

GEOLOGICAL REPORT ON THE MISSION CREEK GOLD DEPOSITS

MISSION CREEK AREA

EAST OF THE CITY OF KELOWNA

VERNON MINING DIVISION, BRITISH COLUMBIA

by

R. E. RENSHAW, P. Eng.

Consulting Geologist

49°-50' North Latitude

115°-20' West Longitude

Vancouver, B. C.

6 Mar 75

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LOCATION MAP OF BILL GROUP  
MISSION CREEK, KELOWNA AREA  
VERNON MINING DIVISION, B. C.

To Accompany Report By:  
R. E. Renshaw, P. Eng.  
Consulting Geologist

March, 1975

BILL GROUP

BRITISH COLUMBIA  
MAIN HIGHWAYS, CITIES & TOWNS

Scale  
0 10 20 30 40 50 Miles

DOMINION MAP LIMITED  
571 HOWE ST., VANCOUVER B.C.

GEOLOGICAL REPORT ON THE MISSION CREEK GOLD DEPOSITS

MISSION CREEK AREA

EAST OF THE CITY OF KELOWNA

VERNON MINING DIVISION, BRITISH COLUMBIA

INTRODUCTION

This report is prepared at the request of Mr. William J. Thompson, Executive Administrator, 301-1237 Burrard St. Vancouver, B. C. It is based upon an examination of the property made February 15 and 16, 1975 under winter conditions, a study of regional geological reports published by the Geological Survey of Canada and the British Columbia Bureau of Mines, plus my personal knowledge of the area dating back to 1950.

Gold is present in the post glacial creek sands of Mission and Hydraulic Creeks as well as in cemented conglomerate of preglacial or an interglacial age.

Both types of gold occurrence warrant an exploration program to determine their economic potential.

LOCATION AND ACCESS

The property is located immediately east of the city limits of Kelowna. From the downtown area to the claims it is about 13 miles by graded secondary gravel roads maintained by the British Columbia Department of Public Works. Little or no money will be required for road building other than preparing test hole sites.

The geographical location of the property is 49°-50' north latitude and 115°-20' west longitude.

## VEGETATION

Little or no timber is present and consists of small stands of pine. In the valley bottoms of Hydraulic and Mission Creeks some alder is present.

Lumber and sawn timbers can be purchased from numerous dealers and contractors in the area.

## WATER AND POWER

Ample water for all mining and milling purposes is available from Hydraulic and Mission Creeks. No tittle search has been made to the Water Resources Branch to determine the quantity available. There will be a larger amount available in the winter months than in the summer months when the farms and orchards are being irrigated.

Ample hydro-electric power is available from the transmission lines which pass through the property.

## TOPOGRAPHY

The property is located in the Okanogan Highlands, which locally in the claim area has a maximum elevation of about 2300 feet. The Creeks have incised a valley some 500 or 600 feet into the upland, causing areas of narrow canyon and wider valley floors.

## CLIMATE

Annual precipitation is about 15 inches per year and falls mostly as snow from December to February and may be some four feet deep. Light rainfall occurs in the spring and fall with the summer months being very dry.

Summer temperatures may be as high as 100° F. while winter lows may be below zero for 5 or 6 weeks.

However climatic conditions are such that year round exploration and development may be carried out with little or no lost time from inclement weather.

### ACCOMODATION

No accomodation is present on the property. However, due to the close proximity of the City of Kelowna no provision for a bunkhouse or cookery is required.

### SUPPLIES

Nearly all supplies can be purchased in Kelowna. If they are not available there they can be obtained from nearby Penticton or Vernon. Another alternative is from Vancouver within hours by air express or motor freight.

### LABOUR

An ample pool of experienced men and labour is present.

### HISTORY

Very little is known of the past history of the area. The only reported production is some 611 ounces of gold between the years 1870 - 1880. The total production must be considerably higher as small scale has been done ever since. Local rumor talk places it as some \$50,000.00 in the more recent years.

During 1974 the present owners did considerable panning and the results were encouraging. Eight keystone holes were drilled in the valley floor. The cuttings were panned and sent for assay. Holes 1 and 8 were high being 82.8 and 33.14 oz/t. The balance 2 to 7 returned 7.69;6.20;3.04;3.26; 7.71; and 1.29 oz/ton. The assay sheet is appended.

