82-#917-1010 17/1010

ASSESSMENT REPORT ON THE
SURPRISE CLAIM

NANAIMO LAKES AREA

BRITISH COLUMBIA

NANAIMO M.D.

NTS 92F/1E

49°05'N, 124°24'W

bу

P.W. Conroy, B.Sc.

for

CANAMIN RESOURCES LTD. (owner and operator)

# GEOLOGICAL BRANCH ASSESSMENT REPORT

# 11,010

SURPRISE

January 13, 1933

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#### INTRODUCTION

The purpose of this report is to assess work done on the Surprise Claims in 1982. On December 28, 1982 the author visited the claim, the purpose of which was to map, log core, and examine the property.

#### LOCATION & ACCESS

The Surprise claim is located in the Nanaimo Lakes district of Vancouver Island, B.C. It lies just northeast of Fourth Lake on Rockyrun Creek. Access to the claim is by four-wheel drive on good logging roads operated by Crown Zellerbach Ltd. (Nanaimo Lakes Div.). The claim is approximately 46 kilometres by road from Cassidy.

#### TOPOGRAPHY AND VEGETATION

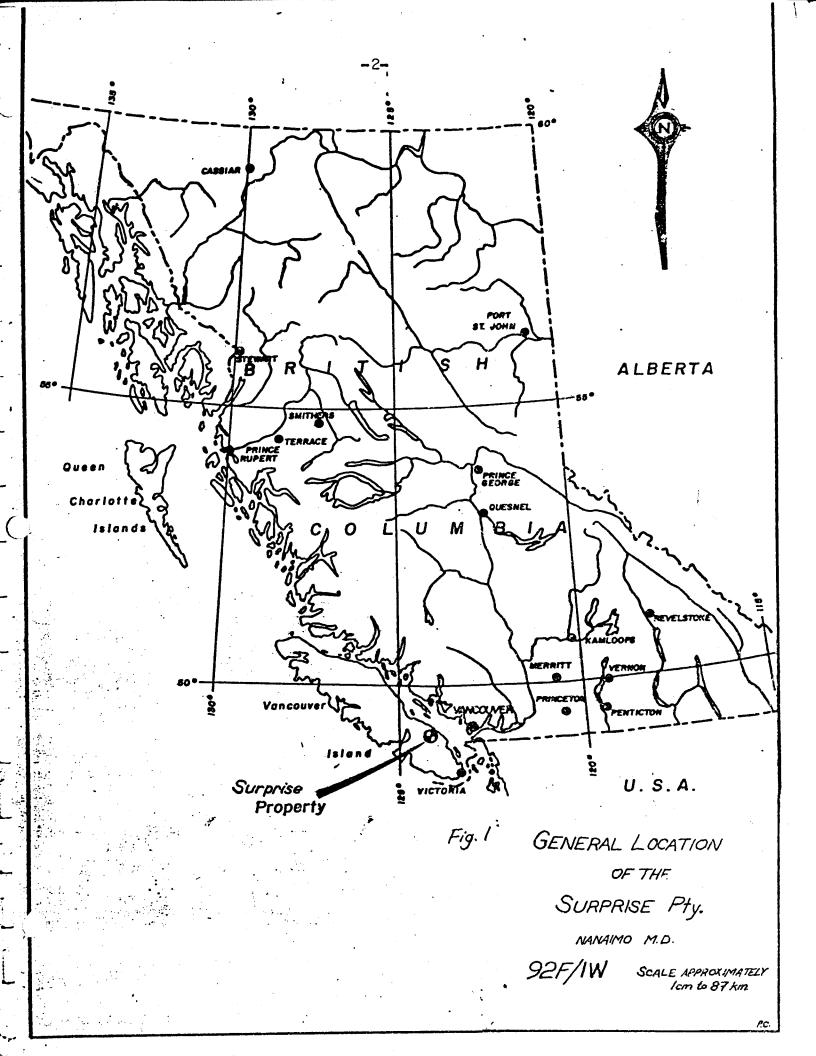
The topography in the area ranges from steep to moderate slopes. The claim itself is in relatively steep terrain, at elevations upwards of 550 metres.

