

INDEX DATA	RPS INFORMATION
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County Wiltshire	
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REPORT ON GEOPHYSICAL SURVEY

Site: Great Woodbury

Report : 90 / 63

September 1990

Client : Trust for Wessex Archaeology

GEOPHYSICAL SURVEYS

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REPORT ON GEOPHYSICAL SURVEY

Survey Number: 90/63
Site: Great Woodbury
Date: September 1990

Location, topography, and geology

The site is situated to the south of Salisbury on short scrub/grass over-lying chalk subsoil. The survey consists of a series of transects based on Great Woodbury Hill Fort.

Archaeology

This area is of great archaeological potential. The Hill Fort and appended ditch systems are scheduled, whilst field systems to the NE have also been identified by aerial photography.

Aim of Survey

To establish the likely archaeological implications of road routing for the A36 Salisbury bypass.

Permission for the survey over the protected areas of the Great Woodbury Monument No 298 has been given by English Heritage (Ancient Monuments Division (South) ref: AA 70915).

Instrumentation

Magnetometer : Geoscan FM36 with ST1 automatic trigger

Survey Method

Magnetic readings are logged at 0.5m intervals along one axis (in 1.0m traverses, 800 readings per 20m x 20m grid) over the survey area. The data are then transferred to a Compaq SLT/286 and stored on 3.5" floppy discs. Field plots are produced on a portable Hewlett Packard Thinkjet. Further processing is carried out back at base on a Mission 386 linked to appropriate printers.

The location of the survey area is shown in Figure 1.

Report on the Geophysical Surveys around Great Woodbury

Introduction

The magnetic surveys described in this report mainly comprise sample transects centred on the site of Great Woodbury. The radial sampling scheme, devised by the Trust for Wessex Archaeology (TWA), was based on the notional centre of the site, as plotted from aerial photographs. The aerial photograph evidence for the site has indicated a large ditched enclosure, with several ditches radiating from the main ditch. Prior to the magnetometer survey aerial photographic evidence suggested that there were ditches and ring ditches in the area around the site.

As the survey was done in two stages, on the second occasion the relocation of the central point proved to be a small distance from the original 'centre', and these were labelled 'A' and 'B' respectively.

The reason for using transects was to define the position of the defences of the site, and find evidence for archaeological activity within, or beyond, the monument itself. In an effort to achieve these aims, the original sampling scheme was modified to cover a minimum width of 20m.

Results

For ease of display the results are described by survey area (see Figures 1 and 2). In general, whilst the results are clear, the level of response is very low. Most of the anomalies are 1-2 nT in strength, just above the level of instrument noise. As a result, only selected areas have been chosen for presentation by X-Y or grey-scale.

Investigations to the East of Odstock Road (Figure 1)

This is the primary focus of the survey. It comprises six linear transects, and one small 40x40m survey, next to the present Harvard Hospital.

Survey 1 (Figures 3-4)

This is the second longest of the transects undertaken at this site. The main ditch of the site was located at about 90m from the notional centre point, A, of the survey.

Within the confines of the site are numerous isolated anomalies. These probably indicate the positions of individual pits. Some of the pits are very large, circa 4m in diameter. Directly outside of the fort several smaller pits probably exist.

There are no further major features until 340m from the central point, where a ditch crosses the transect. Similarly, another anomaly crosses at 400m.

Survey 2 (Figures 5-6)

This survey transect was 380m in length. Fortuitously, the survey has been placed over an entrance to the site, about 90m from its assumed centre. There appears to be little suggestion of major activity directly behind the entrance.

However, outside of the enclosure there is clear evidence for a series of ditches. There is a long, linear anomaly obliquely crossing the survey transect. Although the response is 'interrupted', it is likely that this is a function of the 'strike-angle' rather than a true representation of the physical remains. This anomaly presumably represents an axial ditch attached to the main ditch, as seen on some of the aerial photographs. An anomaly of much weaker strength crosses this ditch.

There are a few possible pits in the survey area. There are a parallel set of anomalies close to the boundary with Harvard Hospital. These presumably represent a trackway.

Survey 3 (Figure 7)

This transect was 240m in length, and located the main ditch at about 100m from the central point B.

Within the enclosed area there is a substantial number of pits, and at least one short length of curving ditch.

Directly outside of the main ditch is a linear anomaly, presumably relating to a former field system. A parallel anomaly can be seen at the end of this survey transect.

In the area between 140-190m from the central point B, there is an unusual level of noise that may be archaeological in origin. The anomalies apparently relate to former pits and lengths of ditch. It is thought that there may be some disturbed area of ground within the second field, north of the main enclosure. This should be confirmed at some later stage.

Survey 4 (Figure 8-10)

This is the longest of the survey transects; 500m in length. The enclosure ditch is approximately 95m from the central point B. On both sides of the ditch are further, slighter anomalies. Again, these should represent ditch features.

The most striking aspect of the results from this survey transect is the lack of pit-type anomalies within the enclosure.

At about 200m from the central point there is a ditch-type anomaly, indicating a former field boundary.

The wider area surveyed at the northern end of the transect was intended to locate a possible barrow. However, in the area surveyed, there was no trace of an anomaly that would be associated with such a feature. The anomaly running through the northern extension is probably due to ferrous material. It is possible that the anomaly could be due to barbed wire in an old field boundary.

