



Department of Energy

Nevada Operations Office

P. O. Box 98518

Las Vegas, NV 89193-8518

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FEB 27 1989

John Linehan, Director
Repository Licensing Project Directorate
Division of Waste Management
U.S. Nuclear Regulatory Commission
4-H-3
Washington, D.C. 20555

TRANSMITTAL OF REFERENCES FOR FIVE CONSTRUCTION-PHASE, EXPLORATORY SHAFT FACILITY (ESF) STUDY PLANS (8.3.1.2.2.2, 8.3.1.2.2.4, 8.3.1.4.2.2, 8.3.1.15.1.5, AND 8.3.1.15.2.1)

The U.S. Department of Energy (DOE) recently transmitted to the U.S. Nuclear Regulatory Commission (NRC) copies of the plans for five construction phase ESF studies. In accordance with the agreements of the December 15, 1988, DOE/NRC Meeting on Study Plans, the DOE will provide the NRC with copies of Study Plan references that are not readily available. Enclosed with this letter is a list of those references for the five ESF construction phase Study Plans.

The enclosure provides a current status for all ESF construction phase Study Plan references that the DOE has identified as not readily available to the NRC. All but two of these references were transmitted to you under separate cover on February 15, 1989. Copyright clearances for these two references are in progress but have not been completed. These references are:

Dueholm, K.S., 1979, Geological and topographic mapping from aerial photography, in: Geological and topographic Mapping from aerial photographs, the Institute of surveying and photogrammetry, DTH, Meddelesle nr: 36, p. 1-146.

Dueholm, K.S., 1981, Computer supported geological photointerpretation, Photogrammetria 36, p. 173-181.

These two references will be provided to you as soon as we have completed the copyright clearance process. Should you have any questions concerning the references or require additional information, please contact David C. Dobson of my staff at (702) 794-7940 or FTS 544-7940.

Carl P. Gertz, Project Manager
Yucca Mountain Project Office

YMP:DCD-2198

Enclosure:
Study Plan Reference List

8903030477 890227
PDR WASTE
WM-11 PDC

102.8
Wm-1
NH03

John Linehan

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cc w/encl:

Ralph Stein, HQ (RW-30) FORS
S. H. Kale, HQ (RW-20) FORS
S. J. Brocoum, HQ (RW-221) FORS
D. H. Alexander, HQ (RW-33) FORS
J. L. King, SAIC, Las Vegas, NV
S. C. Adams, Harza, Las Vegas, NV
M. B. Blanchard, YMP, NV

cc w/o encl:

M. D. Voegele, SAIC, Las Vegas, NV
M. W. Pendleton, SAIC, Las Vegas, NV
E. L. Wilmot, YMP, NV
D. C. Dobson, YMP, NV
J. R. Dyer, YMP, NV

STUDY PLAN REFERENCES FOR THE NRC

8.3.1.2.2.2 WATER MOVEMENT TEST

Phillips, F. M., 1984, Radiometric methods for estimating potential nuclide migration rates from high level nuclear waste repositories, in Proceedings of the Workshop on fundamental geochemistry needs for nuclear waste isolation. CONF-8406134 (US Department of Energy, Washington, D.C.)

8.3.1.2.2.4 Characterization of the Yucca Mountain Unsaturated Zone Percolation-Exploratory Shaft Facility Study

Bathe, K. L., 1978, ADINA/BM - A general computer program for nonlinear analysis of mine structures: U.S. Bureau of Mines contract No. J0255008

Davis, G. S., Marvil, J. D., and Runnells, D. D., 1985, Hydrochemical feasibility studies related to subsurface flow on Yucca Mountain, Nevada Test Site. USGS Contract No. 14-08-0001-10190 Final Report: Boulder, Colorado, Department of Geological Sciences, University of Colorado, p. 3.8-8.

Mishra S., Bodvarsson, G. S. and Attanayake, M. P., 1987, Estimating properties of unsaturated-fractured formations from injection and falloff tests: to be published as an LBL report.

Montazer, P., 1983, Demonstrative finite element modeling of the influence of a borehole on the permeability of a single fracture: Internal Report to Karnobransleosakerhet, Sweden: Denver, Colorado, U.S. Geological Survey.

