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REPORT  
ON THE  
PATSY GROUP MINERAL CLAIMS  
OF  
CARNES CREEK EXPLORATIONS LTD.  
SIMILKAMEEN MINING DIVISION  
BRITISH COLUMBIA  
BY  
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VICTORIA, B.C.

DECEMBER 17, 1983

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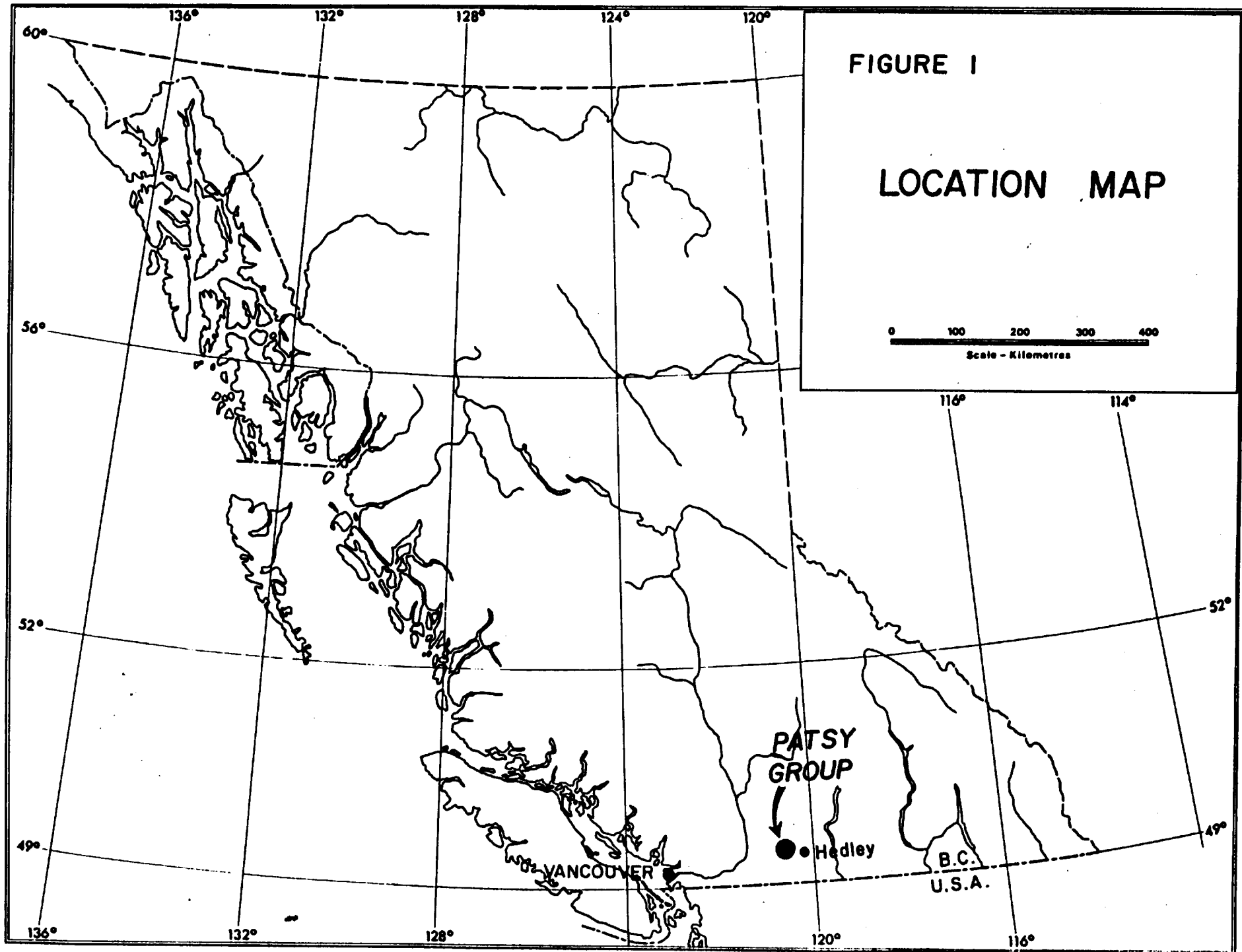
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FIGURE 1

LOCATION MAP



SUMMARY

Carnes-Creek Explorations Ltd. owns ten mineral claims known as the Patsy group in the Similkameen Mining Division of south-central British Columbia. The claims are situated near Hedley and afford easy access.

