

**BRECON TO TIRLEY NATURAL GAS PIPELINE
FINAL REPORT
ASSESSMENT REPORT FOR STONE
ALAN VINCE AND KATE STEANE
AUGUST 2008
NETWORK ARCHAEOLOGY LTD ON BEHALF OF MURPHY
PIPELINES LTD FOR NATIONAL GRID
VER 01**

SUMMARY

A collection of stone was recovered from archaeological fieldwork on the Brecon to Tirley pipeline. Much consisted of fragments of cracked, rounded pebbles, which are often evidence for the presence of a mound of burnt stones, of Bronze Age date. However, very few of these stones were convincing and several were of a coarse sandstone which, if heated and suddenly cooled would probably have disintegrated.

A smaller collection consists of fragments of slate, used in the main as roof slates in the post-medieval, early modern and modern periods.

INTRODUCTION

The stone from the Brecon to Tirley pipeline was examined to establish whether any fragments had been subjected to heating and fire-cracking. Long thin pebbles were examined closely to see if there were traces of use as honestones.

METHODOLOGY

Each item was examined by eye and, if required, using a x20 stereomicroscope. Detailed description was not carried out of the stone for those items for which no evidence for human use could be found.

ASSESSMENT OF ASSEMBLAGE

Quantity

One hundred and eighteen fragments of stone were recovered. These come from no more than 66 objects and weigh in total 11.534 Kg.

Provenance

The finds come from 13 separate plots (Table 1), in two counties, Powys and Herefordshire, with by far the highest number coming from Plot 454.

Table 1

County	trench	Context	Fragments	Objects	Weight (Gm)
Powys	PL 49	49001	3	3	1061
		49028	3	3	481
		49090	1	1	13
	PL 88	88001	2	2	132
	PL 110	70005	1	1	25
		70019	1	1	19
PL 160	160037	1	1	181	
Herefordshire	PL 211	211005	3	3	106
	PL 250	65006	1	1	13
	PL 271	67005	1	1	325
		67058	2	2	3
		67065	3	2	24
		67087	2	2	6
	PL 331	75054	5	5	174
	PL 430	86157	1	1	927
		86190	1	1	190
		86193	1	1	314
		86198	1	1	142
		86223	3	1	1148
		86245	1	1	615
	PL 454	85000	2	2	14
		85001	1	1	636
		85003	3	3	900
		85033	2	2	430

	85039	1	1	37
	85043	7	2	151
	85050	32	2	2052
	85082	14	14	253
	85085	1	1	63
	85105	16	2	909
	85106	2	2	190
	Grand Total	118	66	11534

The majority of the finds are interpreted here as unworked stones, although the fact that they were collected suggests that they are unusual in the area where they were found and may therefore have been brought to the sites for some purpose.

A single piece from context 85001 is identified as a possible saddle quern, and might therefore be of earlier prehistoric date (Neolithic to early Iron Age).

Fragments from four contexts (49023; 49090; 160037 and 211005) are from slate roof tiles and of Post-medieval or Early Modern date.

Single examples of a “pot lid” and a counter from contexts 49001 and 49028 are definite artefacts but not closely datable (similar examples are known from both Roman and medieval contexts).

Finally, a number of fragments come from cracked pebbles, although only seven show any convincing sign of being fire-cracked (and none of these is definite). These come from three contexts, all on Plot 454: 85043; 85082 and 85085. If these do indeed come from a burnt stone mound then this is probably of Bronze Age date and the contexts in which they were found would be Bronze Age or later in date.

