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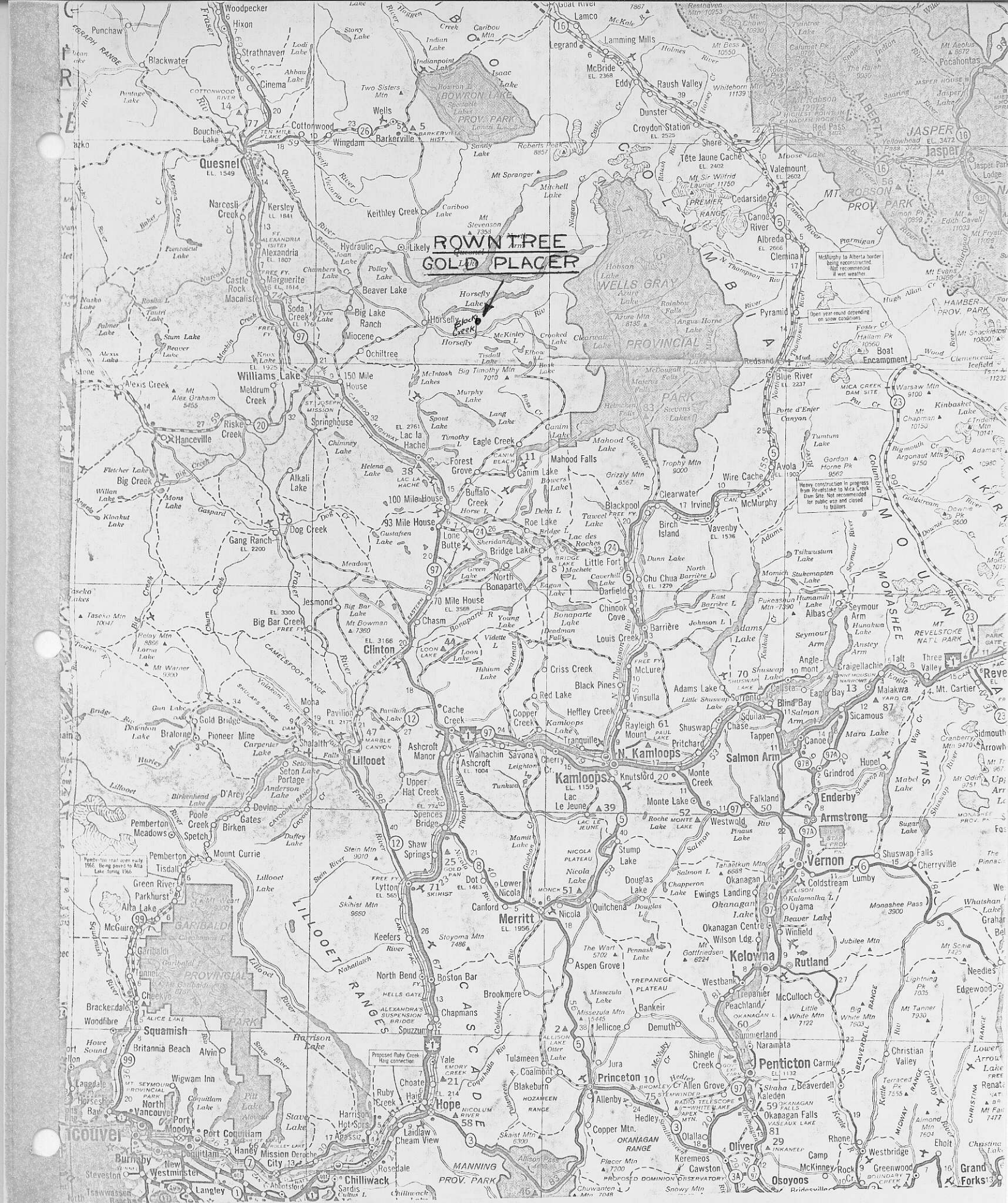
REPORT  
on  
THE ROWNTREE GOLD PLACER  
HORSEFLY AREA, BRITISH COLUMBIA

for  
DONNA MINES LTD.

by  
R.W. PHENDLER, B.Sc., P.Eng.

Vancouver, B.C.

September 5th, 1969.



**ROWNTREE GOLD PLACER**

SCALE: 1" = 30 MILES

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The potential gold placer deposit, with which this report is concerned, is 50 miles northeast of Williams Lake, in the Cariboo M.D. of British Columbia. It is in the Horsefly area where activity commenced in the 1860's and continued until about 1912, when the larger placers were worked out.

