830140

COMMENTS ON GEOLOGICAL PARAMETERS OF SHERWOOD MINE AND COMPARABLE PROPERTIES

CONTAINED IN A REPORT PREPARED BY
D.A. BARR, P.ENG.
DATED SEPTEMBER 26,1992

BY

N.C. CARTER, PH.D. P.ENG.

JANUARY 27,1992

TABLE OF CONTENTS

	Page
SUMMARY	1
INTRODUCTION	4
DEFINITION OF COMPARABLE PROPERTIES	5
GEOLOGICAL PARAMETERS - COMPARABLE PROPERTIES	7
Geological Belts	7
Deposit Classification	10
Host Rock	11
Mineralization and Wallrock Alteration	12
Number of Known Veins	15
Average Vein Width	18
Lateral and Vertical Range of Mineralized Structures	22
DURATION OF EXPLORATION AND DEVELOPMENT PROGRAMS	24
CONCLUSIONS	26
REFERENCES	27
CERTIFICATE	28

List of Figures

Following Text

Figure 1 - Location of Sherwood Mine

Figure 2 - Mineral Commodity Map - Gold

Figure 3 - Comparable Properties - Work Periods

Figure 4 - Vancouver Island Gold Deposits

SUMMARY

This report adrresses various geological parameters which have been used by D.A. Barr to compare the Sherwood Mine property with a number of British Columbia vein gold deposits. Mr. Barr's conclusions are contained in a report dated September 26,1991 and referred to as Exhibit 131.

This writer's assessment of the geological parameters leads him to conclude that the Sherwood property is directly comparable to other vein gold deposits on Vancouver Island and is similar in many respects to selected deposits elsewhere in British Columbia. There are some notable differences between Sherwood and other referenced properties and these are discussed in the context of the various parameters which include geological belts, deposit classification, host rock, mineralization and wallrock alteration, number of known veins, average vein widths and lateral and vertical ranges of known mineralized structures. Summary comments on each of these is as follows:

Geological Belts - The location of the various properties within specific geological or tectonic belts is not considered to be a significant factor inasmuch as vein gold deposits are fairly evenly distributed throughout four of the five tectonic belts making up most of British Columbia. Sherwood and other deposits on Vancouver Island are within

the Insular tectonic belt; the other referenced properties are within the Coast, Intermontane and Omineca belts.

Deposit Classification - Sherwood and all other properties referred to in this report include gold-bearing veins which have formed at considerable depths and high temperatures and are classified as mesothermal deposits which commonly have significant lateral and vertical ranges.

Host Rock - British Columbia vein gold deposits are hosted by rocks which vary in type and age. Host rocks on the Sherwood property include volcanic, granitic and sedimentary rocks.

Mineralization and Wallrock Alteration - The nature and extent of wallrock alteration marginal to veins on the Sherwood property is considered to be comparable to other deposits in the Zeballos and Bedwell River areas of Vancouver Island.

Number of Known Veins - Fourteen veins in addition to the Main Vein have been reported for the Sherwood property. At least eight of these are considered to have widths exceeding 0.1 metre, bringing the number of known veins to about the average identified at other vein gold properties in British Columbia.

Average Vein Width - Sampled vein widths on the Sherwood property are two to three times greater than those reported for similar properties on Vancouver Island and are similar to

vein widths documented for other British Columbia deposits. *Lateral and Vertical Range of Mineralized Structures* - strike lengths and particularly vertical ranges of ore shoots within vein structures for most Vancouver Island vein gold properties, including Sherwood, are not well documented. On the basis of existing ionformation, the known shoot in the Sherwood shear has dimensions comparable to, or larger than, other Bedwell properties. Two principal structural trends host gold-bearing veins on the Sherwood property and the main shear zone has demonstrated strike continuity. Lack of systematic recent work at Sherwood precludes any direct comparison with Zeballos area veins.

Gold was discovered on the Sherwood property in the late 1930's following significant discoveries in the Zeballos area. Exploratory work was undertaken over a two year period until wartime labour and supply shortages effectively curtailed additional investigation. Higher overall costs and a fixed price for gold in the post-war years directed attention away from gold deposits and toward base metals which lasted until dramatic price increases in the early 1970's rekindled interest in gold. Unfortunately for the Sherwood and several other properties in Strathcona Provincial Park, a 1973 Provincial Government moratorium prohibited further investigation of these vein gold deposits.

INTRODUCTION

This report, which compares the geological features of the Sherwood Gold Mine property with a number of similar vein gold deposits, has been prepared at the request of Ferguson Gifford, counsel to S.C.M. Services Ltd., Casamiro Resource Corporation, Cinta Resource Corp. and Sherwood Mines Ltd. (N.P.L.)

The report is specifically directed to providing comments on several tables, geological sketches and a report dated September 26,1991 comparing the Sherwood property with a number of other deposits, all prepared by D.A. Barr, P.Eng.

Many of the sources of information used in the preparation of this report have been entered as exhibits during hearings before the Expropriation Compensation Board of British Columbia and reference to these is made by exhibit number where applicable. Additional sources of information are listed in the References section.

The writer has a personal knowledge of many of the vein gold properties discussed herein based on property examinations conducted over the past 12 years and has previously reported on the Dome Mountain property and on a number of gold deposits on Vancouver Island. A Background Study on the Mining Sector of the Clayoquot Sound Area was undertaken by the writer for the Clayoquot Sound Sustainable

Development Strategy Committee in early 1991.

DEFINITION OF COMPARABLE PROPERTIES

The geological setting and style of gold mineralization of the Sherwood property has been compared to a number of other gold deposits situated in a diversity of geographic and geological settings in British Columbia by several investigators including Heard and Carter(1991 - Exhibit 18), Barr(1990 -Exhibit 14;1991 -Exhibits 129,130,131), Wright Engineers Limited(1990-Exhibit 16) and Glanville(1991 - Exhibit 17).

