4.1 Worked shale

Fraser Hunter

Given the scale of excavation, the worked oil shale assemblage is notably small, but it is intriguing because it is so selective. Of the six clearly worked items, four are perforated roughouts for bangles or (in one case) a smaller piece of jewellery such as a ring-pendant; there is one block which has been shaped but not perforated; and one near-completed bangle fragment (Illus 23). Six further blocks or fragments of varying sizes could in theory represent blocks gathered for working, but none were clearly worked. Some showed surface abrasion, but as this was rarely noted on the certainly worked pieces it cannot be considered clear evidence of use. Several were also rather small, and they are not considered here as working evidence.

The assemblage is dominated by a single stage of the working process: the preparation and initial perforation of a block, with no further working to expand the perforation to the desired size. Not only that, but the blocks themselves are unusual; the perforations are not the usual raw, freshly worked form, but have been smoothed off. This suggests they represent a deliberate stage in the process of production, with the smoothing either occurring naturally from transporting them on a string or being a deliberate feature to improve the appearance. It suggests a distributed working system where different stages of the craft took place in different places. This is suggested also by the lack of working debris: none was collected in the field, and the samples from wet-sieving all appeared to be rounded natural flakes (C Hills, pers comm). This strongly indicates that working did not take place at the site to any significant degree. Instead, it seems part-worked material was brought there as discs or perforated roughouts, presumably for exchange when groups gathered at the site. The unfinished bangle SF27 is not inconsistent with this; in this condition, it was ready for finishing by abrasion and polishing, and could have been carried around by someone for working on as they had time.

This picture of a staged, distributed process has also been suggested from work at Braehead, Renfrewshire, where craft activity focused on initial preparation and perforation of blocks (Hunter 2007) – exactly the kind of products we see at Winchburgh in the process of exchange. The original source is likely to have been quite local. All the items were variants of oil shale, which is readily available locally, as the site sits in an area of West Lothian rich in oil shale deposits (Gibson 1922: 43–6). The degree of post-medieval mining of this material makes it hard to assess specifically where local outcrops might have occurred.

Only three fragments were found in context, two from the outer ditch (on the south and north-east) and one from the inner (on the south-west). There is no clear patterning in this small sample to allow any cogent arguments for structured deposition. It cannot be entirely ruled out – finds were otherwise so rare, so these pieces are exceptional – but all the items were damaged or incomplete in some way, and discard because of this seems the most likely interpretation.

4.1.1 Catalogue of illustrated shale finds (Illus 23)

4.1.1.1 Prepared roughouts

► SF20

Fragment of a prepared roughout which has split from a larger block. Sub-circular with around half the edge natural, the other half snapped to a circular shape. Grey-brown shale. $99 \times 94 \times 17$ mm. C152, Slot 105, basal fill of scoop in inner ditch on southwest side.

