Title
An Energy-Dispersive X-Ray Fluorescence Analysis of an Obsidian Projectile Point from Coronado National Memorial, Southeastern Arizona

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Publication Date
2012-05-22

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LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF AN OBSIDIAN PROJECTILE POINT FROM CORONADO NATIONAL MEMORIAL, SOUTHEASTERN ARIZONA

22 May 2012

Dr. Bruce Huckell
Maxwell Museum of Anthropology
University of New Mexico
Albuquerque, NM 87131

Dear Bruce,

As many of the artifacts previously analyzed from Coronado National Memorial, the projectile point was produced from the Antelope Wells/El Berrendo source in southwestern New Mexico/northwestern Chihuahua (Table 1).

The samples were analyzed using a Thermo Scientific Quant’X EDXRF spectrometer in the Archaeological XRF Laboratory, Albuquerque, New Mexico. Source assignments were made by comparison to published source standard data and the source standard collection at this laboratory (Shackley 1995, 2005). Instrumental methods can be found at http://www.swxrflab.net/anlysis.htm. Analysis of the USGS RGM-1 standard indicates high machine precision for the elements of interest (Govindaraju 1994; Table 1 here).

Sincerely,

M. Steven Shackley, Ph.D.
Director

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http://www.swxrflab.net/
REFERENCES CITED


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

<table>
<thead>
<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>SOURCE</th>
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<tr>
<td>BLOCK2-IO-1</td>
<td>1377</td>
<td>746</td>
<td>1904</td>
<td>323</td>
<td>9</td>
<td>125</td>
<td>1173</td>
<td>96</td>
<td>Antelope Wells/El Berrendo standard</td>
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<tr>
<td>RGM1-S4</td>
<td>1608</td>
<td>273</td>
<td>1330</td>
<td>148</td>
<td>108</td>
<td>24</td>
<td>217</td>
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