A listing of comparable properties referred to in the aforementioned reports is as follows:

Table 1

Vancouver Island
(Insular Tectonic Belt)

Bedwell River Area	Prosper
"	Seattle
"	Avon
"	Noble
"	OK
"	Musketeer
"	Buccaneer
"	You
"	Casino
"	Trophy
"	Thunderbird
"	Della
"	P.D.Q.
"	Galena
"	Joker
"	BB&M

Herbert Inlet	Big Boy
"	Abco
Meares Island	Kalappa
"	Iron Cap
Warn Bay - Tranquil Inlet	Maple Leaf
" "	Gold Flake
" "	Fandora
Zeballos Area	Privateer
"	Spud Valley
"	Mount Zeballos
Mainland Coast	
(Coast Plutonic Complex)	Alexandria
"	Georgia River
"	Snip
"	Skyline
	Lucky Jim*
Interior	
(Intermontane Tectonic Belt)	Blackdome
	Dome Mountain
	Sulphurets
(Omineca Tectonic Belt)	Erickson
Southeastern B.C.	
(Omineca Tectonic Belt)	Willa*
	Skylark*

* These three properties are not considered to be comparable to the Sherwood and other vein gold deposits. Lucky Jim, on Quadra Island, is a replacement skarn deposit consisting of irregular pods of copper and iron sulphide minerals in limestone marginal to a granitic intrusion. Copper-gold-silver mineralization on the Willa property, east of Slocan Lake, is contained in a breccia zone more typical of porphyry copper style mineralization. The Skylark, near Greenwood, is a vein deposit in which the principal values are in silver rather than gold.

All of the foregoing properties, except as noted, are vein gold deposits situated in British Columbia which, like Sherwood, are, have been, or would be developed by underground mining methods.

GEOLOGICAL PARAMETERS - COMPARABLE PROPERTIES

Criteria used by Barr (Exhibits 129,130,131) to compare Sherwood with other properties include, in addition to geological features, reference to the timing and nature of technical surveys and physical work programs carried out to assess various properties in the exploration stage, reported reserves, gold grades and production records, and an assessment of exploration, development, capital and operating costs. Comments regarding Mr. Barr's conclusions with respect to these criteria have been prepared separately and will not be dealt with further here.

This report addresses the geological parameters presented by Mr. Barr for purposes of comparing various properties with the Sherwood mine. These include geological belts, deposit classification, host rocks, mineralization and wall rock alteration, number of known veins, average vein widths, and lateral and vertical ranges of known mineralized structures. The nature and duration of post-discovery exploration of the various properties referred to in Table 1 is also discussed.

Geological Belts

Most of British Columbia, Yukon and Alaska comprise what is known as the Northern Cordilleran region of North America.

This region is made up of a number of geological terranes which may be broadly grouped in five parallel tectonic belts which include, from west to east, Insular Belt, Coast Belt (Coast Plutonic Complex), Intermontane Belt, Omineca Crystalline Belt and Rocky Mountain or Eastern Belt.

These tectonic belts are characterized by rocks of similar type, age and geological history. Metallic mineral deposits and occurrences are common to all with the exception of the Eastern or Rocky Mountain Belt. Characteristic mineral commodity "signatures" (Sinclair et al,1978) for the various belts include:

Insular Belt	- Copper, Gold
Coast Belt	- Gold
Intermontane Belt	- Copper-Molybdenum
Omineca Belt	- Lead-Zinc

Figure 1 (modified after Barr, Exhibit 131) shows the five tectonic belts and the locations of Sherwood mine and other properties listed in Table 1. Deposits on Vancouver Island are in the Insular Belt with the other gold deposits situated in the Coast Belt (Alexandria, Georgia River, Snip, Skyline - note: the latter two are on the margin of the Intermontane Belt), Intermontane Belt (Blackdome, Dome Mountain, Sulphurets) and Omineca Belt (Erickson).

Barr (Exhibit 131, page 8) states that 40% of known vein type deposits (presumably containing a variety of metals including gold) occur within the Intermontane Belt compared

with 23 % in the Omineca Belt and 15% each in the Coast and Intermontane Belts. This inference that the Intermontane Belt has a better potential for vein type deposits is based on the distribution of some 10,500 known mineral deposits and occurrences as listed in the B.C. Ministry of Mines computer-based Minfile (Exhibit 131 -Figure 2) and is misleading. For example, Figure 2 of this report is a generalized plot of deposits and occurrences in which gold is the principal commodity. The vast majority of these are vein type deposits which are fairly evenly distributed between four tectonic belts confirming earlier observations of Sutherland Brown et al(1971).

Figures 1 and 2 also show the limited landmass within the Insular Belt relative to the other belts. Queen Charlotte Islands and Vancouver Island make up 6% of the area of British Columbia (844,000 square kilometres) as opposed to the Intermontane Belt which constitutes 43%. Consequently, it stands to reason that there would be fewer known vein type occurences in the Insular Belt. However, factoring in relative land areas, an analysis of commodity occurrence - densities for the various tectonic belts by Sinclair et al(1978) indicates that the Insular Belt may be 1.5 to 3 times more prospective for gold deposits than the other belts.

Notwithstanding the foregoing statistical studies regarding the distribution of mineral commodities and deposit types, it is the writer's opinion that geological or tectonic belts are not a significant factor when comparing vein gold deposits like Sherwood.

Deposit Classification

As pointed out by Barr(Exhibit 131) there are two principal classifications for known gold-bearing vein deposits in British Columbia - epithermal and mesothermal.

Mesothermal vein deposits are known to have a greater lateral and vertical extent than epithermal deposits by virtue of their having formed at depths of more than 1 km and at temperatures of 200 - 300 C. Mesothermal vein deposits have accounted for 65% of British Columbia lode gold production of 20.1 million ounces through 1987. Most of this production was from veins in the Bridge River camp (4.1 million ounces) in which the Bralorne and Pioneer vein systems, developed over strike lengths of 6 km and to depths of 1800 metres, provide good examples of the lateral and vertical ranges of mesothermal deposits.

Mesothermal veins generally have a low sulphide content and commonly exhibit ribbon structures or layering of light and dark quartz parallel to vein walls.

