

TARRABY, CARLISLE

GEOPHYSICAL SURVEY, 1976

This survey covering an area some 600m long between Hadrian's Wall and the Vallum and including two fields to the N of the Wall was intended as an initial check for evidence of archaeology. The site lies around grid ref NY 405575 and is shown bounded by dashes on the 1:2500 plan.

Each field was first scanned with the magnetometer and then where necessary 30m squares were marked out and plotted in detail. Resistivity measurements were also taken along five traverses A-E principally to try and locate the Military Way. Plots of the magnetic survey and resistivity graphs are enclosed.

1. MAGNETIC SURVEY

The Stanwix shale is covered with boulder clay containing strongly magnetic igneous rocks which gave a noisy background to the survey. This makes detailed interpretation of the plots difficult but any substantial occupation features or earthworks should be detectable. There is a limit in the case of very broad features where contrast with the background is lost, as with the Vallum which gave only a weak response. Some anomalies detected in the scan were found when plotted not to be archaeological in character. The results from each of the fields were as follows:

Field 4540 & 5038: There was magnetic disturbance along the lines of the old hedges and in the E part of the field but squares 7-10 were surveyed to the W. There was a hint of archaeological activity in the scan but only a few weak anomalies appeared in the plot. Possibly significant ones are outlined on the plot but only the ones in square 7 which could represent a pit and a length of ditch are well defined.

Field 5151: A few uncertain anomalies are marked in square 6. There was modern disturbance at the N of the field.

Field 5860: The scan here showed only scattered and probably geological anomalies.

Field 7073: A large anomaly was found next to the bank which runs parallel to the Wall through this field. It is plotted in squares 1 and 2 and could again represent a length of ditch.

Fields 7972 & 6250: Pipes near the stream at the N of the fields obscured a large area. The remainder was under long grass and scanned less thoroughly than elsewhere, but was very quiet. There were only a few isolated anomalies which did not suggest archaeology.

Field 6283: Much of the field was waterlogged and nothing was detected apart from the pipe.

Field 4770 & 4779: Here there was a lot of magnetic noise but older editions of the ordnance map show the field subdivided, probably into allotments, which would explain much of the disturbance. The two squares 3 and 4 were surveyed with vertical scale for each traverse reduced to half of the usual setting because of the strength of the anomalies. Those plotted in square 3 could all be either geological or caused by iron debris. Square 4 shows a disturbed band probably from the stones forming the bank which crosses the field. The bank lies just off the line of the wall as shown on the map and so



whether it marks the wall or has been made up as a track is uncertain.

2. RESISTIVITY SURVEY

If a road does cross the site the magnetic survey might detect side ditches but resistivity is more likely to show the road itself. There were various banks parallel to the wall possibly forming sections of an agger but although traverses A and E show strong peaks there is nothing in the intermediate traverses B and D. Alternatively if the high readings between 60 and 75m in traverse C are due to a road the alignment may lie closer to the Vallum.

There are anomalies at about 30m in traverse D which lie close to the magnetic features in squares 7 and 9.