Survey 5 (Figure 11-12)

This survey transect was 300m in length. Again, the main enclosure ditch was located at about 100m from the central point B. A substantial number of large pits was noted within the enclosed area. It is possible that there is a small ditch within the enclosure.

There are three lengths of ditch outside of the main enclosure, all on differing alignments. There are few other anomalies of archaeological potential.

Survey 6 (Figure 13)

This transect is 220m in length, with the enclosure ditch approximately 120m from point B. There is some evidence for the existence of pits within the enclosure. There is clear evidence for a ditch running approximately east-west from the enclosure ditch.

Survey 7 (Figure 14)

A recent evaluation by TWA of the grounds of Harvard Hospital had indicated the presence of prehistoric material, including a ditch. It was decided that a small detailed area would be investigated at the end of Survey 2, immediately outside the present confines of the hospital, where the ditch was found.

Whilst there was no suggestion that the ditch continued into the field under question, other anomalies of interest were found. In particular, there is clear evidence for a ring ditch and a trackway. The latter is probably the continuation of the anomaly seen in Survey 2.

There is a poorly defined area of activity to the south-east of the ring ditch.

Investigations to the West of Odstock Road (Figure 2)

Two areas were investigated to the west of Odstock Road. The first was a detailed survey to establish the location of two presumed barrows. The second was a 'scanning' transect. The latter was undertaken to establish the existence, or otherwise, of possible field boundaries identified on aerial photographs.

Survey 8 (Figure 15)

This was the detailed survey described above. It is clear that the main barrow was easily identified, producing a relatively strong anomaly 2-3 nT in strength. The presumed second barrow has also been identified. However, the latter is only clipped by the eastern edge of the survey area.

The main anomaly has several internal anomalies that may be of archaeological interest.

Survey 9 (Figure 15)

The interpretation of the scanning undertaken by two operators across the length of this transect was very difficult. As suggested above, the level of the response from the most enhanced features was very small. This makes scanning very difficult as the identification of significant anomalies becomes very subjective. Only one anomaly was thought to be important and a 20x20m grid was placed around it. The detailed survey, however, did not establish any archaeological activity, the anomaly being an isolated high reading.

The scanning, therefore, proved inconclusive in the identification of the presumed field boundaries. It is likely that only detailed survey would identify the low level anomalies associated with these features.

Conclusions

The surveys in and around the site of Great Woodbury have proved most valuable in the defining the limits of the monument. Also, areas of considerable activity have been identified within parts of the interior of Great Woodbury.

The evidence for activity in the area around the site has been significantly extended. The geophysical results have indicated a complex of field systems, some probably associated with the monument itself. The location of the ring ditch, next to Harvard Hospital, may indicate further similar remains in the immediate area.

It must be remembered that the anomalies located in this survey indicate only a sample of the archaeological remains within the area.

Fieldwork: C Gaffney, J Gater, S Gaffney and D Shiel
Report: C Gaffney and J Gater

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SURVEY MAP WITH THE PERMISSION
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GREAT WOODBURY

