LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF TWO OBSIDIAN ARTIFACTS FROM OKLAHOMA

21 October 2015

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Dear Lee:

The projectile point was produced from the Cochetope Dome source in Colorado, and the debitage sample from Cerro Toledo Rhyolite obsidian in the Jemez Mountains, northern New Mexico (Table 1). Specific instrumental methods can be found at http://www.swxrflab.net/anlysis.htm, and Shackley (2005). Source assignment was made by comparison to source data in the lab and Shackley (2005; Table 1 here).

Sincerely,

M. Steven Shackley, Ph.D.
Director

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REFERENCE CITED

Shackley, M.S.

Table 1. Elemental concentrations for the archaeological samples, and USGS RGM-1 rhyolite standard. All measurements in parts per million (ppm).

<table>
<thead>
<tr>
<th>Sample Source</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>
</tr>
</thead>
<tbody>
<tr>
<td>Washita River 1</td>
<td>909</td>
<td>319</td>
<td>8974</td>
<td>192</td>
<td>11</td>
<td>30</td>
<td>97</td>
<td>27</td>
<td>Cochetope Dome, CO</td>
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<tr>
<td>34Ci488</td>
<td>931</td>
<td>502</td>
<td>10964</td>
<td>226</td>
<td>12</td>
<td>64</td>
<td>188</td>
<td>100</td>
<td>Cerro Toledo Rhy, NM</td>
</tr>
<tr>
<td>RGM1-S4</td>
<td>152</td>
<td>282</td>
<td>13267</td>
<td>148</td>
<td>105</td>
<td>26</td>
<td>223</td>
<td>15</td>
<td>standard</td>
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