

## UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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TO:

John J. Linehan, Director, HLPD

Division of High-Level Waste Management, M/S 4-H-3

FROM:

Paul T. Prestholt, Sr. On-Site Licensing Representative

DATE:

April 25, 1989

SUBJECT:

WEEKLY ACTIVITY REPORT, PROTOTYPE TESTING

Please find enclosed the above-referenced report (3), received in this office, i.e., week ending March 5, 12, and 19, 1989.

PTP:nan Enclosure

cc:

Carl Johnson

Agency for Nuclear Projects Nuclear Waste Project Office

Capitol Complex

Carson City, Nevada 89710

8905030061 890425 PDR WASTE WM-11 PDC 403 NH03

# WEEKLY ACTIVITY REPORT PROTOTYPE TESTING Week Ending - March 19, 1989

#### **ACCOMPLISHMENTS**

.LLNL - Engineered Barrier: Heater turned off, cool down measurements continue.

.USGS - Cross Hole: No NTS activity.

- Wet and Dry Drilling: Continued data collection on the four test holes.
- Drill Hole Instrumentation: Data acquisition continues.
- Mapping: Yucca Mountain Project approval of FR (Fran Ridge) work order delayed.
  - Intact Fracture: Drilling completed at Phase I welded axial sample site.

- Rubble Coring: Work order opened.

- Blast Effects: Criteria letter in SNL review.
- Excavation Effects: No NTS activity.

- Perched Water: No NTS activity.

- Controlled Blasting: QALA returned from Yucca Mountain Project Office. Revision required to meet new QA procedures.
- In Situ Stress: Gauges being calibrated.
- .LANL Diffusion Test: Test in progress in DH #2 and #3. Revised criteria submitted to TMO.
- .SNL Thermal Stress: No NTS activity noted.

#### PLANNED\_WORK

- .LLNL Engineered Barrier: Continue data acquisition on Horizontal Heater Test cool down. Develop Vertical Test criteria letter.
- .USGS Mapping: Start FR mapping as Yucca Mountain Project authorization is obtained.
  - Cross Hole: Field deployment effort rescheduled for April 17, 1989.
  - Intact Fracture: Continue prototype drilling, in non-welded sample area.
  - Drill Hole Instrumentation: Continue instrumentation data acquisition.
  - Wet and Dry Drilling: Continue data collection on test holes.
  - Rubble Coring: Drilling to start tentatively March 27, 1989.
  - In-Situ Stress: Obtain a Yucca Mountain Project Office approved criteria letter and QALA.
  - Controlled Blasting: Submit revised criteria letter for transmittal to Yucca Mountain Project Office. Obtain an open work order.
  - Blast Effects: Submit criteria letter for approval.
  - Excavation Effects: Obtain an open work order.

TWS-ESS-1-LV-03-89-41 Attachment 1 Page 3 of 3

- Optimal Rubble Size: Start non-welded rubble collection ASAP. The PI is available, work order finalization is in progress.
- Perched Water: Obtain an open work order.
- .LANL Diffusion: Continue and monitor solute injection in DH#2.
- .SNL Thermal Stress: Obtain an open work order.

## PROBLEMS/ISSUES

NONE

## **EXPENDITURES**

.Prototy	ype Test:	ing: Work Day	ys Remain j	<u> 137</u>	•	1	Expe	ended	<u>45</u> %
.REECo:	Current	Week-Prototype	Testing	\$ 1	6,320	Year	to	Date	\$ 113,048
	Current	Week-G-Tunnel	Operation :	\$ 1	8,063	Year	to	Date	\$ 441,291
.H&N:	Current	Week-Prototype	Testing :	\$	6,943	Year	to	Date	\$ 92,248
.F&S:	Current	Week-Prototype	Testing :	\$	*	Year	to	Date	\$ *

\*Information not available at the time of this report.

TWS-ESS-1-LV-03-89-40 Attachment 1 Page 2 of 3

## WEEKLY ACTIVITY REPORT PROTOTYPE TESTING Week Ending - March 12, 1989

#### **ACCOMPLISHMENTS**

- Prototype Diffusion and Hydrology testing PIs visited SMF. .TM Written observations pending.
- Engineered Barrier: Heater turned off. Cool down .LLNL measurements continue.
- Cross Hole: No NTS activity. .USGS
  - Wet and Dry Drilling: Continued data collection on the four test holes.
  - Drill Hole Instrumentation: Data acquisition continues.
  - Mapping: Yucca Mountain Project approval of FR (Fran Ridge) work order delayed.
  - Intact Fracture: Drilling underway at welded axial sample site.
  - Rubble Coring: Work order opened, equipment delivery delayed to mid-March. Tentative drilling start March 21, 1989.
    Blast Effects: Finalized criteria letter forwarded to NTSO.

  - Excavation Effects: No NTS activity.
  - Perched Water: Readiness review completed.
  - Controlled Blasting: SIP and QALA submitted to Yucca Mountain Project Office.
  - In-Situ Stress: Drilling equipment reviewed at NTS with site engineers and drillers. Gauges received.
- .LANL Diffusion Test: Test in progress in DH #2 and DH #3.
- .SNL Thermal Stress: No NTS activity.

