Coldwell and Trawden Raw Water Transfer Pipeline to Laneshaw WwTW, Lancashire



Archaeological Watching Brief



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SUMMARY

Oxford Archaeology North (OA North) was commissioned by United Utilities to carry out an archaeological watching brief along the route of the Coldwell and Trawden water transfer pipelines. This follows a tract of land between Laneshaw Water Treatment Works (SD 9490 4110) and Coldwell Reservoir (SD 9001 3637), and Briercliffe Service Reservoir (SD 8590 3500) and Herd House Reservoir (SD 8920 3530).

A programme of desk-based assessment and walkover survey (OA North 2004a) was initially undertaken across the whole of the pipeline corridor to target areas of archaeological potential within the study area. The pipeline corridor was then subject to a further phase of archaeological works comprising of a series of evaluation trenches and a topographic survey (OA North 2006).

Following on from the results of these earlier works, the specialist advisor (Archaeology) at Lancashire County Archaeological Service (LCAS) then recommended that a watching brief be undertaken during the topsoil strip of pipeline routes. The watching brief was undertaken to identify and record any archaeological features located during the topsoil strip or those identified during previous surveys, and was conducted from March 2007.

The section of the pipeline discussed within this report is in the Wycoller area, which stretches from the immediate east of Trawden (SD 9250 3790) to the south-west of Laneshaw Wasterwater Treatment Works (SD9350 4070). The remainder of the pipelines has already subject to a separate report (OA North 2007). During the watching brief on this section of pipeline no archaeological features of any significance were observed.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also due to staff of KMI Ltd, especially John Levelle, for their assistance during the watching brief.

Pip Haworth undertook the watching brief and wrote the report. Mark Tidmarsh produced the drawings. Alison Plummer managed the project and edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 United Utilities proposed to construct a water transfer pipeline serving Laneshaw Wastewater Treatment Works (SD 9490 4110), Coldwell Reservoir (SD 9001 3637), and Briercliffe Service Reservoir (SD 8590 3500) and Herd House (SD 8920 3530). Following the results of a desk-based assessment (OA North 2004a), walkover survey (OA North 2005), and a topographic survey (OA North 2006), the Specialist Advisor (Archaeology) at Lancashire County Archaeological Service (LCAS) recommended that a watching brief should be undertaken during the topsoil strip of the pipeline easement.
- 1.1.2 This report sets out the results of the watching brief programme, along the Wycoller (SD 9250 3790 to SD9350 4070) section of the pipeline (Figs 1 and 2), whilst the remainder of the pipeline has already been subject to a separate report (OA North 2007). The fieldwork was undertaken during March 2007.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 OA North submitted a project design (*Appendix 2*) in response to a verbal brief issued by LCAS. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 WATCHING BRIEF

- 2.2.1 This programme of field observation recorded accurately the location, extent, and character of any surviving archaeological features and/or deposits exposed during the course of the topsoil strip. The work comprised the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.
- 2.2.2 All groundworks on the site were conducted under constant archaeological supervision and comprised stripping of topsoil and subsoil to a maximum depth of 0.4m. These works were enacted by a 360° mechanical excavator using a 2m flat ditching bucket. All exposed soil horizons were examined and described and spoil heaps were carefully checked for any unstratified finds.
- 2.2.3 A daily record of the nature, extent and depths of groundworks was maintained throughout the duration of the project. All archaeological features were recorded on OA North's *pro-forma* sheets, using a system based on that of the English Heritage Centre for Archaeology. A monochrome and colour slide photographic record was maintained throughout and, where appropriate, scaled plans and sections were produced to locate the presence of archaeological features as accurately as possible.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with current English Heritage guidelines (1991). Arrangements for the deposition of the paper and digital archive along with a copy of this report have been made with the Lancashire record office, Preston.

