



## **Further archaeological work done within the Daer Reservoir, South Lanarkshire**

by Tam Ward. Finds by Ian Paterson 2013.



Surveys and excavations of various sites within the reservoir and spanning the Mesolithic, Bronze Age and Post Medieval and later periods has been conducted by Biggar Archaeology Group since 1995, the work has been opportunistic and carried out during periods of low water level due to weather conditions. A series of reports are available on [www.biggararchaeology.org.uk](http://www.biggararchaeology.org.uk), and the work reported here is a latest supplement to that work already achieved by the voluntary group.

Further Mesolithic and Post Medieval sites have been proved and which significantly add to the story of the valley.

### **Introduction**

In July 2013 the water levels were again reduced within the Daer Reservoir (PI 1) due to dry summer conditions, this has been the first opportunity to investigate the reservoir since 2005 when the water levels were last reduced.

Known sites and locations were re-visited to inspect for erosion damage and a search was made to detect previously unrecorded sites. Photographs of known sites were taken and these may be compared to records from previous work (Ward 2013).

The opportunity was taken to resume work which had previously been planned and to engage in further work on sites where erosion was demonstrated to have taken place in the intervening years.

Reference should be made to previous reports (Ward *ibid*).



**Plate 1**

It should be borne in mind that the Daer Valley Project has evolved over a period of twenty three years of continuous fieldwork, taking advantage of forestry and reservoir opportunities when they were presented. As a consequence, two numbering systems running simultaneously were used for both terrestrial and submerged sites; numbers are therefore repeated in both aspects of the Project. The repeated numbers are an unfortunate and possibly confusing consequence of the work, which was never originally anticipated. Particular attention is drawn to Site No's 46 and 46a of this report.

The finds from all locations are listed as Appendix 1 in this report and which is the work of Ian Paterson (BAG), the descriptions given should be read as 'non specialist'.

This report is a further Interim Report on the archaeological work in Daer Valley by BAG; the ultimate aim is to produce a more definitive work on the entire project. Prehistoric sites are given firstly in this report, followed by Post Medieval work.

It is important to note that where reference is made to chert in this report, this applies to radiolarian chert which abounds naturally along the Southern Uplands Boundary Fault Line, which traverses the Upper Clyde Valley. However, none of this material is found as natural deposits in the Daer valley which lies to the south of the SUBFL, and all glacially transported material was carried in a northerly direction away from Daer valley. The local chert was used throughout all pre-historical periods recorded in Clydesdale.

### **Site monitoring**

All known sites were visited to compare with previous visits; these are given as short notes herewith:

#### **Site's No 1, 2 and 3**

Site No 1 produced a few additional flint flakes including a blade and a small chip of 'bluestone', these items were lying on the surface of the previously excavated area and may constitute wash out objects from the surrounding ground.

Inspection of Site 2 produced no further lithics and nothing of note was observed apart from the continued erosion of the bank there. Up to 2m metres (linear) of peat have now been scoured away from the reservoir edge since the site was excavated in 1997.

**Site No 3** was seen as 'no change' and nothing was found.

**Site No 4** is also noted as 'no change' in terms of erosion although a few chert lithics were found to have washed out, these were not retained but placed under a flat stone on the site.

### **Sites 5, 6 and 7**

Further lithic has been washed from these locations which therefore appear to be under moderate erosion.

Further lithic including a fragment of a brown chert steep sided scraper was washed from around the area of Site No 5 and a fireplace of 0.6m in diameter and consisting of burnt stone was found at NS 97161 07636. Despite random test pitting around the general area no concentration of lithic was detected.

Further lithic including a flint microlith (PI 2) was picked up around the area of Site No 5 but despite test pitting, no concentration of lithic was detected.



**Plate 2**



**Plate 3**



**Plate 4**

**Site No 8      c NS 9680 0715      [Actually NS 96783 07176 now found, see below]**

Site No 8 is the location where trial pits were excavated before (Ward, Daer Interim No 4, and Fig 42); however from the 12 of square metre pits only a few lithics were recovered, nevertheless, over the years a significant quantity of lithic had been found here including a chert leaf arrowhead.

The location on the east side of the prominent knoll at Kirkhope produced the following lithic (PI's 3 & 4); the peculiar shaped flint scraper being embedded in situ (NS 96773 07176) at the edge of the exposure, therefore showing that active erosion is taking place here. Another nice flint scraper and a chert leaf were also found, however, the most intriguing object is the microlith (PI 4); close up viewing shows this to be an example of 'bluestone' the unknown lithic type from Site No 1. The specimen is a darker type to the previously found samples which seemingly are unique, and therefore it may not be associated with Site No 1, the complexity of lithic types now found at Daer is worthy of a paper in its own right and certainly more exhaustive research.

The work was resumed in 2013 adopting the strategy of opening random test pits (below) in areas where the peat was scoured, although several pits were opened on patches of peat at the reservoir edges in an attempt to pinpoint site/s. Finally after 33 pits were opened, the centre of what is now believed to be the source of lithic forming what was described as Site No 8 has been found at the above NGR.

An area of about 5m in diameter appears to have accounted for nearly all of the material found on the east side of the knoll although some items such as the in situ scraper (above) certainly did not emanate from the new find spot as reservoir wash out.

The collection was retrieved by trowelling only and from a podsol no thicker than 100mm. The small area was completely scoured on its eastern side and peat varying from zero thickness up to 0.3m deep still survived on the west side. There must have been a natural break in slope along the entire edge of the reservoir at Site No 8 since the present reservoir edge, which is scoured to a depth of about 0.5m of till, is elevated above the areas which have been test pitted.

The outcome of the excavation has been the retrieval of 8 microliths of chert (PI 5), but additionally with the 'bluestone' example (above) (PI's 3 & 4), and which is a fine point with edge modification along both sides.



**Plate 5**

Numerous core fragments and tiny debitage were recovered and although some of the smallest sized material may have been lost by trowelling only, the objects recovered indicates the care taken by the excavators to salvage all of the material. For example several revisits to the site showed only two pieces left in the spoil heap.

No dateable contexts were located although charcoal flecks were noted throughout the podsol, and a small sample of soil with charcoal flecks was taken. Only one small piece of burnt stone was observed during the work.

Honey coloured flint pebbles have been split and a lithic which may be agate was also found.

Seventy eight test pits in Site 8 area were hoed and trowelled out with no sieving and for the most part were 0.5m – 0.75m square, they were opened along the entire length of the reservoir edge at the area formerly designated Site 8; that is east of the knoll. The pits were opened at random spots on the ground depending on topography, peat cover and redeposit gravel and stone cover, it is now reckoned that no other in situ scatters of lithic are to be found among the area of test pitting, although random objects may be found anywhere.

The locations of the test pits are as follows and all of the finds will eventually be amalgamated with the previously opened pit objects along with all other items from the area:

All locations are NS --

96759 07198, 96761 07196, 96763 07192, 96765 07190, 96767 07188, 96770 07186, 96772 07187, 96775 07159, 96776 07186, 96775 07180, 96777 07180, 96779 07181, 96783 07182, 96783 07180, 96778 07175, 96787 07178, 96787 07185, 96789 07184, 96790 07179, 96792 07178, 96794, 07177, 96791 07173, 96787 07174, 96791 07169, 96792 07168, 96795 07167, 96799 07164, 96799 07162, 96786 07167, 96784 07169, 96783 07171, 96783 07165, 96784 07163. Further test pits were opened in the area: 96780 07179 one chert, 96778 07178, 96781 07175, 96783 07173, 96780 07176 one flint pebble, 96791 07163, 96792 07160, 96792 07158, 96803 07153, 96805 07151, 96806 07153, 96808 07153, 96810 07152 two chert, 96813 07153, 96811 07149, 96810 07148, 96811 07145, 96806 07149, 96807 07144, 96810 07142, 96807 07141, 96802 07145, 96802 07143, 96804 07138, 96806 07137, 96807 07135, 96808 07133, 96804 07132, 96803 07134, 96804 07135 two chert, 96803 07137, 96802 07135, 96803 07133, 96805 07132, 96802 07136, 96799 07135, 96800 07136, 96799 07135, 96800 07134, 96799 07134, 96800 07136, 96801 07131, 96801 07128 three chert, 96801 07127 and 96810 07134 two chert. = Total of seventy eight test pits.

## **Conclusion**

When all of the material found over the years as 'random' from this area is amalgamated and professionally studied, a more objective statement may be made. However it does serve the point made repeatedly by the writer that sites are being lost in reservoirs through the continuous process of erosion. It is only through the dedicated work of the voluntary sector, especially BAG, that damage limitation by intervention is preserving some of this important heritage.

Site No 8 is clearly Mesolithic in character although some later material may also have been found in the surface collection of the area, of particular interest will be any opinions expressed regarding the pear shaped, long end/edge scraper found in situ (PI 3).



### Site No 9

A few chert pieces were picked up at this location.

### Site's No's 19 & 20

The summit of the knoll at Site No 19 & 20; NS 9705 0670, was also investigated by hoeing off the surviving thin lens of peat there to ensure that no sites come under threat from continuing erosion. Several pieces of chert were found this time, but all on the southern side (Site 19).

The summit of the knoll was randomly test pitted and a series of pits were opened on the long southern side of the knoll (positions were not plotted). Peat up to 150mm deep was observed over much of the summit and the entire length of the southern side has in situ peat which decreases to a thin lens near the base, however on the south and east side of the knoll there is a 1m depth of peat which extends to the edge of the reservoir. The knoll has been subject to more severe erosion on its north and west sides due to the steeper sides there, most of what may be seen is redeposit gravel over scoured till. The area of in situ peat is approximately 40m N/S by 25m E/W extending from the summit and down the southern flank, it is therefore highly likely that some archaeological deposits may lie in that area although nothing was found in any of the test pitting locations. At the base of the gravel slope of the west side a further peat deposit extends down into the reservoir.

### Sites No's 25, 29 & 30 c NS 96835 07067      Plate 8a

The location is some 50m south east of the main knoll at Kirkhope Cleuch and immediately south east of the subsidiary knoll which is normally covered by high water level. The spot has been recorded in previous surveys as the three site numbers given above; however, it may be that the location represents a single site. A further quantity of chert and a flint flake were recovered as surface finds, indicating continued erosion of at least one lithic site in that vicinity.



Plate 8a

An area of surviving peat extends from the base of the knoll where it is at least 0.3m deep, it runs in all directions and after a few metres in distance it tails out to ogs and patches of ground scoured to the till. In an attempt to locate the actual zone of activity the entire area free of peat was test pitted by hoeing and trowelling. Pits were also opened around the base of the knoll and although a few pieces of chert were found in situ, no concentrations of lithic were found. Therefore the main source of this lithic collection has not been located, and does not appear to be in the area now inspected.

Furthermore another scatter of chert was located c 20m to the NW of this location and this was similarly tested by looking for any concentration of lithic, but none was found. The sources of these scatters remain elusive.

None of these test pit positions were recorded.

#### **Work done of the knoll summit.      Plate 8b**

Since both the main knoll and the smaller one (above) are shown to have significant lithic scatters around their bases (See Sites No's 8, 9 and 10 for the main knoll) it is reckoned that the two prominent landscape features may have been adopted for other purposes, such as funerary rites. While the main knoll summit is not subject to erosion (albeit its base has been severely cut away by the reservoir) the entire subsidiary knoll to the east is under indiscriminate action by waves, several beach lines being seen around its edges.

The summit was therefore cleared of larger stones up to cobble size and the surface hoed off from an area of about 10m by 3m. Surprisingly a depth of at least 0.5m of unconsolidated sharp broken rock was encountered below the redeposit beach gravels and stones. The deposit is entirely natural in origin and what was anticipated was a compacted orange coloured boulder clay or till as may be seen in the exposures around the main knoll, and indeed the same is seen on the other knoll like area to the east and on the other side of the reservoir at Sites No's 19 & 20.

The excavation was therefore abandoned and the location will be monitored as and when the opportunity presents itself in the future.



**Plate 8b**



**Site No 32.**

The previously known burnt mound deposit at NS 97000 07401; measuring 6m by 3m and lying with the long axis in a N/S alignment, immediately above the peat line, appears little changed since the last visitation. It was previously sampled for future research; however a new sample was obtained from the centre of the deposit. It was noted that the scatter of reddened burnt rock and charcoal from the sampled spot was lying superficially on an unburnt surface with no charcoal penetrating the podsol. The colour of some of the reddened rock fragments of the burnt mound have been leached from red to grey in colour, a reversal of the original process of discolouration.

The soil sample produced 70 grammes of charcoal above 1mm in size.

The following two sites (No's 35 & 36) have been accorded numbers which were not used in previous surveys and have now been adopted to complete the sequence of site numbers within the reservoir;

**Site No 35      cairn with charcoal      NS 96946 07390**

At the edge of the reservoir on the west side there was an apparently displaced cairn, the bank showed a few stones in situ and these were covered in charcoal fragments, some of which had found their way below the edges of the extant stones, but not underlying them, therefore the stones were in place before the charcoal was deposited. Circa 2m square was excavated into the bank to reveal only the natural ground surface; a stony podsol, the charcoal was restricted to the position of the surviving stones and was bulk sampled. A single flake of radiolarian chert was found, however this is suspected to be a residual find of Mesolithic date. The displaced stones on the beach were moved to check if any objects were covered by them but nothing was found.

The soil sample produced 86 grammes of charcoal above 1mm in size.

