

SMITHSONIAN INSTITUTION
UNITED STATES NATIONAL MUSEUM
WASHINGTON, D.C. 20560

February 9, 1970

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

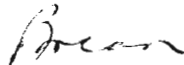
Dear Oscar:

Well, we have sectioned and probed the small fragments of Bells that you left with us, and confirmed that they are meteoritic. These are some intriguing features, however. The density is 2.63 (redetermined; the figure of 2.84 which I published some years ago is evidently too high), which puts it at the low end of the Type II group; it has a few small olivine chondrules in an opaque groundmass which contains small particles of nickel-iron. Unlike the other Type II meteorites Bells is quite easily picked up with a hand magnet, evidently because it contains a good deal of finely divided magnetite. The x-ray powder photograph show strong lines of magnetite, very weak olivine lines, and no serpentine lines; other Type II's give strong serpentine lines.

In these features Bells appears to be intermediate between a Type I and a Type II carbonaceous chondrite. It certainly deserves a thorough investigation and a complete chemical analysis. As you know, we are well set up for this work here and would like to make the investigation. Can we persuade you to provide 5 grams for the analysis?

With best regards.

Sincerely,



Brian Mason
Chairman
Department of Mineral Sciences