AURIFEROUS 82E143

THIS PROSPECTUS CONSTITUTES A PUBLIC OFFERING OF THESE SECURITIES ONLY IN THOSE JURISDICTIONS WHERE THEY MAY BE LAWFULLY OFFERED FOR SALE AND THEREIN ONLY BY PERSONS PERMITTED TO SELL, SUCH SECURITIES.

NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED HEREUNDER AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE. 082ENW046

CTUS

**NEW ISSUE** 

000960

# ZYGOTE RESOURCES LTD.

(hereinafter called the "Issuer") #2 - 2979 Pandosy Street Kelowna, B.C.

**DATED: July 15, 1988** 

## 400,000 Common Shares 1

	Price to Public	Commission <sup>2</sup>	Net Proceeds to be received by the Issuer <sup>3</sup>
	\$0.50	\$0.05	\$0.45
она	\$200,000	\$20,000	\$180,000

<sup>1</sup> The Agents are entitled to over allot the shares in connection with this Offering, and the Issuer has granted an option (the "Greenshoe Option") to purchase shares in the event of an over subscription. See "Plan of Distribution" herein.

THERE IS NO MARKET THROUGH WHICH THESE SECURITIES MAY BE SOLD. The price of this issue has been determined by negotiation between the Issuer and the Agents. The issue price to the public per common share exceeds the net book value per common share immediately prior to the date of the Prospectus by \$0.405 per share. The net book value per common share after giving effect to this Offering, but without giving effect to the Agents Warrants or Greenshoe Option, will be \$0.186 per common share representing a 62.8% dilution of the Offering price per common share.

The Vancouver Stock Exchange has conditionally listed the securities being offered pursuant to this Prospectus. Listing is subject to the Issuer fulfilling all the listing requirements of the Vancouver Stock Exchange on or before January 23, 1989, including prescribed distribution and financial requirements.

A PURCHASE OF THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED A SPECULA-TION. SEE "RISK FACTORS" HEREIN.

Upon completion of this Offering, but without giving effect to the Agents Warrants or the Greenshoe Option, this issue will represent 25.2% of the shares then outstanding. The shares now owned by controlling persons, Promoters, Directors and Senior Officers of the Issuer, and "Underwriters" as defined in Local Policy 3-30 of the British Columnia Securities Commission, represent 50.3% of the shares which will be issued and outstanding on completion of this Offering. Refer to the heading "Principal Holders of Securities" herein for details of shares held by "Underwriters".

This Prospectus also qualifies the issuance of the Agents Warrants and the Agents are entitled pursuant to the Securities Act and its regulations to sell any shares acquired on the exercise of the Agents Warrants without further qualification.

One or more of the directors of the Issuer has an interest, direct or indirect, in other companies. Reference should be made to the item "Directors and Officers" herein for a comment as to the resolution of possible conflicts of interest.

No person is authorized by the Issuer to provide any information or to make any representation other than those contained in this Prospectus in connection with the issue and sale of the securities offered by the Issuer.

We, as Agents, conditionally offer these securities subject to prior sale, if, as and when issued by the Issuer and accepted by us in accordance with the conditions contained in the Agency Agreement referred to under "Plan of Distribution" in this Prospectus.

Agents

### BRINK HUDSON & LEFEVER LTD.

1500 Park Place 666 Burrard Street Vancouver, B.C. V6C 3C4

Effective Date: July 25, 1988

<sup>2</sup> The Issuer has granted the Agents non-transferable Agents Warrants for the purchase of up to 100,000 shares as described in Item 1 of this Prospectus.

<sup>3</sup> Before deduction of the balance of the cost of the issue estimated to be \$15,000.

The Property is without a known body of commercial ore and there is no surface or underground plant or equipment. The proposed program is an exploratory search for ore.

## Auriferous Property (British Columbia)

By an agreement dated August 30, 1987, the Issuer acquired from Murray Morrison ("Optionor") of Kelowna, British Columbia the option ("Option") to earn an undivided 100% interest in two mineral claims (comprising 28 units) located in the Greenwood Mining Division of the Province of British Columbia more particularly described as follows:

Claim Name	Claim Number	Expiry Date
Auriferous 1	4432	November 5, 1989
Auriferous 2	4973	June 30, 1991

The Option may be exercised by:

- (a) paying the Optionor the sum of \$5,000 (paid);
- (b) issuing 12,500 shares in the capital of the Issuer to the Optionor on the Effective Date of this Prospectus;
- (c) issuing 25,000 shares in the capital of the Issuer to the Optionor after completion of Stage I exploration work;
- (d) issuing 25,000 shares in the capital of the Issuer to the Optionor after completion of Stage II exploration work;
- (e) issuing 25,000 shares in the capital of the Issuer to the Optionor after completion of Stage III exploration work;
- (f) issuing 12,500 shares in the capital of the Issuer to the Optionor after completion of Stage IV exploration work.

The property is also subject to a 5% Net Profit Royalty payable to the Optionor from production.

Harold M. Jones, P. Eng., the Issuer's consulting engineer has prepared an engineering report dated February 17, 1988, a copy of which forms part of this Prospectus, which summarizes details related to the past history and geological setting of the property and recommends exploration work as follows:

"The Auriferous property consists of two claims totalling 28 units located in the Greenwood Mining Division of southwestern British Columbia, 15 kms. northeast of Beaverdell. It is readily accessible by good forest access roads.

The Auriferous claims cover most of what had been the Rosemont Mine property, located in 1937. It consisted of four claims, of which only

Rosemont Crown Grant (L.3291) is currently in good standing. It does not form a part of the Auriferous property. From this date to 1941 a number of quartz-filled shears, mineralized with pyrite, pyrrhotite and gold were explored by shallow pits, short shafts and adits, and one longer adit with drifts. It produced 110 tons of ore from which 47 oz. gold and 61 oz. silver were recovered.

The property is underlain by scattered remnants of a Permian and/or Triassic roof pendant of Anarchist Group rocks in Cretaceous-aged granodiorite of the Nelson batholith and Valhalla plutonics. The intrusives-Anarchist Group contact is marked by hybrid intrusive rocks, hornsfel and skarn, locally well mineralized with pyrite and pyrrhotite.

Old workings expose a number of shear zones cutting both the Anarchist and intrusive rocks. The shears contain irregular quartz veins sporatically mineralized with coarse disseminations and masses of pyrite and pyrrhotite.

During 1986-87 a grid was laid out over the central part of the property. It was used for control of geological mapping, biogeochemical sampling and VLF-EM and magnetometer surveys.

The assays from the biogeochemical survey were low for all elements. Silver and cadmium appeared to give meaningful results, since, at some locations, assays for both elements were slightly elevated above background. In these areas, silver assays ranged from 0.5 to 1.0 ppm compared with a background of 0.1 to 0.3 ppm and cadmium from 3 to 11 ppm compared with a background of 1 ppm. They may reflect a weak silver build-up beneath the Anarchist cap rock at the intrusive contact. Several areas of coincident slightly elevated Ag-Cd assays were considered significant because they were coincident with VLF-EM and magnetic anomalies.

The VLF-EM survey recorded five conductors. Two appear to be related to the same structure, the third to a separate but parallel one. These are coincident with the above geochemical anomalies. The remaining two conductors are not associated with geochemical anomalies and are not considered of interest.

