

Cantley, Doncaster, Yorks.

Geophysical Survey

This survey was carried out in a field at Redhouse Plantation, Cantley which lies on the probable route of the M18 motorway. The fluxgate gradiometer and automatic platting system were used. Previous fieldwork had shown the existence of kilns on the site which is adjacent to the extensive Roman iron and pottery industry excavated at Cantley in the 1950's.

an enclosure visible in aerial photographs lies within the area of the survey. The enclosing aitch showed up clearly on the recorder charts, particularly at its NE end. To the SW it is fainter but may still be located on the computer act-density plot prepared from the results.

A number of other reatures visible in the AF may also be identified. Adjoining the main enclosure there is a secondary one surrounding the kiln in square F3 and this perhaps overlaps with another enclosure in squares £2 and £3. This latter feature shows strongly in the survey charts but is very faint on the AF. Another line on the AFmay be recognised as a faint diagonal alignment of dots in square G3.

The magnetic features of the site are most pronounced in the region of the kilns, probably because there is magnetic enhancement of the soil caused by the presence of burnt clay in this area. The two kilns which were detected both gave substantial magnetic anomalies, (500 gamma for the kiln in square F3, 300 gamma in F2), indicating the presence of a considerable quantity of burnt clay in each.

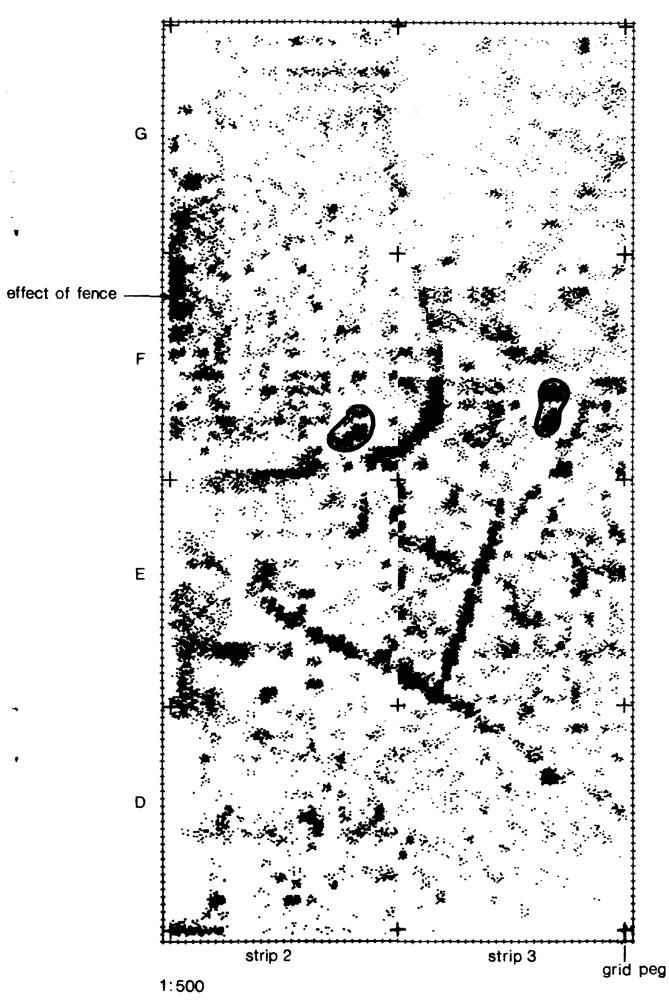
There are magnetic disturbances within all the enclosed areas but they do not suggest any immediately significant pattern of archaeological features. They are probably caused by scattered kiln material and are less intense outside the enclosures. This may indicate that the kilns and enclosures are contemporary.

The survey was extended to the SW with squares H3 to N3 in the hope of finding some trace of the possibly prehistoric track or earthwork which appears to cross this area on the Ar. A number of traverses were made at right angles to the main survey in case the feature was obscured because it lay parallel to to the chart traces of the main survey but no sign of any significant feature feature was found. The weakness of those parts of the main enclosure ditch away from the kilns in the earlier part of the survey does, however, suggest that without the reinforcement from burnt clay magnetic anomalies on this glacial subsoil might be very weak, and that a less than substantial feature could have gone undetected.

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kilns in red A. M. Lab Geophysics Section

