RPS Planning, Transport and Environment

INDEX DATA	RPS INFORMATION
Scheme Title Shepton Mallet Bypass.	Details Report: Geophysical Survey.
Road Number	Date Winter 90/91.
Contractor Somerset County Council	
County Somerset.	
OS Reference	
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REPORT ON GEOPHYSICAL SURVEY

Site: Shepton Mallet Bypass

Report: 90 / 94

Winter 90/91

Client: Somerset County Council

GEOPHYSICAL SURVEYS

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REPORT ON GEOPHYSICAL SURVEY

Survey Number: 90/94

Site: Shepton Mallet Bypass

Date: Winter 90/91

Location, topography, and geology:
The areas of investigation lie to the south east of Shepton Mallet. All of the areas were pasture, except Area 11 which was seeded with a crop.

Archaeology:
There is evidence for substantial archaeological remains in the area to the north of the proposed route.

Aim of Survey:
To establish the extent and nature of any archaeological features along the broad corridor of the bypass.

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 Dell/Mission 386 computer linked to appropriate printers.

Report on the Geophysical Surveys on the Route of the proposed Bypass at Shepton Mallet

Introduction

The surveys described in this report cover eleven areas sampled in the environs of the proposed southern bypass of Shepton Mallet. The areas were specified by R. A. Croft, the County Field Archaeologist.

Results from previous geophysical work in the area had suggested that magnetic survey would be most suitable for identifying areas of archaeological interest. The fieldwork was completed over two separate visits. The work concluded during the first period of this survey comprised Sample Areas 1-7, and these were tied in by Birmingham University Field Archaeological Unit (**BUFAU**). The remaining areas were tied in by **Geophysical Surveys of Bradford**. The position of the sa ple areas can be seen in Figure A.

Results

Area 1 (Figures 1.1-1.2)

This is one of the largest areas surveyed. The field under question (Field 1), is known to contain archaeological remains. Previous geophysical work had identified field systems and possible buildings in the north of this field. Excavations by BUFAU within this area have also identified specific archaeological features.

The magnetic data from survey Area 1 suggests major archaeological activity throughout. This includes pits, lengths of ditch and possible habitation areas. This data set is entirely compatible with the results from the previous geophysical work in the north of the field. Whilst it is not known whether the archaeology continues throughout the field, it is possible that this is so.

Area 2 (Figures 2.1-2.3)

This survey area is to the south of Area 1, within the same field.

The clearest linear anomaly within this area, aligned north-south, is probably due to the trench excavated by BUFAU. However, there are still a number of other potential archaeological anomalies in the survey area. These probably denote the presence of pits and a small length of ditch. Although the density of anomalies which may be of archaeological origin is less than Area 1, it is clear that similar type features have been identified in Area 2.

All of the areas investigated in this field i.e. both those reported here and those from the previous survey, have indicated that archaeological features are present.

Area 3 (Figures 3.1-3.2)

This survey area is directly to the east of Fosse Lane, almost mirroring Area 1 in size and position. This sample area is also directly to the south of the Showerings development, an area rich in Roman remains.

The results from indicate an area of high archaeological potential. In the northern half of the survey is a complex of archaeological remains. This data set suggests the presence of a settlement enclosure, with an associated field system.

Throughout the rest of the area is a series of anomalies that probably indicate the presence of former field boundaries.

There is a substantial anomaly in the south-west corner, running approximately north-south, that is due to a buried pipe.

Area 4 (Figures 4.1-4.2)

This area is directly to the south of Area 3, although it is in separate field. The continuation of the ferrous pipe into Field 3 meant that the land nearest to the Fosse Lane was not surveyed.

The results from this small sample indicate that possible archaeological anomalies continue into Field 3. The results suggest the presence of pits and possible lengths of ditch.

Area 5 (Figures 5.1 and 5.2)

The level of magnetic response in this area is very low. The display levels chosen has resulted in a very 'noisy' data set, shown in Figure 5.1. However, there are hints of anomalies that may be archaeological. In the grey scale in Figure 5.2 the data have been filtered, in an effort to enhance the low level features.

There is a distinct linear anomaly aligned north-south, which should indicate the position of a former field boundary. However, more subtle are the possible linear anomalies to the west of this presumed boundary. Only the most convincing of these anomalies have been indicated on the interpretation.

Area 6 (Figure 6.1)

This area, in the same field as Area 4, shows very little archaeological potential. The range chosen in the dot-density display is very small. Although anomalies can be discerned, their strength is very weak (see the X-Y plot). Whilst the majority of these anomalies are unlikely to be archaeological, their presence should be noted.

Area 7 (Figures 7.1-7.2)

There are anomalies in Area 7, especially when viewed in conjunction with those from Area 8, that suggest considerable archaeological activity. The strength and number of the anomalies are significantly greater than in Area 6. The anomalies indicate that some lengths of ditch may be present, although the majority of the anomalies are compatible with large pits/habitation areas.

Area 8 (Figure 8.1-8.2)

The results from this area have been partially distorted by the presence of a metal feeding tank. associated with this are two pipelines connected to the tank.

There are many anomalies in this area that are likely to be archaeological in origin. There are a number of ditch type anomalies, and a substantial number of other a omalies are present. The results suggest a dense concentration of complex archaeological features, particularly in the western half of the survey area.

Area 9 (Figure 9.1-9.2)

This sample contrasts sharply with the results from Area 8. Apart from the presence of metal pipe in the northern part of the survey area (associated with the metal feeding tank noted in Area 8), there are few anomalies of any interest.

The dot density range is again very small, and although some patterning can be identified, it is unlikely that this is archaeological in nature. It is suggested that this area probably lacks any anomalies of archaeological significance.

Area 10 (Figure 10.1-10.3)

The results from Area 10 show ve y few anomalies of archaeological interest.

The confused set of results in the south-western part of the survey probably indicate ferrous/hardcore dumping, or some other modern activity.

The central area of this sample is largely devoid of anomalies. The north eastern corner of the survey has a number of parallel anomalies. Whilst the most southerly of these is obviously the product of ferrous disturbance, the other three may be of archaeological interest. The former is likely to be a recent field boundary (see Figure A), whilst the latter may also represent field boundaries, trackways of an unknown age, or even ridge and furrow.

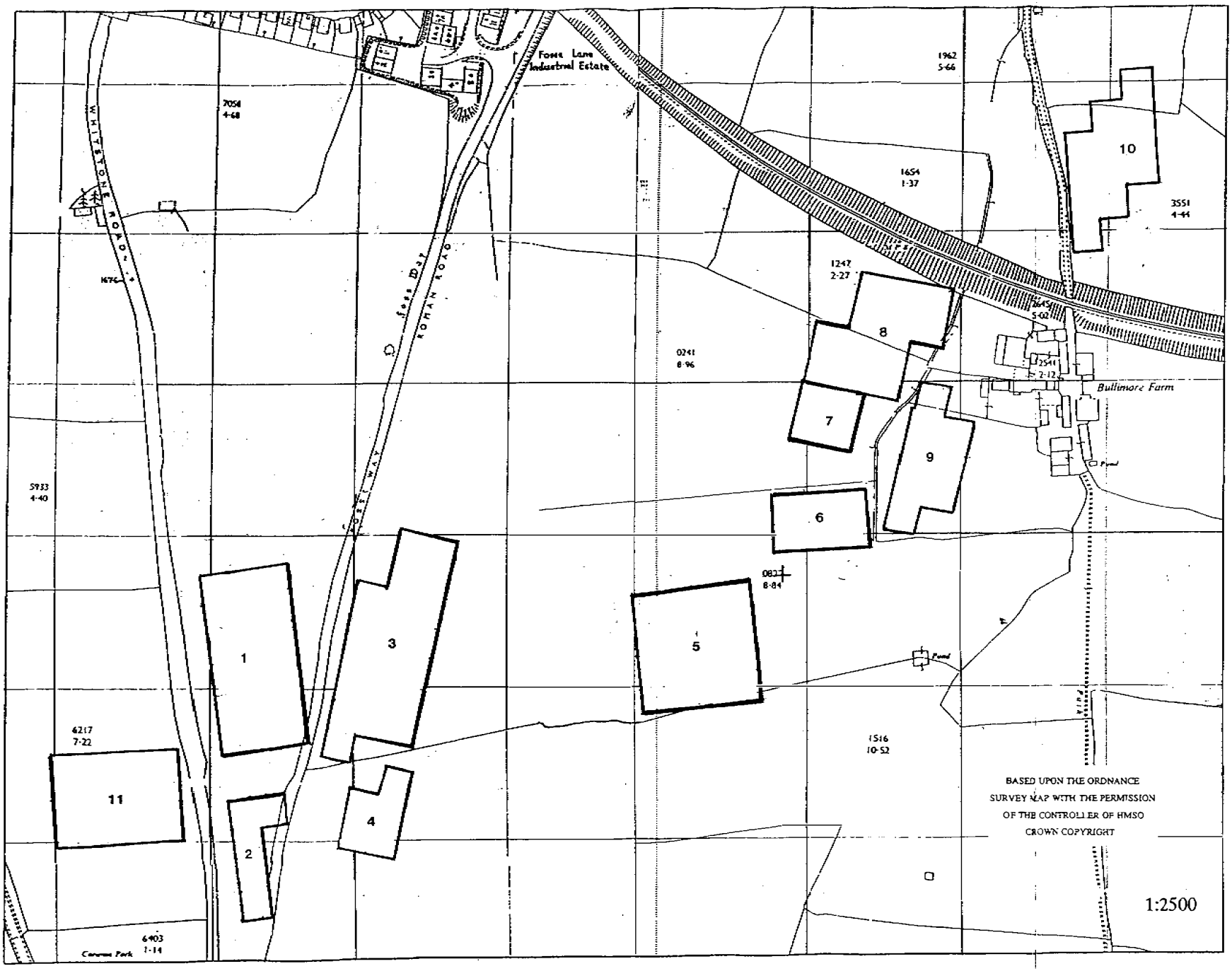
Area 11 (Figure 11.1)

This area is at the most westerly of the eleven survey areas reported here. There are a few very minor anomalies that have been identified. These may represent former field boundaries.

Conclusions

The eleven magnetic sample areas surveyed at Shepton Mallet have proved successful in extending the amount of archaeology known in the area. In a number of areas (i.e. 1, 2, 3, 4, 7 and 8) there is strong evidence for the presence of archaeological remains.

