

# 4738

FAN GROUP

92H/10E

GEOLOGICAL REPORT

GEOCHEMICAL REPORT

BY

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Consulting Geologist

Vancouver, B.C.

November 20, 1973

Department of	
Mines and Petroleum Resources	
ASSESSMENT REPORT	
NO. <b>4738</b>	MAP.....

FAN GROUP

OWNER: BRONSON MINES ? J. Butterworth

Claims: Fan Numbers 29 to 34 and 49 to 54.

Location: Princeton

Latitude: 49°

Longitude: 120° N.W.

Similkameen Mining Division

Author: D.C. MALCOLM, B.A.Sc., P. Eng., 2568

Dates of Work: July 2 to 5, 1973

October 1 to 6, 1973

November 16 to 20, 1973

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### SUMMARY

The Fan claims are well located in the Princeton area. They are underlain by Nicola volcanics intruded by granodiorite near the Allison Creek fault zone.

The Nicola rocks are metamorphosed and contain pyrite. Geochemical samples show some anomalous copper bearing soils.

### LOCATION

Latitude: 45°39' North  
Longitude: 120°36' West  
Elevation: 3,600 to 4,500 Feet

The claims are a mile east of Laird Lake 12 miles north of Princeton, B.C., along Allison Creek. They are reached by Highway 5 north from Princeton then by the Mount Oliphant road to the claims.

### GENERAL GEOLOGY

The area north of Princeton lies between two granodiorite batholyths and is underlain by Nicola Series sediments and volcanics.

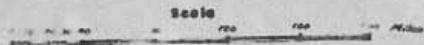
There are numerous granodiorite plutons joining the batholyths and intruding the older Nicola rocks and there are irregular dike swarms and dikes of younger diorites and quartz feldspar porphyry.

NO. 4738 MAP #1

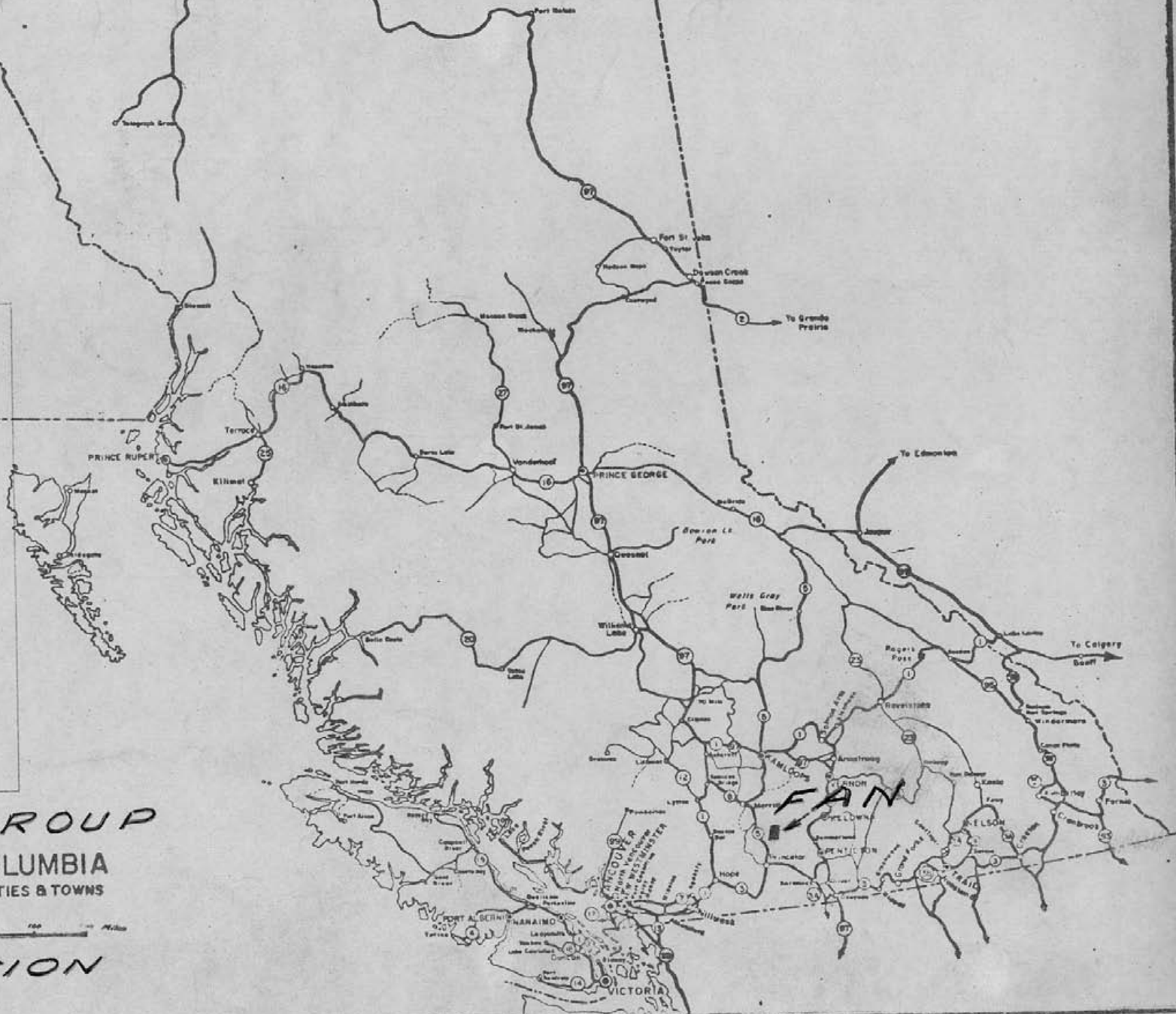
Mines and Petroleum Resources  
ASSESSMENT REPORT

