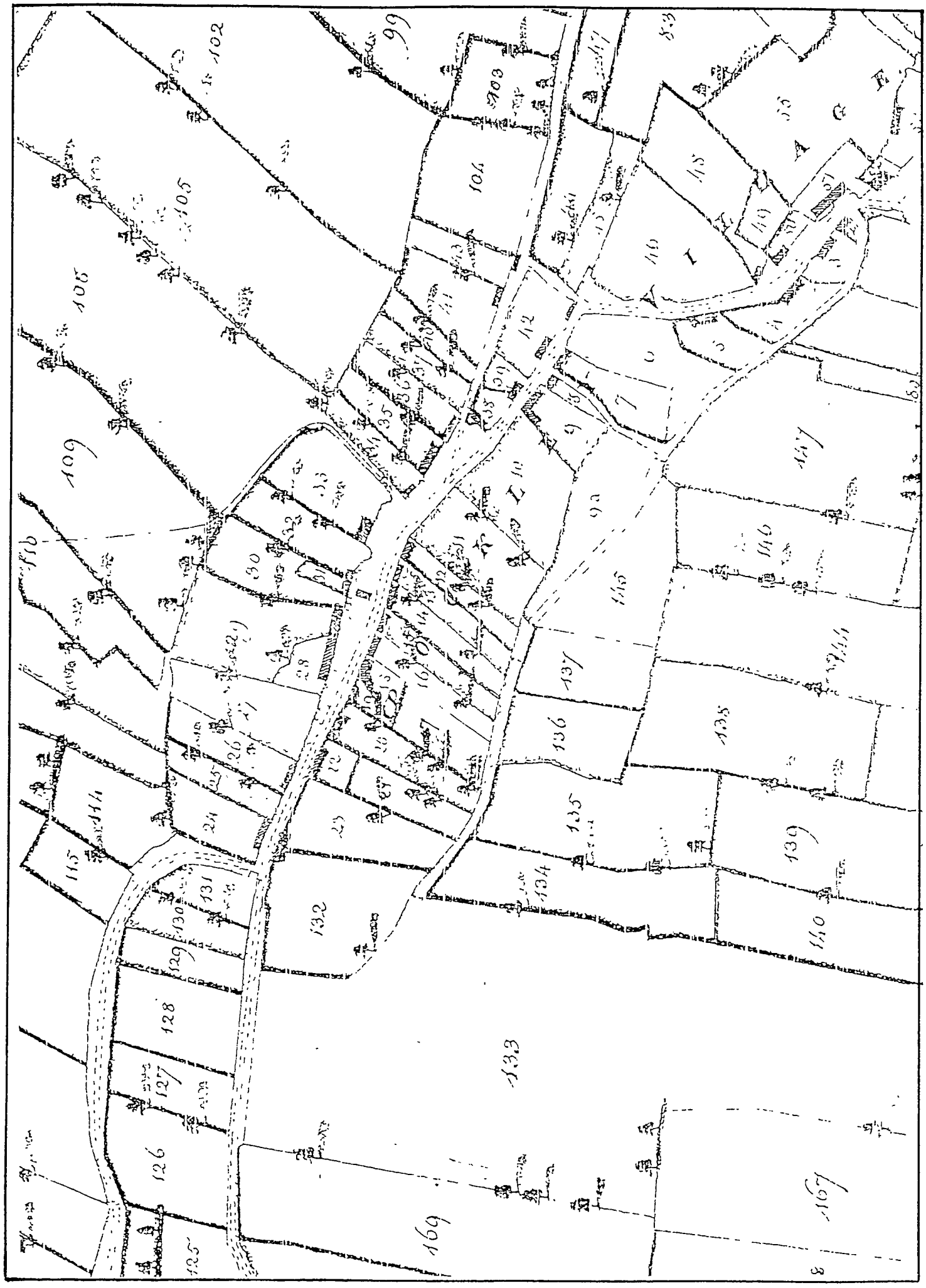


Fig. 4 Tuke 1775; Estate Plan of Pockley (part copy)

