

ANCIENT MONUMENTS LABORATORY GEOPHYSICS SECTION

REPORT ON MAGNETOMETER SURVEY

SURVEY: COFFLETE

DATE: 30/4/80

Report no. 10/80

1. SITE

OS grid reference: SX 547 514

Field no. 7231

Location: near the crest of the spur of land N of Spear Point and between Cofflete Creek and the Yarlung estuary.

Geology: Middle Devonian sandstone/shales.

Archaeological evidence: topographically well-placed for early settlement.
Some flints.

2. SURVEY

Object: to locate any evidence of surface magnetic anomalies on the plateau 320m north of Spear Point, or on the ridge below.

(a) Magnetic survey

Type of survey: automatic

Magnetometer: fluxgate

Range: 0-50 γ

Initial chart recorder settings - Y: 10 γ/cm
X: 1:200 scale

Logged for computing: yes/no

(b) Other tests

(i) Magnetic susceptibility:

topsoil: **subsoil:**
86 (sqrs. 1-5), 413 (sqrs. 6-10)

(ii):

$\times 10^{-6}$ emu/gm
(ac bridge readings)

(iii):

Survey grid measured to: fence

Plans/charts enclosed:

- 1 - location plan
- 2 - sqrs. 1-5, magnetometer traces
- 3 - sqrs. 1-5, magnetometer traces, plus inter. rotations.
- 4 - sqrs. 6-10, magnetometer traces
- 5 - sqrs. 6-10, magnetometer traces, plus inter. rotations.

3. RESULTS

Squares 1 - 5 were placed over part of a buried ditch system located initially by scanning. The resultant plots (plans 2 and 3) reveal part of a rectilinear arrangement presumably representing enclosures of some kind, and possibly trackways where the ditches are close and parallel. The relatively pronounced negative anomalies to the N of the two main E - W ditches may indicate the remnants of banks no longer actually visible as earthworks. One is reminded that an old bank is still visible on the plot of uncultivated and wooded land only some 15 m. or so S of the survey area.

Slight occupation activity might be hinted at by the smaller and possibly pit-like anomalies, but where susceptibility is so high - 86×10^{-6} emu/gm. - one would expect settlement activities to leave more pronounced and frequent magnetic disturbance.

Scanning also showed archaeological activity on the higher ground to the N, and sqs. 6 - 10 were surveyed to sample this. Magnetic susceptibility here is exceptional - 415×10^{-6} emu/gm. - and the traces are correspondingly more noisy, unfortunately masking the possible presence of discrete archaeological anomalies. Several such anomalies are clearly visible, though, particularly in sqs. 9 and 10 which coincide approximately with the N-S line of the local topography and might, on analogy with the earlier site, be a probable indicator for an archaeological site. In these fields again, the magnetic noise is high, and despite this the interpretation of the anomalies is not that occupation, and possibly the associated finds, are absent. This possibly conflicts with the lack of finds in the open field areas, suggesting that only field activity on the scale of an enclosure, perhaps the remainder showing only surface scatter, is significant, owing to the noise. A local change in sub-soil, perhaps due to a weathering factor, may also be a controlling factor.

Further down slope, unfortunately no better profile, and a series of several well-defined anomalies have been detected in sq. 4 and 7. The linear feature running diagonally through sq. 3 (giving strong response which are not reproduced on the plans) is typically that excited from a modern pipe. Modern activity in the field is also suggested by the presence of at least three mortar bomb fragments, and a possibly recent origin for some of the anomalies must be kept in mind. The field also contains a widespread scatter of bottle-glass fragments, suggesting a manufacturing site nearby. Much of the evidence from the two areas surveyed, however, suggests that an extensive ditch system and possibly localized settlement may exist over this large field and perhaps beyond. There appears to be no relationship to present field boundaries.

Surveyed and reported by: A. David.

