

MR METEORITE 2013

NEW TEXAS IRON METEORITE, "LLANO RIVER"

Reprinted from the Meteoritical Bulletin (<http://www.lpi.usra.edu/meteor/index.php?sea=Llano+River&sfor=names&ants=&falls=&valids=&stype=contains&lrec=50&map=ge&browse=&country=All&srt=name&categ=All&mblist=All&rect=&phot=&snew=0&pnt=Nor>

Llano River 30°31.328'N, 99°44.219'W

Texas, Kimble County, United States

Found: 1975

Classification: Iron meteorite (IIIAB)

History: A single 4318 g mass (weight after small piece cut off end) was found by Thomas Hobbs in 1975 while he was searching for meteorites with a metal detector around a "meteor crater" just north of Junction, Texas. Mr. and Mrs. Hobbs kept the mass until their curiosity was piqued after watching a television show on meteorites in early 2010. A small end piece was sent to ASU and confirmed to be a meteorite.

Physical characteristics: Slightly elongated cuboid stone. Surface moderately weathered with small patches of corroded fusion crust. A few broad regmaglypts cover half the stone, the other side being smoother.

Petrography (L. Garvie, ASU): Etched sections show a medium Widmanstätten structure. Kamacite lamellae display numerous subboundaries. Neumann bands are well developed and in several places deformed. A few black taenite wedges are present. Displays well-developed open-meshed, comb and net plessite. Inclusions are rare - the 6 × 7 cm slice contains three 1-mm rounded troilite and rare schreibersite. A heat-affected zone is up to 2 mm thick on one side of the stone.

Geochemistry: Bulk composition: INAA data (Activation Laboratories - Ancaster, Ontario): Co 5.1 mg/g, Ni 76 mg/g, Ga 17.0 µg/g, Ir 9.7 µg/g, and Au 0.54 µg/g.

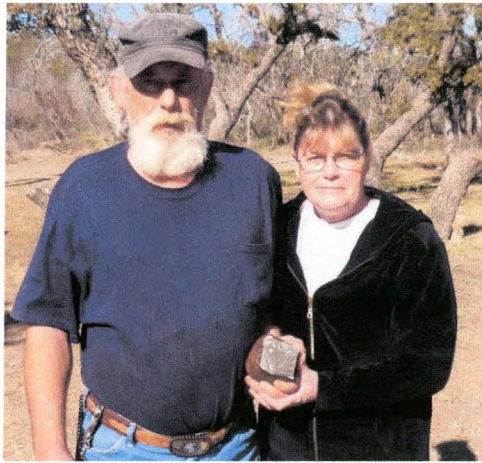
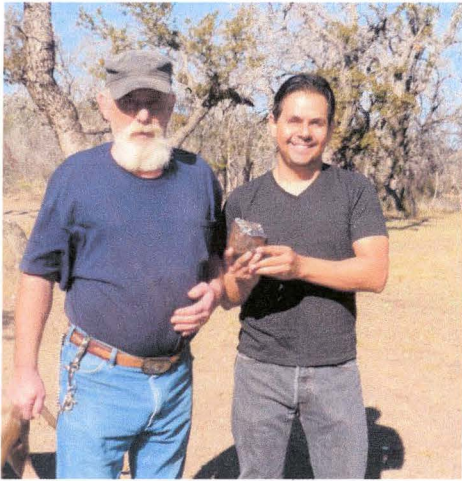
Classification: Iron meteorite, IIIAB, medium octahedrite, moderately shocked. Compositionally and structurally similar to San Angelo (<http://www.lpi.usra.edu/meteor/metbull.php?code=23117>).

Specimens: Type specimens, 105.3 g slice, 16.3 g slice, end piece 13.8 and 6.8 g, and 9.78 g of fragments are on deposit at ASU.

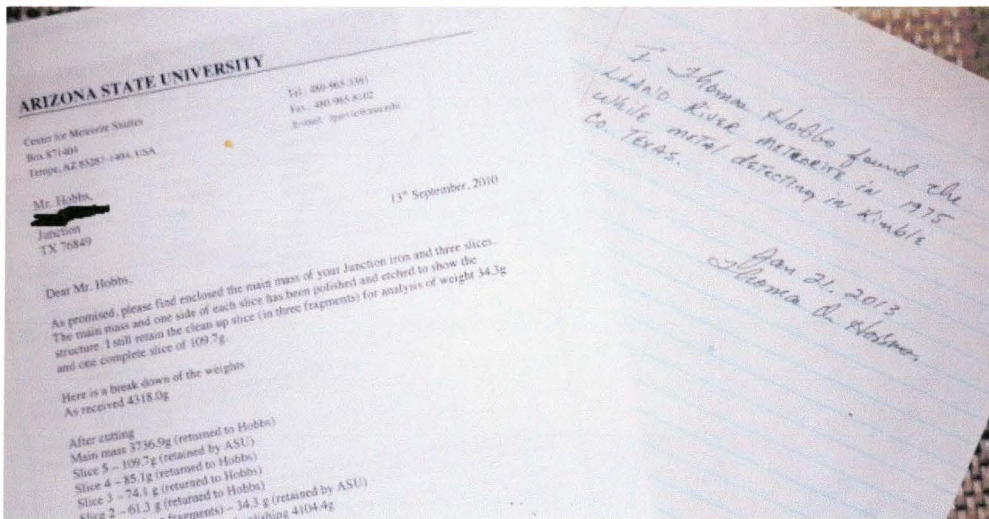


Thomas Hobbs (Finder) with Ruben Garcia

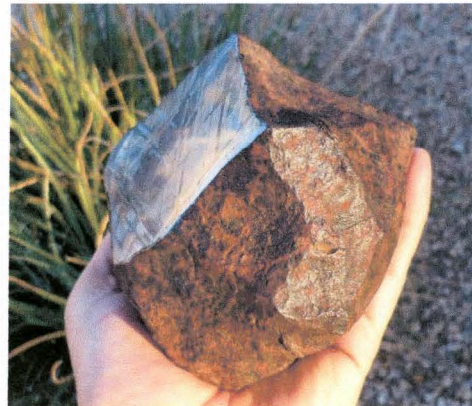
Thomas and Rhonda Hobbs



Below: Paperwork that includes correspondence between ASU and the Hobbs family, including a handwritten note from Thomas Hobbs.



Click on any of the photos below to see a larger image of **Llano River**



<http://www.mrmeteorite.com/llanoriver.htm>