

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



Reply to:  
301 E. Stewart Ave., #203  
Las Vegas, NV 89101

Tel: (702) 388-6125

TO: Joseph Holonich, Director, HLPD, M/S 4 H 3  
FROM: Sr. On-Site Licensing Representatives Office, Las Vegas  
DATE: DECEMBER 18, 1992  
SUBJECT: OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE  
WEEK ENDING DECEMBER 4,, 1992, and YUCCA MOUNTAIN SITE OFFICE  
(YMSO) FIELD ACTIVITY REPORT FOR WEEK ENDING NOVEMBER 27 AND  
DECEMBER 4, 1992

Please find enclosed the above-referenced reports.

There is nothing requiring specific management attention in the reports.

cc: w/enc.: Charlotte Abrams, M/S 4 H 3  
Rosetta Virgilio, M/S 3 D 23  
Dean Kunihiro, Region 5

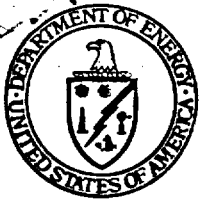
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NOTE TO CHARLOTTE - Also enclosed: FIELD TEST COORDINATOR'S REPORT FOR  
THE WEEK ENDING NOVEMBER 27, 1992, AND THE YMP  
STATUS REPORT FOR REYNOLDS ELECTRICAL &  
ENGINEERING CO., INC. (NOVEMBER 1992)

220035

9212230279 921218  
PDR WASTE PDR  
WM-11

102  
WM-11  
NH03



Department of Energy  
Yucca Mountain Site Characterization  
Project Office  
P. O. Box 98608  
Las Vegas, NV 89193-8608

WBS 1.2.9.2  
QA: N/A

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John W. Bartlett, Director, Civilian Radioactive Waste Management,  
HQ (RW-1) FORS

OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING  
DECEMBER 4, 1992

I. CRITICAL ITEM STATUS - YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
(YMP)

A. Site Characterization Planning

Field Operations

The Site Manager and Field Operations Center staff participated in and provided logistical support for four major tours this reporting period. They finalized preparations for the public open house and site tour scheduled for December 12, 1992.

On Job Package (JP) 92-3, drilling activities continue with the LM-300 drill rig on Borehole UZ-16. Reynolds Electrical & Engineering Co., Inc. (REECo), has cored and reamed to a depth of 1109 feet. At approximately 9 a.m. on December 2, 1992, light moisture was discovered. The Principal Investigator and concerned parties are working on this situation.

On JP 91-9, Neutron Access Boreholes, Phase II, drilling activities continue on USW UZN-59. As of December 1, 1992, the borehole had been cored to 40.36 feet with Odex casing at 26.36 feet.

Boreholes NRG-1, UE-25, RF-9, RF-10, and RF-11 were plugged from their total depth to the surface with Type II cement and abandoned in preparation for the Exploratory Studies Facility (ESF) pad construction.

On November 25, 1992, REECo commenced the initial earthmoving operations for the access road to the ESF pad layout area and the topsoil storage area. The following milestones represent the near-term plan for ESF activities:

At the request of the Secretary of Energy, a member of the Senate Appropriations Committee will tour Yucca Mountain, Nevada, on December 5, 1992.

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Sample Management Facility

Recovery and processing of core from UE25 UZ-16, USW UZN-59, and UE25 NRG-6 continued. Fifteen specimens from UE25 UZ-16 core were removed for shipment to the U.S. Geological Survey (USGS). Sixty-four boxes of old core from various locations were laid out for examination by the State of Nevada. On December 2, 1992, drilling at UE25 UZ-16 penetrated the top of basal vitrophyre in the Topopah Springs.

Regulatory InteractionsIssue Resolution

The Erosion Topical Report is undergoing Yucca Mountain Site Characterization Project Office (YMPO)/participants review. A video-conference was held on December 1, 1992, to familiarize reviewers with the document and the review process and requirements. Comments are to be completed by December 17, 1992. The draft working paper on Calcite-Silica deposits has been completed and is also in review.

Advisory Committee on Nuclear Waste (ACNW) Interactions

The draft agenda for the ACNW Working Group on Performance Assessment is being finalized. The presentation will include an overview of the U.S. Department of Energy (DOE): Performance Assessment program, a summary of the initial Total System Performance Assessment (TSPA) for Yucca Mountain, and future direction for the DOE TSPA.

Environmental Field Programs

On December 3, 1992, a tour of Yucca Mountain was conducted for representatives of the Nevada Nuclear Waste Project Office and the Nuclear Waste Technical Review Board (NWTREB). The purpose of the tour was to review the application of the Yucca Mountain environmental program to various activities. Well JF-3, Midway Valley, and several neutron boreholes were visited. The YMP preactivity, postactivity, compliance, and reclamation programs were explained.

ESF Task Force Activities

A major milestone was met on November 25, 1992, when ESF site preparation work began. The following milestones represent the near-term plan for ESF activities:

NRC License Status:

Receiving comments from NRC

Response transmitted from OGD to DOE/NE

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Release Tunnel Boring Machine (TBM)  
 Request for Proposal  
 Receive TBM Vendor Proposals  
 Award Subcontract for Underground  
 Construction  
 Award TBM Contract  
 Start Excavating TBM Launch Chamber

December 15, 1992  
 January 1993  
 March 1993  
 April 1993  
 April 2, 1993

### Site Characterization Plan (SCP) Study Plan (SP) Status

Two ESF SP revisions were submitted to YMPO this week:  
 SP 8.3.1.2.2.7, Revision 1, "Hydrochemical Characterization of the  
 Unsaturated Zone," and SP 8.3.1.2.2.8, Revision 1, "Fluid Flow in  
 Unsaturated, Fractured Rock."

### STUDY PLAN BREAKDOWN

In Screening Review .....	2
In YMPO and DOE/Headquarters (HQ) Review .....	6
Awaiting Comment Resolution .....	9
Awaiting Author Revision .....	4
In YMPO/HQ Verification Audit .....	6
Preparing to Submit or Awaiting YMPO Approval .....	3
Awaiting Submission to the U.S. Nuclear Regulatory Commission (NRC) .....	5
NRC Phase 1 Review .....	15
NRC Acceptance .....	28
Total .....	78

### SCP/SP Status:

Total SPs Assigned to Cover 106 Studies .....	103
SPs Not Yet Submitted for Review .....	35
SPs Submitted for Initial Review .....	68
Revised SPs Submitted for Review .....	5
Revised ESF SPs Submitted for Review .....	5
Total SPs Submitted for Review .....	78

### State of Nevada Comments Status:

Received Comments from the State of Nevada .....	10
Responses Transmitted to the State of Nevada .....	10

### NRC Comments Status:

Received Comments from NRC .....	17
Responses Transmitted from OGD to DOE/HQ .....	16

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**Critical ESF SP Status:**

SP 8.3.1.2.2.4, "Characterization of the Yucca Mountain Unsaturated Zone Percolation ESF Study," will be submitted to YMPO by December 7, 1992.

