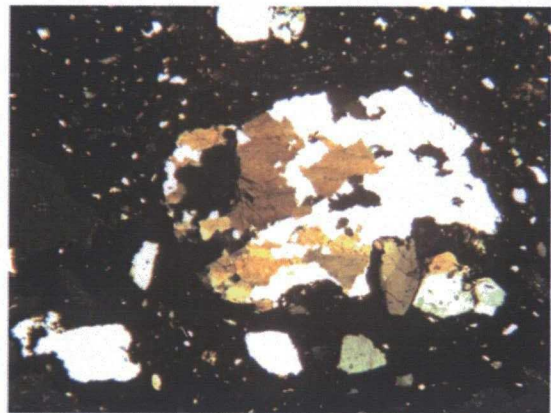


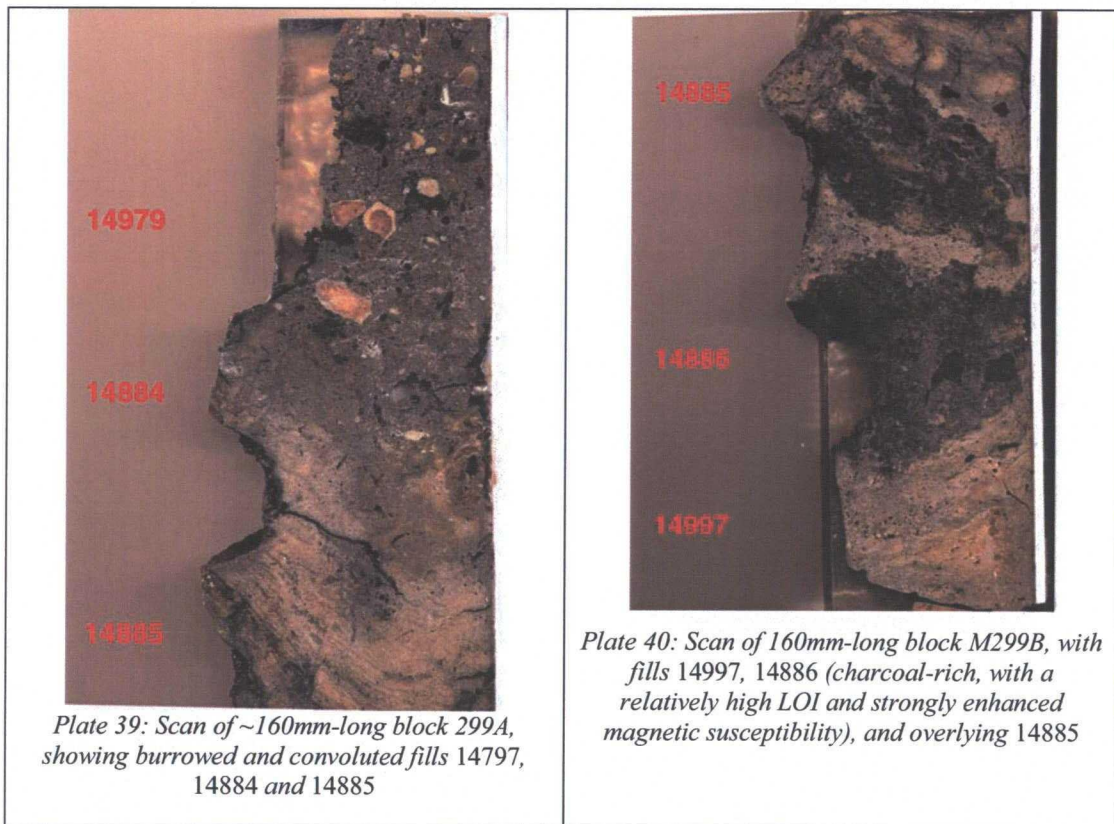
A – A66/11



B – A66/12

Plate 38: Thin-section photomicrographs of late Iron Age ceramics, showing: A - quartz and sandstone inclusions; B - quartz and polycrystalline quartz sand

Images taken in XP. Image width 39mm



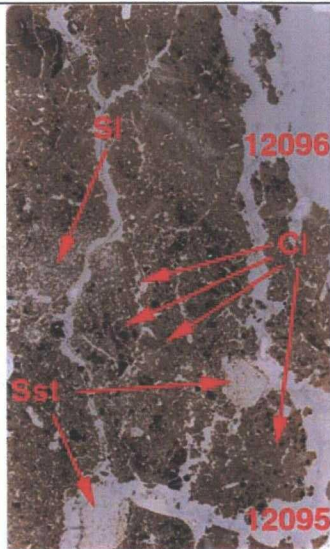


Plate 41: Scan of M201C; across fills 12096 and 12095; clayey ditch sediments contain two fine sandstone clasts (Sst), and the boundary to 12096 is marked by coarse silty-fine sandy inwash (SI); clay inwash (CI) is common

