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RECORDS 1947/87

BEACH SANDS INVESTIGATION

REPORT FOR MONTH ENDING 30TH SEPTEMBER, 1947

by

D.E. Gardner

Department of Supply & Shipping,

Bureau of Mineral Resources,

Seabank Lane,

SOUTHPORT, QUEENSLAND.

The Chief Geologist.BEACH SANDS INVESTIGATION.Report for month ending 30th September, 1947.1. GENERAL.

1947/87.

(A) During the month visits were made to Brisbane:- (a) obtain the Jones Riffles from Mr. Donaldson, (b) to obtain equipment from Supply and Shipping, (c) to attend a meeting of A.I.M.M. and to obtain supplies from Supply and Shipping. A visit was also made to North Stradbroke Island.

(B) Old boring charts of areas bored by Mineral Deposits Syndicate and Rutile Sands Pty. Ltd., but not yet worked, have been copied. A small number of bores can be put down by us, e.g., by students, to get some samples and to level the deposits.

(C) A start has been made on writing up a report on the St. Leonards bauxite deposits. Very little time can be given to this at present.

2. Plant Sampling.

Samples were obtained from Mineral Deposits Syndicate, Southport; Rutile Sands Pty. Ltd., Currumbin; Titanium Alloy Mfg. Coy., and Tweed Rutile Syndicate, Cudgen; Metal Recoveries Ltd., Mooball; Zircon Rutile Ltd., Byron Bay and from Zircon Rutile Ltd. Beach Tables, 7 Miles Beach. It is intended that plants be sampled at approximately five-week intervals.

3. SAMPLING OF DEPOSITS.

Samples have been obtained from bore holes in areas west of the first line of dunes, Broadbeach and North Burleigh; also from working faces of the deposits of Mineral Deposits Syndicate west of Broadbeach and from Associated Minerals Pty. on the beach at North Burleigh; from Alluvial Gold Ltd bores, Cudgen; and from Zircon Rutile Ltd., bores at Tallow Beach.

We can obtain samples from boring to be carried out by Rutile Sands Ltd., Titanium Alloy Mfg. Coy and Metal Recoveries Ltd., but it will probably be necessary for one of us to visit each of the areas, and also that we do something in the way of mapping and levelling for the Companies.

4. MAPPING AND LEVELLING.

Boring by Zircon Rutile Ltd. behind Tallow Beach, south of Byron Bay, was completed during the month. The boreholes have all been plotted and levelled.

Bores put down by Mineral Deposits Syndicate in the Broadbeach-North Burleigh area have been plotted and levelled.

Levels in Queensland have been referred to State Datum using Bench Marks established during Contours Surveys for sewerage at North Burleigh and at Broadbeach.

5. DRAFTING.

A start has been made in transferring the results of field work from field note books to plans in a form suitable for the draftsman to work on when he arrives.

6. LABORATORY WORK.

Preliminary work was started before the end of the month. Panning the beach sands does not enable a complete separation of heavy minerals from quartz because fine-grained rutile and zircon goes

over with the quartz (Zinc Corporation have the same trouble on Stradbroke Island. They do not get a complete recovery of the heavy mineral).

When the laboratory Wilfley table arrives we may get a better separation. In the meantime, a combination of screening, panning and dry separation will be used.

The electromagnet as received had insufficient field strength at 12 volts to pick up ilmenite at all. It is being fitted with a different design of pole pieces.

(Sgd). D.E. GARDNER.
Geologist.