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Enclosure 8

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LPDR
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Dr. J. W. Bradbury
Geotechnical Branch
Office of Nuclear Materials Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Room 623-SS
Washington, D.C. 20555

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WM Project 10, 11, 16
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Dear John:

In preparation for the upcoming QA review of the DOE mineralogy and petrology information for the Yucca Mountain candidate repository site, Jim Blencoe has compiled the relevant reviews and evaluations which he has written. (Jim has been our lead person for Yucca Mountain mineralogy.) I thought you might be interested in having a set of these reports and am enclosing them with this letter.

The following Letter Reports and Meeting Report have been completed:

LR 4.1-7: J. G. Blencoe and A. D. Kelmers, Review of "Summary Report on the Geochemistry of Yucca Mountain and Environs", LANL Report LA-9328-MS.

MR-287-1: J. G. Blencoe and G. K. Jacobs, Trip Report of Geological Society of America Meeting at Reno, Nevada, and Field Trips to the Nevada Test Site.

LR-287-4: J. G. Blencoe, Review of "The Dissolution of Rainier Mesa Volcanic Tuffs, and Its Application to the Analysis of the Groundwater Environment," by M. S. Henne, M.S. Thesis, University of Nevada, Reno.

LR-287-13: J. G. Blencoe, Review of "Minerals in Fractures of the Unsaturated Zone from Drill Core USW G-4, Yucca Mountain, Nye County, Nevada", by B. A. Carlos, LANL Report LA-10415-MS.

LR-287-69: J. G. Blencoe, Review and Evaluation of "Chemistry of Diagenetically Altered Tuffs at a Potential Nuclear Waste Repository, Yucca Mountain, Nevada", by D. E. Broxton, R. G. Warren, R. C. Hagan, and G. Luedemann, LANL Report LA-10802-MS.

LR-287-70: J. G. Blencoe, Review and Evaluation of "Mineralogic Summary of Yucca Mountain, Nevada", by D. L. Bish and D. T. Vaniman, LANL Report LA-10543-MS.

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The following evaluations have been completed by Jim Blencoe and are in the computer-based Information Library:

JGB EVAL1: Walter, G. R., 1982, Theoretical and Experimental Determination of Matrix Diffusion and Related Solute Transport Properties of Fractured Tuffs from the Nevada Test Site, LANL Report LA-9741-MS.

JGB EVAL2: Weeks, E. P., and Wilson, W. E., 1984, Preliminary Evaluation of Hydrologic Properties of Cores of Unsaturated Tuff, Test Well USW H-1, Yucca Mountain, Nevada, U.S. Geological Survey Water-Resources Investigations Report 84-4193.

JGB EVAL3: Montazer, P., and Wilson, W. E., 1984, Conceptual Hydrologic Model of Flow in the Unsaturated Zone, Yucca Mountain, Nevada, U.S. Geological Survey Water-Resources Investigations Report 84-4345.

JGB EVAL4: Thordarson, W., 1965, Perched Ground Water in Zeolitized-Bedded Tuff, Rainier Mesa and Vicinity, Nevada Test Site, Nevada, U.S. Geological Survey Trace Elements Investigative Report TEI-862.

JGB EVAL5: Henne, M. S., 1982, The Dissolution of Rainier Mesa Volcanic Tuffs, and Its Application to the Analysis of the Groundwater Environment, M.S. Thesis, University of Nevada, Reno.

JGB EVAL9: Knauss, K. G., 1984, Petrologic and Geochemical Characterization of the Topopah Spring Member of the Paintbrush Tuff: Outcrop Samples Used in Waste Package Experiments, report UCRL-53558.

We are continuing to review pertinent documents in preparation for the QA review meeting.

Sincerely,



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ADK:jts

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cc/w encl: J. G. Blencoe
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cc/wo encl: D. J. Brooks, NRC