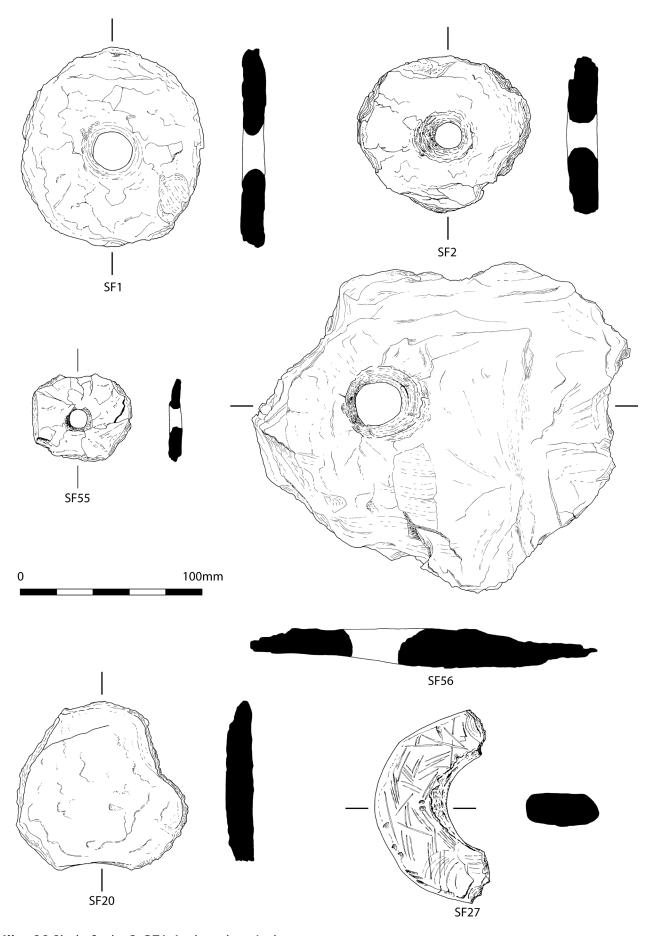
4.1.1.2 Perforated roughouts

► SF01

Well-formed circular roughout, flaked (predominantly unifacially) to shape. Biconical perforation (Diam: min 19, max 32) which is notably smoothed. Surfaces are either natural or carefully split; there are no toolmarks or abrasion. Loss from accidental flaking on one side. Dark grey shale. 110 × 108 × 16mm. C023, Slot 021, fill of outer ditch on north-east.

► SF02

Slightly irregular circular roughout, damaged in one area. Flaked bifacially to shape. Central biconical perforation (Diam: min 12, max 30), well-smoothed but with some circumferential toolmarks visible. Surfaces either natural or carefully split; a few stray



Illus 23 Shale finds. © CFA Archaeology Ltd

cutmarks on one surface. Grey-brown shale. $94 \times 85 \times 16$ mm. Pipe trench in Slot 025, south side of outer ditch circuit.

► SF55

Spalled upper surface from a circular roughout; some damage to edges, but it seems to be close to the original size as the flaked edges survive. Perforation is tapered (Diam: 9–12mm) as it survives, indicating it was originally biconical. Limited irregular abrasion towards one edge. Its small size suggests it was intended for a ring-pendant or similar. Black shale. $54 \times 48.5 \times 9$ mm. Surface find.

► SF56

Perforated roughout with one face spalled off and damage to the sides, making it unclear which edges were originally flaked or snapped to shape and which represent damage. The off-centre perforation indicates part of one side has been lost and spalls have been detached from the surface, but there is no sign of any surface preparation. Biconical perforation (Diam: min 24, max 45), smoothed to a fair degree. Black shale. $210 \times 185 \times 21$ mm. If the hole is assumed to be central, diameter would be c 280mm. Surface find.

4.1.1.3 Perforated roughout, finishing in progress

► SF27

Perforated roughout, near-complete, which has broken in half. Slightly irregular disc, the edges cut and abraded to shape. Some fine abrasion on the surface; biconical perforation, abraded to smooth it off, suggesting it was complete. Probably abandoned due to fracture and spalling of one surface, but its size is consistent with a bangle, of internal diameter 50–55mm in this condition. Black shale. External Diam: 101mm; Th: 28–40mm; H: 18.5mm. C239, Slot 235D, basal fill of ditch on north-west side.

4.2 Coarse stone

Ann Clarke

The coarse stone assemblage recovered from Winchburgh consisted of two plain hammerstones. One (SF45, Slot 115C, C147) is a simple oval cobble of quartzite with light pecking wear on either end. This was found together with animal bone in the inner ditch. The wear patterns are undeveloped and it is not clear to what use this hammerstone was put.

The other hammerstone (SF13, Slot 105, C152) is a small sub-angular cobble of coarse-grained sedimentary rock with pecked wear on three projecting corners. This sub-angular cobble must have been deliberately selected to use the projecting corners of the tool for delicate work. It was probably used to shape the shale blanks that were found in the same context (152).

4.3 Glass

Fraser Hunter

An annular black glass bead was recovered from sieving a soil sample from Context 103. The colour indicates it is post-medieval in date. Diam: 2.3mm; H: 1.3mm.