Date: March 2004
Client: Kinegar Sand and Gravel Ltd
Project Code: KSG99

Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath, Scottish Borders

Phase 9

Richard Conolly

PROJECT SUMMARY SHEET (KSG 99)

Client	Kinegar Sand and Gravel Ltd
National Grid Reference	NT 773 701
Project Manager	Stephen Carter
Project Supervisor	Richard Conolly
Text	Richard Conolly
Illustrations	Ross Murray
Schedule	
Fieldwork	19th-21st January 2004
Report	March 2004

Summary

Headland Archaeology undertook an archaeological watching brief during topsoil stripping at Kinegar Sand and Gravel Quarry, Cockburnspath, Scottish Borders. Five archaeological features, all pits, were identified and recorded in the course of the watching-brief. Fragments of four Neolithic vessels and worked stone, including a piece in pitchstone, were recovered from one pit.

1. INTRODUCTION

Headland Archaeology Ltd was commissioned to carry out an archaeological watching brief during topsoil stripping for an extension to Kinegar Sand and Gravel Pit, Cockburnspath, Scottish Borders, in order to satisfy a condition of planning consent. This report details the results of the ninth phase of the watching brief, following on from strips monitored in 2000 (Conolly 2000) and 2001-2 (Conolly 2001 a & b and 2002a) under an earlier consent and 2002-3 under the present consent (Conolly 2002b & c and Conolly 2003a & b).

The work was carried out between the 19th and 21st January 2004 in variable weather conditions.

2. SITE LOCATION AND DESCRIPTION (FIGURE 1)

Kinegar Sand and Gravel Pit is located to the south of Cockburnspath, Scottish Borders (NT 773 701). This phase involved the stripping of a rectangular parcel of land running parallel to the road and covering some 5400 m^2. The field was under cultivation at the time of the watching brief. The underlying geology is sandy gravel and sand overlying boulder clay.

3. ARCHAEOLOGICAL BACKGROUND

The quarry is situated in an area where several prehistoric cist burials have been discovered, including two within the quarry itself. In addition to this, a number of cropmark sites are known, one of which lies at the southern end of the current application area.

Previous phases of the watching brief have identified several clusters of small pits, with Neolithic and Bronze Age pottery being recovered from several features (Conolly 2000, 2001a & b and 2002a). These clusters of features were all identified some distance to the north-west of the present site and only two undated pits have been identified within the current application area. Both these features were identified in Phase 6 of the watching brief.

4. AIMS AND METHODS

The watching brief was intended to ensure that any archaeologically significant deposits that would be destroyed by quarrying operations might be appropriately recorded.

The topsoil strip was carried out using a 360° mechanical excavator fitted with a toothless ditching bucket, operating under continuous archaeological supervision.

Any potential features identified during the strip were hand cleaned, investigated and recorded appropriately.

5. RESULTS (FIGURES 1 & 2)

Five pits were identified and excavated. All were located in the lowest lying parts of the stripped area, presumably to take advantage of natural shelter. Pits 244, 251 and 253 were isolated, but Pits 247 and 249 were within three metres of each other and are therefore assumed to be related.

Artefactual material was largely recovered from a single context; Deposit 241, a fill of Pit 244. This charcoal-rich deposit contained fragments of Neolithic pottery (Appendix 3), representing four vessels, which had been broken before deposition. The pottery was concentrated at the southern end of the deposit and followed its tip-lines. It is therefore likely to have entered the pit with the deposit rather than having been more deliberately placed.

In addition to the pottery, four pieces of worked stone were recovered from Deposit 241. The most notable of these was a probable blade in pitchstone. In Scotland, this material is generally sourced from Arran. The remaining pieces were waste flakes in chert including a possible core rejuvenation flake. A small chip was recovered from Deposit 243, also in Pit 244.

No structural features were identified.

6. CONCLUSIONS

The results of this phase of the watching brief are once again consistent with low level prehistoric occupation of this area, largely dating to the Neolithic and placed to exploit topographic shelter.

