# YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION

### QUALITY ASSURANCE SURVEILLANCE REPORT

<u>OF</u>

LAWRENCE LIVERMORE NATIONAL LABORATORY

SURVEILLANCE NUMBER YMP-SR-91-004

CONDUCTED NOVEMBER 26 THROUGH 29, 1990

### ACTIVITIES SURVEILLED:

INSPECTION; TEST CONTROL; NONCONFORMING ITEMS; AND HANDLING, STORAGE, AND SHIPPING

Prepared by:

Date: 12/7/80

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Approved by:

Date: 12/7/90

Donald G. Horton, D@rector Yucca Mountain Quality Assurance Division

**ENCLOSURE** 

#### 1.0 INTRODUCTION

This report contains the results of the Yucca Mountain Quality Assurance Division (YMQAD) surveillance (No. YMP-SR-91-004) of Lawrence Livermore National Laboratory (LLNL), conducted in Livermore, California, to verify compliance and implementation of their approved implementing procedures.

#### 2.0 PURPOSE AND SCOPE

The purpose of this surveillance was to evaluate the effectiveness of the implementation of selected LLNL Quality Procedures (QPs). The scope of the surveillance covered the procedures and activities associated with the following criteria:

- Х Inspection
- XI Test Control
- XIII Handling, Storage, and Shipping
- XV Control of Nonconforming Items

The following LLNL implementing procedures were examined during the course of the surveillance:

- 033-YMP-QP 10.0, Revision 0, "Inspection" 1.
- 033-YMP-QP 11.0, Revision 0, "Test Control"
  033-YMP-QP 13.0, Revision 0, "Handling, Storage, and Shipping"
- 4. 033-YMP-QP 15.0, Revision 2, CN No.: 15.0-2-1, "Nonconforming Items"

In addition to the above procedures, the surveillance included an attempt to verify the corrective action and closure of all Standard Deficiency Reports (SDRs) identified by LLNL as ready for closure.

### 3.0 SURVEILLANCE PERSONNEL

The surveillance was conducted by the following personnel:

Amelia I. Arceo, QA Engineer (QAE) (Surveillance Team Leader), Science Applications International Corporation (SAIC) / YMOAD Robert B. Constable, QAE, U.S. Department of Energy (DOE) /YMQAD Frank J. Kratzinger, QAE, SAIC/YMQAD

## 4.0 SUMMARY OF SURVEILLANCE RESULTS

The implementing procedures listed in Section 2.0 of this report were the source of questions used to conduct this surveillance. Checklists generated from these documents were used to determine compliance. The following results were obtained during the surveillance:

### 033-YMP-QP 10.0, Revision 0, "Inspection"

Inspection of engineered items that are Quality Level I or II has not occurred.

### 033-YMP-QP 11.0, Revision 0, "Test Control"

Testing of engineered items that are Quality Level I or II has not occurred.

### 033-YMP-QP 13.0, Revision 0, "Handling, Storage, and Shipping"

Handling, storage, and shipping of engineered items has not occurred.

### TIP-YM-3, Revision 0, "Labeling, Tracking, and Shipping of Samples"

This procedure applies to samples used in scientific investigations in support of LLNL-YMP QA Level I, II, and III activities. Paragraph 3.5.3, "Shipping," addresses the shipping requirements, which complies with 033-YMP-QP 13.0. Implementation of this procedure was not verified.

### TIP-CM-6, Revision 6, "Identification and Control of Metal Specimens"

This procedure establishes the methods for the identification and control of metal specimens that will be tested by the Metal Barrier Selection and Testing (MBST) task. Section 8.0 addresses the "Storage" requirements and Section 9.3 addresses the "Handling, Storage, and Shipping" requirements of specimens. This TIP complies with the requirements of 033-YMP-QP 13.0, Revision 0, "Handling, Storage, and Shipping."

Two metal specimens used for Metal Barrier Performance Testing, Activity E-20-17, "Experimental Technique Development," and Activity E-20-18 "Parametric Degradation Studies," were examined. The specimens were kept in polyethylene bags labeled "Alloy 825, E-20-18A, 17, P.O. B107251, and Alloy 825, E-20-18A, 19, P.O. B107251." These specimens were documented in the Yucca Mountain Scientific Notebook for Activity Plans E-20-17 and E-20-18 (LLNL Control No. 00047) and the Master File for Metal Specimen for Activity E-20-17 and E-20-18 (LLNL Control No. 00090). An entry dated 1/29/90 by Dennis Fleming indicates, "Sample Alloy 825 was verified to conform with Alloy Incoloy, Pages 6-71 of Marks Standard Handbook." A copy of the Mill Test Report sent by Metal Samples Company, Inc., with Purchase Order B107251, was pasted to the Master File Notebook. Implementation of handling and storage requirements of metal specimens is satisfactory.

033-YMP-OP 15.0, Revision 2, CN No.: 15.0-2-1, "Nonconforming Items"

A total of 18 nonconformance reports (NCRs) were listed on QA Action Item Lists dated 9/21/90, 9/28/90, 10/5/90, 10/17/90, 10/22/90, 10/26/90, 11/2/90, 11/12/90, and 11/20/90. The following 10 NCRs were reviewed:

NCR-030	NCR-038	NCR-040	NCR-055	NCR-060
NCR-033	NCR-039	NCR-042	NCR-056	NCR-061

It was verified that the above procedure was implemented satisfactorily.

Verification of corrective action of SDRs 507, 537, 540, 541, and 544 was performed during this surveillance. The results were satisfactory and it is recommended that these SDRs be closed.

5.0 PERSONS CONTACTED DURING THE SURVEILLANCE

Blink, James A., Assistant Project Leader, LLNL Bryan, Barbara A., Project Administrator, LLNL Clarke, Willis L., Task Area Leader, LLNL Dann, Robert K., Quality Assurance Engineer (QAE), LLNL Fleming, Dennis, Senior Technologist, LLNL Hamati, Raymond E., QAE, LLNL Jardine, Leslie J., Technical Project Officer, LLNL Lauen, Eugene, QAE, LLNL Short, David W., QA Manager, LLNL

- 6.0 MEASURING AND TEST EQUIPMENT USED DURING THE SURVEILLANCE None.
- 7.0 SYNOPSIS OF DEFICIENCY DOCUMENTS

No deficiency documents issued.

8.0 RECOMMENDATIONS

None.

9.0 REQUIRED ACTIONS

None.

DEC 13 1990

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