

REPORT ON SAMPLING OF MURRAY'S ALLUVIAL GOLD PROSPECT
AT BEACONSFIELD.

Location and Access. The alluvial deposits are situated one mile north-west of Beaconsfield Post Office at the western boundary of the Town Reserve.

Access is gained by means of the road from Beaconsfield to York Town which passes through the area.

Mining Tenements.

- (1) An area of 50 acres of Crown Land has been pegged under Prospecting Licence.
- (2) Application No. 11174/M by J.W. Murray to lease 10 acres of Crown Land.
- (3) It is stated that a permit to enter and search was granted to J.W. Murray and others by the owners of 207 acres, 1 rood, 8 perches purchased from the Crown by F. Evans and A. Douglas for that portion of the land extending northerly for 25 chains from the northern boundary of 5 acres, 3 roods, 14 perches, G. Page, Purchaser. No record of this permit exists in the Mines Department.
- (4) A permit to enter and search was held by W. Murray and others up to 30th April, 1934, on 5 acres, 3 roods, 14 perches, G. Page, Purchaser.

Alluvial Deposits. The deposits were formed at two different stages and consist of:-

- (a) Recent gold bearing sands, clays and gravels extending over a flat area along the course of Brandy Creek.
- (b) Older terrace, gold bearing gravels, sands and clays rising above the alluvial flat of Brandy Creek on the north-western side.

Prospecting operations have been undertaken on both deposits and 15 shafts have been put down in them. In only one instance (No. 1) was rock bottom reached in these holes.

In most cases the shafts bottomed on clay, or slate wash in clay immediately under quartz and sandstone wash. In several instances the full depth of the latter wash was not penetrated during prospecting.

Sampling Operations. A sampling campaign was carried out on the alluvial material exposed in the prospecting shafts, one sample being obtained for each of 13 shafts. In the remaining two holes the in-flow of water was too great to allow samples to be obtained.

Samples were taken from top to bottom of the shafts after first cleaning the face by picking. As far as was possible each sample was extracted over a width of 4 inches and to a depth of 2 inches. The material obtained was then measured in a cubic foot box and a gold concentrate secured by washing in a prospecting dish. The concentrate from each shaft was numbered and forwarded to the Government Chemist and Assayer to be weighed and assayed and weight of gold in the sample determined.

A survey traverse was made of the shafts and connections carried out to corners of purchased lots. The positions of the shafts in relation to each other and to Private and Crown Land are shown in the accompanying plan.

The results of the sampling of each shaft together with other details are given in the attached table.

In calculating the following averages, no allowance has been made for the irregular spacing of the shafts, each shaft being considered of equal "weight". If such an allowance were made it would in the present case give a truer average which would be lower than the figures quoted.

The calculated averages of all shafts sampled gave a result of 2.17643 ~~gs.~~ ^{grs.} fine gold per cubic yard of material.

It will be seen that No. 6 shaft produced an exceptionally high result compared with the other shafts. If No. 6 shaft was excluded the average value of the ground in the remaining shafts would be .87827 grains of fine gold per cubic yard.

The most productive area is that in a general north and south belt, 13 chains long and up to 2 chains wide, along and in the immediate vicinity of the old tram reserve purchased by Evans and Douglas. In this belt are included shafts Nos. 1,2,3,4,5,6,7,9 and 13 and the average value of the material in these is 2.87027 grains of fine gold per cubic yard.

No. 6 shaft is within the belt and if excluded the average would be 1.11663 grains of fine gold per cubic yard.

Conclusions.

It is apparent from the results obtained that the area covered by all the shafts sampled is generally too low in value to be worked economically.

The western belt along the old tram reserve shows slightly better values but the area tested is much smaller and it is doubtful if it could be profitably treated by itself.

With the exception of No. 1 shaft the deposits were not penetrated to rock bottom and it is just possible that gold bearing gravels exist below the bottoms of the other shafts.

There is also a possibility of the existence of other small areas of payable ground within the land held by Murray and others which have not been prospected by means of shafts.

F. Blake (Sgd).
FIELD GEOLOGIST.

Mines Department,
Hobart.
21/8/34.

Shafts	Depth in Feet.	Section	Fine gold contents in grains per cubic yard.	Remarks.
No.1	7'0"	Sand & grit Quartz & sandstone wash ..	5'0" .42525 2'0"	Bottomed on sand- stone.
No.2	7'0"	Sand & grit Quartz & Sandstone wash	5'0" .42525 2'0"	Bottomed on blue clay with some pebbles.
No.3	6'0"	Sand & grit	3'0" 3.33007	do.
No.4	6'0"	Sand & grit Quartz & sandstone wash	4'0" 1.60477 2'0"	Bottomed on slate. wash with clay.
No.5	6"	Quartz & sandstone wash	6'0" .33048	Bottomed on slate wash.
No.6	7'6"	Sand & grit Quartz & sandstone wash	4'6" 13.85975 3'0"	do.
No.7	7'0"	Sand & grit Quartz & sandstone wash	4'6" .93798 2'6"	Bottomed on clay.
No.8	5'0"	Sand & grit Quartz & sandstone wash	1'0" .11299 4'0"	do.
No.9	4'3"	Sand & grit Quartz & sandstone wash	4'0" .14944 0'3"	Still in wash on bottom
No. 10	5'0"	Clay drift with grit Wash with clay ..	3'6" .41990 1'6"	Blue grey clay on bottom.
No.11	5'6"	Sand & clay drift Sand & clay drift with pebbles	2'6" .64962 3'0"	Still in drift with pebbles on bottom.
No.12	5'0"	Sandy drift Wash with clay	4'6" .11299 0'6"	Still in wash on bottom.
No.13	3'9"	Quartz pebbles with sand.. Wash with sand and clay.	1'9" 2.06307	