Geophysical Surveys of Bradford
13th February 1991


Forge Lane Industrial Estate
WHITSTONE ROAD
FORE DOT FOHAN ROAD
FOOT WAY
Bullimore Farm
Pond
Pond
1
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BASED UPON THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HMSO CROWN COPYRIGHT
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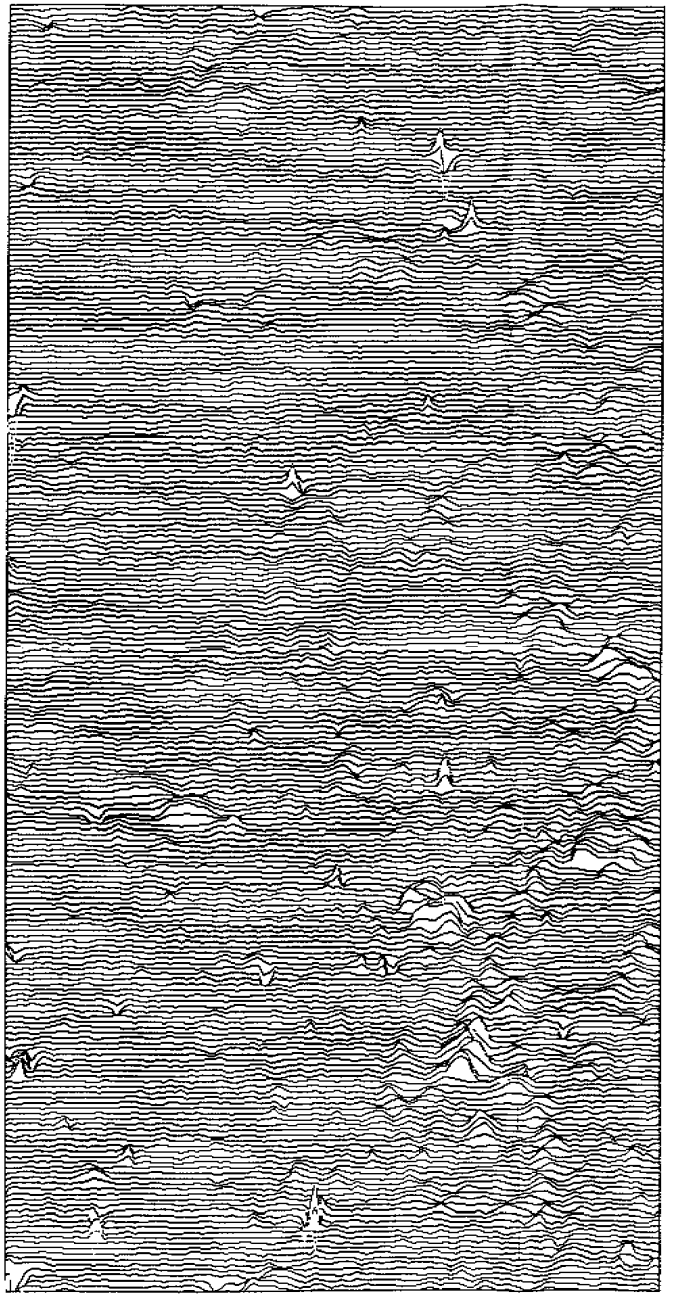
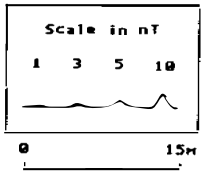
Figure A

Min = .1 nT Max = 3 nT



SHEPTON

Area 1



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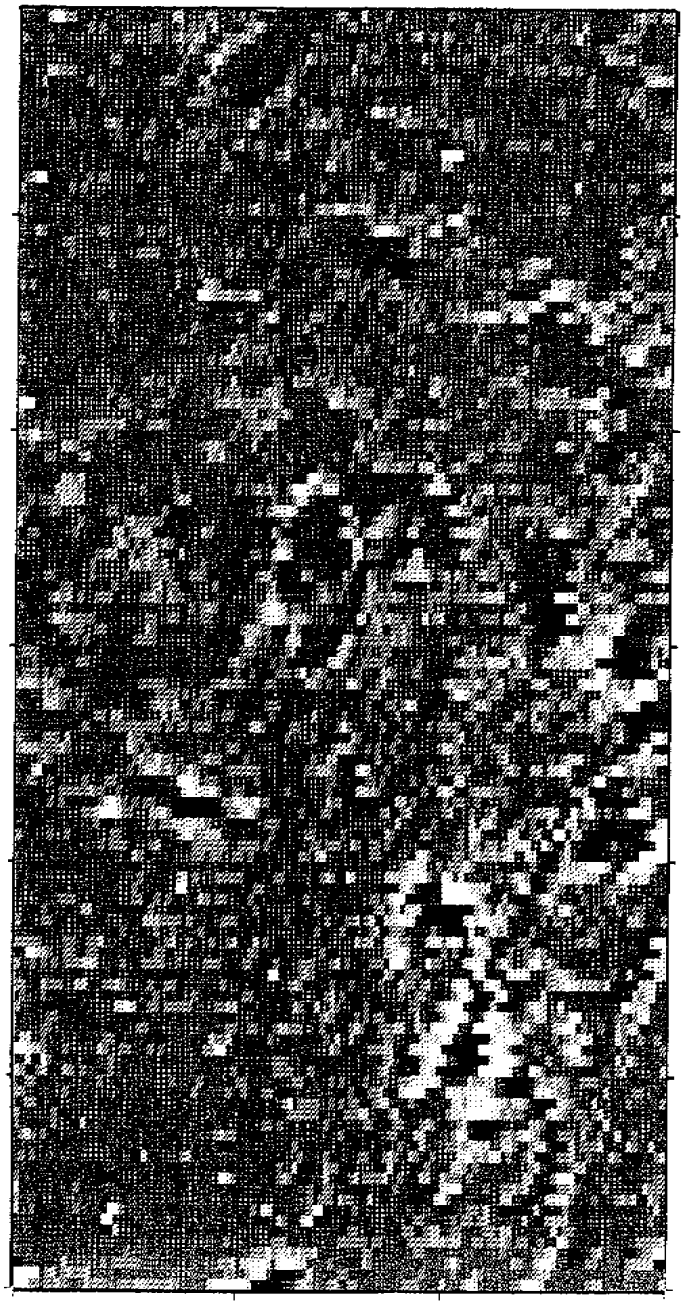

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SHEPTON

Area 1

INTERPRETATION

Archaeology ?

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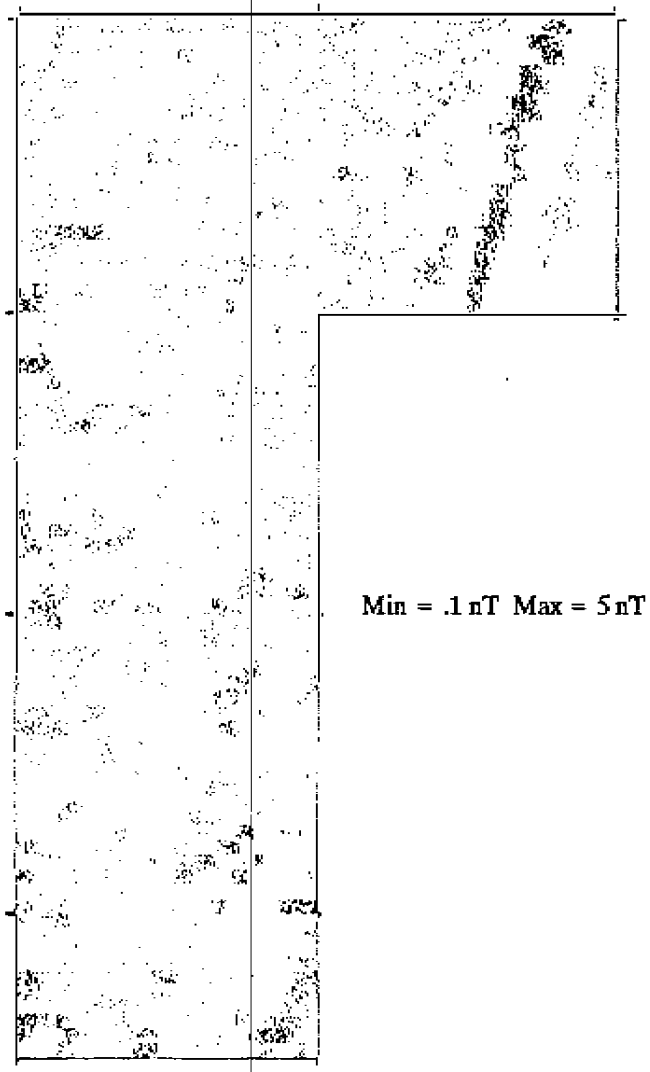
Figure 1.2

SHEPTON

Area 2



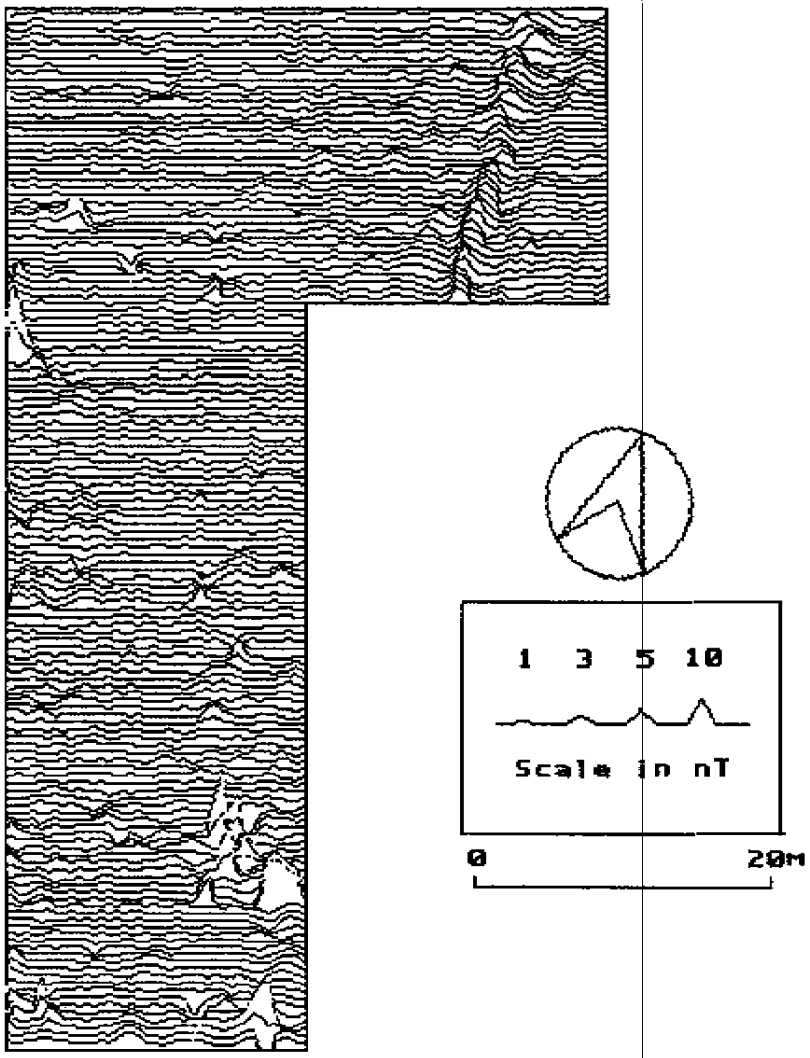
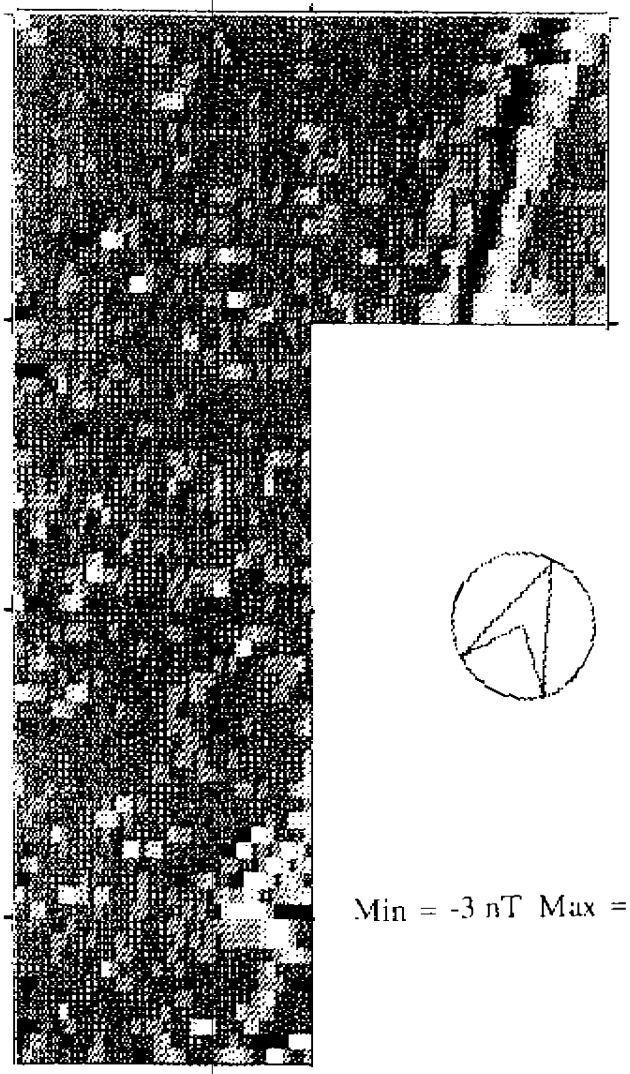