Epithermal vein deposits formed at shallower depths and lower temperatures, are irregular in form and feature vugs or open spaces within the quartz, indicative of a shallow level of emplacement. Silver grades may be quite high as opposed to a silver:gold ratio of about 1:1 in mesothermal deposits. Ore shoots within mesothermal veins have a limited vertical range - 80 metres in the case of Blackdome and about 60 metres at Baker Mine, both of which are good examples of epithermal vein deposits.

Most of the deposits listed in Table 1, including Sherwood Mine and others on Vancouver Island, are mesothermal veins. Notable exceptions include previously mentioned Blackdome and some of the gold-silver mineralization on the Sulphurets property. In context of deposit type, most of the properties may be considered directly comparable.

Host Rock

The rock type hosting a vein deposit is not considered to be a meaningful criterion for comparative purposes. As illustrated on Figure 2, gold deposits are widely distributed throughout the various tectonic belts in which host rocks vary in type and age. Sutherland Brown et al(1971) state that 45% of gold deposits in British Columbia occur in mixed volcanic and sedimentary terranes, 30% in intrusive rocks and

25% in sedimentary rock sequences with no associated volcanics. Ages of these host rocks range from Precambrian to Tertiary.

Barr (Exhibit 131,page 9) infers that sedimentary rocks are important hosts at the Skyline, Snip, Sulphurets and Dome Mountain properties but that no sedimentary rocks are present on the Sherwood Mine property. In fact, Sargent (Exhibit 41,page 88) describes the dominant host rocks as being part of a Paleozoic and Mesozoic complex consisting of volcanic and sedimentary rocks.

Mineralization and Wallrock Alteration

Barr (Exhibit 131,page 10) describes wallrock alteration at Sherwood Mine as being not as intense as that documented at other properties and classified it as "propylitic", a weak alteration assemblage characterized by "green" minerals such as chlorite and epidote. It is apparent that Barr's comments in this regard are based on his observations of a limited part of the Mac vein system on Sherwood Knob.

An inspection of the No.3 underground level and surface exposures in the area of No.1 level show wallrocks marginal to the vein in the Sherwood shear to be intensely bleached with a fair percentage of "gouge" material which consists of a fine-grained mixture of quartz(silica), carbonate, sericite and pyrite. These zones, which extend for about 0.6 metre on

either side of the vein, have been referred to by Sargent(Exhibit 41,page 90,91) as being "greatly altered". In this writer's opinion, the intensity of this wallrock alteration compares favourably with that reported for vein gold properties elsewhere in British Columbia.

The style and intensity of wallrock alteration for other Bedwell River area gold properties is not well documented. Stevenson(1947) refers to narrow (0.5 metre) zones of bleached wallrocks adjacent to veins which is better developed where the host rocks are volcanics rather than more competent granitic rocks. A spectrographic study carried out by Sargent(1942) showed an enrichment of potassium and a depletion of sodium in altered wallrocks marginal to quartz veins on the Musketeer property. This alteration signature has also been reported by Stevenson(1950) in the Zeballos camp, by Leitch et al(1989) for Bridge River area veins and by Sketchley and Sinclair(1987) for wallrocks adjacent to veins on the Erickson property.

Elsewhere on Vancouver Island, Carson(1969) refers to restricted zones of silicification, sericitization, carbonatization and chloritization marginal to gold-bearing veins. This writer, during various examinations of vein gold deposits, has observed narrow (5 cm) zones of sheared and altered granitic rock (gouge) bordering quartz veins on the

You property in the Bedwell River area and bleached zones up to 50 cm wide in volcanic rocks marginal to veins in the Kennedy River area. In both cases, the original wallrocks have been transformed by the addition of silica, carbonate, sericite, chlorite and pyrite and the nature and style of this alteration is similar to that described by Stevenson(1950) for Zeballos vein deposits.

There is little doubt that wallrocks marginal to vein gold deposits on Vancouver Island have been intensely altered, albeit over limited distances outward from vein contacts particularly where wallrocks are more competent granitic rocks.

Barr(Exhibit 131,page 10) makes reference to zones of intense alteration tens of metres wide adjacent to quartz veins on the Erickson property. These features have been documented by Sketchley and Sinclair(1987) and by Panteleyev and Diakow(1982) who describe extensive alteration of volcanic rocks adjacent to veins but virtually none where the wallrocks are sediments. Consequently, it is inferred that the nature (degree of fracturing and shearing) and composition (volcanics vs sediments) dictate the intensity and extent of alteration zones on the Erickson property. Similar features are evident at the Dome Mountain property where wallrock alteration is most extensive in sheared

volcanics and virtually non-existent where the wallrocks are massive volcanics (MacIntyre,1985).

In summary, the degree and nature of wallrock alteration at Sherwood and elsewhere in the Bedwell River area is considered to be similar to that documented for the Zeballos vein gold deposits. Many of the gold-bearing quartz veins in both districts are hosted at least in part by competent granitic rocks which visually appear to be only weakly altered.

Extensive alteration zones reported for other deposits in British Columbia are developed in less competent, sheared volcanic and sedimentary rocks and are not necessarily a reflection of better grades of mineralization within the veins.

Number of Known Veins

Barr (Exhibit 129,131,page 12) discusses number of known veins with widths greater than 0.1 metre at various properties and concludes that the greater the number of veins, the greater the potential for economically viable deposits.

Barr lists Sherwood Mine as having only one known vein exceeding 0.1 metre width as opposed to all other comparable properties, most of which have several veins. This conclusion

regarding Sherwood is incorrect. In fact, there are at least eight vein structures, part of the Mac and Taylor vein systems on Sherwood Knob (Exhibit 1,Tab 26), from which assays of 1 to 1.5 oz/ton gold have been reported by McDougall(1946). There is little information regarding widths of these veins except for a reference to one having a width of 22 inches (0.56 metre) (Exhibit 47 - March 20,1946).

