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NRC000165

***W C R M***  
***WESTERN CULTURAL RESOURCE MANAGEMENT, INC.***

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November 17, 2010

Kenneth Reid, Ph.D.  
 State Archaeologist  
 Deputy State Historic Preservation Officer  
 Idaho State Historical Society  
 210 Main Street  
 Boise, ID 83702

Dear Dr. Reid,

This letter is to summarize Western Cultural Resource Management's data recovery activities for the Eagle Rock Enrichment Facility Project located in Bonneville County, Idaho (west of Idaho Falls) and to request a notice-to-proceed for our client, AREVA Enrichment Services, LLC (AES). Data recovery was conducted by WCRM from October 5 to November 8, 2010, and is now complete.

*Project Background*

AES is preparing an application to the U.S. Nuclear Regulatory Commission (NRC) to construct, operate, and decommission a gas centrifuge uranium enrichment plant called the Eagle Rock Enrichment Facility in Bonneville County. WCRM conducted cultural resource inventories of the proposed project area in 2008 and 2009, surveying a total of 1,005 acres and identifying and recording 13 new archaeological sites and 25 isolated finds (Ringhoff et al. 2008; Estes and Raley 2009). One of the sites, MW04 (a historic homestead with a small prehistoric lithic scatter), was determined eligible to the National Register of Historic Places by the NRC under 36 CFR part 60.4, Criteria A and D. The State Historic Preservation Office (SHPO) concurred with this determination in a letter dated September 29, 2009.

WCRM prepared a data recovery plan detailing treatment recommendations to mitigate adverse impacts of the proposed facility to the eligible archaeological site, MW04 (Ringhoff and Stoner 2010). This plan also includes the collection of all known obsidian bifacial tools within the project so that they can be chemically sourced through x-ray fluorescence analysis, per the recommendation of the Idaho SHPO.

*Summary of Recommended and Completed Treatment*

Table 1 shows the recommended treatment described in the data recovery plan as well as what activities took place during the data recovery effort. Recommended treatment for site MW04 included mapping the entire site with a total station transit, collecting a representative sample of surface historic artifacts, excavating up to six 1 x 1 m units in Feature 1 (a dugout), doing a Class III+ artifact inventory of Feature 8 (a historic refuse concentration) as well as excavating one 1 x

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1 m unit in that feature, and excavating one 1 x 1 m unit in Feature 7 (a possible privy). Additionally, 11 obsidian bifacial tools from multiple sites and isolated finds in the project area were to be collected.

All treatment proposed in the data recovery plan was completed or attempted. Not all the obsidian tools could be relocated, but all other activities were completed at least to the extent described in the treatment plan. Additionally, the treatment of Feature 1 required more work than originally proposed due to the unexpected discovery of a wood floor. While only six excavation units were initially recommended for that feature, 27 units were ultimately excavated in order to expose the extent of the wood floor (see Figures 1-4).

Table 1. Recommended and Completed Treatment of Cultural Resources for the Eagle Rock Enrichment Facility Project

<b>Location</b>	<b>Recommended Treatment</b>	<b>Completed Treatment</b>
MW04 - General site	Detailed mapping of entire site using total station transit.	Detailed mapping of entire site using total station transit.
MW04 - General site	Collection of a representative sample of diagnostic historic artifacts.	Collection of a representative sample of diagnostic historic artifacts.
MW04 – Feature 1 (dugout)	Linear series of up to six 1 x 1 m units to be excavated by hand, with at least one placed outside the feature.	Grid of 27, 1 x 1 m units (including one placed outside the feature) excavated by hand. Initial 6 units placed in a line along middle of feature, with additional units added as necessary to expose entire extent of feature’s wood floor (an unexpected discovery).
MW04 – Feature 7 (possible privy)	One 1 x 1 m unit placed over feature and excavated by hand to a sufficient depth to determine if feature is cultural.	One 1 x 1 m unit placed over feature and excavated by hand in ten arbitrary 10 cm deep levels, with a 1.25 m deep auger test placed at the bottom. No cultural materials were revealed.
MW04 – Feature 8 (historic refuse concentration)	Set up a surface grid of 1 x 1 m units to cover entire feature and do a Class III+ artifact inventory for each unit. Collect a representative surface sample of the feature’s artifacts. Excavate by hand one 1 x 1 m unit to determine presence or absence of subsurface materials.	Set up a surface grid of twelve 1 x 1 m units to cover entire feature and did a Class III+ artifact inventory for each unit. Collected a representative surface sample of the feature’s artifacts. Excavated by hand one 1 x 1 m unit to determine presence or absence of subsurface materials; no subsurface cultural materials were identified.
Multiple sites and IFs throughout the area previously inventoried by WCRM	Collect 11 obsidian bifacial tools.	Collected 4 of the 11 known obsidian bifacial tools; 7 could not be relocated. One previously unidentified tool was also found and collected, bringing the total number of obsidian tools collected up to 5.

At this time, field work related to the treatment of cultural resources related to this project is complete. WCRM is preparing a detailed final report that will contain discussion and analysis of the results of the data recovery. We respectfully request that a notice-to-proceed be granted to the project proponent, AES.

If you have any questions or comments, feel free to call me (775-358-9003).

Sincerely,



Jennifer Sigler, M.A., RPA  
Project Manager  
WCRM, Inc.

Jim Kay (AES)  
Stacy Thomson (Areva NP)  
Tom Lennon (WCRM)



Figure 1. Feature 1 during excavation, with bed frame on wood floor of dugout. View facing southwest.



Figure 2. Wood floor of dugout (Feature 1) exposed in its entirety. View facing south.





Figure 3. Wood floor of dugout (Feature 1) exposed in its entirety. View facing west.



Figure 4. Feature 1 with all excavation completed. View facing east.

## References Cited

Estes, Mark and Jaclyn Raley

2009 *Amendment To: A Class III Cultural Resource Inventory of the Proposed Eagle Rock Enrichment Facility, Bonneville County, Idaho.* Prepared by Western Cultural Resource Management, Inc., Sparks, Nevada for AREVA Enrichment Services, LLC, Bethesda, Maryland.

Ringhoff, Mary and Edward J. Stoner

2010 *A Treatment Plan for Historic Site MW04 in the Area of the Proposed Eagle Rock Enrichment Facility, Bonneville County, Idaho.* Prepared by Western Cultural Resource Management, Inc., Sparks, Nevada for AREVA Enrichment Services, LLC, Bethesda, Maryland.

Ringhoff, Mary, Edward J. Stoner, Collette Chambellan, and Steve Mehls

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