Interpretation is difficult given the limited work however a cremation site is suspected albeit no burnt bone was seen in the extant charcoal deposit.

**Site No 36      burnt stone and flint      NS 96902 07350**

At the edge of the reservoir on the west side was an area of displaced burnt stone which was eroded from the bank where 0.5m deep peat existed. Fragments of reddened stone could be seen at the base of the peat and extending for about 3m however no charcoal was noted and the deposit was not further investigated. A single flake of honey coloured flint with edge wear was picked up among the displaced burnt stone.

It is possible that this was an undeveloped burnt mound deposit or merely a fireplace, and given the apparent absence of charcoal the latter theory is perhaps more probable.

Site No 39 is also noted as 'no change' in terms of erosion although further chert lithics were retrieved as a scatter over the location, also, a previously un noted fireplace lies near the drystone dyke, it is evidenced by the usual heat reddened and scorched fire cracked stones, and is about 0.6m in diameter. No charcoal was noted and the fire place was not disturbed.

**Site No 44 and surrounding area (near the burnt mound deposit above)**

NGR at 5m on baseline = NS 96991 07402 = centre of site

Magnetic bearing from 0 base = 700

A surface scatter of lithic about 10m in diameter was centred at the above NGR. The location is at the edge of a large expanse of peat which extends down into the reservoir and where numerous birch tree roots and stumps survive below the peat (PI 6a). Trial pits determined where the scatter was concentrated, thus leading to the excavated grids of which there were fourteen (see Fig 1). Finds were bulk recorded to 1m square blocks. A baseline was laid and grid numbers were allocated to each side of it; those on the west side are numbered e.g. 5W, 6W while those extending away in that direction are 5W/1, 5W/2 etc. Only three grids on the east side of the base were excavated (5, 6, & 7 E). All of the lithic retrieved was handpicked from the excavation as neither dry nor wet sieving was practical.

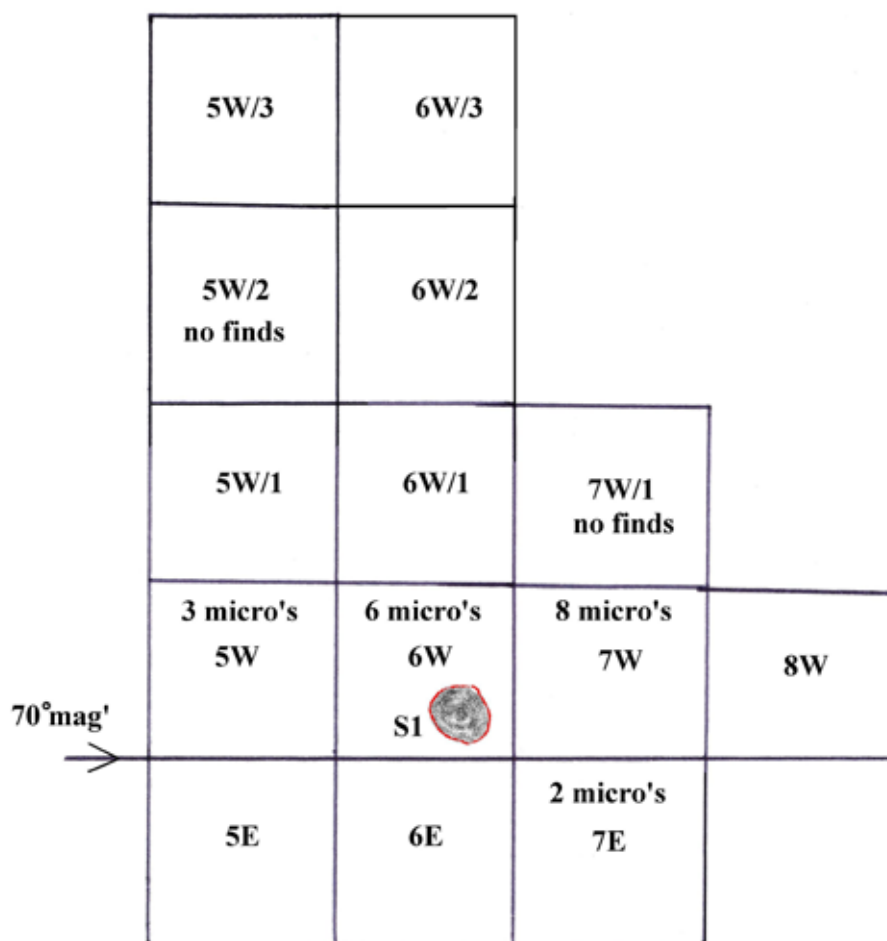


Fig 1

The ground was covered in a thin layer of peat and re deposited silt (about 75mm) over a non organic soil/podsol mixed within a matrix of stones of varying sizes, the total depth of the ground profile was less than 0.2m to the underlying till. Charcoal fragments were seen at various places but a denser patch was sampled (S1) and which penetrated the till to about 0.3m in an amorphous shaped pit which also contained an abundance of chert lithic, this was located in Grid 6W. Two microliths were found in the random scatter along with a tiny pitchstone flake, a further nineteen microliths were found in the grids, one came from the soil sample along with a possible piercer, and all of the microliths (PI 6) were made from radiolarian chert. Only obviously modified pieces have been described as microliths.

Clearly a major concentration of the lithic lay in Grids 6 & 7W where the bulk of the material was found, including fourteen microliths. The significant numerical drop off in lithics from adjoining grids was rather surprising, especially those adjacent grids on the east side of the base. The excavation was discontinued as the lithic numbers fell. The assemblage which includes amorphous cores and fragments is entirely blue/grey radiolarian chert. It is likely that the location has been a knapping site.



**Plate 6**



**Plate 6a**



## **Charcoal**

The charcoal was wet sieved to 1mm and 0.3mm sieves by flotation; the residues were then inspected and discarded. Charcoal retrieved was as follows although the 0.3mm flots contain fine grit:

Charcoal over 1mm in size      c4 grammes

Charcoal over 0.3mm in size      weight N/A as the sample contains much grit and fibre

## **Other lithic in close proximity to Site 44**

Trial pitting failed to locate concentrations

Bag 1    NS96979 07399-15m from Site 44 0 baseline

Chert 24 of

Bag 2    NS 96991 07402

Chert 46 of

Bag 3    NS 97023 07436      (with superficial charcoal which may be modern)

Chert 23 of

Tuff axe flake Group VI

Flint 4 of

Bag 4    NS96965 07390

Flint chunk (core fragment?)

Bag 5    NS 96961 07389

Chert 2 of

Bag 6 NS 96965 07390

Chert 4 of

## **Site No 45      NS 96823 07113      (near knoll)**

On the east side of the knoll at Kirkhope Cleuch and north of the scatter at Sites 25, 29 & 30 (all the same site?) another collection of surface chert was made and forming a local scatter of about 10m in diameter. Various test pits were opened in the area but no concentration of lithic was found, the source therefore remains unknown.

## **Sites 11, 12 and 13**

Further inspection of the beach along the area of the three previous locations above has produced several groups of lithic.

Random test pitting (not recorded) was carried out around the vicinities of each clutch of lithic and while further material was picked up from within the redeposit gravels, only at two locations were lithics found in the ogs, these are new sites:

**Site No 46 (reservoir site) NS 96702 07017**

Lying on the south side of an earth fast boulder there was a scatter of lithic lying in the ogs and covering an area of only a few square metres. Two microliths were included in the debitage which seems to indicate a small scale knapping site. A patch of superficial charcoal measuring c0.3m in diameter by around 40mm deep also lay on the south side of the stone and almost beside it; a two litre soil sample was retrieved.

**Site No 47 at reservoir edge NS 96704 07066**

The location at the edge of the reservoir produced in situ lithic in the ogs and was excavated for about six square metres. A mixed assemblage of both blue/grey and brown chert was found and included four microliths, a scraper, four flakes which have edge wear and a further which may be a burin (PI 7). Core fragments are also present in the scatter which extends up to the undisturbed ground (the reservoir edge), but not into it. It is possible that the location is the source of much of the brown chert found in the vicinity over the years and may also account for some of the following scatters in the area.



**Plate 7**



**Plate 8**

Six other nearby locations, all in close proximity to one another, produced surface scatters of between 3m and 6m and these are recorded as:

NS 96696 07002; where a boulder lying beside the beach edge had clearly been the seat of a severe fire as its surface was discoloured and crazed by heat, however, although lithic was recovered around it, no in situ material was found despite about 6 square metres being excavated. It is possible that the burnt stone was the result of a modern fire as several have been seen around the reservoir edges and presumably created by fishermen. A chert microlith and a flint knife (PI 8, left side) are included in the material recovered.

Several other find locations near by and all to the north of the boulder and also at the beach edge, were NS 96693 07017, this included a chert microlith, a flint blade and a fine specimen of chert with an abundance of radiolaria showing as spots (PI 10).

NS 96699 07074 and including a chert boring or piercing tool (PI's 8 & 9).

NS 96703 07051 and including a chert microlith.

NS 96698 07012, NS 96708 07019 and NS 96703 07029

A pitchstone flake was found at NS 96705 07001.



Plate 10

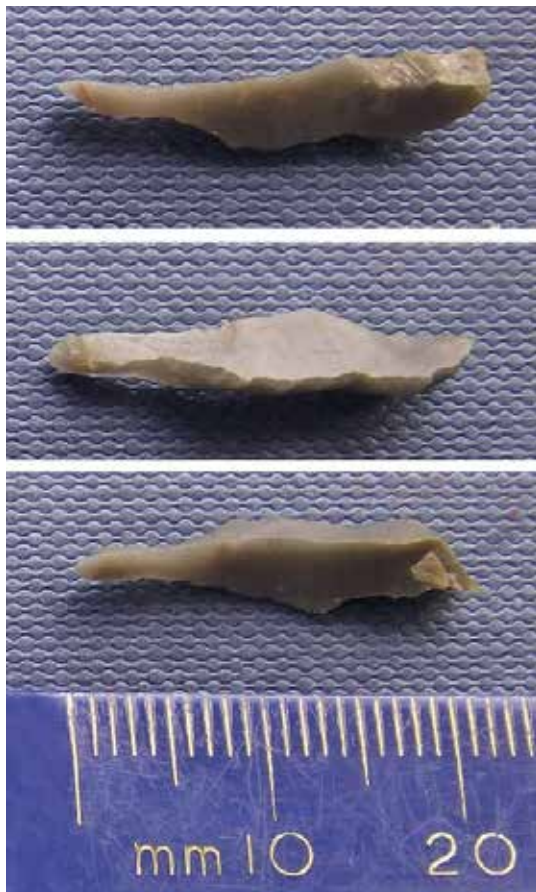


Plate 11



Plate 9



Regardless of the fire site, lithic was found along the shore edge but only in the vicinity of the three previously recorded locations; 11, 12 & 13. It is now believed that the source of some at least of this material is further down the slope and has been carried up to the edge by wave action, and consequently giving a misleading impression of its source, an alternative to that is the two locations where in situ lithic has now been found; No's 46 and 47 above, could have been at least in part the sources of some of this material.

Finally regarding prehistoric sites; a location some 15m north of Sites 1 & 3 on the east side of the reservoir and which was previously noted as a small surface chert scatter has produced a peculiar chert microlith (PI 11), the spot was not further investigated as the water level rose once again, however, it may be excavated at some future opportunity.

The locations of the prehistoric sites now discovered within the reservoir may be understood better by reference to Plate 12.



Plate 12

## **POST MEDIEVAL SITES**

### **Site No 41      NS 96844 07184**

Site No 41 was previously trenched but the results were not recorded as the water levels rose before it could be done. Green glazed sherds were found (but now lost!) and in 2013 a piece of faceted haematite was found as a surface object.

It was shown that a building may have existed here but the fragmented alignment of possible walls up to 1m in thickness had been laid directly on the pre existing silt derived from Kirkhope Cleuch Burn. It is possible that the stones represent the footings for turf walls as was seen at nearby Glenochar fermtoun. The NW corner curved from the long west 'wall' to the 'gable' and immediately within the corner were a setting of flat stones lying stacked together on edge.

### **Site 41a      NS 96785 07228**

Further upstream and also on the south side of Kirkhope Cleuch Burn was another similar alignment of boulders indicating the position of a possible post medieval building.

### **Discussion**

Sites 41 and 41a may have been post medieval buildings but insufficient survived to draw any further conclusion, the remains may have been intended buildings which were never completed, judging by the ground surface in what would have been internal areas, being only the natural peat and silt in the case of Site 41a and silt at Site 41.

### Site No's 46 & 43

The post medieval sites of Kirkhope Tower (Site 46, terrestrial site number) and Crookburn (Site 43) show little change from previous visits although the stair at Kirkhope is rather exposed and has now been re covered with heavy stones to prevent further erosion. Redeposit silt has again covered the two lower of four steps. A piece of faceted haematite was found near the 'tower' site and also a wine bottle neck dating to circa 1800 (PI 13). A figurine object (PI 14) and found by metal detecting at the SE corner of the building is described below.

A further blue bead was found at Crookburn (Site 43), 100m north of the site where a significant assemblage of finds was previously made and which originally had been thought to have been washed from the main site, however, it is now considered that the find spot may have been a midden area as no objects have been found between it and the main site.



