

ANCIENT MONUMENTS LABORATORY GEOPHYSICS SECTION

REPORT ON MAGNETOMETER SURVEY

SURVEY: GREAT OAKLEY

DATE: 29/9/81

Report no. 22/81

1. SITE

OS grid reference: SP 882 865

Field no. 2661

Location: 200 m. N of Lyveden Lodge, some 3 miles NW of Corby

Geology: clay on Middle Jurassic Oolite

Archaeological evidence: Iron Age features and evidence for iron-working found during excavation.

2. SURVEY

Object: to locate any further signs of iron-working in the immediate vicinity

(a) Magnetic survey

Magnetometer	:	fluxgate
Survey	:	automatic
Setting	:	20 gammas/cm.
Scale	:	1 : 200

(b) Other tests

(i) Magnetic susceptibility:

topsoil: 33.6	subsoil: 14.1	fill:	$\times 10^{-6}$ emu/gm (ac bridge readings)
---------------	---------------	-------	---

(ii)

Survey grid measured to: field edges.

Plans/charts enclosed:

1	-	location plan (1:2500)
2	-	magnetometer traces (1:200)

3. RESULTS

There is a generally uniform magnetic response from the site providing an undisturbed background against which strongly magnetic features associated with iron-working can be expected to show up. The magnetic susceptibility of the topsoil (33.6×10^{-6} emu/gm.) contrasts well with that of the subsoil (14.1×10^{-6} emu/gm.), suggesting that non-industrial features would also stand a good chance of being detected, if present.

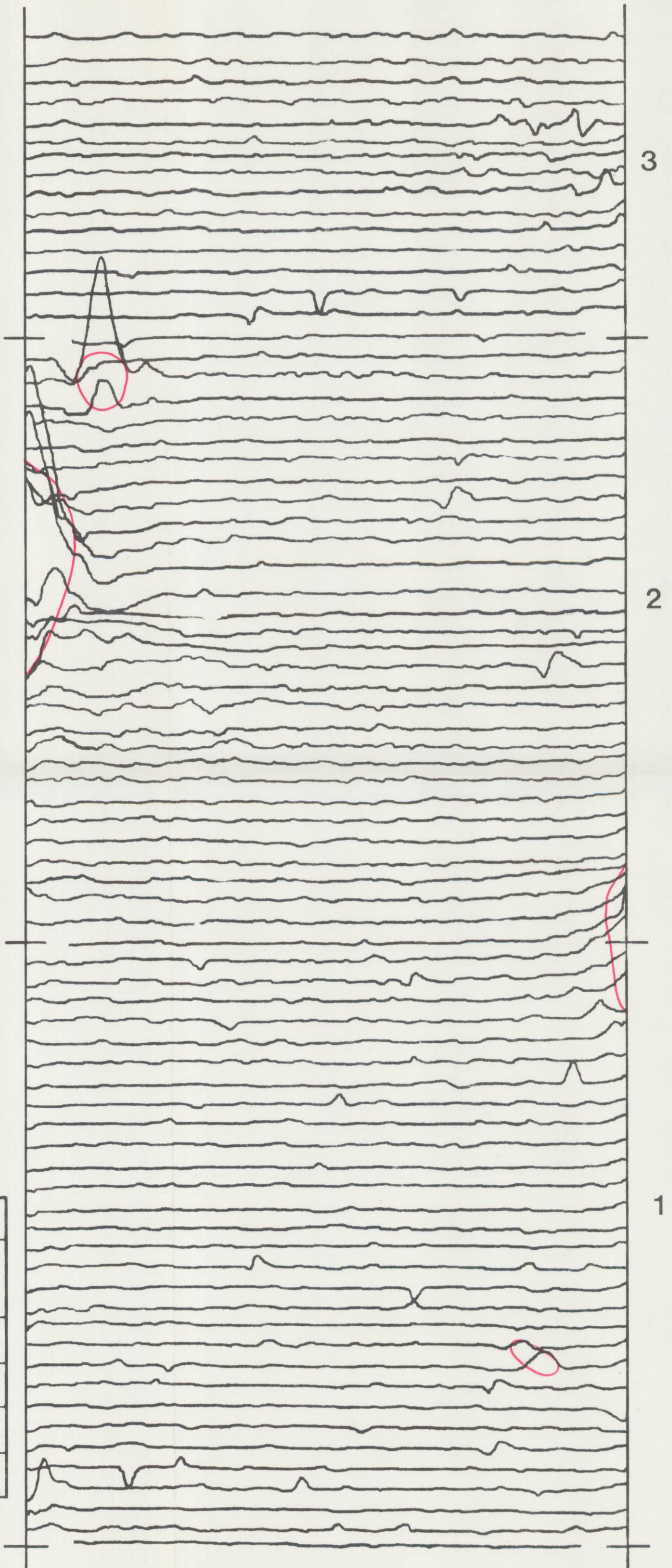
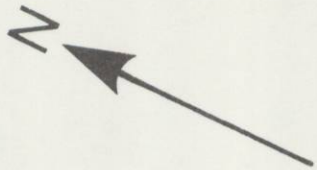
An area adjoining the known iron-working site was surveyed with fluxgate magnetometer and recording system. Traverses were plotted at 1.0 m. intervals over an area 30 x 75 m. (location on plan 1). The resultant magnetometer traces are illustrated on plan 2, where significant anomalies are outlined in red. Of these, the two on the N and S edges of the area may be ignored as the former relates to a known dump of excavated slag, and the latter is almost certainly a response to magnetic material associated with the hard-core of the adjacent track. The anomaly in the northernmost corner of sq. 2 is the one most likely to represent iron or an associated industrial feature, and subsequently, excavation has proved it to be a large piece of slag buried at about 45 cms.

