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Assessment of metalwork from the A465 sections 5 & 6 (Heads of the Valleys) [HOTV/21/SMR]

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Abstract

The assessed materials comprised 184 items with a total weight of 33.7kg. A further 23 items were previously recorded from the project: 3 are missing and 20 were photographed on site before being disposed of. The total assemblage was therefore 217 items weighing an estimated 58.9kg.

The materials are, in general poorly preserved, commonly embedded in concretion and frequently fragmented.

Only four sites presented an assemblage of any size: New Area 1 and Asset 48 (small structures built adjacent to ironstone workings of the Cyfarthfa ironworks), Asset 46 (a house just to their west that survived until 2009) and Asset 22 (a farmstead that survived into the 20th century).

Contents

Abstract 1

Contents 1

Methods 1

Results 1
General description of the assemblage 1
Summary of assemblage by site..... 1

Interpretation 3

Further work 3

References 3

Table 1: summary catalogue 4

Methods

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

Measurements of items are presented in millimetres. For many structural items and fasteners, the design dimensions would have been in inches.

This assessment was conducted in March 2024 and was commissioned by Dr Rhiannon Philp of Archaeology Wales.

Results

General description of the assemblage

The assessed materials comprised 184 items with a total weight of 33.7kg. A further 23 items were previously recorded from the project: 3 are missing and 20 were photographed on site before being disposed of. The total assemblage was therefore 217 items weighing an estimated 58.9kg.

Summary of assemblage by site

Pond C
A single highly corroded nail/bolt fragment was the only metalwork find from this site.

Asset 13
This site produced a fragment of a horseshoe and a single small spike.

Asset 15
This site produced only a single bolt.

Tr 5 (Asset 19)
Metalwork from this site comprised a single large nail encased in mineralised wood.

Hirwaun nr Asset 22
This site yielded and iron spike, possibly a pintle, a boot heel tap and a small piece of iron rod.

New Area 1
This site produced 24 items of metalwork. A small number of pieces are related to transport: a short fragment of cast iron plateway plate, a cast iron plateway chair and a cast iron plateway dram wheel,

together fragments of two horseshoes. Four iron spikes might also have been related to the mounting of plateway, but other uses are also possible. A large washer may also fall into this category.

An iron chain with a hook, a padlock and two other possible padlock fragments were related to security.

Personal items were restricted to a single 'horseshoe' boot heel tap.

The remainder of the assemblages included assorted nail, bolt and nuts remains, together with fragments of iron bar, rod and sheet.

The assemblage contained no domestic items.

The dram wheel was smaller (at 240mm diameter) than any recorded from the Ffos-y-fran project (Young 2016). The wheel differs from many recorded from the Merthyr Tydfil area in having simple trapezoidal gaps between the spokes, rather than tear-drop shaped perforations. Small diameter wheels were employed on later underground railways, but so far have not been recorded on plateways.

The chair is also unusual for Merthyr Tydfil in possessing a large ring (37mm internal diameter) on its outer side for mounting with either a substantial spike or bolt or with a large wooden plug and a spike. Asymmetrical large holes were employed on some internal plateway of the Dowlais Ironworks (Lewis 1975), but they differ markedly from the present form. Other chairs with large holes do not show the 'neck' between rail and the hole; those of this form known are largely associated with flat bottomed rail rather than plate.

This asset lies within an area of ironstone quarrying and mining associated with Cyfarthfa ironworks. The lack of comparative examples for the wheel and chair may be because of the relative lack of investigation of systems associated with Cyfarthfa ironworks, compared with systems to the east.

This assemblage, if associated, is likely to be of the first half of the nineteenth century.

Prince Charles WB
This watching brief produced a small iron sheet fragment and a large steel horseshoe of late 19th or more likely 20th century date.

Asset 22
Asset 22 produced a large assemblage of 47 items (26.8kg), but of these 30 items were photographed on site and then disposed of. Only 17 items (total 2kg) were thus available for full assessment.