The YMPO completed technical review of SP 8.3.1.4.2.2, Revision 2, "Characterization of Structural Features Within the Site Area." The comment resolution meeting is scheduled for December 4, 1992.

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**B. Project Planning and Control**

The Cost Performance Report for October 1992 was produced. The performance data did not include earned value because it is yet to be baselined.

Development and testing of enhanced Planning and Control System reports were completed and the new formats were moved to production.

**C. Quality Assurance (QA) Implementation**

The Office of Civilian Radioactive Waste Management (OCRWM) conducted an audit of the Yucca Mountain QA Division, from November 30-December 2, 1992.

**Determination of Importance and Grading Enhancement****Quality (Q) List and O-List Procedure Development**

The Assessment Team (AT) accepted the Sandia National Laboratories' (SNL) Items Important to Waste Isolation report. The AT continues review of the SNL Items Important to Safety report.

**Implementation**

Review of the draft classification package on the TBM, submitted by Raytheon Services Nevada (RSN), was completed and comments were provided to RSN.

The AT began evaluation of natural barriers as part of the initial steps in classification and development of the Q and Management-grade Control Lists.

at Los Alamos High School.

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Based on discussions in a meeting on December 1, 1992, involving OCRWM and YMP staff, it was agreed that steps will be taken to readdress the role and function of Administrative Procedure 6.17Q in conjunction with release of the new QA Requirements Document.

The AT was requested by YMPO to comment on the level of analysis to determine impact of surface-based testing on waste isolation. A sample analysis was provided.

**D. Public Outreach and Institutional Activities**

Carl Gertz, Project Manager, gave an ESF media briefing on November 30, 1992, in Las Vegas, Nevada, to an audience which included representatives from KVBC-TV, Channel 3; KLAS-TV, Channel 8; and KNEWS Radio. Institutional and External Affairs (IEA) staff coordinated a tour to Yucca Mountain for five members of the local media regarding the start of ESF construction.

Carl Gertz and other YMP technical staff provided presentations on the ESF to local businesses at the Industry Day briefing on December 1, 1992, in Las Vegas. Approximately 100 people attended.

The IEA staff created a 90-second excerpt from the ESF video to be viewed by and provided to news media representatives. They provided exhibit and organizational support for the ESF media briefing and the Industry Day briefing.

A. C. Robison, YMPO, and other technical staff participated in a Yucca Mountain debate forum for approximately 150 Wells High School political science students on December 1, 1992, in Wells, Nevada.

Tours to Yucca Mountain were conducted on December 1, 1992, for 40 guests of Paradise Christian Academy; on December 2, 1992, for 30 guests of the YMP Business Opportunity group who attended the Industry Day presentations; and on December 3, 1992, for 90 students and guests from Pahrump Middle School and 15 guests from the NWTRE/State of Nevada Environmental group.

On December 1, 1992, several educational presentations were given. These included: two presentations on nuclear generation by Todd Kaish, Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O), to approximately 60 students of the Paradise Christian Academy; a presentation on Native American Culture by Richard Arnold, a consultant, to two second grade classes at J. E. Manch Elementary School, with approximately 28 students in attendance; a presentation on rocks and minerals by Michael Pitterle, Technical and Management Support Services (T&MSS), to approximately 120 students in kindergarten through seventh grades at the Amargosa Elementary School; and a presentation by Claudia Newbury, YMPO, to four sixth grade classes studying earth science at Orr Junior High School.

Representatives from the Waste Isolation Pilot Plant project, Earth Coalition, and Radioactive Waste Campaign also participated.

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Max Powell, YMPO, provided presentations to two history classes at the Henderson Community College December 1-2, 1992, with approximately 80 students in attendance. Michael Pitterle gave an educational presentation on geology--rocks and minerals to approximately 30 students in the third grade class at the Robert E. Lake Elementary School in Las Vegas on December 2, 1992. Educational presentations were given on December 3, 1992, by Richard Arnold to approximately 125 students from the Court Continuation School, and by John Hartley, T&MSS, on geology--rocks and minerals, to five fourth grade classes at the Derfelt Elementary School, with approximately 120 students attending. Michael Foley, Science Applications International Corporation, gave an educational presentation on atoms, acids, and bases to five eighth grade science classes at Orr Junior High School December 3-4, 1992. Approximately 125 students attended his presentation.

On December 3, 1992, the IEA staff attended the Clark County Nuclear Waste Steering Committee meeting on December 3, 1992, in Henderson, Nevada, and coordinated a tour and YMP overview for Nye County Commissioners and staff. They supported and attended the State/Local Government Planning Group meeting in Las Vegas on December 4, 1992.

The CRWMS M&O staff organized and managed the first planning committee meeting for a national conference on math and science education reform in Las Vegas on December 3, 1992. The committee is chaired by University of Nevada, Las Vegas (UNLV) Dean of Education Dale Anderson and includes representatives from business, education, and government. CRWMS M&O also sponsored, and IEA staff coordinated, two hands-on science workshops for more than 70 elementary and middle school teachers. The all-day workshops were held at Kenny Guinn and William Orr Junior High Schools on December 5, 1992.

The IEA staff has submitted several papers and the State of the Project video as entries in the International Association of Business Communicators/Las Vegas Bronze Quill competition.

The IEA staff finished reviewing the OCRWM Communications Handbook and are finalizing the following fact sheets: "The ESF," "Oklo: A Natural Nuclear Reactor," and "Why Do Scientists Think a Repository Will Work?" They are also making final revisions to fact sheets which were reviewed previously.

## II. ANALYSIS & VERIFICATION DIVISION

The staff participated in a panel discussion on nuclear waste disposal hosted by the Environmental Engineering Department at Columbia University in New York, New York, on December 1, 1992. In addition to OCRWM, representatives from the Waste Isolation Pilot Plant project, Earth Coalition, and Radioactive Waste Campaign also participated.

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Presentation materials were prepared for the HQ QA audit kick-off meeting on December 7, 1992.

The staff attended InfoSTREAMS training for the Mined Geologic Disposal System Annotated Outline pilot project November 30-December 4, 1992.