The full archive will be deposited with the National Monuments Record of Scotland.

BIBLIOGRAPHY

Conolly, RJ 2000 *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath*. Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2001a *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 2.* Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2001b *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 3*. Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2002a *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 4.* Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2002b *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 5.* Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2002c *An Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 6.* Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2003a *Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 7*. Unpublished report of Headland Archaeology Ltd.
Conolly, RJ 2003b *Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath: Phase 8*. Unpublished report of Headland Archaeology Ltd.

APPENDIX 1: FIELD REGISTERS

Context Register

Context Number	Description
1-239	Used in previous phases
240	Upper fill of Pit 244. Light reddish brown silty coarse sand with very common gravel >5 cm. Redeposited natural
241	Fill of Pit 244. Very dark greyish brown to black sandy silt with common gravel, common charcoal and rare burnt bone fragments. Pottery was concentrated at the southern end of the deposit with few pieces towards the centre. It followed the tip-lines of the deposit. Dump of material.
242	Fill of Pit 244. Light reddish brown sand with abundant gravel <5 cm with light greyish brown lens. Identical to natural. Redeposited natural.
243	Basal fill of Pit 244. Light greyish brown silty sand with common gravel <3 cm and rare charcoal flecks. Evenly distributed across bas of feature.
244	Cut of pit. Sub-ovoid with steep to near vertical slightly concave sides breaking sharply to near flat base.
245	Fill of Pit 247. Very dark greyish brown sandy silt with common gravel <15 cm and rare charcoal flecks.
246	Basal fill of Pit 247. Mid greyish brown silty sand with common gravel <5 cm.
247	Cut of pit. Sub-circular with near vertical sides breaking sharply to asymmetric tapering base.
248	Fill of Pit 249. Dark greyish brown silty sand with very common randomly placed cobbles 10 – 20 cm and rare charcoal. Deliberate dump, given sorting of stones.
249	Cut of pit. Sub-ovoid with steep slightly concave sides breaking sharply to stepped base.
250	Fill of Pit 251. Dark greyish brown silty sand with moderate gravel rare charcoal. Single heat effected stone at top of deposit.
251	Cut of pit. Sub-circular with slightly concave steep sides breaking gently to slightly concave base.
252	Fill of Pit 253.

	Dark reddish brown sandy silt with sparse gravel < 5 cm and rare charcoal flecks.
253	Cut of pit. Sub-circular with moderate to steep slightly concave sides breaking gently to near flat base.

Photo Register

Film numbers 1 – 26 were used in previous phases.

Film no. 27
Film Type: Colour Slide and Colour Print

Shot no.	Direction Facing	Description
1	E	Pottery in Deposit 241 *in situ*.
2	E	West facing section Pit 244.
3	E	West facing section Pit 247
4	NE	Pre-ex shot Pit 249
5	NE	South-west facing section Pit 249
6	N	South facing section Pit 251
7	SE	North-west facing section Pit 253

Drawing Register

Drawing Number	Description
1-116	Used in previous phases
117A	West facing section Pit 244
117B	Post ex plan Pit 244
117C	West facing section Pit 247
117D	Post ex plan Pit 247
117E	South-west facing section Pit 249
117F	Post ex plan Pit 249
117G	South-west facing section Pit 251
117H	Post-ex plan Pit 251
117I	North-west facing section Pit 253
117J	Post ex plan Pit 253

Finds Register

Context Number	Description
241	Neolithic pottery: 20 sherds Pitchstone – probable blade Chert – possible core rejuvenation flake and 2 x waste flakes
243	Possible chip

APPENDIX 2. ASSESSMENT OF SAMPLES

SITE CODE	KSG99	**SITE NAME**	Kinegar Sand and Gravel Quarry
AUTHOR	Mhairi Hastie		

SAMPLING STRATEGY

Bulk soil samples were taken from the fills of Pit 244 for the recovery of small finds and palaeoenvironmental remains.

