

THREE WELL DOCUMENTED GEORGIA TEKTITES FROM MONTGOMERY, WHEELER AND TWIGGS COUNTIES, GEORGIA. K.I. Povenmire and H. Povenmire ¹Florida Institute of Technology 215 Osage Dr. Indian Harbour Bch., FL 32937 cpovenmire@cfl.rr.com

Introduction: Georgia tektites are small natural glasses of uncertain origin. They are found in about 17 counties parallel to the Eocene-Oligocene boundary which separates the Piedmont Plateau and the Georgia Coastal Plains in east central Georgia. This line runs roughly from Hawkinsville in Pulaski County ENE to Augusta in Richmond County. At this time about 1700 Georgia tektites have been recovered. Georgia tektites have a laser-fusion age of approximately 34.5 million years.

On November 28, 1984, in response to an article in the local paper about Georgia tektites, Gail Johnson remembered a stone found on her farm many years earlier that she had kept in her jewelry box. I received a call from her on the following day and within one minute of examination realized that this excellent specimen was the first tektite found in Montgomery County.

The find location was approximately 6 km south of the county seat, Mount Vernon. The coordinates taken from the USGS 7'.5 Mount Vernon, Ga. topographic map were long. 82° 35' 22". 5 W. and lat. 32° 08' 02". 2 N. at an altitude of 53 meters. This area has the typical Hawthorn-Altamaha deposits. This tektite had washed into a dry streambed and was left there as lag gravel.

Characteristics: This egg shaped tektite was the typical drab olive green color and weighed 27.8 grams. It was in excellent condition and had no obvious inclusions. Most of the surface was worn smooth by water action, but some parts of the original surface could be seen. The dimensions were approximately 47x26x16 mm.

Montgomery County is bordered by Wheeler County on the west, Treutlen County to the north and Emanuel to the northeast. Tektites have been found in these counties. Toombs County to the east does not have a confirmed tektite yet, but there is active field work in progress at this time. Montgomery County is a geologically logical area.

Wheeler County is in the Georgia tektite strewn field and there have been unconfirmed reports of tektites being found in this county. About 1971, a tektite was found in Wheeler County by John McBride and confirmed by the State Geologist, Sam Pickering. Later, this researcher contacted Hugh McBride and obtained the coordinates from the USGS 7'.5 Jordan, Georgia topographic map. The find site was at long. 82° 38' 03".3 W. and lat. 32° 01' 50".4 N. at an elevation of 50 meters. It was found on a sloping area about

19 meters from Carver Creek, which flows into the Oconee River.

This specimen weighs approximately 13.5 g and has the approximate dimensions of 31 x 19 x 8 mm. It has the general shape of a flattened teardrop.

Wheeler County is surrounded by other counties which are confirmed tektite areas with the exception of the south. There is an active effort to do more field work in Wheeler County.

In August 2001, a large tektite was found west of Danville in Twiggs County. This specimen was an elongated disk with only minor chips. It has the approximate dimensions of 56 x 46 x 10 mm and a weight of 46.3 g. It is the classical drab olive-green color with no visible inclusions. Only 3 other tektites have been found in Twiggs County, and all were in the extreme southern part of the county.

References: {1} The Montgomery Monitor November 28, 1984. [2] Povenmire H. (1997) *Tektites: A Cosmic Paradox* Scott Press Cocoa, Fl.