

BERENS RIVER MINES LTD.
(Non-Personal Liability)
717-744 West Hastings St.,
Vancouver 1, B.C.

671869

April 5th, 1954.

Mr. Earl Brett,
Empire Valley Gold Mines Ltd.,
P.O. Box 33,
CHILLIWACK, B.C.

Dear Sir:-

Enclosed herewith is a signed copy of my last report on your property on Black Dome Mountain near the head of Lone Cabin Creek, Clinton Mining Division. I trust that it will be sufficient for your needs.

Although this company is not presently interested in optioning medium grade gold deposits, it is my personal opinion that the widespread indications of auriferous mineralization, the pronounced difference in elevation of the various exposures, and the apparently strong structural continuity as exhibited by the Giant Vein, all indicate possible gold mineralization of sufficient merit to justify additional prospecting by the owners.

Of the present exposures, the Giant and Upper Red Bird veins are the most attractive and additional work should be concentrated on them. As an initial effort, my recommendation would be to strip the surface of the Giant Vein between the present outside trenches and follow this with sufficient rock trenching to permit fresh samples to be cut and the vein to be mapped. Further work will depend on the results you achieve.

In the event that this work is done by your company, Berens River Mines will welcome the opportunity for the further consideration of your property on its completion.

Very sincerely yours,

"D.M. CANNON"

DMC/jg
Enc.

REPORT ON PROPERTY OF EMPIRE VALLEY GOLD MINES LIMITED
CLINTON MINING DIVISION, BRITISH COLUMBIA

Introduction

The data contained in the following report was acquired during two trips to this property, July 21st and 22nd, 1953, and October 3rd to 7th, 1953.

Initial prospecting on the property was unconcentrated and inconclusive. Very little attempt was made to develop strike continuity to any of the various showings. During this past field season some additional trenching was done on the two best looking exposures.

Conclusions

Preliminary prospecting has established the presence of widespread marginal gold values in several veins. Gold is found in the free state and is also probably associated with pyrite.

Of the several mineralized structures that have been exposed, the Red Bird and Giant Veins are the most important. These show sufficient strike continuity and persistence of values to warrant additional exploratory development work.

The other vein exposures on the property are too low grade or too narrow to be interesting as an initial effort.

A bulk test of the placer leases owned by the company indicated an overall gold content of approximately 50¢ per yard of gravel. Unless unforeseeable operating difficulties are encountered, this should be minable at a profit.

Title

The property owned by Empire Valley Gold Mines Ltd. consists of eight full lode claims and two fractions, namely:-

Moosehorn M.C.	Lot 7871
Saddle M.C.	" 7872
Whiskey Jack M.C.	" 7873
Pinion Pine M.C.	" 7874
Bonanza M.C.	" 7876
Eldorado M.C.	" 7877
Black Dome M.C.	" 7878
Ptarmigan M.C.	" 7879
Electrum Fr. M.C.	" 7875
Sugar Bowl Fr. M.C.	" 7880

In addition, the company owns six placer leases on Fairless Creek, numbered 339 to 344.

Location and Access

The claim group is located at elevations ranging from 6000 ft. to 7500 ft. on the south, west and north slopes of Black Dome (Porcupine) Mountain, approximately 35 airline miles S 75° W from the town of Clinton on the Cariboo Highway and the P.G.E. railroad, or 60 airline miles S 15° W from the town of Williams Lake.

The property is accessible from the Cariboo Highway from a point 12 miles north of Clinton. From this point there is a rough but passable automobile road that extends northwesterly to cross the Fraser River at Gang Ranch bridge, a distance of 66 miles. From the bridge a similar road extends southerly 17 miles to Empire Valley Ranch. The mining company has, this year, built a new road from the ranch westerly for 13 miles to the property.

Timber and Water

There is virtually no timber within the boundaries of the claim group as it lies mostly above timber line. There are good stands of white pine along the road between Empire Valley Ranch and the mine.

