UR1891 - 1969/255 - 258

20th December, 1968.

The Chief Geologist,
HOBART.

F.B. Lode - Blue Tier - Visit of 3rd, 4th, 5th December 1968

Object

A request was received from Mr. H. Moses for financial assistance to cover the removal of his machinery and gear from alluvial workings at Moon Creek on Blue Tier, to the 'F.B.' lode on the Frome River. An assessment was required of the problems involved and the feasibility of the project, and confirmation of the economic potential of the proposition.

Conclusion

On the evidence produced there is no justification for H. Moses transfer to the 'F.B.' site on the Frome River: he is better advised to remain at Moon Creek and work creek gravels and adjacent remnants of virgin ground providing demonstrably higher tin values.

3rd Dec. 1968. Access

The motor track from Weldborough to the 'F.B.' lode was traversed in damp conditions with some difficulty in a station sedan with limited slip differential. H. Moses had not used the track or visited the 'F.B.' site since accompanying Senior Geologist, A.J. Noldart some weeks previously. No prospecting had been done.

Two bridges within a mile of Weldborough are being replaced by the P.W.D. in anticipation of logging activities by Tasmanian Board Mills in the newyear (1969), and renovation of the track by the timber company is anticipated prior to log carting operations. Any roadworks effected by Moses would inevitably be revised within a few months. Two badly eroded corners over creeks and a poorly drained section need attention before the track is passable to a lorry with an overhanging load of 28 foot water pipes. A revision of Moses transport plans is in order, as the dozer for essential roadwork must precede the camp removal, in spite of loading difficulties thus incurred at the Moon Creek site. Once at the Frome River a substantial bridge must be constructed to ensure all-weather access to the work site on the eastern shore.

H. Moses was advised that should finance for road reconstruction be required it should be sought from P.W.D. sources.

Water Supply

The water supply for sluicing purposes was anticipated from a race constructed to supply the old stamp mill on Hibernus Creek. The hill slope was traversed along the line of the race, the latter being well preserved at the north (Hibernus Creek) end but washed away by floods at the inlet on the Frome River. Elsewhere the race is locally collapsed, breached and generally overgrown suggesting several weeks renovation is required to bring it into service. An alternative water supply was sought from the Winiford River via the Endurance Tin Mine link-race from the Winiford to the Frome River, and a branch race into Hibernus Creek. The branch race could not be located and can no longer exist.

4th December, 1968. Access

The track to the 'F.B.' lode was not open from Weldborough due to bridge works, but a route was taken via Moorina, and although in good condition at both ends the track was not passable in the heavily forested central section, due to poor drainage and the past activities of timber lorries.

Water Supply

The position of the northern limit of a further water race from the Frome River, suitable as a supply for sluicing the southern flank of the 'F.B.' lode was established, but no assessment was made of repairs necessary before it could be used.

Tin Values

That part of the 'F.B.' lode east of the Frome River and south of Hibernus Creek was tested with samples collected from six pits sunk at the limit of the old alluvial workings on the southern flank, two pits at the limit of previous working above the old stamp battery on the northern flank and four pits across the heavily timbered zone on the line of the lode between the old workings. Several samples collected on the northern and western flank of the hill on the previous day showed a negligible heavy fraction and were not retained.

Samples of wash were panned, bulked and sent for analysis. The area of old forkings and discarded overburden on the hillside in the immediate vicinity of the derelict battery, open-cut and adit site previously demonstrated to Mr. A.J. Noldart was not retested.

Results of Analysis for tin. 'F.B.' lode	
(8014/68. Advice No. 379)	oz. per cu. yd.
6 samples from South lode	1.81
4 samples from Centre lode	0.75
2 samples from North lode	0.70

Microscopic inspection of some of the heavy mineral concentrate from the 'F.B.' lode by Mr. G. Everard indicated a composition of:-

5-6% Ilmenite
2-3% Topaz
2-3% Zircon
3-4% Cassiterite
85% Quartz (heavily iron-stained).

The problems of difficult access, problematical water supply and poor tin values combine to discourage further interest in the alluvial potential of this area.

5th December, 1968

H. Moses' present workings on Moon Creek were visited, consisting of a small sluiced area on the northerly stretch of the creek (worked with hydraulic blower and a large water pump), and two much smaller paddocks downstream adjacent to the westerly section of the creek (worked with a small water pump and nozzle into sluice boxes lodged in the creek bed). The latter section of the creek incorporates water race 1789W of the Endurance Tin Mining Company and is deep, broad and straight, and runs into a narrow cleft some 20' deep blasted through a granite bar. Currently a shallow but rapid flow of water is maintained over a gravel bed 8-10' wide and the stream is reportedly permanent.

Prospect samples were taken from remnants of unworked ground in the creek bank, the gravels of the creek bed and from shallow pits sunk to granite bedrock in the heavily timbered rising ground to the west of the cleared area about Moses camp site. Superficial tests show promise of good tin values and Moses is convinced that the water supply is adequate for working the stream bed. Should water supply become a problem an economy can be effected with a small dam constructed in the steep sided creek bed, and some water recycled.

The style of operation envisaged sets the hydraulic blower in a hole in the creek bed, with sluice boxes low on the bank, dumping all but the finest tailings clear of the stream course. Pockets of high grade virgin ground from near the creek can be sluiced or 'dozed into the creek and recovered together with creek gravels. The engine, blower and boxes would be moved progressively upstream in 60-80 yard stages as each locality is worked out.

Work on the heavily timbered ground was not advised as the rate of felling and clearing, (and hence tin recovery) would inevitably be slow.

Results of Analyses for tin. Moon Creek.

(8074/64 : Advice No. 379)

	oz. per cu. yd.
Heavy gravel in creek (5 dishes)	15.6
Unworked ground on bank (2 dishes)	8.58
Timbered rise W of camp (7 dishes)	6.52

H. Moses was advised to proceed with the stream gravels in Moon Creek, in preference to other alternatives.

(D.J. Jennings)
GEOLOGIST