

GeoArch

Report 2010/32

Evaluation of residues from M1
Northern Motorway (J2009):
Lagavooren 6 (01E0396)

Dr Tim Young & Thérèse Kearns
November 15th 2010

Evaluation of residues from M1 Northern Motorway (J2009): Lagavooren 6 (01E0396)

Dr T.P. Young & T. Kearns

Abstract

Material from this site includes a probable 19th-20th century block of clinker from blacksmithing (from a field drain) and some natural bog iron ore that has grown in a ditch fill since its deposition.

Contents

Background	1
Methods	1
Description	1
Evaluation of potential.....	1
Appendix 1: summary catalogue	2

Background

This report is an evaluation of archaeometallurgical residues from Lagavooren 6 (01E0396) on the M1 Northern Motorway development, excavated by E. Stafford, on behalf of Irish Archaeological Consultancy Ltd.

Methods

All materials were examined visually and using a low-powered binocular microscope where necessary. As an evaluation, the materials were not subjected to any high-magnification optical inspection not to any other form of instrumental analysis. The identifications of materials in this report are therefore necessarily limited and must be regarded as provisional.

It should be noted that after washing the overall weights of the material submitted in many cases differs significantly from those originally recorded.

Description

The catalogue for this site is presented in Appendix 1.

Approximately 800g of possible residues were submitted from Lagavooren 6. Slag was present from two contexts, one large block (255g) of low density vesicular clinker [C2], and 577g of stone-rich concretions recovered from the fill [C49] of an enclosing ditch [C44].

The large block of clinker is not identifiable with certainty, for clinker (partially melted inorganic coal residue) may be formed in a wide variety of settings including metallurgical contexts, but also in other uses

of coal such as steam engine boilers. In this instance the concavo-convex shape is strongly suggestive of an origin in a coal-fuelled blacksmith's hearth as a smithing hearth cake. Coal is seen occasionally as a smithing fuel from the medieval period onwards on the east coast, but a more likely date for a light-weight piece such as this (which suggests the use of an iron tuyère rather than the earlier ceramic tuyères) would be post-1800.

The concretionary material from the ditch fill (c49) is an entirely natural development of ferruginous mottling – essentially a development of bog iron ore, which has presumably grown since the filling of the ditch.

Although this bog ore has no archaeological significance, it is a useful observation because other sites on this scheme have produced isolated blocks of a similar ore, which can therefore be seen as being potentially of natural occurrence also.

Evaluation of potential

The material from this site has no potential for enhanced understanding through further detailed analysis. The material is not of high priority for retention.

Appendix 1. Summary catalogue of material

Site: Lagavoreen 6 (01E0396)

<i>context</i>	<i>sample no</i>	<i>weight (g)</i>	<i>quantity</i>	<i>description</i>
2	15	255	1	low density vesicular clinker. Broken mass, but broadly concavo-convex shape, 120x(60)x55. Contains large shale clasts
49	16	577	23	concretions of natural stones bound by ferruginous mottles
49	16	31	1	animal tooth
	<i>total</i>	<i>863</i>		

GeoArch



geoarchaeological, archaeometallurgical & geophysical investigations

Unit 6,
Western Industrial Estate,
Caerphilly,
Wales,
CF83 1BQ.

Mobile:
Fax:
E-Mail:
Web:

07802 413704
08700 547366
Tim.Young@GeoArch.co.uk
www.GeoArch.co.uk