Title
An Energy-Dispersive X-Ray Fluorescence Analysis of Obsidian Artifacts from CA-SDI-317 in Northern San Diego County, California

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LETTER REPORT

AN ENERGY-DISPERSIVE X-RAY FLUORESCENCE ANALYSIS OF OBSIDIAN ARTIFACTS FROM CA-SDI-317 IN NORTHERN SAN DIEGO COUNTY, CALIFORNIA

26 August 2004

Carol Serr
Mooney & Associates
9903 Businesspark Avenue
San Diego, CA 92131-1120

Dear Carol,

The one artifact was too small for a confident assignment to source (see Davis et al. 1998). However, the relatively high strontium concentration indicates that it is not from one of the domes in the Coso Volcanic Field, Inyo County, California (Table 1; Hughes 1988; Gilreath and Hildebrandt 1997). While the high Sr suggests a Casa Diablo origin, the other elemental concentrations do not support this. Beyond that, not much can be inferred.

The samples were analyzed with a Spectrace (ThermoNoran) *QuanX* EDXRF spectrometer in the Archaeological XRF Laboratory, University of California, Berkeley. 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 (Govnidaraju 1994; Table 1 here).

Sincerely,

M. Steven Shackley, Ph.D.
Director

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

Sample	Ti	Mn	Fe	Rb	Sr	Y	Zr	Nb	Source
SDI-317-1	1193	448	10580	128	50	0	71	11	unknown
RGM1-S1	1624	308	13113	145	112	23	217	11	standard