Figure 2.1

SHEPTON

Area 2



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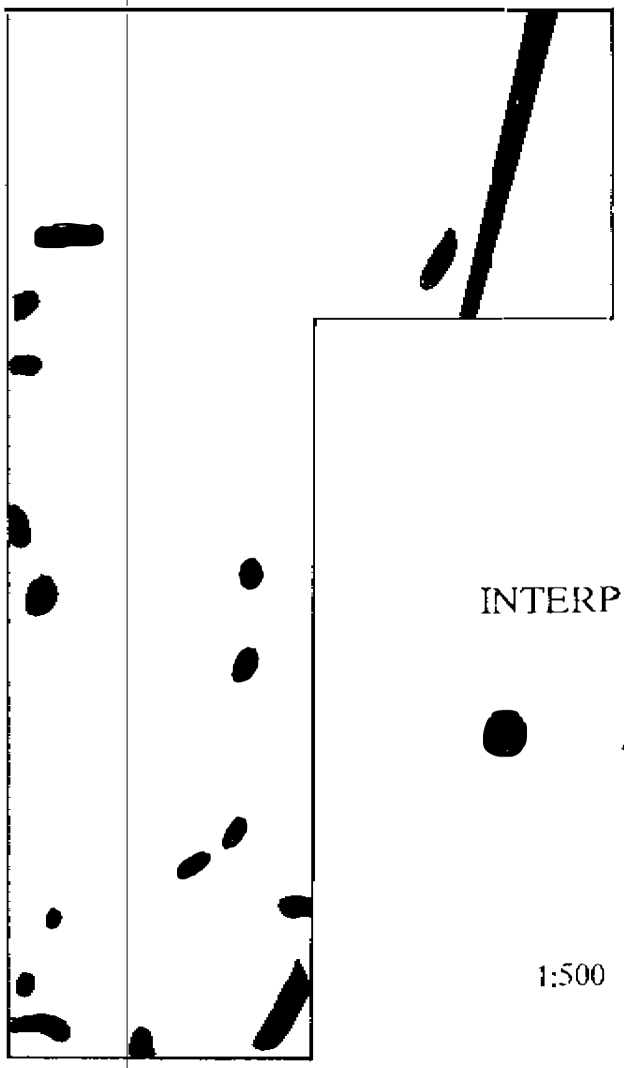

INTERPRETATION

Archaeology ?

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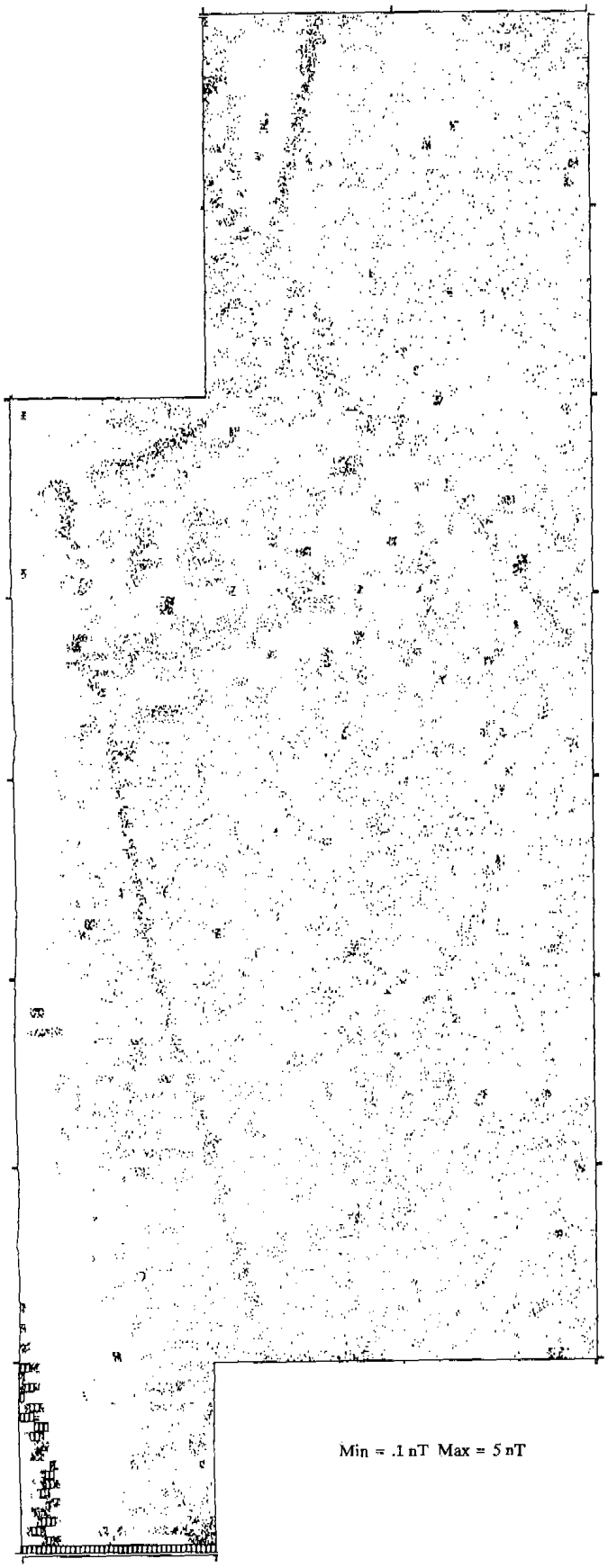
Figure 2.2