Neglecting the highs the average is 4.867 ounces gold/ton. The owners place a more realistic value of \$18.00 per ton with the average depth to bedrock of 20 feet.

### CLAIMS

The property is held by Mr. William J. Thompson, of Vancouver, B. C. It consists of 2 placer leases and 12 location claims. Additional claims should be staked.

Claims Bill 1 to 5 Record Numbers 18316/20, Date 23 Dec 74

Claims Bill 6 to 11 Record Numbers 18320/27 Date 30 Dec 74

### GEOLOGY

The oldest rocks in the area are Precambrian in age and consist of gneiss and schist of the Monashee group.

Tertiary basalt, andesite, and conglomerate rest unconformably upon the gneiss.

Post-glacial and Recent clays, sands, and gravels are also present in variable thicknesses.

Gold is present in two types of occurrences.

The first is by conventional placer mining of the creek gravels of Mission and Hydraulic Creeks. The second is a hard rock open pit and underground mining of the consolidated cemented Tertiary ? conglomerate.

Samples R 1, R 2, R 3 were taken from the conglomerate. They were weighed and measured for volume. Gold is present.

Samples R 4 and R 5 are creek sands. They were air dried, weighed and measured for volume. Gold is present.

These samples have been sent for assay and the results appended to this report.

No tonnage or yardage figures backed by engineering tests are available. Visually it is not difficult to assume that more than 10,000,000 cubic yards of both types are present at the owners estimated value of \$18.00/ton.

Recovery of nearly all the gold should present no difficulties either in the creek sands nor in the consolidated conglomerate.

I have no hesitation in recommending this property for exploration and development. Upon the completion of the exploration program considerable more reserves should be found.



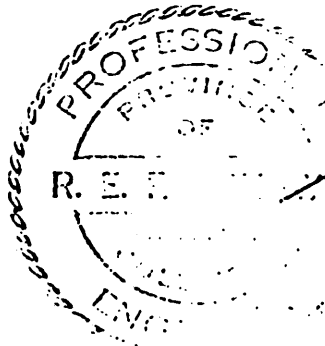
RECOMMENDATIONS

1. Survey claims by chain and compass.
2. Stake more claims.
3. Make a transit, chain , and stadia survey of valley and valley walls and prepare cross sections of topography. The grid to be on a 200 feet spacing and the maps on a scale of 40 feet to 1 inch.
4. Percussion drill the grid and establish grade and yardage available. 10,000 feet of drilling should be done.
5. Some minor creek operations can be done immediately to help defray some of the costs of the exploration program.

TABLE OF ESTIMATED COSTS

1. Surveys.	\$ 6000.00
2. Bulldoze roads, establish drill stations	6000.00
3. Percussion drilling, testing etc. about 10,000 feet required.	50,000.00
4. Engineering and supervision	10,000.00
5. Legal and head office	7,500.00
6. Logistics	15,000.00
7. Assays	2,500.00
8. Reserve for contingencies	15,000.00

TOTAL-----\$112,000.00



*R. E. Renshaw*  
R. E. Renshaw, P. Eng.  
Consulting Geologist

Sample R1 : Consolidated conglomerate, cobbles up to 3 inches diameter  
48 inch channel sample taken at face of small adit  
7 pounds - 6 ounce sample, volume 141.615 cubic inches  
Assay; 1.008 ounces gold per ton

Sample R2 : Fine sand taken from floor of small adit by face  
2 pound - 15 ounces, volume 56.446 cubic inches  
Assay: 3.032 ounces of gold per ton.


Sample R3 : Consolidated conglomerate, cobbles up to 3 inches diameter  
48 inch channel sample taken on north wall of small adit  
7 pounds - 8 ounces, volume 126.037 cubic ounces  
Assay : 1.008 ounces gold per ton

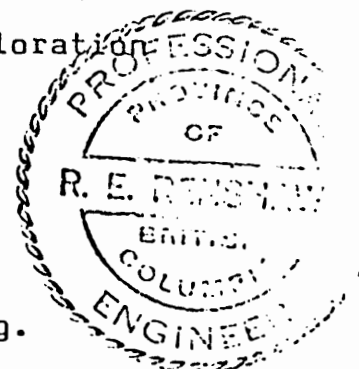
Sample R4 ; Creek sand, about 300 feet north of small adit,  
south side of creek  
3 pounds -11 ounces, volume 69.234 cubic inches  
Assay ; 2.202 ounces of gold per ton

Sample R5 : Creek sand about 3 hundred feet north of small adit  
north side of creek  
2 pounds - 6 ounces, volume 40.911 cubic ounces  
Assay : 2.028 ounces gold per ton

Sample R1, R3, R4, and R5 have a numerical assay of 1.5615 oz/ton  
or \$283.26 per ton in gold calculated at a value of \$175.00 per ounce.

