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Short Report form no. 2020-07R

Name of site: **Roman Tile Kiln at East End, Witney, Oxfordshire**



Approximate survey location on Google Earth base

County: Oxfordshire. District; West Oxfordshire. Parish; North Leigh.

NGR grid reference Centred on SP401144

Nearest postcode. OX29 6PX

Start date: 22-09-2004

End date: 23-09-2004

Report date: 22-12-2020

This is in our short report format as details of techniques can be found elsewhere, such as in our e-book " Archaeology - In the Service of Property Development?"



The field and pieces of tile on the surface

Survey Details

Geology at site: The Geology of Britain Viewer gives this as being Forest Marble Formation - Mudstone of the Jurassic Period. No drift geology is recorded but our observation was that the surface was covered by clay with quartzite pebbles and cobbles and is therefore probably Northern Drift, which is shown to be elsewhere in this vicinity.

Known archaeological sites / monuments covered by the survey: None

Archaeological sites / monument types detected by the survey: Probably a Roman tile kiln.

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

Name of client, if any: George Speake

Purpose of survey: To ascertain if magnetometry and earth resistance could locate either a kiln or a building.

Reasons for methods used: We used these methods as we have found that this equipment often works in these soil conditions. Other methods such as radar are slower and are best used if other, less expensive, methods don't work.

Reference numbers: Kiln = Oxfordshire Sites and Monuments Record no 27539.

Location of:

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

Abingdon Archaeological Geophysics.

b) Full report: ditto

Technical Details

Type of survey

A Magnetometer

Area surveyed: 3600 sq metres

Traverse separation, if regular: 1metre

Reading / sample interval: 4 per metre

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

B Earth Resistance

Area surveyed, 2700 square metres.

Traverse separation, if regular: 1 metre

Reading / sample interval: 1 per metre

Type, make and model of instrumentation: TR Systems/CIA resistance meter. Twin probe array, 0.5 metre mobile probe separation.

Land use at the time of survey; Wheat stubble

Topography: On a gently sloping (approx 10%) area at approx 100m OD. Ditches to north and east of the field.

Additional remarks

30 metre grids. First line start NW corner going east zig zag.

Earth resistance data recorded in TR Systems .dat format but converted for further processing.

Processed using TerraSurveyor and TR Systems software.

This had previously been reported to the client but this version is now possible as it is understood that the landowner no longer wishes it to be kept confidential.

Location

60m x 60m magnetometry area. Earth resistance was also carried out using 3 of these grids.

North west corner 440154 214428

North east corner 440214 214443

South west corner 440172 214368

South east corner 440230 214385

Grid order

Magnetometry	1 4	Earth Resistance	1
	2 3		2 3

Results (refer to plans below)

- 1 Trench with high magnetic readings. Not sure what this is but we have found similar at Showells Farm near Hailey, Witney. We excavated one and it had a layer of fairly stone free fill and pieces of pottery.
- 2 Rectilinear enclosure. The resistance readings are lower than the surrounding area so it may be a stone wall. The high magnetometry readings appear to be contained within the rectangular area, indicating that the walls were there when the kiln was used. The walls could be a device to stop the wind affecting the firing of the kiln
- 3 Area of high readings. Probably the kiln. The Kiln magnetometry readings were approx 100nT.
- 4 Area where fragments of Roman tile are on the surface.
- 5 Area of high readings. Approx 40nT. Possibly where ash had been deposited from clearing the kiln.
- 6 Small kiln- like anomaly.

Conclusions

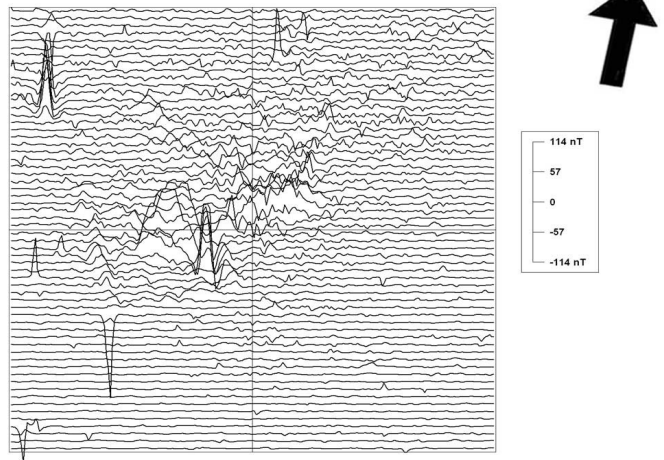
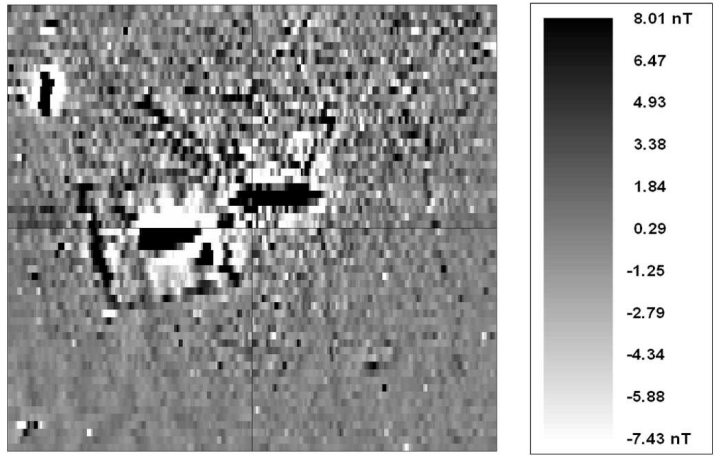
We appear to have detected a kiln with a smaller one near it and both within a 20m square enclosure.