## PLANNED WORK

- Engineered Barrier: Continue data acquisition on Horizontal .LLNL -Heater Test cool down. Develop Vertical Test criteria letter.
- .USGS Mapping: Start FR mapping as Yucca Mountain Project authorization is obtained.
  - Cross Hole: Field deployment effort rescheduled for April 17, 1989.
  - Intact Fracture: Continue prototype drilling.
  - Drill Hole Instrumentation: Continue instrumentation data acquisition.
  - Wet and Dry Drilling: Continue data collection on test
  - Rubble Coring: Drilling to start tentatively March 21, 1989.
  - In-Situ Stress: Obtain.a Yucca Mountain Project Office approved criteria letter and QALA.
  - Controlled Blasting: Submit finalized criteria letter for transmittal to Yucca Mountain Project Office. Obtain an open work order.

TWS-ESS-1-LV-03-89-40 Attachment 1 Page 3 of 3

- Blast Effects: Obtain an open work order.

- Excavation Effects: Obtain an open work order.

- Optimal Rubble Size: Start non-welded rubble collection ASAP. The PI is available. Work order finalization is in progress.
- Perched Water: Obtain an open work order.
- .LANL Diffusion: Continue and monitor solute injection in DH#2.
- .SNL Thermal Stress: Obtain an open work order.

## PROBLEMS/ISSUES

NONE

#### **EXPENDITURES**

.Prototype Testing: Work Days Remain <u>142</u> Expended <u>43</u> % .REECo: Current Week-Prototype Testing \$
Current Week-G-Tunnel Operation \$ 24,149 Year to Date \$ 96,728 Year to Date \$ 423,228 17,574 Current Week-Prototype Testing \$ Year to Date \$ .H&N: 5,483 85,305 .F&S: Current Week-Prototype Testing \$ Year to Date \$ \*

\*Information not available at the time of this report.

## WEEKLY ACTIVITY REPORT PROTOTYPE TESTING Week Ending - March 5, 1989

#### **ACCOMPLISHMENTS**

Engineered Barrier: Continued data acquisition on the .LLNL Horizontal Heater Test.

- Cross Hole: No noted activity. .USGS

- Wet and Dry Drilling: Continued data collection on the four test holes.
- Drill Hole Instrumentation: Data acquisition continues.
- Mapping: Yucca Mountain Project approval of FR (Fran Ridge) work order delayed.
- Intact Fracture: Test work order opened. Equipment delivery delayed to March 6, 1989.
- Rubble Coring: Work order opened, equipment delivery delayed
- to mid-March. Tentative drilling start March 21, 1989. Blast Effects: Finalized criteria letter mailed to Las Vegas.
- Excavation Effects: Finalized criteria letter mailed to SNL.

- Perched Water: Readiness review completed.

- Controlled Blasting: SIP and QALA submitted for Yucca Mountain Project Office approval.
- In Situ Stress: Drilling equipment shipped to NTS for assembly in preparation for drilling start.
- .LANL Diffusion Test: Test in progress in DH #2 and #3.
- Thermal Stress: Readiness review completed. .SNL

#### PLANNED WORK

- Engineered Barrier: Continue data acquisition on Horizontal .LLNL -Heater Test. Develop Vertical Test criteria letter.
- .USGS Mapping: Start FR mapping as Yucca Mountain Project authorization is obtained.
  - Cross Hole: Field deployment effort rescheduled for April 17, 1989.

Intact Fracture: Start drilling March 6, 1989.

- Drill Hole Instrumentation: Continue instrumentation data acquisition.
- Wet and Dry Drilling: Continue data collection on test holes.
- Rubble Coring: Drilling to start tentatively March 21, 1989.
- In-Situ Stress: Obtain a Yucca Mountain Project Office approved criteria letter and QALA.
- Controlled Blasting: Submit finalized criteria letter for transmittal to Yucca Mountain Project Office. Obtain an open work order.
- Blast Effects: Obtain an open work order.
- Excavation Effects: Obtain an open work order.
- Optimal Rubble Size: Start non-welded rubble collection ASAP. The PI is available, work order support has not been completed.

TWS-ESS-1-LV-03-89-39 Attachment 1 Page 3 of 3

- Perched Water: Obtain an open work order.
- .LANL Diffusion: Continue and monitor solute injection in DH#2.
- .SNL Thermal Stress: Obtain an open work order.

#### PROBLEMS/ISSUES

Prototype testing drilling is suspended, pending opening of approved work orders and equipment delivery delays.

## **EXPENDITURES**

Prototype Testing: Work Days Remain 147 Expended 41 %

REECo: Current Week-Prototype Testing \$ 2,885 Year to Date \$ 72,579

Current Week-G-Tunnel Operation \$ 25,656 Year to Date \$405,654

H&N: Current Week-Prototype Testing \$ 2,060 Year to Date \$ 79,822

F&S: Current Week-Prototype Testing \$ \* Year to Date \$ \*

\*Information not available at the time of this report.