

Three Launceston men, Messrs. W. Pitulej, H. Cyran and A. Sharp are interested in a prospect situated on the Ford River, near Upper Blessington in Northern Tasmania. This was discovered by W. Pitulej who submitted samples to the Government Chemist. On assay, these samples showed appreciable amounts of tin and copper so that an examination by officers of this Department was sought.

This prospect is situated in the bed of the Ford River some 85 chains south-south-west of the Ford River bridge on the Launceston - Roses Tier road, three miles beyond the Upper Blessington turnoff and about 53 miles from Launceston. A cart road leading from the Roses Tier Road may be followed for 60 chains until the valley floor narrows. The prospect is located on land that has been set aside as a Scenic Reserve.

The topography of this district has been dominated by the influence of large sills of dolerite intruded into the Permian and landscape presents an appearance of a series of terraces. The lowest one is the alluvial plain of the Ford River, the next the top of the Mathinna Series and the two upper are expressions of two dolerite sills. Into the Mathinna Series platform the Ford River has carved a steep sided valley, the river running at several hundred feet below.

The principal rocks outcropping over this area and those which carry any mineralization are alternating beds of slates and quartzites assigned to the Mathinna Series. Sometimes these different facies are of very narrow width, one bed of quartzite measured being only a few inches wide. The effects of stresses are more noticeable in the more incompetent slate beds, and these in places especially where abutting on quartzite beds have been twisted and metamorphosed to such an extent that they may almost be described as schists containing large amounts of mica. For purposes of brevity however, the name slates is used in this report to designate the more argillaceous members of the series. The strike of these rocks is about 320° and is fairly constant over the area examined. Some 40 chains upstream from the prospect a more recent fault occurs wholly within this series. It shows as a linear feature on the aerial photographs and it is also noticeable that the argillaceous facies to the south of the fault has not suffered the same degree of shearing as that to the north. In the former instance, the slates are actually slates and not more akin to schists, as they are to the north. The fault is post mineralisation.

On the inner edge of the Mathinna Series terrace and also in the bed of the Ford upstream from the prospect, among boulders of dolerite, may be found boulders of and pebbles from a Permian conglomerate. No actual outcrop of this rock was observed and no very great thickness of this bed can be expected, as the lower dolerite sill was probably intruded near the base of the Permian.

In the neighbourhood of the Ford River crossing are large acreages of Recent alluvial flats. Outcropping in the northern part of the area examined is portion of the Roses Tier granite massif. These outcrops are very close to the granite roof which appears to dip to the south under the Mathinna Series. This granite is composed of quartz, oligoclase feldspar and biotite with subsidiary amounts of hornblende and orthoclase.

A portion of the lower dolerite sill of the Ben Lomond plateau extends into the mapped area. The folding of the Mathinna Series has caused differential movement between the more massive quartzites and the argillaceous beds. Into these movement planes which appear to be best developed parallel and

normal to the strike of the rocks have permeated mineralising solutions. Most of these solutions appear to have deposited barren silica but occasionally sulphide minerals may be observed and as shown in certain assays there is a percentage of tin sometimes present. Although these quartz veins appear stronger and better defined in the slates, they do occur quite commonly in the quartzites, though here they are more sporadic. There appears to be no replacement of country rock.

The actual prospect which occurs in the bed of the Ford, consists of two converging quartz veins of 1 to 3 inches in width and a cross vein of smaller size. These occur near the boundary of a slate-quartzite bed. Three samples were taken from here and their position is indicated on the attached sketch. The first taken over 6 feet, including portion of the three veins showed:-

| | | |
|---------------|---|-------|
| Tin | - | Trace |
| Copper | - | Nil |
| Zinc | - | 0.2% |
| Gold & Silver | - | Nil |

The second was taken over three feet, where the two main veins converged and showed:-

| | | |
|--------|---|------------|
| Tin | - | Nil |
| Copper | - | 0.1% |
| Zinc | - | 0.4% |
| Gold | - | Nil |
| Silver | - | 4dwt./ton. |

The third, of selected material from the two veins, showed:-

| | | |
|--------|---|-------------|
| Tin | - | 0.15% |
| Copper | - | 0.2% |
| Zinc | - | 1.3% |
| Gold | - | Nil |
| Silver | - | 10dwt./ton. |

Three other samples, taken from other quartz veins in this area showed negative results for tin and copper.

These results indicate that while some quartz veins may contain a little tin, most of them, and the country rock itself are barren. The small size of the veins themselves and the small amount of tin they contain is discouraging. From this examination it does not appear that the prospect can have any economic value. Mr. Pitulej is of the opinion that these veins would increase greatly in width at depth but there is no evidence for this.

It is interesting to note that tin, copper and zinc occur in the same samples. This indicates that this prospect is located on overlapping metalliferous zones and it would be expected that as the granite was approached at depth the ratio of tin to copper and zinc would increase.

The possibility of alluvial tin occurring in the recent wash, north of this prospect should not be overlooked.

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