

The Search for Siris

July 17-22, 1967

At the request of ^{and} and with the kind cooperation of Dr. D. Adamasteanu, ^{Soprintendente} ~~il~~ alle Antichità della ^{Basilicata} ~~Basilicata~~, a team from the University Museum, University of Pennsylvania, Philadelphia undertook a preliminary search for Siris with the Varian Associates Portable Precision Cesium Magnetometer. The operation and the utility of this instrument are described in the attached reprint (Rainey and Ralph, Science, vol. 153, pp. 1481-1491, 1966), especially, from page 7 following.

Ten grids were made with locations as shown on the attached maps. Grids 1, 2, 3, 8, ⁹, and 10 were made where there appeared to be anomalies in the infrared photographs of this area. The locations of grids 4, 5, 6, and 7 were dictated more from historical evidences as suggested by ^{Dr.} Lorenzo Quilici and D. Adamasteanu.

The characteristics of the grids are as follows.

Q 1, 2, and 3. Absolutely no anomalies representative of buried archaeological features and extremely quiet magnetically.

Q 4, 6, 7, 9, and 10. Some minor magnetic disturbances but none representative of buried structures with the possible exception of a vague anomaly in Q 4 (near the center of the grid).

Q 5 and 8. Q 5 has one anomaly in its southwest corner. This anomaly continues into Q 8 and appears to be a promising anomaly, possibly representative of a buried structure. Also, in Q 8 there is a linear anomaly running roughly from the northeast to the southwest for most of the length of the grid. This may represent a row of buried structures. Since both anomalies are magnetic ones, that is, they are more magnetic than the surrounding regions, if real, they are probably caused by deposits of roof tiles.

These anomalies were probed with "lo spillo", but at the anomalies and in two other parts of the grid, ^{without anomalies} the "spillo" was stopped at depths of 2.5 to 3.6 meters, either by dense sand or by stones. Therefore,

it was decided that drilling would provide a more reliable test.

Results of Drilling

Q5 and Q8

The promising anomaly in Q5 and its continuation into Q8 (Holes A & B designated in red on the grid plots) and the linear anomaly in Q8 (hole C) were probed with a McCulloch-powered auger drill. These were probed to a depth of 7.2 meters. In hole C, especially, there was resistance from 4.8 to 7.2 meters, but the drill was not stopped by a solid structure. "Terra vegetale" was found from 0 to 1.2 meters, and thereafter, sand with coarse sand at 7.0 to 7.2 meters. In each hole, many stones were found from 4.8 to 6.0 meters deep, but no potsherds nor pieces of ceramics representative of archaeological features were found. These anomalies were, therefore, caused by natural geological features rather than by archaeological deposits.

Found
Q4, Stones from 4 to 7 meters, but fewer than in ~~the~~ holes A, B, and C

SIRIS - SONDAGGI

7/22/67

Q8 - A

2.4 m resistenza

4.4 m "

a 7.2 M passa

→ 7.2 m - sabbia

4.8 - 6.0 m - pietre - molte

Q5 - B

0 - 1.2 m - terra vegetale

1.2 - 7.2 sabbia

→ 7.2 M passa

4.8 - 6.0 m - pietre

Q8 - C

→ 7.2 M - passa

4.8 - 7.2 m - resistenza - abbastanza forte

(over)

Q4 - D

→ 7.2 m - passa

0 - 1.2 m - terra vegetale

1.2 - 7.2 - sabbia

4.0 - 7 pietre - ma meno di fori
A, B, e C