Fig. 5 Ordnance Survey 1853

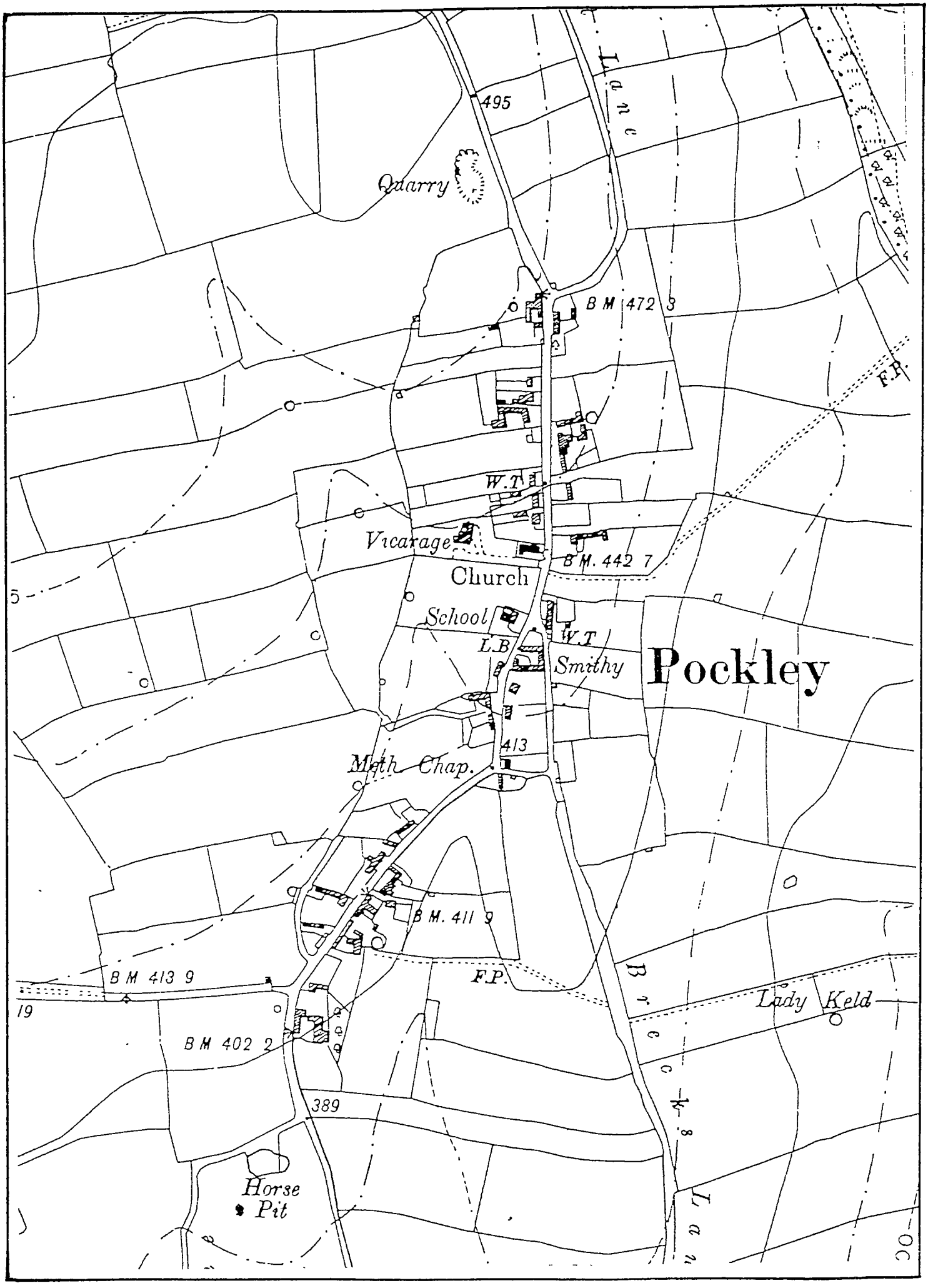


Fig. 6 Ordnance Survey 1914

the eariy 18th century (DoE 4/93) and Daleside, of 17th century date (DoE 4/97) (Fig. 3). Both West View Cottage and Daleside have a cruck frame structure which suggests a possibly earlier date.