Draft responses to public comments on the Early Site Suitability Evaluation document were reviewed in preparation for a review group meeting on December 10, 1992, in Las Vegas.

### III. GENERAL INFORMATION ITEMS

#### Lawrence Livermore National Laboratory

Flow-through testing with oxidized and unoxidized spent-fuel particles 1 millimeter in size indicates that the oxidized specimen dissolution rates of both uranium and cesium are about twice as fast. The oxidized specimen dissolution rate of technetium was initially eight times as fast, decreasing to about twice as fast after 35 days. The higher ratios are attributed to increased access to the grain boundary surfaces of the outermost few layers of grains; the remaining layers apparently were not opened by the prior oxidation.

#### Los Alamos National Laboratory

The following papers were presented at the Materials Research Society Symposium on the Scientific Basis for Nuclear Waste Management XVI, which was held November 30-December 3, 1992: "Surface-Discharging of Hydrothermal Systems at Yucca Mountain--Examining the Evidence," by Schon Levy; "Transport of Neptunium through Yucca Mountain Tuffs," by Ines Triay; and "Sorption Characteristics of Yucca Mountain Tuffs as a Function of Particle Size," by Steven Kung.

The SP for Diffusion (YMP-LANL-SP 8.3.1.3.6.2, Revision 0) was submitted to YMPO.

Paleomagnetic sampling at the Cind-R-Lite volcanic center was completed.

#### CRWMS M&O

The development of classification analyses was initiated for ESF design items in Package 1A.

The staff conducted the Quarterly Technical Data Administrators Working Group meeting. Items discussed included technical data base and Parameter Dictionary interfaces, and technical data base and GEMBOCHS data qualifications. The status of the following were presented at the meeting: the work that EG&G Energy Measurements, Inc., is doing on the GENISES/SEPDB, the Automated Technical Data Tracking system, and the Parameter Dictionary normalization.



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USGS

USGS completed chemical analyses of 22 volcanic rock samples collected in Crater Flat. Initial results indicate that some rock units, frequently difficult to distinguish in hand specimens, are notably different in trace-element abundances including elements that are virtually immobile during weak hydrothermal alteration.

IV. UPCOMING EVENTS CALENDAR

Please note that the usage of "(P)" in the calendar indicates that the event is open to the public. Educational presentations and State and Public Interactions are coordinated by the Speakers Bureau; contact Linda Artis at (702) 794-7896 or Theresa Hirsch at (702) 794-7759 for additional information. Exhibits are coordinated by Kevin Rohrer at (702) 794-7769, Public Update Meetings are coordinated by Joanna Magruder at (702) 794-7056, and tours are coordinated by Carleen Hill at (702) 794-7375.

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMP Contact</u>
<b>A. <u>DOE/HQ Meetings</u></b>			
No significant new meetings this week.			
<b>B. <u>CRWMS M&amp;O/DOE Meetings</u></b>			
Monday, December 21	CRWMS M&O Program Management Review	Vienna, VA	C. Gertz
Wednesday, December 23	YMP Monthly Management Meeting	Las Vegas, VA	C. Gertz
<b>C. <u>Internal and DOE/NV Meetings</u></b>			
Monday, December 7	State of the Project	Denver, CO	C. Gertz
Friday, December 11	Technical Project Officers Meeting	Las Vegas, NV	C. Gertz
Friday, December 11	Planning and Budget Meeting	Las Vegas, NV	C. Gertz
Saturday, December 12	Trip		
<b>D. <u>NRC Interactions</u></b>			
Monday- Tuesday, December 14-15	Technical Exchange TSPA (P)	Rockville, MD	T. Bjerstedt
Thursday, February 11, 1993	Management Meeting on Topical Report	Video- Conference	T. Bjerstedt

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
<b>D. <u>NRC Interactions</u> (Continued)</b>			
March 1993 TBD	NRC Site Visit	Las Vegas, NV	T. Bjerstedt
Monday, May 17, 1993	Technical Exchange - Program Planning and Integration	Video- Conference	T. Bjerstedt
Tuesday, May 18, 1993	Technical Exchange - OCRWM Technical Baseline Documents	Video- Conference	T. Bjerstedt
Tuesday, June 8, 1993	Technical Exchange - Geophysics Integration	Las Vegas, NV	T. Bjerstedt
Wednesday June 9, 1993	Technical Exchange - Volcanism (P)	Las Vegas, NV	T. Bjerstedt
Thursday, June 10, 1993	NRC Management Meeting for Interactions Scheduling	Las Vegas, NV	T. Bjerstedt
Wednesday, July 28, 1993	Technical Exchange - ESF Title II Design	TBD	T. Bjerstedt

**E. NWTRB Interactions**

Tuesday- Wednesday, January 5-6, 1993	NWTRB Full Board Meeting (P)	Arlington, VA	J. Cooper
February or March 1993 TBD	NWTRB HG&G Panel Meeting (P)	TBD	J. Cooper
Tuesday- Friday, April 20-23, 1993	NWTRB Full Board Meeting (P)	Reno, NV	J. Cooper
Tuesday- Saturday, June 1-12, 1993	NWTRB International Trip	TBD	J. Cooper
Monday- Thursday, July 12-15, 1993	NWTRB Full Board Meeting (P)	Denver, CO	J. Cooper
December 3			

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<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
<b>E. <u>NWTRB Interactions</u> (Continued)</b>			
Tuesday-Friday, October 19-22, 1993	NWTRB Full Board Meeting (P)	Las Vegas, NV	J. Cooper

**F. ACNW Interactions**

Wednesday, December 16	ACNW WG on PA - Phase 2 HLW Interactive PA by NRC (P)	Bethesda, MD	A. Gil
Thursday-Friday, December 17-18	ACNW 49th Meeting (P)	Bethesda, MD	A. Gil
Wednesday-Thursday, January 27-28, 1993	ACNW 50th Meeting (P)	Bethesda, MD	A. Gil
Wednesday-Thursday, February 24-25, 1993	ACNW 51st Meeting (P)	Bethesda, MD	A. Gil
Wednesday-Thursday, April 28-29, 1993	ACNW Meeting Topic TBD	TBD	A. Gil
Wednesday-Thursday, May 19-20, 1993	ACNW Meeting Topic TBD	TBD	A. Gil

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
<b>G. <u>State and Public Interactions</u></b>			
Monday, December 7	State of the Project, USGS	Denver, CO	C. Gertz
Tuesday, December 8	Katz Elementary School	Las Vegas, NV	R. Arnold
Wednesday, December 9	Indian Springs Elementary School	Indian Springs, NV	R. Arnold

