

191

221192

CENTRAL MINERALOGICAL SERVICES PTY. LTD.

Date 23rd May 1977

SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

Job No. CMS 77/5/23 Date Received: 17.5.77

Reference PA/T/MOINA 2

Sample No. SMD 14/13.6

Nature of Sample: D.D. Core

IDENTIFICATION
SMD 14/13.6
CARBONACEOUS DOLOMITIC/ CALCAREOUS ROCK

DESCRIPTION SECTION No. 21203

a. Hand Specimen:

Dark, fine-grained rock, with sulphides - conspicuous in some bands or zones.

b. Microscopic:

The polished section indicates that the same opaque minerals are present as at 10.4m. The distribution is different, however, as shown by an etched surface.

There are pyrite-rich bands in the rock, in which quite large pyrite crystals and aggregates have formed; some of these are lenses up to several millimetres long and 0.5mm wide, and others are up to 1-2mm across. In other parts of the rock the sulphides are generally much finer (2-100μ, mostly < 30μ) and scattered, as isolated grains and tabular crystals of pyrrhotite and pyritised pyrrhotite. Very rare grains of chalcopyrite were also detected.

The etched surface shows unattacked areas; immersion-oil determinations indicate that these are dolomite. Sulphides, particularly the coarse pyrite, are virtually confined to these areas of dolomitisation. Moreover, the distribution of sub-graphitic/carbonaceous matter is closely related to dolomitisation, often forming semi-continuous streaks alongside these areas.

The overall percentage of sulphides is perhaps 1 - 2% but rises to 5 - 10% in the zones described. Carbonaceous matter comprises perhaps 2%.

Study of a thin section would be necessary to arrive at a complete understanding of the rock.

H.W. Fander, M.Sc.