

AN
INVESTIGATION
OF THE
MUTOOROO COPPER MINE
SOUTH AUSTRALIA

HONOURS THESIS

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ABSTRACT

The Mutooroo Mine was the largest copper producer in the Olgary province until its closure in 1914. Recent geophysical work and drilling have discovered a deeper massive sulphide body of over 8 million tons, averaging 1.66% copper. It is not yet economic, but the depth is unknown, and thick ore may occur in fold positions. The ore is epigenetic, and appears concentrated in one of the massive amphibolite dykes which have intruded the surrounding high grade schists and gneisses. Two narrow but distinct zones of hydrothermal alteration have been produced in the wall rocks. The ore was intruded before the last phase of metamorphism, and has been recrystallized and deformed.

This paper, being the first detailed investigation of the mine, examines general aspects of the petrology, mineragraphy, structure and economics.

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