

**YCCART 2019/Y26**

**Gradiometry survey at Brickyards, south-east of Unique Farm, Kenn**

**YATTON, CONGRESBURY, CLAVERHAM AND CLEEVE ARCHAEOLOGICAL  
RESEARCH TEAM (YCCART)**

*General Editor: Vince Russett*



'Brickyards' is the two fields at the centre of this 1799 map of Yatton marked '591' & '592'

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## **Abstract**

*Gradiometry survey in this field, named 'Brickyards' on early maps, revealed no evidence of brick making here. A palaeochannel and early former field boundary were the only items revealed.*

## **Acknowledgements**

A Heritage Lottery Grant enabled the purchase, by YCCCART, of a Geoscan RM 15 resistivity meter and a Bartington Gradiometer 601 without which this survey could not have been undertaken.

This survey would also not have been carried out without the willing permission of the landowner, Mr G. Burdge, and his agent, Mr F Malton.

The authors are grateful for the hard work by the members of YCCCART in performing the surveys and Vince Russett for editing.

## **Introduction**

Yatton, Congresbury, Claverham and Cleeve Archaeological Research Team (YCCCART) is one of a number of Community Archaeology teams across northern Somerset, formerly supported by the North Somerset Council Development Management Team.

Our objective is to undertake archaeological fieldwork to enable a better understanding and management of the heritage of the area while recording and publishing the activities and locations of the research carried out.