Gold mineralization in the Hedley camp is associated with arsenopyrite rich replacement bodies in the Nicola group skarnified limestones and to a lesser degree, with quartz veins and sulfide lenses in argillaceous rocks of similar age.

The Patsy group is underlain by a sedimentary sequence of cherty argillites and lesser tuffs, limestones and felsites, which is intruded by sill-like bodies of diorite and andesite. Two styles of mineralization are known on the property including; gold values with arsenopyrite in narrow quartz veins in the northern claims, and thin lenticular, concordant zones of gold-bearing massive arsenopyrite-pyrite on the southern part of the property.

Orientation and reconnaissance soil geochemical surveys have defined at least nine zones with anomalous arsenic values which warrant follow-up work.

A two phase program to further investigate anomalous areas is recommended. The first phase, involving detailed geochemical sampling and trenching, is estimated to cost \$40,000.00. Based on positive results being obtained from Phase I, a limited diamond drilling program would be recommended at an estimated cost of \$85,000.00.

## INTRODUCTION

Carnes Creek Explorations Ltd. owns ten claims near Hedley in the Similkameen Mining Division of south-central British Columbia.

This report, prepared at the request of Carnes Creek Explorations Ltd., is based on a brief visit to the property December 13, 1983, and on various published and unpublished maps and reports provided to the writer by the Company. Particular use was made of a geological report on the claims by W. G. Smitheringale, P.Eng., dated April 21, 1982, and of results of geological and geochemical surveys conducted on the claims in mid-1983 by W. G. Smitheringale and Associates Ltd.

