

ANCIENT MONUMENTS LABORATORY GEOPHYSICS SECTION

REPORT ON MAGNETOMETER SURVEY

SURVEY: CLEAVEL POINT (3)

DATE: 2 - 4/3/81

Report no. 6/81

1. SITE

OS grid reference: SY 999 859

Field no. 8891

Location: a small headland between estuarine marsh flats on the south side of Poole Harbour

Geology: Eocene Sands

Archaeological evidence: pottery and midden deposits visible on surface.

Expected continuation of archaeological features detected during earlier magnetic surveys (1978 & 1979)

2. SURVEY

Object: to plan the location of archaeological features in this field.

(a) Magnetic survey

Automatic plotting with fluxgate gradiometer

Settings: X : 1 : 200  
Y : 15 gammas/cm.

(b) Other tests see plan 3

(i) Magnetic susceptibility:

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

Survey grid measured to: field boundaries

Plans/charts enclosed:	1 - location plan	1 : 2500
	2 - magnetometer traces with interpretation	1 : 500
	3 - magnetic anomalies and susceptibility values	1 : 2500
	4 - fieldwalking data	1 : 2500

### 3. RESULTS

Magnetometer coverage of this peninsula, with its dense lay-out of buried remains of the Late Iron Age - Roman period was extended in 1981 over field 8891 where earlier work (squares 47 - 54) in 1978 suggested a continuation of a network of ditched enclosures and related features. Plan 1 shows the total extent of the area surveyed at the site (see also reports G 27/78 and G 6/79), and plan 3, at the same scale (1:2500), illustrates a summary of the anomalies detected, along with soil magnetic susceptibility values. Plan 2 shows this year's magnetometer traces with significant anomalies outlined. Plan 4 shows a summary of fieldwalking data compared with the earlier geophysical survey results.

As anticipated, the pattern of enclosures can now be shown to extend substantially beyond the area previously covered, and to reflect much the same general character and lay-out. At least eight ditched enclosures, arranged more or less rectilinearly can be seen in the new area. Each enclosure tends to be a discrete unit separated from its neighbours by long and narrow (approx. 5 - 20 m. wide) spaces presumably serving as access and entrance routes. Entrances to several of the enclosures are visible, along with a characteristic localized magnetic enhancement of the adjacent ditch-fills (eg. in sqs. 93, 97, and 103).

Detectable anomalies diminish towards the western edge of the survey area, and with the additional evidence of very low soil susceptibility values here (see traverse A - B, plan 3), this suggests a limit to the site on the inland side, corresponding with that in the field to the north. A line of disturbance and soil noise running along the western half of sqs. 85, 92, 99, 106 and 112 represents the grubbed out former hedge-line, and the less uniform soil of the former heathland edge.

Soil magnetic susceptibility values have been measured for samples collected at 10 m. intervals along the length of two traverses set at right angles along the length and breadth of the peninsula (see plan 3).<sup>\*</sup> In both traverses the high values, as would be expected, coincide with the thickest concentrations of buried features, and especially where industrial or occupation activity appears to have been at a maximum. Exceptional to this observation are the high values at either end of traverse X - Y, where there appear to be no archaeological features. The cause of this is not understood, and if not spurious, might relate to special conditions associated with waterlogging and/or localized redistribution of magnetic constituents of the soil. Elsewhere along the traverse, high susceptibility values correspond with areas where anomalies are at their strongest (eg. sqs. 97, 96). On traverse A - B values are low to the west where there appears to have been no human activity, but rise substantially over the enclosures with a sustained peak over the dense remains in and around the excavation area where occupation and industrial activity have been shown to have taken place. Values fall off sharply at the eastern extremity of the traverse where features again become scarce.

### 4. CONCLUSIONS

In contrast to the general situation elsewhere over the site there is no very remarkable evidence here (sqs. 85 - 117) for industrial activity. Anomalies are on the whole rather weak and there is a conspicuous lack of detectable activity within the enclosures, although here and there (eg. sqs. 109, 111 and 88) individual anomalies suggest

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\* We are grateful to Mr. Woodward and his staff for collecting these samples.

perhaps the presence of pits and localized burning. Evidence from controlled fieldwalking in this field (see plan 4) corroborates this impression of a slackening in activity in that quantities of briquetage and pottery recovered here are very much less than to the east and north, and only a part of the archaeologically significant area seems to have been productive of material at all. There appears to be no strong correlation between anomalies and shell middens, and there is no specific evidence for settlement or buildings although such traces as these would leave are often unsuitable for detection by magnetic means.