Such preliminary results more than justify the exploration  
program recommended.

  
R. E. Renshaw, P. Eng.  
Consulting Geologist



MINE HILL

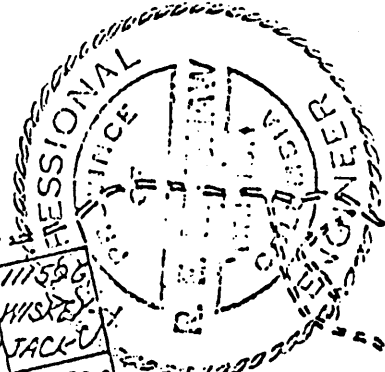
MIN.

CT.

DAVES

Mission Cr.

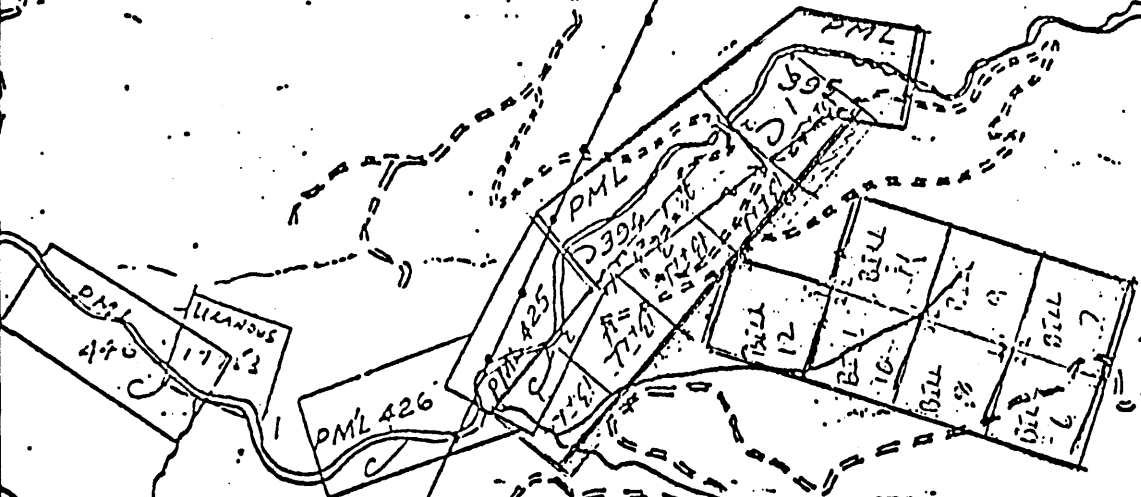
*Referred to  
6/14/75*



111576 CHICKA DEE	111586 WISKEY TACK
111566 PAIRO DICE	111586 BLUE HAWK

Hydraulic

Cr.



