## ANCIENT MONUMENTS LABORATORY GEOPHYSICS SECTION REPORT ON MAGNETOMETER SURVEY

SURVEY: TRETHERRAS, NEWQUAY

DATE: 17-18/3/82

Report no. 5/82

1. SITE

OS grid reference: SW 827 615

Field no.

Range: 0 - 100 y

8368, 6865, 7148

Location: W of Treloggan Lane, at Tretherras, on the E outskirts of Newquay.

Geology: Lower Devonian black calcareous slates with thin limestones.

Archaeological evidence: ditch seen in pipeline section.

2. SURVEY

Object: to define the nature and extent of the site.

(a) Magnetic survey

Type of survey: scanning and automatic recording

Magnetometer: fluxgate

Initial chart recorder settings — Y: 20 y/cm X: 1:200 scale

Logged for computing: yes/no

(b) Other tests

(i) Magnetic susceptibility:

topsoil: subsoil:

149.7 x 10<sup>-8</sup> SI Units/Kg.

fill:

x10<sup>-6</sup> emu/gm (ac bridge readings)

(ii)

Survey grid measured to: field boundaries.

Plans/charts enclosed: 1 - location of survey, 1:2500

2 - magnetometer traces and interpretation, 1:500

The recognition of a substantial ditch in a pipe-trench drew attention to the possibility of an important site in this immediate area. Scanning with the magnetometer located this ditch, and others, and a detailed survey was then recorded. See plan 1 for location, and plan 2 for the magnetometer traces and interpretation.

## 3. RESULTS

The site appears to span the junction of all three fields (8368, 6865 and 7148), and is thus incompletely surveyed where crossed by hedge banks and where interference from iron objects and building has been too great. The approximate position of the pipe is indicated on plan 2 by a dashed line. Square 12, not illustrated here, showed very extensive metallic interference which quite blotted out the slighter archaeological anomalies that may have existed. Scanning throughout this field showed much the same disturbance, largely resulting from its former use as a caravan site.

Over the rest of the survey area, the archaeological anomalies resolve themselves into several ditches in a rectilinear pattern, part of which is a substantial cornered enclosure with an apparent entrance along the W edge where subsidiary ditches suggest a complex of annexes. The N ditch of the enclosure may be double, or widened in a second phase.

Due to the strong magnetic response from the soil (magnetic susceptibility of 149 x 10<sup>-8</sup> SI Units/Kg.), a fairly insensitive recording level was used, with the result that weaker features may not be defined. Thus, although external features are clearly visible in sqs. 6 and 7, there may well be other features present but undefined, in sqs. 1, 2, 3 and 8. However, extensive scanning here and elsewhere in this field suggests that the main archaeological activity is restricted to the SW corner

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