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#1 Claim map #2 Geochemical Survey map

GEOCHEMICAL SURVEY

JD - PAN GROUPS

OWNER: Marshall Creek Copper Mining Co. Ltd. CLAIMS: JD, JD Nos. 1 to 19, 21, 23, 24 & 25; Mar C 3 to 8; Pan 1 to 8, 10 to 21; Easy 29 to 36 LATITUDE: 48° LONGITUDE: 124° NW

VICTORIA MINING DIVISION

AUTHOR: D.C. MALCOLM, B.A.Sc., P. Eng., 2568 DATES OF WORK: July 1, 1971 to May 20, 1972

Desistment of Mines and Jamain's Antources sssisier derogr 671 MAP NO.

JD - PAN GROUPS

SUMMARY

Grid lines were cut and a detailed geochemical soil survey was made on Marshall Creek Copper Co. Ltd.'s property. The claims are north of the Caycuse River four miles east of Nitinat Lake in the Victoria Mining Division.

The claims are underlain by Bonanza volcanics intruded by quartz feldspar porphyry and mineralized by pyrite, bornite and chalcopyrite.

The geochemical survey reflects this mineralization with high anomalous copper bearing soils about mineralized outcrop areas.

LOCATION

Latitude:	48°48'	North
Longitude:	124°38'	West
Elevation:	50 to 2	,500 Feet

The claims are north of the Caycuse River four miles east of its mouth at the north end of Nitinat Lake on the west coast of Vancouver Island.

They are reached by 20 miles of paved and gravel road from Cowichan Lake to Caycuse, then by 12 miles of main haulage logging roads via Nixon Creek and along the north side of the Caycuse River. This B.C. Forest Product road crosses the claims but access is restricted.

CLAIMS

Fifty-five located claims.

Claim	Record No.	Due Date
JD	16,504	May 21, 1973
JD 1	16,505	91. 12. II
JD 2	16,506	H H H
JD 3	16,507	H
JD 4	16,596	June 4, 1973
JD 5	16,597	n an
JD 6	16,608	June 9, 1973
JD 7	16,609	11 FI H
JD 8	16,610	81 F2 F3
JD 9	16,611	11 H H
JD 10	16,630	June 16, 1972
JD 11	16,631	11 H H H
JD 12	16,632	1997 - 19
JD 13	16,633	11 11 11
JD 14	16,634	31 <u>11</u> 11
JD 15	16,635	11 11 11
JD 16	16,636	11 H R
JD 17	16,637	H H H
JD 18	16,638	12 13 19
JD 19	16,639	H H H

Claim	Record No.	Due Date
JD 21	16,688	July 2, 1972
JD 23	16,690	July 2, 1972
JD 24	16,691	H H H
JD 25	16,692	17 11 11
Mar C .3	16,956	June 28, 1972
n n 4	16,957	11 11 11
" " 5	16,958	11 II II
и и 6	16,959	11 H H
* * 7	16,960	ti ti ti
n n - 8	16,961	E1 F1 F1
Pan 1	16,666	June 26, 1972
" 2	16,667	tt tt II
" 3	16,668	11 11 11
n 4	16,669	11 DF 21
" 5	16,670	75 58 77
" 6	16,671	98 19 1 9
" 7	16,672	11 11
n 8	16,673	11 11 11
" 10	16,675	TT - 19 19
" 12	16,677	11 II II
" 14	16,679	11 11 15
" 15	16,680	11 11 PT
" 16	16,681	11 11 11 11
" 17	16,682	FE ES ET
" 18	16,683	11 11 11
" 19	16,684	17 17 17 17 17
" 20	16,685	11 11 11 11
" 21	16,686	11 11 11

Clai		Record No.	<u>_</u>		D	ue Date	
Easy	29	16,640			June	19, 197	2
61	30	16,641		k	n	F1	
11	31	16,642			11	11 11	
. 11	32	16,643			n	11 H	•
PT	33	16,644			11	H . H	
Ħ	34	16,645			11	11 14	
11	35	16,646			Ħ	17 11	
n	36	16,647			H	H B	

TOPOGRAPHY

The claims are on the south facing timbered slope of the Caycuse River; a fairly steep slope. They cover the lower slopes and canyon of 4 Mile Creek.

The slopes are covered by generally shallow overburden.

GENERAL GEOLOGY

The Nitinat area is underlain by Triassic Vancouver Group volcanics and sediments intruded by Jurassic granodiorite and by plugs and dike swarms of quartz feldspar porphyry.