The magnetometer results show an irregular pattern of weak magnetic "highs" and "lows". This pattern does not aid in interpreting the geology. However, the highest magnetic reading is coincident with both a VLF-EM conductor and a Ag-Cd anomaly, and an area of weak magnetic "highs" is also similarly coincident. It is interpreted that these anomalous areas might reflect shear zones mineralized with pyrite and pyrrhotite possibly accompanied by gold.

The Rosemont Mine workings, some of which are overstaked by the Auriferous claims, and do not form a part of the present property, contain irregular quartz veins mineralized with coarse disseminations and masses of pyrite and pyrrhotite in strongly altered shear zones. It was

from one or more of these shears that 110 tons of ore were mined in the past yielding 47 oz. gold and 61 oz. silver.

It is concluded that, because of similar geological settings on both the Auriferous claims and the Rosemont Mine property, the coincident geochemical - geophysical anamalies on the Auriferous claims may reflect mineralized shears. These could be gold bearing.

A modest exploration consisting of backhoe trenching followed by reverse circulation drilling is recommended to test the anomalous areas. Stage I, which includes trenching and sampling, is estimated to cost \$15,000. Stage II, contingent on Stage I, consists of reverse circulation drilling and is estimated to cost \$45,000."

In 1981 a widely spaced (200m x 50m) soil geochem program was conducted over the west-central portion of the Goldie 1 mineral claim (now the Auriferous 1 mineral claim) by Cominco Ltd. at a cost of \$3,566. One hundred and two samples were analyzed for gold, silver, copper, lead and zinc. No anomalous zones were identified, possibly due to a combination of the wide sampling density and the mantle of clay-rich glacia till known to be widespread on the property.

A widely spaced (200m  $\times$  25m) VLF-EM ground survey was conducted over the southwestern corner of the Goldie 1 mineral claim (now the Auriferous 1 mineral claim) in 1984 by M. Morrison at a cost of \$2,780. (Much of this area was resurveyed in 1987 with a more detailed grid spacing of 100m  $\times$  25m or 50m  $\times$  25m).

In 1986 an experimental biogeochemical survey (77 samples Douglas fir twigs and needles) was conducted over a limited area on the west-central portion of the Auriferous 1 mineral claim by M. Morrison at a cost of \$1,940. The grid spacing for the survey was  $100m \times 25m$  and the data obtained has been included with the data illustrated on the 1987 series of biogeochemical maps on file at the office of the Issuer.

The Issuer has carried out magnetometer and VLF-EM geophysical surveys, biogeochemical surveys and geological mapping on the west-central portion of the Auriferous 1 mineral claim. This work was carried out May through July of 1987. The surveys covered a 0.6 square kilometre area of the Auriferous 1 mineral claim, and maps of each survey at a scale of 1:2000 were produced. Reductions of these maps accompany the engineering report on the Property prepared by Harold M. Jones, P. Eng., as Figure 4-3 in the engineering report.

Grid lines for mapping control were laid out over the west-central portion of the Auriferous 1 mineral claim at 50 or 100 metre separations with stations marked at 25 metre intervals. The grid lay out and geological mapping at a scale of 1:2000 were completed at a cost of \$3,500 to the Issuer. The grid consists of a baseline of 1.1 kilometres and grid lines totalling 11.3 kilometres. The magnetometer and VLF-EM surveys were conducted over the same grid at a cost of \$2,600 each.

A total of 206 biogeochem samples (fir twigs and needles) were collected and sent to Acme Analytical Laboratories in Vancouver for 10 element I.C.P. analysis. The cost of collecting, shipping and analyzing the samples was \$4,800.

The Issuer intends on carrying out Stage I recommendations of its consulting engineer at an estimated cost of approximately \$15,000 utilizing proceeds from this Offering.

The Property is without a known body of commercial ore and there is no surface or underground plant or equipment. The proposed program is an explanatory search for ore.

#### (7) RISK FACTORS

The securities offered hereby are speculative investments, and prospective purchasers should consider the following risk factors.

The Issuer's business is subject to risks normally encountered in mineral resource exploration and development. The profitability of the Issuer's business and the market value of the Issuer's securities will be related to the success the Issuer experiences in exploration and development of resource properties. Mineral exploration and development involve significant risk and while the rewards if an ore body is discovered may be substantial, few properties which are explored are ultimately developed into producing mines. Substantial expenditures may be required to establish ore reserves through drilling, to develop metallurgical processes to extract the metals from the ore and to construct the mining and processing facilities at any site chosen for mining. No assurance can be given that current exploration programs will result in any commercial mining operation.

The Issuer's mineral properties are without a known body of commercial ore and the proposed programs are an exploratory search for ore. The boundaries of the mineral properties referred to in this Prospectus have not been surveyed and, therefore, in accordance with the mining laws of the applicable jurisdictions, their precise location and area may be in doubt.

In addition, it is normal practice in the mining industry to conduct preliminary title examinations to mineral properties prior to conducting exploration work, however, there is no assurance that such an examination establishes ownership of the mineral property and accordingly, ownership of the Issuer's mineral properties may be in doubt. The Issuer will follow usual industry practice in conducting a preliminary title examination prior to the commencement of exploration work and will complete a comprehensive title examination, if and when a decision is made to place a mineral property into commercial production. Mining operations and exploration activities are also subject to national and local laws and regulations which currently or in the future may have a substantial adverse impact on the Issuer. In order to comply with applicable laws the Issuer may be required to make capital and operating expenditures or to close an operation until a particular problem is remedied.

The Directors of the Issuer are also Directors of other reporting companies and therefore it is possible that a conflict may arise between their duties as a Director of the Issuer and those companies. Reference should be made to the Item "Directors and Officers" in this Prospectus for a comment of the procedure for the resolution of possible conflicts of interest.

#### (8) PROMOTER

The Promoters of the Issuer are Kenneth Albertson and Thomas Armitage both Directors and Officers of the Issuer.

Both Kenneth Albertson and Thomas Armitage have each purchased 250,000 escrowed shares of the Issuer at the price of \$0.01 per share and 20,000 and 10,000 shares of the Issuer at the price of \$0.25 per share respectively. The Issuer has granted incentive share purchase options to Kenneth Albertson and Thomas Armitage entitling them to each purchase 39,125 shares of the Issuer. The options are exercisable at the price of \$0.50 per share for a period of two years after the Effective Date (see Item 14).

#### (9) LEGAL PROCEEDINGS

There are no legal proceedings material to the Issuer to which the Issuer is a party or of which any of its property is the subject.

## (10) DIRECTORS AND OFFICERS

Name, Municipality of Residence, and Position with the Issuer

Kenneth Magnus Albertson Kelowna, B.C. Chief Executive Officer, President, Director and Promotor

Thomas Alec Armitage Kelowna, B.C. Chief Financial Officer, Secretary, Director and Promotor

Alan Blaire Bischoff Kelowna, B.C. Director

Mona Claire McKinnon Kelowna, B.C. Director Principal Occupation for the past 5 years

Currently British Columbia representative for North Associates Canada Ltd. (1985 to present); Previously stockbroker at Richardson Greenshields Canada Ltd. (1983 to 1985)

Currently semi-retired self-employed businessman; Previously owner-manager of the Waverley Hotel (1981 to 1984)

B.Sc. (Geophysics), Currently President of Brent Mill Holdings Inc. (1981 to present)

Currently Dietetics Consultant, Previously Director of Dietetics at Pearson Hospital (1973 to 1981)

## HAROLD M. JONES & ASSOCIATES INC.

**CONSULTING GEOLOGISTS** 

605 - 602 WEST HASTINGS STREET, VANCOUVER, B.C. V6B 1P2

TELEPHONE: (604) 689-5533

## A REPORT ON THE AURIFEROUS PROPERTY

ST. JOHN CREEK

BEAVERDELL AREA, B.C.

