

84-#285-12216

GEOLOGY AND SILT GEOCHEMISTRY

SCOTCH CLAIM (15 UNITS)  
KAMLOOPS MINING DIVISION

82L/13E, 14W

Lat: 50°57'N  
Long: 119°30'W

Owner: Brican Resources Ltd.  
Operator: Esso Minerals Canada

by

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ESSO MINERALS CANADA  
600-1281 W. Georgia St.  
Vancouver, B.C.

GEOLOGICAL BRANCH  
OF MINING REPORT

25/4/1984

12,216

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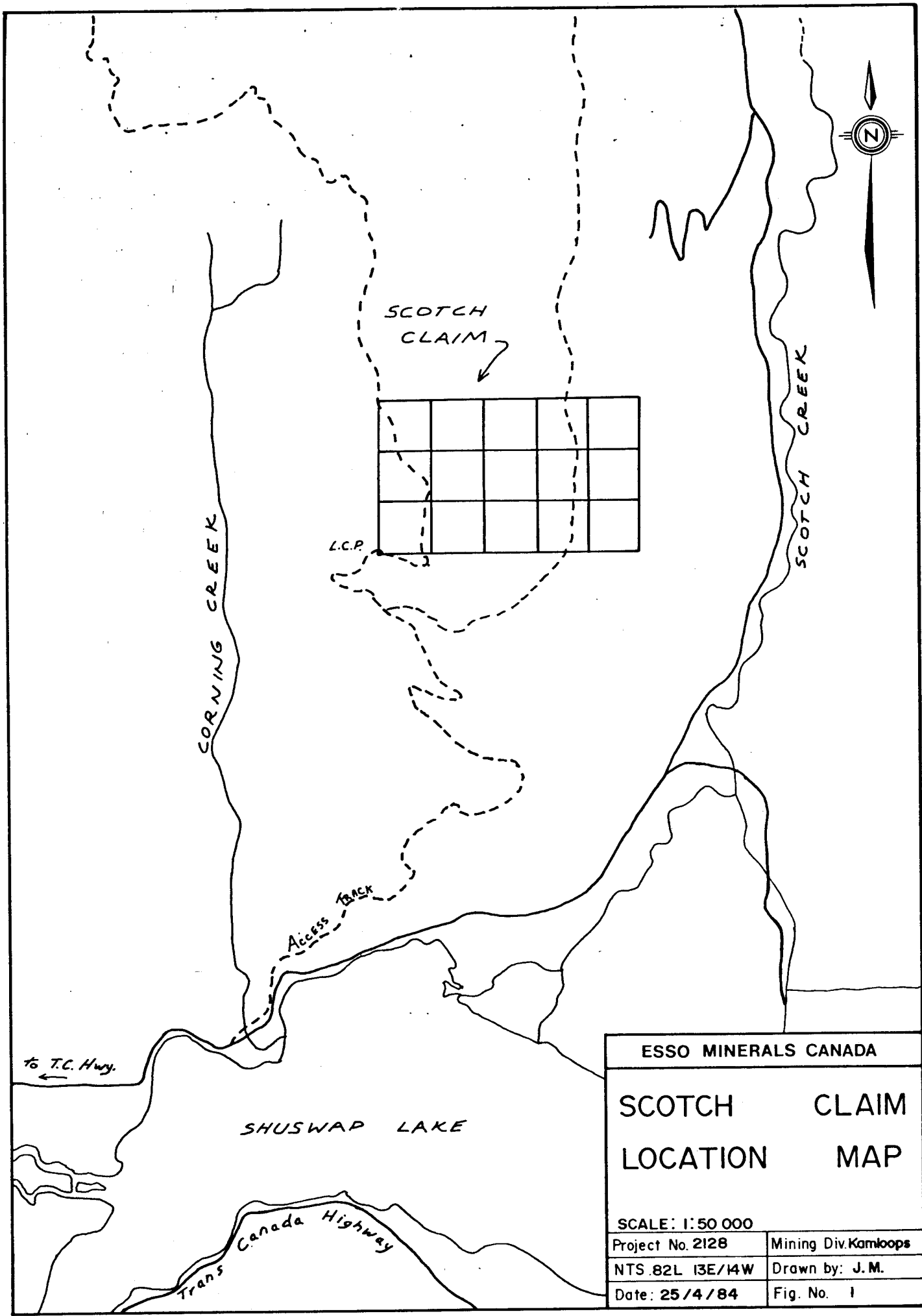
## INTRODUCTION

- (i) The Scotch Claim is located between Corning and Scotch Creeks on the north side of Shuswap Lake. They lie on gently south-sloping country on the south edge of the Adams Plateau. The location map on the next page shows this arrangement.
  
- (ii) The Scotch Claim was optioned from Brican Resources Ltd. in 1979, although it had seen exploration work prior to that date by other companies. It comprises 15 units in a 3 x 5 block.

Diamond drilling has taken place on the claim, notably by Derry, Michener and Booth (2 holes) and by Craigmont Mines (4 holes). Results have indicated a zone or zones of pyrrhotite and chalcopyrite, which appear stratiform, at the contact between sediments and structurally overlying volcanic rocks. Nothing economic as been found to date.