SHEPTON

Area 3



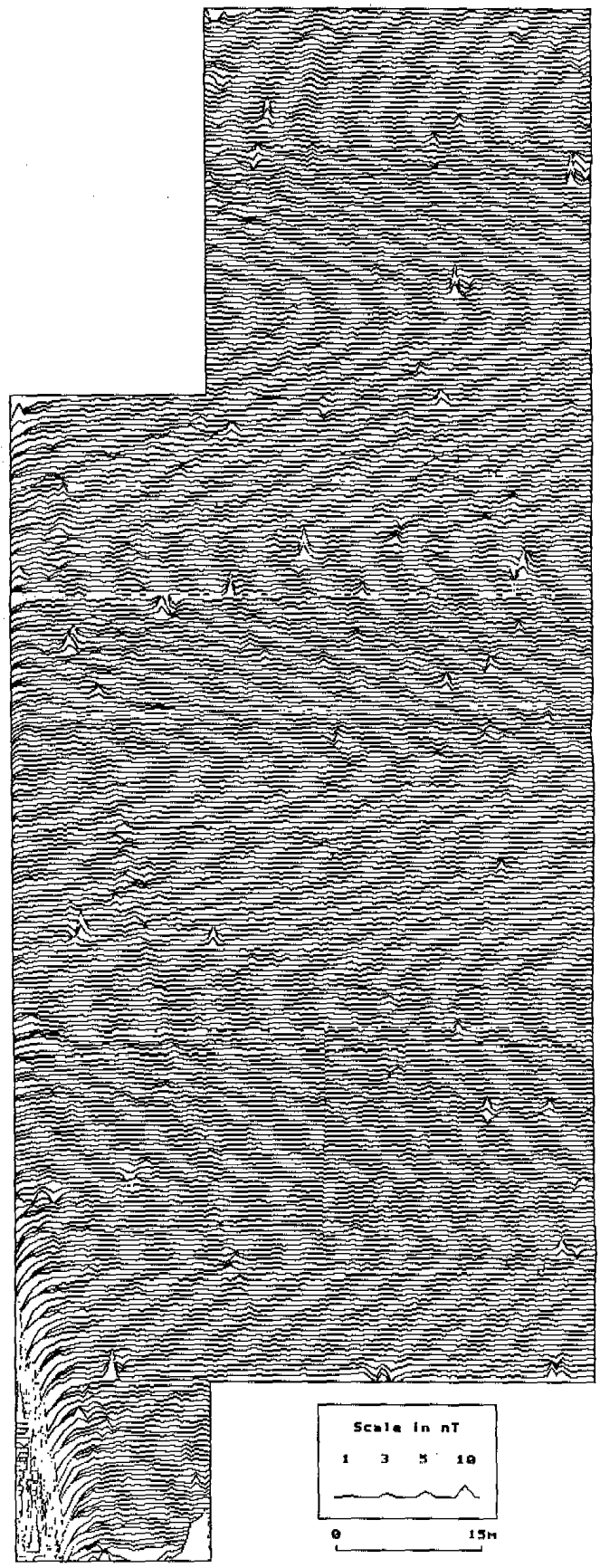


Figure 3.1

SHEPTON

Area 3

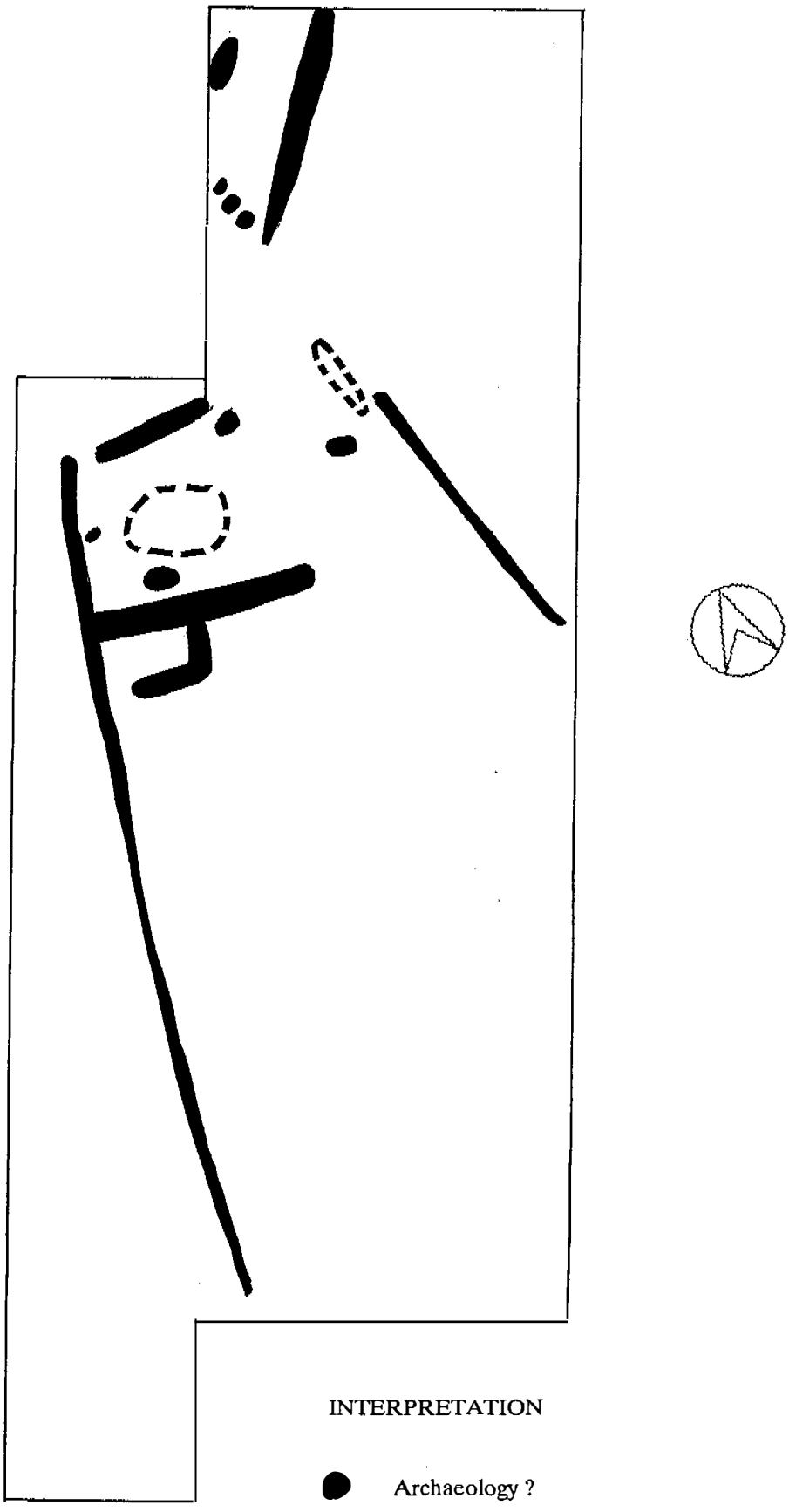
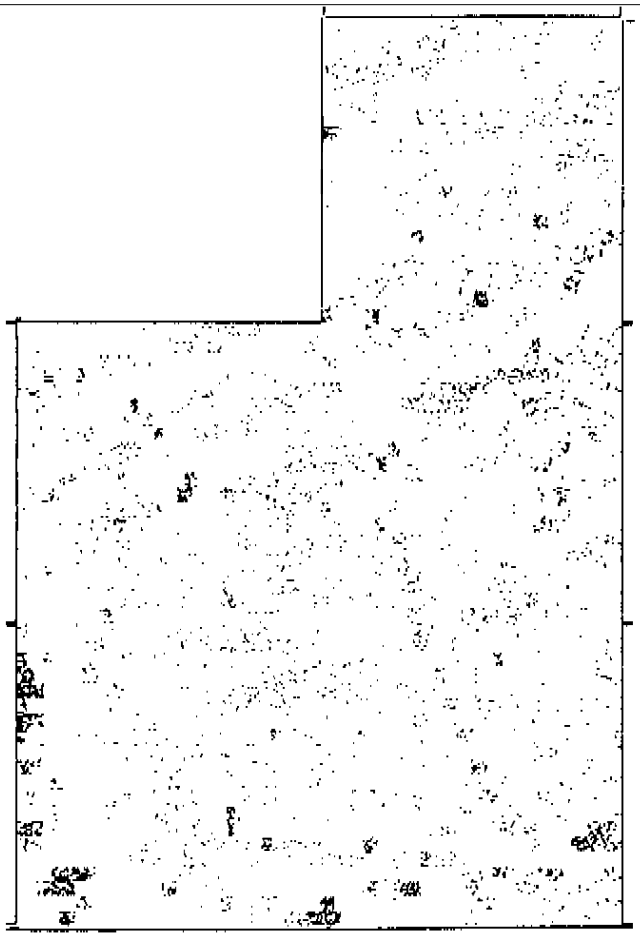


Figure 3.2

SHEPTON

Area 4



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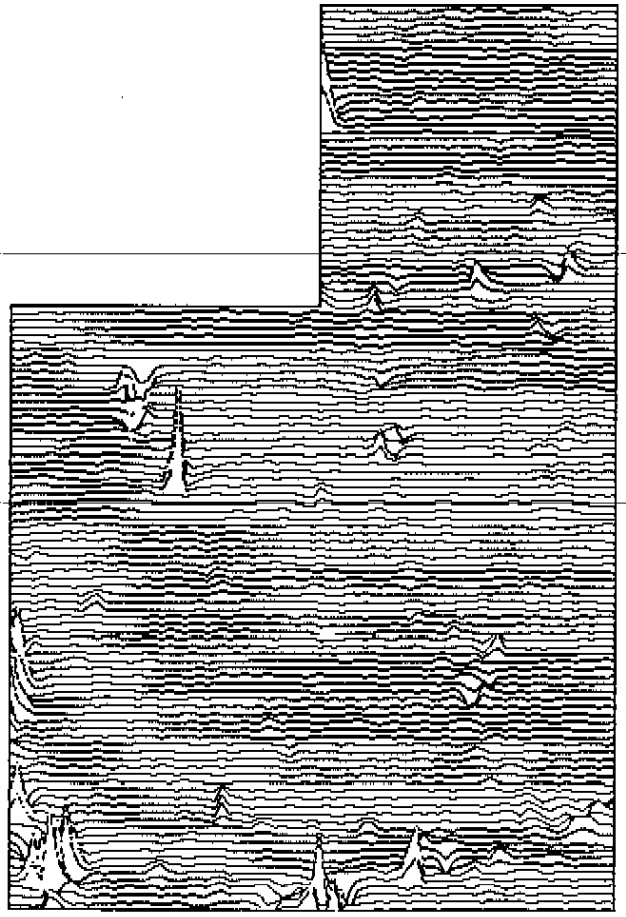


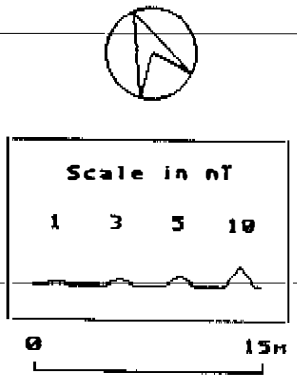
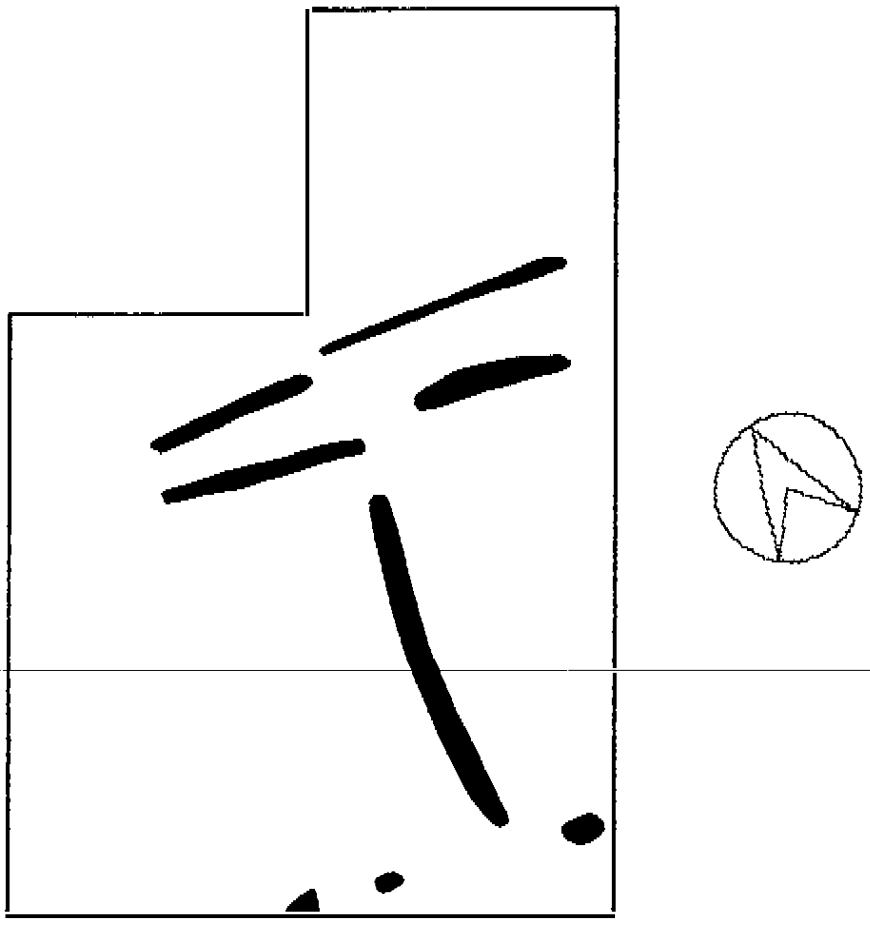


Figure 4.1

SHEPTON

Area 4



INTERPRETATION

Archaeology ?

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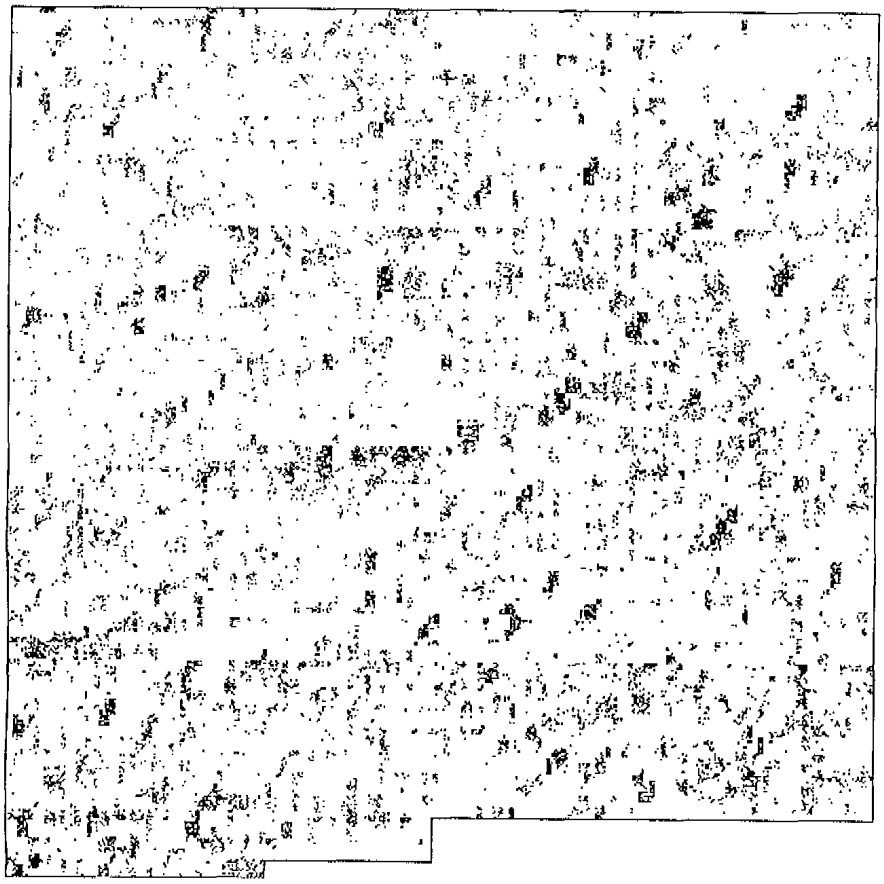
Figure 4.2