GREENWOOD MINING DIVISION

82 E 10 W, 11 E

FOR

ZYGOTE RESOURCES LTD. Kelowna, B.C.

BY

HAROLD M. JONES, P.ENG.
HAROLD M. JONES & ASSOCIATES INC.

Date Prepared: February 17, 1988

> Date Revised: June 22, 1988

#### CERTIFICATE

I, NICHOLAS C. CARTER, of 1410 Wende Road, Victoria, B.C., do hereby certify that:

- 1. I am a Consulting 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 and western Canada and in parts of the United States for more than 25 years.
- 4. This report is based on brief visits to the property area, on unpublished and published information dealing with the property and its regional setting and on my background knowledge of the Beardmore - Geraldton gold district.
- 5. I have no imterest, direct or indirect, in the Vivian Township mining claims or in the securities of Zygote Resources Ltd.
- 6. Permission is hereby granted to Zygote Resources Ltd. to use this report in support of a Prospectus to be submitted to regulatory agencies.

N.C. Carter, Ph.D. P.Eng.

Victoria, B.C. April 8,1988

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#### SUMMARY

The Auriferous property consists of two claims totalling 28 units located in the Greenwood Mining Division of southwestern British Columbia, 15 kms northeast of Beaverdell. It is readily accessible by good forest access roads.

The Auriferous claims cover most of what had been the Rosemont Mine property, located in 1937. It consisted of four claims, of which only Rosemont Crown Grant (L.3291) is currently in good standing. It does not form a part of the Auriferous property. From this date to 1941 a number of quartz-filled shears, mineralized with pyrite, pyrrhotite and gold were explored on the Rosemont Mine property by shallow pits, short shafts and adits, and one longer adit with drifts. It produced 110 tons of ore from which 47 oz. gold and 61 oz. silver were recovered.

The property is underlain by scattered remnants of a Permian and/or Triassic roof pendant of Anarchist Group rocks in Cretaceous-aged granodiorite of the Nelson batholith and Valhalla plutonics. The intrusives-Anarchist Group contact is marked by hybrid intrusive rocks, hornsfel and skarn, locally well mineralized with pyrite and pyrrhotite.

Old workings expose a number of shear zones cutting both the Anarchist and intrusive rocks. The shears contain irregular quartz veins sporatically mineralized with coarse disseminations and masses of pyrite and pyrrhotite.

During 1986-87 a grid was laid out over the central part of the property. It was used for control of geological mapping, biogeochemical sampling and VLF-EM and magnetometer surveys.

The assays from the biogeochemical survey were low for all elements. Silver and cadmium appeared to give meaningful results, since, at some locations, assays for both elements were slightly elevated above background. In these areas, silver assays ranged from 0.5 to 1.0 ppm compared with a background of 0.1 to 0.3 ppm and cadmium from 3 to 11 ppm compared with a background of 1 ppm. They may reflect a weak silver build-up beneath the Anarchist cap rock at the intrusive contact. Several areas of coincident slightly elevated Ag-Cd assays were considered significant because they were coincident with VLF-EM and magnetic anomalies.

HAROLD M. JONES & ASSOCIATES INC.

The VLF-EM survey recorded five conductors. Two appear to be related to the same structure, the third to a separate but parallel one. These are coincident with the above mentioned slightly elevated Ag-Cd assays. The remaining two conductors are not associated with significant geochemical values and are not considered of interest.

The magnetometer results show an irregular pattern of weak magnetic "highs" and "lows". This pattern does not aid in interpreting the geology. However, the highest magnetic reading is coincident with both a VLF-EM conductor and the higher Ag-Cd assays, and an area of weak magnetic "highs" is also similarly coincident. It is interpreted that these areas might reflect shear zones mineralized with pyrite and pyrrhotite possibly accompanied by gold.

The Rosemont Mine workings, some of which are overstaked by the Auriferous claims, and do not form a part of the present property, contain irregular quartz veins mineralized with coarse disseminations and masses of pyrite and pyrrhotite in strongly altered shear zones. It was from one or more of these shears that 110 tons of ore were mined in the past yielding 47 oz. gold and 61 oz. silver.

It is concluded that, because of similar geological settings on both the Auriferous claims and the Rosemont Mine property, the coincidence of slightly higher geochemical assays with geophysical anomalies on the Auriferous claims may reflect mineralized shears. These could be gold bearing.

A modest exploration consisting of backhoe trenching followed by reverse circulation drilling is recommended to test the anomalous areas. Stage I, which includes trenching and sampling, is estimated to cost \$15,000. Stage II, contingent on Stage I, consists of reverse circulation drilling and is estimated to cost \$45,000.

#### INTRODUCTION

This report on the Auriferous property was prepared at the request of the President of Zygote Resources Ltd. Data for the report is based on the writer's examination of the claims on November 13, 1987 and a review of the literature listed under "References" in this report.

## Location and Access

49° 32' North Latitude ) to approximate centre 119° 00' West Longitude ) of the claims

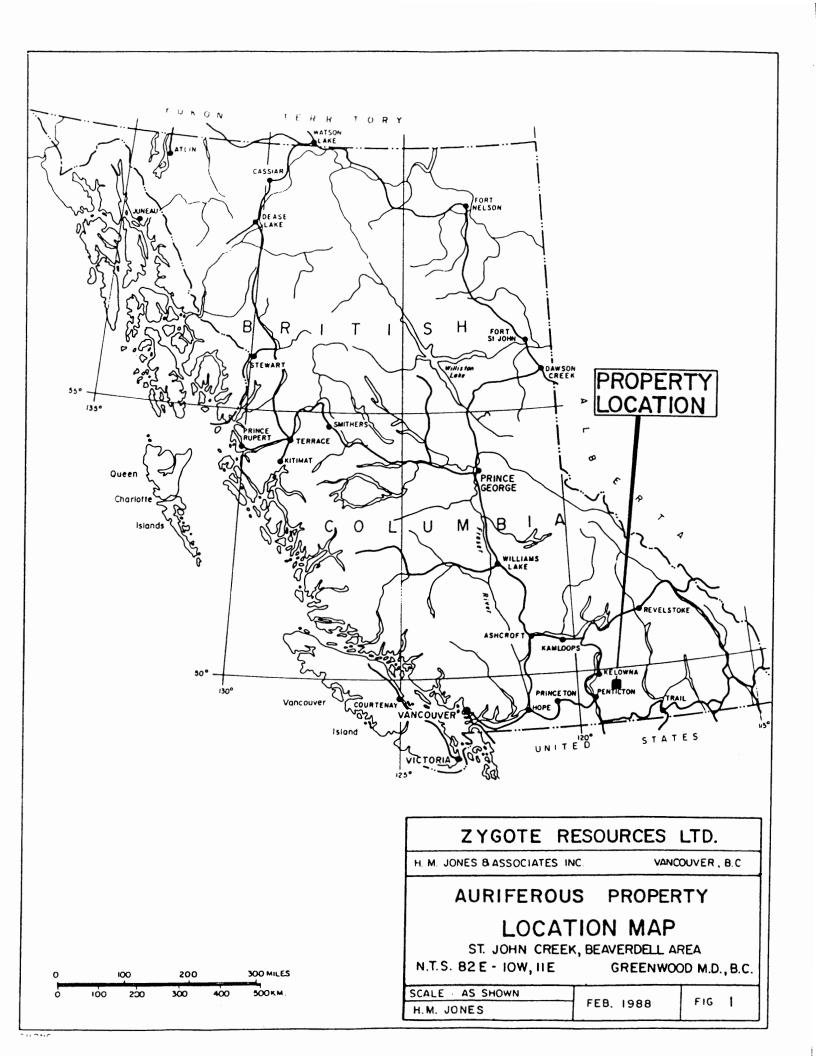
The Auriferous claims are located in the Greenwood Mining Division approximately 50 kms due north of Rock Creek and 10 km northeast of Beaverdell (Figure 1). They are situated on the ridge which separates the headwaters of St. John and China Creeks (Figure 2).