These rocks, especially the limestones and younger Bonanza sediments and volcanics, are extensively mineralized by chalcopyrite, pyrite magnetite and some molybdenite.

CLAIM GEOLOGY

The claims are underlain by Bonanza siliceous andesites, basic andesites and by tuffs.

A granodiorite batholyth and the Quatsino limestone band lie south of the Caycuse River and a large feldspar porphyry plug lies immediately east of the property. A swarm of quartz feldspar porphyry dikes trending northwest intrudes the volcanics northeast of the area.

The quartz feldspar porphyry plug east of the property contains between 5 and 25% pyrite. Pyrite occurs in all the volcanics and chalcopyrite was found in siliceous andesite.

GEOCHEMICAL SURVEY

A base line was cut using a chain and compass survey in a north direction across the claims. East west lines at 200 foot intervals were cut. These total 25 line miles.

Soil samples were taken from the B soil horizon which generally is well developed beneath a shallow humus cover. These samples were taken every 100 feet along the base line and on the cross lines.

A total of 1,400 samples were collected and the sample locations were marked by flagging. The sample was collected in a standard soil sample envelope marked with the line and sample number.

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The samples were <u>crushed</u> to minus 80 mesh and analized for total copper in parts per million by Chemex Laboratories Limited by the atomic absorption method after hot acid digestion.

DISCUSSION OF GEOCHEMICAL RESULTS

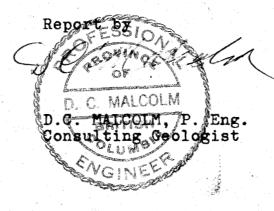
The Marshall Creek Copper Co. Ltd.'s JD and Pan groups cover a pyritized porphyry deposit which has a background of copper soils of 50 parts per million. Basic andesites show background copper soils. Siliceous andesites show appreciable sized areas of anomalous copper bearing soils 2 to 10 times the background as shown on the attached plan.

Massive and disseminated pyrite and chalcopyrite have been found and trenched in siliceous andesite in areas which show anomalous soils. (See attached plan)

RECOMMENDATIONS

C

The anomalous areas should be diamond drilled as they probably represent areas of copper mineralization similar to that trenched.



May 22, 1972 Vancouver, B.C.

4400 E (Line E 44)8578 8577 857.9 576 12,2005 200' to bleached % winning pyse Sample $A_{U}(oz)$ Cu% Ag(oz)Width 101 and 110' to % of fig. gn. vold with very minor py. 8576 grab 3.5 5·10 5·35 tr. 0.005 0.06 0.24 0.98 . 89 9 4.0' 0.10 0.005 tr. NITINAT PROPERTY MAIN SHOWING 1! = 10' Dec 15, 1971 P.W.R.

ROBERTS DENSON HILL & CO.

Chartered Accountants 759 Courtney Street Victoria, B.C. Telephone 385-8791 Dennis C. Roberts, C.A. R.W. Denson, B.Comm., C.A. Henning E. Norgaard, C.A. Charles F. Loveless, C.A.

Licensed Trustees: R. W. Denson, B. Comm., C. A. Henning E. Norgaard, C. A.

May 5, 1972

Mr. J. McNulty 2838 Bryn Mawr Road Victoria, B.C.

Dear Sir:

JBM:dr

Re: Marshall Creek Copper Co. Ltd. (N.P.L.)

This is to certify that the following are expenses related to the J.D. and PAN group of claims situated in the Victoria Mining Division for the calendar year 1971. We have taken these figures from our audited financial statements of July 31, 1971 and February 29, 1972.

Wages and employee benefits \$	8,173
Equipment rentals	nil
Transportation	2,045
Camp operation	9997
Engineering and prospecting supplies	2,0435
Consulting fees	1,282
Assays	1,535

We trust this is the information you require.

Yours very truly, ROBERTS, DENSON, HILL & CO.

J.B. MANTELL

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PERSONNEL

- J.D.McNulty \$800/Mo. May to October 31, 1971 \$4,173.00
- W. McNulty

\$600/Mo. May 1 to September 30, 1971 \$2,400.00

S.V. Henry

\$600/Mo. June 1 to August 31, 1971 \$1,800.00

D.C. Malcolm

\$100/Day	October 1	to 6,1971	\$600.00
11 11	May 15 to	20, 1972	\$600.00

