PHILLIP LAKES PROPERTY

FRED 1, FRED 2 CLAIMS OMENICA MINING DIVISION NTS 930 4W

LATITUDE 55 04; LONGITUDE 128 48

OCTOBER 1 1989

WIM S. VANDERPOLL BSc

SUMMARY

The Phillip Lakes property comprises the Fred 1 claim (15 units) and the Fred 2 claim (16 units), and is located in the Omenica Mining Division, 55 kilometres west of the town of MacKenzie.

Access is by good logging road from Highway 97.

The property is underlain by andesite and minor argillite of the Takla Group, intruded by calcalkaline monzonite.

Preliminary prospecting and mapping of the claims suggest that the geological environment is similar to that of the nearby Mount Milligar porphyry gold-copper deposit where more that 100 million tonnes grading 1 gram per tonne gold and 0.4 per cent copper are indicated.

Sampling on the claims has returned values to 1480 ppb gold, 1.2 ppm silver and 1034 ppm copper. Mineralization is present over an area of 3500 metres.

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INTRODUCTION

The Fred claims that make up the Phillip Lakes property were staked in September 1989 to cover an area of interest that was explored and sampled in the early 1980's.

Recent development by Lincoln Resources and associated companies at the nearby Mount Milligan Phil-Heidi claims prompted a renewed interest in the Phillip Lakes area, where the geological setting is similar to that an Mount Milligan.

LOCATION AND ACCESS

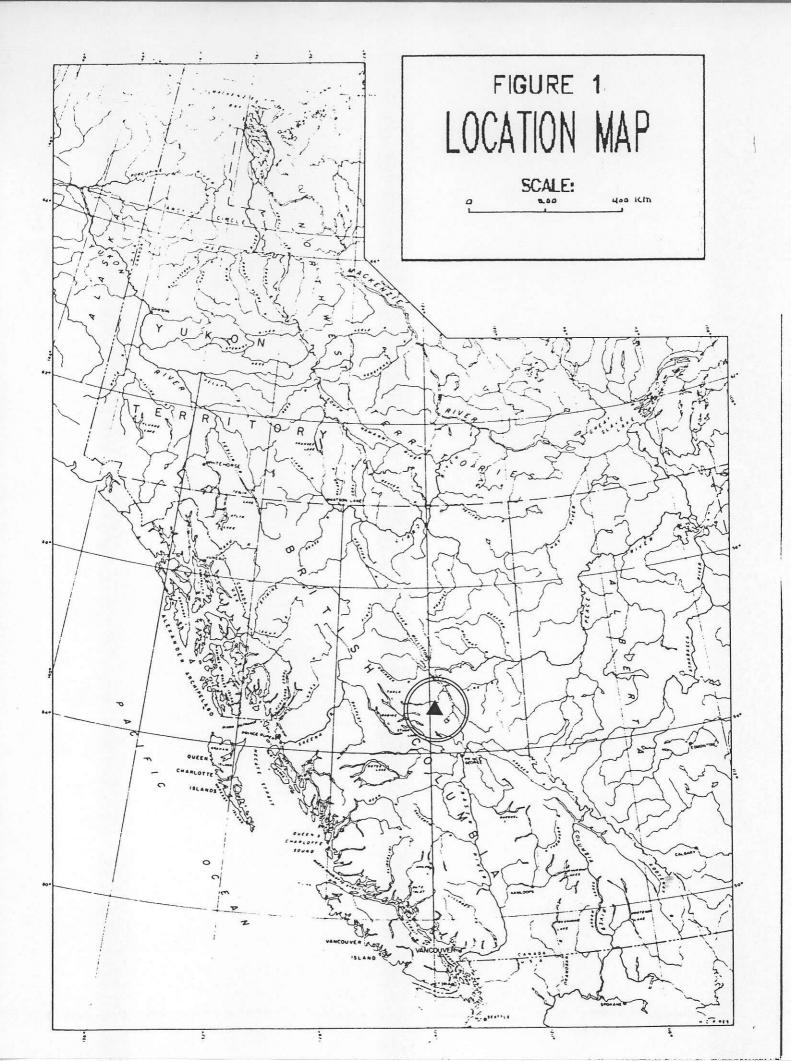
The Fred claims are located at the east end of Phillip Lakes, 55 kilometres west of the town of MacKenzie.