8. Geophysical Survey Results

8.1 Presentation of the Data

8.1.1 Figures 7 and 8 present 1:500 plots of both data sets overlaid on an Ordnance Survey base. Grey-scale and X -Y trace plots are included as Figures 9 and 10 at a scale of 1:250. An interpretation plot is presented as Figure 11.

8.1.2 The gradiometer data has been corrected for bias and instrument drift and heading errors using the in-house Geocon (Version 8) software and is shown throughout at a clip of -InT to +2nT.

8.1.3 The resistance data is presented "raw" at a clip of one standard deviation either side of the mean data value.

8.2 Gradiometer Data

8.2.1 The types of magnetic response generally detected can be divided into five main categories described below:

1. Iron Spikes (Dipolar Anomalies)
   These responses are also referred to as dipolar anomalies and are caused by buried iron objects which are commonly recent in origin on rural sites.

2. Rapid, strong variations in magnetic response
   Also referred to as areas of magnetic disturbance these can be due to a number of different types of feature. They are usually associated with burnt material such as industrial waste or other strongly magnetic material. It is not always easy to determine their date of origin without supporting information.

3. Positive, linear responses
   These can vary greatly in strength of response depending on the underlying geology. For example in West Yorkshire values can range between 1.5nT and 30nT. They are commonly caused by ancient ditches or by more recent field drains.