LOCATION PLAN 1

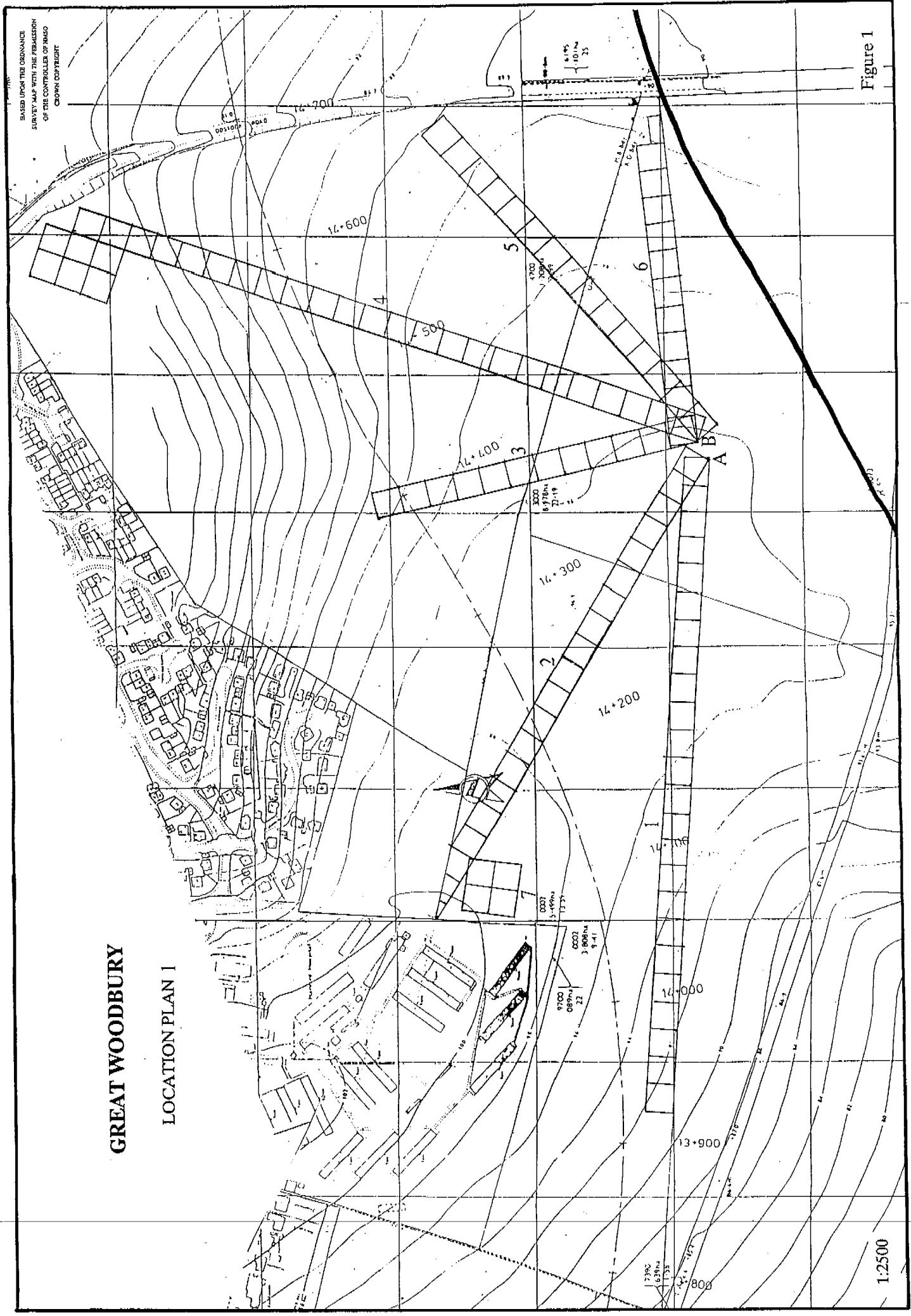


Figure 1

1:2500

GREAT WOODBURY

LOCATION PLAN 2

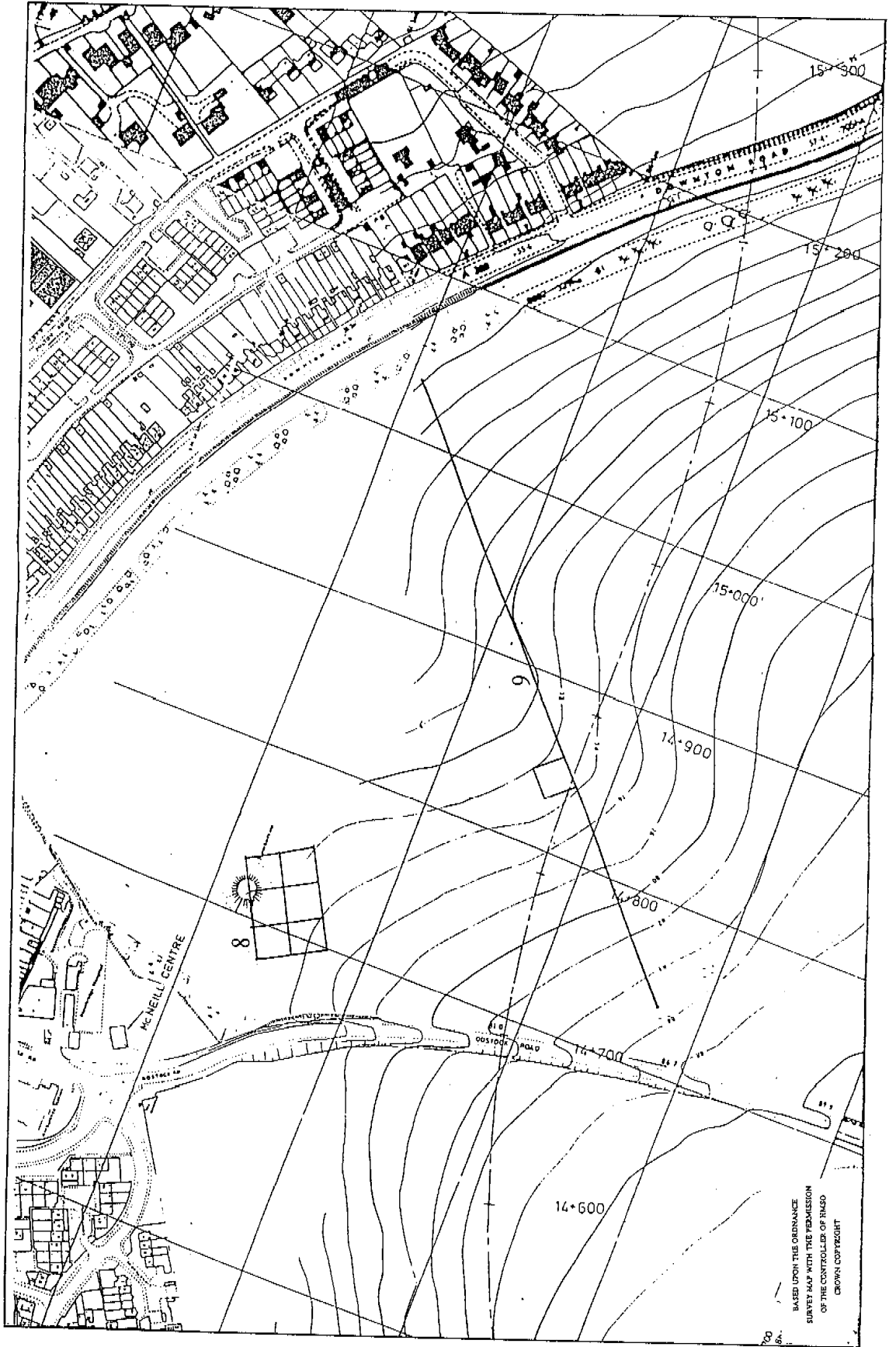


Figure 2

GREAT WOODBURY

SURVEY 1

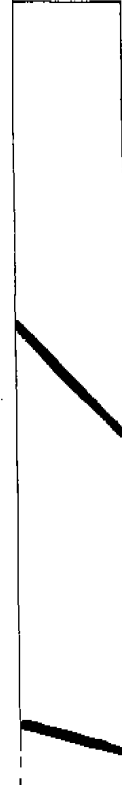