Water is available from the tributaries of either Lone Cabin Creek or Porcupine Creek, a tributary of Lone Cabin Creek. Hose lines up to 3000 feet long will be needed for initial exploratory diamond drilling.

Power

There is no immediately available hydro electric power within 60 miles of the property.

Improvements

This year the company constructed 23 miles of excellent access road from the end of the old road at Empire Valley Ranch up the north slope of Lone Cabin Creek Valley to the properties.

A portable camp consisting of cookhouse, four-man bunkhouse, two-man bunkhouse and office, and warehouse, is on the property.

Geology

The rock underlying the claim group consists of coarse andesite porphyry or fine grained porphyritic diorite, that is overlain by a later dull pink to dark reddish vesicular rhyolite. The vesicles are filled with carbonaceous material, probably calcite. Surface exposures suggest that the rhyolite is later in age than the vein mineralization as well as the andesite and has flowed over and obscured it in some places.

The vein structures are all essentially the same. They strike in a generally north-easterly direction, but dip both to the east & west. They consist of poorly defined shear or shatter zones impregnated with quartz. Some veins (Red Bird) show a high degree of jasperization both

in the quartz and included fragments of host rock.

Metallic mineralization consists of sparse pyrite and gold. The latter metal was observed in the free state in the quartz of four different veins and was panned from the residual material of two others. Surface oxidation is prevalent in all vein zones at least to the depth that they have been exposed (2-3 feet).

Veins

Sugar Bowl Vein is partly exposed in one pit near the southern boundary of the claim group. It has an apparent strike N 23°E and dips vertically. A line of fairly heavy float up-slope to the north to a pit 250' distant suggests the continuation in that direction. This pit did not reach bedrock. There is heavy overburden to the south.

In the pit where it is exposed the vein consists of a 2 foot quartz vein slightly mineralized with pyrite and some visible gold. The east wall is slightly brecciated, highly altered for a distance of 1.2 feet and mineralized with specks of oxidized pyrite. Some free gold was seen associated with the oxidized sulphide. The west wall is more brecciated and is laced with a network of quartz stringers for a distance of 7.2' from the quartz vein. No gold was seen in this wall.

Ribbon Vein

The Ribbon Vein strikes parallel to the Sugar Bowl and lies 147' to the west. Only one pit has been taken down to solid rock. The possible continuation to the north can be followed by heavy float for a distance of 200'. There is deep overburden to the south.

The vein shows a width of 3.3 feet consisting of stringers of quartz in altered andesite porphyry. Sparse sulphide has been somewhat oxidized. No gold was observed in the vein but crushed material showed a good "tail" on panning.

Gray Shear

The Gray shear lies 500 feet north of the southern boundary of the claim group and 150 feet west of the central location line. It is exposed in one pit. This zone consists of slightly rusted shear with practically no quartz, in andesite porphyry. The exposed width is 12 feet. The strike of the zone is N 60°E. No gold was seen in this zone. It is reported to have been revealed by panning.

Red Bird veins

The Upper and Lower Red Bird veins are exposed at the location posts designating the centre point of the four most southerly claims of the group. They are parallel and strike in a N 50°E direction. Between the two veins there is 150 feet of rusty soil and quartz float. On panning the soil generally shows a few colours of gold.

The Upper Red Bird vein has been exposed by trenches for a length of 645 feet. The trenches are badly sloughed and in some cases full vein widths are not exposed. The vein consists of lenticular stringers of quartz in fairly well brecciated and altered andesite porphyry. The wall rock and included breccia fragments have been highly jasperized. Metallic mineralization consists of oxidized pyrite and some free gold. The exposed width of vein varied from 2.8 feet at the northeasterly end to 4.0 feet at the southwesterly. To the north east the vein has been obscured by what appears to be a tongue of later flow rhyolite. The southwesterly extension is covered with slide rock and overburden.

The Lower Red Bird is exposed in one trench as an oxidized shear zone 3.9 feet wide. Gold was panned from this trench. Additional bulldozer work failed to reach bedrock.