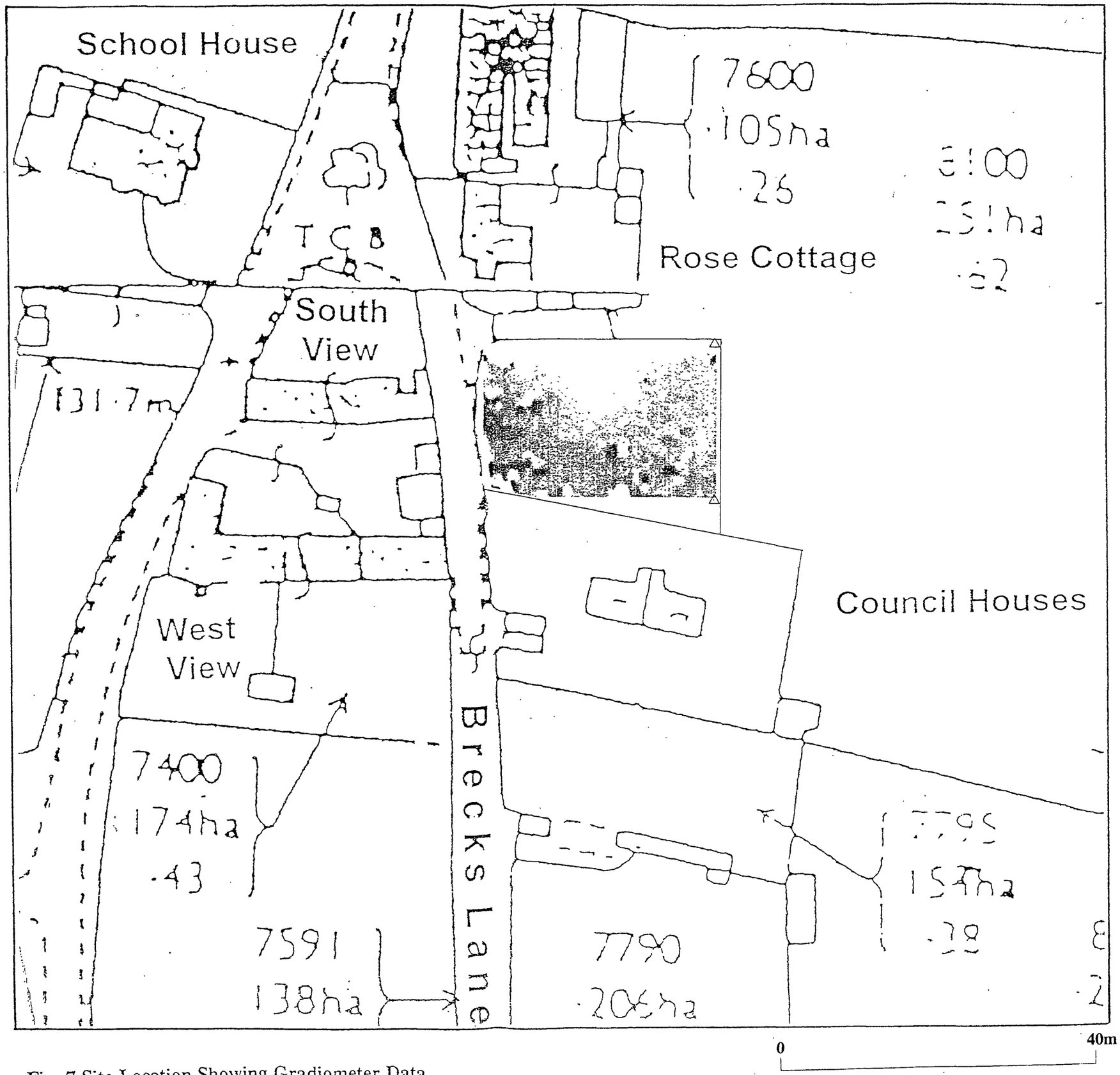


Fig. 7 Site Location Showing Gradiometer Data

Fig. 7

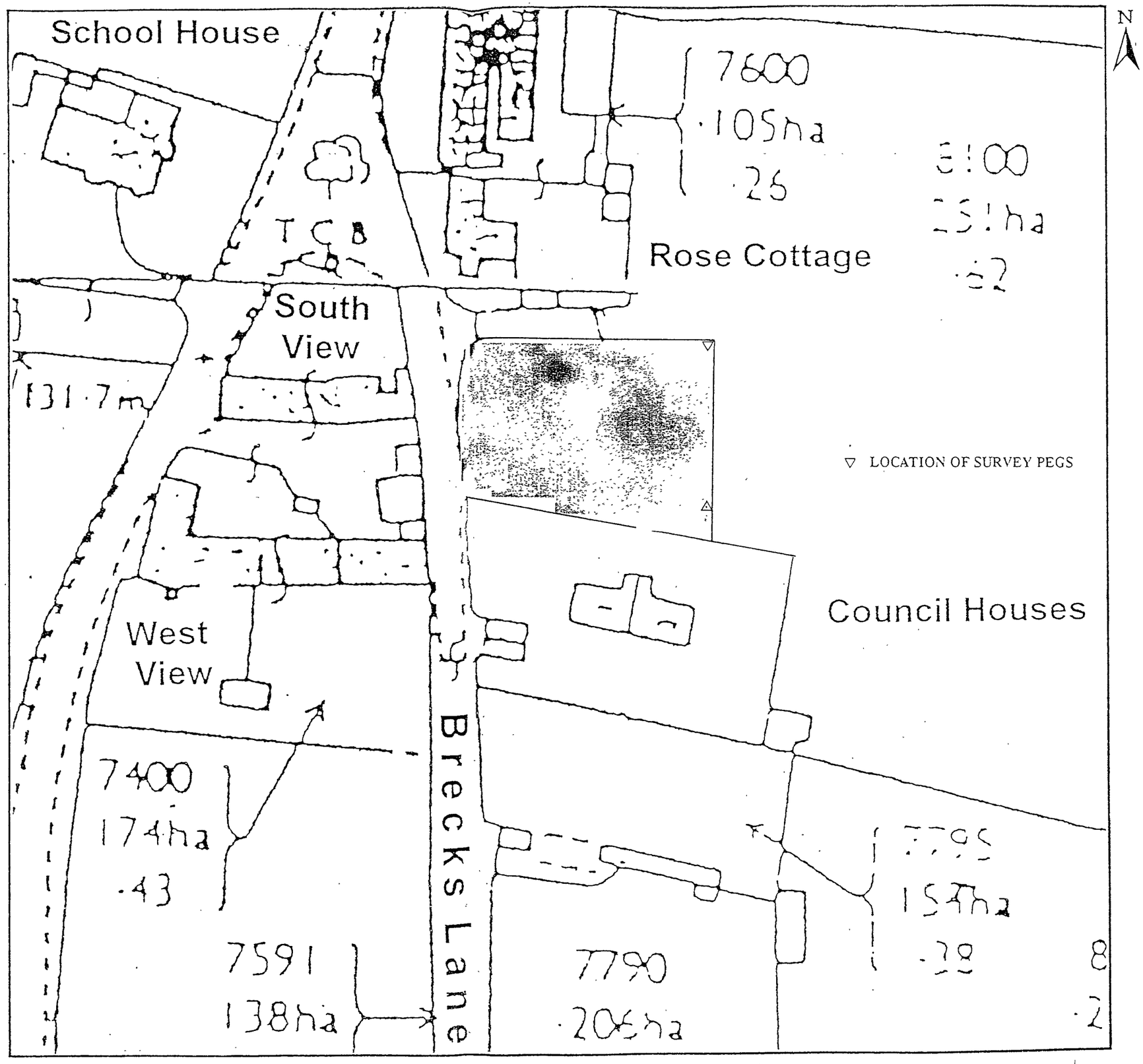


Fig. 8 Site Location Showing Resistance Data

Fig. 8

4. Isolated positive responses
These exhibit a magnitude of between 2nT and 300nT and, dependent on the strength of their response, can be due to pits, hearths, ovens or kilns. On certain geologies natural features can show the same type of response. It is, therefore, very difficult to be certain of an anthropogenic origin without an intrusive means of examining the features.

5. Negative linear anomalies