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<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
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G. State and Public Interactions (Continued)

Thursday, December 10	Savannah Chapter of American Nuclear Society (ANS)	Aiken, SC	M. Blanchard
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Monday, December 14	NRC Commissioner Curtis Pretour Briefing	Las Vegas, NV	C. Gertz
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Wednesday, December 16	Orr Junior High School	Las Vegas, NV	L. Flint
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Thursday, January 7, 1993	Nevada Development Authority	Las Vegas, NV	C. Gertz
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Monday, January 11, 1993	Las Vegas Host Lions Club	Las Vegas, NV	T. Geer
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Tuesday- Wednesday, January 12-13, 1993	Marion Earl Elementary School	Las Vegas, NV	A. Gil
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Wednesday, January 13, 1993	Association of Professional Mortgage Women	Las Vegas, NV	J. Younker
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Wednesday, January 13, 1993	ANS	Schenectady, NY	C. Gertz
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Thursday, January 14, 1993	ANS	Parsippany, NJ	C. Gertz
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Saturday, January 16, 1993	Girl Scout Troop 319	Las Vegas, NV	A. Gil
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Tuesday, February 23, 1993	University of Iowa	Ames, IA	C. Gertz
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Tuesday, May 4, 1993	Underground Structures Colorado School of Mines	Golden, CO	C. Gertz
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<u>Date</u>	<u>Event</u>	<u>Location</u>
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H. Exhibits Scheduled

Monday-Friday, December 7-11	American Geophysical Union	San Francisco, CA
Saturday, December 12	Public Open House (P)	Las Vegas, NV

<u>Date</u>	<u>Event</u>	<u>Escorts</u>
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I. Tours Scheduled

Monday, December 7	UNLV Cooperative Agreement Group	M. Powell
Tuesday, December 8	Bonanza/Cheyenne Las Vegas Rotary Club	TBD
Saturday, December 12	Public Open House (P)	Various Escorts
Monday, December 14	NRC Commissioner Curtis	TBD
Saturday, January 16, 1993	Public Open House (P)	Various Escorts
Wednesday, January 20, 1993	Tonopah Middle School	TBD
Wednesday, February 3, 1993	Green Valley High School	TBD
Saturday, February 20, 1993	Public Open House (P)	Various Escorts
Wednesday, February 24, 1993	Tonopah Middle School	TBD
Thursday, March 11, 1993	Meadows School	TBD
Thursday, March 18, 1993	Gabs School	TBD
Wednesday, March 24, 1993	Thurman White Middle School	TBD
Thursday, April 1, 1993	Orr Junior High School	TBD

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<u>Date</u>	<u>Event</u>	<u>Escorts</u>
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I. Tours Scheduled (Continued)

Monday, April 19, 1993	Hydrology Field Trip	A. Flint
Tuesday, April 20, 1993	Round Mountain High School	TBD
Monday, April 26, 1993	High-Level Waste Conference	TBD
Monday, June 21, 1993	Girl Scouts Wider Opportunity Program	TBD

YMP:VFI-1334

*For*   
Carl P. Gertz  
Project Manager



**Department of Energy**  
Yucca Mountain Site Characterization  
Project Office  
P. O. Box 98608  
Las Vegas, NV 89193-8608

WBS 1.2.7.3  
QA: N/A

**DEC 15 1992**

Carl P. Gertz, Project Manager, YMP, NV

**YUCCA MOUNTAIN SITE OFFICE (YMSO) FIELD ACTIVITY REPORT**

The following are the significant field activities for the weeks ending November 27, 1992 and December 4, 1992:

**1. Field Operations Center, (YMSO)**

**A. Management and Administration**

- a. The Site Manager and FOC staff participated in and provided operational and logistical support to several tours conducted during this period. These were: Palo Verde Nuclear Power Station; LLNL; ESF Groundbreaking; Fluor Daniel; Paradise Christian Academy; WMP Business Opportunity; Pahrump Middle School; TRB/State of NV Environmental and Nye County.
- b. Site Manager approved a new FOI-5502, YMP Emergency Evacuation.
- c. Provided operations support for field site characterization activities.
- d. Issued vehicles, first aid kits, fire extinguishers, and other necessary equipment to personnel performing field duty.
- e. Continued providing operations and administrative support to the Yucca Mountain Site Manager and his DOE staff.
- f. Updated draft GIS Management Plan.
- g. Revised and submitted 10 day updates on 2 ORPS reports.
- h. Met with REECO road maintenance to review work request for road signs.
- i. Escorted REECO work party to bullfrog repeater site. Temporary repeater now in operation at site.
- j. Processed 23 work order requests and 2 technical field work request. Provided monthly work order request activity report to participants.
- k. Completed first draft of hardware/software requirements for the VARS system.

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1. Restricted parking and removed vehicles from FOC parking lot in preparation for new layout and stripping of lot.
- m. Photographed trenches 6 and 7 in Midway Valley.
- n. Completed Crater Flat, Stagecoach Road, and Fran Ridge photogrammetric missions.
- o. Finalized logistics for photographing construction progress; prototype photos taken and approved; drafted instructions being developed for photographers to ensure accuracy and consistency.
- p. Finalized plans for first ESF construction progress photos and ESF construction progress photos and ground breaking vide/photo coverage for 11/30.
- q. Met with M&O to discuss ESF briefing room displays and photo needs; designed scale drawing display.
- r. Delivered negatives to satisfy short turn-around demands for presentation/display materials for institutional.
- s. Bullfrog Planning commission continuing with development of data base for Facilities Management Program.
- t. Continuing to gather information on vehicle usage and assignments for decision paper concerning YMP/YMSO vehicles.
- u. The Site Manager and Field Test Coordinator convened a meeting at NRG-6 drill pad/access road on November 26, 1992 with a representative from REECo Construction and RSN QC. The Site Manager, and Field Test Coordinator approved and accepted the NRG-6 Pad and Road.
- v. Bullfrog Planning Commission participated in meeting with Nye County Representatives.
- w. Finalized ORPS Report #1922-0002, "Power Outage, Bldg. 4014 (Bird Incident)."
- x. Participated in fire evacuation exercise at FOC Building.
- y. Coordinated planned replacement of radio desk consoles for Ranch Control with REECo Radio Shop.



- z. Designed Block Diagram for the VARS system.
- aa. Refined Capital Equipment List for FOC for FY 93.
- bb. Coordinated ESF Construction.
- cc. Coordinated and completed photo and video coverage of ESF Ground Breaking on 11/30.
- dd. Continued working with M&O on ESF Situation Room displays and photo needs. A display to scale and accepted by room users but is on hold due to funding.
- ee. Arranged rough cut videotape session for 12/10 & 11 at JCWSI for ESF video.