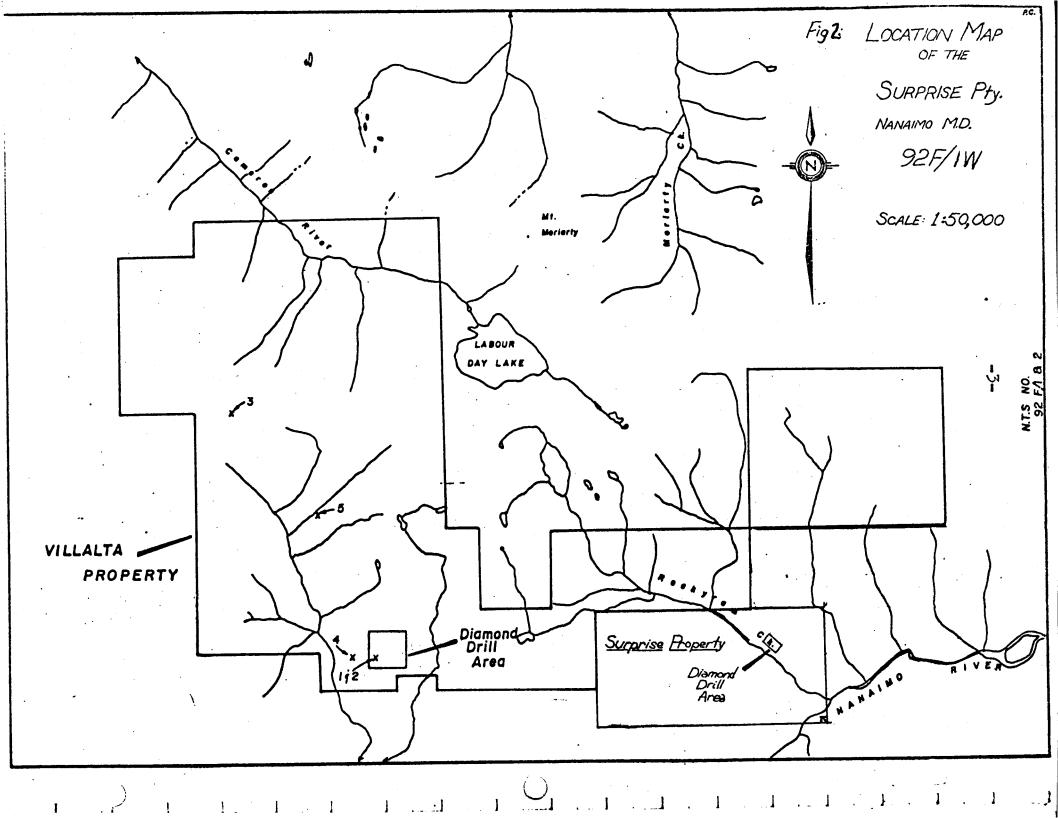
The claim area is in cedar forest, with heavy to low underbrush. Some areas have been logged off.

## CLAIMS

The Surprise claim was staked from November 24 to 29, 1982 by Efram Specogna for Canamin Resources, Ltd. The claim is 18 units, 6 west and 3 north.

Claim	Record #	Date Recorded	Expiry
Surprise	1058	Dec. 29, 1981	Dec. 29, 1982





### HISTORY

Copper mineralization in the form of malachite was first noticed by Mr. Specogna in 1981, after road repairs were done by Crown Zellerbach crews. The claim was staked in November of that year, and work was done through 1982. One trench (2.5m x 2.5m x 2m) was dug, four diamond drill holes (EXT, approx. 26m), and minor prospecting was done. Ten rock samples were taken on December 28 for assay; eight samples from the core, and two from the trench (assays summarized on a later page).

#### GEOLOGY

#### REGIONAL

The claim is in an area consisting primarily of middle Jurassic granodiorites, monzonites, and tonalites. There are some exposures of Triassic Vancouver Group volcanies (Karmutsen formation), and lesser amounts of Paleozoic Sicker Group limestone, tuff, and sediments.

The intrusive bodies are broken by north-westerly and north-easterly trending faults, with the older rocks exposed in faulted sections.