Black Creek, on which the Rowntree Gold Placer is located, is actually eighteen miles east of Horsefly, and is a tributary of the Horsefly River.

Geological work in 1930-1938 by Douglas Lay of the British Columbia Department of Mines led to the theory that a buried Tertiary channel of Horsefly River exists 750' vertically above and two miles to the north of the present Horsefly River. The gravels within this channel were proven gold-bearing as were the transverse Black Creek gravels. Moreover no gold was ever found in Black Creek upstream from the old channel. Operations on Black Creek were carried out for many years but records of total production are not available.

During the writer's examination on August 25th, 1969, sluicing operations were carried out in a small way and about ten 1/8" gold flakes were recovered. It is the opinion of the writer that the Rowntree prospect warrants testing. A staged program is recommended, the first stage to include a seismic survey and limited test holing by churn drilling - for a total cost of \$21,450.

A second, more comprehensive drilling program is recommended if the first stage is successful in outlining substantial volumes of gravel running close to \$1.00 per cubic yard. The cost estimate for Stage 2 is \$44,000.

#### SCOPE

On August 24th and 25th, 1969, the writer examined the Rowntree Gold Placer with Mr. I. Todd, President of Donna Mines Ltd., C. Soux and J. Todd, fieldmen for Donna Mines Ltd.

Accompanying the above party were Messrs. Frank, Robert and Allan Arnes of Williams Lake, who control the property.

#### LOCATION AND ACCESS

The prospect is 50 miles northeast of Williams Lake in central British Columbia. By air it is 240 miles from Vancouver but, by road, the distance is nearly 400 miles. Access is by 50 miles of good gravel road from 150 Mile House on Route 97. Eighteen miles east of Horsefly, a 1½ mile bush road leads north to the diggings.

Elevation of the property is around 3500'; topography is relatively moderate. The region is well covered with second growth poplar, spruce and underbrush. Good timber is scarce.

Serviceable camp buildings exist on the property.

PROPERTY AND OWNERSHIP

The Arnes family of Williams Lake holds placer mining leases 3098 and 3099, each being 80 acres in size. They cover 1/4 mile along Black Creek and 1/2 mile along the assumed Tertiary channel of the Horsefly River. In addition, the Arnes family holds the water rights on Black Creek and the rights on 80 acres of tailings disposal area 3000 feet southwest of the placer deposit.

The property is presently under option to Donna Mines Ltd.

HISTORY

Placer mining operations in the area date back to 1862 and up to 1912, considerable gold was recovered, mainly west of Horsefly.

Exploratory work on Black Creek commenced around 1918 when unsuccessful test holes were drilled to test for bedrock east of Black Creek.

For several years after 1927 the property was worked in a small way by Rowntree Mines Ltd. In 1938 Mr. Sig Johnson acquired a lease on the property and operated it for a number of years.

Testing the gravel of the supposed ancient channel of the Horsefly River was carried out by Mr. Harold Arnes a few years ago but bedrock was not reached with an 82' vertical hole. This drilling was done in the Black Creek channel itself four hundred feet upstream from two adits. Nothing is known of values in the gravels penetrated and little has been done on the property since 1956.

Mr. A. Allen, Vancouver consultant, examined the prospect in August, 1959. Mr. J.A.C. Ross, also of Vancouver, examined the workings in April, 1964. Both reports are available. During the present visit, a few yards of gravel were sluiced and about ten 1/8" flakes of gold were recovered.

#### GEOLOGY AND ECONOMICS

(See Figs. 1 and 2)

Black Creek was the centre of placer attention for a long period of time because the deposits in the lower reaches of the channel were believed to be derived from a wide buried channel of Horsefly River that crosses Black Creek at right angles, i.e. running almost due west. This supposed old channel is marked by a clearly defined depression that can be followed for some miles. On either side of this old channel, in Black Creek, are andesite outcrops about 1300 feet apart.

Depths of bedrock in the present channel of Black Creek are generally unknown; near the supposed south rim of the old Horsefly River channel the depth is about 10-14'. One hole, about 400 feet upstream in Black Creek reportedly went 82' vertically without encountering bedrock. It is probable that bedrock beneath the old channel is at a lower elevation than bedrock elsewhere in Black Creek. Hence difficulty may be encountered in sluicing gravel over the south rim of the old channel.

