ANL Rpt 2619

SOIL REPORT___ STAMFORD, LINCS. P. TAYLOR.

The site was situated near Stamford on sandy material. It consisted of a curved ditch associated with a line of pits. The pits followed the line of the ditch for part of its length then departed from the ditch at a tangent. Samples of the ditch and a pit along the ditch length were taken as well as samples of a pit away from the ditch. The main problem was to ascertain whether the pits and ditches infilled naturally, and also to see if there was any difference between the fill of the pits as they departed from the ditch. (see diagram).

RESULTS

	sand%	silt%	clay%	humus mgs/100grs.
Ditch top	77.5	7.5	5.0	29
" mid.	77.5	7.5	5.0	14
" btm.	85.0	12.5	2.5	9
Pit A top	70.0	20.0	10.0	23
btm.	87.5	10.0	2.5	12
Pit B top	72.5	22.5	5.0	21
btm.	87.5	10.0	2.5	11

CONCLUSIONS

In the field, angles of rest of the material at the bottom

of the ditch and pits indicated natural infill. This basal material was similar in the ditch and both the pits, being almost 90% sand. It is probable therefore that a preliminary period of natural infill, where sand from the lip and sides of the features was washed in, occurred. Observations under a low power microscope showed thin laminations in this material, indicating that infill may have been in various time phases.

Above this basal material, the fill is less sandy and there are no laminations. It is not possible to say whether this upper material was naturally or artificially infilled.

The results also indicate that there is no significant difference between the physical constituents of the pits adjacent to the ditch and those away from the ditch.

Organic matter tests show that humus decreases from top to bottom in the features, although it is generally low throughout. This suggests either a short period of soil formation when the features had filled, or that the infill at the top of the features already contained higher amounts of humus when it was deposited.

SOIL DESCRIPTIONS.

Ditch top------Dark yellowish brown (10YR 4/4) sand.

Very poor medium crumb structure.

Moderately firm consistency. Stones 15%.

Ditch mid.-----Yellowish brown (10YR 5/6) sand.

Structureless. Loose consistency. Stones 15%.

Ditch btm.-----Yellowish brown (10YR 5/8) sand.

Structureless. Loose consistency. Stones 15%.

Pit A top------Dark yellowish brown (10YR 4/4) sand.

Very poor medium crumb srtucture.

Moderately firm to loose consistency.

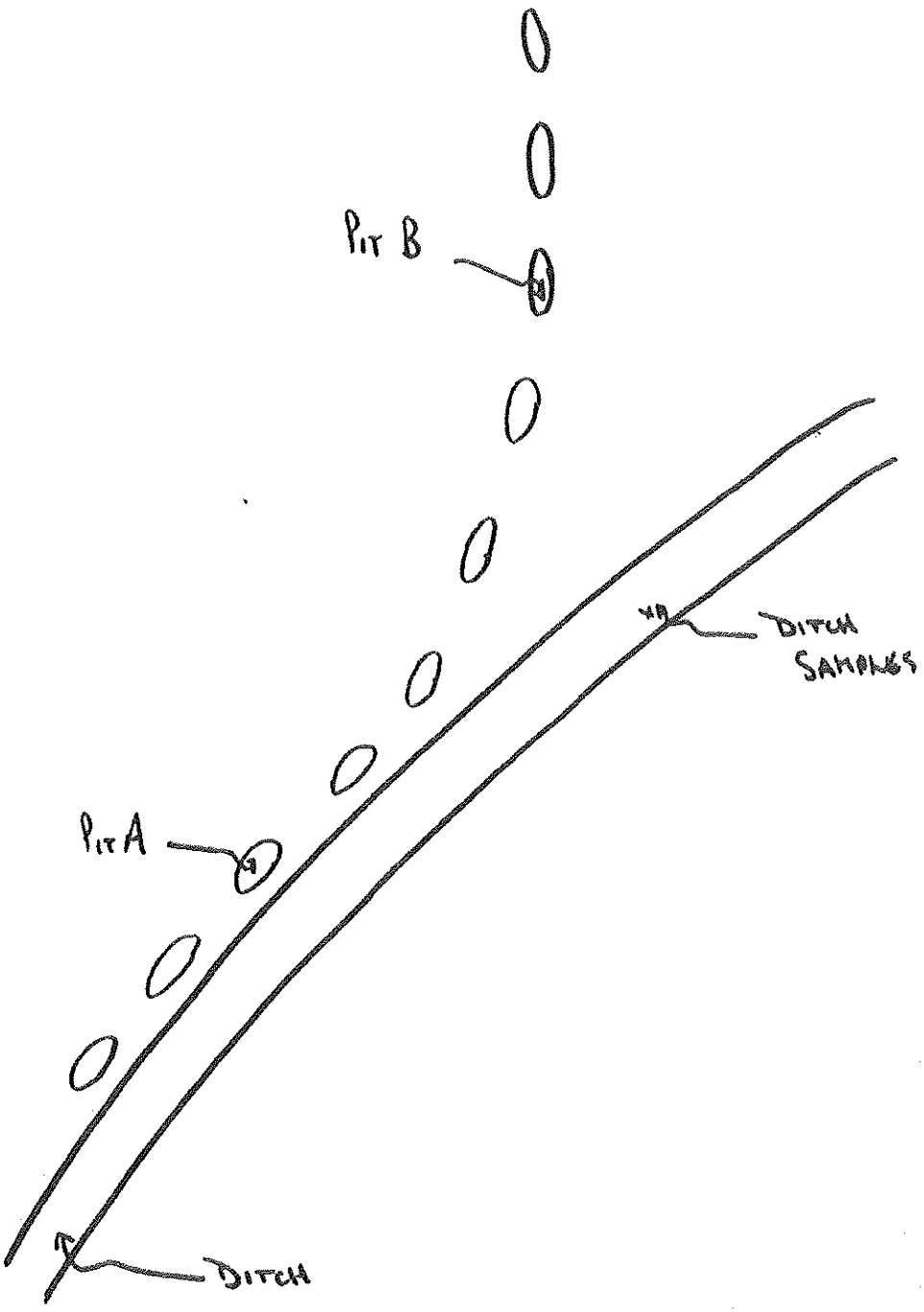
Stones 20%.

Pit A btm.-----Yellowish brown (10YR 5/8) sand.

Structureless. Loose consistency. Stones 5%.

Pit B top------Dark yellowish brown (10YR 4/4) sand. Structureless. Loose consistency. Stones 15%.

Pit B btm.------Yellowish brown (10YR 5/8) sand. Structureless. Loose consistency. Stones 5%.



Relationship of Ditch And Pit Line At Stamford, Lincs.