LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF AN OBSIDIAN ARTIFACT FROM 41TA107, TAYLOR COUNTY, TEXAS

25 August 2015

Steve Carpenter
SWCA Environmental Consultants
4407 Monterey Oaks Blvd.
Austin, TX 78749

Dear Steve:

The one obsidian artifact was produced from obsidian procured from the Malad source in eastern Idaho, not unusual in northern Texas, particularly in Archaic sites. Specific instrumental methods can be found at http://www.swxrflab.net/analysis.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
REFERENCE CITED

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>Rb</th>
<th>Sr</th>
<th>Y</th>
<th>Zr</th>
<th>Nb</th>
<th>Ba</th>
<th>Source</th>
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<tr>
<td>P05</td>
<td>1183</td>
<td>238</td>
<td>9648</td>
<td>125</td>
<td>81</td>
<td>30</td>
<td>84</td>
<td>12</td>
<td>1797</td>
<td>Malad, ID</td>
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<tr>
<td>RGM1-S5</td>
<td>1624</td>
<td>303</td>
<td>13149</td>
<td>145</td>
<td>104</td>
<td>19</td>
<td>213</td>
<td>11</td>
<td>677</td>
<td>standard</td>
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