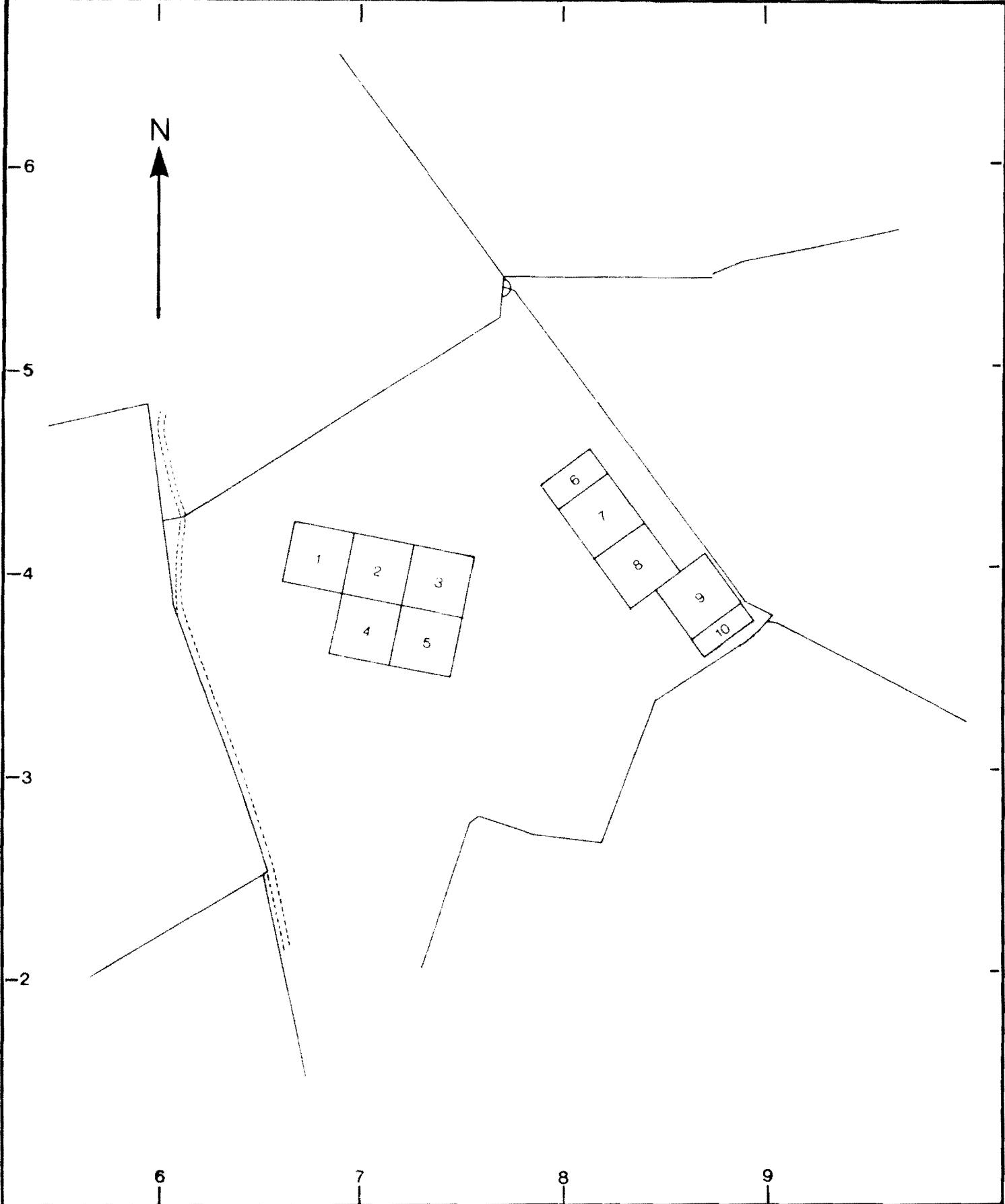
with: J. Hoil.