**B. Project Safety and Health, (DOE/SAIC)**

- a. Arranged fire drill and developed a criteria checklist for Field Operations Center.
- b. Provided a health/sanitation guideline for building 4001, "YMP Change House."
- c. Performed air sampling and noise survey of SMF cut-off saw room in building 4221.
- d. Assisted DOE S&H in verification of closure of open compliance assessment test (CAT) finding.
- e. Supported ongoing tours.
- f. Occurrence Reports - 1 awaiting FM signature, 2 new reports submitted.
  - 1. REECO-5 outstanding: 2 waiting FM signature; 2 rejected (by F, both on 06/02/92; and 1-10 day notification (11/23/92).
  - 2. SAIC-6 outstanding: 1 rejected (by F, 07/27/92); 2-10 day notification (both dated 11/03/92); and 2-10 day update (11/24/92); and 1 Pre-Final awaiting FM signature.
- g. Attended meeting on Five Year Safety & Health Plan for FY 94 and outyears. Rock storage areas.
- h. Worked on comment resolution of MGDS Requirement Document.

g. Field Engineering provides support to GP-9 Rev 3, GP 92-5,

GP 92-12, GP 92-7, GP 92-8 and GP 92-10, as required.

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- i. Reviewed and commented on Safety and Health Plans for M&O and the T&MSS Organizations.
  - j. Conducted Fire Drill for FOC Building and wrote critique report.
  - k. Wrote memos to SMF on Ventilation for Dry Coring/Slab Sawing and on Respirator Protection while slab sawing.
  - l. Researched Fire Codes on parking lot requirements.
  - m. Conducted informal total dust survey at Joy Rig, NRG-6, no problems noted.
  - n. Conducted noise dosimetry and total dust measurements of construction activities at the ESF Access Road.
  - o. Supported ongoing tours.
  - p. Occurrence Reports-none awaiting FM signature, 2 new reports submitted.
    1. REECO-5 outstanding: 3 rejected (2 on 06/02/92; 1 on 09/03/92); and 1-10 day notification (11/23/92).
    2. SAIC-4 outstanding: 1 rejected (by F, 07/02/92); 2-10 day notification (both dtd 11/03/92); and 1-10 update (11/24/92).
2. Raytheon Services Nevada, (RSN)
- A. Field Supports
- a. Continued work on Area 25 control net, ongoing.
  - b. The Field Engineering Group checks the trench walls on a daily basis in order to determine suitability for continued operations.
  - c. Survey of the geophysical lines Phase II is complete, calculations remain.
  - d. Survey of Neutron Boreholes (JP 91-9, Rev. 2) is complete. Neutron Boreholes N34, N35, and N63 have been surveyed and calculated.
  - e. Survey currently establishing work point monuments around ESF and Topsoil and Rock storage areas.
  - f. Issued five (5) work initiations (WI's) in support of ongoing and upcoming job packages.
  - g. Field Engineering providing support to JP-9/Rev 3, JP 92-5, JP-92-12, JP 92-7, JP 92-8 and JP 92-10, as required.

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- i. Electrical as-built of FOC, Building 4015 is 95% complete. Work is ongoing.
- j. GSF Test Pits survey complete. Calculations and plotting remain.
- k. Survey of JP 92-12 is complete with the exception of Fran Ridge Pit. Calculations remain.
- l. Trench 7, JP 92-05, as-built survey complete, calculations remain.
- m. Verified vertical alignment, LM300, UZ-16.
- n. As-built survey of NRG-6 Drill pad and Access Road complete. Calculation remain.

**B. Quality Control**

- a. Started verification activities on NRG-6 utilizing the Joy 1 Rig.
- b. Completed documentation and sent records to RSN Records coordinator for UZN-58 and NRG-1 video camera surveying.
- c. Verification activities for backfill operations on: NRSF Test Pits 16, 25, 26, 27A, 28, 29, 30, 31, and 32; MWV Pits 1, 29, 30, 31 and 32; MWV Trenches 5A (partial), 6 and 7.
- d. Performed verification activities for plug with neat cement for abandonment: a) NRG-1 plug & abandonment program; b) Borehole security program #5 for RF 9, 10, and 11.
- e. Continued verification of activities on UZ-16 borehole utilizing the LM-300 Drill Rig.
- f. Continued verification of activities performed at UZN-59 utilizing the CME-850 Rig, due to REECO crew working on other projects.
- g. Continued verification activities on NRG-6 utilizing the Joy 1 Rig.
- h. Closed packages and sent records to RSN Records coordinator for the following:
  1. NRG-1 Plug and Abandonment Program.
  2. Borehole security program #5 for RF-9, 10 and 11.
  3. Standard Test Pit, MWV-P-33, P-1 and P-29.
  4. Standard Exploratory Trenches T6 and T7.
- i. Performed weekly verification on condition of fences and trenches around SCR-T1, T3, CF-1 and SCF-T1.

DEC 15 1992

3. Sample Management Facility, (SMF/SAIC)

- a. Continued recovery and processing core and cutting from UZ-16, UZN-59, and NRG-6.
- b. Continued processing core from UZN-58.
- c. Started drilling on UZN-59.
- d. Started drilling on NRG-6.
- e. Successfully completed testing of dust collection system for dry-cut saws.
- f. Removed 15 specimens from UZ-16 core shipment to USGS.
- g. Laid out 64 boxes of old core from various locations for examination by State of Nevada.
- h. Drilling at UZ-16 penetrated top of basal vitrophyre in the Topopah Springs, 12/02.

4. YMP Hydrologic Research Facility, (USGS)

- a. Saturated Zone: Water level measurements taken from WT-6 and WT16, WT15, J11, WT14, WT18, G2 WT4, H1, and B1. Data dumped at WT1, P1. Calibrated well WT2.
- b. Kevin Scofield at NTS to monitor tracer gas injection at UZ16 and to observe core collection for hydrochemical studies.
- c. Chris Menges and Giovanni Vadarro, completed detailed description of Stratigraphic units and soils in trenches and mapping Busted Butte experiences and completing Trench 14 studies.
- d. Scott Lundstrom, UNR Seismic Program, in field to coordinate office set up.
- e. John Whitney, Bill Simonds, and Jeff Coe at NTS to attend LANL field trip to Lathrop Wells Cone and Crater Flats.

