

# 4940

92C/9W

Geological Report

on the

San Juan Property

of

Perbell Mines Ltd. NPL

Sue 1-6, 11-13, Ed 6

Caty 2-8, 12, 14, 16, 18, 20, 22, 24

Val 1-14

Victoria Mining Division

3 mi NE of Port Renfrew

49<sup>o</sup>, 124<sup>o</sup> SW

By John McGoran

January & February 1974

Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. <b>4940</b> MAP.....
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## INTRODUCTION

The San Juan property of Perbell Mines Ltd. (NPL) consists of 38 mineral claims located immediately north of Port San Juan.

Work conducted by this company to date, consists of prospecting and assessment work recorded as soil sampling in 1973 and a magnetometer survey recorded in 1972. Prior work consists of a short adit which was driven before the turn of the century.

## LOCATION & ACCESS

The following mineral claims lie three miles north-east of Port Renfrew,  $124^{\circ} 25' W$   $48^{\circ} 35' N$ .

Claim name	Record No.
Sue 1-6	16475 - 16480
Sue 11-13	16485 - 16487
Ed 6	16619
Caty 2-8	16394 - 16400
Caty 12,14,16,18,20,22,24	16404,06,08,10,12,14,16
Val 1-14	16432 - 16445

There is a good all weather road between Port Renfrew and Victoria, a distance of 69 miles. Several good logging roads belonging to B.C. Forest Products traverse this property. Travel is restricted to times when logging trucks are not on the road.

### TOPOGRAPHY

These mineral claims cover a south facing slope from sea level to 2000 ft. a.s.l., covered, in most part, by second growth from ten to seventy years in age. The vegetation is typical dense growth common to the west coast of Vancouver Island.

### GENERAL GEOLOGY

Reconnaissance geological mapping by the Geological Survey of Canada at a scale of one inch = eight miles by J. E. Muller 1967, shows that the claim area is underlain by Jurassic or older, sediments in the south in fault contact with Mesozic Island Intrusions.

Control for mapping these claims consisted of the grid previously established by Perbell Mines, aneroid and 1:50,000 topographic map, 92 C 9/W; air photos BC 5086-124 and BC 7239-171 and a logging road location map supplied by B.C. Forest Products. The area underlain by these claims and south of the B.C.F.P. road is devoid of outcrop.

G.S.C. map 932A shows this area underlain by the Triassic and/or Jurassic Leech River Fm., the Jurassic Beale Fm., and Mesozoic intrusive rocks.

A. Sutherland Brown states in C.I.M. special volume 8, that the Leech River Group may be contemporaneous with Callovian to Aptian deposits elsewhere <sup>on</sup> Vancouver Island.

The San Juan Fault, is indicated along the San Juan river on Fig. 10-1 C.I.M. special volume No. 8. This structure is seen on the air photos as a major east-west lineament which separates the two rock types.

Quarz veins of up to two feet in width cut both the intrusive and sedimentary rocks.

During February 1974 mapping was conducted by the writer who was assisted by T. Dyakowski.

#### PETROLOGY

The volcanic and sedimentary rocks consist of deformed cherts argillites, limestone, sandstones, pyroclastics and volcanic flows.

The pyroclastics are unsorted with fragments of up to six inches, grading to a well sorted sandstone or siltstone. These are in units of several hundred feet thick.

The cherts are in bands one half inch to two inch, in units of tens to one hundred feet thick.

The limestone is grey and several tens of feet thick. Sufficient recrystallization has taken place to obliterate fossils.

The volcanic rocks consist of greenish porphyritic andesitic flows, some of which have possible pillow structures.

The sandstone is an arkosic or greywacke arenite which is the same grey color as the tuff. This sandstone may be, in part, a well sorted water-lain tuff.

The argillite is black, highly sheared and occurs in units up to several hundred feet thick.

The siltstone is a transition from sandstone to argillite.

The diorite grades from medium-grained near the edges to coarser grained near the centre. The diorite is foliated and sheared. The average composition of the diorite is plagioclase 70% hornblende 20% biotite 10%.

#### ALTERATION

The flows and pyroclastics have been chloritized, giving the fresh volcanic rocks a green appearance. Carbonaceous material in the argillite has been altered to graphite. The chert, however, remains relatively unaltered.

