UR 1944/34-35

PRELIMINARY REPORT ON TIN PROSPECTS OF THE COLES BAY AREA

The Coles Bay area was visited during the week 19th to 26th May, accompanied by Mr. L.D. McRae and Mr. R. Hutton for the purpose of inspecting areas held as mining leases by Mr. McRae.

The leases are situated on Saltwater Creek to the north of the Llandaff-Coles Bay road and about one mile north from the Sunshine Chalet.

W. H. Twelvetrees, Government Geologist, in the year 1901 examined the areas and reported favourably on their possibilities under the heading "On Deposits of Tin Ore on Schouten Main", embodied in his "Report on the Coalfield of Llandaff, the Denison and Douglas Rivers, on Deposits of Tin Ore on Schouten Main, and on Outcrops of Quartz near Buckland." From that report it is gathered that a company had been formed to erect a dredge for treatment of the ground and recovery of the tin ore. He says, "A bucket-dredge is mentioned in the prospectus, but, from the nature of the flat, I doubt whether a pump will not be found more suitable."

Since the visit by Twelvetrees some surface work has been carried out with the removal of shallow depths of soils and wash. In a few isolated places greater depths have been attained but seldom if ever has bottom been reached in the deeper parts of the area.

The flat extends on both the north and south sides of the road but existing leases are situated on the north side and attention was directed more particularly to that section of the area. The flat country extends along Saltwater Creek in a northerly direction for approx; one and a half miles with width varying to and estimate of 7 chains as a maximum, on the 10 acre lease No.11689/M. No measurements were made during this inspection, the figures quoted being estimates only. Several prospects were taken with a view to deciding the advisability of further testing.

It was claimed by McRae that high grade ore exists to the grassroots. Samples taken from the upper levels of sand and wash were washed by prospect dish and the concentrates won were kept. These do not appear to be high grade in tin and definitely contain an appreciable proportion of ilmenite.

A second series of samples was taken from slightly greater depth and from the spoil dumps of old prospecting holes located there. The grade of concentrate was here much improved though still containing ilmenite.

A third series of samples, taken from as near bottomas possible in freshly dug holes, gave a concentrate of high grade tin ore in sufficient quantity to cause the belief that profitable operations could be carried out if the grade were found to be persistent. Discussion with McRae on the site of the leases disclosed his willigness to bore the area and, as it was impossible without boring to check the maximum depth (28 feet) claimed by McRae, for the lower part of the area, it was decided to recommend boring by McRae under Departmentals supervision.

The country rock is in general a white to gray granite varying in parts to the pink variety and further south to the ornamental red variety. In the vicinity of the mining leases, the white granite predominates and there is evidence that the tin is in association with minute quartz and greisen veins occurring in the granite. Though these veins strike in various directions, the more common line of strike is north-west, as do the few larger quartz veins observed in the locality.

Should further testing be decided on at McRae's leases, the more eastern holdings on Middleton Creek may warrant further attention. Near these old leases shallow ground was tested for similar results to those obtained at McRae's area and with a number of small flat areas available near the creek results may justify the work done.

In each area the main difficulty is in securing a water supply sufficient to maintain continuous production. A dam site believed suitable to conserve sufficient water for continuous production in his area has been secured by Mr. McRae. On the eastern areas, a small dam has been constructed but continuous operation is not possible.

Samples taken during the visit were as follows:-

		Est. Val. Crude Conc. oz. per c.y.	% Tin met.	Corrected Value 70% oz. per c
(1)	Sample of surface material (3 prospect dishes)	13.3	9.8	1.8
(2)	Samples from spoil dumps old prospect holes. (2 dishes)	42.0	34.3	20.5
(3)	From slope of ridge. Ground 2 feet deep. (1 dish)	30.45	60.9	26.5
(4)	Samples of shallow ground at bottom eastern workings. Middleton Creek.	65.0	70.2	65.0
(5)	Fresh dug holes. Sample from bottom and near bottom various positions. (5 dishes)	84.0	70.2	84.0

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