

1966, January 11.

Mr. Glen Orr,
c/o R. C. Orr,
Route 2,
Tishomingo, Oklahoma.

Dear Glen:

The U. S. National Museum still doesn't know what to think about the iron you let me submit to them, along with the little piece I had. Most of the indications, to their mind, are that it is a piece of iron that could be reproduced artificially and they are not yet ready to accept it as a meteorite.

When a meteorite is out in space cosmic rays produce an isotope of aluminum called Al_{26} . They tested for this but got a very slight unsatisfactory reading. If it is a meteorite, it has been on earth over a half million years, during which time the Al_{26} would largely decay and disappear. This test did not prove to be very useful or satisfactory in this case.

He 3 — They are now trying a test for a form of helium known as He_3 which is also created when the meteorite is out in space, and which lasts longer, and their verdict will depend a lot on how this comes out.

Various tests show the nickel content runs between 29.1% and 33%. Cobalt, phosphorus and carbon are generally in meteorites in small amounts; they have not yet determined these precisely, but there is at least a little carbon. Phosphides seem to be scarce and they would generally expect more in this kind of meteorite.

It is possible in any way that these smaller pieces came from somewhere else and are artificial iron? The big ones certainly look like meteorites to me and I still think they are. I will probably come up there again in a few weeks to discuss this thoroughly with you, but this Friday I have to go to New York and I won't have much time until well into February. Regards to all your folks, and a Happy New Year. I will keep you informed.