

1960, Jan. 5.

Mr. Will T. Scott,
4820 Beaumont Drive,
La Mesa, Calif.

Dear Mr. Scott:

Happy New Year! I don't recall whether I sent you copies of my last correspondence with Barnes, but here they are.

While I lean away from the meteoritic hypothesis I am going to revisit this place further and I think I shall call it to the attention of Robert S. Dietz, who is much interested in meteorite craters and especially the "crypto-explosion" types. He feels he has recently definitely added the Sierra Madera dome near Fort Stockton to the list of such craters by finding therein some "shatter cones". If there is here any connection with meteoritic impact, I think the crater would have to be of that type. The central hill would represent the eroded remains of the reaction to the main impact, and the surrounding wall the first of a series of the rings formed around the hill by the spreading shock wave. Do you remember that there is an arc of a second similar wall off to the southeast a hundred feet or so? This is a complication which would have to be explained as the second series of the shock wave rings; the owner has put a dam between these two to make a tank.

At a crypto-explosion crater you wouldn't expect to find any meteorites; they have all presumably long since been eroded away, according to Dietz.

I am interested in your statement that there are no other formation like this in the region; we didn't have time to do any scouting around on this point, and actually you would need a plane. I did find the quartzite in scattered pieces and brought home a sample, but I don't recall any definite or large outcrop of it. I didn't find anything I would call marble; what color was it?

The typical Tertiary gravels of various colors (quartzes, chalcedonies or cherts or varying purity) were noticed in abundance in the central hill, and the black-

cemented sand stone material which I understand is from the Dockum beds was most conspicuous. Much of this tends to occur in concretionary or nodular form, and there are many rounded "geodes" of it, often cracked in half and showing a central core of similar material. Some of this material is in groups that could be termed pisolitic to botryoidal. However, all these items speak to me of water action rather than any intense heat or pressure.

Incidentally, I found one very pretty Indian arrow head and then lost it somehow later in the trip! No doubt this hill was a good lookout point and even on some sides good weather protection attimes for the Indians.

I am not a good geologist, and never had any formal course or training in the subject. I do not redall the impression that the rim rocks slope notably towards the center. In fact, I think I remember a few on the SW edge that tilt the other way (outwards), which is actually what I would expect in a meteorite crater. I believe I have one picture showing this, but I'm now at the store and the pictures are at home so I can't check the point at the moment.

I did notice some thin, laminated sandstone in the edge of the central hill that sloped inwards, and think I have one picture of my friend Mr. Morse sitting thereon. I will have to examine the whole place closer from the point of view of metamorphism and dip of strata on our next tour. We were there about four hours, but it takes that much time just to walk around and over it a few times and take some photographs, so that I don't consider I made any thorough investigation.

Mr. Morse and I hope to return later in the spring, when we want to go on down and prowl the Sierra Madera a while. I'll write you gain after my second trip. I am surprised La Paz never replied to you, as he used to be very energetic about everything he did. I have heard little from or about him recently, and have wondered what may have happened to him. Clarly, however, he did n't think it was a meteorite crater if he ever got there, as I'm sure he would have vigorously pursued it further.

I am getting aerial photo of the place. Thanks for all the information and invitations in your letter, and my best regards to your daughter. I hope to see you some day.

Sincerely,

Don E. Mearns