No. 4 Vein

No.4 Vein is exposed in a shallow trench 100 feet long, approximately midway between the initial and final posts of the second most northwesterly claim of the group. The vein, as exposed, strikes N 31° SE. It shows a width of 2 to 4 inches of lenticular drusy quartz in a 2 foot fault zone in andesite. The quartz has largely been picked out by Mr. Frenier while prospecting. Where it can be seen, it generally shows a gold content.

Honey Vein

The Honey vein is parallel to and approximately 100 feet north of the No. 4 vein. It has been exposed in two shallow trenches as a narrow quartz-filled crack in the andesite. No continuity has been established.

Giant Vein

The Giant Vein lies 303 feet northwest of the centre posts of the claim group. It has been exposed by four trenches over a distance of 480 feet. The vein strikes N.52°E and dips fairly steeply to the southeast. Vein filling consists of sulphide bearing quartz with highly oxidized somewhat jasperized sheared rock. Widths vary from 2.0 to 4.0 feet.

No. 13 Vein

No.13 Vein is 4.0 - 6.0 foot shear containing reticulated quartz stringers.

No.14 Vein

No.14 vein is exposed in one pit 20 feet above the new road at the old campsite. It consists of 1.5 ft. of quartz with 1.0 ft. of highly sheared material on the footwall. The zone strikes N.45° E and dips 78°NW. Gold was panned from the footwall shear.

Three additional vein exposures immediately outside the property boundaries were also examined, but do not appear important at this time.

Samples

Thirty samples were taken during my two visits to the property. The samples were chip channels consisting of pieces 3/4 " to 1" in diameter. Each piece was examined so as to avoid free gold where possible. Where an inordinate amount of oxidation was present, the samples were washed.

<u>Sample No.</u>	<u>Description</u>	<u>Width</u>	<u>Gold</u>	<u>Silver</u>
1	Slightly oxidized quartz from Sugar Bowl main pit	2.0'	.07	1.1
2	Slightly oxidized wall rock with quartz stringers. Adjoining sample 1 to the west	5.5'	.05	1.0
3	Quartz stringers in fracture zone slightly south of property line.	1.5'	.03	.45
4	No.14 Vein.1.5' of quartz & 1.0' of shear. Shear badly oxidized	2.5'	.06	.75
5	Sugar Bowl Vein - Altered wall rock. Adjoining sampe 1 to the east	1.2'	.17	1.4
6	Sugar Bowl - Wall rock & quartz. Adjoining sampe 2 on west	1.7'	Tr.	.4
7	Ribbon Vein. Altered host rock with bands of quartz slightly oxidized	3.3'	.22	1.9
8	Gray Vein. Sheared andesite. Slightly rusty.	12.0'	.01	.2
9	Red Bird Vein.No.3 open cut. Jasperized shear with quartz	4.6'	.66	.75
10	Red Bird Vein - No.4 open cut Similar material to Sample 9	2.8'	.10	.65
11	Red Bird Vein - No.5 open cut Similar to 10	3.8'	.64	.85
12	Lower Red Bird No.7 open cut Rusty shear	3.9'	.01	.15
13	Upper Red Bird -No.11 open cut Similar to 10	4.0'	.03	.25

Cont.

<u>Sample No.</u>	<u>Description</u>	<u>Width</u>	<u>Gold</u>	<u>Silver</u>
14	No.4 Vein - 2 inches of Quartz. Remainder sheared rock. Oxidized	2.3'	.53	.7
15	Giant Vein - quartz and jasperized wall rock. Oxidized	4.0'	.28	.85
16	Kilbourn showing - quartz with some iron stain	1.2'	.01	.48
17	Schroeder showing -white quartz with specks of magnetite	1.7'	.12	.10
18	Fenton showing - sheared volcanics with quartz stringers	2.5'	.03	.10
19	Westerly extension of Giant Vein Fresh quartz	2'	.58	.35
20	Hangingwall adjoining Sample 19	2.9'	.02	.80
21	Footwall adjoining Sample 19	2.0'	.04	.15
22	Middle cut on Giant Vein Fresh quartz	3.6'	.72	.80
23	East side of new cut on Upper Red Bird. Oxidized quartz		.04	.25
24	Wall rock adjoining sample 21	4.7'	.02	.10
25	West side of new cut on Upper Red Bird - Fresh quartz	3.4'	.44	.30
26	Wall rock adjoining sampe 23	2.0'	.03	.10
27	Sugar Bowl Vein. Check of Sample 23	6.0'	.03	1.35
28	Sugar Bowl Vein. Check of Sample 1	2.0'	.02	.40
29	Sugar Bowl Vein. Check of Sample 5	3.0'	.06	.10
30	No.13 Vein - Altered shear with quartz stringers	3.0'	.06	.12