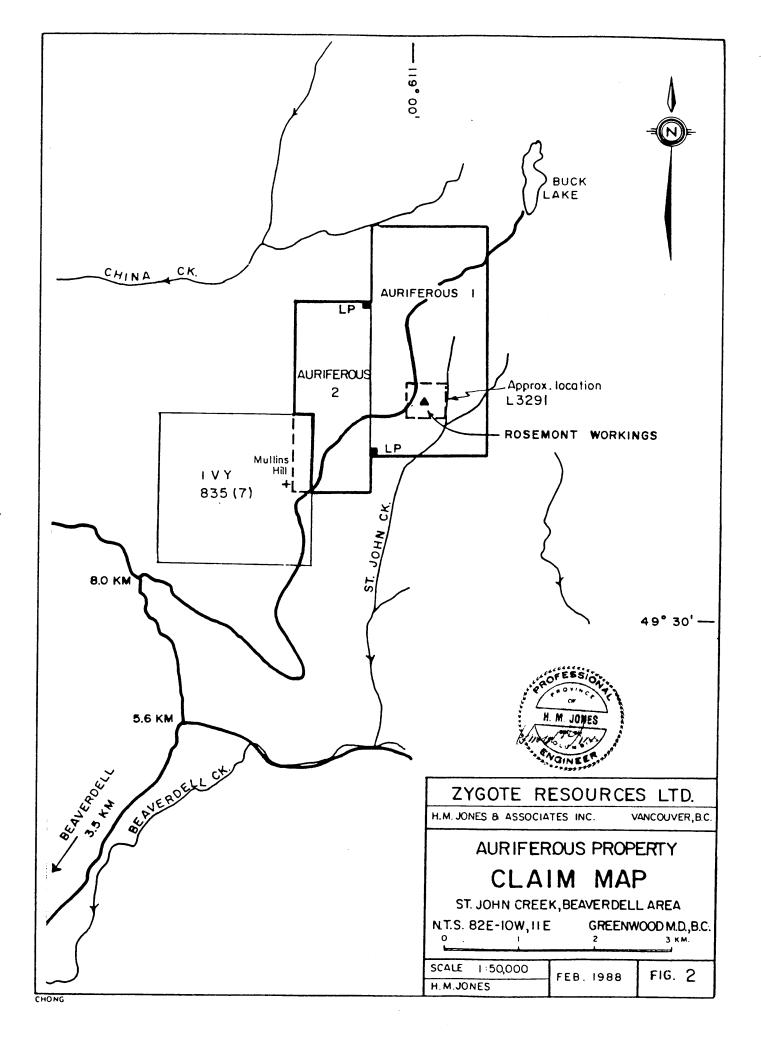
Beaverdell is very accessible via Highway 33 from Kelowna (90 km) or from Rock Creek (40 km). It is approximately 15 kms to the property from Beaverdell via the Beaverdell Creek and Buck Lake forest access roads. The latter road traverses the property.

## Topography and Vegetation

The claims are located on the southeast end of the Okanagan Highlands, which is characterized by low, rolling hills separated by broad shallow valleys. This moderate terrain is interrupted by deeply incised east and west flowing streams draining into the equally deeply incised, south flowing Kettle River and West Kettle River valleys.

The claims lie on China Butte, a northeast trending, flat-topped ridge. Elevations range from the West Kettle River valley at approximately 760 metres to the claims at 1,225 metres.





Vegetation in the Beaverdell area is typical of the dry belt of interior British Columbia. Mature stands of fir, pine, tamarack and alder occur dispersed with areas of thick second growth forests of the same trees. The latter area the results of old forest fires. Most of the Auriferous claims are within an old burn and are covered by dense second growth.

## Property

The property consists of two contiguous claims totalling 28 units (Figure 2). They are:

Claim Name	No. of Units	Record No.	Expiry Date*	
Auriferous 1	18	4432	Nov. 5, 1989	
Auriferous 2	10	4973	June 30, 1991	

<sup>\*</sup>Expiry date assumes acceptance of recently filed assessment work.

The claims are owned by M.S. Morrison, 862 Balsam Street, Kelowna and held under an option agreement by Zygote Resources Ltd. of Kelowna, B.C.

The Auriferous 1 claim is thought to include the overstaking of Rosemont Crown Grant (L3291) owned by others. This lot is shown on mineral claim map 82E11 as being within Auriferous 1 claim but 1 km north of old workings. However, old workings lying just south of the 1987 grid appears to compare with those of the Rosemont Mine described in the literature. It is assumed that this Crown Grant is misplaced on the government claim map. (It appears to be correctly placed on Min. file map 82E/NW.) A ground search was made for Crown Grant posts or old cut lines but none could be found.

## History and Previous Work

The general Beaverdell area was actively prospected during the late 1800's. This lead to the discovery of the Highland Bell Mine which commenced producing high grade silver ore in 1900 and has operated continuously to the present.

- 5 -

The Rosemont Mine property was located in 1937 and explored by numerous pits, several shallow shafts and several short adits. It was under option to Highland Bell Mine between 1939-41 during which time they completed 80 feet of drifting and 100 feet of crosscutting. Total production between 1937 and 1941 was 110 tons yielding 47 oz. gold and 61 oz. silver (recoverable grade 0.427 oz/ton gold and 0.55 oz/ton silver).

Limited bulldozer trenching was conducted north of the old Rosemont Mine workings, probably during the 1960's, but there is no record of this work.

In 1981, Cominco staked the Rosemont Mine area as the Goldie claims, then conducted a soil sampling program over the property. Results were discouraging, so they transferred the property to M.S. Morrison, the original locater of the ground.

