

DON TULLY ENGINEERING LTD.  
SUITE 102 - 2222 BELLEVUE AVENUE  
WEST VANCOUVER, BRITISH COLUMBIA

5377

~~XXXXXXXXXX~~

#5375

GEOPHYSICAL ASSESSMENT REPORT

ON THE

BIG BEN FRACTION, YOUCO NO. 2, 4, FRACTION,  
GOLD ROCK NO. 1, 3, FRACTION MINERAL CLAIMS  
ZEBALLOS RIVER AREA  
ALBERNI MINING DIVISION  
BRITISH COLUMBIA

N.L. 50°-03'

W.L. 126°-47'

92L/2W

FOR

DIANA EXPLORATIONS LTD. (N.P.L.)  
3RD FLOOR - 555 HOWE STREET  
VANCOUVER, BRITISH COLUMBIA

BY

DONALD W. TULLY, P.ENG.

FEBRUARY 15, 1975

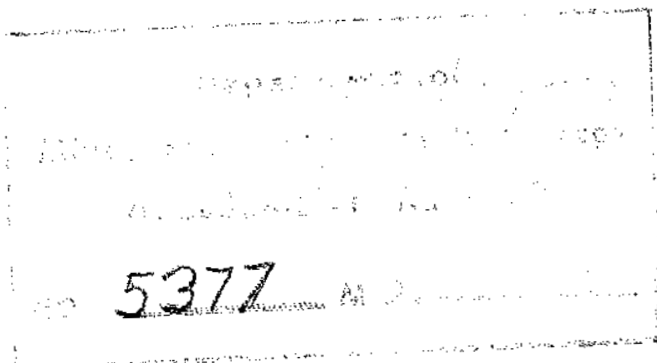
WEST VANCOUVER, B. C.

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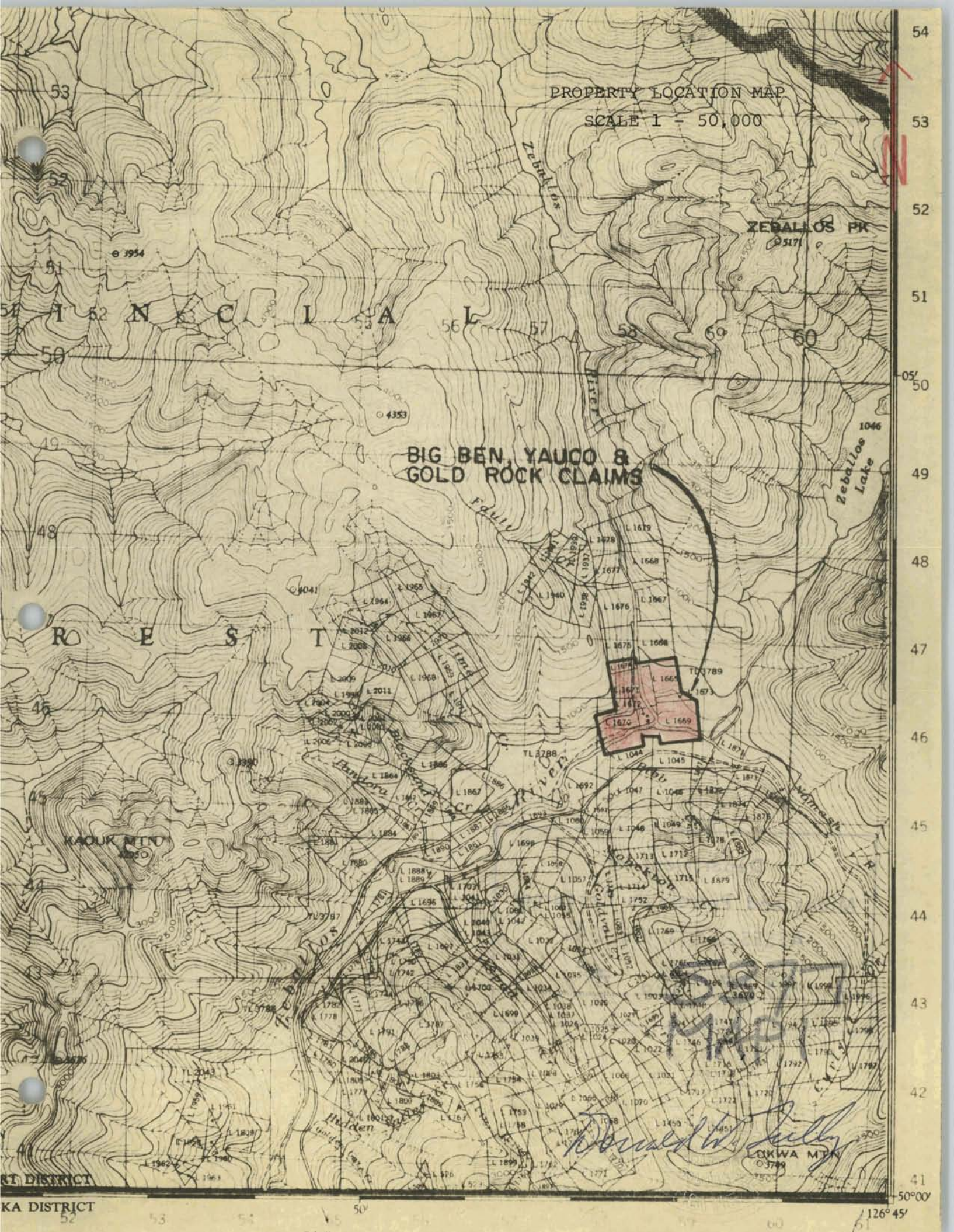