## Site location

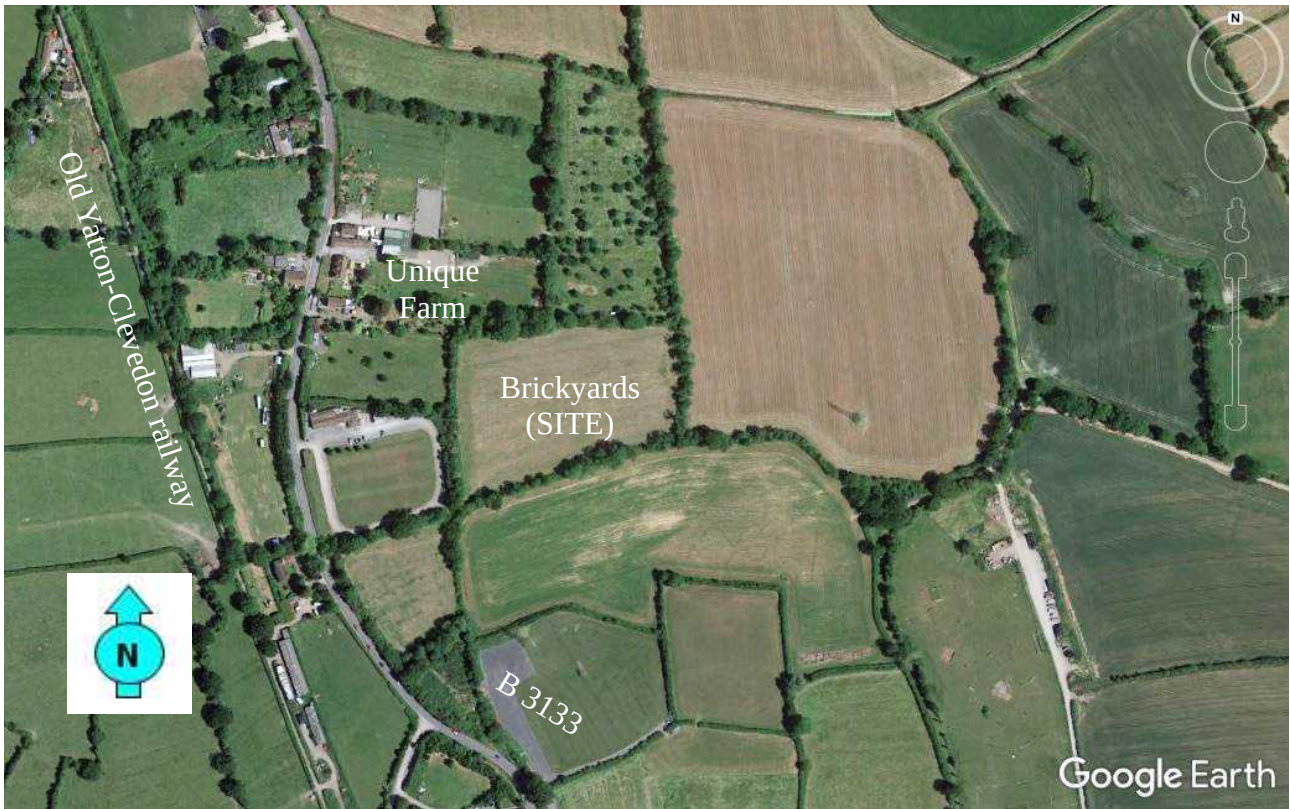


Fig 1: Location

The second 'Brickyards' field, here surveyed, lies at ST41546782, off the B3133 Yatton-Clevedon road. It currently lies in the parish of Kenn, but until the 19th century was part of the neighbouring parish of Yatton. Both are in North Somerset.

## Land use and geology

The site lies on the estuarine alluvium of the Northmarsh, although over a buried ridge of Mercia Mudstones that protected the peatlands of the Inner Northmarsh from alluviation in the post-Roman period (<http://mapapps.bgs.ac.uk>; *pers comm*, V. Straker).

The land was under pasture when surveyed in 2019. There is no public access to this site.



## Historical & archaeological context

This field, along with others nearby, is named 'Brickyards' on the 1821 and 1840 (Tithe) maps of Yatton. An earlier survey of an adjacent field (YCCCART Y18, 2019) showed potential evidence of brick making, and the current survey (part of a wide-ranging survey of the area around Northend, Yatton) was partly intended as an examination of whether this field, too, showed such signs.