These are normally very faint and are commonly caused by features such as plastic water pipes which are much less magnetic than the surrounding soils and geology. As above natural features can exhibit the same response as might the presence of a solid structure.

8.2.2 The gradiometer data from Pockley is dominated by one very large negative response which is clearly visible 2m from the northern edge of the site on both the grey scale and X -Y trace plots (see Fig. 9). This response is typical of an iron pipe buried vertically in the ground.

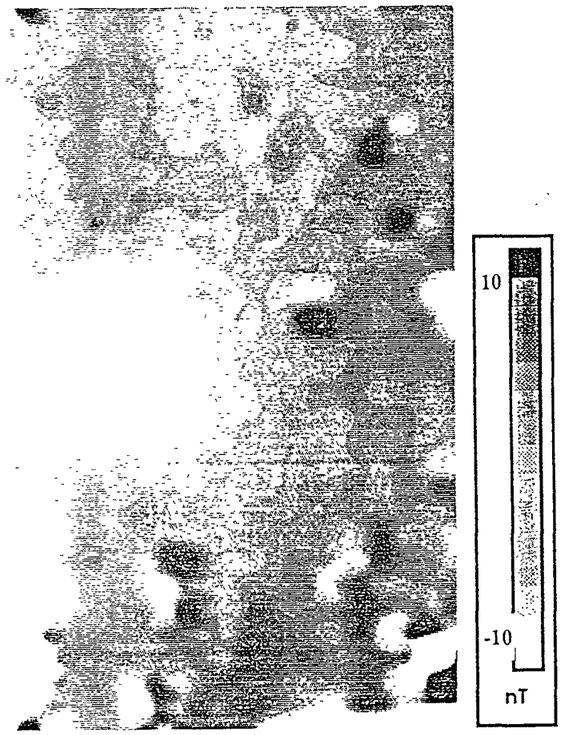
8.2.3 A line band of negative responses can be seen along the northern edge of the site. This is due to the magnetic effect of the wire mesh fencing.