The foregoing reference notes the discovery of 12 new veins on the property in 1945 which would likely include the Mac and Taylor veins and two narrow veins with gold values near Della Falls in the Drinkwater Creek valley (McDougall, Exhibit 1,Tab 13,page 17) in the southwest part of the present property. Two or three narrow veins along the western extension of the Sherwood shear below the talus fan and 500 feet above Drinkwater Creek valley bottom were also reported (McDougall,1946,page 2). Not included are the two reported veins in the vicinity of the gossanous or rusty area west of Drinkwater Creek close to the trace of the western extension of the Sherwood shear zone.

The Sherwood Mine property therefore has 14 or 15 known vein structures in addition to the main vein in the Sherwood shear. As noted, there is little information regarding widths but it is not unrealistic to assume that at least half of these other structures would have widths greater than 0.1

metre. It is also significant that the structures on Sherwood Knob have north-northeast trends similar to the two nearby P.D.Q. veins from which encouraging results were reported by Pioneer Gold Mines Ltd.(Exhibit 136,1941) including 1.09 oz/ton gold over a 12 inch width (0.3 metre) and a 177 ft.length on No. 1 vein and 0.83 oz/ton over a 13 inch width and a length of 340 feet on No.2 vein. Eight veins with widths of greater than 0.1 metre brings Sherwood to about the average of properties elsewhere in British Columbia (Exhibit 129, Tables Nos.1 and 1a).

It is worthy of note that the number of veins on several of these properties were found following considerable exploration work. For example, the only currently productive vein on the Dome Mountain property, the Boulder Creek zone, was discovered in 1985 after more than 70 years of intermittent exploration. Several of the veins mined on the Erickson property were "blind" discoveries found while driving underground headings to known veins.

Also noteworthy is the fact that most production from many properties is, or has been, from only one vein - examples include the currently producing Snip property, Privateer at Zeballos and Blackdome.

Average Vein Width

Barr (Exhibit 131,page 13) stresses that average vein widths and average grades across those widths are the two most important criteria governing the viability of a vein gold deposit. This writer agrees that grades and widths are closely linked and it is a fact that good gold grades within a narrow vein can render it an economic proposition.

The "1" factor is a rough rule of thumb which is sometimes used to assess vein gold deposits. This method involves multiplying average gold grades in ounces per ton by the average width in feet - if the product is "1" or more, the vein may be potentially economic. For example, 5 ft. @ 0.20 oz/ton = 1, 2 ft @ 0.5 oz/ton = 1, 1 ft @ 1 oz/ton = 1 etc.

Many of the narrow veins in the Zeballos and Bedwell River areas are known to have exceptionally high gold grades; examples include Musketeer (Exhibit 41 - Sargent sampling) where the Trail vein averages 1.15 oz/ton over 0.83 ft which when multiplied is equal to 0.95 or close to "1". This vein was subjected to considerable work and was mined in a limited way at the beginning of World War II. The You property with 2.15 oz/ton over 0.80 ft. (2.15 x 0.80 = 1.72) would be an attractive target as would the P.D.Q. No.1 vein (1.09 oz/ton x 1 ft. = 1.09).

Sherwood Mine looks particularly attractive even when using Pioneer Gold Mines average uncut grades (Exhibit 136,1941) of 1.30 oz/ton gold over an average width of 22.5 inches or 1.88 feet which when multiplied equals 2.4.

Obviously, the lateral and vertical extent of veins are equally important factors and would further modify and refine any assessment. Nevertheless, the grade times width exercise can provide a quick and useful guide to an initial evaluation of the potential of a narrow vein gold deposit.

Average vein widths for a number of properties are shown by Barr in Tables Nos. 1,1a and 1b (Exhibit 129). There are two entries in Table No.1 which require clarification. Sherwood Mine average width is reported as being less than 1 metre with a corresponding grade of less than 20 grams per tonne, apparently reflecting Barr's estimate (Exhibit 15, page 25) of 22.40 grams/tonne over a "diluted" width of 1 metre. A more appropriate positioning on Table No.1, using Barr's estimate, would show the average width in the 1-2 metre column and grade in the 20-30 grams/tonne column. If Pioneer Gold Mines sampling data (referred to above) were to be used, the average sampled width would remain in the <1 metre (1.88 ft.) column but average grade would be in the >40 grams/tonne (1.30 oz/ton) column, making the property look particularly attractive when compared to others in the

Bedwell River area and elsewhere. It has been noted previously by several investigators, including Barr (Exhibit 15, page 27) that sampled vein widths at Sherwood are greater than those of other properties in the Bedwell area. In fact, they are two to three times greater and in the reasoning of Heard and Carter (Exhibit 14,pages 27,28) and Glanville (Exhibit 17,page 26) good gold values may be expected over widths of 1 to 1.2 metres. These conclusions are supported by results of 1945 bulk sampling by Cangold (Exhibit 47, December,1945) which indicated an average grade of 0.95 oz/ton (32.6 grams/tonne). Fourteen samples, collected at 5 ft. intervals on underground levels 1 and 3, are believed to have been taken across the entire drift backs or over a width of approximately 1 metre.

The other property listed on Table 1 requiring correction is Privateer which is shown as having an average width of less than 1 metre and an average grade of less than 10 grams/tonne. Even the recovered grade per tonne *mined* at Privateer (as shown in the footnotes for this Table - 0.54 oz/ton or 18.5 grams/tonne) is greater than that shown and recovered grade per tonne *milled* (36.1 g/t = 1.05 oz/ton) is significantly greater.

Average vein widths and corresponding average gold grades as shown on Barr's three tables apparently include

both sampled and mining widths plus sampled and recovered grades making any comparisons difficult.

There is also some inference (Exhibit 131,page 15) that minimum mining widths utilizing present day mining practises for a deposit like Privateer would be in the order of 5 feet or 1.5 metres. In fact, lesser widths (32 inches = 0.8 metre - similar to that mined originally at Privateer) are being successfully mined at Lac Minerals' Golden Patricia mine in northern Ontario. Higher recovered gold grades per tonne milled at Privateer (1.05 oz/ton) were obtained by way of labour intensive sorting of mined material prior to milling. This same effect has been achieved in recent years by screening of material prior to milling at some properties in Ontario and there has been considerable recent research directed to mechanical means of ore sorting.