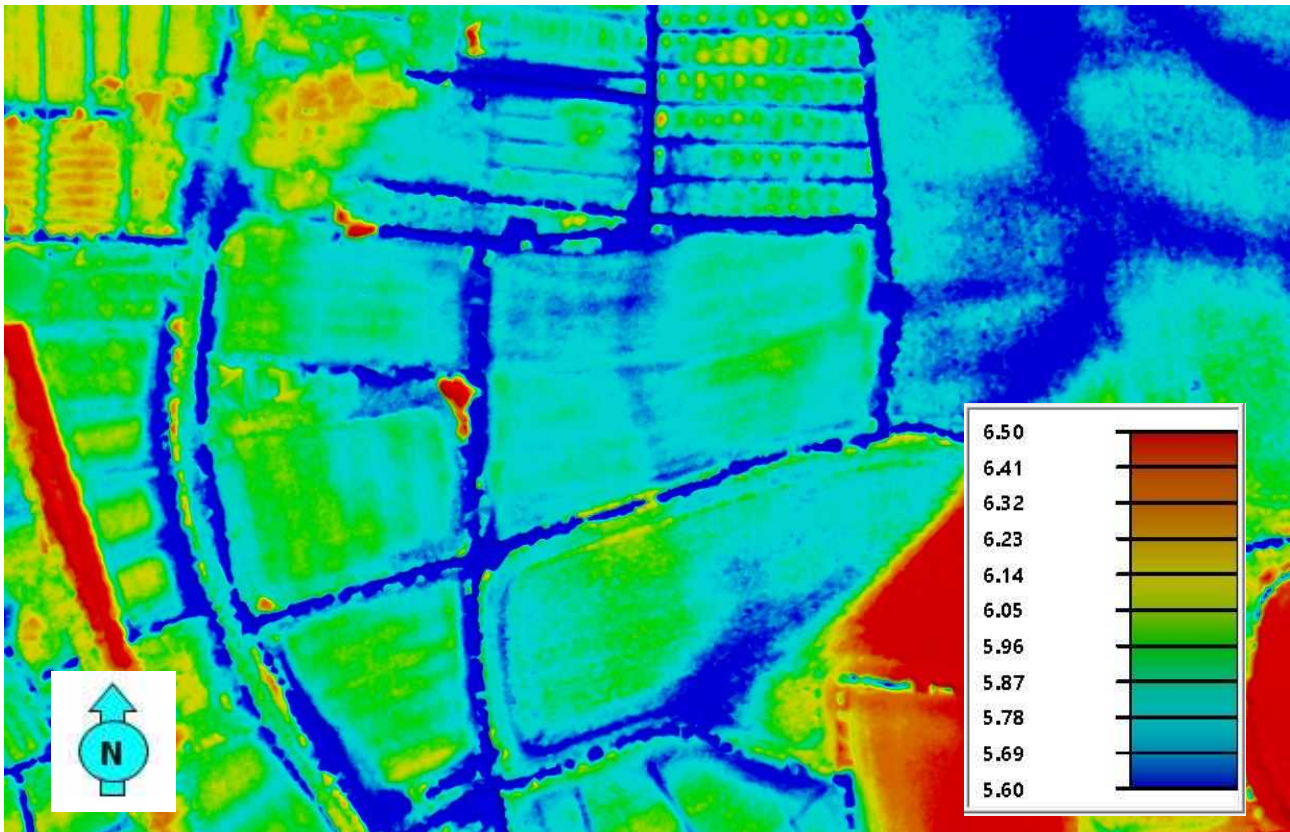


Fig 2: Lidar scan of area (scale in metres AOD)

A lidar scan of the area (above: site at centre of scan), shows a fundamentally flat area to the north-west of the higher ground around Ham Farm (note that the scale of the lidar scan covers less than a metre). Many palaeochannels are visible (dark blue areas). Those to the east of the survey site have been heavily ploughed in the 20th and 21st centuries, and thus are wider spread, but others can be seen in the scan.

Brickyards is named on the 1840 Tithe plan, and on the 1821 map of Yatton (see below). The obvious implication is that this field, too, had brick making activity. If it did so, however, no trace is found in the gradiometer survey (below).

The relationship and date of the palaeochannels, given their existence above the known buried ridge of Mercia Mudstones, is unclear: whether they represent post-Roman features, or remnant features of the earlier landscape cannot at present be known.