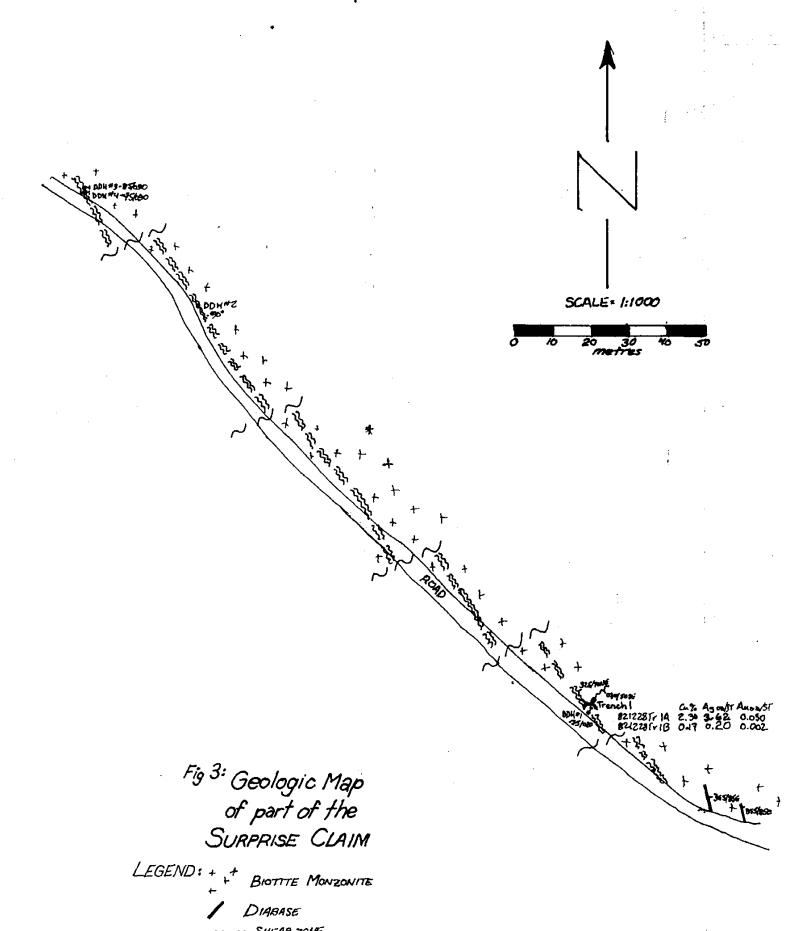
## LOCAL

The deposit lies in middle Jurassic Biotite-monzonite, with some tonalite (in cores), and occasional diabasic dykes. Pyrite, chalcopyrite, bornite, tetrahedrite?
and molybdenite? (in order of decreasing abundance) were
identified in two parallel shears trending 135/70NE.
These are from 5 to 20 cm. wide, and are traceable over
200 metres, but appear to be broken up by cross-cutting
faults. The shear may be related to a major fault to
the north of the claim, which also trends north-east.

Sulfides form from 10% to 100% of the shear fill, along with a dark, chloritic material (diabase?). The sulfides occur as massive, triable masses, as augen, as blobs, and as small veinlets. The shear zones have 5cm silicified envelopes, with up to 5% pyrite.

Also around the shears, the monzonite has been altered, with obvious potassic enrichment, and sausseritized plagicclase. Biotite has been chloritized, and partially replaced by pyrite.

Malachite and tenorite are common alteration minerals, malachite stains being traceable for at least 200 metres.



N N ASSUMED FAULT

## <u>ASSAYS</u>

Ten rock samples were taken on December 28, 1982, two from the trench, and eight from the core. Of the eight core samples, only seven were sent in for assay.

The samples were taken to General Testing Laboratories, and were assayed for copper, silver, and gold.

