



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

Reply to:
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Las Vegas, Nevada 89119
Tel: (702) 388-6125
FTS: 598-6125

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: June 29, 1989

SUBJECT: WEEKLY ACTIVITY REPORT, PROTOTYPE TESTING

Please find enclosed the above-referenced report received in this office, i.e., weeks ending May 28 and June 4, 1989.

PTP:nan
Enclosure
cc:

Carl Johnson
Agency for Nuclear Projects
Nuclear Waste Project Office
Capitol Complex
Carson City, Nevada 89710

memorandum

TWS-ESS-1-LV-06-89-26
June 16, 1989
702/794-7094
FTS 544-7094
Mail Stop 527

Arch Girdley
Site Investigations Branch
U. S. Department of Energy
Yucca Mountain Project Office
P. O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: WEEKLY G-TUNNEL ACTIVITY REPORT FOR WEEK ENDING
MAY 28, 1989

Transmitted herein is the subject report describing work performed in G-Tunnel in support of the Prototype Testing.

If you have any questions, please contact Steve Francis at FTS 544-7162.

Sincerely,

H. N. Kalia
H. N. Kalia

HNK:SDF:kq24

Attachment

Cy: W. Hughes, YMP/DOE, MS 523
U. Clanton, YMP/DOE, MS 523
S. Carter, YMP/DOE, MS 523
R. Waters, YMP/DOE, MS 523
W. Wilson, YMP/DOE, MS 523
A. Veloso, NTSO/DOE, MS 701
E. Cikanek, HARZA, MS 517
R. Bullock, F&S, MS 403
J. Calovini, H&N, MS 519
L. Ballou, LLNL, P.O. Box 808, Livermore, CA 94550
R. Pritchett, REECO, MS 408
T. Blejwas, SNL, Dept. 6310, Albuquerque, NM 87185
R. Dye, SNL, MS 944
D. Harris, USBR, P.O. Box 25007 MCD362ON, Denver, CO
R. Craig, USGS, MS 509
L. Hayes, USGS, P.O. Box 25046, Denver, CO 80225
B. Lewis, USGS, P.O. Box 25046, Denver, CO 80225
R. Herbst, Los Alamos, N-5, MS J521
W. Morris, Los Alamos, ESS-1, MS D462
T. Merson, Los Alamos, WX-4/LV, MS 527
D. Oakley, Los Alamos, N-5, MS J521
R. Oliver, Los Alamos, ESS-1/LV, MS 527

ACTION

CC: *HUGHES/WATERS*
CC: *WILSON/TORTI*
CC: *KRIANEK*
CC: *PRESTHOLT-NRC*
CC: *CUNNINGER*
CC: *JONES*
CC: *GIRDLEY*
CC: *WHITE*
CC: _____
CC: _____

REC'D IN WMPO

6/20/89

RECORD COPY

A. Girdley
WEEKLY WEEK ENDING 5/28/89
June 16, 1989

TWS-ESS-1-LV-06-89-26
Page 2 of 2

Cy: S. Francis, Los Alamos, WX-4/LV, MS 527
ESS-1, Los Alamos, MS D462
ESS-1/LV, Los Alamos, MS 527
RPC File, Los Alamos, MS J521 (2)
CRM-4, Los Alamos, MS A150

WEEKLY ACTIVITY REPORT
PROTOTYPE TESTING
Week Ending - May 28, 1989

ACCOMPLISHMENTS

- LLNL - Engineered Barrier: The cool down measurements are continuing.
- USGS - Cross Hole: Modification to equipment is progressing at USGS, Denver. There is no NTS activity at this time.
- Wet and Dry Drilling: Data collection is continuing on the four test holes in the U12g12 drift.
 - Drill Hole Instrumentation: Data collection is continuing on the two test holes near the end of the U12g12 drift.
 - Blast effects: Work is complete to start the readiness review.
 - Excavation Effects: The PI is preparing to perform his prototype test at G-Tunnel.
 - Perched Water: Drilling began on the 3rd Perched Water test hole in the Laser drift. Total depth to date is 13 feet. Core recovery is 85.6%.
 - Controlled Blasting: Work is proceeding to complete the readiness review.
 - In-Situ Stress: Overcore drilling in the Demonstration Drift continues. Total depth to date is 13 feet. Total core recovered is 98.2 % (core is broken pretty badly). The PI is trying different bits to provide longer core samples to test.
- LANL - Diffusion Test: Test monitoring continues in DH#2 and DH#3.
- SNL - Thermal Stress: There were no significant accomplishments during this reporting period.