5. Reynolds Electrical and Engineering Co. Inc., (REECO)

Activities conducted during week ending November 27, 1992:

DEC 15 1992

**A. Drilling**

- a. JP 92-3, UZ-16, LM-300, cored to 1,096.38 feet, reamed to 1,089.04 feet. Two Survey at 1,069 feet -7 degrees and 2 degrees, respectively. Survey at 1,089 feet -2 degrees.
- b. JP 91-9, CME-850, UZN-59, cored to 12.57 feet reamed to 10.55 feet.
- c. JP 92-2, NRG-1, CME-550, USBR logged from 88 feet up. Bridge located at 88 feet. A 2"x2"x10" lead weight lost in hole. Tripped in the hole with HQ core barrel, knocked out bridge and chased to the bottom at 150 feet. Recovered lead weight and hole cemented back to the surface.
- d. JP 92-11, NRG-6, Joy #1, cored to 22.11 feet, reamed to 11.12 feet.

**B. Logistics**

- a. Continued requisitioning supplies, materials, ad services for YMP Field Operations Center.
- b. Supported tours during the week.

**C. Construction**

- a. JP 92-5; "Soil Test Pits and Trenches"...REECO completed backfill of Trench MWV-T7. Proposed ESF north portal area Trenches and Pits have been backfilled.

**Activities conducted during week ending December 4, 1992:****A. Drilling**

- a. JP 92-3, UZ-16, LM-300, cored to 1, 149.43 feet, reamed to 1, 128.89 feet. Two Survey at 1, 109 feet -2 degrees 15 minutes. Survey at 1, 129 feet -2 degrees 15 minutes.

- b. JP 91-9, CME-850, UZN-59, cored to 80.33 feet, reamed to 75.33 feet.

- c. JP 92-11, NRG-6, Joy #1, cored to 55.83 feet.

**B. Logistics**

- a. Continued requisitioning supplies, materials, and services for YMP Field Operations Center.

- b. Supported tours during the week.

DEC 15 1992

C. Construction

- a. Up 92-20, "North ESF Portal Pad and Access Road"... REECO commenced initial site preparation operations. Rough grading of the Road "H" access road entry to pad as well as the topsoil storage area grading. Hauling fill began from the access road work.

6. Los Alamos National Laboratory, (LANL)

- a. Added Key Dye to TCO staff. He will be stationed at the FOC starting Mid December.

7. Documents and Records Center, (M&O)

Activities during week ending November 27, 1992:

- a. Received and Issued to following Controlled Documents:

Job Packages: N/A  
Test Planning Packages: N/A  
Specifications: N/A  
Drawings: N/A  
FCRs: N/A

FCR 93/069, Rev. 0, "Addition of Clean-Out and Attempted Fishing Activities Associated with Borehole UE25 NRG#1.

Work Programs: N/A

- b. Reproduction:

4,522 pages copied.

839 drawing copied.

- c. Documents Issued:

68 controlled documents.

0 uncontrolled documents.

- d. DTAR logoffs: 64.

- e. Attended week FOC staff meeting.

- f. Worked Saturday, 11/21, to reproduce 777 Size "D" drawings for REECO.

Activities during week ending December 4, 1992:

- a. Received and Issued to following Controlled Documents:

Job Packages: N/A

Test Planning Packages: N/A

DEC 15 1992

Specifications: YMP-025-1-SP10, Rev. 0, "Rock Bolts and Accessories."  
Drawings: YMP-025-1-MING-MG142, Rev. 0, "Highwall Rock Support, Elevation,  
Sections and Details."

FCRs: FCR 03/070, Rev. 0, "Remove Note 8 on Drawing for JP 92-4."  
FCR 93/071, Rev. 0, "JP 92-20, Field Operations Permit Change."  
FCR 93/072, Rev. 0, "JP 92-20, field Operations Permit Change."  
FCR 93/077, Rev. 0, "Clarify Dimensional Tolerances and Indicate  
Class of Reinforced Concrete Pipe (RCP)."  
FCR 93/078, Rev. 0, "Posting of RSN Hold H1 Against Drawing  
YMP-025-1-CIVL-GP101, Rev. 1."

Work Programs: N/A

b. Reproduction:  
6,831 pages copied.  
94 drawing copied.

c. Documents Issued:  
210 Controlled documents.  
4 Uncontrolled documents.

d. DTAR logoffs: 34.

8. Field Training, (SAIC)

- a. Training conducted for GET 1.2, 1.3, and 1.4. A total of 18 people attended.
- b. 10 GET 1.5 exams were administered. All examinees passed.

*Winfred A. Wilson*

Winfred A. Wilson  
Site Manager

YMP:WAW-426

CC:

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J. R. Dyer, YMP, Las Vegas, NV



Department of Energy  
Yucca Mountain Site Characterization  
Project Office  
P. O. Box 98608  
Las Vegas, NV 89193-8608

WBS 1.2.3  
QA: N/A

DEC 02 1992

J. Russell Dyer, YMP, NV  
Winfred A. Wilson, YMP, Mercury, NV, M/S 717

FIELD TEST COORDINATOR'S REPORT FOR THE WEEK ENDING NOVEMBER 27, 1992

UZ-16

Scope of Activity: A borehole approximately 1700 feet in depth will be drilled using the LM-300 drilling system. The primary purpose of the hole will be for vertical seismic profile testing, although other tests such as air permeability, hydrogeochemistry, and matrix hydrologic properties are also being planned. Drilling is scheduled from May through December 1992, following pad construction in March 1992.

Status as of November 27, 1992: Borehole UZ-16 continues to be drilled with the LM-300 drill rig. Coring continued from 1073.31 feet to 1096.38 feet and the borehole was reamed from 1069.02 feet to 1089.04 feet. On November 25, 1992, a deviation survey was run at a depth of 1089 feet using a 3 degree tool. Deviation of the hole was found to be 2 degrees and 0 minutes off vertical. The deviation surveys have shown that no additional cumulative deviation of the borehole from vertical can be detected. Deviation surveys will continue to be conducted following reaming cycles to monitor this condition.

NEUTRON-ACCESS BOREHOLES

Scope of Activity: Approximately 24 shallow boreholes will be drilled/cored for neutron logging by the U.S. Geological Survey (USGS) in order to evaluate natural infiltration. Core taken from these holes will be used by USGS for determination of moisture content and to construct tritium profiles. The drilling operation utilizes an Odex drilling system, which produces HQ core and a cased hole having a diameter of approximately six inches. The drilling program is being implemented in two phases, each consisting of 12 boreholes that will take several months to complete.