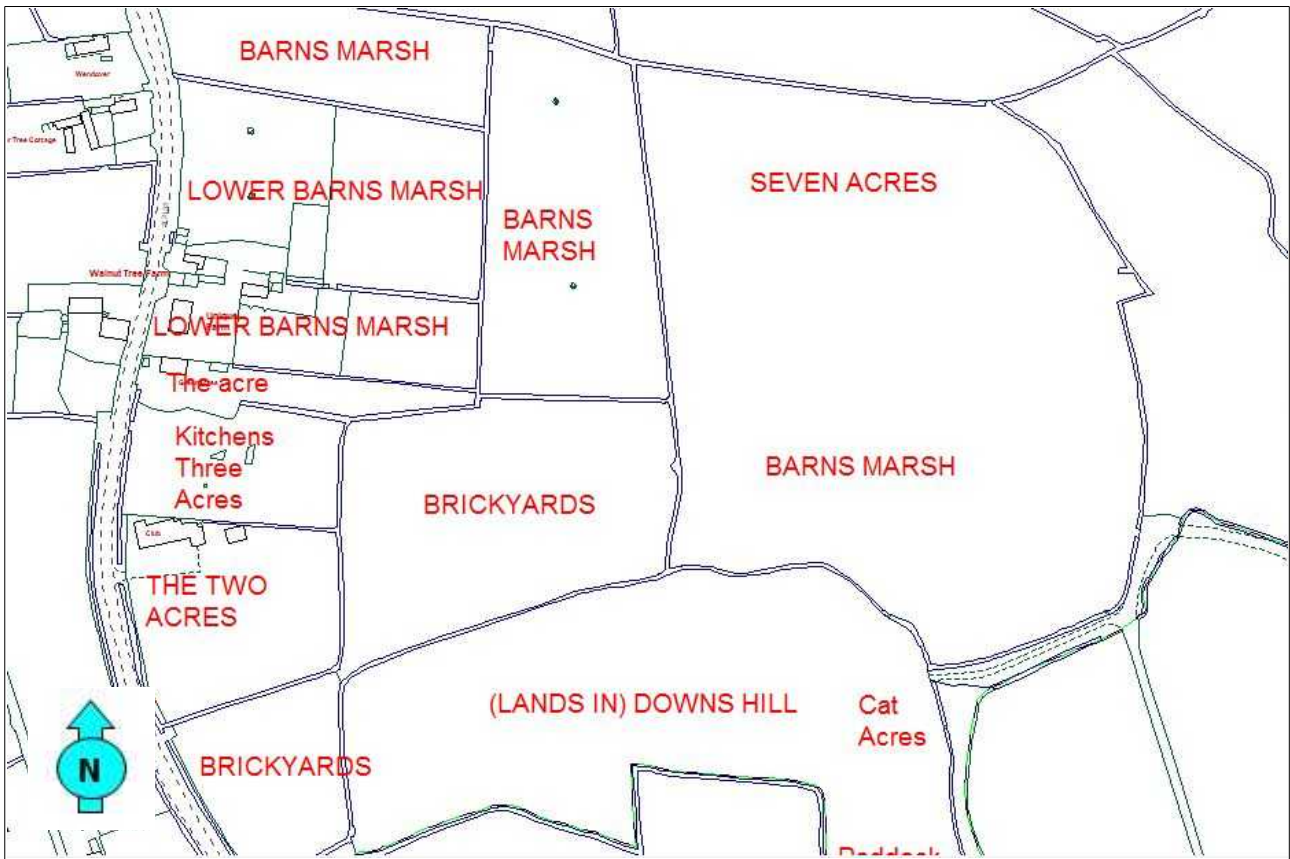


Fig 3: Field names from 1821 Yatton map (SHC D/P/yat/13/1/3)

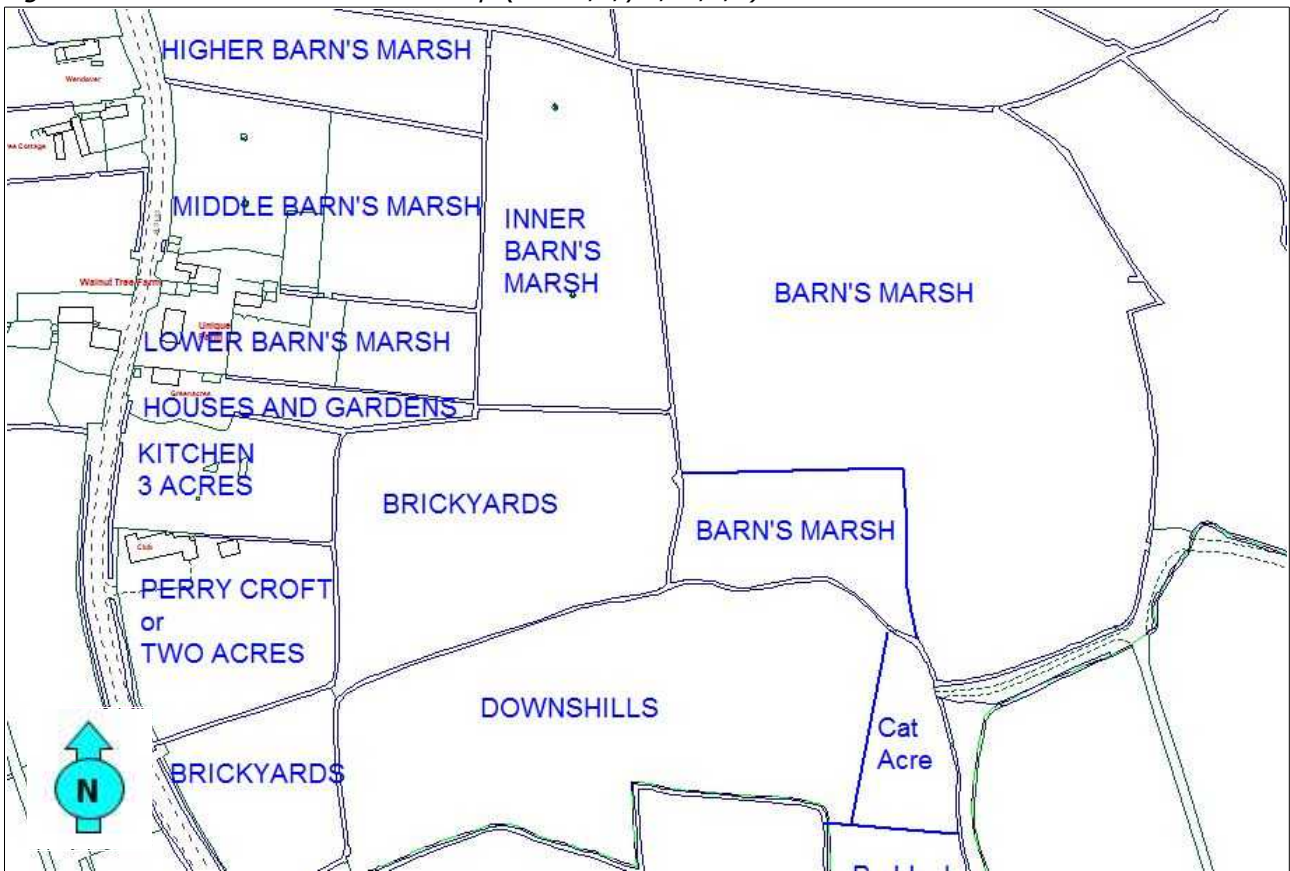


Fig 4: Field names from 1840 Tithe map

The surrounding field names ('Barns Marsh' / 'Lower Barns Marsh' as opposed to the higher 'Downshills') are instructive: when the names were coined, this area was obviously regarded as a low, marshy area.