Average widths and corresponding average grades are important factors in the assessment of vein gold deposits. The Sherwood Mine property, with demonstrated good gold grades over widths which are appreciably greater than those documented for other properties, particularly on Vancouver Island, render it an exceptionally attractive prospect.

Lateral and Vertical Range of Mineralized Structures

These parameters have been compared for a number of properties, including Sherwood Mine by Barr by way of diagrams and accompanying notes in Exhibit 130. All of the examples presented are mesothermal vein deposits which by their nature can be expected to have significant lateral and vertical ranges.

Veins in the Zeballos camp are continuous along strike for distances of up to 800 metres and ore shoots within the veins have lengths ranging from 300 to 450 metres. The vertical range of veins and ore shoots is not well documented and current knowledge is based almost entirely on existing underground development which indicates a range of 250 - 350 metres for most ore shoots within veins whic extend to unknown depths. Limited drilling on the Spud Valley property indicated gold values some 150 metres below the deepest underground workings on the Goldfield vein which had previously been developed over a vertical range of 350 metres.

Vein gold deposits in the Bedwell River area are less well known than those in the Zeballos camp. Structures hosting the veins are of two orientations, east-northeast and north-northeast, and are developed in a variety of rock types over a vertical range of at least 1200 metres. Strike lengths

of these structures may extend over greater distances; for example, a study of air photograph BC80095-064 by the writer shows the east-northeast Sherwood shear zone extending over a strike length of at least 2500 metres.

Vein strike lengths within the major structures in the Bedwell area range from 300 to 1200 metres; ore shoots within the veins have known lengths of up to 100 metres. The known vertical ranges of veins and contained ore shoots, as for those in the Zeballos camp, are based entirely on previous underground exploratory work which in most cases is limited. Vertical depths of at least 140 metres are reported for the Musketeer property by Joubin (Exhibit 133, page 13). There is no record of drilling to depth on this property; three holes drilled in 1961 were apparently flat holes designed to test for parallel vein structures.

The known extent of the shoot within the Sherwood shear measures 80 metres laterally and 247 metres vertically (Heard and Carter, Exhibit 14,pages 27,28). The lateral:vertical ratio of 1:3 is identical to known shoot dimensions at Musketeer.

The Fandora property northeast of Tofino provides evidence for the existence of multiple shoots both along strike and to depth within vein structures on Vancouver Island. Here, ten small ore shoots are contained in a vein

structure over a strike length of 900 metres and a vertical range of 330 metres.

The lateral and vertical extent of vein structures and contained ore shoots for Vancouver Island deposits and particularly those in the Bedwell River area is imprecisely known. Available evidence indicates that the Bedwell deposits should have vertical and lateral ranges equivalent to those known in the Zeballos camp.

DURATION OF EXPLORATION AND DEVELOPMENT PROGRAMS

Barr (Exhibit 131,pages 24,25), in discussing his assessment of the principal differences between Sherwood Mine and comparable properties, refers to 30-40 years of intermittent exploration at the Blackdome and Erickson properties compared with only seven years at Sherwood.

There are several factors which govern the nature and duration of exploration of mineral properties including metal prices, property access and the general economic and political climate of the jurisdiction in which the property is located. Figure 3 is a chart showing work periods since 1900 for properties listed in Table 1. Also shown is a plot of the yearly average gold price from 1900 to present. The work periods, indicated on the chart by horizontal bars, are based on references to work done in Minister of Mines Annual

Reports which are summarized in Minfile. The nature and extent of the work done since discovery of the various properties is variable in nature and extent.

Several features are evident on the chart including a significant number of discoveries and increased work programs following a rise in the price of gold to $35 per ounce in 1934. Most of the Zeballos and Bedwell River area properties were discovered in the mid- to late 1930's. Significant work programs continued on these and other properties until the early 1940's when wartime labour and supply shortages curtailed most programs. Note that sporadic work, most of it of a limited nature, was undertaken on only a few properties in the post-war years because of a fixed gold price and increased overall costs.

The fixed gold price was abandoned in 1968 and the beginnings of a dramatic price increase in the early 1970's was roughly coincident with a 1973 Provincial Government moratorium prohibiting work on mineral properties in Strathcona and other Provincial Parks. The rise in the price of gold provided the impetus for significant exploration and development programs on most properties shown on Figure 3 with the notable exception of those situated in Strathcona Provincial Park.

CONCLUSIONS

A review of various geological parameters indicates to the writer that the Sherwood Mine property is directly comparable with other vein gold deposits not only in the Bedwell River area but throughout Vancouver Island. These comparisons have also been made by other investigators including Carson(1969).

Figure 4 shows known gold deposits on Vancouver Island. Deposits indicated as open or closed circles are those in which gold is the primary commodity; most of these are vein deposits. Clustering of these vein deposits along the west coast is evident in the Zeballos, Bedwell River and Kennedy River - Port Alberni areas. Geological features of these deposits, including host rocks, wallrock alteration and style and grades of mineralization are essentially similar.

The distinguishing feature of the Sherwood Mine property is high gold grades over vein widths which are 2 to 3 times greater than those documented for other Vancouver Island vein deposits. This feature, coupled with the existence of other known gold-bearing veins on the property which have received only limited attention to date, makes Sherwood an attractive prospect which can be favourably compared to vein gold deposits elsewhere in British Columbia.