Range & Variety of Material

Geology

Three main rock types were recognised in the collection; slate; coarse red sandstone; and micaceous grey sandstone. The slate is light grey metamorphic slate similar to that produced in North Devon and North Wales in the post-medieval and later periods. The coarse red sandstone is similar to that found in South Wales and the Welsh Marches in the Old Red Sandstone and consists of poorly-sorted rounded grains in a red iron-rich cement (1971, 72-81; 1970, 51-7). It is likely that if this rock was heated and suddenly cooled it would disintegrate rather than crack. The micaceous grey sandstone fragments are similar to those found in the South Welsh and Forest of Dean coalfields (Kellaway and Welch 1948, 25-33; 1970, 83-100). These were used as roofing tiles in the Roman period and later. Several rounded pebbles with a finer texture to the two common sandstone types were present but none showed any convincing signs of use, not even by fire-cracking.

Pot lid

A single fragment from a pot lid was recovered. This object was made from a fragment of strongly bedded micaceous sandstone roughly chipped to a disk.

Counter

A single complete counter was recovered. The object is a 48mm diameter disk chipped from a block of micaceous sandstone 12mm thick.

Cracked pebbles

Twelve fragments of seven pebbles were recovered in which the pebble had cracked into two or more pieces. Two of these (from contexts 85043 and 85085) showed some signs of heating and the remaining five could have been cracked through other mechanisms. However, since all come from the same plot, 454, it is possible that all were fire-cracked.

Roof Slates

Seven fragments of slate were recovered. All had thicknesses consistent with their use as roof tiles and in one case the tile was chipped to a rectangular shape. One (context 160037) has a single circular nail hole, 7mm diameter, and had an upper edge chipped to a semi-circular shape.

Saddle quern

A single fragment from context 85001 made of light-coloured micaceous sandstone had a concave surface which may have been created or enhanced by pecking with the peck marks then partially removed by use. Several other faces show rounding, however, which indicates that the stone originated as a rounded cobble.

Condition of Material

Stone is a very stable material and there are no problems with survival or long-term storage. It is possible that there are biases in collection, depending on the experience of the excavators and character of the local geology.

Statement of Potential

One stones which show no signs of use have been excluded; the collection is extremely small and has little potential.

New Research Questions and Potential of Data

The stone assemblage has little potential for studying new research questions.

Recommendations

In our view, no further work is required on the collection.

Bibliography

- Earp, J. R. and Hains, B. A. (1971) *British Regional Geology: The Welsh Borderland*, HMSO, London
- Kellaway, G A and Welch, F B A (1948) *Bristol and Gloucester District*. British Regional Geology London, Inst Geol Sci
- Neville George, T. (1970) *British Regional Geology: South Wales*, HMSO, London

Appendix - Catalogue of Finds

County	trench	Context	context group	cname	subfabric	Form	Nosh	NoV	Weight	Description	TH	diameter	Condition
Herefordshire	PL 211	211005	CHARCOAL LENS	STONE	SLATE	ROOFER	3	3	106			0	
Herefordshire	PL 250	65006	CURVILINEAR FEATURE 65009	GEO		GEO	1	1	13			0	
Herefordshire	PL 271	67005	STONY DEPOSIT	GEO	MICACEOUS SANDSTONE	GEO	1	1	325			0	
Herefordshire	PL 271	67058	DITCH 67059	GEO	MICACEOUS SANDSTONE	GEO	2	2	3			0	
Herefordshire	PL 271	67065	DITCH 67054	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	9			0	
Herefordshire	PL 271	67065	DITCH 67054	GEO	MICACEOUS SANDSTONE WITH BLACK CORE	GEO, CRACKED	2	1	15			0	
Herefordshire	PL 271	67087	SHALLOW PIT 67086	GEO		GEO	2	2	6			0	
Herefordshire	PL 331	75054	DITCH 75069	GEO	ERATIC	GEO, CRACKED	1	1	141			0	
Herefordshire	PL 331	75054	DITCH 75069	GEO	MICACEOUS SANDSTONE	GEO	4	4	33			0	
Herefordshire	PL 430	86157	WALL	GEO	MICACEOUS SANDSTONE	GEO	1	1	927			0	
Herefordshire	PL 430	86190	DITCH 86270	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	190			0	
Herefordshire	PL 430	86193	DITCH 86194	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	314			0	
Herefordshire	PL 430	86198	PIT 86270	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	142			0	
Herefordshire	PL 430	86223	DITCH 86222	GEO	MICACEOUS SANDSTONE	GEO	3	1	1148			0	
Herefordshire	PL 430	86245	PIT 86239	GEO	OLD RED SANDSTONE	GEO	1	1	615			0	