3. BACKGROUND

3.1 PHYSICAL BACKGROUND

- 3.1.1 The longest section of the pipeline route is orientated approximately north-east/south-west between Coldwell Reservoir at the south-west end (SD 90016 36376) and Laneshaw Wastewater Treatment Works at the north-east end (SD 94961 41232). The route is situated on the eastern edge of East Lancashire (the north-east end is situated on the boundary with Yorkshire), within 5km of Colne and Nelson. The smaller section runs approximately east/west between Briercliffe Service Reservoir (SD 88576 35378) and Haggate (SD 85994 34921), with a short branch to the north at Stony Rakes, and is situated on the outskirts of Haggate (Fig 1).
- 3.1.2 The landscape of the main pipeline is typically between 350m and 220m above sea-level and much of it is moorland which developed in the last 5000 years before it was enclosed during the improvements of the late eighteenth and early nineteenth century (Ede and Darlington 2002, 64). This type of landscape forms the north-eastern edge of the Southern Pennines, and comprises course-grained sandstones (gritstones) on the higher ground and coal measures in the valleys (Countryside Commission 1998, 107-8). The majority of the land is used as grazing for sheep and cows, although the influence of centuries of industry, in particular water-powered mills and quarrying, is evident in many places (*ibid*). The smaller section of pipeline to the south-west is generally lower-lying, but still typically at 250m above sea-level, and situated between the valleys of the River Don and Catlow Brook.

3.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.2.1 The archaeological and historical background of the proposed development area has been presented in a previous report (OA North 2004a). The following paragraphs present a synopsis of the information presented in the report.
- 3.2.2 *Prehistoric Period:* evidence for prehistoric activity is visible in the immediate area from the Mesolithic period onwards. Flint scatters have been discovered, and in some cases excavated, on some of the higher moorland areas to the north and south of the study area (Harrison 1998, 4), and these form part of a wider distribution across the south Pennines (Cowell 1996). The Neolithic and Bronze Age periods are similarly represented, with occasional stray finds and burials making up the majority of the evidence (Bentley 1975; Harrison 1998, 4). This is a common feature of the period, although it is during the Neolithic that larger structures and monuments begin to appear for the first time (Middleton 1996, 43). During the Iron Age large enclosures were constructed, in particular 'hill forts', and there are a number of good examples of these in the vicinity of the study area, including the multi-vallate site of Castercliffe to the south-west (Haselgrove 1996, 68). There is a large collection of Scheduled Monuments to the south-east of Briercliffe at Twist Hill, including a number of burial mounds and earthworks.

- 3.2.3 There is only a single confirmed site of this period within the study area, a quern thought to be of Neolithic or Bronze Age date at Broadshaw Farm, Worsthorne Moor (OA North 2004a). It has also been suggested that some of the standing stones known from the area, such as at Laneshaw, Pot Brinks Moor and Will Moor may form part of prehistoric monuments (OA North 2004a). The place-name Burwains, situated immediately to the north-east of the smaller section of the study area, is thought to derive from the Old English 'burgh', and is taken to suggest the presence of ancient burials in the area (Ekwall 1922, 85).
- 3.2.4 *Roman:* Colne has long been regarded as having a Roman origin: '*This is unquestionably the Colunio of the anonymous Ravennas*' (Whitaker 1818, 385), and there have been a number of discoveries of Roman coins in the area (Harrison 1998, 7). Evidence for Colne's Roman origins has not been plentiful, although a Roman road is thought to pass to the north between Ilkley and Ribchester (*ibid*).
- 3.2.5 Only two sites of Roman date were identified within the study area, although these are both of some significance in the local area. A large number of silver Roman coins contained within a silver cup was discovered shortly before 1700 near Emmott Hall. The discovery was first reported by Leigh (1700, 10-11), and has been repeatedly discussed in the following 300 years (Watkin 1883, 233-4; Shotter 1978, 13). Unfortunately, it remains an unusual discovery, although further coins found in the same area might suggest it is not unique (Watkin 1883, 233-4). A second, smaller number of coins was found at Catlow, in Marsden (Shotter 1978, 13).
- 3.2.6 *Early Medieval:* there is little physical evidence for activity following the collapse of Roman control and the Norman Conquest in the eleventh century. The area probably came under a mix of Anglian and Norse influence (Harrison 1998, 7), whilst place-name evidence suggests a strong native British influence (Ekwall 1922, 87-8). It is thought by some that the battle of '*Brunanburh*', at which the Anglo-Saxons under Athelstan defeated a combined force of the Scots, Strathclyde Britons and the Norse in AD 937, is in the vicinity of Trawden (*ibid*), although a variety of other locations have been suggested (e.g. Lawrenson 2003).
- 3.2.7 There are no sites of early medieval date within close proximity to the study area, although many of the adjacent settlements probably have early medieval origins. In all cases, however, the evidence for this relies mainly on placenames (Ekwall 1922).
- 3.2.8 Late Medieval: during the medieval period the entire area of the development lay within the parish of Whalley and Hundred of Blackburn. Much of it will have been within the Chase or Forest of Trawden, which is thought to have been established prior to the thirteenth century (Farrer and Brownbill 1911, 548). These chases were originally used as a deer park by local nobles, but they were reorganised in the later thirteenth century to form a number of vaccaries (*ibid*; Harrison 1998, 11). Two of these were situated at Wycoller, two at Beardshaw and one at Winewall (*ibid*), and one may be located at Monkroyd.

