

## Department of Energy

Richland Operations Office

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Richland, Washington 99352

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WM Project

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Docket No.

PDR

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Distribution:

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(Return to WM, 623-SS) WKerr RJohnson  
Sac

Mr. Terry Husseman, Program Director  
Office of High-Level Waste  
Management  
State of Washington Department  
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Olympia, WA 98504

Mr. Max S. Power, Science and Technology  
Washington State Institute for  
Public Policy  
The Evergreen State College  
Seminar Building, Room 4111  
Mail Stop TA-00  
Olympia, WA 98505

Mr. Roger R. Jim, Sr., Chairman  
Yakima Tribal Council  
Yakima Indian Nation  
P. O. Box 151  
Toppenish, WA 98948

Mr. Elwood H. Patawa, Chairman  
Board of Trustees  
Umatilla Confederated Tribes  
P. O. Box 638  
Pendleton, OR 97801

Mr. Allen V. Pinkham, Chairman  
Nez Perce Tribal Executive Committee  
Box 305  
Lapwai, ID 83540

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.

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State and Indian Tribes

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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. Max L. Powell of my staff on (509) 376-5267.

Very truly yours,

ORIGINAL SIGNED BY  
O. L. OLSON

O. L. Olson, Director  
Basalt Waste Isolation Division

BWI:CTT

Enclosure

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

Ronald Halfmoon, Nez Perce Tribe


Peter P. Ramatowski, Umatilla Conf. Tribes

Wyatt Rogers, CERT

Bill Dixon, State of Oregon

Linda Lehman

James B. Hovis

J. Linehan, NRC HQ 

F. R. Cook, NRC Richland

Barry Gale, DOE-HQ

C. A. Peabody, DOE-HQ

J. Graham, Rockwell

BWI Record Cy

Activities	Date	Rev.*
<u>Site</u>		
o Test casing shoe in RRL-2B	10/14-10/18/85	10
o Install piezometers in DC-23W	10/21-10/25/85	
o Install Westbay Packer in RRL-14	Complete	10
o Groundwater monitoring of boreholes DC-19, DC-20, DC-22, and RRL-14	Daily	
o Monitoring of other boreholes	Weekly	10
o Electronmicroprobe analysis of flow top samples	Ongoing	
o X-ray diffraction analysis of flow top samples	Ongoing	10
o Modeling gravity, magnetic data	Ongoing	
o Collection of magnetic and gravity data	Ongoing	10
o Seismic surveillance and data analysis	Ongoing	
o Lab studies on sorption and chemical dissolution	Daily	10
o Drill RRL-17 to top of Grande Ronde	Complete	
o Drill DC-23GR	Complete	10
o Collection of paleomagnetic data	10/06-10/31/85	

Solution Chemistry Laboratory

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

Microcharacterization (Solids) Laboratory

## Scanning Transmission Electron Microscope -

o Analysis of flow-through run products	Ongoing
o Analysis of Dickson autoclave run products	Ongoing

Activities	Date	Rev.*
X-Ray Diffractometer -		
o Analysis of McCoy Canyon, Umtanum and high-Mg flow tops	Complete	10
o Analysis of flow-through run products	Ongoing	
o Analysis of Dickson autoclave run products	Ongoing	10
o Analysis of fault gouge	Complete	
o Analysis of sedimentary interbed minerals	September 1986	
o Analysis of concrete samples	Cancelled	
o Analysis of corrosion water surface coatings	Ongoing	
Electron Microprobe -		
o Analysis of Rocky Coulee flow tops	Complete	10
o Analysis of natural pyrites	Complete	
o Analysis of Dickson Autoclave run products	Ongoing	10
o Analysis of oxide minerals in Rocky Coulee/Cohasset flow tops	Complete	
<u>Radioactive Hydrothermal Laboratory</u>		
o Basalt and synthetic groundwater tests in flow-through autoclave	Ongoing	
o Radionuclide-doped simulated Savannah River Plant Defense glass + basalt and synthetic groundwater	Ongoing	
o Experiments using fully radioactive waste forms in the presence of various waste package components (metal, barriers, and/or basalt)	April 1986	
o Experiments on the behavior of specific radionuclides, introduced individually with groundwater, in the presence of packing material at low temperatures	Ongoing	
<u>Non-Radioactive Hydrothermal Laboratory</u>		
o Hydrothermal tests on basalt + bentonite + groundwater	Ongoing	
o Long-term hydrothermal tests (1-5 years) on basalt + groundwater	Ongoing	
o Determine the solubility of selenium under hydrothermal conditions simulating the near-field environment	Ongoing	
o Evaluate Redox conditions in a hydrothermal experiment simulating a near-field environment	Ongoing	
o Dehydration experiments	Ongoing	
<u>Waste Package Packing Investigatory Testing</u>		
o Uniaxial compression	50 tests	10
o Brazillian tension	50 tests	
o Direct shear	50 tests	
o 4-point flexure	40 tests	
o Density	100 tests	

Activities	Date	Rev.*
<u>Concrete Testing Laboratory</u>		
o Prefabricated Packing testing - Developmental	Complete	
o Near-Surface Testing Facility Remedial Shotcrete	Ongoing	
<u>Backfill Testing Laboratory</u>		
o Hydraulic conductivity tests	Ongoing	
o Start swelling, pressure permeameter and triaxial tests	Ongoing	10
o Possibility of (2) long-term flow through permeameter tests	October	
o Compaction tests on bentonite/basalt mixes/specific gravity	Complete	
<u>Geomechanics Testing at Near-Surface Test Facility</u>		
o Overcoring developmental testing with CSIRO triaxial cell	10/85 - 12/85	10
o Development testing of a prototype thermal conductivity probe	10/85 - 12/85	
<u>Rock Mechanics Laboratory</u>		
o Thermal conductivity/thermal expansion development testing	10/85 - 12/85	

\*Changes in this schedule from that last issued are indicated by a revision bar and revision number. Items will remain on listing for a two month period after completion.