Results are summarized below:

Sample #	Copper %	Silver oz/ST	Gold oz/ST
Hole #1			
0' - 12'	0.014	0.05	0.020
12'- 20	0.023	0.20	0.006
20 - 30 6"	0.101	0.30	0.014
Hole #2		•	
0'- 17'	0.054	0.22	0.020
Hole #3			
0'- 10'	0.325	0.25	0.024
Hole #4			
0' - 5'	3.43	2.61	0.080
5'- 10'	0.50	0.93	0.072
821228TrlA	2.30	3.62	0.030
821228Tr1B	0.17	0.20	0.002

## DISBURSEMENTS

Physical Work: one trench, 2.5m x 2.5m x 2m\$1000.00
Drilling: Packsack EXT Diamond Drilling,
approx. 26 metres @ \$210/metre\$5400.00
Assays: General Testing Laboratories; nine
samples assayed for Cu, Ag, Au at
\$16.75 per sample \$150.75
Transportation: one man, Vancouver-Nanaimo return. \$100.00
Personnel: one man; for examining property,
logging core, writing report;
4 days (Dec. 28, 29 1982 & Jan.
11, 12 1983) @ \$175.00 per day \$700.00

TOTAL .....\$7350.75

Paul W. Conroy, B.Sc.

January 13, 1983

## CERTIFICATE

- I, Paul W. Conroy, of the city of Vancouver, British Columbia, do hereby certify that:
  - 1. I graduated from the University of British Columbia in 1982 with a Bachelor of Science degree in geology.
  - 2. I have been practicing my profession as a geologist since May, 1982.
  - J. I examined the Surprise claim on December 28, 1982.

Dated at Vancouver, B.C. this 4th. day of January, 1983.

Paul W. Conroy, B.Sc.

# APPENDIX 1

DRILL LOGS HOLES 1-4

# Claim Name: SURPRISE

Hole Number: #1 Drilled by : see below Dip/Bearing :75/020
Total Depth: 9.3 m (30.5')Date Drilled: Nov 15,1982 Recovery (%):80%
Bit Size : EXT Logged by : Paul Conroy Page 1 of 1

Depth	Lithology, etc.	Sample #	Assays			
netres (feet)			Cu	Ag	Au	
<b>0-3.35</b> /(0 <b>-11)</b>	somewhat altered biotite- monzonite; mottled pink & gree -pyrite replacing biotite -pyrite disseminated, or fine fracture fillings -pyrite assoc. with limonite	n Hole #1 0'-12'			0 2/ST 0 • 0 2 0	
(11-13'6)	less altered biotite-monzonite -some chlorite repl. biotite -very low pyrite -some epidote veins	Hole #1 12'-20'	0.02	50.20	p <b>.</b> 006	
4.15-4.72 (13 <u>'</u> 6-15'6)	silicified and sausseritized zone, with chloritized biotite -small, thin quartz veins, may contain purite and minor chalcopyrite -pyrite to 1%, chalcopyrite less than 1%					
4.72-6.20 (15'6-20'4	as 3.35-4.15; some quartz-pyritepidote veinlets 5.79m: 3-cm. aplite vein, minosulfides; potassic envelopes	Hole //1	0.10	1 0.3	0.01	
6.20-8.38 (20'4-27'6	as 4.15-4.72 6.86-7.31m:badly fractured 7.77m: 6-cm zone with 2% chalcongular coatings 7.95-8.08m:as 7.77,less chalcongular coatings pyrite; some tenorite and malachite	3				
8.38-9.30 (27°6-30 <u>°</u> 6	as 0-3.35 metres.				. Can an	
END			Test	ing I	Gener aborat	
	Drilled by E. Specogna & R. Wdighill(Packsack EXT Diamond Drilling)					

# Claim Name: SURPRISE

Hole Number: #2
Total Depth: 7.62m (25') Date Drilled: Nov. 1982 Recovery (%): 70%
Bit Size : EXT Logged by Paul Conroy Page 1 of 1

Depth	Lithology, etc.	Sample #	Assays			
metres (feet)			Cu Ag Au			
7 -			% oz/SToz/S			
0-5.18 (0-17.	greenish, altered biotite-mon- zonite; sausscritized and chlor itized; some small epidote vein lets with/without pyrite -some silicification -jmm veinlet of pyrite at top of core	- Hole #2	0.0540.220.020			
5.18-7.62 (17'-25')	altered biotite-monzonite; pink and green mottled -occasional veinlets of epidot at 10° to axis; some bleachin of walls -some K-spar hematized(?)	e Hole #2				
END						
			Assayed by General Testin Laboratories			
		-				
	and the second					
	Drilled by E. Specogna & R. Wdighill (Packsack EXT Diamond Brilling)					