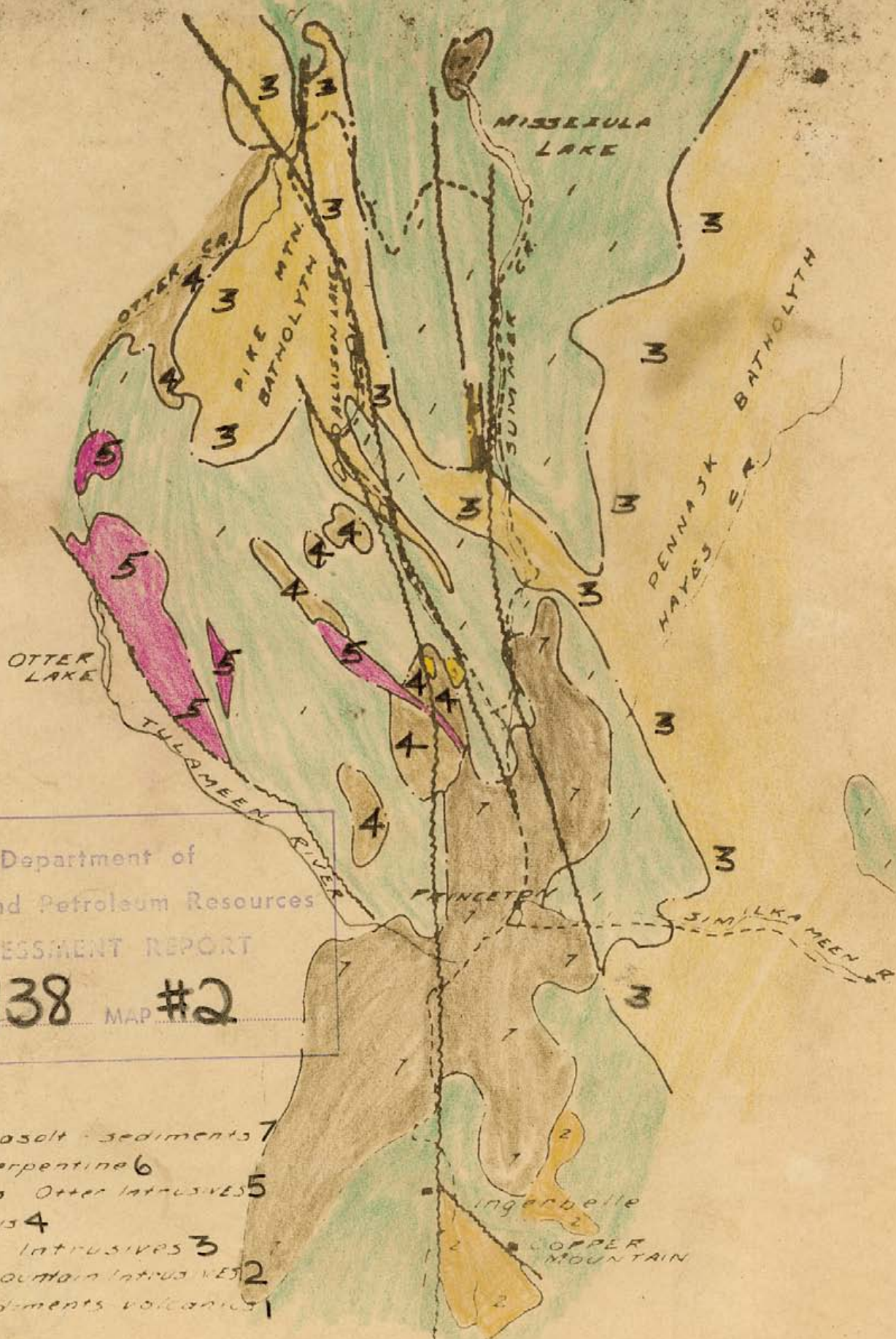
Department of

# FAN GROUP BRITISH COLUMBIA MAIN HIGHWAYS, CITIES & TOWNS










## LOCATION





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**LEGEND**

-  Tertiary basalt - sediments 7
-  Gabbro serpentine 6
-  Cretaceous Otter intrusives 5
-  Cretaceous 4
-  Jurassic intrusives 3
-  Copper Mountain intrusives 2
-  Nicola sediments volcanics 1

**FAN GROUP**  
 GENERAL GEOLOGY  
 Scale 1" = 4 Miles

After Rice GSC Map 38821

Hydrothermal alteration and metamorphism are extensive. Faulting, crushing and brecciation are major controls to both the geology and mineralization.

