

000

1. Rkw Archives 65,66
2. R. Bottrell

66-441
198001

PRELIMINARY REPORT ON THE JANE RIVER GOLDFIELD, TASMANIA, FOR
NEW MOUNT COSTIGAN MINES LIMITED.

by

M. SOLOMON

January, 1968.

INTRODUCTION

ACCESS

GEOLOGY

THE OCCURRENCE OF GOLD

RESERVES

THE LEASE SITUATION

CONCLUSIONS.

MICROFILMED

OPEN FILE

PRELIMINARY REPORT ON THE JANE RIVER GOLDFIELD, TASMANIA.

INTRODUCTION

The goldfield lies south-west of Algonkian Mountain which forms part of the Prince of Wales Range in central Tasmania, (Figure 1). Gold occurs in several creeks draining the lower westerly slopes of Algonkian Mt., particularly near Warne's Lookout (Figure 2).

Gold was first discovered in the district in 1894 but prospecting became intensive in 1935 when rich pockets of alluvial gold were found in Reward Creek. The field supported 30 miners in 1936 and yielded several hundred ozs. of gold but over the past 25 years the field has only been worked intermittently by individual prospectors. The only literature on the area consists of two typewritten reports by F. Blake, prepared in 1936 for the Department of Mines.

ACCESS

A foot-track links the field with the Lyell Highway about 12 miles to the north but the syndicate now holding the leases is currently bulldozing a jeep track from Butlers Gorge via Lake Rufus and Erebus Rivulet. Butlers Gorge (a Hydro Electric Commission township) is 90 miles from Hobart and the Jane River field some 18 miles from Butlers Gorge.

GEOLOGY

Most of the district is underlain by Precambrian metamorphic rocks, mainly quartz-muscovite, chlorite and quartz schists with relatively minor dolomitic limestones (Figure 2). Warne's Lookout is a small hill consisting of Ordovician conglomerates and sandstones lying unconformably on the Precambrian rocks. Quartz veins intersecting the Precambrian rocks are common and pebbles of white quartz carrying gold have been found in creek gravels. These veins are probably the source of the alluvial gold.

THE OCCURRENCE OF GOLD

Gold occurs in (a) gravels and sands in Reward Creek and a parallel creek to the north, (b) in the upper reaches of Ridge Creek, and (c) in gravels of a large river flat north of Warne's Lookout (Figure 2).

In Reward Creek, the stream flows for about 300 yards over dolomite. The dolomite bottom is most irregular, and the gravel cover varies from 6 feet to over 30 feet in thickness. Most of the gravel consists of quartz and quartzite pebbles up to 1 or 2 inches diameter with sand, grit and clayey sand as matrix. The gravels carry variable quantities of gold varying from flour size to nuggets weighing up to $\frac{1}{2}$ 35 dut. This is the area from which most gold has been won and F. Blake reports that 40 cubic yards yielded 45 oz. of gold. In this investigation, all dishes washed at random from exposed gravel banks yielded gold of varying size but it was clearly concentrated in the more coarsely grained gravel. The coarse gold is irregular in shape and clearly of local derivation. Blake reports that a mint assay showed a decimal fineness of 0.99821. The gold is associated with rounded grains of chromite (X-ray determination) and in one place small spheres of silver (?) were found by N. Clark.

The gravels alongside the present course of Reward Creek cover some 9,000 sq. yards and probably average 3 yards in thickness. However, Reward Creek appears to be cutting through older gravels deposited from another course. The gravels merge with those of the new creek to the north to give a minimum area of 50,000 sq. yards, and a possible 100,000 sq. yards of gold-bearing gravels.

Further downstream, adjacent to Warne's Lookout, Reward Creek is joined by other small creeks to form the headwaters of Ridge Creek. Here the river gravels are fairly extensive and a shaft revealed a thickness greater than 30 feet. At least part of the gravels are gold-bearing for some distance downstream and gold was won from this area in 1935/36. One of the small creeks of this area is known as Cinnabar Creek because

in 1935 irregular grains of cinnabar were found in the gravels, the mineral being proved by assay. I was unable to find cinnabar in this creek, despite careful search.

One mile north north-east of Warne's Lookout there is a large alluvial flat which, according to N. Clark, bears good gold values (Figure 2). He is currently prospecting this area by pitting and panning. The area of this flat is about 1,300,000 sq.yards and the depth of gravel probably greater than 2 yards.

RESERVES

The syndicate has drawn attention to three areas of gold-bearing gravel: (a) Reward Creek (b) the head of Ridge Creek (c) a flat north of Warne's Lookout.

(a) This area is the only one for which there is some reasonably reliable information on size and grade. The gravels cover at least 50,000 sq.yards and possibly 100,000 sq.yards. Taking 60,000 as a useful figure and guessing at an average 3 yards thickness, yields 180,000 cu.yards. If this averaged 1 dwt/cu yard, then some 9,000 oz. of gold could be present, worth about \$300,000 (Australian).

(b) A crude guess of the volume of gold-bearing gravel in this area yields about 250,000 cu.yards. The grade is unknown.

(c) The flat is largely unprospected as yet but could reasonably contain 2,500,000 cu.yards, of unknown grade.

The total volume is almost 3,000,000 cu.yards. As far as could be seen from this preliminary inspection, the gravels could be worked by sluicing, bulldozing and local pitting.