Personal items included 7 'horseshoe' boot heel taps (one with other parts of the heel preserved) and one possible iron buckle. Domestic items included a probable cast iron oven dish, two table forks (in plated copper alloy), fragments of a thin-walled ferrous vessel, probably either tinned or galvanised, and a pair of scissors. A complex metal item may be a fragment of an oil lamp.

Other tools included the head of a sledgehammer, a pitchfork and a possible leather knife.

Structural and security items include three padlocks (two from the same manufacturer), with two lengths of chain, a fragment of an iron hinge and an iron pintle.

Items associated with transport included two heavily concreted chairs (probably from plateway; the attached concretion prohibits any detailed observation), a plate fragment from a plateway and two horseshoes.

This is a very mixed assemblage containing items of probable early-mid 19th century date (the plateway components) together with others, such as two of the padlocks for which a very late 19th or early 20th century date is likely.

46 items with a weight of 4.6kg derived from this second phase of work at Asset 22 (listed as *'New Asset 22'*). The assemblage was a very heterogeneous collection of small 19th and 20th century items.

Structural items included a came from a window, apparently of aluminium (perhaps from a caravan rather than a building), a fragment of cast iron guttering, an iron door hinge of 'T'-shape and a possible door latch.

Fastenings included a variety of bolts and nails of both 19th and 20th century age, most noticeably at least five examples of 70mm-lomg nails with domed heads and round washers.

There was a large, probably horticultural, 4-tined rake.

Transport was represented by a large non-ferrous buckle, probably from horse harness and possibly by some long iron spikes (although these might have been structural).

There was a considerable number of indeterminate fragments of iron sheet and rod together with an iron ring.

A closed, cylindrical sheet metal object was of uncertain origin, but could have been part of a candle stick.

The overall assemblage (both phases of work) is commensurate with a general debris from a 19th to early 20th century farmstead. The substantial fragments from plateways do not sit neatly in this interpretation and there were no known plateways close to the site. Plateways were present in coal and ironstone workings to the south and it is possible that these objects were brought to the site for a secondary purpose (as weights or doorstops for instance).

Gurnos S
The subsoil on this site yielded three miscellaneous fastenings: a bolt, a 'U'-bolt and a carpentry nail.

Asset 46
This assemblage of 56 items (2.7kg) is dominated by small items of domestic and structural origin.

Domestic items include fragments of a shoe polish tin, a possible iron buckle, two plated copper alloy spoons, a straight hairgrip, some fragments of a cast iron pot and multiple fragments of thin sheet metal vessels.

Structural items include 22 nails, screws, bolts and nuts. These are extremely varied, with cut (steel?) clasp nails, a zinc nail and a brass nail, as well as many small screws.

The datable items in this assemblage are suggestive of a 20th century age, in agreement with the cartographic evidence for the survival of this structure in comparison with the early ruination of Assets 48 and New Area 1 to the immediate east.

Asset 48
The overall assemblage from Asset 48 included 28 items with a total weight of 3.7kg. Of this assemblage, 11 fragments from within the cottage structure were from a thin sheet metal vessel or vessels, probably either galvanised or tinned.

The topsoil produced a short prise bar, a spike possibly from rail infrastructure, a large wrought iron horseshoe and a 'horseshoe' boot heel tap.

Other items included fragments of iron bar and rod and a probably galvanised iron ring. A steel hexagonal nut (probably 20th century) was the most recent dateable item, other items were likely to be earlier, probably 19th century.

Unstratified
A small concretion of uncertain core was labelled *'between drain and gully'* and a short length of iron rod was labelled unstratified.

Interpretation

The early industrial exploitation of the ridge between the Cynon and Taff valleys by Cyfarthfa ironworks is probably represented by items associated with plateways from New Area 1 and by a prise bar from Asset 48. Plateway fragments from Asset 22 may have brought to the site for repurposing. In general, the natura of the sites means their assemblages contain much less of both industrial items and larger ferrous structural components, than has been observed in previous assemblages from the area (Young 2013, 2014a, 2014b, 2014c, 2016).

Agricultural activity is represented by a pitchfork and a horticultural rake from Asset 22.

