

CENTRAL MINERALOGICAL SERVICES PTY. LTD.

Date 1st May, 1980

SAMPLE REPORT (Mineralogy, Petrology, Ore Microscopy)

Job No. CMS 80/4/24 Date Received: 24.4.1980Reference Order No. 900144Sample No. 33062TNature of Sample: D.D. CoreDESCRIPTION SECTION No. 31447

a. Hand Specimen:

Pale, fine-grained siliceous, felsic rock with sulphides;
K-stain test positive.

b. Microscopic:

Because of the abundance of free, apparently primary quartz, this rock is classified as a porphyritic rhyolite; however, in common with the others, it is unusual in containing no quartz phenocrysts. The quartz in the groundmass may be late-magmatic or may even be a product of devitrification, representing excess SiO_2 in a K-silicate glass. In any case, it can probably be regarded as primary and thus a criterion in classification.

Fresh albite phenocrysts are haphazardly scattered through the rock, set in a micro-crystalline groundmass of shapeless quartz patches (average size = 0.05 mm) and poorly defined K-feldspar. The fabric has a vague preferred orientation, but no definite flow features or othertextures characteristic of extrusive rocks. Fine sericite has developed throughout but, as in the other rocks, ferromagnesian minerals are absent.

Patches and veinlets of carbonate occur, and are cut by younger veinlets of quartz-sulphides. The sulphides are galena, chalcopyrite, sphalerite and pyrite; of these, galena is the most common, up to 600 μ in size, but generally much finer-grained (< 100 μ). The other sulphides too, are fine-grained and poorly developed, finely intergrown with gangue minerals.

H.W. Fander, M. Sc.

IDENTIFICATION

33062T

Mineralised,
Porphyritic Rhyolite

98m