Frame width is ~50mm



Plate 42: Scan of M201A, fill 12098, showing burrowed junction (arrows) between silty sediment and an overlying, more clayey fill. Much clayey inwash is in evidence

Frame width is ~50mm

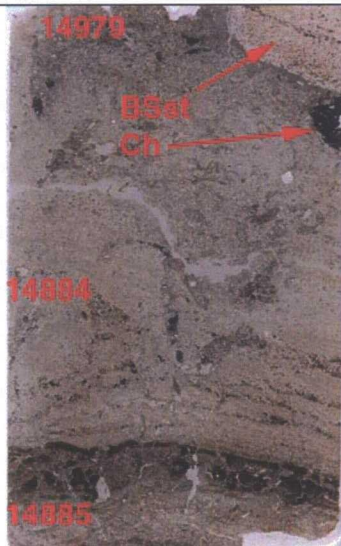


Plate 43: Scan of thin section M299A. Finely laminated upper 14885, with fine charcoal and an iron-stained clayey uppermost layer; massive and laminated sands (14884); and burrow mixing of overlying 14979, which includes coarse charcoal (Ch) and burned sandstone (BSst)

Frame width is ~50mm



Plate 44: Scan of M299B, with clean sands of fill 14997 and overlying very charcoal-rich fill, 14886. The latter may record deposition of hearth waste between fills that are dominated by clean coarse silt and fine sand inwash, possibly recording seasonal use of the site

Frame width is ~50mm

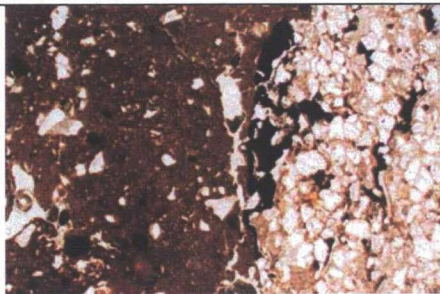


Plate 45: Photomicrograph of M201C (fill 12095), showing clayey slurry of slaked soil, with closed vugs and clay-infilled voids; example of fine sandstone gravel (right)

Plane polarised light (PPL): frame width is ~4.62mm

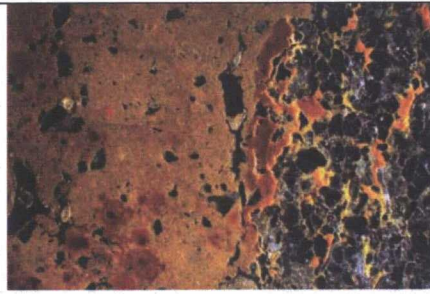


Plate 46: Photomicrograph of M201C, under oblique incident light (OIL), illustrating yellow and brown-coloured clay and iron-staining of sandstone clast

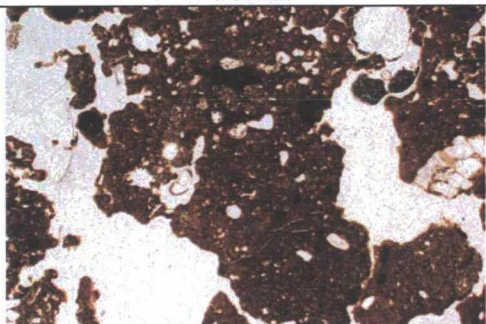


Plate 47: Photomicrograph of M201C: an example of a slaked and partially collapsed mammilated earthworm excrement

PPL, frame width is ~4.62mm

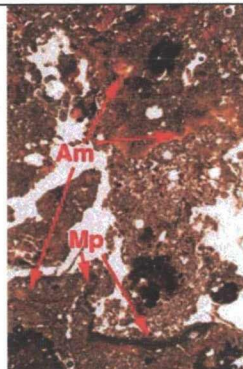


Plate 48: Photomicrograph of M201B (fill 12097), showing a burrow that was later affected by clayey inwash, forming micropans (Mp) and amorphous (Am) iron staining