Domestic activity is represented by cast iron pot fragments from Asset 46, a fragment from a possible cast iron oven dish from Asset 22, two table forks from Asset 22 and two spoons from Asset 46. There was a possible lamp fragment from Asset 22. The cutlery was all of very cheap quality, the original plating now lost revealing the copper-alloy cores.

The use of horse power is indicated by numerous horseshoes and by a large buckle form Asset 22.

More personal items were rare, except for the numerous 'horseshoe-type iron boot heel taps. A hairgrip from Asset 46 was probably of the 20th century.

Many sites produced crushed items formed of thin sheet metal – but distinction between 'tin cans' and less ephemeral (perhaps galvanised) vessels was not generally possible.

One interesting facet of the assemblages from these sites is the relative abundance of padlocks (mostly probably of early 20th century date), together with several instances of short chains – reflecting the need for security.

Structural elements were restricted to small items of fasteners (screws, nails, bolts, nuts etc) and to door furniture (hinges and latches).

Further work

The residue assemblage contains few items of intrinsic importance. The exceptions include the dram wheel and plateway chair fragment from New Area 1, which are interesting additions to the understanding of transport within the broad Cyfarthfa Ironworks complex. These items are worthy of preservation and, perhaps, a search for unpublished comparative items.

The assemblages from the various sites are largely poorly stratified, which reduces the significance of individual items further. No further work is recommended and, with the exceptions noted above, the assemblage can be considered of low importance for retention.

References

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Table 1: summary catalogue listed by context. Weights in grams. Items in green tone: transferred from archaeometallurgical residues collection. Items in salmon tone: items photographed on site, but disposed of and not available for assessment. Items in blue tone: missing.

Context	Context notes	Feature	Item wt	Item no.	Item notes
2	Pond C	Subsoil	22	1	highly corroded nail/bolt fragment
104	Asset 13	Hardcore layer	58	1	short spike; c11mm square; narrows down to chisel tip; 100x25mm overall
105	Asset 13	Earthwork bank	88	1	probable horseshoe fragment
302	Asset 15	Made ground	264	1	bolt; 100mm long, 30mm square head c15mm thick; hint of thread for at least 55m of shaft but very heavily corroded
504	Tr 5 (Asset 19)	Silty layer, base earthwork	44	1	probably a large headed nail, c70mm long, head 23mm; curved; but obscured by mineralised wood
1000	Hirwaun nr Asset 22	Topsoil	118	1	pointed wrought iron bar fragment; 17mm square near tip, but 15mm diameter at butt end; rounding hints that this acted as pivot/pintle
			8	1	concretion on iron rod
			96	1	concretion on 'horseshoe' heel tap; 13x5mm section; thins slightly inwards; 60mm long x 67mm wide
1005	New Area 1	Wall related to ancillary structure	1315	1	iron chain with hook; 32 links (mostly 50-60mm) in total, including terminal long one (70mm); existing length approximately 3ft to hook, but would stretch out a little more; links 6-8mm round bar; hook 103mm long, eye 40/17mm, hook 20mm internally
1014	New Area 1	Wall related to ancillary structure	654	1	bar (or probably spike, there is a hint of tapering) with a forged oblique square head; head c40-45mm across; bar 17mm square; 240mm long preserved; not known if head perforated
			3240	1	plateway chair, large casting, 255x85x48mm; flat area 80x120x22mm thick, then lip rises 10mm, then necks down to c 45mm wide, 50mm from lip, then widens to ring, 65mm wide x 37mm i/d, 42mm thick; hole through very centre of flat area; 85mm wide at lip
			622	1	20mm d x 345mm l, round iron rod
			80	1	bent section of wrought iron; c16mm x 7mm section; accretions thickens one side, unclear if this reflects the underlying iron; on the other side the iron is 20mm x 4mm; some resemblance to a padlock clasp; this was identified in the field as a buckle.