Plate 13



Plate 14



**Site No 42      centred NS 96757 06436      Plates 15 - 20**

The small patch of floor surface, previously recorded and south of Kirkhope 'tower' was visible; it was excavated as it represents a building probably associated with the 'tower'. Probing around the area revealed that a cobbled floor surface existed to the south of the visible remains but this was covered in up to 0.3m depth of redeposit silts, indicating that the previously known part of the floor surface was lying at a higher elevation to the rest.

Deposits of silt (PI 15), perfectly sorted, over the entire floor consisted of the following; a basal layer of fine dark stone free mud between 50-100mm deep, which had been laid directly onto and between the floor stones by sedimentation, as it followed the floor contour and was level at its uppermost surface. Above this was a layer of fine grey coloured sandy gravel, again with an absence of larger stone content and which was consistently 50mm deep. Finally over the whole area was another layer of muddy stone free silt, up to 250mm deep. Each of the deposits was noted outwith the area of the building.

The interpretation of the siltation is thus: the floor surface was washed clean of any original deposits and turf cover during the initial inundation of the reservoir. The first layer of dark mud was deposited while the reservoir waters initially settled; this was followed by a deposit of grey sand derived from the nearby Daer Water as submerged flood currents carried and spread it over the entire area and finally, since the reservoir was filled, an ever increasing layer of muddy sediment has formed.



**Plate 15**



**Plate 16**

The site was inundated with water pouring from the adjacent gravel slope on the west side and drains (PI 16) had to be cut through the redeposit silt and around the newly discovered cobbled area, before work could proceed. The ground immediately to the east is dead level and would have been a good field (PI 16).

Excavation has revealed an extremely well made fairly level and rectangular shaped cobbled floor surface (PI's 17-19), and which measures on a N/S alignment 12.7m long by 4.3m wide, giving a floor area of circa 55 square metres.

The long east side forms a straight line which is interrupted near the northern end by a patch of disturbed floor. The southern end of the floor is somewhat ragged although the SE corner is so well defined and indicates that the floor stones must have abutted a boundary wall, as much of the other peripheral stones of the floor show. It is reasoned that if a wall were not present, the smaller of the floor edge stones would have become displaced.

The north end (PI 17) forms a straight defined external line and abutting it is a secondary area of stone work which runs the full width of the main floor, but is only 1m wide. This was the previously visible part of the floor and was wrongly described in earlier reports as 'an open drain', on the assumption that it was a kerb. The purpose of the extension stones may have been the footings of a turf wall which would have been a gable. Similar stones are to be seen at the northern end of the west long side, on the NW corner (PI 17).

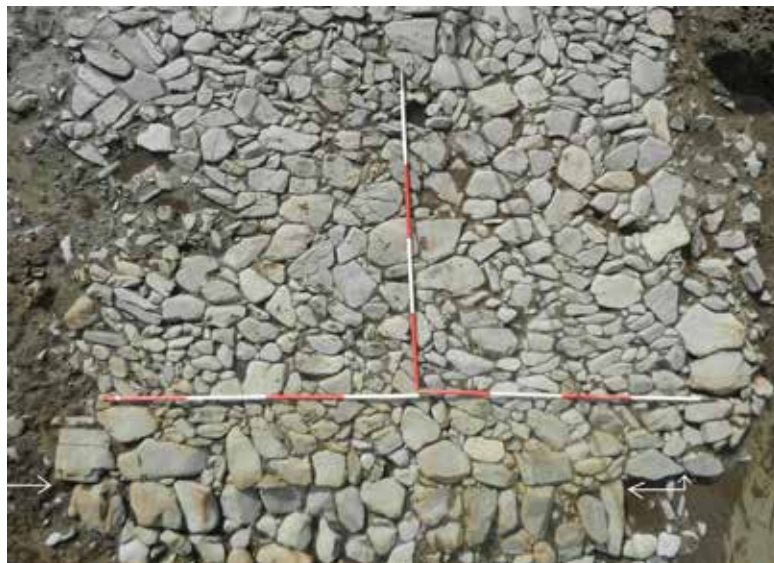


Plate 17



Plate 18



An apparent extension of the floor surface in the centre of the south side may indicate an entrance, however the long west side is reasonably straight, although at its northern end is an extended patch of stones (above) and, taken with others at the SW corner these may all support the idea that a turf wall was built on top of a stone foundation around the edge of the floor surface (but see below).

No further projections of stones extended from the well made floor and on the SE side an extension to the trench was cut in an attempt to understand if a wall had existed. The area had what appeared to be a natural deposit of rounded stones intermixed with gravel and forming a bank along and outwith the cobbled edge, this was sectioned and was shown to be entirely natural in origin. The apparent bank of gravel and pebbles extended down to an excavated depth of 0.4m, and the external edges of floor cobbles were exposed in the section to show that the floor surface had been quarried into the gravel surface. It would appear that the floor surface was created to be level with the surrounding upper surface of the natural gravels and if a wall (which is uncertain) existed, it could only have consisted of turf and with no special arrangement made for its foundation; this interpretation appears in conflict with the stone surfaces at the northern and southern ends (see above). Hardly any stone robbing was evident on the site to suggest that 'external' stones elsewhere had been removed.



Plate 19



Plate 20



Apart from the stones originally seen at the north end and elevated by a margin of only about 100mm; the remainder of the floor was consistently level excepting for an area on the western side and which sloped for 1.75m down to the edge where it was 2m wide, the drop in elevation was 0.25m (PI's 18 & 19). The curving feature appeared to have been an original concept although its appearance looked like an area of subsidence. Some flat stones extended from the feature and outwith the line of the cobbled edge and this may indicate an entrance onto the cobbled floor surface and a desire to partially drain the floor at that point.

A small, centrally placed fireplace of 0.5m in diameter and 2m from the north end was detected by reddened and scorched stone, but it was clear that this was not an extended activity and probably accounted for a single fire episode. A further central patch of cobbles, 4m from the north end and possibly deliberately set as a circular area, and about 1.25m in diameter showed the stones had been apparently heat cracked, however and rather surprisingly, there was no discolouration of the stones as is usually found, nevertheless it is assumed a fire took place on this spot.

The floor stones were extremely well placed in a tight fitting arrangement, using a flat side forming the floor surface but with deeper edges extending down c0.2m, thus binding each stone firmly and having no loose surface. Most of the floor stones appeared to have been laid in an ad hoc manner as far as surface area and stone shape was concerned, but in the central area and leading to the bowl shaped depression on the west side, most of the floor stones appeared to be aligned in the same direction across the floor and to the lower part, possibly at attempt at drainage in that direction.

Finds were predominantly pieces of facettted haematite (PI 20) which is a ubiquitous find type for post medieval settlement sites in Upper Clyde and Tweed areas. Lodged below the floor stones were two buttons detected by metal detecting and retrieved by removing the stones. Other finds included fragmentary and indeterminate pieces of iron and two tiny sherds of 18th century pottery, all of the finds were located between the interstices of the floor stones. A fragment of 18th C shoe buckle was found by metal detecting on the beach adjacent the site.

### **Finds list**

1. Haematite pieces some with facettted sides 13 of south end of floor
2. Haematite pieces some with facettted sides 10 of central floor
3. Haematite pieces some with facettted sides 15 of north end of floor
4. Corroded iron some indeterminate but including a boot heel plate, clog plate, nails, and a scissor blade.
5. Copper alloy toggle button with star design from south end
6. Copper alloy toggle buttons (2 of) no design from north end
7. Ceramic, two tiny sherds c18th C wares from south end
8. Copper alloy shoe buckle found on beach nearby

## **Discussion**

It therefore seems likely that the cobbled surface was stripped almost completely of any floor deposits during the reservoir inundation process, possibly removing some objects which may have lain there.

The rarity of finds and features on the floor surface make interpretation awkward. The site does not appear to have been a house or combination house/byre as has been found in numerous nearby excavations on post medieval sites by BAG. Although two fireplaces on the floor have been adopted at some point, neither appears to have been extensively used as such, no other structural evidence of human occupation was recovered and the near absence of finds reinforces an opinion that humans did not live on the floor space for extended periods of time. Similarly, the absence of open drains on the floor surface detracts from an interpretation as a byre since such features are ubiquitous on every BAG excavation where byres have been found.

Structural evidence of any walls was scant apart from the possible stone footing for a turf wall and no evidence for a roof in the form of cruck pads or positions was obvious. Entrance positions were more imaginary than positively identified. The floor surface certainly indicates that a wall was present judging by the alignments and corners of the floor stones (see PI 15), which it is reasoned could only be kept in place by an enclosing feature such as a wall, either of stone or turf. If a roof had been present, it must have been thatched.

The occurrence over most of the floor of pieces of haematite (PI 20) believed to have been used as keel certainly indicate animal activity, most likely with sheep, however the floor was so well made it is more likely that cattle were involved, as sheep do not require to be housed nor do they require such solid floor surfaces upon which to be kept, but on both counts - cattle do.

The two tiny sherds of 18th C pottery and more especially the buttons indicate that the place was used during the 18th century, but for a purpose which is not understood, it may however be seen as in association with Kirkhope 'tower' in its latter stages of occupation.

It seems highly likely that other buildings may have existed in the general area, and evidence of them may lie buried in the surrounding silts, a hypothesis which may be explored when further opportunity presents itself.

## **Site No 46 Kirkhope Tower**

Note this site is not numbered as a reservoir site and is part of the sequence of terrestrial site numbers in the overall project.

A metal detecting sweep around the area of Kirkhope tower (bastle) produced the following: Two lead pistol balls and a modern fishing float of lead and appearing like a pistol ball but for the perforation through it, a turner coin, seven buttons including one with a 'star' motif and a fragment of iron knife blade. None of the items were spot recorded as they all were found around the ruin in demolition contexts.

However, a singular object (PI 14) was found at the SE corner of the building (marked X on Fig 2), again in lime rubble and it is described as follows:

**Description of a cast brass object found beside Kirkhope tower (bastle) within the Daer Reservoir. Plate 14**

The object is a figurine of the upper part of a female body mounted on a tapering pedestal. It measures 80mm tall by 23mm broad and by 15mm deep overall. The figure is a bare breasted female although she has a drape over the left shoulder and which extends down both the front and back of the body to the right side at the waist. The figure appears to be clutching a bunch of grapes behind and at the base of the back with the right hand, while the left hand is laid against the bare stomach area with slightly opened fingers. The frontal part of the body extends as far as the belly where a possible belly button is seen, below the belly is another bunch of grapes suspended on a girdle which may have foliate designs on each side of the grape bunch. The head looks slightly to the left and has almond shaped eyes and pouting lips. The full face is presented from the top of the brow to behind the cheeks. The arms, shoulder and back appear as muscular, almost male like. A head dress or tiara type ornament appears over the hair style which is difficult to determine, although the entire head may be covered in a coiffure rather than an adornment, a bun appears at the top and a flower consisting of a central pellet surrounded by six others adorns the left side near the back of the head, at the rear is a 'v' shaped arrangement which is either hair styling or part of a head dress, below that may be a chignon (hair bun) and on the right side may be a large leaf, perhaps a fig leaf or an oak leaf.

The rectangular section pedestal extends from the top at 10mm square to the base which is 8mm broad by 5mm deep. The base of the pedestal extends minutely to form a foot. On the front and rear of the pedestal and within panels formed by incised lines are inscriptions also formed by incised capital letters.

The frontal panel is split vertically with two lines of text and viewed from the right hand side of the figure the upper one reads from the column top: SELDENWISISMIN

The lower legend with one possible illegible letter reads: AW-SALVATICKVIN

The rear panel is not split like the frontal one and is less legible but the following letters are definite, with those in italics less so: -SVOPRCS

Below the legend are further possible letters and motifs? Possibly a hand?

The two sides of the pedestal are plain.

The base of the foot has corrosion products adhering but may have been an indented panel and if so the object may have been a seal. However and perhaps more likely the object is an incomplete seal and the missing die, whether circular or squarish in shape, would allow the object to be stood upright. A weak cast may account for the seal being missing.

The brass object weighs between 49.5 and 50 grammes

Research of the date and function of this object continues.



### Site 46a

**Note: Site No 46; Kirkhope Tower, is not a 'reservoir' site number, but a terrestrial site number. Coincidentally the reservoir numbers arrived at No 46 on the discovery of the following site under discussion in 2013, given its proximity to the 'Tower' and its possible association with it, the reservoir number allocated will be 46a.**

**Site 46a      Building      centred NS 96767 06530      Plates 21 – 29 & Fig 2 & 3**

Kirkhope Tower is now reinterpreted as a possible bastle house, but for the sake of convention and former nomenclature, the word 'tower' is used here.

During metal detecting in 2013 around Site 46; Kirkhope Tower, evidence of walling was found, however this was recorded previously (Fig 2) as part of the survey and partial excavation at Site No 46 (Ward 2002), although at that time the significance of the walling was not understood, it was assumed to be part of the adjacent but ruinous drystane dyking. Massive boulders, presumably from reservoir construction had apparently been dumped on the location, but never used. However most of the drystane dyke (given of 1st Ed OS maps), was demolished and recycled to the dam wall, its dispersed remains ran over the location under discussion.



