

strong self-potential anomaly which strikes east-west and extends over a length of approximately 800 feet. The intensity is variable along this length and ranges up to -580 millivolts. Its strike is different from any of the known geological features. Soil samples have been taken over this anomaly but have not yet been assayed. Recommendations for testing will await the results of these assays.

(B) Costeaning

Following the 1952 survey, a trench was dug along traverse HCA to ascertain the cause of the S.P. anomaly. The S.P. indication has a very steep gradient and indicates a body at fairly shallow depth. It was therefore considered advisable to test the indication by a trench. The trench, dug in 1953, showed only a few pieces of galena and pyrite in a shear zone and gave no definite signs of a nickel ore body; only later deepening and extension of trenching operations in 1957 revealed a compact nickel ore body. About half a ton of ore was taken from it. A quartered sample was sent to the Mines Department Laboratory in Launceston for assaying and flotation tests. The assay of the sample, dated 6th June, 1957, gave the following results :-

Copper :	5.26 per cent
Nickel :	7.23 per cent
Iron :	34.6 per cent
Sulphur	43.9 per cent
Acid, insoluble :	5.72 per cent

Mineragraphic examinations of this ore by Williams and Edwards (1958) showed that the ore consists of intergrown millerite and chalcopyrite, both of these minerals enclosing corroded residuals of pyrite and resembling the disseminated ore in the Cuni North area.

No other trenching was carried out on the Nickel Reward Prospect or its southern continuation.

The failure of the shallow trench to reveal the cause of the self-potential anomaly, subsequently disclosed by the diamond drilling and later deepening of the trench, emphasises the limitations of shallow trenching as a method of testing. Not only did the shallow trench fail to reveal any copper-nickel mineralisation but the minor galena and pyrite revealed in a sheared zone was misinterpreted as the cause of the anomaly.

(C) Results from Drill Holes M13 to M22

The first drilling sites were selected so that the holes would intersect the ore at right angles to the direction of the strike of the S.P. anomaly. The drill holes disclosed high-grade nickel ore at shallow depth. After completion of the first holes, it was decided to drill several more holes to ascertain whether the ore body could be mined by open-cut methods and to determine its size and shape. The position of, and sections through, these drill holes are shown on Plates 8 to 10.

DRILL HOLE M13

Angle of Depression : 45°

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