The extent of plotted archaeological features at Cleavel Point now covers an area approaching eight hectares. The recent survey has extended the number of enclosures located to a minimum of fifteen amongst which are a wide scattering of more partial features relating to subsidiary enclosures with associated settlement and industrial constituents. A limit to the site has been located to the east and the north-east, but scanning in the field (8471) to the south-west suggests that features may well continue in this direction. Only slightly further afield, to the north-west, scanning by this laboratory in 1979 and a recent survey by the BGC this year (see A. M. Lab. report G 10/81) at Fitzworth Farm (SY 993 865) has identified further anomalies of a similar character, again emphasizing the wealth of such sites in this vicinity.

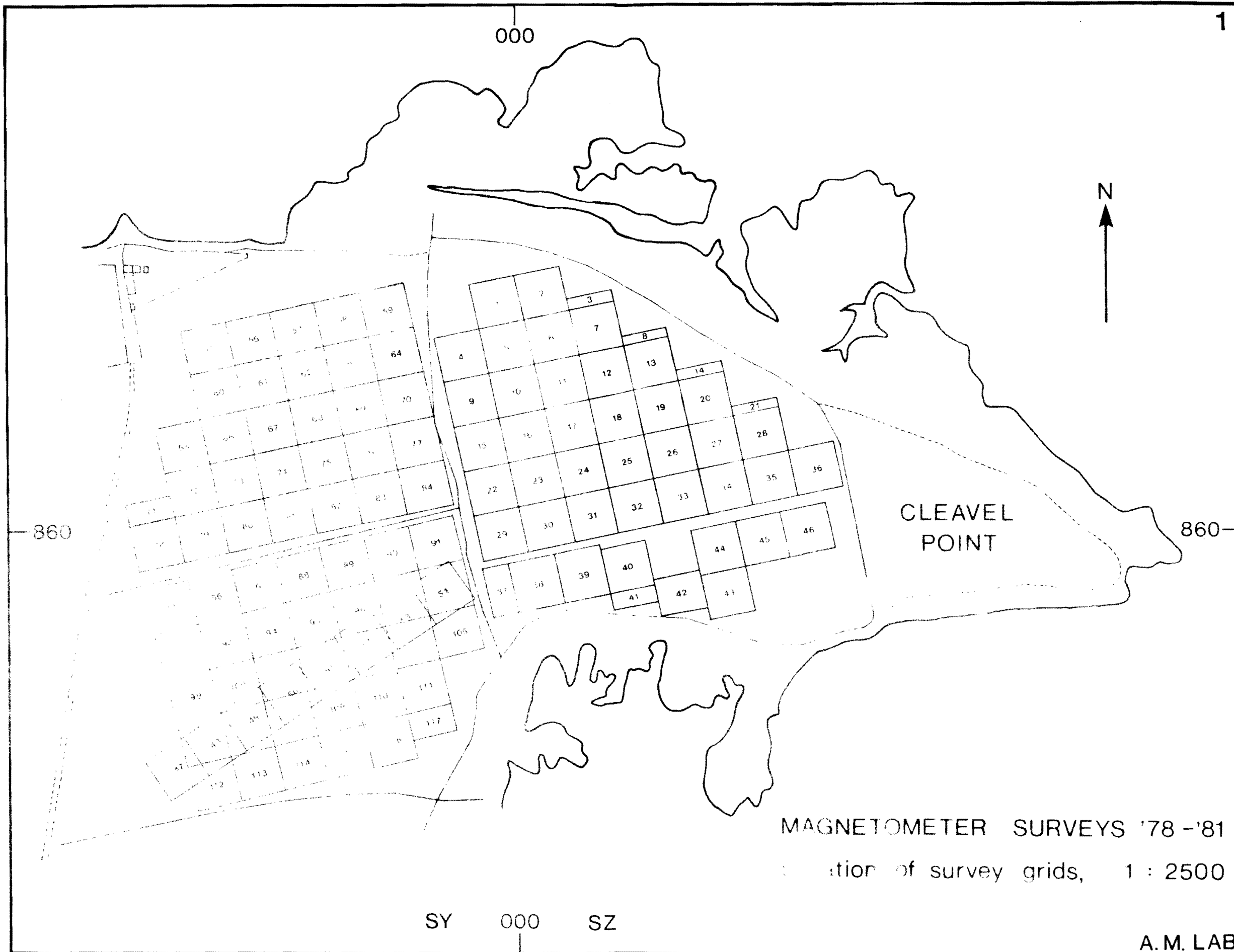
Surveyed and reported by A. David.  
with A. Bartlett.