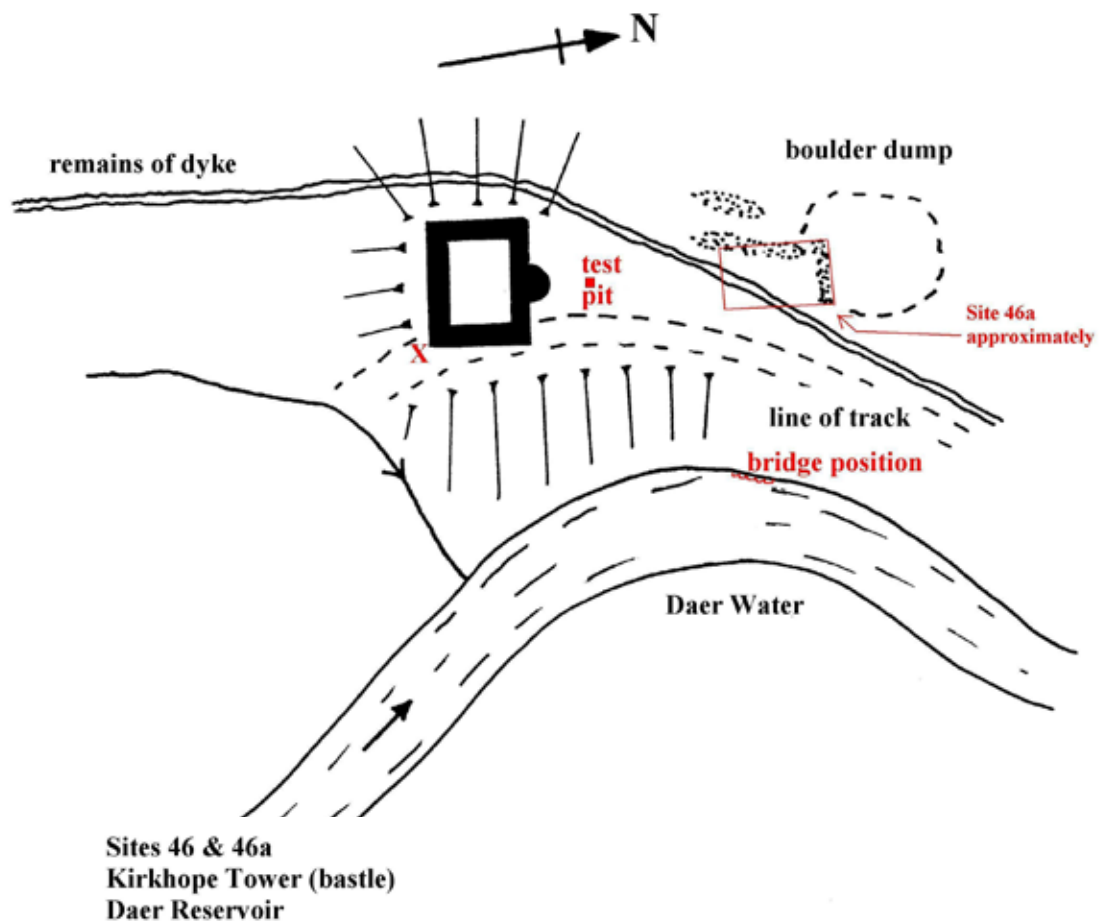
Plate 21



Plate 23



Plate 22



Scale  50m

Fig 2

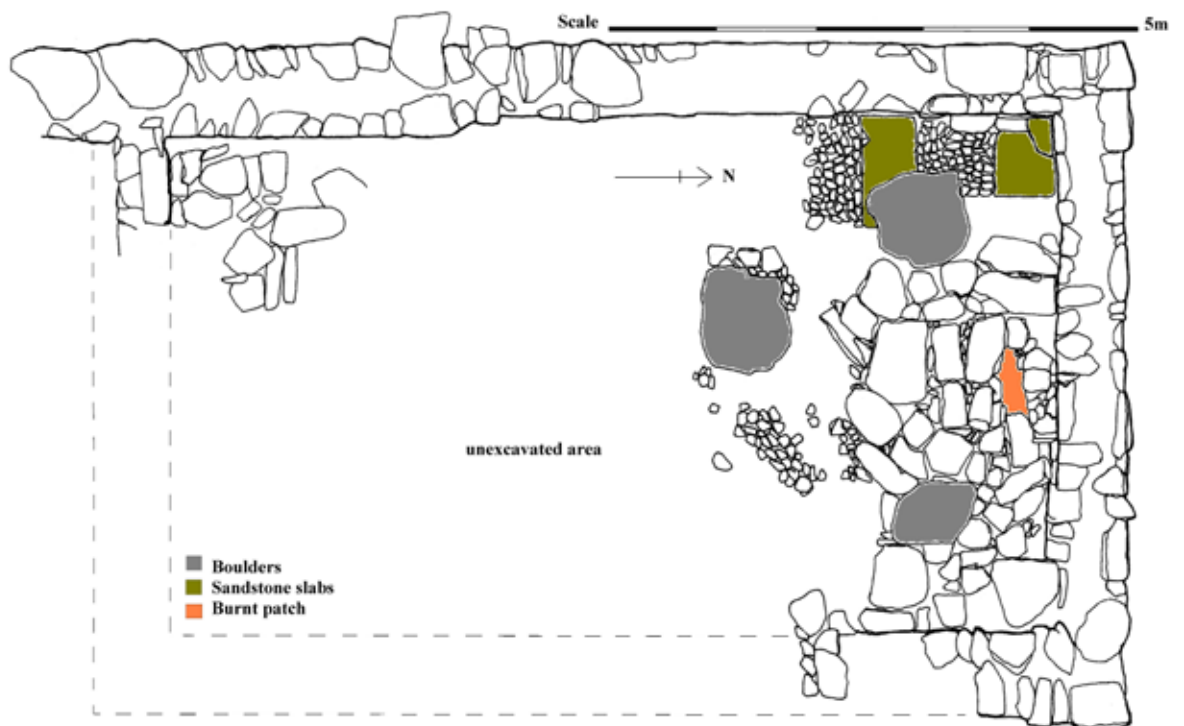


Fig 3

The general area around the tower site is covered in a depth of up to 0.6m in redeposit silts, especially on the lower lying ground to the west and south of the tower site which itself is elevated on a spur of ground, presumably a glacially deposited pile of gravels. Site 46a lies on this higher ground immediately north of the 'tower' and was covered with up to 0.3m deep redeposit silt which appears to have overlain an ogs and which may have been protected to some extent in the early years of the reservoir history by the large and recently dumped boulders.



Plate 24



Plate 25

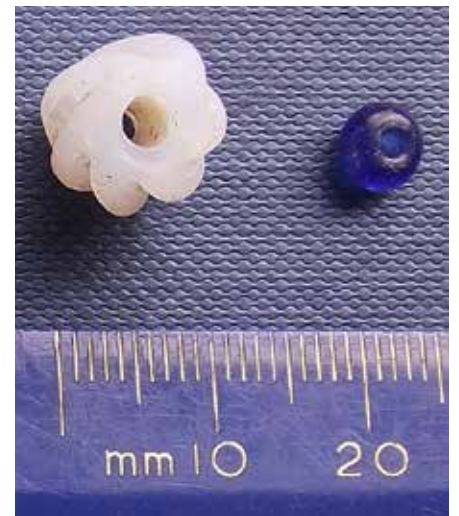


Plate 27



Plate 26



The metal detecting discovery spot proved to be the NE corner of a previously unknown building (PI 22) which was only partially excavated and recorded as the water levels rose before the intended completion of the work, the following description details what was discovered:

Overall the building was 10.3m long, and lying on the same alignment with the 'tower' (Fig 2), it was 6.1m wide, the long axis being on a N/S alignment. The internal space measured 9m by 4.7m (42.3 square metres) and the walls which were 0.6m thick were neatly built with local greywacke as random rubble and using lime mortar. The wall alignment survived best on the long west side but only up to 0.5m high where small stones survived up to four or five high, on the north gable the wall line survived from corner to corner but on the NE corner only the foundation stones remained but included the return to the south of the long east wall (PI 22).

About 2.4m from the NW corner lay the centre of a fireplace (PI 24) which was constructed against the gable wall with pieces of red sandstone, easily recognisable as coming from the nearby 'tower', and therefore having been recycled from there. It appears that a fireback of masonry was made against the wall and that a basket grate had been used for the actual fire site as a rectangular space of 0.5m by 0.25m survived on the floor and which was full of burnt soil and some fine charcoal, probably the product of burning peat or turf. There was no evidence of burning against the actual wall stones which survived and it is possible that a cast iron fire back was also used.



Plate 28



Plate 29

The remaining parts of the wall alignments of the building had been stripped out, probably finally succumbing to the dyke builders whose wall ran obliquely over the former structure, it may even be possible that much of the building ended up in the dyke. However, one stone abandoned on the dyke line and lying above the building appears to have been worn smooth as a step or threshold and it is considered to have been part of the building, perhaps for its presently lost entrance, which almost certainly was on the east side where the stone was found.

The floor arrangement was varied with different types of covering from formally squared sandstone slabs, patches of fist sized cobbles and larger stones up to 1m in size and all used as paved floor surfaces, but all of a high standard of construction and evidently built to achieve a comfortable floor surface.

The NW corner (PI 23) had a square red sandstone slab measuring 0.58m and only 40mm thick and laid dead level on course burn gravel. Adjacent it and along the west wall was a neatly laid square patch of small cobblestones up to about 100mm in size and occupying about the same area, next was another sandstone slab but measuring slightly less wide but longer and laid longwise into the floor, that was followed by another patch of similar cobbles but which were at least partially robbed out, all were laid level and it was seen that all were laid on top of burn gravel. The massive boulder lying there may have crushed the second slab when the rock was dumped on the site.

Distinctively different was an area of larger stones, laid as an equally perfectly level floor surface, this was in front of the fireplace (PI 24). The surviving floor measured approximately 3m by 2m and was clearly designed to be associated with the fire place, it gave way to further small cobbles on the eastern side and presumably such small cobble stones were missing between the 'fireplace' floor surface and the one in the corner composed of slabs and small cobbles.

The NE corner may have been composed of two different levels of floors as the wall foundations lay much lower down, and the 'fireplace' floor terminated at a higher level than other possible lower floor stones in that corner (PI 22).

The SW internal corner of the building was also paved with greywacke rocks but this was re flooded before a record of it could be made, however, as seen in Plate 25, through the water, it can be seen to have been of a similar nature to that part of the floor in front of the hearth, although here it had been disturbed to some extent.

Interestingly the long west wall may have extended further towards the tower as it extended past the line of the south gable? wall, also, a cobbled floor surface was noted on the southern side of the supposed gable, all of which may eventually show that the building was indeed much longer, and extending further south than the present work demonstrates.

Fragments of window glass indicate that glazed windows were present however no other details of the building are known from the site, but an absence of roof slate or fragments would indicate that the building was thatched.

The central part of the floor was only partially excavated due to the rising water level.

Three massive boulders lay on the floor surfaces at the northern end of the building; these were evidently dumped by the reservoir builders and seemingly are part of a group forming an unused pile of boulders there.

On the NE corner and external to the building, a cobbled surface was noted and even further east at the edge of the Daer Water (submerged) there is a stone built bridge abutment (Fig 2) with a possible cobbled surface leading towards the building, Similar pottery to that found in the excavation was noted at the burn side and lying in an ogs there. All of this will be pursued in the future if possible.

It is the intention to further explore the area around Kirkhope Tower by test pitting in order to establish if evidence of further buildings exists, this will be done at some future date given the opportunity so to do.

#### **Finds                      Plates 26 - 29**

Unless otherwise stated all finds were lying in the ogs which covered the entire site. Locations are given as 'nominal', e.g. NW corner area, NE corner area; central area, SW corner area and SE corner area. Central area was partially excavated and SE corner was not excavated.

For the most part finds consisted of pottery sherds diagnostic to the late 18th and early 19th centuries (PI 26) although some later wares may be present having come from the nearby Kirkhope shepherds house to the north (demolished site). Much of the pottery is similar to that excavated previously at Crookburn, Site No 43; and the same is true for the glass beads found (PI 27). Corroded iron included a plate from a clog and parts of knives and nails. Window glass was present and a few sherds of wine bottle glass (PI 13), a few fragments of tobacco pipe stems (including a glazed mouth piece found below the corner flagstone, and the only stratified find) and two complete pipe bowls all indicate the main period of occupation to be the first half of the 19th century.

Metal detected objects near Site 46a (not plotted)

1. Finger signet ring (PI 28) of copper alloy bearing the letter 'H' in Gothic script, corroded and with ring snapped but complete.
2. Copper coin, corroded and illegible but with crown, possibly a Hanoverian halfpenny.



## **Discussion**

It is clear from the finds that the building was occupied during the early part of the 19th century and possibly the latter part of the 18th century, and may have been in use at the end of the life of Kirkhope Tower. A sherd found in the test pit is identical to one found at Crookburn just to the south but on the other side of the Daer Water (see Ward 2013).

It is possible that the building is earlier than the finds indicate but this is at present unclear. Certainly the thickness of the walls and their construction detail including the fireplace against the gable wall, indicate a late 18th/early 19th C building. It may be that the sandstone slabs were derived from the tower as were bits of other red sandstone strewn around the site, and it may be that both buildings were finally abandoned when the now demolished and submerged 19th century Kirkhope site was built just to the north.

The 1st Ed OS maps show only Site No 46; Kirkhope Tower, and give it as 'Peel' (Remains of). Therefore Site 46a was not visible or extant enough to be included on the map which also shows the now demolished Kirkhope shepherds house and outbuildings just to the north.