THE LEASE SITUATION

N. Clark, J. Bibby and J. Bennetto hold a 30-acre mining lease over Reward Creek. This lease was granted by the Mines Department with the

4

permission of the B.H.P. Co., which holds an exploration licence covering the district (see Figure 1). The syndicate have applied for an additional five 30-acre mining leases in this area and they already have permission from B.H.P. to take out an Authority to Prospect of 8.5 sq.miles surrounding Reward Creek. The syndicate intends to work the alluvials on Reward Creek for gold.

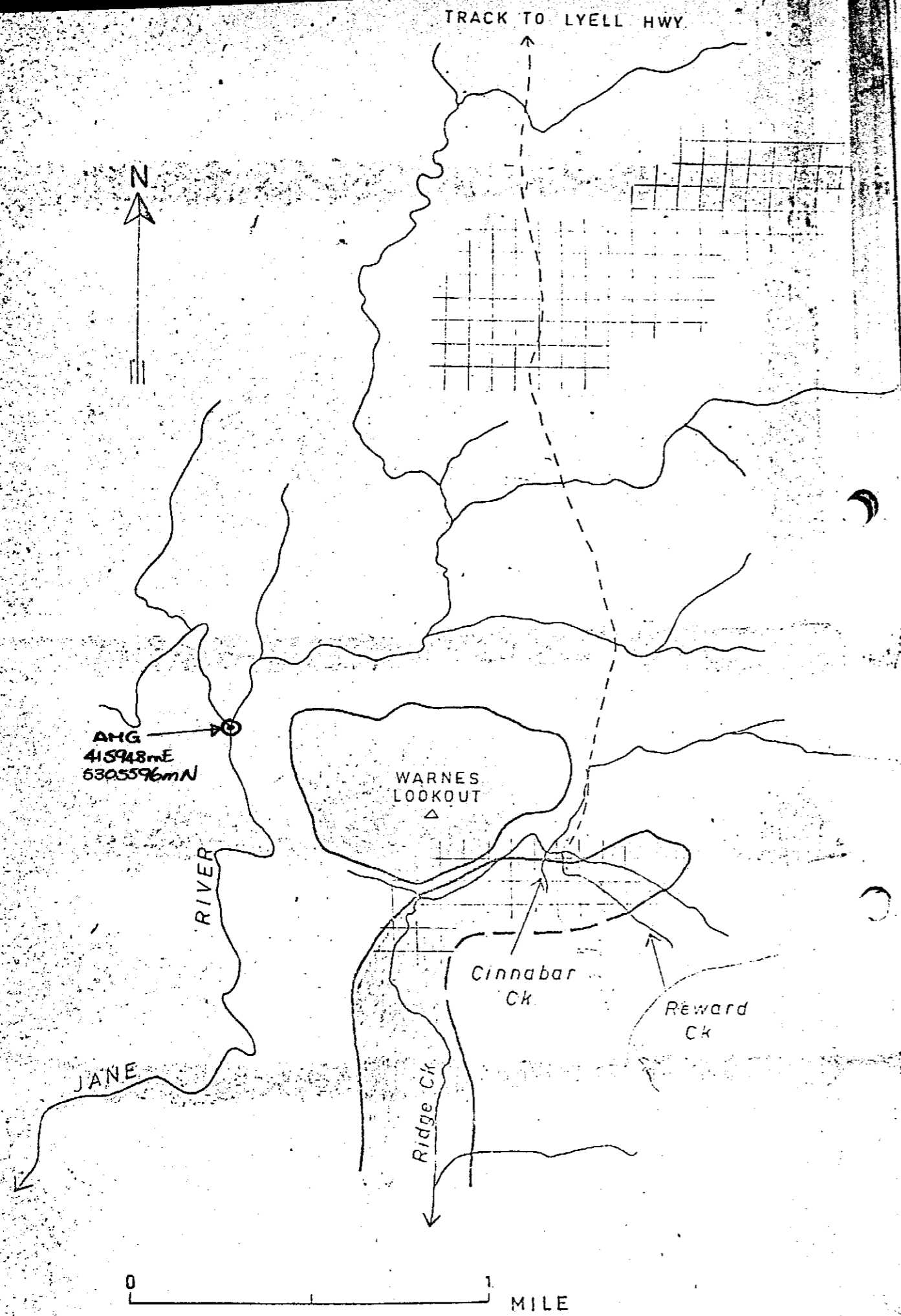
CONCLUSIONS





A brief inspection indicates the possibility of there being approximately 3,000,000 cu.yards of gold-bearing gravels near Warne's Lookout. The grade is clearly high in Reward Creek but is unknown in the remainder, and extensive testing would be required before a grade estimation could be made.


If B.H.P. grant the syndicate the five 30-acre mining leases applied for, all the gravels of Reward Creek (area (a)) will be included and also part of those in Ridge Creek (area (b)). However, at the moment the gravels of area (c) are within B.H.P.'s exploration licence. The licence is currently under review by the Director of Mines and some reduction will probably be required.

J. Holman
5-1-68

005



-  GOLD-BEARING GRAVELS
-  ORDOVICIAN CONGLOMERATE
-  PRECAMBRIAN DOLOMITE
-  PRECAMBRIAN SCHISTS etc.

ALGONKIAN MOUNTAIN


0 1 MILE

5 cm

FIGURE 1

AMG REFERENCE POINTS ADDED