



Department of Energy

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AUG 29 1985

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Mr. Allen V. Pinkham, Chairman
Nez Perce Tribal Executive Committee
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Gentlemen:

MONTHLY TRANSMITTAL OF "SCHEDULE FOR NEAR TERM BWIP SITE CHARACTERIZATION ACTIVITIES"

Enclosed for your use is our monthly update and schedule for Site and Engineered Barriers Department activities in this precharacterization phase.

As committed, we will continue to update this information on a regular basis. Should you have any questions relative to this transmittal, please contact Mr. C. Thomas Tinsley of my staff on (509) 376-8736.

Very truly yours,

O. L. Olson
O. L. Olson, Director
Basalt Waste Isolation Division

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PDR WASTE
WM-10 PDR

WM DOCUMENT CONTROL
ENCLOSURE
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WM Record File

101.3

WM Project 10

Bucket No.

PDR

LPDR

Distributions

J. Linehan
DRM

(Return to WM, 623-SS)

CFR

nb

bcc's for letter, Olson to States/Indian Tribes, "Monthly Transmittal of
Schedule for Near Term BWIP Site Characterization Activities"

bcc, w/encl:

Russell Jim, Yakima Indian Nation

Ron Halfmoon, Nez Perce Tribe

Peter P. Ramatowski, Umatilla Conf. Tribes

Wyatt Rogers, CERT

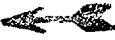
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J. Graham, Rockwell

BWI Record Cy

SITE AND ENGINEERED BARRIERS DEPARTMENT ACTIVITIES

Activities	Date	Rev.*
<u>Site</u>		
• Install Westbay Packer in RRL-14	09/01-09/30/85	
• Run and grout liner in DC-3 (to support seismic monitoring)	Complete	
• Remove bridge plugs from RRL-14	Complete	
• Groundwater monitoring of boreholes DC-19, DC-20, and DC-22	Daily	
• Monitoring of other boreholes	Weekly	
• Integrity testing, DB-14	Complete	
• Integrity testing, DB-1	Complete	
• Deepen Borehole DH-27	Complete	8
• Drill cable tool start holes, RRL-2B, RRL-2C	Complete	
• Drill rotary hole RRL-2C	Complete	
• Surveying gravity at magnetic stations	Complete	
• Electronmicroprobe analysis of flow top samples	Ongoing	
• X-ray diffraction analysis of flow top samples	Ongoing	
• Modeling gravity, magnetic data	Ongoing	
• Collection of magnetic and gravity data	Ongoing	
• Seismic data surveillance analysis	Ongoing	
• Lab studies on sorption and chemical dissolution	Daily	
• Test Cohasset in RRL-2A	Complete	
• Drill rotary hole RRL-2B	Complete	
• Deepen borehole DH-28	Complete	
• Drill RRL-17 to top of Grande Ronde	07/15-08/15/85	
• Drill DC-23G	08/23-09/30/85	8

Solution Chemistry Laboratory

• Develop method for rock analysis using ICP-AES	Ongoing
• Upgrade anion analysis on ion chromatography	Ongoing
• Develop method for analysis of groundwater tracer using HPLC	Ongoing
• Support to Site Department database development	Ongoing
• Development of methods for analysis using AA	Ongoing
• Procedure development	Ongoing
• Analysis of aqueous solution samples from hydrothermal testing and groundwater sampling	Ongoing
• Field and field analyses of water from local springs, unconfined aquifer and other test horizons	Ongoing
• Laboratory upgrade of uv-visible spectrophotometric equipment	Complete
• Study of kinetic of decomposition of hydrogen peroxide with basalt under various conditions using uv-visible spectrophotometry	Ongoing
• Develop method for analysis of fixed gases in water samples by gas chromatography	Ongoing
• Develop improved methods for chemical speciation measurements of arsenic and selenium for use in analysis of hydrothermal samples	Ongoing
• Development and initiation of improved methods of records retention	Ongoing

Activities	Date	Rev.*
<u>Microcharacterization (Solids) Laboratory</u>		
Scanning Transmission Electron Microscope -		
• Analysis of flow-through run products	Ongoing	
• Analysis of well-characterized biotite and chlorite as possible standards	Complete	
• Analysis of Dickson autoclave run products	Ongoing	
• Analysis of Rocky Coulee flow top clay minerals	Complete	
X-Ray Diffractometer -		
• Analysis of McCoy Canyon, Umtanum and high-Mg flow tops	Ongoing	
• Analysis of flow-through run products	Ongoing	
• Analysis of Dickson autoclave run products	Ongoing	
• Analysis of Cohasset and Rocky Coulee flow tops	Complete	
• Analysis of fault gouge	Ongoing	
• Analysis of sedimentary interbed minerals	Deferred Until FY 1986	
• Analysis of concrete samples	Cancelled	8
• Analysis of corrosion water surface coatings	Ongoing	
Electron Microprobe -		
• Analysis of Cohasset flow tops	Complete	8
• Analysis of Rocky Coulee flow tops	Ongoing	8
• Analysis of natural pyrites	Complete	8
• Analysis of Dickson Autoclave run products	Ongoing	
• Analysis of oxide minerals in Rocky Coulee/Cohasset flow tops	Ongoing	
<u>Radioactive Hydrothermal Laboratory</u>		
• Basalt and synthetic groundwater tests inflow through autoclave	Ongoing	
• Radionuclide-doped simulated Savannah River Plant Defense glass + basalt and synthetic groundwater	Ongoing	
• Experiments are being conducted using fully radioactive waste forms in the presence of various waste package components (metal, barriers, and/or basalt)	April 1986	8
• Experiments on the behavior of specific radionuclides, introduced individually with groundwater, in the presence of packing material at low temperatures	Ongoing	8
<u>Non-Radioactive Hydrothermal Laboratory</u>		
• Hydrothermal tests on basalt + bentonite + groundwater	Ongoing	
• Long-term hydrothermal tests (1-5 years) on basalt + groundwater	Ongoing	
• Determine the solubility of selenium under hydrothermal conditions simulating the near-field environment	Ongoing	
• Evaluate Redox conditions in a hydrothermal experiment simulating a near-field environment	Ongoing	
• Dehydration experiments	Ongoing	

Activities		Date	Rev.*
<u>Waste Package Packing Investigatory Testing</u>			
• Uniaxial compression	50 tests	Ongoing	
• Brazillian tension	50 tests	Ongoing	
• Direct shear	50 tests	Ongoing	
• 4-point flexure	40 tests	Ongoing	
• Density	100 tests	Ongoing	
<u>Concrete Testing Laboratory</u>			
• Hydraulic conductivity testing		Complete	8
• Heat gain testing		Complete	8
• Prefabricated Packing testing - Developmental		Ongoing	
• Near-Surface Testing Facility Remedial Shotcrete		Beginning	8
<u>Backfill Testing Laboratory</u>			
• Hydraulic conductivity tests		Ongoing	
• Start swelling, pressure permeameter tests		August	8
• Possibility of (2) long-term flow through permeameter tests		August	8
• Compaction tests on bentonite/basalt mixes/specific gravity		Complete	8

*Changes in this schedule from that last issued are indicated by a revision bar and revision number.