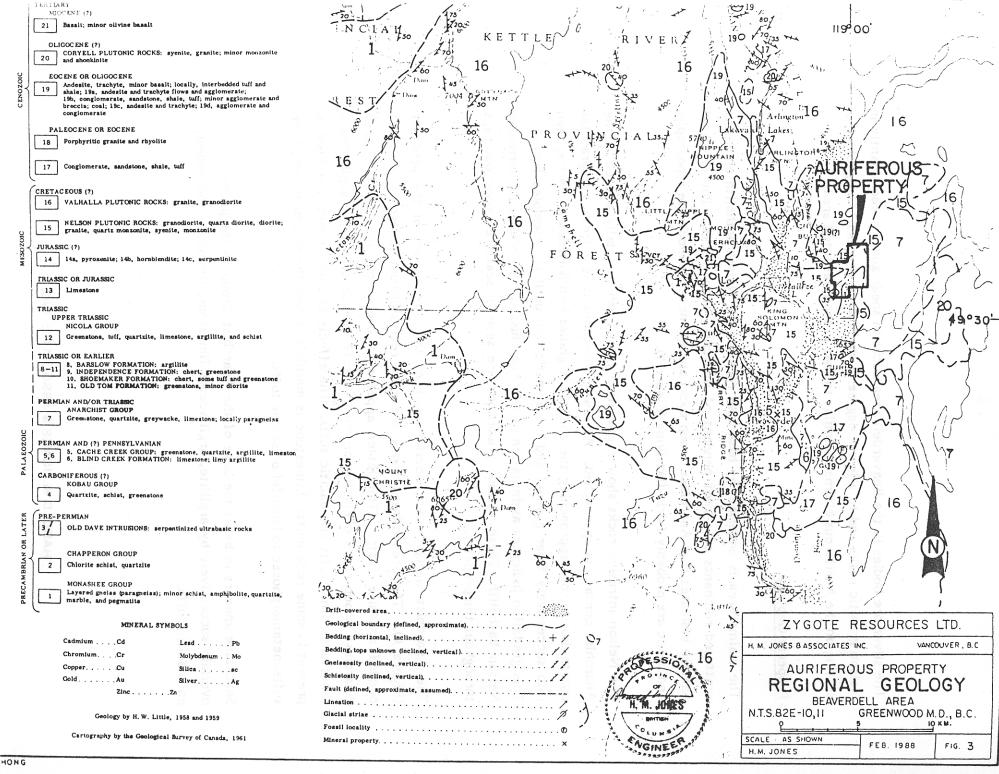
In 1984 Morrison conducted a VLF-EM survey over a part of the property. In 1985 he re-staked the Goldie 1 claim as Auriferous 1, and in 1987 staked Auriferous 2.

During 1986, Morrison conducted a preliminary biogeochemical survey over a part of Auriferous 1 claim. In 1987 he expanded the above survey, and also conducted geological mapping and VLF-EM and magnetometer surveys. The results of this exploration is included in the following report.

#### **GEOLOGY**

## Regional Geology

The Auriferous claims are underlain by greenstone, greywacke, limestone and gneissic rocks of the Permian and/or Triassic Anarchist Group (Figure 3). These rocks occur as a pendant within granitic rocks of Cretaceous Nelson batholith and Valhalla plutonics. The Nelson intrusive rocks are slightly older than the invading Valhalla plutonics resulting in the former rocks occurring generally as small bodies enveloped by the large stock-like body of Valhalla rocks.



The silver ore bodies in the Beaverdell area occur in shear zones predominantly in Nelson granitic rocks and to a lesser degree in the Anarchist rocks. The geological setting on the Auriferous claims is similar to that in the Beaverdell area.

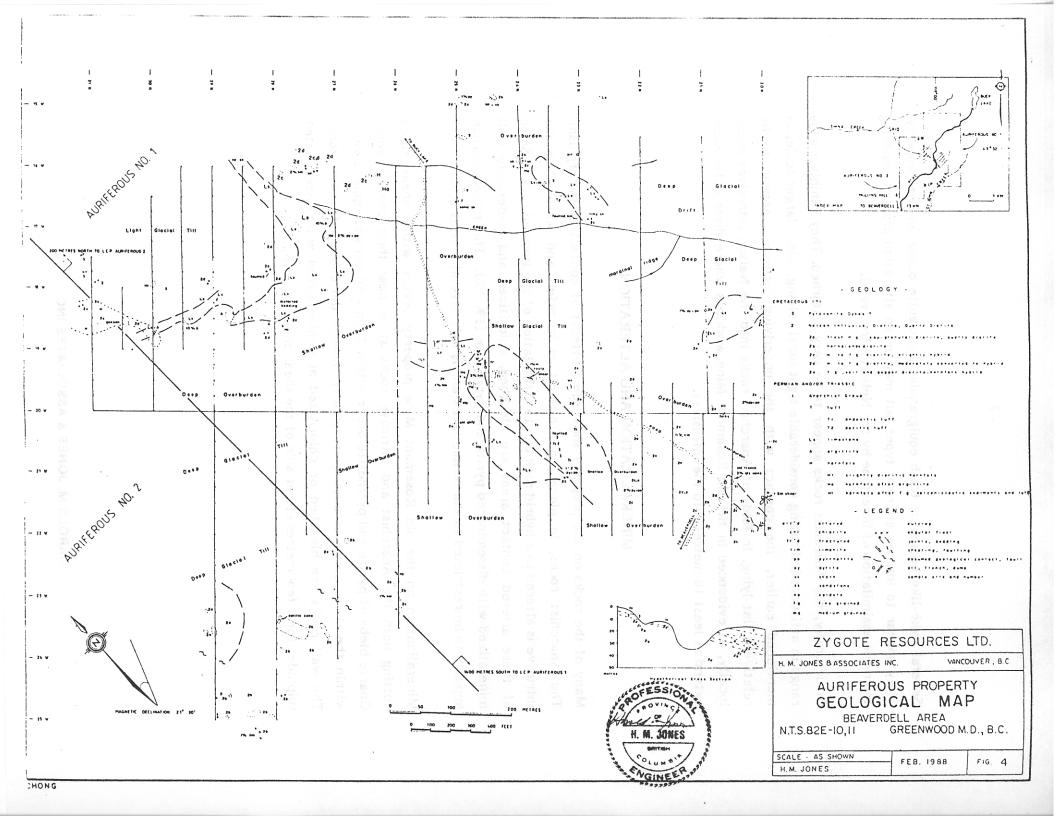
## **Property Geology**

The claims area is underlain by basement rocks of the Nelson batholith enclosing scattered remnants of a roof pendant of Anarchist Group rocks. The erosional pattern indicates that Anarchist Group rocks approximate the moderate topography and hence are probably fairly flat-lying (Figure 4).

The Nelson intrusive rocks show a gradation from fresh to totally altered as the Anarchist contact is approached. At lower elevations it is a fresh, equigranular quartz diorite, but approaching the contact it grades into hornblende diorite, than into successively finer grained and more mafic-rich until it resembles hornsfel. This gradation indicates assimilation of the Anarchist Group rock by the intruding Nelson batholith. These various gradations are seen in scattered poor outcrops throughout the property.

The Anarchist Group rocks underlie much of the central part of the property (Figure 4). The predominant rocks are grey recrystallized limestone and thin bedded andesite tuffs. The latter appears to overly the limestone. Other Anarchist Group rocks occurring on the property include sandstone, argillaceous limestones, limy tuffs and dacitic tuffs. The effects of contact metamorphism is present in some rock units. Limestone is marbleized, and the sediments and limy tuffs metamorphosed to hornsfel or skarny tuffs.

Sandstone appears to be at the base of the Anarchist Group on the property. It is overlain successively by argillite, argillaceous limestone, limestone and andesitic and dacitic tuffs.



Several dyke-like bodies of fresh equigranular pyroxenite occur on the property. They appear to intrude all rock types but may be an alteration product resulting from the assimilation of limestone by the Nelson intrusive(?).

Structurally, the Anarchist rocks appear to be very disturbed. They exhibit a wide range in attitudes indicating considerable tight local folding. On a larger scale, as mentioned earlier, the contact with the underlying intrusives appear to be relatively flat-lying. In-folds of Anarchist rocks into the Nelson intrusives occur locally, as evidenced in the old Rosemont Mine workings where these older rocks extend at least 10 metres into the intrusives.