Shepton Mallet
Area 5



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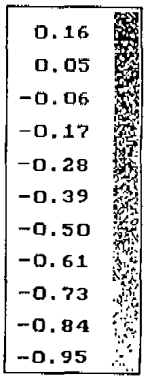
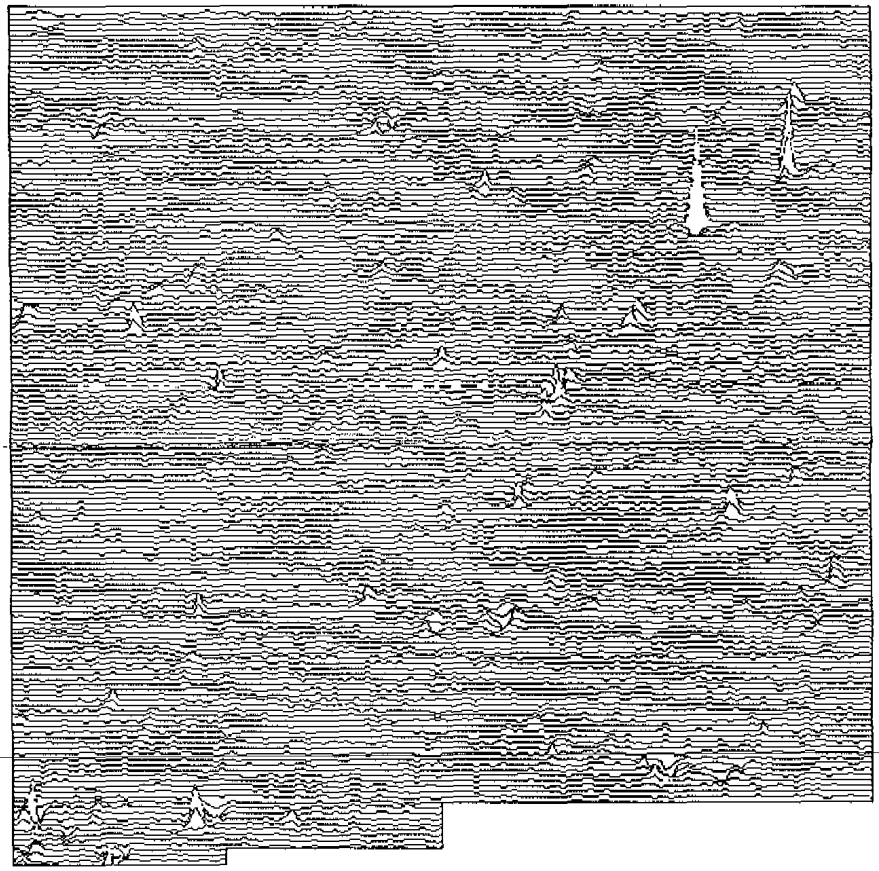




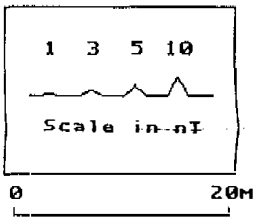
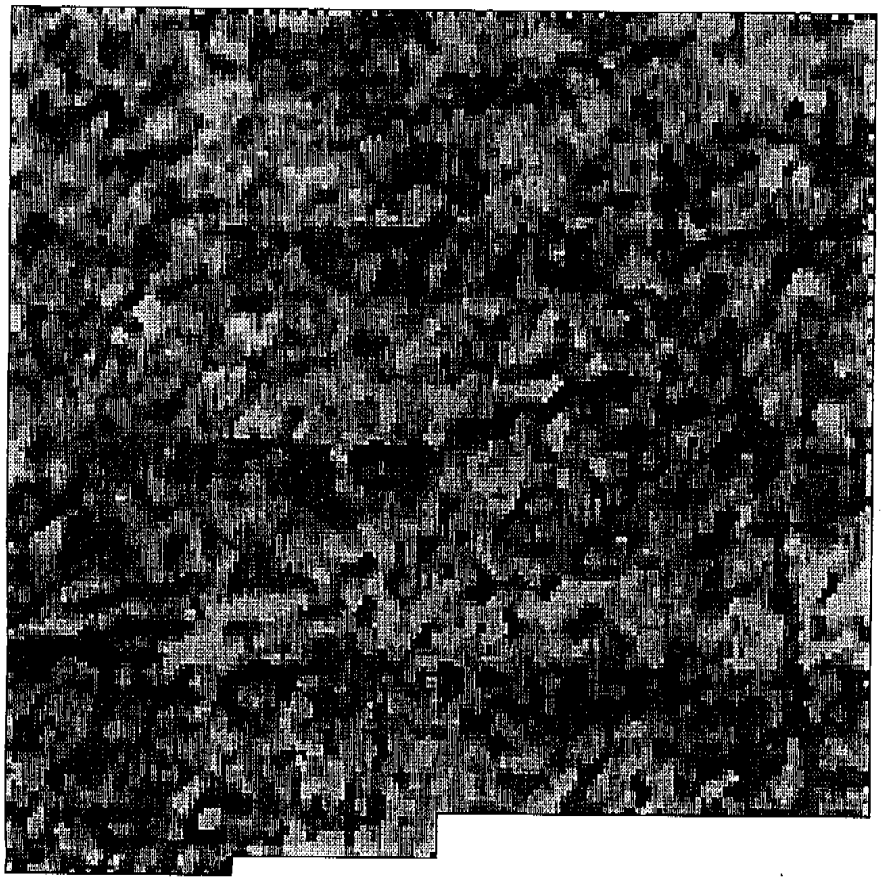


Figure 5.1

Shepton Mallet
Area 5



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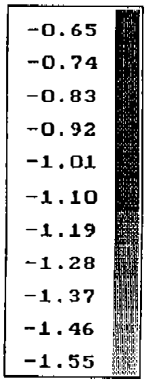

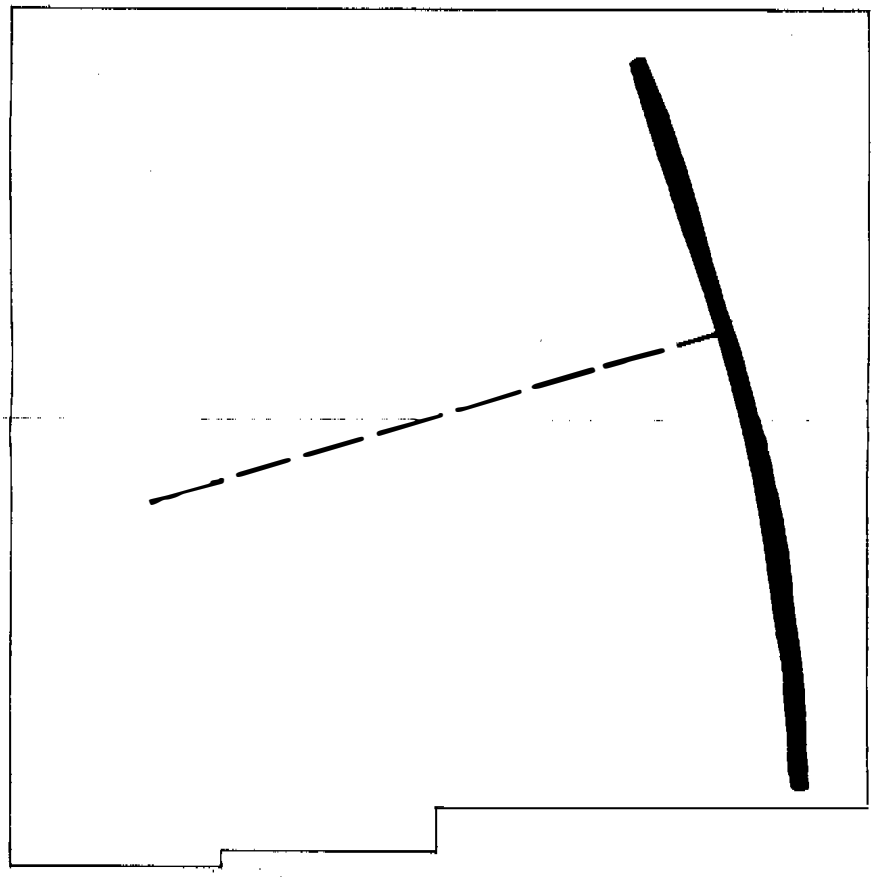

INTERPRETATION

Archaeology ?

Figure 5.2

Shepton Mallet
Area 6

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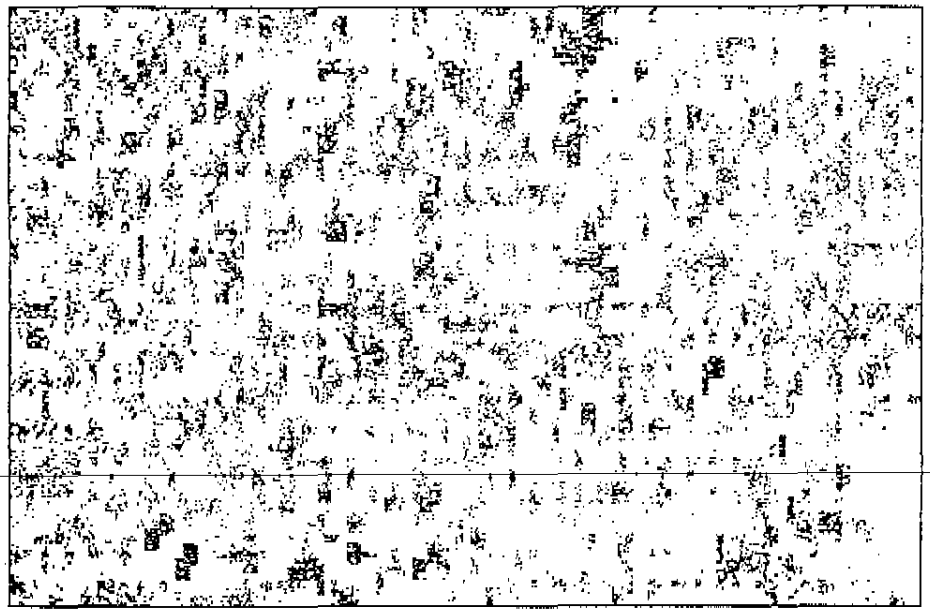

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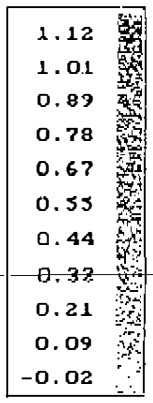