## **Addendum      NS 96764 06519      Trial pit Plate 29 & Fig 2**

Three metres north of the 'tower' stair a pit of 0.75m square was opened to test for features between the two buildings. A 0.3m depth of silt lay over an ogs of about 100mm, which in turn lay on natural grey coloured gravel. A variety of pottery sherds which date to the 18th and possibly 19th centuries was found in the ogs indicating the entire area between the two buildings has a scatter of rubbish or perhaps even midden lying over it.

Of particular interest is a sherd of pottery (marked 'X' in PI 29) which is identical to one retrieved at nearby Crookburn site (No 43) and therefore appears to indicate contemporaneous occupation at both locations.

## PEAT DEPOSITS

### Survey of principal peat deposits which survived within the reservoir area.

It is now clear that countless undiscovered archaeological sites must exist in areas submerged within the reservoir, in the forests and on the surrounding landscape of the Daer valley. Numerous other Mesolithic sites are suspected. The surviving peat deposits within the reservoir (PI 30) appear to be choice locations for such sites based on what has so far been discovered.

Towards the aim of mapping areas of potential archaeological significance in the valley, the peat which was visible within the reservoir has been plotted as of July 2013. Taken with the limitations of this survey and photographic evidence it may be appreciated where such potential sites may exist, and where future monitoring of the reservoir area should be undertaken to prove or disprove the theory. The following NGR's should be 'joined up' to give the known extent of submerged peat.

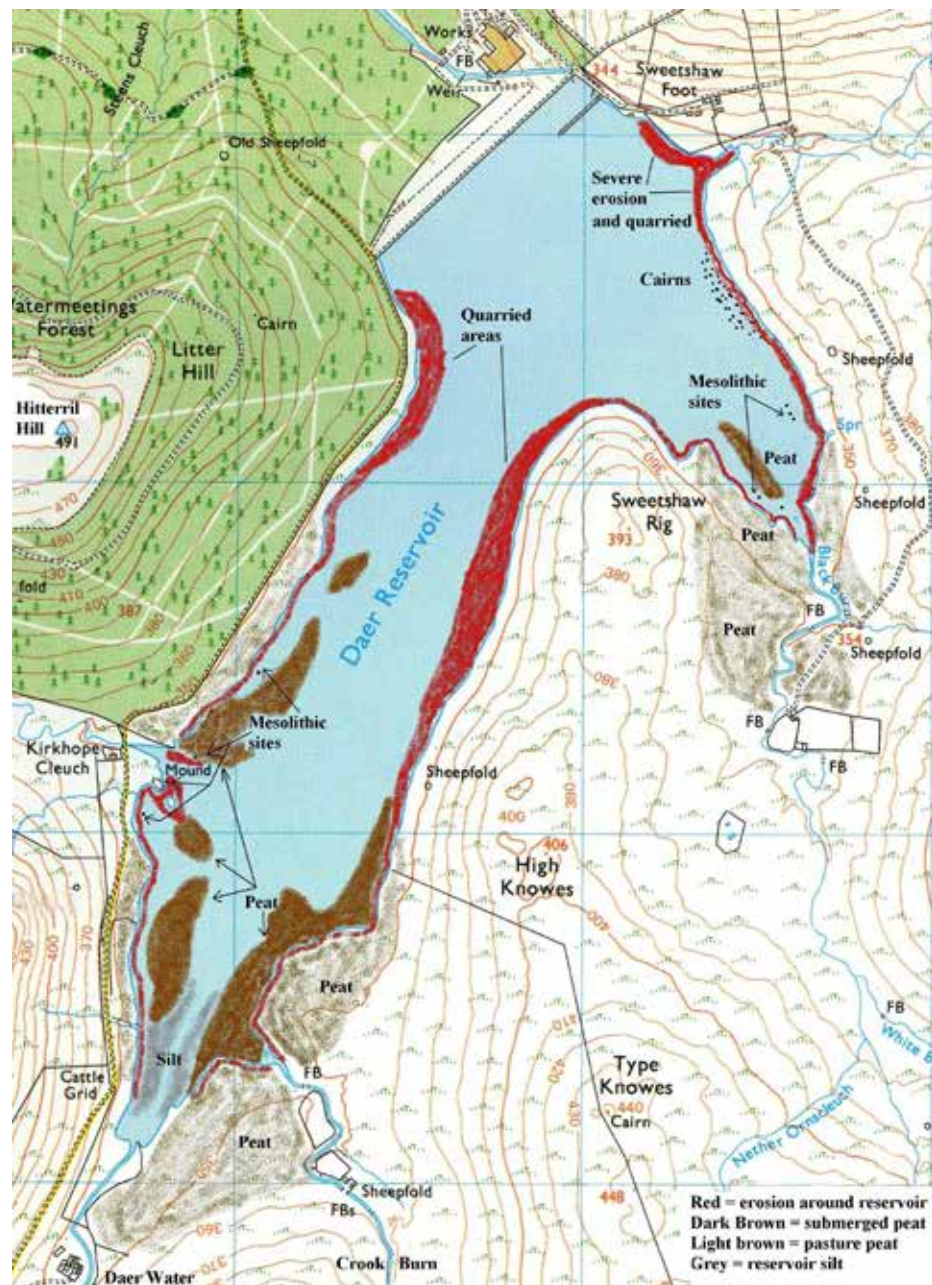


Plate 30

Over the years erosion has been demonstrated to be active in most areas within the reservoir, albeit at different and unpredictable rates, principally because of the vagaries of weather and water levels, especially when normally submerged areas are battered by storm waves or heavy rain fall. Under these conditions new sites have become exposed as object scatters and features, as the ongoing interim reports clearly demonstrate.

Top edge of peat at reservoir edge 96934 07375  
Top of peat with birch woodland 96979 07391 but 50m to water  
Ditto 97050 07484  
Top of peat at water edge 97163 07512

New section  
Waters edge top of peat with birch woodland 97187 07540  
97141 07585  
Top of peat at large stone 97152 07611  
Top of peat at burn 97195 07670 water 50 m away

New section  
Peat at edge of water 97269 07684  
Top of peat with birch woodland 97280 07711 20m away from water  
Top of peat with birch 97291 07751

Edge of water with peat 97312 07767

NO further peat towards the dam on this side, the area was probably excavated for dam wall construction.

New section  
(Part of section first above)  
97046 07324 30m from water edge  
97056 07292 30m from water edge  
97073 07249 ditto  
97077 07219 ditto  
Waters edge 97030 07186

At dyke at waters edge 96982 07117 with peat all the way up the dyke to the reservoir edge and up to road.

East of knoll location  
96830 07065 extending for about at least 100m out and by 100m wide

## GENERAL DISCUSSION

The programme of work in 2013 has considerably improved the understanding of the archaeology of and the erosion effects within the reservoir.

Lithic scatters in particular are now shown to be found not necessarily directly where they were laid down, rather the effects of wave action appear to have moved much material up the beaches, rather than down slope as one may have assumed. Test pitting is the only way to identify the source of lithic scatters and this has proved both costly in time and effort and given that some in situ collections of lithic may only be a few metres in diameter, then it is evident that some sources have not yet been located. Nevertheless, the programme of test pitting has been a success with some sites being narrowed down, but with the caveat that all surface scatters may have been derived originally from more than a single source, some of which remain to be found.

Work on the post medieval sites near Kirkhope Tower have also advanced our knowledge of the settlement of Daer valley in the 17th- 19th centuries, in particular the 'tower' is no longer seen in isolation and formed the focus of an extended settlement which may have been assumed before, but which is now proved. The floor surface of Site No 42 has no parallel in the work of BAG in Upper Clyde or Tweed areas where much excavation on post medieval sites has been done by them. The site was not a house as understood by BAG's work in the area and period, and may have been a turf walled and roofed barn which may have been used to house both animals and people at different times. Certainly people were losing buttons from their jackets whilst using haematite in the building.

The new discovery of the building (Site No 46a) beside the 'tower' is equally interesting and shows that sites of buildings predating OS maps has been lost, but can still be rediscovered. The occupation of this house may have been contemporaneous with Crookburn to the south but on the other side of the Daer Water and with the latter days of Kirkhope tower itself.

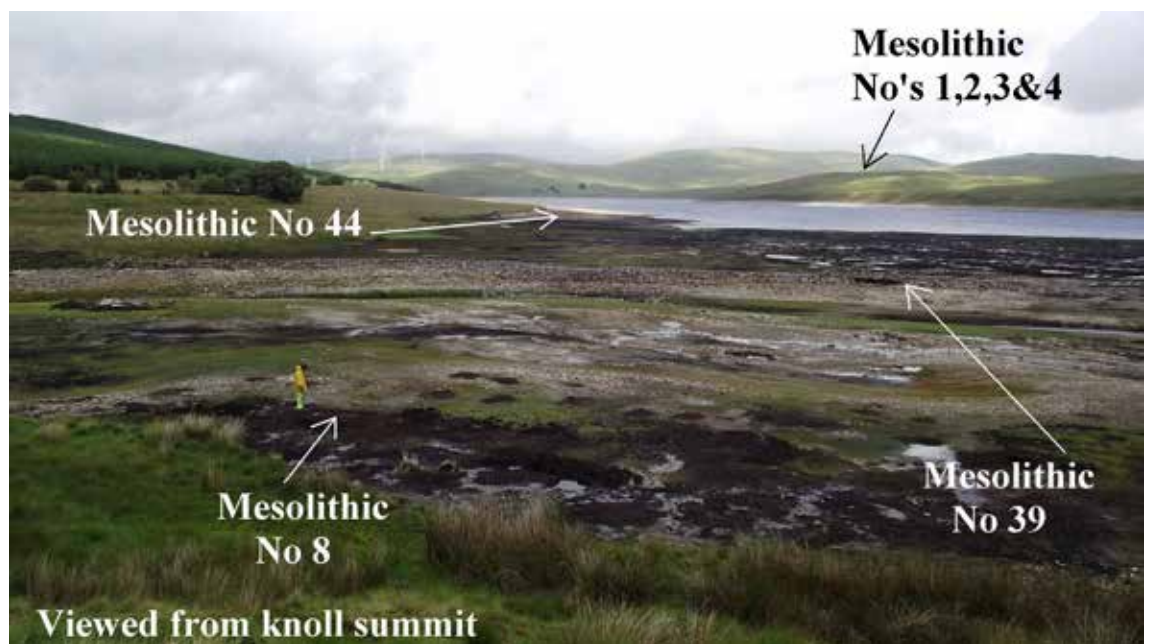


Plate 31



Since numerous campaigns of work within Daer Reservoir have now been accomplished by BAG since 1995, the laws of diminishing returns must apply on ground which has been scoured, and inspected. Sites have been proved while others remain elusive, and without any doubt, considerable archaeology must still await discovery, lying on the submerged landscape in deeper waters, and which ground surfaces BAG have not seen. However, the submerged peat covered areas which BAG regularly do see (PI's 6a & 30) must surely conceal evidence of the pre historic past; the same argument is surely true for those undisturbed areas around the reservoir and indeed in the entire valley - and beyond.

The area could already now be described as the Mesolithic capital of Scotland, based on the number of sites now discovered and excavated, and since every campaign by BAG in Daer Valley has produced more and more Mesolithic sites, evidently only the tip of the Mesolithic iceberg has been seen.

Certainly the Daer Reservoir now has an impressive range of known prehistoric sites, most especially of Mesolithic (PI 30 & 31) and Bronze Age (PI 12) date, but also with a background data on Neolithic activity in the form of pitchstone and leaf arrow finds. The recent work on Comb Rig nearby has now confirmed Early Neolithic settlement in the valley (Ward 2013).

BAG have also pursued a keen interest in Post Medieval history through their archaeological endeavour, and repeatedly surprise even themselves at the discoveries which are still to be made in this period, hopefully this aspect will also be pursued within the reservoir at the next available opportunity.

The richness of the landscape in Upper Clydesdale in archaeological terms cannot be overstated, and it may reasonably be argued that it cannot be surpassed in Scotland. The wealth of sites discovered by BAG over the years is supplemented with many others, for example those found through developer funded archaeology; the latest being the significant discoveries made during the construction of the Clyde Windfarm.

The synthesis of all this data bank has been attempted by the writer in the past and hopefully will be done by him again, as the overall story becomes out of date almost by the decade. However, it seems to him that an opportunity presents itself for a more comprehensive and academic work on the Archaeology of Upper Clydesdale, but which is beyond his own capability; in consequence he wishes to intimate that the entire record of BAG is public information and is available to anyone who wishes to pursue it.



**Plate 6a**

## **ACKNOWLEDGEMENTS**

The following people engaged with the work discussed above:

Ed Archer, Drew Conlon, Brenda Dreghorn, Jacquie Dryden, David Drury, Val Ferguson, Paul Gannon, Bill Glass, Tom Hyslop, Sandra Kelly, Nisbet Lawrie, Bob Main, Jim Ness, David Paterson, Neil Simpson, Alick Walkingshaw, Morag Thompson. Ian Paterson described the finds assemblage.

The writer was responsible for project management and site recording and any mistakes and or omissions in this report are his.

## **References**

Ward T 2002. Draft of forthcoming report History of the Daer Valley, unpublished, Biggar Museum Trust 2002. Now given on [www.biggarchaeology.org.uk](http://www.biggarchaeology.org.uk).

