# **DUNADD ARCHIVE**

# **SECTION 3:** ANALYSIS AND SPECIALIST REPORTS

# 3.8 Pottery fabrics

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A technical description of the pottery fabrics identified at Dunadd (published in the text volume as Appendix 4: ceramic fabrics).

#### Group A: imported wheelthrown pottery

#### A1: E ware

Macroscopic examination: hard, well-fired fabric, sometimes approaching a proto-stoneware in thin sherds. Inner surface often with strong finger rilling, especially on lower part. Strongly laminated and very gritty texture, with quartz grits protruding at surface, which is wet-wiped on the exterior, to give a pimply surface texture. The lamina often have airspaces between them and streaks of earthy iron ore minerals. Colour variable, mainly off-white, cream or beige (Munsell 7.5-10YR 7/4-6), but sherds with more iron ore can be pink or red (Munsell 5YR 7/8). Variations in firing conditions produce reduced grey patches or surfaces. Variations in use or soil conditions can stain the white fabric anything from brown to black. Some fresh sherds have a faint orange tinge in places on the surface due to firing conditions. Sherds re-fired in an oxidising atmosphere are very pale yellow or beige (Munsell 7.5-10YR 7/4-6) which indicates the original fired colour. Inclusions are abundant clear to white quartz, sub-angular, 1-3mm in diameter, though occasionally up to 10mm. In some sherds close observation of the quartz shows traces of red iron ore adhering, and some iron ore has the occasional quartz grain within it. This suggests that the quartz sand is derived from a hematite-cemented sandstone. The iron ore is rounded, occasionally streaked out in the paste and around 1mm in size, and can vary from absent to abundant. Any other inclusions are very rare. Organic stems are occasionally seen as cavities. There is one instance of a carbonised bud-scale surviving on an outer surface. Feldspar is absent and any mica is usually a surface contaminate. Minute sparkly quartz in the groundmass can be mistaken for mica. Rounded clay pellets are occasionally found. The exterior surfaces have a characteristic pimply texture, caused by wet-wiping (self-slipping).

*Microscopic examination*: matrix anisotropic, often streaky. The larger quartz grains can often be seen to have traces of red hematite cement on their surfaces, indicating derivation from a red sandstone, and rarely fragments of this sandstone are seen. The groundmass has abundant small quartz grains (0.01-0.1 mm). Characteristically, feldspar and mica are always absent. Six samples from Dunadd were sectioned, but there was no variation between the fabrics, including *1154*, the rim of unusual form.

#### A2: 'F ware' - buff micaceous ware

*Macroscopic examination*: soft fabric with silty feel, laminated and flaky texture, few inclusions except abundant small mica. Occasional very large rounded white quartz grains up to 3 mm. Colour uniformly pinkish buff.

*Microscopic examination*: anisotropic. Abundant tiny sub-angular quartz in groundmass, and some larger with iron cement like E ware. Much tiny mica, occasional iron ore sometimes in hexagonal shapes indicating alteration of mafic mineral.

# A3: Red quartz-gritted ware

*Macroscopic examination*: medium hard oxidised gritty fabric. Inner surface finger rilled, outer wetwiped smooth. Quartz grits are common, sub-angular to sub-rounded, well sorted, 0.5-1.0 mm., with a few other well-rounded, frosted grains of white or yellow colour. Colour reddish buff. *Microscopic examination*: anisotropic. Apart from the common quartz there are rare rounded calcite,

quartzite and altered feldspar. The groundmass has abundant tiny quartz and mica.

### A4: soft pink ware

*Macroscopic examination*: soft flaky texture with few inclusions. Occasional white sub-angular quartz and red iron ore. Colour flesh-pink with buff margins. Handle pulled, not rolled or thrown. *Microscopic examination*: inclusions include quartzite and quartz with iron ore pellets and one possible mica schist fragment.

# A5: D ware

*Macroscopic examination*: soft, fine ware with few inclusions. Occasional rounded quartz to 2mm, no limestone, occasional mica flakes. Colour grey.

### Group B: local handmade pottery

#### **B1: organic-tempered ware**

*Macroscopic examination*: thin medium hard handmade ware. Micaceous fabric with few inclusions except abundant fine hair-like organics, burnt out but visible on the surface and in the fabric. Colour dark brown.

#### **B2:** soft buff ware

Macroscopic examination: soft buff fabric with few inclusions, rather silty feel.

#### **B3:** sparsely-gritted ware

*Macroscopic examination*: soft, silty fabric with scattered inclusions. Texture lumpy due to fusing of iron minerals in the clay body. Inclusions occasional local rock fragments and quartz grains. Colour blue-grey with orange oxidised patches.

## B4: very coarse rock-tempered ware

*Macroscopic examination*: handmade, medium hard, thick, coarse ware with abundant very large rock inclusions up to 25mm long. Rock inclusions angular, of local schists and epidiorites. Coarse organic inclusions also common in some sherds. Colour variable buff to yellow-brown.

#### **Group C: industrial ceramics**

# C1: moulds

Macroscopic examination: soft, silty, fine fabric with no inclusions. Colour oxidised orange with grey reduced surfaces in interior.

#### C2: crucibles

Macroscopic examination: hard, vitrified fabric with abundant quartz. The amount of quartz is variable due to differing degrees of vitrification of the clay matrix, but has been arbitrarily subdivided as: fabric C2a –normal: C2b - little quartz; C2c – abundant quartz. Colour grey.

#### C3: tuyère

Macroscopic examination: fabric like the furnace lining, but with added temper of large angular crushed fragments of white vein quartz.

#### C4: furnace lining

Macroscopic examination: rather silty fabric, with occasional large organics, blocky texture. Colour orange with reduced patches on interior which are sometimes vitrified.

#### C5: mixed grits

Macroscopic examination: a miscellaneous fabric group with a variety of small local rock and quartz fragments. Generally soft and silty, from same clay source as Fabric C1.

# C6: micaceous

Macroscopic examination: soft silty fabric. Small flecks of mica, one cleavage flake of Galena (Lead sulphide) on exterior. Colour buff to grey.