



# CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES QUALITY ASSURANCE SURVEILLANCE REPORT

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SURVEILLANCE SCOPE: Structural Deformation and Seismicity KTI Related Activities

REFERENCE DOCUMENTS: Current PMPR, Quality Requirements Application Matrices

STARTING DATE: February 20, 1997      ENDING DATE: February 20, 1997

QA REPRESENTATIVE: R. D. Brient *[Signature]*

PERSONS CONDUCTING TEST/EXAM/ACTIVITY: J. Stamatakos, D. Ferrill, Robert Boneau

**SATISFACTORY FINDINGS:**

**Task 1: Technical Assistance**

Analysis of paleomagnetic data (leading to IM 5708-471-730) from the Yucca Mountain Region is being conducted, documented in Scientific Notebook #99. The magnetic measurements were performed at the University of Michigan by CNWRA staff. Input and output data and references to the calculational methods were documented in the notebook for statistical analyses of the data. In addition, the notebook documented correction-factor calculations performed by computer, which were verified by hand calculation as required by QAP-014. Other activities include preparation of a manuscript on Yucca Mountain tectonics.

**Task 2: 3DStress Software Development**

Version 1.2 was released in 11/96, and work on version 1.3 is beginning, partly to address a bug identified by a client. A Software Problem/Change Report is needed, as well as a Software Requirements Document. The P.I. and student scientist working on this task were not available together during the surveillance, so a meeting in early March has been scheduled to review the TOP-018 requirements applicable to the 3DStress version 1.3 development.

**TASK 3: Applied Technical Investigations**

Personnel qualifications documentation was verified as being complete and current for the individuals conducting the activities, as listed above.

UNSATISFACTORY FINDINGS: none

NONCONFORMANCE REPORT NO: none

ATTACHMENTS: none

RECOMMENDATIONS/ACTIONS:

APPROVED: *[Signature]*  
CNWRA DIRECTOR OF QUALITY ASSURANCE

DATE: 2/20/97

**DISTRIBUTION:**  
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