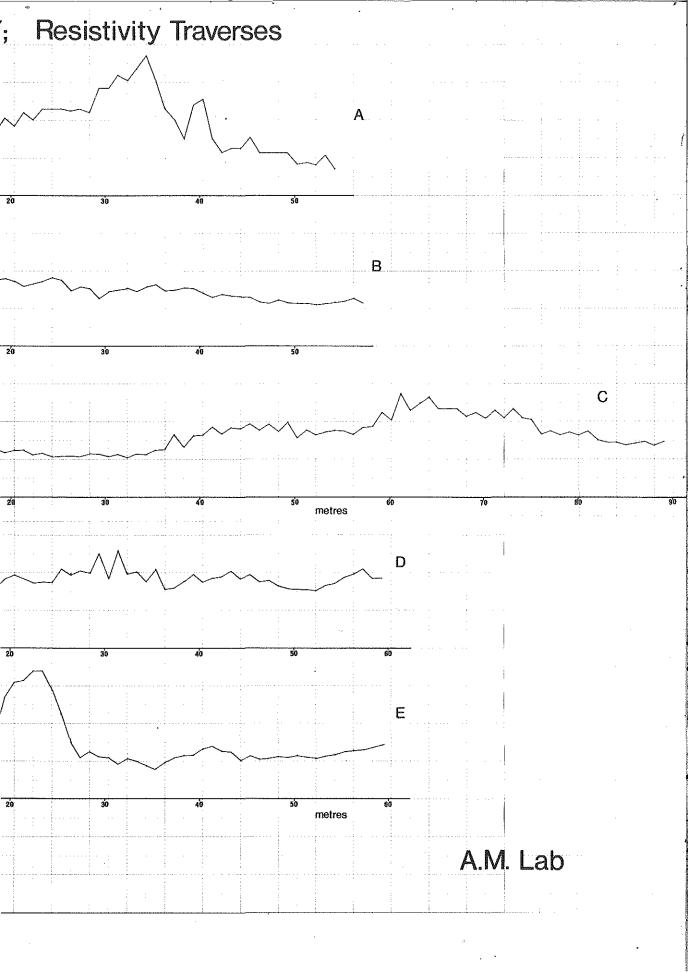
CONCLUSIONS

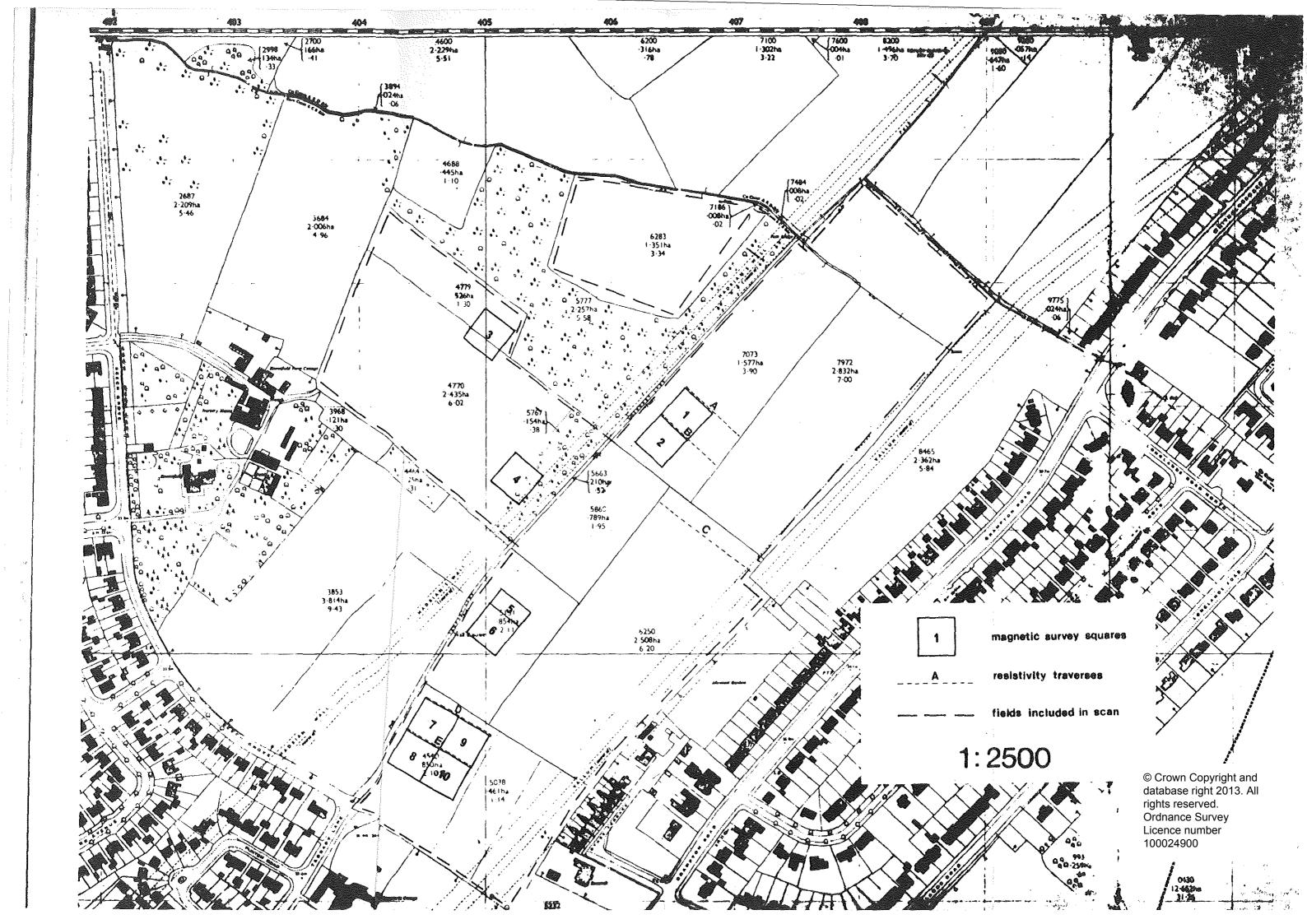
Some features could have gone undetected in the difficult soil conditions but there is no geophysical evidence for substantial archaeological activity. Apart from the ditches that were found there may be some pits at the N side of squares 7 and 9 and perhaps similar local remains elsewhere.

Conditions im field 4770 N of the Wall were so disturbed that it is unlikely that any archaeology would be detectable.

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DOE ANCIENT MONUMENTS LABORATORY 13th August 1976





TARRABY; Magnetometer Survey

