MOEL-Y-GAER, RHOSE MOR: A SOIL REPORT BY

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The hillfort of Moel-y-Gaer is situated in an area of millstone grit but with limestone exposed nearby and bounded to the north by a mineralised fault (presumably lead).

The parent material consists of quartz-rich sandstone drift and consequently the soils are decidedly acid - ie surface turf pH 3.7, underlying "boulder clay" (in the Clay Pidgeon pit) pH 4.1 (Jenkins, D pers.comm. to G Guilbert, 1972) and bone does not survive.

A number of soil samples were examined and detailed results are given below.

ANCIENT MONUMENTS LABORATORY

MATERIAL SOIL

SITE: MOEL-Y-GAER (DATE:

SHEET: (1)

AM No	X-Ray No	Photo No	Description and Report	Ref No
740302			Question - IS IT A TURF LINE ? From the morphology it appears to be the Ea horizon of a podzolic soil. Very pale grey (10YR7/2) when dry. 10 YR5/2 (greyish brown) when wet. There is no evidence of any humic material ar old root chanels. The lower part of the sample is distinctly orange coloured which may represent a BFe or a B1 horizon containing the leached sesquioxides from above. It would seem therefore that, if this was a soil at the surface, the Ea horizon had been removed prior to the construction of the early rampart. The structure of the sample is also not typical of an organic rich horizon.	M04 pre-bank surface
740303			If this sample has been taken in the same way as the previous one, then the turf line is at the bottom of the sample. The top 2" of the sample shows no indication of organic matter, while the lower 1" is a definite organic rich horizon. - HAS THE SAMPLE BEEN DISTURBED ?	M04 thin crumbly dark grey
740304			IS THIS A TURF STACK ? Sample contains many roots which I assume to be modern. Apart from this, evidence of previous organic matter content is negative. The colour, 7.5 YR 4/4 (brown) is not indicative of a turf stack. The texture is primarily silty with quite a high sand content and the structure is sub-angular. However there are local spots of darker material indicating small patches of organic matter (1" diameter). But to classify the sample as a turf stack would be an over exaggeration.	M1 upcast lump
740305/6/7			The difference between the "grey" silt and the brown silt is due to different organic matter contents. The "grey" silt colour is 7.5 YR 3/2 (dark brown) while the brown silt is 10YR 4/4 (dark yellowish brown.) The former is higher in organic matter. There is also evidence of modern roots in sample M/BB02 ((7.5 YR 3/2). This could be explained in two ways. i. The holes were filled with similar silt (ie from the adjacent soil). This was followed by, in the case of the grey silt, cover by vegetation	M1/BB02 M1/uP°1 M1/dg°3

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MATERIAL SOIL

MOEL-Y-GAER
SITE:..... (DATE:
(2)
SHEET: .....

AM No	X-Ray No	Photo No	Description and Report	Ref No
740305/6/7			causing the higher organic content, and in the case of the brown silt no such organic cover. (This organic cover may be recent). b. The grey silt post holes were filled by inwash top soil and the brown silt post holes were filled by subsoil silt, perhaps from an exposed or cleared surface. The grey silt contains small amounts of charcoal which may reflect occupation. However, from the texture and structure of the silt (grey) I would say the organic material (and hence the colour difference) is post depositional. Similar amounts of charcoal were found in the brown silt. The grey silt contains "positive" phosphate. Therefore grey silt may indicate occupation. From the above, it seems that the grey silt shows more evidence of occupation, but one cannot conclude why the organic content of the grey silt is higher than that of the brown silt. The difference between the two layers in the 4-poster post holes may be due to the lower layer (10YR 4/4) being occupation deposit while the top layer(10YR 5/6 - yellowish brown) is post occupational and contains no charcoal. It is also much better sorted into the silt and fine sand fractions which may indicate earlier deposition.	
740308			DOES IT CONTAIN COOKING REFUSE (MORE THAN IN ABOVE SAMPLES). Contains more charcoal, also charcoal of greater size. No other morphological evidence of cooking refuse. Contains no phosphate.	M1/YR04
740308/9/10/11			740310 (TL26) contains high phosphate levels indicating a former body. TL04 contains no phosphate therefore not a grave. The compact white material (TL04) has, again, a silty texture with fine sand. The colour is similar to sample 740302 (Ea horizon); Vastly different from	TL04 TL10 TL26 TL28

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MATERIAL SOIL

SITE: MOEL-Y-GAER ..... (DATE:

SHEET: (3) .....

AM No	X-Ray No	Photo No	Description and Report	Ref No
740308/9/10/11			other samples. The colour indicates heavy leaching prior to deposition in the pit, but the circumstances which caused this are not apparent. Contains charcoal. MOTTLED.	