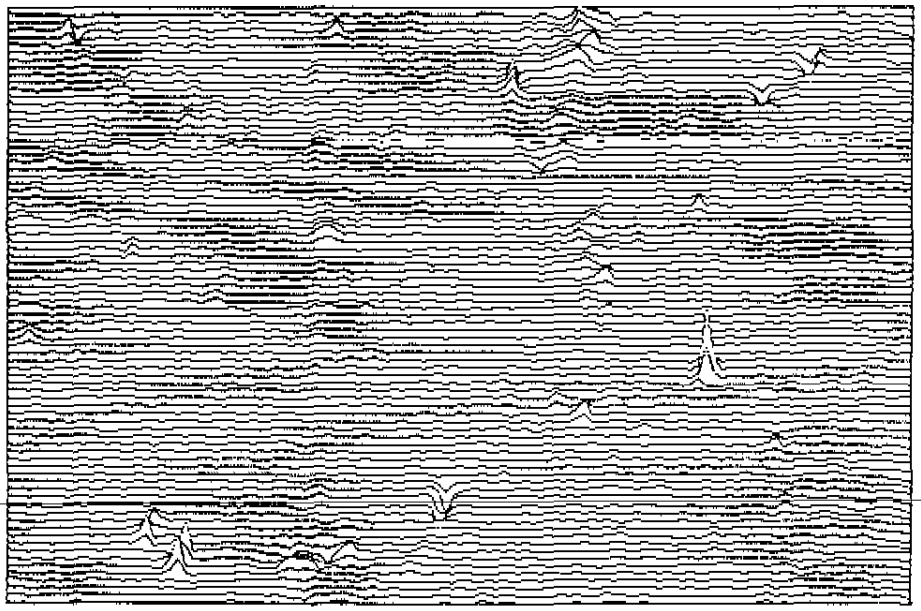

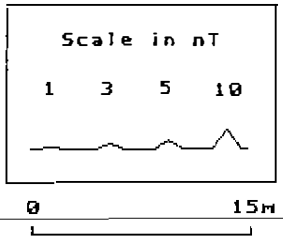

Figure 6.1

Shepton Mallet
Area 7

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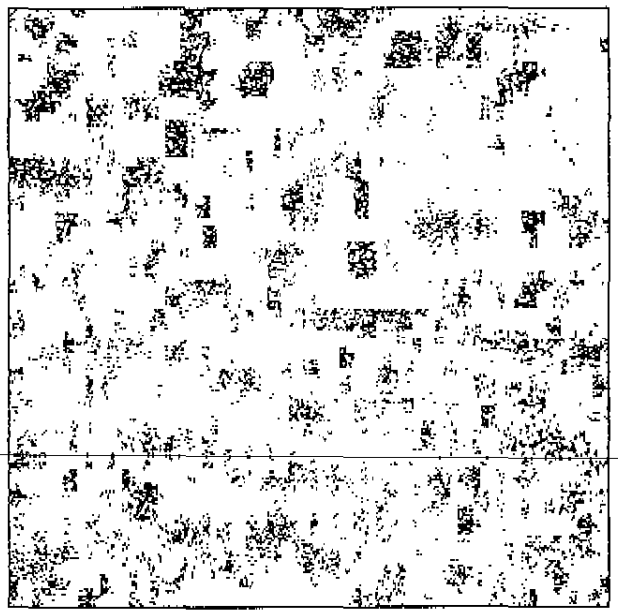
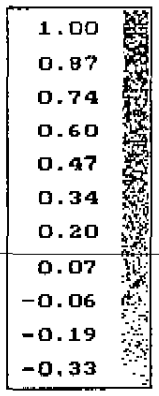
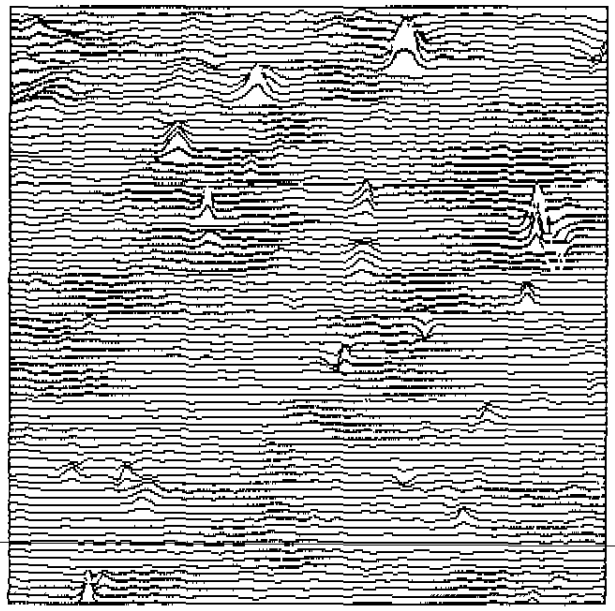






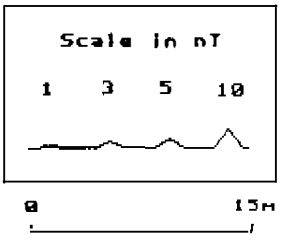
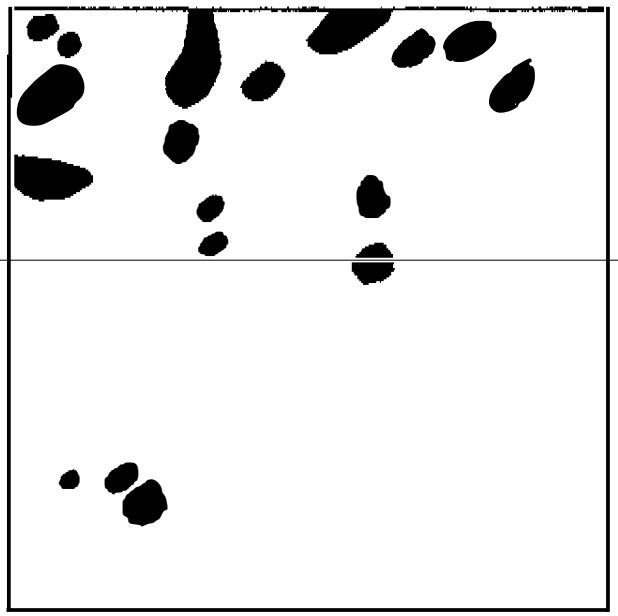


Figure 7.1

SHEPTON

Area 7



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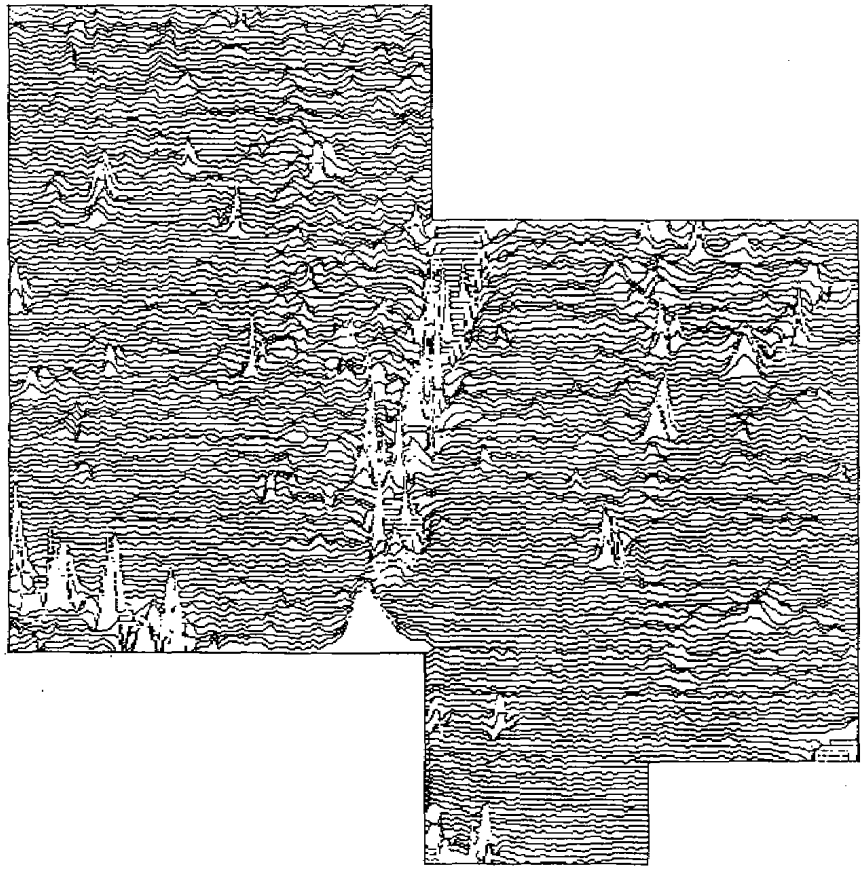
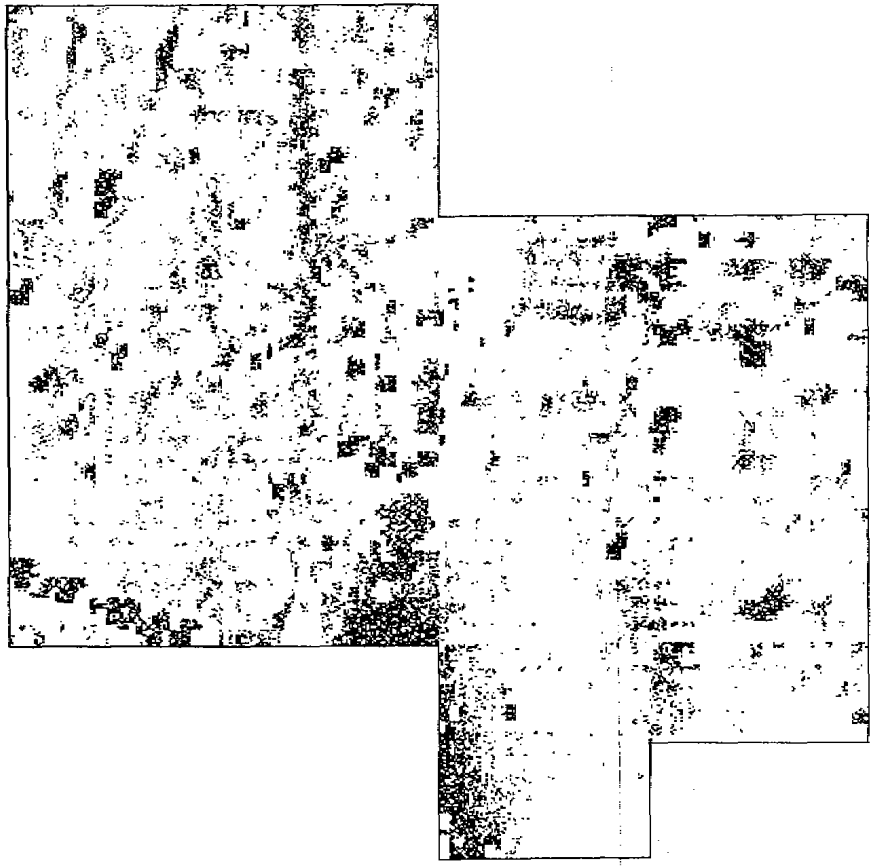
INTERPRETATION

Archaeology ?

Figure 7.2

Shepton Mallet
Area 8





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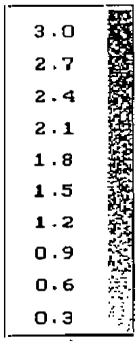