Major pyrite-chalcopyrite, bornite-magnetite and chalcopyrite-hematite deposits occur at Merritt, Princeton and on Summers Creek a short distance east of the claim area.

### CLAIM GEOLOGY

The Fan claims are underlain by a dark andesite or basalt intruded by two wide granodiorite dikes which strike northwesterly across the claims. Extensive pink orthoclase alteration occurs on the western Fan claims and in the granodiorite. Epidote alteration occurs in most of the volcanic outcrops. Faulting is believed to be extensive and some outcrops show brecciation and shearing but the outcrops are scarce. The fault indications on the surface would be heavily covered by glacial till and soil.

### GEOCHEMICAL SURVEY

East-west lines at 400 foot spacing were cut across the Fan claims and soil samples were taken at 100 foot intervals along these lines. A total of 494 samples were taken from the B soil layer 6 inches to 18 inches below the surface.

The samples were placed in waterproof soil sample bags, labelled and taken to the General Testing Laboratories in Vancouver for assaying. These were assayed there by hot acid digestion and copper determination in parts per million by atomic absorption spectrophotometer.

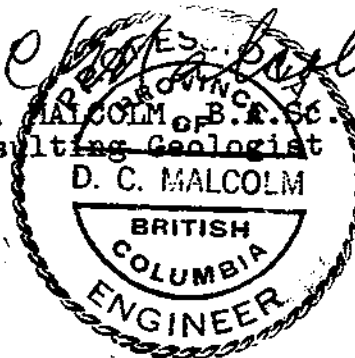
The results were, in general, low but some samples show anomalous copper content in the soils along the granodiorite contacts.

### CONCLUSION

The Fan claims are underlain by pyritized Nicola volcanics along the Allison Creek fault intruded by granodiorite. Geochemical samples were low but some anomalous copper soils do occur along granodiorite contacts in metamorphosed volcanics. Some chalcopyrite was found in the geological work.

Report by

*D. C. Malcolm*  
 D.C. MALCOLM of B.C. P. Eng.,  
 Consulting Geologist



Vancouver, B.C.  
 November 20, 1973



REFERENCE

Geology and Mineral Deposits of the  
Princeton Map-Area, British Columbia,  
G.S.C. Memoir 243 by H.M.A. Rice

DOMINION OF CANADA: }  
 PROVINCE OF BRITISH COLUMBIA. } **In the Matter of**  
 To Wit: }

I, Evan Sleeman  
 1561 West 26 Ave.,  
 Vancouver, B.C.

of

in the Province of British Columbia, do solemnly declare that the following is the true cost of work done on the Fan group of claims.

<u>Labour</u>	<u>Dates Worked</u>	<u>Days</u>	<u>Cost</u>	<u>Total</u>
<u>Name</u> Evan Sleeman	Oct. 1st to 6th	6	\$50.00	\$300.00
	July 2 to 5 th	4	\$50.00	\$200.00
Kevin Sleeman	Oct. 1 to 6th	6	\$22.00	\$132.00
Jay Butterworth	July 2nd to 5th	4	\$50.00	\$200.00
Douglas C. Malcolm	July 2 & 3	2	\$100.00	\$200.00
<u>Food</u> -----				\$ 72.42
<u>Milage</u> ----- 600 miles @ 10¢ per mile				\$ 60.00
<u>Gasoline</u> -----				\$ 93.89
<u>Lodging</u> -----				\$ 73.70
<u>Supplies</u> - Flaggging tape, Maps etc.-----				\$ 16.32
<u>Geochemical Assays</u> -----				\$654.75
Geological and geochemical report, D.C. Malcolm, P, Eng.-----				\$500.00
Total				\$2,503.08

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, in the  
 Province of British Columbia, this 29<sup>th</sup>  
 day of November 1973, A.D.

*Evan Sleeman*

*J.P. Phillips*  
 A Commissioner for taking Affidavits for British Columbia or  
 A Notary Public in and for the Province of British Columbia.

SUB-MINING RECORDER



**4738-M1**

Department of  
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NO. **4738** MAP #1

FAN CLAIM GROUP  
GEOLOGY



Scale 1"=400'

DATE 1/1/73

