Title
An Energy Dispersive X-Ray Fluorescence (EDXRF) Analysis of Obsidian Artifacts from The Salton Sea Region, Imperial 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 (EDXRF) ANALYSIS OF OBSIDIAN ARTIFACTS FROM THE SALTON SEA REGION, IMPERIAL COUNTY, CALIFORNIA

19 March 1997

Christy Dolan
KEA Environmental
1420 Kettner Blvd.
San Diego, CA 92101

RE: Salton Sea region obsidian

Dear Christy:

I am sending a letter report due to the small sample size. The source provenance is shown in Table 1. Source assignment was made with data in the Berkeley EDXRF library (Shackley 1995). Instrument methodology is discussed in Shackley (1992, 1994, 1995). Note that one of the artifacts was produced from obsidian procured from the San Felipe source in northern Baja California and is not necessarily megascopically distinguishable from Obsidian Butte. Additionally, one specimen appears to have been produced from a mafic or intermediate volcanic rock and one piece of debitage was too small to yield reliable results. Numbering was too obscure to assign to a particular specimen; we assigned our own prefix on each.

Sincerely,

M. Steven Shackley, Ph.D.
Associate Research Archaeologist
Adj. Associate Professor

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FAX: 510/642-6271
INTERNET: shackley@qal.berkeley.edu
http:\obsidian.pahma.berkeley.edu/xrflab.htm
http:\obsidian.pahma.berkeley.edu/swobsrschs.htm
REFERENCES CITED

Shackley, M. Steven


Table 1. EDXRF concentrations for the archaeological sample. All measurement 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>1-SC4</td>
<td>1842.89</td>
<td>419.30</td>
<td>21651.78</td>
<td>139.75</td>
<td>42.77</td>
<td>105.52</td>
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<td>2-CS23</td>
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<td>18836.99</td>
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<td>270.97</td>
<td>11835.48</td>
<td>83.43</td>
<td>42.82</td>
<td>47.72</td>
<td>165.29</td>
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<td>4-DF166-1</td>
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<td>429.73</td>
<td>21971.99</td>
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<td>371.52</td>
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<td>1049.91</td>
<td>60379.71</td>
<td>112.66</td>
<td>346.52</td>
<td>32.51</td>
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<td>5.97</td>
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