## MINERALIZATION AND ALTERATION

Many of the rocks on the property show some effects of contact metamorphism. The Anarchist rocks, in places, are altered to hornsfels and skarn while the intrusive is altered to a hybrid rock due to assimilation of the invaded rocks. Some of these altered contact areas are bleached, chloritized and moderately well mineralized with disseminated pyrite and pyrrhotite (1%-3%). This mineralization appears to be restricted to the contact area and is only several metres thick.

Mineralization on the old Rosemont Mine property occurs within shear zones cutting both the Anarchist and intrusive rocks at or near their contact zone. Coarse blebs of pyrite and pyrrhotite occur within 2 cm - 40 cm wide quartz veins within the shear zones or cutting irregularly through the contact fracture zone. The wall rocks are bleached or chloritized and mineralized with disseminated sulphides for a few metres either side of the shear zones or veins.

## SAMPLES AND ASSAYS

The writer collected eight rock and two soil samples, most of which came from old workings on the Rosemont Mine area. The purpose of these samples was to test for the presence of gold in the various shears. Shears are not well exposed on the Auriferous claims due to the overburden cover.

			-		Check	
Sample No.	Туре	Width		Ag nnm	Assay Au oz/ton	Remarks
110.	1700	WIGHT	ru ppb	146 pp	rid OZ/ toll	
604	specimens	-	42	1.9	0.001	Old pit - specimens massive pyr in qtz.
605	11	-	6	1.1	0.001	Vuggy limonitic qtz. in dump
606	11	-	215	0.2	0.006	Massive qtz., some vuggs diss. py.
607	chip	10 ft.	. 75	0.7	0.002	Old pit - chips across 10' shear zone, includes 8" vn.
608	chip	8 in.	. 63	1.0	0.002	8" qtz vn. in above pit, no obvious sulphides
609	specimens	-	445	1.6	0.013	Specimens qtz. from dump, abund. py
610	chips	4.4 ft.	. 23	0.4	0.001	Rosemont adit - fr'd qtz calcite vn.
611	specimens	-	775	0.7	0.022	Qtz. rubble from dump, coarse py.

Two soil samples from the Auriferous grid at 30N, 18+75W assayed respectively 12 and 4 ppb Au. These were taken near the site of a high magnetometer reading. All samples were assayed by Acme Analytical Laboratories in Vancouver, B.C.

The above sample results are much lower than anticipated, considering that a small tonnage of gold ore was produced from the property and that several significant assays were previously obtained from the property.

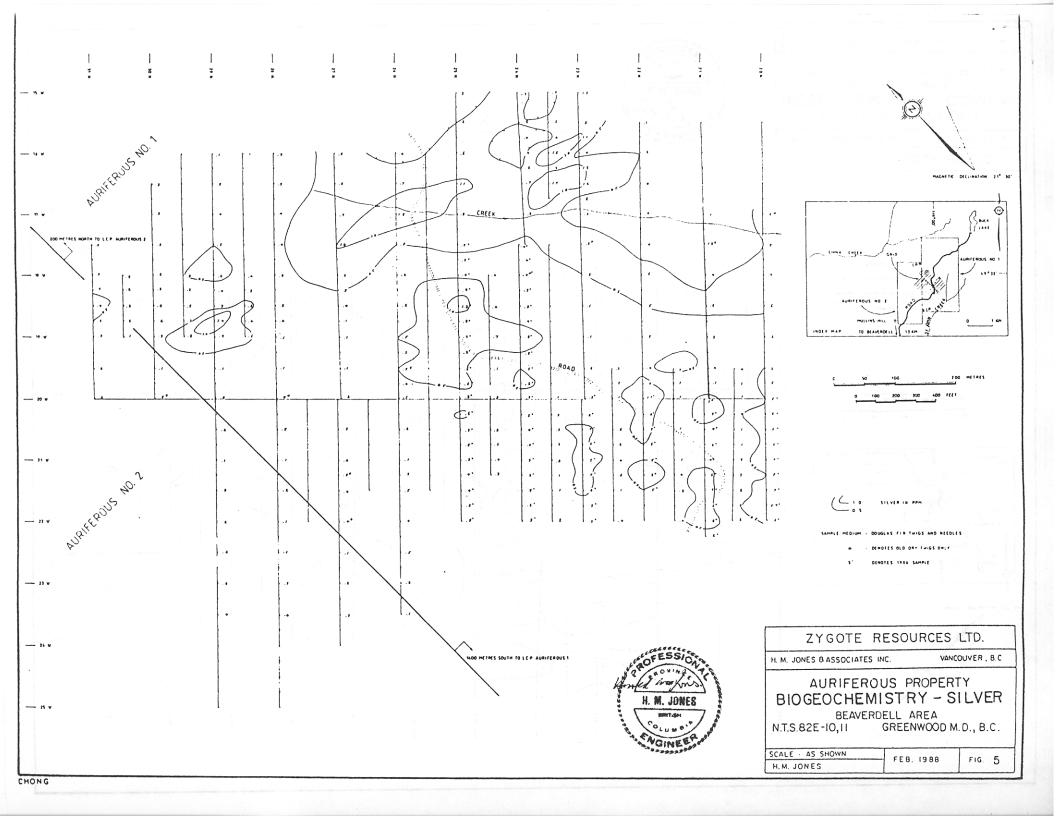
A selected sample of quartz vein material containing abundant pyrrhotite and pyrite with minor chalcopyrite assayed 16,000 ppb Au (0.447 oz/ton) and a sample from a pit at grid point 20N, 21+75W assayed 2880 ppb Au (0.084 oz/ton). These were taken by Morrison in 1980. A Cominco sample taken from a shaft at grid point 20N, 21+40W in 1981 assayed 25,000 ppb Au (0.729 oz/ton). At both grid locations Anarchist Group rocks are cut by shear zones in-filled with irregular narrow quartz veins or small zones of massive pyrite/pyrrhotite.