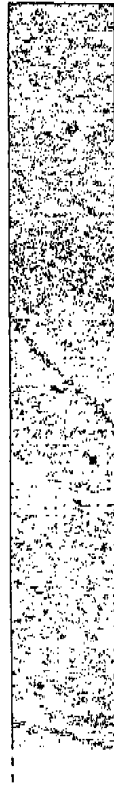
A



nT
2.7
2.3
1.9
1.5
1.1
0.7
0.3



1:1000

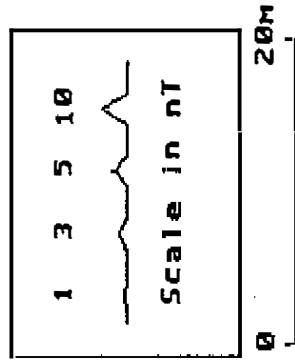
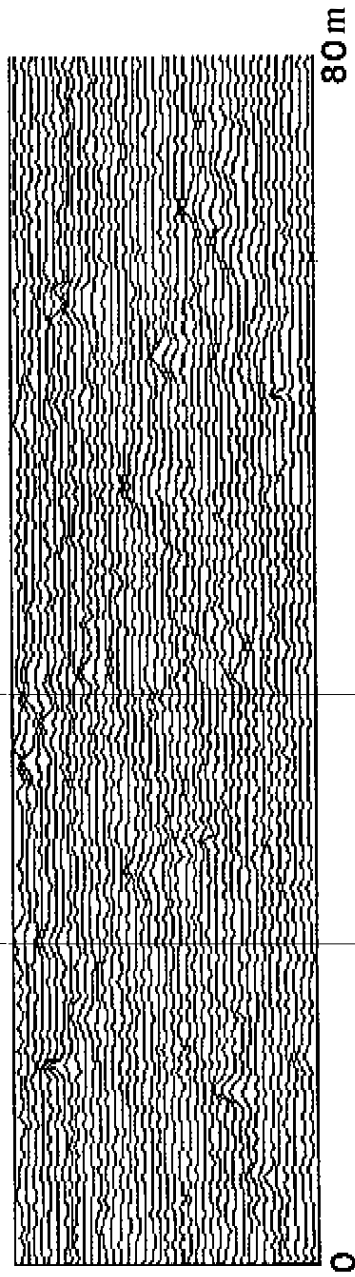


◆ Ditch/Pit

Figure 3

GREAT WOODBURY

