



To: *Mr. Lincoln 8562355*

*23*

**Department of Energy**

Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

**WM DOCKET CONTROL CENTER**

'85 MAY 21 <sup>011-44</sup>  
MAR 26 1985

Mr. David W. Stevens  
State of Washington Department  
of Ecology, MS PV-11  
Olympia, WA 98504

Mr. Max S. Power  
Joint Legislative Committee on  
Science and Technology  
B14 Institutions Building (AG-12)  
Olympia, WA 98504

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.

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,

*R.P. Saget for*  
O. L. Olson, Project Manager  
Basalt Waste Isolation Project Office

BWI:CTT

Enclosure

WM Record File  
101.2

WM Project 10  
Docket No. \_\_\_\_\_  
PDR   
LPDR

Distribution:

WRIGHT LINCHMAN  
KENNEDY HJM  
(Return to WM. 628-SS)

*CP Russell  
OR Mattson*

8506060687 850326  
PDR WASTE PDR  
WM-10

*1373*

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

Ron Besser, Umatilla Confederated Tribes

Wyatt Rogers, CERT

Barry Gale, DOE-HQ

Linda Lehman

James B. Hovis

F. R. Cook, NRC ←

BWI Record Cy

bcc, w/o encl:

BWI Rdg File

BLT Rdg File

CTT File

AMCW Rdg File

Archive

SITE AND ENGINEERED BARRIERS DEPARTMENT ACTIVITIES

Site	Activities	Date	
	o Groundwater monitoring of boreholes DC-19, DC-20, and DC-22	Daily	
	o Monitoring of other boreholes	Weekly	
	o Integrity testing, DB-14	Complete	
	o Integrity testing, DB-1	Complete	
	o Deepen Borehole 27-28	03/20-04/30/85	R3
	o Drill cable tool start holes, RRL-2B, RRL-2C	03/18-04/01/85	
	o Drill rotary hole RRL-2C	04/01-06/01/85	
	o Surveying gravity at magnetic stations	Jan - March	
	o Electronmicroprobe analysis of flow top samples	Ongoing	
	o X-ray diffraction analysis of flow top samples	Ongoing	
	o Modeling gravity, magnetic data	Ongoing	
	o Collection of magnetic and gravity data	Ongoing	
	o Seismic data surveillance analysis	Ongoing	
	o Lab studies on sorption and chemical dissolution	Daily	
	o Test Cohasset in RRL-2A	01/14-03/30/85	R3
<u>Solution Chemistry Laboratory</u>			
	o Develop Method for rock analysis using ICP-AES	Ongoing	
	o Upgrade anium 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 method for training analysis using AA	Ongoing	
	o Procedure development	Ongoing	
	o Analysis of aqueous solution samples hydrothermal testing and groundwater sampling	Ongoing	
<u>Microcharacterization (Solids) Laboratory</u>			
Scanning Transmission Electron Microscope -			
	o Analysis of flow-through run products	Ongoing	
	o Analysis of well-characterized brotite and chlorite as possible standards	Ongoing	
	o Analysis of Dickson autoclave run products	Ongoing	
X-Ray Diffractometer -			
	o Analysis of McCoy Canyon, Umtanum and high-Mg flow tops	April 1985	R3
	o Analysis of flow-through run products	Ongoing	
	o Analysis of Dickson autoclave run products	Ongoing	
	o Analysis of Cohasset and Rocky Coulee flow tops	Ongoing	
	o Analysis of fault gauge	Ongoing	
	o Analysis of sedimentary interbed minerals	October 1985	
	o Analysis of concrete samples	Ongoing	R3

<u>Activities</u>	<u>Date</u>	
<u>Electron Microprobe -</u>		
o Analysis of Cohasset and Rocky Coulee flow tops	Ongoing	
o Analysis of natural pyrites	Ongoing	
o Analysis of Dickson Autoclave run products	Ongoing	
o Analysis of oxide minerals in Rocky Coulee flow tops	May 1985	R3
<u>Radioactive Hydrothermal Laboratory</u>		
o Basalt and synthetic groundwater tests inflow through autoclave	Ongoing	
o Radionuclide-doped simulated Savannah River Plant Defense glass + basalt and synthetic groundwater	Ongoing	
o Experiments are being conducted using fully radioactive waste forms in the presence of various waste package components (metal barriers and/or basalt)	October 1985	R3
o Experiments are being conducted on the behavior of specific radionuclide, introduced individually with groundwater, in the presence of basalt 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	January	
o Dehydration experiments	Ongoing	
<u>Waste Package Packing Investigatory Testing</u>		
		R3
o Uniaxial compression	50 tests	Ongoing
o Brazillian tension	50 tests	Ongoing
o Direct shear	50 tests	Ongoing
o 4-point flexure	40 tests	Ongoing
o Density	100 tests	Ongoing
<u>Concrete Testing Laboratory</u>		
o Hydraulic conductivity testing	5 tests	Ongoing
o Heat gain testing	5	On hold
<u>Backfill Testing Laboratory</u>		
o Hydraulic conductivity tests		Ongoing
o Start swelling, pressure permeameter tests		Late-March
o Possibility of (2) long-term flow through permeameter tests		Late-March
o Compaction tests on bentonite/basalt mixes		Ongoing