PLANNED WORK:

- LLNL - Engineered Barrier: LLNL personnel continued to monitor cool down measurements. Planning has started to overcore the heater hole.
- USGS - Mapping: Fran Ridge mapping will begin as soon as Yucca Mountain Project authorization is obtained.
- Cross Hole: Work is scheduled to begin again at the USGS Arizona site on May 22, 1989. Work in G-Tunnel is scheduled to begin tentatively on July 1, 1989.
 - Intact Fracture: Phase II work is scheduled to begin tentatively on June 19, 1989.
 - Drill Hole Instrumentation: No work other than data collection is scheduled for the near future.
 - Wet and Dry Drilling: No work other than data collection is scheduled for the near future.
 - In-situ Stress: Continue 6-inch overcoring in the Demonstration drift.
 - Controlled Blasting: Readiness review is scheduled for June 12, 1989. Sign off the QALA for the Controlled Blasting Test. Institute an open work order for procurement purposes.

- Blast effects: Complete readiness review on May 31.
- Excavation Effects: Close Readiness Review actions. Prepare for G-Tunnel work.
- Perched Water: Continue drilling NQ hole to 80 feet total depth.

LANL - Diffusion: Continue data collection in drill holes #2, and #3. Continue monitoring solute injection in drill hole #2. Interact with the TMO and REEC Co to develop a draft test installation coring procedure.

SNL - Thermal Stress: Obtain an open work order.

PROBLEMS AND ISSUES:

None

EXPENDITURES

.Prototype Testing:	Work Days Remain	<u>87</u>	Expended	<u>65</u> %
.REECo: Current Week-Prototype Testing	\$	22,165	Year to Date	\$ 293,476
Current Week-G-Tunnel Operation	\$	22,981	Year to Date	\$ 684,998
.H&N: Current Week-Prototype Testing	\$	3,767	Year to Date	\$ 179,184
.F&S: Current Week-Prototype Testing	\$	*	Year to Date	\$ *

*Information not available at the time of this report.

memorandum

TWS-ESS-1-LV-06-89-29
June 20, 1989
702/794-7094
FTS 544-7094
Mail Stop 527Arch Girdley
Site Investigations Branch
U. S. Department of Energy
Yucca Mountain Project Office
P. O. Box 98518
Las Vegas, NV 89193-8518SUBJECT: WEEKLY G-TUNNEL ACTIVITY REPORT FOR WEEK ENDING
JUNE 4, 1989Transmitted herein is the subject report describing work
performed in G-Tunnel in support of the Prototype Testing.If you have any questions, please contact Steve Francis at
FTS 544-7162.

Sincerely,

H. N. Kalia

HNK:SDF:kq25

Attachment

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D. Harris, USBR, P.O. Box 25007 MCD3620N, Denver, CO
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R. Herbst, Los Alamos, N-5, MS J521
W. Morris, Los Alamos, ESS-1, MS D462
T. Merson, Los Alamos, WX-4/LV, MS 527
D. Oakley, Los Alamos, N-5, MS J521
R. Oliver, Los Alamos, ESS-1/LV, MS 527