Herefordshire	PL 430	86272	UNSTRAT	MOD		COPING TILE	1	1	141	0	
Herefordshire	PL 454	85000	TOPSOIL	GEO	MICACEOUS SANDSTONE	GEO	2	2	14	0	
Herefordshire	PL 454	85001	SUBSOIL	STONE	MICACEOUS SANDSTONE	SADDLE QUERN??	1	1	636	0	SMOOTH SURFACE FROM WEAR?
Herefordshire	PL 454	85003	DITCH 85002	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	3	3	900	0	
Herefordshire	PL 454	85033	DITCH 85034	GEO		GEO PEBBLE	1	1	26	0	
Herefordshire	PL 454	85033	DITCH 85034	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	404	0	
Herefordshire	PL 454	85039	CLAY EXTRACTION PIT 85041	GEO	MICACEOUS SANDSTONE	GEO	1	1	37	0	
Herefordshire	PL 454	85043	DITCH 85042	GEO		GEO PEBBLE, CRACKED	1	1	20	0	
Herefordshire	PL 454	85043	DITCH 85042	STONE		FIRE CRACKED PEBBLE?	6	1	131	0	
Herefordshire	PL 454	85050	POSS CREMATION 85049	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	275	0	
Herefordshire	PL 454	85050	POSS CREMATION 85049	GEO	OLD RED SANDSTONE	GEO	31	1	1777	0	
Herefordshire	PL 454	85082	ENCLOSURE DITCH TERMINUS 85081	GEO		GEO PEBBLE, CRACKED	4	4	135	0	
Herefordshire	PL 454	85082	ENCLOSURE DITCH TERMINUS 85081	GEO	MICACEOUS SANDSTONE	GEO	10	10	118	0	

Herefordshire	PL 454	85085	STAKE HOLE 85086	STONE		FIRE CRACKED PEBBLE?	1	1	63		0
Herefordshire	PL 454	85105	DITCH 85104	GEO		GEO PEBBLE	1	1	42		0
Herefordshire	PL 454	85105	DITCH 85104	GEO	MICACEOUS SANDSTONE WITH BLACK CORE	GEO	15	1	867		0
Herefordshire	PL 454	85106	DITCH 85107	GEO		GEO PEBBLE	1	1	155		0
Herefordshire	PL 454	85106	DITCH 85107	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	35		0
Powys	PL 110	70005	COBBLED ROAD	GEO		GEO	1	1	25		0
Powys	PL 110	70019	CLAY SILT BETWEEN ROAD METALLINGS	GEO		GEO	1	1	19		0
Powys	PL 160	160037	TRACKWAY	STONE	SLATE	ROOFER	1	1	181	NAIL HOLE 7 DIA	0
Powys	PL 49	49001	SUBSOIL	GEO		GEO	1	1	14		0
Powys	PL 49	49001	SUBSOIL	GEO	MICACEOUS SANDSTONE	GEO PEBBLE	1	1	1012		0
Powys	PL 49	49001	SUBSOIL	STONE	MICACEOUS SANDSTONE	COUNTER	1	1	35	12	48
Powys	PL 49	49028	SUBSOIL	STONE	MICACEOUS SANDSTONE	POT LID?	1	1	466	19	190
Powys	PL 49	49028	SUBSOIL	STONE	SLATE	ROOFER	2	2	15		0
Powys	PL 49	49090	RUBBLE	STONE	SLATE	ROOFER	1	1	13		0
Powys	PL 88	88001	TOPSOIL	GEO	MICACEOUS SANDSTONE	GEO	2	2	132		0