

SUPPORT FOR CONTRACTOR REQUEST

CONTRACTOR: James Evans

RATE (dollars/hour)

PERIOD OF PERFORMANCE: 8/30/1999 to 8/29/2000

STATEMENT OF WORK:

Dr. Evans's primary tasks will be to work with hydrogeologists to produce a representative suite of equivalent hydraulic properties for aquifer strata, including fault zones, fractured damage zones around faults and fault blocks, and to work with hydrologists to incorporate these results into saturated zone groundwater flow simulations of the Yucca Mountain hydrologic system.

ESTIMATED UTILIZATION (hours):

80 hours

PRIOR CONTRACTOR WORK EXPERIENCE WITH SWRI:

None

PROGRAMMATIC NEED FOR CONTRACTOR WORK:

The role of fractures and faults in hydrologic flow has a number of uncertainties associated with it. This work will specifically look at the role of faults and damage zones around faults as hydrologic pathways and barriers.

LIST OF ELIGIBLE CONSULTANTS CONSIDERED:

None

RATIONALE FOR SOLE/SINGLE SOURCE SELECTION:

Dr. Evans has worked for several years characterizing aquifer heterogeneity and anisotropy due to structural features.

RATIONALE FOR NOT USING SWRI RESOURCES:

Expertise does not exist.

PROJECT NUMBER(S): 20-1402-471, 20-1402-861

SUPPORT FOR CONTRACTOR REQUEST

CONTRACTOR: Dr. James P. Evans

RATE: _____ our

PERIOD OF PERFORMANCE: May 21, 2001 through May 31, 2002

STATEMENT OF WORK:

The work to be accomplished under this consulting arrangement will consist of conduct field and laboratory measurements to evaluate spatial and scale variability of hydraulic properties in a fractured and faulted nonwelded tuff that is used as an analog site for the PTn.

ESTIMATED UTILIZATION: 120 hours

PRIOR CONTRACTOR WORK EXPERIENCE WITH SWRI:

This is a re-initiation of a consulting contract with Dr. Evans. During 1999 Dr. Evans worked for the CNWRA to produce a representative suite of equivalent hydraulic properties for aquifer strata, including fault zones. The work proposed here is an outgrowth of this earlier work.

PROGRAMMATIC NEED FOR CONTRACTOR WORK:

This work is part of the augmented scope approved by NRC for the USFIC KTI. It will be used to support input from the USFIC KTI to the TPA abstraction process, and reviews of DOE calculations and reports.

LIST OF ELIGIBLE CONSULTANTS CONSIDERED: No other consultants were considered for this work.

RATIONALE FOR SOLE/SINGLE SOURCE SELECTION:

Because of the earlier work Dr. Evans has conducted for CNWRA in this technical area, he is best able to support the proposed work in a timely manner.

RATIONALE FOR NOT USING SwRI RESOURCES: No SwRI resources exist with this expertise.

PROJECT NUMBER: 20.01402.861