ACTION

CC: HUGHESCC: WATERSCC: WILSONCC: LOPPICC: KRIKIANEKCC: PRESTHOLT-NRCCC: CLINGERCC: JONESCC: GIRDLEYCC: WHITE

REC'D IN WMPO

6/20/89

RECORD COPY

A. Girdley
WEEKLY WEEK ENDING 6/04/89
June 20, 1989

TWS-ESS-1-LV-06-89-29
Page 2 of 2

Cy: S. Francis, Los Alamos, WX-4/LV, MS 527
ESS-1, Los Alamos, MS D462
ESS-1/LV, Los Alamos, MS 527
RPC File, Los Alamos, MS J521 (2)
CRM-4, Los Alamos, MS A150

WEEKLY ACTIVITY REPORT
PROTOTYPE TESTING
Week Ending - June 4, 1989

ACCOMPLISHMENTS

- LLNL - Engineered Barrier: The cool down measurements are continuing in the Rock Mechanics incline.
- USGS - Cross Hole: Modification to equipment is progressing at USGS, Denver. There is no NTS activity at this time.
- Wet and Dry Drilling: Data collection is continuing on the four test holes in the U12g12 drift.
 - Drill Hole Instrumentation: Data collection is continuing on the two test holes near the end of the U12g12 drift.
 - Blast effects: The readiness review was completed on May 31, 1989.
 - Excavation Effects: The PI is reviewing equipment lists, operational plans, etc., to begin testing.
 - Perched Water: Continued HQ coring in the Laser Drift to a total depth of 69.4 feet. Footage for this reporting period is 56.4 feet. Core recovery for this reporting period is 97.3%. Total core recovery is 97.75%. The core is broken up pretty badly. The longest piece of core recovered is 1.4 feet.
 - Controlled Blasting: The PI is continuing preparation for this test.
 - In-Situ Stress: Six inch overcoring in the Demonstration Drift continues. Total depth to date is 24.6 feet. Total depth this reporting period is 11.6 feet. There was no core recovery this reporting period, as the PI is using a 6 inch rock bit to drill through rubble zones and fractures. The PI will try different bit combinations.
 - Intact Fracture: The PI is preparing for a kick-off meeting to begin Phase II of the test.
- LANL - Diffusion Test: Test monitoring continues in DH#2 in the CFE 3 and 4 drift, and DH#3 in the experiment drift.
- SNL - Thermal Stress: There were no significant accomplishments during this reporting period.

PLANNED WORK:

- LLNL - Engineered Barrier: LLNL personnel will continue to monitor cool down measurements. Coring of the instrument package holes is tentatively scheduled to begin on July 5, 1989, and preparation for this event is in progress.
- USGS - Mapping: Fran Ridge mapping will begin as soon as Yucca Mountain Project authorization is obtained.
- Cross Hole: Preparation for G-Tunnel work is in progress.
 - Intact Fracture: Phase II work is scheduled to begin on June 19, 1989.
 - Drill Hole Instrumentation: No work other than data collection is scheduled for the near future.
 - Wet and Dry Drilling: No work other than data collection is scheduled for the near future.

- In-situ Stress: Continue 6-inch overcoring in the Demonstration drift.
 - Controlled Blasting: Preparation to begin the Controlled Blasting Test is in progress at this time.
 - Blast effects: Preparation has begun to proceed with testing on August 28, 1989.
 - Excavation Effects: Preparation is in progress to proceed with testing on September 18, 1989.
 - Perched Water: Continue drilling NQ hole to 80 feet total depth.
- LANL - Diffusion: Continue monitoring-DH #2, and DH #3. Develop a draft test installation coring procedure.
- SNL - Thermal Stress: Obtain an open work order.

PROBLEMS AND ISSUES:

None

EXPENDITURES

.Prototype Testing:	Work Days Remain	<u>83</u>	Expended	<u>67</u> %
.REECO: Current Week-Prototype Testing	\$	16,010	Year to Date	\$ 309,486
Current Week-G-Tunnel Operation	\$	20,287	Year to Date	\$ 705,285
.H&N: Current Week-Prototype Testing	\$	12,900	Year to Date	\$ 192,084
.F&S: Current Week-Prototype Testing	\$	*	Year to Date	\$ *

*Information not available at the time of this report.