REPORT ON GOLD PROSPECT OF BAILEY & FIELD, DELORAINE.

This prospect is situated about 4 miles south of Deloraine and somewhat more than half a mile east of the Meander River.

Access is gained by the Meander road from Deloraine, and thence by a short bush track which branches off just north of the Great Lake road junction.

mesers Field, Field & Bailey have held a "Permit to Enter" several large blocks of land comprising Mr. Field's property. The prospect is located on Lot 2185, a short distance south or south west of the southern angle of Lot 2184.

As one proceeds south from Deloraine, it is noticed that the rich basaltic soil continues for only a short distance and that the country to the east of the road is occupied by timbered hills with a roor soil. Between the road and the Meander River, an alluvial flat of recent age occurs.

The hills to the east of the road are occupied by old schistose rocks which were only studied in detail in the vicinity of the prospect.

An adit has been driven from the southern side of a steep gully for a distance of approximately 190 feet in a general southerly direction. The first 80 feet from the entrance was driven on a bearing of 1650, and the remainder in a general southerly direction. From the entrance to 107 feet the adit passed through a weathered solistose rock resembling a talcose schist. An examination of fresher specimens on the dump, however, rather suggested that the rock was a schistose porphyry resembling the sheared Devonian rorrayries of the West and North West Coast regions? A microscopic examination of a section cut from this rock verified this determination.

At 107 feet there is a sharp change of country, the rocks adjacent to the porphyry being dark graphitic schists with white spots, possibly represent and alusite or similar contact metamorphic minerals. The dark schists form only a thin band and for the next 50 feet the adit passes through a body of oxides of iron and manganese with

irregular bodies of graphitic schists at a number of places.

Drives have been put in to the west and east along the southern side of the formation. The western drive is 20 feet in length with a short cross-cut to the south at the end. Narrow irregular quartz veins occur at intervals in this drive. The southern cross-cut passed out of the formation and revealed mica schiste.

The eastern drive followed the southern wall of the formation for 42 feet, veering to the north towards the end. The wall was composed of weathered mics schists. On the north side of the drive pyrite was abundant at one place in association with quartz and graphitic schist.

The adit continued beyond the drives for 36 feet and passed through mica schists dipping south at a high angle and becoming harder. At a few places, material resembling the sheared porphyry is present and may represent small dykes of the latter.

On the surface, a similar succession of ocks occurs. Walking south up the hill above the adit, a wall of reddish stained porphyry outcrops above the southern boundary of that in the adit. A deep trench has been cut for 30 feet in a southerly direction from nearby and passes through oxides of iron and manganese mixed with black schists, some of which contain the white spots as in the adit.

Near the face of the trench, reddish stained rock with quartz blebs outcrop and probably represents a dyke of porphyry as in the adit below. Further up the hill, the following succession is noticed - mica schists with quartz pebbles, graphitic schists, fine micaceous or argillaceous schists, and quartz schists which continue to the top of the ridge.

The main body of porphyry (probably its southern boundary) has a general strike along the ridge to the east of about 100° and can be followed by numerous outcrops. About 5 chains to the east it crosses a saddle in the ridge. About 50 feet south of an outcrop of porphyry and in the head of a gully falling to the south, a shaft 8 feet deep is stated to have given colours of gold out of the clay and the weathered rock (possibly fine argillaceous schist).

The above descriptions show that the district near the mine consists of schists of various types and of Proterozoic age intruded by sheared porphyries probably of Devonian age.

of the West Coast region. Also wherever they occur a small amount of gold (alluvial) is obtainable, but no payable gold reefs or other primary gold formations have yet been found in association with them. The formation in the prospect under review consists of irregular bodies of oxides of iron and manganese associated with graphitic schiets and occurring adjacent to the southern boundary of the main porphyry intrusion. Narrow and irregular quartz veins and some pyrite is associated with the formation.

The owners have had numerous samples assayed and the highest result was 3 dwts. per ton of gold, the general figure being below this amount. These values are too low to render the deposit of economic importance.

The question arises as to whether further work is warranted and to what objective it should be devoted. The work already carried out has satisfactorily tested the formation at that level. Further driving and cross-cutting could of course be done in the hopes of striking portions with higher gold contents but it is not recommended.

The best procedure appears to be to sink below the adit in order to test the formation at depth and to ascertain if possible if there is any unaltered deposit occurring below the oxides of iron. It might also be necessary to cross-cut from the bottom of the shaft. It is difficult to say at what depth water will be encountered, but an approximate estimate will be at 50 feet below the adit. The material near water level should be carefully sampled and tested to see whether any enrichment occurs there. All sampling should be done systematically so that representative samples are obtained and indicate the true value of the material.

Further work should be based upon the results of the sinking. If an unaltered primary deposit is met with, then a further examination would be warranted.

Mines Department, HOBART. 8/12/32.

GOVERNMENT GEOLOGIST.