There is 100 feet of hornfels alteration surrounding the diorite, which is bleached and partially recrystallized. In the vicinity of quartz veins the wall rock may be silicified for a distance of several feet.

STRUCTURE

The volcanic and sedimentary rocks have been isoclinally folded.

There is considerable S1 and S2 shearing in the argillites. Both the cherts and limestones show thickening along the hinge line of folds. There is no consistent direction or dip of the hinge lines of folds, which indicates that at least two periods of deformation have taken place. This folding may be due in part to the San Juan Fault to the south or the intrusive diorite to the north.

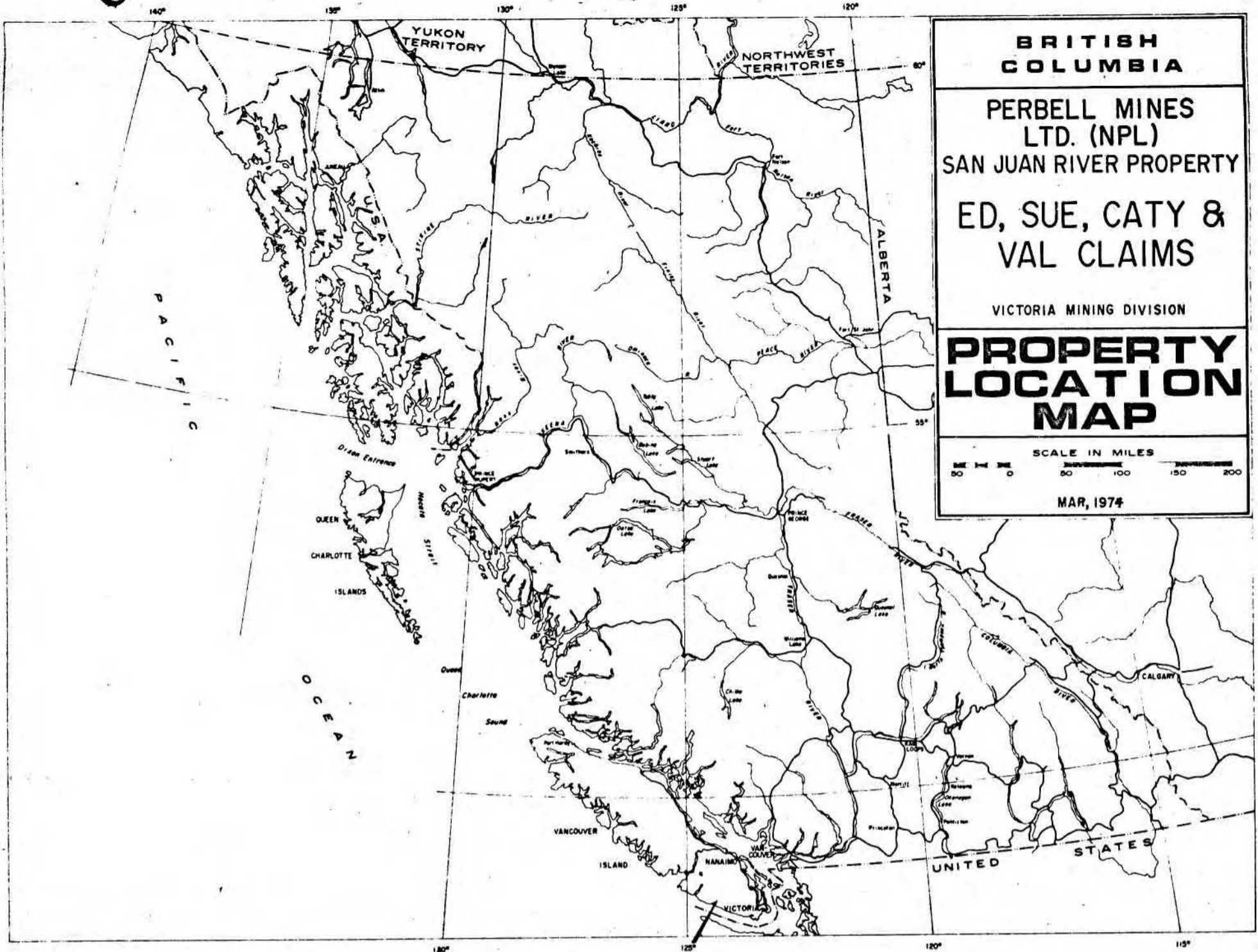
MINERALIZATION

Quartz veins up to two feet thick contain minor pyrite, pyrrhotite and chalcopyrite. Five samples of mineralized material collected by the writer and assayed (see appendix A and Map 2) indicated insignificant amounts of gold and silver.

