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CENTRAL MINERALOGICAL SERVICES PTY. LTD.

Date 23rd May 1977

SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

IDENTIFICATION
SMD 14/52.0
DOLOMITISED CARBONACEOUS ROCK WITH PYRRHOTITE

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

Reference PA/T/MOINA 2

Sample No. SMD 14/52.0

Nature of Sample: D.D. Core

DESCRIPTION **SECTION No.** 21205

a. Hand Specimen:

Grey, fine-grained carbonate rock with very fine sulphides.

b. Microscopic:

This rock is very extensively dolomitised; the process has had two effects. It has introduced pyrrhotite and has redistributed the carbonaceous matter. This was probably fairly uniformly dispersed in the original limestone perhaps with some bedding, but now conforms to the boundaries of coarser dolomite rhombs. The result is a type of network pattern of carbonaceous matter (ie. the "net" being formed by carbon, the "holes" by dolomite rhombs).

Carbonaceous matter (probably subgraphitic but with poorly-defined optical properties) averages perhaps 2% of the rock; some portions contain very little, others much more, and the distribution is zonal.

Pyrrhotite is conspicuous and is closely related to dolomitisation though not confined to it; whilst it is thought that the dolomitisation probably introduced the pyrrhotite, it is possible that it was responsible for redistribution of already existent (?primary) sulphide. It comprises 2-3% of the rock, occurring as single grains 1-100μ and as clusters (in optical continuity) up to 300μ across.

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