

INVERKAYON, WEST LATHLAN : Resistivity test traverse on Antonine Wall

OBJECTIVE: To examine the possibility of using resistivity detection to plan a fort thought to lie in the angle between the Wall and the River Avon (see 1/2500 maplet), and threatened by proposed road development.

METHOD: A Martin-Clark Resistivity Meter was used, with double dipole configuration at 5 ft spacing. A single traverse, calculated to cross the remains of both the fort and the Wall, was laid out. The maplet shows the position of the traverse in relation to identifiable local features; zero was 45 ft from the river.

RESULTS: A single substantial high resistance anomaly was encountered. Its width suggested a feature 30 ft wide, and the most likely interpretation was that it represented an oblique crossing of the Antonine Wall itself. Two low anomalies, extending a further 80 ft overall, suggest a double external ditch.

These results suggest that, rather than following the course shown on the map, the Wall may approach the river at a more obtuse angle. If the Wall foundation is 14 ft wide, as elsewhere, the width of the anomaly indicates that the traverse crossed it at an angle of about 30° . Such a course would seemingly line up better with the continuation on the south side of the river, where the ditch is extant, and would perhaps be more comfortably defensible.

If the Wall does indeed follow this new course, there is little room for a fort between it and the steeply rising ground to the east, and perhaps the fort should be sought elsewhere. It is worth noting that the mass of masonry marked on the map by Dr Breeze could fit in with the modified Wall line as part of the Wall itself.

This report hangs a great deal on the interpretation of a single test traverse. For greater certainty, a more extensive resistivity survey would be required; but a small excavation would be an equally valid approach.

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WEST LOTHIAN

Course of Kilmall

Metres

951

952

953

954

80000

INVERAVON : RESISTIVITY TEST TRAVERSE, Jan. 1973

AM Lab Geophysics Section

2796
6-11

3000 Feet

2500

2000

1500

799

798

797

796

795

Fullbank
3 Meters

NS 9479

0491
6-08

2791
1-48

20

25

B 904

19

50

BM 3638

1475

12-30

2378

1-10

STONE

WALL

254

0263
04

0262
14

0360
20

0058
01

0254
26

0053
01

0247
77

1651
12-78

7055
12-78

DAIR

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