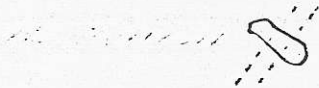
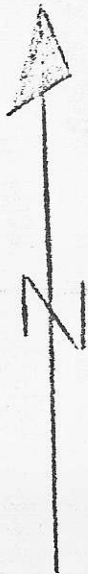
Recommendations

It is hereby recommended that exploratory development of the Upper Red Bird and Giant Veins be continued in the following manner:-

1. Institute a programme of rock trenching to fully expose the veins along their strike between the most easterly and westerly trenches that have already been put in.
2. Carefully map and sample the exposed vein in detail.
3. If the gold content of the veins averages more than 0.40 ounces per ton across minable widths a diamond drill programme is then justified.
4. Continued, carefully supervised development of the placer leases, to establish a cost factor is warranted.

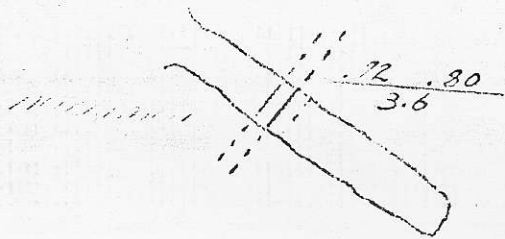
"D. M. CANNON"

NOVEMBER 16, 1954.



$\frac{.28 \ .85}{4.0}$

OVERBURDEN



$\frac{.72 \ .80}{3.6}$

GIANT VEIN

SCALE 1 IN = 50 FT.