Ward T 2013. All interim reports on the Daer Valley project by BAG including reservoir and forestry aspects [www.biggarchaeology.org.uk](http://www.biggarchaeology.org.uk)

## **ADDENDUM**

### **Report on two further radio carbon dates for Daer valley**

During the recent programme of work in 2010-2012 and now given on [www.biggarchaeology.org.uk](http://www.biggarchaeology.org.uk), we suggested that some sites where Mesolithic and Early Neolithic evidence was retrieved from the same locations, could represent the elusive Mesolithic/ Neolithic Transition. The evidence from several sites seemed good enough to make the suggestion, so good in fact that we did this on the Digging for Britain T/V programme in 2012, while work was still underway.

In our haste for an answer we commissioned two C14 dates in 2013; both from Site No 94 where nice sherds of Early Neolithic carinated bowl were found in close proximity to some rather attractive microliths and other Mesolithic objects (see the report). The details of these dates are given here and it will be seen that they work out around 5600 years ago. While this is excellent evidence of Early Neolithic settlement in the valley and the first we have dated, it is clear that it is not early enough to be the transitional period between the two cultures, unless the Mesolithic presence on the site was extremely late, which is given no credence here. We therefore have to conclude that the sites were co incidentally occupied at different periods, a phenomenon which does seem to occur regularly on prehistoric locations, as we ourselves have found repeatedly between the Early and Late Neolithic and the Bronze Age.

Although this is convincing evidence that the various sites we found are coincidentally placed beside one another, it does not definitively prove that some of the other locations are not associated in time. All sites would have to be dated and this is currently beyond the resources of BAG.

**Date results**

SUERC-47420 (GU30927)

Daer Site 94

Feature No 3

Betula charcoal

Radiocarbon age BP 4721+/-28

68.2% probability

3627 (25.5%) 3591 calBC

3527 (12.0%) 3509 calBC

3426 (30.6%) 3382 calBC

95.4% probability

3633 (35.9%) 3559 calBC

3537 (20.5%) 3497 calBC

3456 (39.1%) 3377 calBC

SUERC-47421 (GU 30928)

Daer Site 94

Feature No 7

Corylus charcoal

Radiocarbon age BP4764+/-26

68.2% probability

3633 (7.4%) 3625 calBC

3601 (46.1%) 3554 calBC

3540 (14.6%) 3525 calBC

95.4% probability

3640 (93.4%) 3517 calBC

3396 (2.0%) 3386 calBC

## Appendix I

### Finds description by Ian Paterson (BAG)

#### Daer 2013 – the catalogue

Site 1 (2013)	Surface scatter		
	Chert		
	a	Large	Chunks and flakes, 4 of, olive grey [5 Y 4/1], smooth fracture - one is perhaps a broken blade.
	b	Medium	Chunks and flakes, 2 of, olive grey [5 Y 4/1], smooth fracture. blade.

Site 5 (2013)	Surface scatter		
	Chert		
	a	Large	Chunks and flakes, 3 of, medium dark grey [N 4].
	b		Chunks, 15 of, medium dark grey [N 4] and dark grey, some with thick pale altered zones - radiolarians, smooth fracture.
	c	Medium	Chunks and flakes, 11 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d		Flakes, 20 of, olive grey [5 Y 4/1], smooth fracture - some have red-brown mottling.
	e	Small	Flakes, 12 of, various types.
	'Grey' chert		
	f		Flake, 2 medium, light brownish grey [5 YR 6/1].
	'Red chert'		
	g		Chunks, 1 large, 1 small, dusky brown [5 YR 2/2], rough fracture.

Site 6 (2013)	Surface scatter [NS 97023 07436]		
	Chert		
			Microlith, 14mm long, visible radiolarians
	a	Large	Chunks and flakes, 5 of, olive grey [5 Y 4/1], smooth fracture – 2 have pale altered zones showing radiolarians, smooth fracture
	b	Medium	Chunks and flakes, 8 of, olive grey [5 Y 4/1], smooth fracture – 1 has pale altered zone showing radiolarians, smooth fracture
	c	Small	Flakes, 3 of, various types



Site 8 (2013)	Surface scatter unless otherwise stated		
	<b>Flint</b>		
		Fl a	Scraper, pale brown with small pale spots – struck from pebble and a flake of similar lithology.
		Fl b	Scraper, brownish grey – in situ.
		Fl c	Scraper, in situ [NS 96773 07176]. Pale brownish grey with darker mottling 39mm long.
	<b>Chert</b>		
		Tools 1	Leaf arrowhead, dark olive grey [5 Y 4/1], smooth fracture
		Tools 2	Microliths, 2 of, 11 and 17mm long, dark olive grey [5 Y 4/1], smooth fracture
	a	Large	Chunks and flakes, 13 of, dark grey [N 3] to medium grey [N 5], rough fracture. Some have pale weathered zone showing radiolarians. Some are cut by very thin calcite veins.
	b	Large	Chunks and flakes, 6 of, olive grey [5 Y 4/1], smooth fracture -one has a pale altered zone showing radiolarians, smooth fracture
	b	Medium	Chunks and flakes, 14 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d		Chunks and flakes, 4 of, olive grey [5 Y 4/1], smooth fracture.
	e	Small	Flakes, 11 of, various types.
	<b>Grey chert</b>		
	f		Flake, 1 of, medium, light brownish grey [5 YR 6/1].

### Site 8 (2013) - Excavation.

Site 8 (2013)	Excavation [NS 96783 07176]		
	<b>Flint</b>		
		<b>FI</b>	Flakes and chunks, 9 of, 8 medium, 1 small, ranging in colour from dark yellow brown – struck from pebbles with pale weathered zone – and 2 medium-sized, off- white flakes.
	<b>Chert</b>		
		Tools	Microliths, 8 of, 21;16; 14; 13; 11.5; 10; 8 and 7 mm long, most in medium grey [N 5], rough fracturing chert. the 2 smallest appear to be broken
	a + b	Large	Chunks and flakes, 57 of, mostly dark grey [N 3] to medium grey [N 5], rough fracture. Some have pale weathered zone showing radiolarians.
	c	Medium	Chunks and flakes, 165 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 85 of, olive grey [5 Y 4/1], smooth fracture.
	e	Small	Flakes, 164 of, various types.
	<b>Grey chert</b>		
	f		Flakes, 14 of, 13 medium, 1 small light brownish grey [5 YR 6/1].
	<b>'Red chert'</b>		
	g		Chunks, 1large, 1 small, dusky brown [5 YR 2/2], rough fracture.

Test Pit 8.1	[NS 96810 07134] Near Site 8 (2013)		
	<b>Chert</b>		
		Medium	Flakes, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.

Test Pit 8.2	[NS 96810 07152] Near Site 8 (2013)		
	<b>Chert</b>		
		Medium	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture.

Test Pit 8.3	[NS 96780 07176] Near Site 8 (2013)		
	<b>Chert</b>		
		Medium	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture.

Test Pit 8.4	[NS 96804 07135] Near Site 8 (2013)		
	<b>Chert</b>		
		Medium	Flakes, 2 of, olive grey [5 Y 4/1] – both with dark red-brown mottling. Smooth fracture.

<b>Test Pit 8.5</b>	<b>[NS 96801 07128] Near Site 8 (2013)</b>		
	<b>Chert</b>		
		Medium	Flakes, 3 of, olive grey [5 Y 4/1] – 2 have dark red-brown mottling. Smooth fracture.

<b>Test Pit 8.6</b>	<b>[NS 96787 07178] Near Site 8 (2013)</b>		
	<b>Flint</b>		
		Medium	Chunk, 1 of, medium, dark yellow brown – struck from pebbles with pale weathered zone.

<b>Site 9 (2013)</b>	<b>Surface scatter</b>		
	<b>Chert</b>		
	a	Large	Flakes 2 of, olive grey [5 Y 4/1], smooth fracture.
	b	Medium	Chunk, 1 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	c	Medium	Chunks and flakes, 9 of, olive grey [5 Y 4/1], smooth fracture.

<b>Site 11-13.1 (2013)</b>	<b>Surface scatter – near 11, 12, 13. [NS 96703 07051]</b>		
	<b>Chert</b>		
		Tool	Microlith, 1 of, 10mm long, perhaps broken, in olive grey [5 Y 4/1], smooth fracture.
	a	Large	Chunks and flakes, 6 of, dark grey [N 3] to medium grey [N 5], rough fracture. Some have pale weathered zone showing radiolarians.
	b	Large	Chunks and flakes, 8 of, olive grey [5 Y 4/1] - some have a pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks and flakes, 5 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 5 of, olive grey [5 Y 4/1], smooth fracture - 1 has dark red-brown mottling.
	e	Small	Flakes, 2 of, various types.
	<b>'Red chert'</b>		
	f		Chunks, 2 of, 1 large 1 medium, dusky brown [5 YR 2/2], rough fracture.

<b>Site 11-13.2 (2013)</b>	<b>Surface scatter – near 11, 12, 13. [NS 96693 07017] – at reservoir edge.</b>		
	<b>Flint</b>		1 small flake,
	<b>Chert</b>		
		Tool	Microlith, 1 of, 10mm long, perhaps broken, in olive grey [5 Y 4/1], smooth fracture.
			?scraper or blade, 35mm long, in chert with conspicuous radiolarians
	a	Large	Chunks and flakes, 6 of, dark grey [N 3] to medium grey [N 5], rough fracture. Some have pale weathered zone showing radiolarians.
	b	Large	Chunks and flakes, 8 of, olive grey [5 Y 4/1] - some have a pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks and flakes, 12 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 17 of, olive grey [5 Y 4/1], smooth fracture - 1 has dark red-brown mottling.
	e	Small	Flakes, 16 of, various types.
	<b>'Grey chert'</b>		
	f		Chunks, 4 of, 1 large 3 medium, light brownish grey [5 YR 6/1].



Site 11-13.3 (2013)	Surface scatter– near 11, 12, 13. [NS 96708 07019].		
	<b>Flint</b>		Large flake
	<b>Chert</b>		
	a		None of
	b	Large	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture
	c	Medium	Chunks and flakes, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 5 of, olive grey [5 Y 4/1], smooth fracture. One has dark red-brown mottling.
	e	Small	Flakes, 7 of, various types.
	<b>'Red chert'</b>		
	f		Chunk, 1 of, large, dusky brown [5 YR 2/2]].

Site 11-13.4 (2013)	Surface scatter – near 11, 12, 13. [NS 96703 07029].		
	<b>Chert</b>		
	a	Large	Chunks, 3 of, dark grey [N 3] to medium grey [N 5], rough fracture..
	b	Medium	Chunks, 3 of, olive grey [5 Y 4/1], smooth fracture..
	c	Small	Flakes, 2 of.
	<b>'Grey chert'</b>		
	d		Flakes 2 of, 1 medium, 1 small, light brownish grey [5 YR 6/1].

Site 11-13.5 (2013)	Surface scatter – near 11, 12, 13. [NS 96698 07012].		
	<b>Chert</b>		
	a	Large	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture..
	b	Medium	Chunks, 3 of, dark grey [N 3] to medium grey [N 5], rough fracture..
	c	Medium	Chunks, 2 of, olive grey [5 Y 4/1], smooth fracture..
	d	Small	Flakes, 3 of.
	<b>'Red chert'</b>		
	e		Chunk, 1 of, medium, dusky brown [5 YR 2/2].
	<b>'Grey chert'</b>		
	f		Flake, 1 of, medium, light brownish grey [5 YR 6/1].

Site 11-13.6 (2013)	Surface scatter – near 11, 12, 13. [NS 96705 07001].		
	<b>Pitchstone</b>	Medium	Flake, dark grey with pale crystallites

<b>Site 11-13.7 (2013)</b>	<b>Surface scatter at fire [NS 96696 07002]. – near sites 11, 12, 13.</b>		
	<b>Flint</b>		
		Tool	Knife, part of, 34mm long, in dark yellow brown with some pale cortex.
	<b>Chert</b>		
		Tool	Microlith, 1 of, 13 mm long, in medium grey [N 5], rough fracturing chert.
	a	Large	Chunks and flakes, 16 of, dark grey [N 3] to medium grey [N 5], rough fracture. Some have pale weathered zone showing radiolarians.
	b	Large	Chunks and flakes, 5 of, olive grey [5 Y 4/1], smooth fracture. - some have a pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks and flakes, 37 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 18 of, olive grey [5 Y 4/1], smooth fracture.
	e	Small	Flakes, 36 of, various types.
	<b>Grey chert</b>		
	f		Chunks and flakes, 5 of, 1 large, 4 medium, light brownish grey [5 YR 6/1].
	<b>'Red chert'</b>		
	g		Chunks and flakes, 4 of, 1 large, 3 medium, dusky brown [5 YR 2/2], rough fracture.

Site XX (2013)	Surface scatter [NS 96699 07074].		
	<b>Flint</b>		
			Flake, in pale grey..
	<b>Chert</b>		
		Tool	'Borer', 1 of, in medium grey [N 5], rough fracturing chert.
	a	Large	Chunks and flakes, 6 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 5 of, olive grey [5 Y 4/1], smooth fracture. – one has a pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks and flakes, 6 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 3 of, olive grey [5 Y 4/1], smooth fracture.
	<b>Grey chert</b>		
	e		Chunk and flake, 1 large, 1 medium, light brownish grey [5 YR 6/1].
	<b>'Red chert'</b>		
	f		Chunks and flakes, 16 of, 10 large (3 with smooth fracture – one with traces of the original olive grey colour), 6 medium, dusky brown [5 YR 2/2], rough fracture.