The Phillip-Findlay Forest Service road cuts through the centre of the claims. This road connects to Highway 97 at Windy Point, 40 kilometres south of MacKenzie, and is the main access road to the Mount Milligan area.

A portion of Fred 2 claim has been logged; the remainder of the claims is covered by mature forest, and by areas of heavy second growth in old burns.

Relief on the claims is gentle to moderate; elevations range from 975 metres at lake level to a 1250 metre hill in the southwest corner of Fred 2 claim.

Exposure is generally poor.



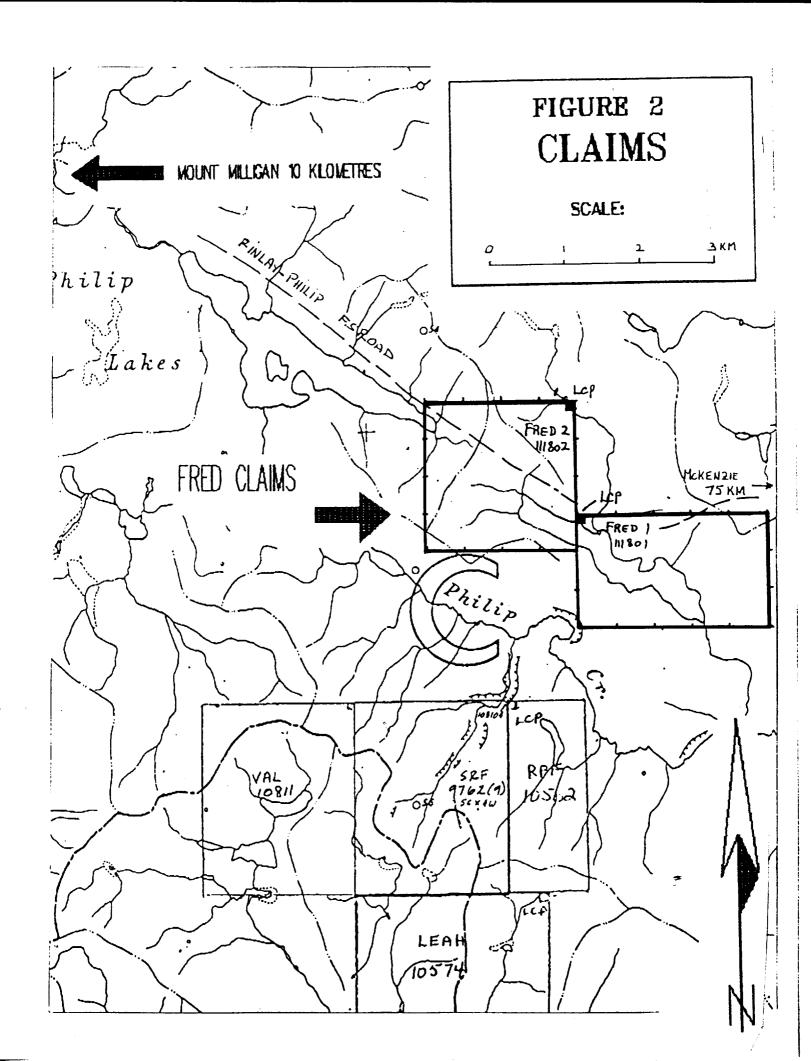
CL.AIMS

The property comprises the following claims:

Fred 1 Tag # 111801 Expiry date September 9 1990

Fred 2 111802 10 1990

The claims are wholly owned by Wim Vanderpoll of 45-1101 Nicola Street in Vancouver, B.C.