- 3.2.9 Evidence for the formation of the vaccaries that replaced Trawden Forest is present within the study area in the form of two areas of walling. Enclosures at New Laith and near Far Laith, the latter known as the "walls of Traden Forest" are considered to relate to the vaccaries. Also within the vicinity of the development, and of this period, is the stone cross, which stands in the grounds of Emmott Hall.
- 3.2.10 *Post-medieval:* although the study area persisted as essentially rural in character, dramatic changes occurred during the late eighteenth and early nineteenth century. There was a drive towards improving areas that had previously been waste or used for common grazing, as demonstrated by the enclosure of Trawden Common (UDTr 4/1 1821). Much of the area had come into the possession of a few families during the medieval period, and many of these improved or expanded their holdings from the seventeenth century onwards, and large houses, such as Wycoller and Emmott Hall, were expanded or rebuilt at this time (OA North 2004b). The area was also affected by the Industrial Revolution, albeit on a smaller scale, with a number of cotton mills being constructed around Trawden during the nineteenth century (RCHME 1999). A similar collection of larger mills was also constructed in Haggate, such as Queen Street, Harle Syke, Briercliffe, Primrose and Walshaw mills, which in turn led to Haggate expanding in size to slightly less than its present extent.
- 3.2.11 A particularly local industrial phenomena was limestone hushing, whereby streams would be dammed and the water released to wash soil and clay out of the natural limestone. This could then be burned in limekilns and the lime used for building and in agriculture. Although evidence for the exact nature and date of this is far from clear, it is evident in large parts of the surrounding landscape (P Isles *pers comm*). A map dated to *c*1752 depicts this activity taking place near Deerstone Moor (DDBd 14/6/1).
- 3.2.12 The vast majority of sites identified within the area belong to the post-medieval period, many relating to industrial activity. These include quarries, limekilns, mills, and even a coal pit. A number of buildings of various types also belong to this period, most frequently farms houses or farm buildings, ecclesiastical buildings, a stables, school, inn and weavers cottages. It is also likely, judging by form, that most of the ridge and furrow in the area belongs to the late eighteenth or early nineteenth century. This was a period when 'ploughing extended onto many areas which have since reverted to moorland' (Higham 2004, 58), much of it as a result of an increased need for production during the Napoleonic Wars (Turner 1984, 17). The improvement of much of this land is probably in turn linked to its enclosure and the availability of lime, as a result of limestone hushing.

4. WATCHING BRIEF

4.1 RESULTS

4.1.1 *Introduction*: the results of the watching brief programme presented below comprise the Wycoller section of the pipeline. The field numbers are a continuation of the recording methodology for the other sections.