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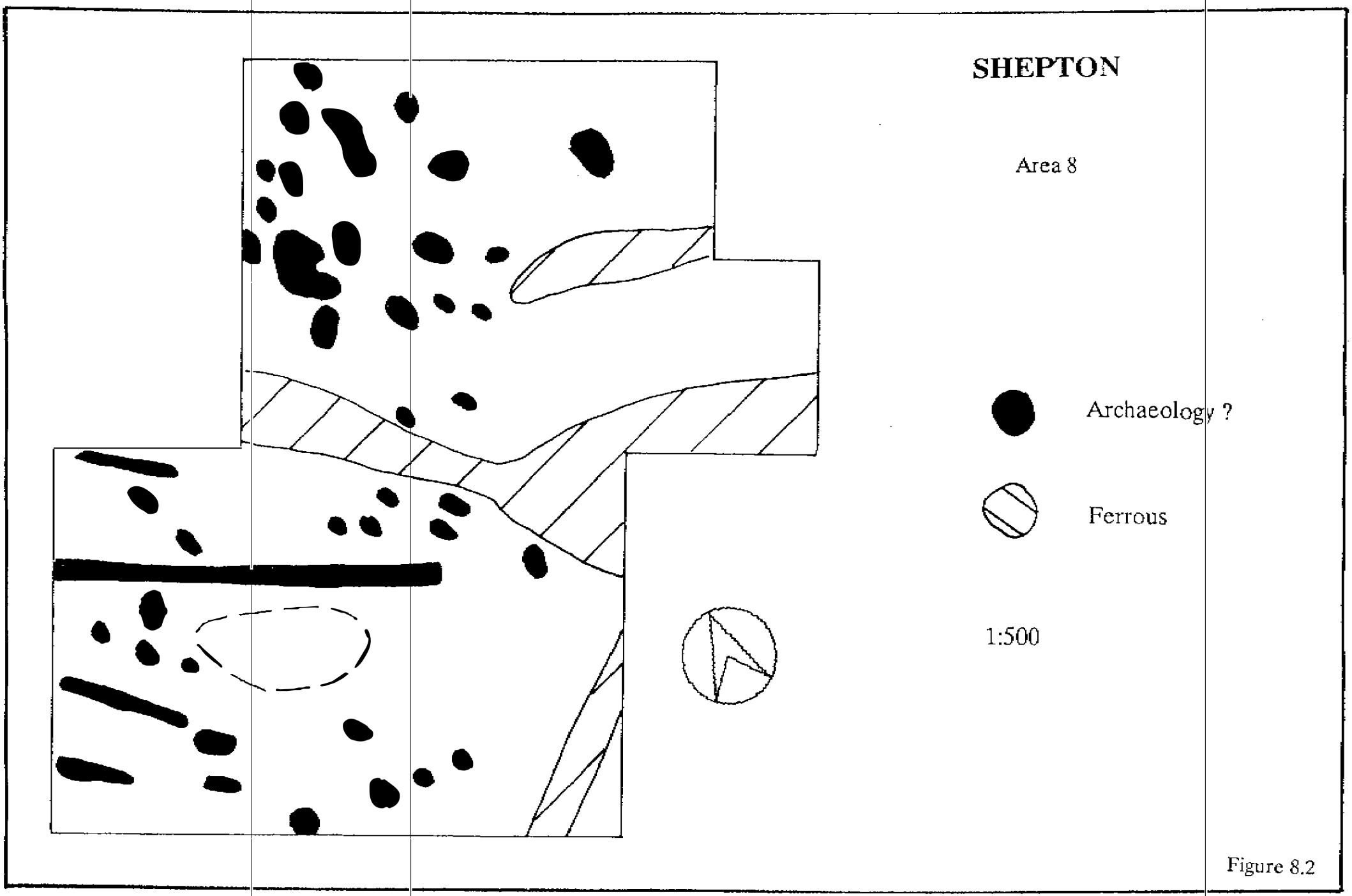

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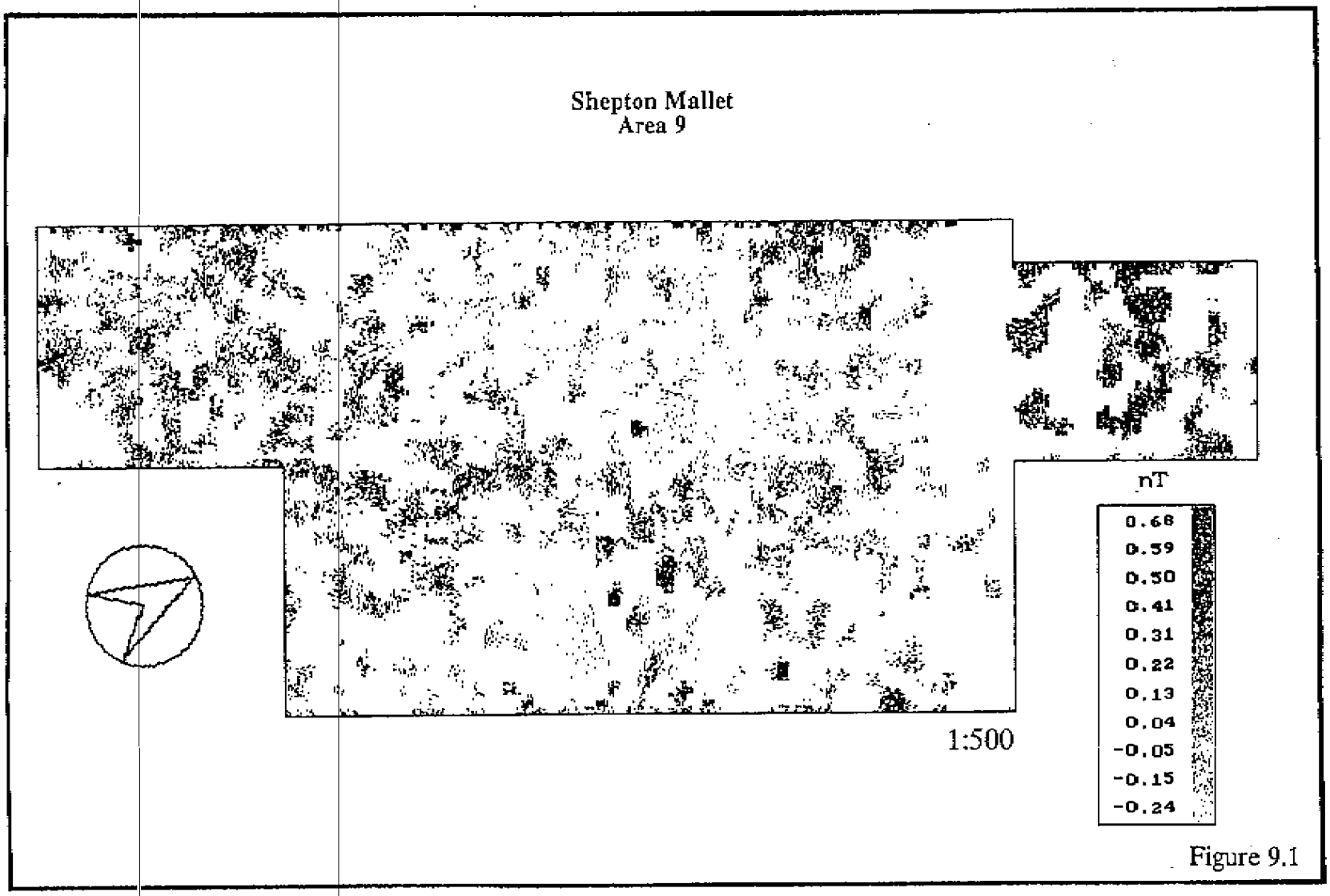
Shepton Mallet
Area 9
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Figure 9.1

