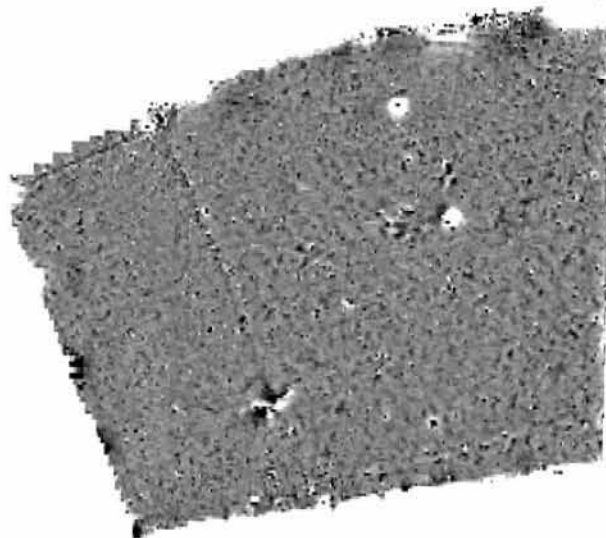




Northamptonshire  
County Council

# Northamptonshire Archaeology

Archaeological Geophysical Survey  
on Land at Stanway, Colchester,  
Essex  
September 2008



Ian Fisher and John Walford

October 2008

Report 08/183

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Verified by	Adrian Butler		03/11/08
Approved by	Andy Chapman		03/11/08

**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		
Project name	Archaeological Geophysical Survey on Land at Stanway, Colchester, Essex	
Short description	Northamptonshire Archaeology conducted an archaeological geophysical survey on land, located to the south-west of Colchester, Essex. Approximately 7ha of detailed gradiometer survey was carried out in seven fields. The survey identified four possible enclosures, former field boundaries and a dry valley.	
Project type	Geophysical survey	
Site status	None	
Previous work	None	
Current Land use	Agricultural	
Future work	Unknown	
Monument type/ period		
Significant finds	None	
<b>PROJECT LOCATION</b>		
County	Essex	
Site address	Colchester, Essex	
Study area	14 ha	
OS Easting & Northing	595200, 223000 – 595900, 223300	
Height OD	26m-36m AOD	
<b>PROJECT CREATORS</b>		
Organisation	Northamptonshire Archaeology	
Project brief originator	Andrew Josephs Ltd	
Project Design originator	Andrew Josephs Ltd	
Director/Supervisor	John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	Tarmac Quarry Products Ltd	
<b>PROJECT DATE</b>		
Start date	September 2008	
End date	September 2008	
<b>ARCHIVES</b>	<b>Location</b>	<b>Content</b>
Physical	n/a	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
<b>BIBLIOGRAPHY</b>		
Title	Journal/monograph, published or forthcoming, or unpublished client report	
Serial title & volume	Archaeological Geophysical Survey on Land at Stanway, Colchester, Essex	
Author(s)	NA Report 08/183	
Page numbers	Ian Fisher & John Walford	
Date	9	
	03/11/08	

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# ARCHAEOLOGICAL GEOPHYSICAL SURVEY ON LAND

## AT STANWAY, COLCHESTER, ESSEX

SEPTEMBER 2008

### ABSTRACT

*Northamptonshire Archaeology conducted an archaeological geophysical survey on land, located to the south-west of Colchester, Essex. Approximately 7ha of detailed gradiometer survey was carried out in seven fields. The survey identified four possible enclosures, former field boundaries and a dry valley.*

## 1 INTRODUCTION

Northamptonshire Archaeology was commissioned by Andrew Josephs Ltd, on behalf of Tarmac Quarry Products Ltd, to undertake an archaeological geophysical survey on land south-west of Colchester, Essex (NGR TL 956, 232; Fig 1). The work was undertaken to support a planning proposal for the expansion of the existing sand and gravel quarry to the south.

The objectives of the geophysical survey were to identify the presence or absence of archaeological remains within the proposed development area. The programme consisted of a detailed gradiometer survey of approximately 7ha area of land.

## 2 TOPOGRAPHY AND GEOLOGY

The proposed quarry extension is located within the civil parish of Stanway, south-west of Colchester. The site comprises a group of eleven fields totalling 14ha. The site is currently under a mixed cultivation regime, with some fields in arable use and others containing orchards. At the time of survey, seven of the eleven fields were surveyable (7ha).

The area is mapped by the British Geological Survey as being London Clay, with superficial deposits of Glacial Sand and Gravel (BGS 1:625,000 geology map: [www.bgs.ac.uk/geoindex](http://www.bgs.ac.uk/geoindex) accessed 28/10/08).