PPL, frame height is ~4.62mm

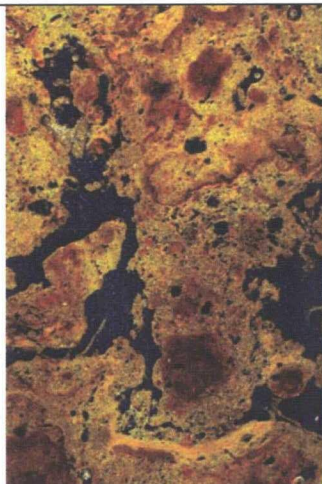


Plate 49: Photomicrograph of M201B, under OIL, illustrating iron staining

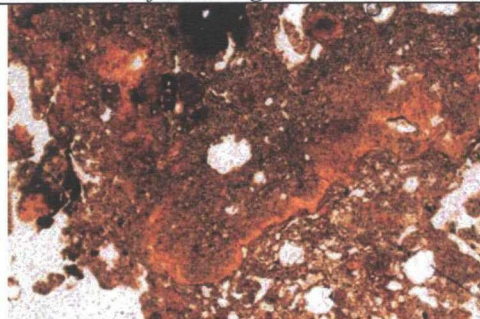


Plate 50: Detailed photomicrograph of M201B, showing staining – possibly iron and phosphate staining

PPL, frame width is ~0.90mm



Plate 51: Photomicrograph of M201A (fill 12098), showing burrowed junction between silty and clayey sediments

PPL, frame width is ~4.62mm



Plate 52: Photomicrograph of M201A, under crossed polarised light (XPL)

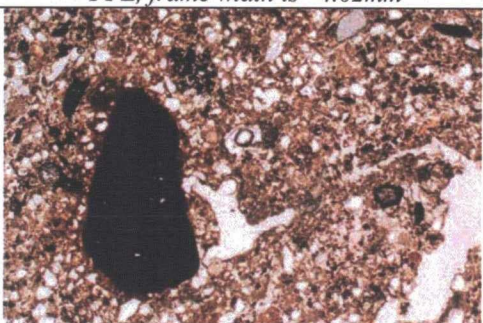


Plate 53: Photomicrograph of M299B (fill 14886), containing an iron fragment, which stains the soil around it, and burned mineral grains, charcoal and charred humic soil

PPL, frame width is ~4.62mm



Plate 54: Photomicrograph of M299B, under OIL

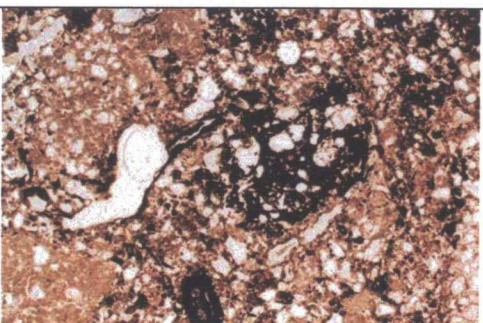


Plate 55: Photomicrograph of M299B, showing pale (gleyed?) and dark humic soil clasts

PPL, frame width is ~4.62mm

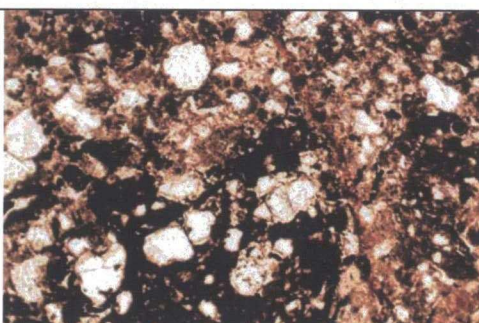


Plate 56: Detail of M299B, showing blackened and rubefied charred soil

PPL, frame width is ~2.85mm



Plate 57: Detail of M299B, under OIL, with blackened and rubefied humic soil clasts – fuel ash residues from hearths employing turf as fuel

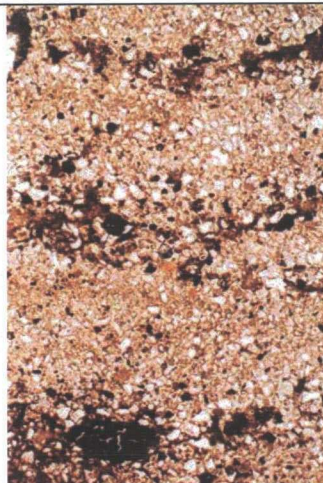


Plate 58: Photomicrograph of M299A (fill 14884); upward-fining coarse silty-fine sandy laminae with charcoal and iron-stained clay