GEOLOGY

REGIONAL GEOLOGY

The Fred claims lie within the Quesnel Trough near its eastern margin .

The area is underlain by volcanics and sediments of the Upper

Triassic to Lower Jurassic Takla Group that overlie the Upper

Paleozoic Slide Mountain Group. Block faulted segments of older rocks

are exposed and represent the Misinchinka Group and the Wolverine

Complex. Intrusive rocks in the area are coeval with Takla Group

rocks, but Cretaceous and Tertiary stocks are also recognized.

The Takla Group comprises northwest trending andesitic to basaltic augite porphyry flows, related pyroclastic rocks and minor tuffaceous argillites.

Rocks of the Slide Mountain Group lie in a northwest trending belt along the easter boundary of the Quesnel Trough and comprise greenstone, argillite, limestone, slate and banded quartzite.

Wolverine Complex and Misinchinka Group rocks include schist and gneiss, and an assemblage of black slate, quartzite, conglomerate, limestone, chlorite sericite schist and grit, respectively.

The Takla-coeval intrusive rocks comprise calcalkaline and alkali porphyries. Cretaceous stocks in the area are of granodiorite to granite composition; younger intrusives include quartz monzonite, dacite and rhyolite.

Strong regional faults in the area trend northwest, northeast and north.

FIGURE 3 REGIONAL GEOLOGY 1:250,000 SCALE SEE NEXT PAGE FOR LEGEND Cpsm (MT. MILLIGAN) FJt Pm

LEGEND

TERTIARY

Tr MHYOLITE, DACITE CRETACEOUS AND OLDER

Kg MONZONITE, GRANODIORITE

UPPER TRIASSIC

TJE TAKLA GROUP

ANDESITE FLOWS, THEF, MERCIA, AGGLOMERATE, MINOR SEDIMENTS

UPPER .PALEOZOIC

Cosm SLIDE MOUNTAIN GROUP

GREENSTONE, ANGILLITE, LINESTONE, QUANTZITE

LOWER PALEOZOIC AND OLDER

Pm MISINCHINKA GROUP; WOLVERINE COMPLEX ARGILLITE, QUARTZITE, CHEISS, SCHIST

X AU	MINERAL OCCURRENCE
~~	FAULT
	CONTACT

The most significant mineral deposit in the area is the Mount
Milligan (Phil-Heidi) gold-copper occurrence of Continental Gold
Corporation, United Lincoln and BP Canada, located 15 kilometres west
of the Phillip Lakes property.

Mineralization at Mount Milligan occurs mostly as disseminated and stockwork aurifirous pyrite-chalcopyrite in potassic-altered and in propylitically altered volcanic rocks peripheral to a small phased monzonite stock. The MBX and 66 Zones have been explored over an area of at least 1000 by 300 metres and contain a minimum of 100 million tonnes containing 0.3 to 1.0 grams per tonne gold and 0.2 to 0.8 per cent copper.

Other zones at Mount Milligan contain thin tabular sub-parallel bodies of massive chalcopyrite grading up to 90 grams per tonne gold and 10.0 per cent copper (Esker Creek, Creek and 79 Vein Zones). The the West Breccia Zone contains veinlet— and fracture controlled gold—copper mineralization in the brecciated margin of porphyritic monzonite.

PROPERTY GEOLOGY

The Fred claims are underlain by volcanic and sedimentary rocks of the Upper Triassic Takla Group that have been intruded by monzonite.

The volcanic rocks (Unit 1) include massive dark coloured andesite (flows ?) and pyroclastics containing fragments of augite porphyry.

Locally, the volcanic rocks are strongly \sin_{λ}^{∞} fied and rusty; strong disseminated pyrite and pyrrhotite, and manganese fracture-coating are present.

Argillite (Unit ia) was observed in the east-central portion of Fred 2 claim only, where it has been intruded by monzonite and is strongly hornfelsed and strongly pyritic.