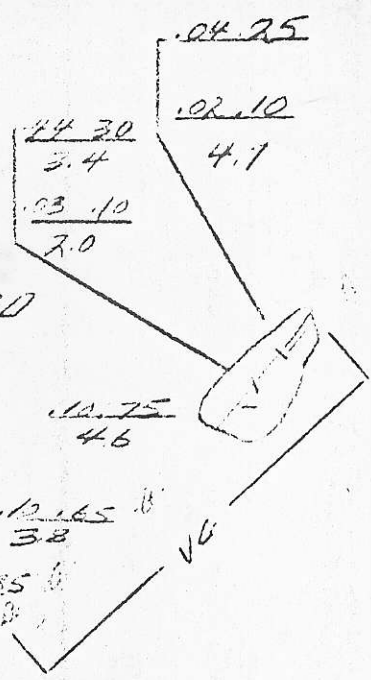
ASSAY SEQUENCE

ALL AG
WIDTH

MIN 11 - 500

SOFT ZONE VOLCANICS

$\frac{.58 \ .35}{2.0}$



LOWER RED BED

$\frac{.01.15}{3.9}$

$\frac{.10.75}{4.6}$

RUSTY FLINT

SOIL PANS GRIND

$\frac{.12.65}{3.8}$

$\frac{.64.85}{3.8}$

TALUS SLOPE

UPPER RED BED

TALUS SLOPE

$\frac{.03.25}{4.0}$

RED BED SHOWING
 SCALE 1" = 100 FT.
 OPEN SEQUENCE

Full Fig
 WIDTH

$\frac{35}{3.5}$

$\frac{30}{4.7}$

$\frac{30}{3.4}$

$\frac{10}{2.0}$

LOWER RED BIRD

FLOW
ROCK

$\frac{01.15}{3.9}$

$\frac{25}{4.5}$

RUSTY FLOAT
SOIL PANS GOLD

$\frac{10.65}{2.3}$

$\frac{24.35}{3.8}$

UPPER RED BIRD

TALUS SLOPE

TALUS SLOPE

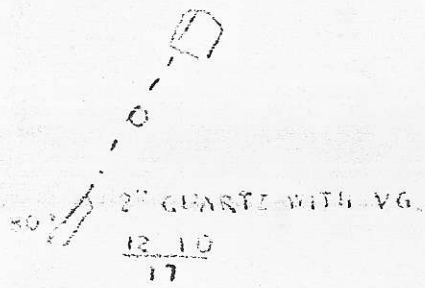
$\frac{23.25}{4.0}$

RED BIRD SHOWINGS

SCALE 1"=100'

ASSAY SEQUENCE

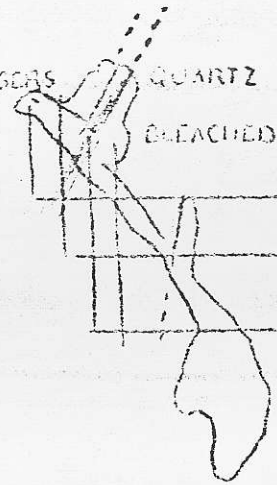
$\frac{10}{15}$
WIDTH



1 MASSIVE ANDERITE PORPHYRY
2, 1/2' QUARTZ STRS.

SCHRAEDER SHOWING
SCALE 1 IN. = 90 FT.

