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Evaluation of additional possible
archaeometallurgical residues the
Felindre to Brecon pipeline

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Abstract

This report covers some minor occurrences of potential archaeometallurgical residues from the Felindre to Brecon pipeline. These items were identified as being of potential interest after completion of the report on the major residue occurrences. The materials involved had almost all been described as vitrified or bloated ceramics in earlier investigations – but very little of the material actually answered this description.

Site 50.05 produced what had been identified as vitrified ceramic, but can now be identified as a highly corroded iron nail.

Site 51.07 produced a range of micro-residues, dominated by burnt and sometimes vitrified organic material, probably mainly bone. There were a few occurrences of fuel ash slags from the site and these were probably non-metallurgical.

A smaller assemblage of similar material was also identified from Site 52.01.

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The specimen 50.5.12 proved to be a highly corroded iron nail, with the artefact completely altered to a hollow iron oxide crust.

The material from sites 51.07 and 52.01 contained abundant residues from high temperature activities, including burnt and vitrified organic material (probably mostly originally bone), some small particles of fuel ash slag, fragments of vitrified stones with glazed surfaces and fragments of charcoal. None of this material need represent burning within a metallurgical context, and in the absence of any clear metallurgical residues almost certainly does not.

Many of the samples contained small particles of coal. These may have been present as a component of the natural sediment, rather than as fuel residues.

Methods

All investigated materials were examined visually using a low-powered binocular microscope where necessary and were summarily described and recorded to a database (table 1). As an evaluation, the materials were not subjected to any form of instrumental analysis. The identifications of materials in this report are therefore necessarily limited and must be regarded as provisional.

Evaluation of potential

None of the material examined for this report has any potential to produce further information of a metallurgical nature.

Results

The materials from three sites originally described as vitrified or bloated ceramic were re-examined. The resultant catalogue is presented as Table 1. The report acts as a supplement to the earlier assessment (Young 2011).

None of the material proved to be archaeometallurgical.

References

YOUNG, T.P. 2011. Assessment of the archaeometallurgical residues from the Milford Haven to Brecon High Pressure Gas Pipeline. *GeoArch Report 2011/40*. 9 pp.

Table 1: Summary catalogue

Site	Context	Sample	Find	Fill of...	Weight	No.	Description
50.05	50.5.47/48/49	50.5.12			11.3	1	Iron nail corroded to hollow oxide shape. 12mm head, 35mm squarish-sectioned shank (now slightly broken)
51.07	51.7.019	51.7.15			0.69	33	17 pieces of coal, 5 pieces of charcoal, 6 pieces of vesicular vitrified organic material, 1 piece of fuel ash slag, 1 piece of green glassy vesicular slag, 3 stones
51.07	51.7.037	51.7.009			0.19	10	8 pieces of vesicular vitrified burnt organic matter probably bone, 1 piece of sandstone, 1 piece of coal
51.07	51.7.038	51.7.010			0.01	7	3 fragments of vesicular vitrified organic material probably bone, 4 pieces of charcoal
51.07	51.7.152	51.7.057			2.02	c.18	mainly vesicular, dark, glassy, low density material, probably burnt bone; one piece of wood charcoal; one small vitrified pebble fragment with dark slaggy glaze
51.07	51.7.191	51.7.63			0.02	2	2 pieces of vesicular glassy burnt organic material probably bone
51.07	51.7.204	51.7.098			0.14	12	3 pieces of charcoal. 8 pieces of vesicular vitrified burnt organic material probably bone, 1 piece of slag formed of coalesced hollow spheroids
51.07	51.7.215	51.7.071			0.13	1	probably burnt stone
51.07	51.7.218		81		<0.01	1	vesicular, dark, glassy, low density material, probably burnt bone
51.07	51.7.234	51.7.073			0.11	9	4 pieces of charcoal, 4 pieces of burnt organic matter, probably bone, 1 piece of coal
51.07	51.7.234		106		0.38	3	1 large rounded lump of fuel ash slag, 2 small fragments of vesicular vitrified organic matter
51.07	51.7.242	51.7.076			0.41	c.15	1 cortical chip of chert, 7 pieces of charcoal, 2 pieces of poss. Coal, 5 pieces of vesicular burnt organic matter
51.07	51.7.245		77		0.08	5	mainly vesicular, dark, glassy, low density material, probably burnt bone; one piece is dense than the others and is probably coal
51.07	51.7.255		80		2.9	c. 86	13 small stones, 20 charcoal fragments, 47 vesicular burnt bone/organics fragments, 1 piece of fuel ash slag/vitrified tone, 9 fragments of various natural iron oxides, probably mainly after pyrite, but 1 spheroidal siderite?
51.07	51.7.339		125		0.13	12	10 fragments of vitrified burnt organic matter, probably bone; 2 grains of sandstone
51.07	51.7.340		126		0.01	5	dark vesicular glassy material, burnt organic material, probably bone
51.07	51.7.341		127		<0.01	10	burnt organic material
51.07	51.7.349	51.7.137			0.17	1	small fragment of vitrified stone with green glaze, vesicular
52.01	52.01.07	52.01.002		52.01.006	0.75	c.32	mainly burnt sandstone particles, but four fragments of dark vesicular glassy material, probably organic (poss. bone)
52.01	52.1.44	52.0.04		52.01.043	<0.01	1	vesicular, dark, glassy, low density material, burnt organic material (poss. bone)

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