Site 12 - 14 (2013)	Surface scatter At sites 12 - 14 – mostly near No 12.		
	<b>Flint</b>		
			Flake, perhaps a scraper, and medium chunk, in pale grey with red-brown mottling
	<b>Chert</b>		
	a	Large	Chunk, 1 of, dark grey [N 3], rough fracture.
	b	Large	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture.
	c	Medium	Chunks and flakes, 4 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 3 of, olive grey [5 Y 4/1], smooth fracture.



Site 19 (2013)	Surface scatter (Knoll). [NS 9705 0670]		
	<b>Flint</b>		
			Flake, 1 of, in moderate reddish brown [10 R 4/6]...
	<b>Chert</b>		
		Tools	?Scrapers, 2 of, 1 in medium grey [N 5], rough fracturing chert; 1 in olive grey [5 Y 4/1] with smooth fracture..
	a	Large	Chunk, 1 of, dark grey [N 3], rough fracture.
	b	Large	Chunk, 1 of, olive grey [5 Y 4/1], smooth fracture. – pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks, 2 of, dark grey [N 3] to medium grey [N 5].
	d	Medium	Chunks and flakes, 2 of, olive grey [5 Y 4/1], smooth fracture – one with brown mottling.

Site 35 (2013)	Surface scatter [NS 96946 07390]		
	<b>Chert</b>		
	a	Medium	Flake, 1 of, possibly part of a blade, dark grey [N 3] to medium grey [N 5], rough fracture.

Site 36 (2013)	Surface scatter [NS 96962 07350]		
	<b>Flint</b>		
	a	Large	Flake, 1 of, ?a scraper, Dark yellowish brown [10 YR 4/2] with some pale cortex preserved.

Site 39 (2013)	Surface scatter.		
	<b>Pitchstone</b>		Flakes, 2 of, pale grey, laminated..
	<b>Chert</b>		
	a	Large	Chunk, 1 of, dark grey [N 3], rough fracture.
	b	Large	Chunks, 2 of, olive grey [5 Y 4/1], smooth fracture. – one has pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks, 7 of, dark grey [N 3] to medium grey [N 5]. rough fracture.
	d	Medium	Chunks and flakes, 13 of, olive grey [5 Y 4/1], smooth fracture – one with brown mottling.
	e	Small	Flakes, 8 of, various types.

<b>Site 41 (2013)</b>	<b>Surface find</b>		
	<b>Haematite</b>	Large	Chunk, triangular shape with 3 smoothed facets..

<b>Site 42/1 (2013)</b>	<b>South half.</b>		
	<b>Haematite</b>	Various sizes	Chunks, 14 of. Two are large, more than 30mm long, with up to 3 facets; 6 are medium sized each with one facet; 4 are small and have no facets,. Two are very small chips...

<b>Site 42/2 (2013)</b>	<b>Central area.</b>		
	<b>Haematite</b>	Various sizes	Chunks, 10 of. Five are medium sized - each with one facet; 5 are small and have no facets.
	<b>Iron</b>		Blade 35mm long, tang 30mm long perhaps terminating in a finger loop – possibly scissors

<b>Site 42/3 (2013)</b>	<b>Surface scatter (North half).</b>		
	<b>Haematite</b>	Various sizes	Chunks, 14 of. Nine are large, more than 30mm long, with up to 3 facets; 6 are medium sized, each with one facet...

<b>Site 42.4 (2013)</b>	<b>North half</b>		
<b>4 42/4.1</b>	<b>Iron</b>	Strip, flat, up to 11mm wide, 3mm thick and 180mm long, with rounded ends – bent into a rounded curve. Purpose not known.	
<b>42/4.2</b>	<b>Iron</b>	Strip, flat, up to 8mm wide, 3mm thick and 80mm long, with rounded ends – bent into a rounded curve. Purpose not known.	
<b>42/4.3</b>	<b>Iron</b>	Strip, flat, up to 11mm wide, 4mm thick and c.60mm long, with broken ends – part of a flat circular ring c.50mm in external diameter – perhaps part of harness.	
<b>42/4.4</b>	<b>Iron</b>	Plate, irregular fragment of, up to 70mm long and 30mm wide.	
<b>42/4.5</b>	<b>Iron</b>	?Blade, part of, 72mm long, 11mm wide, tapering from 4mm at back.	
<b>42/4.6</b>	<b>Iron</b>	Nail, tapering from c.8mm below domed head, 13mm in diameter, to 4mm at broken-off point..	
<b>42/4.7</b>	<b>Iron</b>	Nails, 2 of, 73mm and 53mm long, up to 6mm thick, lacking heads.	
<b>42/4.8</b>	<b>Iron</b>	Nail head, domed, 10mm in diameter.	

<b>Site 42/5 (2013)</b>	<b>South end of floor</b>	
	<b>Copper alloy</b>	Button, flat, 25mm in diameter, loop broken off. Surface decoration has an 8-pointed star incised into a circular 11mm diameter band composed of 8 narrow concentric incised circles. forming a zone c.4mm wide. The points of the star are rounded. The central motif is surrounded by a plain band 5mm wide. The edge of the button has a 5mm wide zone composed of 6 concentric incised circles into which are incised 2 opposing wavy lines.

<b>Site 42/6 (2013)</b>	<b>North half</b>	
<b>42/6.1</b>	<b>Copper alloy</b>	Button, slightly domed, 24mm in diameter, loop broken off. No decoration.
<b>42/6.2</b>	<b>Copper alloy</b>	Button, slightly domed, 17mm in diameter, loop broken off. No decoration.

<b>Site 42.7 (2013)</b>	<b>South half</b>	
<b>42/7.1</b>	<b>Ceramics</b>	Sherd from rim of bowl with part of turned out ledge, in white earthenware. Greyish orange [10 YR 7/4] glaze inside and out - ?Staffordshire slipware -18th Century.
<b>42/7.2</b>	<b>Ceramics</b>	Sherd from ?bowl in red earthenware. Black glaze inside and out - ?Staffordshire slipware -18th Century.

<b>Site 42/8 (2013)</b>	<b>North half</b>	
<b>42/8.1</b>	<b>Copper alloy</b>	Buckle, frame of, distorted c.80mm long and c.50 mm high with rounded corners – probably from shoe. The sides of the frame vary in width from 8mm at their centres to 5mm at the corners. The wider parts of the frame are pierced by elongated, pointed ellipses.

<b>Site 43 (2013)</b>	<b>Crookburn site.</b>	
	<b>Glass</b>	Bead, damaged, in greenish blue glass, 5mm in diameter by 5mm.

<b>Site 44 (2013)</b>	<b>Surface scatter.</b>		
	<b>Pitchstone</b>		Flake, 1 of, dark grey..
	<b>Chert</b>	Tools	Microliths, 2 of, 9 and 15mm long.
	a	Large	Chunks and flakes, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks, 6 of, olive grey [5 Y 4/1], smooth fracture. – one has a pale altered zone showing radiolarians, smooth fracture
	c	Medium	Chunks and flakes, 9 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	d	Medium	Chunks and flakes, 38 of, olive grey [5 Y 4/1], smooth fracture.
	e	Small	Flakes, 30 of, various types.
	<b>Grey chert</b>		
	f		Chunks, 4 medium, light brownish grey [5 YR 6/1].
	<b>'Red chert'</b>		
	g		Chunks, 3 of, 2 medium, 1 small, dusky brown [5 YR 2/2], rough fracture.

<b>Site 44/5W (2013)</b>	<b>Excavation</b>		
	<b>Chert</b>		
		Tools	Scraper – in olive grey [5 Y 4/1], smooth fracture
			?Knife - in olive grey [5 Y 4/1] and dusky brown [5 YR 2/2],, smooth fracture.
			Microliths, 3 of, 8, 9 and 11mm long.
	a	Large	Chunks, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Medium	Chunks and flakes, 13 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	c	Medium	Chunks and flakes, 22 of, olive grey [5 Y 4/1], smooth fracture.
	d	Small	Flakes, 21 of, various types.
	<b>Grey chert</b>		
	e		Chunks, 2 medium, light brownish grey [5 YR 6/1].

Site 44/6W (2013)	Excavation		
	<b>Chert</b>		
		Tools	'Piercer' – in olive grey [5 Y 4/1], smooth fracture
			Microliths, 7 of, 8 - 17mm long.
	a	Large	Chunks, 10 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 21 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 30 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 36 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 42 of, various types.
	<b>'Grey chert'</b>		
	f		Chunks, 6 of -3 medium, 5 small light brownish grey [5 YR 6/1].

Site 44/7W (2013)	Excavation - washed and sieved sample		
	<b>Chert</b>		
		Tools	Microliths, 8 of, up to 16mm long.
	a	Large	Chunks, 7 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 11 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 48 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 59 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 143 of, various types.
	<b>'Grey chert'</b>		
	f		Chunks, 12 of, 6medium, 6small light brownish grey [5 YR 6/1].
	<b>'Red chert'</b>		
	g		Flake, 1 of, medium, dusky brown [5 YR 2/2], smooth fracture



Site 44/8W (2013)	Excavation		
	Chert		
	a	Large	Chunks, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 7 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 5 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 12 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 16 of, various types.
	'Grey chert'		
	f		Chunks, 3 of, 6medium, 6small light brownish grey [5 YR 6/1].

Site 44/5/W1 (2013)	Excavation		
	Chert		
	a	Large	Chunks, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 7 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 4 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 10 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 8 of, various types.
	'Grey chert'		
	f		Chunks, 2 of, medium, light brownish grey [5 YR 6/1].

Site 44/5/W/2 (2013)	Excavation		
	Chert		
	a	Large	Flake, 1 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	b	Medium	Chunks and flakes, 17 of, olive grey [5 Y 4/1] - smooth fracture.
	c	Small	Flake, 1 of.

Site 44/5/W/3 (2013)	Excavation		
	<b>Chert</b>		
	a	Large	Chunks and flakes, 2 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	b	Medium	Chunks and flakes, 8 of, olive grey [5 Y 4/1] - smooth fracture.
	c	Small	Flakes, 3 of, various types.

Site 44/6W/1 (2013)	Excavation		
	<b>Chert</b>		
	a	Large	Chunk, 1 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	b	Medium	Chunks and flakes, 3 of, dark grey [N 3] to medium grey [N 5], rough fracture
	c	Medium	Chunks and flakes, 5 of, olive grey [5 Y 4/1] - smooth fracture.
	d	Small	Flakes, 4 of, various types.
	<b>'Grey chert'</b>		
	e		Chunks, 1 of, medium, light brownish grey [5 YR 6/1].

Site 44/6W/2 (2013)	Excavation		
	<b>Chert</b>		
	a	Large	Flake, 1 of, olive grey [5 Y 4/1] - smooth fracture.
	b	Medium	Chunks and flakes, 17 of, olive grey [5 Y 4/1] - smooth fracture.
	<b>'Grey chert'</b>		
	c		Chunk, 1 of, medium, light brownish grey [5 YR 6/1].

Site 44/6W/3 (2013)	Excavation		
	<b>Chert</b>		
	a	Large	Chunks and flakes, 3 of, olive grey [5 Y 4/1] - smooth fracture.
	b	Medium	Chunks and flakes, 6 of, olive grey [5 Y 4/1] - smooth fracture.

Site 44/5, 6, 7/ E1 (2013)	Excavation		
	<b>Chert</b>		
	a	Large	Chunk, 1 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	b	Medium	Chunks and flakes, 3 of, dark grey [N 3] to medium grey [N 5], rough fracture
	c	Medium	Chunks and flakes, 5 of, olive grey [5 Y 4/1] - smooth fracture.
	d	Small	Flakes, 4 of, various types.
	<b>'Grey chert'</b>		
	e		Chunks, 1 of, medium, light brownish grey [5 YR 6/1].

Site 44/5, 6, 7/ E1 (2013)	Excavation		
	<b>Chert</b>	Tools	Microliths, 2 of, 12 and 18mm long.
	a	Large	Chunks, 2 of, dark grey [N 3] - rough fracture.
	b	Medium	Chunks and flakes, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture
	c		Chunks and flakes, 5 of, olive grey [5 Y 4/1] - smooth fracture.
	d	Small	Flakes, 18 of, various types.
	<b>'Grey chert'</b>		
	c		Chunk, 1 of, medium, light brownish grey [5 YR 6/1].

Bag 1 (2013)	Surface scatter [NS 06070 07399] – 15m from Site 44		
	<b>Chert</b>		
	a	Large	Chunk, 1 of, olive grey [5 Y 4/1] - smooth fracture.
	b	Medium	Chunks and flakes, 3 of, dark grey [N 3] to medium grey [N 5], rough fracture
	c	Medium and small	Chunks and flakes, 20 of, olive grey [5 Y 4/1] - smooth fracture.

<b>Bag 2 (2013)</b>	<b>Surface scatter [NS 06991 07402]</b>		
	<b>Chert</b>		
	a	Large	Chunks, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 8 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 8 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 21 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 6 of, various types.
	<b>'Grey chert'</b>		
	f		Chunks, 2 of, medium, light brownish grey [5 YR 6/1].

<b>Bag 3 (2013)</b>	<b>Surface scatter + charcoal, NW of burnt mound deposit [NS 97023 07436]</b>		
	<b>Flint</b>		4 medium-sized flakes of, yellow-brown with pale cortex.
	<b>Chert</b>		
	a	Large	Chunks, 10 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 12 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 4 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 7 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 9 of, various types.
	<b>'Grey chert'</b>		
	f		Chunks, 2 of, 1 large, 1 medium, light brownish grey [5 YR 6/1].

