

0598

SAMPLE NUMBER: 563715, MAC-27, 667.7m

SUMMARY:

This sample is a fine-grained poorly sorted quartz sandstone that has been strongly carbonate-altered. It is derived largely from pelitic metamorphic detritus, and resembles strongly the Animal Ck greywacke.

HAND SPECIMEN:

This is a uniform (unbedded in the small hand spec) dark grey fine-grained silty sandstone.

THIN SECTION:

This is a poorly sorted and strongly altered fine-grained sandstone in which about 3 modal% of small (<<1mm across) angular detrital quartz grains, and flakes of detrital muscovite to 1.4mm long, are set in a heavily carbonate-altered matrix. The quartz grains include both monocrystalline (volcanic?) and polycrystalline (metamorphic) quartz; the latter are sometimes schistose intergrowths with muscovite.

The matrix of this rock is uncleaved and was probably clayey, but it has been pervasively overprinted by murky very fine-grained calcite. Veinlets of calcite with scattered euhedral opaque minerals (pyrite or pyrrhotite) are not uncommon cutting this rock.

The sample shows obvious strong similarities to the Animal Ck Greywacke petrographically, and clearly is derived in large part from a nearby pelitic metamorphic source.