### 3 ARCHAEOLOGICAL BACKGROUND

The field pattern has changed very little since the late 19th century, other than for the addition and removal of hedge lines to increase field numbers or size. In 1939, it was documented that much of the area was woodland (Essex 1:2,500 map, 1939: [www.old-maps.co.uk](http://www.old-maps.co.uk) accessed 28/10/08).

### 4 METHODOLOGY

Geophysical survey was carried out in accordance with the Method Statement (NA 2008) and English Heritage and the Institute of Field Archaeologists Guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002). Seven fields were subject to geophysical survey.

#### Detailed Gradiometer Survey

All detailed magnetometer survey was undertaken using Bartington Grad601-2 fluxgate gradiometers. The Grad601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem.

Seven blocks were surveyed in detail in Fields 1-7. The detailed gradiometer survey was composed of a total of 101 whole and partial, 30m x 30m grid-squares. Each grid square was traversed at rapid walking pace in zigzag mode; and data was recorded every 0.25m along traverses spaced at 1.0m separations. All fieldwork was carried out in accordance with the aforementioned guidelines (EH 2008 & Gaffney, Gater and Ovendon 2002).

The data was analysed using Geoplot 3.00u software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greytone plots. To avoid the introduction of processing errors, minimal manipulation was carried out on the data. The 'Zero Mean Traverse' function was applied in order to bring the average level of each data line into a balanced zero.

The processed data is presented here in the form of a greyscale highlighting the weaker magnetic anomalies (-4nT / +4nT scale; Figs 2, 3, 5, and 7) georectified to the Ordnance Survey base. Interpretative plots have been generated from the results (Figs 4, 6, and 8), both sets of figures are referred to directly in the following section.

## 5 SURVEY RESULTS

### Detailed Gradiometer Survey

#### Field 2 (Figs 3 & 4)

The survey identified two positive magnetic linear anomalies that may be archaeologically significant. The first ditch was orientated east to west, located in the north of the survey area. The second was located in the south of the survey area and extended north-east into Field 3. The survey also traversed a dry valley, evident in the field. This was recorded as three linear anomalies, orientated north-east to south-west and can be seen to extend into Field 3 (geological feature). A single ferrous anomaly was identified and represents a manhole cover.

#### Field 3 (Figs 3 & 4)

In the south of the survey area, three positive linear anomalies were detected, possibly part of a rectilinear enclosure. The long axis is orientated north to south and extends towards Field 2, but it is not visible in the data from Field 2. The dry valley continues and extends northwards, represented by a single curving anomaly. The survey also identified two ferrous anomalies, indicating manhole covers.

#### Field 4 (Figs 3 & 4)

No significant anomalies were detected. However, only a small area was surveyed.

#### Field 5 (Figs 5 & 6)

The survey did not identify any significant archaeological remains.

#### Field 7 (Figs 7 & 8)

The survey was hindered by tree planting; survey was only possible in between lines of trees. The survey results do not show any significant anomalies.

#### Field 9 (Figs 5 & 6)

Three possible archaeological anomalies were identified adjacent to the eastern boundary. These included a sinuous positive linear anomaly, orientated east to west, a length of ditch that may form part of a sub-rectangular enclosure. Immediately south, the survey detected a curving anomaly. It may be part of an enclosure that extends towards Field 10. A second curvilinear anomaly (an oval enclosure) was identified further south. In the western part of the survey area, former field boundaries were recorded. A linear anomaly orientated north-west to south-east is visible on the

1934 Ordnance Survey 1:2,500 map for Essex and indicates that Field 9 was previously two fields and that the anomaly detected is a former field boundary ([www.old-maps.co.uk](http://www.old-maps.co.uk) accessed 28/10/08). Two more field boundaries, orientated north-east to south-west were identified. Two ferrous anomalies, of unknown provenance, were also detected.

**Field 11 (Figs 7 & 8)**

No significant anomalies were detected by the survey

**6 CONCLUSION**

The survey successfully identified anomalies relating to archaeological and geological features and former field boundaries. Four possible enclosures were recorded, a rectangular feature in Field 3 and two ovoid and one possible sub-rectangular enclosure in Field 9 as well as a dry valley in Field 3. No other significant anomalies were identified.