The argillite, overall, contains less than one percent disseminated pyrite, knots of pyrite however were observed in the argillite.

Conformable small bands of pyrite, pyrrhotite and chalcopyrite were observed in tuff one half mile north of this claim group.

*John M. Doran.*



**BRITISH COLUMBIA**

**PERBELL MINES LTD. (NPL)**  
**SAN JUAN RIVER PROPERTY**

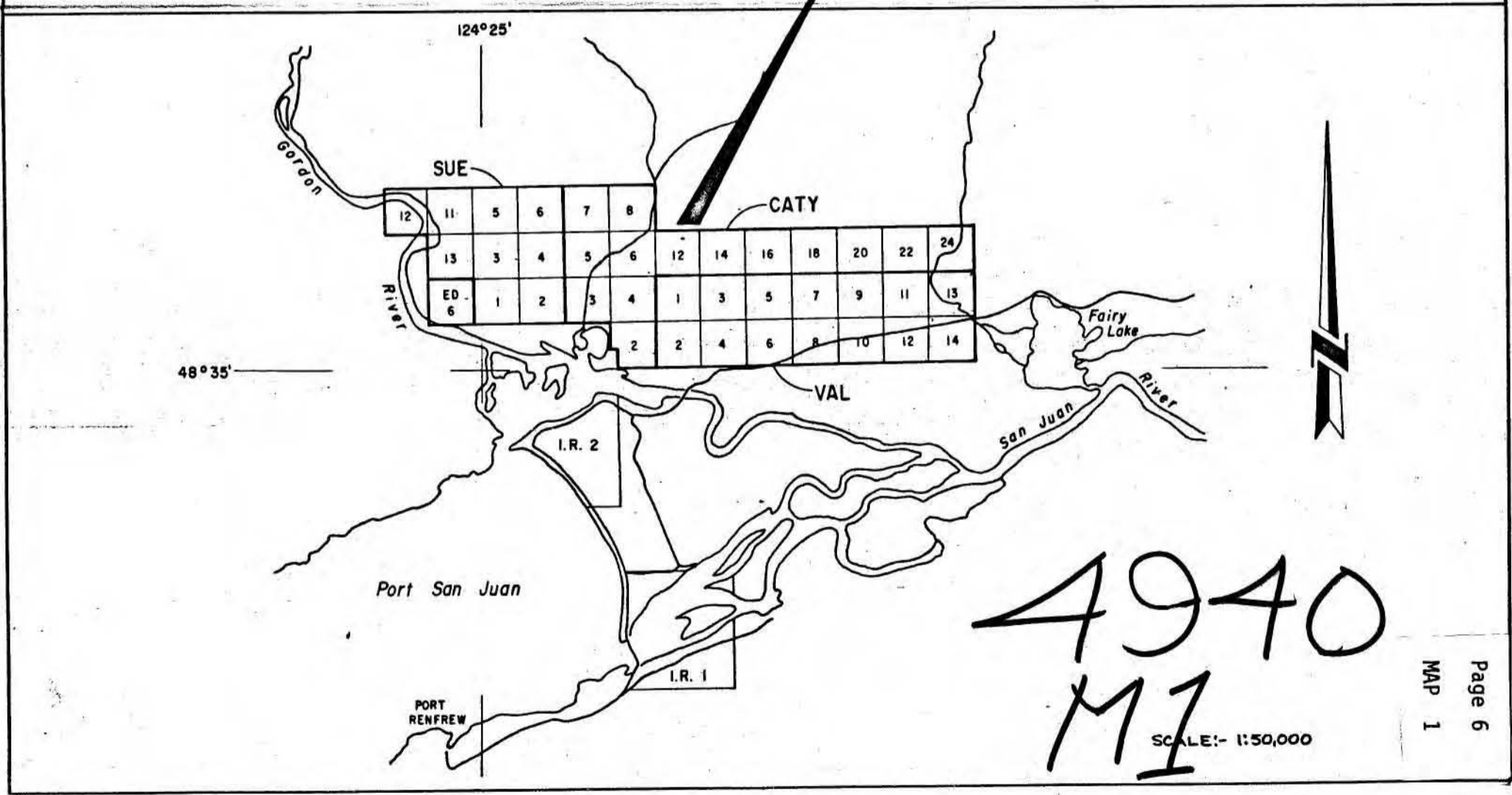
**ED, SUE, CATY & VAL CLAIMS**

VICTORIA MINING DIVISION

**PROPERTY LOCATION MAP**

SCALE IN MILES  
 0 50 100 150 200

MAR, 1974





Mar 1974

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MAP 2



Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. **4940** MAP **#2**

LOCATION	WIDTH	ASSAY IN OZ/TON	
		Au	Ag
1	6 ft.	0.003	0.01
2	3 ft.	0.002	0.01
3	4 ft.	Tr.	0.01
4	4 ft.	Tr.	0.01
5	2 ft.	0.002	Tr.

SCALE  
 one inch = 1320 feet

LEGEND  
 — road  
 ~ creek  
 - - - claim group boundary

Geology

- ↖ adit
- ↗ bedding
- ↘ dip of hinge
- ↙ line of fold
- S.M.Z fold type
- PY pyrite
- PO pyrrhotite
- CP chalcopyrite
- ↖ quartz vein
- orange box diorite
- Leech R. Fm.
- 2 argillite
- 3 tuff
- 4 chert
- 5 limestone
- 6 sandstone
- 7 andesite



**GENERAL TESTING LABORATORIES**

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TO:  
**Mr. J. McGoran**  
**3091 W. 3 Avenue**  
**Vancouver, B.C.**

**CERTIFICATE OF ASSAY**

No.: **7102-1550**      DATE: **Feb. 18th/74**

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

MARKED	GOLD	SILVER					
	OZ/ST <del>GR/MT</del>	OZ/ST <del>GR/MT</del>					
<b>P.O. NO. 124855</b>							
<b>409</b>	<b>0.003</b>	<b>0.01</b>					
<b>410</b>	<b>0.002</b>	<b>0.01</b>					
<b>411</b>	<b>Trace</b>	<b>0.01</b>					
<b>412</b>	<b>Trace</b>	<b>0.01</b>					