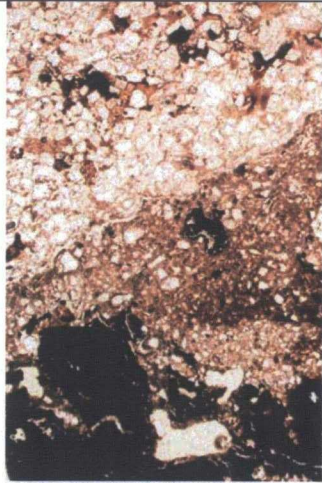
PPL, frame height is ~4.62mm



Plate 59: Photomicrograph of M299A, under XPL

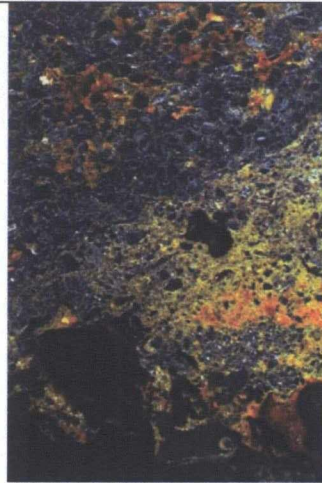


Plate 60: Photomicrograph of M299A, under OIL, with charcoal and iron-stained clay at the top of each laminae



*Plate 61: M299A, base of fill 14979,
with coarse charcoal (base) and burned fine
sandstone clast (top)*

PPL, frame width is ~4.62mm



*Plate 62: M299A, under OIL, with rubefied iron
staining on burned sandstone (cf unburned
gravel)*



Plate 63: Locations of sediment core samples 330-1, 330-2 and 330 -3 in the Scots Dyke ditch (12035) at SCA10



Plate 64: Site 001, the eastern end of Gatherley Moor Quarry, from the north of the carriageway, looking south-east. Wall in state of disrepair, large sections missing



Plate 65: Site 002, the eastern end of Gatherley Moor Quarry, from the north of the carriageway, looking east. Substantial damage can be seen



Plate 66: Site 003, the eastern end of Gatherley Moor Quarry, from the north of the carriageway, looking north. Substantial damage is evident and the majority of the wall does not survive



Plate 67: Site 004, western end of Gatherley Moor Quarry, taken from the north of the carriageway, looking south. Note the removal of a section of the wall at this location



Plate 68: Site 005, western end of Gatherley Moor Quarry, taken from the north of the carriageway, looking north-west towards Carkin Moor. Note the removal of a substantial section of the wall at this location



Plate 69: Site 006, western end of Gatherley Moor Quarry, taken from the north of the carriageway, looking north. Note the removal of a section of the wall at this location



Plate 70: Site 007, western end of Gatherley Moor Quarry, taken from the north of the carriageway, looking north-west. Note the removal of a section of the wall at this location

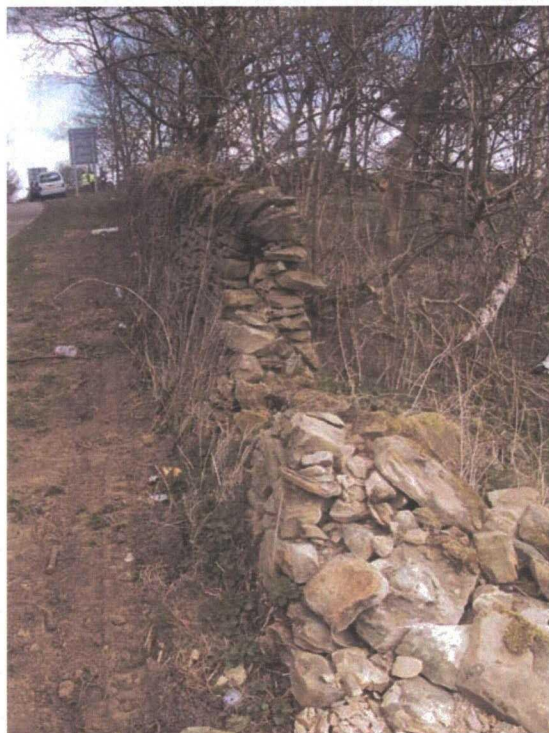


Plate 71: Site 008, field wall to the north of the A66 on the corner of Forcett Lane, looking north-west towards Carkin Moor. Note the similar construction style to the walls at Gatherley Moor Quarry, and substantial damage



Plate 72: Site 009, field wall to the south of the carriageway taken on Forcett Lane, looking north-east. It appears to have been poorly rebuilt and shows signs of deterioration. Note the lack of quality in its construction compared to examples at Gatherley Moor Quarry