Shepton Mallet
Area 9

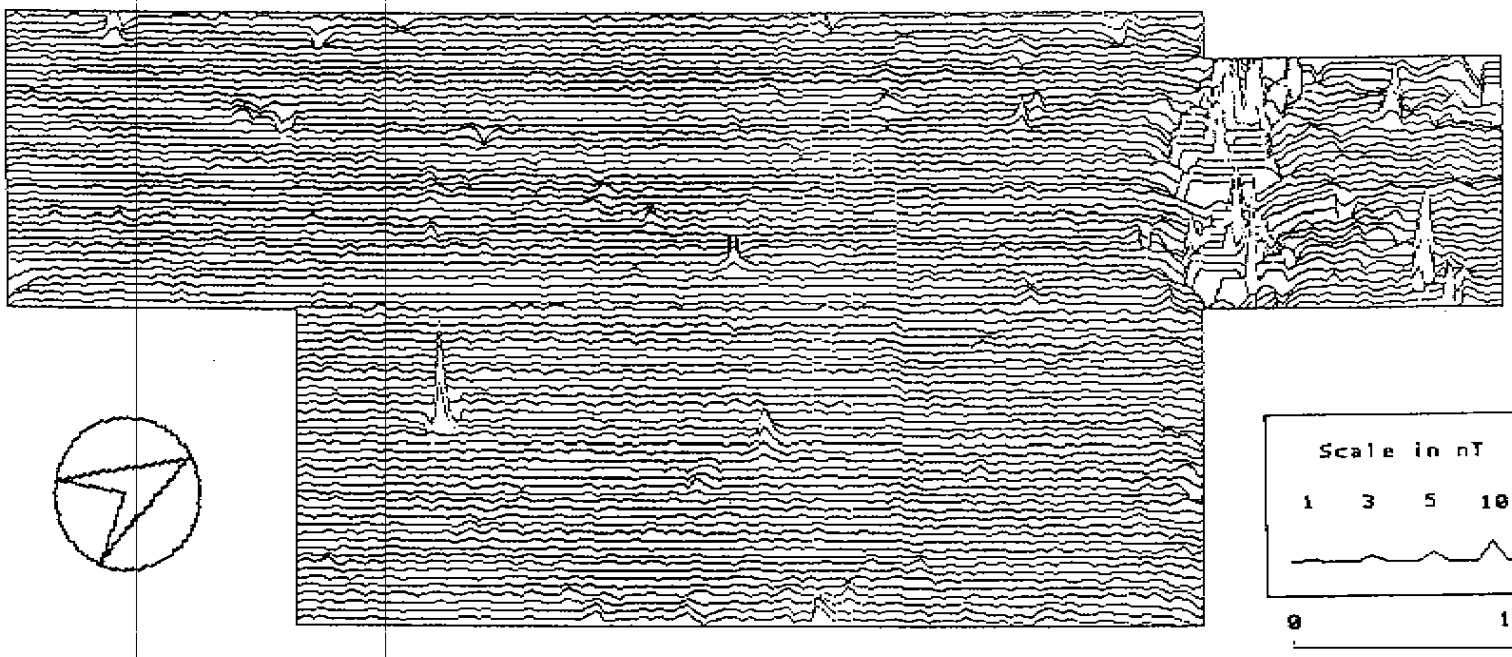


Figure 9.2

Shepton Mallet
Area 10

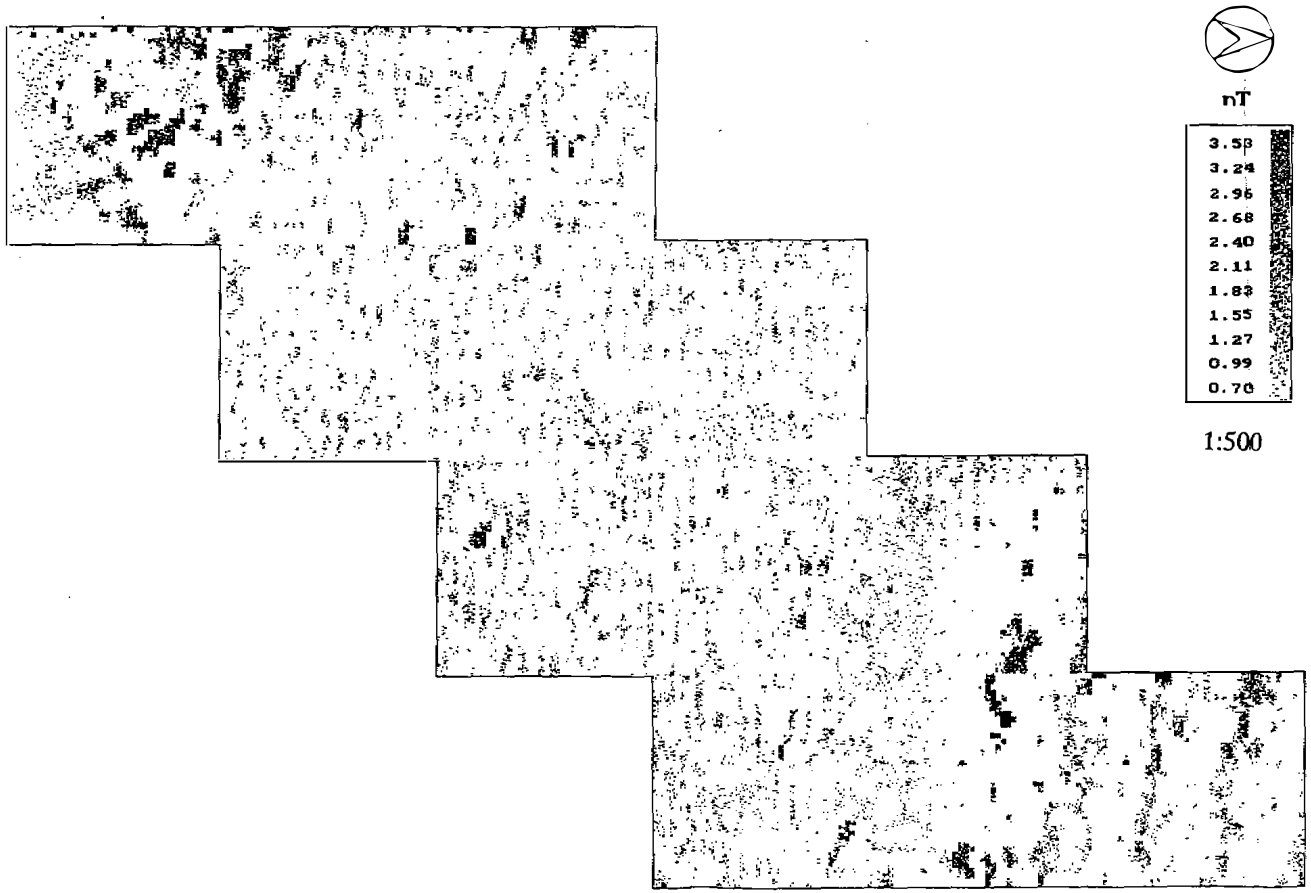


Figure 10.1

Shepton Mallet
Area 10

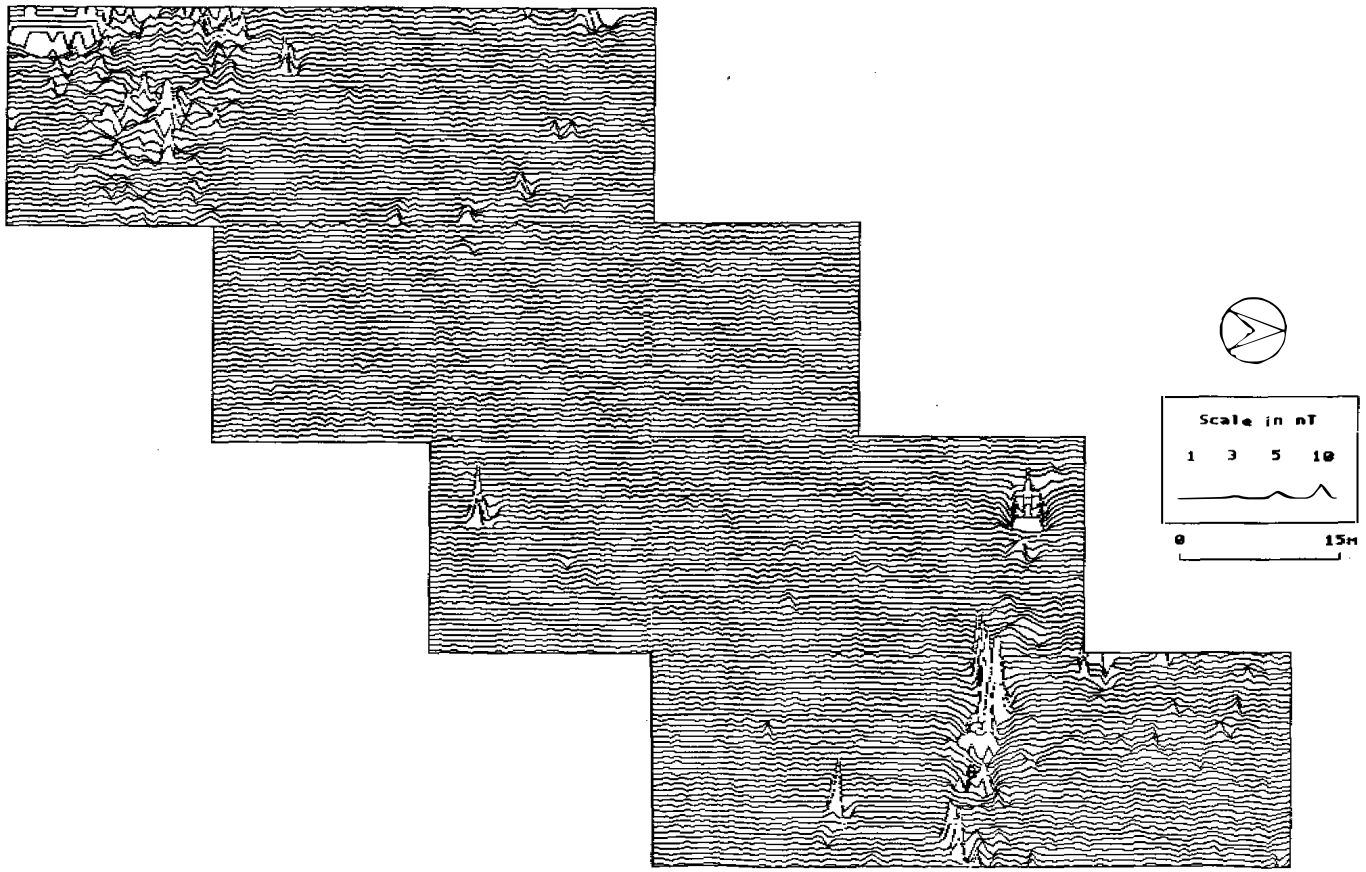
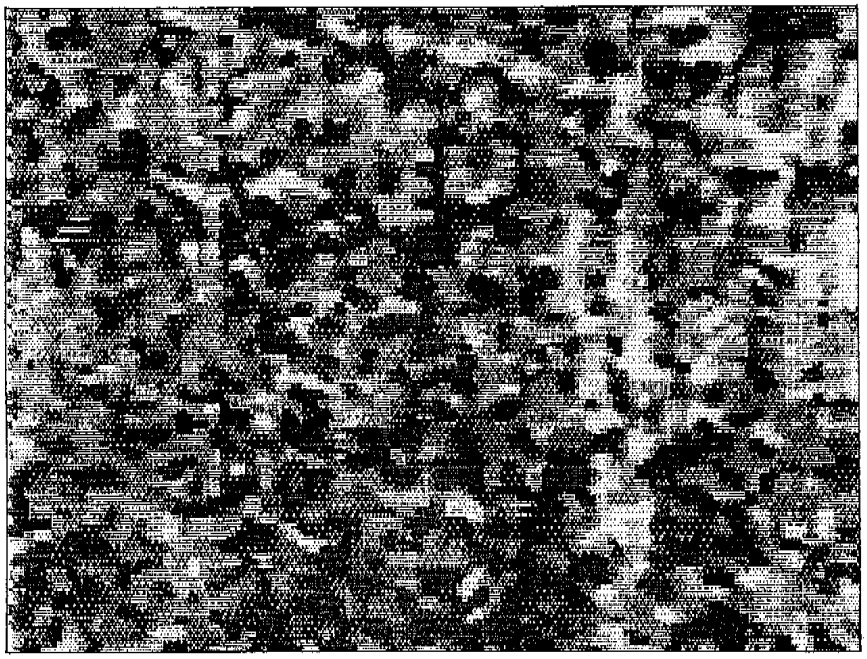
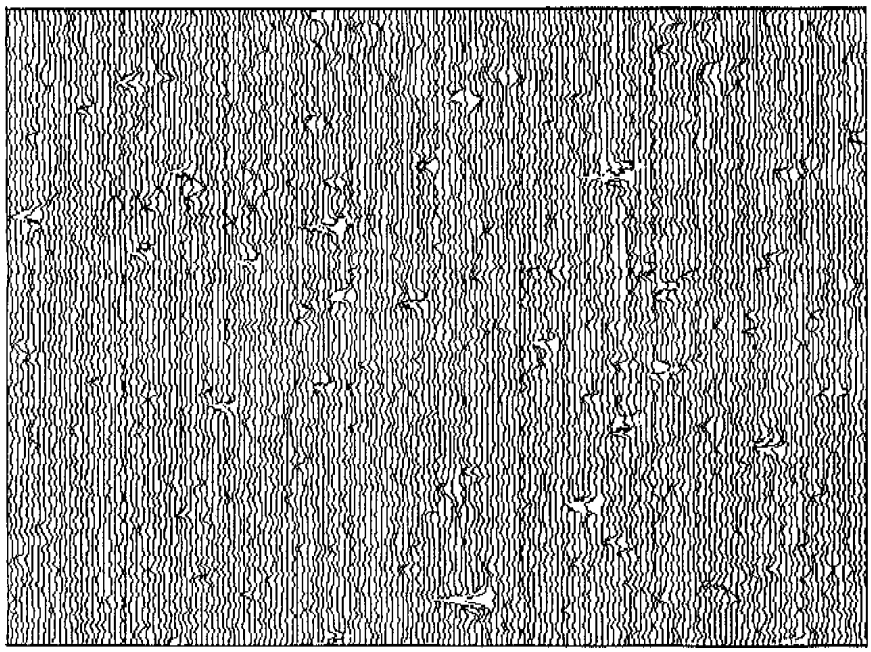
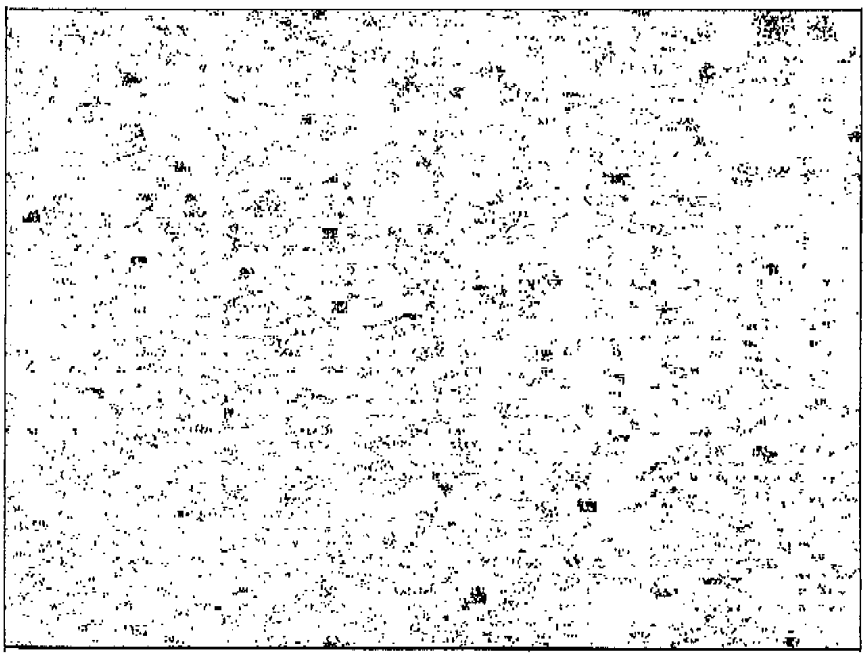


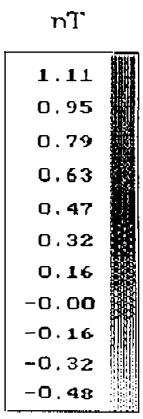
Figure 10.2

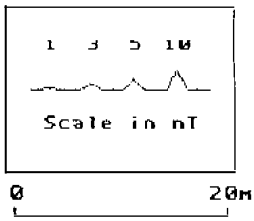
Shepton Mallet
Area 11











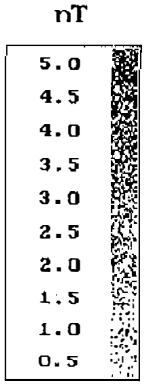


Figure 11.1