The geometric shape of the fields, and their ability to switch parish, also implies relatively marginal land, in all senses of the word. Most of the area is shown as pasture land in the 19th century, although drainage in the 20th century has allowed much of this fertile land to become arable.

## **Survey objectives**

This survey was part of a large scale geophysical survey of the landscape to the north of Northend, and in Kenn Moor.

In addition, the survey was to discover (in the light of the field name) if there was any evidence of brick making.

## **Methodology**

The survey of the fields was undertaken during the period 25 July to 19 September 2019 by teams from YCCCART using the Bartington 610-2 gradiometer.

The completed survey was downloaded to the TerraSurveyor programme and the resultant composite adjusted using the following filters:

### Gradiometry

Colour - Red Blue Green 2  
Band weight equaliser  
Grad shade  
Destriped  
Despiked  
Clip SD2

The report was written in Libre Office 5 Writer.

Photographs were taken by members of YCCCART, and remain the copyright of YCCCART.



## Results

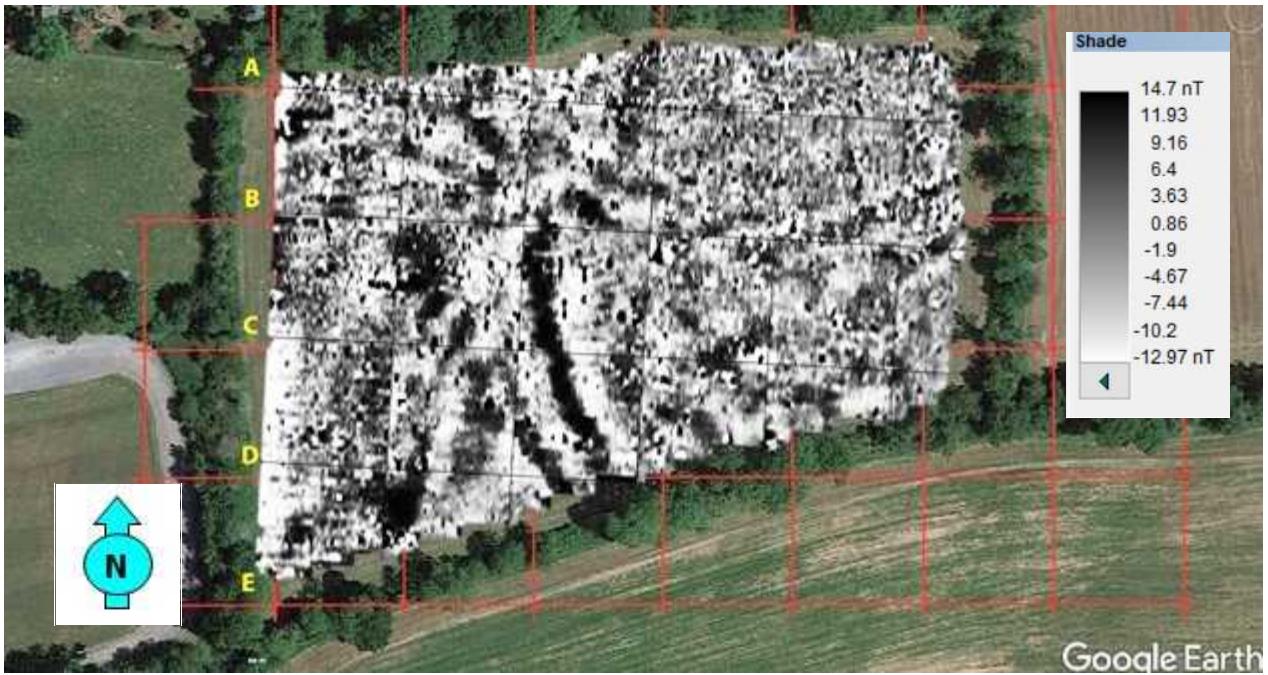


Fig 5: Gradiometry results (monochrome)