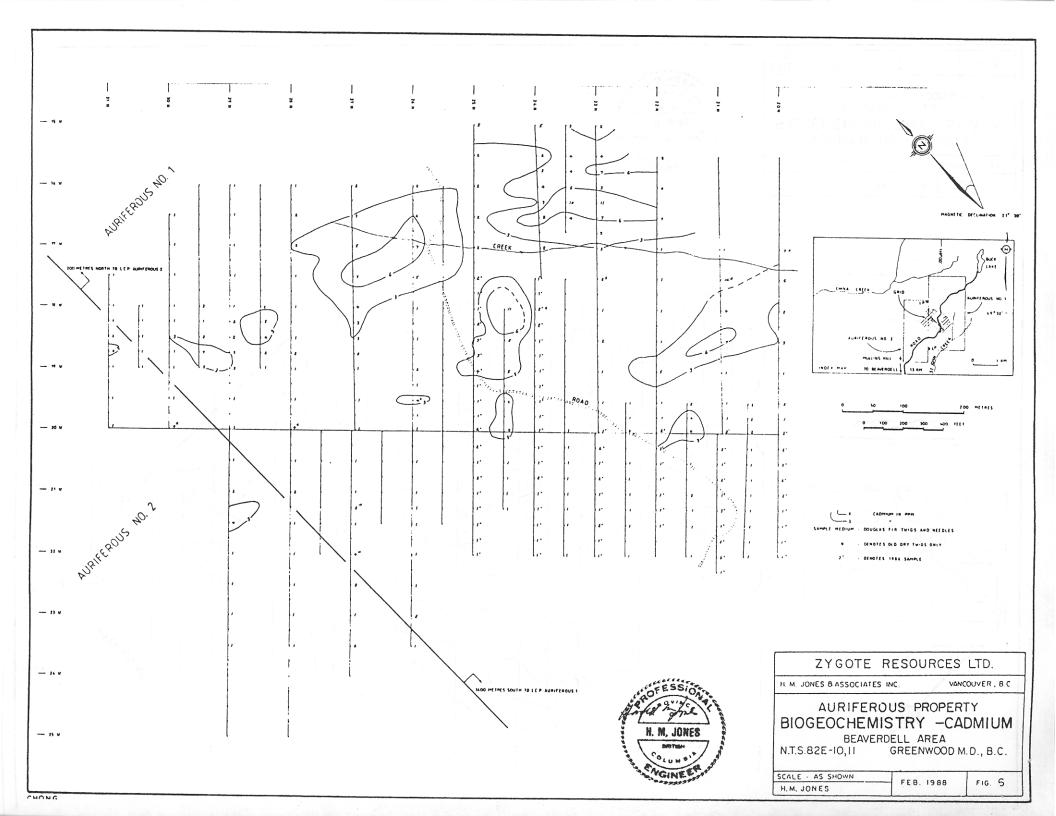
#### GEOCHEMICAL AND GEOPHYSICAL SURVEYS

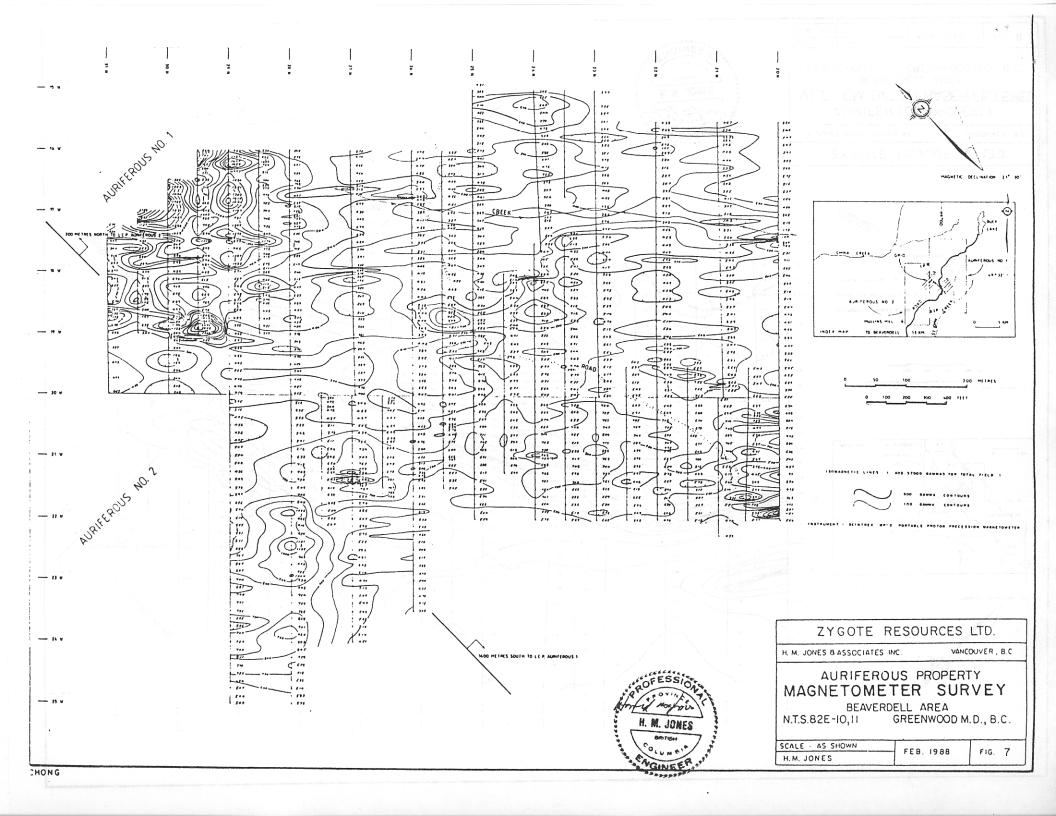
Biogeochemical, VLF-EM and magnetometer surveys were run over a grid in the central part of the property. The results of these surveys are shown on Figures 4, 5, 6, 7 and 8.

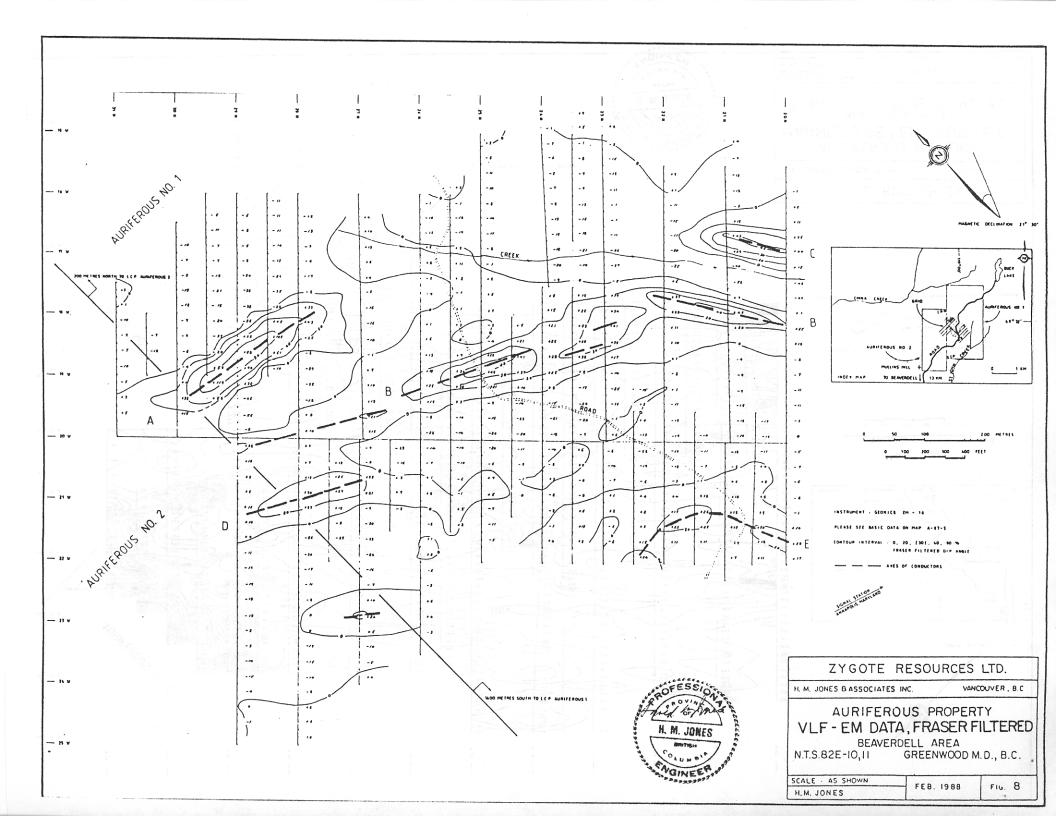
The biogeochemical survey, using Douglas fir as the sample medium, was run to test its effectiveness on the property. Of 10 elements assayed, only silver and cadmium appeared to give meaningful results. Those for copper, lead, zinc, cobalt, iron, arsenic, gold and strontium were either too low or too erratic. It should also be noted that in some areas the usual sampling medium of 1-2 year old twigs and needles could not be obtained due to the height of the trees. In these areas old and dry twigs had to be used. These generally returned higher assays for all elements and had to be discounted in contouring the data.