<b>413</b>	<b>0.002</b>	<b>Trace</b>					
<b>LW/pa</b>							

NOTE: 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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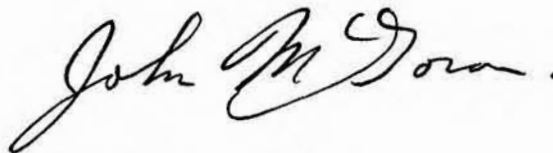
  
 L. Wong      PROVINCIAL ASSAYER

**COPY**

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

## QUALIFICATIONS

I, John McGoran, am a graduate of Carleton University with a B.Sc. (Geology 1972). I have worked in the mining industry for fifteen years as a prospector, geological assistant, geologist, and as a manager of several exploration programmes financed by major companies.

A handwritten signature in cursive script that reads "John McGoran". The signature is written in black ink and is positioned above the printed name.

John McGoran, B.Sc.

DOMINION OF CANADA:  
PROVINCE OF BRITISH COLUMBIA.

In the Matter of

To WIT:

I, Antony S Dyakowski

of 4190 Balaclava St, Vancouver, B.C.

in the Province of British Columbia, do solemnly declare that

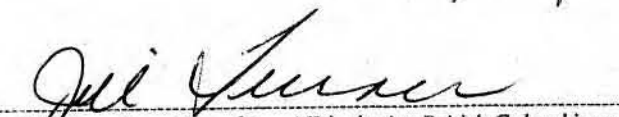
The following expenses were incurred in the exploration and mapping of the mining claims owned by Perbell Mines L.T.D. NPL during January, February and March 1974. This work was conducted at Port Renfrew, Vancouver Island by J. McGoran and A.S Dyakowski.

Geologist	34 days 65 per day	2210
Assistant	27 days 50 per day	1350
Four wheel drive	27 days, transportation costs, camp and supplies.	1040
Total		<u>4600</u>

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  
City of Vancouver  
of 22nd day of April 1974, in the  
Province of British Columbia, this  
day of \_\_\_\_\_, A.D.



  
A Commissioner for taking Affidavits for British Columbia or  
A Notary Public in and for the Province of British Columbia.  
Sub-mining Recorder