One year of assessment credits is being applied to extend the claim expiry date to May 7, 1985.

- (iii) Results of the technical data being submitted here are shown on map 1. It should be noted that fieldwork completed in August 1983 also covered the area of an expired claim to the west (Scotch 2). This was done to provide a more complete picture of the geological situation. This being the case, only half the available costs will be applied to the assessment requested for the Scotch claim.



ESSO MINERALS CANADA	
SCOTCH	CLAIM
LOCATION	MAP
SCALE: 1:50 000	
Project No. 2128	Mining Div. Kamloops
NTS. 82L 13E/14W	Drawn by: J.M.
Date: 25/4/84	Fig. No. 1

GEOCHEMICAL SURVEY

Stream Sediments

Fourteen regular stream sediment samples were collected in the area, mainly in Corning Creek and its eastern tributary. Intent was to show where metal was being sourced and to examine downstream dispersion trains.

These samples were collected by the author and his assistant in the active part of the creek. They were shipped in Kraft paper bags to Min-En Laboratories in North Vancouver where the -80 mesh fraction was analyzed for 10 elements. Analysis was carried out by I.C.P. (Inductively Coupled Argon Plasma) following nitric-perchloric acid digestion.

Results of this work are shown on the margin of Map 1, including the sample numbers and analytical values for Ag, As, B, Co, Cu, Mn, Mo, Pb, Sb and Zn.

These values are very consistent overall. The most anomalous value is 3J-5374 which is only moderately anomalous in many of the elements tested. It does drain the contact area, however, which appears to locate mineralization in this area (see geological report, to follow).

### Lithogeochemistry

Six samples of bedrock were submitted for analysis to check for alteration patterns in the host rocks. One sample (8200) was an assay from a 50 kilo boulder of pyrrhotite and chalcopyrite dug from the overburden on the western part of the Scotch 2 claim.

Lithologies sampled, locations and analytical results are again shown on Map 1. In general, 2 kilo chip samples in plastic bags were collected from the outcrops shown and shipped to Min-En Laboratories in North Vancouver for grinding, pulverizing and analysis by ICP, again following digestion by a nitric and perchloric acid mixture.

Samples 8201, 8203 and 8204 indicate some soda-depletion in rocks which are believed to form the immediate footwall to the stratigraphic horizon which contains the known mineralization on the Scotch claim (see geological report, to follow). However this effect, commonly associated with volcanogenic deposits of stratiform type, does not appear to extend great distances into the footwall rocks, as shown by series of samples collected in several areas. There is no strong evidence for a substantial footwall altered zone in this area.

## Geological Report

The geology of the area is also shown on Map 1. The main aspect of the property is a contact between sediments to the south and volcanic rocks to the north. This contact area appears to localize most of the known mineralization in the manner of stratiform volcanogenic deposits.

The units have a consistent north-easterly strike and gentle northerly dip. The apparent northerly bends in contacts as shown on Map 1 are due to the effect of the deeply incised creek valleys on this gentle northerly dip.

There is no evidence of structural discontinuity between the sediments and volcanics. A number of gradational units near the contact suggest a true sequence and further suggest that the sequence is overturned, although there is no hard evidence to support this.

The volcanic sequence comprises mainly felsic volcanic rocks, usually porphyritic, light coloured and schistose. They appear to be all dacitic in composition, the subdivisions in units 1-4 are mainly textural. They are thought to represent variations due to explosive ash flow activity.

The sediments comprise basically two lithologies, light grey featureless, massive limestone predominately near the contact and grey phyllites with some associated limestone beds to the south.

Mineralization was observed mainly on the eastern part of the Scotch claim which had been previously tested by drilling. Narrow conformable veinlets of pyrite with chlorite envelopes are well exposed on the access road, mainly occurring in the felsic schists. This type of mineralization may be more common but outcrop is generally lacking. Gossanous greenschists nearer the contact (Unit 5a) show no veinlets but rather a pervasive oxidation of fine grained sulphide which may in this case be pyrrhotite. There is no actual exposure of massive sulphide.



Itemized Cost Statement

Senior Geologist (J. Marr) Aug 1-10, 1983

<u>Field</u> 10 days @ \$250/day	2500
<u>Office</u> 2 days @ \$250/day	500

Field Assistant Aug 1-10, 1983

(K. Foellmer) 10 days @ \$72/day	720
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Vehicle (fuel, oil, mileage, rental)	500
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Accommodation (20 man days x \$40/day)	800
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Analytical Costs (14 silts @ 6.85, 8 rock samples @ \$8.50)	150
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Support staff, miscellaneous	<u>130</u>
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TOTAL	5300
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Total Applicable (see geology section)	\$ 2650
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J. M. Marr

STATEMENT OF QUALIFICATIONS

I, John M. Marr, of 2630 Haywood Avenue, West Vancouver, B.C. state my qualifications in regard to this report to be as follows:

1. I graduated with a B.Sc.(Hons.) degree in Geology from the University of St. Andrews, Scotland in 1968.
2. I obtained an M.Sc. degree from the University of Manitoba in 1970.
3. I have been practising my profession as an exploration geologist since that date in Canada and Australia.