No gold has ever been recovered on Black Creek upstream from the supposed old channel of Horsefly River. This old channel is

believed to be Tertiary; it has been traced for at least twenty miles downstream (west) to old productive placer workings near the town of Horsefly.

As reliable production records are not available, it is impossible to estimate with any accuracy the dollar value of the gravels treated to date. With this information lacking, the deposit must be regarded like an untested placer prospect.

According to calculations by J.A.C. Ross in his report of 1964, the area within the lease could contain 3,000,000 cubic yards of gold-bearing gravels. Various dollar values have been mentioned by the Arnes family members, who know more about this property than anyone, and these reports cannot be ignored. They state that the gravels within the old channel will run about 50¢ per cubic yard except for the bottom 20-30' which can be expected to run considerably higher.

Mr. Ross calculated a profitable operation at a rate of 1200 cubic yards per day, provided the gravels average \$1.00 per cubic yard. The first step, therefore, is to test the gravels and establish the values.

#### RECOMMENDED WORK

After observing the recovery of gold from gravel (albeit from only one location) and reading all the available reports and literature on the property, it is the opinion of the writer that testing is warranted.

Test-holing to bedrock with an efficient machine and a careful crew is recommended. Prior to test-holing, however, depth to



bedrock in the old channel must be ascertained accurately in order to facilitate the drilling. It is recommended, therefore, that a seismic survey be carried out across the old channel in several locations (see Fig. 1). Test-holing should then be carried out in one section about 200' west of Black Creek, and in Black Creek itself.

If this first stage drilling is successful in outlining substantial volumes of gravel averaging \$1.00 per yard, additional test-holing should then be carried out.

COST ESTIMATE

Stage 1

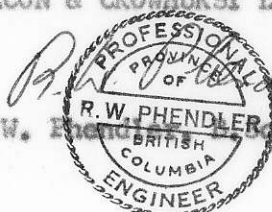
1. Seismic survey	\$1,500.00	
2. Test hole drilling - churn 1500' @ \$10/ft.	15,000.00	
3. Supervision - sampling - engineering	<u>3,000.00</u>	
	\$19,500.00	
Contingencies	<u>1,950.00</u>	\$21,450.00

Stage 2

1. Additional test hole drilling - churn 3500' @ \$10/ft.	\$35,000.00	
2. Supervision - sampling - engineering	<u>5,000.00</u>	
	\$40,000.00	
Contingencies	<u>4,000.00</u>	\$44,000.00
<u>Total</u>		\$65,450.00

Respectfully submitted,

BACON & CROWHURST LTD.

*R. W. Phendler*  
 R. W. PHENDLER, P. Eng.  


CERTIFICATION

I, Roy William Phendler, of the City of Vancouver in the Province of British Columbia, hereby certify as follows:

