

ABINGDON ARCHAEOLOGICAL GEOPHYSICS

4 Sutton Close, Abingdon, Oxon OX14 1ER

tel. 01235 529720 website www.archaeologicalgeophysics.co.uk

email: archgeophys@hotmail.co.uk

Blacklands, Swalcliffe lea, Oxfordshire

2018- 09R

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Survey approximately located on Google earth air photo.

Author	Roger Ainslie, Abingdon Archaeological Geophysics
Client	Keith Westcott
Report reference no	2018 - 09Rv2
Date	10 May 2021

1 Summary

This is a reduced version of our 2018 report to concentrate on the geophysics and avoid repeating details of geophysics methods and previous work, which can be found elsewhere.

This was a 330m x 30m line of magnetometry grids to test whether the Historic England reassessment of the area resulting in the remains being downgraded to "About ten minor buildings and a villa complex... located along a road..." was justified.

It found indications of remains on 3 alignments indicating some complexity of settlement. The high magnetometry readings support earlier theories of iron working in the area.

In retrospect it is suggested that Historic England could use their own geophysics team to survey areas as part of any reassessment arrangements.

2 Introduction

Name of site:

Blacklands, Swalcliffe lea, Oxfordshire.

Purpose

Research to see whether magnetometry could add to the fieldwalking by the North Oxon Field Archaeology Group.

site location,

Blacklands, Swalcliffe lea, **grid ref**, SP3903 3861 NE corner of grid 1 at 438910.0E 238620.0N **Postcode** OX15 6ET **County**, Oxfordshire **District** Cherwell, **Parish** Swalcliffe

client

Keith Westcott

History

This area has been known to contain remains for over 100 years. The Historic England Pastscape system lists several sources, although the North Oxon Field Archaeology Groups fieldwalking reported in South Midlands Archaeology for 1998 is a major omission. A reassessment of remains in the area by Historic England however has downgraded the remains to "About ten minor buildings and a villa complex... located along a road..." This would have no remains in the area we surveyed.

Geology at site

The geology, from the geology of Britain viewer is Whitby Mudstone Formation - Mudstone. Sedimentary Bedrock formed in the Jurassic Period.
To its north and uphill is Marlstone Rock Formation - Ferruginous Limestone And Ironstone. Sedimentary Bedrock formed in the Jurassic Period.

Topography: At about 130m OD, with the land sloping upwards gently to the north.

Field conditions: Fairly level with stubble. A hedge crossed the survey line.

Weather: It rained most of the time.

Dates of work: 10 August 2018

Location of:

a) Primary archive, i.e. raw data, electronic archive etc

Abingdon Archaeological Geophysics and with the client.

b) Full report: Ditto

Surveyor : Abingdon Archaeological Geophysics, Roger Ainslie, Sally Ainslie.

3 Methods

Please see our e-book *"Archaeology –In the Service of Property Development?"* for details of the methods.

Type of survey

Magnetometry

Area surveyed: 0.93 hectares

Traverse separation, if regular: 1.0 metre.

Reading / sample interval: 0.125 metres.

Type, make and model of instrumentation: Bartington Grad 601/2 fluxgate gradiometer.

Sensitivity 0.1nT

Processing

We have used TerraSurveyor for this.

Data was processed by destaggering by 65 cms and clipped to remove the effect of high and low readings in order to reveal any archaeological features.

Additional remarks

Grids set out on the National Grid using a Trimble pro XR differentially corrected GPS, probably accurate to 0.5metres.

Survey carried out in 30 metre grids.

First line start NW corner going east zig zag.

4 Results

We located several possible buildings and walls on at least 3 different alignments in addition to various ditches and a possible road. Geophysics cannot on its own give a date to them, although we assume most of the remains to be Roman, based on the fieldwalking by others.

The ditches appear to have high magnetic responses and the walls, where the stone has not been burned, have a low response.

It is difficult to distinguish some features as sometimes small areas of high readings can be hearths and sometimes they can be pits containing burnt material.

The numbering below refers to the interpretation plot.

- 1 Possible building
- 2 Slightly curved ditch. Could be one of a pair on the sides of a trackway.
- 3 Ditches of various phases.
- 4 Probably a wall, possibly a field wall as it is not on the same alignment as most other anomalies.
- 5 Walls and ditches on same alignment as the present hedge.
- 6 Enclosure walls on a different alignment.
- 7 An area of very high magnetic readings with some ditch-like anomalies.
- 8 A possible enclosure.
- 9 A possible road or large ditch going NE-SW. This alignment is followed by various walls.
- 10 Walls, probably buildings on same alignment as 9.

5 Conclusions

We appear to have located extensive building remains supporting the North Oxon Field Archaeology groups fieldwalking results reported in South Midlands Archaeology 1998 and 1999, Whilst the settlement area appears to be more extensive than the roadside settlement envisaged by Historic England, its extent and phasing will require further work. The high level of the magnetization of the soil in the eastern part of the survey could indicate intensive iron working in the vicinity.