## BIBLIOGRAPHY

EH, 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

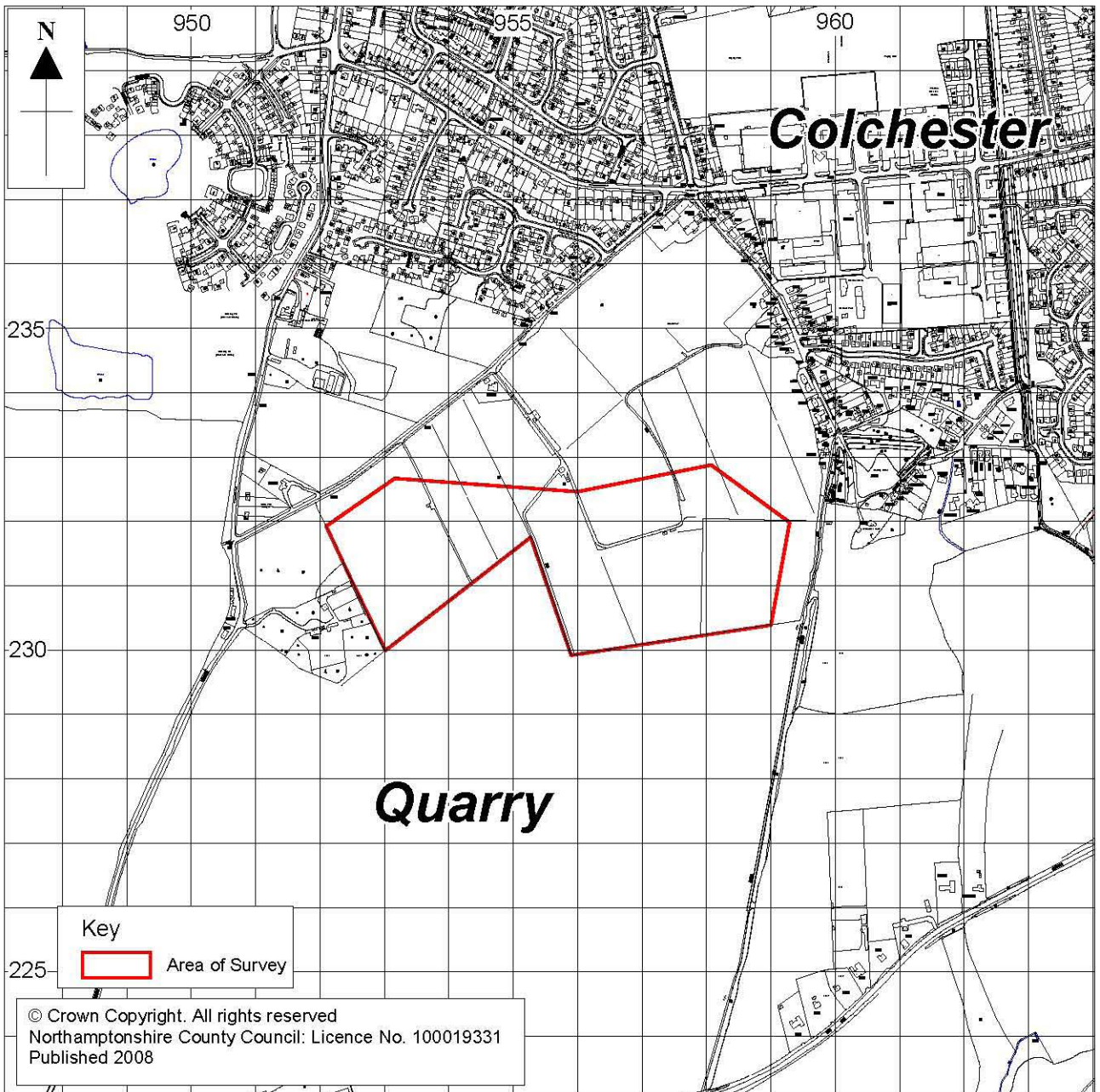
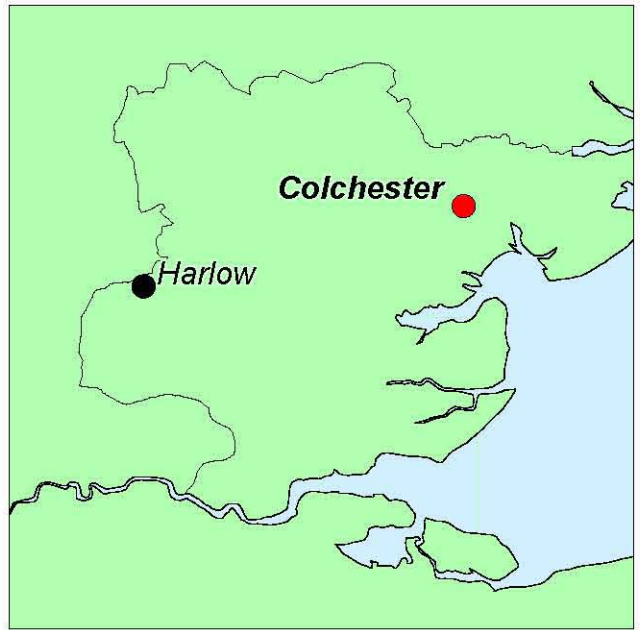
Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, 6

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Northamptonshire Archaeology