SURVEY 1



nT

2.5
2.2
1.9
1.6
1.3
1.0
0.7
0.4
0.1



1:500

Figure 4

GREAT WOODBURY

SURVEY 2

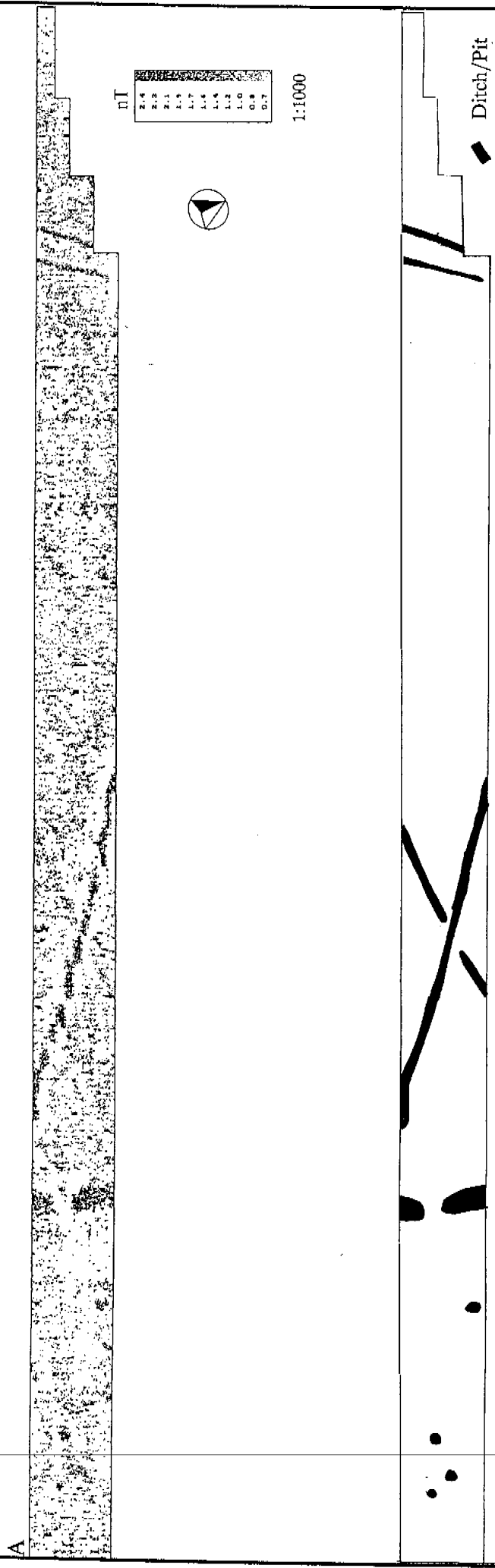
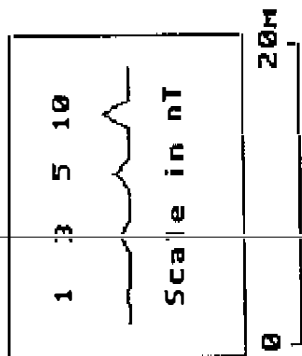
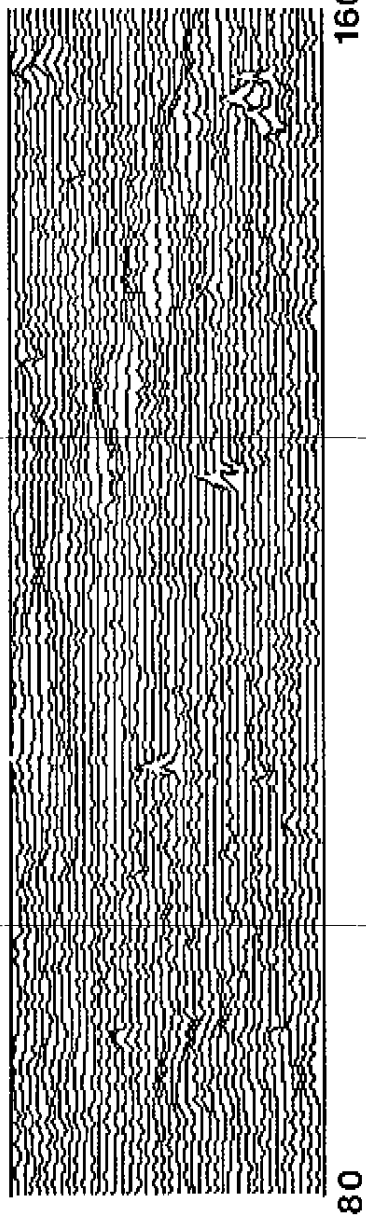


