, Revision 0, "Field Drilling Engineer Support Activities." The following records were examined and found to be complete.

PP-01-03, Revision 0:

- Field Survey notes

PP-01-04, Revision 0:

- All survey data for the neutron access boreholes had been submitted in record package NNA.920929.0015 which was examined and found complete.

PP-10-01, Revision 0:

- RSN YMP Instrument Calibration Checklist
- RSN YMP Core Run Record
- RSN YMP Ream Down Record
- RSN YMP Daily Operations Report
- RSN YMP Threaded Tubing and Casing

PP-10-02, Revision 0:

- "Record of Verbal Communication" is the only QA record generated by this procedure and had not been implemented for the boreholes examined.

3. Statement of Adequacy

It is the opinion of the Surveillance Team that the procedures identified above are adequate for the activities they govern and are being satisfactorily implemented.

## 6.0 RECOMMENDATIONS

The Surveillance Team recommends that a follow-up surveillance be conducted upon receipt of JP-91-09 records package by the YMPO Local Records Center.