

PRELIMINARY REPORTUPPER WILSON RIVER DISTRICT, WEST COAST

Lying between Mt. Ramsay and the Meredith Range is a wide belt of country which in the past has received very little attention from prospectors.

In the vicinity of Pine Creek and Tin Creek a short distance south of the old Mt. Stewart Silver Lead Mine some prospecting was carried out - according to authentic information as far back as 50 years ago; the remains of the old camps are still to be seen; subsequently, at different periods prospectors have reported of the occurrence of tin in the locality, their attention, however, seemed to have been confined to the area contiguous to and westerly of Pine Creek and the vicinity of Tin Creek. About thirty years ago the late David Jones, district surveyor of Waratah, marked out a route from Mt. Stewart to the Stanley River district; this track took a course westerly of Pine Creek.

The area of thickly wooded country extending easterly of Pine Creek is drained by the upper reaches of the Wilson River. Pine Creek takes a general south westerly course, which with other tributary streams form the western branch of the Wilson River. A number of creeks flowing from the eastern fall of the area join the eastern branch of the Wilson River, which flows in a southerly direction along the western flanks of Mt. Ramsay joining the Pieman River about 12 miles further to the south.

The area to which this report relates embraces the elevated belt of country bounded on either side by the upper branches of the Wilson River; its extent covers approximately 25 to 30 square miles. Practically the whole area is covered with dense bush consisting of horizontal scrub, and various kinds of trees and shrubs indigenous to the mountainous country of the West Coast. It is no doubt due to the density and impenetrable character of the bush that has kept this area to all intents and purposes terra incognita.

Recently its western fringe has been investigated by a prospecting party consisting of Pryde Bros. & Keygan with encouraging results, and within the past two years the Public Works Department cut a track from the Waratah Corinna Road towards Parson's Hood, a distance of eleven miles, eight miles of this track being cleared to a width of 12 ft. The track penetrates the area from north to south through the central portion for a distance of six miles and follows a route originally marked out by J. Betts, a well known prospector of the Waratah district, who, on his subsequent investigations, has proved the occurrence of tin to exist over a wide area in country hitherto unexplored. The route of the track is well selected, being direct in course and of easy gradients.

The inaccessibility of the locality has been responsible for its inattention by prospectors in the past, not only in the matter of having food supplies delivered but the impracticability of getting to market any tin raised has been the chief factor in retarding the investigation and development of its mineral resources.

Several tons of tin obtained from sluicing operations had to be carried for miles over rough unformed tracks through the thick bush by the prospectors, in order that they would realise on their output to enable them to carry on with further prospecting work, with the hope that these would continue to develop sufficiently to warrant reasonable transport facilities being provided.

The prospects of the field are encouraging and the success which has attended the efforts of the parties already working there will, no doubt, be an inducement for others to follow, if transport to the field by pack horse or automotive vehicle is made available.

There are two routes giving access to the field, neither of which in their present state are of any real assistance in its development. The track now used for packing is that passing the old Mt. Stewart Mine, following the former wooden tram route from the 15 miles peg on the Corinna Road.

That already referred to is the only one worth considering as a means of providing a permanent outlet for the field, and moreover, if extended would serve the Stanley River and Mt. Lindsay Mining Fields, which in the past have been allowed to languish through the difficulties encountered in the transportation of machinery and ore.

The track commences at a point on the macadamised portion of the Waratah-Corinna Road six miles from Waratah taking a course varying a few degrees east or west of south. At the turn off, the distance from Burnie by road is 55 miles. The route followed by the track, from an engineering point of view, is a comparatively inexpensive one for the construction of a road, owing to the even grade and the moderate sideling slopes, and what is more important there are no rivers or large streams to cross; in this respect it may be considered as unique for West Coast conditions of road construction. For the first five miles of the route the construction of a track or road would be the most difficult section in the matter of foundation and material for forming, beyond that to the Stanley River granite country is passed through, which affords excellent material for road making purposes.