A similar kiln layout at Priors Hall, Corby has been reported in Current Archaeology, vol 370 January 2021 p18-25. There Paddy Lambert and Oxford Archaeology East found a Romano-Celtic temple-mausoleum and evidence of industry with the cella used as tile kiln within a similar enclosure, which had originally been for the mausoleum. 10 tonnes of tile were found in their excavation.

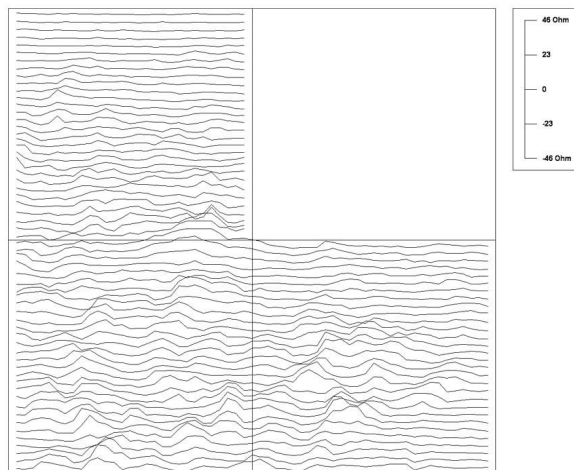
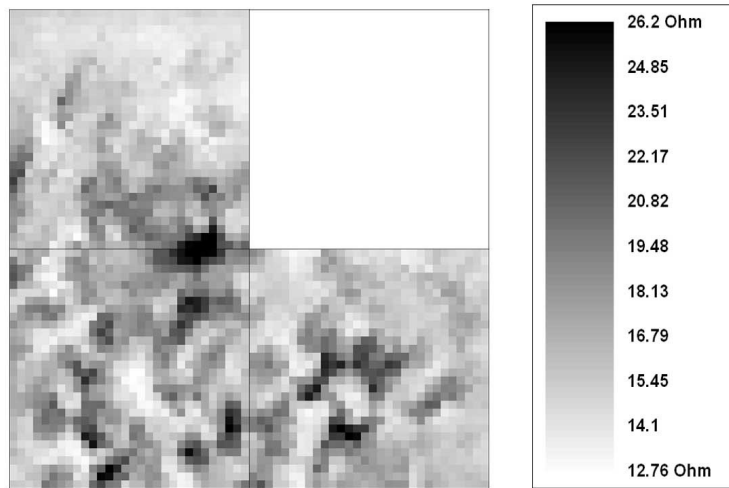
Finding that this one was surrounded by a wall may be of use for identifying Roman tile kilns.

REMINDER

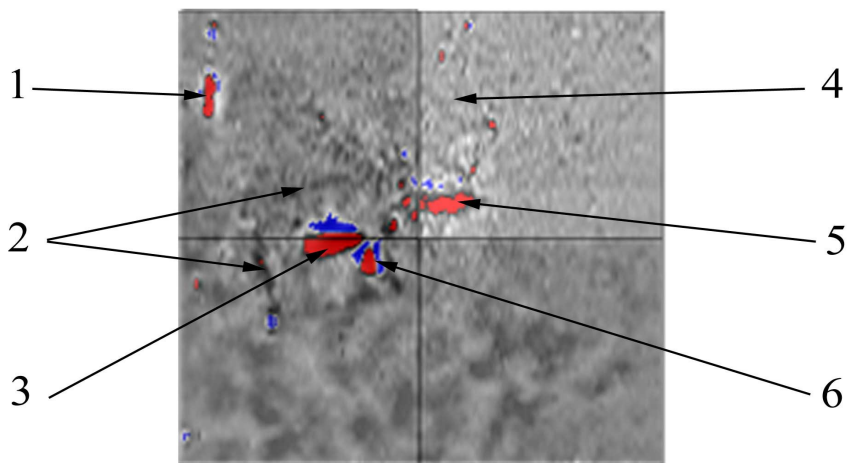
Many features cannot be located by using magnetometry or resistivity. Features including flint scatters and burials may well exist which are not detectable by these survey methods. The failure to locate remains does not mean that they are not there.



Magnetometry Greyscale and trace plots



Earth resistance greyscale and trace plots.



Interpretation using Magnetometry and Earth resistance combined plot.