Rissler, P. 1978, Determination of water permeability of jointed rock: Publications of the Institute for Foundation Engineering, Soil Mechanics, Rock Mechanics, and Water Way Construction, RWTH (university) Aachen, Federal Republic of Germany, English edition of volume 5, ISSN 0341-7972.

Snow, W. T., 1965, A parallel model of fractured media, [Ph.D. thesis]: Berkeley, California, University of California.

Snow, D. T., 1966, Three-hole pressure test for anisotropic foundation permeability: Fels. U. Ing. Geology, v. 4, p. 298.

Trautz, R. C., 1984, Rock fracture aperture and gas conductivity measurements in situ [M. S. thesis]: Tucson, Arizona, University of Arizona.

8.3.1.4.2.2 Characterization of Structural Features in the site area

Barton, C.C., Page, W.R., Morgan, T.L., in prep., Fractures in outcrops in the vicinity of drill hole USW G-4, Yucca Mountain, Nevada—Data analysis and compilation: U.S. Geological Survey Open-File Report.

Barton, C.C., and Scott, R., 1987, Rationale for continuous map of geologic features in the exploratory shaft and drifts: U.S. Geological Survey Administrative Report, 15p.

Curry, Sean, 1986, Evaluation of the potential of close-range photogrammetry for tunnel mapping at the Nevada Test Site: VEXEL Technical Report 08-04-86, 42p.

Dueholm, K.S., 1974, Untraditional topographic mapping in central west Greenland: Groenlands Geol. Unders., Rapp., nr 65, p.. 26-28.

Dueholm, K.S., 1976, New Instruments for geological photointerpretation and mapping: Groenlands Geol. Unders., Rapp., nr. 80, p. 144-148.

Dueholm, K.S., 1979, Geological and topographic mapping from aerial photographs, in Geological and topographic mapping from aerial photographs: The Institute of Surveying and Photogrammetry, DTH, Meddelesle nr. 10, p. 1-146.

Dueholm, K.S., 1981, Computer supported geological photointerpretation: Photogrammetria 36, p. 173-181.

Dueholm, K.S., and Garde, A.A., 1986, Geological photogrammetry using standard colour slides: Groenlands Geol. Unders., Rapp., nr. 130, p. 69-74.

Dueholm, K.S., Pedersen, A.K., and Ulf-Moller, F., 1977, High precision photogrammetric methods used in geological mapping: Groenlands Geol. Unders., Rapp., nr. 81, p. 53-56.

Jepsen, H.F., and Dueholm, K.S., 1978, Computer supported geological photointerpretation: Groenlands Geol. Unders., Rapp., nr.146-150.

Pillmore, C.L., Dueholm, K.S., Jepson, H.S., and Schuch, C.H., 1980, Computer assisted photogrammetric mapping system for geologic studies—progress report: Photogrammetria, v. 36, p. 159-171, reprinted from: F. Ackerman, ed., International Archives of Photogrammetry, v. 23, pt. B-2, p. 195-205.

Scott, r.b. 1987, Comparison of the benefits of photogrammetric, photomosaic, and conventional mapping of underground geologic features: U.S. Geological Survey Administrative Report, 14 p.

8.3.1.15.1.5 Excavation Investigations

Bieniawski, Z.T., and R.K. Maschek, 1975, Monitoring the behavior of rock tunnels during construction, Civil Engineer in South Africa, p. 255-264.

Hustrulid, W., and W. Ubbes, 1982, Results and conclusions from rock mechanics/hydrology investigations: CMS/ONWI Test Site, in: Workshop Proc. Geological Disposal of Radioactive waste in situ experiments in granite, Stockholm, Sweden, OECD Nuclear Agency, p. 57-75.

Schneider, J. 1967, Moyen nouveaux de reconnaissance des massifs rocheux (New tools for exploration of rock masses). Ann. Inst. Tech. Batim. Trav. Publics, v. 62, p. 1055-1094

Teufel, L.W., 1981, Strain relaxation method for predicting hydraulic fracture azimuth from oriented core, SPE/DOE Low Permeability Symp., Denver, CO, p. 81-86.

8.3.1.15.2.1 Characterization of site ambient stress

none

Errata

Montazer, P., 1983 is incorrectly referenced in the Study Plan Reference List. The correct citation should be Montazer,p. and Stephansson,O., 1983.