Figure 5

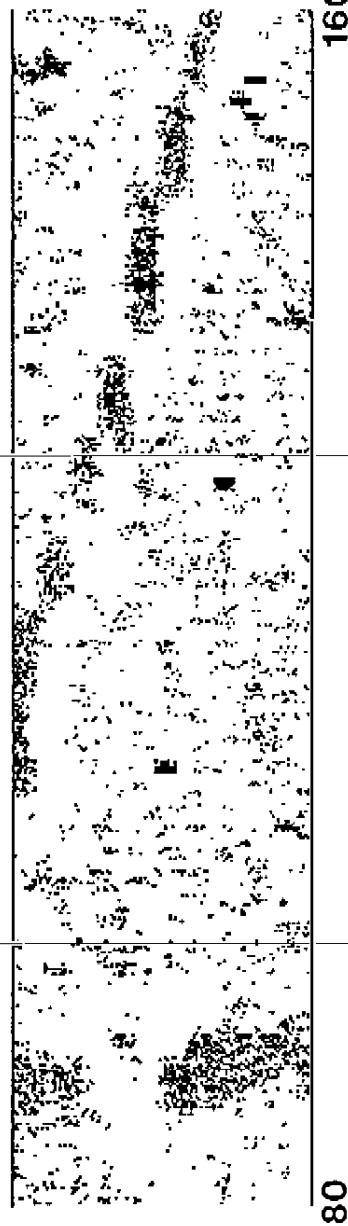
GREAT WOODBURY

SURVEY 2



nT

2.5
2.2
1.9
1.6
1.3
1.0
0.7
0.4
0.1



1:500

Figure 6

GREAT WOODBURY

SURVEY 3

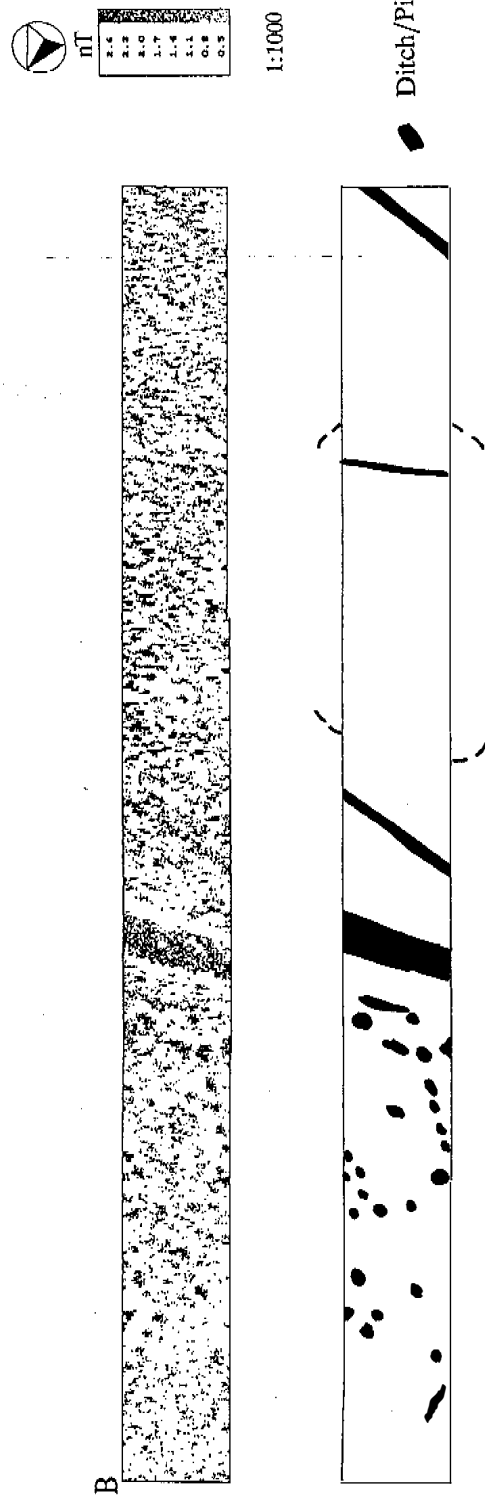


Figure 7

GREAT WOODBURY

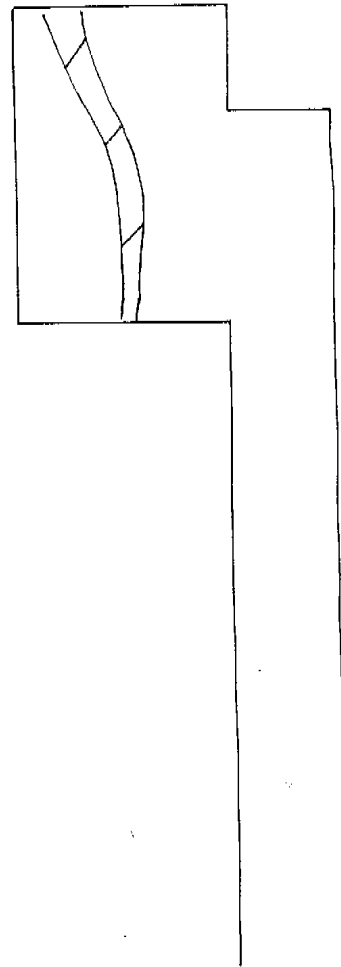
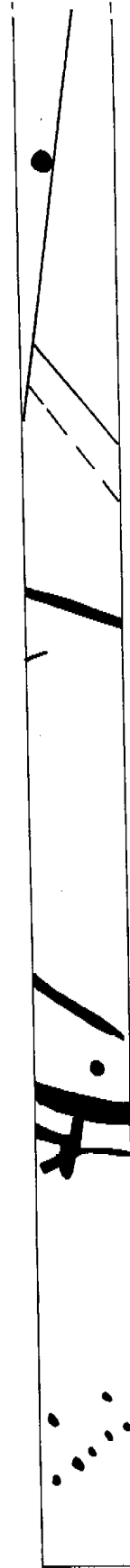
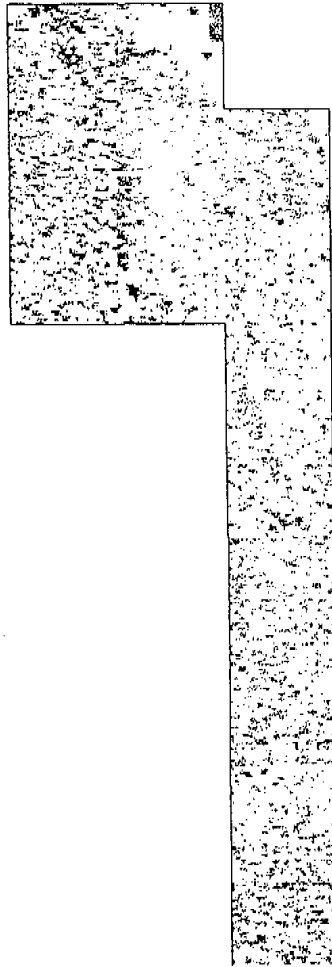
SURVEY 4