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3 November 2008



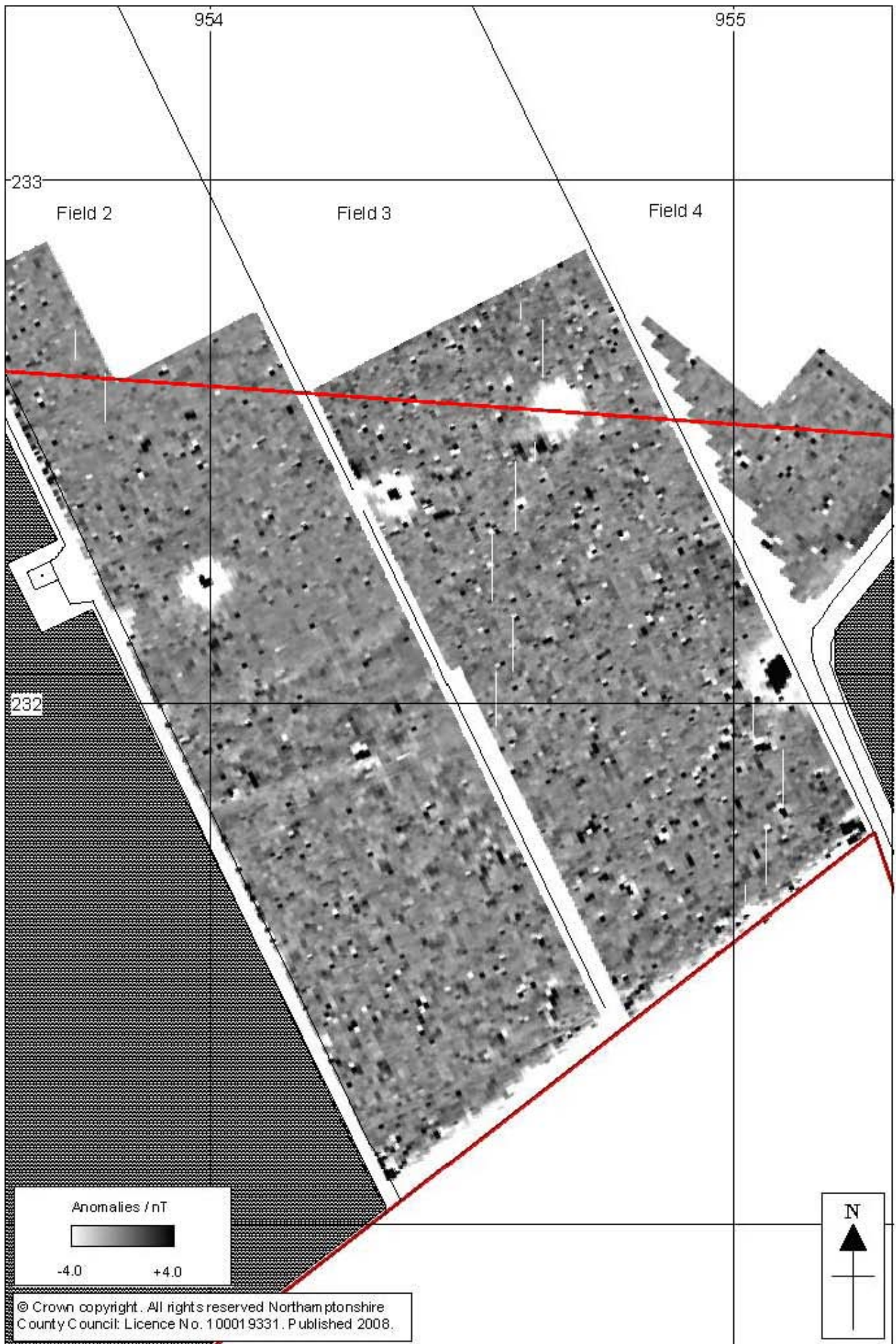
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Site Location Fig 1