4.2 WYCOLLER SECTION

Field No	Location	Description
Field 39	Adjacent to Robert Laith Farm, south side	The easement ran east/west adjacent to the south field boundary and was c 9m in width. Removal of the topsoil, $\theta 1$, to 0.15m in depth revealed a silty-clay natural subsoil, of mid reddish brown clay $(\theta 2)$. No archaeological features were revealed
Field 40	To the west of Robert Laith Farm and to the west of Field 39	The easement ran north-east/south-west adjacent to the east field boundary and was c 9m in width. The deposits remained the same as those seen in Field 39. A substantial stone drain was observed 77m from the north field boundary.
Field 41	To the north of school lane and south of Field 40	The easement ran north-east/south-west adjacent to the west field boundary and was c 9m in width. Removal of the dark grey brown clay topsoil, 05 , to 0.2m in depth revealed a mid orange brown sandy-clay subsoil (06). No archaeological features were revealed.
Field 42	To the south-west of School Lane and Field 41	The easement ran north/south. The deposits (07, 08) remained the same as those in Field 41. 53m from the north field boundary was a stone drain running in a north-west/south-east direction.
Field 43	To the south-west of Field 42	The easement ran north-east/south-west across the south end of the field. The deposits (09, 10) were as those seen in Fields 41 and 42. No archaeological features were observed within this field.
Field 44	To the south of Field 43	The easement ran north/south adjacent to the west field boundary. The topsoil, 11, measured 0.25m in depth, and was a dark grey-brown silty -clay, which overlay subsoil, 12, comprising mid orange-brown clay. No archaeological features were observed.
Field 45	To the south of Field 44	The easement ran north-east/south-west across the north half of the field. The deposits (13, 14) the same as in Field 44. No archaeological deposits were observed.

Field 46	To the south-west of Field 45	The easement ran north/south across the south end of the field. There was very little topsoil (15), only measuring 0.06m in depth. It consisted of dark grey brown sandy-clay; this was stripped onto the natural subsoil, 16, a mid orange-brown very sticky clay. No archaeological features were observed.
Field 47	To the west of Field 46	The easement ran north/south. The topsoil, 17, measured 0.05m in depth and consisted of a dark black-brown clay. The ground was quite marshy within this field. A mid brownish-orange sandy-clay, 18, was present No archaeological features were encountered.
Field 48	To the west of Slackhead Farm and the south of Field 47	The easement ran north/south though the field. In the north of the field the deposits (19, 20) are the same as those in Field 47. However, towards the south of the field on the brow of the hill, the deposits change, the topsoil (21) has a greater depth to it at 0.23m and is a black brown sandyclay, with large sandstone pieces within it 0.20-0.50 m in length. The subsoil was the same as context (22).
Field 49	To the south of Slackhead Farm and south of Field 48	The easement ran north-east/south-west before turning north/south along the west field boundary. The deposits (23, 24) were the same as those in the south of Field 48. No archaeological features were encountered.
Field 50	To the south-east of Field 49	The easement ran north-west/south-east, along the western field boundary. The deposits (25, 26) were the same as those in the south of Field 48. No archaeological features were encountered.
Field 51	To the north of Great Hill and south-east of Field 50	The easement ran north-west/south-east, along the western field boundary. The deposits (27, 28) were the same as those in the south of Field 48. No archaeological features were encountered.
Field 52	To the west and north- west of Great Hill Farm	The easement ran north-west/south-east, along the western field boundary. The deposits (29, 30) were the same as those in the south of Field 48. No archaeological features were encountered.
Field 53	Adjacent and to the west of Great Hill Farm	The easement ran north/south. The topsoil, 31, comprised 0.25m in depth of peat. This overlay a natural grey clay (32). The ground in this field was very boggy, with marsh grasses. No archaeological features and/or deposits were observed within this field.

Field 54	To the south of Great Hill Farm and Field 52	The easement ran north/south. The topsoil, 33, comprised 0.2m in depth of very organic black brown silty-clay, overlying a light grey clay natural subsoil (34). The archaeological visibility was very poor in this field with large areas of topsoil not fully excavated to natural. No archaeological features were observed.	
Field 55	To the south of Field 54	The easement ran approximately north/south through the centre of the field. The topsoil, 35, comprised 0.2m of mid grey-brown sandy-clay, which overlay light yellow brown sandy-clay natural (36.) No archaeological features were observed.	
Field 56	To the south of Field 55 and to the east of New Laith Farm	The easement ran north/south down the centre of the field. The topsoil, 37, comprised 0.3m in depth of mid grey-brown sandy-clay overlying light yellow brown sandy-clay natural (38). The weather was very wet making the ground very muddy and churned up by the mechanical digger. No archaeological features were observed.	

