

REPORT ON MAY QUEEN AREA - ZEEHAN

The area is situated in the North Zeehan district and is about 2½ miles to the North West of the township of Zeehan.

The area consists of a small low rounded hill which is surrounded by flat open country. The hill has been largely costeamed and several parallel lodes have been disclosed trending North North East and South South West. They dip to the east at angles ranging from 37° to 60°.

An underlay shaft has been sunk on the top of the hill on one of the lodes to a depth of 40 feet which is the present water level, this lode having been drained to this level by adit work to the south.

At a depth of 36 feet a small amount of driving has been carried out from which galena with high silver content has been obtained. Driving north the ore went underfoot and driving was discontinued. In a crosscut at the bottom of the shaft the lode is 8 feet in width. On the hanging wall there is a 6 inch vein of clean metal which is said to assay 68 % of lead and 116 oz. of silver. The remaining portion of the lode to this footwall is in fair milling ore.

The work at the 36 ft. level has not disclosed any length of payable ore.

The proposition is purely a prospecting venture and can be developed as follows:-

- (1) By adit from the Western side of the hill
- (2) By a main shaft to cut the lode at a depth of 200 ft.
- (3) By continuing the present underlay shaft to a depth of 110 feet.

(1) I understand that instructions have been given to drive a tunnel from the Western side of the hill and am informed that this tunnel would intersect the lode twenty feet below the workings in the underlay shaft, naturally I assumed that levels had been taken to ascertain the position. On enquiry I cannot find any evidence of this having been carried out.

It is very essential that this information should be available before the tunnel is commenced. If at least twenty feet cannot be obtained below the underlay working it is very doubtful if the driving of the tunnel is warranted.

The tunnel would be about 250 feet in length and the cost should not exceed £1 per foot, and with rails, sleepers and truck provided, which would cost approximately an additional £20, the maximum cost of the tunnel could be estimated at £250 to £300. If this work was contracted for it would be found more economical than on wages.

(2) A main shaft of nine feet by four feet (9' x 4') timbered with frame sets to cut the lodes at 200 feet, would cost approximately £6 per foot. The depth to be sunk should be 110 feet, allowing 10 feet for a well. The approximate cost of labour, timber, ladders and incidentals would be £660.

If it could be assured that the shaft would not make water the cost might be reduced by £100 and could be sunk by a windlass with a double bucket, but there would always be the danger of water being encountered.

In any case provision would have to be made to deal with water when the lode was out. If the water is not greater than that encountered in other workings in the vicinity it could be dealt with by a horse-whip.

To install a Ronaldson Tippett, 12 cwt belt-driven and fuel oil engine would cost, with head-gear £350 or a total of £1010.

If a small pump was available with kerosene engine the shaft should be carried down for £600 to £700.

The developments at present, in my opinion, do not warrant this expenditure.

(3) To continue sinking the present underlay shaft to a depth of 110 feet.

To carry out this work it would be necessary to install a small pumping unit or winding engine.

The cost of sinking and timbering a distance of 70 feet would be about £170.

The cost of a new 7 h.p. kerosene engine to operate a small pump would cost £130 landed at the mine.

I understand that the Department owns a kerosene engine which is on loan to the Dundas Tin Mining Company, Dundas, and that the Department purchased a pump for G. T. Bell of Zeehan. Enquiry should be made if this plant is available and is suitable for controlling the water likely to be encountered on this mine.

The cost of driving from the underlay shaft would be about 30/- per foot.

In conclusion it can be taken that the proposition is purely a prospecting venture and if the tunnel could obtain a depth of not less than 20 feet below the present workings it would probably be sufficient to demonstrate the possibilities of the property and furnish evidence to warrant sinking a main shaft. In addition the workings would always be accessible to anyone wishing to inspect, but with sinking it would necessitate bailing or pumping for any inspection after the water was allowed to accumulate.

The tunnel would intersect two lodes before reaching the underlay shaft. These would be cut at shallow depths.

The driving of the tunnel would provide a very small amount of ore for stoping.

I am of the opinion that the continuance of the underlay shaft to a depth of 110 feet with drives at 100 feet would be the most satisfactory method of developing the mine.

Full details of development are contained in a report by Mr. Blake, Acting Government Geologist.

(Sgd) J. O. HUDSON.

CHIEF INSPECTOR OF MINES

Mines Department,  
HOBART

25th November 1936