#### Topographical Features

The area is a thickly wooded undulating plateau, the higher ground having an elevation of approximately 1500 ft. above sea level. There are no outstanding land marks and it is only from a few points that a view can be obtained on the surrounding mountain ranges; this is due to the moderate hill slopes, particularly in the western portion; as the valley of the Wilson River is approached the ground becomes steeper.

The area is traversed by numerous small streams draining respectively its eastern western slopes extending to the branches of the Wilson River. A number of small creeks cross the Parson's Hood track, the principal ones of these being Betts Creek, near the 9 mile peg, Keygan Creek between 10 and 11 miles, a mile further on is a fair sized stream and a similar distance again is Yellow Band Creek; all of these flow into the eastern branch of the Wilson River.

The volume of water flowing in the creeks referred to

varies considerably, but on the average would not exceed 2 to 3 sluice heads. In places they have very little fall and it is due to this fact that accumulations of drift have occurred. The flat sections in places extend for many chains, then for some distance the rate of fall will increase; this variation in grade is due to hard bars alternating with softer country rock. This feature is favourable for the construction of small dams for water conservation, in order to ensure a more regular supply for sluicing purposes than would be possible if depending upon the natural flow of the creeks.

### Geology

The country rock consists almost wholly of porphyritic granite. It is first seen outcropping on Parson's Hood track five miles from the Corinna Road, and continues without change as far as the track extends and no doubt linking up with that of the Stanley River district.

It extends westerly to the Meredith Range and easterly to Mt. Ramsay. In the bed of a small creek crossing the track at the 11 mile peg, an outcrop of a dyke of diabase occurs; this intrusion is about 15 ft. wide and has an apparent bearing of 90 degrees. Apart from an occasional outcrop of veins of quartz tourmaline, all rock exposures seen were of the characteristic porphyritic granite. Owing to the even surface of the area and the soil covering of from two to three feet, outcrops of country rock are not often seen..

The sand and gravels composing the drifts in the creeks and water courses represent material eroded from the granite and consist of fine quartz gravel, sub-angular pieces of chalcedonic quartz and quartz tourmaline, also large water worn boulders of porphyritic granite. Samples of these drifts taken at different points from the creek beds representing an area of many square miles proved a wide distribution of tin ore with its accessory metals osmiridium and gold.

The tin ore occurs in well rounded grains, the average size of which would be about  $1/16$ " diameter. In some cases lumps the size of a small hen's egg have been obtained. In some of the prospects tried the tin occurred in very fine even grain size. In colour, generally speaking, it is black; occasional pieces of the grey variety occur, also the usual translucent varieties ranging from deep red to light yellow in lesser quantity. The osmiridium occurs as bright specks of good even grain size, and appears to be as widely distributed over the area as the tin is. Gold occurs in water worn flattened plates of irregular shape, the particles are comparatively coarse to those usually found in drifts of the kind in the West Coast regions.

The average osmiridium content found in the drifts is not sufficient to pay for working for that metal alone.

### Productive Operations

At the present time the only claim being worked is that of Pryde Bros. & Keygan, who are engaged in sluicing operations in Keygan Creek at a point approximately  $\frac{3}{4}$  of a mile west of the 10 mile peg on Parson's Hood track.

The tin bearing drifts occur in the bed and banks of the Creek and consist of well washed sand and quartz gravel amongst large water worn boulders of porphyritic granite. The drifts as far as tested are shallow, being not more than two or three feet in depth, with a covering of a foot or more of surface soil matted with roots of the thick vegetation growing above.

The width of the drift varies, being in places only a few feet, sometimes on the course of a creek widening out to several chains. Where Pryde Bros. & Keygan are working the width of drift is from 15 to 20 feet. It is estimated to carry up to 10 lbs. of tin oxide per cubic yard, with an average of 4 dwts. of osmiridium and one grain of gold for each hundred weight of tin ore actually recovered. On the present price on the basis of the grade to which it is dressed 72 to 73 per cent metallic tin it is worth £6 per hundred weight, the value of the osmiridium is £4 making the total value received £10 per cwt. The tin ore and osmiridium are recovered together by ground sluicing and their separation when cleaning up in a small sluice box entails practically no extra work.