Table 1: Results from the Wycoller branch of the pipeline

5. DISCUSSION

5.1 SYNTHESIS

5.1.1 The watching brief recorded no archaeology of any significance during this branch of the pipeline. The dearth of archaeological features strongly suggests that human activity in the area has been largely agricultural and pastoral in nature. Due to the limited nature of the development there are no recommendations for further archaeological mitigation.

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7. ILLUSTRATIONS

7.1 LIST OF FIGURES

Figure 1: Site Location

Figure 2: Watching brief field location plan, Wycoller area

7.2 LIST OF PLATES

Plate 1: General shot of the easement under excavation

Plate 2: Remains of boundary wall 012

Plate 3: Possible boundary wall to medieval deer park

Plate 4: Stone field drain 048 in Field 22

Plate 5: Plan view of stone field drains in Field 22

Plate 6: 20th century midden *054* in Field 24

Plate 7: Ridge and Furrow in Field 5

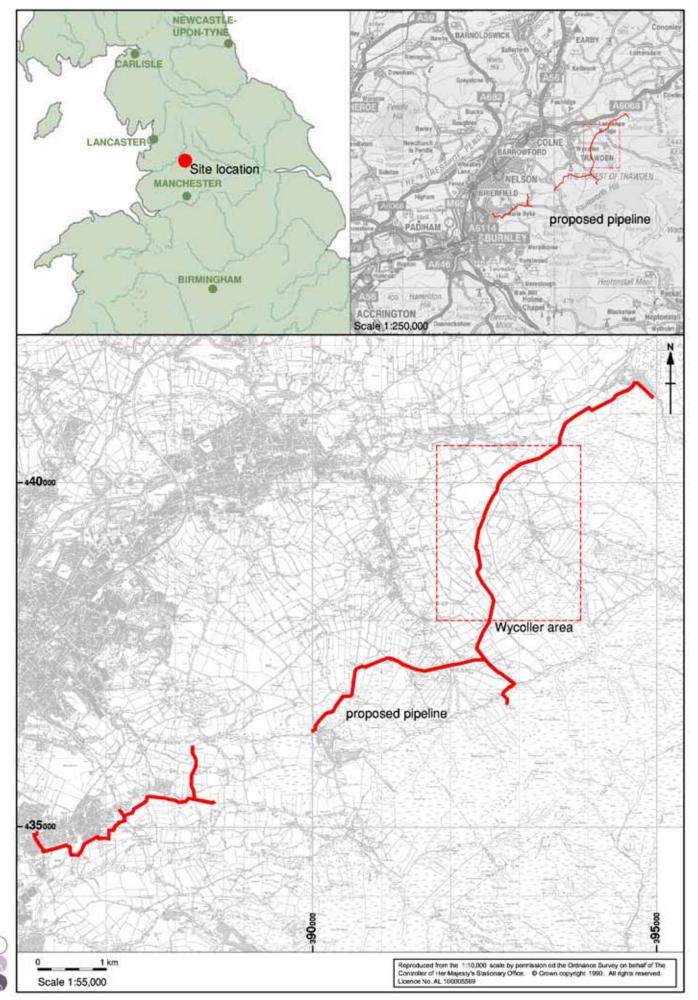


Figure 1: Site Location

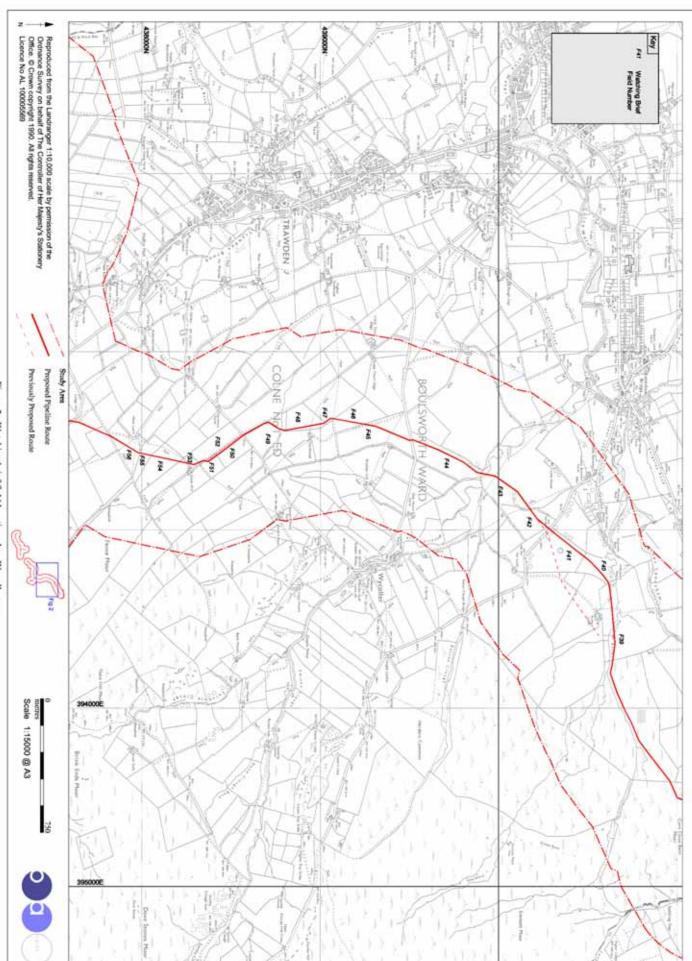


Figure 2: Watching brief field location plan, Wycoller area



Plate 1: General shot of the easement under excavation



Plate 2: Remains of boundary wall *012*



Plate 3: Possible boundary wall to medieval deer park



Plate 4: Stone field drain *048* in field 22



Plate 5: Plan view of stone field drains in field 22



Plate 6: 20th century midden *054* in field 24



Plate 7: Ridge and Furrow in field 5

APPENDIX 1: CONTEXT LIST

Context no	Field no	Depth	Category	Description