Intrusive rocks on the claims include monzonite (Unit 2) and quartz eye porphyry (Unit 3). Strongly kaolinized monzonite occurs in the southwest of Fred 2 claim and in the trench area; fresh monzonite is present in the south-central area of Fred 2 claim. Monzonite in the southeast corner of Fred 1 claim is malachitestained and contains chalcopyrite, pyrite, pyrrhotite and gold.

Quartz-eye porphyry in the east of the trench is extremely siliceous and may represent a different intrusive phase.

A strong magnetic anomaly underlying Phillip Lakes west of the claims suggests the presence of another intrusive body.

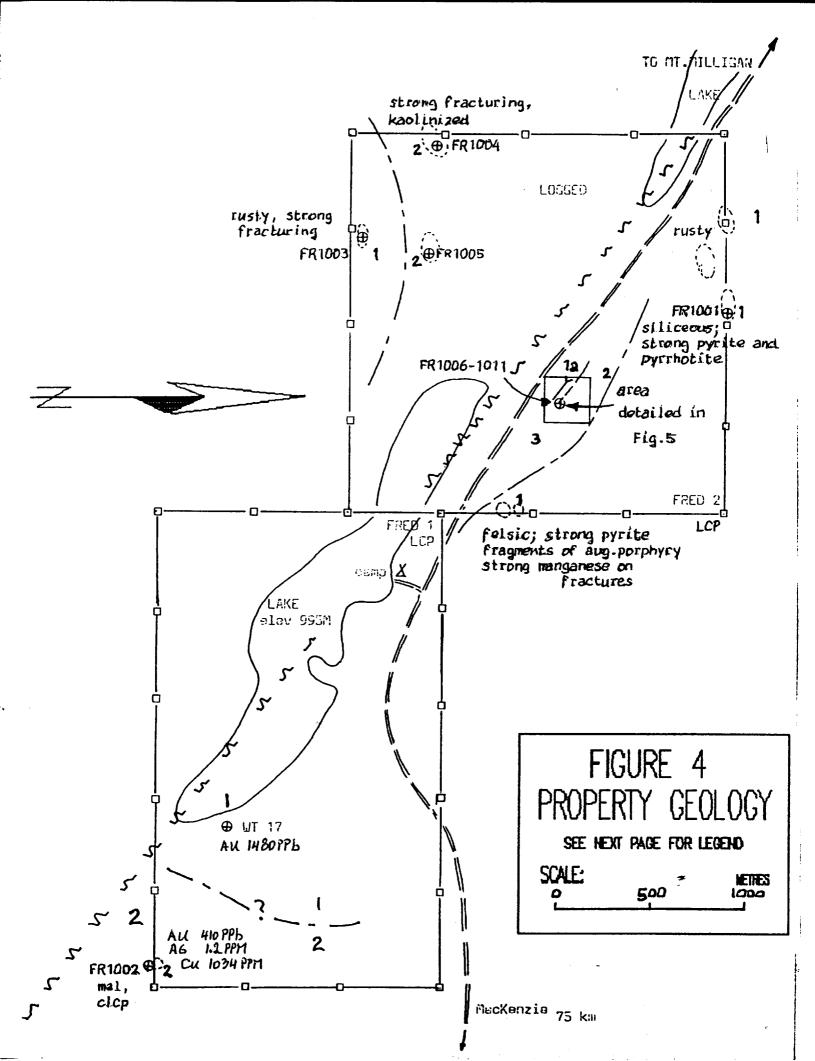


FIGURE 4 PROPERTY GEOLOGY

LECEND:

UPPER TRIASSIC TO LOWER JURASSIC

TAKLA CROUP

1 ANDESITE, PYROCLASTICS

1A ARGILLITE

CRETACEOUS (?) AND OLDER

2 MONZONITE

3 QUARTZ EYE PORPHYRY

- CONTACT, ASSUMED CONTACT

OUTCROP LIMIT

⊕ FR 456 ROCK CHIP SAMPLE, NUMBER

ROAD

TRENCH CLAIM LINE AND POST

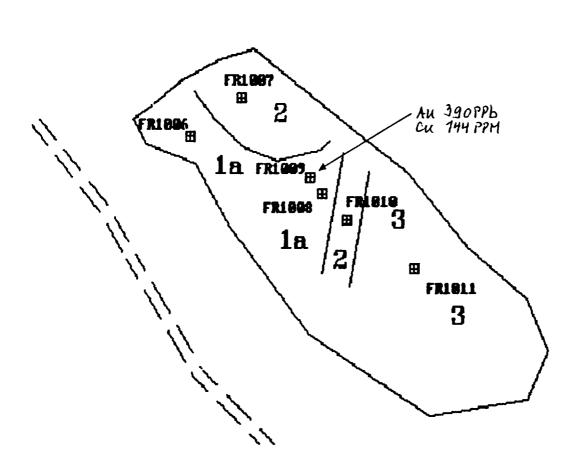




FIGURE 5

TRENCH GEOLOGY

LEGEND: SEE FIGURE 4

SCALE:

25 M

-

MINERALIZATION

Mineralization on the Phillip Lakes property is present in several locations that are spread out over a distance of more than 3500 metres:

- * monzonite in the southeast corner of Fred 1 claim contains 410 ppb gold, 1.2 ppm silver and 1034 ppm copper (sample FR1002)
- ‡ andesite 1.0 kilometres west-northwest of sample FR1002 was sampled
 in 1980 and analyzed 1480 ppb gold
- * a sample of strongly weathered pyritic ochre fault gouge from the trench on Fred 2 claim contains 390 ppb gold, 1.2 ppm silver and 744 ppm copper over a width of 0.5 metres (sample FR 1009). Other samples in the vicinity of this sample are anomalous in copper.

It is believed that this mineralization indicates Mount Milligan type mineralization.

CONCLUSIONS

The Fred claims that comprise the Phillip Lakes property lie in a geological environment that is similar to that of the Mount Milligan deposit, located 15 kilometres to the west, where at least 100 million tonnes grading 1 gram per tonne gold and 0.4 per cent copper are indicated.

While exploration work on the Fred claims to date is limited, rock sampling has returned encouraging results with up to 1480 ppb gold and up to 1034 ppm copper in calcalkaline intrusive rocks and Takla Group andesite. This work suggests that a Mount Milligan type deposit may be present.

The property is readily road accessible.

RECOMMENDATIONS

Further work at the Phillip Lakes property should include a first phase of additional prospecting and systematic soil sampling at an estimated cost of \$ 30,000. A second phase IP survey on a cut line grid is estimated to cost \$ 20,000.

Cost break-down of future work is as follows:

PHASE I PROSPECTING AND SOIL SAMPLING:

5	O kilometres of soil lines- 1500 samples		
C	ollecting of samples 50 man-days 0 \$100	\$	5,000
aı	nalyses, 1500 samples 0 \$ 8.00	-	12,000
pı	rospecting, 15 man-days @ \$100	-	1,500
V	ehicle and equipment	-	3,000
r	oom and board, 65 man-days @ \$ 25	-	1,625
þi	roject management, reports		3,500
C	ontingency		3,375
	TOTAL COST PHASE I	\$	30.000

PHASE II LINE CUTTING AND IP:

20 kilometres of survey grid

line cutting 20 kilometres 9 \$ 250

IP Survey 20 kilometres 9 \$ 350

room and board 40 mandays 0 \$ 25 - 1,000

vehicle and transportation - 2,000

project management and supervision, reports - 2,500

contingency - 2,500

TOTAL COST PHASE II \$ 20,000

5,000

7,000

APPENDIX I

FR 1006

SAMPLE DESCRIPTIONS

SAMPLE NUMBER	DESCRIPTION	SIGNIFICANT ASSAYS
		(GOLD)
WT 17	green andesite, strong pyrite (sample f	rom previous
	exploration program)	1480 PPB
FR1001	siliceous rusty andesite; strong pyrite	e and
	pyrrhotite	
FR1002	altered monzonite with malachite, disse	eminated
	chalco-pyrite, pyrrhotite. Very angula	ar subcrop or
	outcrop	410 PPB
FR1003	strongly fractures rusty andesite	
FR1004	strongly fractured kaolinized monzonite	•
FR1005	fresh monzonite	