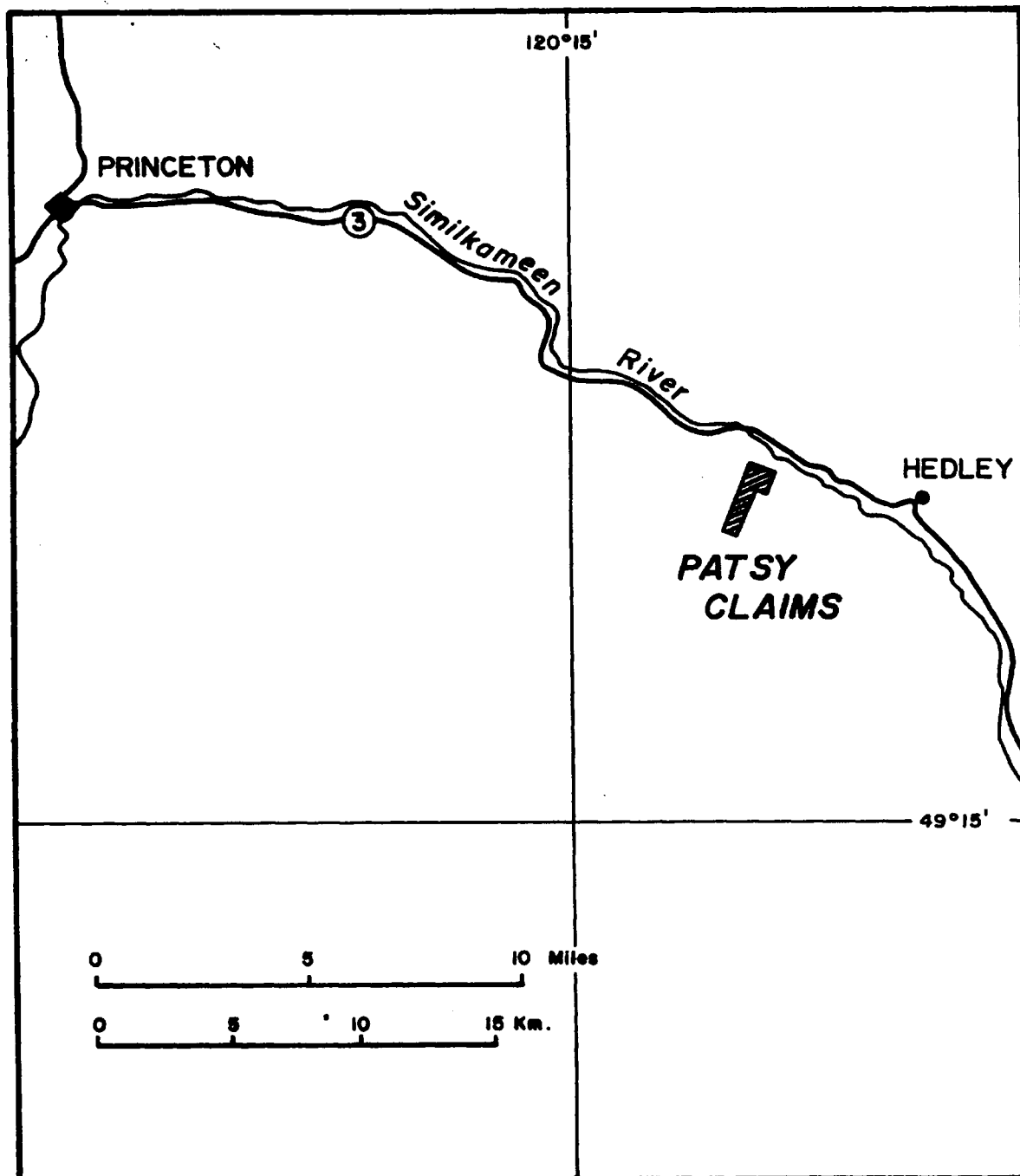
## LOCATION AND ACCESS

The Patsy group of mineral claims is situated 6 km. west of the town of Hedley in south-central British Columbia (Figure 1). The claims, which extend from south of Highway 3 up the east side of Whistle Creek (Figure 2), are located in NTS map-area 92H/8E and the geographic centre of the claims are at latitudes  $49^{\circ}21.5'$  North and longitude  $120^{\circ}10'$  West.

Access to the southern part of the claims is by a logging road up the west side of Whistle Creek which leaves Highway 3 seven km. west of Hedley (Figure 3). The northern claims may be reached by a network of roads which leave Highway 3 just south of the Similkameen River bridge.

## MINERAL PROPERTY

The Patsy group comprises of three Crown-granted and seven recorded two-post mineral claims (Figure 3). Three of the recorded mineral claims are reverted Crown-granted claims for which surveyed locations are available. The Initial Post of the Gary mineral claim (Tag No. 492658M) was observed by the writer December 13, 1983, and the expiry dates were confirmed in the office of the Mining Recorder for Similkameen Mining Division in Princeton.



**FIGURE 2 - LOCATION - PATSY GROUP MINERAL CLAIMS**

Details of the claims are as follows:

<u>Mineral Claims</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Expiry Date</u>
Patsy	3404S	-	-
Patsy 1	3403S	-	-
Patsy 2	3407S	-	-
Ivanhoe	3406S	389	July, 1984
B.C.	3408S	390	July, 1984
Grandview	3405S	391	July, 1984
Gary	-	395	August, 1984
Gary 1	-	396	August, 1984
Gary 2	-	397	August, 1984
Gary 3	-	400	August, 1984

