### PROJECT PROPOSAL SUMMARY

PROJECT TITLE:

Furry Creek Cu-Zn, Au, Ag Project, British Columbia.

LOCATION:

Howe Sound area, southern British Columbia. Approximately 30 km north of Vancouver, at latitude 49° 35'N, longitude 123° 07', NTS 92 G/11.

GEOLOGIC SETTING:

The Furry Creek project area is located in the Britannia "roof pendant", a remnant of mid-Mesozoic volcanic and sedimentary rocks surrounded by the Jurassic-Cretaceous Coast Plutonic Complex. A broad steeply dipping, shear zone known as the Britannia shear zone crosses the length of the pendant in a northwesterly direction and can be traced further to west across Howe Sound. All known ore bodies in the area occur within a 1.5 km long segment of the shear zone immediately west of the Furry Creek project area. The ore bodies consist of semimassive to massive layers, pods, and lenses of sulphides which have yielded, through 69 years (1905-1974) of almost continuous production 55 million tons of ore grading 1.3% Cu, 1.0% Zn, 6 ppm Ag, and 0.8 ppm Au. Massive ore bodies include Zn, Cu and Zn-Cu types. The latter grade approximately 9.5 ppm Au.

The Britannia ore bodies are volcanogenic, Kuroko-type massive sulphides formed from hydrothermal solutions related to dacitic volcanism and deposited at specific stratigraphic horizons within a complex volcano-sedimentary sequence. Ore forming solutions were responsible for chemically altering the volcanic pile through addition of SiO<sub>2</sub>, K<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, H<sub>2</sub>O and subtraction of CaO, FeO, and MnO. Incipient deformation accompanying ore deposition affected preferentially previously hydrothermally altered lithologies and produced the highly schistose rocks which define the Britannia shear zone.

POTENTIAL TARGETS:

Several ore bodies totalling 20 million tons of 1-2% Cu, 0.5-5% Zn, 0.5-10 ppm Au, 5-30 ppm Ag.

LAND STATUS:

The project area lies within the Anaconda owned Indian River-Furry Creek property of 310 Crown-granted claims, 6 reverted crown granted claims, and 8 staked claims.

JUSTIFICATION FOR EXPLORATION:

The Britannia shear zone which contains all the Britannia camp ore bodies, can be traced southeasterly across the length of the Upper Furry Creek Valley. Preliminary reconnaissance mapping indicates that lithologies, stratigraphy, alteration, and deformation along Furry Creek are comparable to those in the Britannia Mine area. Buried massive sulphide occurrences were discovered in the early 1900's at the confluence of Cyrtina and Furry Creeks (Fairwest workings). Limited drilling carried out in 1973

outlined 300,000 tons of ore within the shear zone between the Fairwest workings and the Victoria camp. Previous induced polarization surveys east of the Victoria Mine site have encountered at least three zones of anomalously high chargeability and low resistivity.

#### **RECOMMENDATIONS:**

The purpose of the 1981 Furry Creek project is to define drill targets within the shear zone and carry out a regional geological-geochemical investigation of the Furry Creek-Downing Creek area. Definition of targets within the shear zone will require a) a detailed lithogeochemical study of the rocks within the shear zone in order to reconstruct the pre alteration-deformation stratigraphic and structural framework of the area, b) a detailed study of minor element distribution (e.g. Hg) which may form dispersion haloes above deeply buried sulphide bodies and c) a Max Min and/or EM-37 survey. The latter survey is necessary in order to discriminate between "massive" mineralization and disseminated mineralization previously outlined by the IP surveys. The program should be completed by the end of August, at which time a decision should be made on whether to carry on a drilling programme during September-October.

#### PROJECT COSTS:

(U.S. \$)

Salaries and fringes Transportation Field Equipment Line Cutting Road Repair, Trenching Accommodation Research, Thesis Support Geophysics	\$ 18,000 5,000 3,000 7,000 3,000 8,000 12,000 29,000
Geochemistry	12,000

Drilling	Total	\$97,000 (without drilling) 83,000
	Total	\$180,000 (with drilling)

## PERSONNEL REQUIREMENTS:

Maggie McCall, Senior Assistant, will carry out most of the work as part of an MSc thesis, supervised by Colin Godwin of U.B.C., and supported in part by Anaconda. Other personnel: One Junior Assistant full time; one Senior and one Junior part time. The project will be supervised by L. Riccio, Staff Geologist.

# ENVIRONMENTAL CONSTRAINT:

None anticipated as long as exploration is restricted to areas not belonging to the Greater Vancouver watershed.

RECOMMENDED BY:	Staff Geologist	Date:
	Regional Exploration Manager	Date:
	Manager - International Metals Exploration	Date:
NOTED BY:	Manager - Mineral Lands	Date:
	Legal Department	Date:
	Environmental Department	Date:
APPROVED BY:	Vice President	Date:

cc - Manager - Geologic Services Staff Administrator