REFERENCES

Carson, David J.T.(1969): Teriary Mineral Deposits of Vancouver Island, CIM Transactions,Vol.72,pp.116-125

Leitch,C.H.B., Godwin,C.I. and Brown,T.H.(1989): Characteristics of Mineralizing Fluids in the Bralorne-Pioneer Gold Vein Deposit, in Geological Fieldwork,BCMEMPR Paper 1989-1, pp.365-375

MacIntyre,D.G.(1985): Geology of the Dome Mountain Gold Camp, in Geological Fieldwork,BCMEMPR Paper 1985-1,pp.193-214

Muller,J.E. and Carson,D.J.T.(1969): Geology and Mineral Deposits of the Alberni Map-Area,GSC Paper 68-50

Panteleyev,A. and Diakow,L.J.(1981): Cassiar Gold Deposits, McDame Map-Area, in Geological Fieldwork,BCMEMPR Paper 1982-1,pp.156-161

Sargent,T.E.Hartley(1942): Geology of the Bedwell River - Drinkwater Creek Area, British Columbia, Ph.D. Thesis, MIT

Sinclair,A.J.,Wynne-Edwards,H.R. and Sutherland Brown,A.(1978): An Analysis of Distribution of Mineral Occurrences in British Columbia, BCMEMPR Bulletin 68

Sketchley,D.A. and Sinclair,A.J.(1987): Multi-Element Lithogeochemistry of Alteration Associated with Gold-Quartz Veins of the Erickson Mine,Cassiar District, in Geological Fieldwork,BCMEMPR Paper 1987-1 pp.57-63

Stevenson,J.S.(1947): Lode Gold Deposits of Vancouver Island, BCMEMPR Bulletin 20

Sutherland Brown,A.,Cathro,R.J.,Panteleyev,A. and Ney,C.S. (1971):Metallogeny of the Canadian Cordillera,CIM Transactions,Vol.74,pp.121-145

CERTIFICATE

I, NICHOLAS C. CARTER, with residence and business address at 1410 Wende Road, Victoria, British Columbia, do hereby certify that:

1. I am a Consulting Geologist and have been registered with the Association of Professional Engineers and Geoscientists 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.

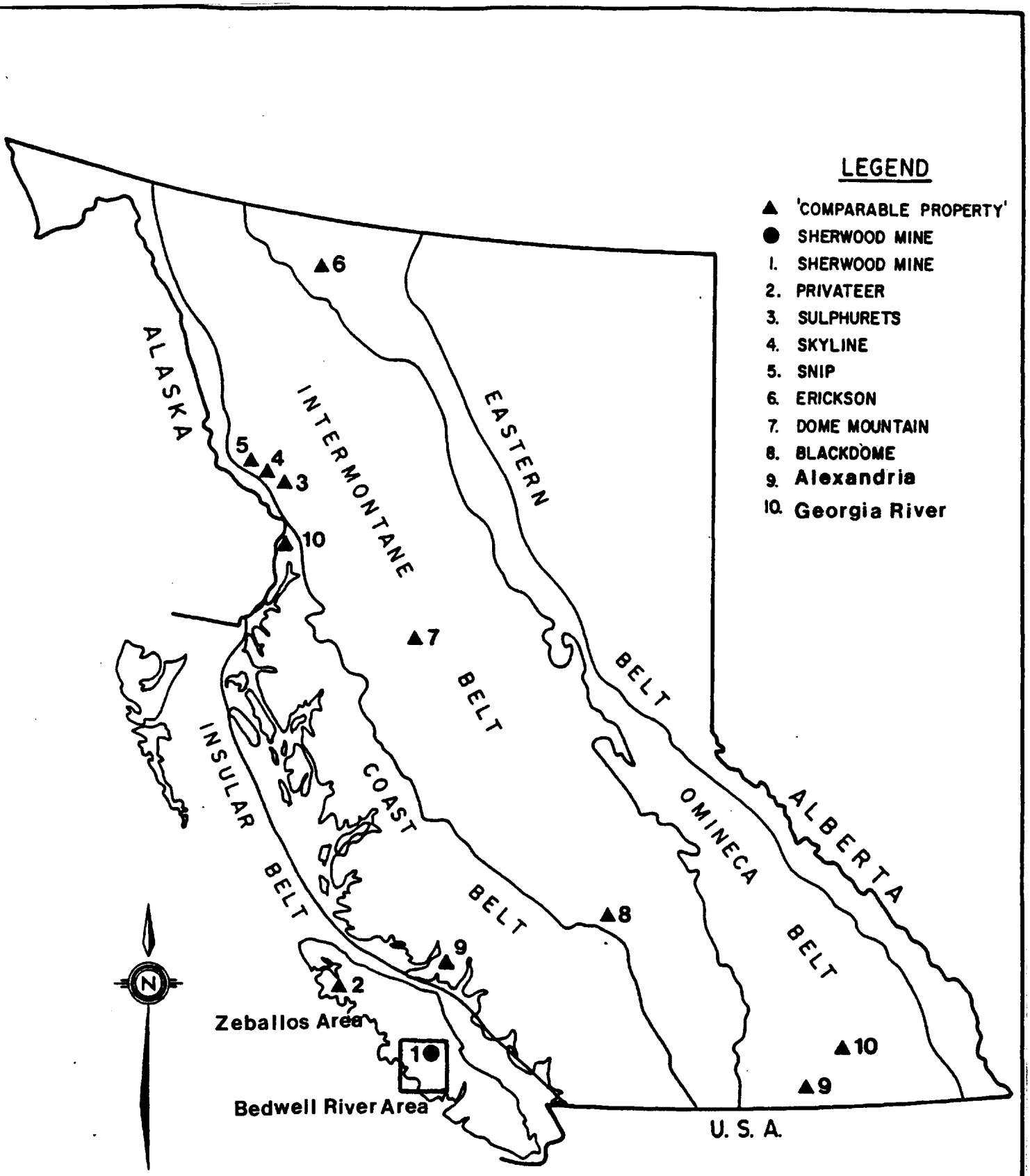
4. I have not, directly of indirectly, received or expect to receive, any interest, direct or indirect, in the property of Casamiro Resource Corporation, Sherwood Mines Limited(N.P.L.) and Cinta Resource Corp., or any of their affiliates, nor do I beneficially own, directly or indirectly, any securities of Casamiro Resource Corporation, Sherwood Mines Limited(N.P.L.) and Cinta Resource Corp. or any of their affiliates.

5. I am the author of the foregoing report, and co-author of two Evaluation Reports on the Sherwood Gold Mine Area, dated November 1989 and September 6,1991. My contributions to these reports is based on a thorough review of data pertaining to the Sherwood mine property and other gold prospects on Vancouver Island and on my background knowledge of similar deposits elsewhere in British Columbia and other parts of North America.

