Title
An Energy-Dispersive X-Ray Fluorescence Analysis of Obsidian Artifacts from Various Sites in Oklahoma

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LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF OBSIDIAN ARTIFACTS FROM VARIOUS SITES IN OKLAHOMA

1 April 2014

Kristen Carlson
University of Oklahoma
Archaeological Survey
111 East Chesapeake Ave.
Norman, OK 73019

Dear Kristen:

As in the earlier studies, some of the artifacts were produced from Malad, Idaho obsidian and some from Valles Rhyolite (Cerro del Medio) obsidian in the Jemez Mountain, northern New Mexico, a rather typical pattern, particularly in early sites. 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

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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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<th>Site/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>Ba</th>
<th>Pb</th>
<th>Th</th>
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