

on the

GEOLOGY of MINERAL LEASE M346

RETALLACK ARBA

Latitude: 50°03' North Longitude: 117°07' West

SLOCAN MINING DIVISION, B.C.

Department of

Mines and Petroleum Resources

ASSESSMENT REPORT

Byı

February 16, 1973

R.J. MacNeill, P.Eng.

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#| Figure 1 Location and Geology of Mineral Lease M346 In pocket

INTRODUCTION

Mineral Lease M346 constitutes a small part of a large block of mineral claims held by Pan Ocean Oil Limited along the Kaslo Ultrabasic Belt. A programme of geological mapping, prospecting, geochemical sampling and a magnetometer survey was conducted by Derry, Michener and Booth during the 1972 season. The object of this programme was the discovery of nickel and/or copper mineralization associated with the Kaslo Ultrabasic intrusions. The enclosed geological map shows the location and geology of Mineral Lease M346 relative to the central part of the Kaslo Ultrabasic Belt.

Geological mapping was conducted by R.J. Trimble B.Sc., under the direction R.J. MacNeill, P.Eng., and K.L. Daughtry.

PROPERTY

Mineral Lease M346 comprises three Crown-Granted claims: Phoenix (L3336), Fletcher (L5608), and Havona (L5610). The property is owned by Pan Ocean Oil Limited.

LOCATION AND ACCESS

The lease is on a spur forming the south part of Blue Mountain about 1 miles north-northeast of the confluence of Whitewater Creek with Kaslo River. This is in the Slocan Mining District, B.C. at approximately 117 degrees 07' west and 50 degrees 03' north.

Access is by Highway 31A from New Denver, 12 miles to the west, or from Kaslo, 15 miles to the southeast, as far as Retallack and then by foot or helicopter.

TOPOGRAPHY AND CLIMATE

The topography of the lease is rugged, ranging from 5,600' to 7,000' in elevation with steep wooded slopes at lower elevations giving way to stunted forest roof higher up.

The climate is typically mountainous with deep snow on the ground until July and thereafter cool weather until the first heavy frosts in late August.

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REGIONAL GEOLOGY

The area is underlain by metamorphosed Triassic volcanic rocks of the Kaslo series which have been intruded by a band of ultrabasic rocks called the Kaslo Ultrabasic Belt. The belt can be traced almost continuously over a distance of 12 miles from a point about 4 miles north of Kaslo, northwestwards, parallel to the Kaslo River, to London Ridge, and the property is at the center of this belt.

The volcanic rocks of the Kaslo series consist of andesites and tuffs metamorphosed into a regionally homogeneous massive greenstone sequence. These rocks are extensively altered to chlorite barite schist along shear zones which are common throughout the region. The volcanics also display tight and complex folding of several generations.

The ultrabasic rocks of the Kaslo Ultrabasic Belt occur as an essentially tabular discordant intrusive body of Upper Jurassic or Lower Cretacious age and are composed essentially of peridotite, dunite and serpentinite.

The economic interest of the ultrabasic belt lies in local occurrences of nickel in serpentinized ultrabasics localized in pyrrhotite-bearing shear zones. Small showings of chrysotile asbestos fibre are known to occur at numerous locations.

PROPERTY GEOLOGY

Outcrop is abundant throughout the area of the Mineral Lease. The southern half of the property is underlain by serpentinized peridotite (Kaslo ultrabasics) and the northern half is underlain by Kaslo series greenstones. Included within the ultrabasic rock is a thick horizon of altered greenstones and along the hanging wall contact of the greenstones and ultrabasics two separate horizons of diabase dykes are known to occur. Within the property the strike of the ultrabasics and volcanics swings from generally northwest around to south at the southeast corner of the property.

MINERALIZATION

No nickel or copper mineralization has been reported on the property by previous workers and no new occurrences of nickel or copper were discovered during the present program. Traces of nickel mineralization in float were found 250' south of the southeast corner of the property and as this is directly down slope from the claim the source of this minerlization may lie within it. Traces of chalcopyrite were present at the base of the ultrabasic sill 300' south of the south margin of the property.

CONCLUSIONS AND RECOMMENDATIONS

Geological mapping of the property shows that the claim is located on the favourable ultrabasic belt but that there is no obvious sign of economic nickel or copper mineralization within the property.

No further work is immediately warranted or recommended unless significant mineral discoveries are made on adjoining ground.

STATEMENT of PERSONNEL EMPLOYED and EXPENDITURES

SALARY COSTS

R.J. MacNEILL	Report Preparation 1 day @ \$200/day	\$ 200.00
K.L. DAUGHTRY	⅓ day @ \$175/day (Aug. 2)	87.50
R.J. TRIMBLE	3 days @ \$100/day July 19, 30, Aug. 2, 30, Sept. 16, 17 (½ days)	300.00
P. LEONTOWICZ	3½ days @ \$50/day July 19, 30, Aug. 30, Sept. 17.	175.00
E. SHEA	2 days @ \$50/day July 19, 30.	100.00

OTHER COSTS

Board and Lodging		
11 man-days @ \$10/day	110.00	
Ground Transport		
3½ days @ \$14.75/day	51.63	
Helicopter		
3/4 hours @ \$165/hr.	123.75	
Other Overhead	150.00	
	435.38	
10% Management and Supervision	43.54	
	478.92	478.92
TOTAL:		\$1,341.42

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Province o. British Columbia, this

day of

A Countries of the minima Affidevits within British Columbia or A Notary tugget in and for the Froymee of British Columbia, Sub minima Recorder

CERTIFICATION

- I, R.J. MacNeill, business address 314, 837 West
 Hasting Street, Vancouver 1, B.C., do hereby certify that:
 - 1. I am a Consulting Mining Geologist.
 - 2. I am a graduate of Queens University (1943) and California Institute of Technology (1947)
 - 3. I have practised my profession for thirty years in Canada, the United States, South American, Africa, Australia and Papua - New Guinea.
 - 4. I am a member in good standing of the Association of Professional Engineers of Ontario and of the Association of Professional Engineers of British Columbia.

R.J. MacNeill,

B.A., M.S., P.Eng.



Reached Feb. 16/73

R. J. MacNelll

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