6. I grant permission to Casamiro Resource Corporation, Sherwood Mines Limited(N.P.L.) and Cinta Resource Corp. to use this report for any purposes in connection with the business of Casamiro Resource Corporation, Sherwood Mines Limited(N.P.L.) and Cinta Resource Corp. including its use in arbitral or litigation proceedings to recover damages for property injuriously affected.

Dated at Victoria,B.C. this 27th day of January,1992

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



LOCATION OF SHERWOOD MINE AND NINE 'COMPARABLE PROPERTIES'

(After Barr, 1991)

FIGURE 1

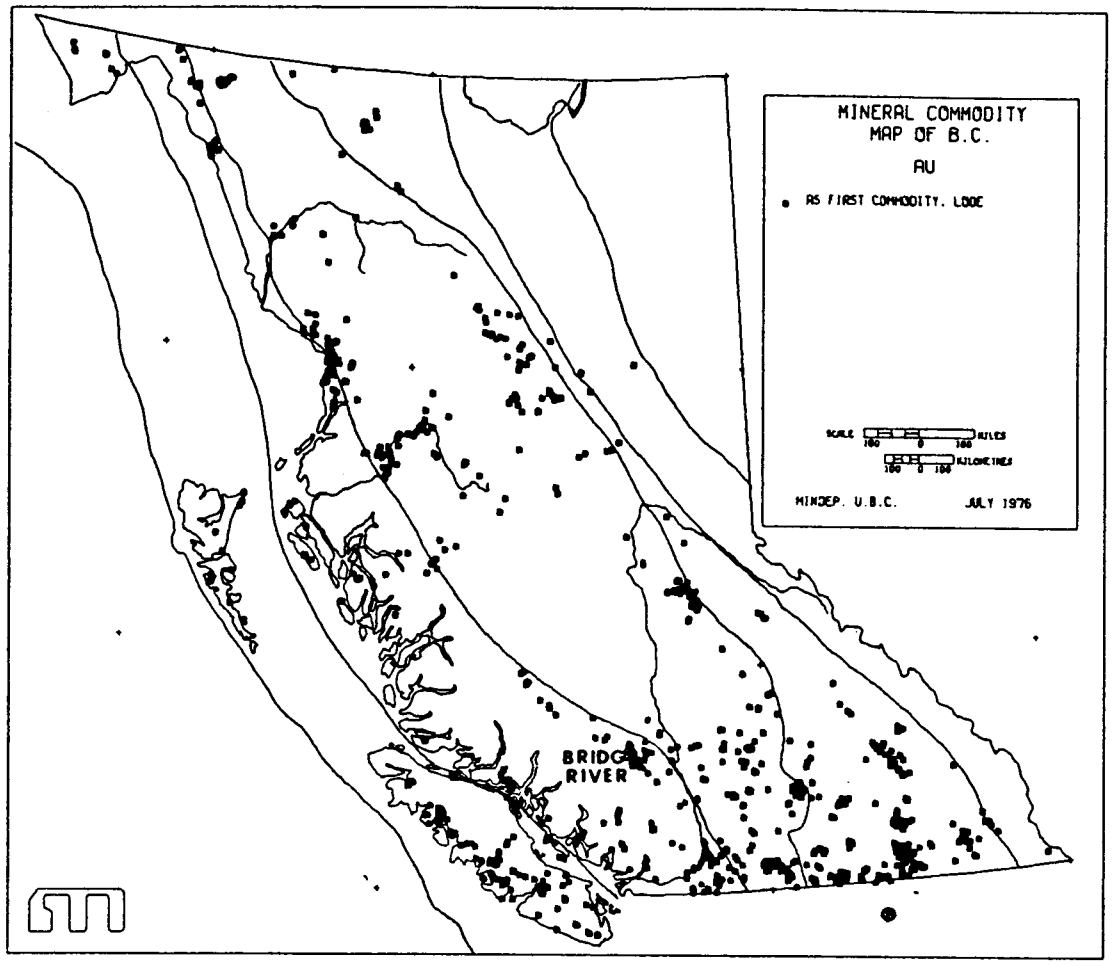
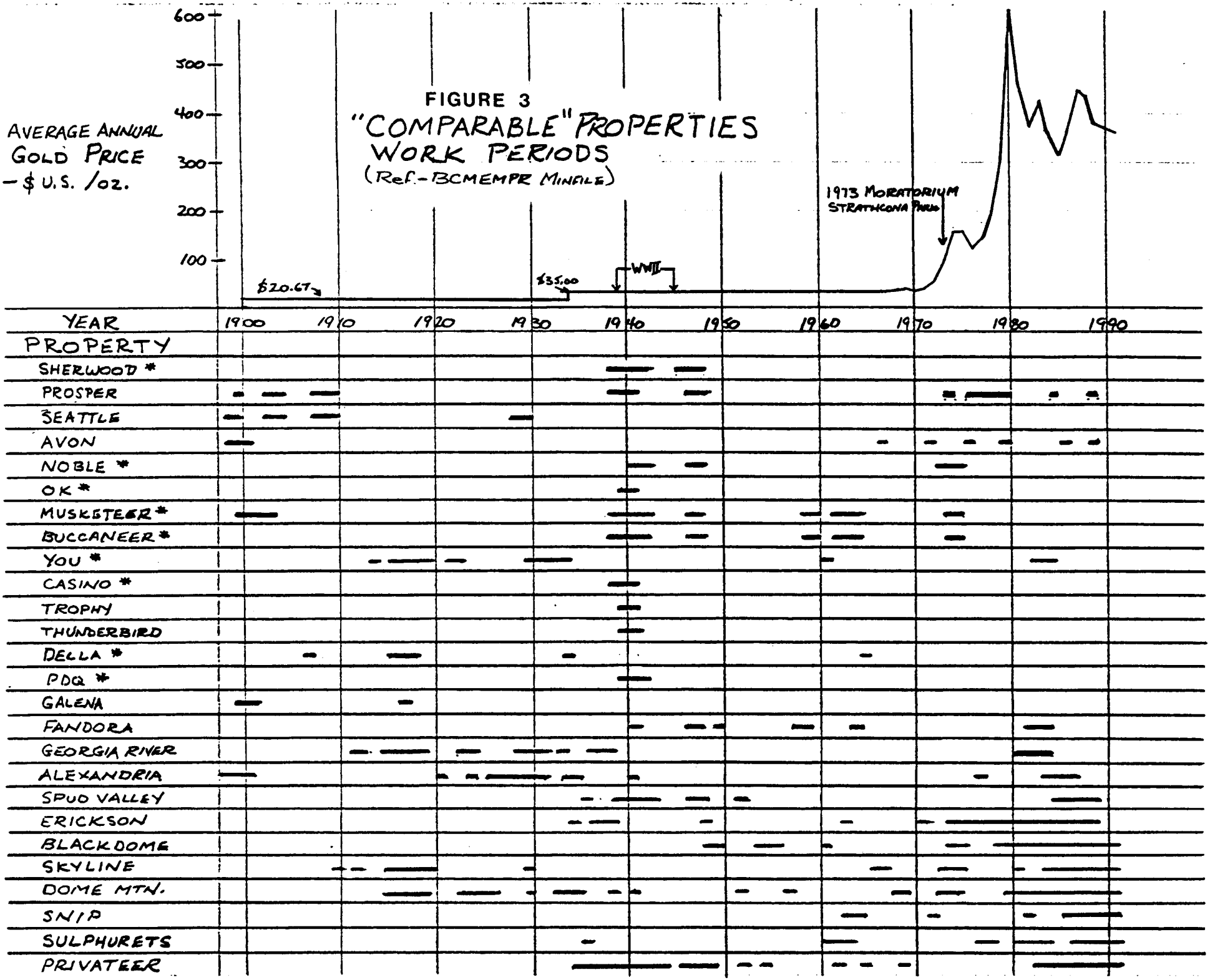


