

Y 24, 2009

West, TX meteorite classified by Dr. Alan Rubin 22FEB09

Dr. Alan Rubin, UCLA, has analyzed the West, TX meteorite and classified it as an L6 chondritic.

W0, S3, L6 olivine

Fe: 24.2 ± 0.2 (n=12) (low-Ca pyx) Fe_{20.5}±0.7 (W0) 6 ± 0.2 (n=12)

kamacite has an average composition of Fe 93.1 (n=5) Ni 5.4 Co 0.63 (n=9)

taenite has an average composition of Fe 69.6 (n=10) Ni 10.3 Co 0.30 (n=9)

Taenite is much more abundant than kamacite. Many kamacite grains exceed 50 µm in size. Some metal grains have irregular grains of troilite inside them. Metallic Cu is present in metal grains. There are some thin metal- and sulfide-bearing crack veins. The rock exhibits significant silicate darkening.

The "Ash Creek" (Doug Dawn's proposed name for the meteorite) meteorite sample was collected by Doug Dawn (Dima, Rob McCarberry), and Sergey and sent to Dr. Rubin for analysis.

The data from Dr. Rubin's classification analysis will be sent to the Meteorite NGMCCM for approval and a final naming will be approved.

Record timing for meteorite recovery and analysis; congratulations to all that worked on this!!! "WEST", McClellan County, Texas

On February 15, 2009, at about 11AM, a fireball streaked across the Texas sky landing near the town of West. Subsequently, many pieces have been found within a "strewn field" of greater than 10 miles to the east of West. For the first time, the "cloud" of small stones was seen on Doppler radar. The original single mass in space surely broke into thousands of small fragments high in the atmosphere because almost all of the pieces are covered with fusion crust.