PROPERTY LOCATION MAP

SCALE 1 - 50,000

BIG BEN, YAUCO & GOLD ROCK CLAIMS



ZEBALLOS PK  
5171

Zeballos Lake  
1046

R O E S T

I N C I A L

KAOUK MITO

*Donald W. July*  
LOKWA MTK  
3789

RT DISTRICT

KA DISTRICT

54  
53  
52  
51  
50  
49  
48  
47  
46  
45  
44  
43  
42  
41

52 53 54 50 51 52 53 54  
126° 45'



## INTRODUCTION

This assessment report was prepared at the request of Diana Explorations Ltd., (N.P.L.), 3rd Floor, 555 Howe Street, Vancouver, British Columbia. The purpose was to summarize the results of a Ronka EM-16 geophysical survey over most of the BIG BEN FRACTION, YOUCO and GOLD ROCK claims located on the Zeballos River, Vancouver Island, British Columbia.

The field work was conducted on January 27, 28, 29, 30, 1975 with Mr. Uno Leis, Manager, Strato Geological Ltd., Vancouver, British Columbia.

## SUMMARY AND CONCLUSIONS

North of the claim group high-grade gold-bearing quartz veins occur along fissure-filled fractures associated with fault zones in the Zeballos area. Chalcopyrite, pyrrhotite, minor sphalerite, pyrite and galena accompany the precious metals in the veins.

A strong north-south fault occurs in the valley of the Zeballos River which traverses the claim group along a general north-south strike.

No significant anomalies were recorded from the results of the Ronka EM-16 survey. The lack of anomaly may be due to depth of overburden as gravel beds are common in the area surveyed.

PROPERTY - LOCATION, ACCESS, TOPOGRAPHY

The property comprises seven full and fractional mineral claims located on the Zeballos River at the confluence of Nomash Creek.

Access is best from the town of Zeballos at tidewater some five miles distant to the south by fair gravel road.

Road access from mileage 4 west of Woss Camp on the Gold River - Beaver Cove road is suitable for pickup truck travel.

The claims are situated at the junction of Zeballos River and Nomash Creek on the west side of the Haihte Range and south-west of Zeballos Lake about elevation 400 - 900 feet above sea-level. Steep topography lies west of the Zeballos River on the claim group. Heavy snow conditions prevented travel on the steep slopes during the geophysical survey.

Rainfall is abundant and the climate temperature is moderate.

Gravel overburden covers much of the south part of the claim group.

LAND USE - ENVIRONMENT

Land use map 92L is available for the area of the claim group.

A study of existing topographic maps suggests the multiple land use potential is related to timber, fishing and mineral.