Status as of November 27, 1992: Due to the utilization of drill crew and equipment at borehole UE-25 NRG-1 for cleanout and hole plugging, no drilling was performed at borehole USW UZ N-59 during the reporting period. Borehole USW UZ N-59 is being drilled with the CME-850 drill rig. The borehole was advanced the previous week ending Friday, November 20, 1992, to a core depth of 12.57 feet and ream depth of 10.55 feet. Boreholes USW UZ N-57, -58, -59 along with future borehole USW UZ N-61 are located in Abandoned Wash.



DEC 02 1992

NRG-6

Scope of Activity: A borehole approximately 1100 feet in depth will be drilled using the Joy 225 drilling system. The primary purpose of this hole is to provide core for determination of stratigraphy and engineering characteristics of the rocks at or near the planned Exploratory Studies Facility North Access Ramp. Drilling is scheduled from November through December 1992.

Status as of November 27, 1992: Commencement of drilling on borehole USW NRG-6 with the Joy 1 drill rig began on November 23, 1992. SF6 tracer gas was injected during drilling operations. By the end of shift on November 25, 1992, coring had reached a depth of 11.76 feet and a ream depth of 6.61 feet.

#### QUATERNARY FAULTING WITHIN THE SITE AREA INVESTIGATIONS

Scope of Activity: Pavements and trenches will be excavated to provide exposures of Quaternary deposits and faults for mapping by geologists from the USGS as described in Study Plan 8.3.1.17.4.6 Quaternary Faulting in the Site Area. Planned activities include excavation of new trenches and modification of existing trenches on the Windy Wash fault, Solitario Canyon fault, and Stagecoach Road fault, and modification of existing exposures of the Paintbrush Canyon fault west of Busted Butte in the sand ramps by developing pavements.

Status as of November 27, 1992: Geologic mapping, sampling, and interpretation continues on trench excavations completed during previous weeks in Midway Valley, Solitario Canyon, and along Stagecoach Road.

#### MIDWAY VALLEY INVESTIGATIONS

Scope of Activity: Test pits and trenches are being excavated to provide exposures for mapping by geologists from the U.S. Geological Survey and Geomatrix Consultants, Inc., in the the Midway Valley area east of Yucca Mountain. The focus of this investigation is a determination of the location and recency of faulting near prospective surface facilities.

Status as of November 27, 1992: Surveys of the MWV-T7 excavation were completed on November 23, 1992, and operations to backfill the trench followed. The primary objective of trench MWV-T7 was to characterize the bedrock structures exposed in trench MWV-T5A. The trench was located in Midway Valley approximately 200 feet north of previously excavated trench MWV-5A and is within the ESF north portal pad footprint. Backfilling was completed by the end of shift of trenches and test pits in Midway Valley identified to be within the ESF north portal ramp pad footprint and construction staging areas following verification that data collecting activities had been completed.

DEC 02 1992

**SOIL AND ROCK PROPERTIES**

Scope of Activity: Objectives of this investigation are to characterize the soil and rock conditions that will influence or be influenced by the construction of the Exploratory Studies Facility surface and subsurface access facilities. This activity is comprised of a total of 32 test pits and one drill hole (NRG-1). Ongoing Phase II activities include 41 additional test pits and pavement clearing at NRG-1.

Status as of November 27, 1992: During geophysical logging operations conducted in the NRG-1 borehole the previous week (November 16-20, 1992), a lead weight was lost in the hole. Additionally, materials were dislodged from unstable borehole walls during the geophysical logging activities bridging the hole off at a depth of about 27 feet. The NRG-1 borehole was cleared of obstructions to a bottom hole depth of about 150.12 feet. SF6 tracer gas was injected during hole cleanout operations. The lead weight was retrieved from the hole on November 24, 1992. On November 25, 1992, the hole was grouted to ground surface using neat cement grout (15.6 pounds Type II Portland cement/gallon H2O) tremied to the bottom of the hole.

**CHARACTERIZATION OF STRUCTURAL FEATURES IN THE SITE AREA**

Scope of Activity: Objectives of this investigation are to conduct prototype work for development of equipment and techniques for shaft mapping in the Exploratory Studies Facility. Developmental work is to be completed in an enlarged and deepened circular test pit on the east side of Fran Ridge. The area around the pit disturbed during the original excavation will be cleaned to the rock surface for use in pavement studies for Surface Fracture Network Studies.

Status as of November 27, 1992: Survey targets installed on the pit walls during geologic mapping operations at the enlarged Fran Ridge test pit on November 17-19, 1992, are to be surveyed the week of December 7, 1992.

**VOLCANISM EXCAVATIONS**

Scope of Activity: Test pits and trenches will be excavated at the Lathrop Wells Volcanic Center and at the Cima volcanic field in order to test alternative models of eruptive histories of cinder cone volcanic activity. The excavations will provide exposures of volcanic materials (lava flows, pyroclastic deposits) and soils for examination and collection of samples. Planned activities include collection of samples for age determinations by multiple methods, description and collection of samples for evaluation of soil development on volcanic units, exposure of contact relations to aid stratigraphic studies for mapping of volcanic centers, and collection of samples for petrologic analysis.

DEC 02 1992

Multiple Addressees

-4-

Status as of November 27, 1992: No field activities were performed during this period.

#### BOREHOLE SECURITY

Scope of Activity: Objectives of this activity are the locking and securing of boreholes drilled during site characterization efforts and tracking of testing conducted in individual boreholes. Over 200 boreholes will be secured during the next several months.

Status as of November 27, 1992: Borehole Security Program 5 was completed on November 25, 1992. Under work program 5, three inactive surface boreholes designated RF-9, RF-10, and RF-11, located in Midway Valley were filled to one foot above ground surface by pouring neat cement slurry (15.6 pounds Type II Portland cement/gallon H2O) from the surface.

If you have any questions, please contact Kenneth J. Skipper at 794-7944.



Dennis R. Williams, Acting Chief  
Site Investigations Branch  
Regulatory & Site Evaluation Division

RSER:KJS-1303

#### CC:

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Per

V

Field Re  
Office Rep

LIMITED VALUE

92-010279 ✓



## Reynolds Electrical & Engineering Co., Inc.

Post Office Box 98521 • Las Vegas, NV 89193-8521

IN REPLY REFER TO:  
580-01-145

WBS 1.2.9.1  
QA: N/A

December 12, 1992

Carl P. Gertz, Project Manager  
Yucca Mountain Site Characterization  
Project Office  
U.S. Department of Energy  
Post Office Box, 98608  
Las Vegas, NV 89193-8608

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP) STATUS REPORT (SCP: N/A)

Attached is the November YMP Status Report for Reynolds Electrical & Engineering Co., Inc.'s participation in the YMP.