B



NT
2.5
2.2
1.9
1.6
1.3
1.0
0.7
0.4
0.1

1:1000



Ditch/Pit

? Barbed Wire Fence

GREAT WOODBURY

SURVEY 4

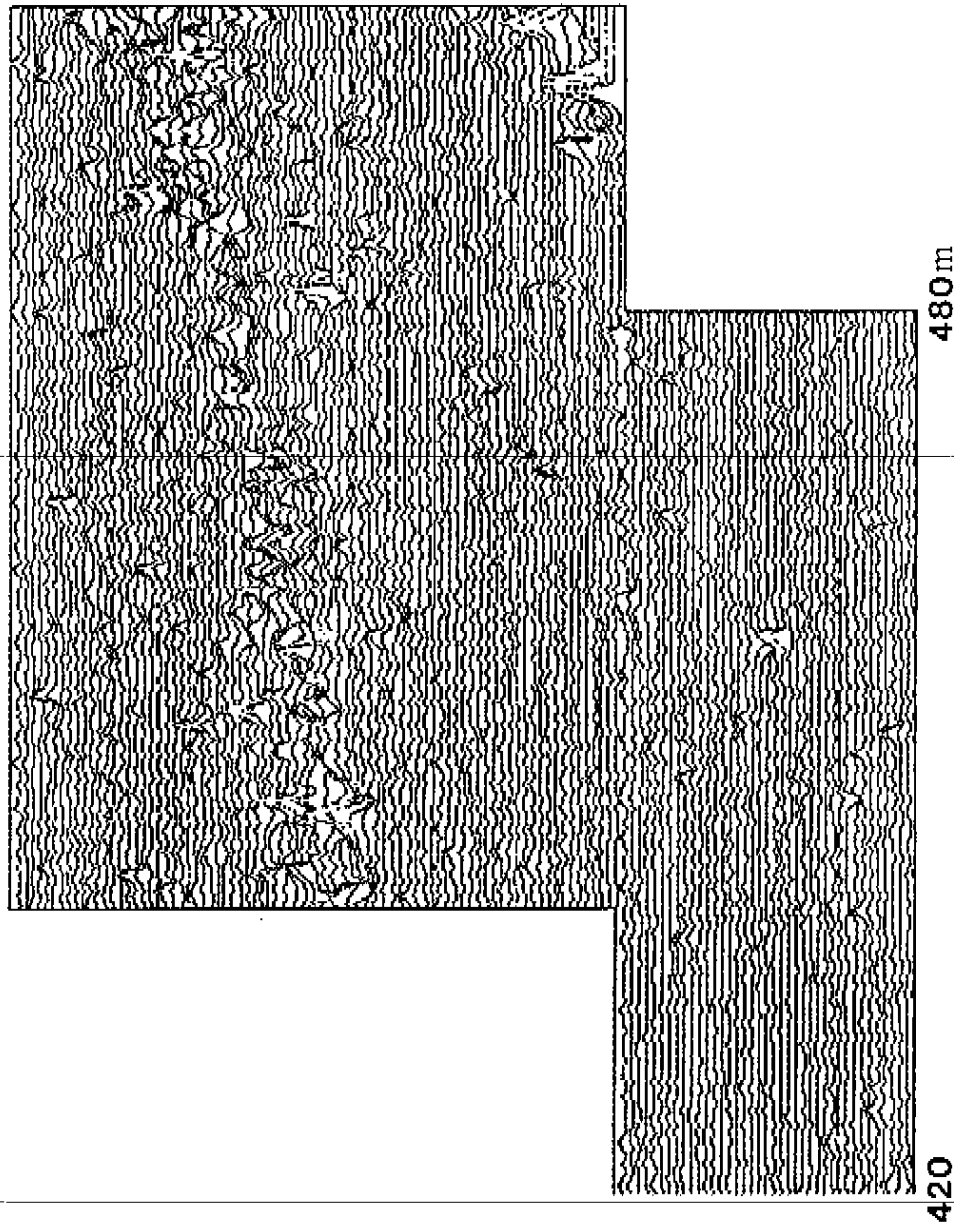


Figure 9

GREAT WOODBURY

SURVEY 4



nT

2.5
2.2
1.9
1.6
1.3
1.0
0.7
0.4
0.1

1:500

420

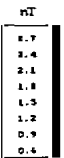
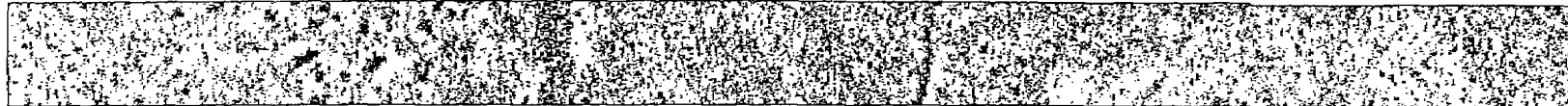
480m