1017	New Area 1	Deposit overlying wall 1021	104	1	iron spike; 10mm wide; chisel tip; head uncertain
			106	1	horseshoe fragment
			176	1	horseshoe fragment
			42	1	iron rod, 7mm square, 120mm long
			256	1	highly corroded large padlock
			36	1	sheet iron fragment; 70x65x2mm
			278	1	wrought iron bar fragment; 32x20x80mm, squeezed down to 22mm in entre
			38	1	60mm/45mm x 5mm thick iron ring
			172	1	40 x 46 x 16mm thick nut with 15mm hole
			46	1	concretion with curving iron band 13mm wide with 40mm long spike crossing one end
			160	1	very deformed small horseshoe or, more likely, large 'horseshoe' heel tap, 75mm w x 90mm long, poorly preserved
			942	1	curving iron bar 200mm long, tapering; has 115mm long iron spike corroded onto one side.
			4	1	small concretion around c4mm square-section mineralised iron; very likely, but not certainly a nail shank
1025	New Area 1	Deposit	4345	1	plateway tram wheel; edge 12mm; diameter 240/195mm; hub 65/28mm; 6 spokes; web descends from top of hub to start of flange along each spoke; flange 22mm wide; hub 55mm tall
1027	New Area 1	Deposit overlying wall 1026	94	1	iron spike or wedge; 155mm length preserved, 17mm x 6mm wide end; 7mm x 6mm broken end
1038	New Area 1	Wall	4920	1	fragment of cast iron plateway plate; 300mm long, base 100mm wide, riser 60mm externally, base 20mm thick, riser 15mm thick; 15mm w ide and 10mm tall facet on inside of angle; no visible wear, no marks
1038	New Area 2 (1?)		23	1	Fe
1058	New Area 1	Paved pathway	566	1	elongate iron object in concretion; striations hint at corroded wrought iron; rounding of one end suggests this may be a bolt
			226	1	elongate object in concretion, striations suggest current surface may be inside wrought iron of shaft; area of potential head is missing
2000	Prince Charles WB	Topsoil	986	1	cleanish horseshoe, probably steel, 178mm wide and 180mm long; 12mm thick, uplift at front
			298	1	cast iron sheet fragment with hole, 90x120mm, 11mm hole, 6-7mm thick
2200	Asset 22	Topsoil	10	1	horseshoe' heel tap, 70mm wide x 50mm long, 4 holes, 3mm thick, 10mm wide
			18	1	fork, long prongs; coating worn back to oxidised Cu-alloy core; 165mm long with 50mm prongs
			300	1	large padlock with ornate brass front plate (same shape as example above but smaller), inscription 'SECURE / 2/ LEVER / LOCK' with loop in horizontal plane
			248	1	large padlock with simple brass plate

			16	1	fragments of complex sheet metal item with interlocking components, one piece shows perforations in component just above complex seat.; gas/oil lamp?
			210	1	iron bar with right angle and two holes
			114	1	iron rod? In concretion
			314	1	heavily corroded wrought iron spike, 150mm 15mm square, hook extends sideways by 25mm, appears to taper to point but unclear
			72	1	Appears to be 3mm thick sheet iron vessel with rim rolled down outside for 20mm, but details very unclear because of concretion
			34	1	probable large 'horseshoe' heel tap fragment, has small hole near termination, 4mm thick
	DSCN6851-6855		430	1	Pitchfork
	ditto			1	Incomplete horseshoe
	DSCN6856-6860		3481	1	Horseshoe
	ditto			1	Sledgehammer
	DSCN6861-6867		692	1	Dinner fork
	ditto			1	Spike?
	ditto			1	Bolt head?
	ditto			1	Hinge? fragment
	ditto			1	Spanner?
2202	Asset 22	Natural	332	1	large padlock with ornate brass front plate, inscription 'SECURE / 2 / LEVER / LOCK'
2204	Trewaun WB		12	2	broken, coal-bearing concretion spalled from surface of a metal artefact; some white on surface hints at coated iron; shape suggests this is the rounded margin and base of a flat-bottomed, cylinder-like form, 30mm in diameter
2211	Asset 22	Coal dust deposit	234	1	corner of cast iron vessel, slightly more than 90 degree angle, side 50mm tall, hooked rim 25mm long, wall c5mm but thickens at top; thin near base, oven dish?
			53	1	probable heel tap, badly decomposed, c75 long
			24	1	fragment of coal-bearing concretion containing a fragment of mineralised sheet iron; no details visible
			16	1	fragment of coal-bearing concretion; bears imprint of mineralised wood on one planar face, and the curved impression of a ribbed object on the other - potentially a fragment of glass or ceramic
			2	assm	debris/dust
2213	DSCN6873-6880	wall	1705	1	scissors
	ditto			1	‘horseshoe’ boot heel tap
	ditto			1	‘horseshoe’ boot heel tap