#### PHYSICAL FEATURES

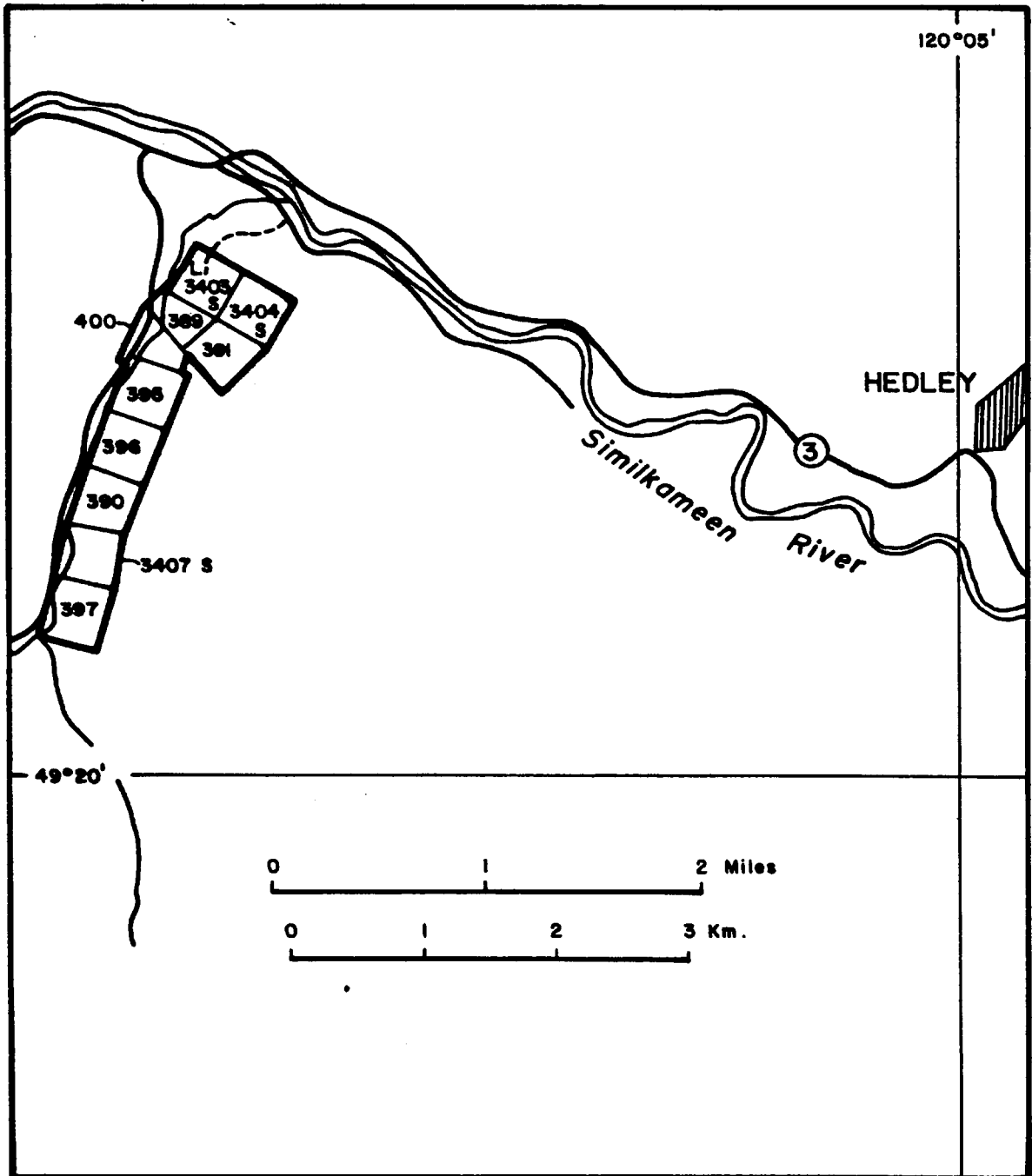
The Patsy group of mineral claims are located on a fairly steep northwest-facing slope, south of the Similkameen River and east of Whistle Creek. Elevations within the claims range from 600 to 1000 metres above sea level.

Open forest is broken by rocky bluffs over much of the claims area.

