

REPORT ON THE  
JURY CLAIMS  
OF  
POLA RESOURCES LTD.

BABINE LAKE AREA  
OMINECA MINING DIVISION, B.C.

BY

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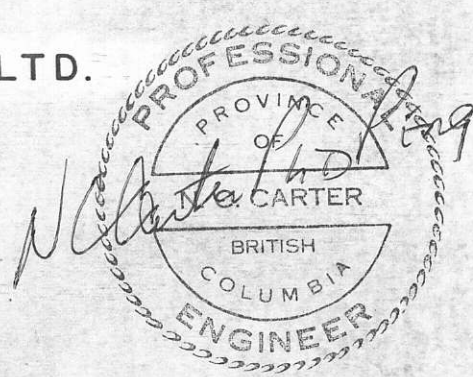
## ILLUSTRATIONS

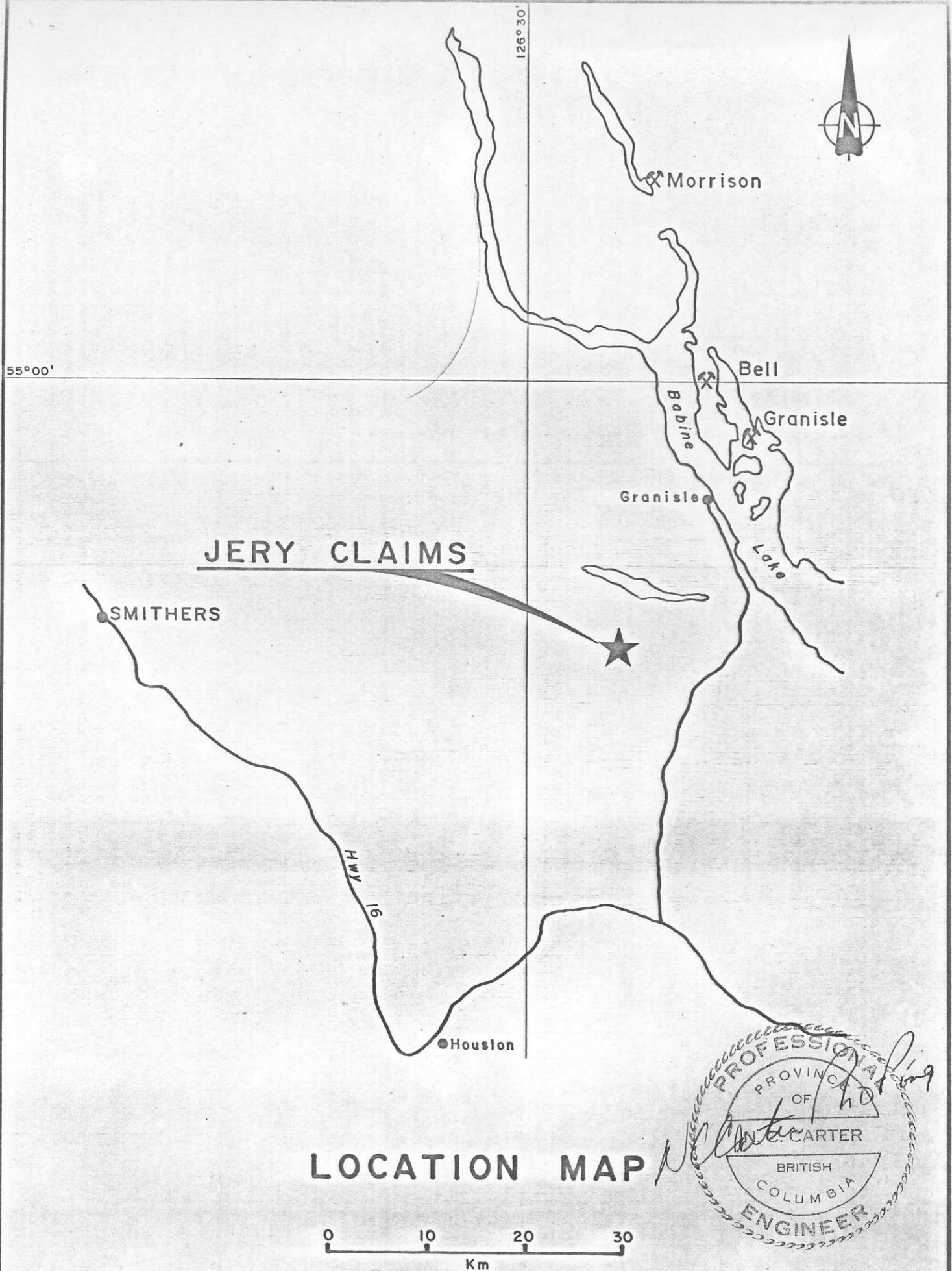
Figure 1	LOCATION MAP
Figure 2	LOCATION MAP - LOCAL
Figure 3	GEOLOGY AND CLAIMS



POLA RESOURCES LTD.