	ditto			1	‘horseshoe’ boot heel tap
	ditto			1	boot heel with ‘horseshoe’ tap and nails?
	ditto			1	buckle?
	ditto			1	iron fragment
	ditto			1	tanged tool?
	ditto			1	chain fragment
	ditto			1	chain attached to large nail
2234	DSCN6820-6828		13000	1	chair
	ditto			1	chair
	DSCN6829-6835		4000	1	plate fragment
	DSCN6836-6843			1	iron bar
	DSCN6844-6850		1504	1	pintle
	ditto			1	iron plate fragment
	ditto			1	iron fragment
	ditto			1	iron fragment
	ditto			1	iron fragment
	ditto			1	iron rod fragment; nail?
	ditto			1	iron rod fragment; nail?
2402	Gurnos S	Subsoil	124	1	8mm diameter ‘U’-bolt, 140mm tall, square nut 14mmx6 on 30mm visible threading, other end missing, has two 20mm a/f nuts looped in centre
			282	1	90mm long bolt, 30mm a/f20mm diameter, head 12 tall, nut32a/f18 tall, end of bolt peened over nut?
			20	1	105mm long, 10x5 at headend, flares to 15mm; large carpentry nail
3001	New Asset 22	Wall	256	1	iron spike, 375mm long, 10mm square section, bent, either possessed head or more likely burred, flattens to chisel tip over150-200mm
			8	1	sliver of corroded iron
3006	New Asset 22	Wall	272	1	iron hinge, door strap 190mm preserved, narrows from 70mm to 45mm, other side perpendicular 35-40mm strap 50mm including hinge, three holes at 40-50 centres, some white on surface
3009	New Asset 22	Wall	484	1	4 tine rake; tines slightly curved and at 70 degrees to handle; 190mm wide, central tines 155mm; socket preserved to 45mm

3010	New Asset 22	Compacted ash layer/surface	128	1	large buckle, probably cast non-ferrous alloy although slightly rusty; copper oxides visible where pin has detached; 90x82mm; pin attachment 6mm wide
3021	New Asset 22	Fill of drain [3020]	28	4	four fragments of tubular concretions - central void surrounded by iron oxides with coarse external concretion; there is no clear evidence these were iron objects - they may be natural concretions
3029	New Asset 22	Fill of large sewer pipe [3028]	178	1	wrought iron ?spike; 350mm long; bent; highly corroded
3039	New Asset 22	Abandonment layer	56	2	two lengths of iron rod; c6mm diameter; c. 110mm and 180mm lengths
		not seen	364	1	Iron plate
				1	small pod
3041	New Asset 22	Layer	18	1	length of came, pale metal but not dense enough for lead -aluminium?
			20	1	base of small can?
			14	2	2 pieces of rounded box-stone crust; natural
			172	1	weathered ironstone nodule; natural
			2	1	small iron nail, 35mm long surviving, probably 5mm square - but expanded by weathering
			10	1	iron rod, 80x5d
			56	1	9mm iron rod, flattened and perforated one end, bent through 60 degrees the other; white surface so possibly coated (galvanized)
3046	New Asset 22	Topsoil	250	1	exploding section of 20mm square iron rod
			6	1	highly corroded iron, probably nail or rod fragment
			230	1	carriage bolt145long, 35 head, 13mm square section
			38	1	two 120m long wrought iron nails
			52	1	two dome head nails, with washers; heavily corroded, 70mm long washers c20mm diameter
			24	1	two corroded nails, up to 60mm
			26	1	concretion containing iron
			216	1	wrought iron ring 80/60, 12? Thick
			20	1	six inch wire nail, ?steel
			34	1	Curved iron fragment in concretion
			10	1	highly corroded iron, possible nail head
			50	3	three heavily corroded nails; two preserved head appear domed, one with washer, c70mm l
			428	1	wrought iron bar rounded ends, dog leg one third in and adjacent hole - so possibly a latch? 280x35 x 7-8mm thick
			470	1	bolt, 255mm, 17mm diameter thread for 40mm? With square nut 28x28x15mm; head highly corroded, but hint of 30x30mm?; Has circular washer just below head

