

TRIP REPORT

TO: King Stablein, Project Manager	TRAVELER FROM BRANCH John J. Peschel WMEG
PLACES VISITED DOE Experimental Facilities (G-Tunnel) at Nevada Test Site	DATES OF TRIP March 3-6, 1986
PERSONS CONTACTED PARTICIPANTS: Paul Prestholt, NRC WM; John Peschel, NRC WMEG; Kanaan Hanna, BOM; David Conover, BOM; Dennis Irby, DOE; Robert Schuck, Sandia Natl. Lab; Daniel Zerga, Parsons-Brinckerhoff	
PURPOSE OF TRIP <ul style="list-style-type: none">- Visit DOE Experimental Facilities (G-Tunnel) at Nevada Test Site to observe smooth wall blasting tests.- Visit the Exploratory Shaft Facility site to become familiar with the geology and topography of this area.- Visit the research facilities of Climax and EMED.	
ACCOMPLISHMENTS <ul style="list-style-type: none">- Observed two smooth wall blasting tests in the Mining Evaluation Drift. Participated in informal discussions on smooth wall blasting techniques and instrumentation. (See Enclosure 1)- Learned the topography, geology and hydrogeology of the proposed ES site.	
PROBLEMS ENCOUNTERED NONE	
PENDING ACTIONS NONE	
RECOMMENDATIONS <p>The NRC staff and NRC contractors should continue to observe the mining and rock mechanics tests in the G-Tunnel to understand the problems of in situ testing in tuff.</p> <p>The NRC staff should also observe the testing of horizontal drilling of emplacement holes and related equipment.</p> <p>The first hand experience is important for future reviews of SCP and repository design by NRC staff.</p>	
SIGNATURE - TRAVELER <i>John Peschel</i>	DATE 4/2/86

The informal discussions in the G-Tunnel included the following topics:

- the use of V-cut in the design of a blasting round through fractured fault zone
- stemming of the perimeter holes for smooth wall blasting
- monitoring vibrations from the test blasts
- testing different types of rock bolts for fractured rock
- the effectiveness of rock bolts under elevated temperatures
- the use of yieldable steel sets as rock support under elevated temperatures (in the emplacement drifts)

MAY 7 1986

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- 1 -

Dr. Donald L. Vieth
Director
Waste Management Project Office
U. S. Department of Energy
Nevada Operations Office
P. O. Box 14100
Las Vegas, NV 89114-4105

Dear Dr. Vieth:

From March 3 to March 6, 1986 John Peschel of the Nuclear Regulatory Commission (NRC) staff and two NRC consultants from the United States Bureau of Mines, Kanaan Hanna and David Conover, made an Appendix 7 visit to the G-Tunnel on the Nevada Test Site. A copy of their trip report is enclosed for your information.

During the smooth-wall blasting tests observed March 4 and 5 in the Mine Evaluation Drift, a Sandia National Laboratory (SNL) photographer was taking photographs of the tests under the direction of Mr. Robert Schuck of SNL. The NRC would appreciate your arranging to have copies of those photographs (prints and/or slides) sent to us.

The NRC staff would also like to receive a copy of the following report on the G-Tunnel Test Plan: G-Tunnel Welded Tuff Mining Evaluations (Test Plan). This is SNL Keystone Document 6310-85-7, published by R. Zimmerman in August, 1985.

If you have any questions about the enclosed trip report or the above requests, please contact King Stablein (FTS 427-4611) of my staff.

Sincerely,

John J. Linehan, Acting Chief
Repository Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure:
March 3-6, 1986 Appendix 7 Trip Report

cc: M. Glora, SAIC, Las Vegas, NV
*See previous concurrence

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973