LOCATION MAP  
OF  
JERY CLAIMS





JERY CLAIMS

SMITHERS

Morrison

Bell

Granisle

Granisle

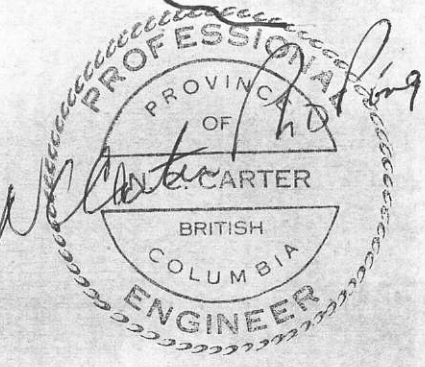
Lake

Babine

Houston

HWY 16

LOCATION MAP



## INTRODUCTION

This report on the Jery mineral claims is based on the writer's intimate knowledge of the geology and mineral deposits of the Babine Lake area. Several field seasons between 1965 and 1972 were spent in the area conducting regional geological mapping and detailed mineral deposit studies while employed by the British Columbia Department of Mines and Petroleum Resources. Several geological traverses were conducted in the vicinity of the Jery mineral claims in 1972, the published results of which are included in the list of references.

## LOCATION AND ACCESS

The Jery mineral claims are situated in the Omineca Mining Division 32 air miles east of Smithers at latitude  $54^{\circ} 45'$  north and longitude  $126^{\circ} 22'$  west at an elevation of 3,000 feet (see Figures 1 and 2). The claims are accessible by 8 miles of secondary and four-wheel drive road which extends from the paved Granisle Highway 17 miles north of Topley on Yellowhead Highway 16.

## MINERAL CLAIMS

The Jery and Jery 1 claims, owned by Pola Resources Ltd., are comprised of 8 units each as shown on Figure 3. Dimensions of each are 2 units east and 4 units north from the Legal Corner Post at the southwest corner of the claim. While not verified in the field, the claims are believed to have been located in accordance with the Regulations of the British Columbia Mineral Act.

## HISTORY OF EXPLORATION

The Jery claims are a partial relocation of the 98 Fly claims staked by Cities Service Minerals Corporation in 1972 following an interpretation of airborne magnetic maps. Cities Service conducted geological, geochemical (1,300 soil samples) and geophysical surveys including magnetometer, electromagnetic and induced polarization in 1972 and 1973. One diamond drill hole was completed which showed a prominent IP anomaly to be due to graphitic sedimentary rocks.