1	39	0.15m	Topsoil	Dark black-brown silty-clay
2	39		Subsoil	Mid reddish-brown clay
3	40	0.15m	Topsoil	Dark black-brown silty-clay
4	40		Subsoil	Mid reddish-brown clay
5	41	0.20m	Topsoil	Dark grey-brown clay
6	41		Subsoil	Mid orange-brown clay
7	42	0.16m	Topsoil	Dark black-brown silty-clay
8	42		Subsoil	Mid reddish-brown clay
9	43	0.15m	Topsoil	Dark black-brown silty-clay
10	43		Subsoil	Mid reddish-brown clay
11	44	0.25m	Topsoil	Dark grey-brown silty clay
12	44		Subsoil	Mid orange-brown clay
13	45	0.15m	Topsoil	Dark black-brown silty-clay
14	45		Subsoil	Mid reddish-brown clay
15	46	0.06m	Topsoil	Dark grey-brown sandy clay
16	46		Subsoil	Mid orange-brown clay
17	47	0.05m	Topsoil	Dark grey-brown clay
18	47		Subsoil	Mid brown-orange clay
19	48(N)	0.07m	Topsoil	Dark grey-brown sandy clay
20	48(N)		Subsoil	Mid orange-brown clay
21	48(S)	0.23m	Topsoil	Dark grey-brown sandy clay
22	48(S)		Subsoil	Mid orange-brown clay
23	49	0.06m	Topsoil	Dark grey-brown clay
24	49		Subsoil	Mid brown-orange clay
25	50	0.05m	Topsoil	Dark grey-brown clay
26	50		Subsoil	Mid brown-orange clay

27	51	0.07m	Topsoil	Dark grey-brown clay
28	51		Subsoil	Mid brown-orange clay
29	52	0.06m	Topsoil	Dark grey-brown clay
30	52		Subsoil	Mid brown-orange clay
31	53	0.25m	Topsoil	Dark grey-brown silty-clay
32	53		Subsoil	Light grey-brown clay
33	54	0.30m	Topsoil	Dark grey-brown silty-clay
34	54		Subsoil	Light grey-brown clay
35	55	0.25m	Topsoil	Mid grey-brown sandy clay
36	55		Subsoil	Mid yellow-brown sandy clay
37	56	0.18m	Topsoil	Mid grey-brown sandy clay
38	56		Subsoil	Mid yellow-brown sandy clay