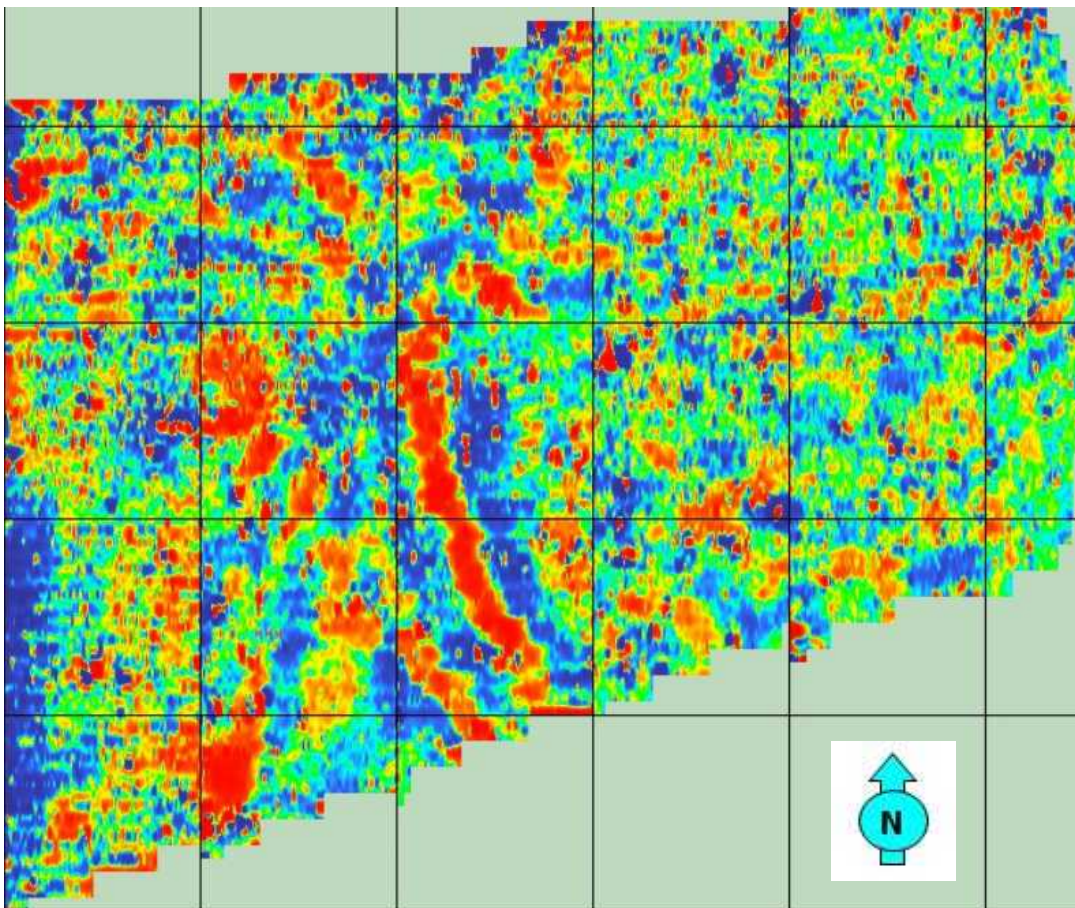


Fig 6: Gradiometry results (colour)

Comparing the gradiometry results with the lidar (Fig 2 above), shows that the palaeochannel running more or less north-south across the centre of the field is visible in both, with the 'parallel high-response with central low' values that we have come to expect in this area of alluvium. It can be seen in the lidar results to continue into the fields to both the north and the south.

In addition, a very faint low response running across the centre of the field east-west represents the former field boundary visible on the 1799 map (cover illustration).

Most of the rest of the field had the swirling patterns seen over most of the post-Roman alluvial clay. There are quite a large number of scattered dipoles in the field, but these are not large or strong enough to be due to burning, and probably represent ferrous junk in the soil.

It can be concluded, therefore, that the Tithe and earlier field name probably means 'land near the brickyard' and not evidence of brick making in its own right.

## **Recommendations for further work**

There is no reason for any further work in this field.