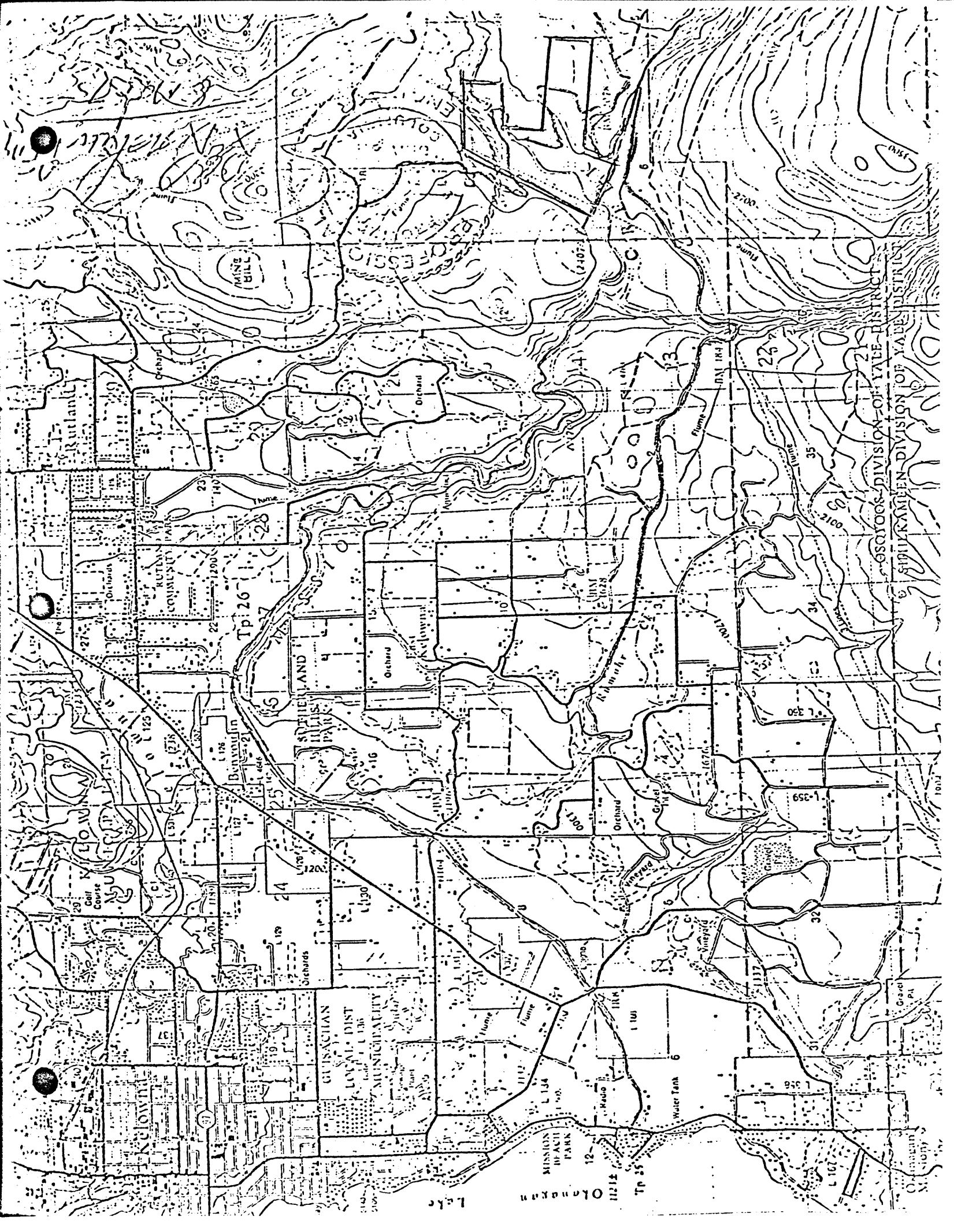
PML 440  
177/3

PML 426

PML 425

PML 395





MINE BILL  
ESCOO'S DIVISION OF TALE DISTRICT

ESCOO'S DIVISION OF TALE DISTRICT  
SULLY DIVISION OF TALE DISTRICT

Okanogan County  
Municipality

Tp 26

Okanogan  
Tp 35

Benavon

LOVELL DIST  
MUNICIPALITY

GUISACHIAN

MISSION BEACH  
PARK

WATER TANK

RADIO

ORCHARD

ORCHARD

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RUTLAND

RUTLAND  
COMMUNITY PARK

SPRUELL  
HILLS PARK

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TO:  
**MATHILLAN HOLDINGS LTD.**  
 1237 Burrard Street  
 Vancouver 1, B.C.  
 Attn: Mr. W. Thompson

**CERTIFICATE OF ASSAY**

No: **105-8203** DATE: **May 23rd/74**

We hereby certify that the following are the results of assays on: **Black Sand**

MARKED	GOLD	SILVER	COPPER	IRON	LEAD	ZINC	NICKEL	OTHER
	OZ/ST GRAMS	OZ/ST GRAMS						
4	7.69							
5	6.20							
6	3.04							
7	3.25							
8	7.71							
MISC 1	1.29							
2	33.14							

REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS ON REQUEST  
 PULPS AND REJECTS WILL BE STORED FOR A MAXIMUM OF ONE YEAR  
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ANALYST'S SIGNATURE: \_\_\_\_\_  
 ANALYST'S NAME: \_\_\_\_\_  
 ANALYST'S TITLE: \_\_\_\_\_