



U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards
Boulder, Colorado 80302

27503

May 23, 1972

Mr. Oscar E. Monnig
29 Chelsea Drive
Fort Worth, Texas 76134

Dear Mr. Monnig:

This is to acknowledge receipt of a polished and etched iron specimen designated Tishomingo (Oklahoma) meteorite and weighing 1390 grams.

Since the specimen has already been prepared for micro-structural examination, we will return it unaltered. We plan immediately to study the specimen by x-ray diffraction and by quantitative metallography. Cursory examination indicates that the light-etching constituent, the matrix, is taenite while the dark-etching constituent, the plates or needles, is type II plessite. A metallurgist calls these austenite and martensite, respectively. In any case, the nature of these phases will be verified by us.

We are quite impressed by your efforts to locate and secure meteorite specimens.

Thank you for such a prompt and gracious response to our request for loan of a meteorite specimen.

Sincerely,

HASELL M. LEDBETTER
Cryogenics Division
Institute for Basic Standards

Mr. Ledbetter: Have you finished with your work on the above specimen and if so could you kindly return it to me? I am afraid of something like this getting lost if it remains outstanding too long a time. Happy New Year!

Sincerely,

D c. 23, 1972