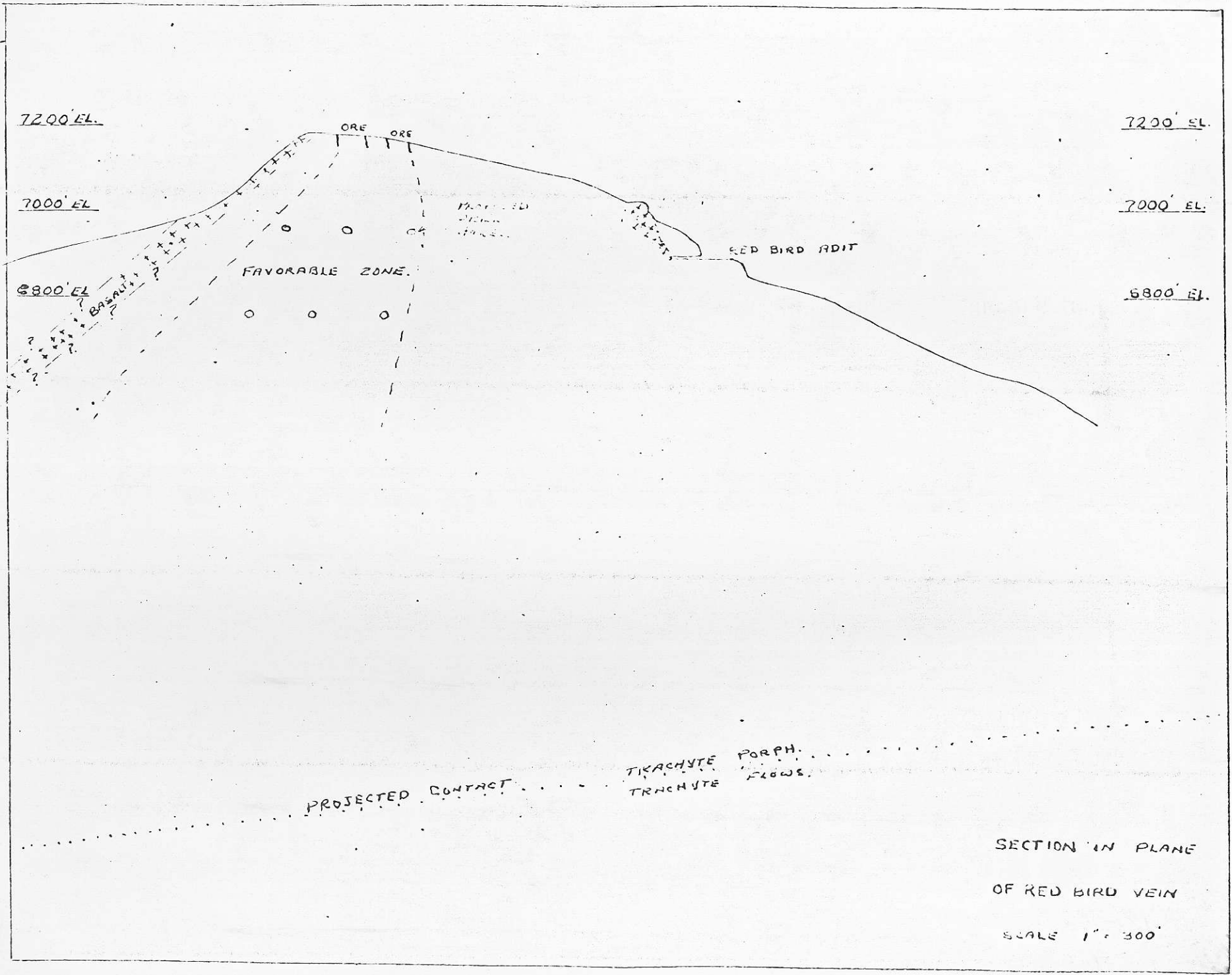
QUARTZ STRINGERS
IN BLEACHED
VOLCANICS



QUARTZ VEIN
BLEACHED VOLCANICS SOME SULPHIDE

RUSTY OXIDATION

TR	0.4
	1.7
CS	1.0
	5.5
OT	1.1
	2.0
.17	1.4
	1.2



7200 EL.

7200' EL.

7000 EL

7000' EL.

6800 EL

6800' EL.

ORE ORE

BASALT

FAVORABLE ZONE.

