



Dorsal View - Spiro Mounds Biface



Ventral View - Spiro Mounds Biface

***Northwest Research Obsidian Studies Laboratory***

Table A-1. Results of XRF Studies: Spiro Mounds, Le Flore County, Oklahoma

Site	Specimen		Trace Element Concentrations											Ratios		Artifact Source
	No.	Catalog No.	Zn	Pb	Rb	Sr	Y	Zr	Nb	Ti	Mn	Ba	Fe <sub>2</sub> O <sub>3</sub> <sup>T</sup>	Fe:Mn	Fe:Ti	
Spiro Mounds	1	378273	301	42	224	8	116	952	96	855	894	18	1.67	17.1	62.3	Pachuca (Hidalgo, Mexico)
			± 9	3	4	7	3	8	2	96	48	14	0.11			
NA	RGM-1	RGM-1	58	28	150	105	26	216	9	1487	292	746	1.72	60.1	37.1	RGM-1 Reference Standard
			± 7	3	3	7	3	7	2	97	47	13	0.11			

All trace element values reported in parts per million; ± = analytical uncertainty estimate (in ppm). Iron content reported as weight percent oxide.  
 NA = Not available; ND = Not detected; NM = Not measured.; \* = Small sample.

The original images of the Spiro Mound biface appeared in:

Barker, Alex W, Craig E. Skinner, M. Steven Shackley, Michael D. Glascock, and J. Daniel Rogers.

2002 Mesoamerican Origin for an Obsidian Scraper from the Precolumbian Southeastern United States.

*American Antiquity* 67(1):103–108.

*Abstract:* EDXRF analysis of an obsidian scraper from the Spiro Mounds, Oklahoma, shows that the source material was from Pachuca, Hidalgo, Mexico. Given the distinctive peralkaline character of the obsidian, the source assignment is considered extremely secure. The artifact was recovered from the east tunnel of Craig Mound, Spiro, immediately after the cessation of commercial digging in 1935, and has been in the Smithsonian's collections since 1937. Despite more than 150 years of speculation regarding supposed contact with and influence from the region, this represents the first documented example of Mesoamerican material from any archaeological context in the Precolumbian southeastern United States.