			170	1	wrought iron rod, highly corroded and embedded in concretion, one end has odd flexible surface layer peeling off
			42	1	broken wrought iron ring, 31mm o/d, 20x3mm section
			16	1	70mm nail with domed head; c5mm diameter
			76	1	curved sheet iron in concretion (just possibly a spall from a larger object) 45x80mm
			96	1	curved sheet iron in concretion, 105x50
			124	1	iron in concretion - appears like 25mm bar one side, but other is wider and curved, details unclear
3051	New Asset 22	Overburden deposit	42	1	short length of iron rod, 75mm x 15mm diameter, but concealed
3059	New Asset 22		346	1	fragment from cast iron gutter
			20	1	sheet iron object, 21mm outside diameter tube, forms 28mm diameter lip; 2mm tick, then folds inside to round ended blind cavity 20mm diameter and 10mm deep with thread for upper 8mm; traces of Cu-alloy corrosion, so coated, or non-ferrous coincidentally coated in rust; ridges rather than thread, could be a candle holder
4600	Asset 46	Topsoil	2.44	1	white weathering nail; 45mm long; shank 5x3.5mm just below 10x6mm head remnant; section square; tapers evenly
			66	1	three layers of sheet iron (or two if one is weathered out leaving crusts)
			6.3	1	sheet iron fragment
			12.5	1	fragment from tin, concentric black with white writing (OLIS…) outside red with white writing (…N); probably Kiwi brown shoe polish (post-1906)
			6	1	Kiwi polish tin, LIGHT on inner banner and SHOE on outer (taken together with 12.5g fragment: LIGHT (BROW)N/SHOE (P)OLIS(H)
			92	1	concretion on possible buckle, 60x45mm with pin projecting 20mm
			10	2	two spalls from surfaces of iron objects
			108	4	four concretions on iron objects that are completely obscured
			68	1	concretion on iron bar with right-angled protrusion at one end - perhaps bent rod or nail?
			208	1	concretion on iron rod - possible eye on exposed end?
			200	1	concretion on c8mm diameter round rod; c280mm long
			54	1	serving spoon, 214mm long, tip worn asymmetrically - by r/h stirring?, stamp on handle probably just decorative for this plated Cu-alloy piece
			0.53	1	hairgrip, rounded coating on ends dense - does not appear to be lacquer; straight not ridged
			1.17	1	iron wire
			5.23	2	two highly corroded 2-inch nails
			8	1	probable wrought iron nail fragment
			10.8	1	4-inch wire nail