Second-growth timber potential is considered minimal at the present time over the claim group.

Sport fishing along the Zeballos River and the creeks in the headwaters area is believed to be important to tourism.

Vein-type mineral potential is considered good but relatively unexplored due to overburden.

CLAIMS

The seven reverted crown grant mineral claims are shown on British Columbia Department of Mines and Petroleum Resources claim map 92L-2W(M) in the Alberni Mining Division.

Information from the Mining Recorder's Office at Port Alberni on February 13, 1975 was as follows:

<u>CLAIM NAME</u>	<u>RECORD #</u>	<u>RECORDED DATE</u>	<u>RECORDED HOLDER</u>
YOUCO No. 2	20378	Jan. 31/74	Diana Explorations Ltd. (N.P.L.)
YOUCO No. 4	20377	"	"
YOUCO FRACTION	20379	"	"
GOLD ROCK FR.	20382	"	"
GOLD ROCK No. 1	20381	"	"
GOLD ROCK No. 2	20380	"	"
BIG BEN FRACTION	20445	Feb. 19/74	George O'Brien







HISTORY - PREVIOUS DEVELOPMENT - REFERENCES

The present claim group is part of the south part of the former King Midas No. 1 property which was staked in 1926.

Records show the King Midas property shipped one ton of ore. It contained five ounces of gold and one ounce of silver. This production was reported from narrow gold-quartz veins carrying chalcopyrite and pyrrhotite.

Adits on separate veins are reported on the King Midas property. On one of these, the Main Vein, a 16-foot winze is reported and lateral development totalling 187 feet. Some of the workings described by H.C. Gunning on the Marks property in G.S.C. Summary Report 1932, Part AII, pages 39-42, probably occur just north of the present claim group.

During the period 1926 - 1948 thirteen lode-gold vein type mines in the Zeballos Camp produced a total of 287,811 ounces of gold.

The following publications have information pertinent to the BIG BEN, YOUCO and GOLD ROCK claim groups.

1. Annual Report of the Minister of Mines, B.C., 1938, Part F, Page 53;
2. Annual Report of the Minister of Mines, B.C., 1932, Page 205;
3. Geological Survey of Canada Memoir 272, Pages 47, 59;
4. G.S.C. Summary Report 1932, Part AII, Pages 39-42;
5. G.S.C. Map 1028A, Scale 1" = 1 miles;
6. G.S.C. Paper 74-8, Page 58.



GEOLOGICAL SETTING

Karmutsen volcanics mostly basaltic in nature occupy the west part of the claims.

East of the Zeballos River, Quatsino limestone occurs with minor horizons of intercalated volcanics.

Just south of the claim group a large mass of Coast Intrusion consisting of quartz monzonite and diorite trends northwest through the region.

A table of formations is as follows:

JURASSIC/CRETACEOUS	-	Quartz monzonite and diorite (Coast Intrusion)
UPPER TRIASSIC	-	Quatsino limestone
	-	Karmutsen volcanics