Since the discovery of tin in Keygan Creek by Messrs. Pryde Bros. & Keygan a few weeks ago, they have recovered and sold approximately one ton of tin concentrates, in addition to the osmiridium and gold in the proportion stated. During this time they have cut several miles of tracks in the vicinity of their claim for prospecting purposes and to provide a means of getting their tin to market.

Under ordinary conditions two men working on this claim could obtain by ground sluicing one cwt. of tin ore daily, in addition to the by-products of osmiridium and gold.

J. Betts' claim is situated about  $\frac{1}{2}$  mile east of Parson's Hood track at the 9 miles peg; the conditions are similar to those already described. From a comparatively small area he has recovered a ton of high grade tin ore, which he and the members of his party carried to the Corinna Road, a distance of 9 miles. Mr. Betts has explored a large area of ground in the district and to facilitate this work he has cut several miles of tracks chiefly in the direction of Mt. Ramsay.

Prior to locating payable drifts in Keygan Creek, Messrs. Pryde Bros. & Keygan carried out some sluicing work on the eastern branch of Pine Creek from which they raised 17 cwt. of stream tin and 10 oz. 4 dwt. of osmiridium. At this point the Creek is in a narrow channel; to obtain the above result it was worked over a length of 300 yds. for an average width of about 9 ft.

A brief examination of the field is sufficient to conclude that its prospects offer inducements to individual miners or small parties of men to investigate the alluvial deposits. It is not, however, to be expected that men will go out to open up a claim unless they are satisfied that the track giving access to it is made suitable for pack horses or motor vehicles.

Considering that the track is cleared to a width of 12 ft. for a distance of 8 miles, and several more miles cut out as a foot track, the prospects of the locality warrant the expenditure necessary to render the track suitable in the first instance for pack horses and later

to make it into a road serviceable for light motor traffic.

The two claims which have been worked on a limited scale are capable of producing at least a ton of tin ore weekly for an indefinite period, but owing to the difficulty of transportation only one is at present producing tin. More than one third of the time occupied in raising the tin is taken in carrying it over the 5 miles of rough bush track to the nearest point to which pack horses can be taken. By that route, via Mt. Stewart, the distance from the claim to Waratah is 27 miles, two rivers being crossed en route, whereas by the Parson's Hood track it would be reduced to 16 miles.

The advantages of the field are that miners can commence producing tin and osmiridium without any expenditure in plant; a few tools only, with a small box for the final dressing of the tin concentrates is all that is necessary.

There are many miles of creek channels to be tested and there is no reason to doubt that other concentrations of tin and osmiridium similar to those referred to will be located. It is realised that, when the track is constructed and made suitable for traffic, branch tracks will be necessary to connect with the main track, as the tin bearing drifts are scattered over a wide area.

The provision of a main outlet from the central portion of the locality will be, however, sufficient inducement to prospectors to give it a trial with the hope of finding profitable employment in raising tin and incidentally osmiridium and gold.

#### Timber

At the Stanley River district is a bed of well grown Huon pine trees, the extent of this class of timber is not known. Further north there is said to be a good area of King William pine trees and at various points along the track route celery top pine trees are fairly abundant. A survey of timber resources is necessary before any statement could be made concerning the extent and value of the timber beds referred to.

They are certainly a valuable asset and with adequate road communication could be made available for use.

In conclusion the writer desires to acknowledge the valuable assistance rendered and hospitality extended by Messrs. Pryde Bros. & Keygan, also Mr. J. Betts during his examination of the area. The many miles of tracks cut respectively by these pioneers greatly facilitated the work. The tracks have been cut at entirely their own expense and will prove invaluable to prospectors and others in the search for minerals.

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