METHODOLOGY

Each sample was subjected to a system of flotation in a Siraf style flotation tank. The floating debris (flot) was collected in a 250 μm sieve and, once dry, scanned using a binocular microscope. Any material remaining in the flotation tank (flot) was wet-sieved through a 1 mm mesh and air-dried. This was then sorted and any material of archaeological significance removed.

The results are summarised in Tables 1 and 2.

RESULTS

Context number	Sample number	Context description	Pottery	Lithics	Burnt bone	Cereal grain	Charcoal		Hazelnut shell
							Qty	AMS	
241	50	Fill of pit 244	+++	+	+	+	+++	*	+++
243	52	Basal fill of pit 244		+			++		++

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant

Table 1. Composition of retents

Context number	Sample number	Context description	Total flot vol (ml)	Cereal grain	Charcoal	Comments
241	50	Fill of pit 244	20	+++	++	Oat x 4, barley x 35
243	52	Basal fill of pit 244	<10		++	

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant

Table 2. Composition of flots

DISCUSSION

The archaeological material recovered from the fill of pit [244] is similar in composition and quantity of finds to material recovered during previous phases of fieldwork. Small finds recovered included prehistoric pottery sherds (Appendix 3), worked lithics and occasional fragments of burnt bone.

Oak charcoal was present in both samples, the majority being recovered from Context 241. The primary value of this charcoal will be as a source of dating.

Other carbonised material present consists of cereal grains and hazelnut shell. High concentrations of both were recovered from Context 241, with small quantities of nutshell being recovered from Context 243.

The cereal grains were generally poorly preserved though the majority of grain was identified as wheat with tentative identifications of both emmer and spelt wheat. Both emmer and spelt wheat are known to have been cultivated in Britain between the Bronze Age and the Roman period (Grieg, 1991).

Similar grain assemblages were recovered from features uncovered during Phases 2 and 4/5 and a more detailed analysis of all the grain-containing assemblages recovered during each phase of fieldwork would provide additional information on the chronology of the site.

The majority of small finds and palaeoenvironmental remains were recovered from Context 241 and this is consistent with the interpretation of the deposit as the remnants of domestic material deliberately dumped into the pit.

RECOMMENDATIONS

- Due to the low concentrations of plant remains recovered from the sample, detailed analysis of individual assemblages is unlikely to provide any information on crop processing or storage. Nevertheless, the analysis of the distribution of grain-containing assemblages from each phase of evaluation could be of some relevance to the chronology of the site and to define any broad spatial trends.

- The lithics recovered from this phase of the evaluation should be incorporated into the analysis of material recovered by hand.

- Mammal bone was restricted to very small burnt fragments that are too fragmentary for further detailed analysis.

REFERENCES

Grieg, R A 1991 'The British Isles' in van Zeist, W, Wasylikowa, K & Behre K (eds) *Progress in Old World Palaeoethnobotany,* 229-334**.** Rotterdam: A A Balkem.

APPENDIX 3: ASSESSMENT OF POTTERY FROM PHASES 8 AND 9

Ann MacSween

Unstratified, Phase 8

Body sherd, probably from the ridged upper portion of a later Bronze Age domestic bucket-shaped vessel (*cf* the pottery from Lintchie Gutter, an unenclosed platform settlement near the head of the Clyde Valley [Terry 1995, 369-427]).

Context 241

The pottery from this context comprises 20 sherds of pottery from four vessels which like the pottery from the previous assessment are probably all from early Neolithic round-bottomed bowls, Sheridan's 'traditional Carinated Bowl pottery'.

The sherds were grouped by vessel as follows:

3 rim sherds and 9 body sherds from a Neolithic round-based bowl with a flanged rim.

3 rim sherds and 3 body sherds from a Neolithic round-based bowl with a slightly flanged rim.

1 carinated sherd.

1 rim, slightly out-turned.

Reference

Terry, J 1995 'Excavation at Lintchie Gutter Unenclosed Platform Settlement, Crawford, Lanarkshire, 1991', *Proc Soc Antiq Scot* 125, 369-427.

Figure 1. Kinegar Sand and Gravel: site and feature location.