#### HISTORY

The Hedley area has long been known as a gold camp. Placer gold was found in the Similkameen River in 1859, but the gold potential of the region was really recognized on Nickel Plate Mountain in 1898 (Bacon, 1978). Two principal mines, the Nickel Plate and Hedley Mascot, produced more than 1.5 million ounces of gold prior to closure in 1955 (Bacon, 1978). Active exploration, development and production has been underway in the past several years, not only on Nickel Plate Mountain, north of Hedley, but also at the Banbury property 2 km. east of the Patsy claims.

Gold mineralization on the current Patsy group was first systematically explored in 1927. By 1935, a number of adits, shallow shafts and limited diamond drilling had been completed on the two principal mineralized zones.



**FIGURE 3 - PATSY GROUP MINERAL CLAIMS**



More recent work has included some hand trenching and in 1983, considerable soil sampling and geological mapping of the entire property by W. G. Smitheringale and Associates Ltd. Cost of this program was in the order of \$22,000.00.

#### REGIONAL GEOLOGY AND MINERALIZATION

The Hedley area is underlain by a late Triassic Nicola group sequence of sedimentary and lesser volcanic rocks which are intruded by stocks, sills and dykes ranging in composition from quartz diorite to gabbro (Rice, 1960). The Nicola group layered rocks and intrusions are bordered on the north and south by the Pennask and Similkameen granite batholiths of Jurassic age.

Gold deposits on Nickel Plate Mountain are replacement deposits of arsenopyrite, gold, and lesser pyrite, pyrrohotite, chalcopyrite and pyrite developed in skarnified limestones adjacent to intrusive rocks.

Elsewhere in the area, including Whistle Creek, gold mineralization is associated with narrow quartz veins and shear zones in argillites (Rice, 1960).

#### PROPERTY GEOLOGY AND MINERALIZATION

Geological mapping by W. G. Smitheringale and Associates Ltd., shows the Patsy group of claims to be underlain principally by cherty argillites and lesser cherty tuffs, limestones and felsites which strike north-northeasterly and dip moderately to steeply east. These have been intruded by diorites and andesites that are semi-concordant to bedding in the layered rocks. Argillaceous rocks adjacent to the intrusions are hornfelsed.

Two styles of gold mineralization are present on the property (Smitheringale, 1982). On the Patsy claim (Lot No. 3404S - Figure 3), gold values are associated with arsenopyrite in narrow, possibly parallel quartz veins which crosscut bedding in cherty argillites containing

disseminated pyrite. These veins are exposed in two adits and several open cuts, at an elevation of about 700 metres.

Sampling by Smitharingale (1982) showed the host rocks to be essentially barren, but the quartz veins yielded values of 0.636 to more than 3 ounces per ton gold over 2 to 4 cm. widths.

Several adits, shallow shafts and open cuts on the Patsy 2 claim (Lot No. 3407S - Figure 3), expose cherty argillites and tuffs hosting semi-concordant lenses of arsenopyrite and pyrite. These massive sulfide lenses are lenticular and range in width from 1 to 10 cm. Sampling by Smitharingale (1982) showed gold values ranging from 0.04 to 0.244 ounces per ton gold. Host rocks returned only low gold values.

#### GEOCHEMISTRY

A geochemical orientation survey in the vicinity of the mineralized zones on the Patsy and Patsy 2 claims was undertaken in May, 1983, by W. G. Smitharingale and Associates Ltd. This consisted of the collection of 75 soil samples at 5 metre intervals with subsequent analysis for gold and arsenic.

Results of the survey indicated that analysis for arsenic alone would suffice for a reconnaissance geochemical survey.

This survey consisted of the construction of two grids, each with N30°E picketed baselines and 100 metre spaced flagged crosslines. Soil samples were collected at 25 metre-spaced stations on the crosslines.

Grid 1 covered the four northernmost claims (Patsy, Patsy 1, Ivanhoe, Grandview), while Grid 2 was constructed over the Patsy 2 and B.C. claims to the south.

Some 650 soil samples were collected and analyzed for arsenic. Statistical analysis of the results by W. G. Smitharingale and Associates Ltd. suggests that values above 90 parts per million arsenic are probably

anomalous, while those above 120 parts per million arsenic are definitely anomalous.

