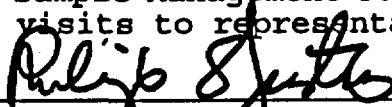



NUCLEAR REGULATORY COMMISSION/U.S. DEPARTMENT OF ENERGY
YUCCA MOUNTAIN HYDROLOGY SITE VISIT
APRIL 19-20, 1994

On April 19 and 20, 1994, representatives of the U.S. Nuclear Regulatory Commission, U.S. Department of Energy (DOE), State of Nevada, and Clark and Nye Counties, Nevada, participated in a site visit to the Yucca Mountain candidate repository site with the purpose of providing an opportunity for NRC staff involved in research to become familiar with ongoing site characterization activities. DOE's participating organizations (U.S. Geological Survey, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Duke Engineering, and Science Applications International Corporation, Inc.) provided technical and logistical support. NRC attendees included staff from the Division of Waste Management and Office of Nuclear Regulatory Research and representatives of the Center for Nuclear Waste Regulatory Analyses and University of Arizona. A list of attendees is in Enclosure 1.

The site visit included stops at locations of excavations and features being investigated for the characterization of the Yucca Mountain site (see trip itinerary in Enclosure 2). At the location of the ESF north ramp, participants were provided an overview and status report on the excavation of the Exploratory Studies Facility (ESF) and the ESF testing program, including a discussion of the hydrochemical test plan and preparations for testing in Alcove 1 of the ESF. Participants also observed initial work on the tunnel boring machine, currently being assembled at the ESF north portal. Site visit participants were provided discussions on the Bow Ridge fault and calcite-silica deposits at trenches NRT-1 and 14 and on the status of the investigation of the Ghost Dance fault zone at Antler Ridge. Discussions of borehole drilling included the systematic drilling program, aspects of dry drilling and the LM-300, and hole UZ-14 where possible perched water was encountered. The trip also included a visit to the site of the large block experiment (LBE) where participants were provided an overview and status of the LBE, including details of the site's preparation, plans for the use of tracers, and the scope of the planned experiments at the site.

DOE Principal Investigators also provided an overview of investigations being conducted at the Hydrologic Research Facility located near Yucca Mountain and a description of the newly revised stratigraphic nomenclature for the volcanic rock units comprising Yucca Mountain. Discussions of the stratigraphy were conducted at the Sample Management Facility (SMF) and included a tour of the SMF and visits to representative outcrops of the various tuff units.


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