Title
An Energy-Dispersive X-Ray Fluorescence Analysis of Obsidian Artifacts from Sugarloaf Ruin, Cornville, Arizona

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LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF OBSIDIAN ARTIFACTS FROM SUGARLOAF RUIN, CORNVILLE, ARIZONA

12 August 2013

Dr. Todd Bostwick
Verde Valley Archaeology Center
385 South Main Street
Camp Verde, AZ 86322

Dear Todd,

Not surprisingly, all four samples were produced from obsidian from the Government Mountain source in the San Francisco Volcanic Field in northern Arizona (see Shackley 2005). All analyses for this study were conducted on the ThermoScientific Quant’X XRF spectrometer at the Geoarchaeological XRF Laboratory, Albuquerque, New Mexico. Specific instrumental methods can be found at http://www.swxrflab.net/anlysis.htm, and Shackley (2005). Source assignment was made by comparison to source standard data in the laboratory. Analysis of the USGS RGM-1 standard indicates high machine precision for the elements of interest (Table 1 here).

Sincerely,

M. Steven Shackley, Ph.D.
Director

VOICE: 510-393-3931
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http://www.swxrflab.net/
REFERENCE CITED

Shackley, M.S.  

Table 1. Elemental concentrations for the archaeological samples. All measurements in parts per million (ppm).

<table>
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<tr>
<th>Sample</th>
<th>Ti</th>
<th>Mn</th>
<th>Fe</th>
<th>Rb</th>
<th>Sr</th>
<th>Y</th>
<th>Zr</th>
<th>Nb</th>
<th>Pb</th>
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<td>452</td>
<td>1104</td>
<td>100</td>
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<td>6</td>
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