If further information is required, please contact Sandra L. Hughes at 794-7192.

R. F. Pritchett, Manager  
Yucca Mountain Project Division  
YMP Technical Project Officer

RFP:SLH:mab

Enclosure  
Status Report (4 pages)

cy: See page 2

TOTAL QUALITY IS OUR BUSINESS

RECO

AN EG&G COMPANY

**REYNOLDS ELECTRICAL & ENGINEERING CO., INC.**  
**(REECo)**

**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP)**

**NOVEMBER 1992 - STATUS REPORT**

Reeco has no reportable Level 0 or Level 1 Milestones.

**SITE (1.2.3)**

**WBS 1.2.3.2**

**Task: USGS Integrated Data Acquisition System (IDAS)**

Continued support of IDAS to include technical support, equipment testing, maintenance and repairs.

**WBS 1.2.3.5**

**Task: Capital Equipment to support Drilling Programs**

Procurement is in progress for the following drilling support equipment: Cuttings/handling system, hydraulic casing jacks and bag house, data recorder and monitors, and Class XIII drill rig. Delivery date for the drill rig is December 16, 1992. The Letter of Protest received from Longyear Co. was reviewed by Legal and resolved.

**Task: Neutron Access Holes (Job Package 91-9)**

Completed drilling/coring UZ-N57 and UZ-N58 at a total depth of 119 feet. The CME-850 drill rig and crew are presently drilling/coring on UZ-N59 at 12 feet. UZ-N59 is the tenth of twelve boreholes in the Phase II program.

**Task: North Portal Drill Hole and Surface Facility Test Pits (Job Package 92-2)**

Utilizing the CME-850 drill crew, cleaned out the North Portal Ramp Borehole to 148 feet in preparation for geophysical logging. Fished lead weight out of the hole after it was inadvertently lost during logging operations by the U.S. Bureau of Reclamation. Plugged the hole from total depth to the surface with neat cement. Demobilized the CME-550 drill rig and associated equipment.

**Task: UZ-16 Drilling and Testing (Job Package 92-3)**

Continued drilling/coring operations. Present depth of the core hole is 1096 feet, and depth of the 12 1/4-inch reamed hole is 1089 feet. Borehole deviation remains stabilized at 2 degrees.

**Task: Midway Valley Trenching (Job Package 92-5)**

Completed dozer excavation of trench MWV-T7. Provided labor support to Principal Investigator for MWV-T7 and MWV-T5A. Completed backfill of Trench MWV-T7, MWV-T5A, and MWV-T6.

**Task: Soil & Rock Properties Test Pits Phase II (Job Package 92-8)**

No activity during this period.

**Task: NRG-6 Drill Pad and Access Road (Job Package 92-10)**

Completed access road and drill pad.

**Task: NRG-6 Drilling and Testing (Job Package 92-11)**

Mobilized the Joy 1 drill rig and the third day shift drill crew at NRG-6 on November 18, 1992. Present depth of the core hole is 22 feet. The 6 5/8-inch casing is at 11 feet. NRG-6 is scheduled to be drilled to a total depth of 1100 feet plus or minus 50 feet.

**Task: Quaternary Faulting (Job Package 92-12)**

No activity during this period.

**Task: Borehole Security Program**

Completed plugging and abandonment of boreholes UE-25, RF-9, RF-10, and RF-11 in accordance with the Borehole Security Work Program. Boreholes were plugged from total depth to the surface with neat cement in preparation for the Exploratory Studies Facility (ESF) pad construction.

**REGULATORY (1.2.5)**

**WBS 1.2.5.2.4: Site Characterization Plan (SCP) Reference Library and Database**

**Task: Site Characterization Plan (SCP) Reference Library and Database**

Distributed five SCP sets during this period.

**EXPLORATORY STUDIES (1.2.6)**

**WBS 1.2.6.1: ASSURANCE (1.2.11)**

**Task: Exploratory Studies Facility (ESF)**

Continued administrative support for ESF activities to include; planning, scheduling, management and Title-II design review. Completed the Title-II Management and Independent Review of the second half of Design Package 1A.

Issued the Request for Proposal (RFP) for crushing aggregate and conducted a preproposal conference. The RFP closing date has been extended to December 17, 1992.

Completed preparations to procure a new or remanufactured Tunnel Boring Machine, and submitted the purchasing requisition and specifications to Procurement on December 1, 1992. Submitted the Procurement Package to DOE/NV on December 7, 1992, for review and approval.

Source Evaluation Board received and began review of amended proposals from prospective subcontractors for Request for Proposal 1-DH-92, Technical Support and Underground Excavation for the ESF.

**Task: ESF North Portal Pad & Facilities**

Mobilized equipment and manpower and commenced construction on November 30, 1992, Milestone RM645.

**TEST FACILITIES (1.2.7)**

**Task: Field Operations Support**

Continued logistical and tour support for DOE Yucca Mountain Site (YMSO) staff. Eight tours were held during this period with 400 people attending. Support included but was not limited to; arrangements for buses, registration of guests, coordination of lunches/beverages, medical service, furniture, mechanical service. Continued preparations for upcoming tours.

Continued support services to participants; and maintenance of YMP utilized facilities, utilities, equipment and roads in Area 25. Issued RFP and held preproposal conference for removal and repair of broken windows in Building 4015 in Area 25. The RFP closing date is December 9, 1992.

**PROJECT MANAGEMENT (1.2.9)**

**WBS 1.2.9**

**Task: Technical Project Office Management/Project Control**

Continued normal administrative level of effort support. Continued status and update of Planning and Control System (PACS) in support of FY 1993 planning; supported Title II Design Package 1A schedules and completed cost estimates as required.

**QUALITY ASSURANCE (1.2.11)**

**WBS 1.2.11**

**Task: Quality Assurance**

Continued normal administrative level of effort support. Continued planning for implementation of first line quality control inspection program to include procedure

completion, revision and approval. Completed all actions to resolve Corrective Action Report CA-92-001 on Document Control deficiencies.

#### **ENVIRONMENT, SAFETY & HEALTH (1.2.13)**

##### **WBS 1.2.13**

##### **Task: Safety & Occupational Health**

Provided medical, occupational safety, industrial hygiene and fire protection support.

#### **SUPPORT SERVICES (1.2.15)**

##### **WBS 1.2.15**

##### **Task: Administrative Support and Training**

Continued to provide procurement, logistical, and information management administrative level of effort support; continued support services to various YMP participants.

Yampa River Basin Project Division