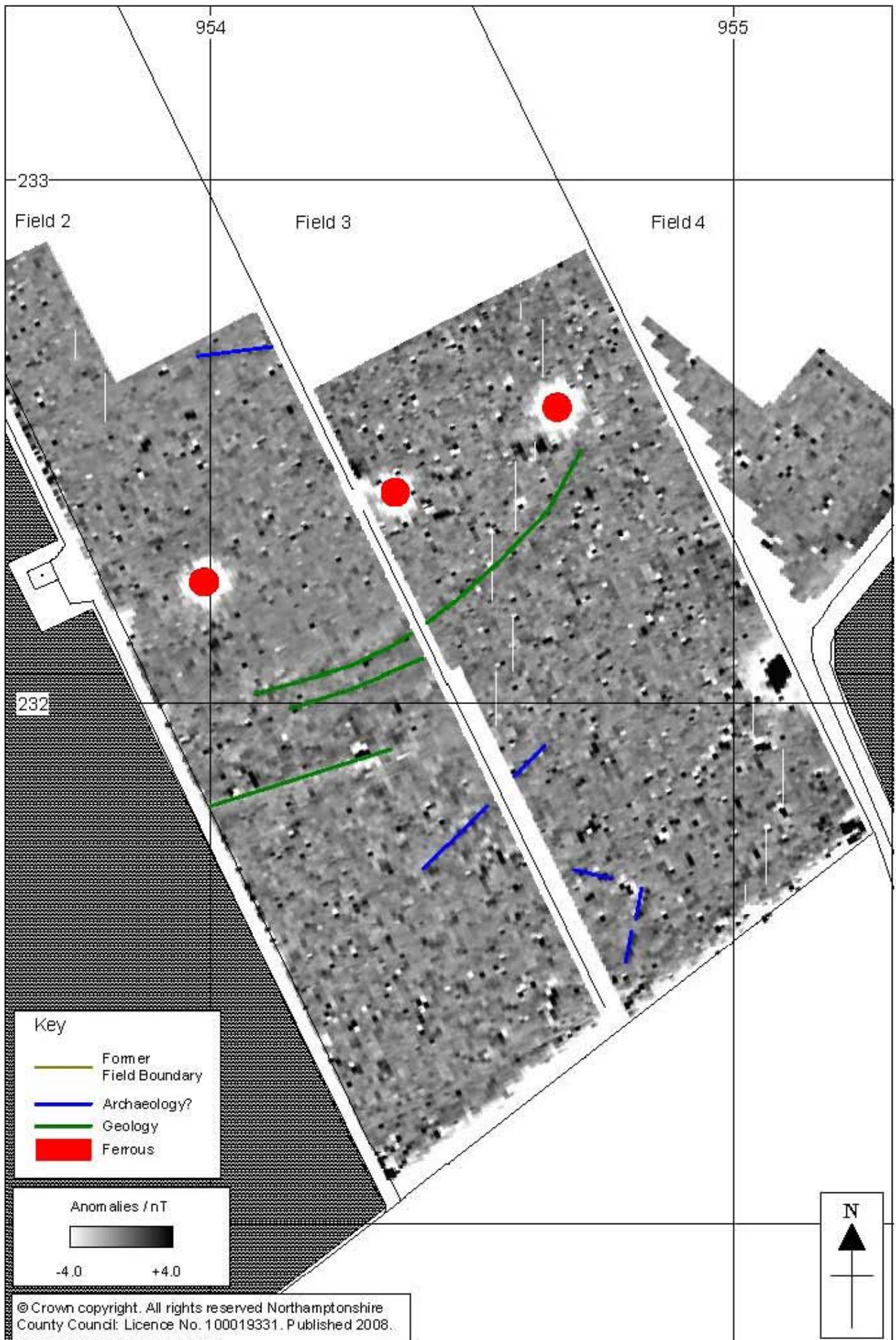


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Detailed Gradiometer Results Fields 2, 3 & 4 Fig 3