As might be expected, areas around the old workings on both grids yielded anomalous values. Six other areas with anomalous values were identified on Grid 1 and three anomalous areas were indicated on Grid 2.

#### CONCLUSIONS AND RECOMMENDATIONS

1. The Patsy group of mineral claims is known to host two styles of gold mineralization associated with arsenopyrite. These include gold values in narrow cross-cutting quartz veins on the Patsy claim and thin lenses of massive sulfides concordant with host rocks on the Patsy 2 claim.
2. A geochemical orientation survey in the vicinity of known mineralized zones showed arsenic to be a good indicator element for a subsequent reconnaissance geochemical survey. This survey identified nine anomalous zones which warrant follow-up work.

#### RECOMMENDED PROGRAM

1. Detailed geochemical sampling of all areas found to be anomalous in arsenic. This work should include the collection of both soil and rock samples (if available) with subsequent analysis for both gold and arsenic.
2. Hand trenching, blasting and sampling as warranted by results of detailed geochemical sampling.
3. Backhoe trenching and blasting as warranted.
4. Predicated on positive results of trenching and sampling, a diamond drilling program to further evaluate areas of interest.

COST ESTIMATE

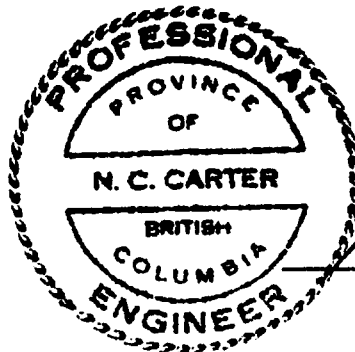
PHASE I

Detailed geochemical sampling and trenching.

1. Sample collection	\$ 3,000.00
2. Sample analysis	2,500.00
3. Accomodation	1,500.00
4. Transportation	1,000.00
5. Hand trenching, blasting	2,500.00
6. Backhoe trenching	20,000.00
7. Engineering, supervision	4,000.00
8. Contingencies	<u>5,500.00</u>
<b>TOTAL</b>	<b><u>\$40,000.00</u></b>

PHASE II

1. Diamond drilling - 600 metres @ \$100/metre	\$60,000.00
2. Assaying	5,000.00
3. Engineering, supervision	5,000.00
4. Contingencies	<u>15,000.00</u>
<b>TOTAL</b>	<b><u>\$85,000.00</u></b>



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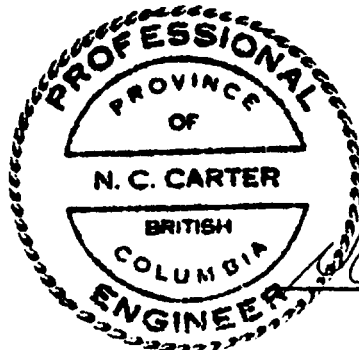
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- Smitheringale W. G.; 1982; Geological Report on the Patsy group Mineral Claims Near Hedley, British Columbia; - private report prepared for Thomas E. Kirk.

CERTIFICATE

I, NICHOLAS C. CARTER, of Victoria, British Columbia, do hereby certify that:

1. I am a geologist registered with the Association of Professional Engineers of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with B.Sc. (1960), Michigan Technological University with M.S. (1962) and the University of British Columbia with Ph.D. (1974).
3. I have practised my profession in eastern Canada and the United States and in British Columbia over the past 23 years.
4. This report is based on a visit to the Patsy group of mineral claims by the writer December 13, 1983, and on published reports and maps and on unpublished reports, maps and progress reports prepared by W. G. Smitheringale and Associates Ltd.
5. I have no interest, direct or indirect, in the Patsy group of mineral claims or in Carnes Creek Explorations Ltd.
6. Permission is hereby granted to use this report in its entirety in support of a Statement of Material Facts or Filing Statement to be submitted to the Vancouver Stock Exchange and the Office of the Superintendent of Brokers.

Victoria, B.C.  
December 17, 1983



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