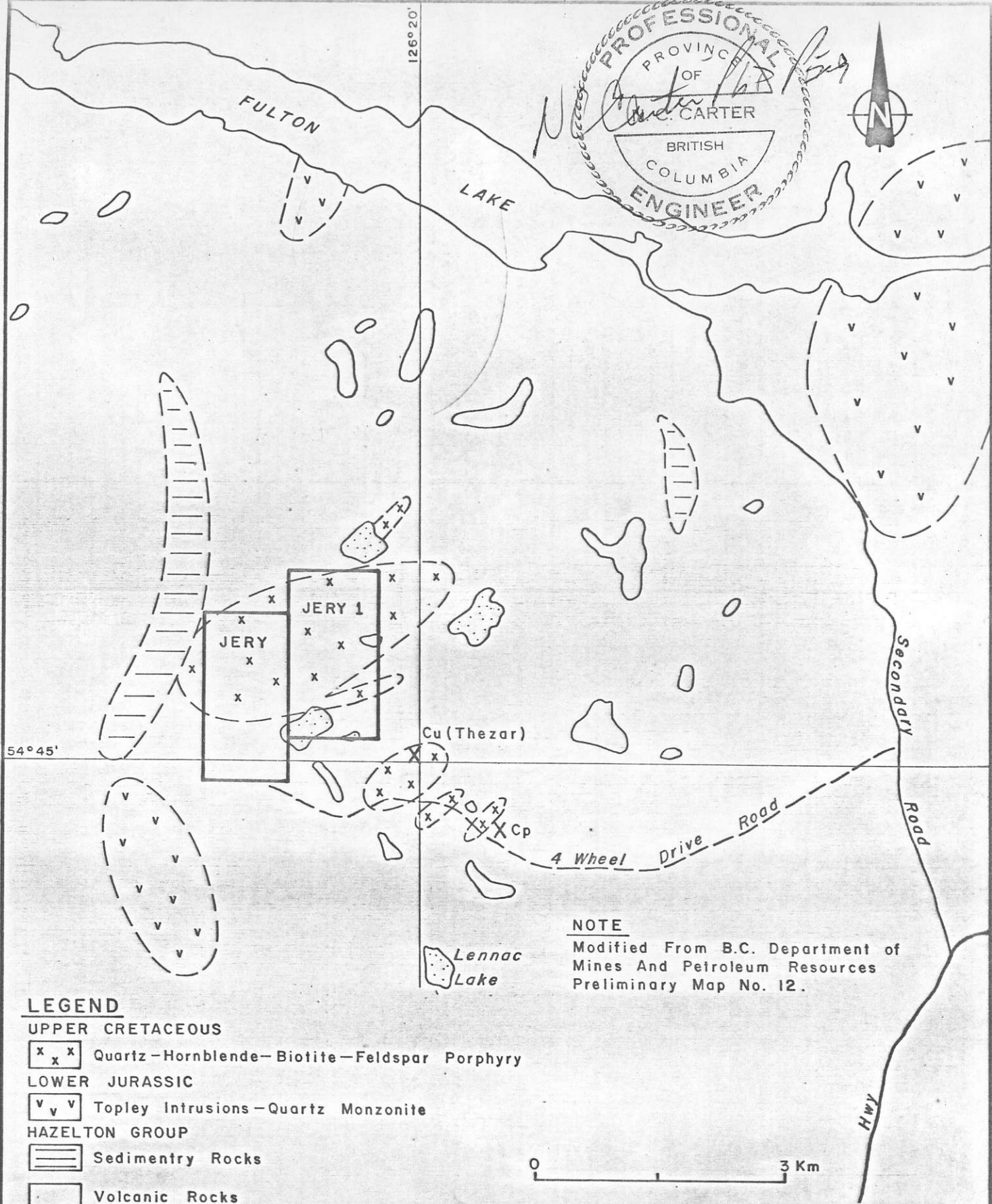
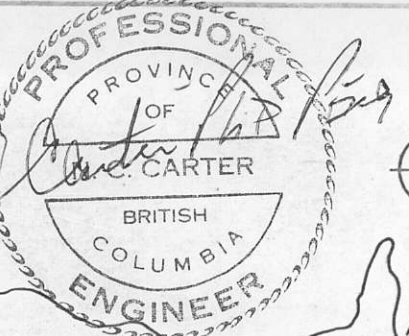
The present claims were located in early October and November of 1980 following a preliminary assessment of the area. Further investigation of the claim area was carried out in late November.

## REGIONAL GEOLOGY AND MINERAL DEPOSITS

The Jery claims are situated in the northern Babine Lake area, noted for significant porphyry copper deposits including Granisle and Bell Copper mines, owned and operated by the Babine Division of Noranda Mines Limited. In addition to the proven but as yet undeveloped Morrison deposit, also owned by Noranda, the area is host to ten known significant porphyry copper prospects.

The northern Babine Lake area is contained within the Nechako Plateau, a physiographic subdivision of the Interior Plateau. Extensive glacial deposits of variable thickness mask much of the bedrock in the region, which is principally underlain by Mesozoic layered rocks, the most widespread being clastic volcanic and sedimentary rocks of the Jurassic Hazelton Group. These are intruded by plutonic rocks of various ages including Lower Jurassic Topley intrusions, Omineca intrusions of early Cretaceous age, late Cretaceous rhyolite porphyry stocks and granodiorite porphyries and Babine intrusions of early Tertiary age.

All of the identified porphyry copper deposits and the majority of significant prospects are related to small stocks and dyke swarms of biotite-feldspar-porphyry of early Tertiary age (Babine intrusions). Copper and molybdenum mineralization is also known to occur in late phases of the Topley intrusions and with porphyritic intrusions of late Cretaceous age at French Peak and at the Thezar property adjacent to the Jery claims (Figure 3).



**NOTE**  
 Modified From B.C. Department of  
 Mines And Petroleum Resources  
 Preliminary Map No. 12.

**LEGEND**

- UPPER CRETACEOUS
- x x x Quartz-Hornblende-Biotite-Feldspar Porphyry
- LOWER JURASSIC
- v v v Topley Intrusions-Quartz Monzonite
- HAZELTON GROUP
- ||| Sedimentary Rocks
- Volcanic Rocks



**GEOLOGY MAP**  
**JERY CLAIMS**  
**POLA RESOURCES LTD.**



## GEOLOGY IN THE VICINITY OF THE JERY CLAIMS

Much of the area around the Jery claims is flat, except for a 250 foot high hill in the northern part of the claims. This hill is underlain by the western half of an elliptical stock-like body of quartz-hornblende-biotite-feldspar porphyry of granodiorite composition (Figure 3). The porphyry, of Upper Cretaceous (77 million years) age, is a medium-grained rock in which phenocrysts constitute 30 percent of the rock by volume and include 4 to 7 millimetre euhedral grains of plagioclase, 4 millimetre quartz eyes, and 2 to 4 millimetre biotite books and hornblende crystals. The phenocrysts are contained in a very fine-grained matrix of K-feldspar and quartz.