For: Dr. Wainwright.
J. Hoil
S. Forham

Date of report: 27/2/86

Ancient Monuments Laboratory Geophysics Section
Department of the Environment
Fortress House
23 Savile Row
London W1X2HE
01-734 6010 ext 571

N



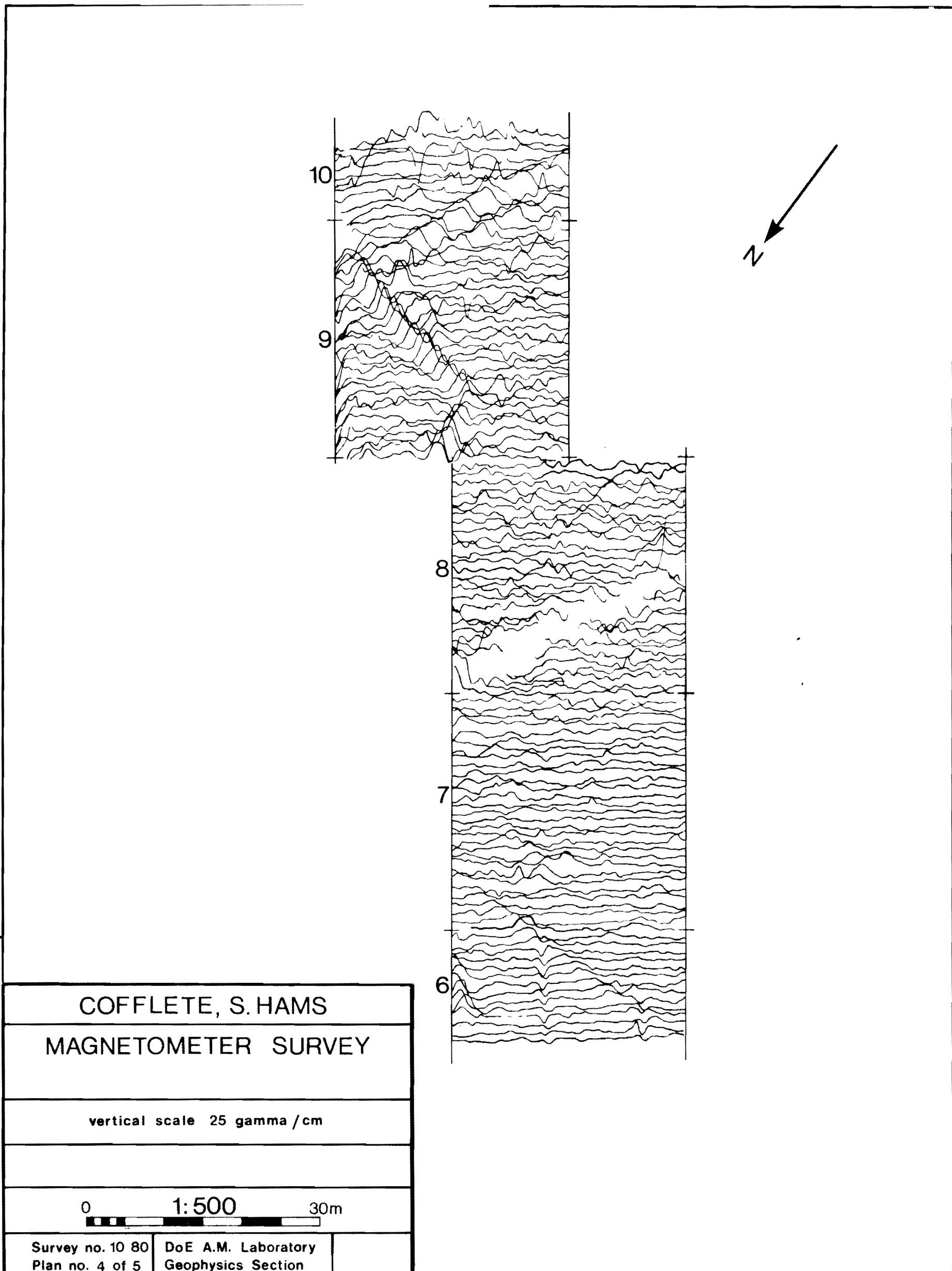
COFFLETE
MAGNETOMETER SURVEY
Location

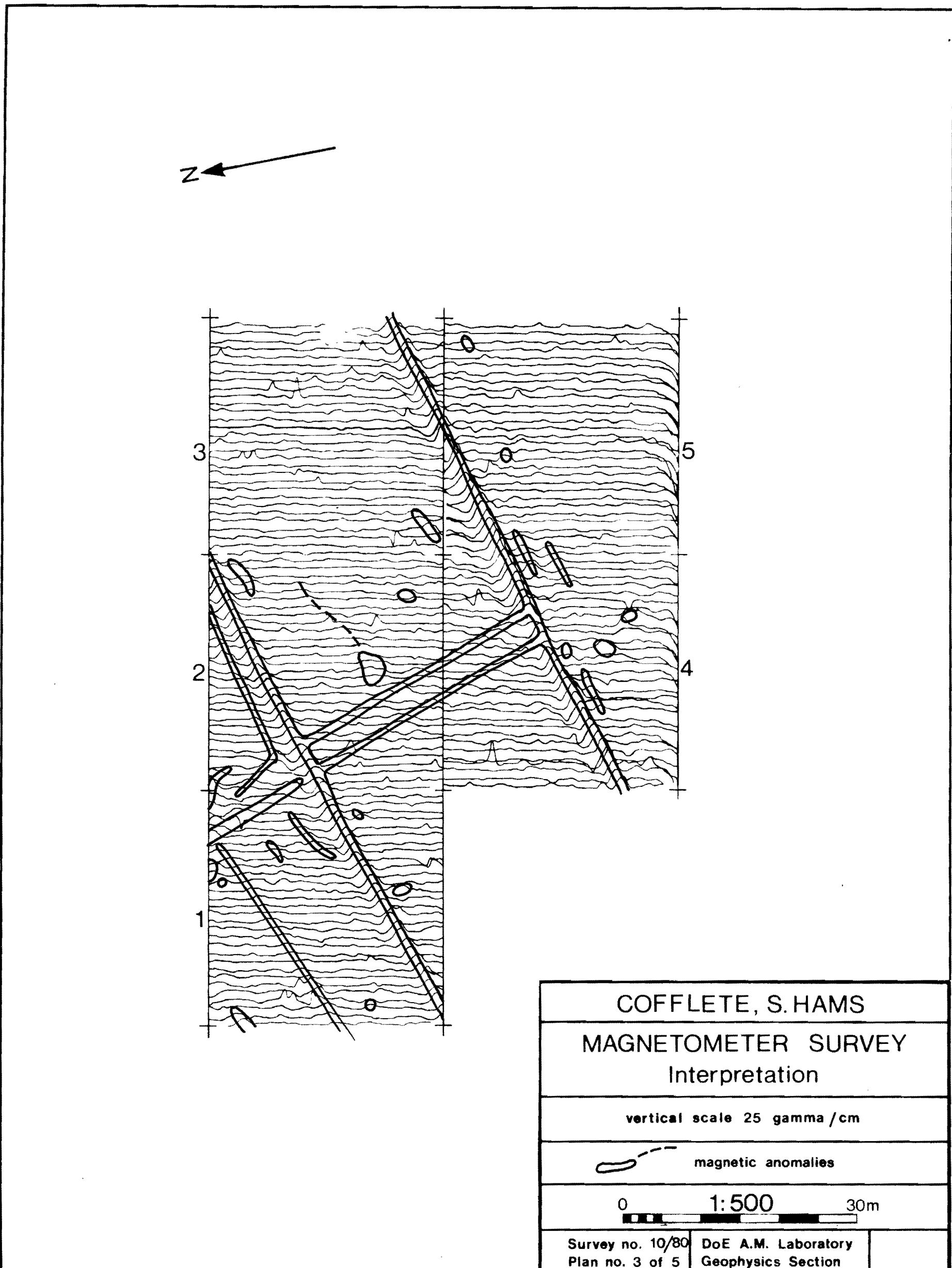
Survey no. 10/80
Plan no. 1 of 5

NG Ref. SX 547514

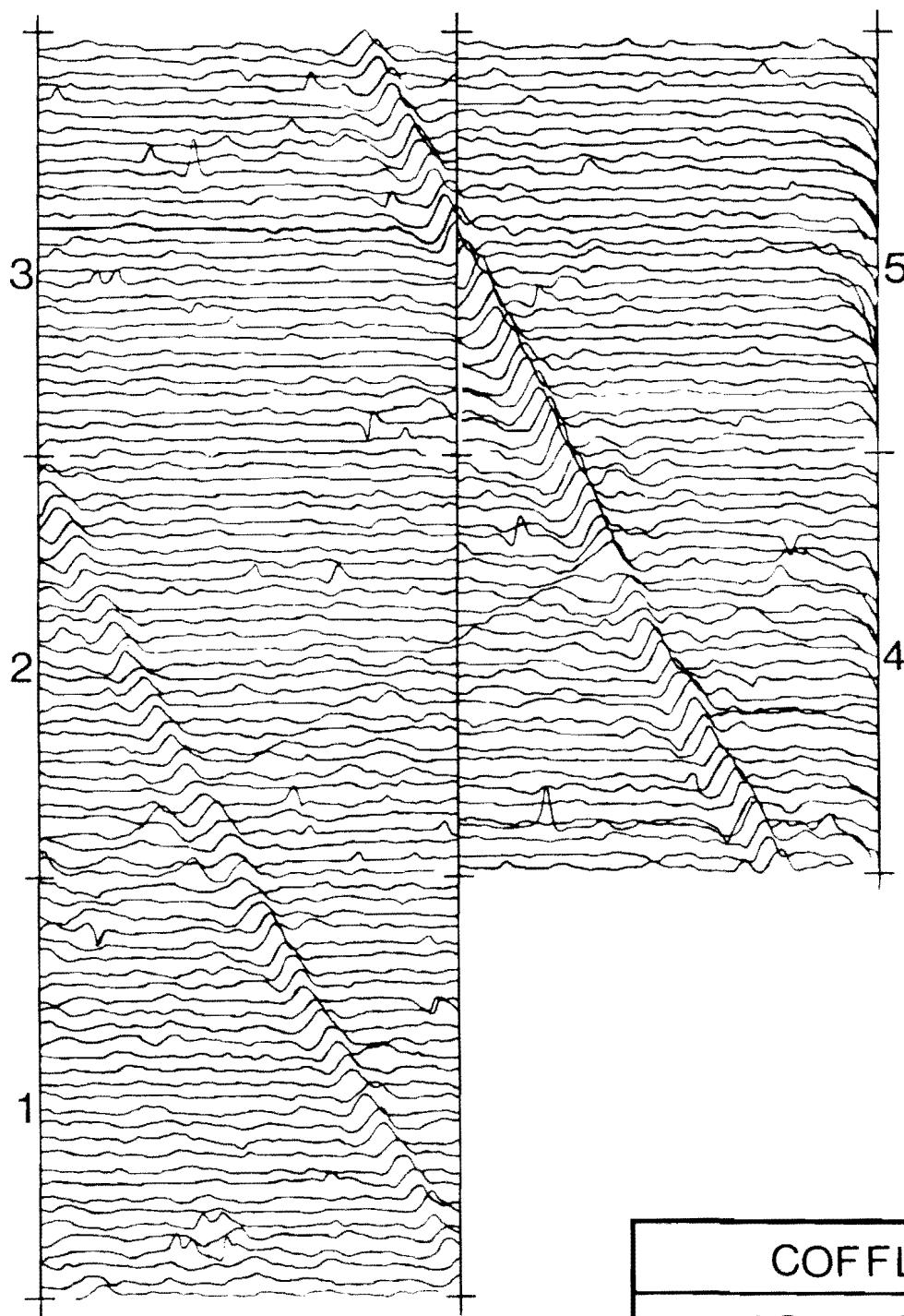
Survey no. 10/80
Based on 1:2500 OS sheet

SX 5451





Z ←



COFFLETE, S. HAMS		
MAGNETOMETER SURVEY		
vertical scale 25 gamma /cm		
0	1: 500	30m
Survey no. 10/80	DoE A.M. Laboratory Plan no. 2 of 5	Geophysics Section