A number of sample locations returned assays slightly elevated in both silver and cadmium (Figure 5 and 6). Of these, two are also coincident with VLF-EM conductors A and B and magnetic "highs". These are interpreted by Morrison (1987) as probably reflecting sulphide mineralization related to faults. A number of other locations returned assays slightly elevated in silver and/or cadmium which are not









associated with geophysical anomalies. In most cases these are located in areas where the roof pendant rocks are very thin exposing the basement rocks in many places. Silver values in these areas may reflect a slight concentration of silver at the pendant-intrusive contact and for this reason are not considered significant.

The VLF-EM survey recorded five conductive zones (Figure 8). Conductor A and B, as mentioned earlier, may be related to mineralized fault zones. Conductor D, short but parallel to Conductor B, may be related to a splay from the Conductor B fault. Conductors C and E are probably due respecting to topography and weak sulphide mineralization and are not considered significant.

The magnetometer survey shows an area of scattered magnetic "highs" in the northeastern part of the grid. This may reflect pyrrhotite occurring at the intrusive-Anarchist contact. One significant "high" was recorded which coincides with the west end of VLF-EM Conductor A. This may be due to pyrrhotite localized along a shear zone. Weak magnetic "highs" are also associated with the eastern end of Conductor B. In general, the magnetic patterns do not aid in interpreting the geology.

#### DISCUSSION

The Rosemont Mine, now encompassed by the Auriferous claims, produced 47 oz. of gold from 110 tons of ore (average recovered grade 0.427 oz/ton Au). This was mined from narrow, irregular quartz veins occurring in strong shear zones transgressing both the Nelson intrusive and Anarchist Group rocks. The veins are locally well mineralized with coarse masses of pyrite, pyrrhotite and minor chalcopyrite.

While the tonnage of the Rosemont Mine was small, its grade was very significant. For this reason, any indications of mineralized zones in similar geology warrants exploring in anticipation of locating larger tonnage deposits. On the Auriferous property, the coincidence of slightly elevated silver-cadmium biogeochemical

assays, VLF-EM conductors and magnetic anomalies could reflect fault zones mineralized with pyrite and pyrrhotite possibly accompanied by precious metals. The anomalies of interest occur in areas of sparse outcrop, preventing visual assessment of these areas.

The areas of interest warrant additional exploration.

#### CONCLUSION

It is concluded that the Auriferous claims are underlain by geology similar to that at the Rosemont Mine which hosts gold-bearing quartz-sulphide veins in shear zones cutting Anarchist Group and Nelson plutonic rocks. Geochemical and geophysical survey results indicate several areas which may be underlain by mineralized shears but are hidden by overburden. A modest exploration program is warranted to investigate these areas for gold-bearing shear zones.

#### RECOMMENDATIONS

It is recommended that the coincident areas of slightly elevated geochemical assays - geophysical anomalies be tested by backhoe trenches and that all altered and/or mineralized areas be sampled in detail. Significant areas should be tested by reverse circulation drilling and detailed sampling of all cuttings.

## **COST ESTIMATE**

# Stage I - Backhoe Trenching

Time: 2 weeks

Total Stage I	\$ 15,000
Contingencies	 1,380
	13,620
Vehicle	 700
Room and board - 2 men at \$40/manday	1,120
Geologist - 14 days at \$200/day	2,800
Assays - 200 samples at \$10	2,000
Trenching, backhoe - say 14 days at \$500/day	\$ 7,000

# Stage II - Contingent on Stage I

Reverse circulation drilling, say 3,000 feet at \$15/ft. all inclusive \$ 45,000

TOTAL STAGE I AND II \$ 60,000

Respectfully submitted,

Harold Market P.Eng.

#### REFERENCES

- Christopher, P.A. (1975) Highland Bell (Beaverdell) Mine, in Geology in British Columbia 1975, B.C. Min. of Energy, Mines and Res.; pp. G30-33.
- Little, H.W. (1957) Geology, Kettle River (East Half) British Columbia; Geol. Surv. Can. Map 6-1975.
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- Ministry of Mines, B.C.; Annual Reports 1937, p. A36, D23; 1938, p. A34; 1939, p. 77; 1940, p. 63; 1941, p. 25, 60.
- Morrison, M.S. (1987) Geological, Biogeochemical and Geophysical Assessment Report, Auriferous Property, Greenwood M.D.

APPENDIX I

**ASSAY CERTIFICATES** 

ACME AMANIMITEAN NAROPATORIES NITA. 1952 TO MASTIMODIST, MANCOLUMODIBLE NIGHT NA TOUR TOTALE (600 053-7 77 F) 1940 TO 195

#### GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 FRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: P1-ROCK P2-SOIL

AUS: ANALYSIS BY FA+AA FROM 10 GM SAMPLE.

3 109 9.79 3 62 .05 .020 2 62 .22 93 .23 605 2 11 .2 5 5 167 1.65 2 2 18 .08 .004 10. 4 2 .36 .01 .03 605 2 5 ND 7 2 10 .29 18 542 7.65 2 96 .34 .050 7 63 1.36 52 .10 2 2.07 .05 .13 2 13 1.0 12 11 233 2.57 3 5 ND 1 12 .04 .003 2 12 .24 608 4 1 2 60 9 .01 609 1 344 13 3 1.6 5 2 53 1.67 4 5 ND 1 6 1 2 111 1 .01 .001 2 5 .01 5 .01 2 .02 .01 .01 10 .01 2 1.54 .05 .04 610 7 5 585 3.06 2 5 ND 1 79 1 2 4 54 3.65 .055 6 8 1.10 511 10 280 2 1 .7 4 3 44 1.49 13 5 2 1 1 1 2 148 1 .01 .001 2 4 .01 1 .01 2 .01 .01 .01 1 .775

HAROLD M. JONES PROJECT-NEVADA/KELOWNA FILE # 87-5723

Page 1

C.R MG BA TI B SAMPLES A5 NI CO HN FE AS AU SR CD SB BI PPM I PPM PPM PPH PPH PPM PPM PPM PPH 1 I PPH PPH PPH PPH PPH 26 10 1224 7.24 22 5 ND 2 2 36 .80 .066 14 .33 4 1.63 .04 .07 1 12 4 25 1 2 2 35 .51 .059 11 12 .34 75 .08 3 1.35 .04 .05 1 4 30M 18+75MB 20 112 .2 23 7 985 3.74 12 פא כ

#### CERTIFICATES

DATED: July 15, 1988

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

ZYGOTE RESOURCES LTD.

KENNETH MAGNUS ALBERTSON Chief Executive Officer THOMAS ALEC ARMITAGE

Chief Financial Officer

ON BEHALF OF THE BOARD OF DIRECTORS

ALAN BLAIRE BISCHOFF

Director

MONA CLAIRE MCKINNON

Director

#### ON BEHALF OF THE AGENTS

To the best of our knowledge, information and belief, the foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the <u>Securities Act</u> and its regulations.

BRINK HUDSON & LEFEVER LTD.

Per: