# REPORT ON THE GEOLOGICAL MAPPING OF THE NORTH-WESTERN PART OF THE STAN CLAIM GROUP

Location: 51 miles due South of Buttle Lake, Upper Drinkwater

Creek Area, Vancouver Island, B.C.

Alberni Mining District.

Latitude 49° 28.5' Longitude 124° 33'

Report by: D. G. Wilbur B.Sc.

Supervised by: B. E. Spencer B.A.Sc., P. Eng.

Work done by: Western Mines Ltd. (N.P.L) as agent for Cream Silver Mines Ltd. (N.P.L).

Work Period: 16th - 25th August, 1971.

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eptember 20th, 1971.

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## MAPS

- #/ i) Ciaim location map, scale 1000' to 1"
- Geological map, Upper Drinkwater Creek, Scale 500' to 1"

#### INTRODUCTION.

Western Mines Ltd. holds under an option agreement with Cream Silver Mines Ltd. a block of 180 mineral claims in the Price Creek-upper Drinkwater Creek area south of Buttle Lake, Vancouver Island, B.C.

A programme of geological mapping and prospecting was carried out from August 16th to 25th 1971 under the supervision of the writer on the northern portion of the Stan group of 22 mineral claims.

Interbedded acidic tuffs and flows of the Permian Sicker
Volcanic Group dip south and are frequently intruded by dykes and
sills thought to be related to the nearby Jurassic Granodiorite
Bedwell batholith. There is local development of strong foliation
with common pyrite, no other sulphides were recognized.

#### LOCATION AND ACCESS.

The Stan Group of 22 contiguous mineral claims is situated astride and extends to the west of Drinkwater Creek from its source to near Della Falls, Central Vancouver Island, B.C. Topography is very rugged and many creeks and valleys are snow covered throughout the year, vegetation is stunted and exposure is generally good.

Access is best obtained by helicopter, but foot-trails from
Buttle Lake via Price Creek and Cream Lake or from Great Central Lake

via Della Falls are practicable. Float plane landing on Bedwell Lake one mile to the west is also possible. In the present work a camp was established at 4400' A.S.L. on the north-east side of Upper Drinkwater Creek.

#### GEOLOGY.

Structure. Faulting rather than folding is the predominant structural feature of the area, the faults often having a distinct topographical expression. The dominant Drinkwater fault trends NW from Bedwell Lake along the Upper Drinkwater Creek to Love Lake, a distance of almost 3 miles. Additional minor faults occur in the mapping area and probably represent stress readjustments concurrent with the larger scale faulting.

The country rock shows only small variations in attitude except where locally influenced by faulting. The average strike is approximately 110°, dipping south around 40°.

Strong foliation is probably a significant feature and occurs in several locations. The b-axis of stress runs just east of north plunging south at approximately 30°. Local variations in strike direction are probably caused by transcurrent movement on adjacent faults.

Rock Types. The country rock probably belongs to the lower volcanic division of the Permian-Pennsylvanian Sicker Group and

consists of a pile of siliceous tuffs and flows. Rhyolite, rhyo-dacite and dacite account for almost all the lithologies encountered. Field differentiation between most tuffs and flows is extremely difficult owing to their fine grained nature.

The rhyolites may be divided into at least four distinctive varieties:-

- i) Grey-green cherty rhyolite, aphanitic chloritized.
- ii) Creamy-white rhyolite, often with strong foliation, and may represent a bleached version of i)
- iii) Medium-grey rhyolite with almost granular matrix containing rounded quartz phenocrysts and occasional laths of mafic material, probably augite.

Towards the top of this volcanic pile the fine-grained volcanics become increasingly pyroclastic, with rhyolite and dacite tuffs and agglomerates become increasingly common.

A complex series of hypabyssal intrusions consisting predominantly of dykes of feldspar porphyry with a dioritic composition, also more acid dykes and sills cut the rhyolites. At least three generations of intrusive activity are represented and may all be related genetically to the Jurassic granodiorite Bedwell batholith one mile to the north-west.

#### MINERALIZATION.

The source of the mineralized float containing substantial amounts

of copper, lead, zinc silver and gold found by Cream Silver Mines

Ltd. was not located in the present survey, neither was any well

mineralized float. Considerable amounts of pyrite with some pyrrhotite

are common over the entire area, especially in the strongly foliated

rhyolites. A small amount of copper oxide staining was discovered at

4925' on the western boundary of claim Stan 13, in grey-green rhyolites,

but amounts were very small.

Since the exact location of the mineralized float could not be found, possibly due to snow conditions, it was not possible to work back from this to the source. Subsequent mapping should be extended to the south and west.

Gangue mineral mineralization consisted of quartz and calcite with epidote common in some of the dacite flows.

BEPORT BY..

D. G. Wilbur B. Sc

SUPERVISED B

B. E. Spencer B.A.Sc., P. Eng.

#### EXPENDITURES.

## Geologists

$\mathbb{D}^{\bullet}$	G.	Wilbur	. @	<b>\$1</b> 075	p.m.	Aug.	16th-25th	(10	days)	\$537.50
G.	H.	Scott	@	¢850	p.m.		ŧt			\$425.00

## Field Assistants

J. D.	Leishman	@ \$550	<b>p</b> .m.	Aug. 16th-25th	\$275.00
P. J.	Mason	@ <b>\$</b> 550	p.m.	11	\$275.00

## Cook

Mrs. K.M. Scott		\$250 <b>.</b> 00
Living Expenses	50 man/days @ \$7.50 per day	<b>\$</b> 375 <b>.</b> 00
Mobilization	10 days @ \$15 per day	\$150 <b>.</b> 00
<u>Helicopter</u>	(proportion of account attributable)	\$500.00

## Report & Draughting

D. G. Wilbur	September	3rd - 10th (5	days)	\$249.00
Total Expenditure	• • •	•••	•••	\$3036.50

D. G. Wilbur B.Sc.

B. E. Spencer B.A.Sc., P. Eng.

## STATEMENT OF QUALIFICATIONS.

- 1. I, David G. Wilbur am a graduate of the University of Durham, England, B.Sc. (Honours) Geology 1965.
- I have practiced my profession over the past six years with the following organizations:- Mineralogy Section, Ministry of Technology, Stevenage, England; Gortdrum Mines, Tipperary, Ireland and Western Mines, Campbell River B.C.

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D. G. Wilbur B.Sc.

## APPENDIX

## Stan Claim Group.

Stan 1 - 22 Mineral Claims

17046 - 17067