With the exception of a tentative feature, perhaps a small pit, in sq. 4 there is no other magnetic evidence for ancient iron-working or related activity in the survey area.

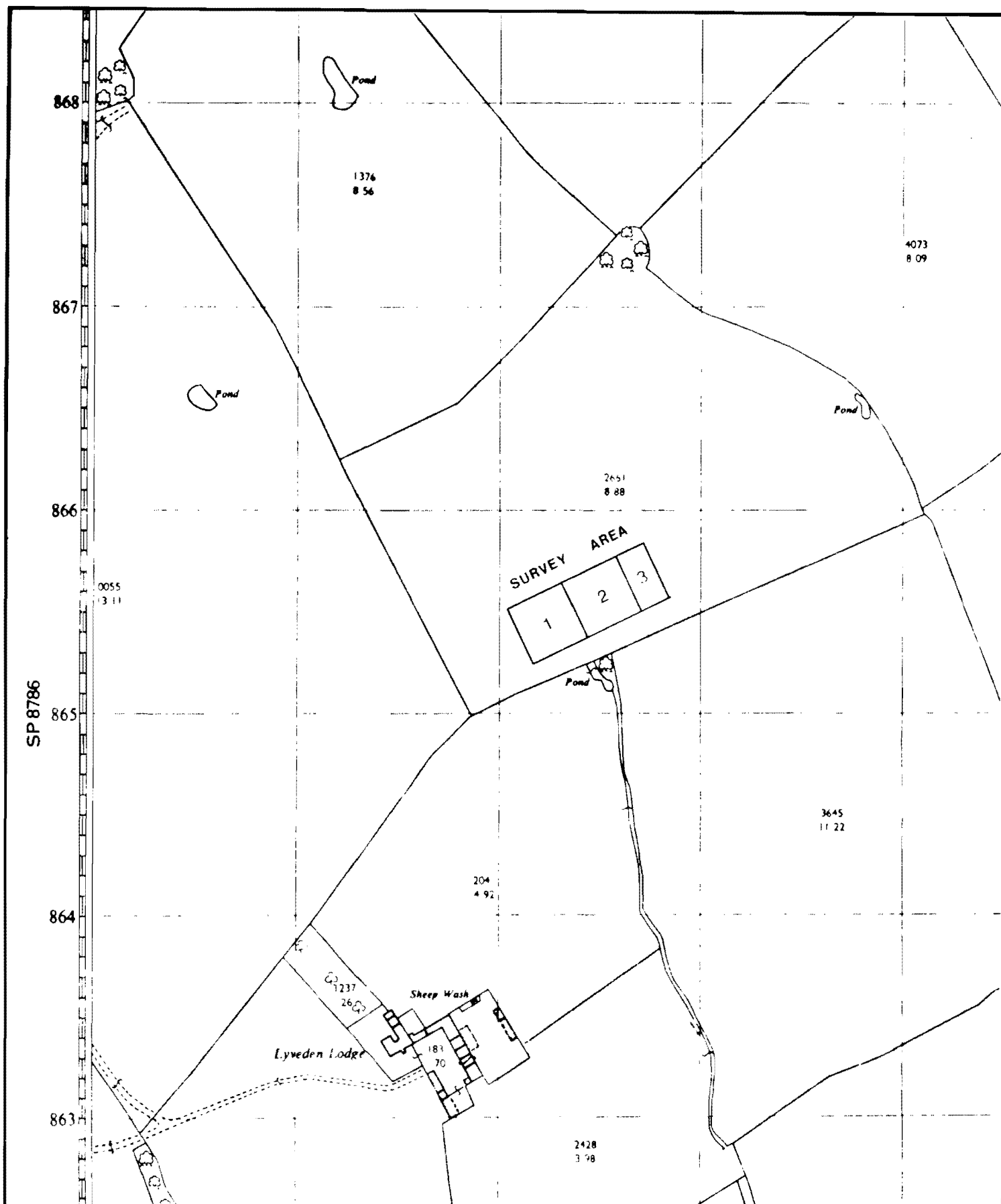
Surveyed and reported by : A. David.
with : A. Bartlett.
for : D. Jackson.

11th. Feb. 1982

Ancient Monuments Laboratory Geophysics Section,
Department of the Environment,
Room 536, Fortress House,
23 Savile Row,
London W 1 01 - 734 6010 ext. 591



GT. OAKLEY, N'HANTS.		
MAGNETOMETER SURVEY		
○ : anomalies		
NG ref. SP 882 865 + grid pegs		
traverses plotted at 15 gamma/cm		
0 1:200 15m		
Survey no. 22/81	DoE A.M. Laboratory	
Plan no. 2 of 2	Geophysics Section	



GT. OAKLEY, N'HANTS MAGNETOMETER SURVEY LOCATION

NG ref. SP 882 865
Based on 1 2500 OS sheet SP 8886

Survey no. 22/81
Plan no. 1 of 2

1:2500 0 60 120m

DoE A.M. Laboratory
Geophysics Section