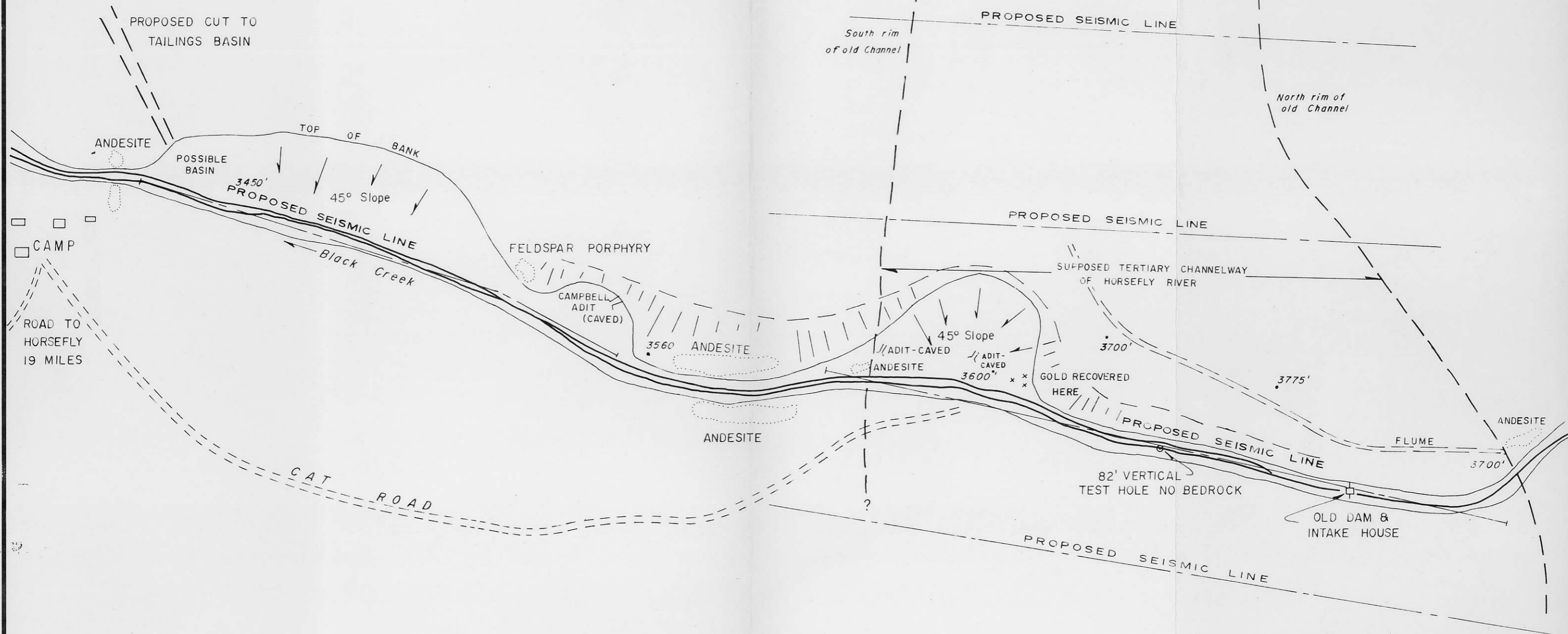
1. That I am a registered Professional Engineer in the Province of British Columbia, No. 4421.
2. That I am a graduate of McGill University, Montreal, Quebec, with a Bachelor of Science degree in geology.
3. That I have practiced my profession as geologist continuously for the past seventeen years in Quebec, Ontario, Saskatchewan and British Columbia in Canada; in some of the western U.S.A.; Mexico; and Peru and Colombia in South America.
4. That I have no interest directly or indirectly in the Donna Mines Ltd. placer claims nor do I expect to receive any.
5. That the information contained herein was compiled during an examination of the ground on August 25th, 1969.

*R. W. Phendler*  
R. W. Phendler, B.Sc., P.Eng.



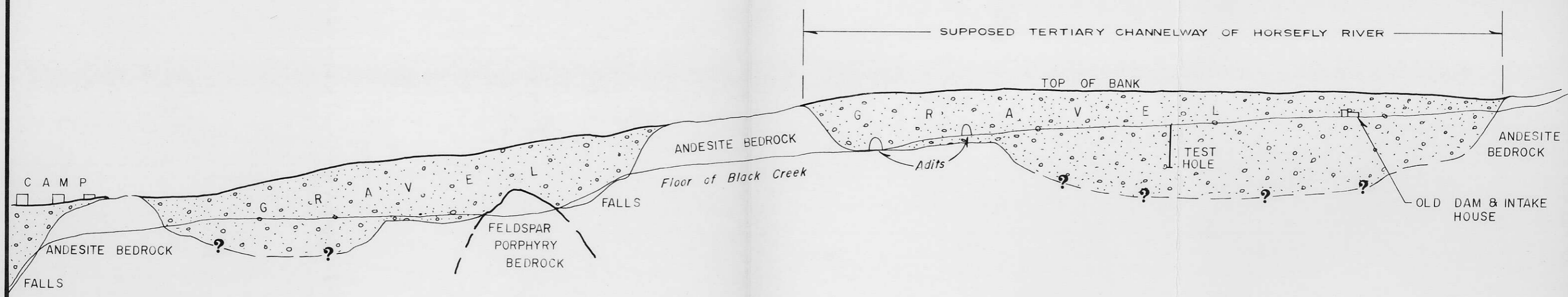
A circular seal for a Professional Engineer in the Province of British Columbia. The seal contains the text: 'PROFESSIONAL ENGINEER OF BRITISH COLUMBIA' around the perimeter and 'R. W. PHENDLER' in the center.

Vancouver, B.C.  
Sept. 5th, 1969.



BACON & CROWHURST LTD.  
VANCOUVER BRITISH COLUMBIA  
**ROWNTREE GOLD PLACER  
PLAN**  
HORSEFLY, BRITISH COLUMBIA

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BACON & CROWHURST LTD.  
VANCOUVER BRITISH COLUMBIA  
**ROWNTREE GOLD PLACER**  
VERTICAL SECTION ALONG BLACK CREEK  
LOOKING WEST  
HORSEFLY, BRITISH COLUMBIA

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