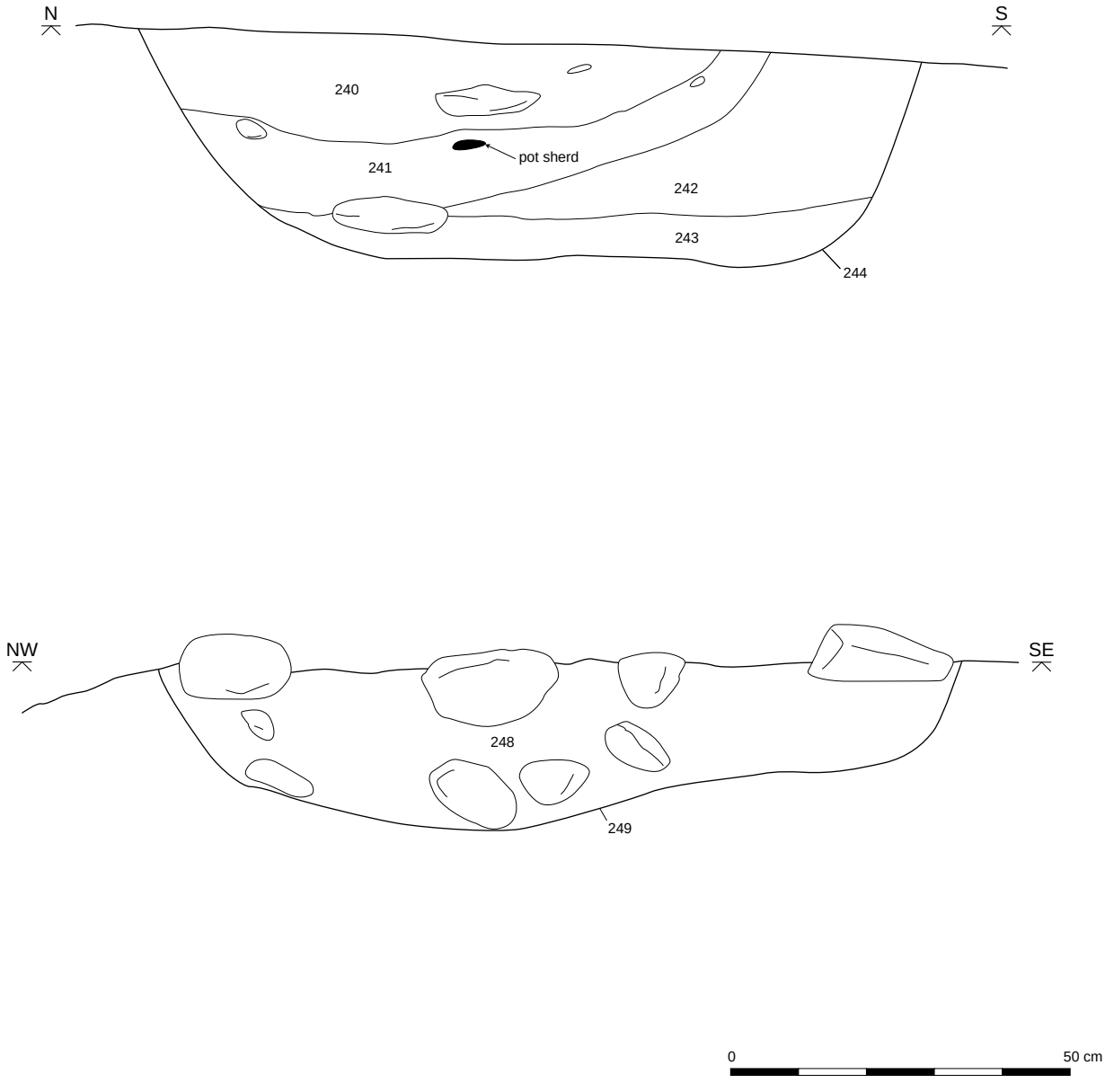

Figure 2. Kinegar Sand and Gravel - sections of pits 244 and 249.