<b>Bag 4 (2013)</b>	<b>Surface scatter, near burnt mound deposit [NS 96965 07390]</b>		
	<b>Flint</b>		Chunk, 1 of, large, yellow-brown with pale cortex.

<b>Bag 5 (2013)</b>	<b>Surface scatter, near burnt mound [NS 96961 07389]</b>		
	<b>Chert</b>	Large	Flakes, 2 of, olive grey [5 Y 4/1] - smooth fracture.

<b>Bag 6 (2013)</b>	<b>Surface scatter, near burnt mound [NS 96965 07390]</b>		
	<b>Chert</b>	Medium	Flakes, 4 of, olive grey [5 Y 4/1] - smooth fracture.

<b>Site 45 (2013)</b>	<b>Surface scatter [NS 96873 07113]</b>		
	<b>Chert</b>		
	a	Large	Chunks, 2 of, dark grey [N 3] to medium grey [N 5], rough fracture.
	b	Large	Chunks and flakes, 9 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 12 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 22 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 11 of, various types.
	<b>'Grey chert'</b>		
	f		Chunk, 1 of, large, light brownish grey [5 YR 6/1].

<b>Site 46 (2013)</b>	<b>Surface scatter [NS 96702 07017]</b>		
	<b>Chert</b>		
		Tools	Microliths, 2 of, 8 and 17mm long
	a	Large	Chunk, 1 of, dark grey [N 3], rough fracture.
	b	Large	Chunks and flakes, 8 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 6 of, dark grey [N 3] to medium grey [N 5], rough fracture
	d	Medium	Chunks and flakes, 20 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	e	Small	Flakes, 16 of, various types.
	<b>'Grey chert'</b>		
	f		Chunk, 1 of, medium, light brownish grey [5 YR 6/1].



<b>Site 46b (2013)</b>	<b>Surface scatter (near Kirkhope)</b>		
	<b>Haematite</b>		1 of, large, 2 well-developed facets.

<b>Site 46 (2013)</b>	<b>Metal detected finds Area of Kirkhope Bastle.</b>		
<b>Find Number</b>	<b>Locality NGR</b>	<b>Find Number</b>	<b>Locality/ NGR</b>
<b>46 a/MD 1</b>	SE corner of tower	Copper Alloy	See main report for this item
<b>46a/MD 2</b>	Not plotted	Copper	Copper turner (Fig. 2). Turners were worth twopence Scots and large numbers were issued in the 1640s. They were the only coins minted during the Civil War.
<b>46a/MD 3</b>	Not plotted	Lead	Pistol balls, 3 of, 24mm diameter, faint raised. equatorial ridge. Two are perforated (1.2 and 3mmdiameter) and may have been converted to fishing weights.
<b>46a/MD 4</b>	Not plotted	Iron	?knife blade, preserved length 77mm, width up to 12mm, slightly curved.
<b>4a6/MD 5</b>	Not plotted		Sherd, 1 of, abraded, from body of large vessel. Fabric is reddish brown silt grade, Traces of yellow brown glaze survive on outside. Scottish post-Mediaeval Ware.
<b>46a/MD 6</b>	Not plotted	Copper	Coin, 26mm in diameter – very worn. Blurred left-facing head on the converse side. On the reverse, a crown is visible.
<b>46a/MD 7</b>	Not plotted	Iron	Signet ring. The ring is formed from strip 4.5 mm high – increasing to 5.5mm at seal - and 1 mm thick. It has an external diameter of c.20mm. The seal is an upright oblong 15mm high by 12mm. It is marked with a raised motif that contains what appears to be a capital H

<b>Site 46a (2013)</b>		
<b>Glass</b>		
<b>Find no</b>	<b>Locality</b>	<b>Description</b>
<b>46a/Gl 1</b>	<b>NW corner</b>	Window glass, shards, 3 of, 1.5mm and 1.8mm thick, slightly clouded.
<b>46a/Gl 2</b>	<b>NW corner</b>	Bottle glass, 1 shard of in yellow-green, clouded, a few seed, from upper side and shoulder of bottle c.80mm in diameter.
<b>46a/Gl 3</b>	<b>NW corner</b>	Bottle glass, 1 shard of in almost black, firebright, from lower side of thick-walled, 6mm, bottle c.80mm in diameter.
<b>46a/Gl 4</b>	<b>NW corner</b>	Beads, 2 of. One in frosted white, diameter 10mm, 11mm deep, hole c. 2.5mm, has coarse, oblique ribbing The other, in black glass, 3.5mm in diameter by 2,5mm deep, hole c.2mm is perhaps a 'spacer'..
<b>Haematite</b>		
<b>46a/Ha 1</b>	<b>NW corner</b>	Haematite ('keel'), small fragment of – no facets.
<b>Iron</b>		
<b>46a/Fe/1</b>	<b>NW corner</b>	Tool or utensil, part of, consisting of a tang 68mm long, tapering from 8.5 x 7mm at attachment to a flat oval sheet 25 x 25 mm.
<b>46a/Fe/2</b>	<b>NW corner</b>	Tube, part of, 56mm long, oval cross-section, 10mm x 6mm, slightly curved.
<b>46a/Fe/3</b>	<b>NW corner</b>	Nail, lacking head, 39mm long, up to 2.5mm in diameter.

Site 46a (2013)		
Ceramics		
Find no	Locality	Description
46a/Ce 1	NW corner	Red earthenware – 6 sherds of., from large vessels Three have yellow slip on inside, two have yellow slip on inside and dark brown on outside. The sixth is split and lacks any glaze. Scottish Post-Mediaeval Ware. 18 <sup>th</sup> C.
46a/Ce 2	NW corner	Red earthenware – 1 sherd., from large vessel. Dark brown glaze on inside. Scottish Post-Mediaeval Ware. 18 <sup>th</sup> C.
46a/Ce 2a	NW corner	Red earthenware – 1 sherd., from large vessel. Dark brown glaze on outside. pale yellow in inside with sponged blob in medium brown. Scottish Post-Mediaeval Ware. 18 <sup>th</sup> C.
46a/Ce 3	NW corner	Sherds, 2 of, one featuring part of foot 100mm in diameter,? of bowl in 'black basalt'. Perhaps Wedgewood. Late 18 <sup>th</sup> C.
46a/Ce 4	NW corner	Sherd, 1 of, white earthenware, featuring part of foot 100mm in diameter, ?of bowl.
46a/Ce 5	NW corner	Sherds, 3 of, white earthenware, featuring lower part of footed bowls.
46a/Ce 6	NW corner	Sherds, 27 of, white earthenware, from sides ?of bowls.
46a/Ce 7	NW corner	Sherds, 5 of, rims of transfer-printed plates; shell-bordered wavy edge with dark blue band up to 10mm wide at rim. 19 <sup>th</sup> C.
46a/Ce 8	NW corner	Sherd, 1 of, featuring the carina of a carinated London style' bowl White glaze (very pale orange - [10 YR 8/2]).Fabric – fine-grained, very pale orange [10 YR 8/2]. Trace of blue from transfer printed ,motif c.1825-30.
46a/Ce 9	NW corner	Sherds, 2 of, featuring tapering foot c.6mm high of bowl. Fabric – fine-grained, very pale orange [10 YR 8/2]. Part of an elaborate transfer printed motif. Mid 19 <sup>th</sup> C.
46a/Ce 10	NW corner	Sherds, 3 of, ?from bowl. Fabric – fine-grained, very pale orange [10 YR 8/2]. Design includes bands in mid brown and yellow – probably from the Prattware palette. 1780 – 1835.
46a/Ce 11	NW corner	Sherd, 1 of, from plain rim of bowl, Fabric – fine-grained, very pale orange [10 YR 8/2]. Small part of a design in blue, yellow brown and mid-brown, ?from the Prattware palette. 1780 – 1835

<b>46a/Ce 12</b>	<b>NW corner</b>	Sherds, 2 of, from side of bowls, Fabric – fine-grained, very pale orange [10 YR 8/2]. One has yellow under glaze slip on inside and outside with part of a design in orange on outside, and in black on the inside. The other has pale blue glaze on the inside - ?from the Prattware palette Mid 19 <sup>th</sup> C
<b>46a/Ce 13</b>	<b>NW corner</b>	Sherds, 3 of, from side of bowls, Fabric – fine-grained, very pale orange [10 YR 8/2]. parts of a transfer printed design in pale blue. Mid 19 <sup>th</sup> C
<b>46a/Ce 14</b>	<b>NW corner</b>	Sherd, 1 of, rim of transfer-printed plate; shell-bordered wavy edge with dark blue band 7mm wide at rim. 19 <sup>th</sup> C.
<b>46a/Ce 15</b>	<b>NW corner</b>	Sherd, 1 of, from transfer-printed bowl with an impressed trellis band coloured dark blue. Pale yellow on inside. 19 <sup>th</sup> C.
<b>46a/Ce 16</b>	<b>NW corner</b>	Sherd, 1 of, from transfer-printed bowl; on outside part of a design with blue and 2 shades of brown. . 19 <sup>th</sup> C.
<b>46a/Ce 17</b>	<b>NW corner</b>	Sherd, 1 of, from bowl; on outside part of a design with blue and 2 shades of brown. . 19 <sup>th</sup> C.
<b>46a/Ce 18</b>	<b>NW corner</b>	Sherds, 7 of, from various vessels – probably bowls; with, on outside, part of a transfer–printed design in dark blue. On inside, very pale blue with, in 3 cases, trace of a design in dark blue. 19 <sup>th</sup> C.
<b>Bone</b>		
<b>46a/Bo 1</b>	<b>NW corner</b>	Bone, probably avian, four fragments of. 3 are limb bones, one perhaps from skull.
<b>Pipe</b>		
<b>46a/Pi 1</b>	<b>NW corner</b>	Fragment from stem, 39mm long, 7mm in diameter; bore 2.7mm.
<b>46a/Pi 2</b>	<b>NW corner – below below sst slab</b>	Fragment from stem, 24mm long, 6mm in diameter; bore 2.3mm – decorated with a patch of brown lacquer.
<b>Wood</b>		
<b>46a/Wo 1</b>	<b>NW corner</b>	Dowel, 75mm long, tapering from 10mm in diameter at top which retains part of a nail..

<b>Haematite</b>		
<b>46a/Ha 1</b>	<b>NW corner</b>	Haematite ('keel'), small fragment of – no facets.
<b>Iron</b>		
<b>46a/Fe 1</b>	<b>NW corner</b>	Tool or utensil, part of, consisting of a tang 68mm long, tapering from 8.5 x 7mm at attachment to a flat oval sheet 25 x 25 mm.
<b>46a/Fe 2</b>	<b>NW corner</b>	Tube, part of, 56mm long, oval cross-section, 10mm x 6mm, slightly curved.
<b>46a/Fe 3</b>	<b>NW corner</b>	Nail, lacking head, 39mm long, up to 2.5mm in diameter.
		<b>Hapturnell Burn [NS 998 102]</b>
<b>Lithics</b>		
<b>Hap 1</b>		Fragments, 7 of, pale reddish brown sandstone, fine-medium grained with a few very small mica flakes, probably from Upper Old Red Sandstone (Upper Devonian). Two have faceted side and were probably used as smoothing stones. One may have been formed into a pointed tool.

<b>Daer (2013)</b>	<b>Surface scatter – South of Knoll (SoK)</b>		
<b>SoK</b>	<b>Flint</b>		Flake, 1 of, possibly a blade, yellow-brown 1 chunk and 1 small flake.
<b>SoK</b>	<b>Chert</b>		
	a	Large	Chunk, 1 of, and flake, 1 of, medium dark grey [N 4] - rough fracture.
	b		Chunks and flakes, 7 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Flakes, 13 of, olive grey [5 Y 4/1], smooth fracture - some have red-brown mottling.



<b>Daer (2013)</b>	<b>Surface scatter – ‘Knoll’[NS 96835 07067]</b>		
<b>Sites 25, 29, 30</b>	<b>Chert</b>		
	a	Large	Chunks, 4 of, medium dark grey [N 4] - rough fracture.
	b		Chunks and flakes, 11 of, olive grey [5 Y 4/1], several with brown mottling - smooth fracture.
	c	Medium	Chunks and flakes, 5 of, medium dark grey [N 4] - rough fracture.
	d		Chunks and flakes, 11 of, olive grey [5 Y 4/1], smooth fracture - some have red-brown mottling.
	e	Small	Flakes, 16 of, various types.
	<b>‘Grey chert’</b>		
	f		Flake, 1 of, medium.
	<b>‘Red chert’</b>		
	g		Chunk, large, 1 of; flake, 1 of, medium.

		<b>Kirkhope Tower {KT[ – near Site 46.</b>
<b>Glass</b>		
<b>KT 1</b>		Neck, complete with part of shoulder of wine bottle in clouded yellow-green. Diameter at shoulder 39mm, diameter below poorly formed string ring with added glass above 38mm – slightly nipped in. Height of string ring 7-6mm. Height to down-smoothed lip 3 -6 mm. Height from shoulder to base of string ring 77mm. 1780 - 1800

**In addition, there is a small collection of flakes, 1 large, 2 medium and 4 small, of olive grey [5 Y 4/1], smooth fracturing chert. The bag is labelled NO.**