Plate 73: Site 010, field wall to the south of the carriageway taken on Forcett Lane, looking south. As with 009, it appears to have been poorly rebuilt and shows signs of deterioration. Note the lack in quality of its construction compared to examples at Gatherley Moor Quarry



Plate 74: Site 011, field wall to the south of the carriageway on the access road to Browson Bank Farm, looking north-east. Its constituent stones appear to be slightly larger than those at Gatherley Moor Quarry



Plate 75: Site 012, field wall to the north of the carriageway opposite the access road to Browson Bank Farm, looking south. Slightly lower than the wall seen at 011, but of identical form



Plate 76: Site 013, field wall at Stephen Bank, to the north of the carriageway on New Road, looking south-west. Similar construction to walls at 011 and 012, but in a very poor state of repair



Plate 77: Site 014, wall on Lanehead Lane, to the north of the carriageway, looking south. The wall is in very degraded state



Plate 78: Site 015, showing details of the wall at the lay-by on Stephen Bank, to the south of the existing carriageway. Its construction is similar to that at Gatherley Moor Quarry. The wall has been extensively rebuilt in places



Plate 79: Site 016, showing details of the wall at the lay-by on Stephen Bank, to the south of the existing carriageway. Its construction is similar to that at Gatherley Moor Quarry. The wall has been extensively rebuilt in places, and has areas of collapse



Plate 80: Site 017, showing details of wall collapse at the lay-by on Stephen Bank



Plate 81: Site 018, wall at Carkin Moor, to the south of the carriageway, looking north-west. This displays evidence of stone removal and deterioration common to most of the field walls in the vicinity of the A66



Plate 82: Site 019, wall opposite Thorpe Farm to the south of the carriageway, looking south-east. The wall is mortared and of a different style from the drystone walls, but of a similar style to the culvert headwalls, and is probably late twentieth-century in date



Plate 83: Site 020, the possible location of the Warrener Lane trough



Plate 84: Site 021, stone headwall for a culvert at the south of the carriageway to the south-east of Carkin Moor Roman fort. The structure is roughly 2.5m in height, and is likely to be of late twentieth-century construction

APPENDIX 1: PETROGRAPHIC ANALYSIS OF LATE IRON AGE POTTERY

A1.1 BACKGROUND

A1.1.1 Thin-section petrographic analysis has been undertaken on a small selection of Late Iron Age-early Romano-British ceramics from two sites on the A66 improvement scheme between Greta Bridge, Co Durham, and Scotch Corner, North Yorkshire. This analysis complements the hand-specimen fabric classification of a larger corpus of material, as well as answering specific questions about the raw materials and provenance of these ceramics.

A1.2 SAMPLE MATERIALS

A1.2.1 The study material comprises 12 Late Iron Age-early Romano-British sherds from SCA8 and SCA15 (*Sections 5.1.8-10*). SCA8 was close to the Iron Age/Romano-British settlement of Rock Castle (*Section 2.3.4*). One sherd was analysed from this site. This had a carbonised deposit that has been radiocarbon dated (*Section 7.1*). SCA15 was an extensive, multi-phase, late Iron Age-early Romano-British rural settlement that included several roundhouses and field boundary/enclosure ditches (*Section 3.3.4*). Many of the latter features yielded Romano-British pottery sherds, 11 of which were selected for petrographic analysis.

A1.2.2 Macroscopic analysis has been undertaken on the pottery from SCA8 and SCA15. The 12 samples analysed petrographically are thought to be gritty 'native'-type material of probable late Iron Age-early Roman date (Evans 2007). Imported Roman wares were also found at site SCA15, but these were not analysed.

A1.2.3 For the purpose of this analysis, all samples were given an analytical number: A66/01–A66/12 (details in Table 31).

Analytical No	Site	Context No	Macroscopic Fabric
A66/1	SCA 15	14663	Fabric 4
A66/2	SCA 15	1466	Fabric 1
A66/3	SCA 15	14663	Fabric 2
A66/4	SCA 15	14732	Fabric 4
A66/5	SCA 15	14105	Fabric 1
A66/6	SCA 15	14732	Fabric 4
A66/7	SCA 15	14781	Fabric 2
A66/8	SCA 15	14533	Fabric 4
A66/9	SCA 15	14884	Fabric 1
A66/10	SCA 15	14172	Fabric 1
A66/11	SCA 15	14805	Fabric 1
A66/12	SCA 8	11036	Fabric 3

Table 31: Late Iron Age-early Romano-British ceramics submitted for analysis with macroscopic fabric classification and analytical numbers