			28	1	wrought iron nail or spike; head missing; 83mm long around 10x8mm at widest; chisel tip, but very abraded
			23	1	irregular mineralised iron - possibly just a casting splash
			416	1	iron or steel plate, 150x62x5mm, faces obscured
			188	1	brass? latch receiver; 2 holes in lower section, the lower countersunk; no holes in upper part; 25x7mm bar; flat for 75mm, then steps out 25mm to upper section of 50mm length that curves out slightly
			84	1	iron strap (hinge or thumb latch), 220mm long, swells at tip with central hole, highly corroded
			16	1	rod, swells at top, could be eyed?
			16.2	1	hex bolt; 25mm long 13mm a/f; 7mm shaft diameter
			7.2	1	hex nut on corroded rod?14mm a/f
			1.86	1	50mm wire (headless 2-inch nail?)
			7.14	1	67mm long chisel-tipped ?brass nail; 5x4mm shank below 8x7mm head
			3.55	2	2 small highly corroded nails or screws
			2.44	1	highly corroded small screw
			4.45	1	dome headed tack; 10mm shank; 18mm diameter head, 5mm tall
			2.76	1	12mm diameter head, 20mm shank
			5.26	1	iron nail? fragment
			72	1	iron binding for handle?, 57mm long, socket 28x24mm, 44mm long, then two further wings clench onto end of handle each just 10mm long
			46	1	sheet iron fragment with adhering secondary mass
			4	1	fragment from above
			20	4	four cut clasp nails; flat nails shaped like tiny spikes, with a protrusion (widening) at the head on one side only; 50mm long; 3 mm wide, expands to 6mm wide then steps out to 8mm for last 6mm
			20	1	corroded rod fragment
			2	1	corroded iron wire fragment
			122	1	exploding concretion, object appears to have large, rounded, head; probably a round headed bolt, but could be large nail
4613	Asset 46	Upper fill of ditch [4611]	4	1	mineralised ?nail fragment
4616		Asset 46	308	1	fragment of coal-, shale- and sandstone-bearing concretion with a large curving sheet of iron; 120x70mm angular fragment, from (probably) a cast iron pot
			120	1	angular fragment of curving ferrous sheet in similar concretion; probably another cast iron pot fragment, but noticeably thinner than the first piece
			8	1	fragment of similar concretion, one surface shows an undulating smooth small contact area with a greenish colour; probably a spall from a copper alloy object
			22	1	small fragment of similar concretion with a curving small void suggestive of the complete weathering-out of a sheet iron object

			118	1	fragment of concretion with multiple internal oxide layers, suggesting iron movement away from central sheet iron fragment (details not seen of the core)
			130	1	fragment of concretion containing iron object; surface morphology suggests a chain-link fragment or more likely a small hook (85x45x10mm), but would require X-Ray to determine this properly; also contains fragments of domestic pottery including piece of creamware cup?
4618	Asset 46		10	1	broken spoon, 135mm long sheet metal only 1-1.5mm thick
4800	Asset 48	Topsoil	136	1	280x17x5mm; iron bar widening to 25mm at broken end, also to 25mm at complete end around 8mm hole
			1950	1	445mm long prise bar; c32mm diameter; last 95mm tapers to blunt chisel end 25mm wide
			14	1	boot 'horseshoe' heel tap with 8x4mm section
			22	1	160mm length of 4mm diameter iron rod
			32	1	7x6mm rectangular section rod; bent through right angle - part of staple?
			110	1	iron spike; 165mm long, 10mm square, tapers to chisel tip; hook extends sideways by 15mm
			982	1	very large horseshoe, 180x160mm wide; ends upturned by 15mm; wrought iron
4801	Asset 48	Subsoil	58	1	irregular iron bar fragment
			88	1	steel hexagonal nut; 35mm a/f; 22mm internal diameter, 5mm turned in13mm
4804	Asset 48	Bank material	34	1	irregular iron rod, highly corroded and accreted
4832	Asset 48	Cottage structure	14	4	four fragments (single piece) of corroded iron - core gone leaving solid mineralised surfaces c 4mm apart. White corrosion near surfaces so tinplate?
			32	4	four pieces from straight walled (unless flattened) vessel with a rolled rim; 50mm high side minimum; 5 mm rim; surface white coated, tin plate? or most likely galvanised.
			134	6	six fragments of sheet metal object; some show a narrow, rolled, rim, one piece shows a larger fold; one piece appears to show rolled rim at right angles to straight simple margin; white deposits on surface so probably galvanised.
			34	1	fragment of sheet metal with white on surface
4844	Asset 48	Floor outside cottage 4832	26	2	two heavily accreted section of iron rod, potentially nails, but not certainly so.
			6	1	incomplete iron ring 40mm o/d; 5mm wire; white surface
between drain and gully			18	1	concretion, probably on iron but core not seen
unstrat			2	1	6x2mm iron rod fragment, 38mm long

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