THE FOLLOWING SAMPLES ARE FROM THE TRENCH ON FRED 2 CLAIM (FIGURE 5):

	include minor tuff	
FR1007	monzonite	
FR100B	blocky siliceous argillite with strong disseminated	
	pyrite; strong limonite	≠
FR1009	0.5 metres strongly oxidized fault gouge, yellow	
	ochre, pyritic	390 PPB

strongly fractured silicified rusty argillite; may

FR1010 monzonite dyke

FR1011 quartz eye porphyry, extremely siliceous

APPENDIX II

STATEMENT OF QUALIFICATIONS

- I, Wim S. Vanderpoll, residing at 45-1101 Nicola Street in Vancouver, British Columbia, declare that:
- I graduated from the University of Tulsa (Oklahoma) in 1972 and hold a Bachelor of Science degree in Geology
- 2. I have done additional course work at the University of British Columbia, Simon Fraser University and the British Columbia Institute of Technology
- 3. I have practiced as a geologist since my graduation from University, and I have worked for several major companies and as an independent contractor and consultant
- 4. I have worked in British Columbia, the Yukon and Northwest Territories, Saskatchewan, Alaska, Colorado and Mexico
- 5. The information contained in this report was obtained by me
- 6. I am the sole owner of the Fred 1 and Fred 2 claims

APPENDIX III CERTIFICATES OF ANALYSES

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby, British Columbia, Can. V5B 3N1

CERTIFICATE OF ANALYSIS

PPB

TO: W. van der POL

45 1101 NICOLA STREET

VANCOUVER, B.C.

PROJECT : FR 1000

PRE

TYPE OF ANALYSIS : GEOCHEMICAL

CERTIFICATE # : 89333

INVOICE # : 90527 **DATE ENTERED** : 89-09-21

FILE NAME : VAR89333.VDP

PAGE # : 1

FIX	SAMPLE NAME	: Au	
Α	FR 1001		
Α	FR 1002		
Α	FR 1003		
Α	FR 1004	. 5	
<u> </u>	FR 1005		
Α	FR 1006	5	
Α	FR 1007	5	
Α	FR 1,008		
Α	FR 1009		
<u>A</u>	FR 1010		
Α	FR 1011	na val	
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CERTIFIED BY :

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ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 S. Springer ave., Burnaby, British Columbia, Cam. VSB 381 Ph: (604)299-6910 Fax: 299-6252

TO: W. van der POL 45 1101 NICOLA STREET VANCOUVER, B.C. PROJECT : FR 1000

CERTIFICATE # : 89333 INVOICE # : 90527 DATE ENTERED: 89-09-21 FILE NAME : VAR89333.I

	SAMPLE MARE		PPH CU	PPN PB	PPH ZN	PPH AG	N99 In	PPM CG	PPH MK	FE	PPM AS	PPM U	PPH AU	PPM H6	PPN SR	PPH CB	PPM SB	PPM Bi	PPN V			PPM LA	PPN Cr	Z 196	PPH BA		PPN B		-	I Sl	PPN W	PPN BE
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	FR-1007	1	172	6	78	0.4	20	14	658	3.96	17	5	NO	MD	64	1	3	2	134	1.68	0.27	11	38	1.22	12	0.27	5	2.50	0.01	0.01	1	2
	FR-1008	7		19	140	0.4	36	6		5.27	28	5	ND	ND	192	2	6	2			0.13	12	65	1.68	47	0.32	299	3.00	0.01	0.01	1	4
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