FIGURE 2 - GOLD DEPOSITS

FIGURE 3
"COMPARABLE" PROPERTIES WORK PERIODS
(Ref.-BCMEMPR Minfile)



* Within Strathcona Park

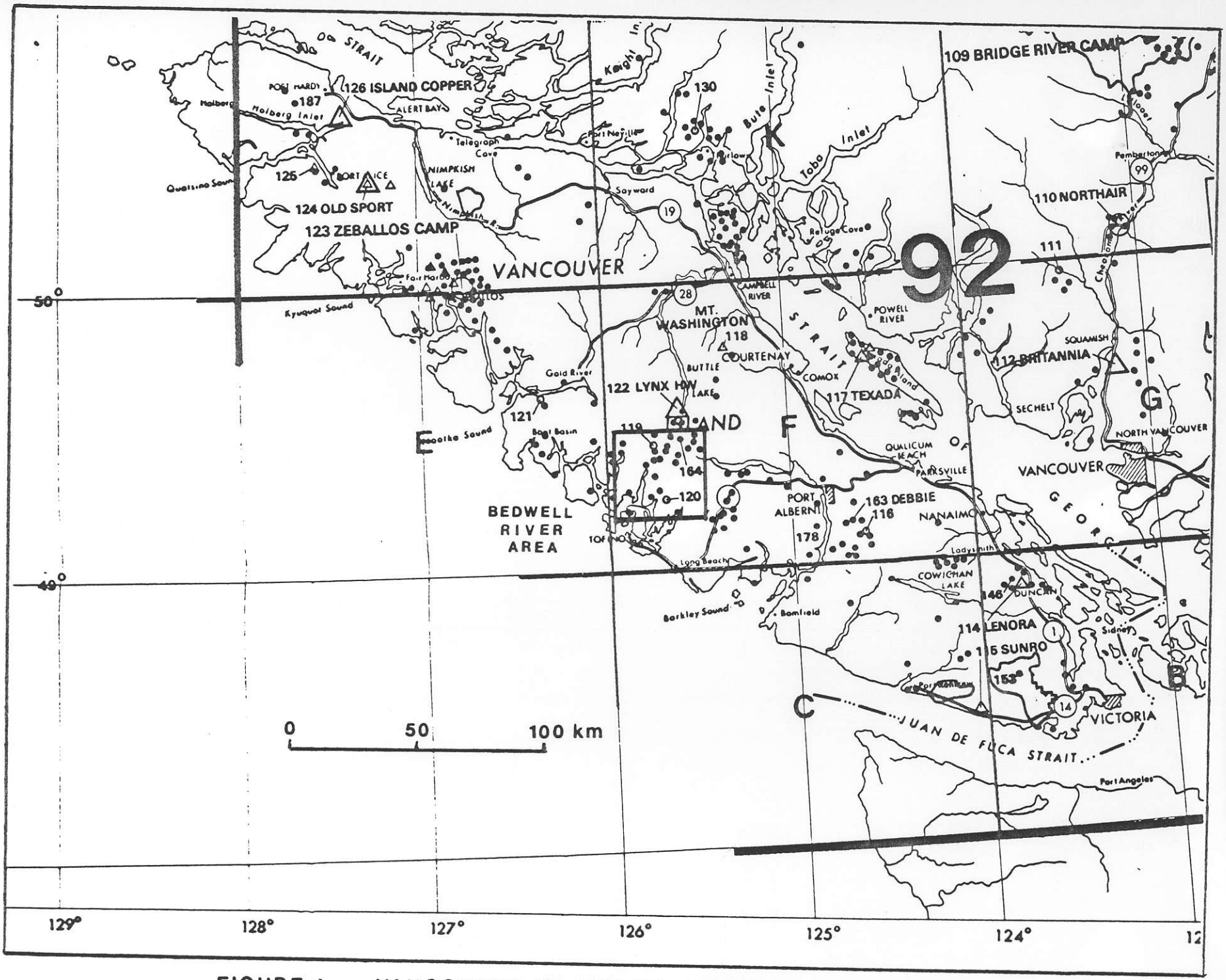


FIGURE 4 — VANCOUVER ISLAND GOLD DEPOSITS (BCMEMPR OF 1989-22)