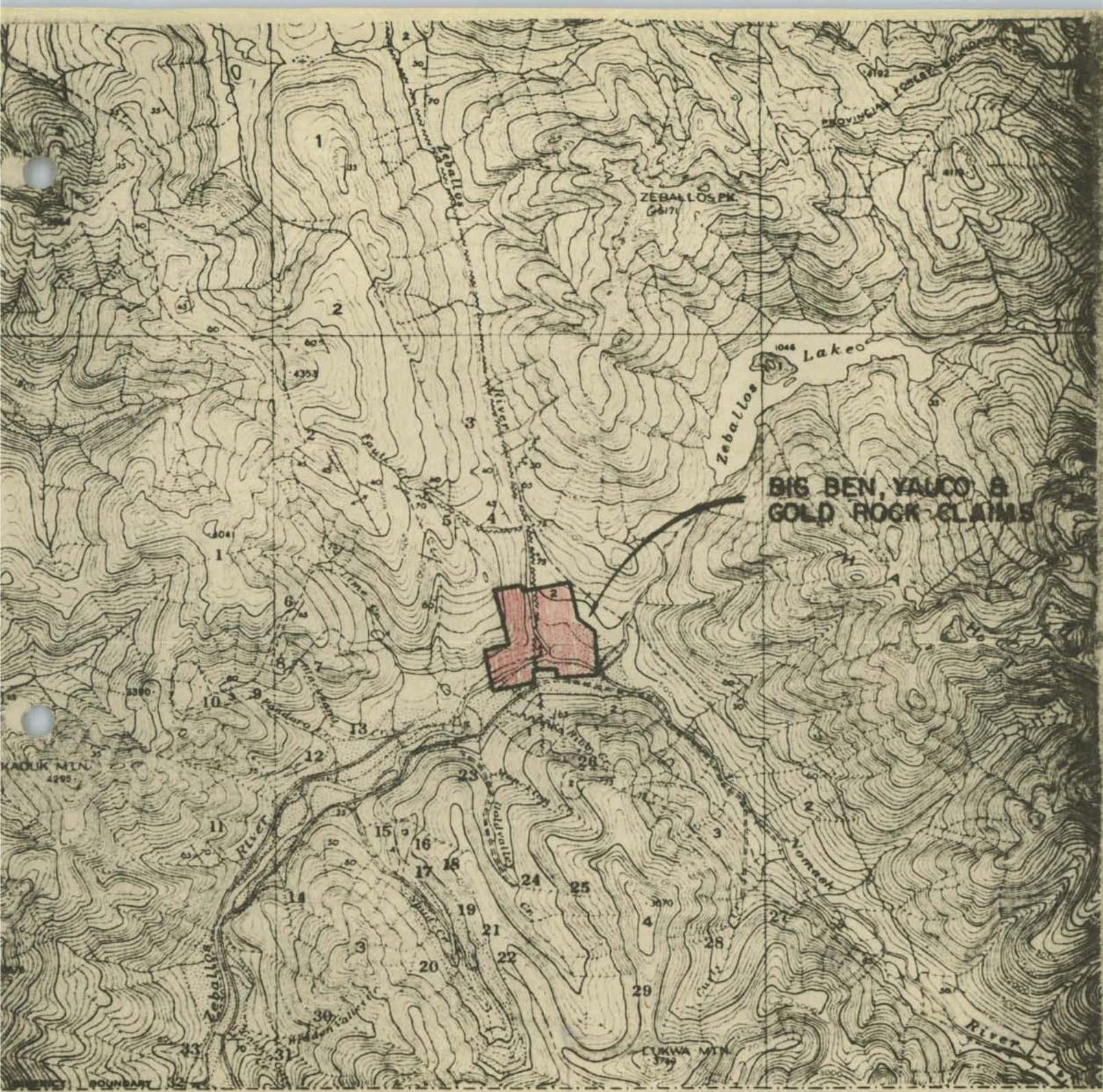
Structurally the Karmutsen trends northwest and dips southward.

The Quatsino strikes northerly and dips westward.

A fault trending north-south in the valley of the Zeballos River marks the contact between the Karmutsen and the Quatsino formations.

Most of the mineralization is probably related to phases of the Coast Intrusion complex in association with the Karmutsen volcanics.





**BIG BEN, YAUCO & GOLD ROCK CLAIMS**

Joins Map 1027A, "Zeballos"

50'

45'

PART OF GEOL. SUR. CAN. MAP 1028A

5377

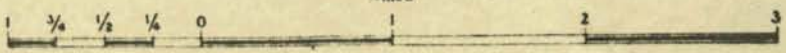
**WOSS LAKE**

VANCOUVER ISLAND  
BRITISH COLUMBIA

MAP 3

Scale: One Inch to One Mile =  $\frac{1}{63,360}$

Miles



*Donald W. Sully*





### MINERALIZATION

Although values from lode-gold veins are reported from the former King Midas property to the north there is no mineralization known to the writer on the claim group.

The property is considered from a geological point of view to be an excellent exploration bet in a favourable geological environment for high-grade gold vein deposits.

British Columbia aeromagnetic map A.M. 57-11 (Lime Creek) Zeballos Area, does not indicate any magnetic anomalies of significance in the area of the claim group.

### RONKA EM-16 SURVEY

#### CONTROL

Survey control was established using the confluence of the Zeballos River and Nomash Creek since heavy snow conditions covered the areas where claim posts were expected but not found.

