

NEW RIVER

Heathorns Gold Prospect at New River was visited on Friday 28th April. Three men were working in developing the mine and in erecting tramlines and forge etc.

In conversation with Mr. Heathorn I was informed that operations were being carried out on his 50 acre lease application which was formerly held by him as Lease No. 11359/M. The Registrar of Mines states that Lease No. 11359/M is now not in force and Heathorn's applications are confined to 22M/46 for 10 acres, which is part of old Lease No. 11583/M and to 6W/46 for five sluiceheads of water to serve 22M/46.

It would therefore appear that Mr. Heathorn is operating on Crown Land which is not covered by lease.

My examination of 28th April was of a preliminary nature only, for I did not have the necessary equipment to make a survey of the area.

An adit has been driven in a general easterly direction for a total distance of approximately 330 feet. From the portal the adit has been driven as a cross-cut, on a bearing of 71 degrees, for a distance of 145 feet. In this section a small vein was cut at 20 feet from the portal and a second vein at 120 feet. On this second vein driving has been carried out for a distance of 160 feet during which the vein makes to a maximum of 20 inches in width and for a distance of 45 feet fades out completely to show only a thin vein of pug in the fissure.

At 110 feet along the drive another vein occurs, apparently striking at 140 degrees. At the intersection of the two veins some unsettled ground occurs and in a recess of the main drive up to 42 inches of quartz occurs. It is however, yet uncertain whether or not this measurement is across the reef or along a narrow vein for the southern wall of the recess is on a fault plane on which a three inch band of pug occurs resulting from the crushing of bluish slates. Some displacement of the main reef has apparently occurred.

At its extremity the drive curves to a south easterly direction, 169 degrees, on a small vein of quartz.

The surface workings consist of a number of shafts and trenches designed to prove the continuation of a reef striking on a bearing of 128 degrees. This is more or less in keeping with the direction of the two veins last mentioned in the underground workings.

On the surface two samples were taken from shallow shafts on the line of what is referred to as the main reef. The first sample represented a width of 35 inches of quartz taken from a depth of about eight feet from the surface and the second sample was taken from a shaft  $1\frac{1}{2}$  chains south east from the first sample. The reef here was in two sections separated by six inches of slate with seven inches and six inches of quartz on either side. Only the quartz was sampled.

The shallow shafts and trenches have served to

prove the continuation of the reef over a distance of at least ten chains to the top of the hill at an approximate height of 150 feet above the adit.

Seven samples were taken during this examination two of which were from surface workings and five from the adit workings.

The samples and the Assay results are as follows:-

<u>Sample No.</u>	<u>Position</u>	<u>Width of Sampling</u>	<u>Assay Results</u>					
			<u>Gold</u>			<u>Silver</u>		
			<u>oz.</u>	<u>dwt.</u>	<u>grns.</u>	<u>oz.</u>	<u>dwt.</u>	<u>grns.</u>
1	Shaft	35	0	4	23	0	7	1
2	Shaft 1½ Sth.	13	0	2	8	0	1	1
3	Adit 75 ft. from cross-out	14		Tr			Tr	
4	Adit 85 ft. from cross-out	14		Nil			Nil	
5	Adit 95 ft. from cross-out	7	0	1	7	0	0	18
6	Adit Recess	42	0	1	13	0	1	12
7	Adit Recess Pug Vein	Grab.	1	19	4	0	7	0

The above results show that only place where an appreciable grade existed was in the pug vein in the recess south from the level and that the quartz is comparatively of a low grade.

In places the quartz is fairly heavily mineralised with pyrite and arsenopyrite abundant.

From a position comparable with that of sample No. 1. Mr. Heathorn assured me that a sample was taken in the year 1935. The Assay result was Gold 4oz. 11dwt. 11grns. Silver 3ozs. 15dwts. 19grns.

The assay results suggest that it is advisable to make a more complete examination of the occurrence and it is suggested that Mr. Heathorn be advised to clean out the various shallow shafts on the main reef and to have ladders available to facilitate their examination. If a fresh surface is exposed time will be saved when sampling commences.

CHIEF GEOLOGIST.

The Director of Mines,  
HOBART....Tasmania

10th May, 1950.