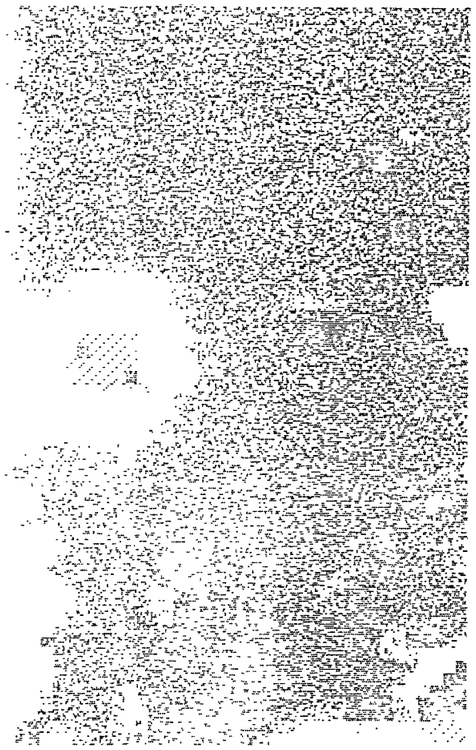
8.2.4 The only other magnetic anomalies on the site are a series of isolated dipolar anomalies, iron "spikes", which show the presence of ferrous material either on the surface or in the topsoil. This could reflect the presence of ubiquitous ferrous material such as nails and horseshoes which appear on most rural sites. Alternatively it could reflect the site's proximity to a former smithy as suggested by the 1914 Ordnance Survey map.

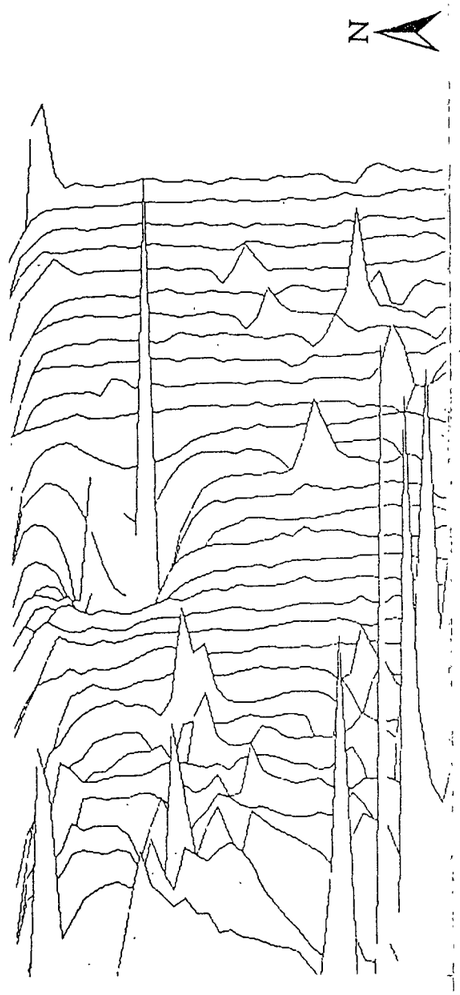
8.3 Resistance Data

8.3.1 Two main areas of high resistance are visible with discrete patches of very high resistance located within these general areas (Fig. 11). These resistance readings reflect the topography of the site such that the highest readings were logged either at the highest points on the site, the western edge and the south-western corner, or along the two linear earthworks which were noted on site.