Claim Name: SURPRISE :

Hole Number: #5 Total Depth: 5.05m(10') Bit Size : EXT

Drilled by : see below Dip/Bearing :-05/090 Date Drilled: Nov. 1982 Recovery (%): 75% Logged by : Paul Conroy Page 1 of 1

Depth	Lithology, etc.	Sample #	Assays			
metres (feet)			Cu Ag Au			
1			\$ 02/ST02/ST			
0-0.46 (0-1'5)	dark grey, altered (chloritized biotite-monzonite(?) -up to 5% chalcopyrite in very fine veins, disseminations, and replacements of biotite	)				
0.46-0.94 (1'6-5')	as 0-0.46m; lighter, no visible sulfides -much limonite on fractures	Nole.75	0.325 0.25 0.02			
0.94-3.05 (3'-10')	pink and green-mottled biotite monzonite; biotite chloritized -limonite on fractures and in biotite (after pyrite replace ments ?)					
END						
			Assayed by General Testin Laboratories			
	*					
		£5 <sub>0</sub>				
- 15						
1 1						
	Drilled by E. Specogna and R. Wdighill (Facksack EXT Diamond Drilling)					

# Claim Name: SURPRISE '

Hole Number: # 4 Drilled by : see below Dip/Bearing: -75/090
Total Depth: 4.88m (16') Date Drilled: Nov. 1902 Recovery (%): 75%
Bit Size : EXT Logged by : Faul ConroyPage 1 of 1

Depth	Lithology, etc.	Sample #	Assays			
metres (feet)			Cu	AS	Au	
19		A SEE	5	oz/ST	02/S	
0-0.76 (0-2'6	highly sheared, hematite and limonite-rich chloritic rock, possibly diabase -specks and blebs ("augen") of chalcopyrite and pyrite -chalcopyrite to 5%, pyrite up to 1%, minor bornite	Hole #4	3.43	2.61	0300	
(2'6-4')	dark green, chloritic rock; probably unsheared equivalent of 0-0.76m -limonite common on fractures					
1.22-3.05 (4'-10')	very dark green, chloritized diorate 2.44m: 3cm patch of purple bornite; no other sulfides	Hole #4	0.50	0.95	0072	
3.55-4.88 (10'-16')	biotite-monzonite; highly sausseritized, and biotite chloritized					
END						
			Gen	eral	restin	
	Note: contacts gradational					
1						
- A						
	Drilled by E. Specogna and R. Wdighill(Packsack EXT Diagond Brilling)					

# **General Testing Laboratories**

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2 PHONE (604) 254-1647 TELEX 04-507514 CABLE: SUPERVISE



TO:

CANAMIN RESOURCES LTD., 170h Centermary Drive, Nanaimo, B.C. Canada VOR SEL

#### CERTIFICATE OF ASSAY

No.: 8212-2954 DATE: Jan. 11/83

We hereby certify that the following are the results of assays on: 9 submitted ore samples

	GOLD	SILVER	Copper	XXX	2000	3000	XXX	3000
MARKED	on/ST	os/ST	(Cu) %	-		0	7-11	
3								poli i
HOLE # 1	li							
0 - 12	0.020	0.05	0.014				340	
12 - 20	0.006	0.20	0.023					
20 = 30*6"	0.014	0.30	0.101		10000			
HOLE # 2					18	1		
0 - 17	0.020	0.22	0.054		-	1		
			1		1	17/	156	
HOLE # 3			1		3			
0 - 10	0.024	0.25	0,325					
HOLE # 4		. 1	0 1	1	3			
	0.080	2.61	3.43					
0 - 5	0.080	0.93	3.43	/				
000000	1	1.51	1					
821228 TR 1 A	0.030	3,62	2.30				12.00	
							8,887	
821228 TR 1 B	0,002	0,20	0.17					
	04000	0,20	0.21					
			. 1					
rea Cea								
LWant								

NOTE: REJECTS RETAINED ONE MONTH. PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXMUM OF ONE YEAR.

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L. Moder PROVINCIAL ASSAYER