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Title
An Energy-Dispersive X-Ray Fluorescence Analysis of Obsidian Artifacts from CA-SDI-8125, San Diego County, California

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The data associated with this publication are in the supplemental files.

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LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF OBSIDIAN ARTIFACTS FROM CA-SDI-8125, SAN DIEGO COUNTY, CALIFORNIA

19 November 2015

Dr. Tim Gross
Anthropology Program
Serra Hall
University of San Diego
San Diego, CA 92110

Dear Tim:

As typical for San Diego County sites, one of the artifacts was produced from the Obsidian Butte source in Imperial County, California, and the other from the West Sugarloaf source in the Coso Volcanic Field, Inyo County, California. Specific instrumental methods can be found at http://www.swxrflab.net/anlysis.htm, and Shackley (2005). Source assignment was made by comparison to data in the laboratory, and Ericson and Glascock (2004) and Hughes (1988). 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
INTERNET: shackley@berkeley.edu
http://www.swxrflab.net/
REFERENCES CITED

Ericson, J.E., and M.D. Glascock

Hughes, R.E.

Shackley, M.S.

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>Zn</th>
<th>Rb</th>
<th>Sr</th>
<th>Y</th>
<th>Zr</th>
<th>Nb</th>
<th>Source</th>
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<td>389</td>
<td>17110</td>
<td>105</td>
<td>141</td>
<td>37</td>
<td>118</td>
<td>339</td>
<td>26</td>
<td>Obsidian Butte</td>
</tr>
<tr>
<td>10-866</td>
<td>621</td>
<td>248</td>
<td>11234</td>
<td>66</td>
<td>204</td>
<td>18</td>
<td>46</td>
<td>138</td>
<td>38</td>
<td>W Sugarloaf, Coso</td>
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<td>RGM1-S4</td>
<td>1530</td>
<td>290</td>
<td>13751</td>
<td>40</td>
<td>150</td>
<td>106</td>
<td>27</td>
<td>220</td>
<td>9</td>
<td>standard</td>
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