8.3.2 Both these linear earthworks are visible running from east to west (at right angles to Brecks Lane) across the site. The first, about 2m wide and 10m in length, was immediately adjacent to the northern edge of the site. This is shown as a high resistance linear anomaly on







0 20m

Fig. 9 Gradiometer Data

Fig. 9

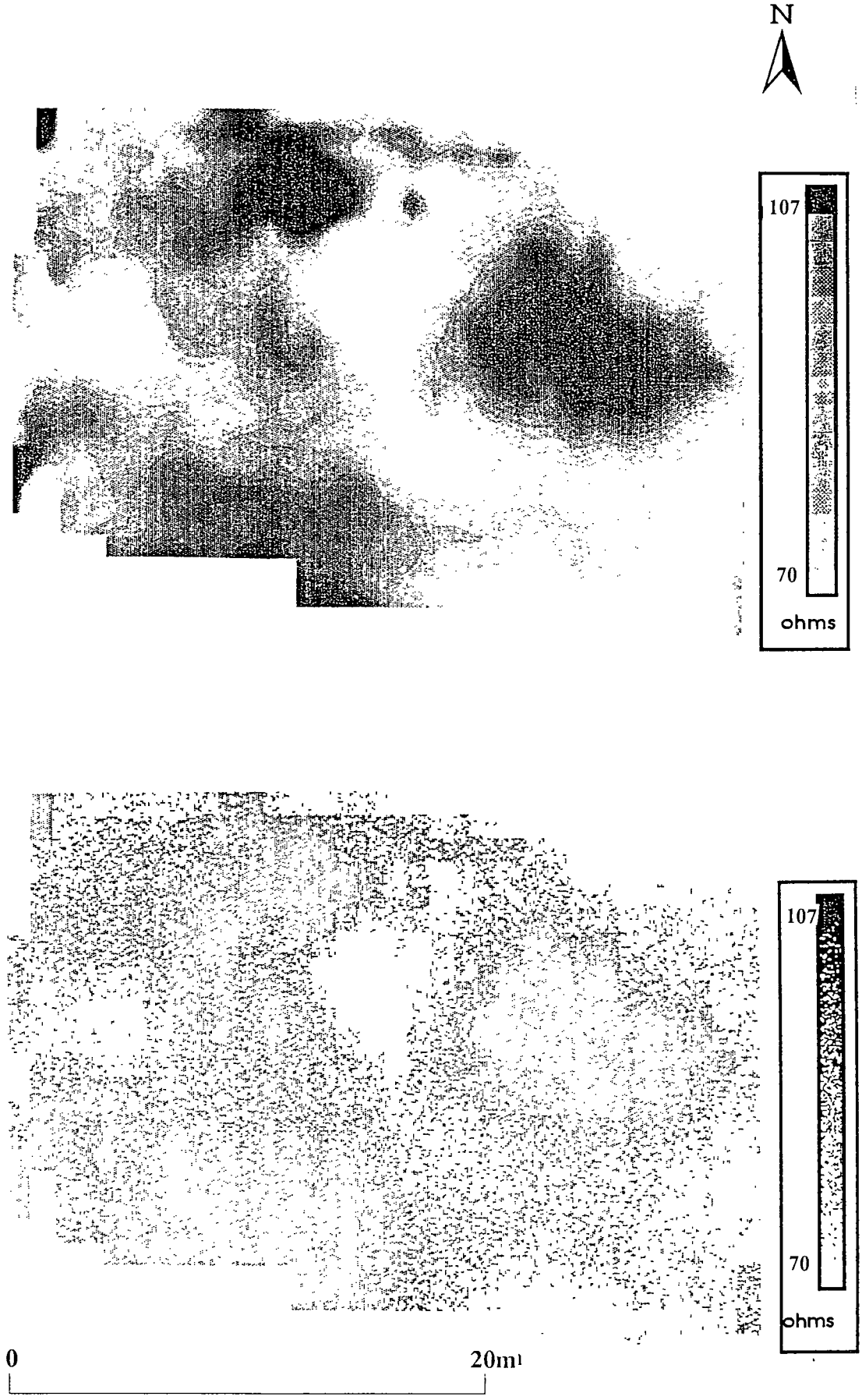


Fig. 10 Resistance Data