PROJECTED CONTACT

RED BIRD ADIT

PROJECTED CONTACT

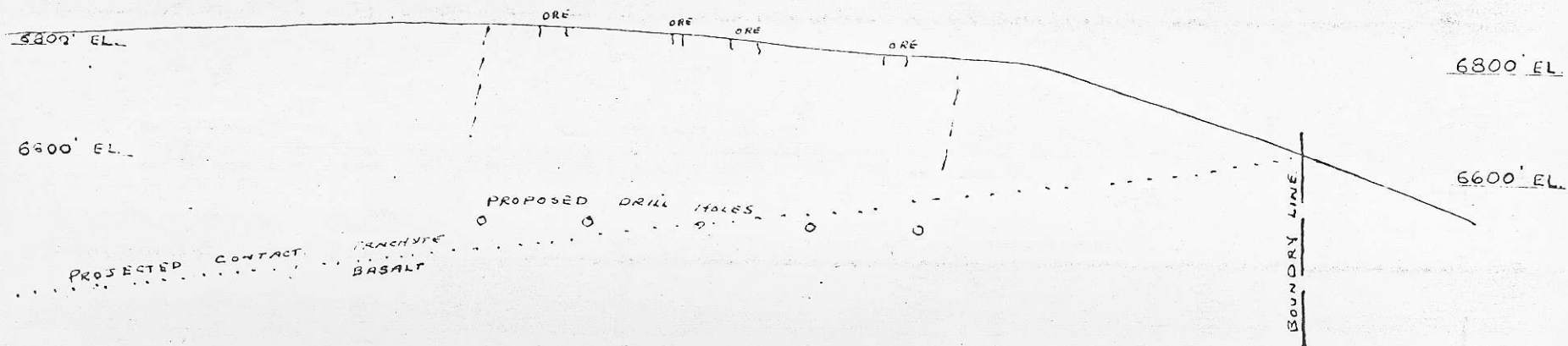
TRACHYTE
TRACHYTE

PORPH.
FLOWS

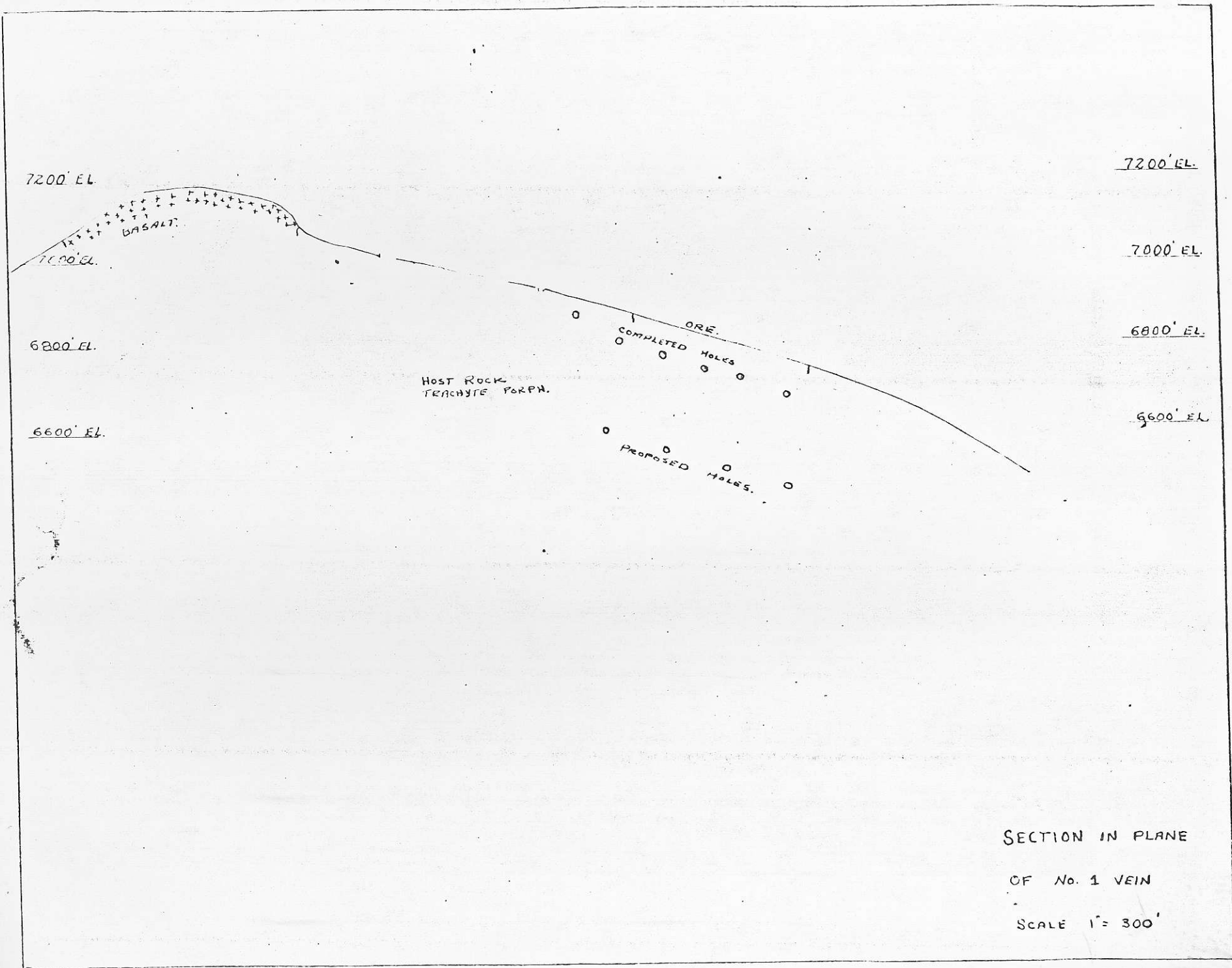
SECTION IN PLANE

OF RED BIRD VEIN

SCALE 1" = 300'



SECTION IN PLANE
OF GIANT VEIN
SCALE 1" = 300'



SECTION IN PLANE
OF No. 1 VEIN
SCALE 1" = 300'