The stock intrudes andesite and basalt tuffs and breccias and argillaceous sedimentary rocks of the Hazelton Group. Small northeast porphyry dykes are situated north and south of the stock. A northeast trending ridge southeast of the stock is underlain by Topley granodiorite.

Similar intrusions to that underlying the northern half of the Jery claims occur on the adjacent Thezar property of Amax Minerals, Inc. Here, sulfide mineralization occurs over an area measuring 1.5 by 1 mile. (Figure 3). Chalcopyrite, pyrite, magnetite and molybdenite occur in narrow quartz veinlets rimmed by secondary K-feldspar within the main stock, while quartz-sericite-pyrite alteration is evident in the dykes east of the stock. Chalcopyrite also occurs in dry fractures in volcanic rocks included within the main stock and in hornfelsed volcanics to the east.

Six diamond drill holes completed in the central part of the stock yielded cores containing 1 to 4% total sulfides including, in decreasing order of abundance, pyrite, chalcopyrite and molybdenite.

As throughout much of the northern Babine Lake area, bedrock exposures are sparse. A soil survey conducted by Cities Service Minerals Corporation in 1972 included the present Jery claims and indicated isolated copper values in excess of 50 ppm copper, with molybdenum values in the 1 to 3 ppm range. However, the value of soil geochemical surveys in this glaciated area is questionable unless overburden profiles are carried out. (Levinson and Carter, 1979).

CONCLUSIONS AND RECOMMENDATIONS

1. A late Cretaceous porphyry intrusion underlying the northern half of the Jery claims is petrologically similar to one hosting copper-molybdenum mineralization on the Thezar property immediately east.
2. Previous geochemical and geophysical surveys conducted on and in the vicinity of the present Jery claims may have been only partially successful in assessing the potential of the property. Standard soil geochemical surveys are of only limited value in this area.
3. A lithochemical program is recommended, consisting of the collection of samples from all bedrock exposures within and marginal to the porphyry intrusion, and chemical analysis of the samples for trace copper, molybdenum and zinc.
4. This program should assist in defining drill locations for two angle diamond drill holes of 1,000 feet each to test the contact area of the porphyry intrusion.

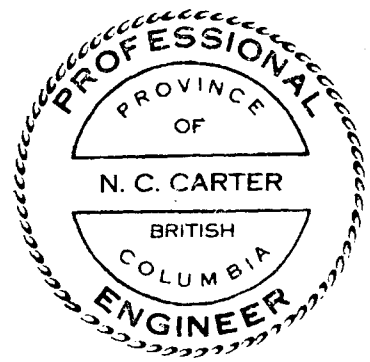
ESTIMATE OF COSTS

1. Lithochemical Survey including analyses	\$ 7,000.00
2. Two 1,000 ft. diamond drill holes	40,000.00
3. Engineering, supervision and contingencies	<u>12,000.00</u>
	<u>\$59,000.00</u>

Respectfully submitted,

*N.Carter Ph.D. P.Eng.*

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LIST OF REFERENCES

Carter, N.C., 1973: Geology of the Northern Babine Lake Area.

British Columbia Department of Mines and Petroleum Resources Preliminary Map No. 12.

\_\_\_\_\_, 1973: Lennac Lake - Red Top Creek Area, in Geology, Exploration and Mining in British Columbia, pp. 393 - 396. British Columbia Department of Mines and Petroleum Resources.

\_\_\_\_\_, 1976: Regional Setting of Porphyry Deposits in West-Central British Columbia in Porphyry Deposits of the Canadian Cordillera CIM Special Volume 15, pp. 227 - 238.

Levinson, A.A. and N.C. Carter, 1979: Glacial Overburden Sampling for Porphyry Copper Exploration, Babine Lake Area, British Columbia, Western Miner, May 1979, page 19.

British Columbia Department of Mines and Petroleum Resources: Assessment Reports 4192, 5031.

CERTIFICATE

I, Nicholas C. Carter, of Victoria, B.C., do hereby certify that:

1. I am a geologist, and have been registered with the Association of Professional Engineers of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick (B.Sc. 1960), Michigan Technological University (M.S. 1962) and the University of British Columbia (Ph.D. 1974).
3. I have practised my profession for 20 years, principally in British Columbia, and in eastern Canada and the United States and in parts of western United States.
4. This report is based on published data based on field work in the area of the Jery claims in 1972 while I was employed by the B.C. Department of Mines and Petroleum Resources.
5. I have no interest in the Jery claims or in Pola Resources Ltd. nor is it my intention to acquire any such interest.

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