## **Authors**

Vince Russett

## **Date**

2019-12-03

## Appendix: Day Sheets

YCCCART Site Survey		
Project – Burge 5		
Survey date	25/07/2019	
Report date	25/07/2019	
Type /Instrument	Grad 601	
	Pace :1.4m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz
Location	Yatton Moor	
Ref	none	
Site name	Burdge 5 Brickworks	
Landowner	Mr G Burdge	
Tenant		
HER ref	MNS 2302	
Site type	Grass	
Description	Open field surrounded by hedges and further open fields	
Period		
Geology		
Land use	Grazing	
Survey team and conditions		
25/07/2019	Team	Pete, David, John, Ferdie, Ian, Arthur
	Weather	Dry, very hot
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	

Survey area		notes		readings		
		size	walk direction	max	min	mean
Date	Grid number					
25/07/2019		Setting out base line and 2 row of grids				
	1	30 x 30	E	+71.1	-46.8	+2.0
	2	30 x 30	E	+33.8	-7.6	+2.6
	3	30 x 30	E	+33.5	-100	+2.1
	4	Partial M & R	E	+9.4	-8.9	+1.9

YCCART Site Survey Project – Burge 5		
Survey date	01/08/2019	
Report date	01/08/2019	
Type /Instrument	Grad 601	
	Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz
Location	Yatton Moor	
Ref	none	
Site name	Burdge 5 Brickworks	
Landowner	Mr G Burdge	
Tenant		
HER ref		
Site type	Grass	
Description	Open field surrounded by hedges and further open fields	
Period		
Geology		
Land use	Grazing	
Survey team and conditions		
25/07/2019	Team	Pete, David, John, Ferdie, Ian, Arthur
	Weather	Dry, very hot
01/08/19	Team	Pete, Peter, John, Ferdie, Ian, Arthur, Janet, Philippa
	Weather	Dry, very hot
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	



Survey area		notes		readings		
		size	walk direction	max	min	mean
Date	Grid number					
25/07/2019		Setting out base line and 2 row of grids				
01/08/2019	1	30 x 30	E	+71.1	-46.8	+2.0
	2	30 x 30	E	+33.8	-7.6	+2.6
	3	30 x 30	E	+33.5	-100	+2.1
	4	Partial M & R	E	+9.4	-8.9	+1.9
	1	30 x 30	E	+13.9	-6.7	-0.4
	2	30 x 30	E	+18.5	-5.9	-0.3
	3	30 x 30	E	+29.3	-17.1	-0.1
	4	M & R last 5 trav	E	+75.6	-100	-03
	5	30 x 30	E	+14.3	-11.9	+0.1
	6	30 x 30	E	+8.3	-4.7	-.08
	7	30 x 30	E	No data recorded		
8	M & R	E	+5.0	-2.5	-1.2	
9	30 x 30	E	+23.9	-22.8	-1.5	
10	30 x 30	E	+11.5	-8.5	-0.9	
11	30 x 30 M & R	E	+10.7	-7.4	-0.9	

YCCART Site Survey Project – Burge 5			
Survey date	05/09/2019		
Report date	05/09/2019		
Type /Instrument	Grad 601		
	<table border="1"> <tr> <td>Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2</td> <td>Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz</td> </tr> </table>	Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz
Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz		
Location	Yatton Moor		
Ref	none		
Site name	Burdge 5 Brickworks		
Landowner	Mr G Burdge		
Tenant			
HER ref			
Site type	Grass		
Description	Open field surrounded by hedges and further open fields		
Period			
Geology			
Land use	Grazing		
Survey team and conditions			
25/07/2019	Team Pete, David, John, Ferdie, Ian, Arthur		

	Weather	Dry, very hot
01/08/19	Team	Pete, Peter, John, Ferdie, Ian, Arthur, Janet, Philippa
	Weather	Dry, very hot
05/09/2019	Team	Pete, Peter, Ferdie, Ian, Arthur, Janet, Philippa, Robert,
	Weather	Fine, light cloud, warm
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	
	Team	
	Weather	