Figure 10

GREAT WOODBURY

SURVEY 5

B



1:1000

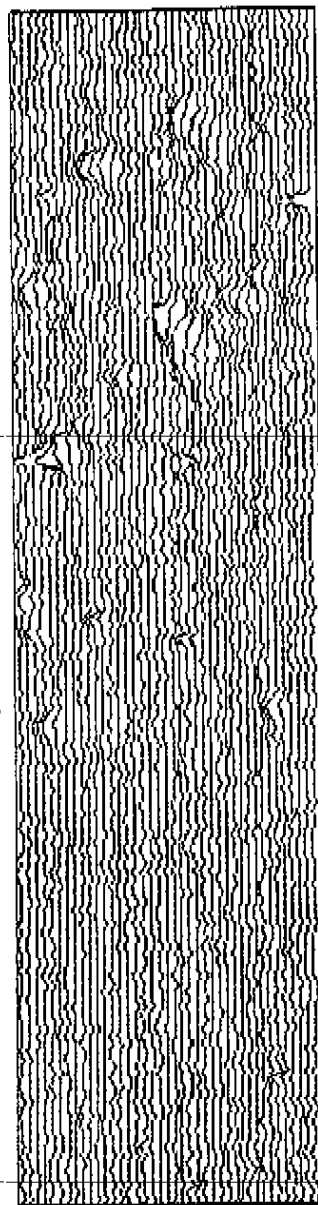


■ Ditch/Pit

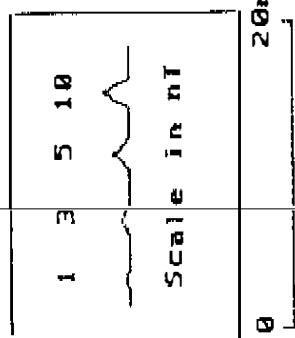
Figure 11

GREAT WOODBURY

SURVEY 5

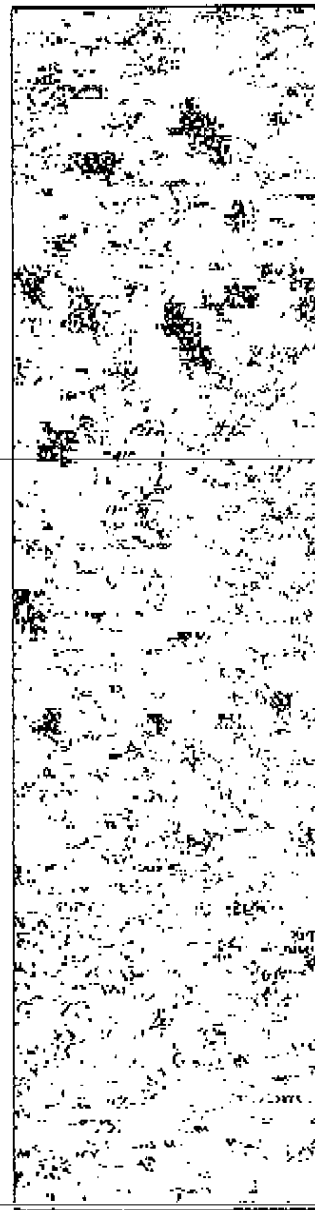


80m



nT

2.7
2.4
2.1
1.8
1.5
1.2
0.9
0.6



80m

1:500

Figure 12

GREAT WOODBURY

SURVEY 6



ft
2.1
1.9
1.7
1.5
1.3
1.1
0.9
0.7
0.5
0.3
0.1

1:1000



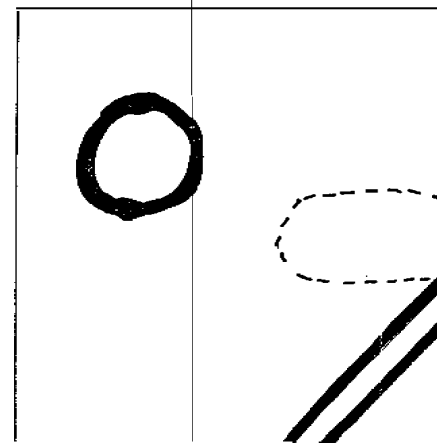
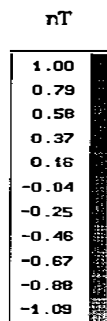
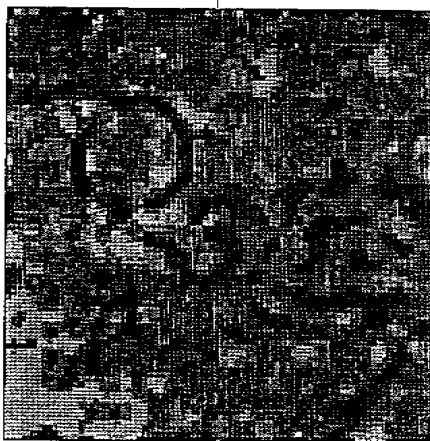
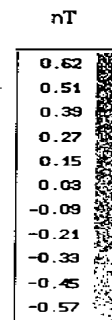
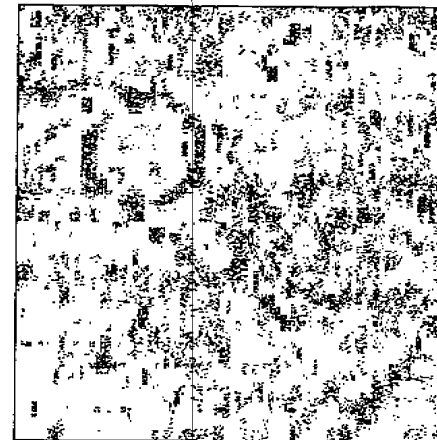
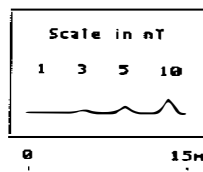
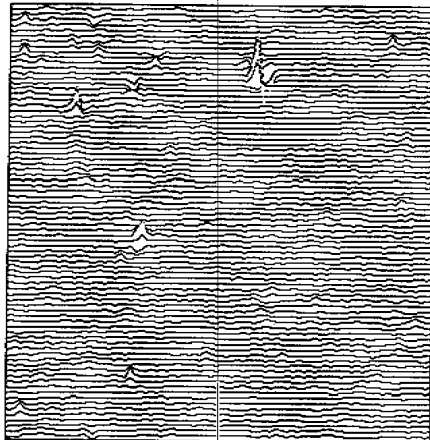
B



Ditch/Pit

GREAT WOODBURY

SURVEY 7




 Ditch/Pit

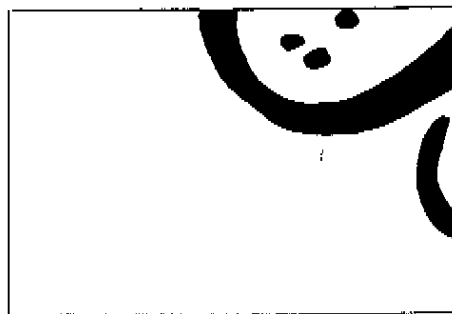
Figure 14

GREAT WOODBURY

SURVEY 8

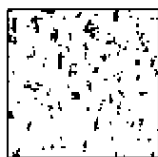


Range: 0.5 - 2.5 nT



 Ditch/Pit

SURVEY 9



Range: 0.5 - 2.5 nT



1:1000