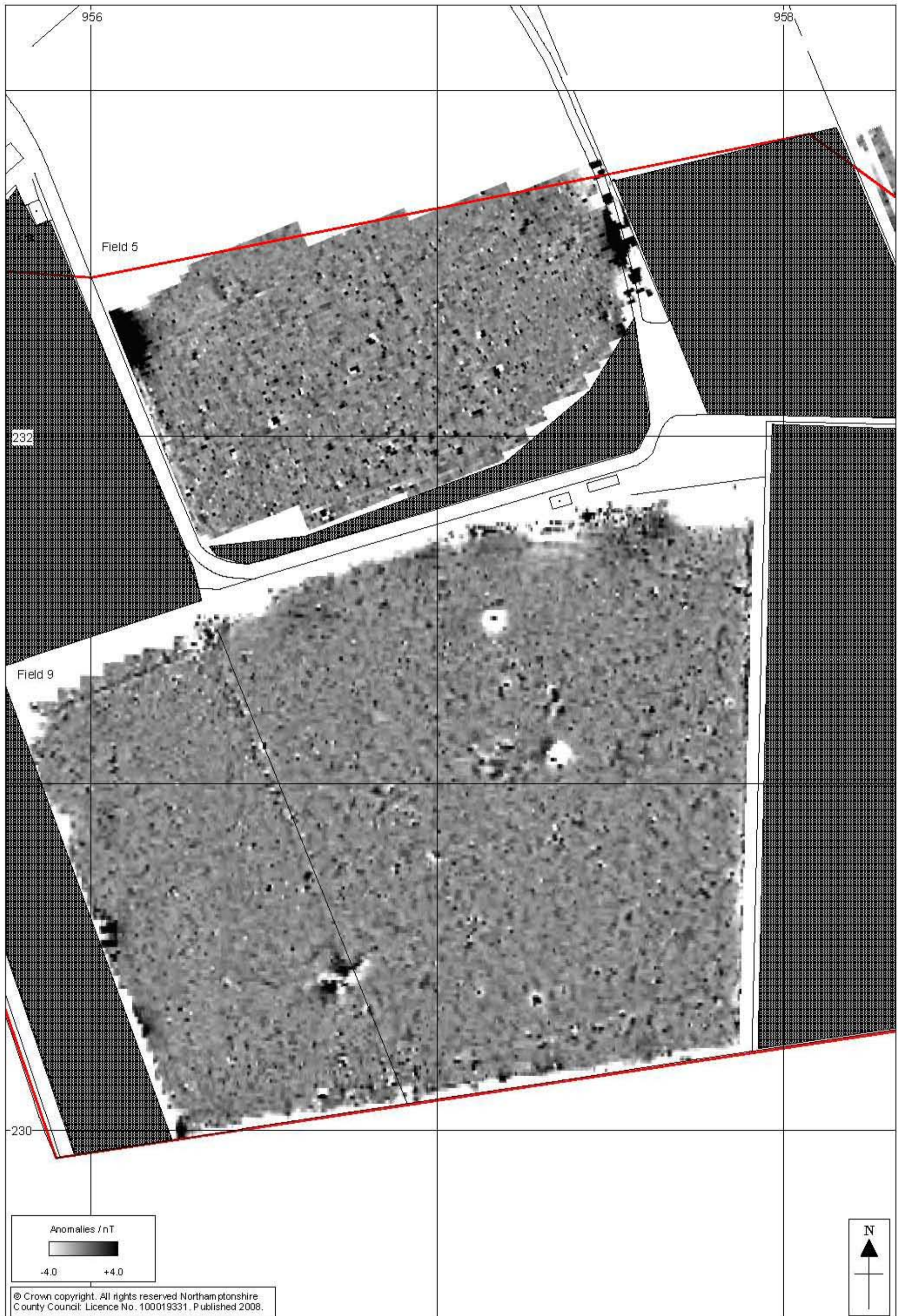




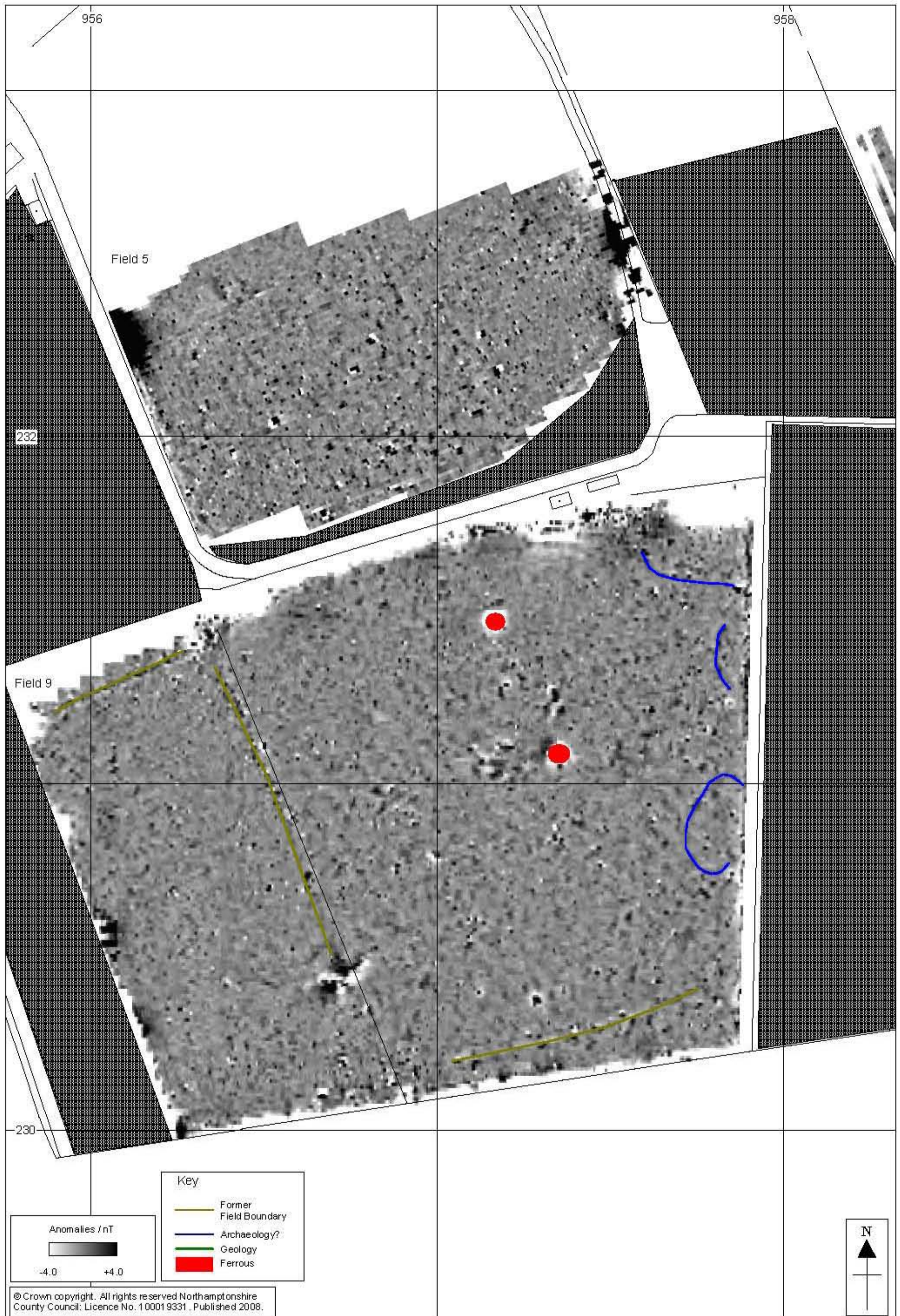
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Detailed Gradiometer Interpretation Fields 2, 3 & 4 Fig 4

