

**August 19, 1988 newsletter titled "A Search for the Elusive Ark", Dr. Baumgardner wrote:**

*"...Between July 28th and August 7th we succeeded, praise God, in drilling four holes to a depth of ten meters and recovered reasonably good cores from each of the holes. Three of the holes were near the centerline of the site while the fourth was near the outer flank of the longitudinal hump.... Another notable discovery was the presence at three locations in the mudflow layer of nodules of the bright yellow mineral limonite. Limonite is the hydrated oxide of iron, and its occurrence in this environment appears to be anomalous. Just how anomalous is the crucial question, since the minerals in the rocks in the source area of the mudflow have a moderate iron content. However, during the months now that I have worked at the site, I have never seen this bright yellow material anywhere in the fissures or exposures in the mudflow clay. Because earlier investigations led us to suspect unusual amounts of iron in site, **these occurrences of limonite are of special interest because they could represent the rusted remains of metallic iron objects.***

*A final observation concerning the core samples was the absence- apart from the limonite nodules- of possible evidence for man-made structure. There was, for example, no evidence for wood, petrified or otherwise. **However, core drilling is severely limited in its ability to find buried archaeological structure, especially if it is sparsely distributed and has been significantly altered by decay and chemical weathering.***

**March 20, 1999 email from Dr. Baumgardner:**

"In 1988 we finally obtained permission to drill into the site, and we obtained reasonably good quality core from four different holes. These data together revealed the existence of a ridge of basement rock aligned along the centerline of the almond shaped formation. On the upper end of the site it was covered by about 15 feet of the mudflow alluvium. Along much of the lower two-thirds of the site, the ridge of basement rock was actually exposed at the surface. The conclusion of this work was that the unusual shape of the formation was the result, not of mud in the mudslide flowing around Noah's Ark, but rather of mud flowing around a narrow ridge-shaped body of rock. The layers of rock in this ridge matched those in roadcuts along the road about a half mile to the west."

**October 6, 2014 emails from Dr. Baumgardner about each core drill:**

"Hole 1 - went to a depth of 10 meters and was in mudflow material as far as we drilled.

Holes 2 and 3 - were drilled to depths of about 6 meters. At 5 meters depth the material changed abruptly from the mudflow material with lots of pea-sized gravel to layered bedrock.

Hole 4 - went to only about a meter depth when it was realized that the bedrock extended all the way to the surface... We were required by the Turkish government to use Turkish equipment and a Turkish crew, and the drilling was slow and arduous. Once we had drilled through a meter of the bedrock, which was well exposed in a roadcut about a half-mile away, we decided it was pointless to drill any deeper."

**August 10, 2021 email from Dr. Baumgardner about the type of rock encountered in the cores:**

"My geologist colleague, Dr. Salih Bayraktutan, who was co-leader of the field work, said that the site was directly above a strip of ophiolite, which is a slab of mostly basaltic seafloor that has been thrust on top of continental plate, generally in the vicinity of a subduction zone. This is the rock into which we were drilling. The topmost portion of this ophiolite was exposed in cross-section in a roadcut about a half mile from where we were drilling. It displayed distinct parallel layers generally a few to several cm in thickness, but I did not get a photo and I no longer recall many details about the different layers other than the rock was very difficult to drill. However, further downslope from where we drilled, there was an outcrop of limestone, and then further downslope, dark high-density rock that likely is basaltic in composition."

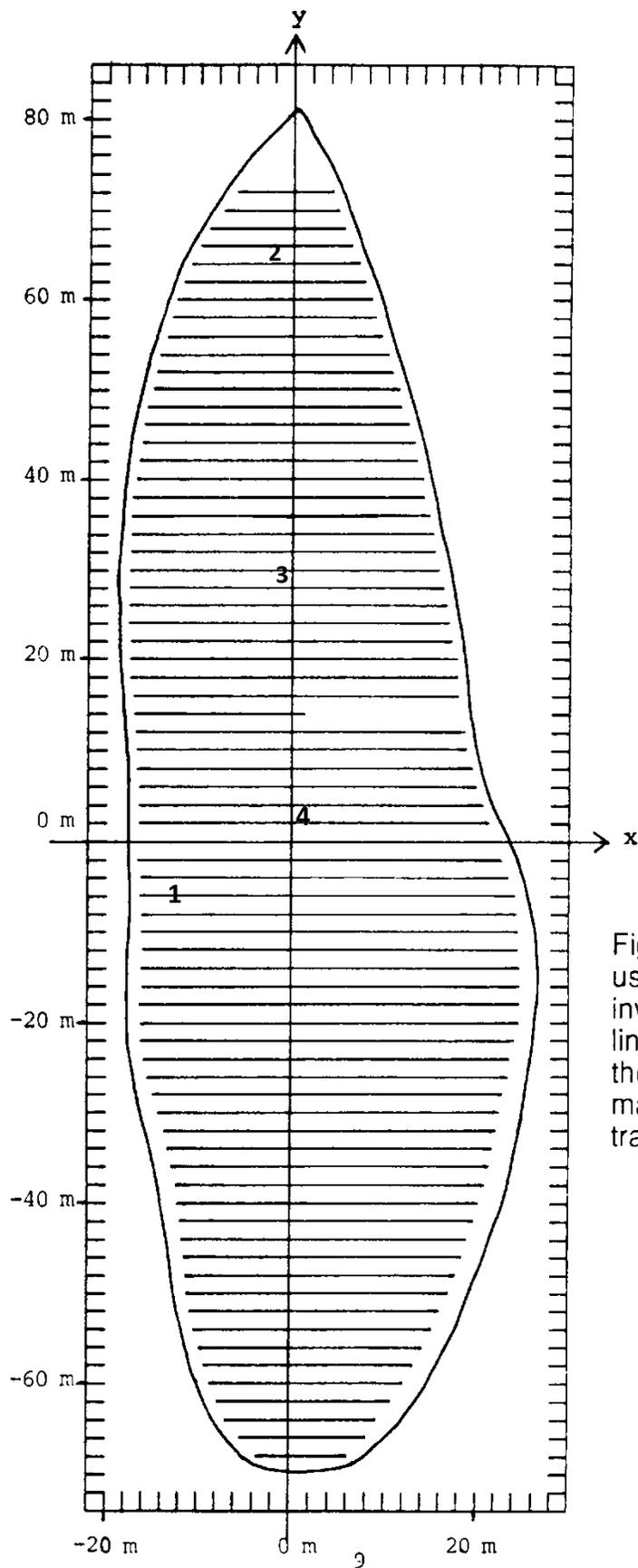


Fig. 6 Coordinate system used for the geophysical investigations. Horizontal lines inside the outline of the site denote transects made in the ground penetrating radar survey.



