

## CENTRAL MINERALOGICAL SERVICES PTY. LTD.

Date 18th January, 1980

## SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

Job No. CMS 80/1/7 Date Received: 8.1.1980Reference Order No. 900093Sample No. T 29707Nature of Sample: D.D. CoreDESCRIPTION SECTION No. 30631

IDENTIFICATION <i>MRP 212</i>
T 29707 45.4
Sulphides

## a. Hand Specimen:

Massive, vuggy sulphides, mainly arsenopyrite, and quartz crystals.

## b. Microscopic:

The sample was examined in polished section only, as per request.

The dominant sulphide is arsenopyrite, as very well-formed, generally coarse crystals, containing inclusions of several other sulphides and of gangue. Pyrite occurs as rather spongy and occasional well-formed crystals, adjacent to, and also within, arsenopyrite; partly oxidised chalcopyrite, with chalcocite/digenite rims, forms small inclusions (< 100  $\mu$ ) in pyrite.

The arsenopyrite crystals often have a core zone of inclusions, of sphalerite, chalcopyrite, and galena; these inclusions range from 5  $\mu$  to 250  $\mu$  in size and most are < 100  $\mu$ . Isolated pyrrhotite inclusions are present, and rare ?tetrahedrite occurs at the junction of sphalerite and arsenopyrite. A single inclusion of possible ?stannite was seen, but was < 10  $\mu$  in size and thus its identity could not be confirmed.

The sulphide assemblage is typical of hydrothermal (mesothermal) genesis, without the usual hallmarks of volcanogenic sulphides.

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