Survey area		notes		readings		
Date	Grid number	size	walk direction	max	min	mean
25/07/2019		Setting out base line and 2 row of grids				
01/08/2019	1	30 x 30	E	+71.1	-46.8	+2.0
	2	30 x 30	E	+33.8	-7.6	+2.6
	3	30 x 30	E	+33.5	-100	+2.1
	4	Partial M & R	E	+9.4	-8.9	+1.9
05/09/2019	1	30 x 30	E	+13.9	-6.7	-0.4
	2	30 x 30	E	+18.5	-5.9	-0.3
	3	30 x 30	E	+29.3	-17.1	-0.1
	4	M & R last 5 trav	E	+75.6	-100	-03
	5	30 x 30	E	+14.3	-11.9	+0.1
	6	30 x 30	E	+8.3	-4.7	-.08
	7	30 x 30	E	No data recorded		
	8	M & R	E	+5.0	-2.5	-1.2
	9	30 x 30	E	+23.9	-22.8	-1.5
	10	30 x 30	E	+11.5	-8.5	-0.9
05/09/2019	11	30 x 30 M & R	E	+10.7	-7.4	-0.9
	1	30 x 30	E	+17.5	-4.1	-0.8
	2	Repeated of 9 30 x 30	E	+96.5	-100	-0.8
	3	Repeat of 10 30 x 30 M & R	E	+21.8	-7.7	-1.1
	4	Repeat of 11 30 x 30	E	+34.4	-13.8	+1.6

YCCART Site Survey			
Project – Burge 5			
Survey date	12/09/2019		
Report date	12/09/2019		
Type /Instrument	Grad 601		
	<table border="1"> <tr> <td>Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2</td> <td>Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz</td> </tr> </table>	Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz
Pace :1.3m/s Lines/m : 1 Range:100nT Volume: High Sensors:2	Grid size: 30m x30m Pattern : Zig Zag Samples/m:4 Audio: On Threshold:30nT Reject:50 Hz		
Location	Yatton Moor		
Ref	none		
Site name	Burdge 5 Brickworks		
Landowner	Mr G Burdge		
Tenant			
HER ref			
Site type	Grass		

Description	Open field surrounded by hedges and further open fields	
Period		
Geology		
Land use	Grazing	
Survey team and conditions		
25/07/2019	Team	Pete, David, John, Ferdie, Ian, Arthur
	Weather	Dry, very hot
01/08/19	Team	Pete, Peter, John, Ferdie, Ian, Arthur, Janet, Philippa
	Weather	Dry, very hot
05/09/2019	Team	Pete, Peter, Ferdie, Ian, Arthur, Janet, Philippa, Robert,
	Weather	Fine, light cloud, warm
12/09/2019	Team	Pete, Peter, Ferdie, Ian, Philippa
	Weather	Overcast, drizzle, showers – brighter and dryer later

Survey area		notes		readings		
Date	Grid number	size	walk direction	max	min	mean
25/07/2019		Setting out base line and 2 row of grids				
01/08/2019	1	30 x 30	E	+71.1	-46.8	+2.0
	2	30 x 30	E	+33.8	-7.6	+2.6
	3	30 x 30	E	+33.5	-100	+2.1
	4	Partial M & R	E	+9.4	-8.9	+1.9
05/09/2019	1	30 x 30	E	+13.9	-6.7	-0.4
	2	30 x 30	E	+18.5	-5.9	-0.3
	3	30 x 30	E	+29.3	-17.1	-0.1
	4	M & R last 5 trav	E	+75.6	-100	-03
	5	30 x 30	E	+14.3	-11.9	+0.1
	6	30 x 30	E	+8.3	-4.7	-.08
	7	30 x 30	E	No data recorded		
	8	M & R	E	+5.0	-2.5	-1.2
	9	30 x 30	E	+23.9	-22.8	-1.5
	10	30 x 30	E	+11.5	-8.5	-0.9
12/09/2019	11	30 x 30 M & R	E	+10.7	-7.4	-0.9
	1	30 x 30	E	+17.5	-4.1	-0.8
	2	Repeated of 9 30 x 30	E	+96.5	-100	-0.8
	3	Repeat of 10 30 x 30 M & R	E	+21.8	-7.7	-1.1
12/09/2019	4	Repeat of 11 30 x 30	E	+34.4	-13.8	+1.6
	1	30 x 30	E	+19.3	-5.8	+1.5
	2	Partial M & R	E	+6.5	-2.9	+0.9
	3	Partial M & R	E	+62.6	-2.6	+4.1
	4	Partial M & R	E	+20.8	-48.7	+2.0
	5	Partial M & R	E	+13.9	-2.2	+1.9
	6	Partial M & R	E	+6.8	-0.2	+1.9
	7	Partial M & R	W	+19.4	-4.0	+0.2
	8	Partial M & R	W	+12.6	-16.8	-0.1
	9	Partial M & R	W	+93.7	-59.8	0.0
	10	Partial M & R	W	+62.2	-60.3	+0.8
11	Partial M & R	W	60.4	-29.2	+0.7	