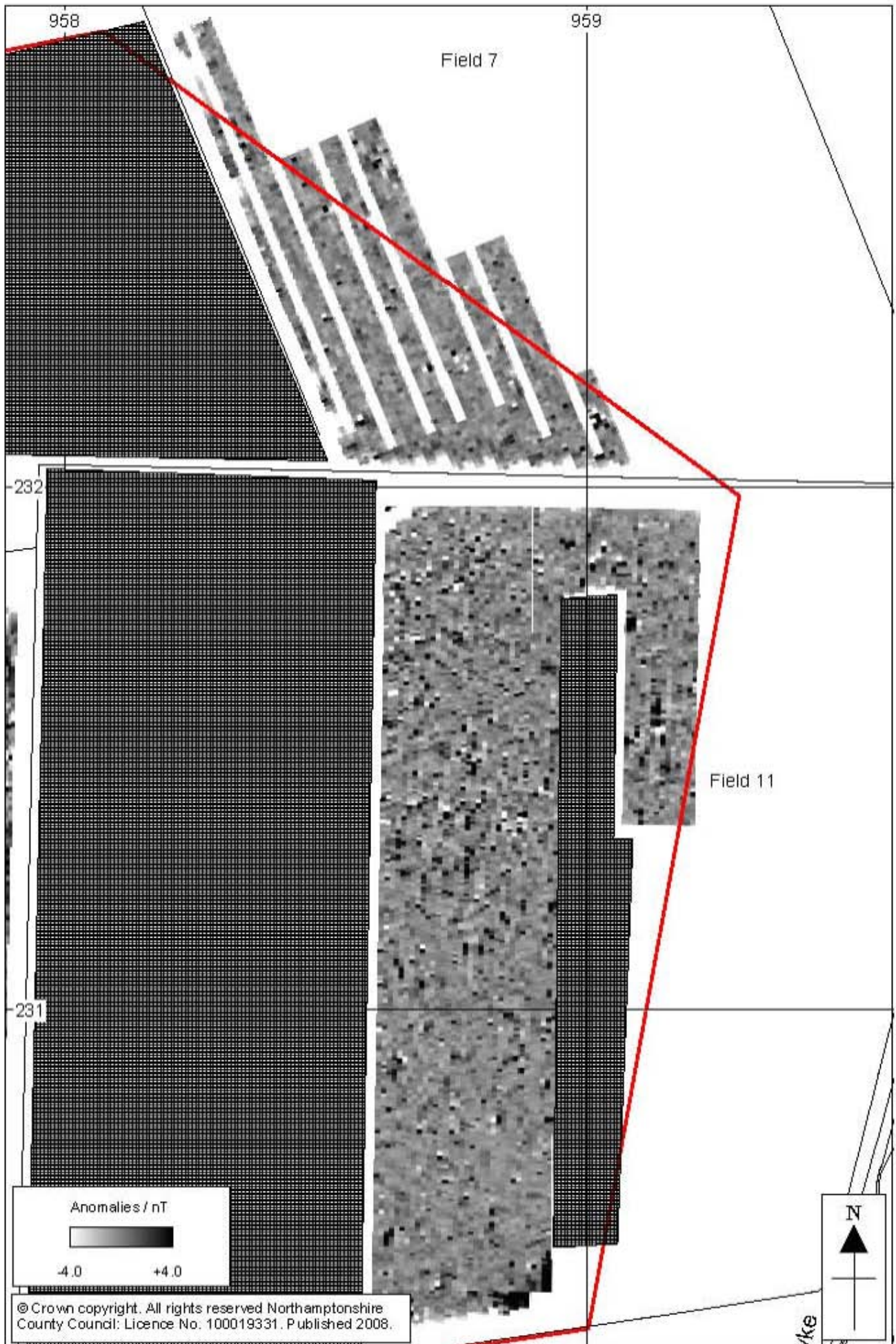










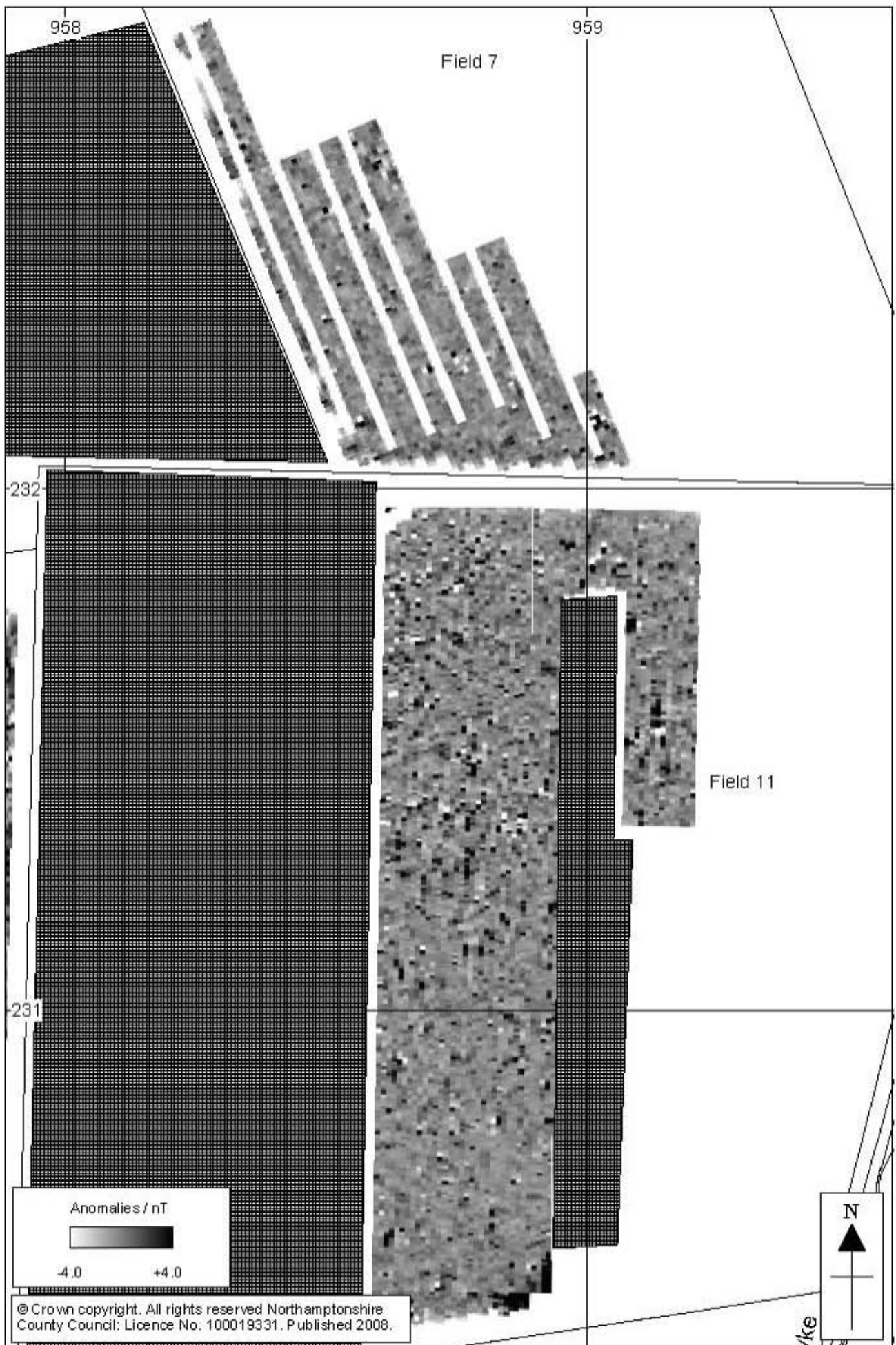


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Detailed Gradiometer Results Fields 7 & 11

Fig 7





Scale 1:1000 @ A4

Detailed Gradiometer Interpretation Fields 7 & 11 Fig 8