6 Copyright

The Chartered Institute for Archaeologists view is that it is normal practice for both the copyright and ownership of the paper and digital archive from the archaeological work to rest with the originating body (the organisation undertaking the work). We would however be happy for the client to use the results for any purpose he wishes. Others should ask us first.

7 Acknowledgements

We would like to thank Keith Westcott for arranging access. We would also like to thank Edward Shawyer and the North Oxon Field Archaeology Group for permitting the use of their illustrations from South Midlands Archaeology in the original version of this report.

8 Disclaimer

Geophysics is not always successful in locating sites. Whilst we do our reasonable best to locate features we cannot influence ground conditions and the state of preservation of remains. Graves and spreads of material are seldom located. The failure to locate remains does not mean that they are not there. Geophysics on its own cannot give a date to remains.

9 Figures

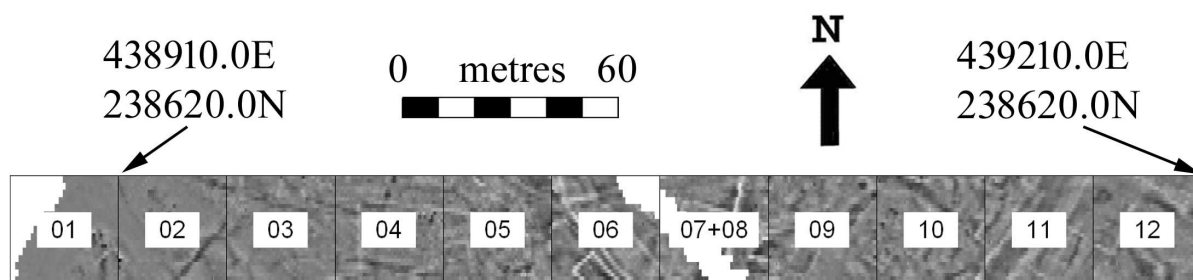
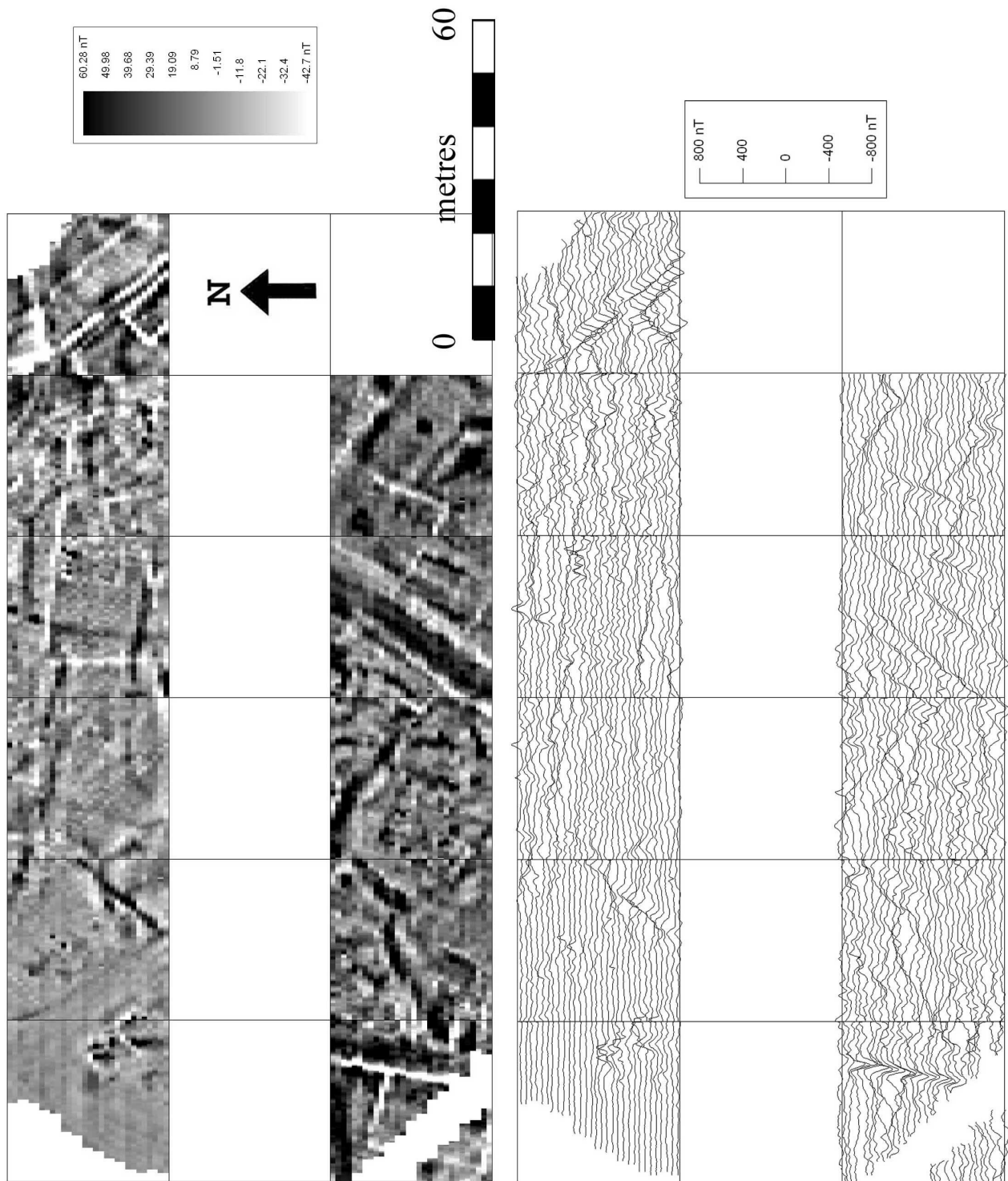
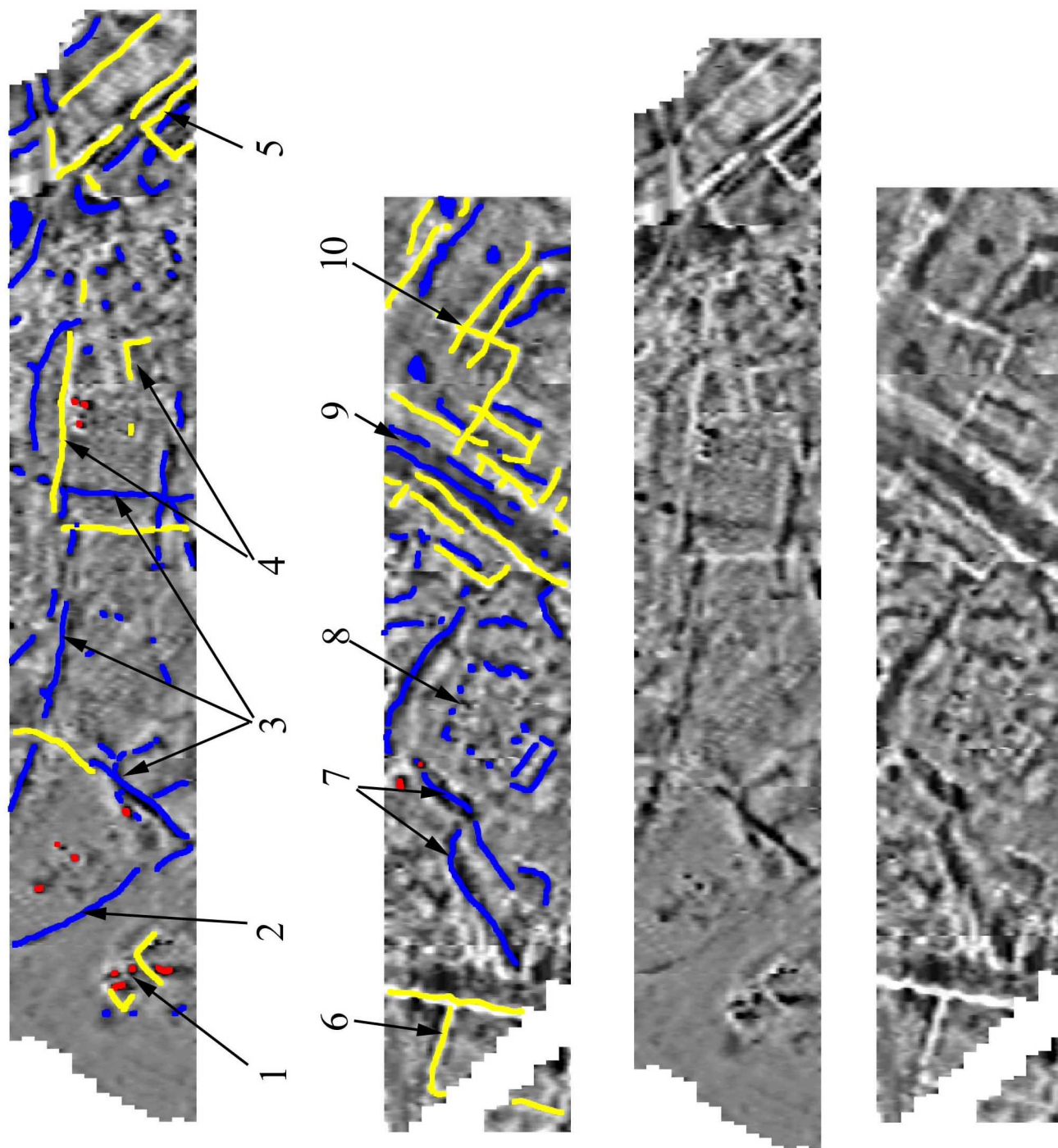


Figure 2 Detailed grid order and location



Greyscale and trace plots

Fig 3 Greyscale and Trace plots



Interpretation and interpolated plots

Fig 4 Interpretation