for: S. Dunmore  
P. Woodward

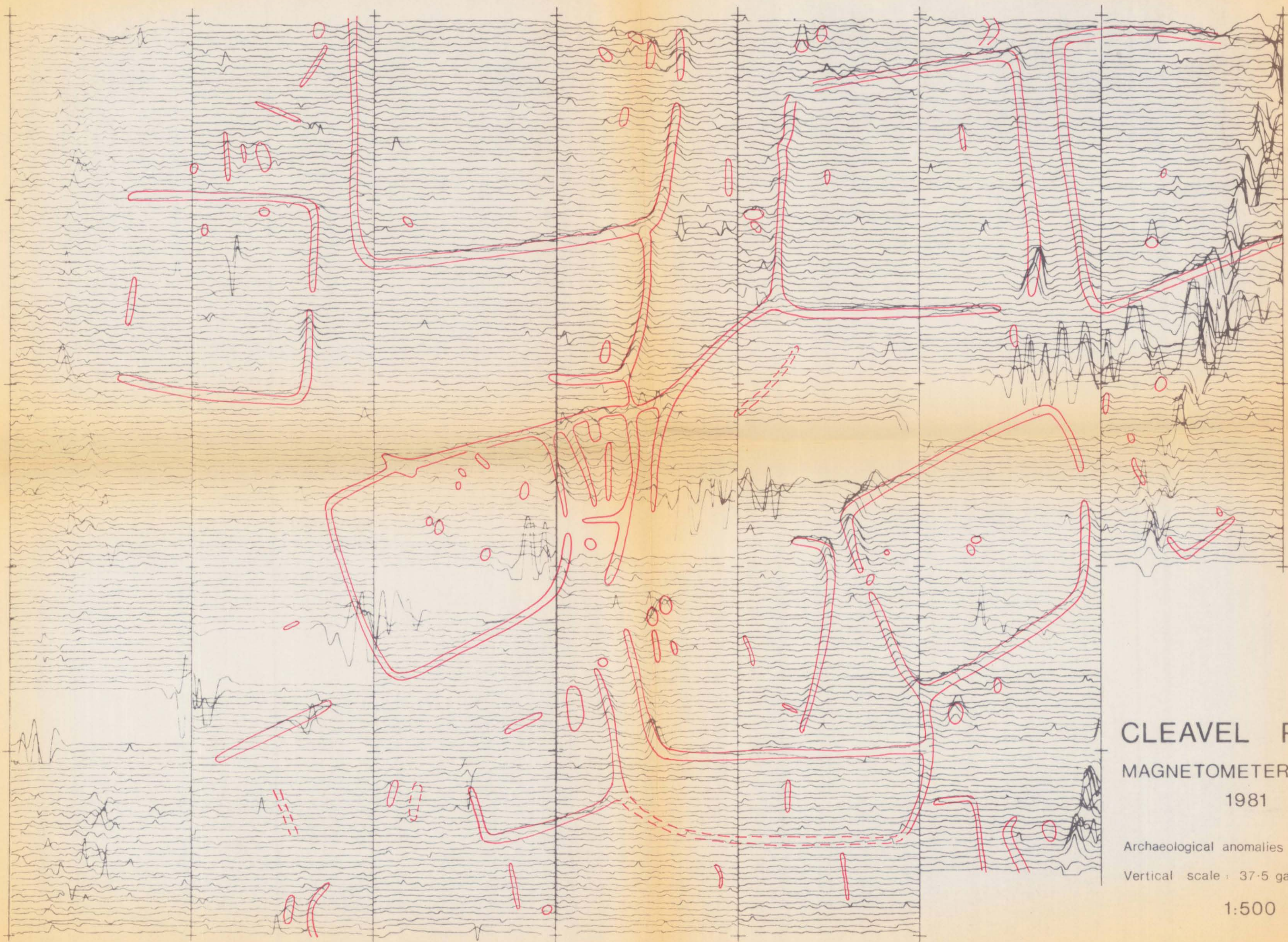
18th. August. 1981.

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CLEAVEL POINT  
MAGNETOMETER SURVEY  
1981

Archaeological anomalies outlined  
Vertical scale : 37.5 gammas cm.  
1:500