Compass and chain lines were run on azimuth  $084^{\circ}$ T and  $264^{\circ}$  from a baseline established more or less parallel to the Zeballos River and a gravel road to Woss on azimuth  $354^{\circ}$ .

Readings were taken at 100-foot intervals along lines 400-feet apart and marked with flagging.

#### INSTRUMENT AND METHOD

The instrument used was a Ronka EM-16 portable unit Model 3329 rented from Geonics Limited, 510 West Hastings Street, Vancouver, B.C.



The instrument was oriented on VLF station NPG, Seattle, Washington. Readings were taken in the vertical field from the In-Phase and Quadrature dials on the instrument, at the NULL or as near to NULL as possible position, and recorded.

### RESULTS

The recorded readings were plotted on the map accompanying this report on scale 1" = 200 feet.

### INTERPRETATION

A study of the plotted results suggests the overburden on claims 20377, 78, 79, 80, 82 is relatively deep.

A suggested weak "crossover" trending southeasterly and more or less parallel and east of the Zeballos River may be an old river channel.

Higher readings of both in-phase and out-of-phase (Quadrature) along the west side of the Zeballos River are probably due to the steep terrain lying to the west of this area.

Respectfully submitted,

Donald W. Tully, P.Eng.

I, DONALD WILLIAM TULLY, MAKE OATH AND SAY as follows that on the dates herein specified I incurred the following costs during the survey and compilation of the work on the BIG BEN Fraction, YOUCO No. 2, 4, Fraction, GOLD ROCK No. 1, 3, Fraction mineral claims.

TIME - COST DISTRIBUTION

			<u>WAGES AND EXPENSES</u>
Jan. 26-30/75	- D.W. Tully & U. Leis	- Field work, grid lay- out and Ronka EM-16 readings	\$ 800.00
Jan. 26/75 - Feb. 15/75	- D.W. Tully	- Mobilization, equip- ment rentals, field and office expenses, maps and report pre- paration covering period	<u>800.00</u>
TOTAL.....			\$1,600.00
			=====

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act".

DECLARED before me at the )  
of in the )  
Province of British Columbia, )  
this day of )  
1975. )  
\_\_\_\_\_)

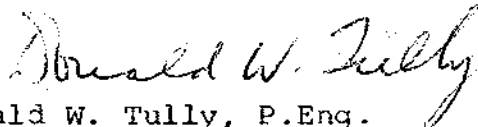
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CERTIFICATE

I, DONALD WILLIAM TULLY, of the Municipality of West Vancouver, in the Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with an office at Suite 102, 2222 Bellevue Avenue, West Vancouver, British Columbia.
2. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario.
3. I graduated with a degree of Bachelor of Science, Honours Geology, from McGill University in 1943.
4. I have practiced my profession for twenty-nine years.
5. I have no direct, indirect or contingent interest in the claims located in the Alberni Mining Division, Vancouver Island, British Columbia, nor in the securities of DIANA EXPLORATIONS LTD. (N.P.L.), nor do I intend to receive any interest.
6. This report dated February 12, 1975, is based on a personal knowledge of the area from field work over the property on January 28, 29, 30, 1975 with Mr. U. Leis, Strato Geological Ltd.

DATED at West Vancouver, British Columbia, this 12th day of February, 1975.

  
Donald W. Tully, P.Eng.  
Consulting Geologist





5377  
MAP 4

-  Gravel road
-  River
-  Creek
-  Swamp
-  20 379 Claim outline
-  Chain and compass (line station) location marked with flagging
-  In phase quadrature Ronka EM-16 readings
-  "Cross-over"

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5377 MAP #4

DIANA EXPLORATIONS LTD (NPL)

PLAN OF  
BIG BEN, YACQ AND GOLD ROCK MINERAL  
CLAIMS

ALBERNI MINING DIVISION  
ZEBALLOS B.C.

SHOWING *Donald W. Tully*

RONKA EM-16 SURVEY WITH PLOT OF READINGS

SCALE: 1"=200'

To accompany report dated February  
15, 1975 by Donald W. Tully P. Eng.